DISCOVER THE UNDERVALUED TERRITORY

BROADWAY THEATER AND HOTEL COMPLEX

P5

Luo Xiaodong

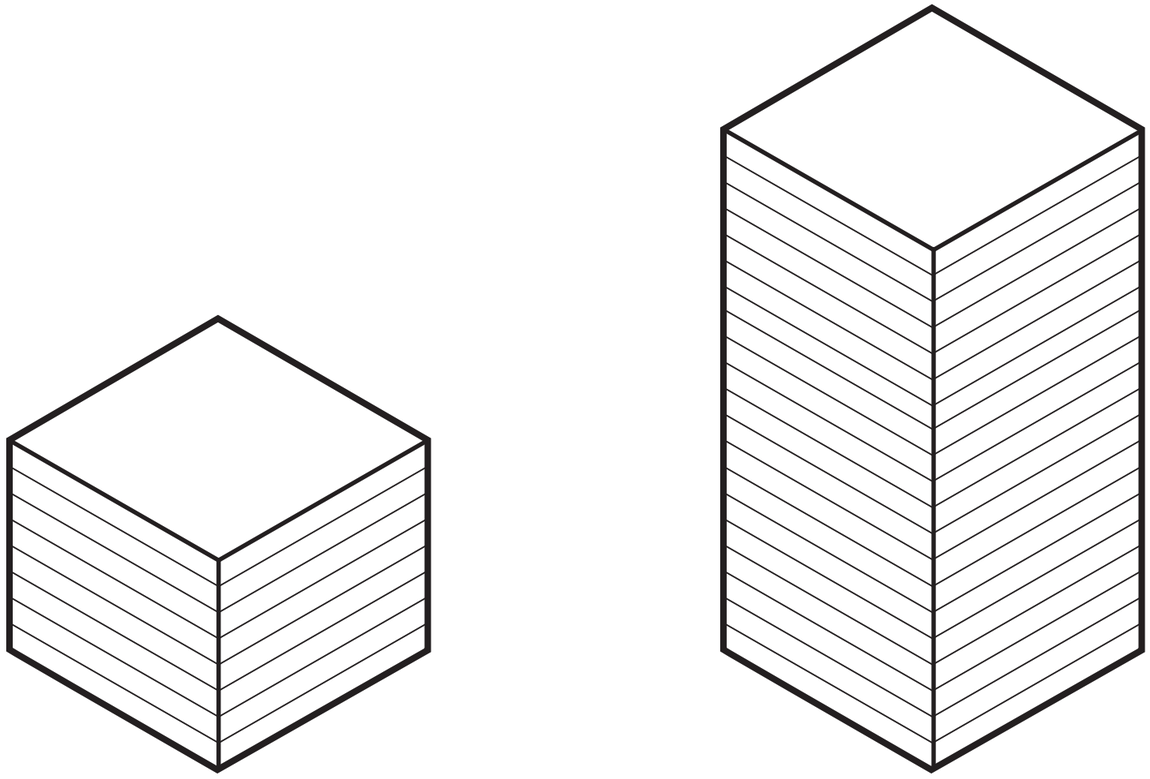
2020-01-28



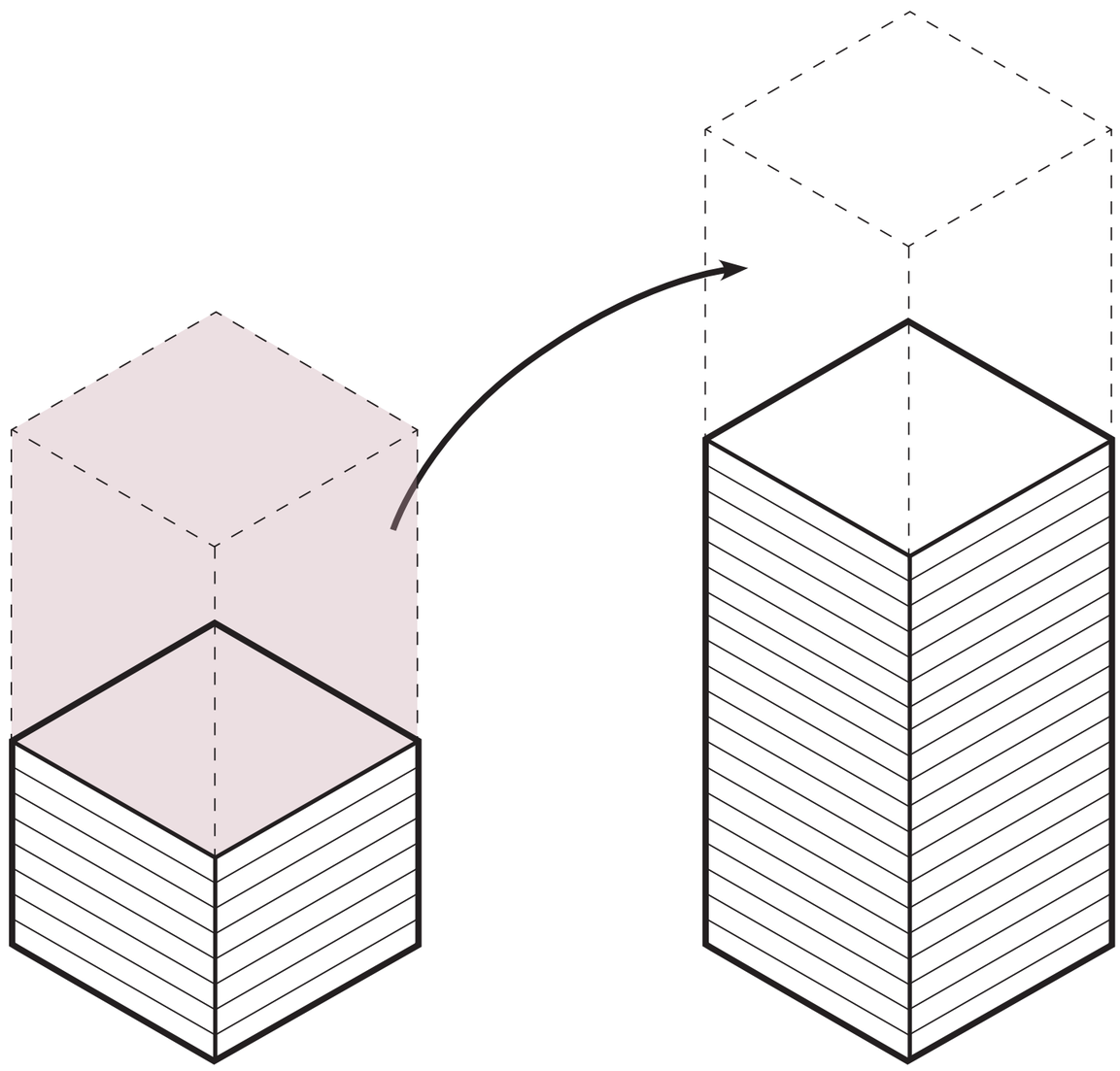



H&M





Air Rights Mechanism



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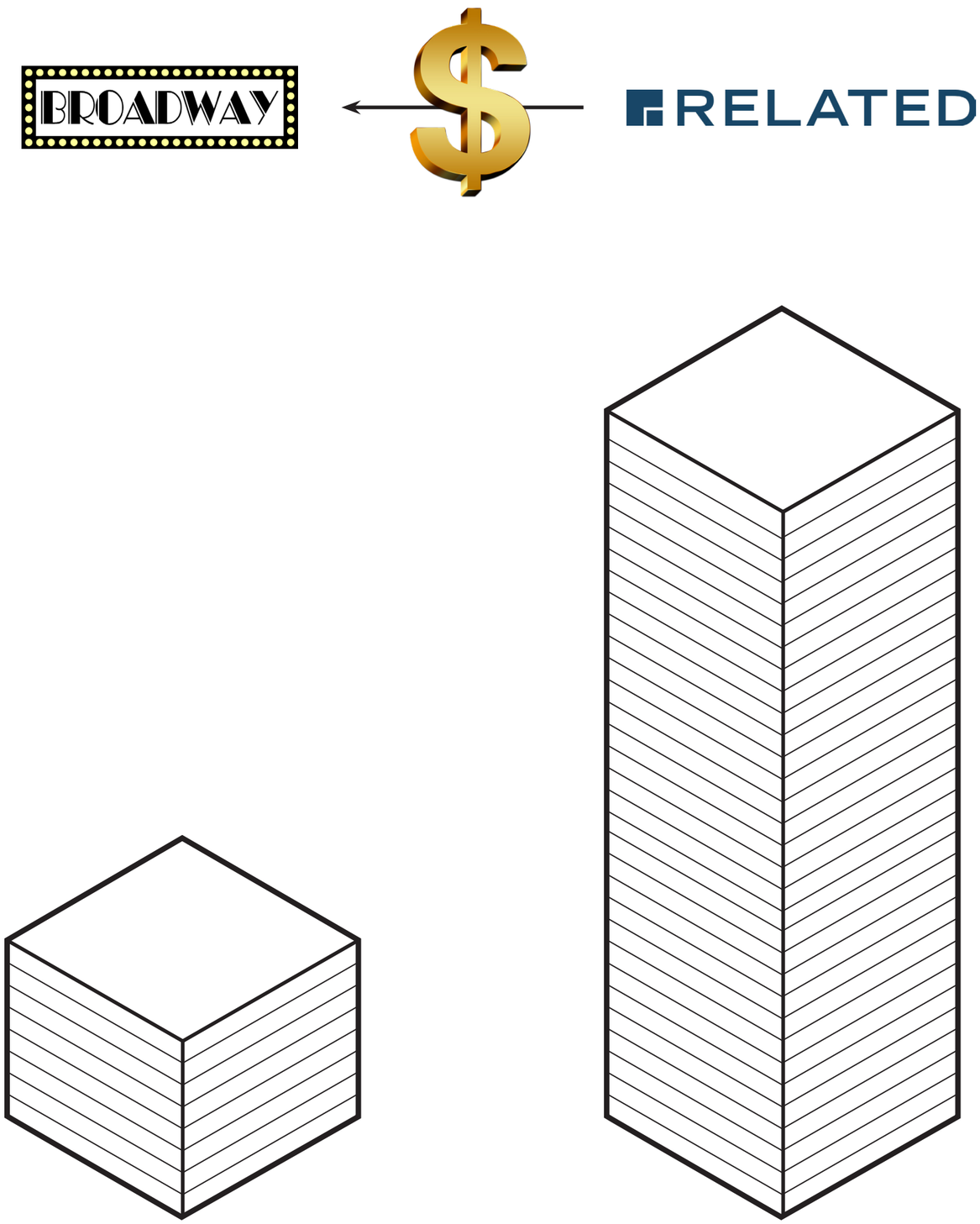


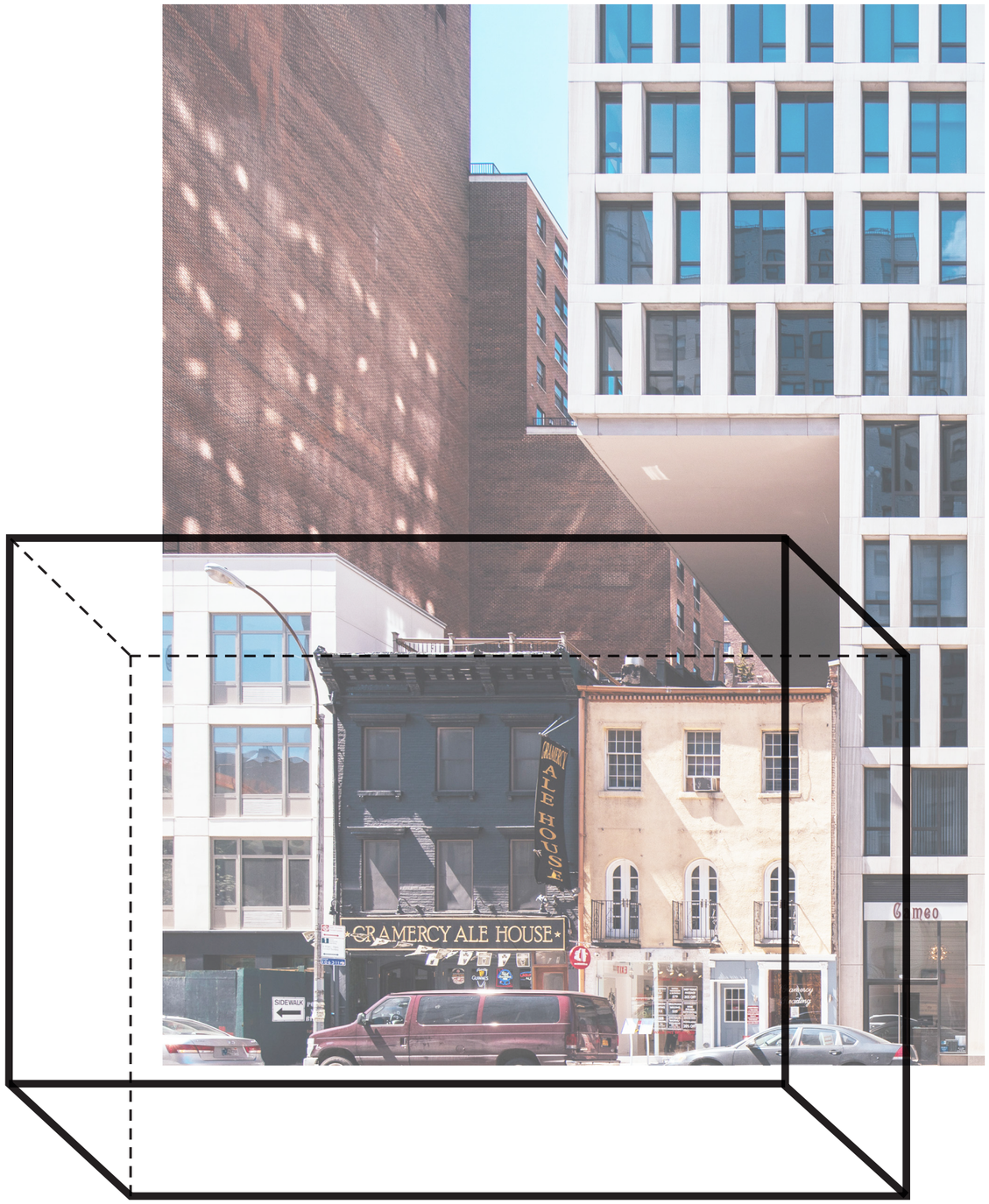
Air Rights Mechanism



Air Price = Land Price



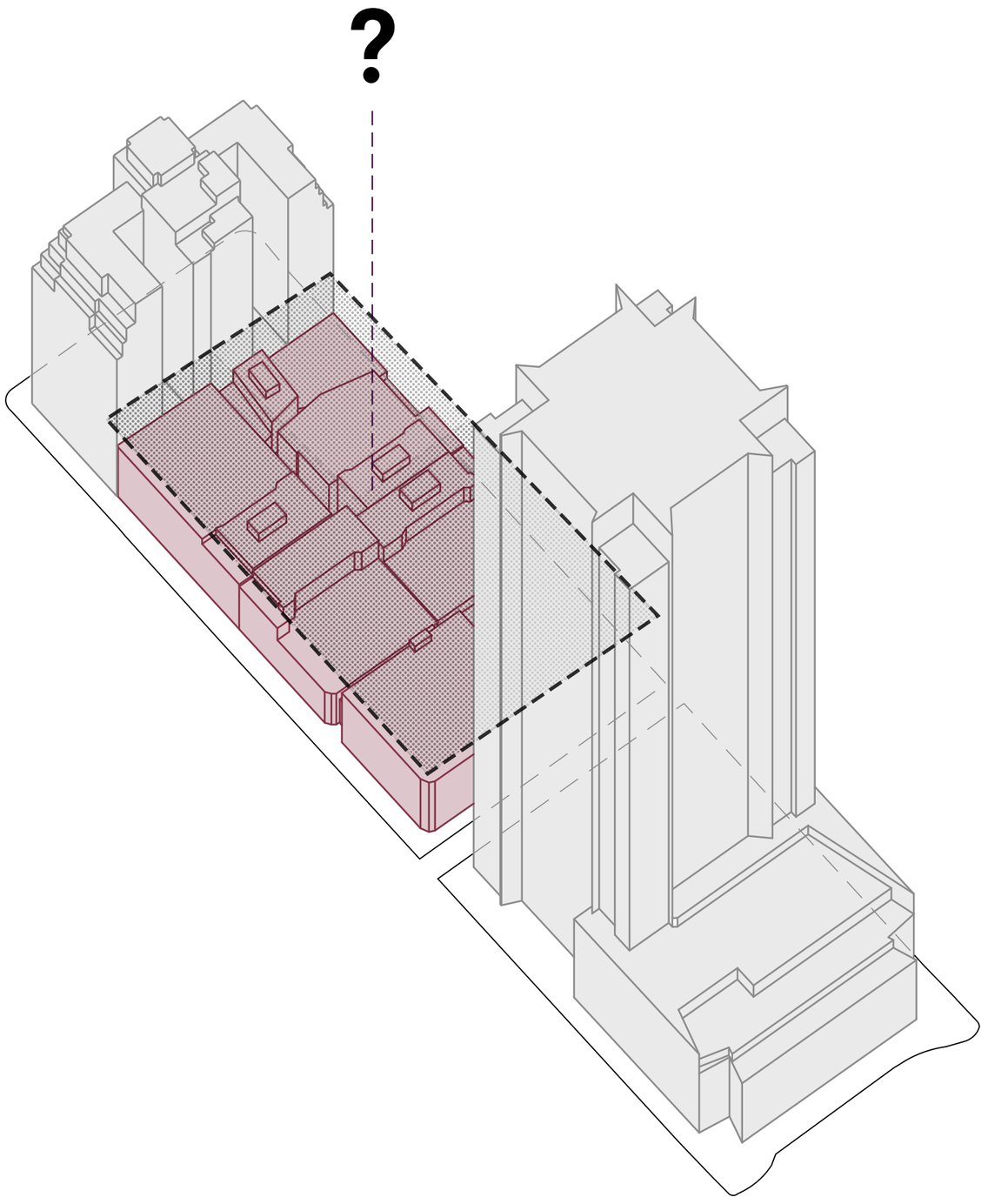
Freedom



Cage

New York Is Always Buiding More and More

Fuller, Manhattan Dome, 1960



Research Question

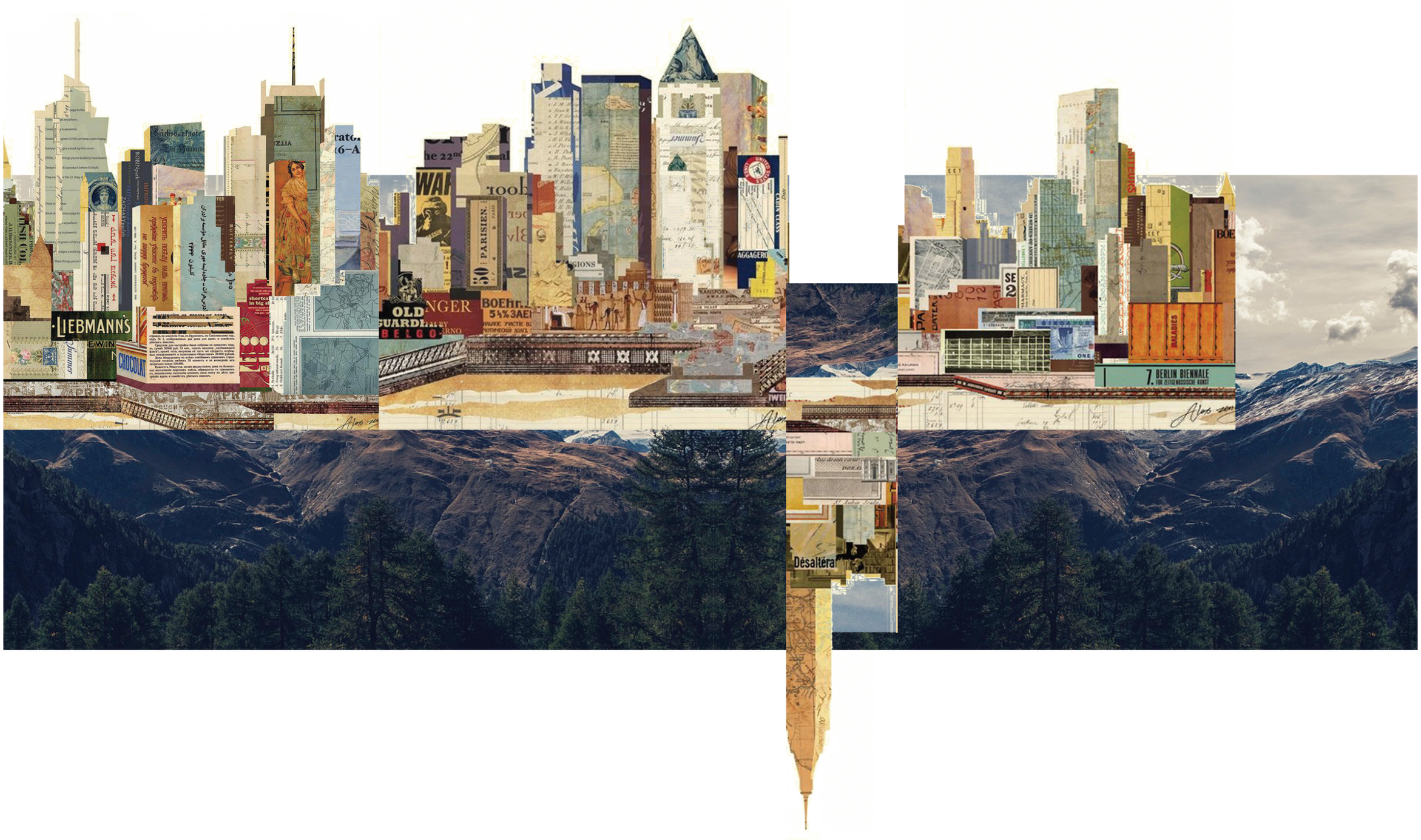


How to sustain density and land value of the lots which sold their air rights in Midtown?

Research Question



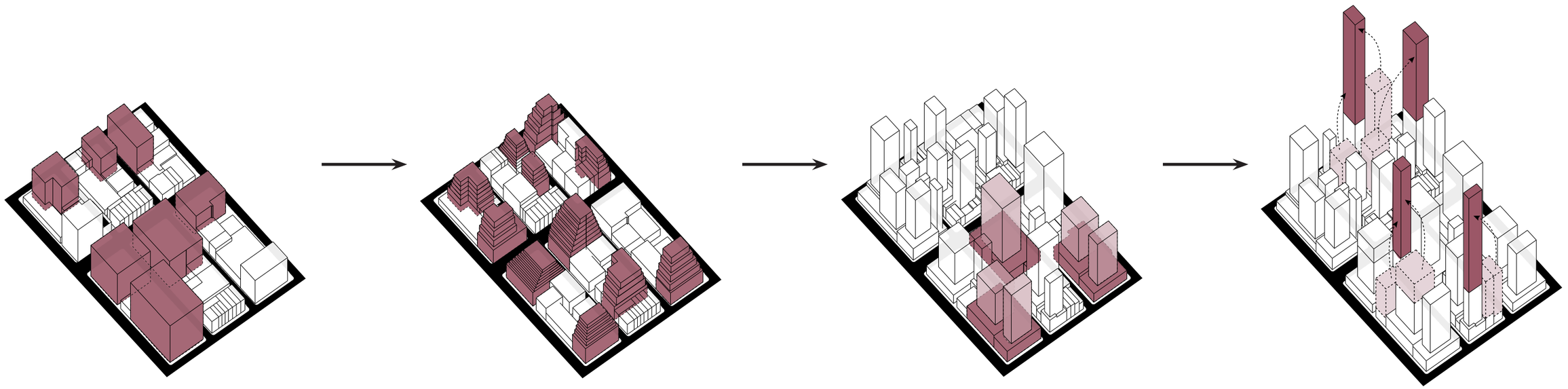
Oscar Newman, Underground City, New York, 1969



Earthscraper ?

DELIRIOUS DENSITY


MetLife



1900

Zoning 1916

Rezoning 1960

Midtown Special District 1980

Morphology


Madison Avenue
Lincoln Square District
Transit Land Use District
Clinton District
Midtown District
Garment Center District
Hudson Yards District
West Chelsea District
Union Square District
Limited Commercial District
Height > 200m
FAR > 15
FAR > 30
Landmarks
Special Districts
Built year after 2010
Rezoning after 2000

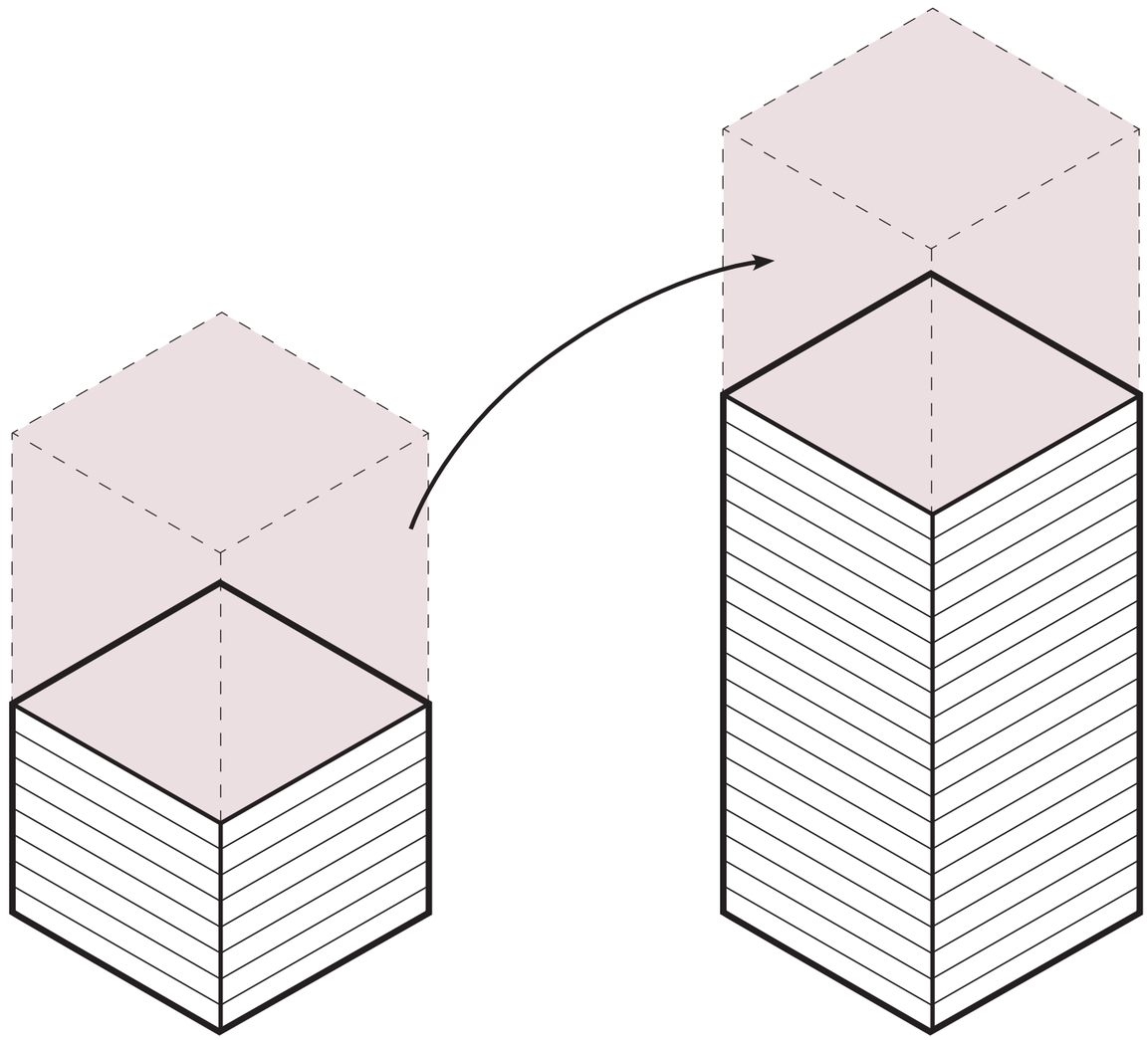
Intensity



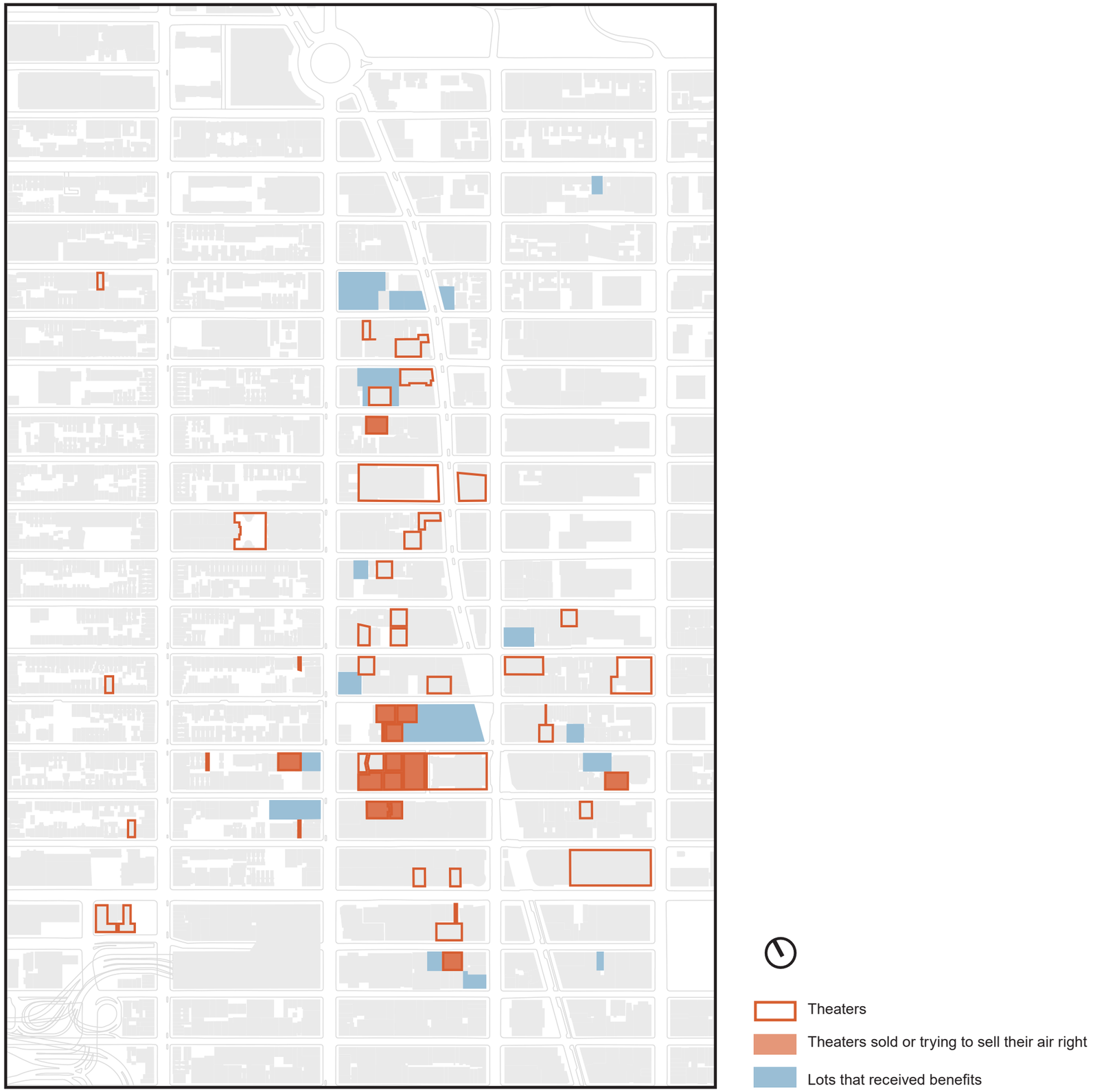
Unused Air Rights

BROADWAY

RELATED



Broadway Air Rights Trading



Theaters Air Rights Trading

Granting Site	Receiving Site	Size of Transfer	Date
Martin Beck aka Hirschfield Theater	750 8th Avenue	29,104 sf	5/22/06
	231 West 54th Street	7,438 sf	6/19/06
	750 8th Avenue	28,901 sf	9/27/06
	131-139 West 45th Street	8,483 sf	4/23/07
St. James Theater	231 West 54th Street	77,840 sf	6/19/06
	131-139 West 45th Street	9,489 sf	4/23/07
Broadhurst Theater	131-139 West 45th Street	54,820 sf	4/23/07
Booth Theater	250 West 55th Street	18,537 sf	1/28/08
	250 West 55th Street	42,081 sf	1/28/08
Shubert Theater	250 West 55th Street	29,667 sf	1/28/08
Majestic Theater	250 West 55th Street	67,351 sf	1/28/08
	306 West 44th Street	48,180 sf	9/24/08
Broadhurst and Booth Theater	120 West 41st Street, 239 West 41st Street	9,480 sf	2/17/09
Broadhurst Theater	120 West 57th Street	18,075 sf	9/6/11
Booth Theater	237 West 54th Street	24,100 sf	2/15/12
TOTAL		**473,546 sf**	

Theaters Air Rights Trading, NYC Planning, 2015

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Broadway Theaters sold over 184 million dollars of air within 6 years


The Shubert Organization

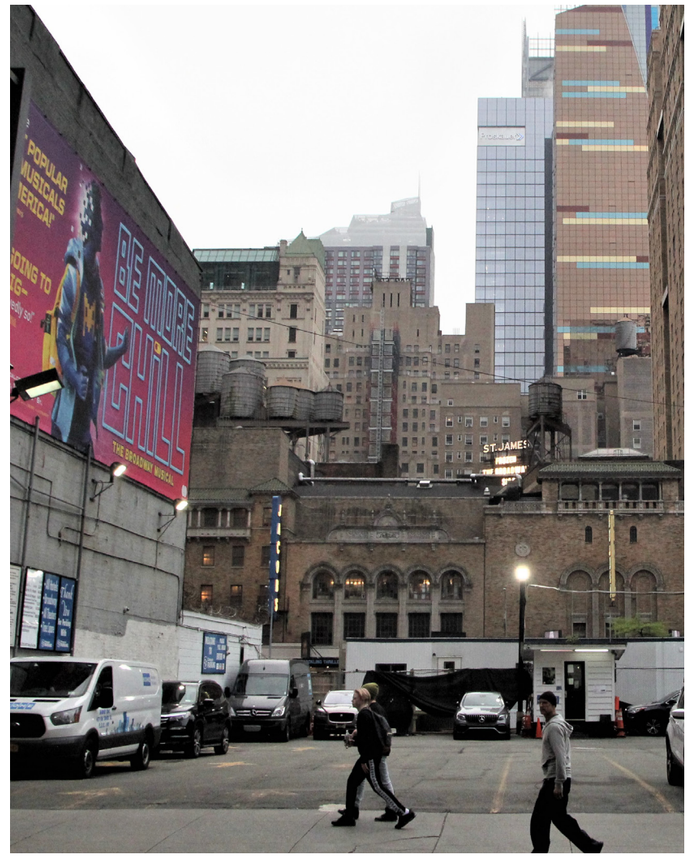
Is Broadway Theaters Doing Fine?



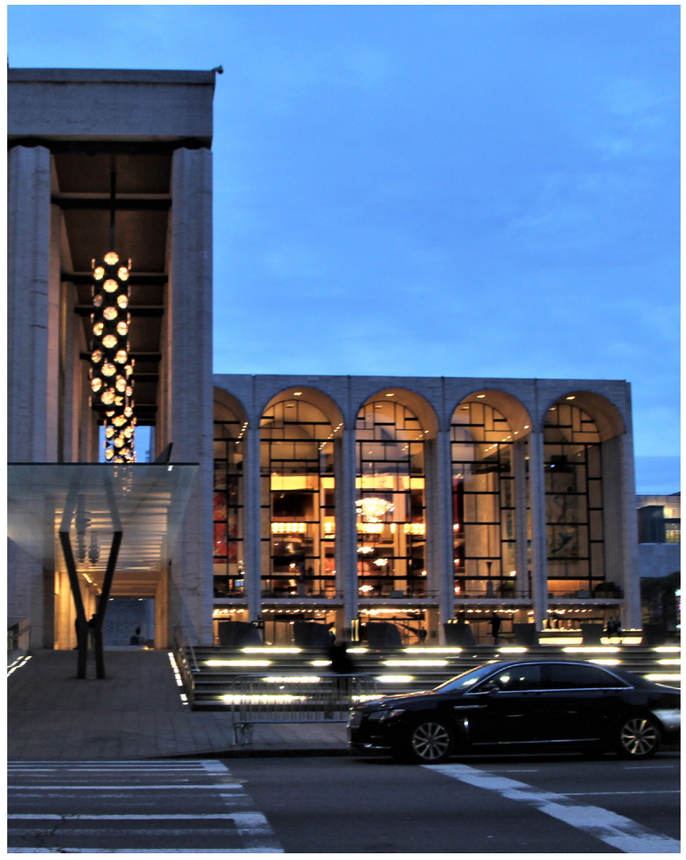


High Land Value

VS



Low Density



Theatrical Jouney

VS



Club Queue on the Street



Contemporary Performance Chamber

VS

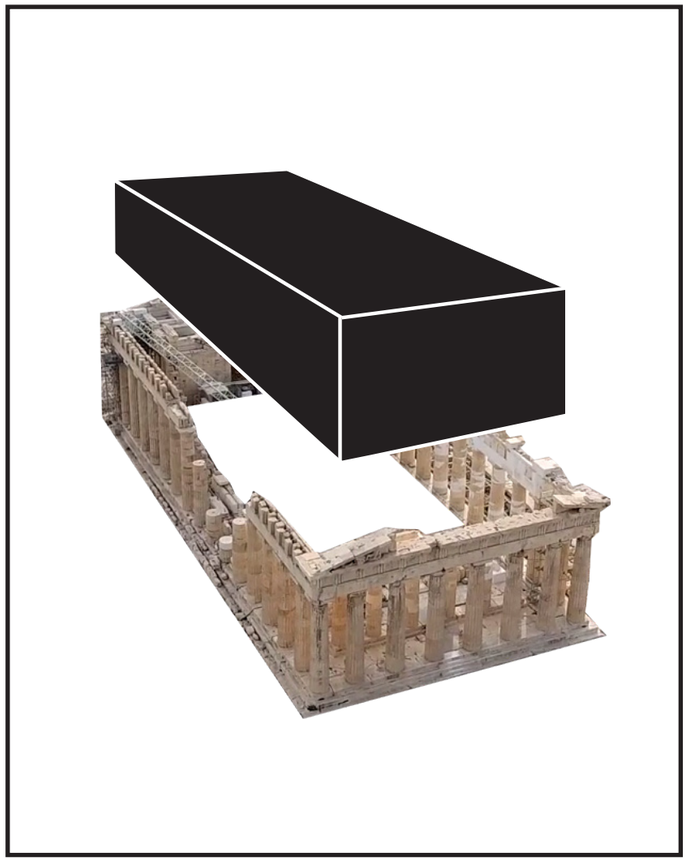


Outdated Stage Infrastructure



Interior Urbanism

VS



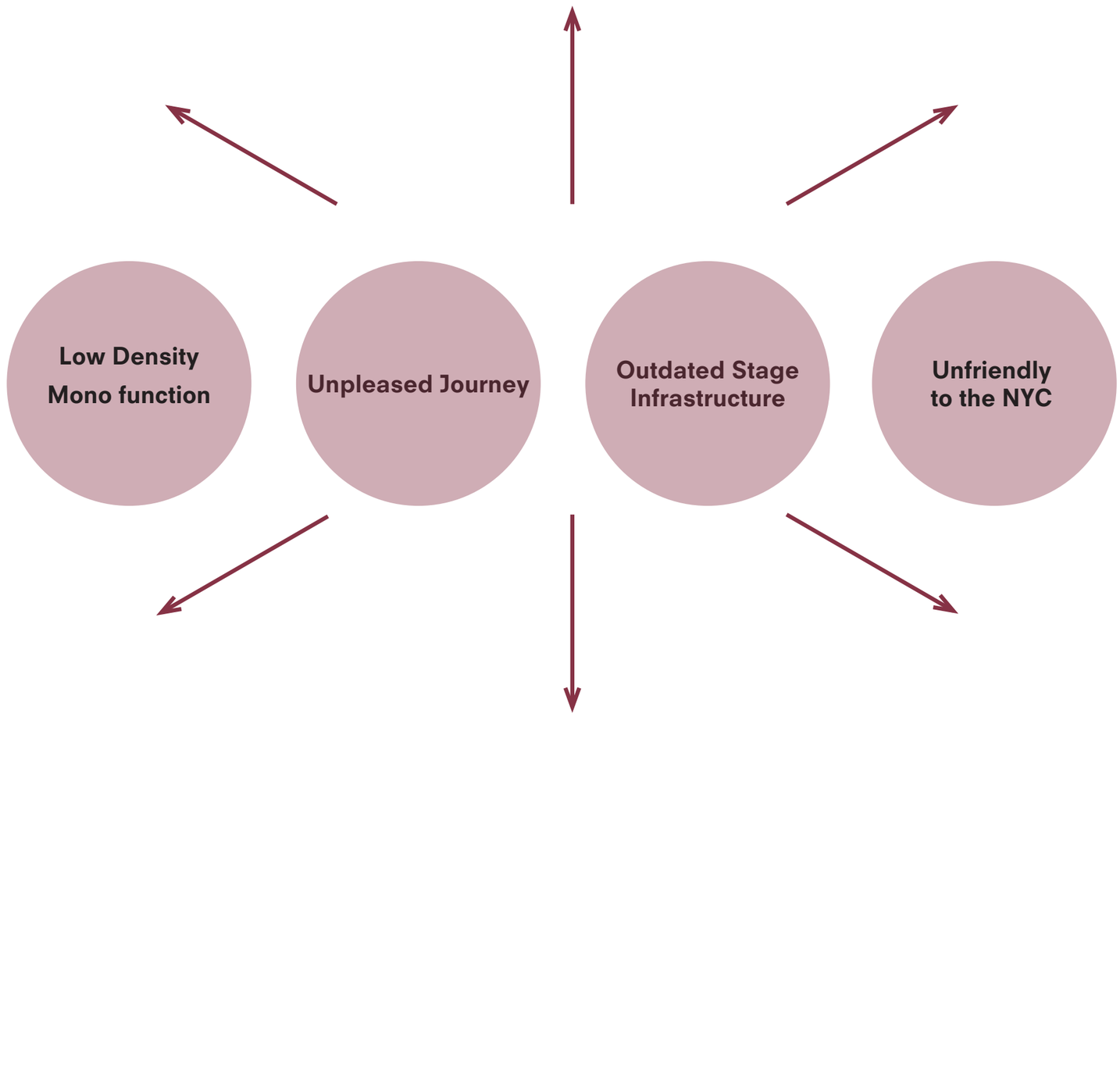
Closed Off Black Box

Low Density
Mono function

Unpleased Journey

Outdated Stage
Infrastructure

Unfriendly
to the NYC


Low Density
Mono function
Unpleased Journey
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to the NYC

Sold Air Rights

Low Density
Mono function

Unpleased Journey

Outdated Stage
Infrastructure

Unfriendly
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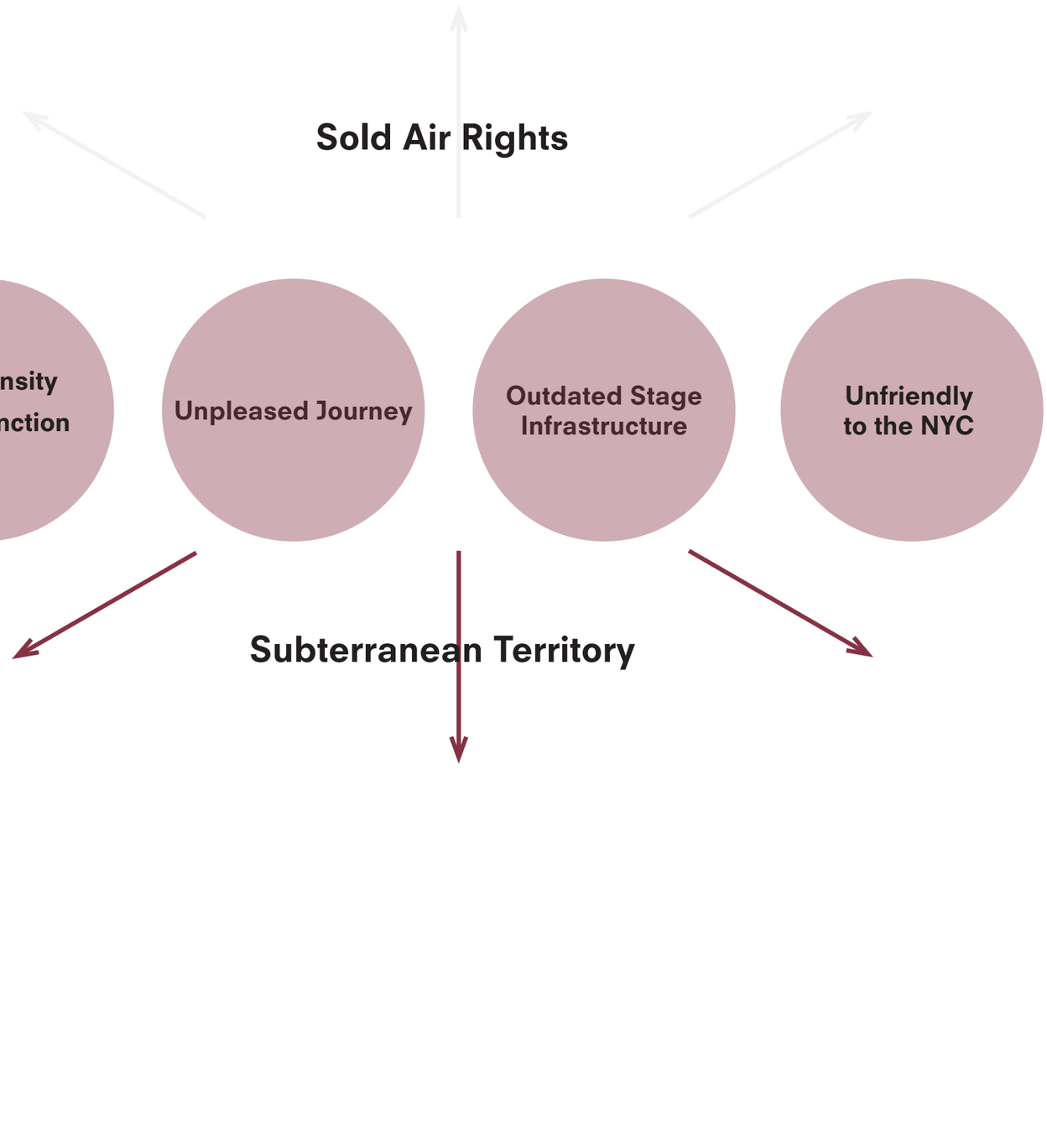
Sold Air Rights
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Infrastructure
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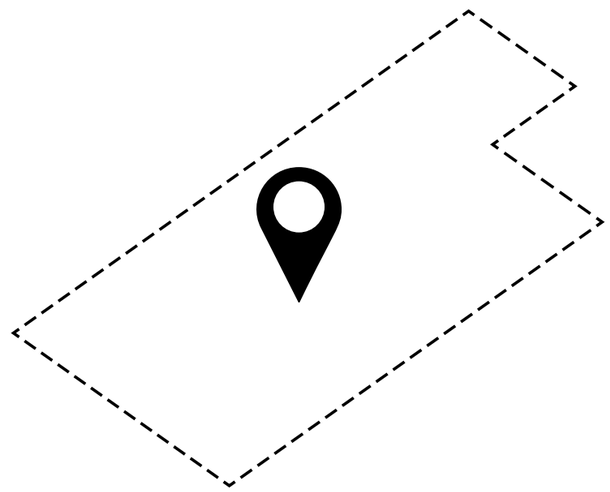
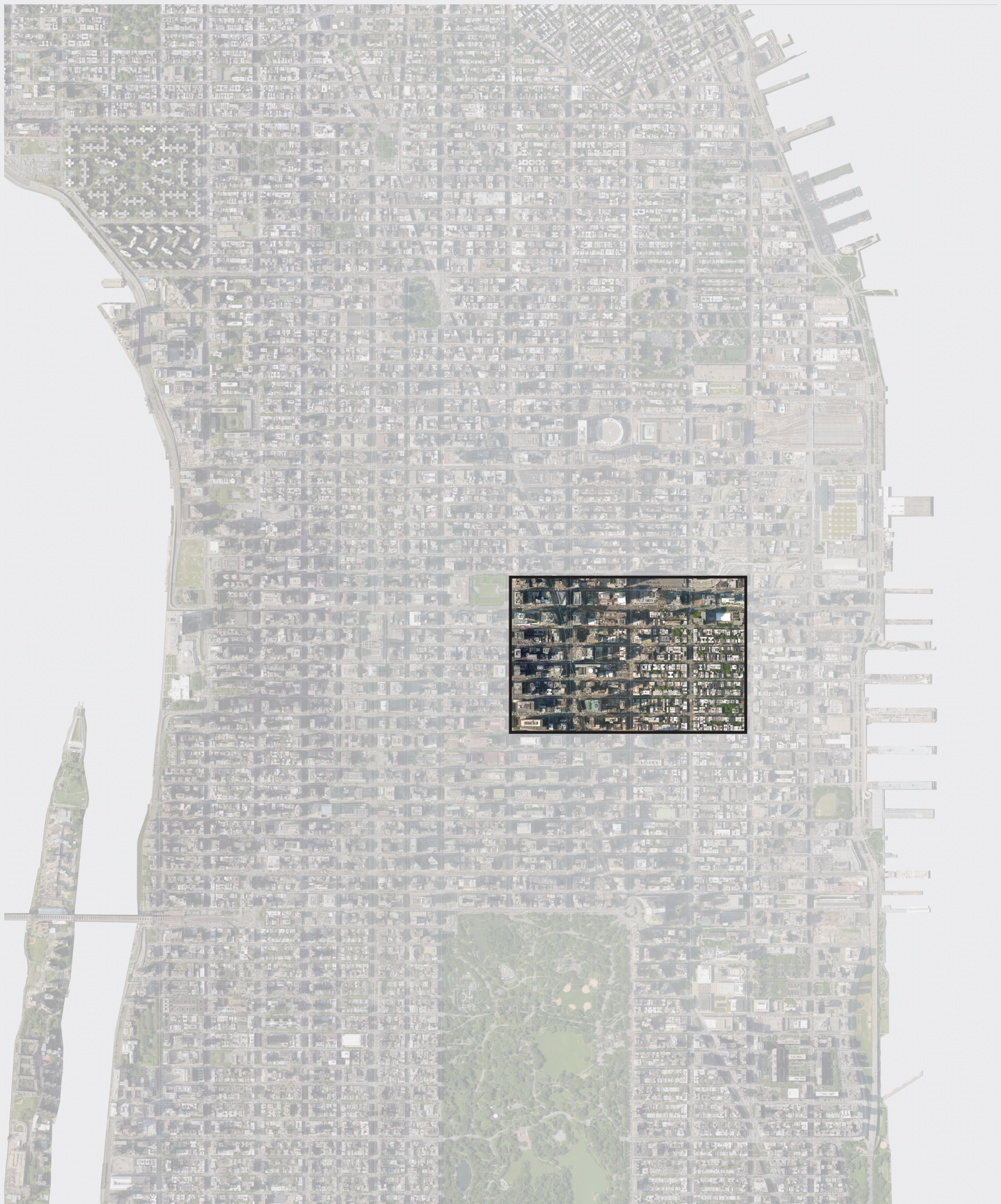
Subterranean Territory

SUBTERRANEAN TERRITORY



Site Argument

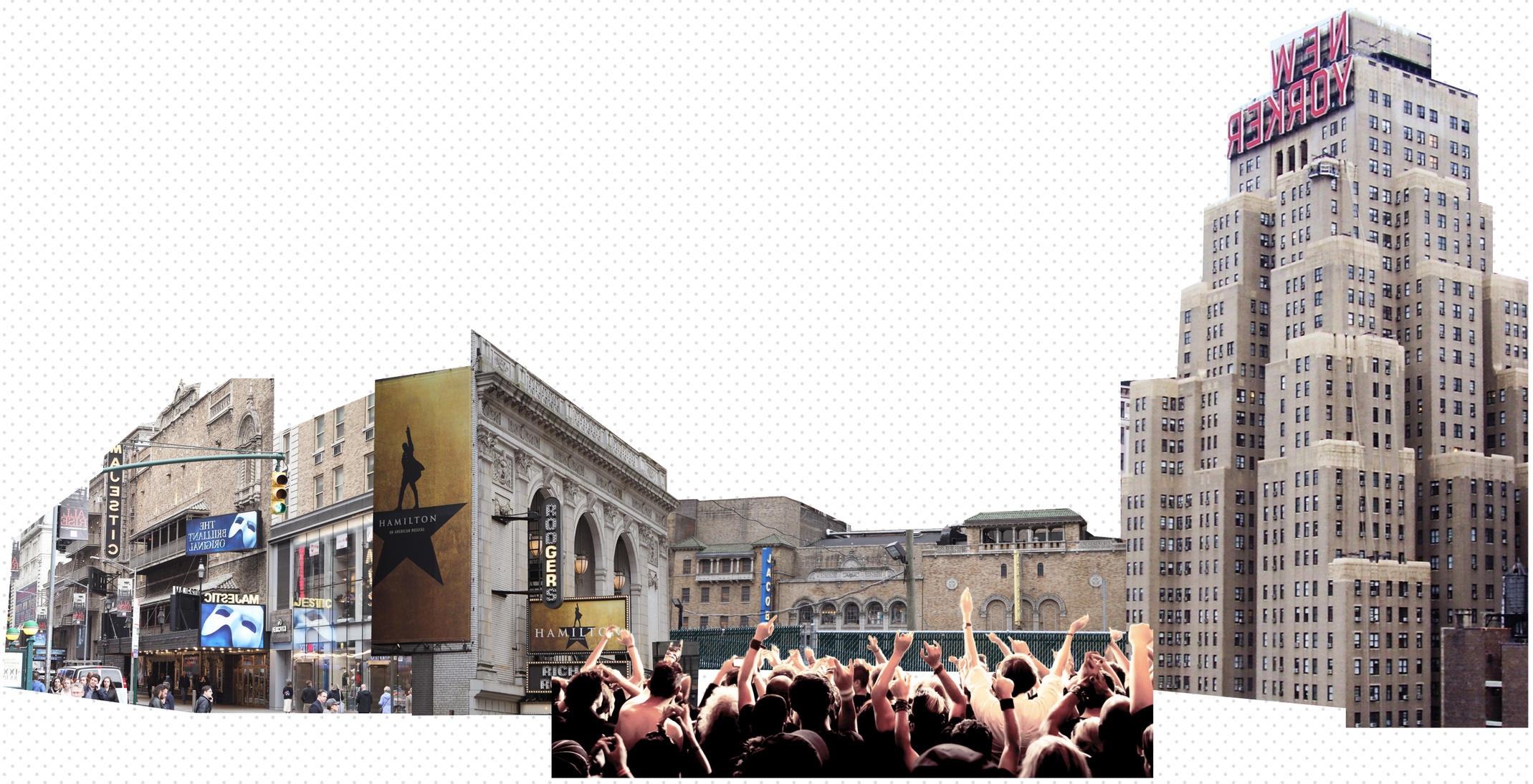




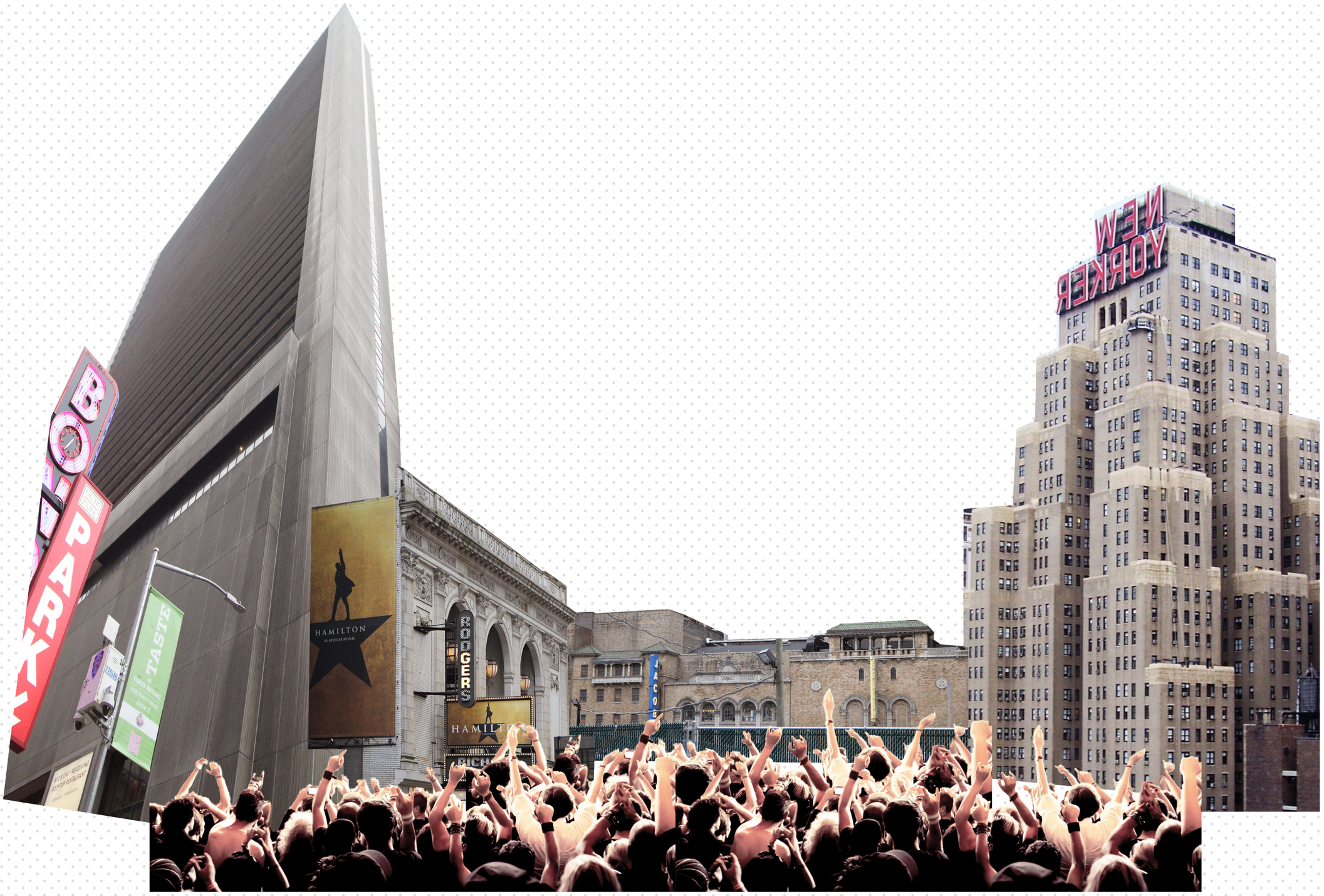

W
HOTELS
THOMSON REUTERS



Broadway Theaters



Broadway Theaters



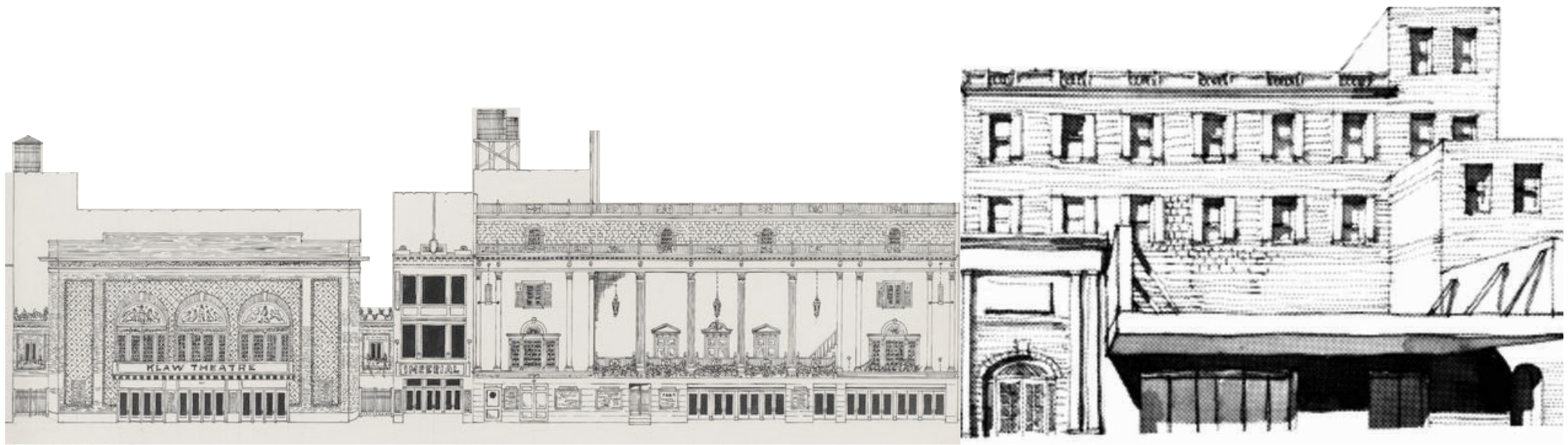
Broadway Theaters



Front Yard

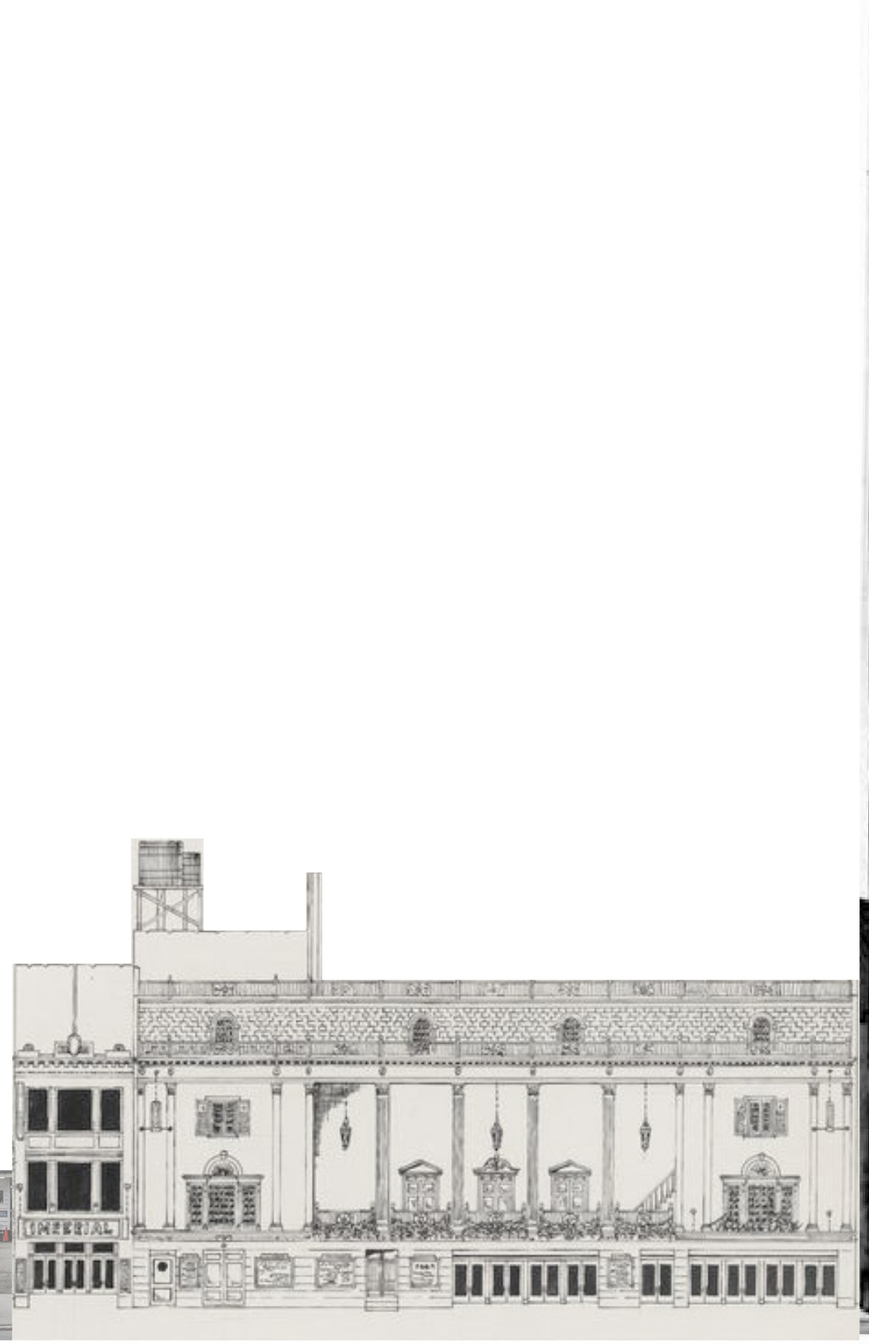


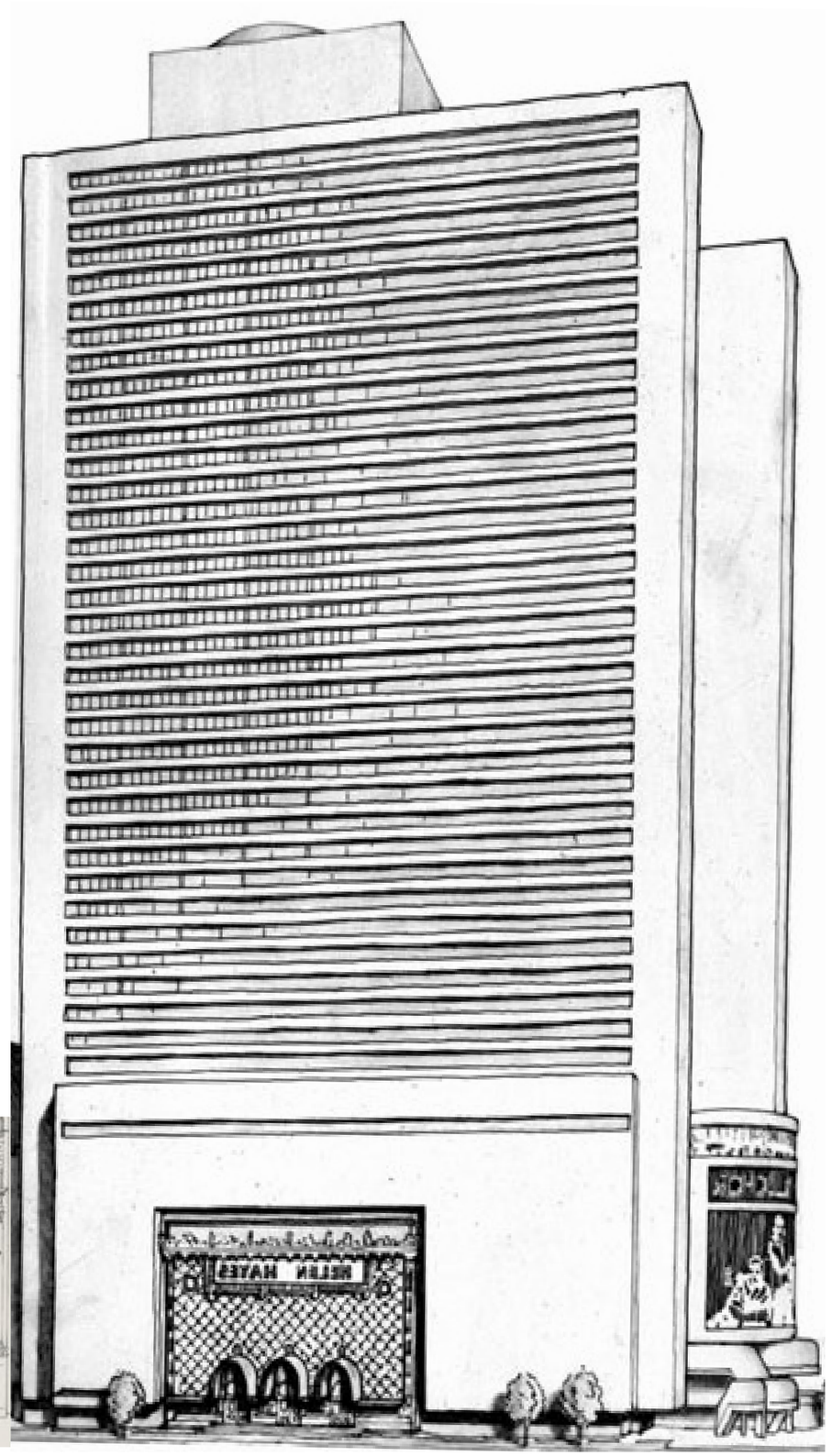
Back Yard



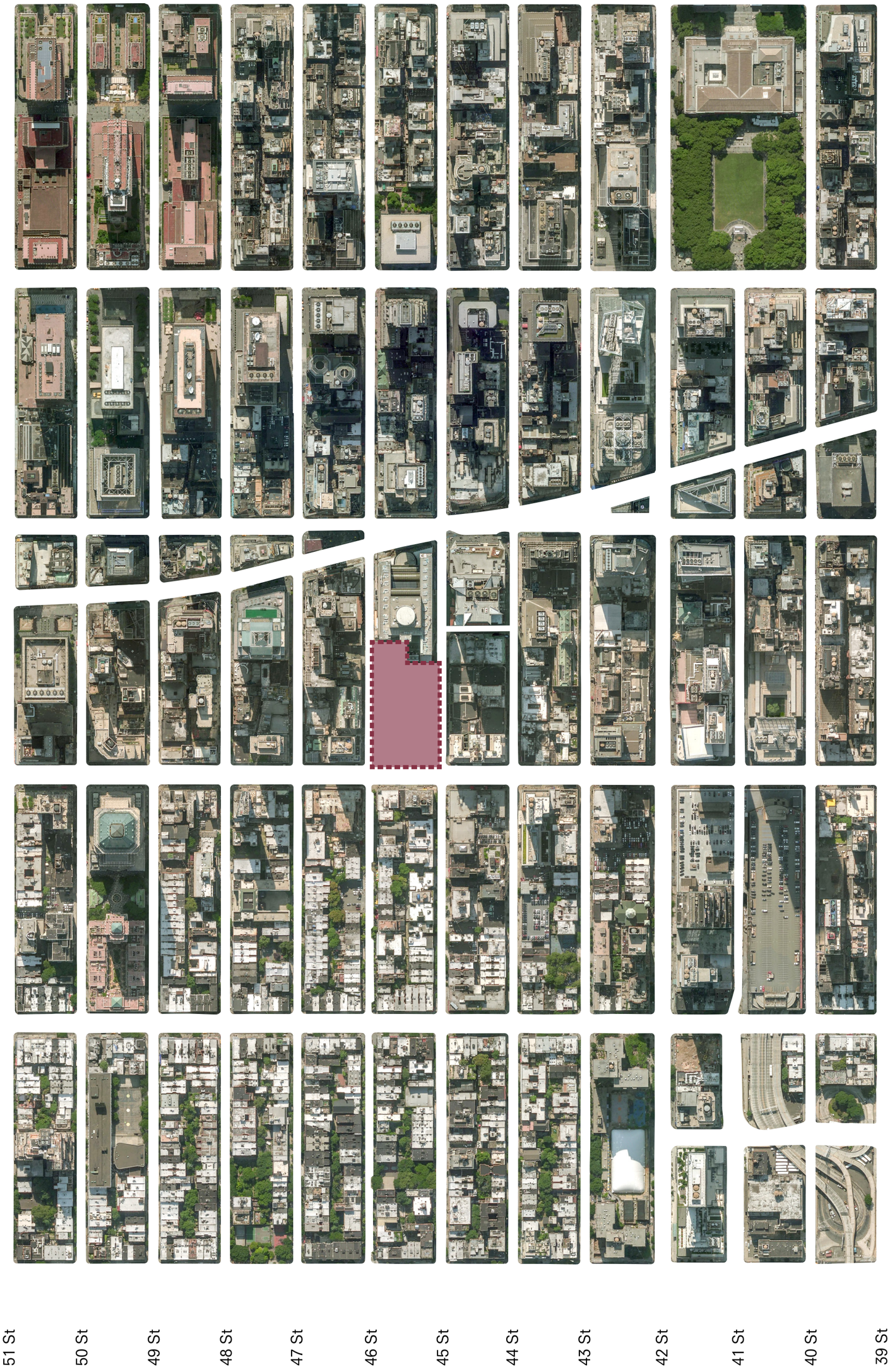
45 St, 1950







45 St, 2019


5th Ave
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Broadway
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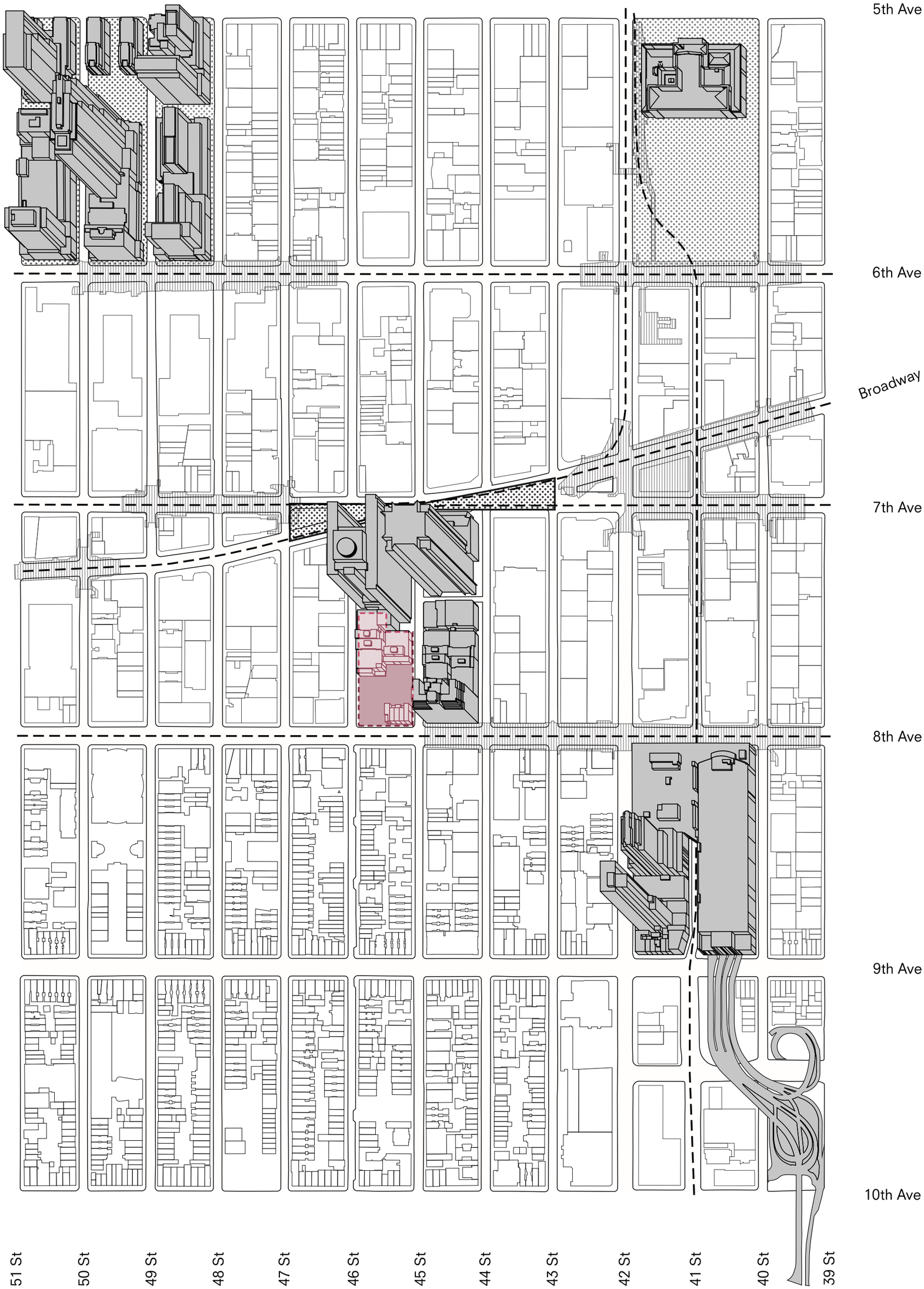
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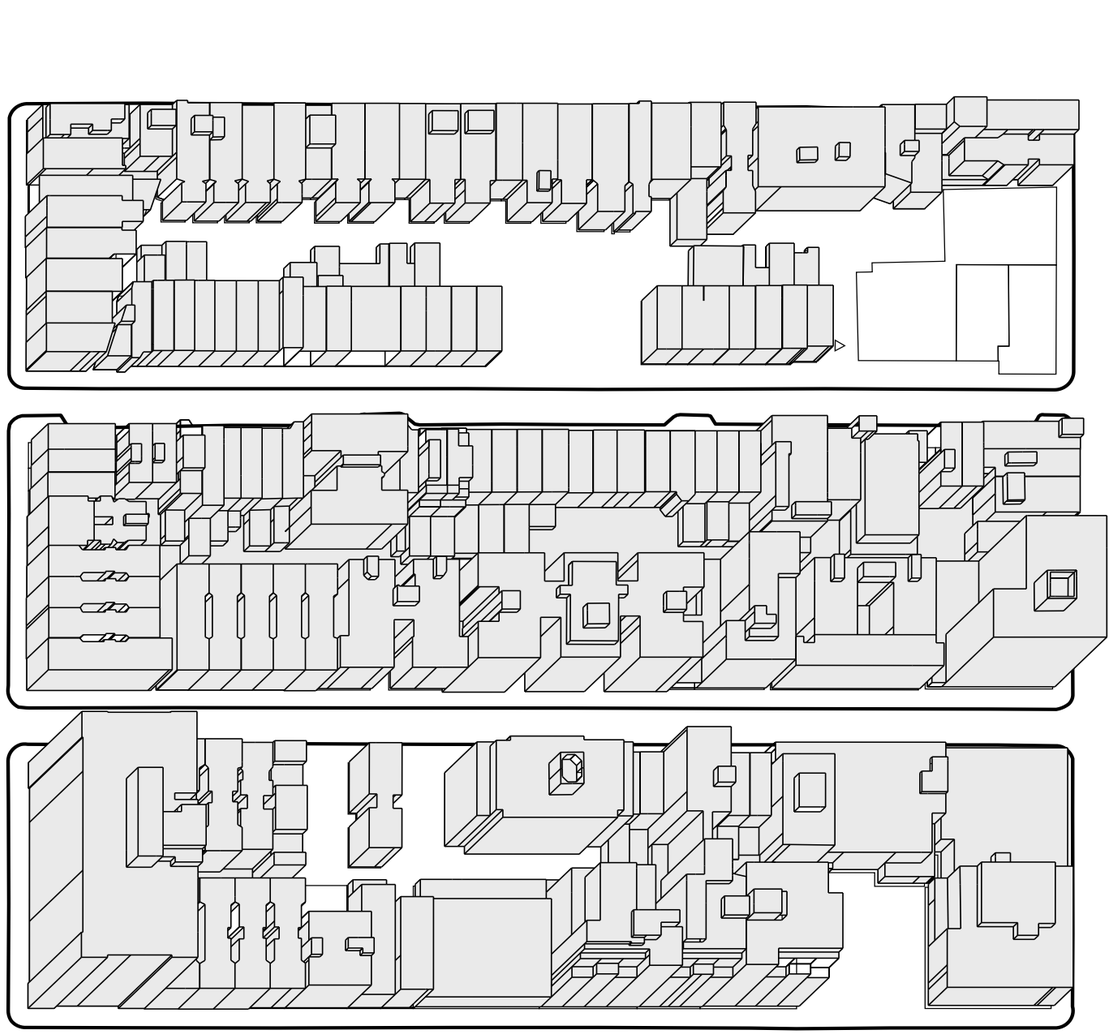
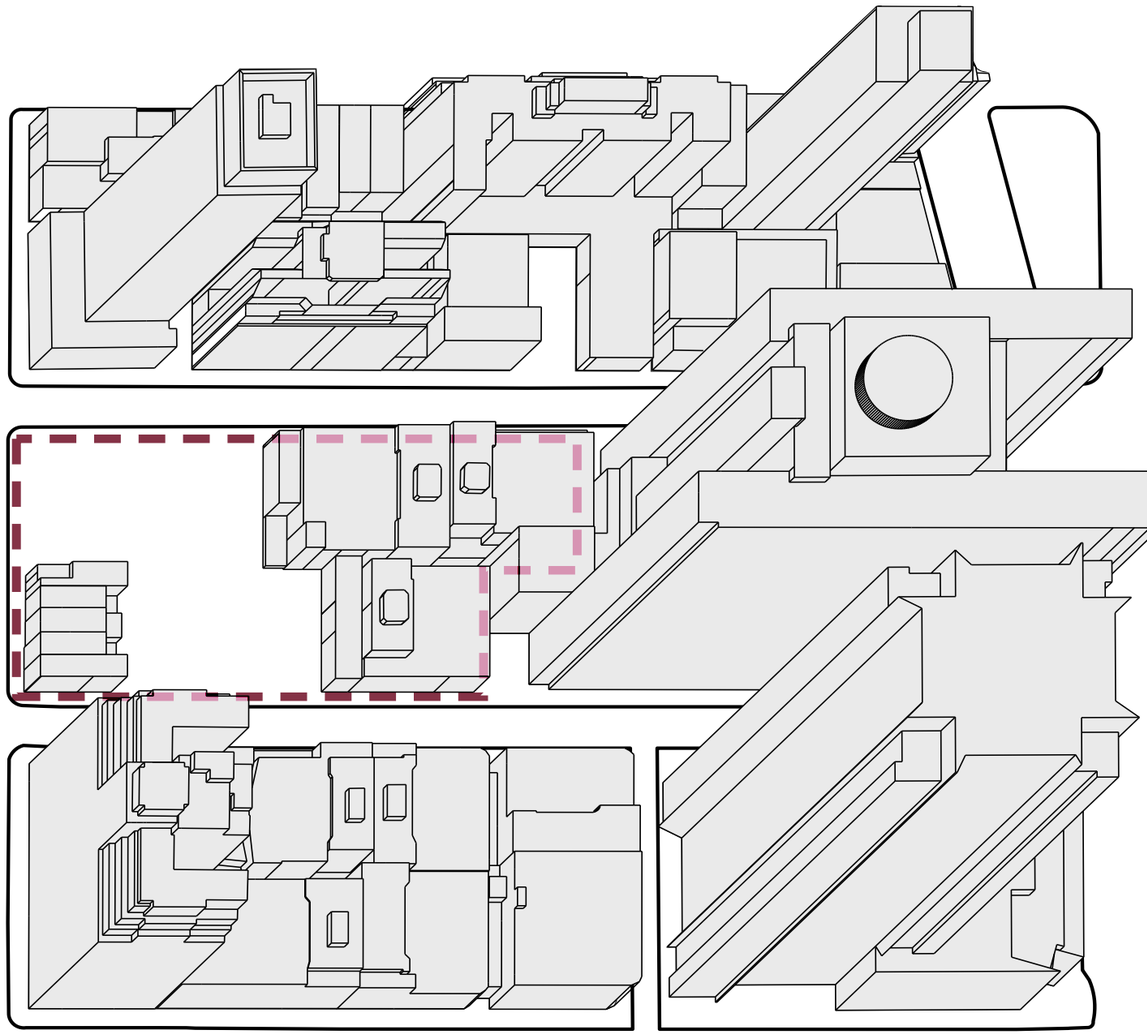
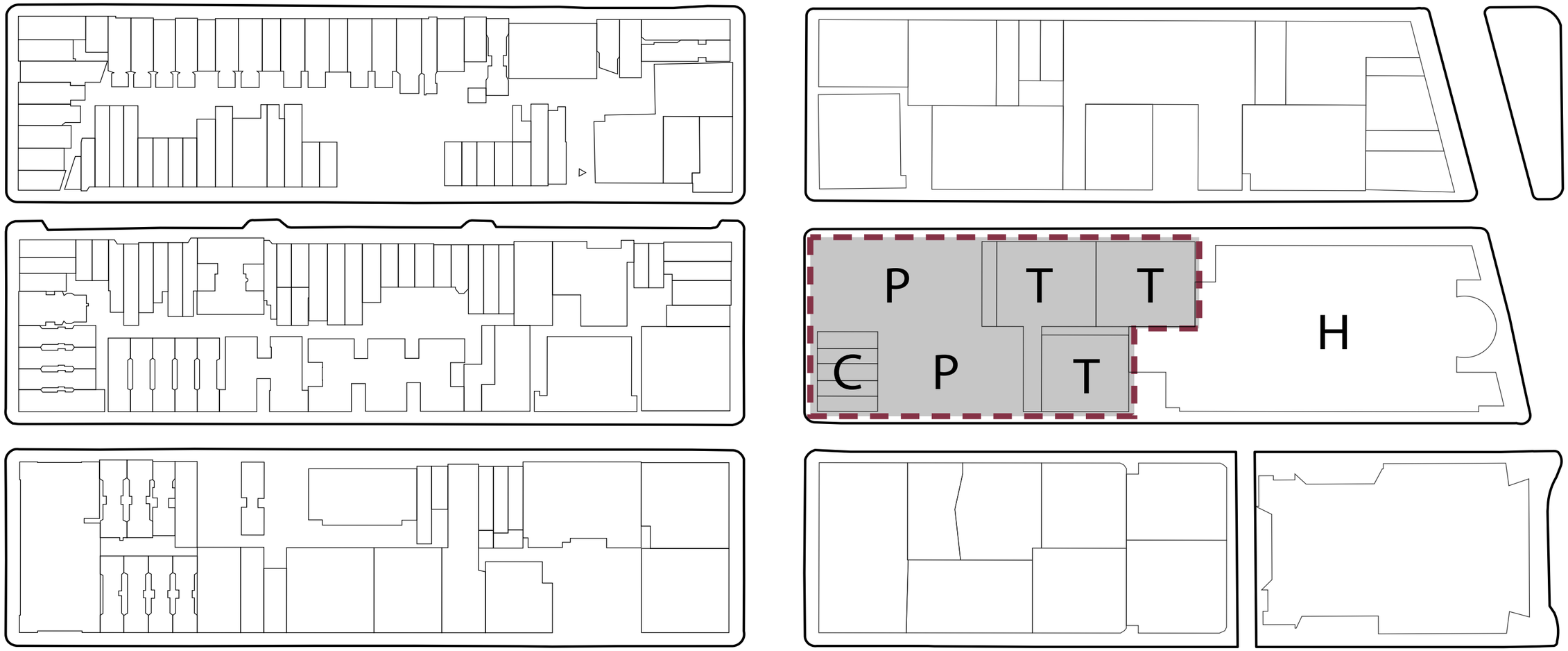
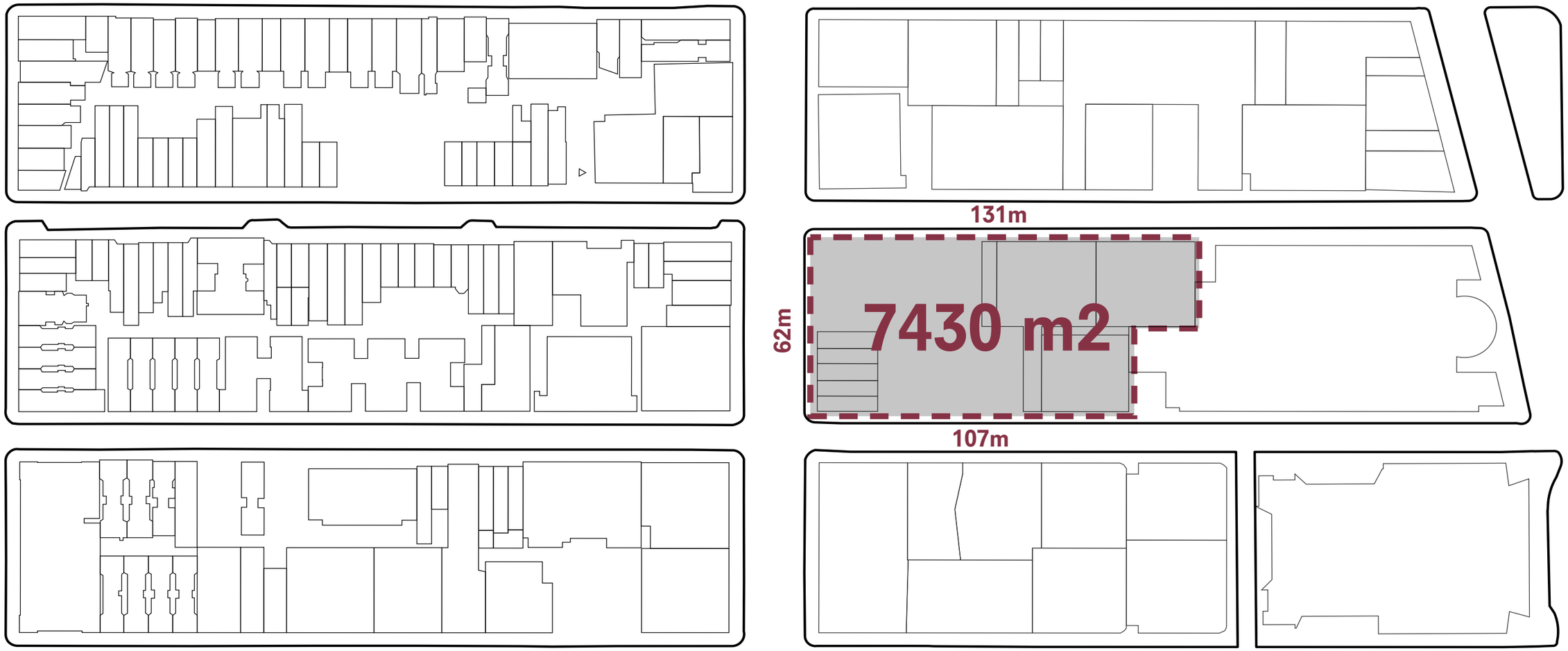




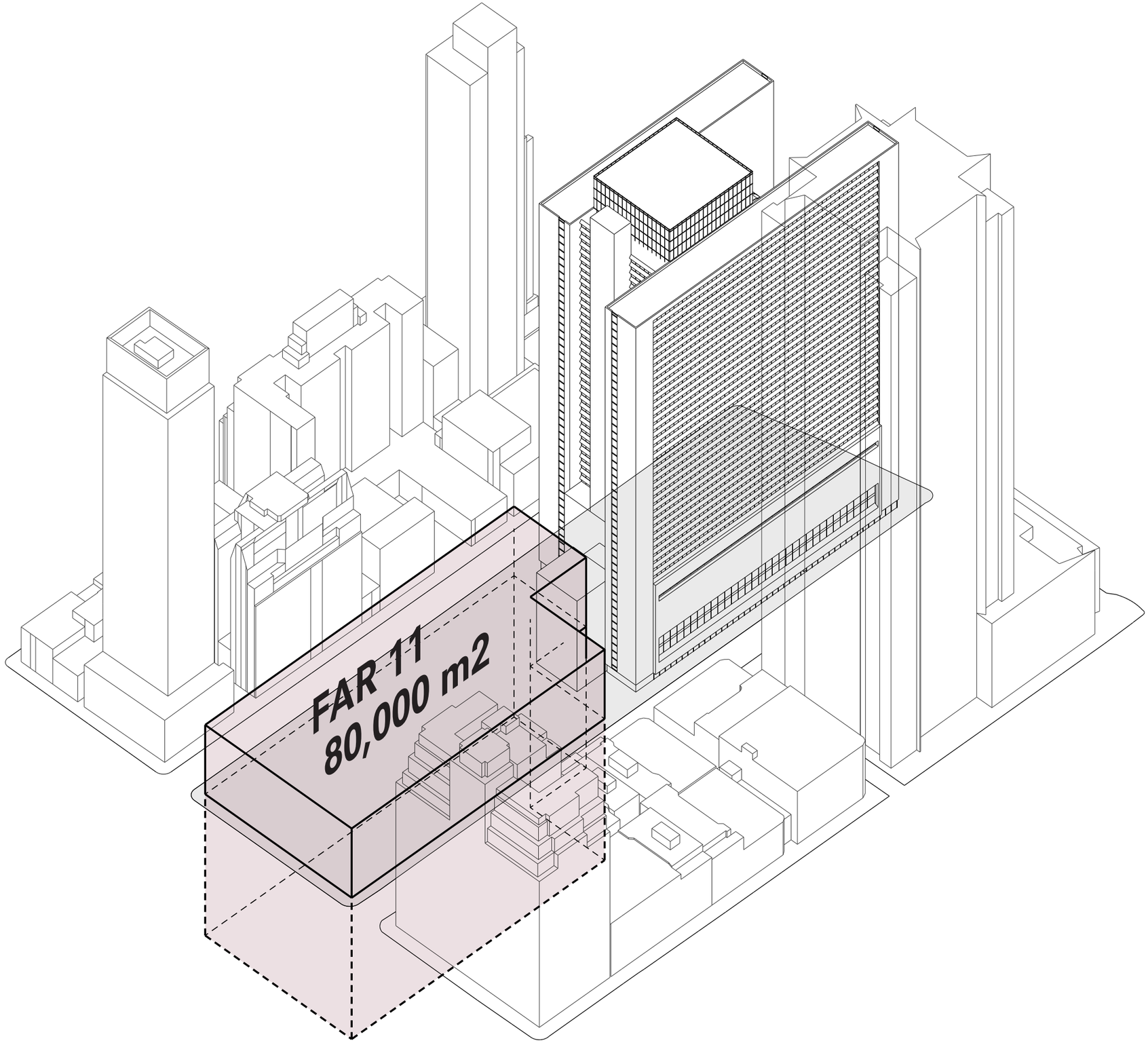
Density



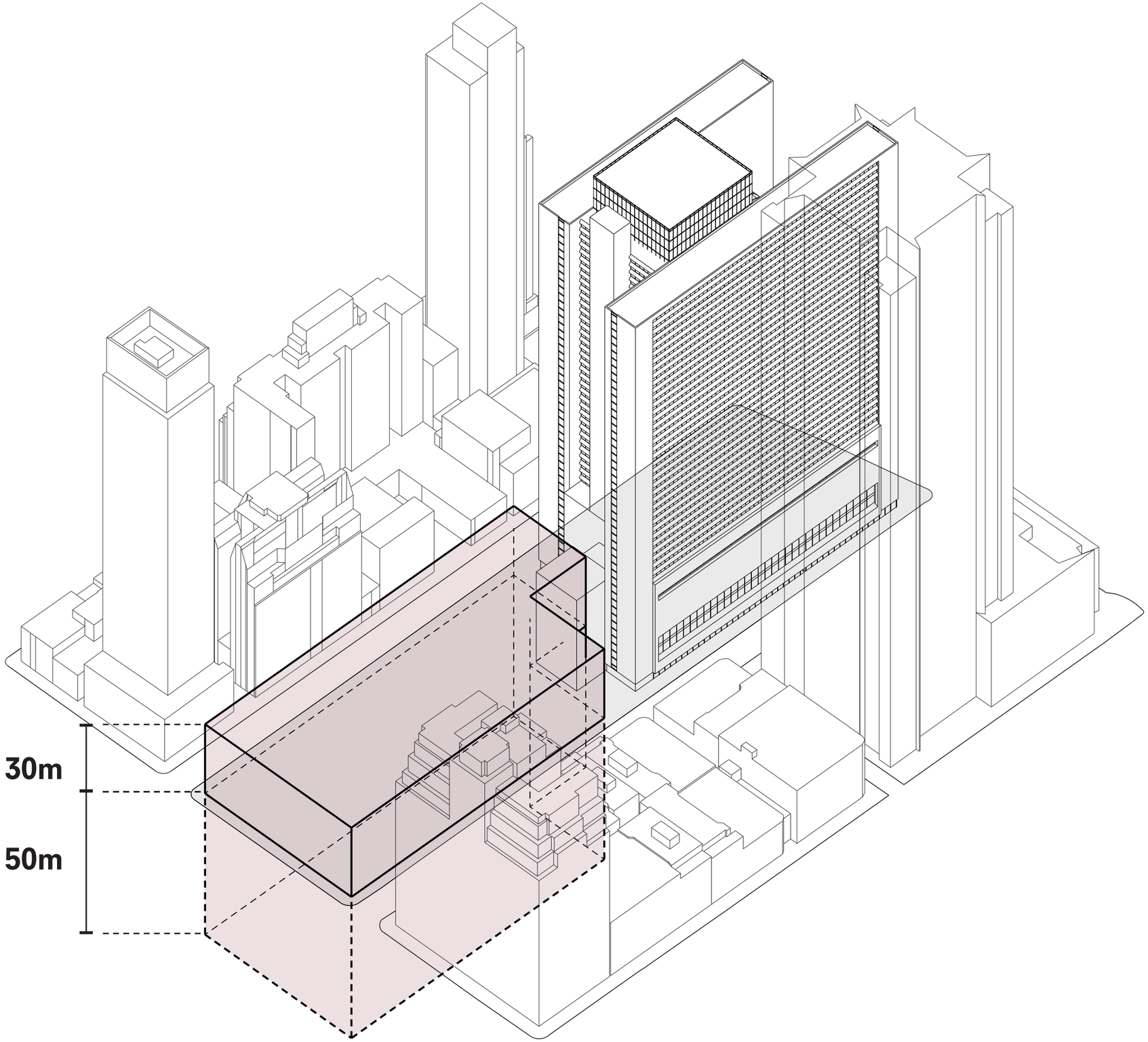
P-Parking, T-Theater, H-Hotel, C-Commercial



Site Area



Envelope



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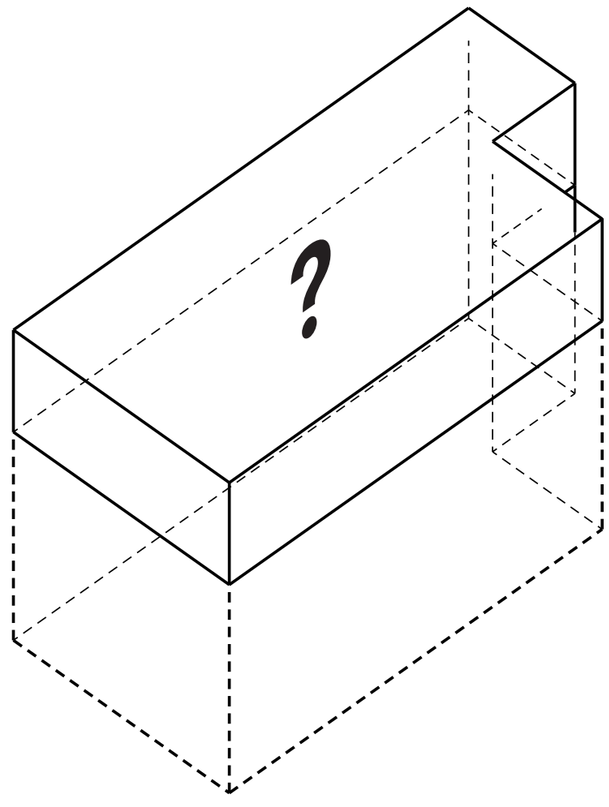
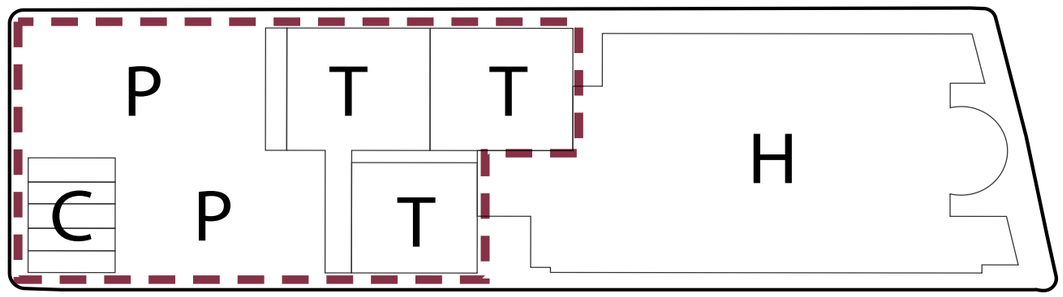
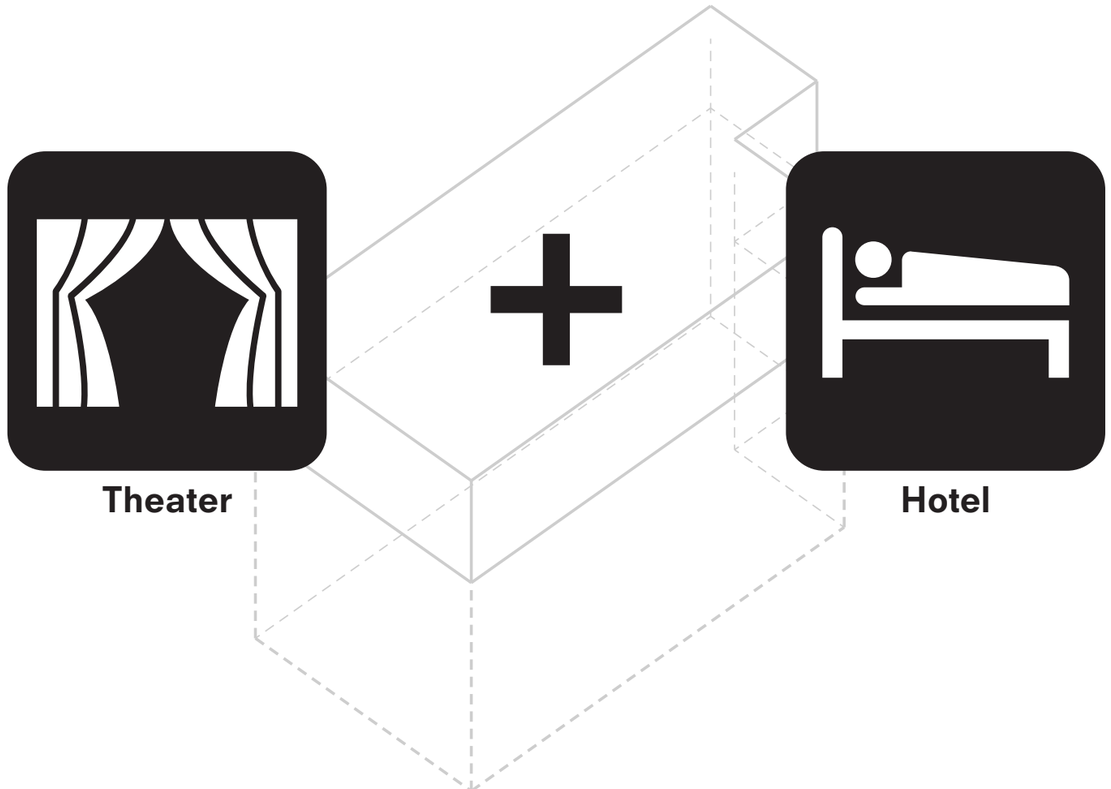


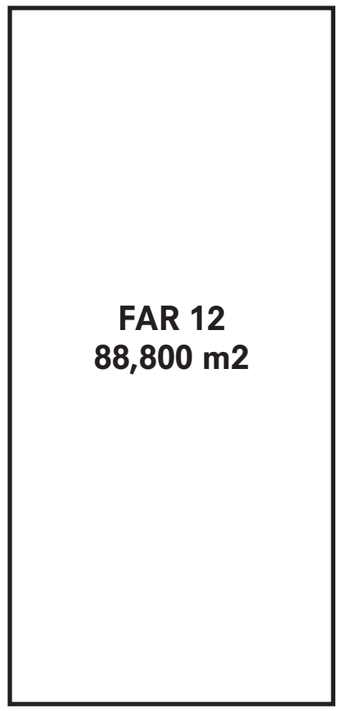
Programme



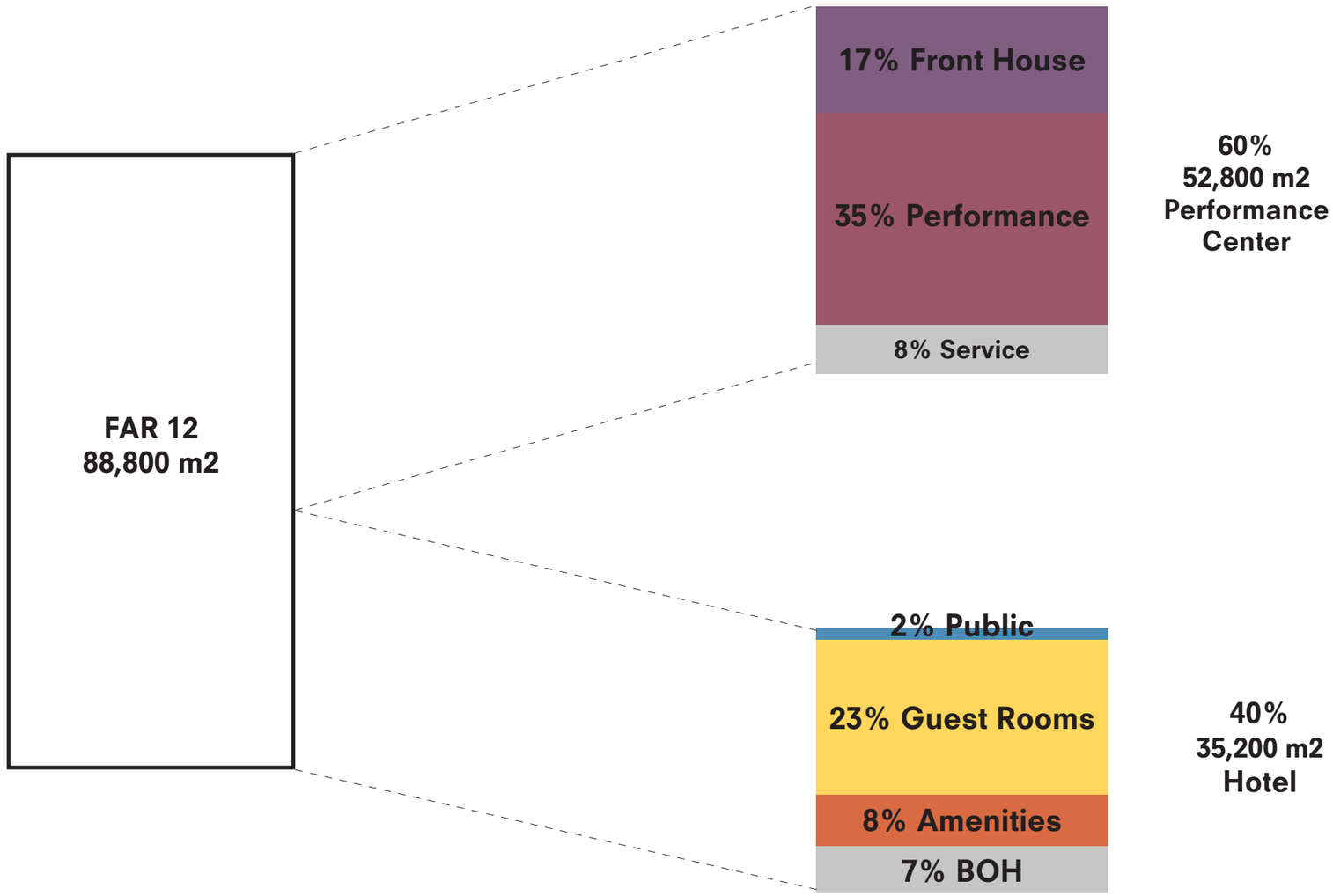
Existing Programme



Programme



Proposed Programme Bar



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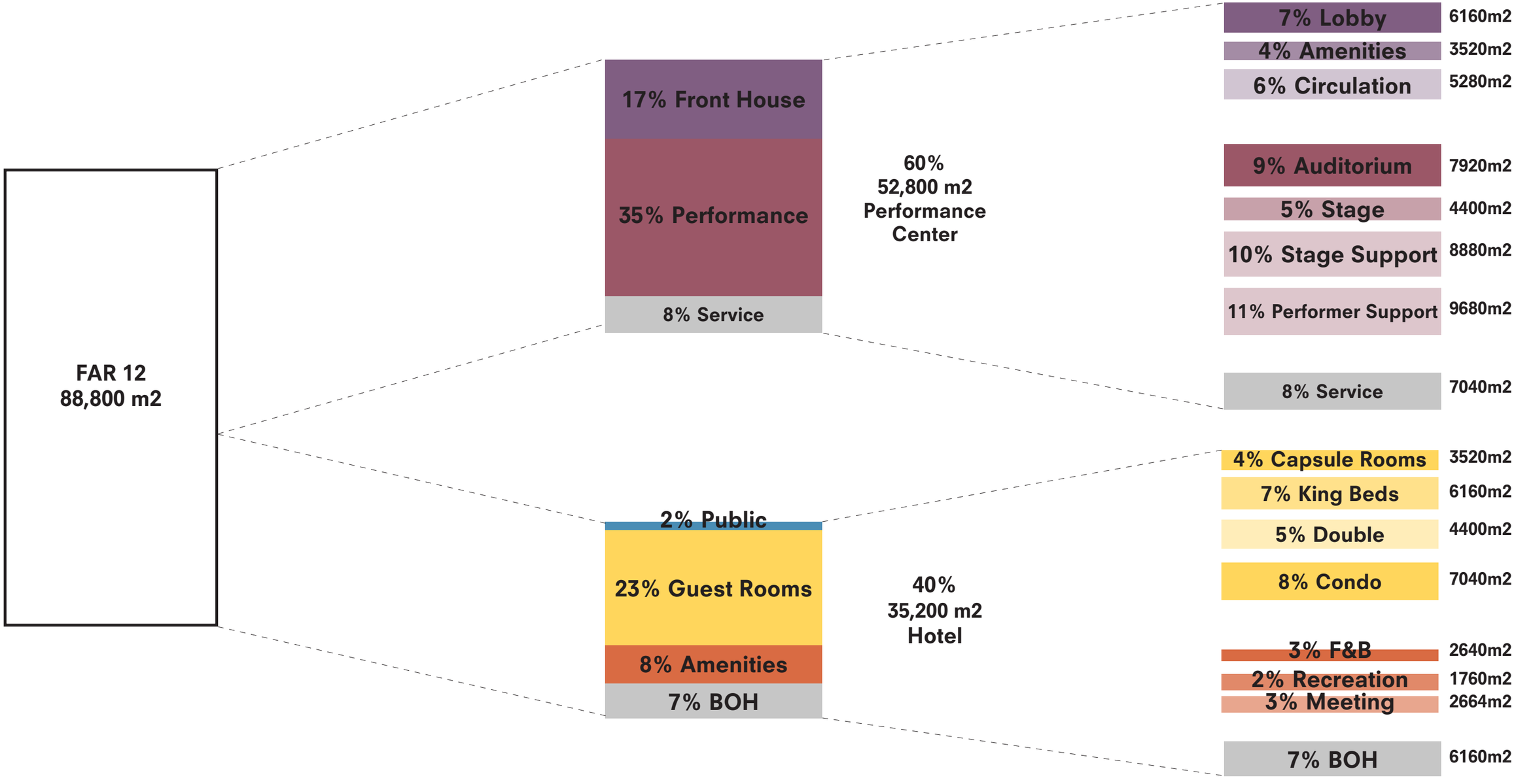


Proposed Programme Bar

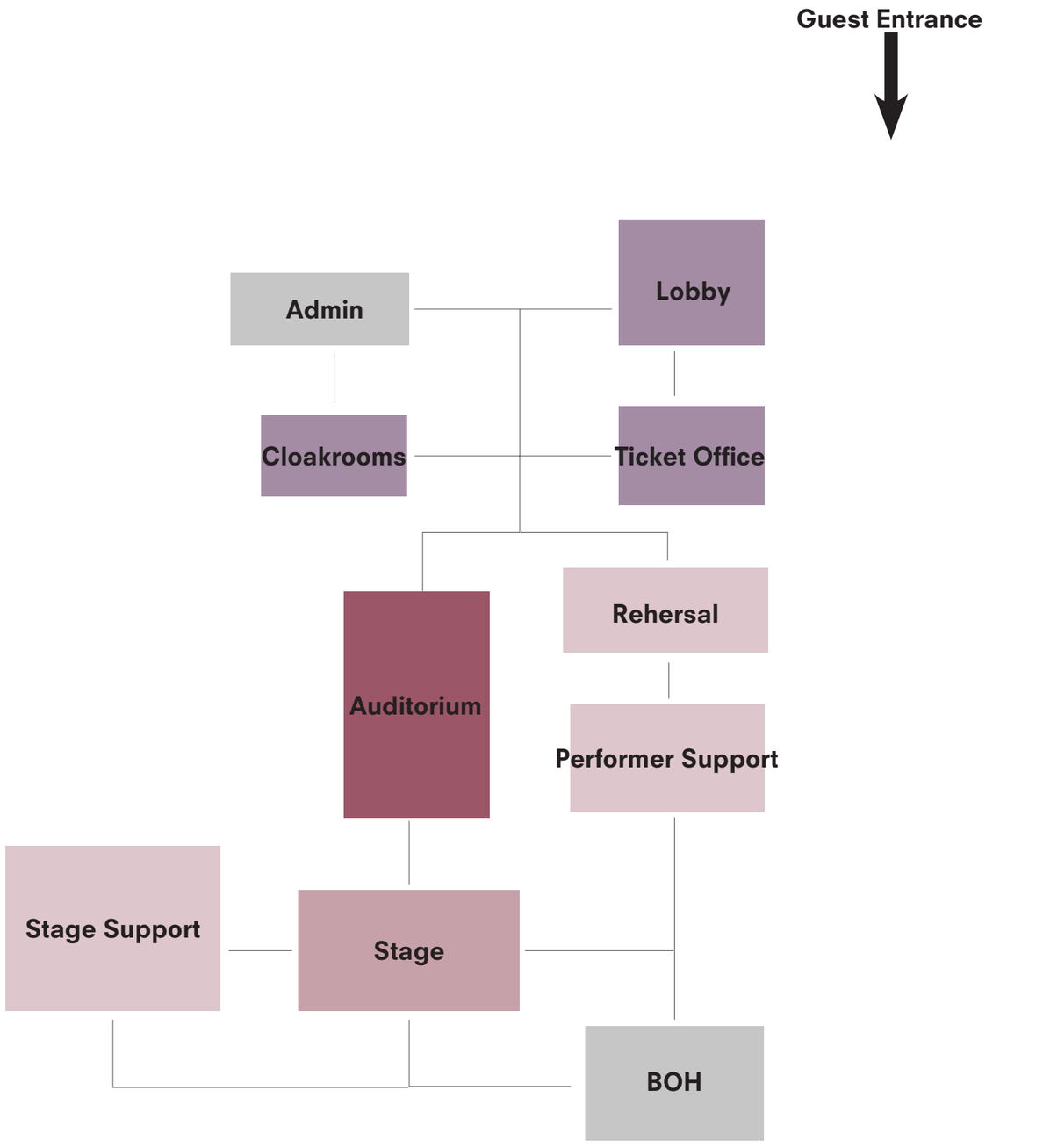
Guest Entrance



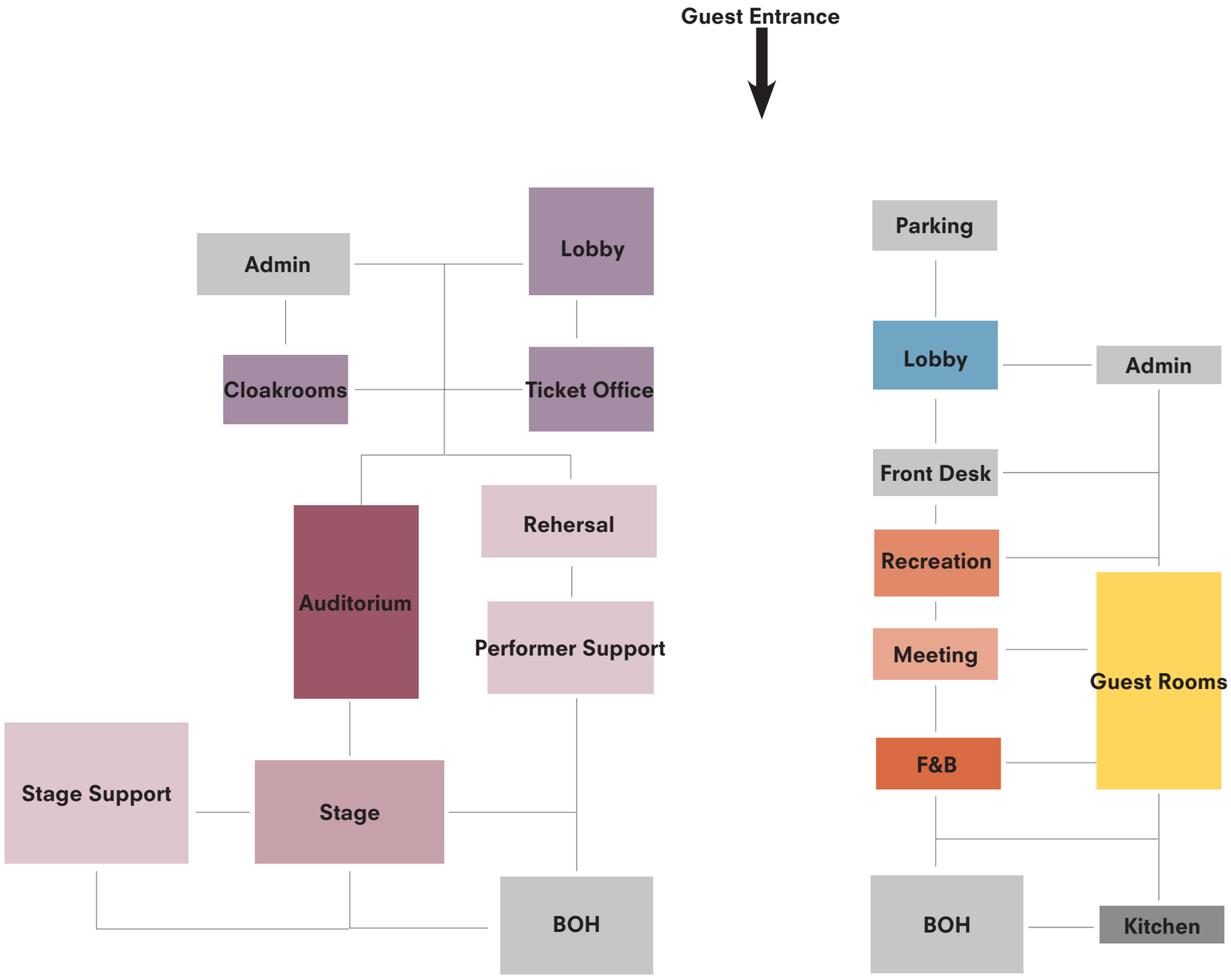


Service Entrance

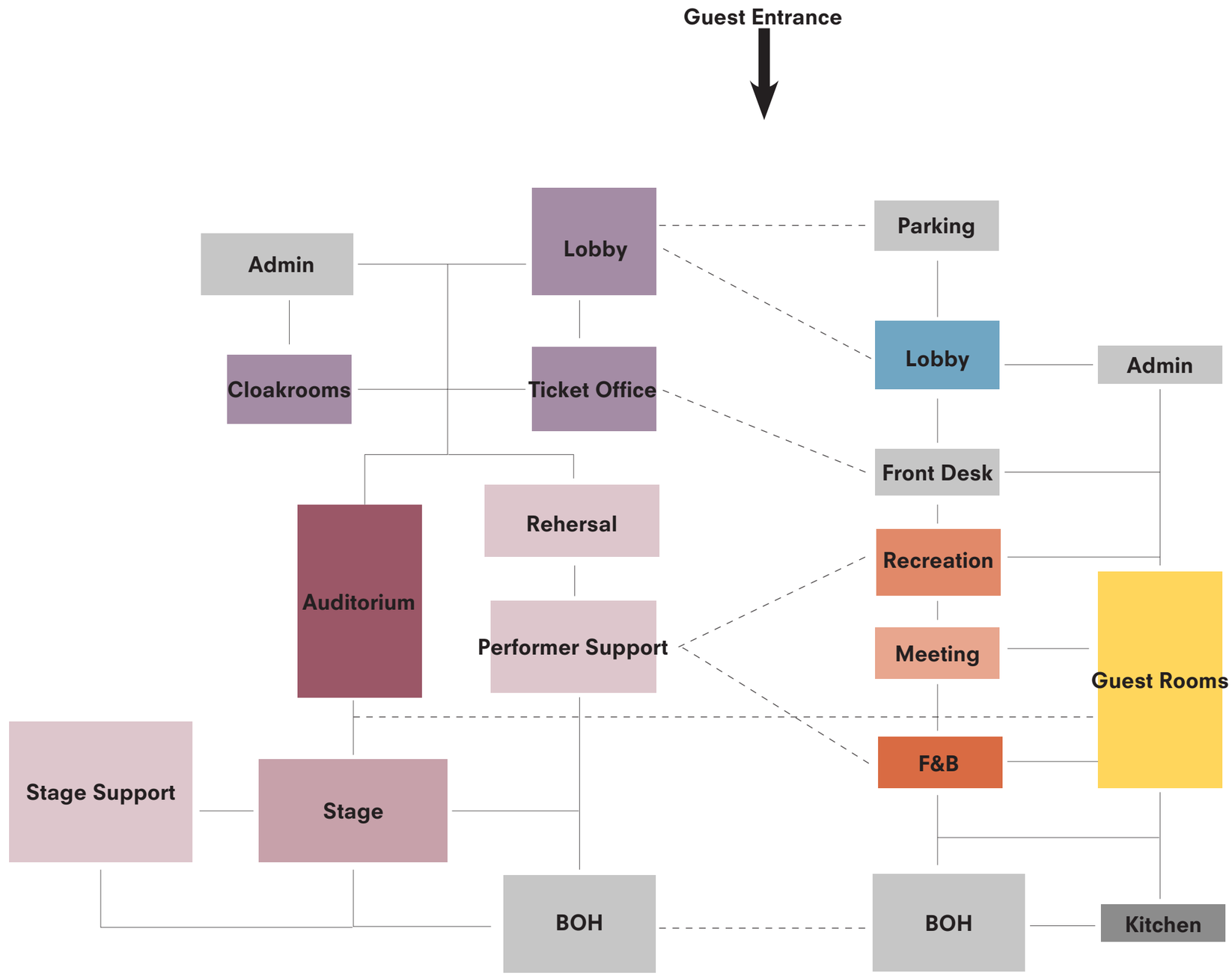
Programme Relation



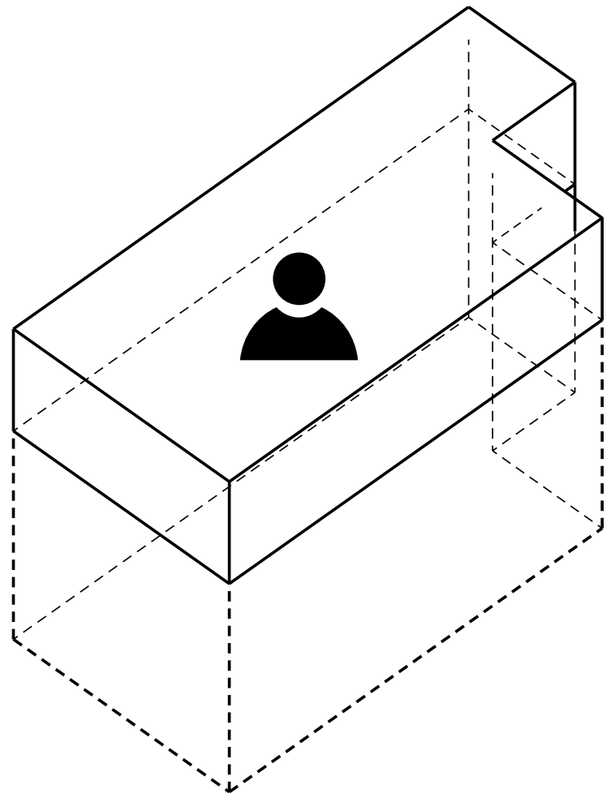
Programme Relation



Programme Relation



Programme Relation



Character

Sold Air Rights

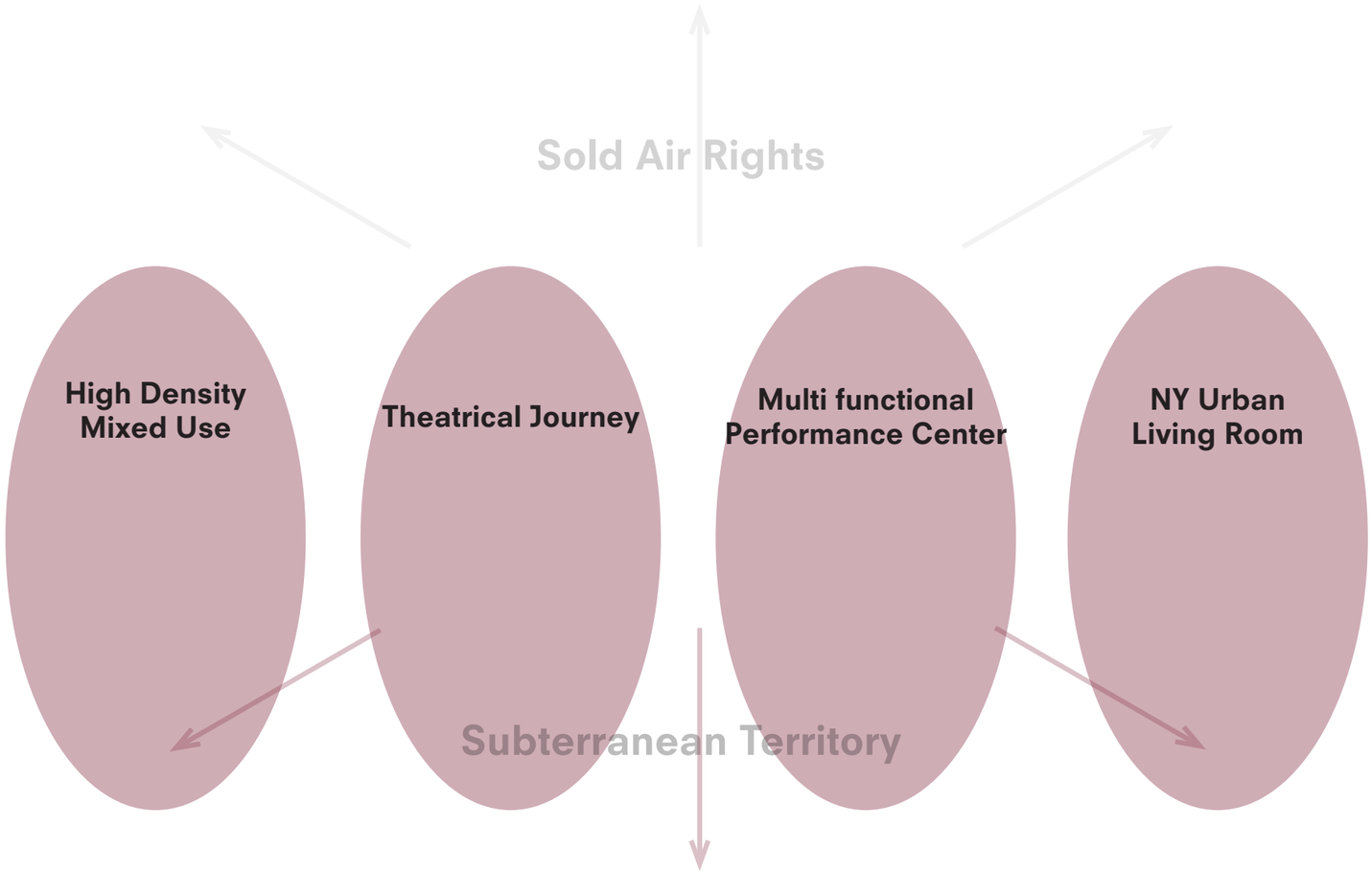
Low Density
Mono Function

Unpleased Journey

Outdated Stage
Infrastructure

Unfriendly
to the NYC

Subterranean Territory


Sold Air Rights
High Density
Mixed Use
Theatrical Journey
Multi functional
Performance Center
NY Urban
Living Room
Subterranean Territory

DESIGN CONCEPT

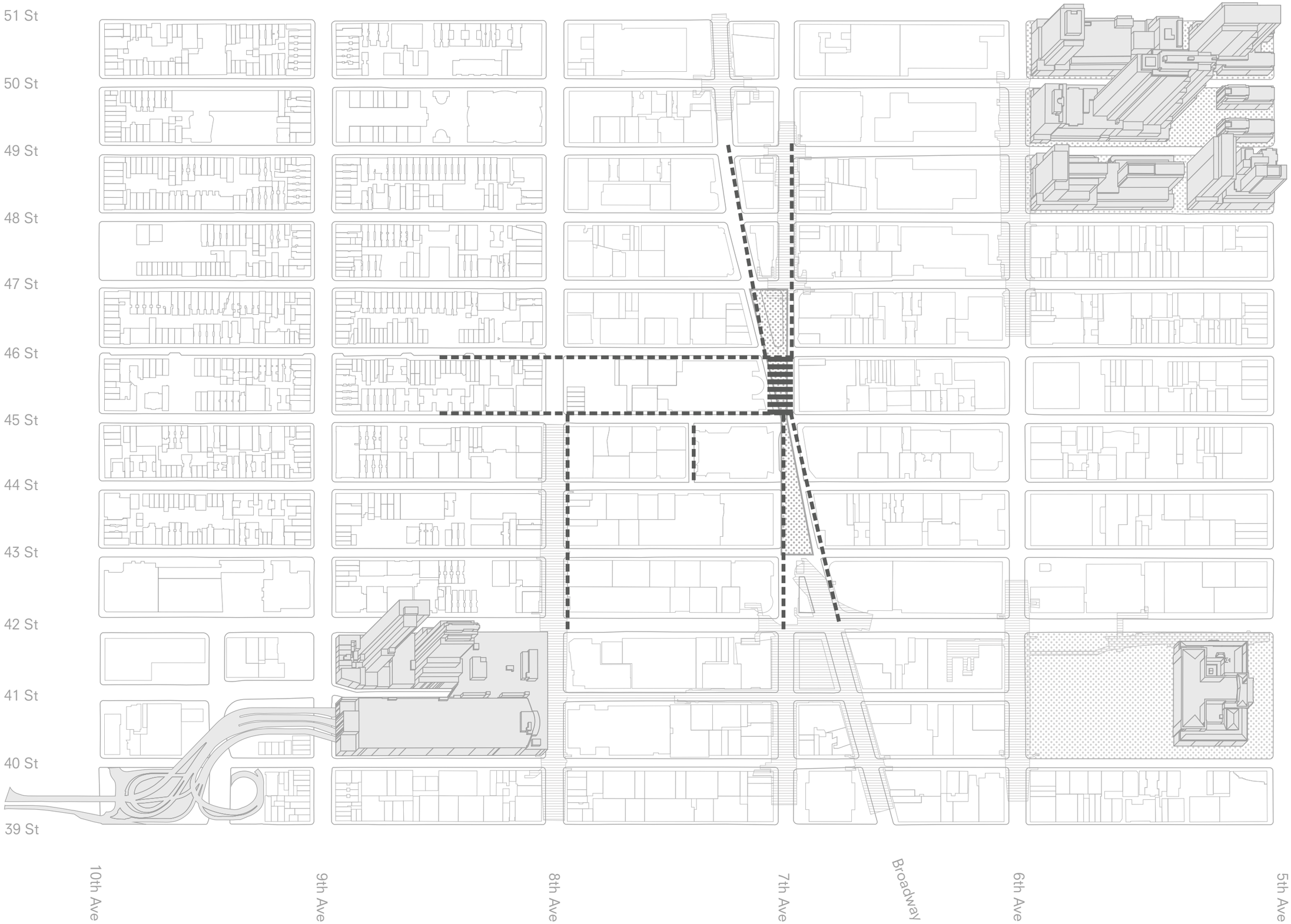


Time Square Crowd

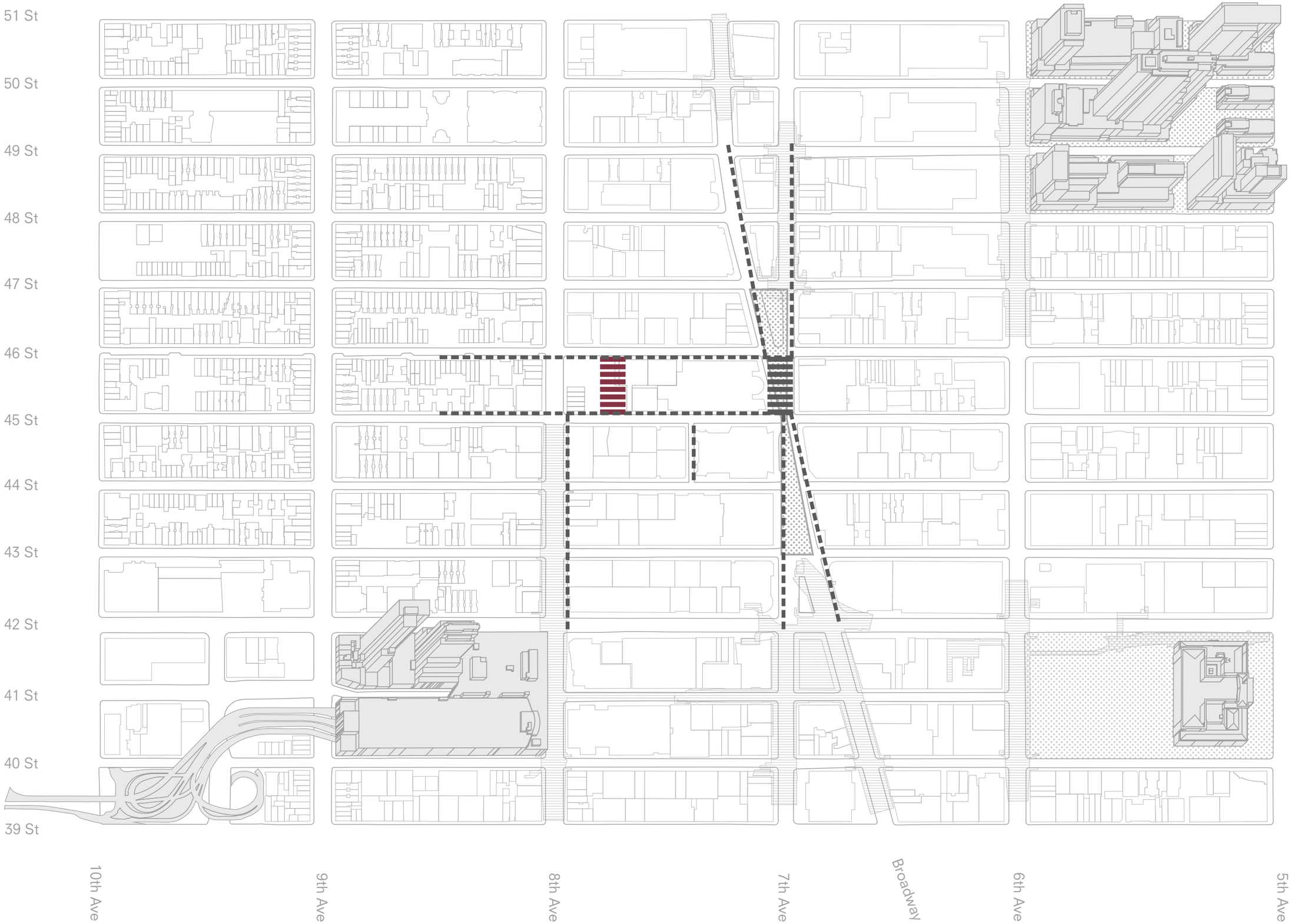
51 St
50 St
49 St
48 St
47 St
46 St
45 St
44 St
43 St
42 St
41 St
40 St
39 St

10th Ave
9th Ave
8th Ave
7th Ave
Broadway
6th Ave
5th Ave

Main Public Attractions



Main Pedestrian Flow


51 St
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43 St
42 St
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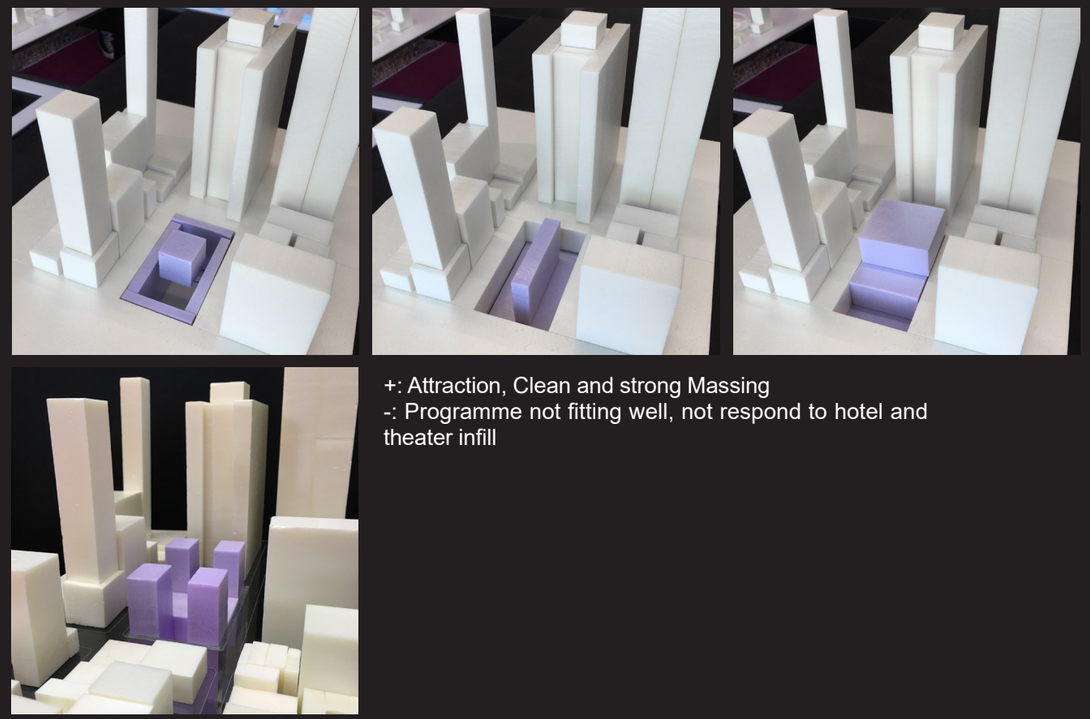
40 St
39 St
10th Ave
9th Ave
8th Ave
7th Ave
Broadway
6th Ave
5th Ave

A New Plaza



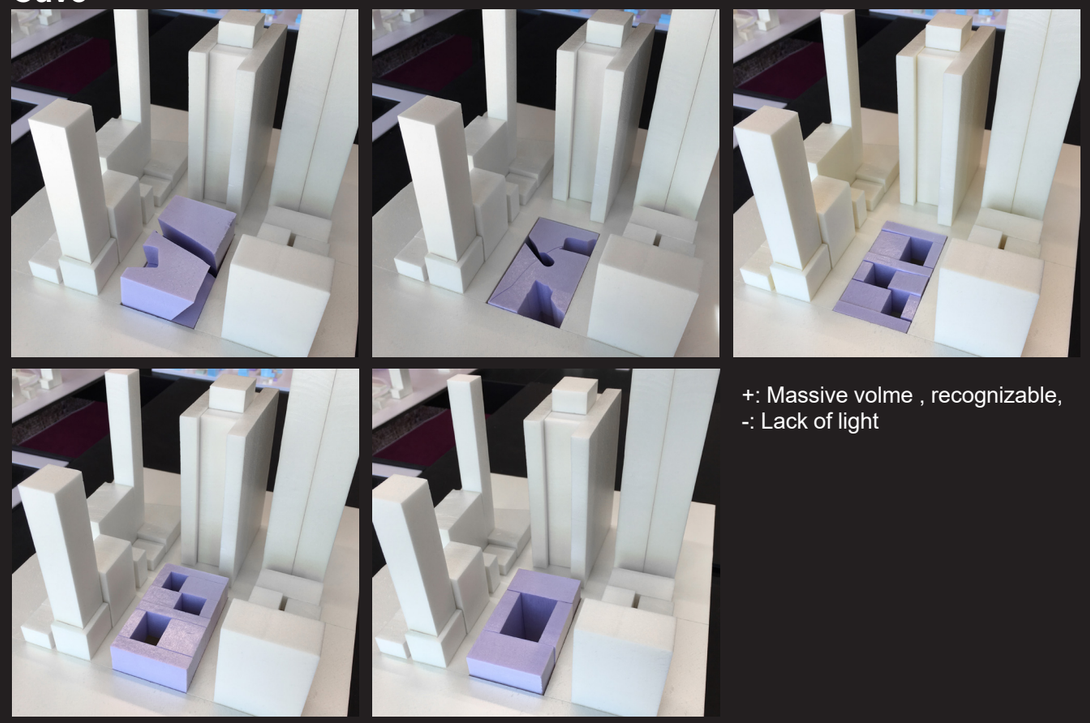
Massing Studies

Monumentality



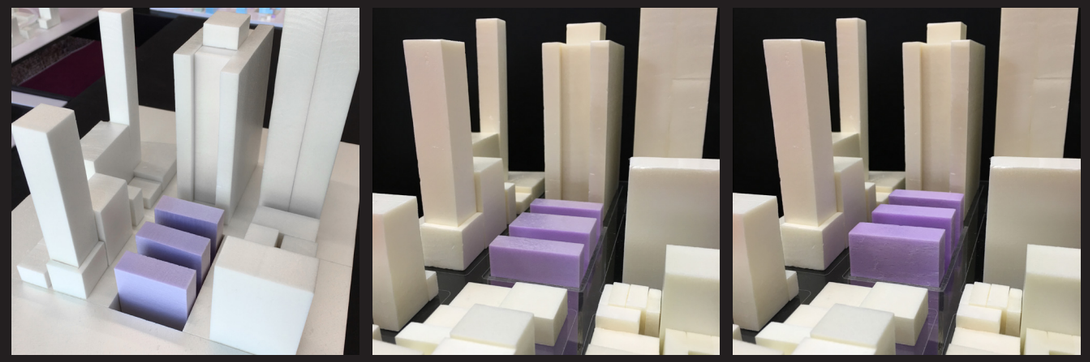
+: Attraction, Clean and strong Massing
-: Programme not fitting well, not respond to hotel and theater infill

Cave



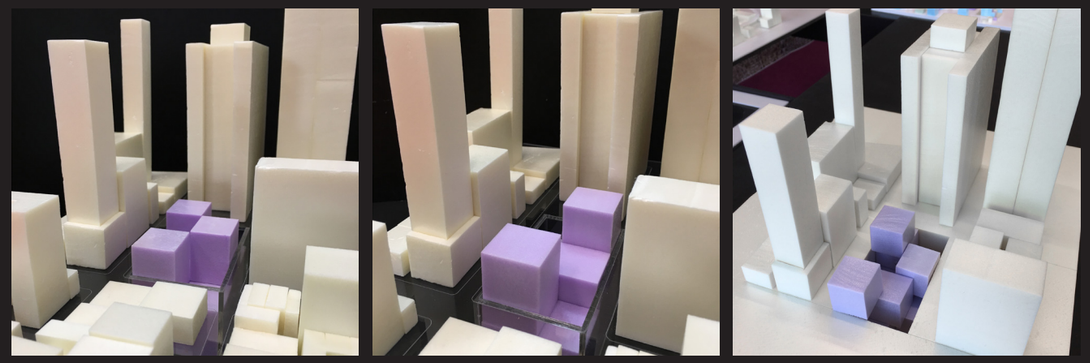
+: Massive volme , recognizable,
-: Lack of light

Order



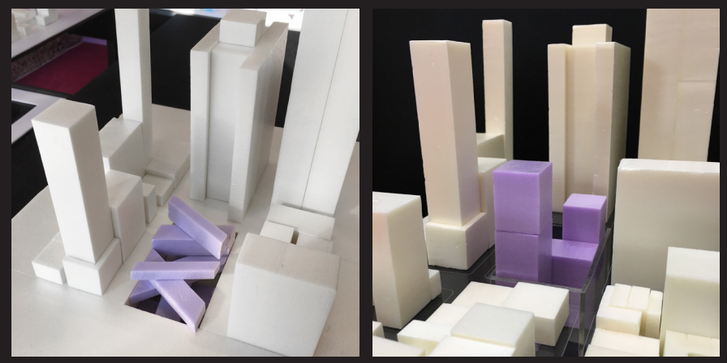
+: Sequence, rhythm, programme fits good, enough light
-: Publicity of entrance, connections between volumes

More Surfaces



+: Adding more surface to expose to light, enabling the light transfer from above ground to underground, public space within the block
-:

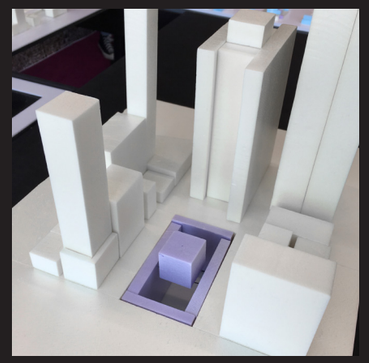
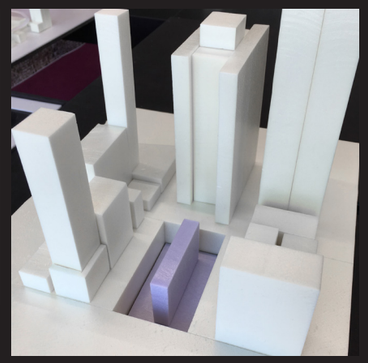
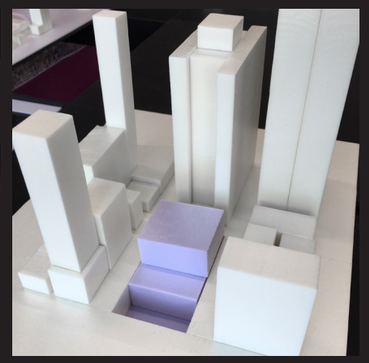
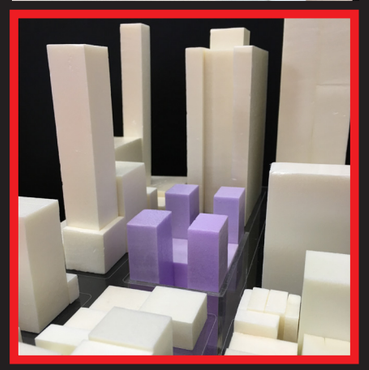
Anti Context



+: Interesting shape
-: Not really working

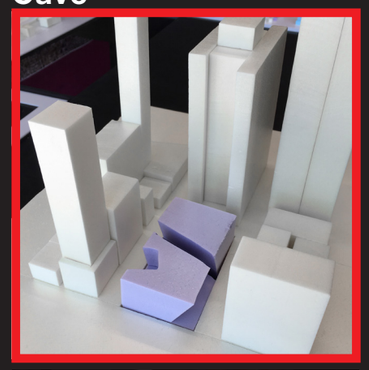
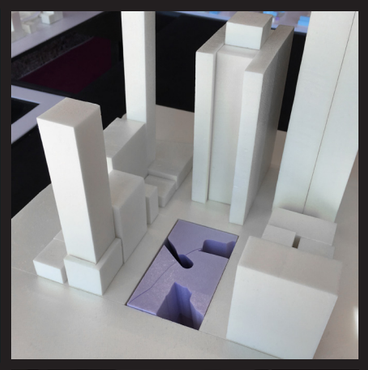
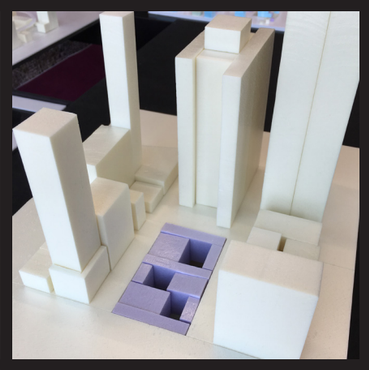
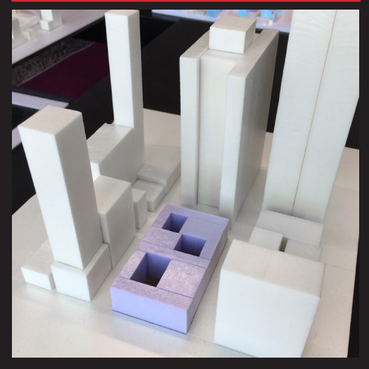
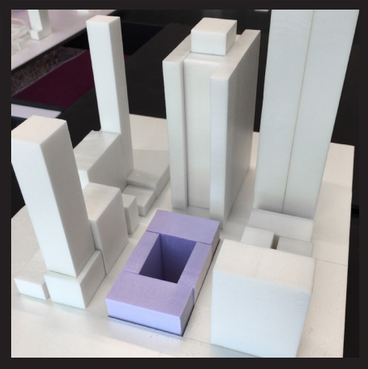
Massing Studies

Monumentality

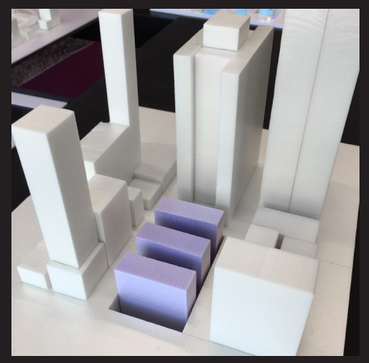
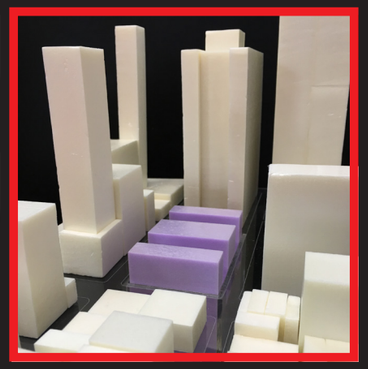
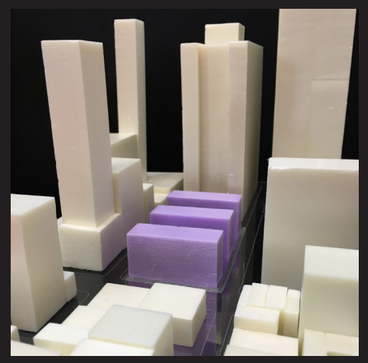
+: Attraction, Clean and strong Massing
-: Programme not fitting well, not respond to hotel and theater infill

Cave

+: Massive volme , recognizable,
-: Lack of light

Order

+: Sequence, rhythm, programme fits good, enough light
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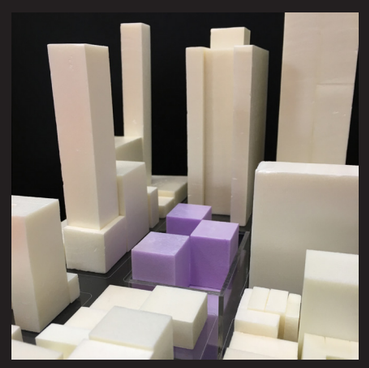
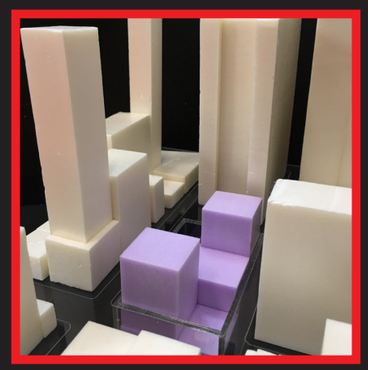
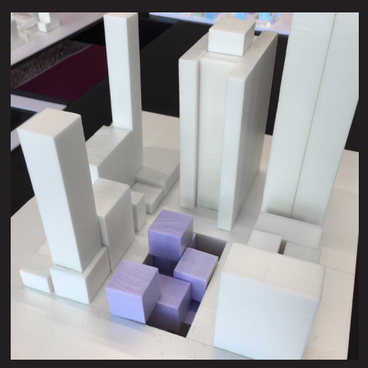
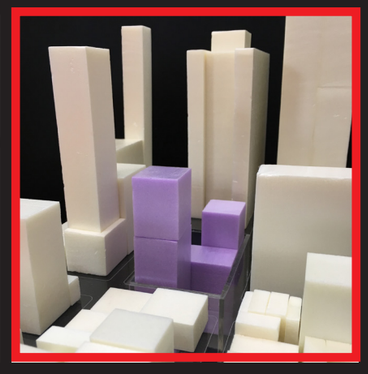
More Surfaces

+: Adding more surface to expose to light, enabling the light transfer from above ground to underground, public space within the block
-:

Anti Context

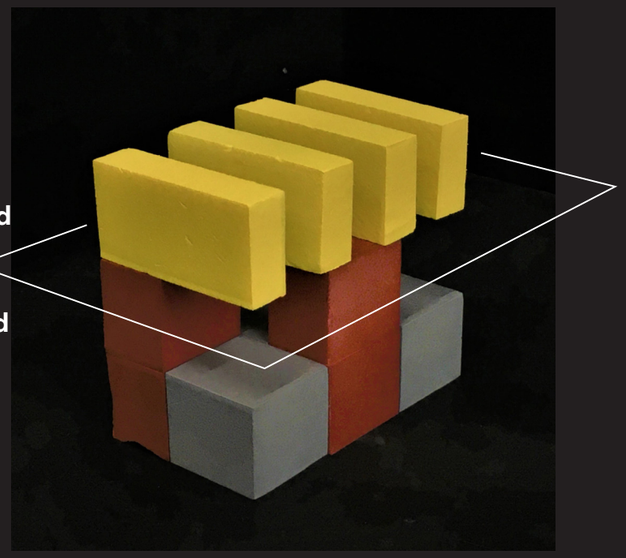



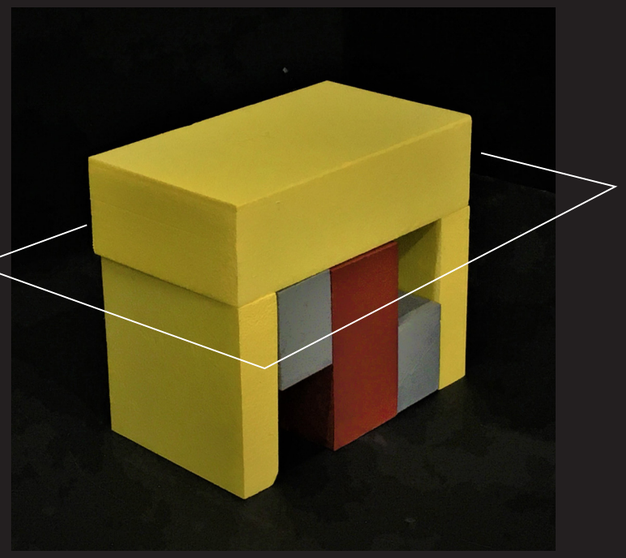
+: Interesting shape
-: Not really working

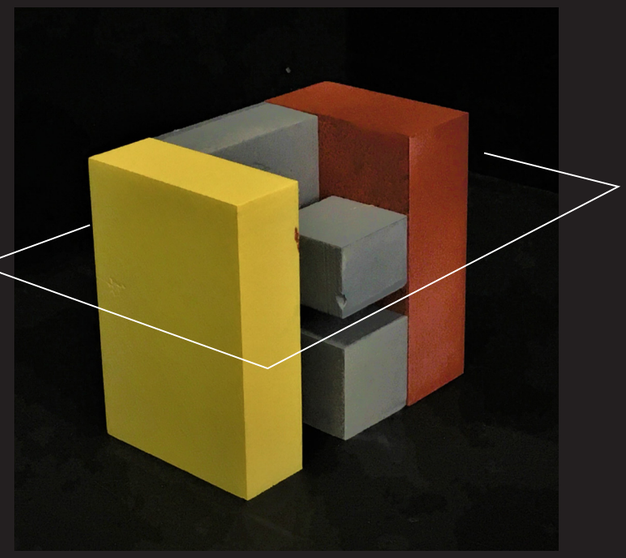
Massing Studies

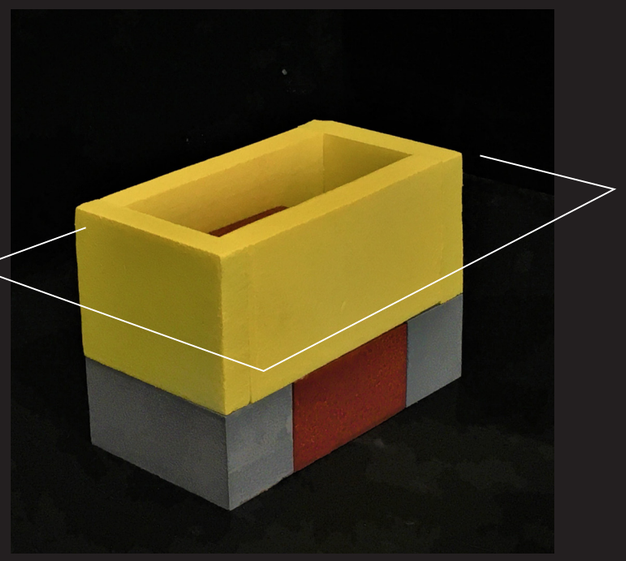
Aboveground

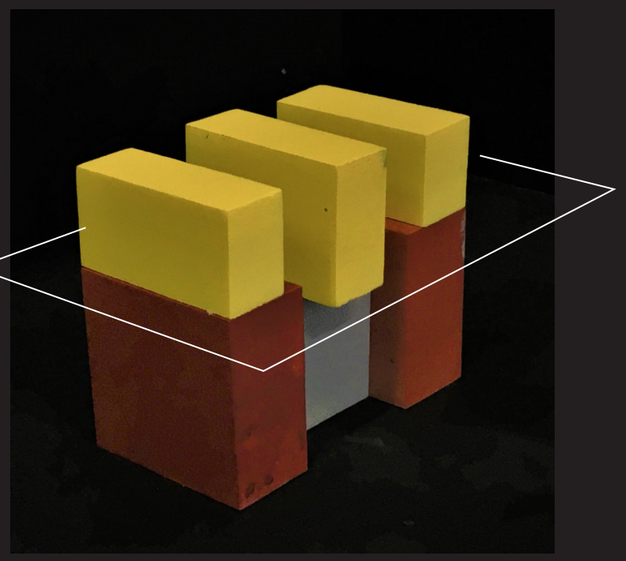
Underground

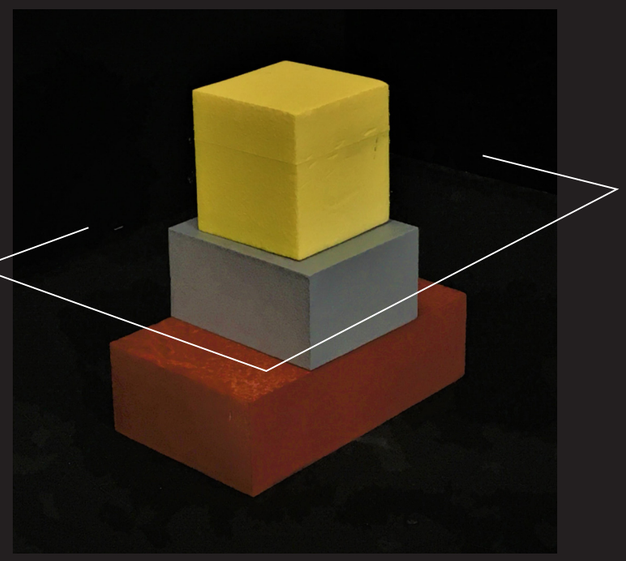


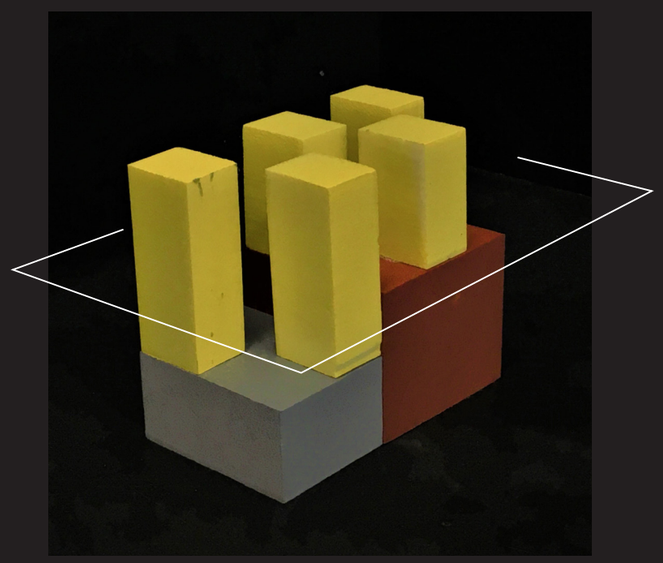


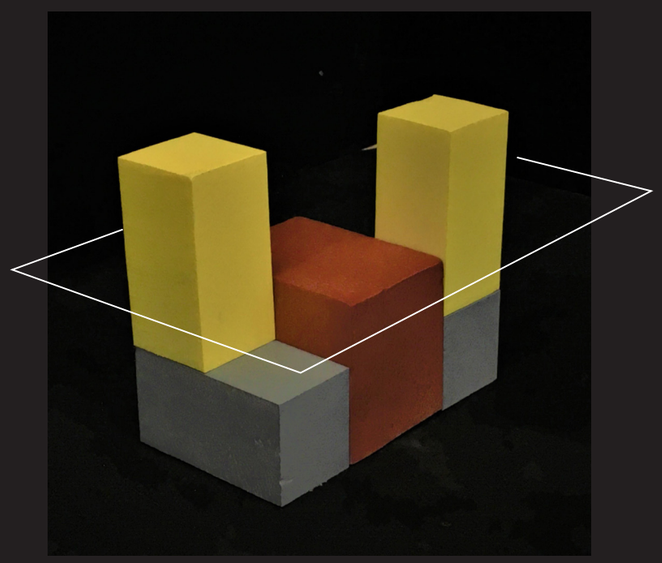








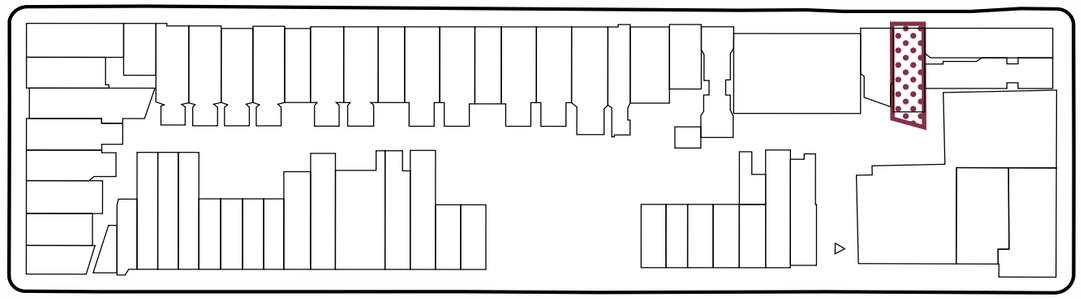


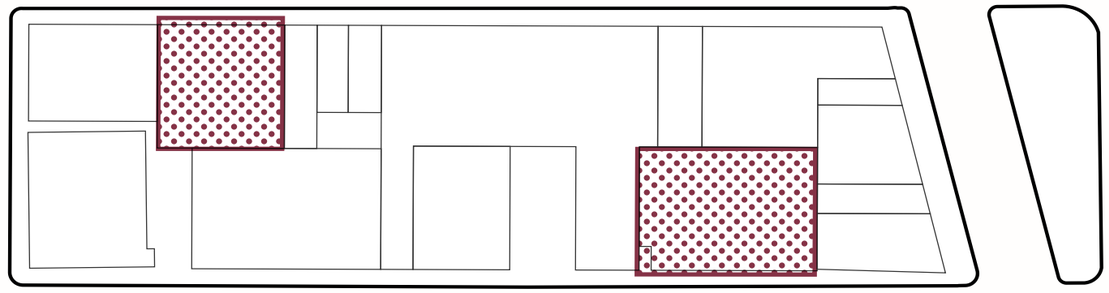


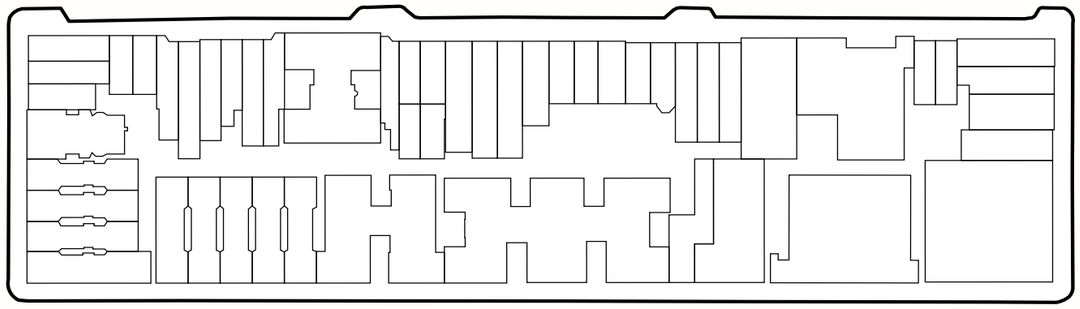
Small Play

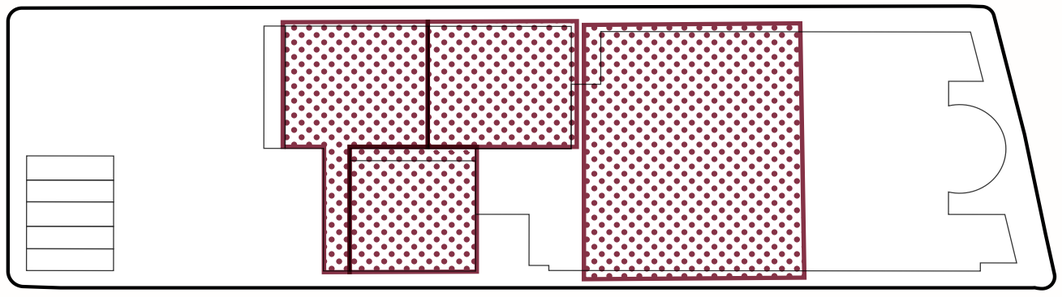
Big Play

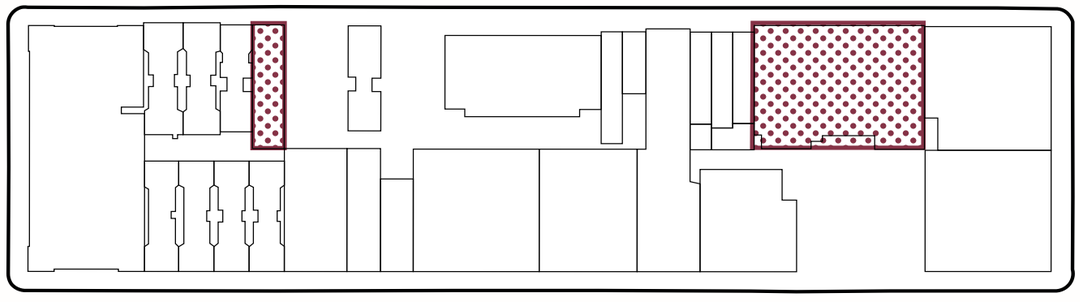
Hotel

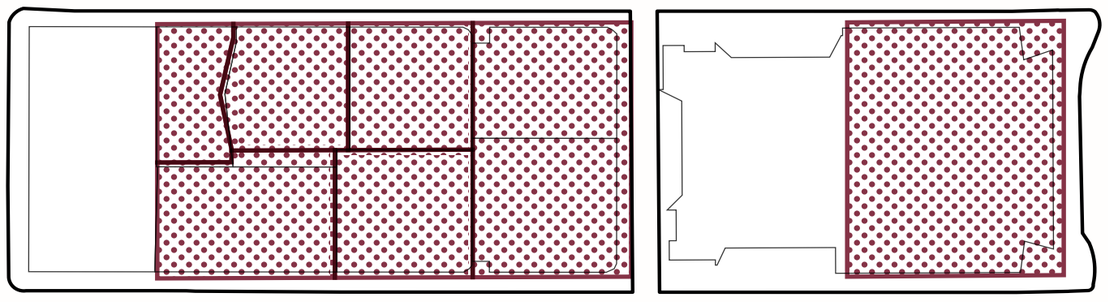




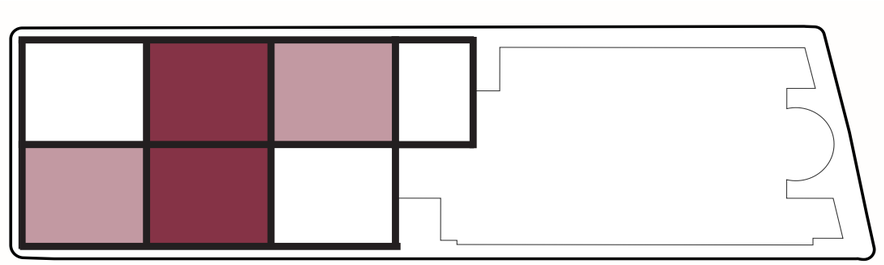


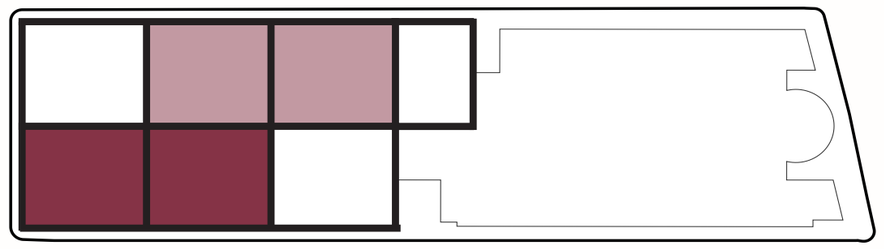


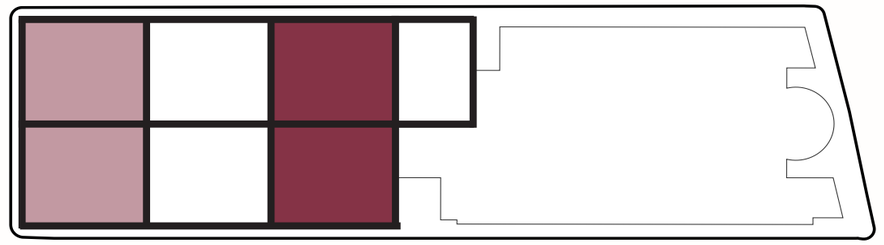


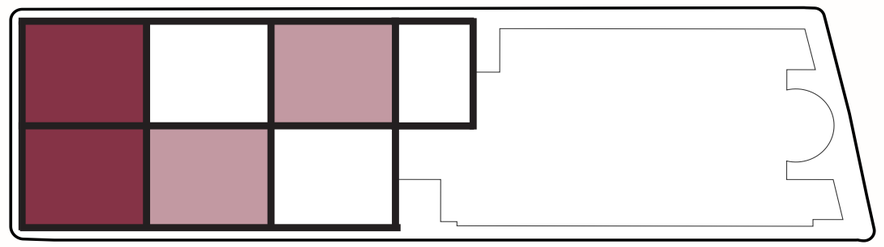


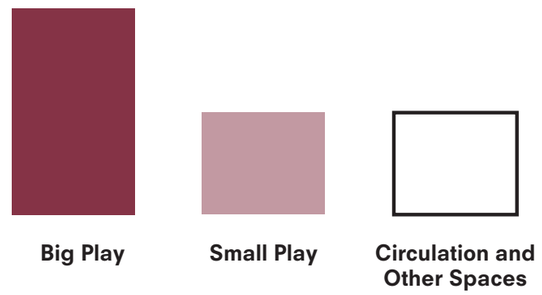
Broadway Theater Size



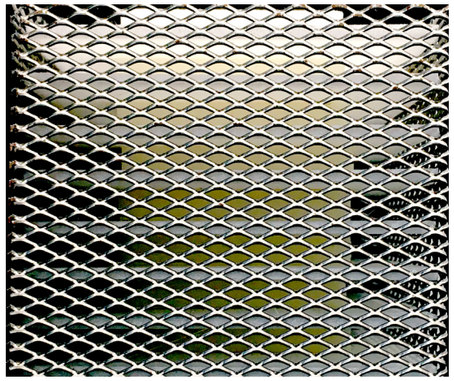




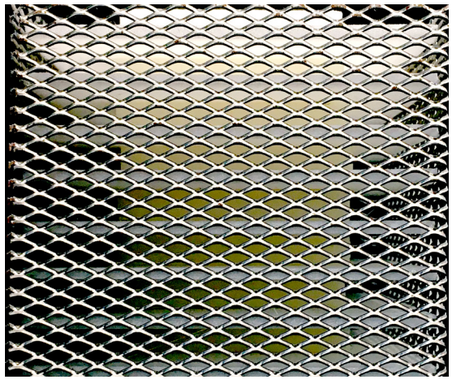




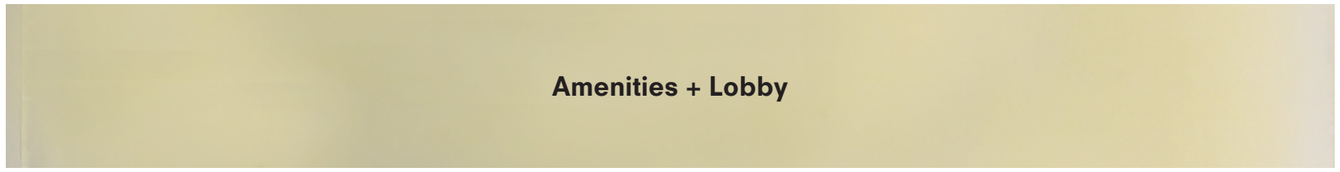
Configurations of Theaters



Hotel 1



Hotel 2



Amenities + Lobby



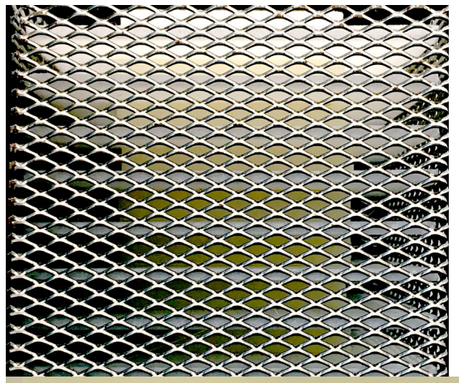
Theater 1

Theater 2

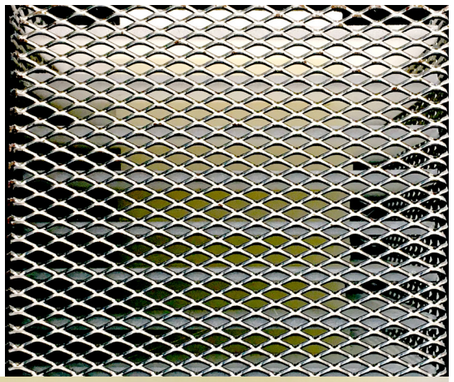
Theater 3

Section Concept

Hotel 1



Hotel 2



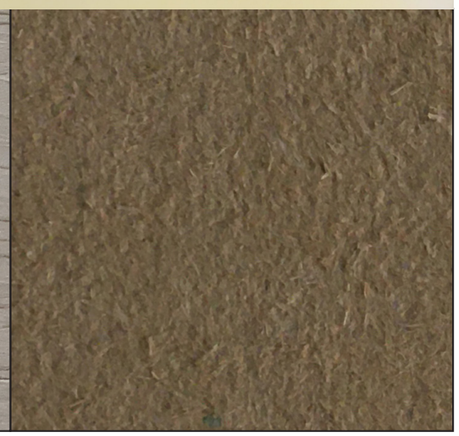
Amenities + Lobby



Theater 1

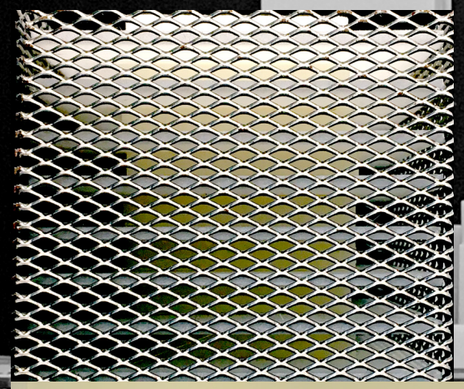


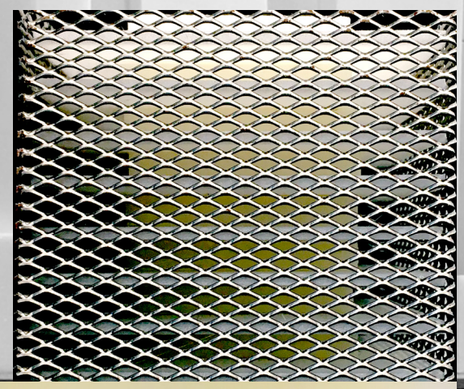
Theater 2



Theater 3

Section Concept

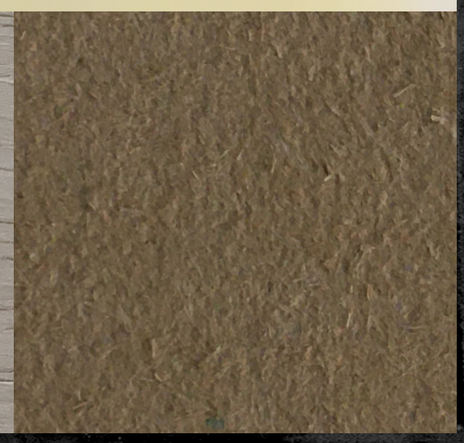


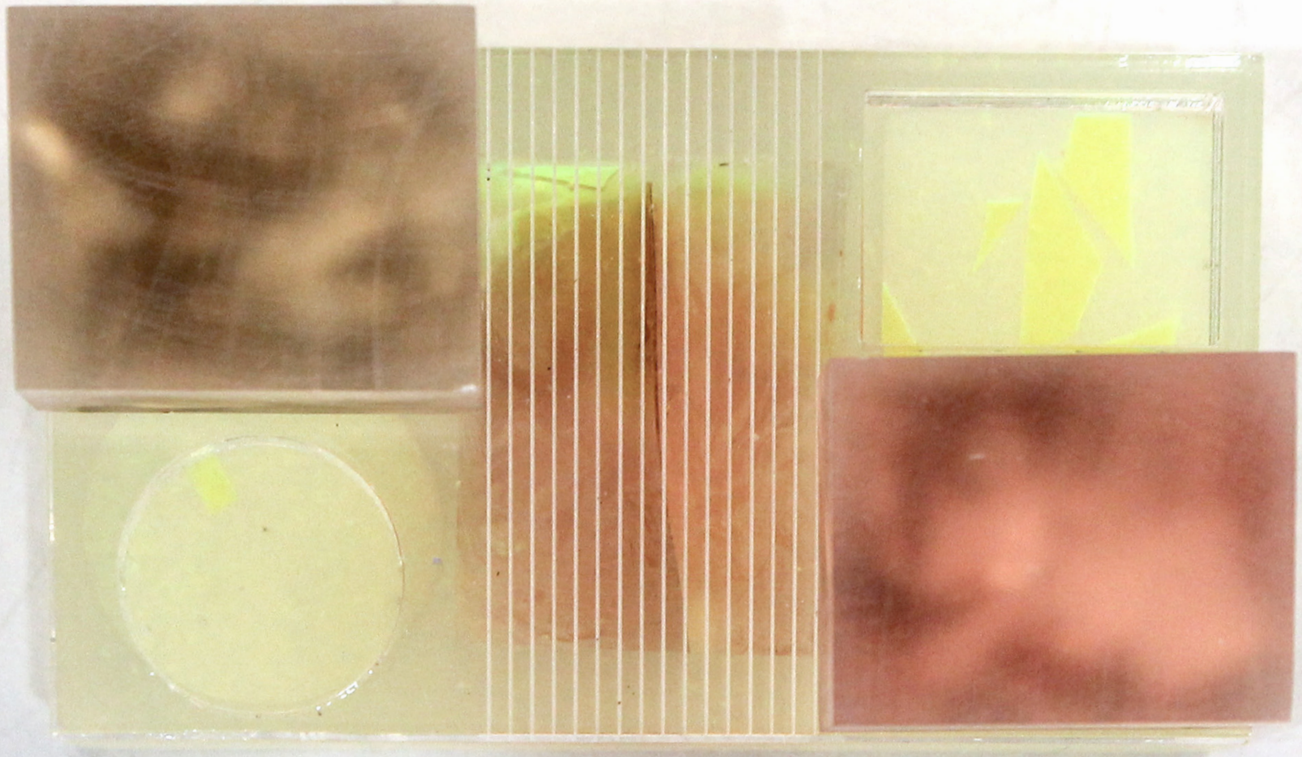


Amenities + Lobby





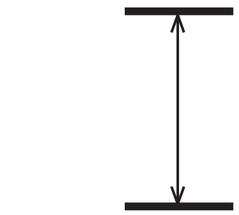




A Plaza, Two Entrances, Tow Blocks



A Plaza, Two Entrances, Tow Blocks

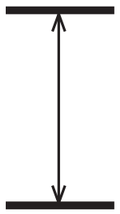


Maximize Volume
Hotel+Theater Compelx



High Density
Mixed Use

Concept



Maximize Volume
Hotel+Theater Compelx

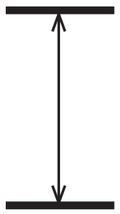


Two Big Void
Inviting Entrances

High Density
Mixed Use

Theatrical Journey

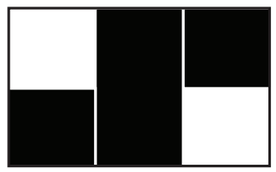
Concept



Maximize Volume
Hotel+Theater Compelx



Two Big Void
Inviting Entrances



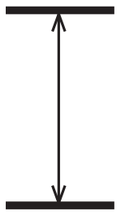
Arena, Proscenium,
Multi functional Theaters

High Density
Mixed Use

Theatrical Journey

Multi functional
Performance Center

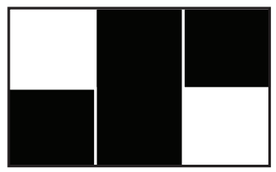
Concept



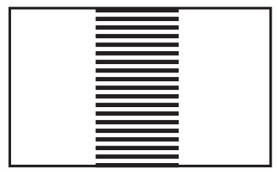
Maximize Volume
Hotel+Theater Compelx



Two Big Void
Inviting Entrances



Arena, Proscenium,
Multi functional Theaters



A Plaza

High Density
Mixed Use

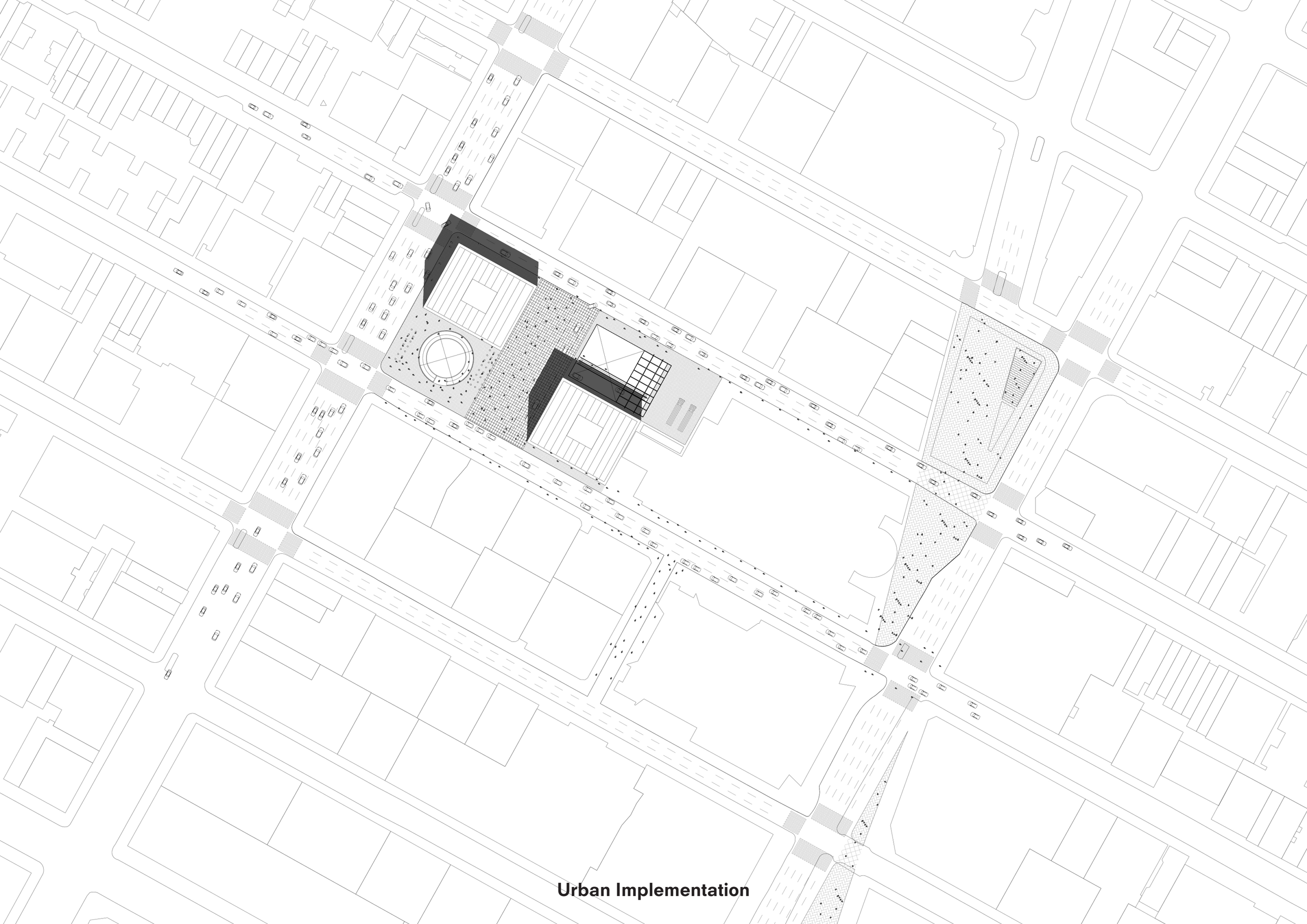
Theatrical Journey

Multi functional
Performance Center

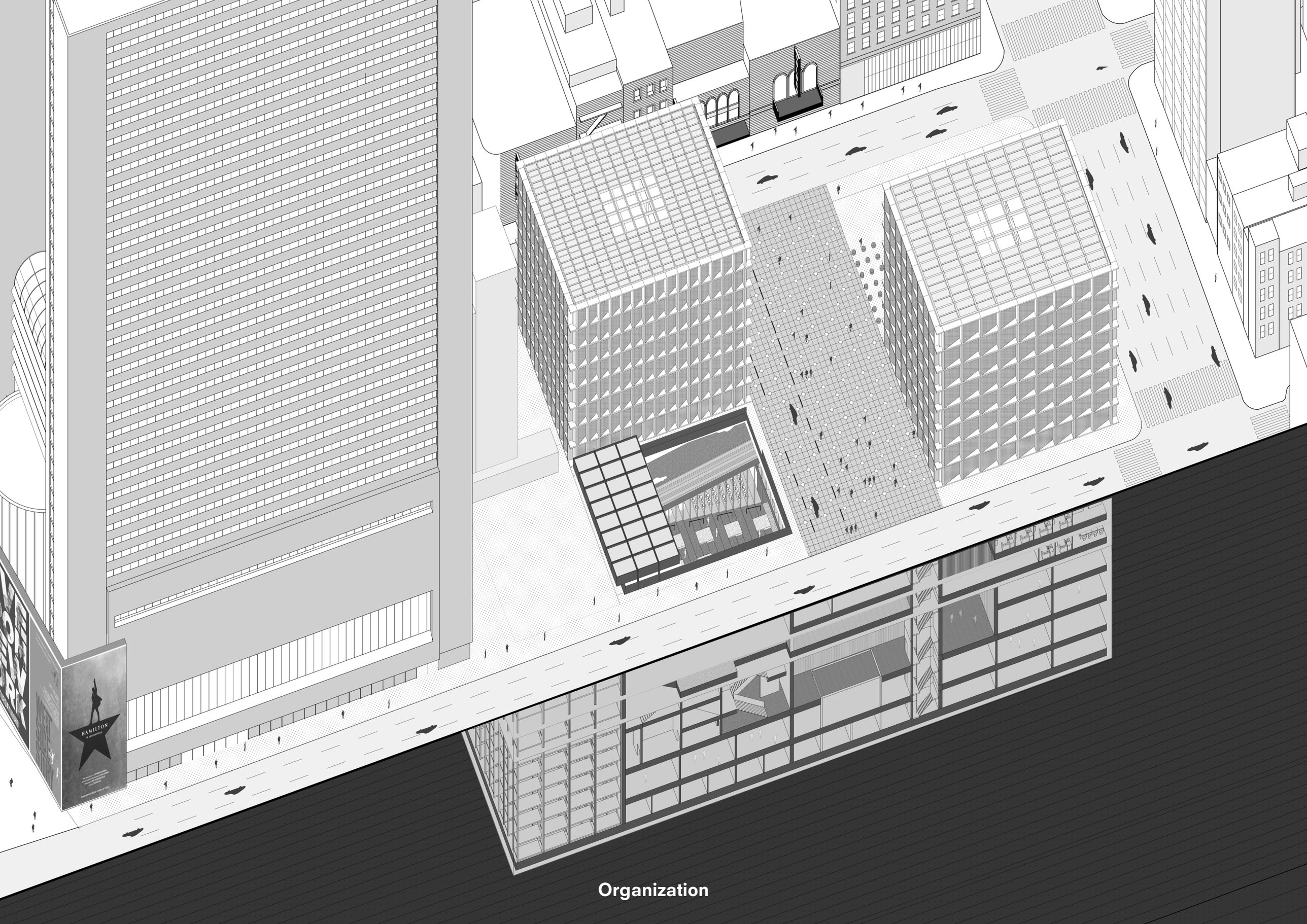
NY Urban
Living Room

Concept

IMPLEMENTATION



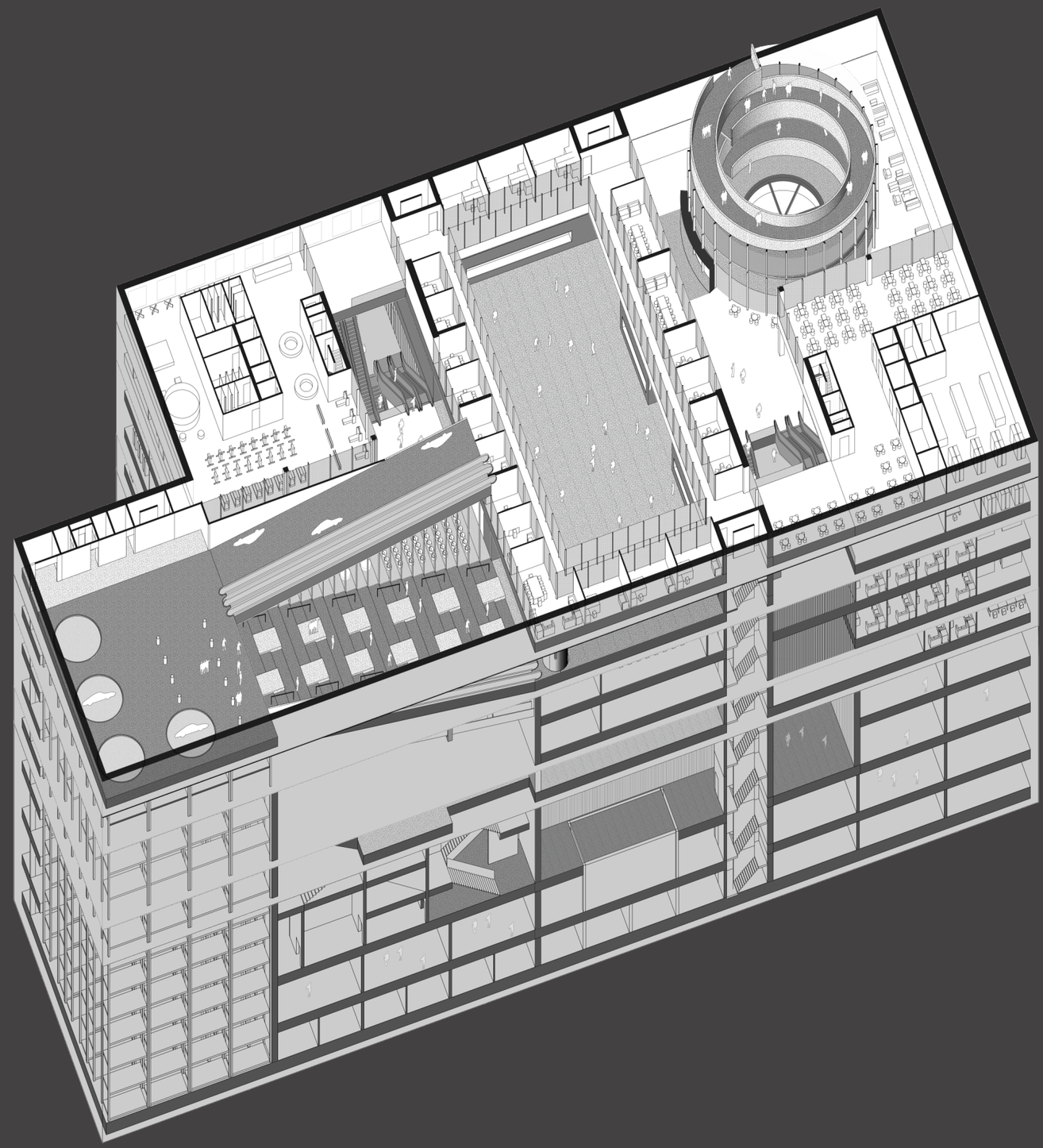
Urban Implementation



Organization



Organization



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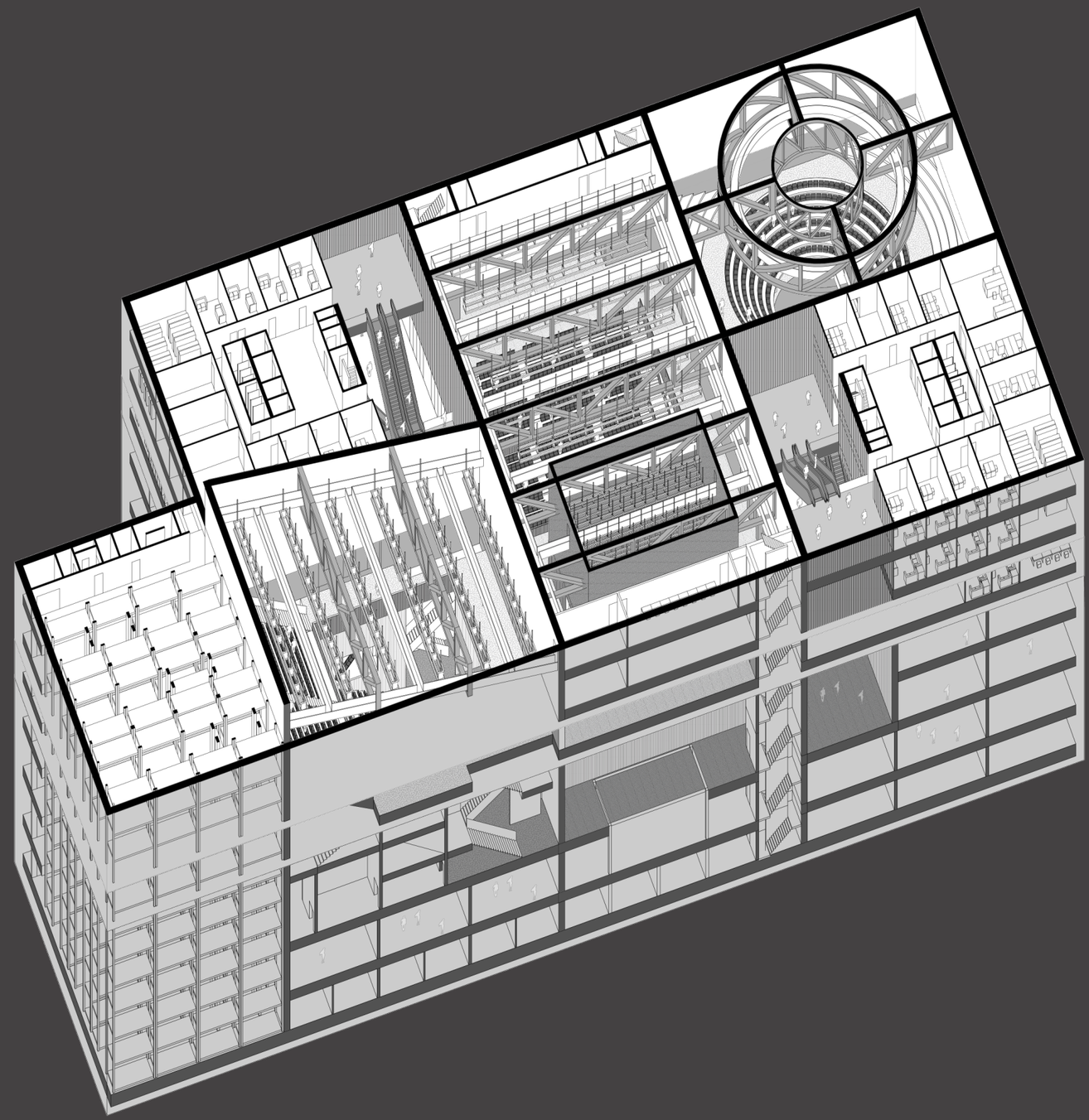

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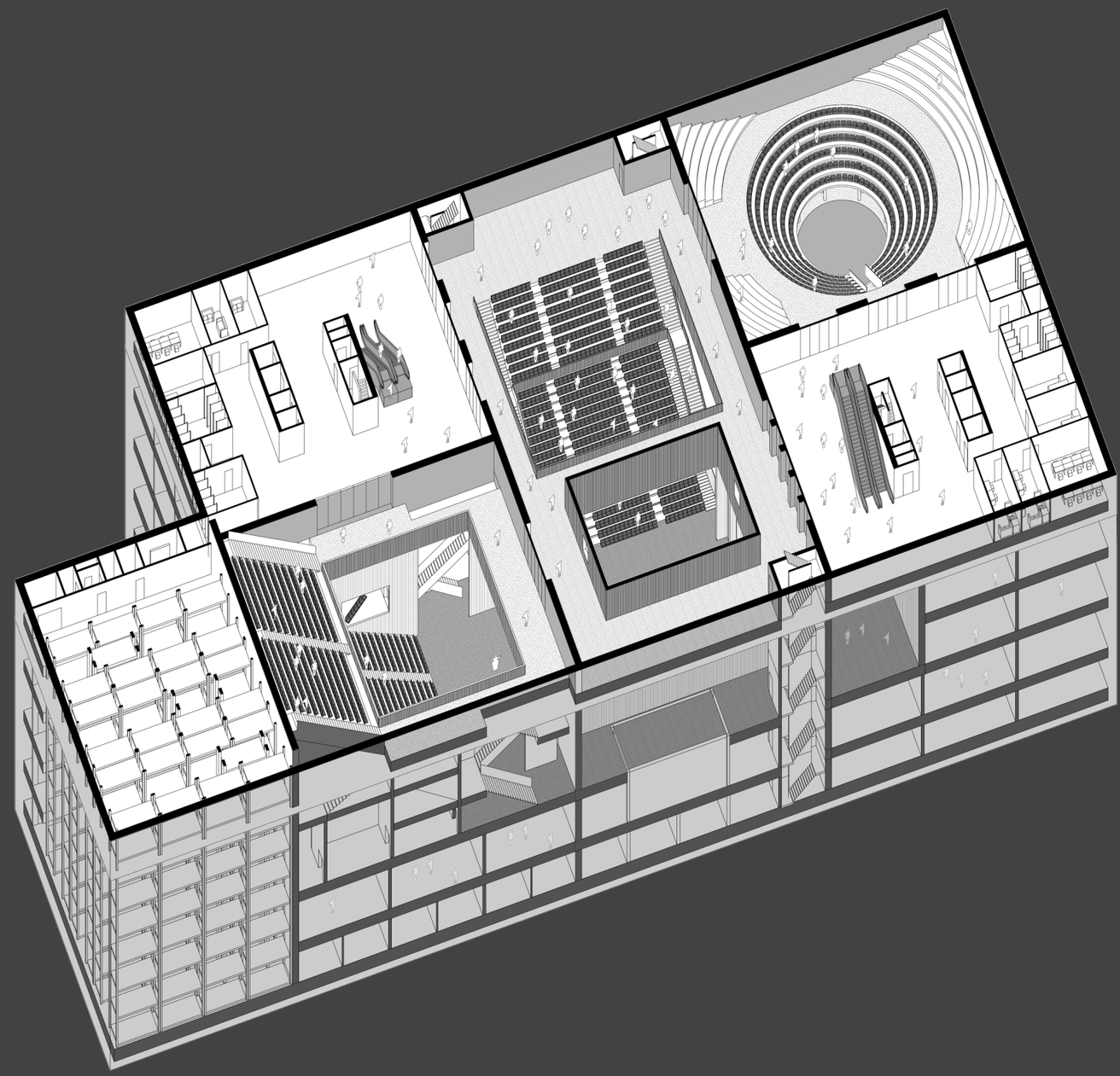

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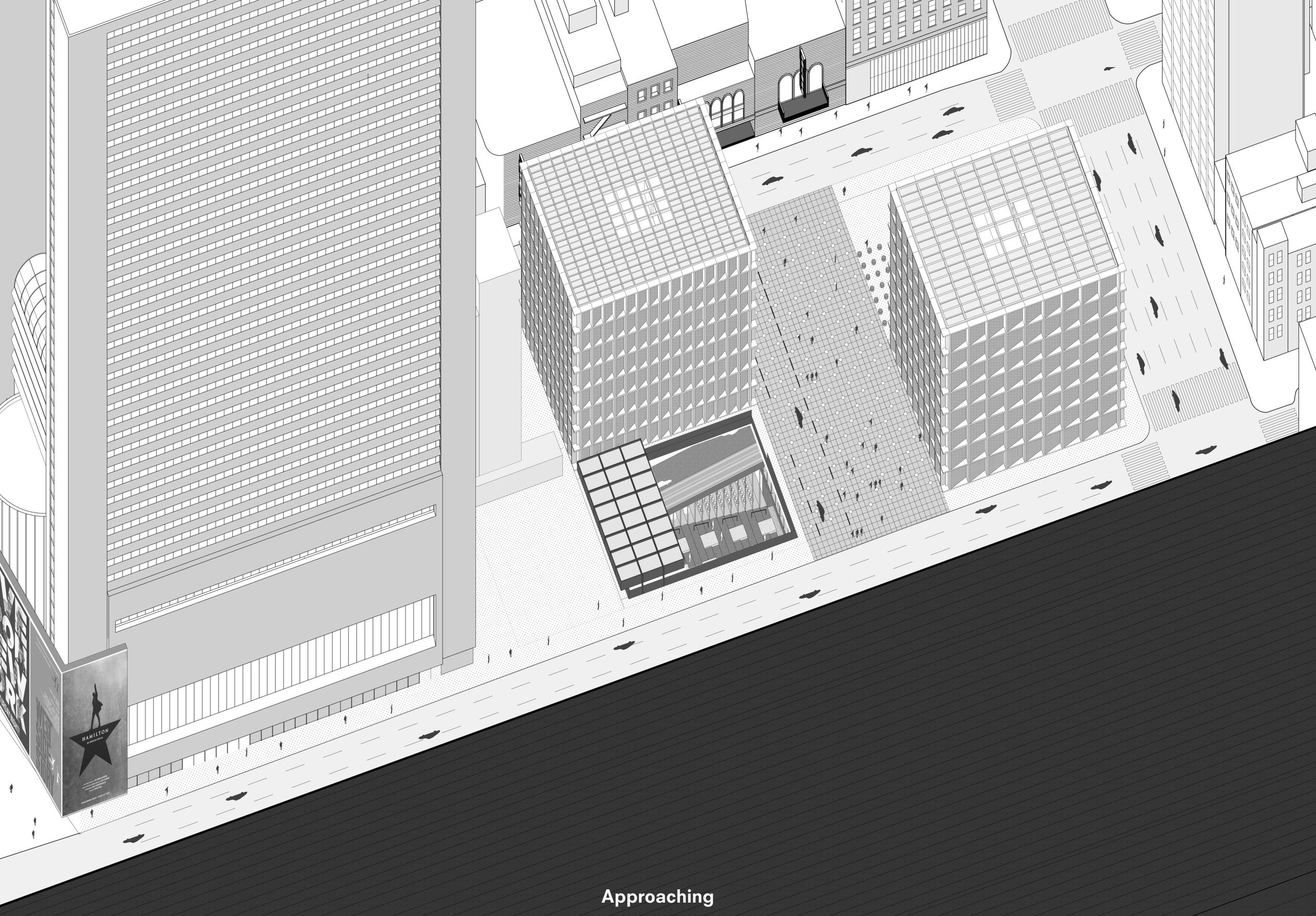


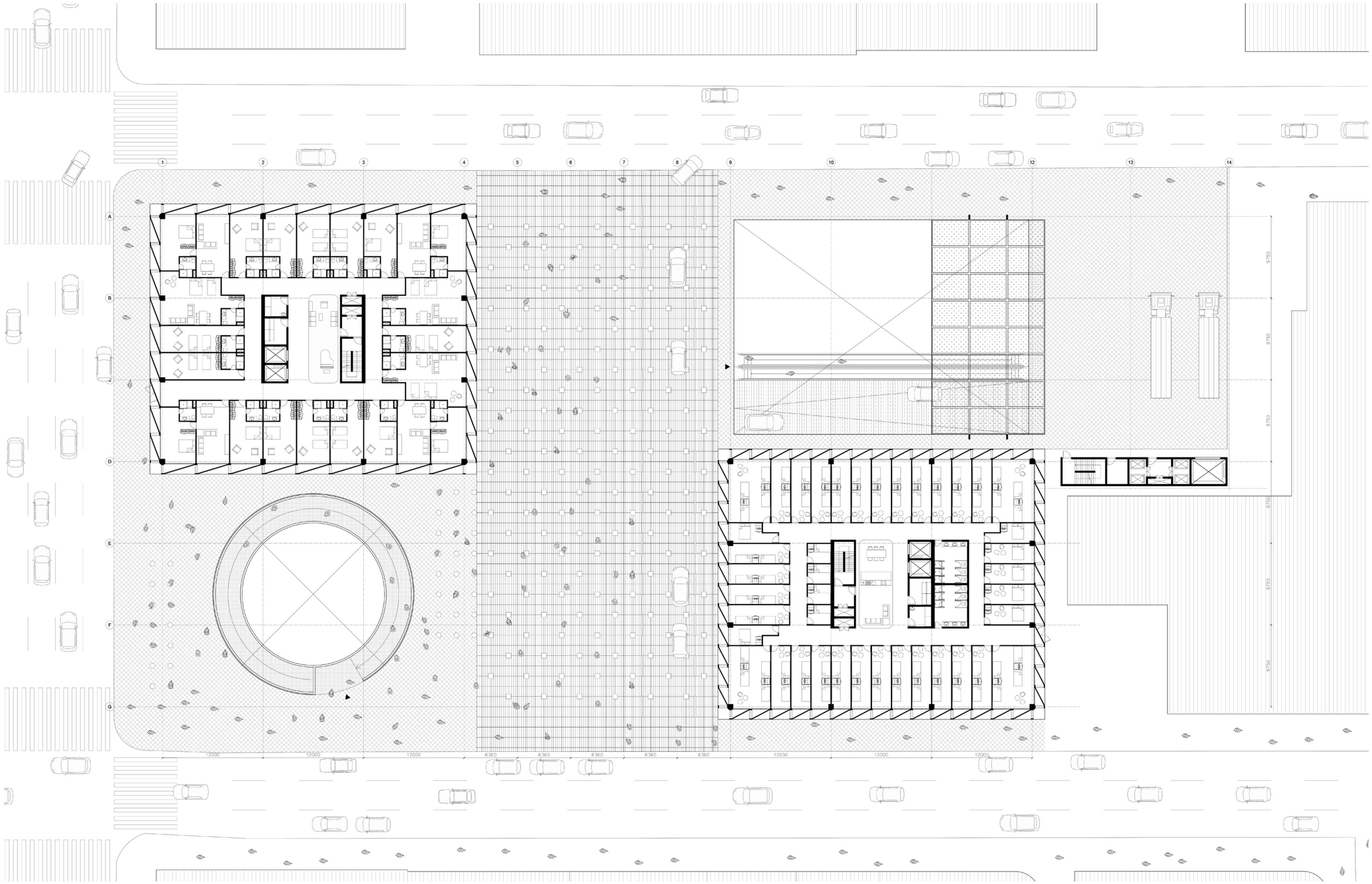
Approaching



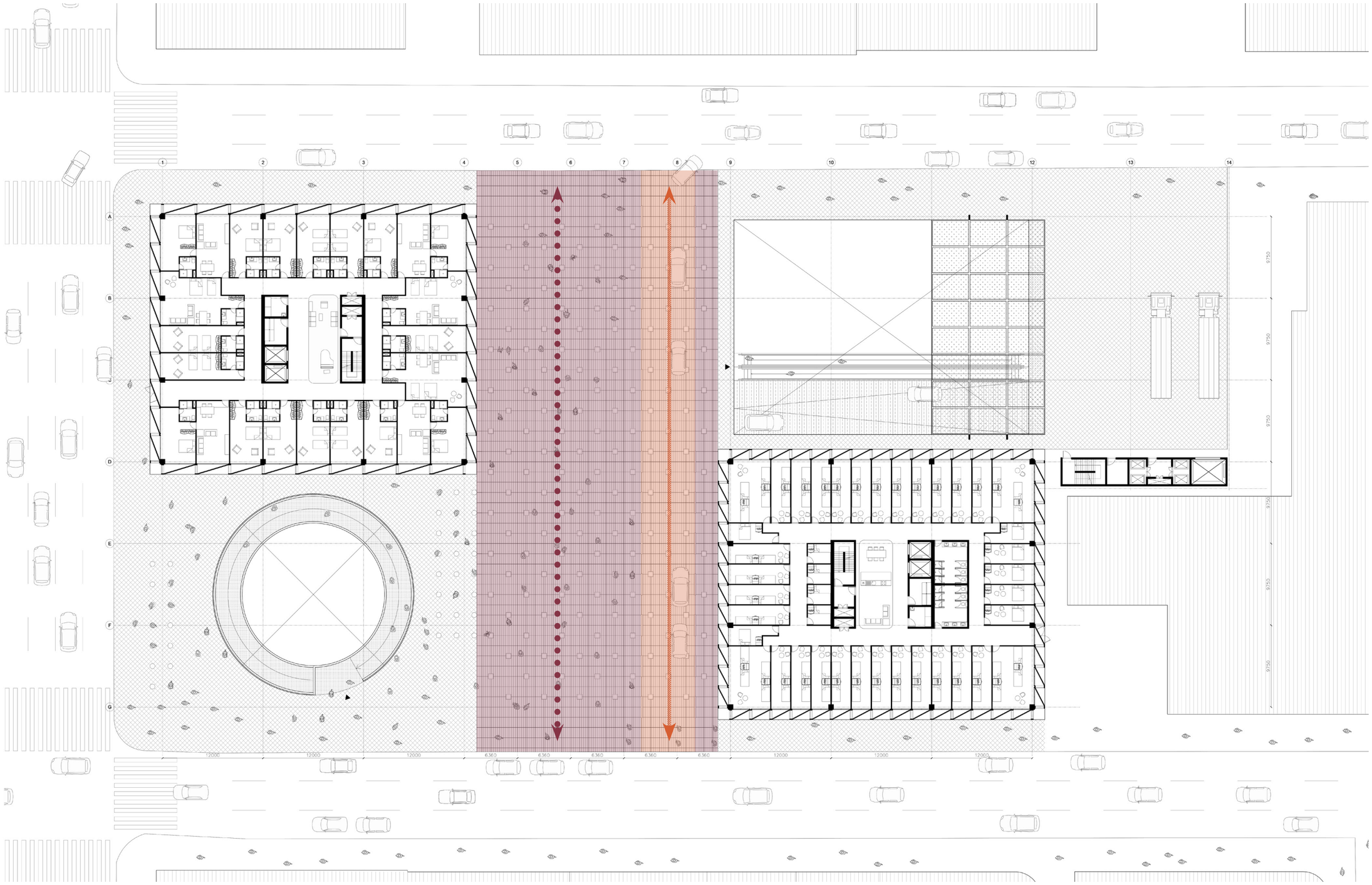
Pedestrain Approaching



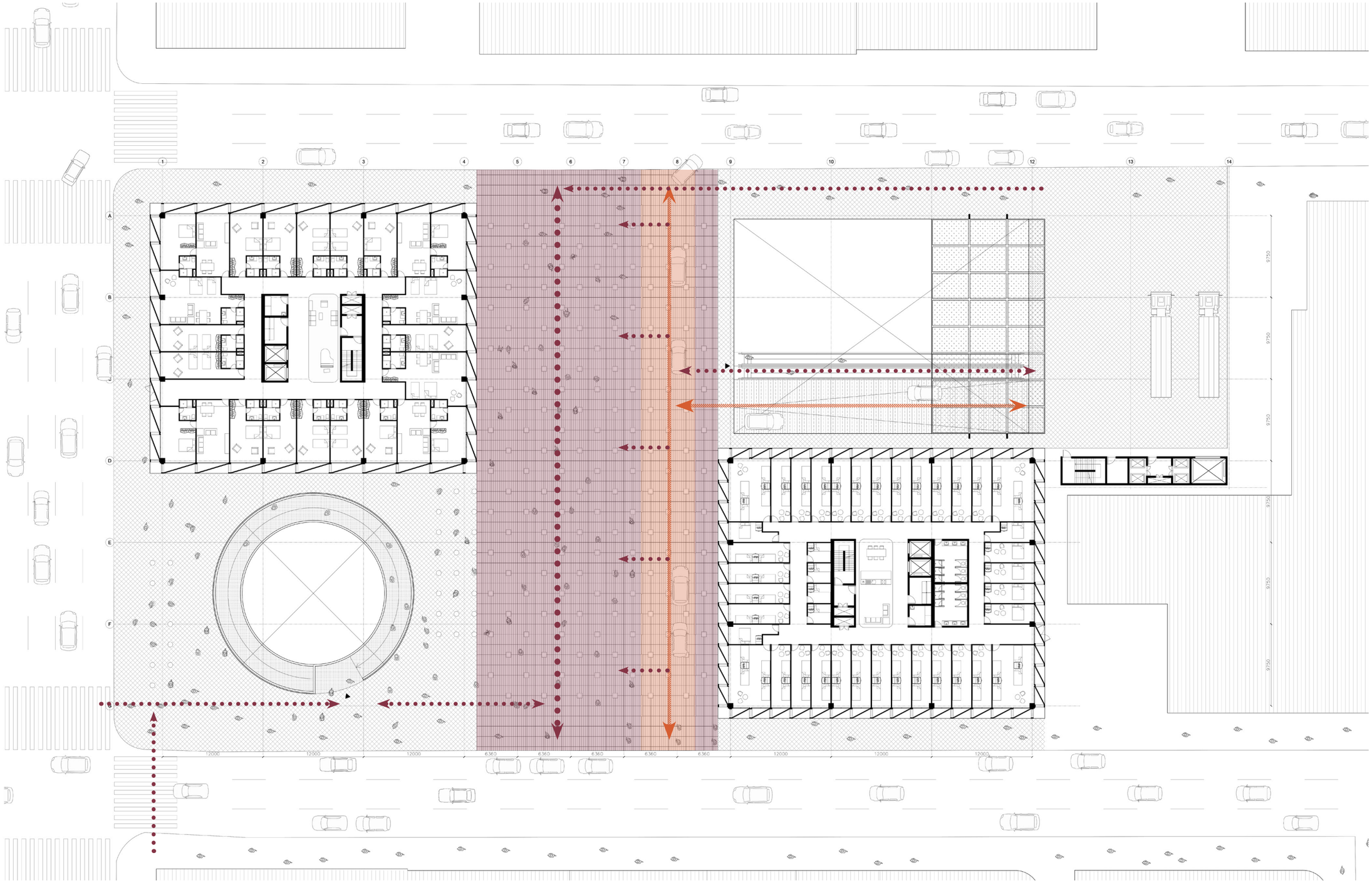
Car Approaching



Ground Floor

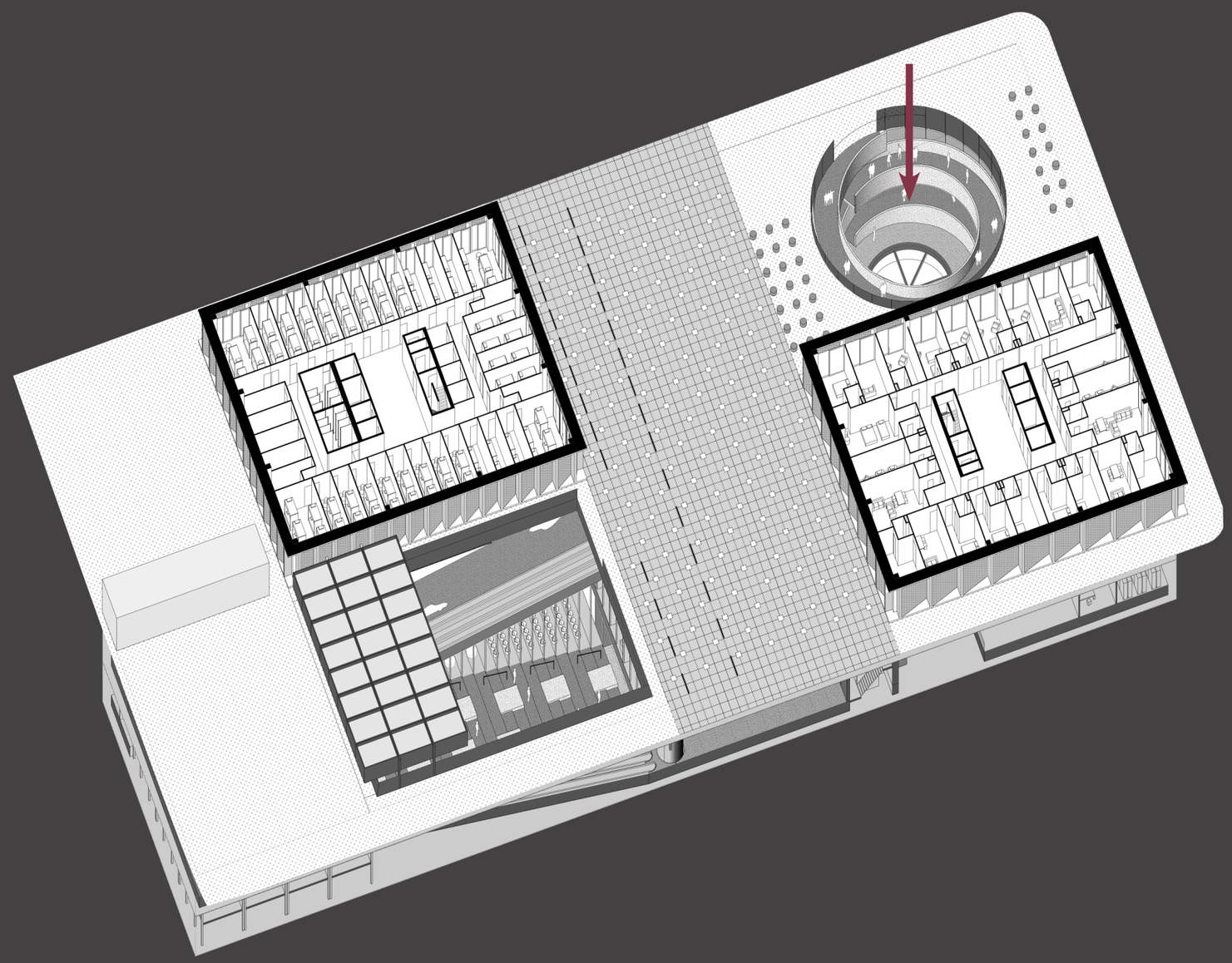


Red Carpet for People and Cars

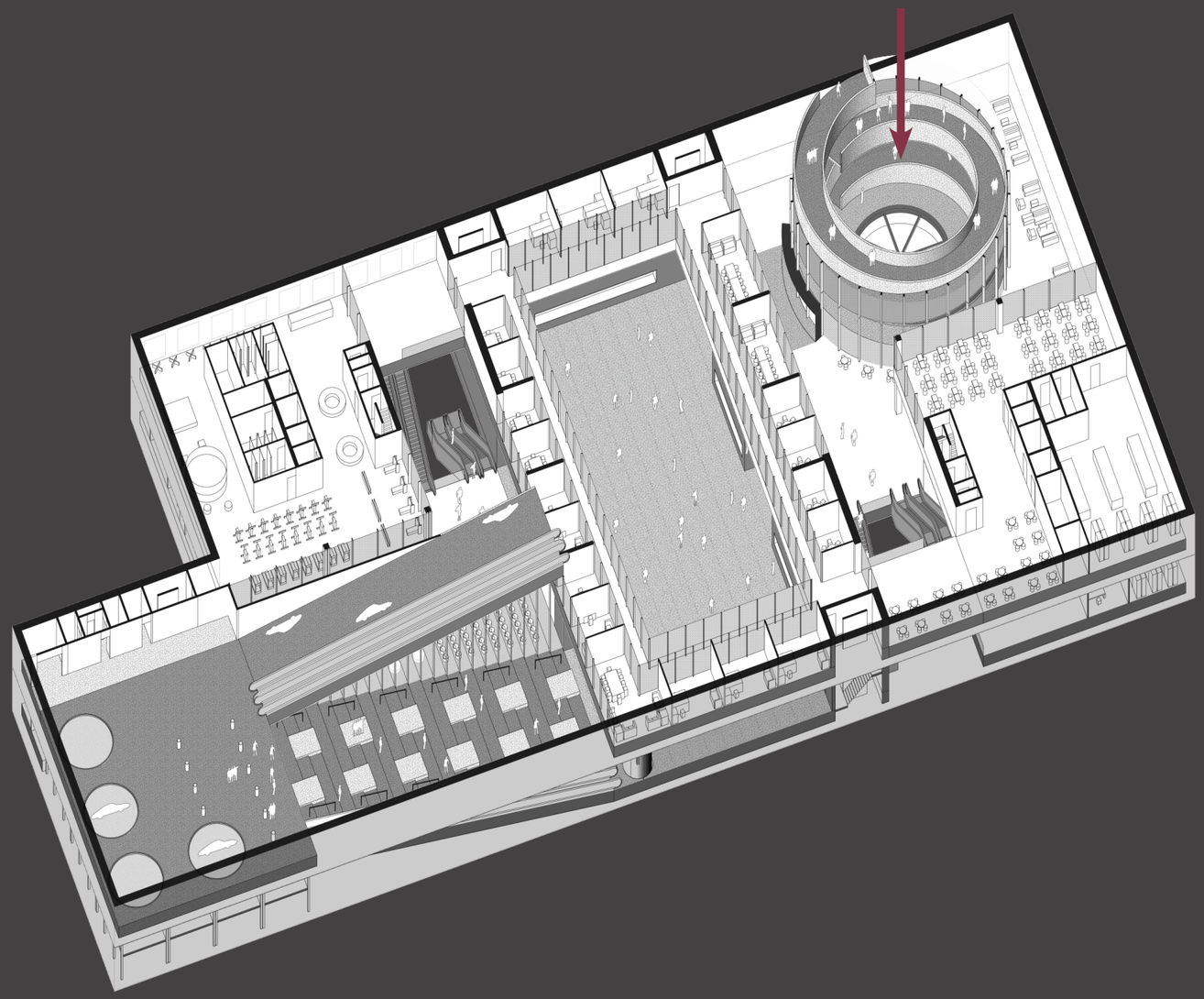


Circulation


BANDSTAND
RD B. JACOBS THEATRE
GOLDEN
DRIVING
Miss Daisy



Pedestrian Entrance



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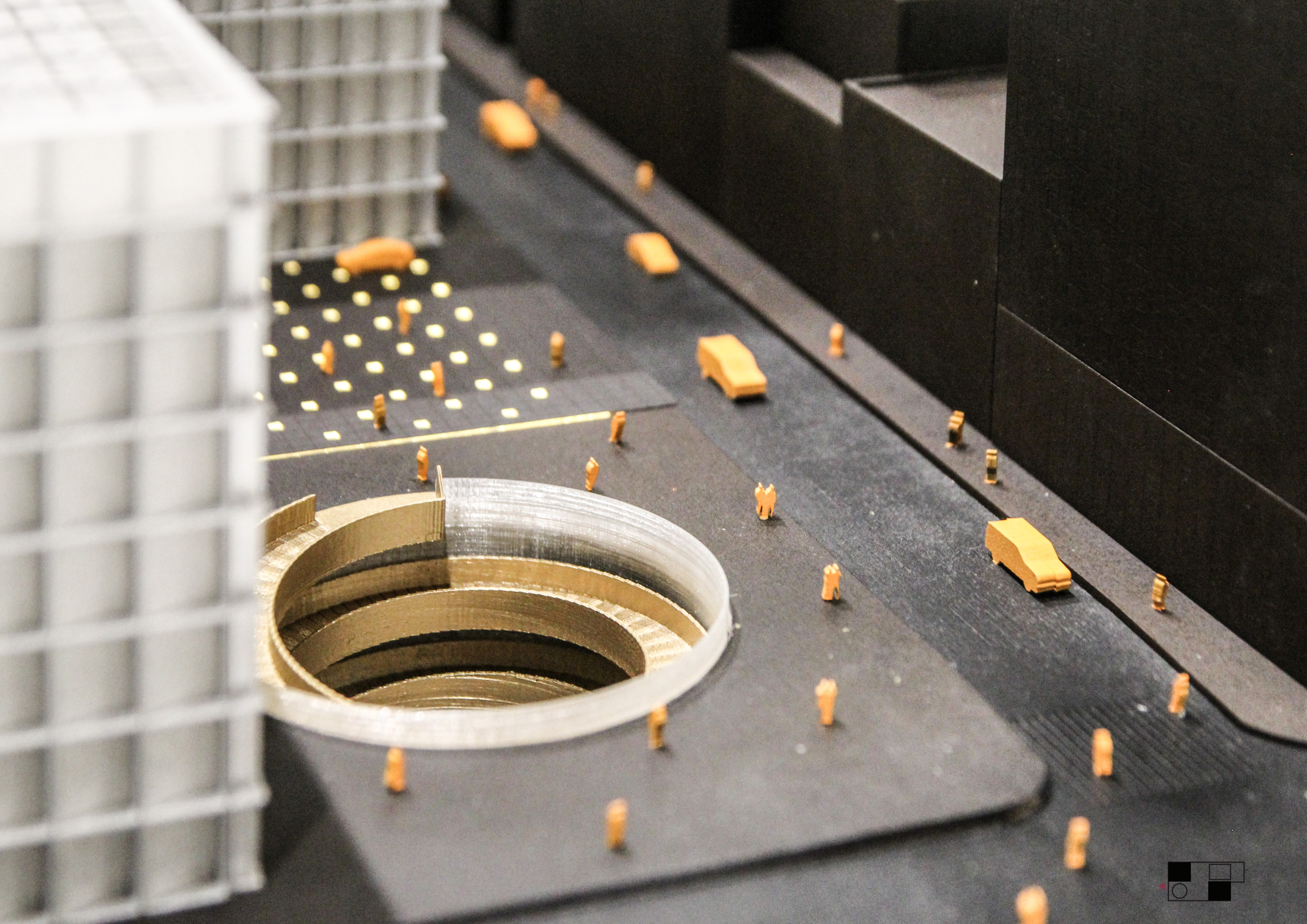
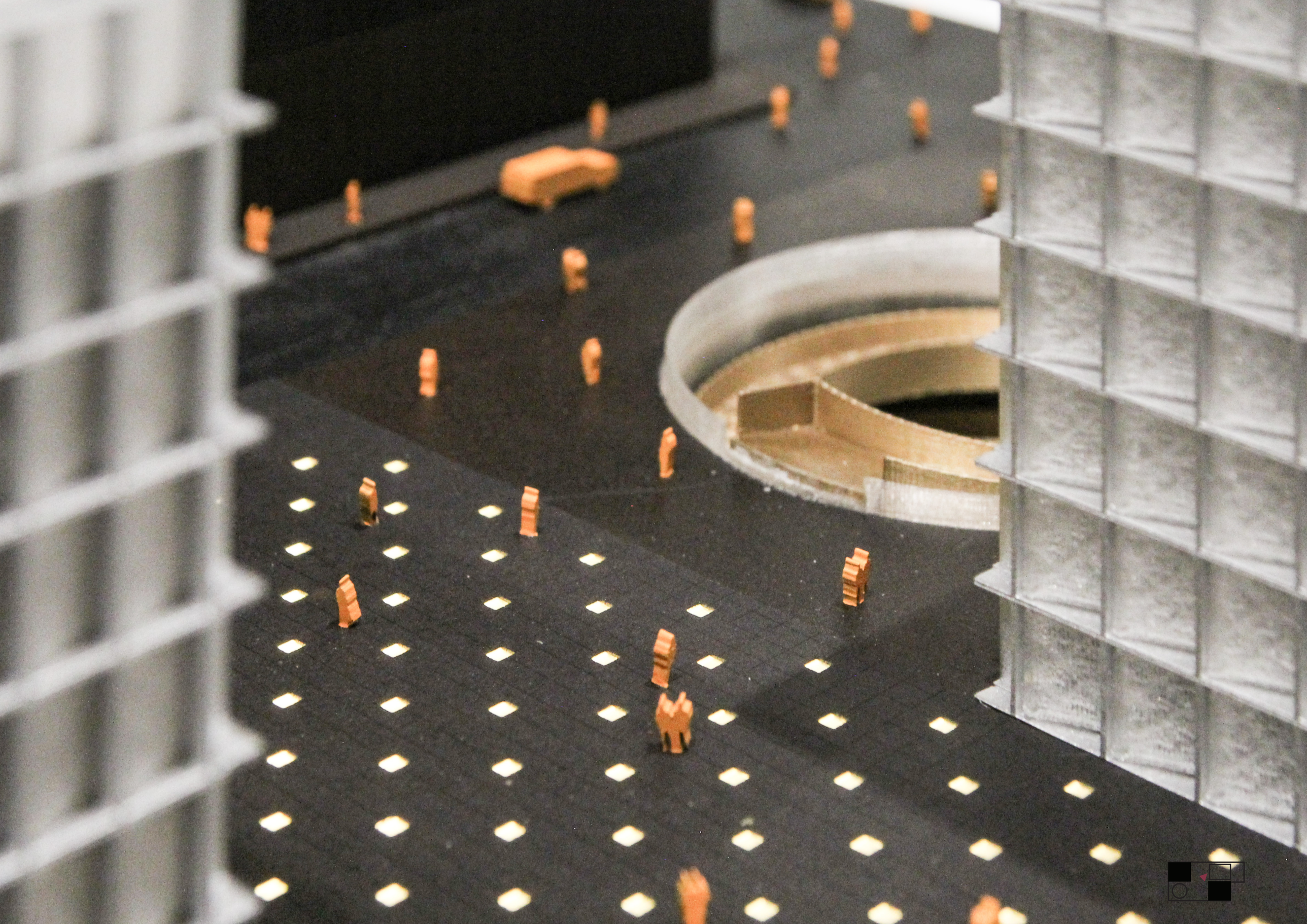
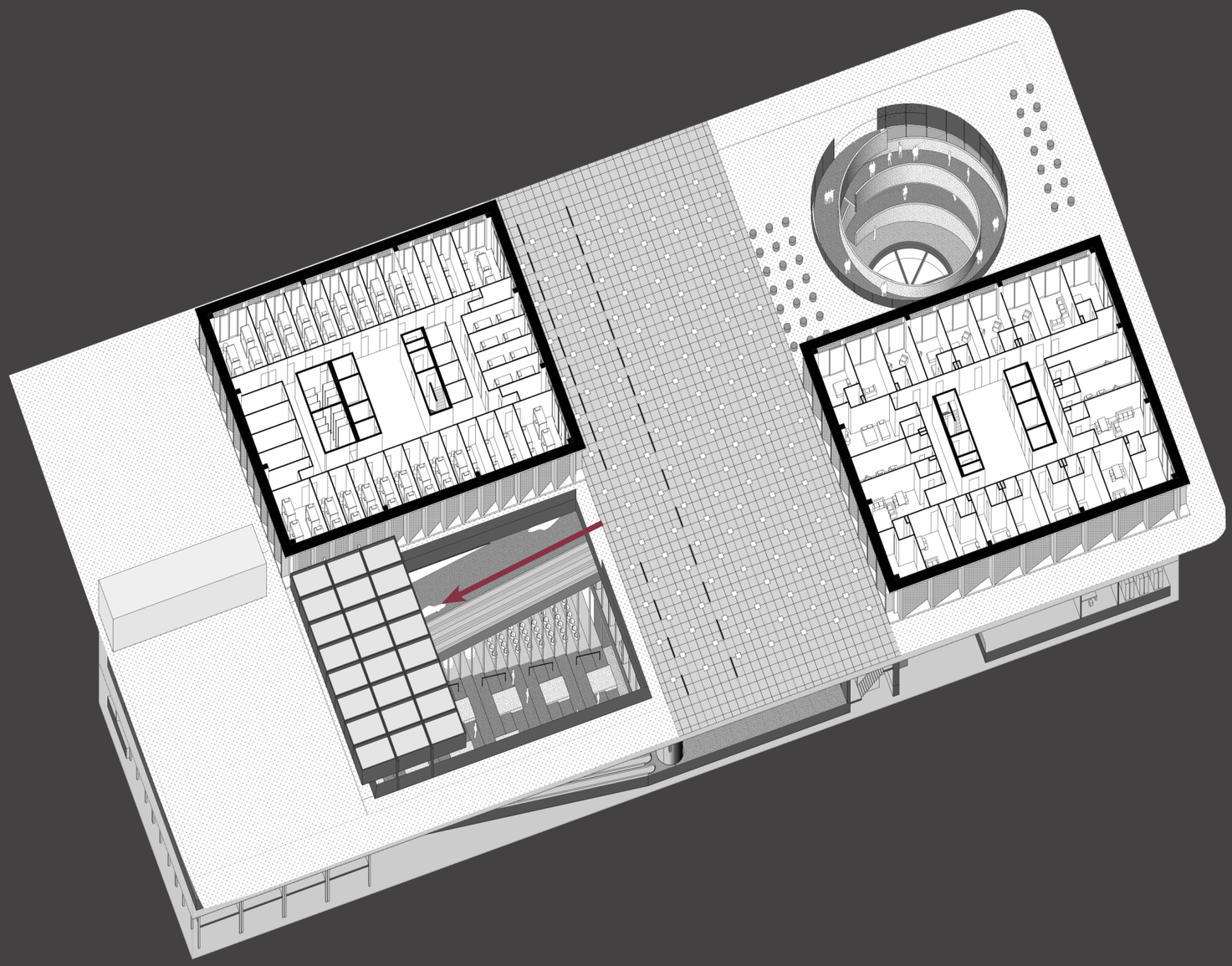
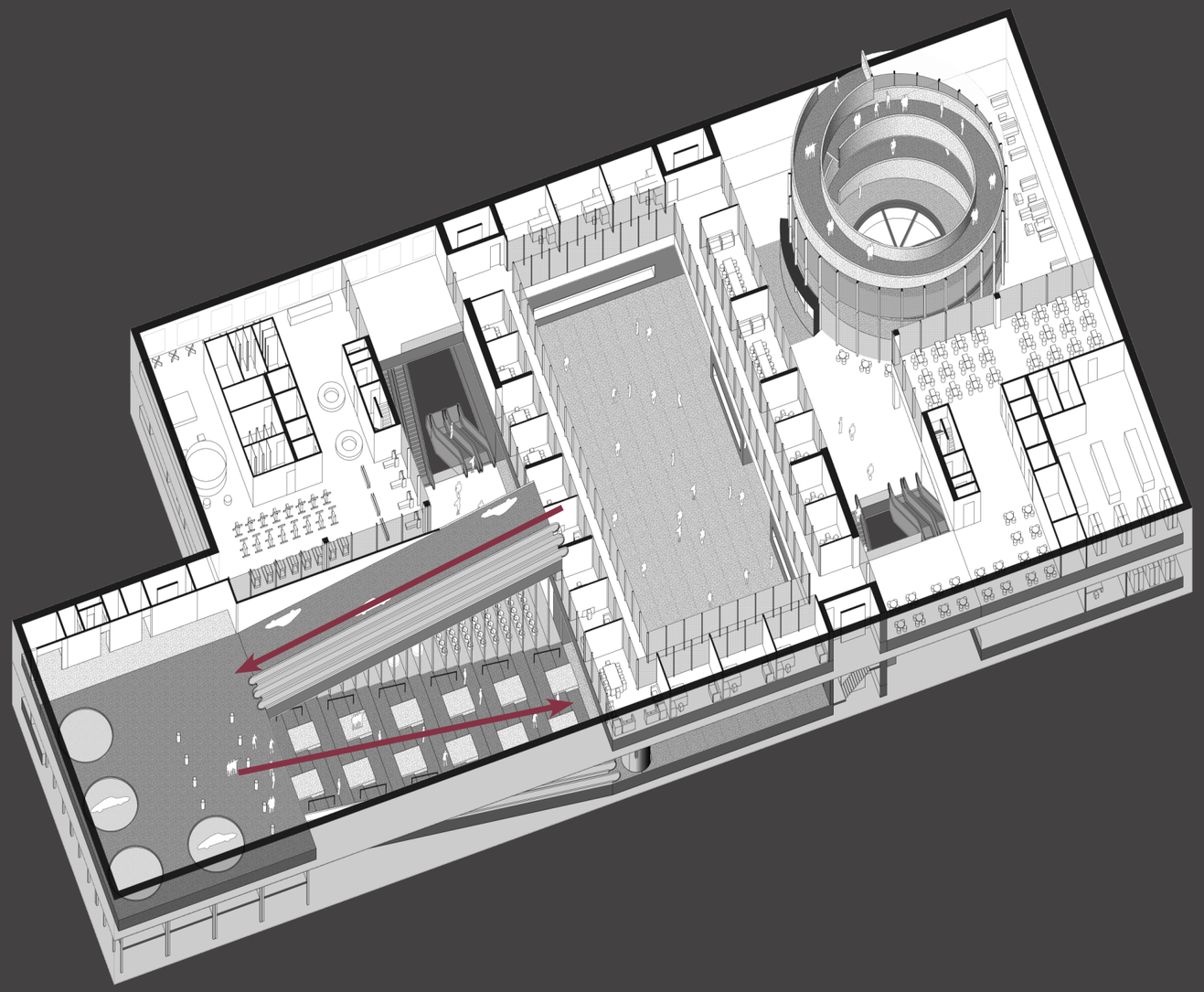





BOOTH
SCHOENFELD
JACOBS
THE LION KING
SLAVE PLAY
BY JEREMY O. HARRIS
DIRECTED BY ROBERT O'HARA
"THIS IS WHAT YOU SHOULD SEE RIGHT NOW."
NYPD



Car Entrance



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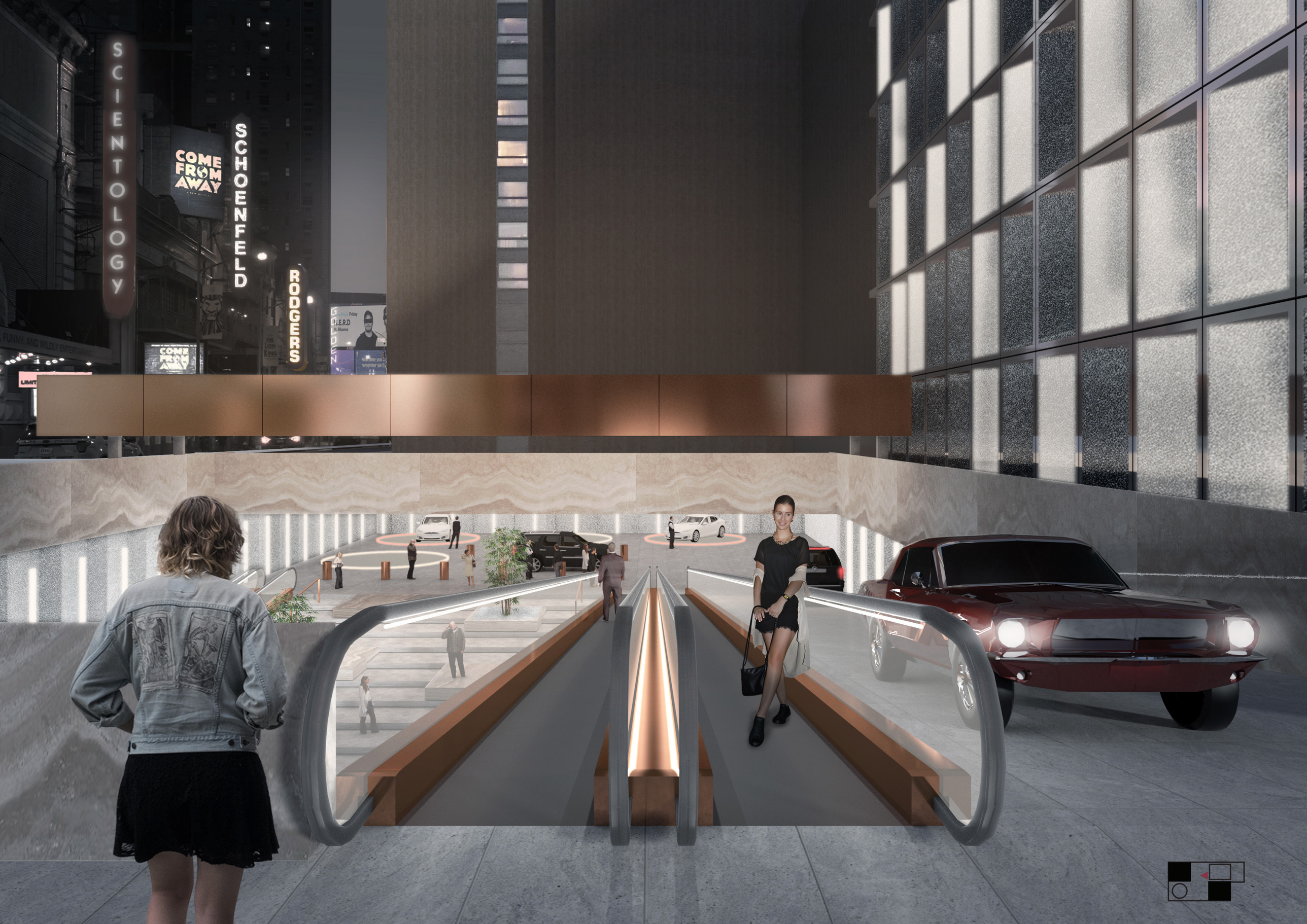
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COME FROM AWAY
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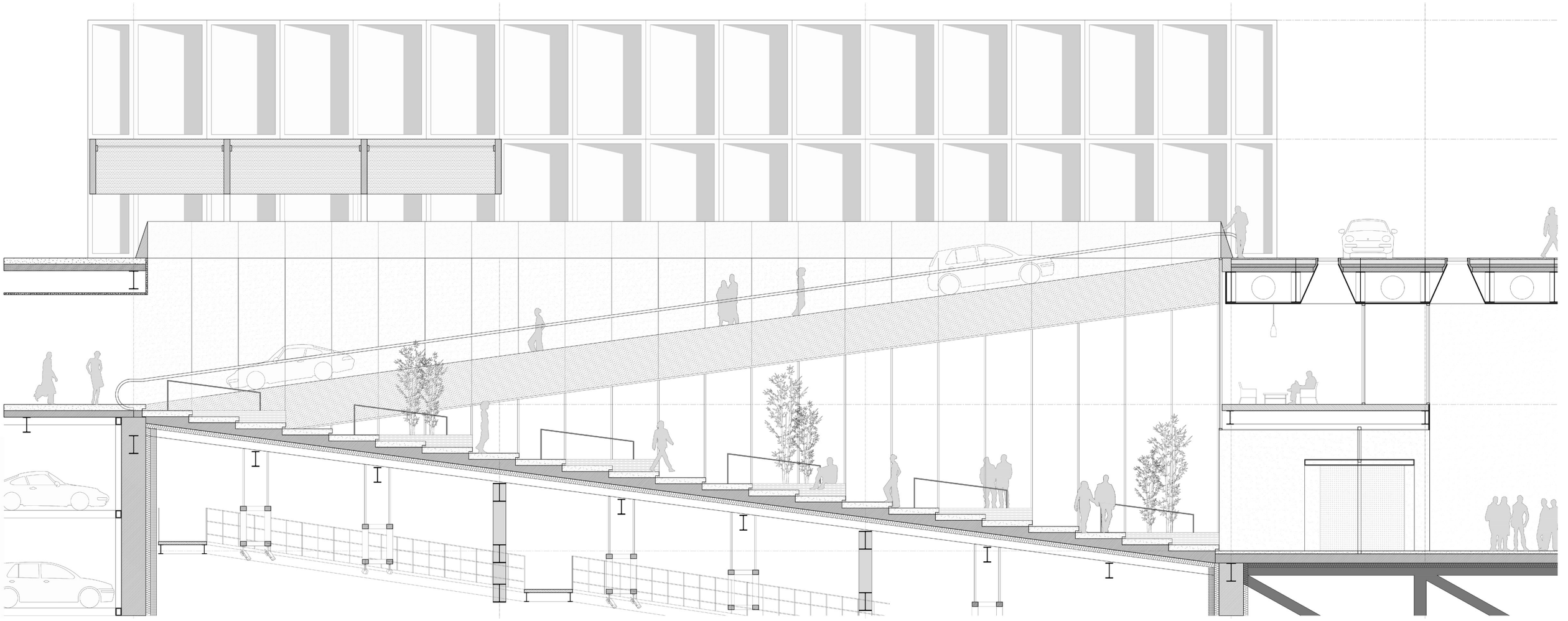
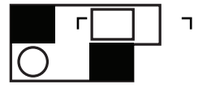
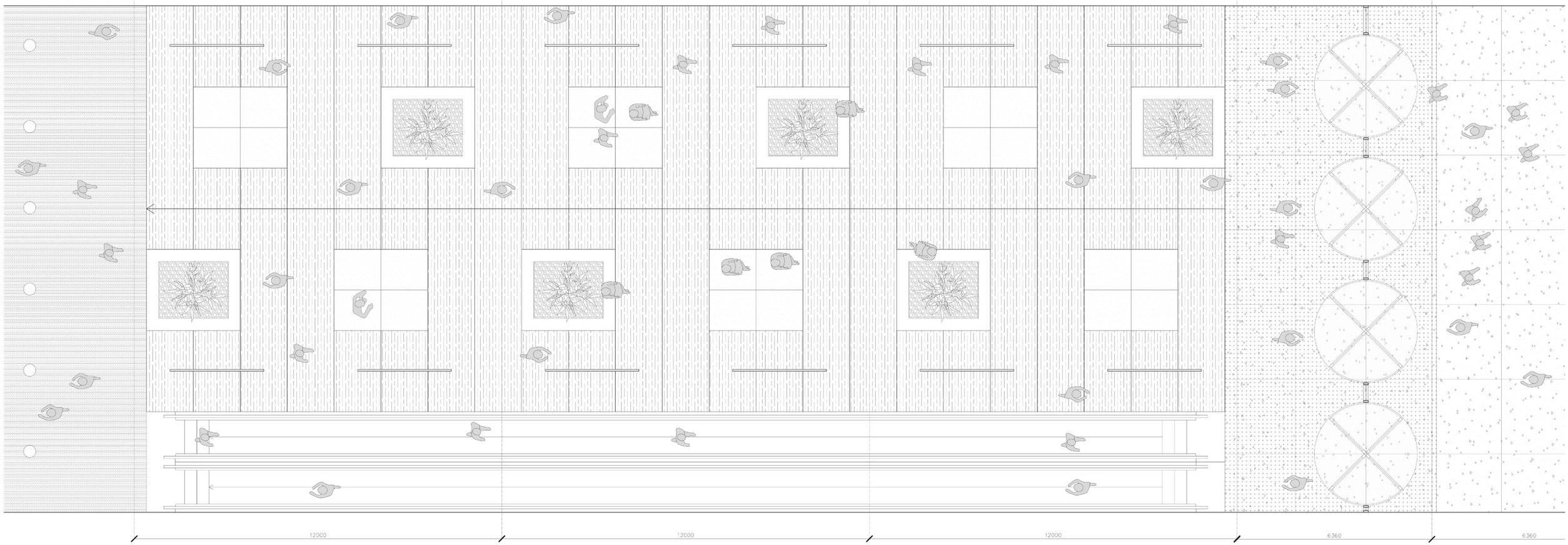
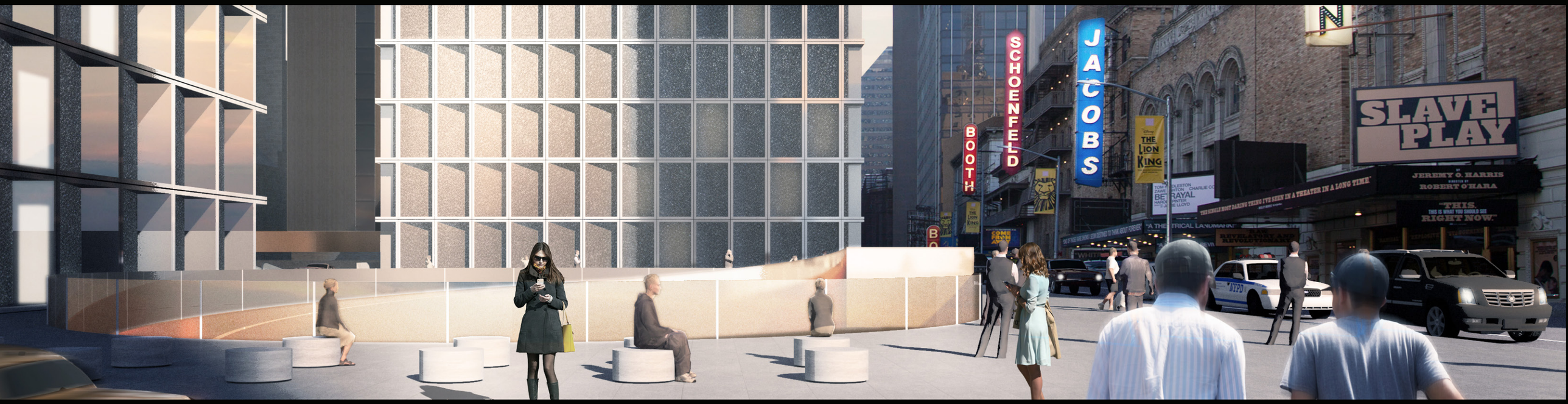


Car Entrance Detail





Car Entrance Detail


SCHOENFELD
JACOBS
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SLAVE PLAY
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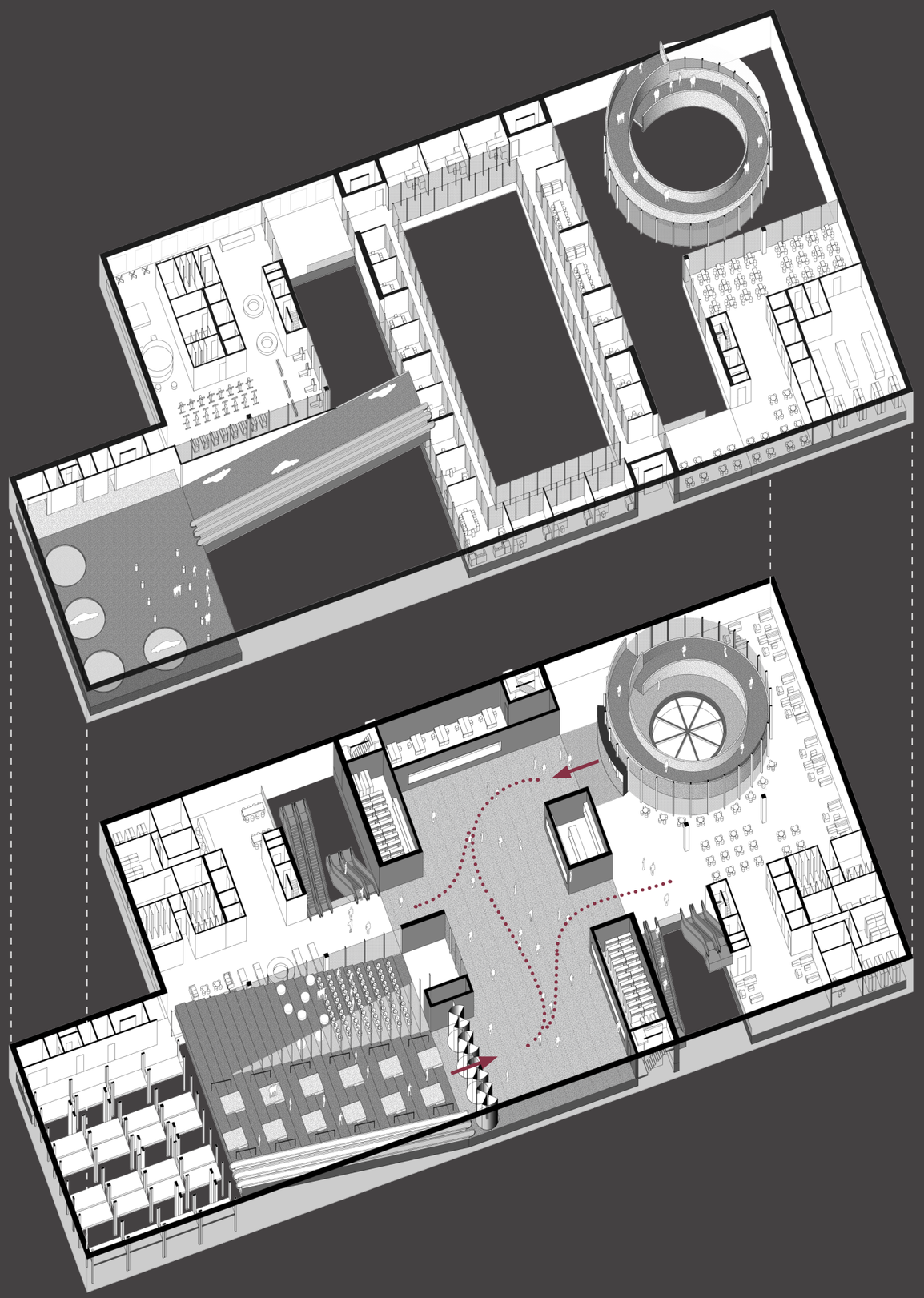
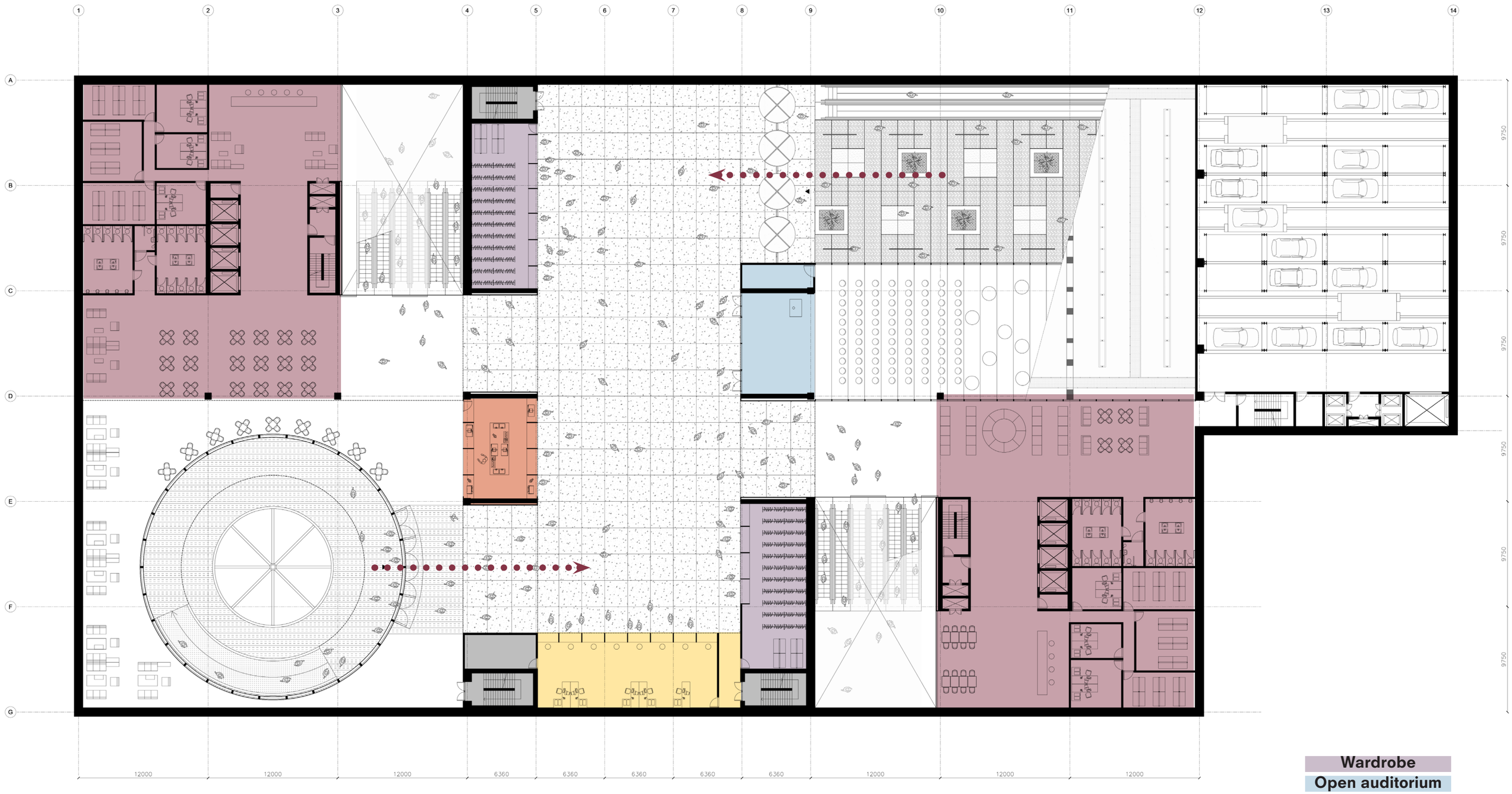
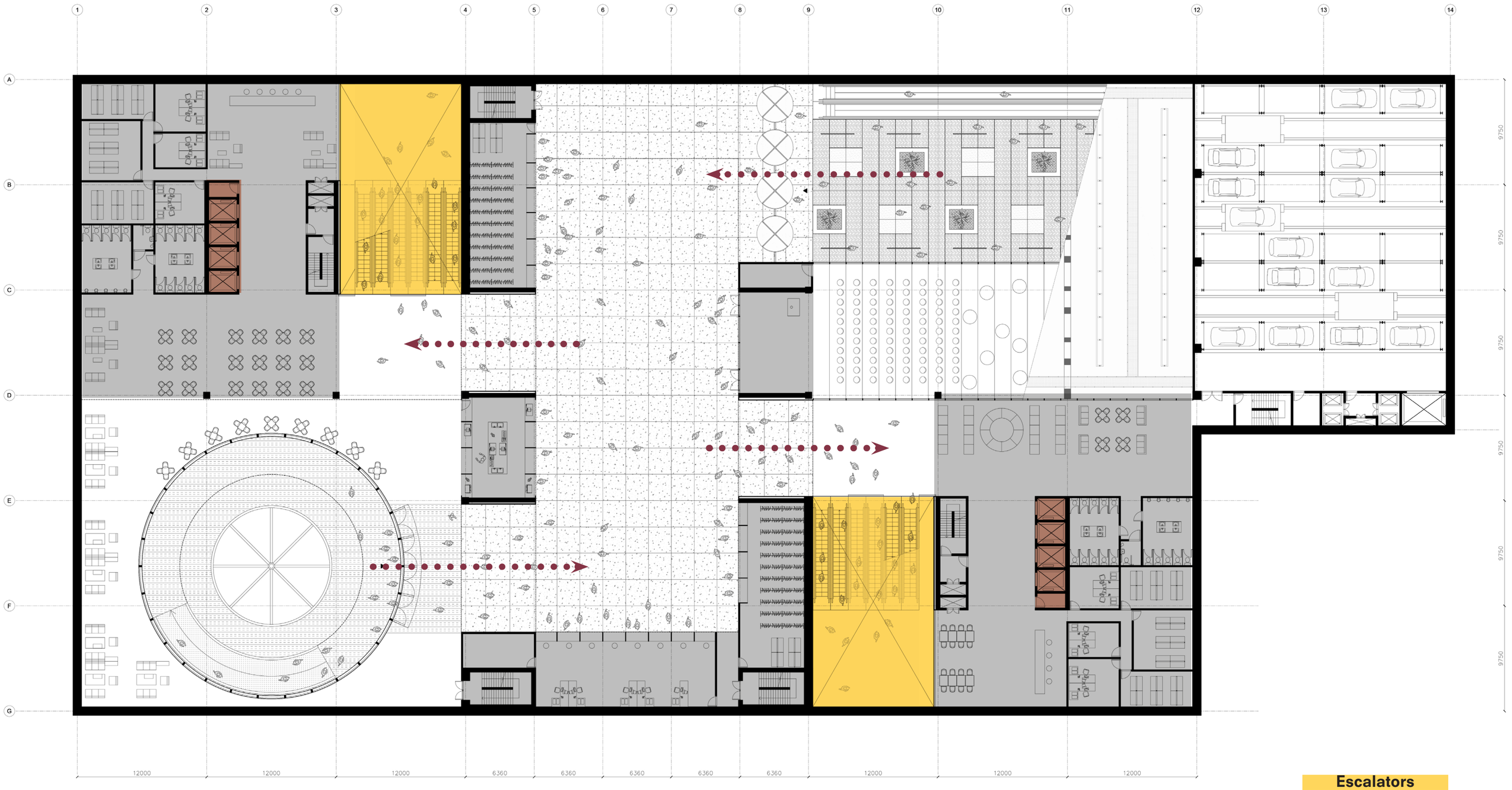


Lobby and Hotel Amenities



Theater and Hotel Lobby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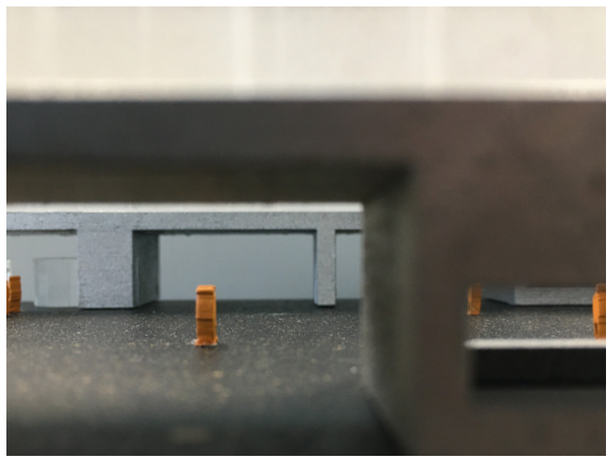
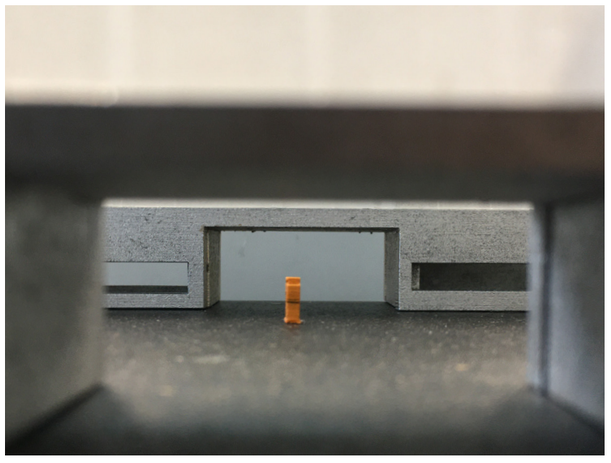
Escalators
Elevators

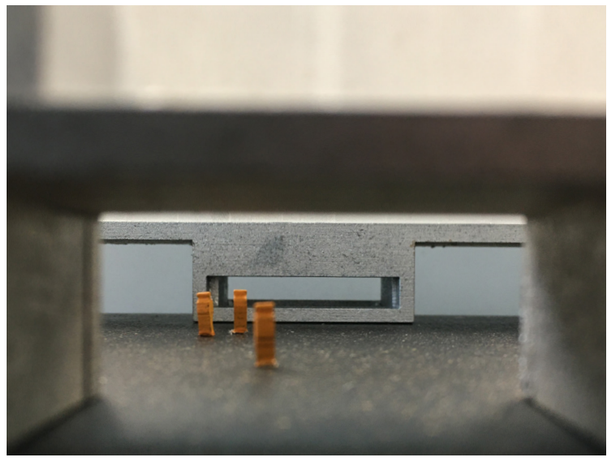
Hotel Lobby





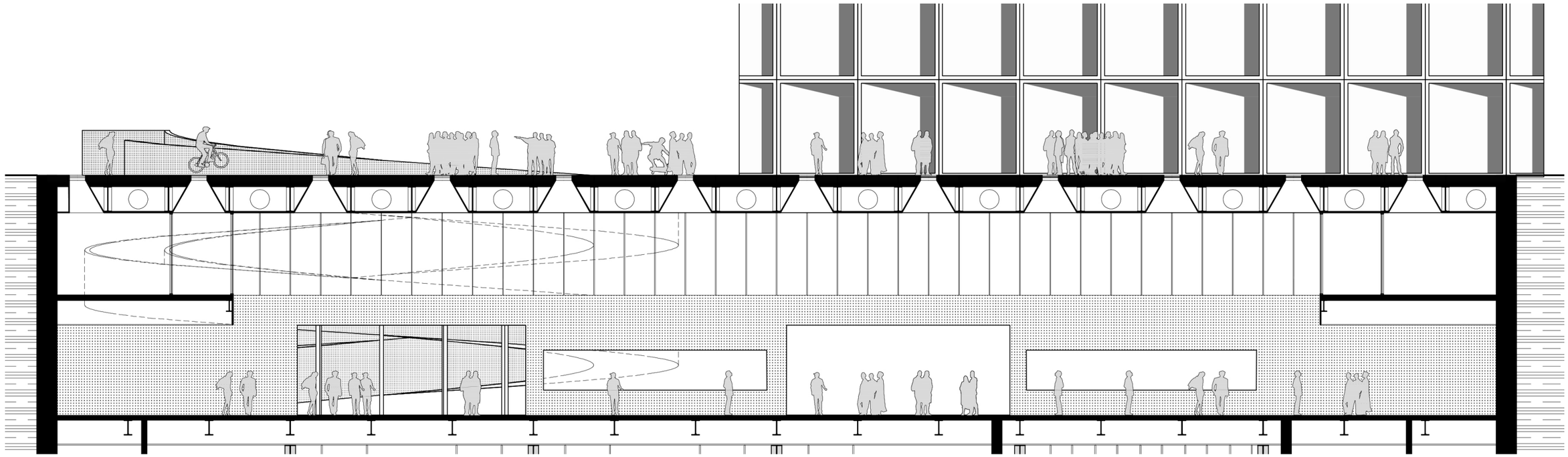




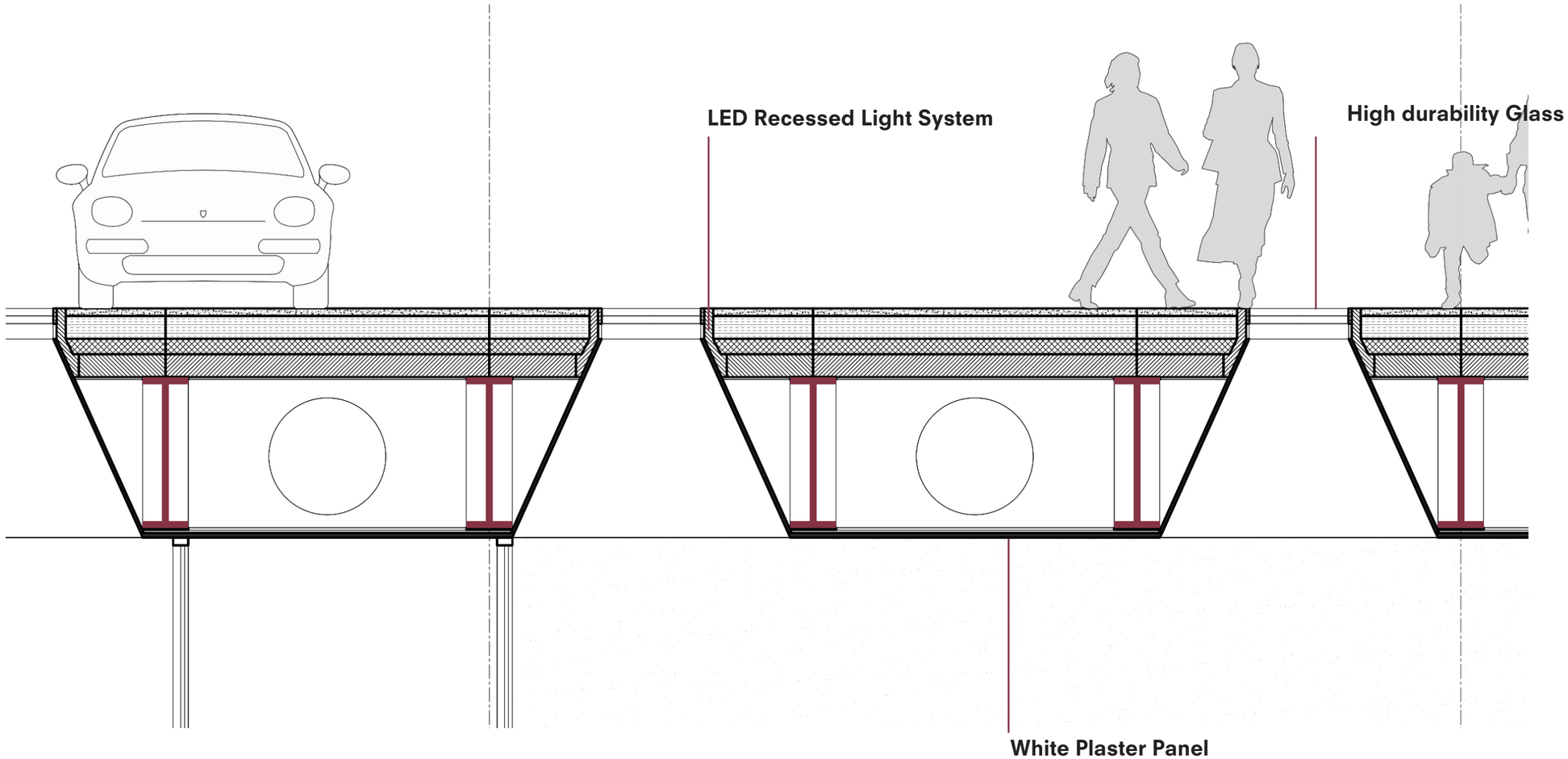


Different Frames Entering Central Lobby

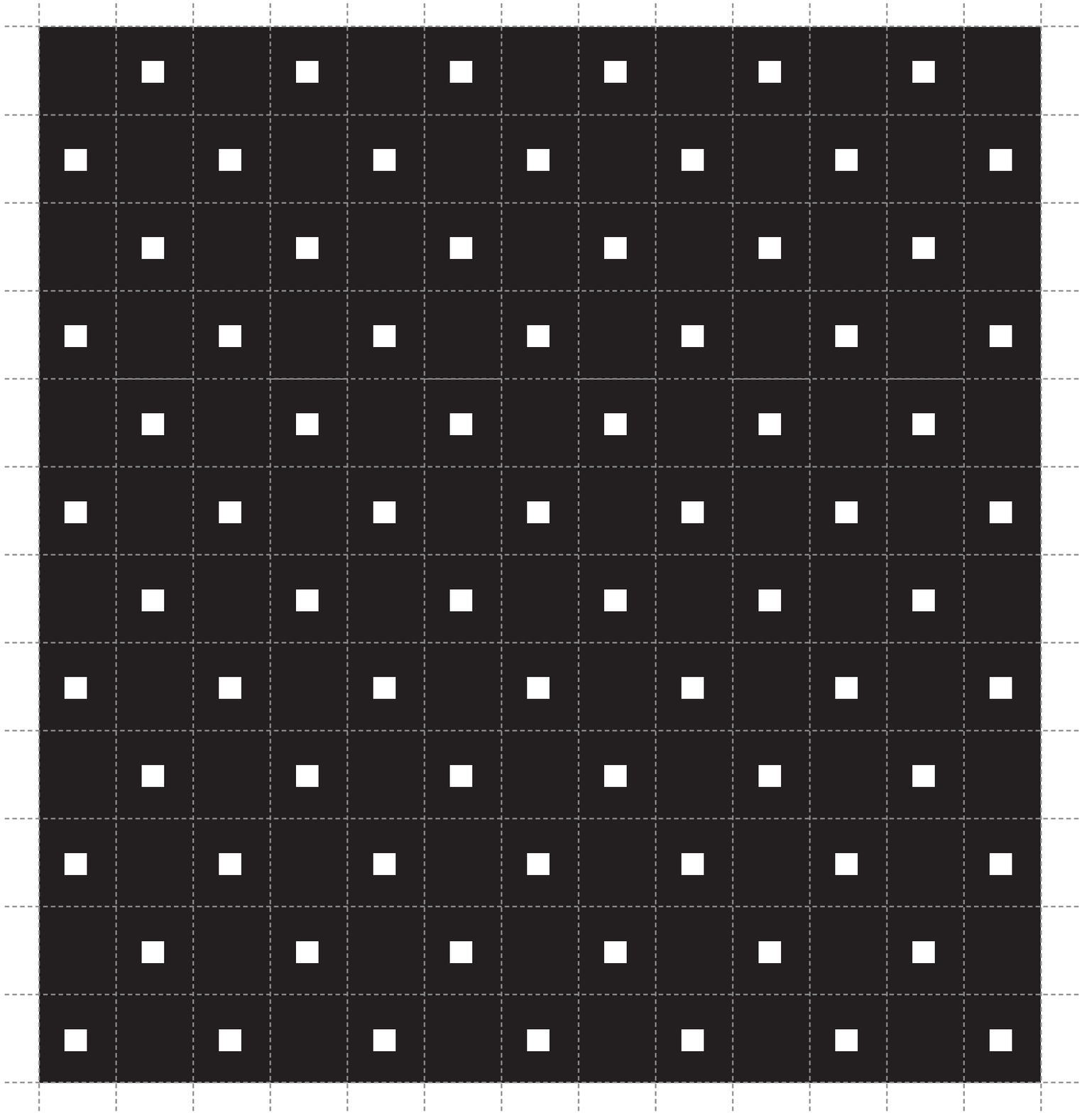




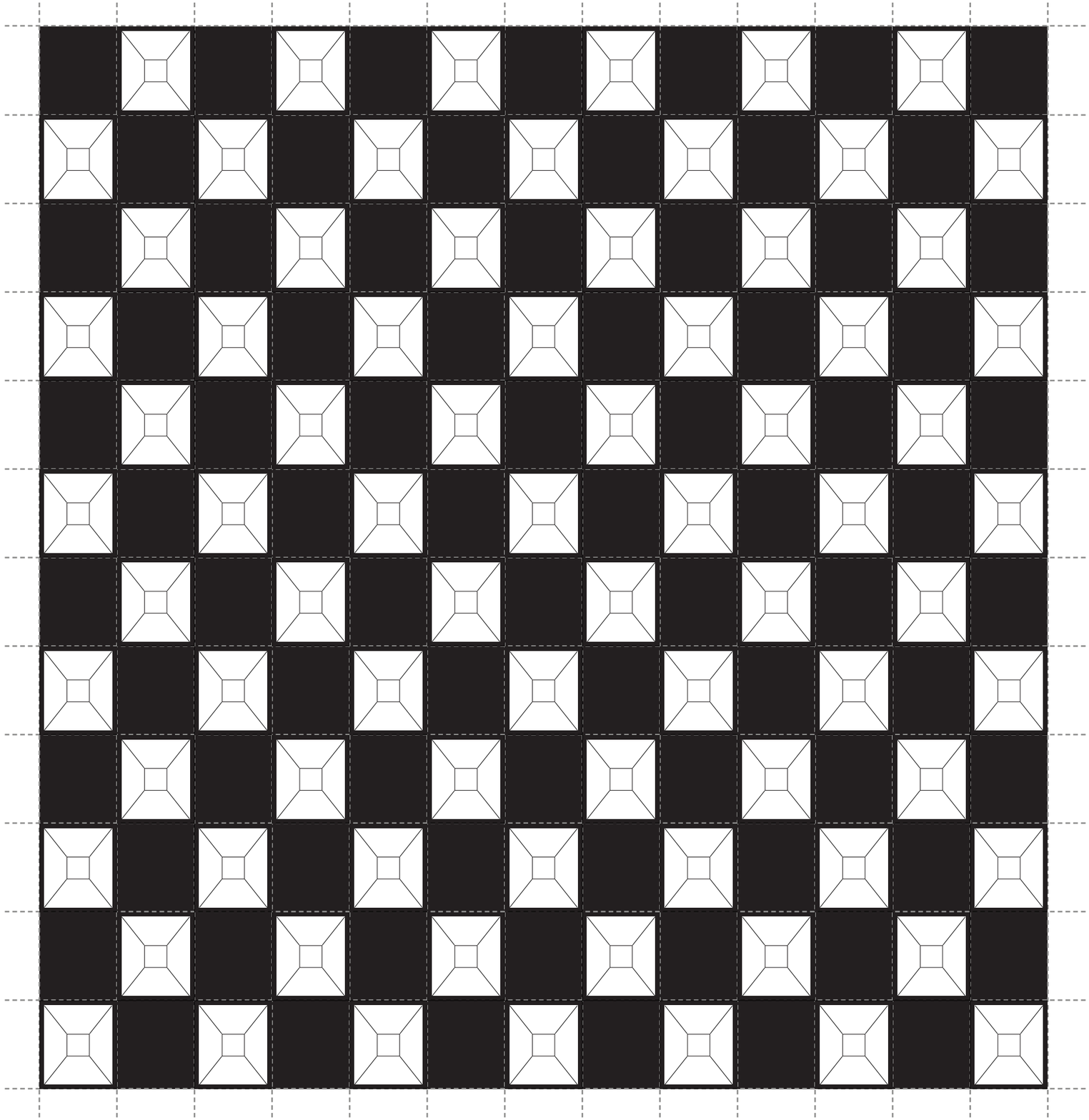
Lobby section



Lobby section



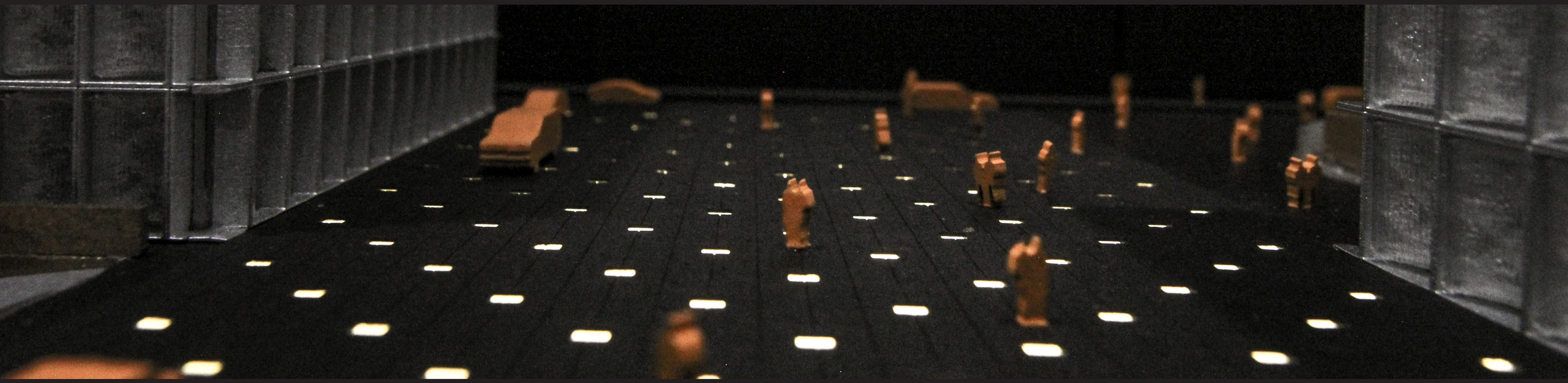
Ground Opnings



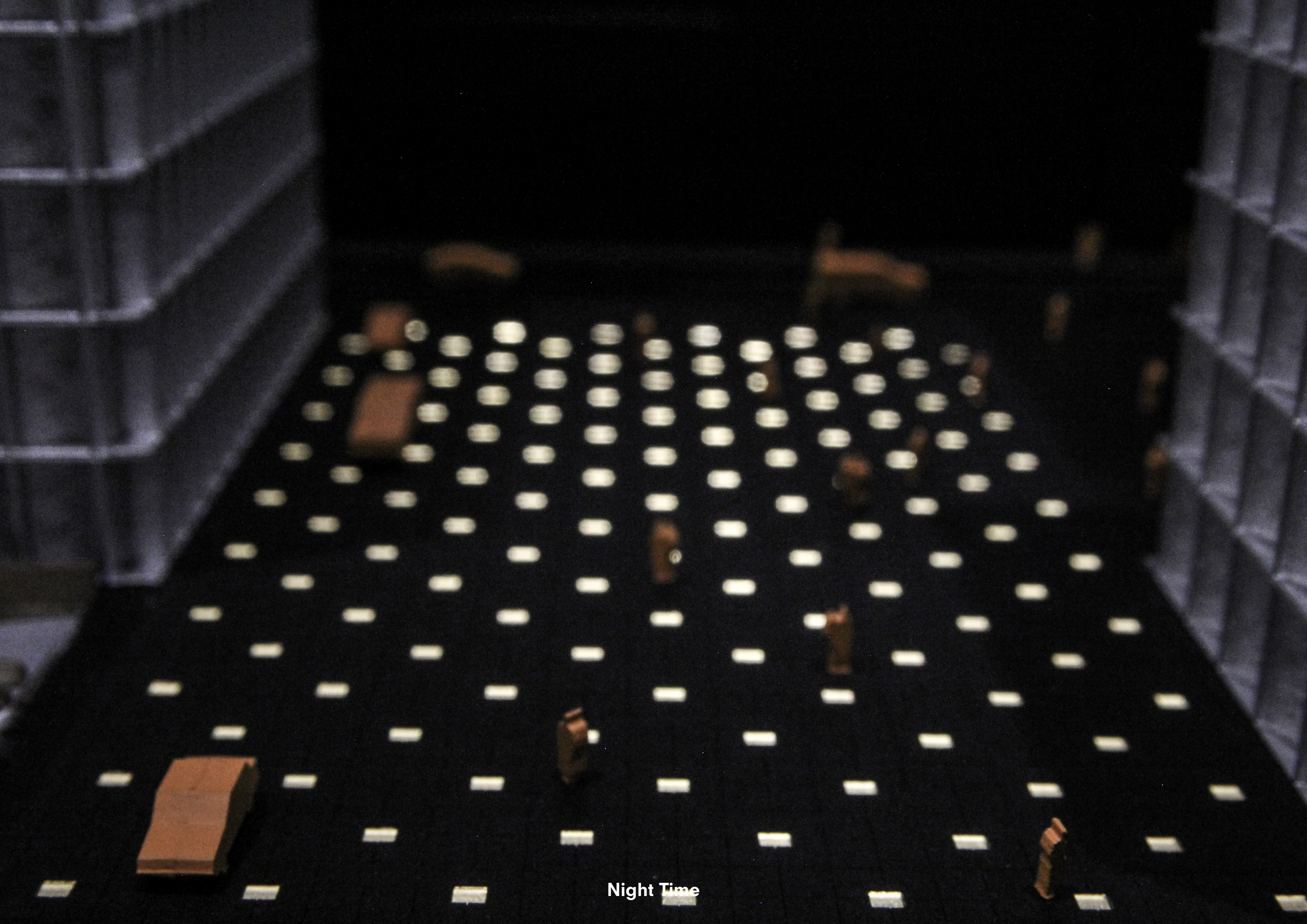
Ceiling Openings


RD B. JACOBS THEATRE
BANDSTAND
The New Homecoom Musical
DRIVING
Miss Daisy

Day Time



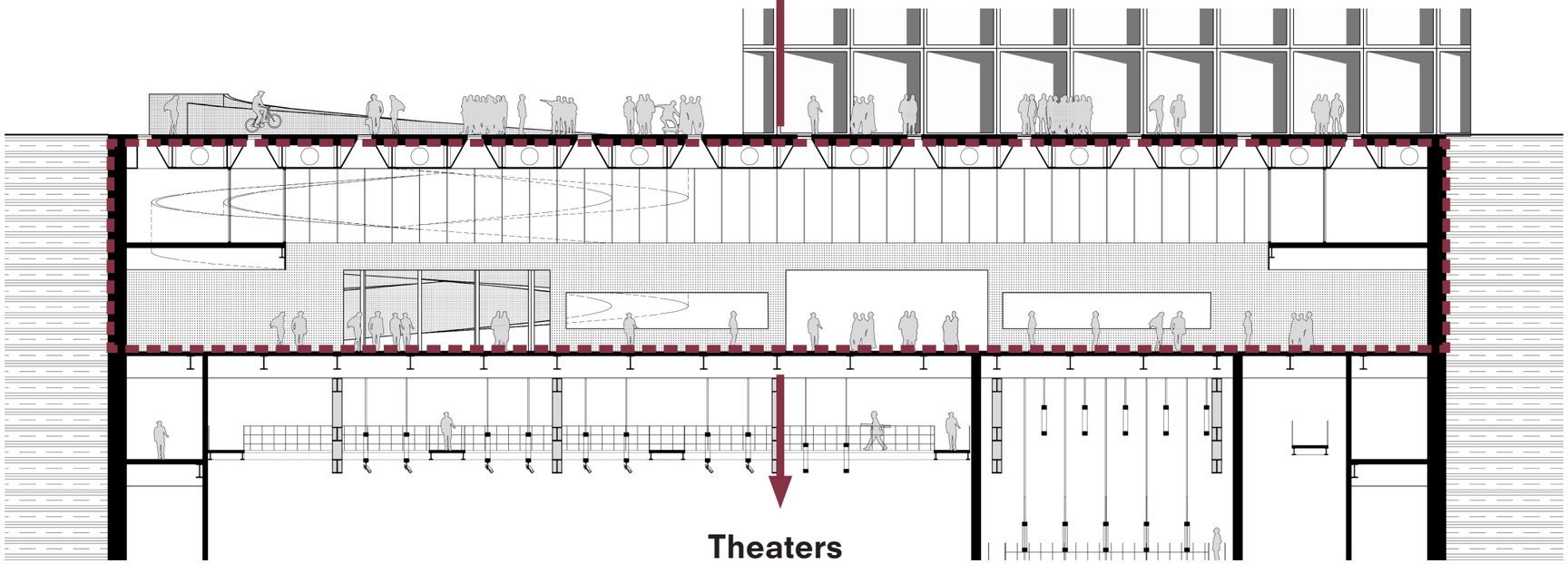
Night Time



Night Time

Hotels

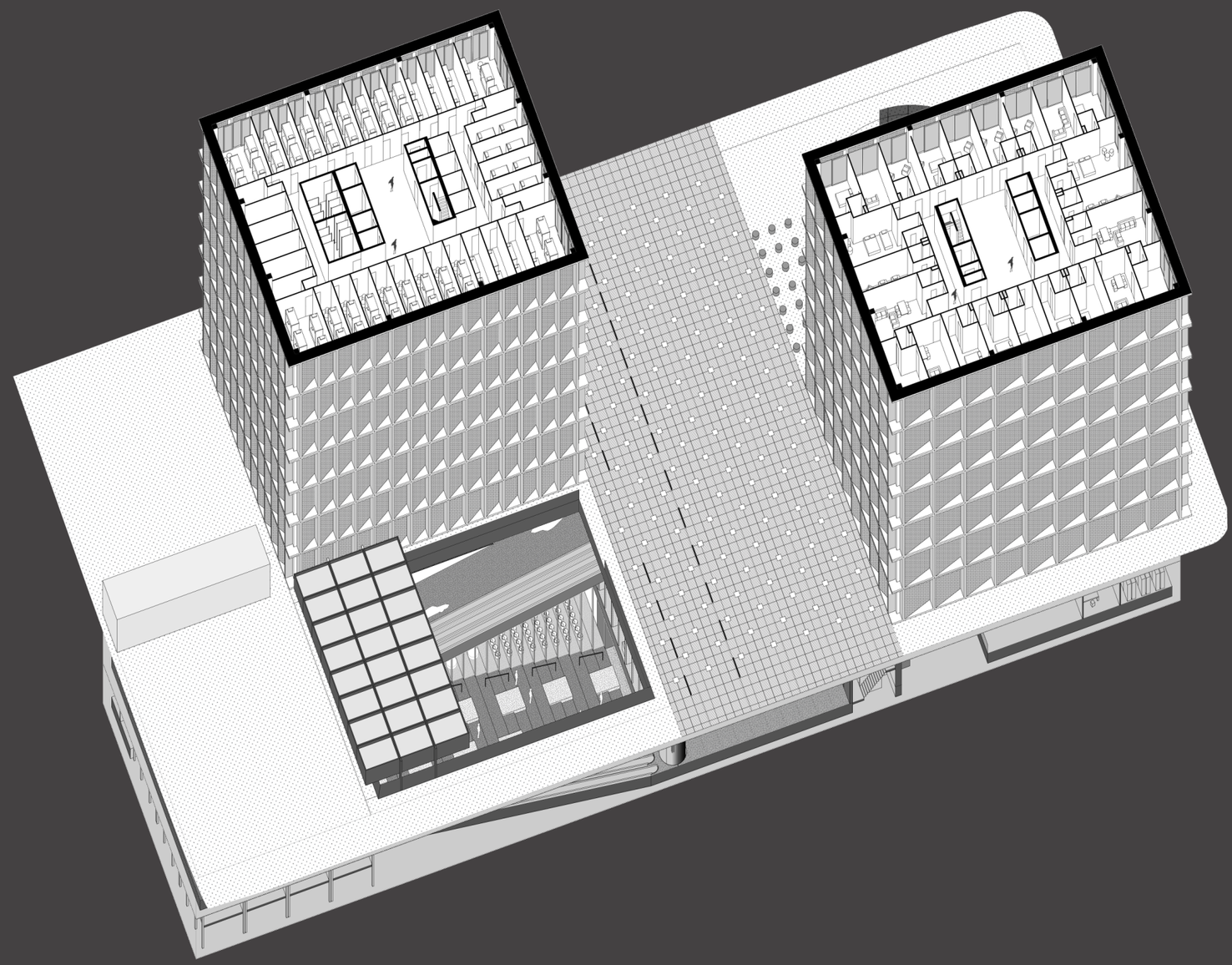
Ground Level



-2 Lobby Level

Theaters

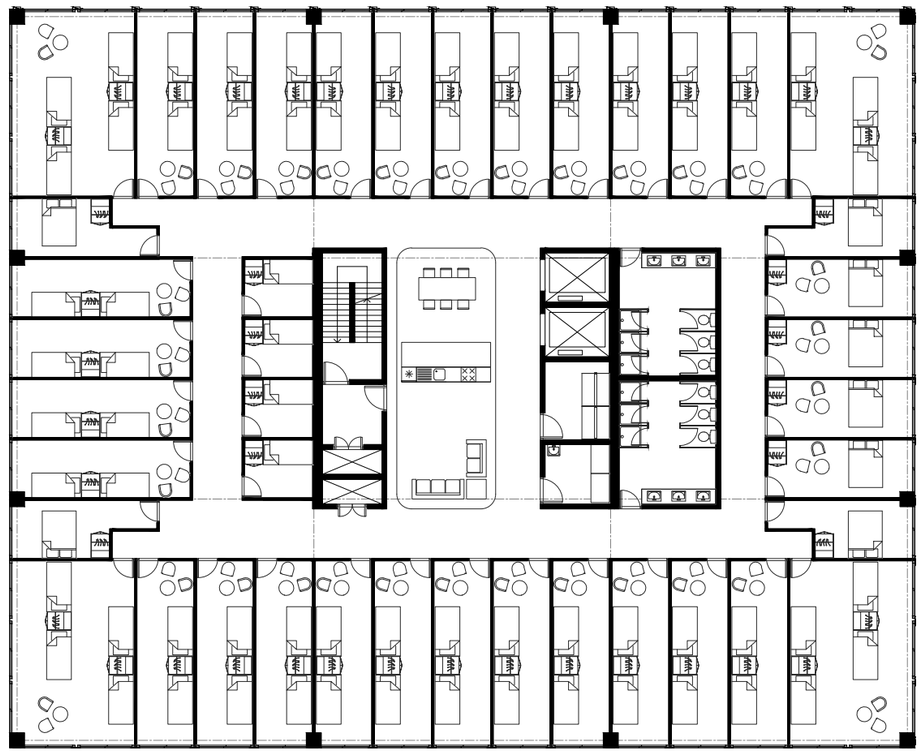
Lobby section



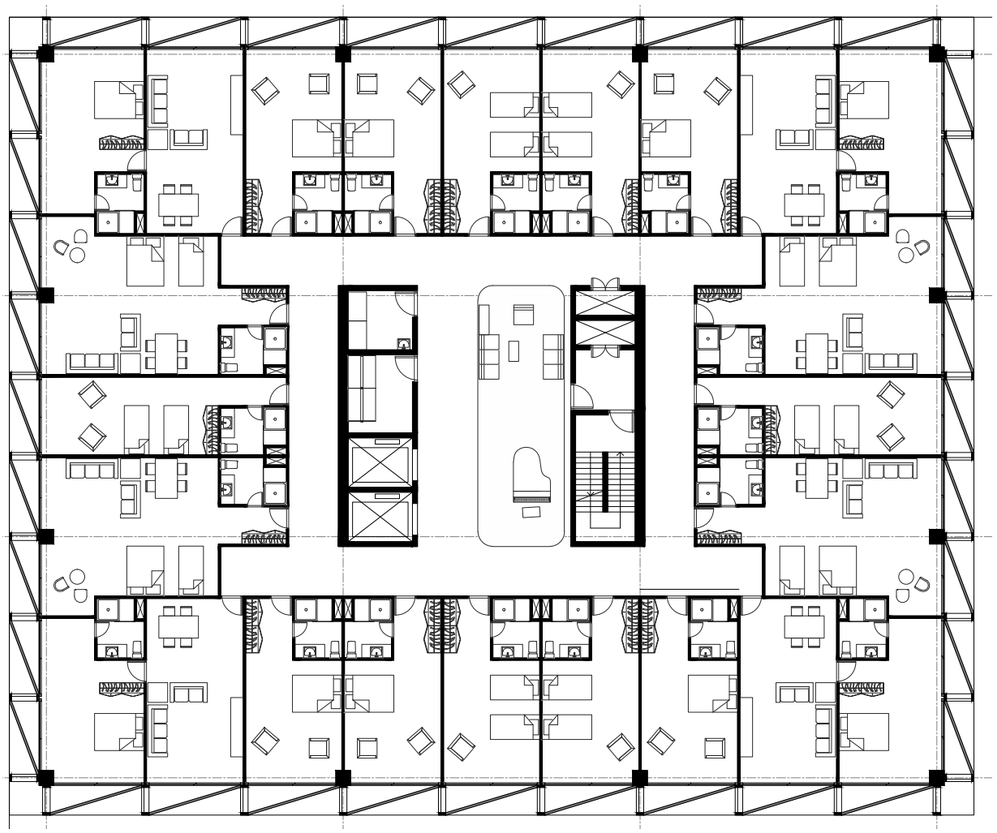
Hotel Typology



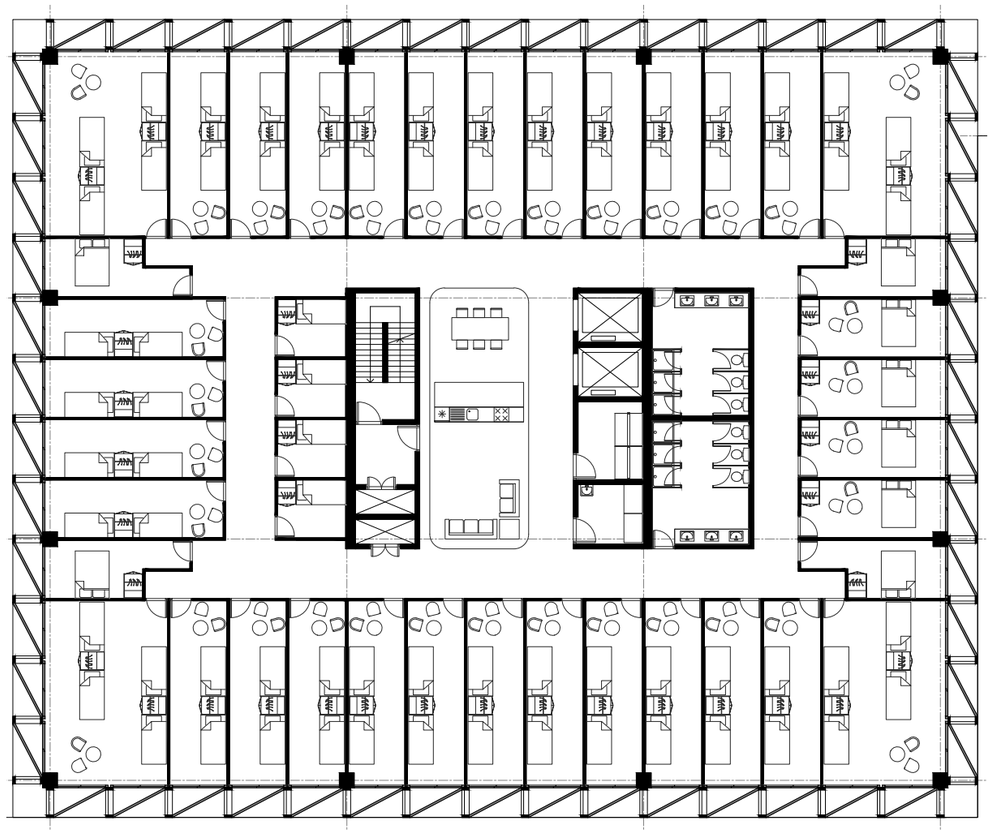
New York Standard Hotel



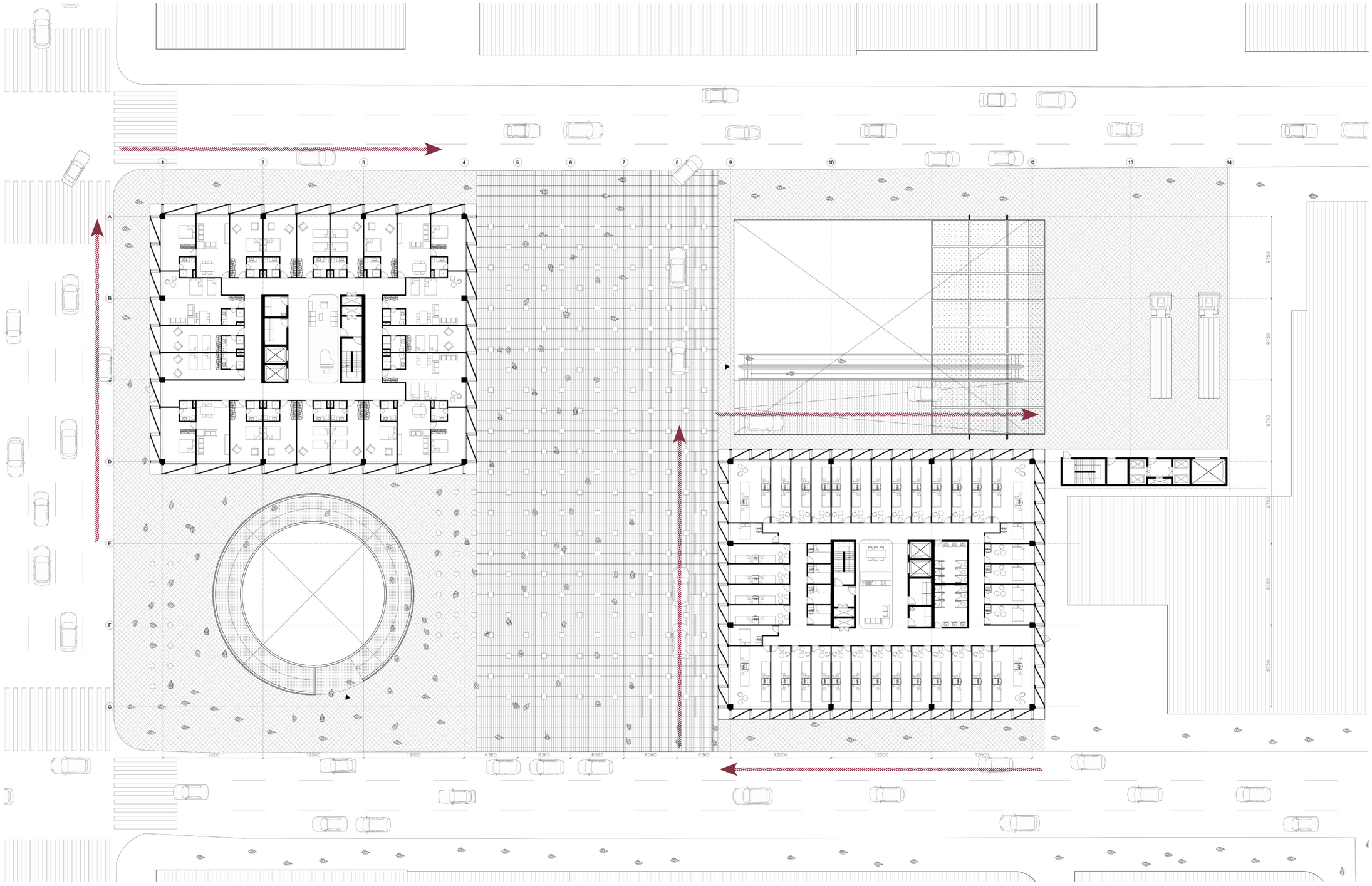
Low Budget Hostel



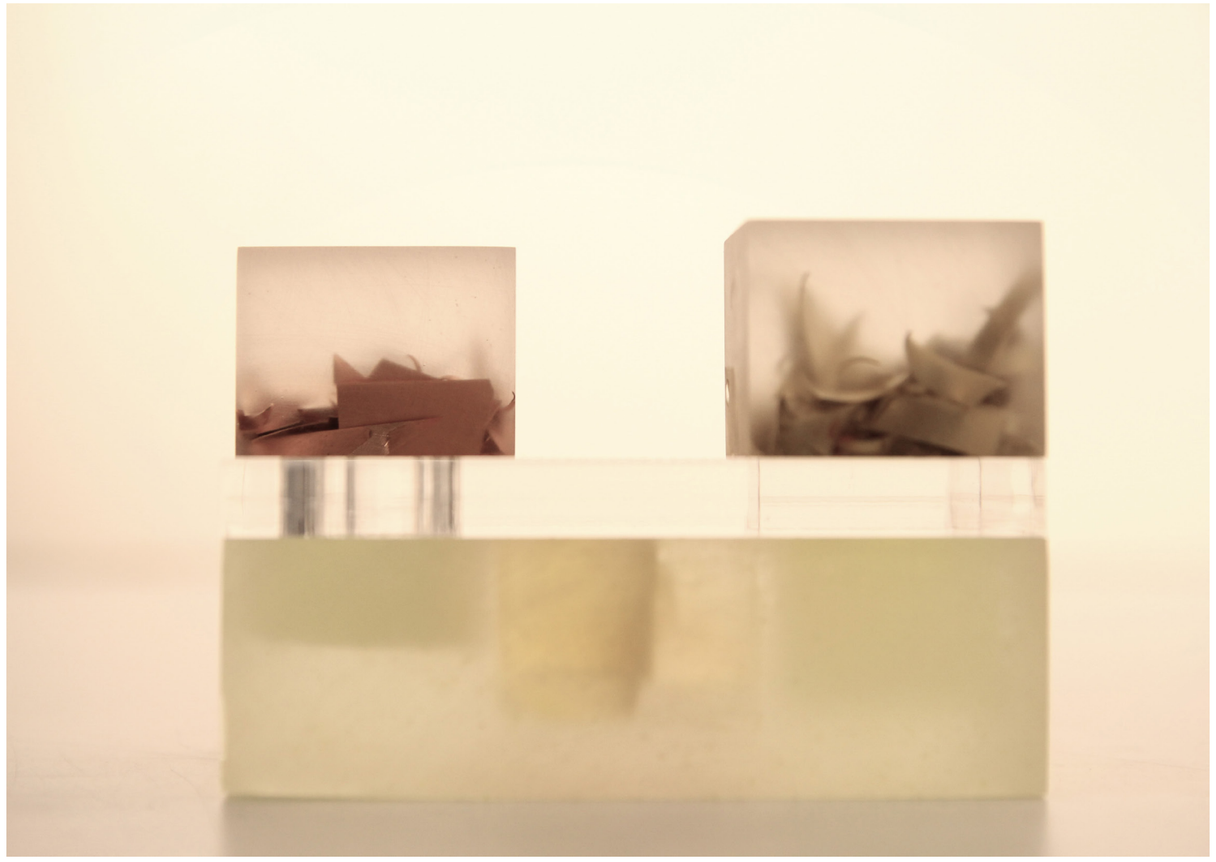
New York Standard Hotel

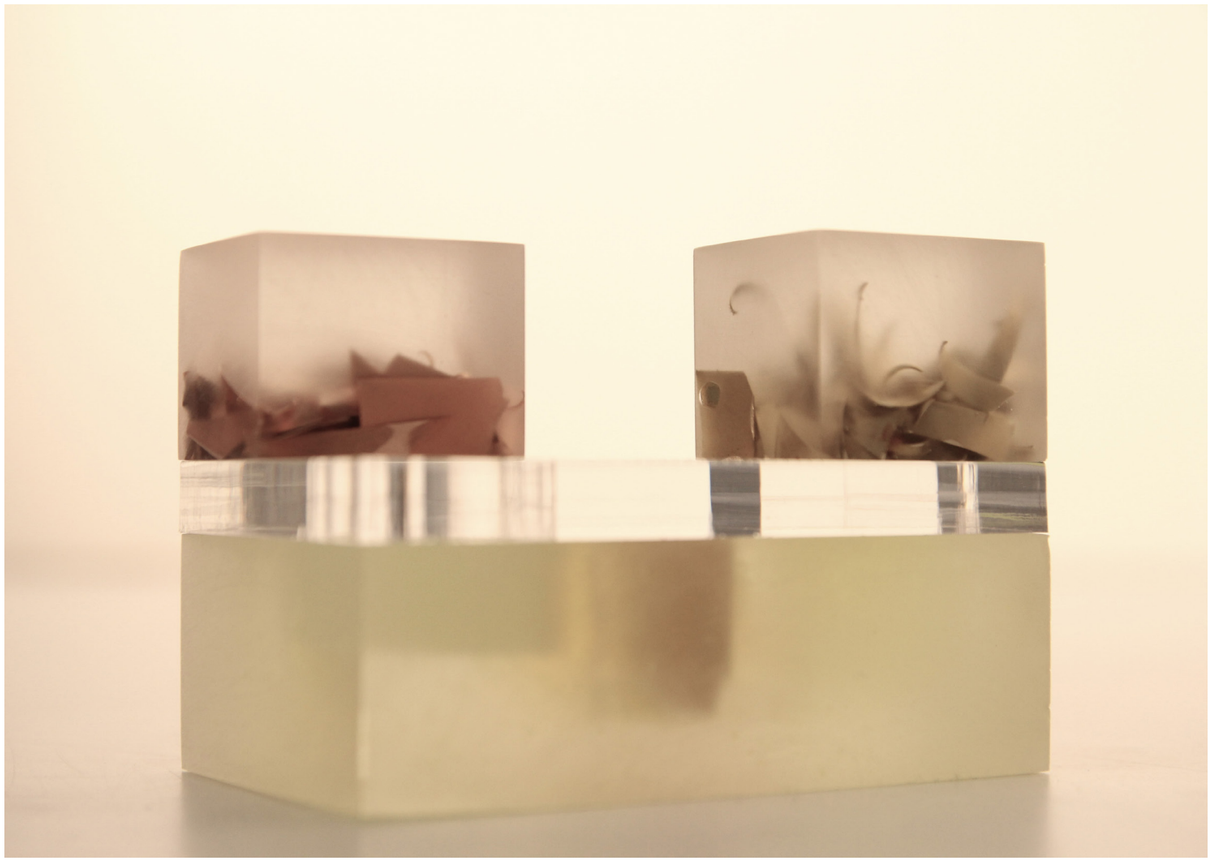


Low Budget Hostel



Diagonal Facade

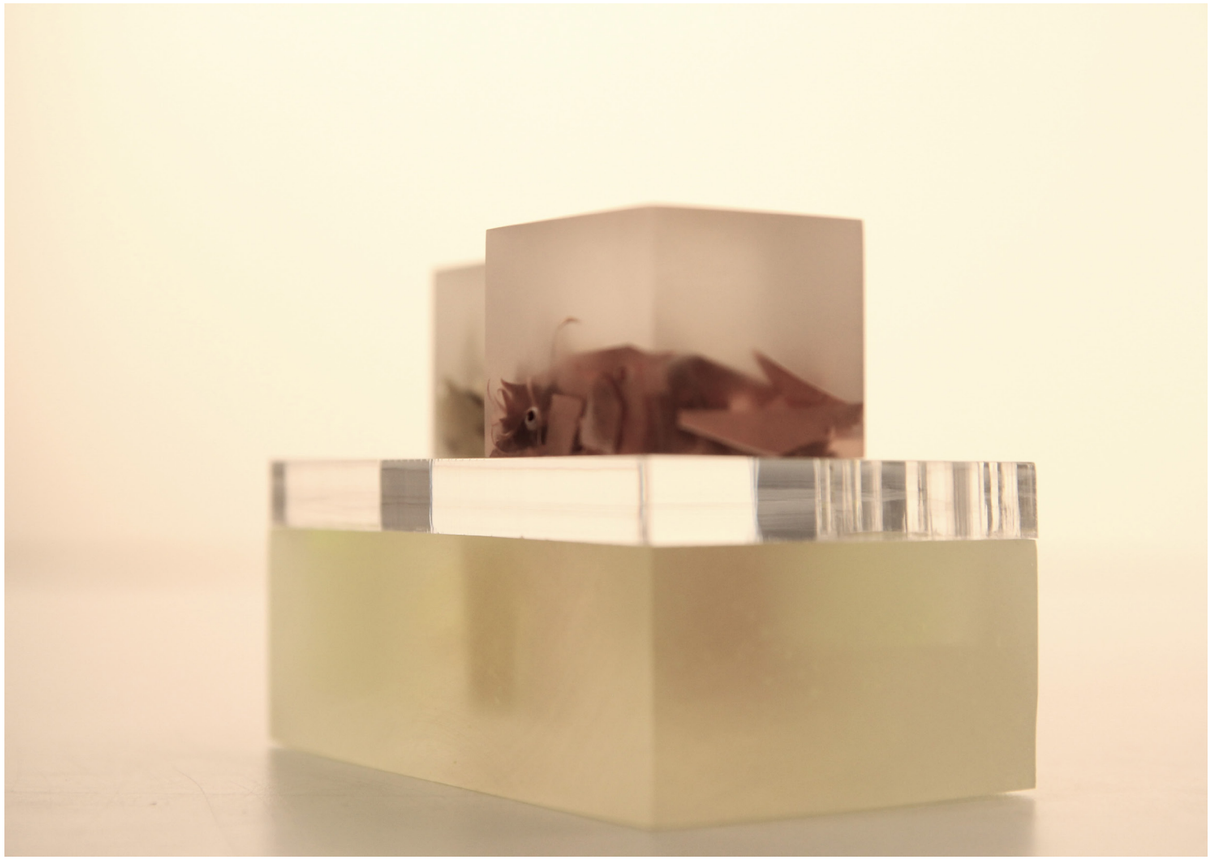


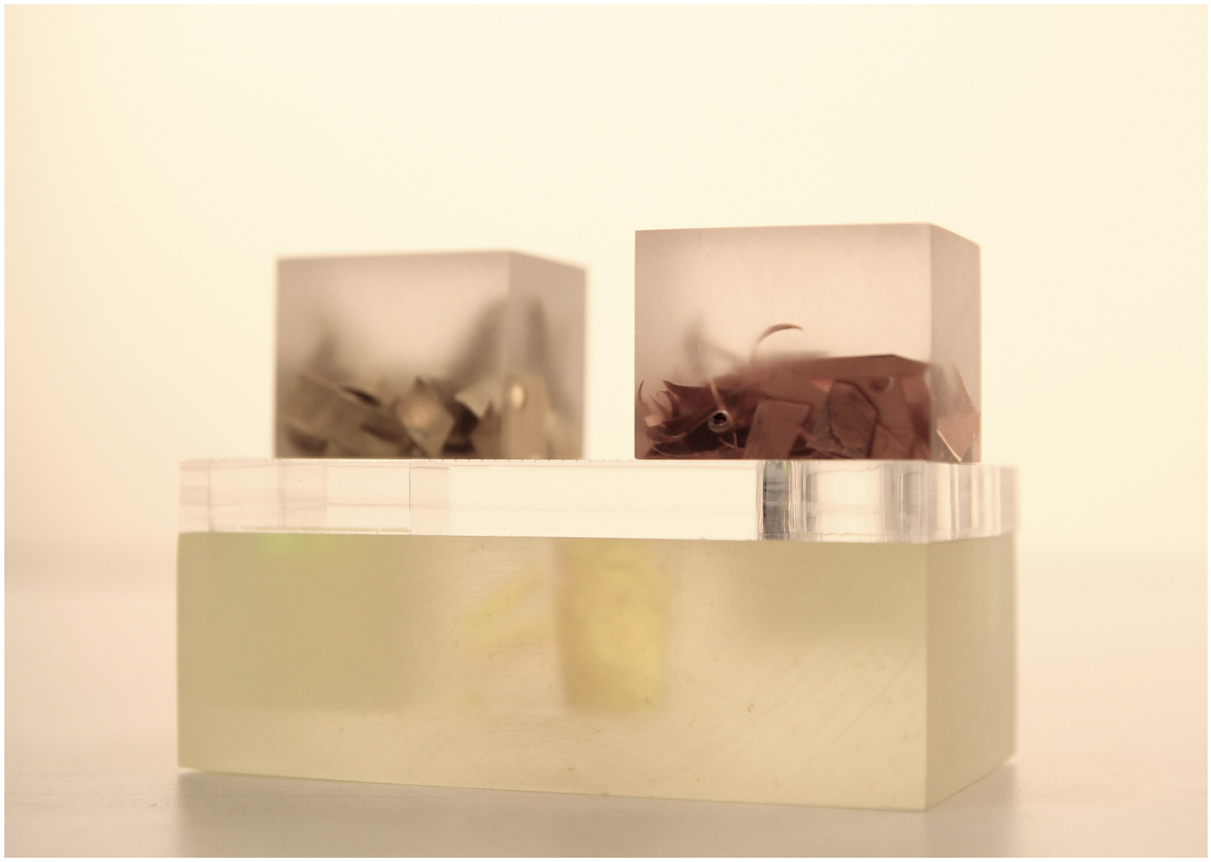


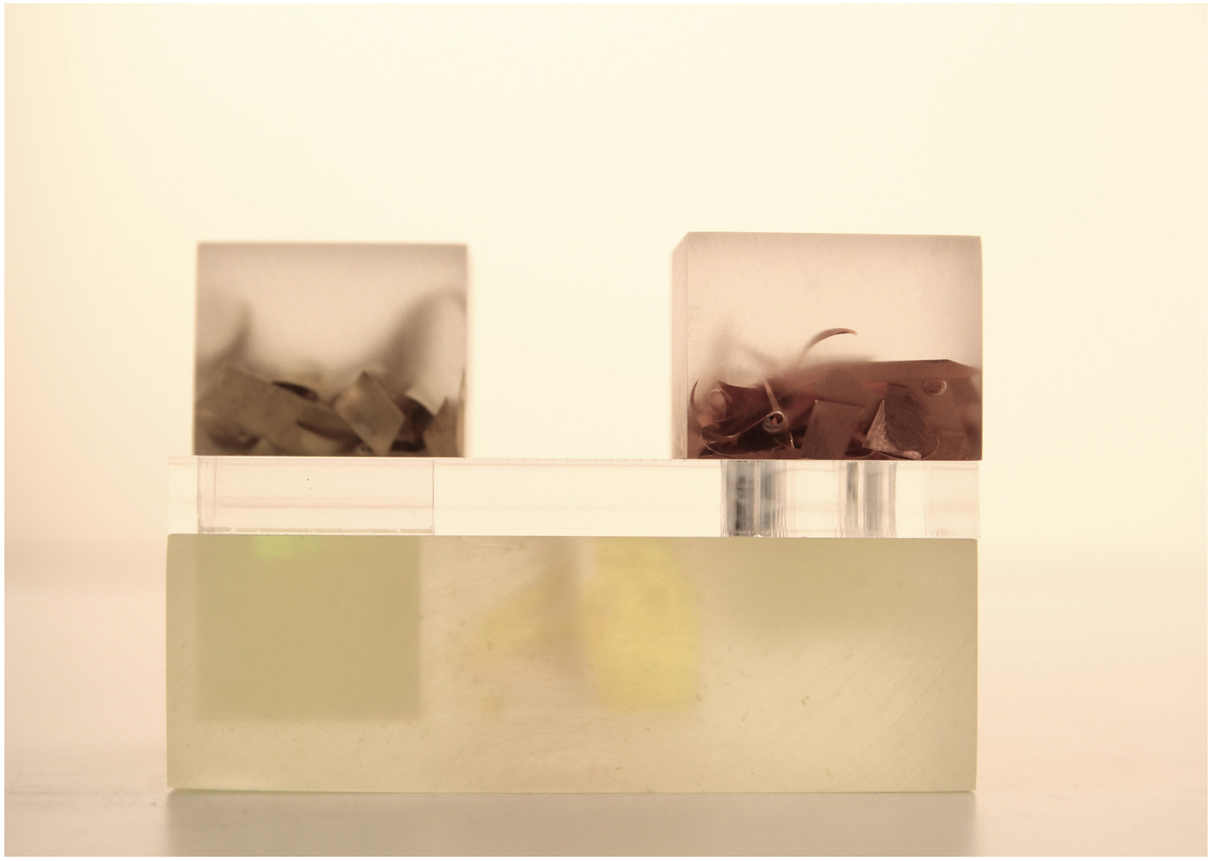


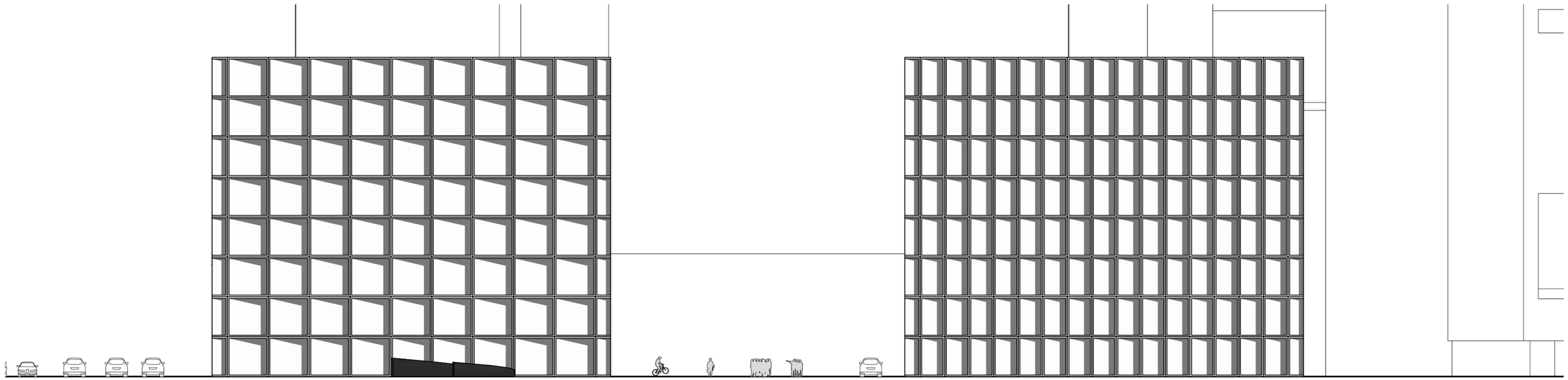


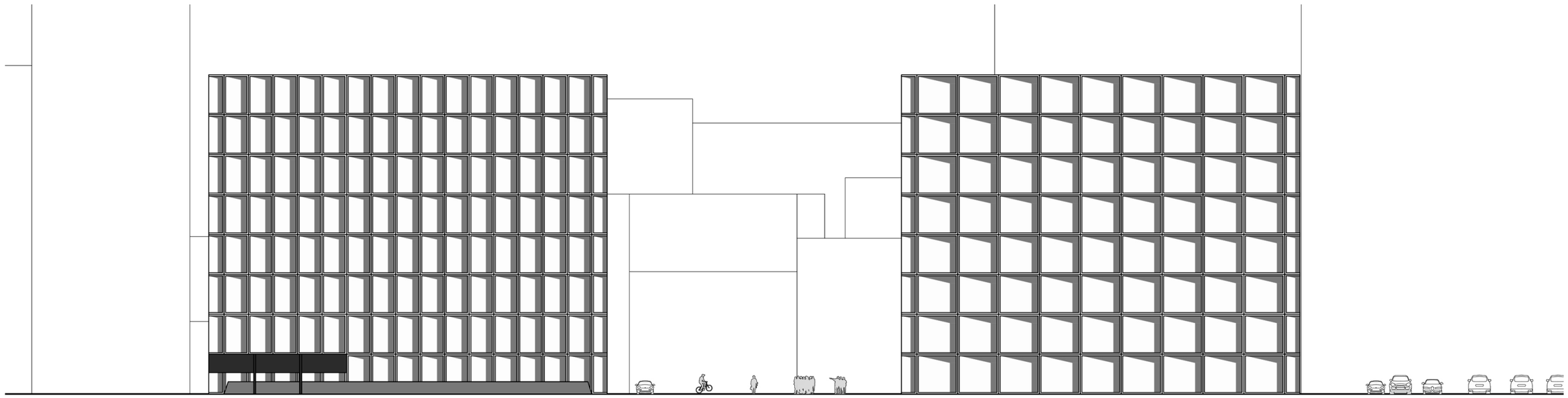




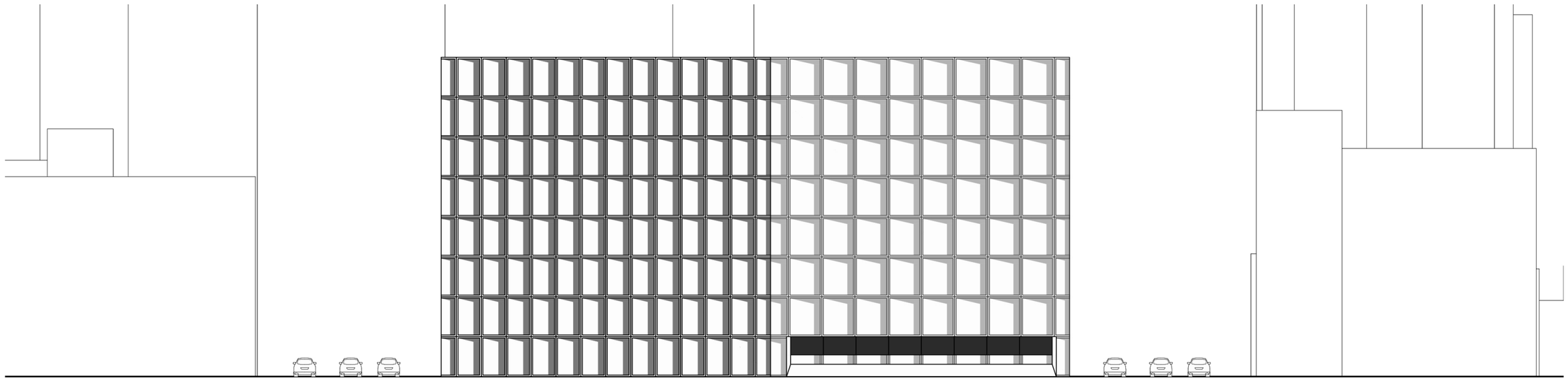


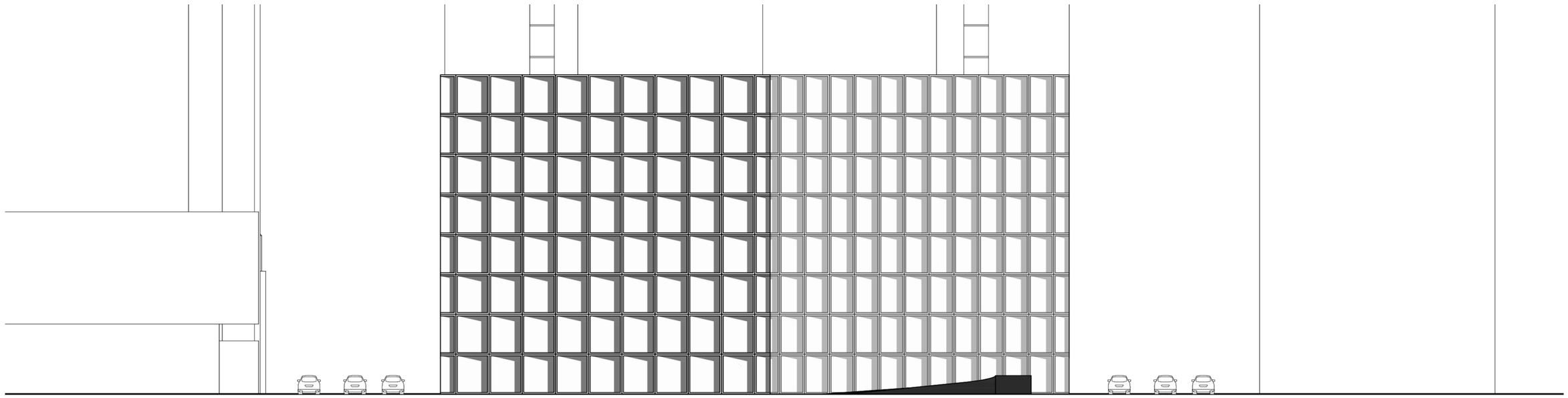




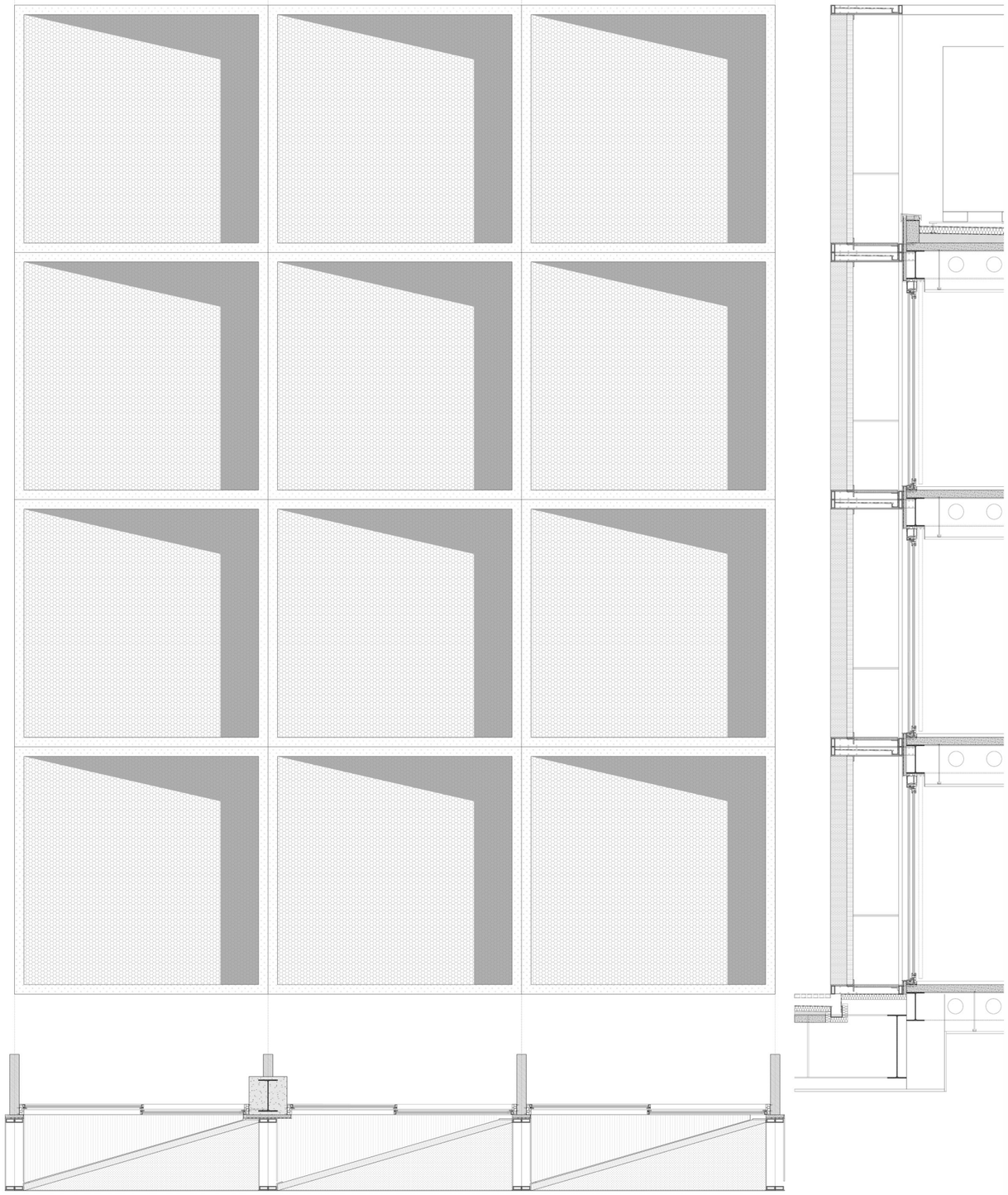


North and South Facade

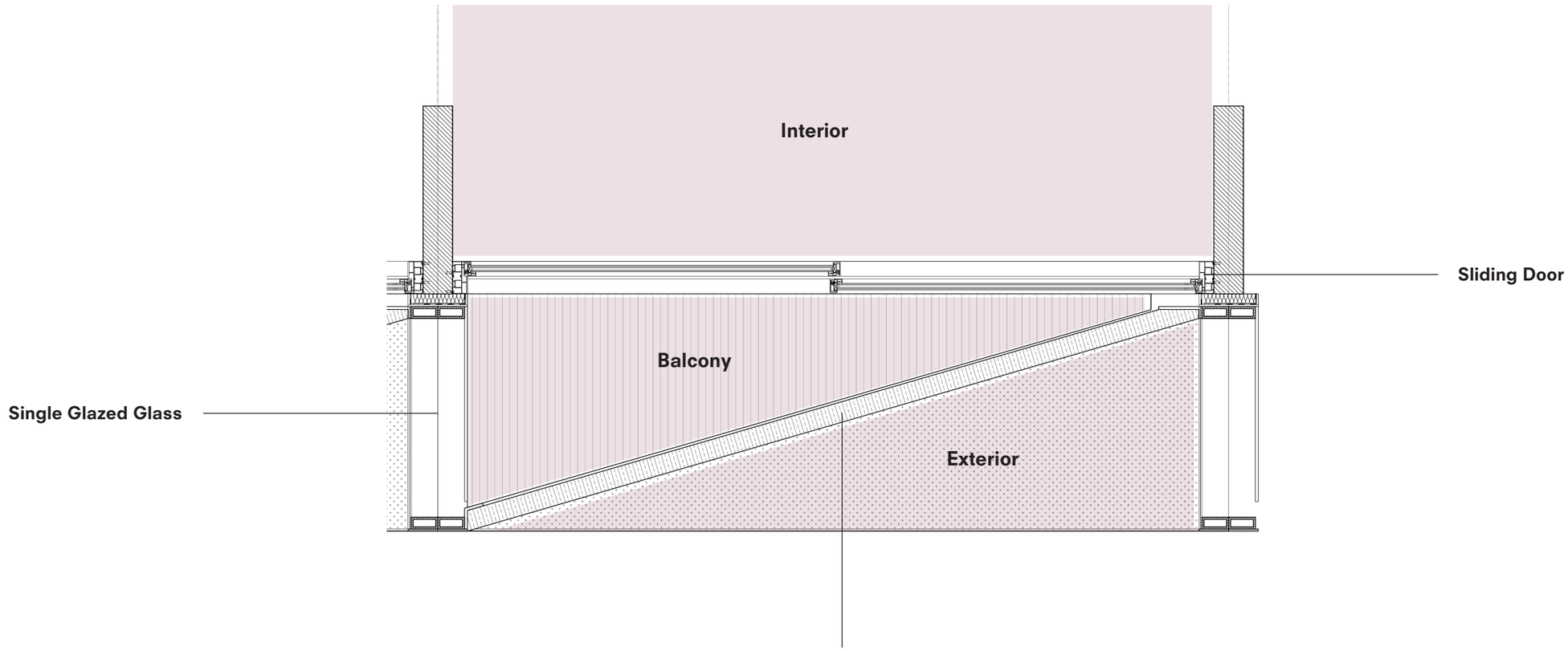




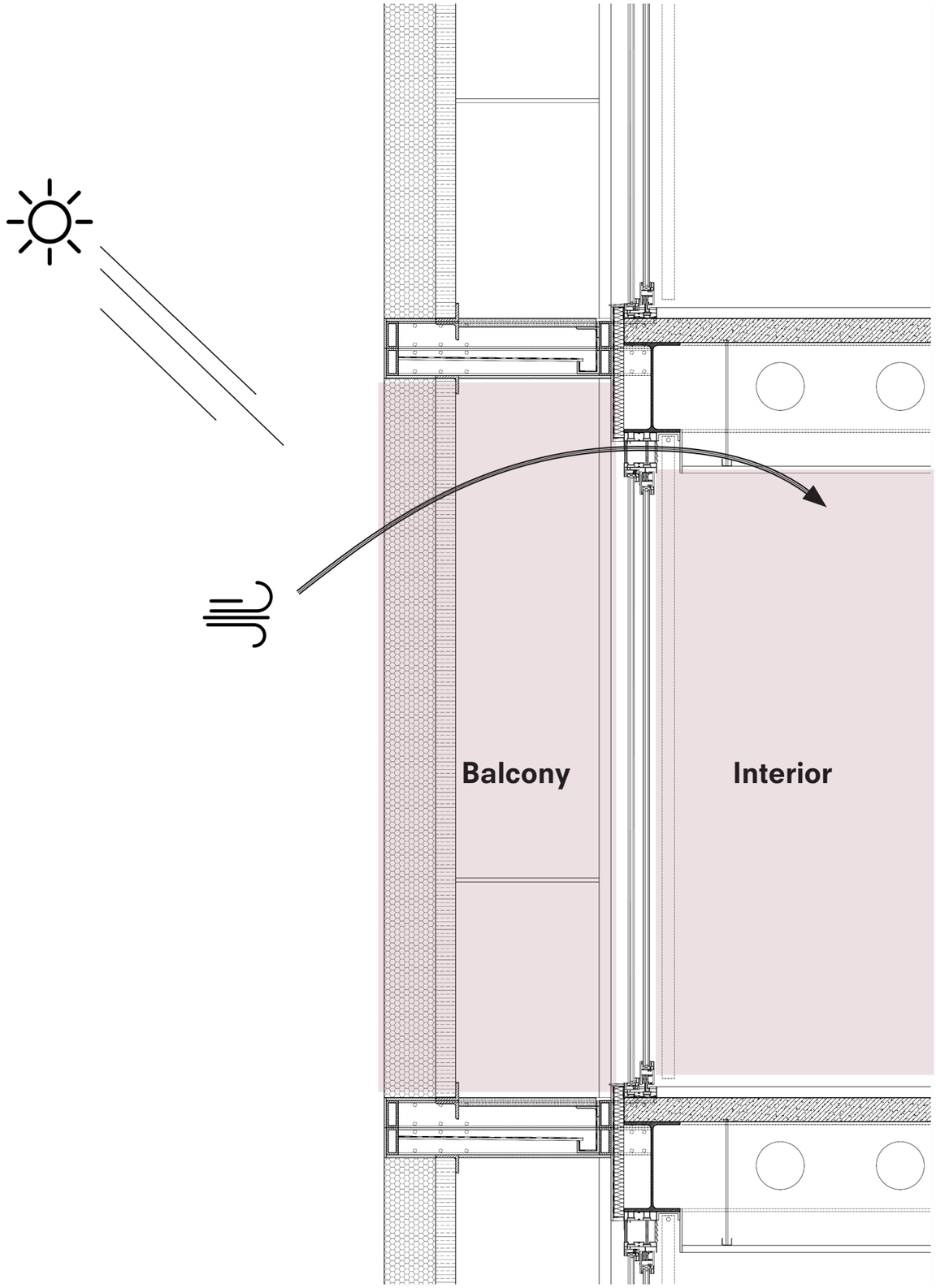
North and South Facade



Facade Detail



Facade Detail Plan



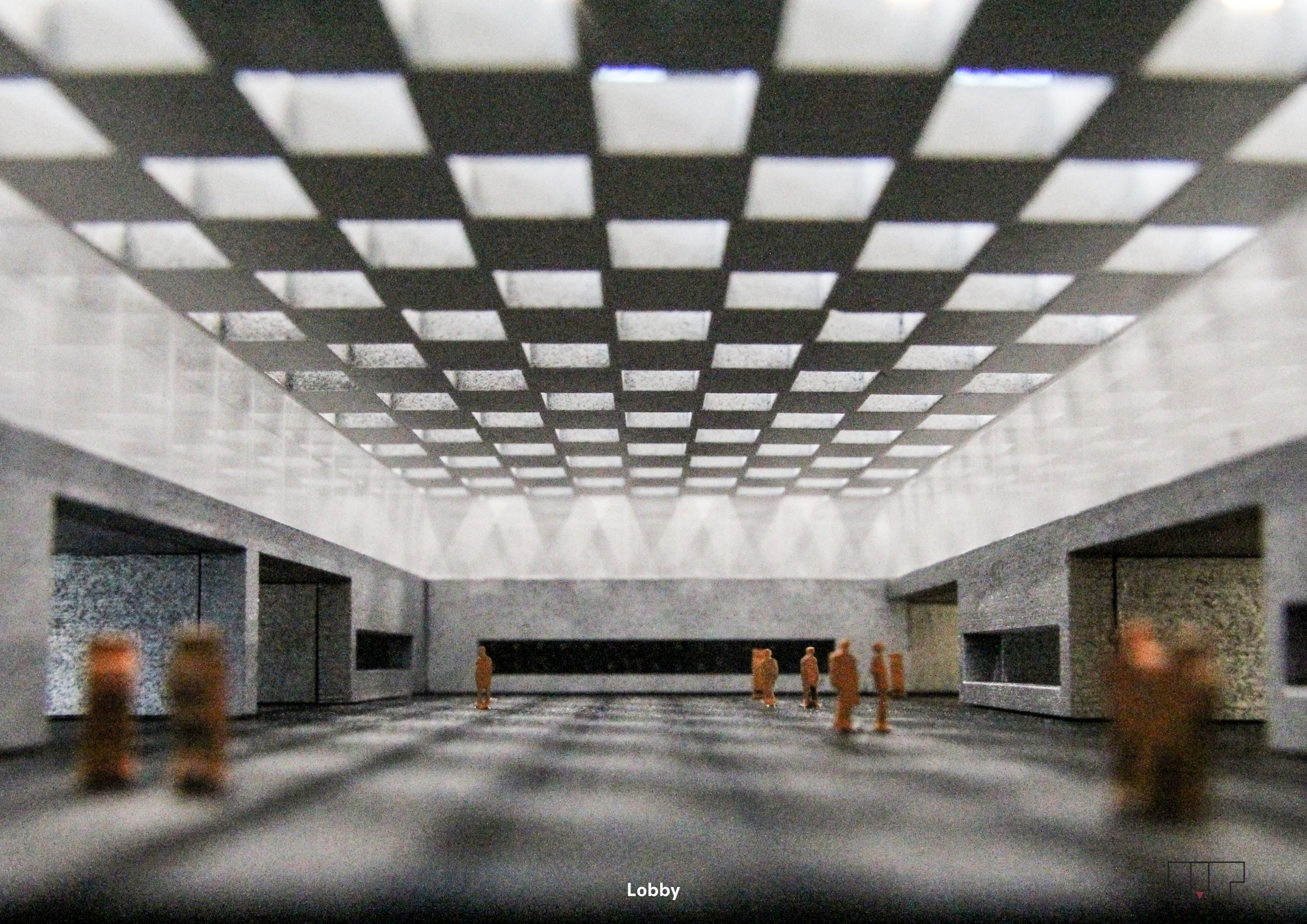
Facade Detail Section



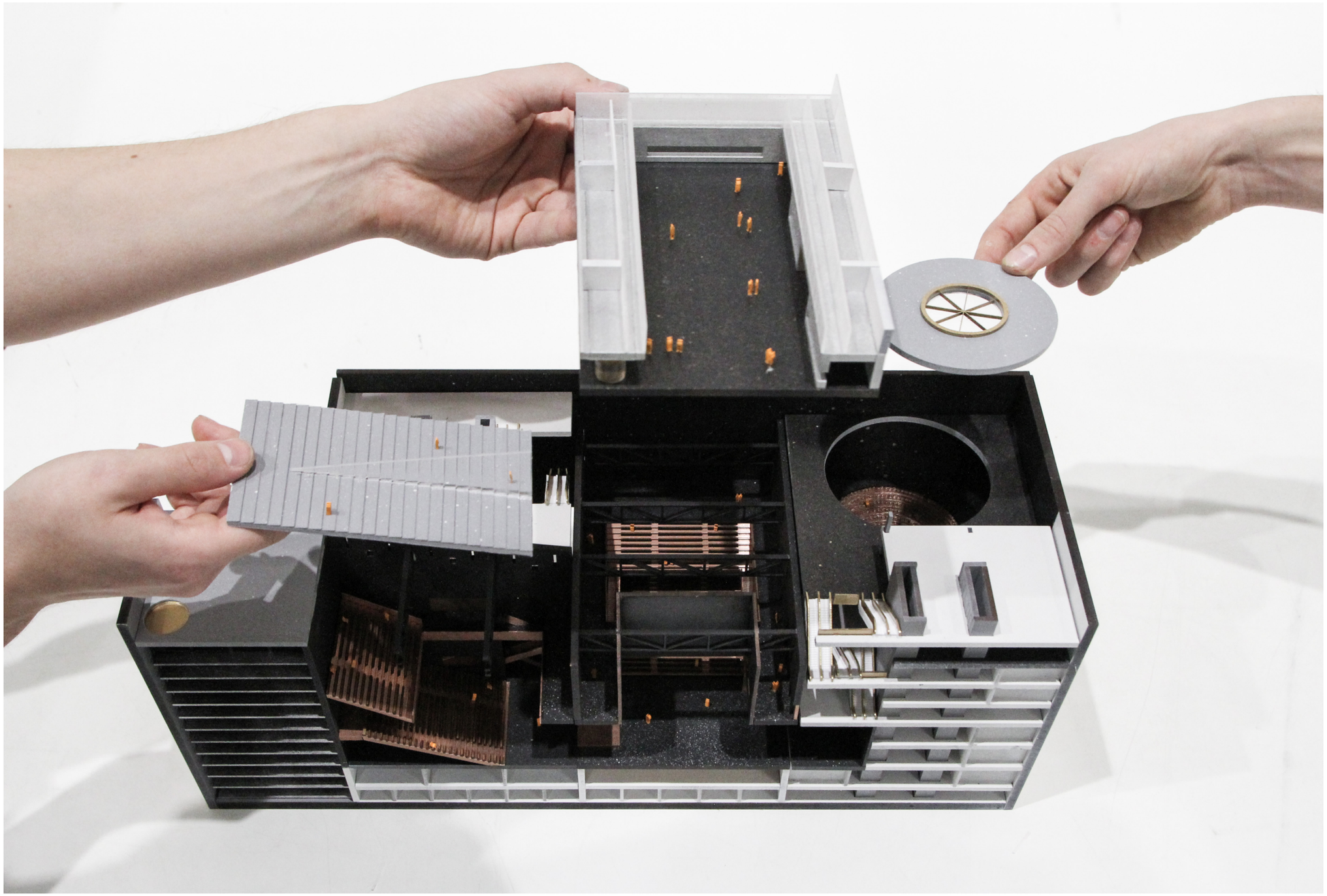


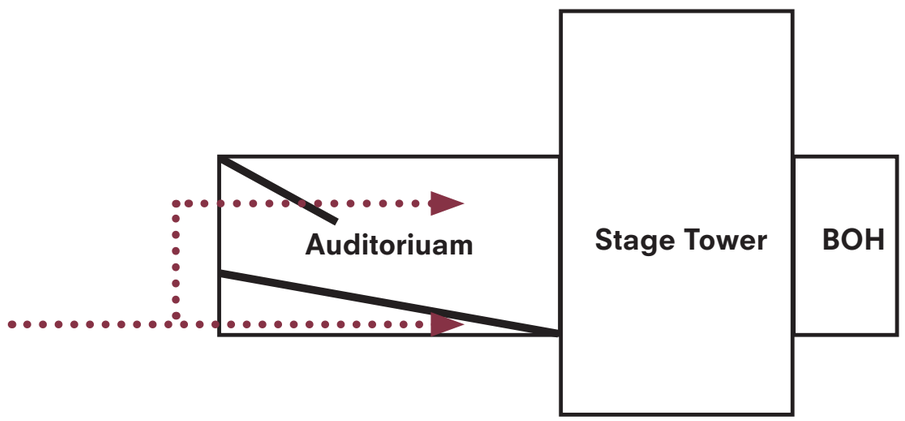



Translucent Facade

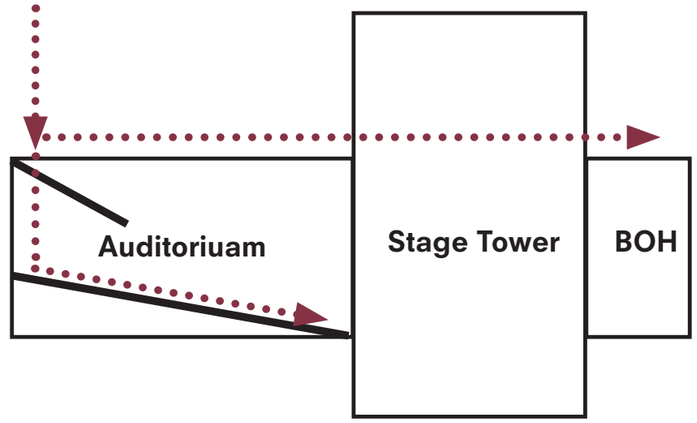


Lobby





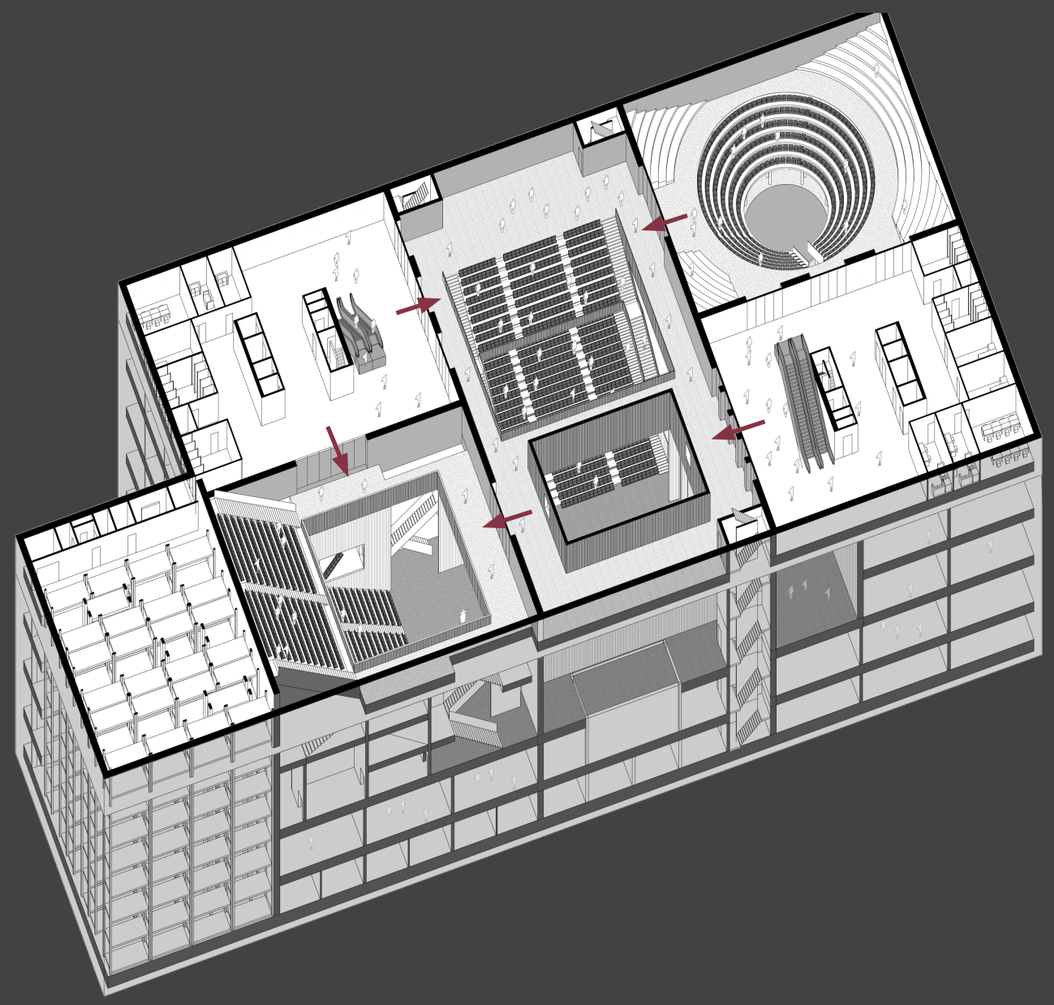
Above Ground Theaters



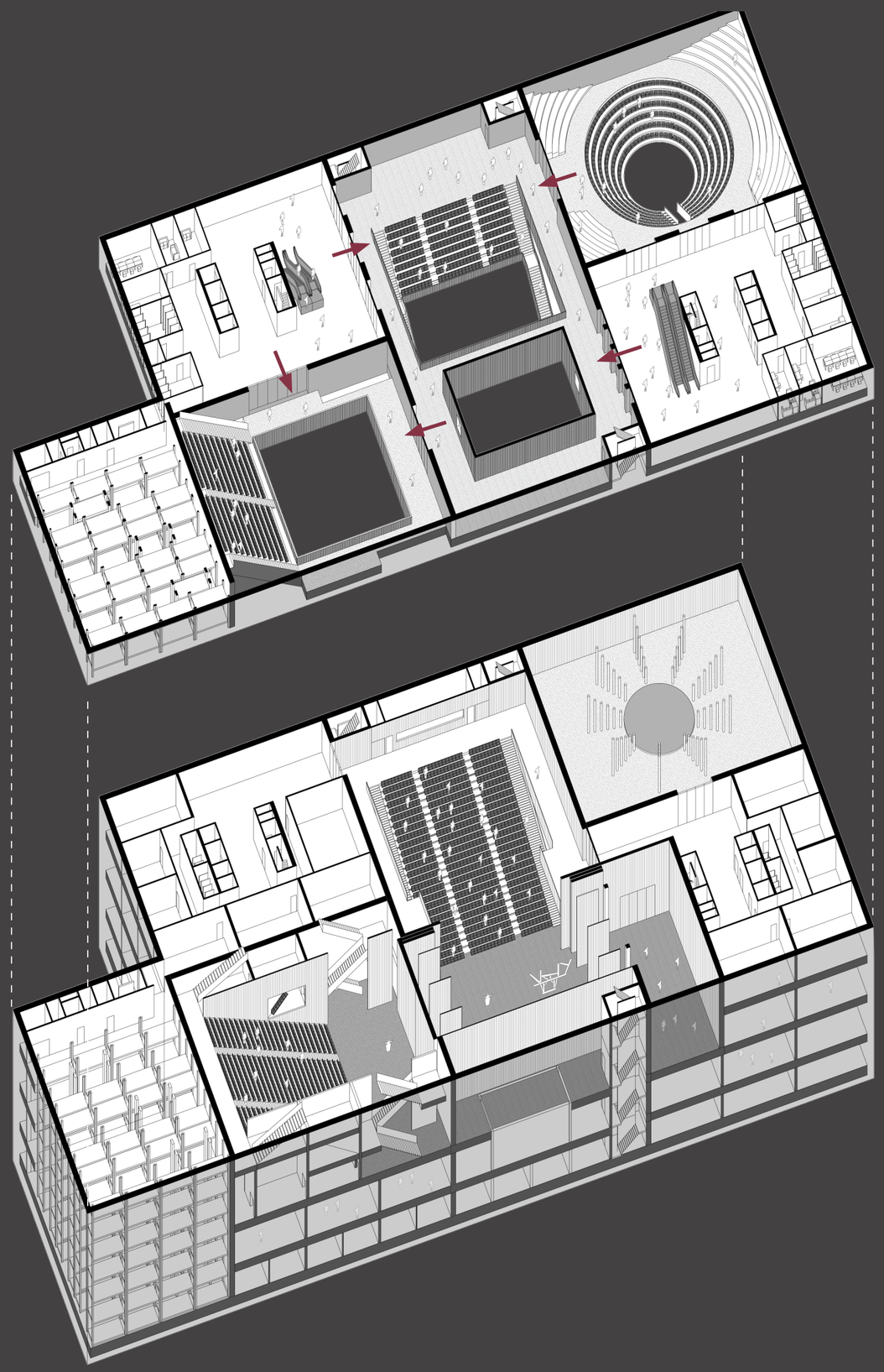
Underground Theaters



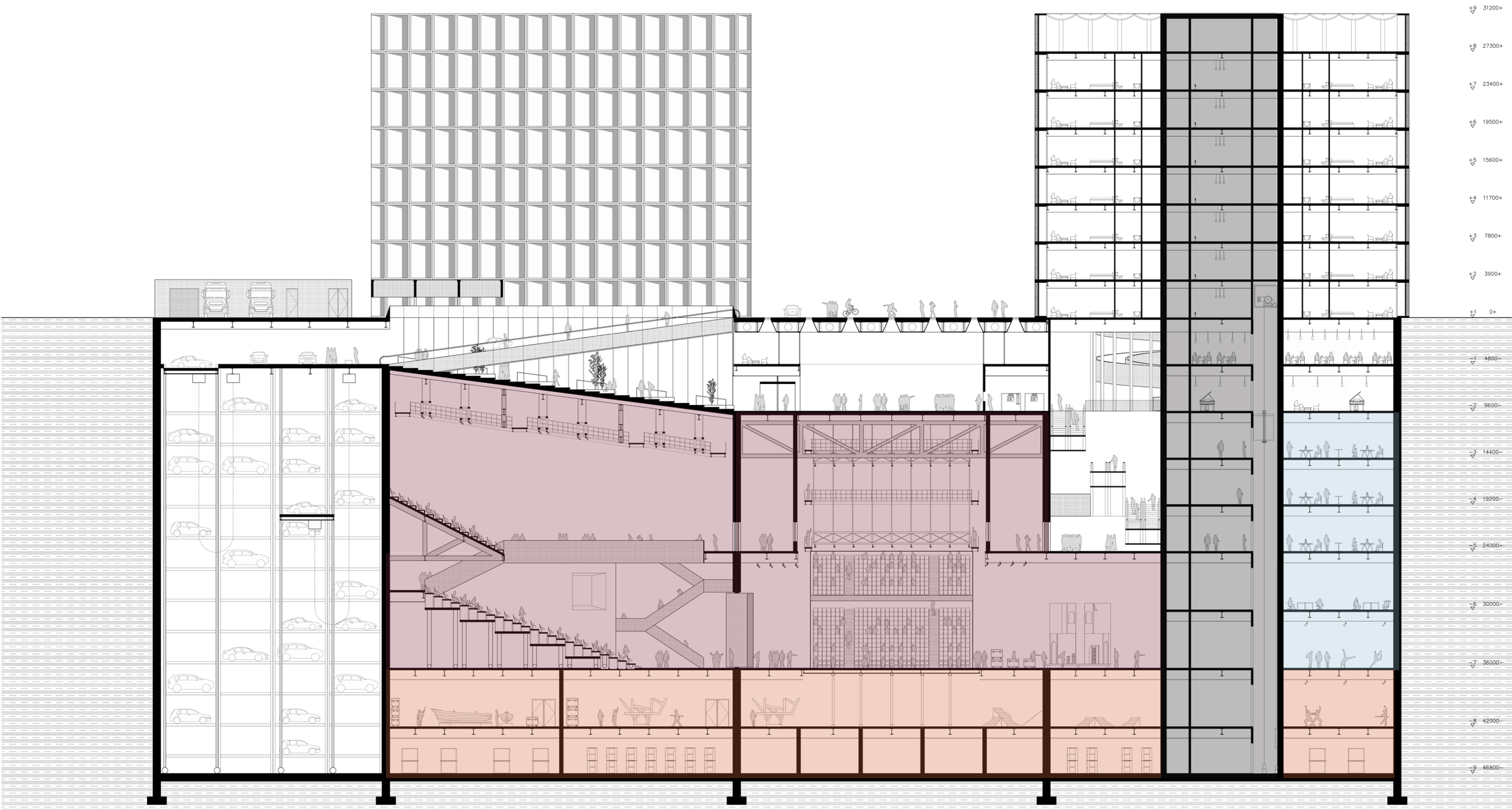
Theaters

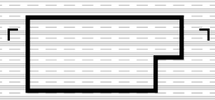


Theaters



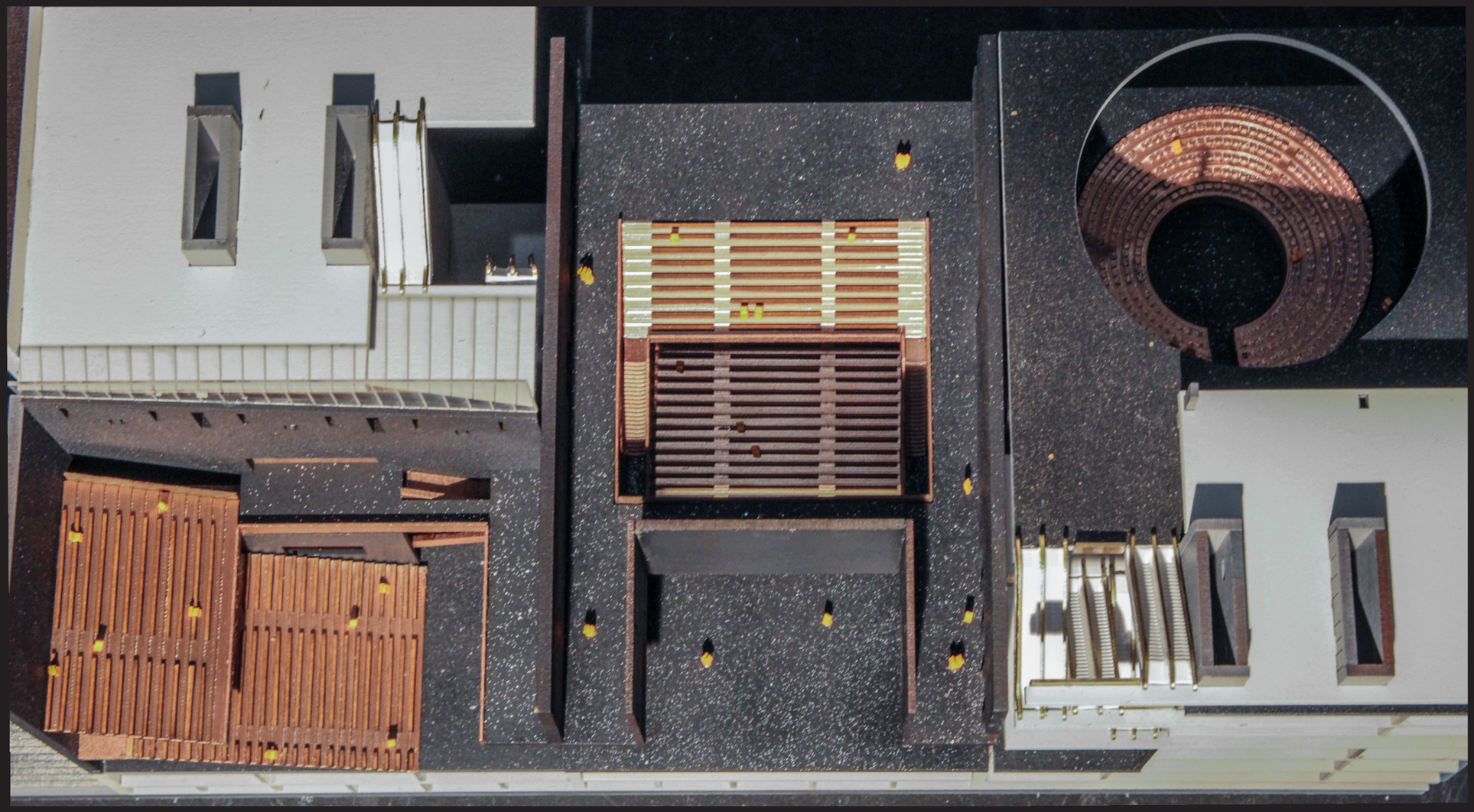
Theaters



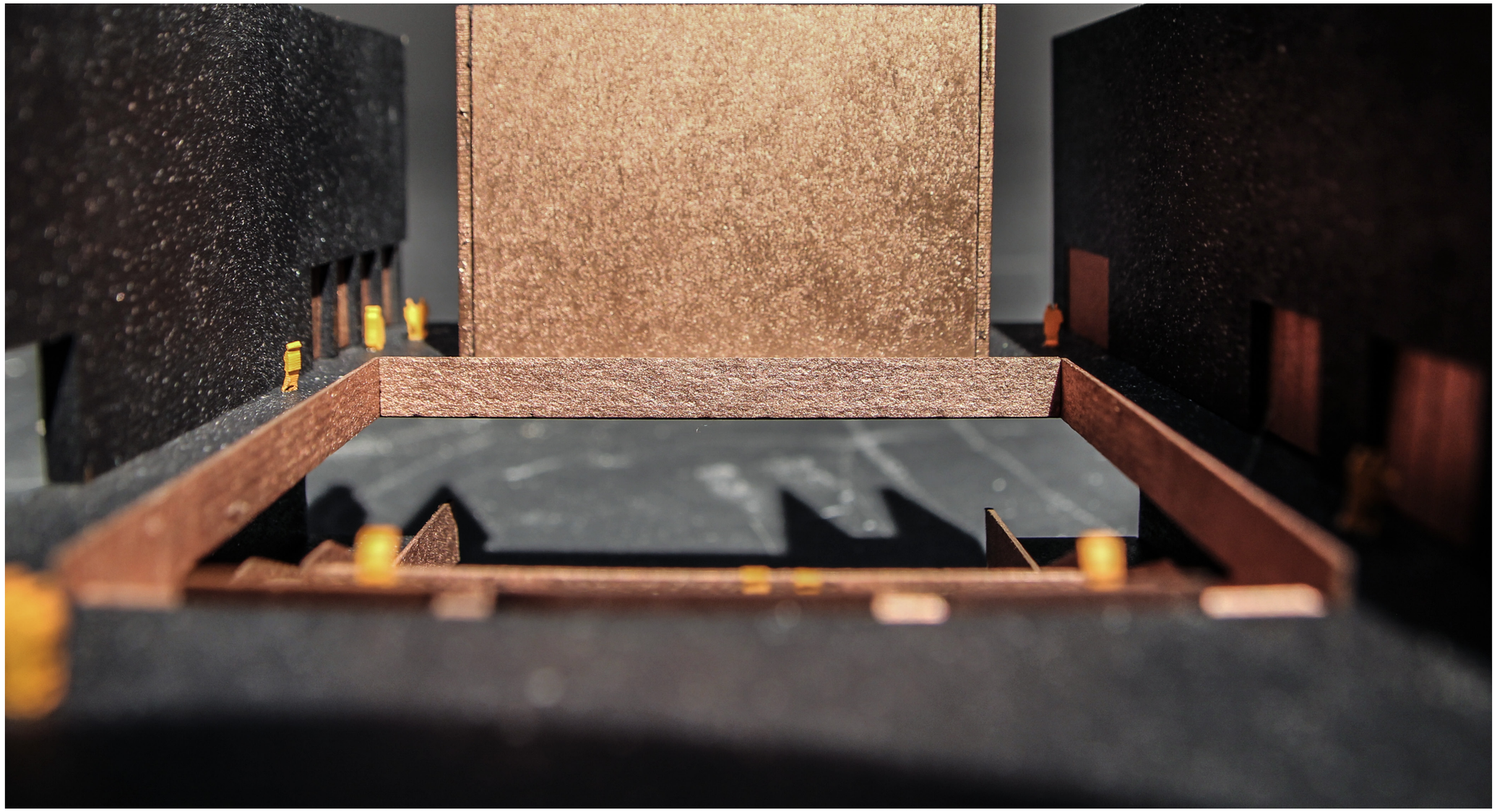


Sectional Organization

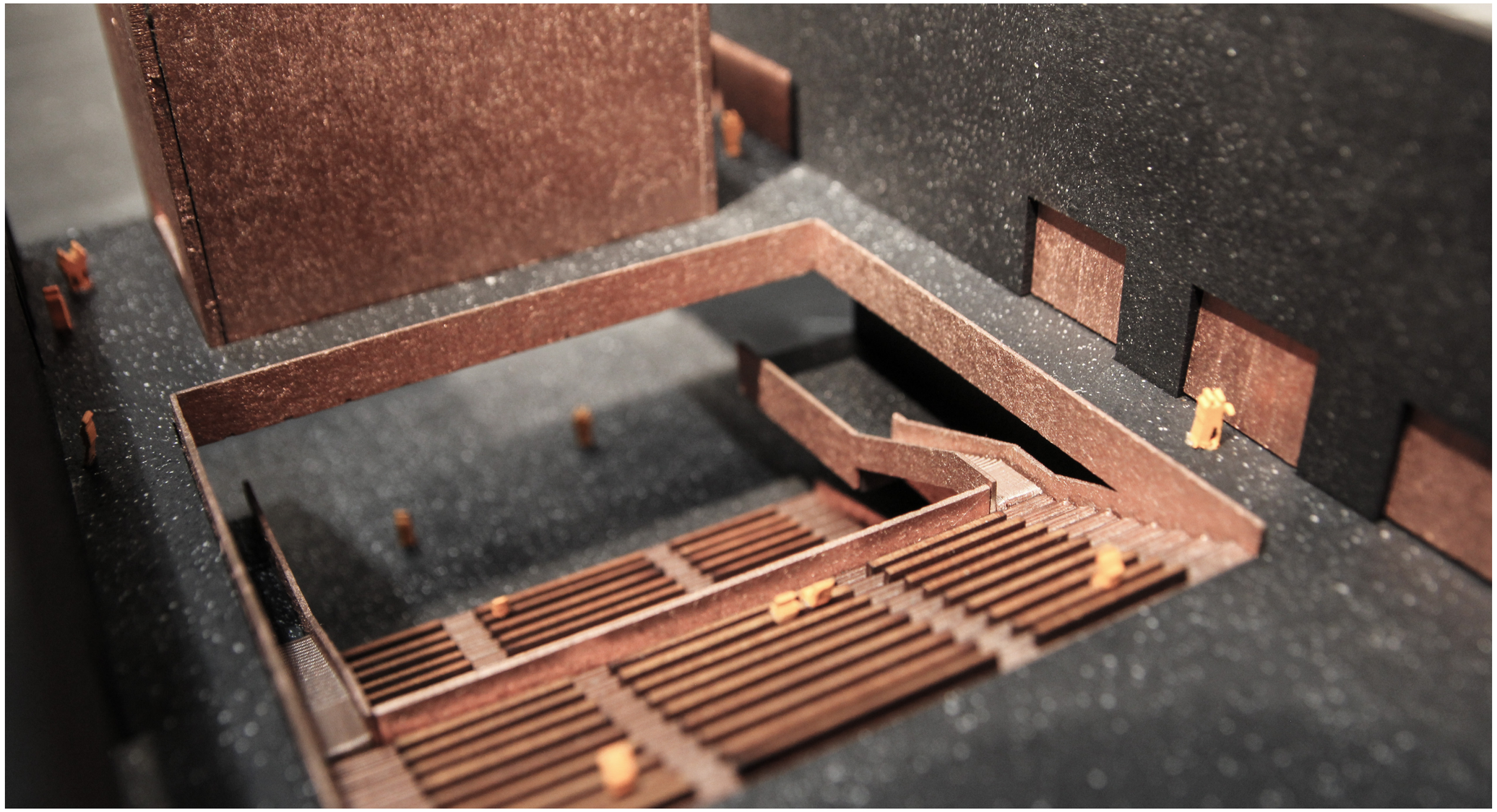
Theaters
Offices and Performer room
Rehersal and Service



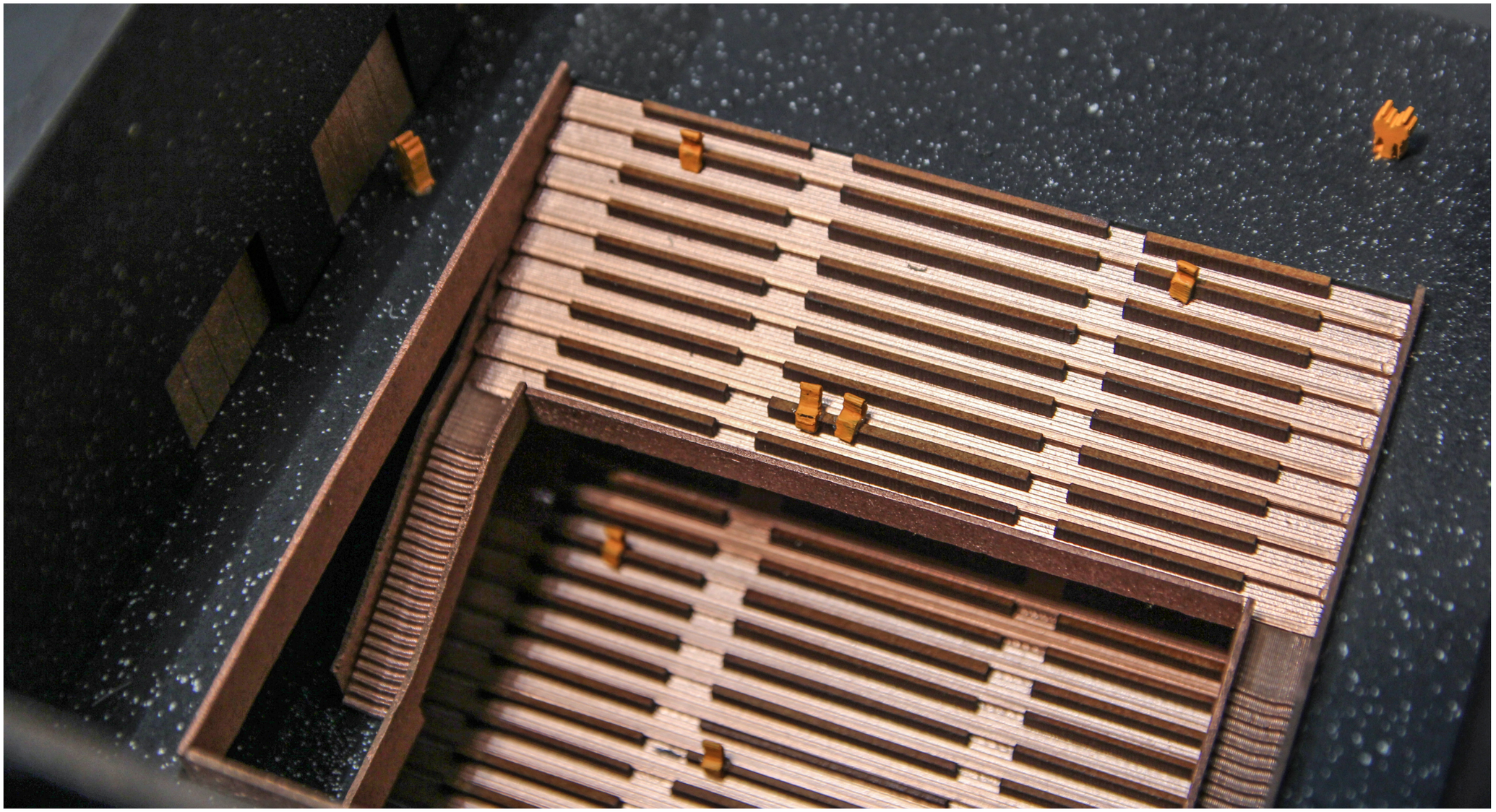
-5th Play Floor



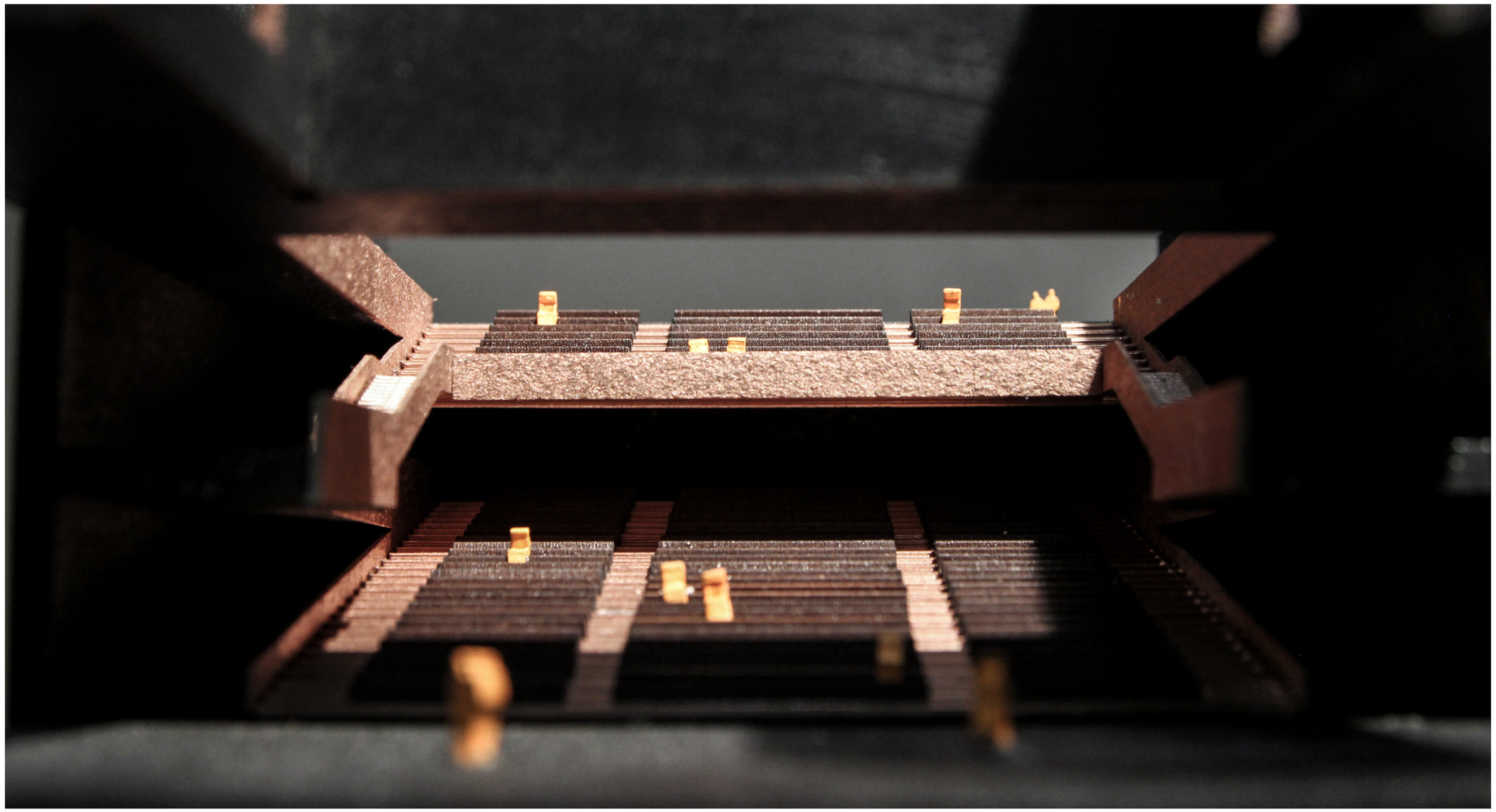
Procinium Stage



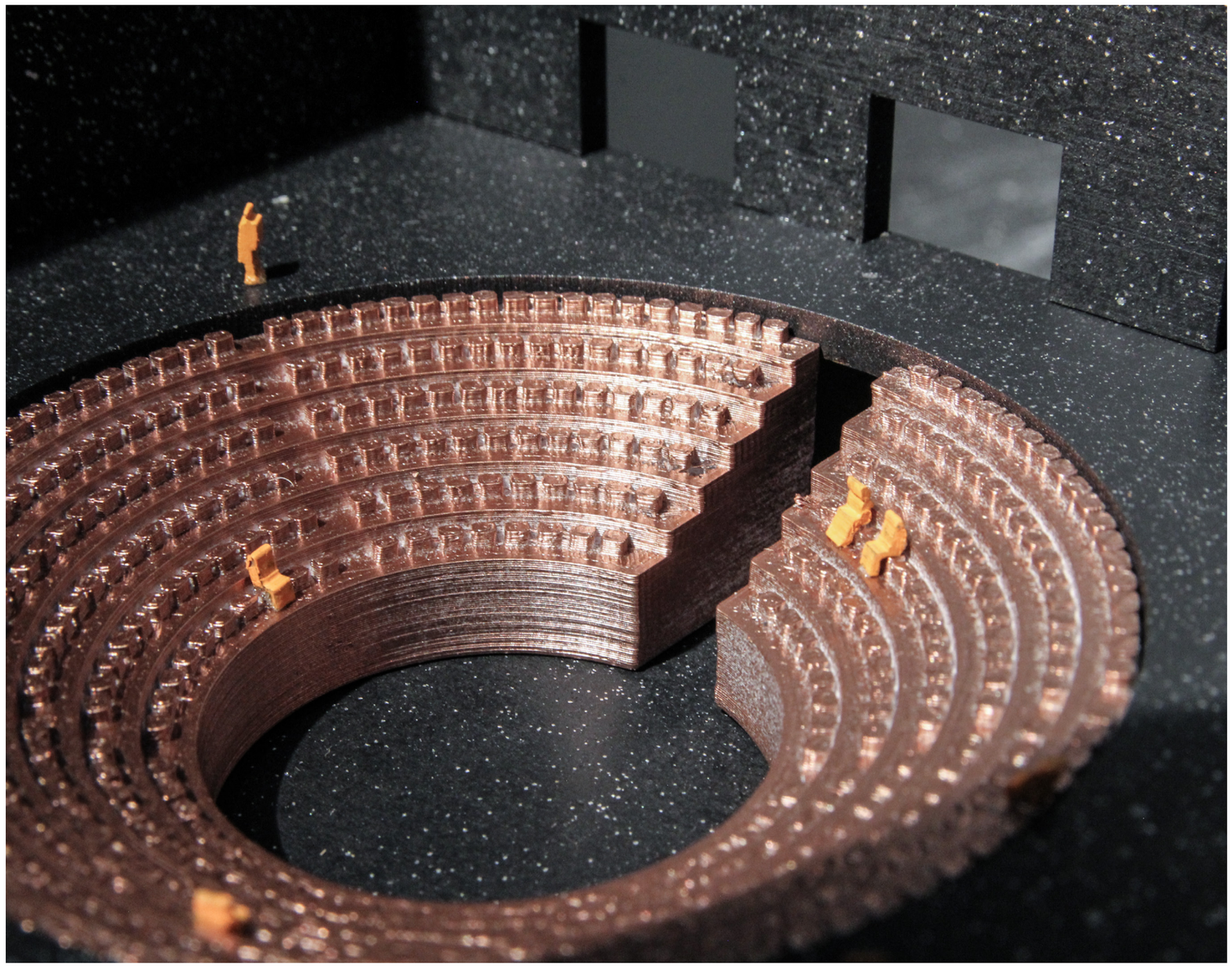
Procinium Stage



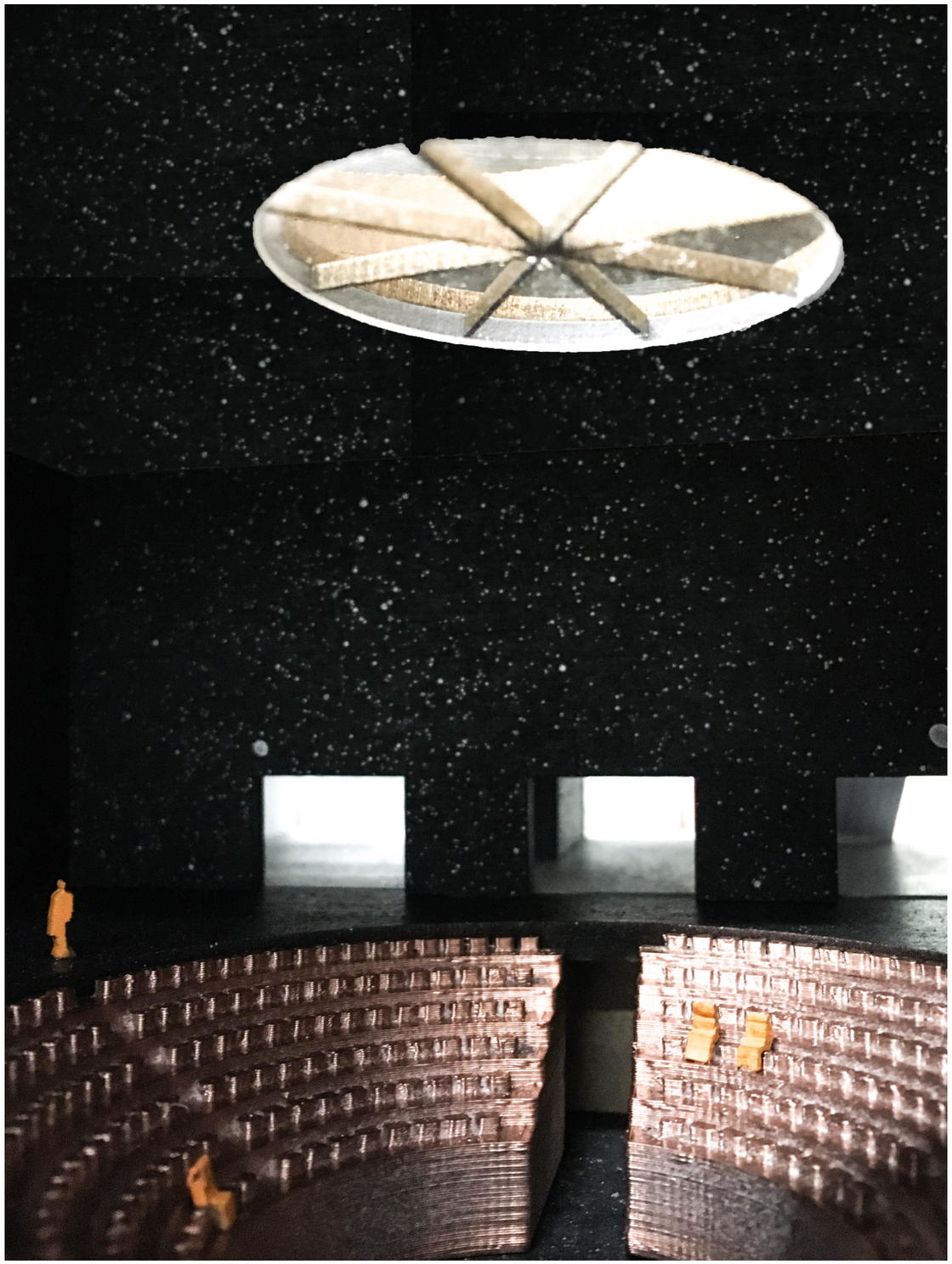
Procinium Stage



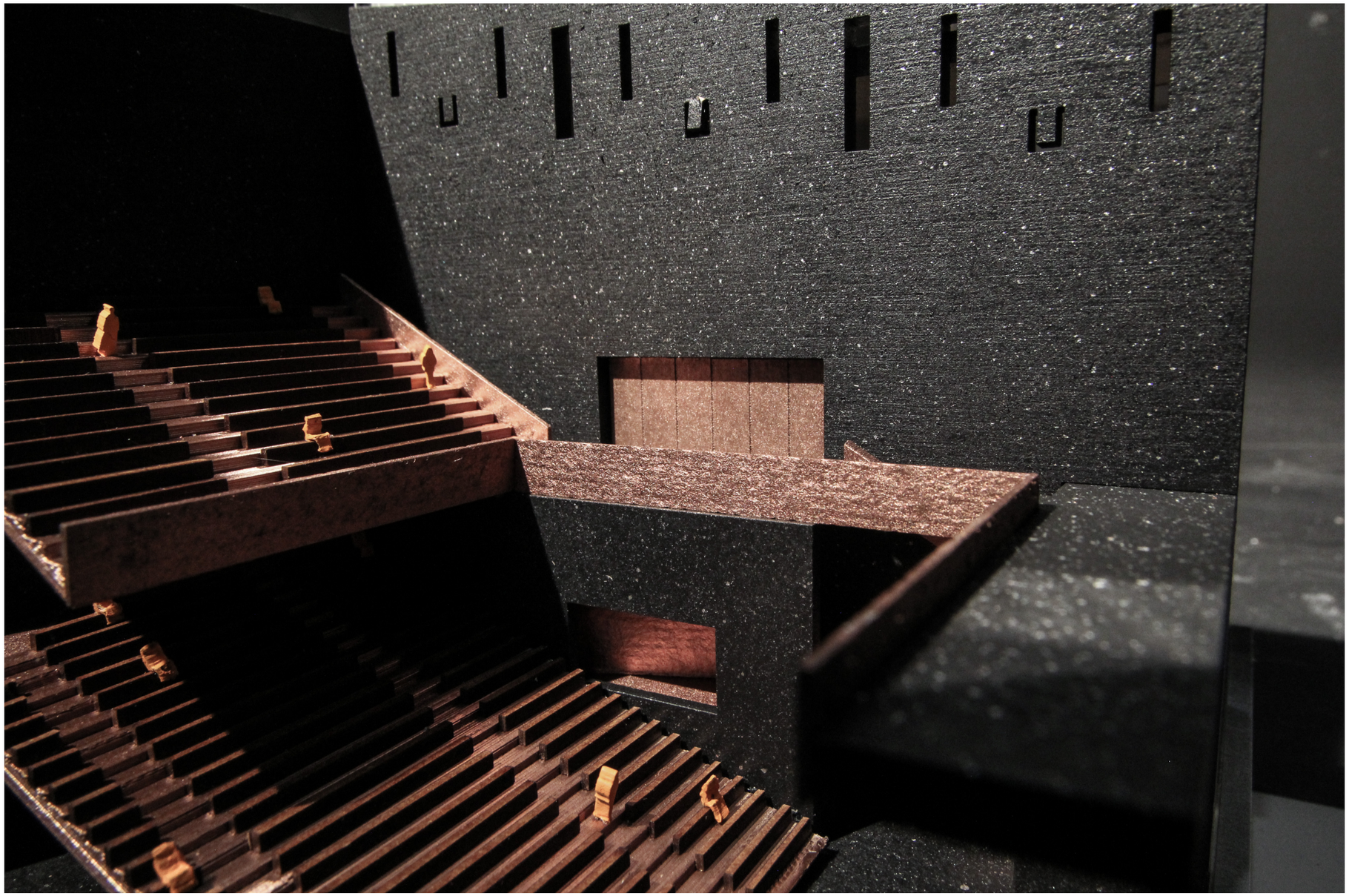
Procinium Stage



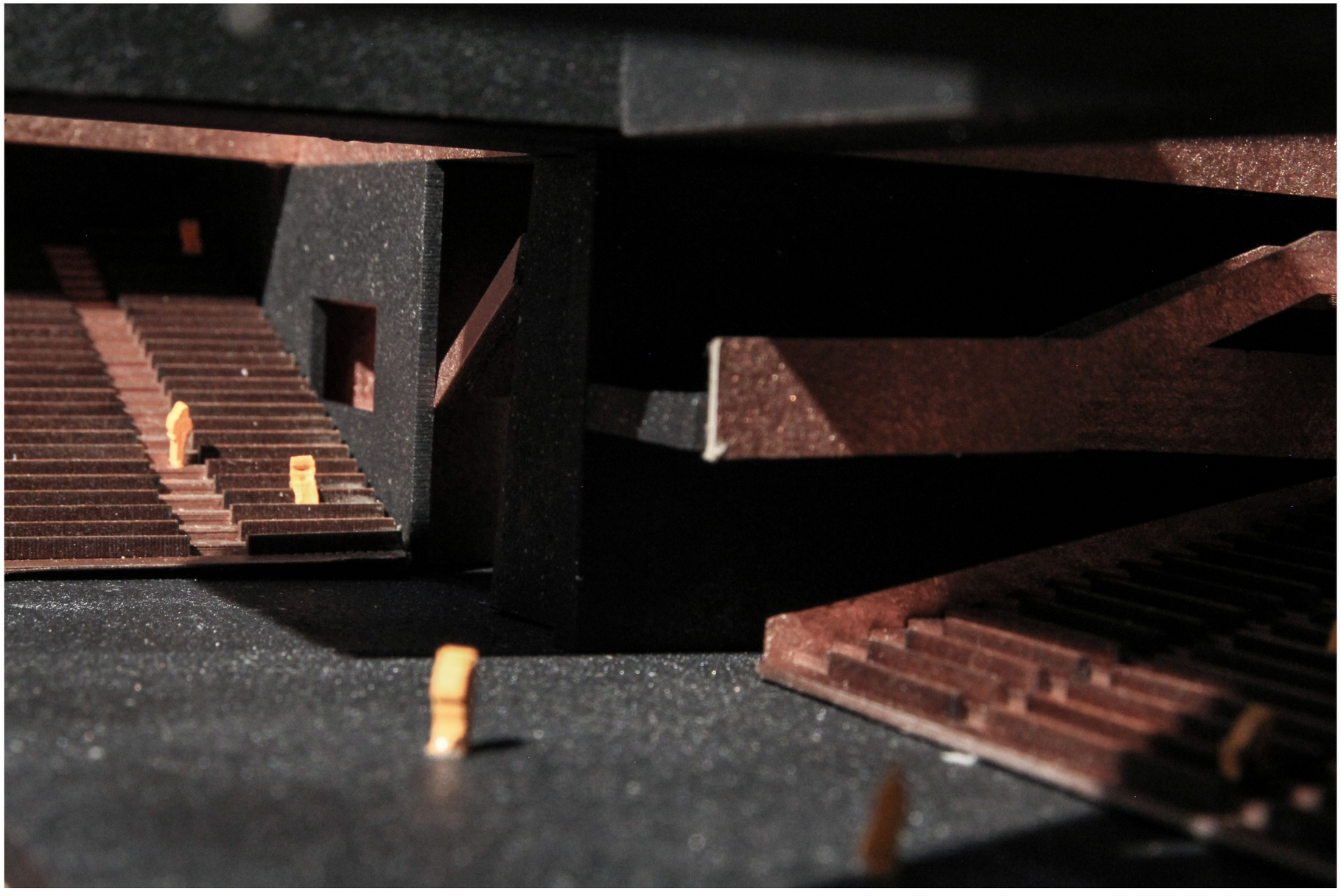
Arena Stage



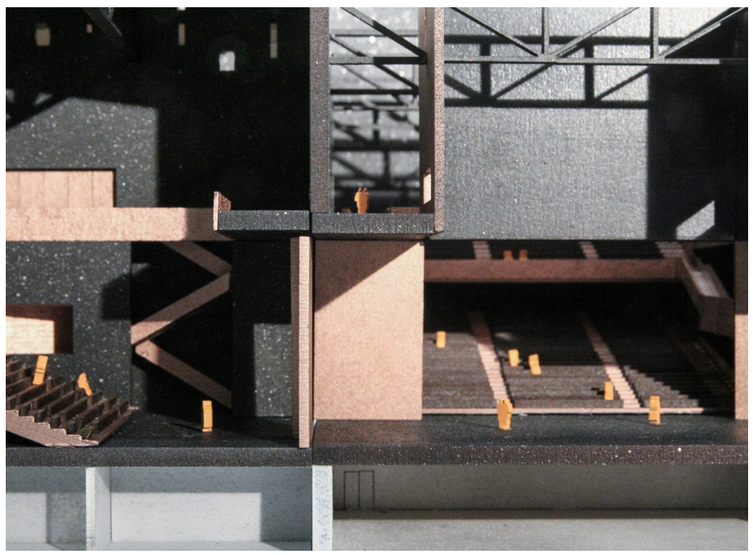
Arena Stage

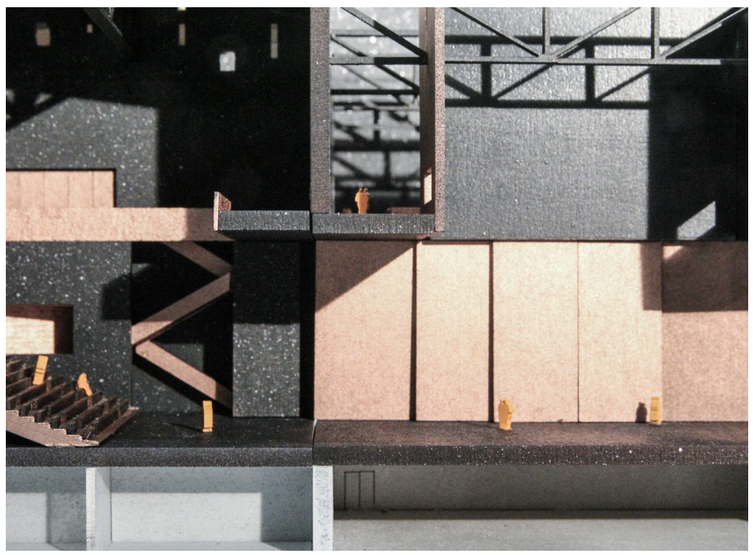


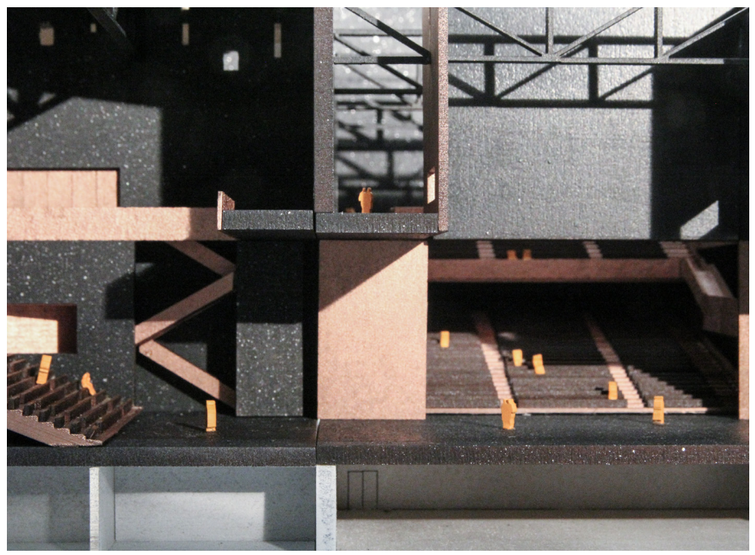
Multifunctional Stage

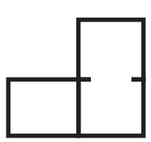


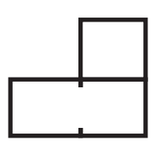
Multifunctional Stage

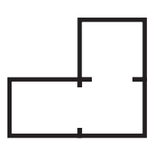












Multifunctional Stage

+4 11700+

+3 7800+

+2 3900+

+1 0+

−1 4800−

−2 9600−

−3 14400−

−4 19200−

−5 24000−

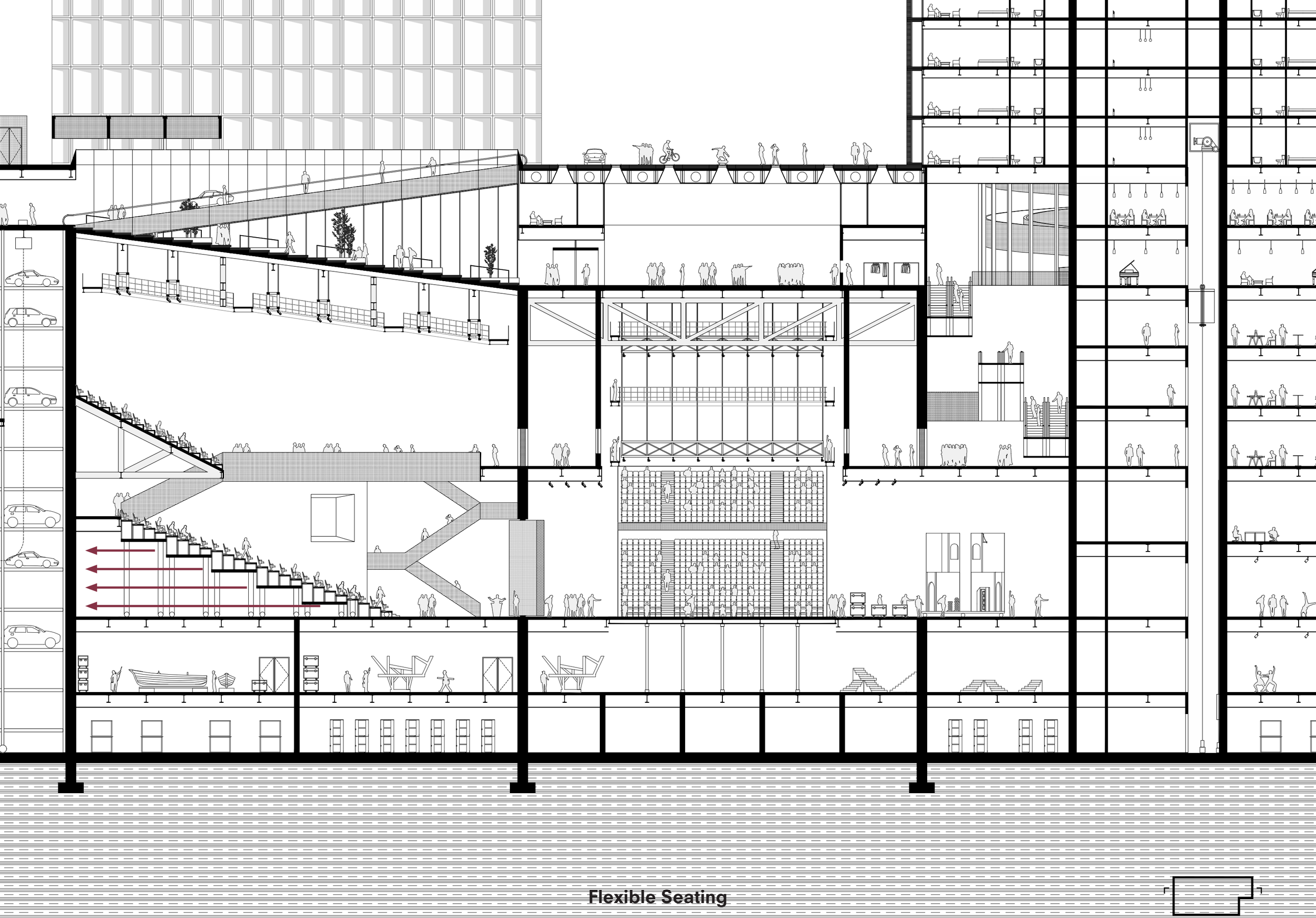
−6 30000−

−7 36000−

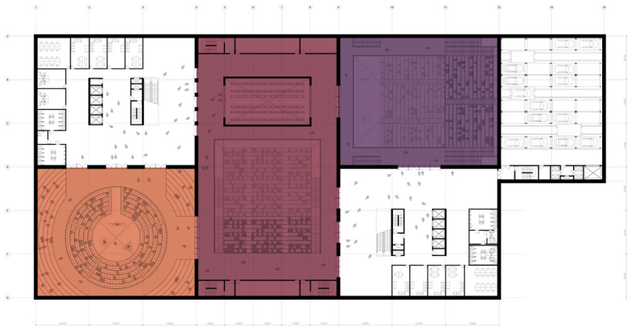
−8 42000−

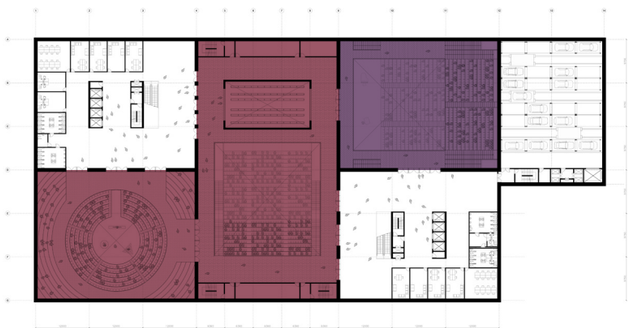
−9 46800−

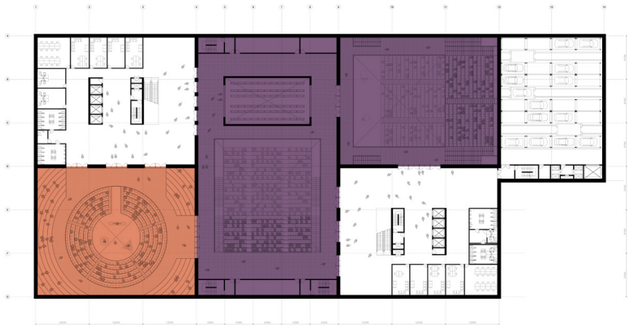
Flexible Seating

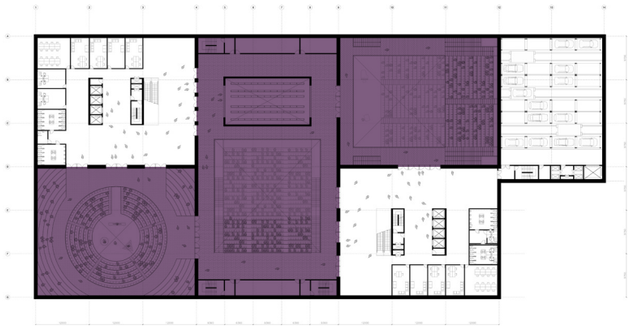


Flexible Seating

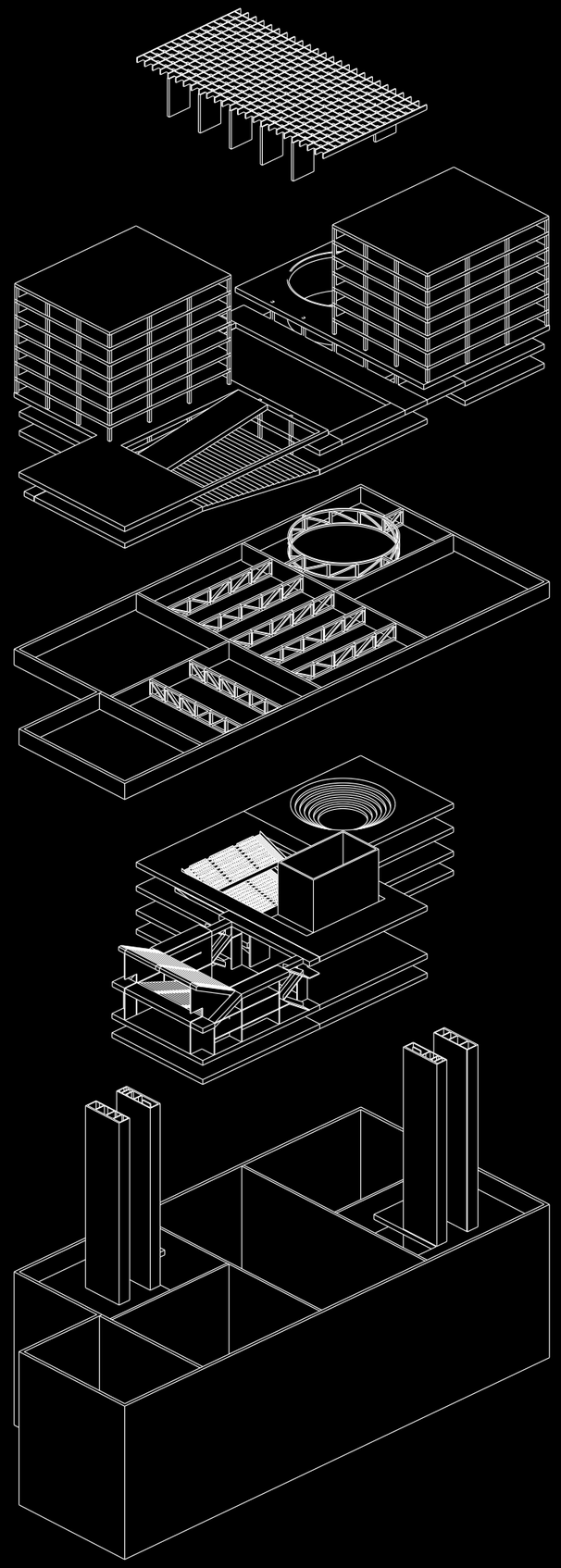






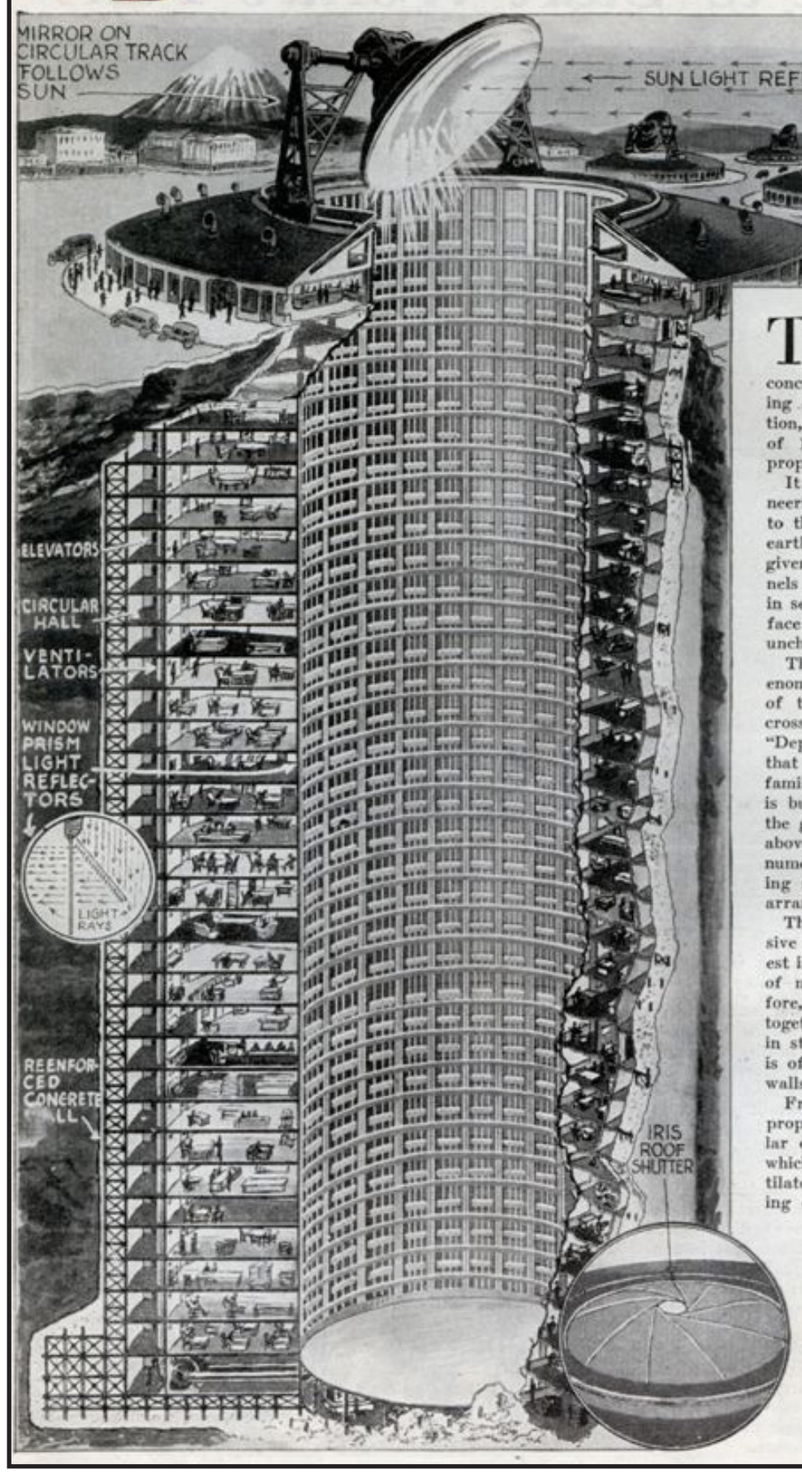


Configuration



Structure

•"Depthscrapers" Defy Earthquakes•



THE "Land of the Rising Sun" (Japan) is subject to earthquakes of distressing violence at times; and the concentration into small areas of increasing city populations invites great destruction, such as that of the Tokio earthquake of 1923, unprecedented in magnitude of property loss, as well as life.

It was natural, then, that the best engineering brains of Japan should be devoted to the solution of the problem of building earthquake-proof structures; and a clue was given them by the interesting fact that tunnels and subterranean structures suffer less in seismic tremors than edifices on the surface of the ground, where the vibration is unchecked.

The result of research, into the phenomenon explained above, has been the design of the enormous structure illustrated, in cross-section, at the left—the proposed "Depthscraper," whose frame resembles that of a 35-story skyscraper of the type familiar in American large cities; but which is built in a mammoth excavation beneath the ground. Only a single story protrudes above the surface; furnishing access to the numerous elevators; housing the ventilating shafts, etc.; and carrying the lighting arrangements which will be explained later.

The Depthscraper is cylindrical; its massive wall of armored concrete being strongest in this shape, as well as most economical of material. The whole structure, therefore, in case of an earthquake, will vibrate together, resisting any crushing strain. As in standard skyscraper practice, the frame is of steel, supporting the floors and inner walls.

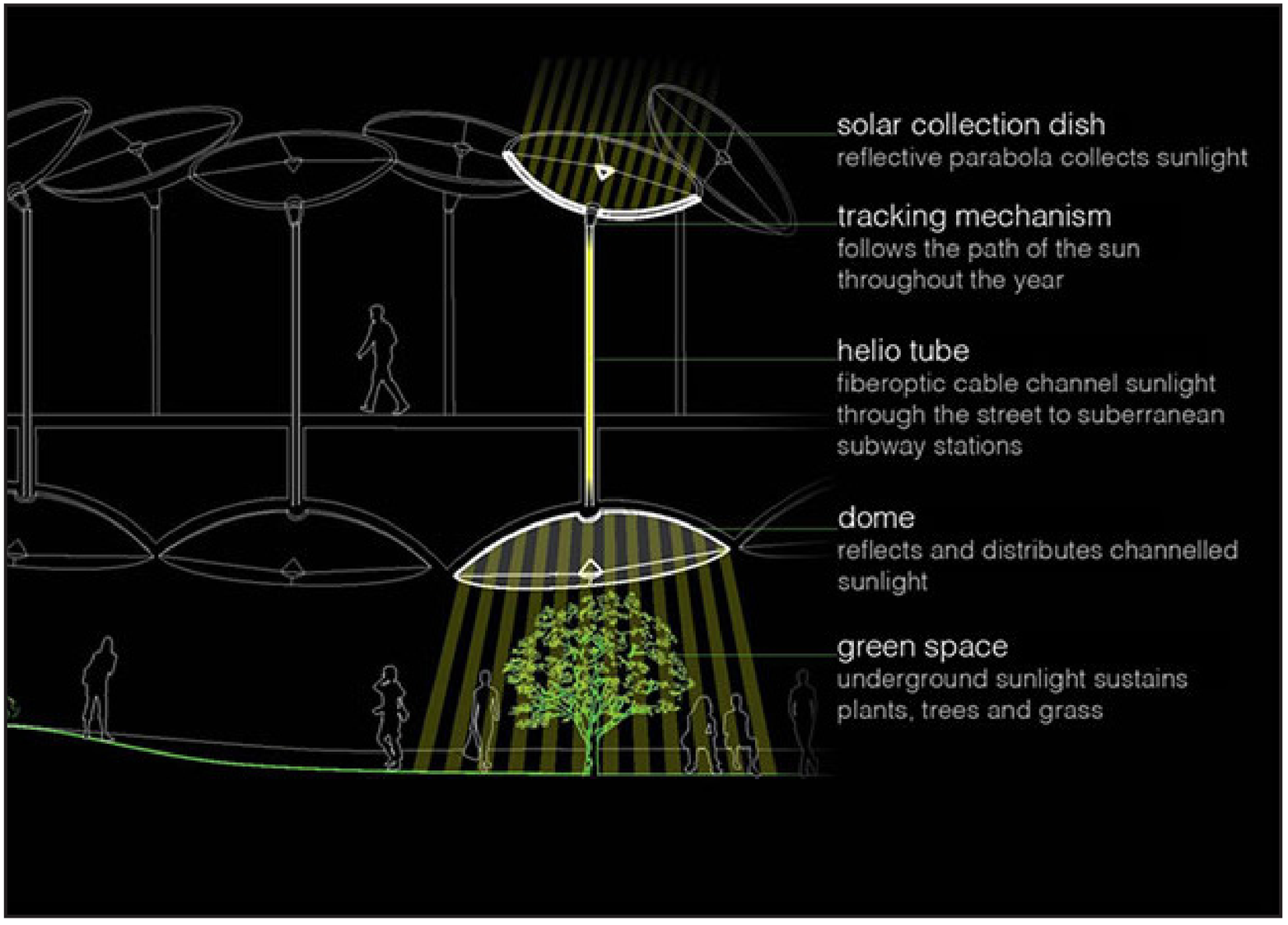
Fresh air, pumped from the surface and properly conditioned, will maintain a regular circulation throughout the building, in which each suite will have its own ventilators. The building will be lighted, during daylight hours, from its great central shaft, or well, which is to be 75 feet in diameter. Prismatic glass in the windows, opening on the shaft, will distribute the light evenly throughout each suite, regardless of the hour.

Making the Most of Sunlight

In order to intensify the degree of daylight received, a large reflecting mirror will be mounted above the open court, and direct the sun-

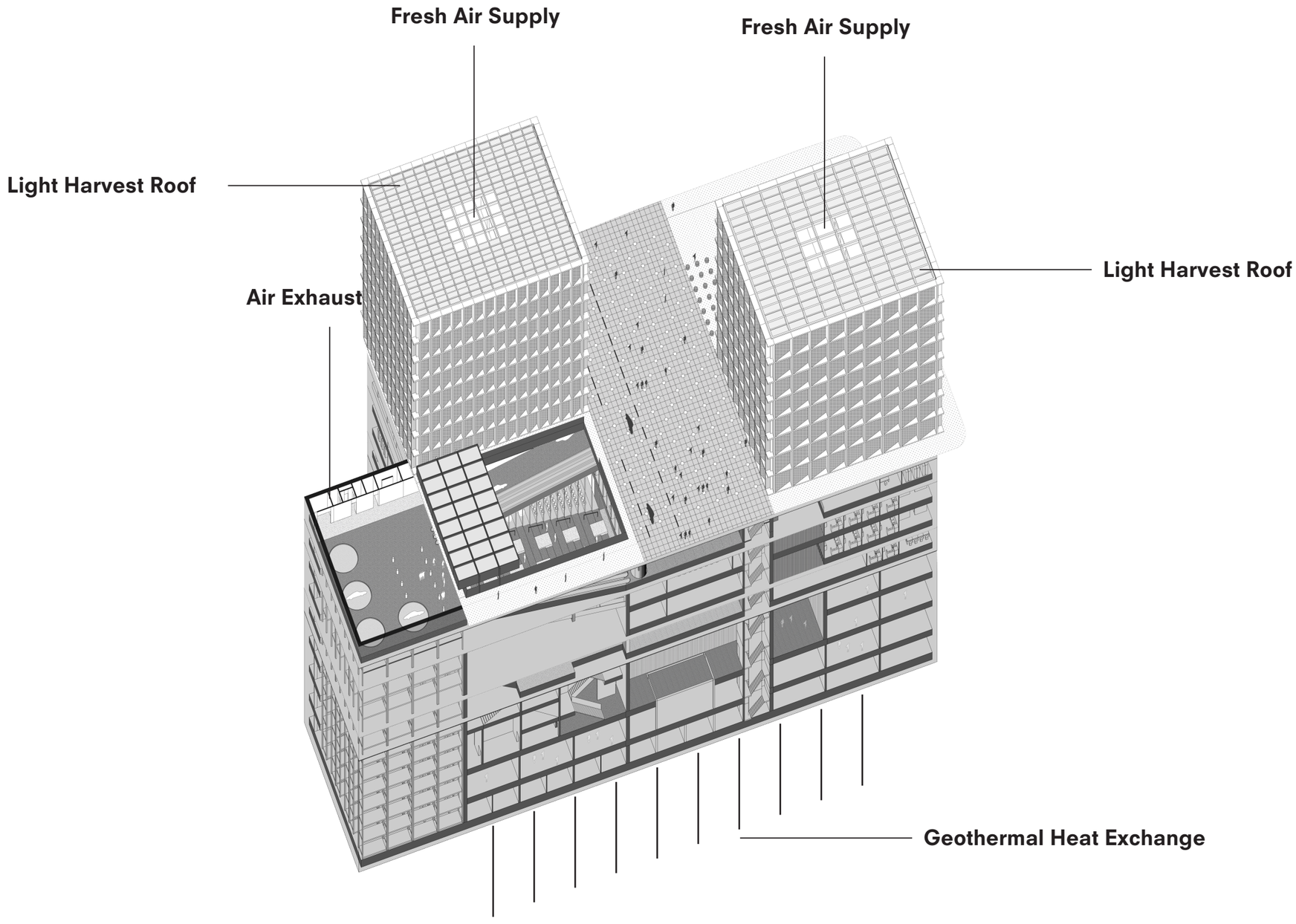
(*Continued on page* 708)

Popular Mechanics, Japan, 1931



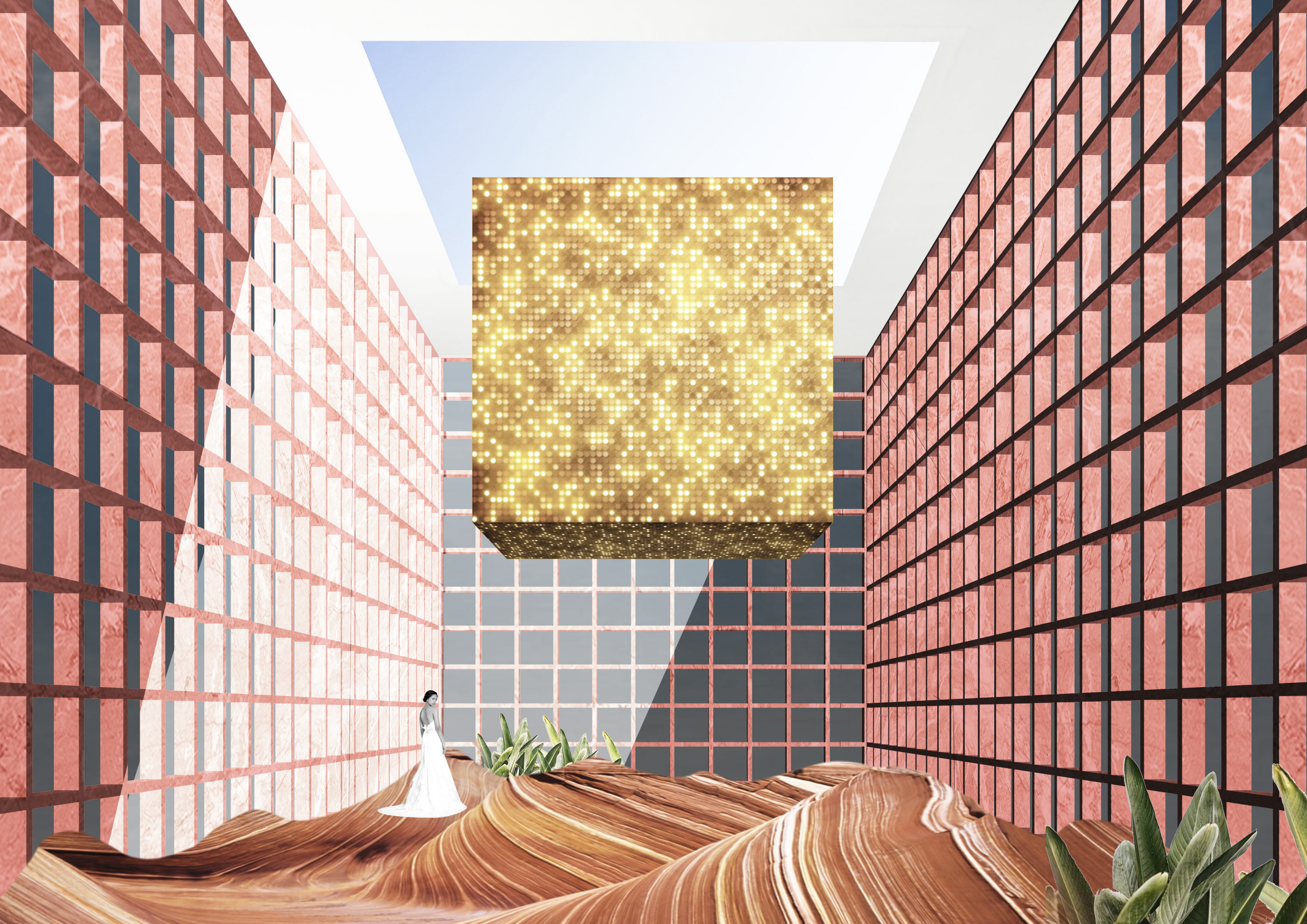
Lovejoy Mechanics, Japan, 1931

Polipus Prosthenic Eastman, 1931

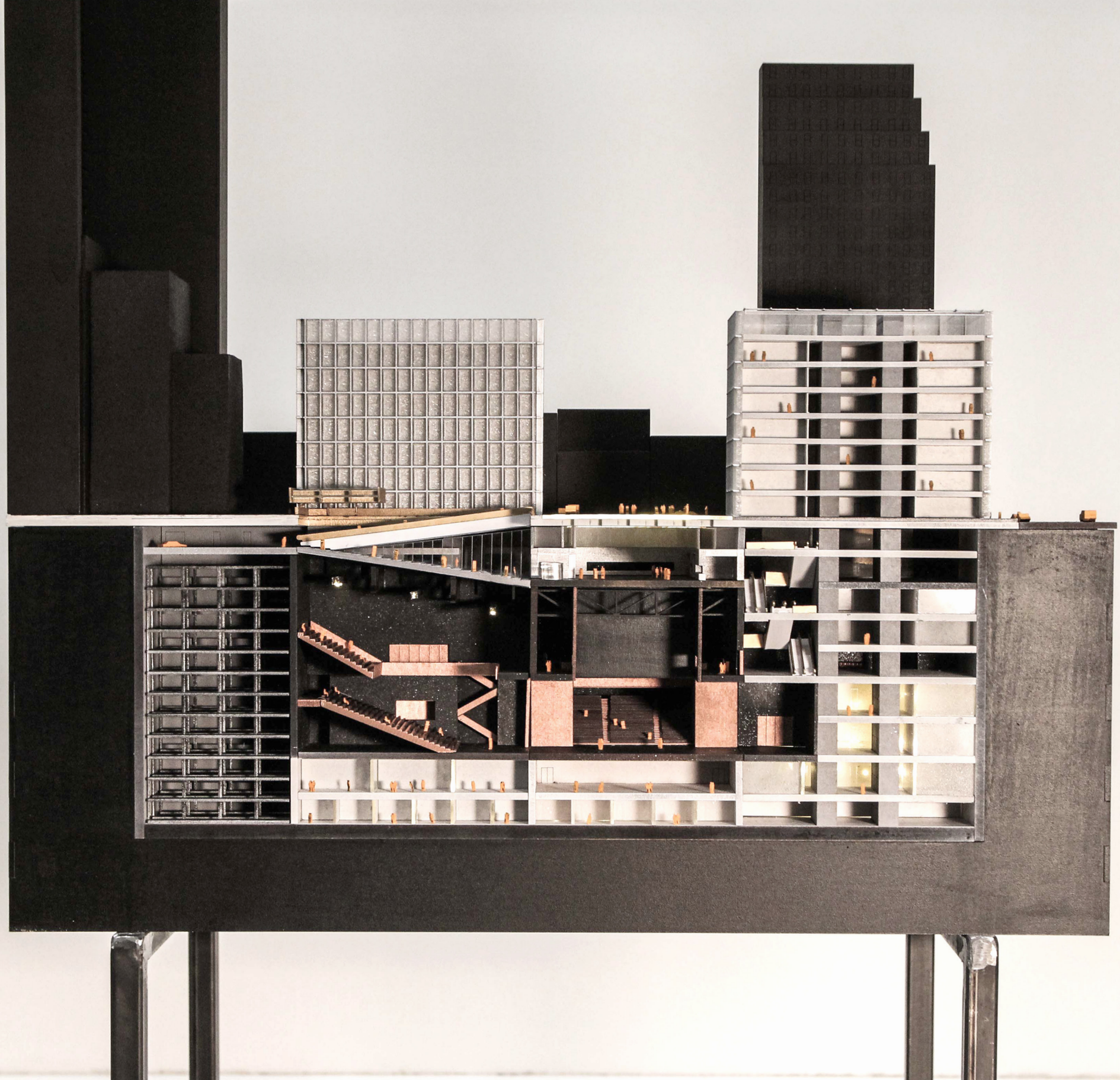

Fresh Air Supply
Fresh Air Supply
Light Harvest Roof
Air Exhaust
Light Harvest Roof
Geothermal Heat Exchange

Climate

TO CONCLUDE




7. BERLIN BIENNALE
Summer
LIEBMANNS



THANK YOU

