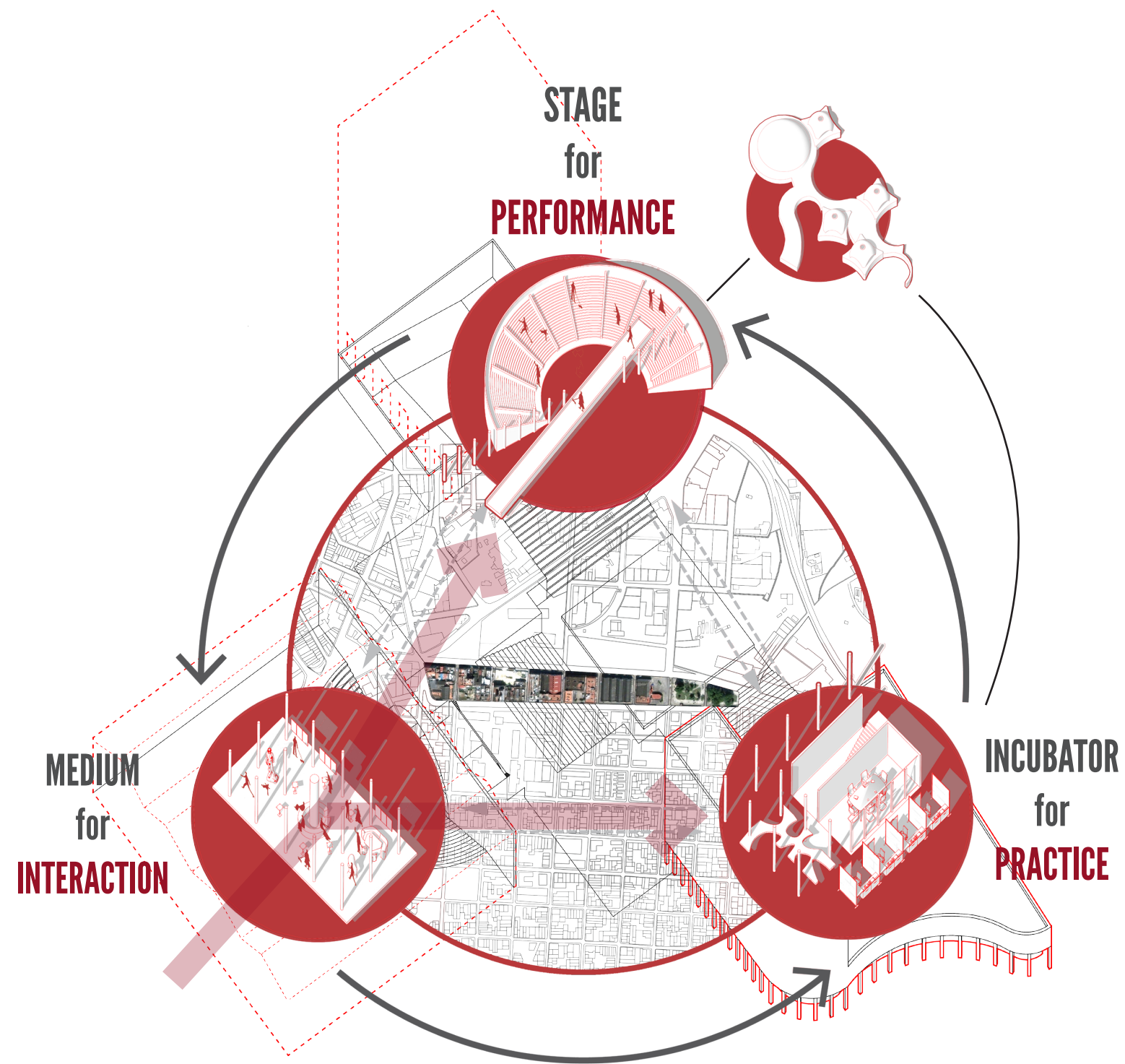




THE
HAVANA
CREATIVE
CITY

MSc3-4 COMPLEX PROJECTS
HAVANA PROFUNDA
Kan Hok Yin
Anthony

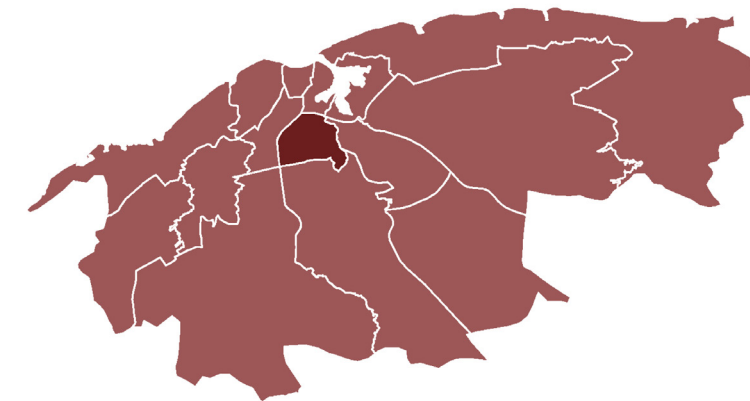
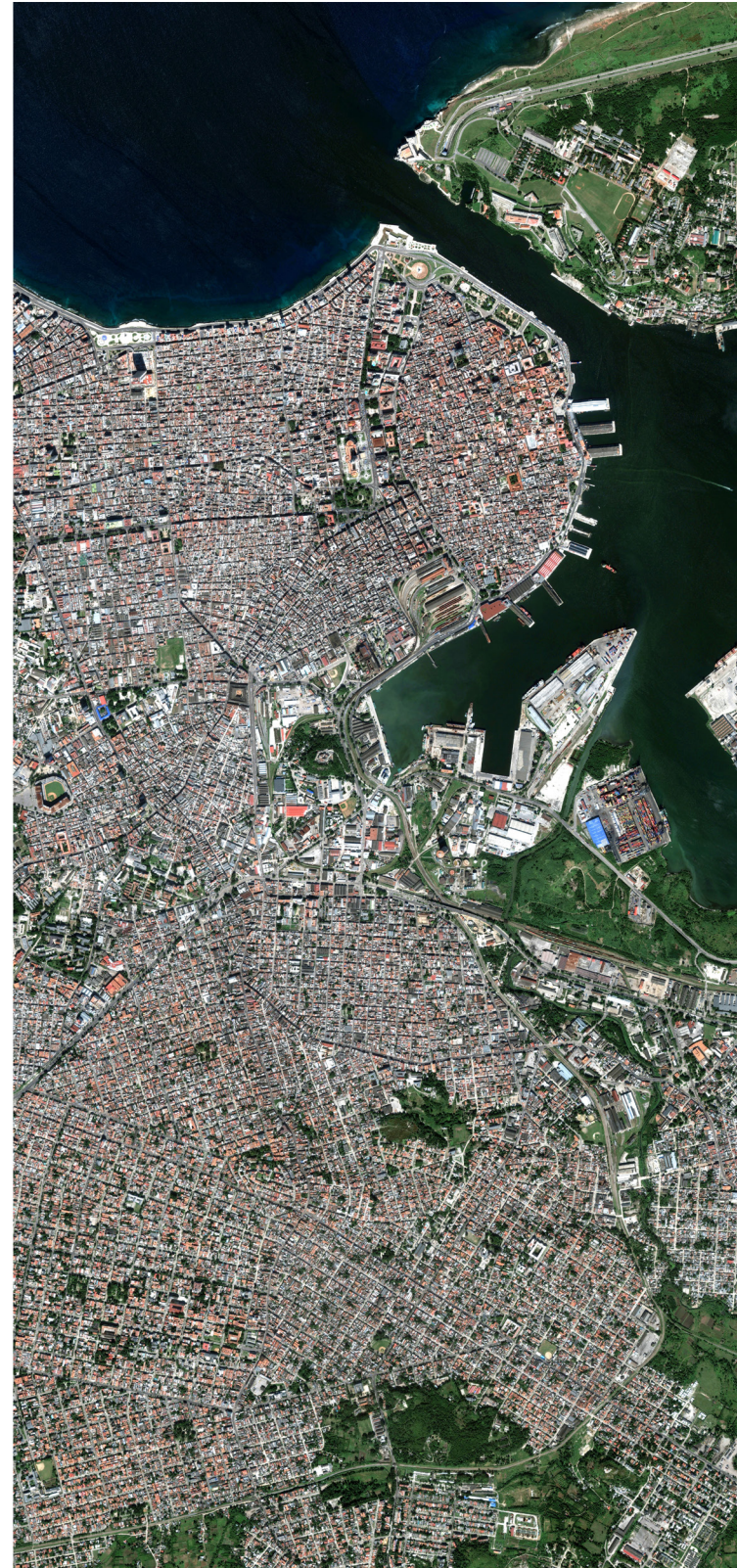
Project:



Cultural District in Havana

Bottom-Up Urban Renewal Project initiated by **Creative Class**, Constructed through **Intervention**

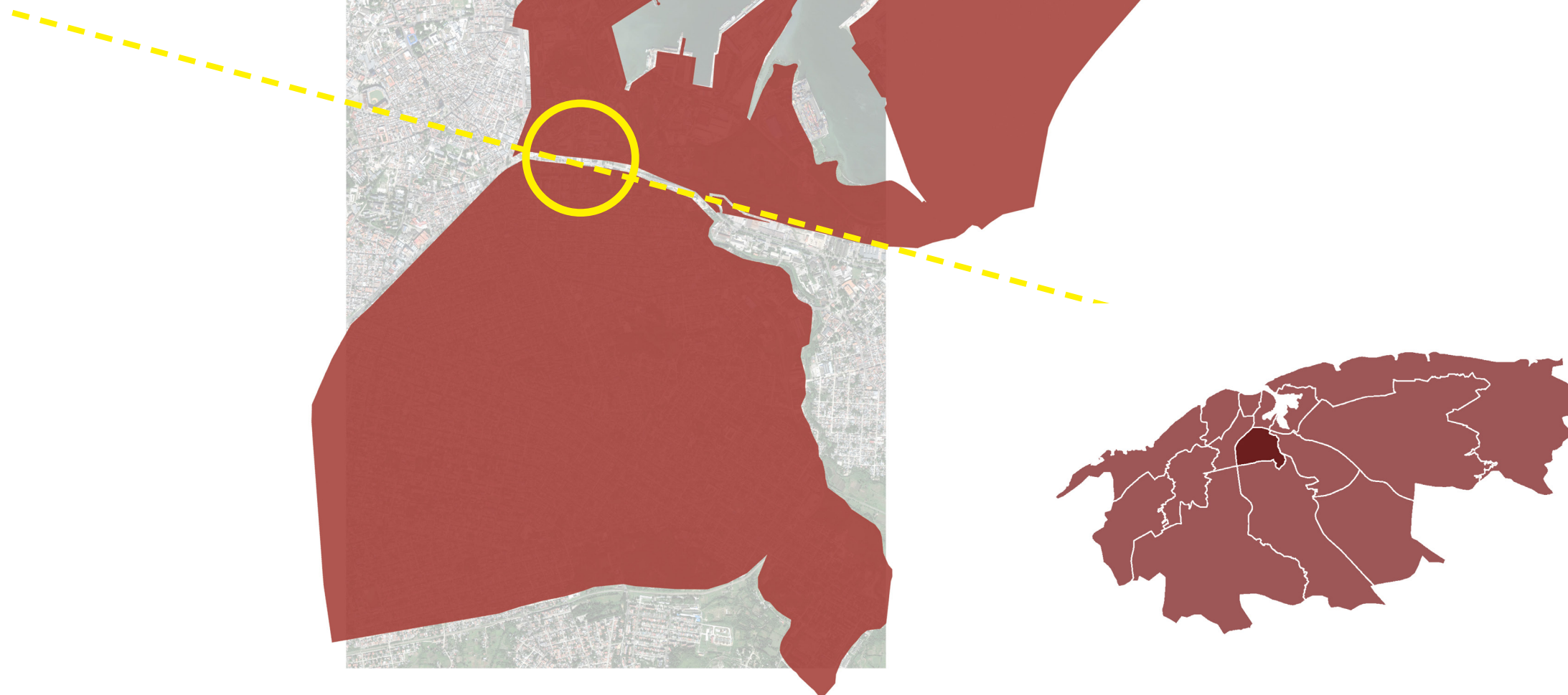
Site:



Between the **Prioritized** and **Neglected** Neighbourhood

the fast growing old town redevelopment area and ignored working-class neighbourhood that left to decaying

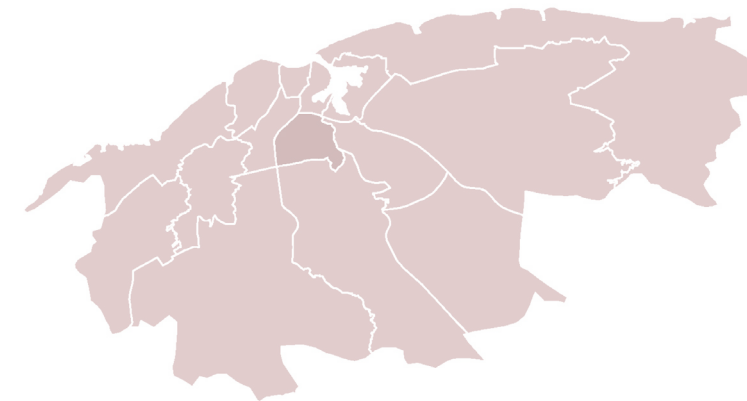
Site:



Between the **Prioritized** and **Neglected** Neighbourhood

the fast growing old town redevelopment area and ignored working-class neighbourhood that left to decaying

Site:



Between the **Prioritized** and **Neglected** Neighbourhood

the fast growing old town redevelopment area and ignored working-class neighbourhood that left to decaying

Aim:



Induction of New Activity and New Connectivity

Cultural activity as means of re-molding impression of the rigid post-industrial leftover border.

01

Cultural Capital of the Caribbean

How Havana shaped/packaged itself as a Cultural
Capital through education and renovations

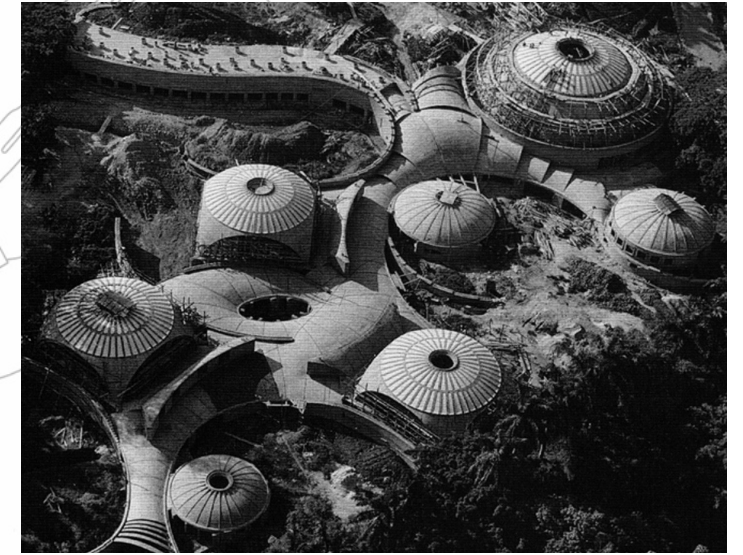
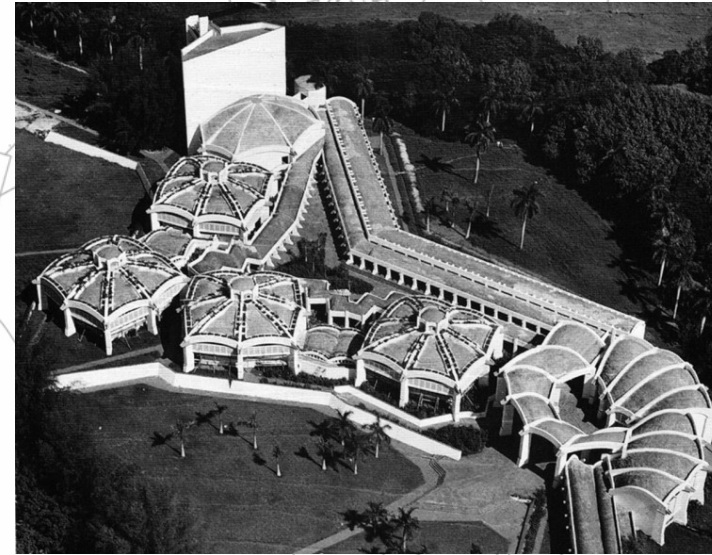
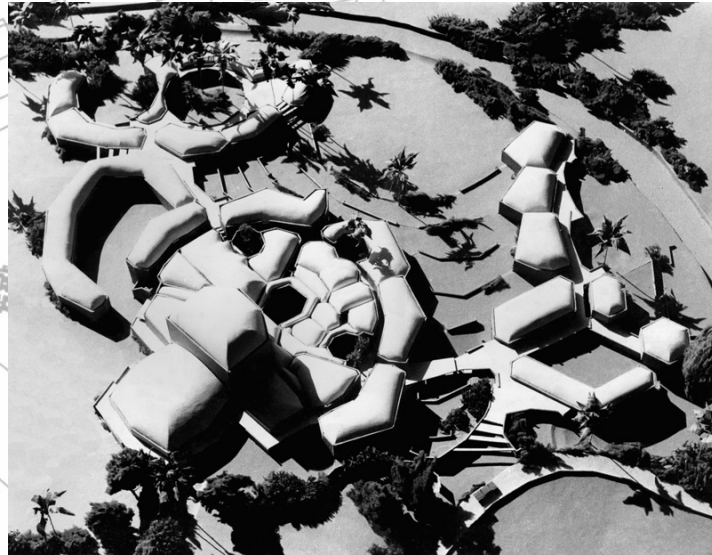
A high-contrast, black and white close-up portrait of Fidel Castro. He is looking slightly to the right of the camera with a serious expression. His dark, curly beard and mustache are prominent. The lighting is dramatic, with strong highlights on his forehead and nose, and deep shadows on the right side of his face.

FIDEL CASTRO: 1960

The culture of socialism is a humanist culture in that stresses the solidarity of men and peoples and fosters whatever is best and most progressive in the human being. It offers the scope and the means for the universal development of the individual, and for the formation of his creative personality, so that he is capable of acting freely and effectively in various social fields through the deployment of his initiative, enriched by a deeper understanding of the world and of himself.

Instituto Superior de Arte:

Site Visit Research



School of Plastic Arts – Ricardo Porro



School of Dramatic Arts – Roberto Gottardi



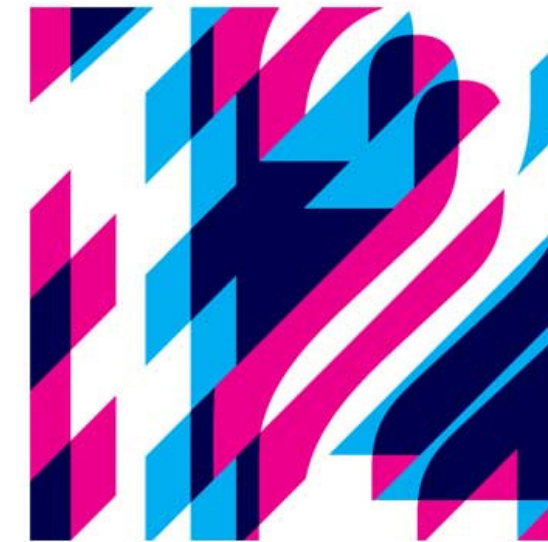
School of Modern Dance – Ricardo Porro



School of Ballet – Vittorio Garatti

Artist Training ->

Art Events:



**BIENAL DE
LA HABANA
2015**



Artist Training -> Cultural Events

Renovation Projects:

Revival of Historical Quarter



- by PUBLIC SECTOR
Office of the Historian of Havana City
- by PRIVATE SECTOR
Private Corporations/ Joint Venture Investment



Artist Training -> Cultural Events -> Historical City as Stage

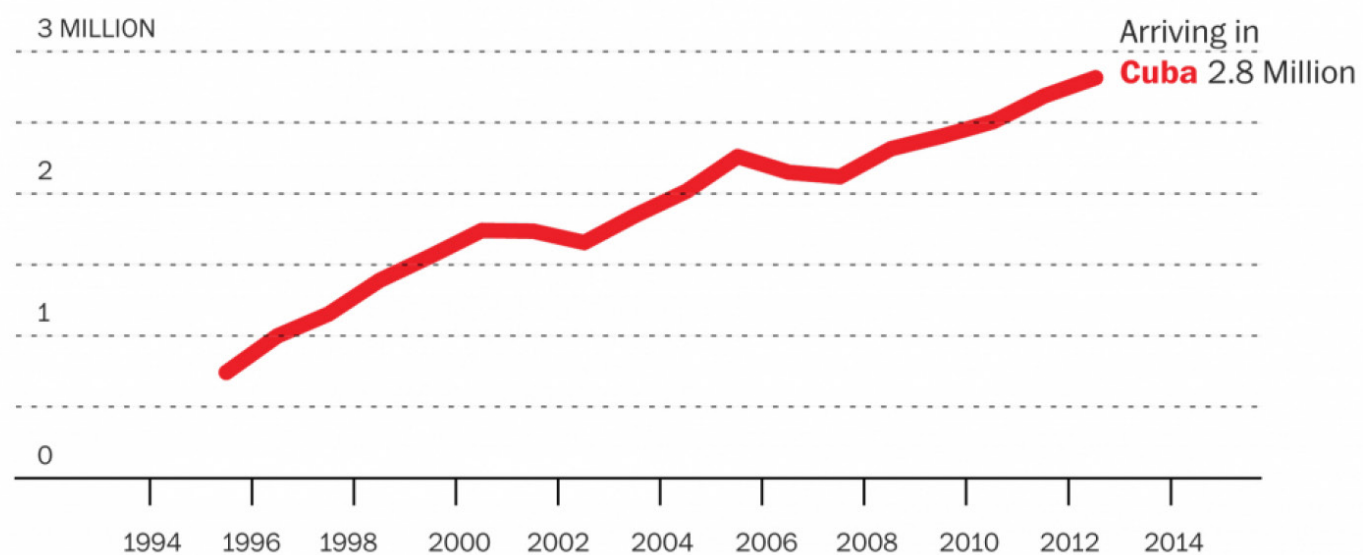
Tourism:

Attractivness of Cuban Culture



Tourists arriving in Cuba

Enticed by the potential flood of cash into the island's reeling economy, Fidel Castro opened Cuba to tourists in 1995, and it quickly became a top Caribbean destination. If U.S. restrictions are eased, the flow of Americans is expected to skyrocket.



Source: The World Bank

THE WASHINGTON POST

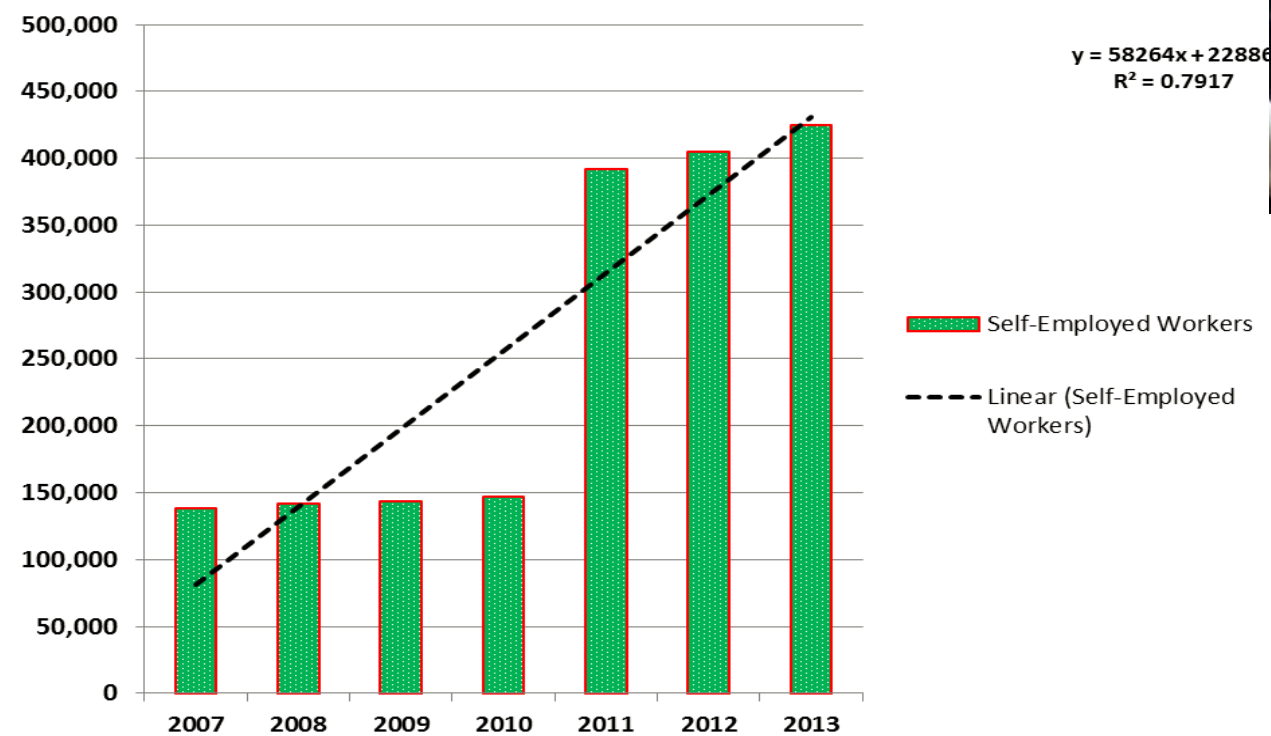
Artist Training -> Cultural Events -> Historical City as Stage -> Foreign Interest

Raul Castro's 5 Year Economic Reform:

A New Economic System for New Tourist Economy, Diversification!



Figure 1. Cuba: Self-Employed Workers: 2007-2013



425,000 Self-Employed Workers
110,000 Reduction in Public Jobs
7.5% Cuba's total Work-Force

Artist Training -> Cultural Events -> Historical City as Stage -> Foreign Interest-> Business

**The Rising Figures However are exposing the weaknesses in
Cuba's Social Policy and Urban Planning**

Expanding Creative Sector



Inability to Digest

Growing Private Sector



Struggle of Survival

On-Going Urban Redevelopment



Strong Border of Gentrification

Artist Environment:

Overloaded Education & Saturated Platform



School of Modern Dance – Ricardo Porro

OVERLOADED WITH 4000 STUDENTS
(DESIGNED FOR 900)

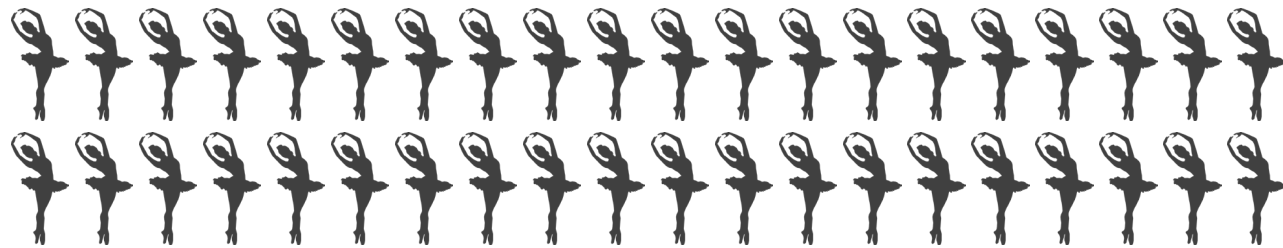
NATIONAL PERFORMANCE GROUP



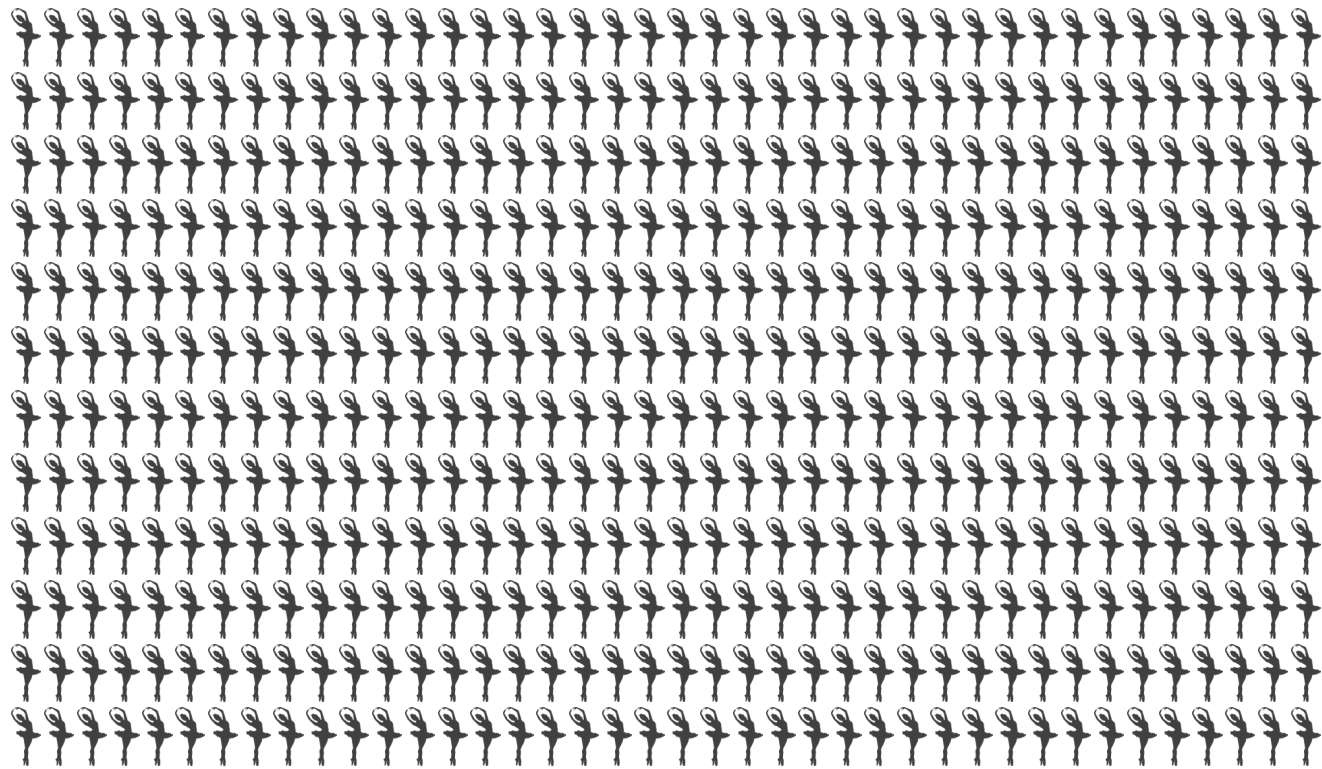
GRADUATES



STUDENTS

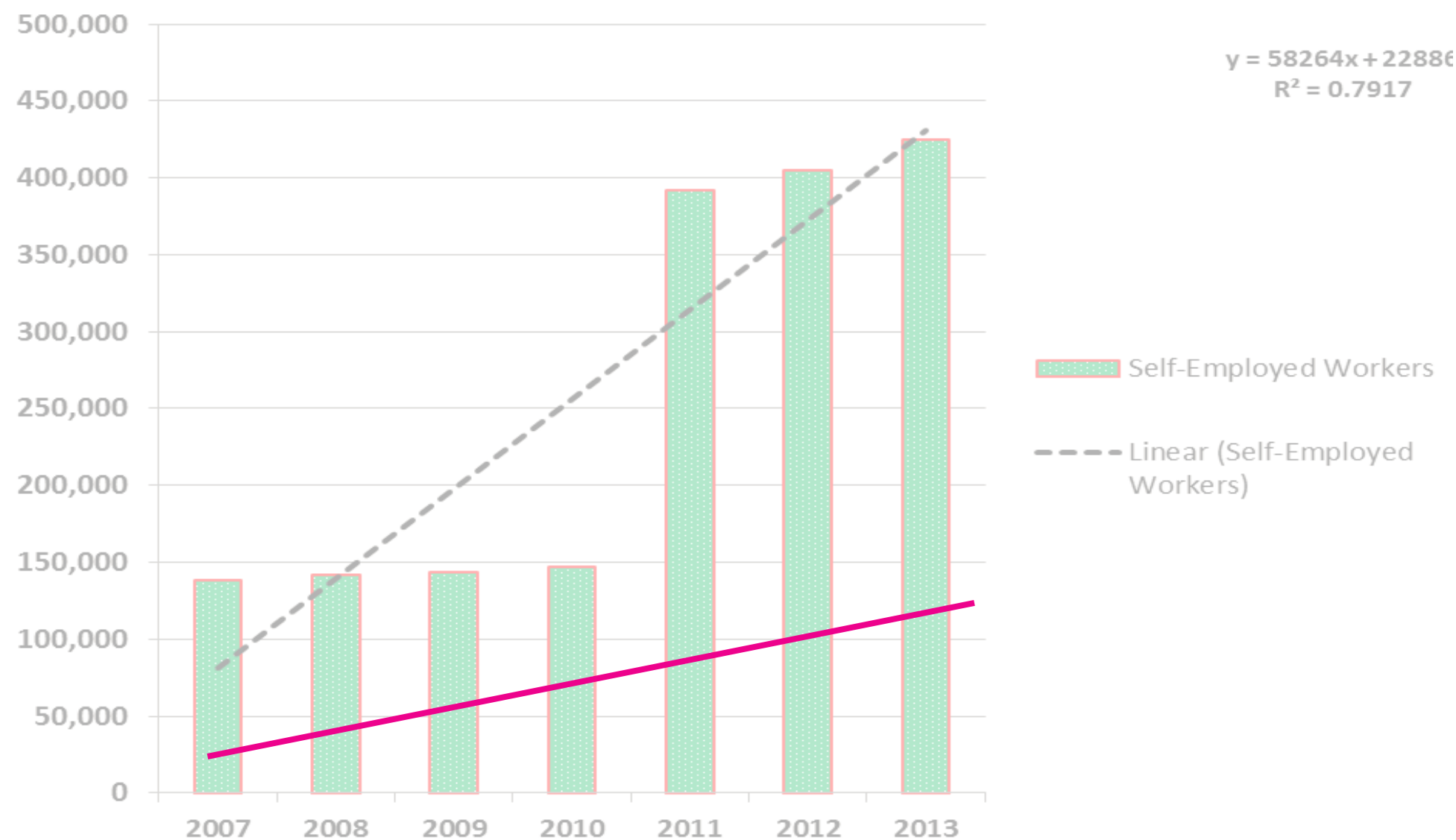


APPLICANTS



Private Business: Failure of Sustainability

Figure 1. Cuba: Self-Employed Workers: 2007-2013



25%

entrepreneurs failed and turned in
their licenses (annually)

Company Size: (Unconditional)

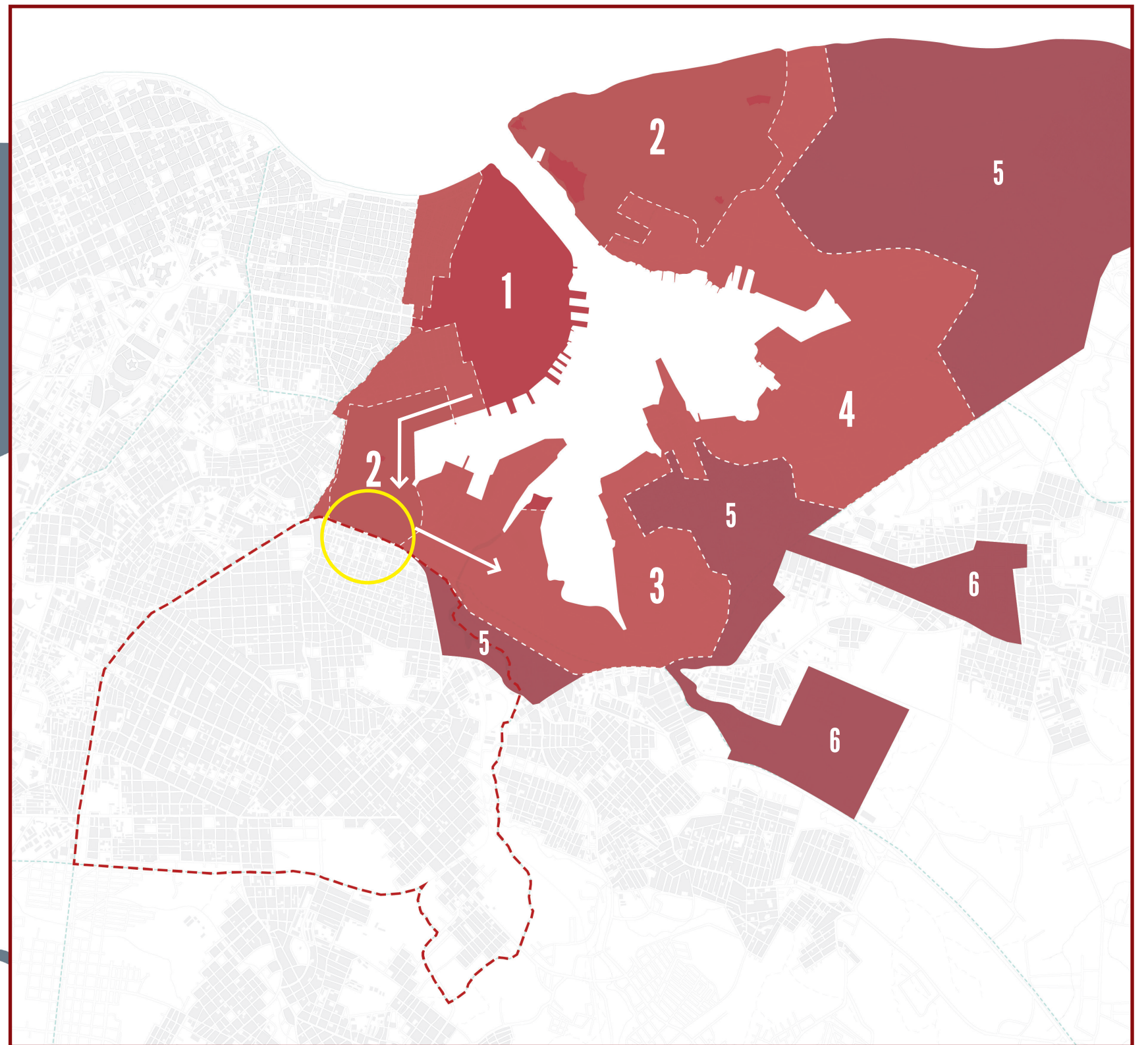
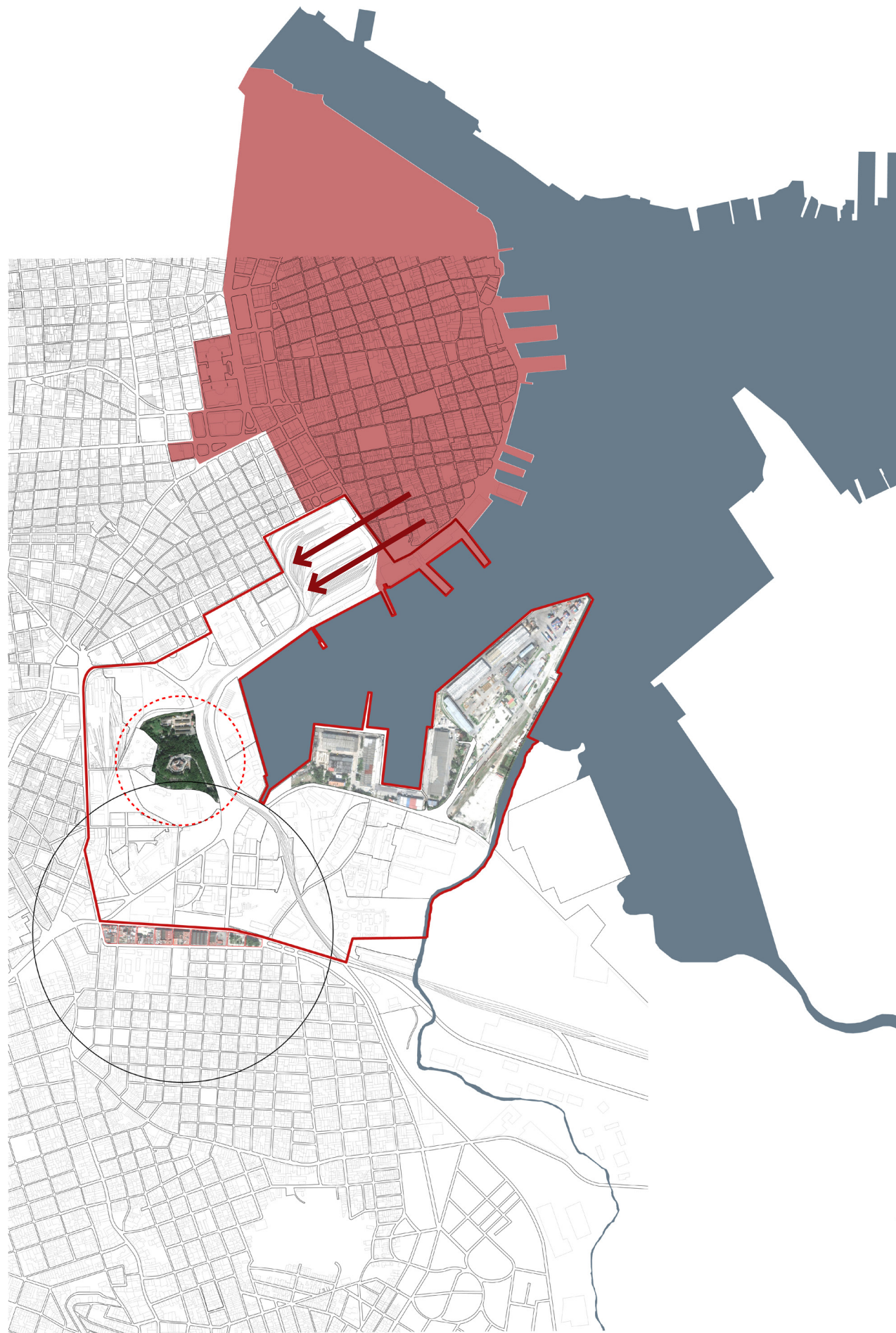


exponential increase in income tax starting from 40% to
discourage large company size & concentration of \$\$.

Working Space Rental:

183 CUC /month

if shared by 6 employees, would account for 50% of income



Plans of Redevelopment

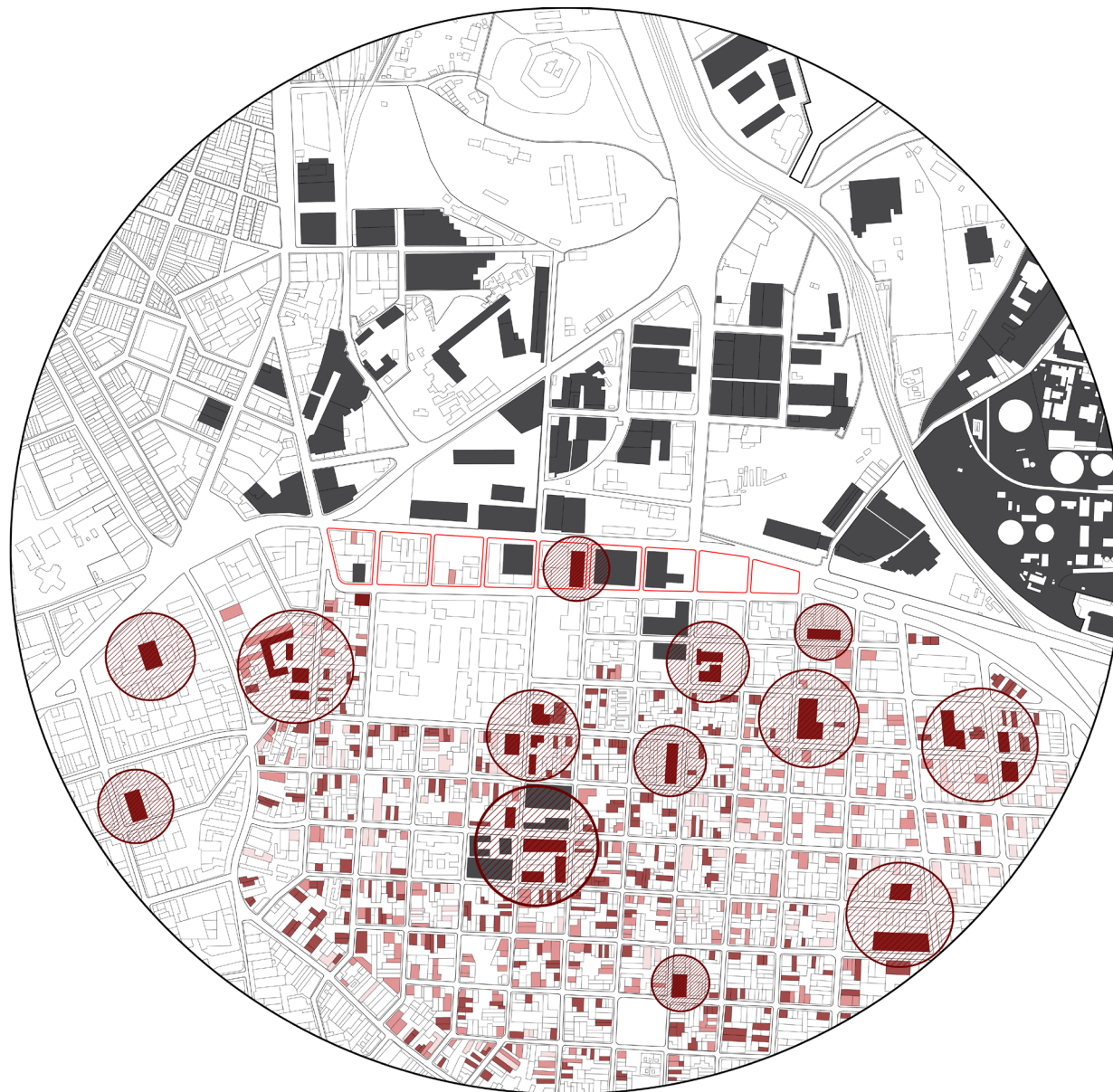
Prioritised Urban planning

Source: Office of the Historian of the City of Havana



Problems of Neglected Neighbourhood

Case Study in Diez de Octubre- Densiest Residential Area



39% families living in merely adequate or
poor condition = **1,170,000** homes
Housing deficit of **1,500,000** homes
26,634 homes constructed in 2014
45% of which unaided by government

CATEGORY I
Extended- Building in Fair Condition

CATEGORY II
Poor Extension on Decent Building

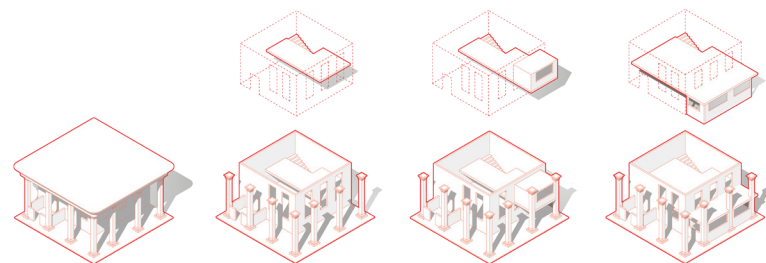
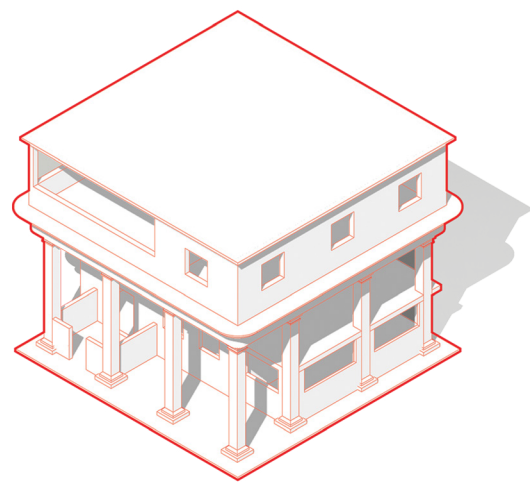
CATEGORY III
Improper Constructed Temporal Building

CATEGORY IV
Adapted Post-Industrial Structure

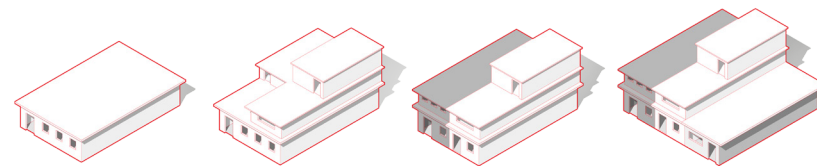
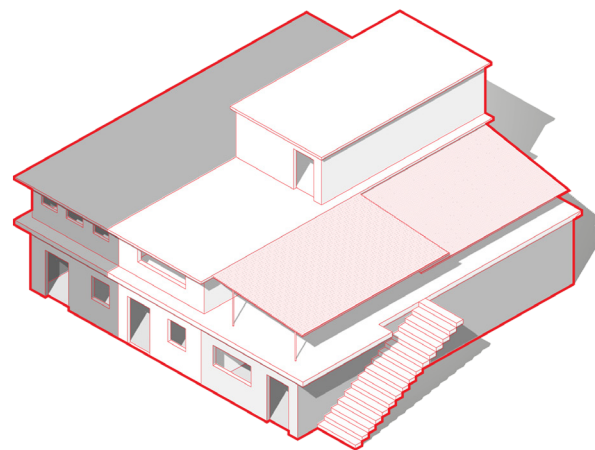
CATEGORY V
Functioning Factories

Problems of Neglected Neighbourhood

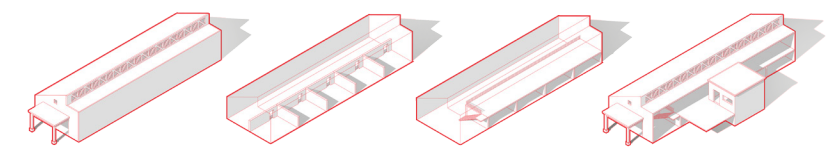
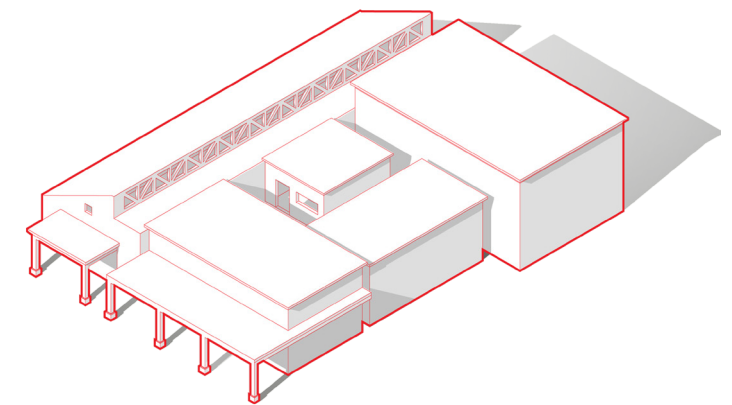
Typologies of DIY extension



Category I:
Singular-Expansion



Category II:
Mass-Multiplication



Category IV:
Metamorphosis

CATEGORY I
Extended- Building in Fair Condition

CATEGORY II
Poor Extension on Decent Building

CATEGORY III
Improper Constructed Temporal Building

CATEGORY IV
Adapted Post-Industrial Structure

CATEGORY V
Functioning Factories

Unsustainable Artist Education

That lacked future prospects and necessary quality to train.

Failure of Private Economy

Full of rigidity and lack of diversity.

Gentrification and Urban Decay

Full of rigidity and lack of diversity.

2 Artist Studios and Venue for Events

Unsustainable Artist Education

That lacked future prospects and necessary quality to train.

1

High Availability of Spaces

3 Incorporation of Community
Business to Finance Daily Expense

Failure of Private Economy

Full of rigidity and lack of diversity.

4 Business opportunity invited market force
to open up decayed area.

Gentrification and Urban Decay

Full of rigidity and lack of diversity.

Problems as Interwoven Possibilities!!

Thesis Statement:

Creative Class as ‘New’ Developers

from the grass roots, honing in on their collective skills and expertise to self-procure, build and manage their own neighborhoods.

Designing the “Process” from simple occupation to expansion.

02

Case Studies:

Case Study I:

Fábrica de Arte Cubano (F.A.C.), Havana



Fábrica de Arte Cubano

The Project is located in Cocinero, originally the headquarters for Havana's electricity company, then converted to an olive oil factory. A third life was given to this space as a new exhibition/ performance stage in Havana, breeding retail branches around itself in the following 2 years.

Program Distribution:



22%

Artist Studio:
Photography Workshop x1
Painter's Studio x3
Archive x1

450 sqm

25%

Exhibition:
Informal Display
Permanant Exhibition
Temporary Display Gallery
Art Work Selling Space

500 sqm



45%

Social:
El Cocinero (Roof-top Restaurant)
Bar x3
Informal Performing Stage
Performance Hall

900 sqm

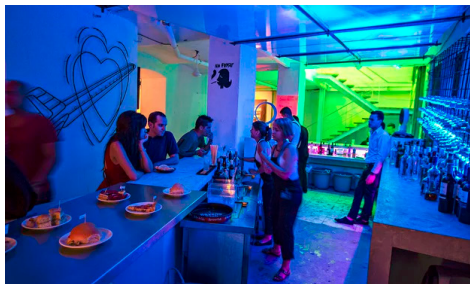
Office and Services:

125 sqm



Spatial Journey:

1)ENTRANCE BAR



2)OUTDOOR BAR



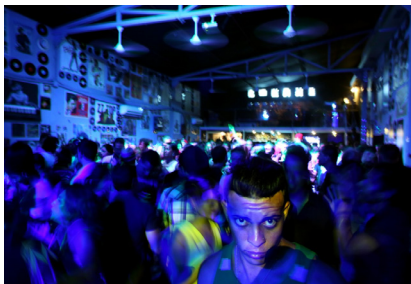
3)GALLERY



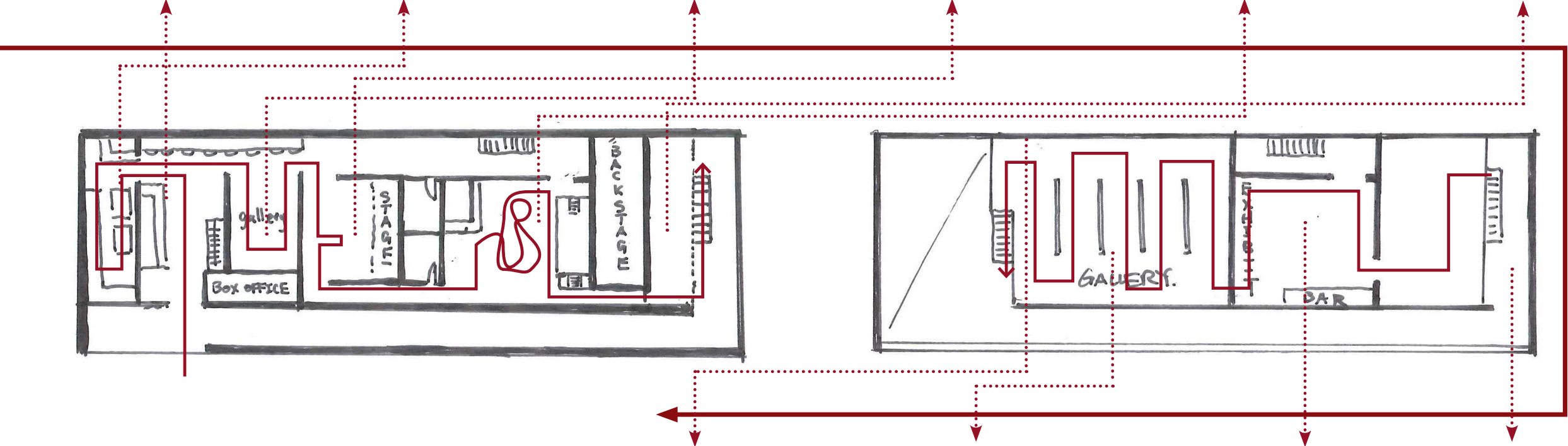
4)INSTRUMENT STAGE



5)PARTY ROOM



6)OUTDOOR BAR



10)ARTIST STUDIO



9)GALLERY



8)EXHIBITION+BAR



7)OUTDOOR BAR

System of Elaboration:

STAGE 1. (INTROVERT)

- 1) Artists looking for Working Space with Low Rent
- 2) Collective Investment of Artist in Refurbishing Factory

STAGE 2. (EXPANSION)

- 1) Factory needs funding to hold public events and support expense.
- 2) Set-up of Bar/ Restaurant to raise money (sustainable)

STAGE 3. (CONTEXT)

- 1) Factory becomes a popular site in district, unconsciously triggering developments around.

Case Study II:

Valsts Elektrotehniskā Fabrika - another socialist example in Riga



Valsts Elektrotehniskā Fabrika

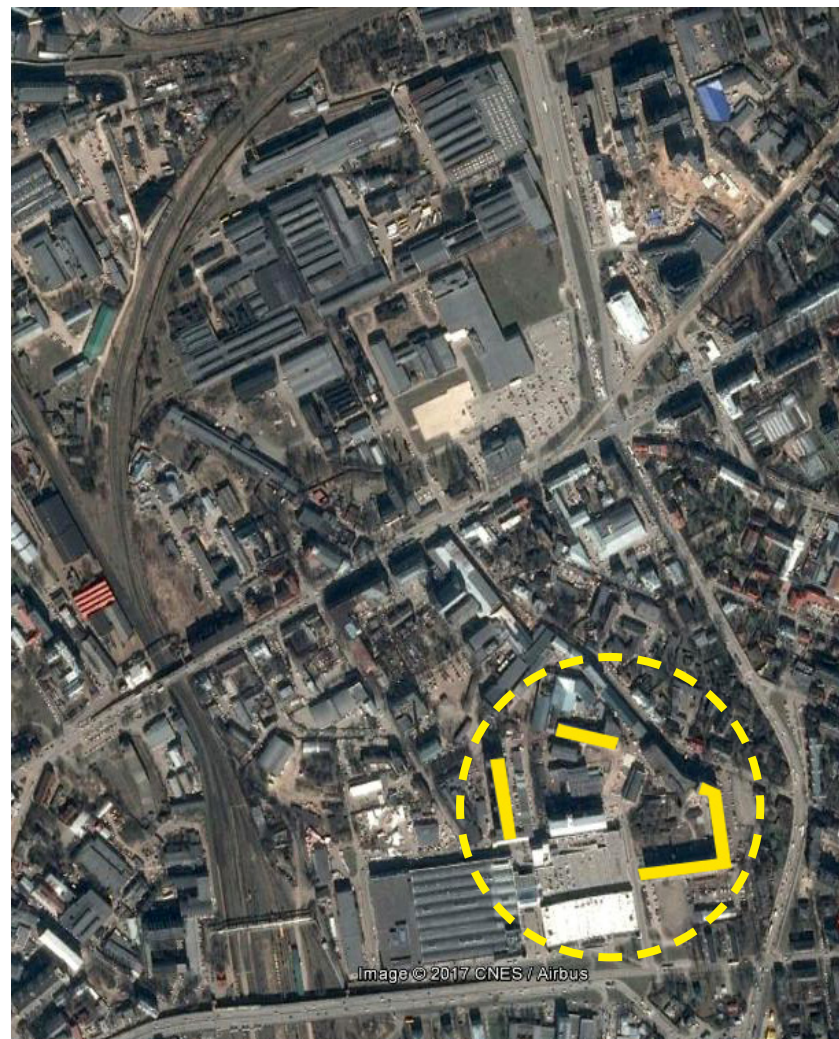
A POST-SOCIALIST TRANSFORMATION – FROM A FACTORY TO A CREATIVE QUARTER

VEF was the biggest manufacturer of electrical and electronic products in the former USSR.

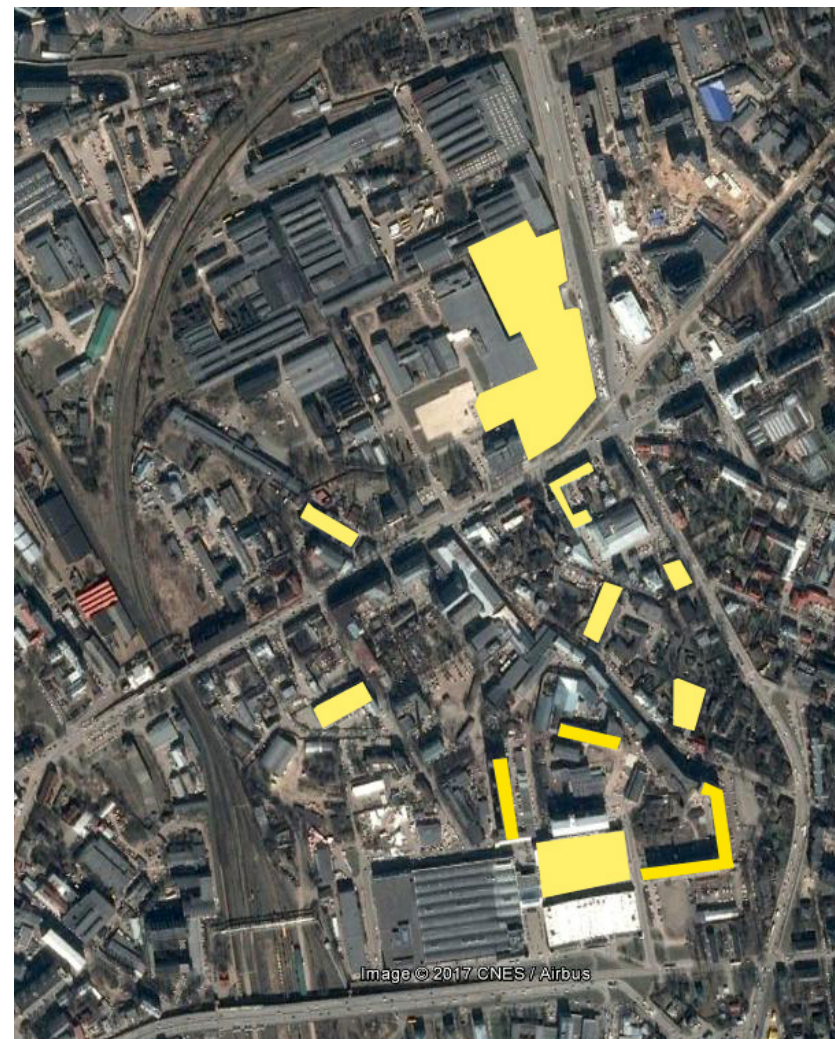
After the re-establishment of Latvia's independence in 1991 these developments left a massive abandoned territory in Riga's urban space. Today Totaldobže, created in 2010, is a private multifunctional cultural centre with a main focus to create an ongoing platform for interdisciplinary art and educational projects.

Expansion: From Building Scale Revitalization to Urban Scale Reoccupation

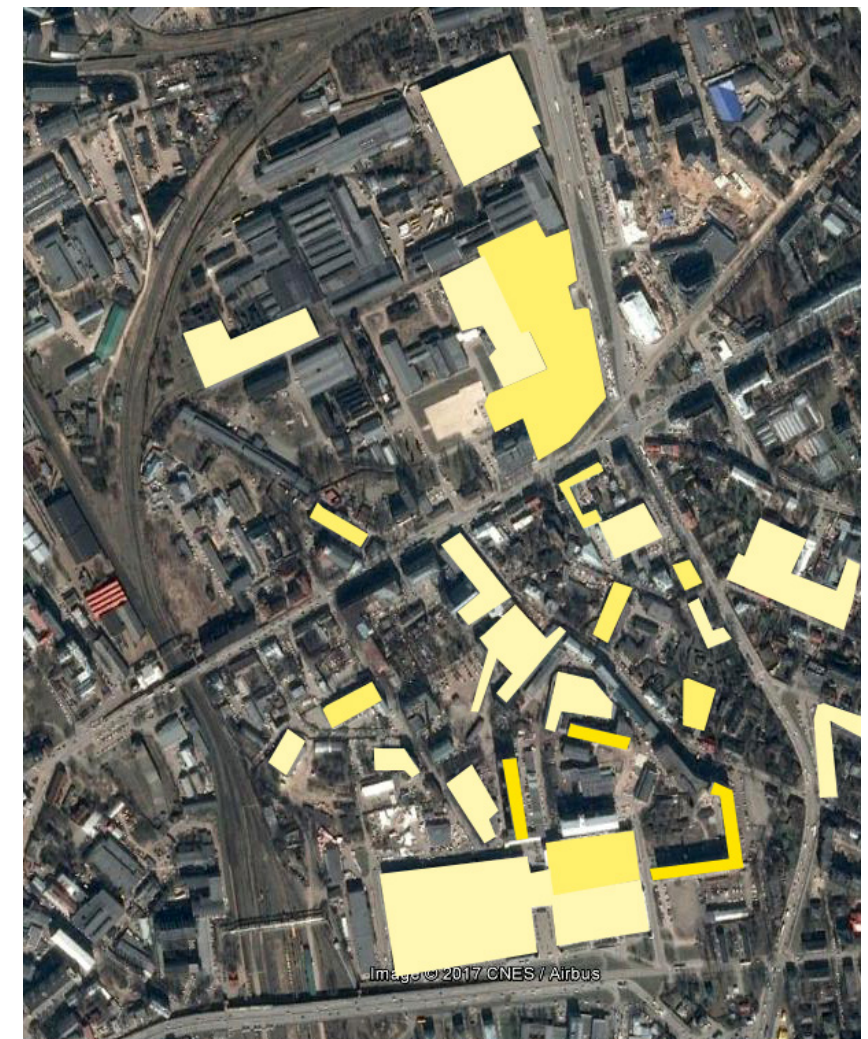
2005-2007



2008-2011



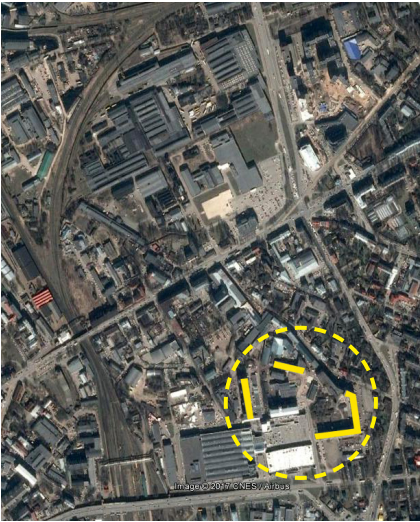
2011-Present



Growth Boosted by Global Economic Downturn 2008,
Unemployment Rate Skyrocketed and Individuals started
looking for cheap locations to conduct Private Business.

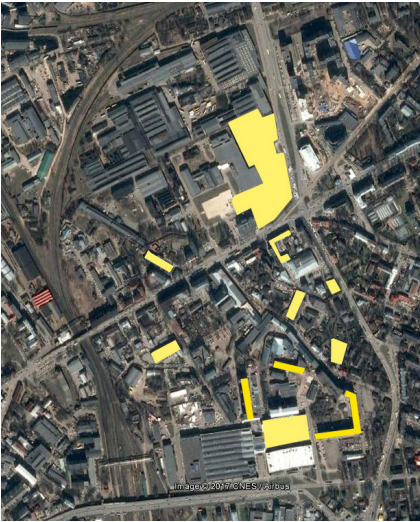
Program Distribution:

2005-2007



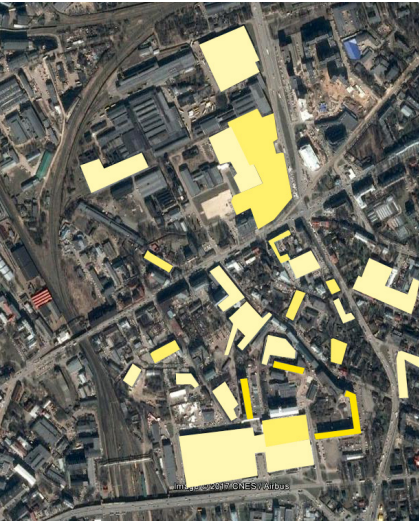
■ Artist Studio:
Refurbished Working Spaces 1000 sqm

2008-2011



■ Artist Studio:
Refurbished Working Spaces 1000 sqm
■ Community Design Workshops:
Galerija Ziema
Open Silkscreen 750 sqm
■ Temporary Event Spaces: 2500 sqm
■ Retail:
Cafe x5
Restaurant x2 200 sqm

2011-Present



■ Artist Studio:
Refurbished Working Spaces Studios 2000 sqm
■ Community Design Workshops:
Galerija Ziema
Open Silkscreen 750 sqm
■ Institutions:
Totaldobže Art Centre
Veizāns Dance School 3000 sqm
■ Retail:
Cafe x15
Restaurant x8
Elkor Plaza
Days Hotel Riga VEF 4000 sqm
■ Wholesale:
Domina Shopping
Evelatus
Euronics 6000 sqm
■ Recreation:
VEF Indoor Extreme Sports Park
Park
Library 5500 sqm
■ Performance:
Melnā Piektdiena
Godvil Concert Hall 1500 sqm
■ Property:
Ober Haus Real Estate 2200 sqm

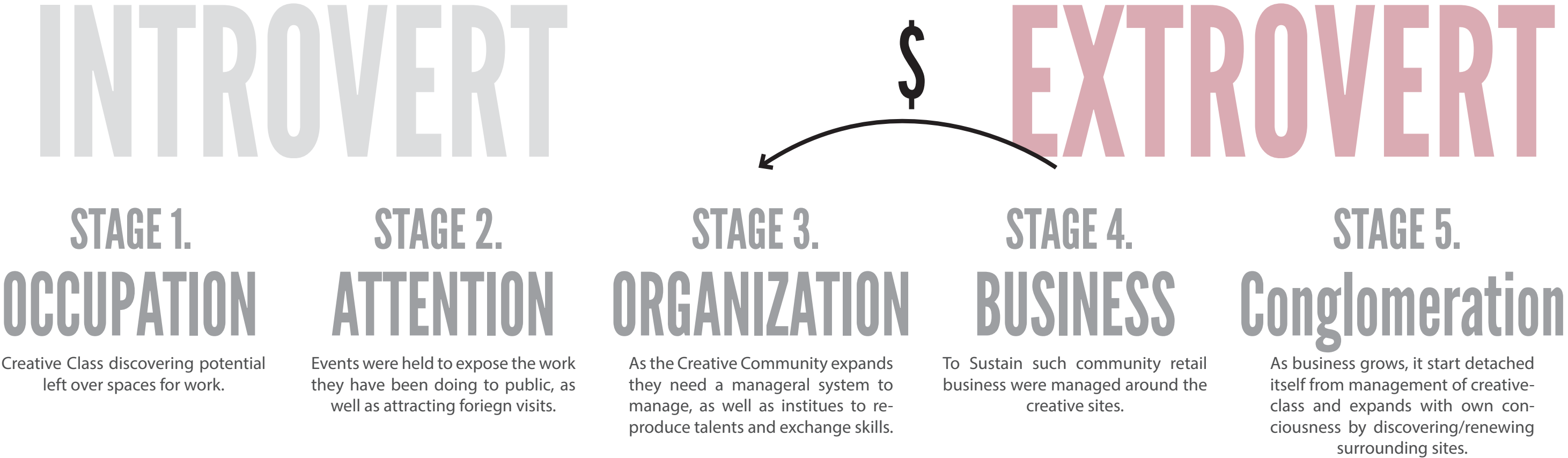


Totaldobže Art Centre



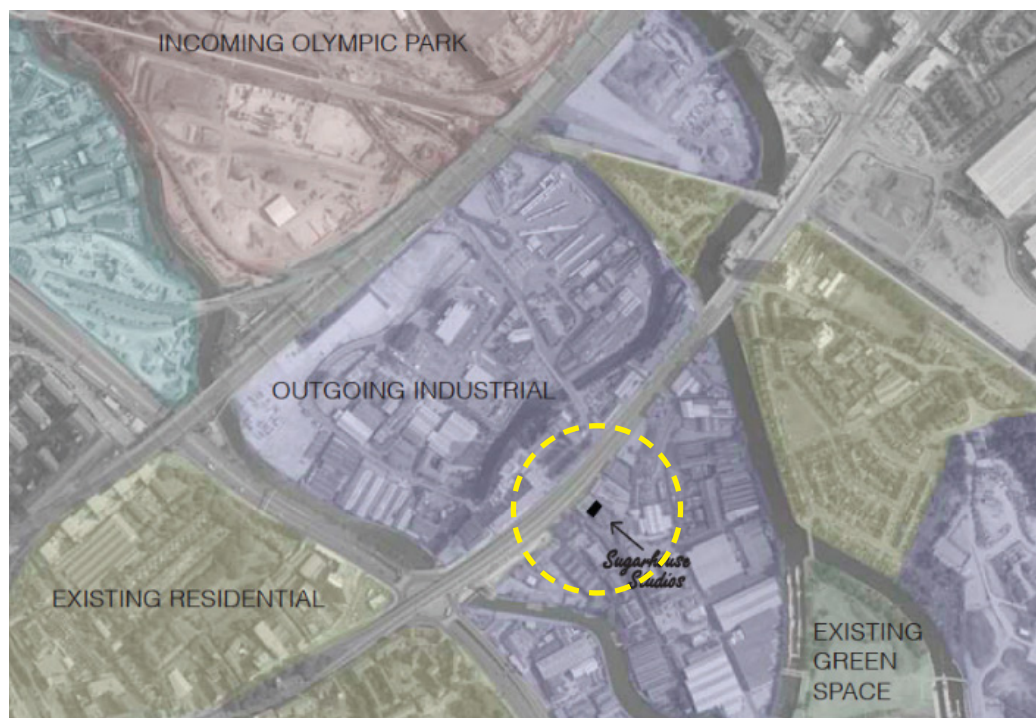
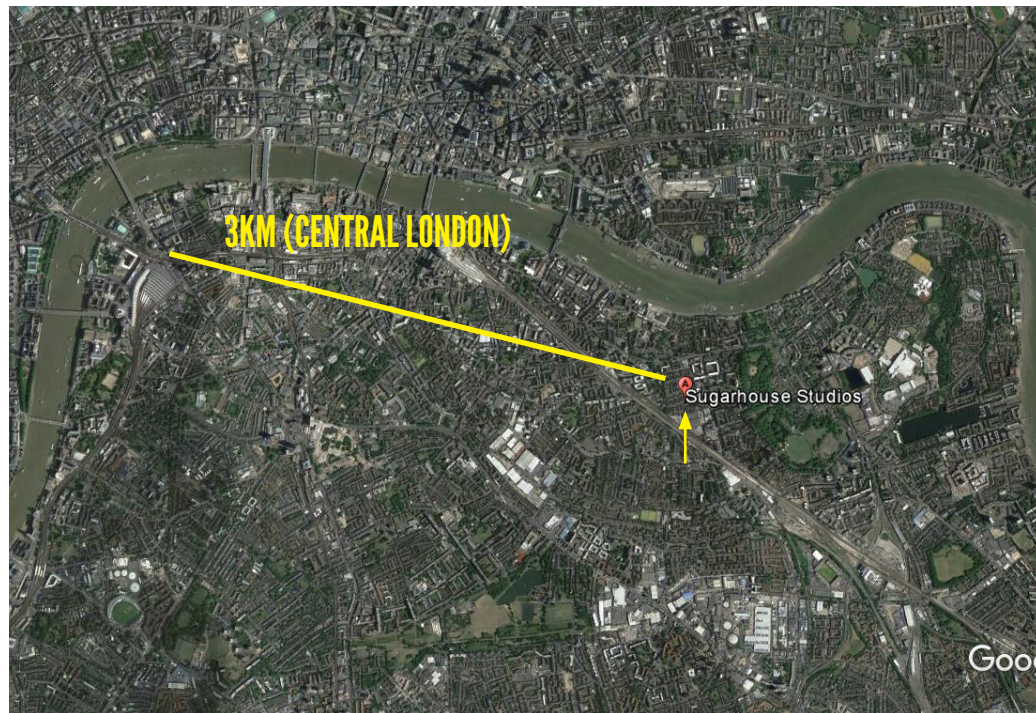
Godvil Concert Hall

System of Elaboration:
Unconscious Bottom Up Urban Renewal?



Case Study III:

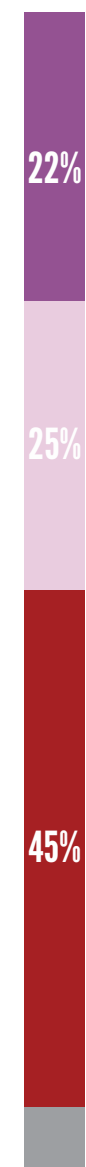
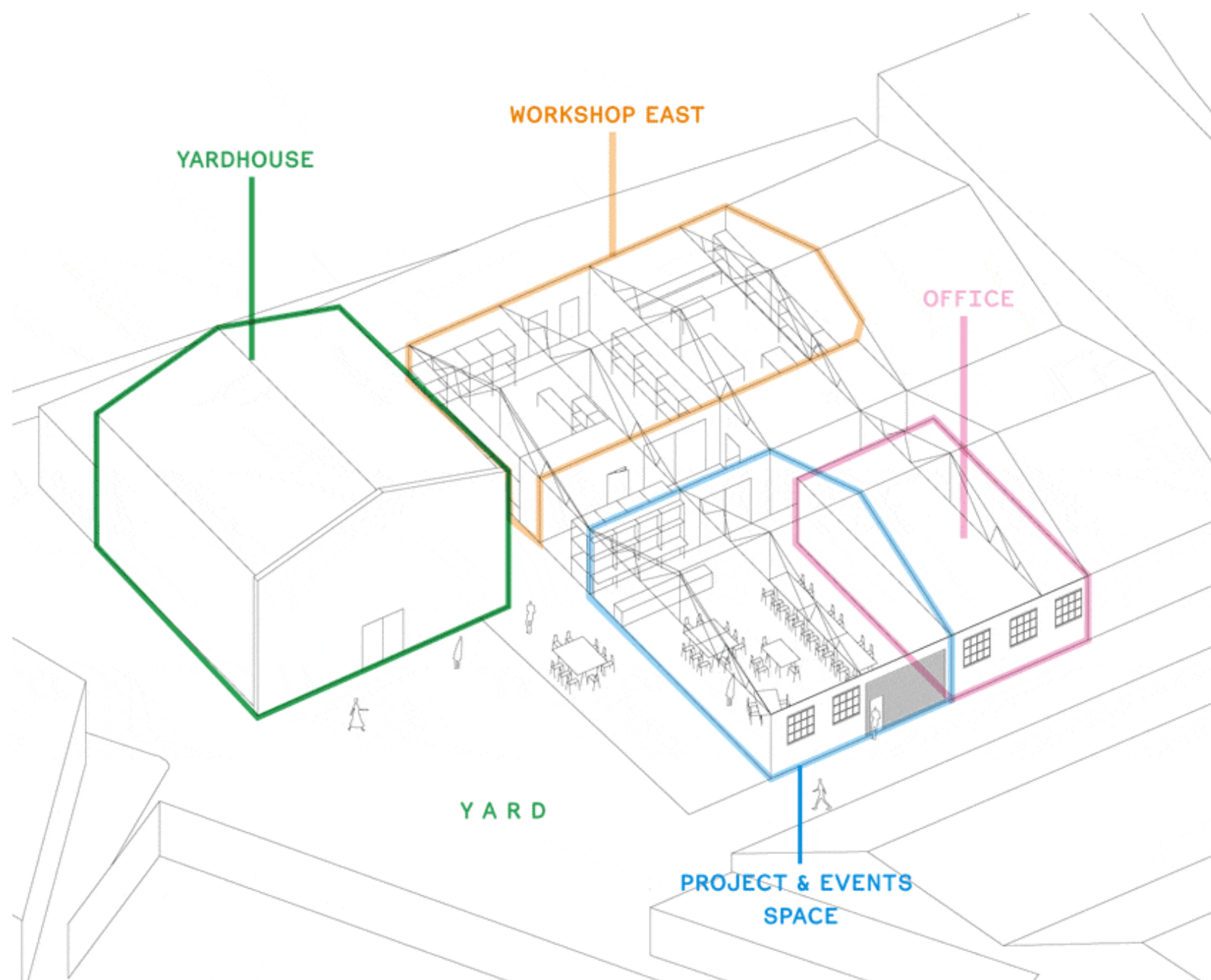
Sugarhouse Studio, London



Sugarhouse Studios

Sugarhouse Studios is a studio and events space on Stratford High Street, conceived and built by Assemble. The project seeks to find a way for private practice (space for research, design and construction) to be opened up to form the backdrop for a public building.





Yard House:

Individual Studio x8

250 sqm

Workshops for Rent:

Music Studio

Ceramic Studio

Metal Workshop

Wood Work Workshop

300 sqm

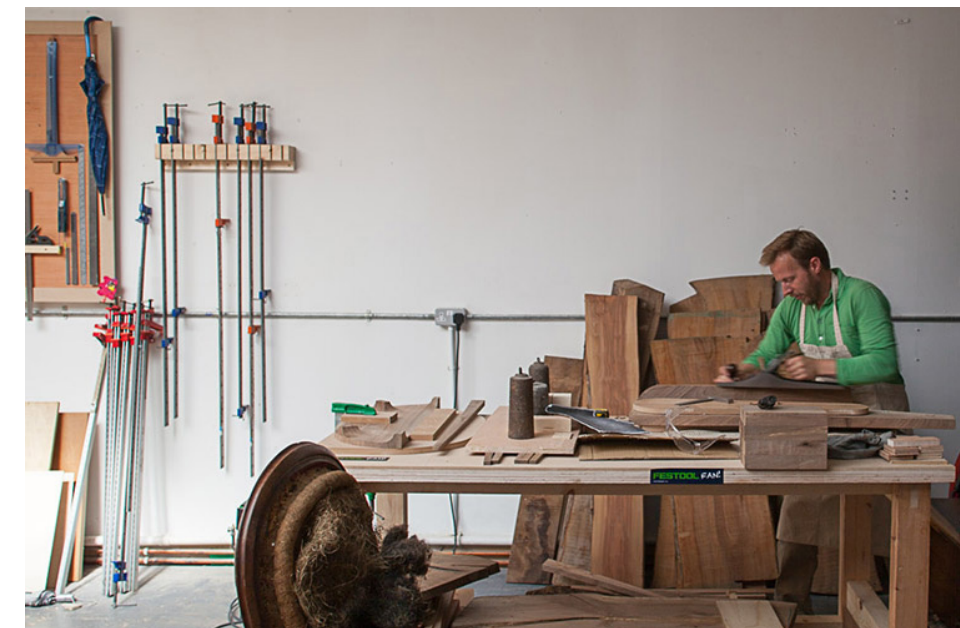
Social:

Cafe-Cinema

300 sqm

Office and Services:

125 sqm



Studio Spaces for private work and Tools to share.

03

Border as Surface for Cultural Catalyst

Site Selection and Project Nature

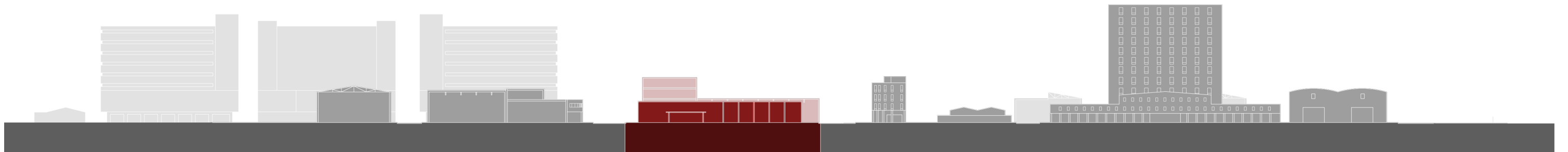
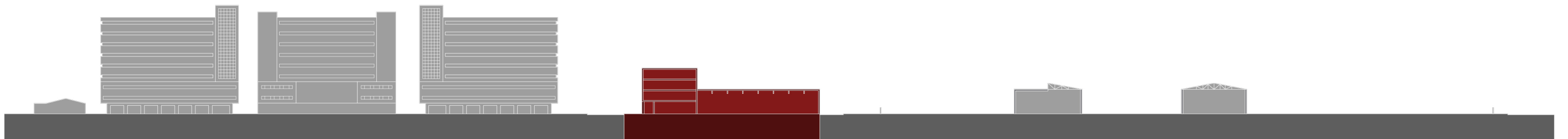
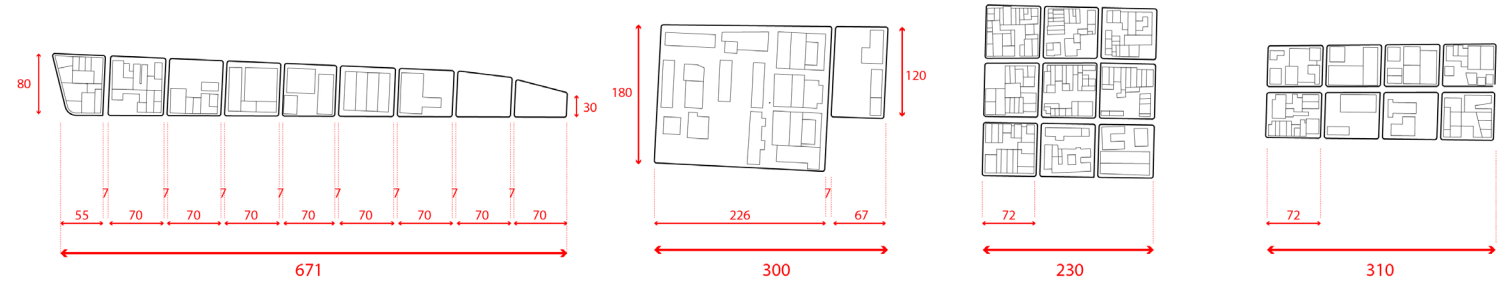
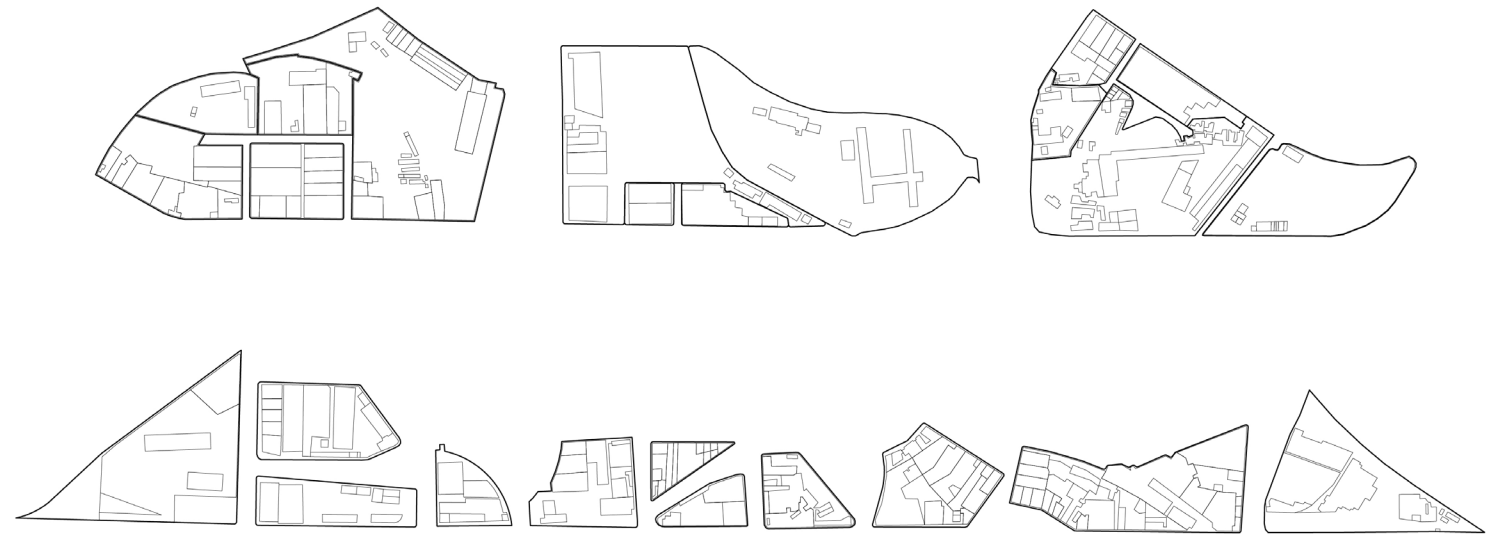
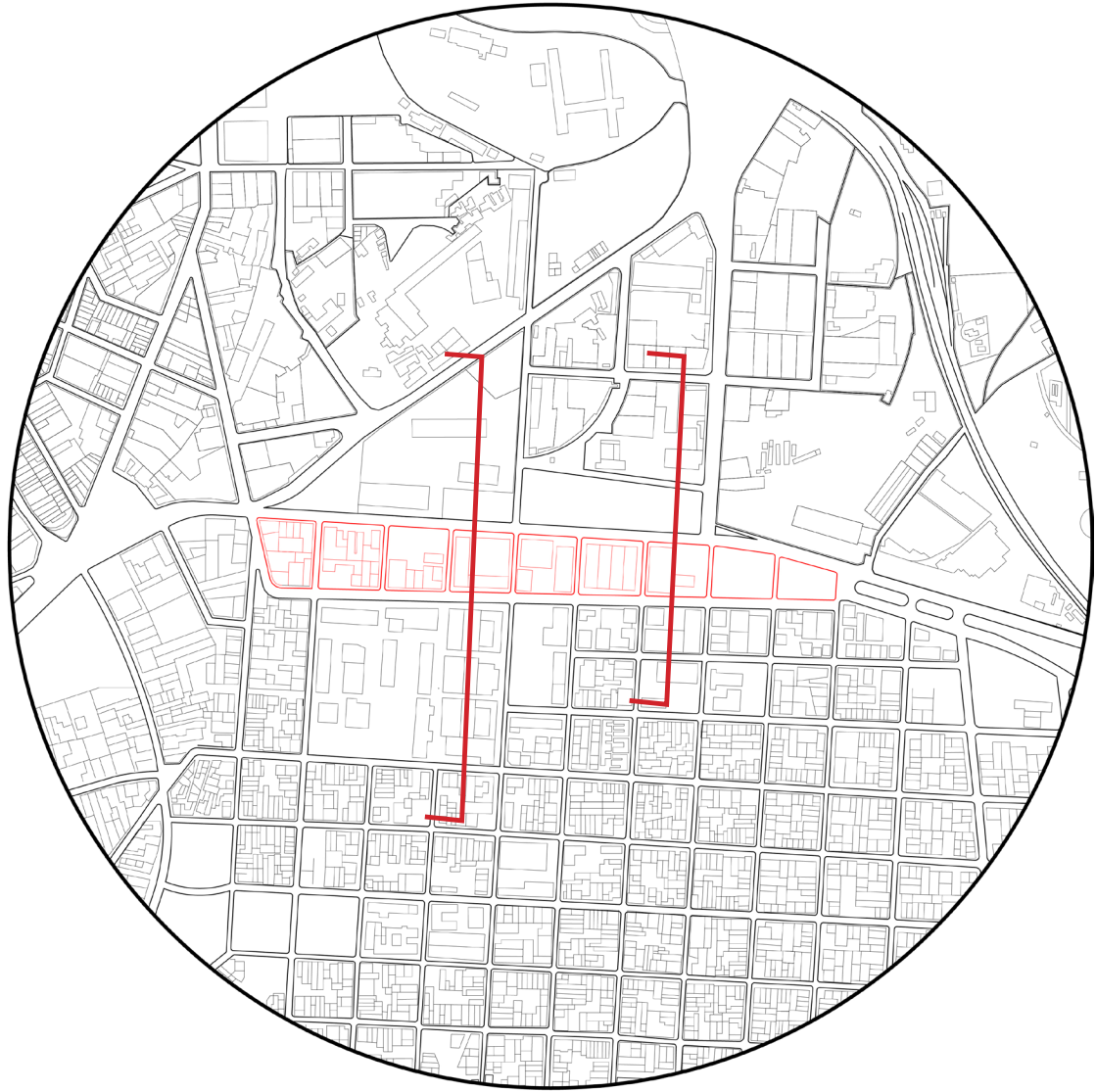


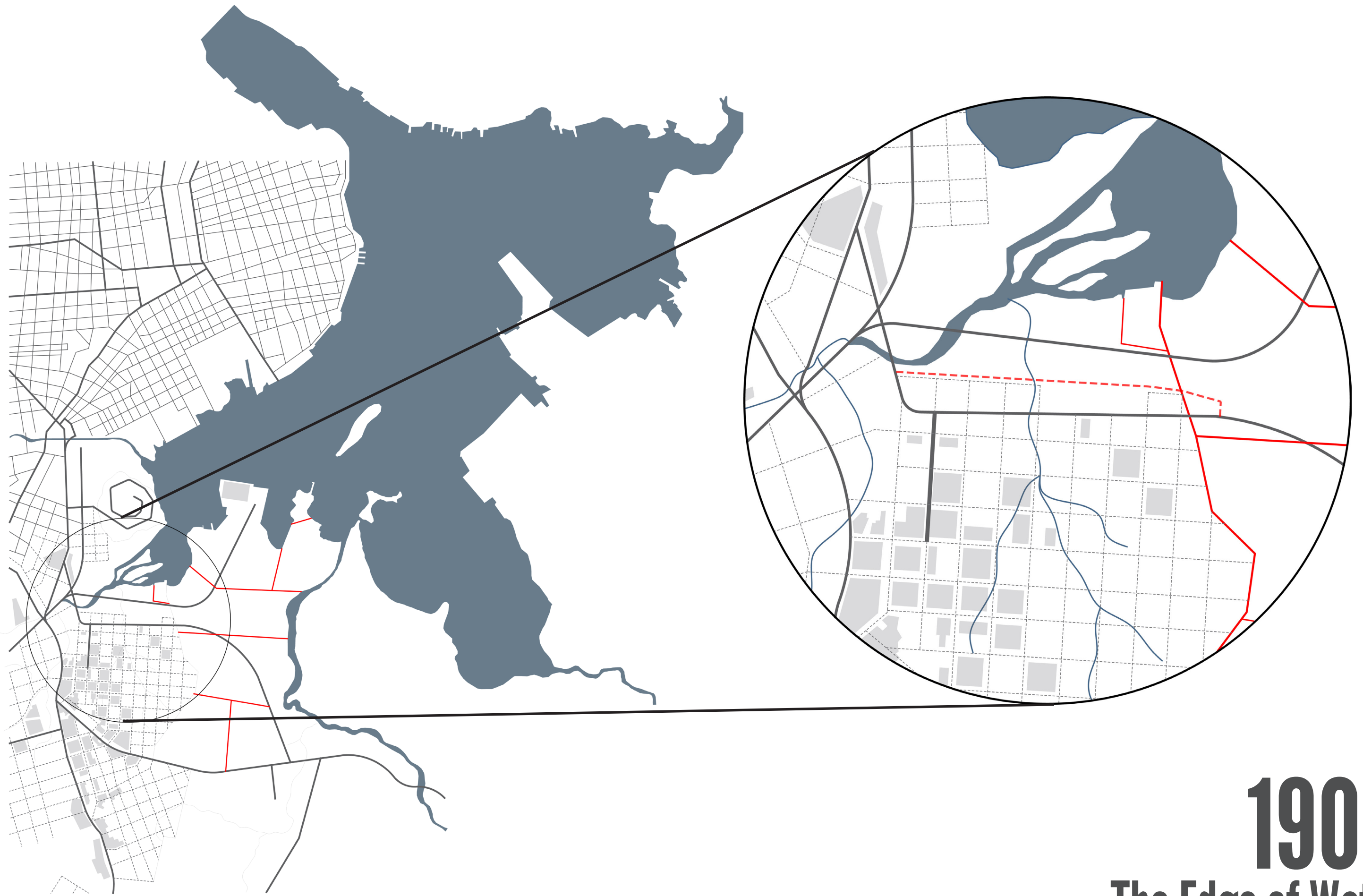


Strip Elevation



Strip Elevation

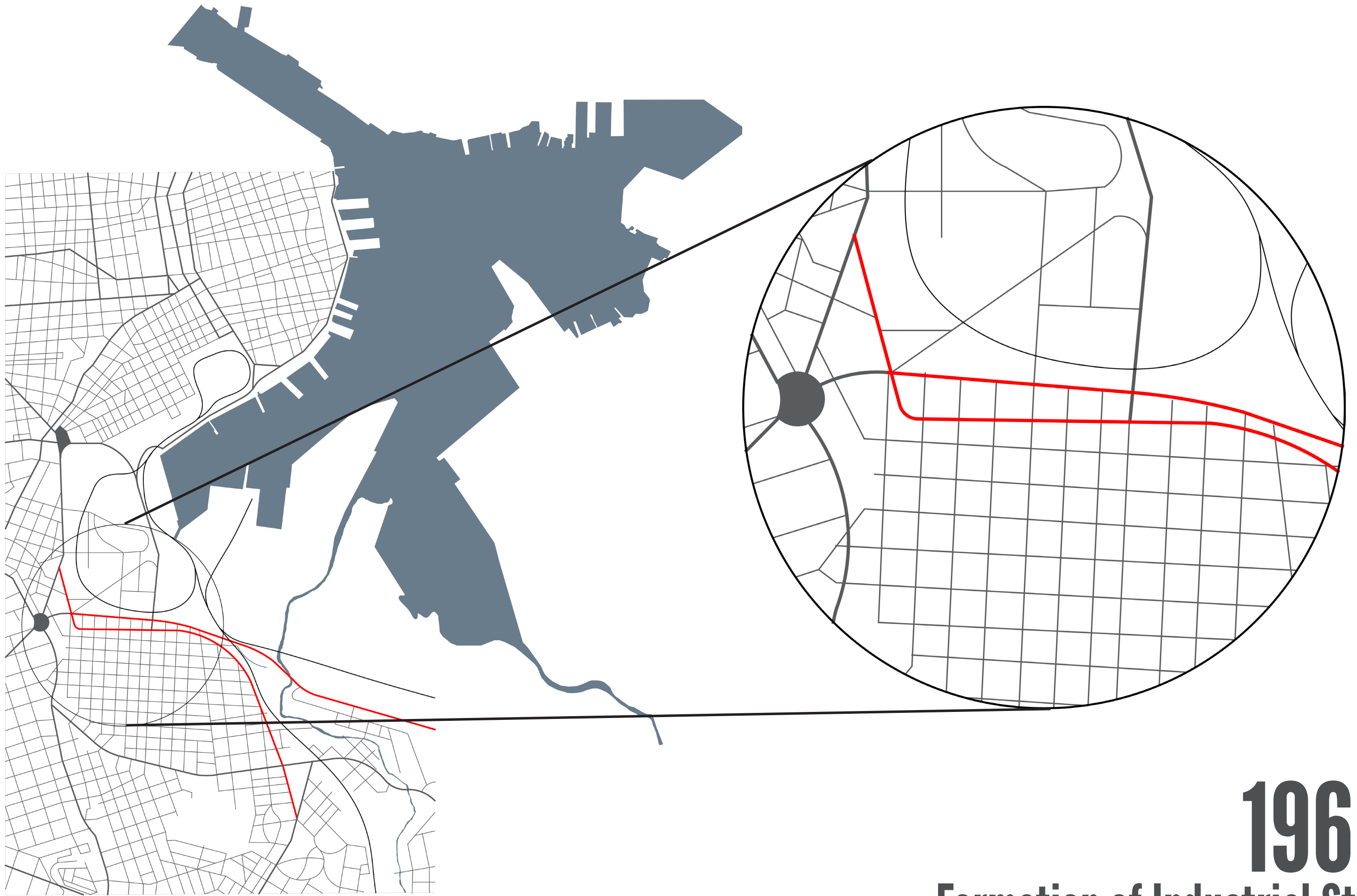




Creator: Pichardo y Tapia, Estéban, 1799-1879
Publisher: Office of Chief Engineer, City of Havana Department of Streets

1900

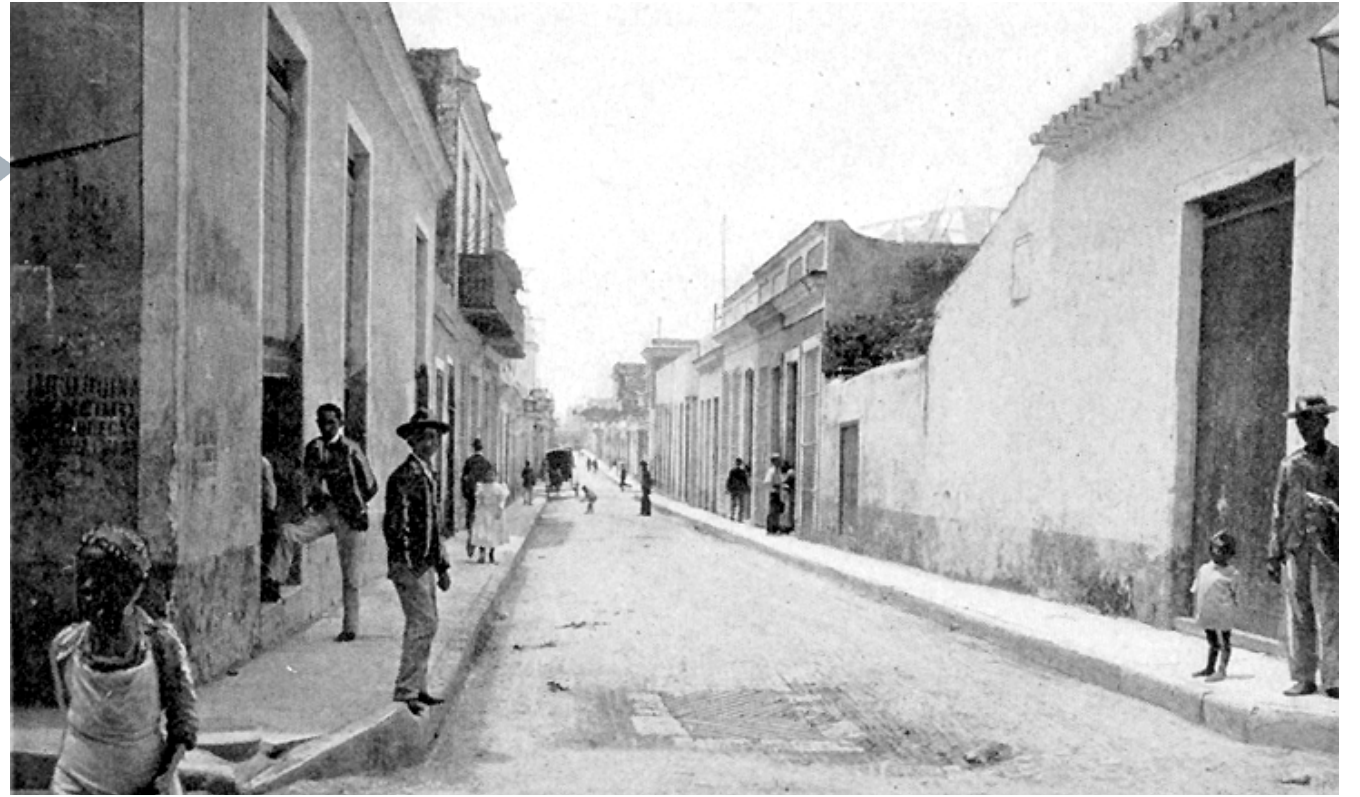
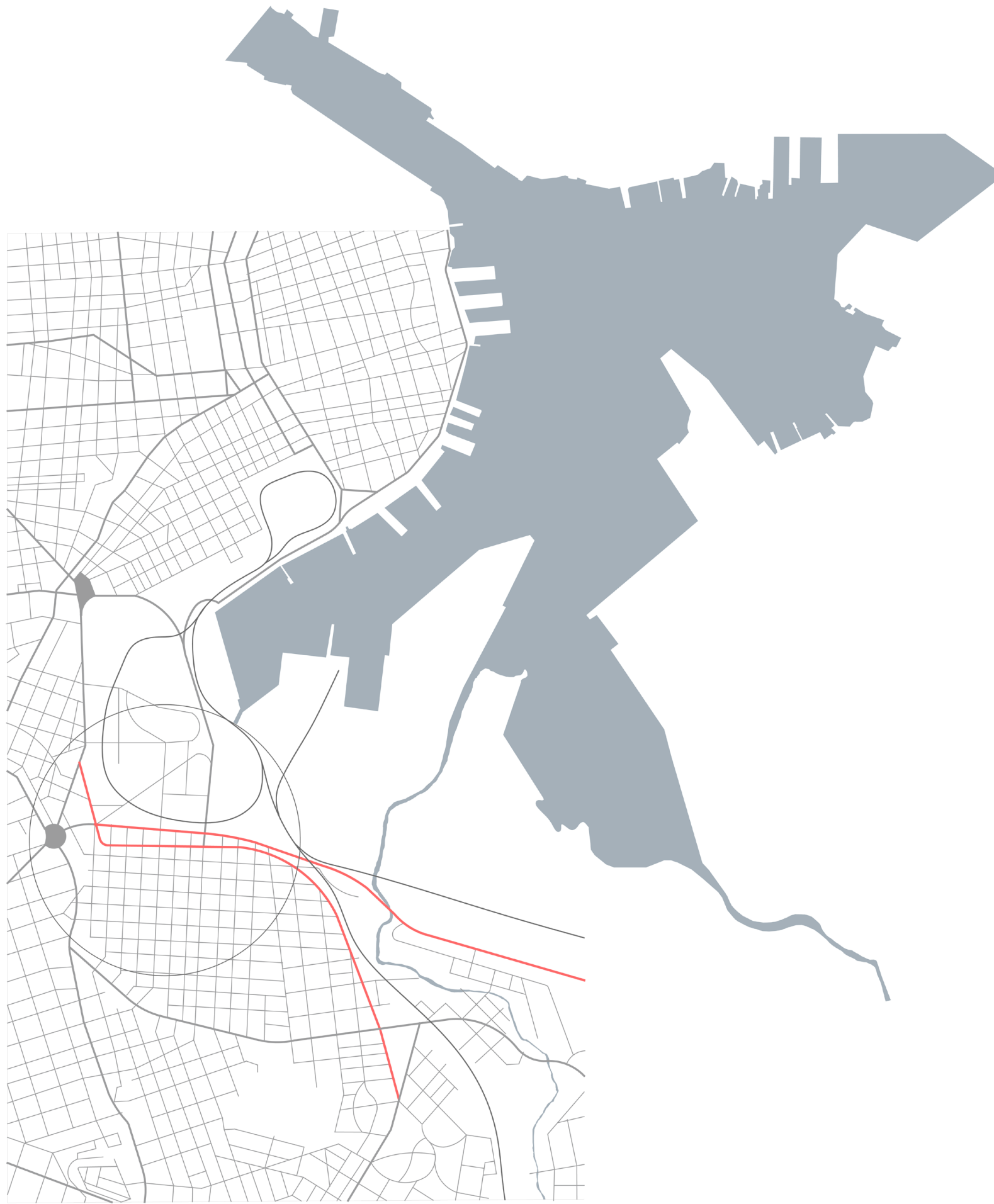
The Edge of Water

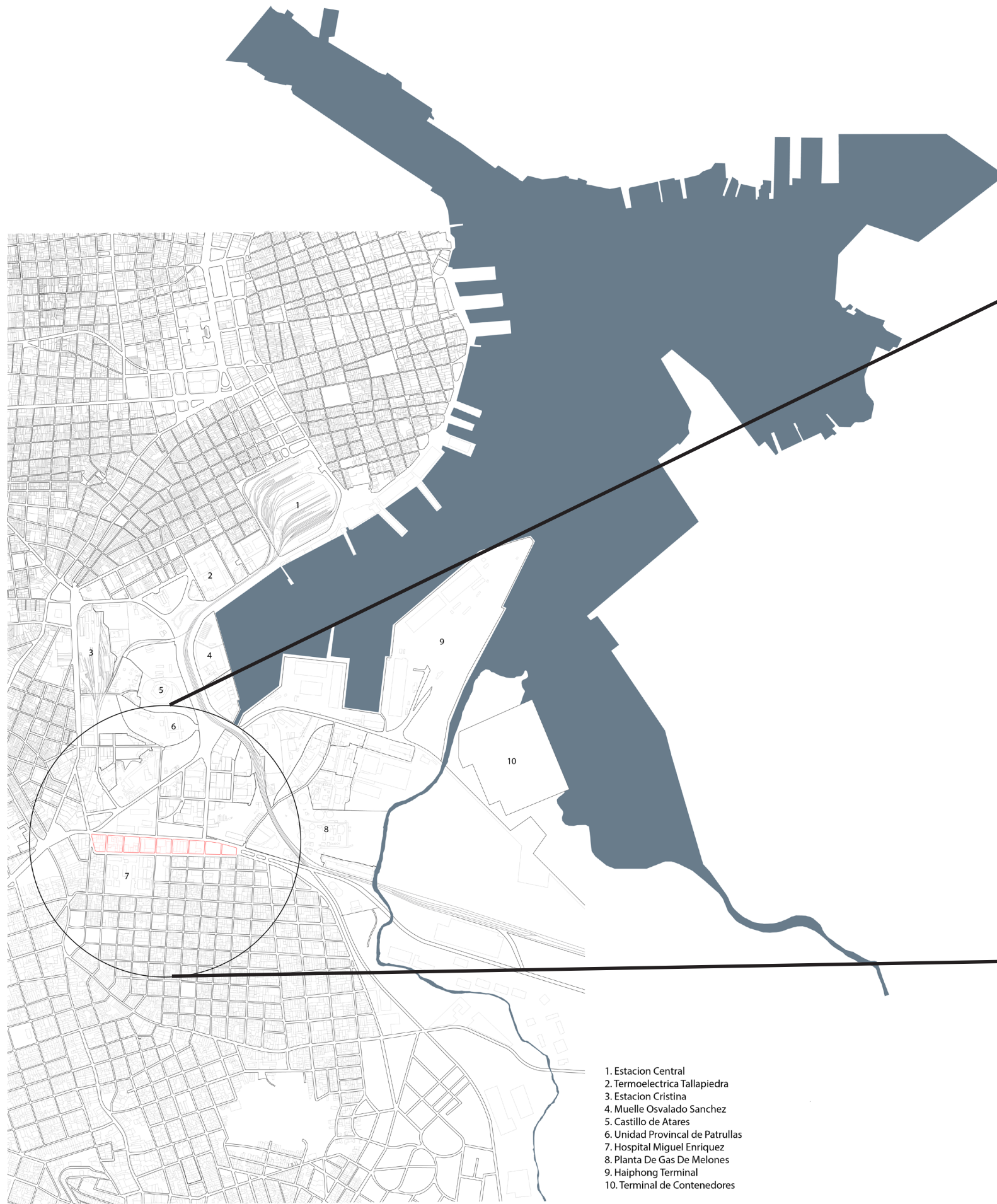


Creator: United States Hydrographic Office
Publisher: Hydrographic Office under the authority of the Secretary of the Navy

1960

Formation of Industrial Strip





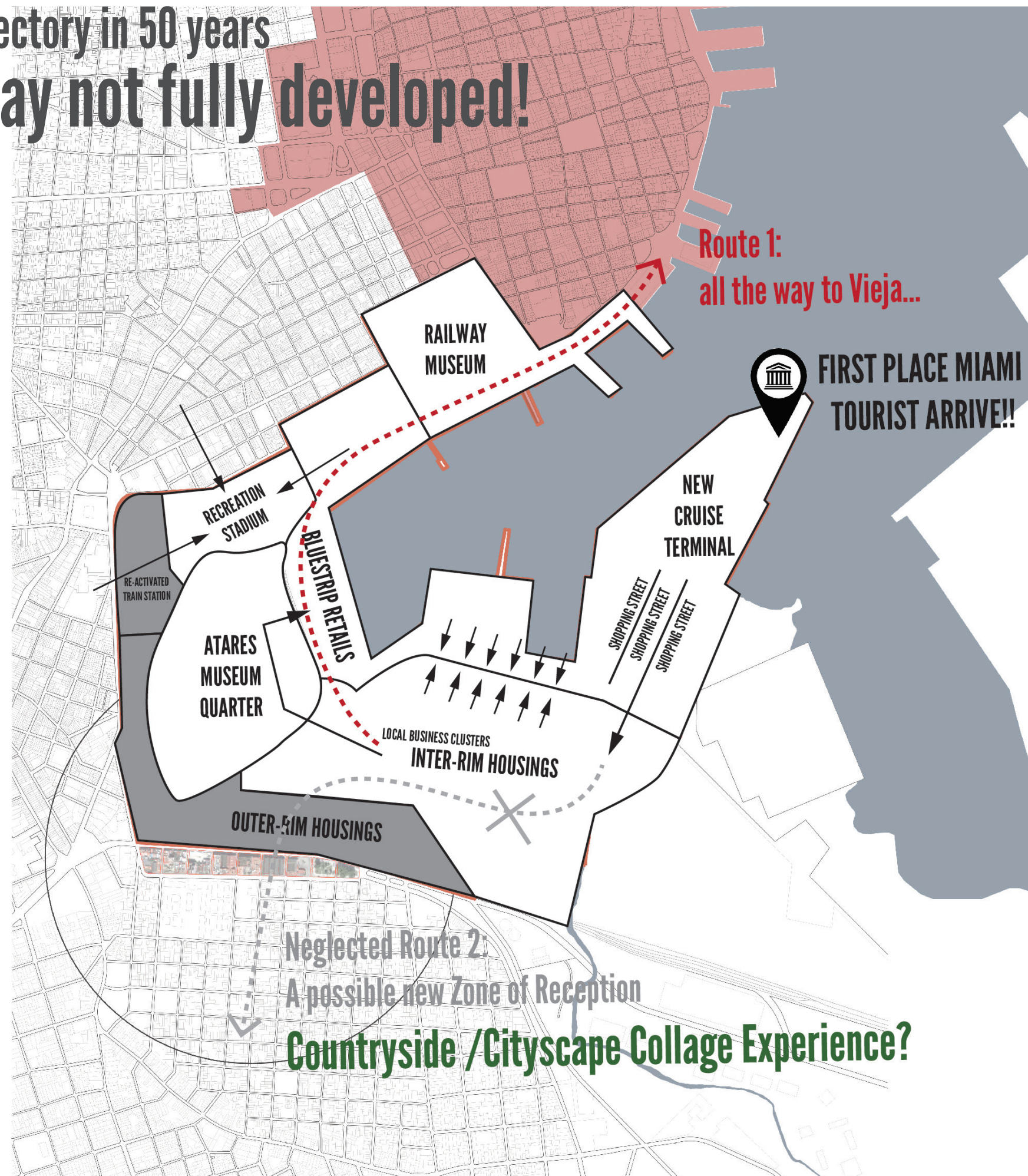
1. Estacion Central
2. Termoelectrica Tallapiedra
3. Estacion Cristina
4. Muelle Osvalado Sanchez
5. Castillo de Atares
6. Unidad Provincial de Patrullas
7. Hospital Miguel Enriquez
8. Planta De Gas De Melones
9. Haiphong Terminal
10. Terminal de Contenedores

Creator: Google Map

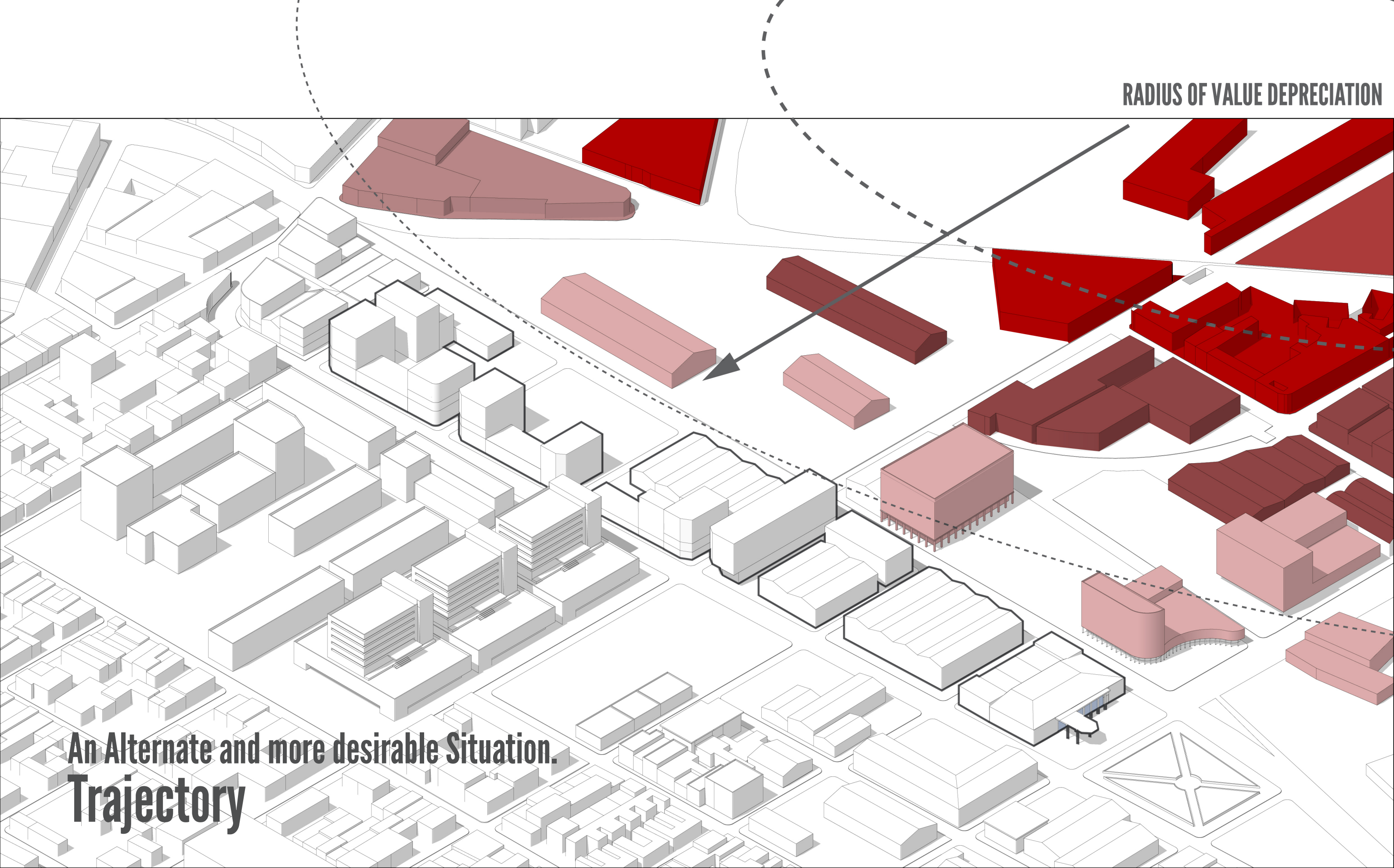
1980-Present

Edge of Post-Industrial Site

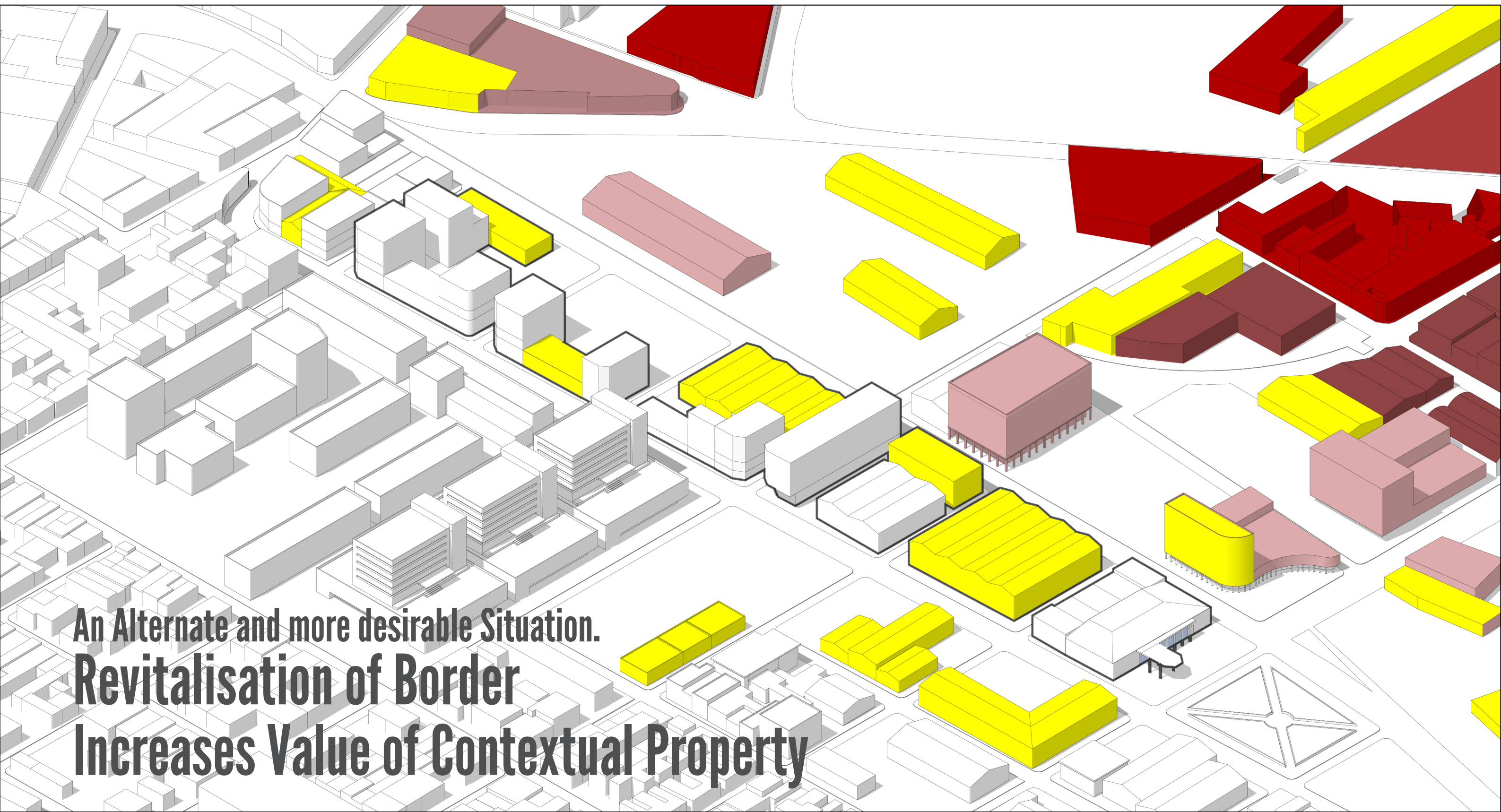
Probable Future Trajectory in 50 years Potential of Bay not fully developed!



RADIUS OF VALUE DEPRECIATION



**An Alternate and more desirable Situation.
Trajectory**



An Alternate and more desirable Situation.
Revitalisation of Border
Increases Value of Contextual Property

04

Methodology of Interventing

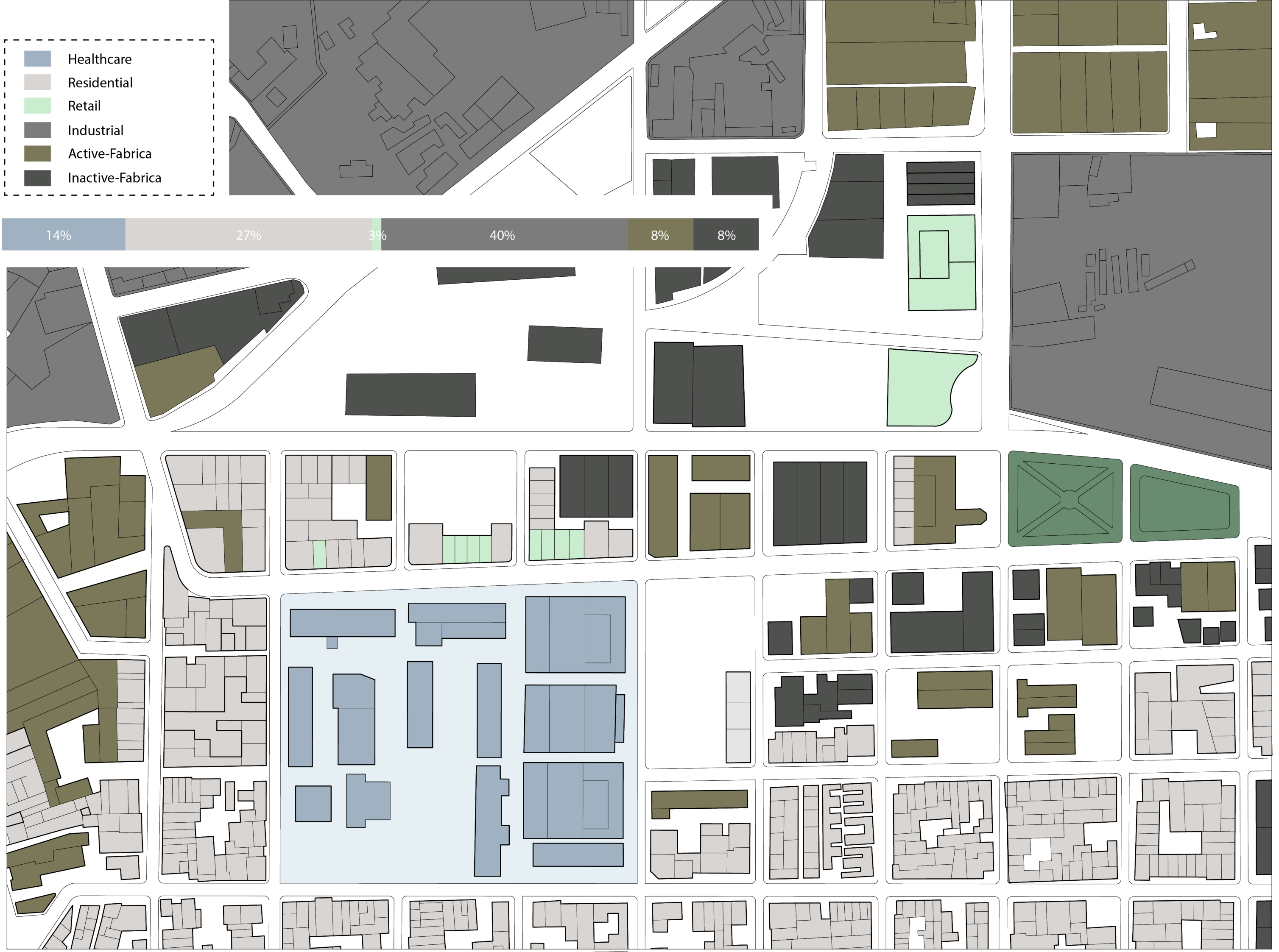
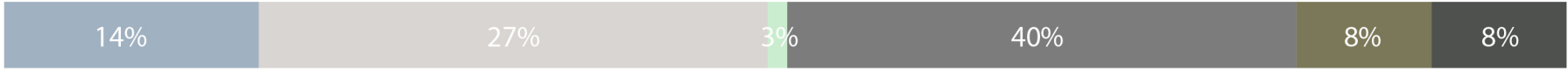
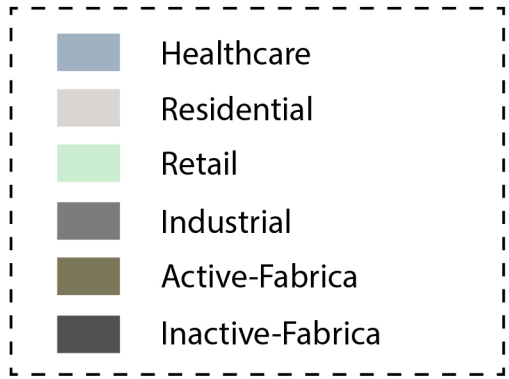
Site Selection and Project Nature

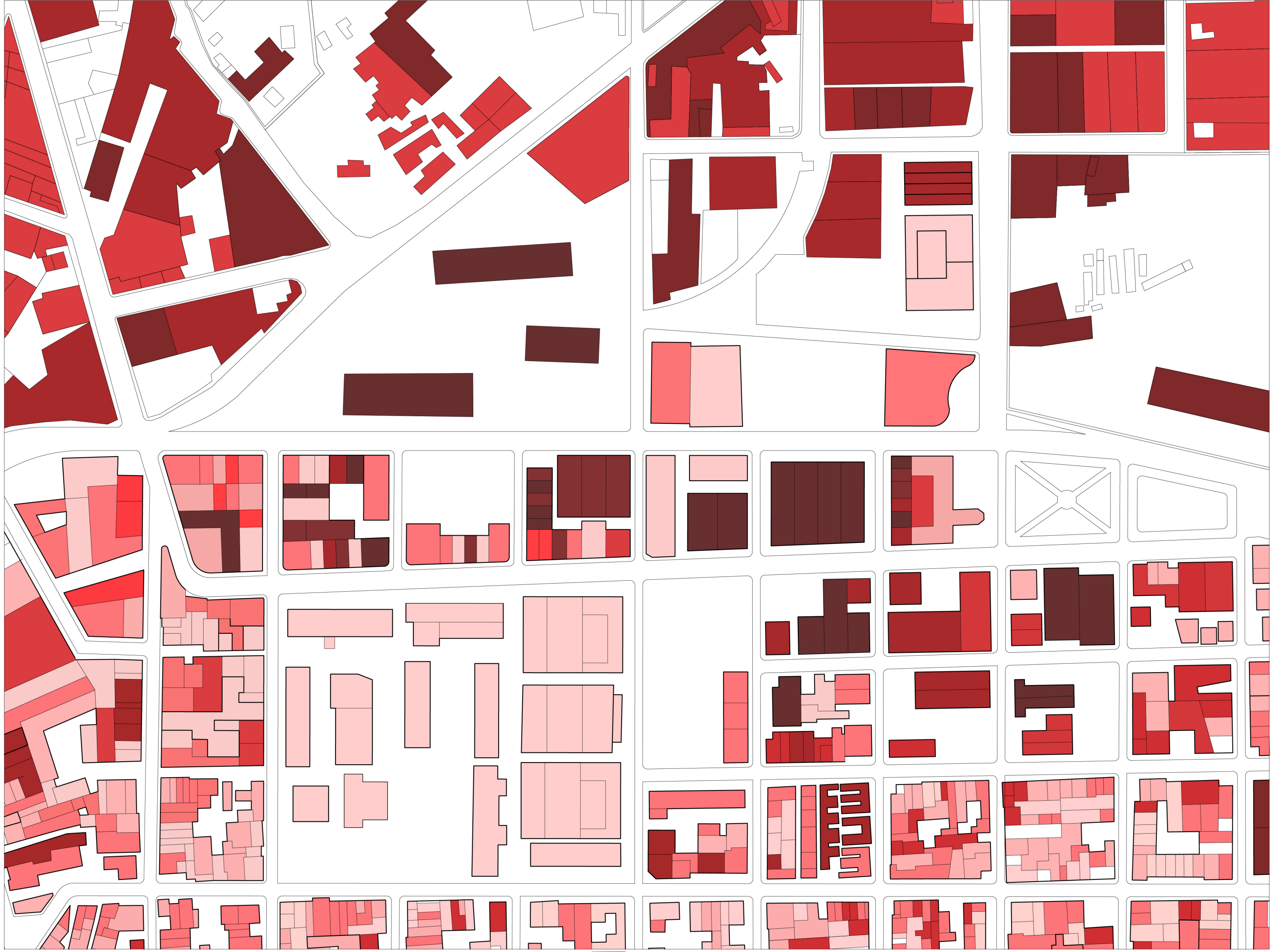
Where To?

What To?

How To?

When To?

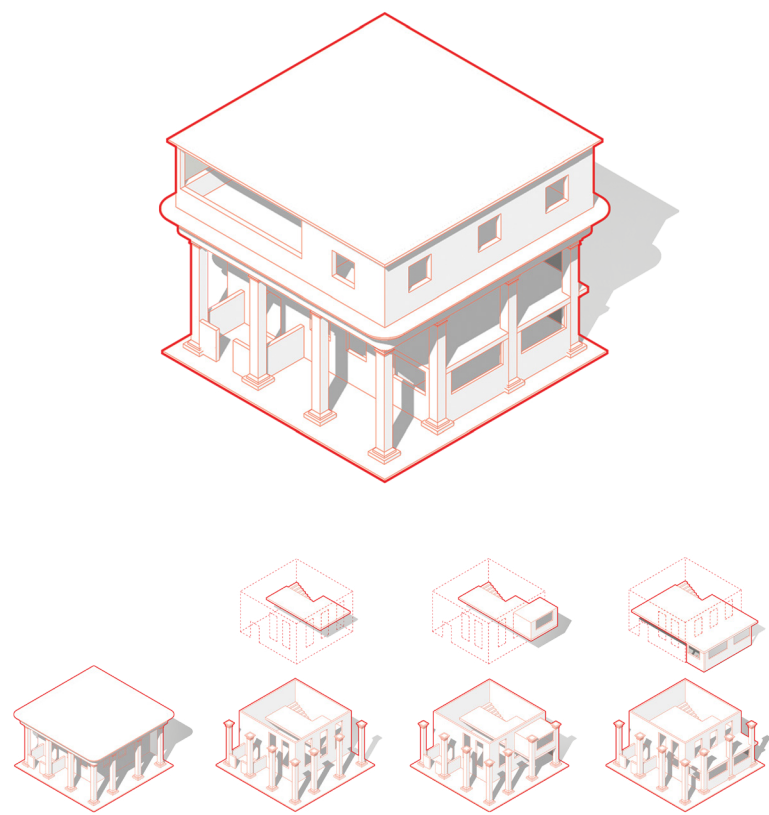




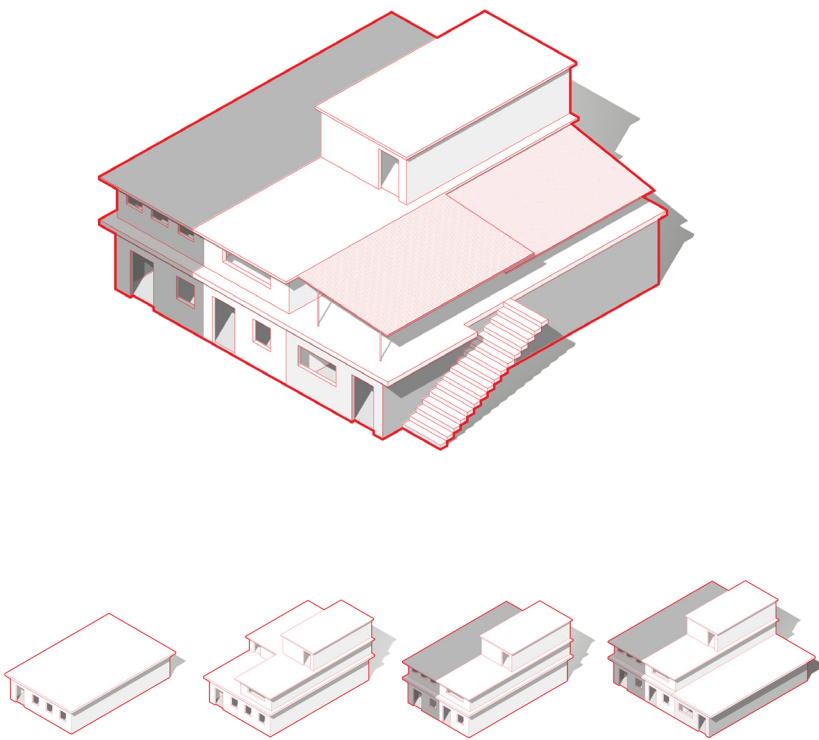


How to Intervent:

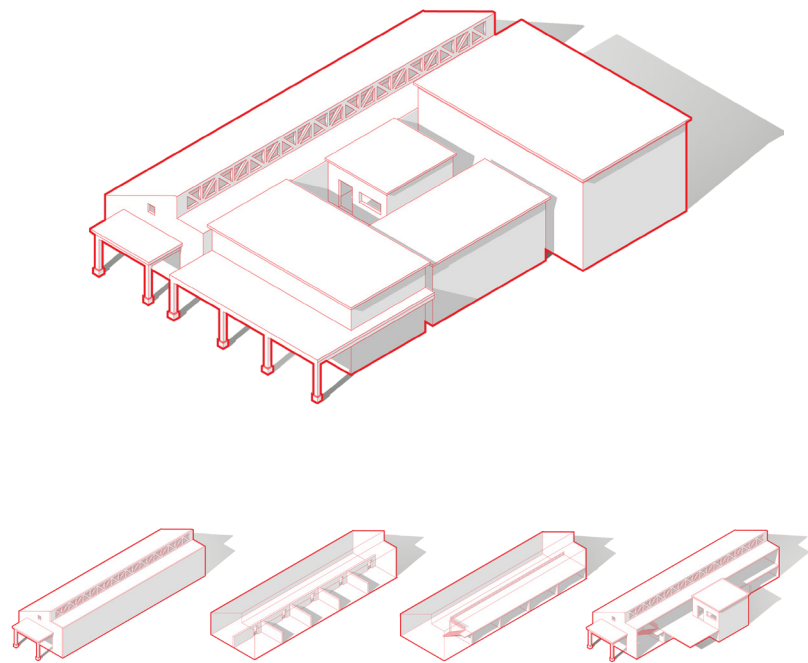
Learning from Local Extension Typologies



Category I:
Singular-Expansion



Category II:
Mass-Multiplication



Category IV:
Metamorphosis

CATEGORY I
Extended- Building in Fair Condition

CATEGORY II
Poor Extension on Decent Building

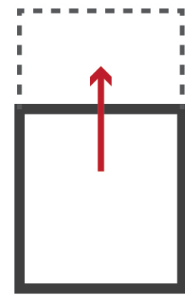
CATEGORY III
Improper Constructed Temporal Building

CATEGORY IV
Adapted Post-Industrial Structure

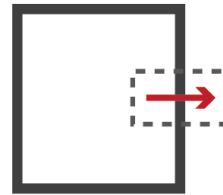
CATEGORY V
Functioning Factories

How to Intervent:

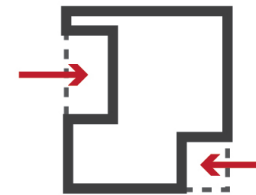
Abstraction of Typologies to Strategies



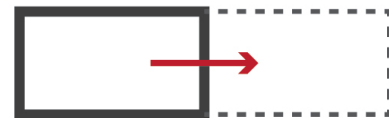
[A]vertical.



[B]parasite.



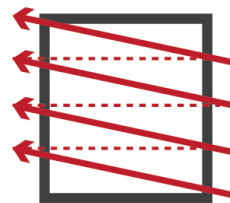
[C]subtraction.



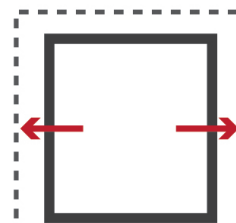
[D]horizontal.



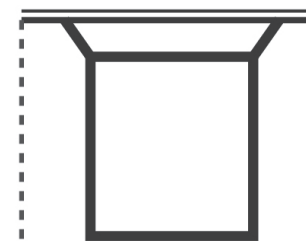
[E]sub-division.



[F]circulation.



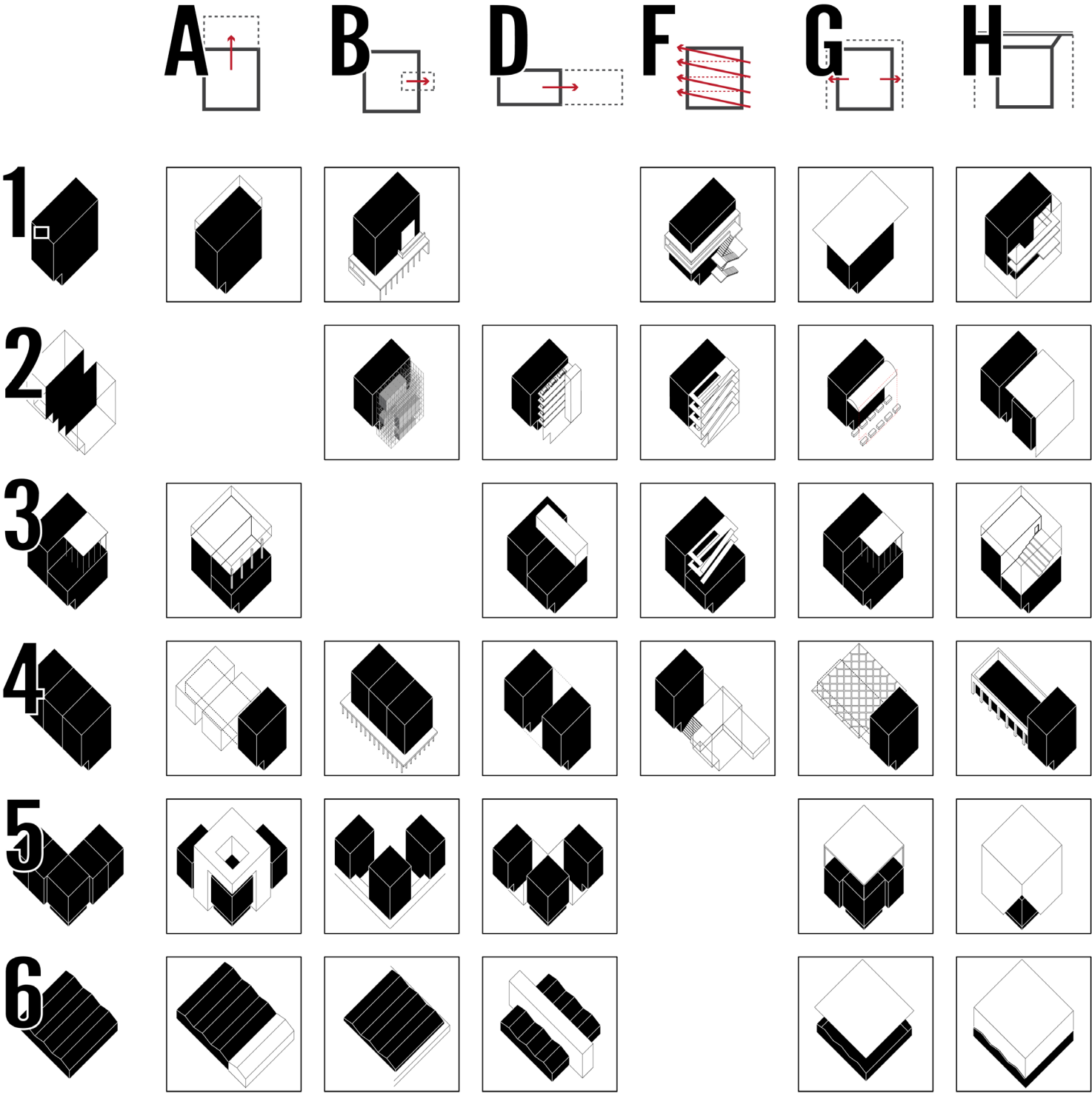
[G]re-embodiment.



[H]canopy.

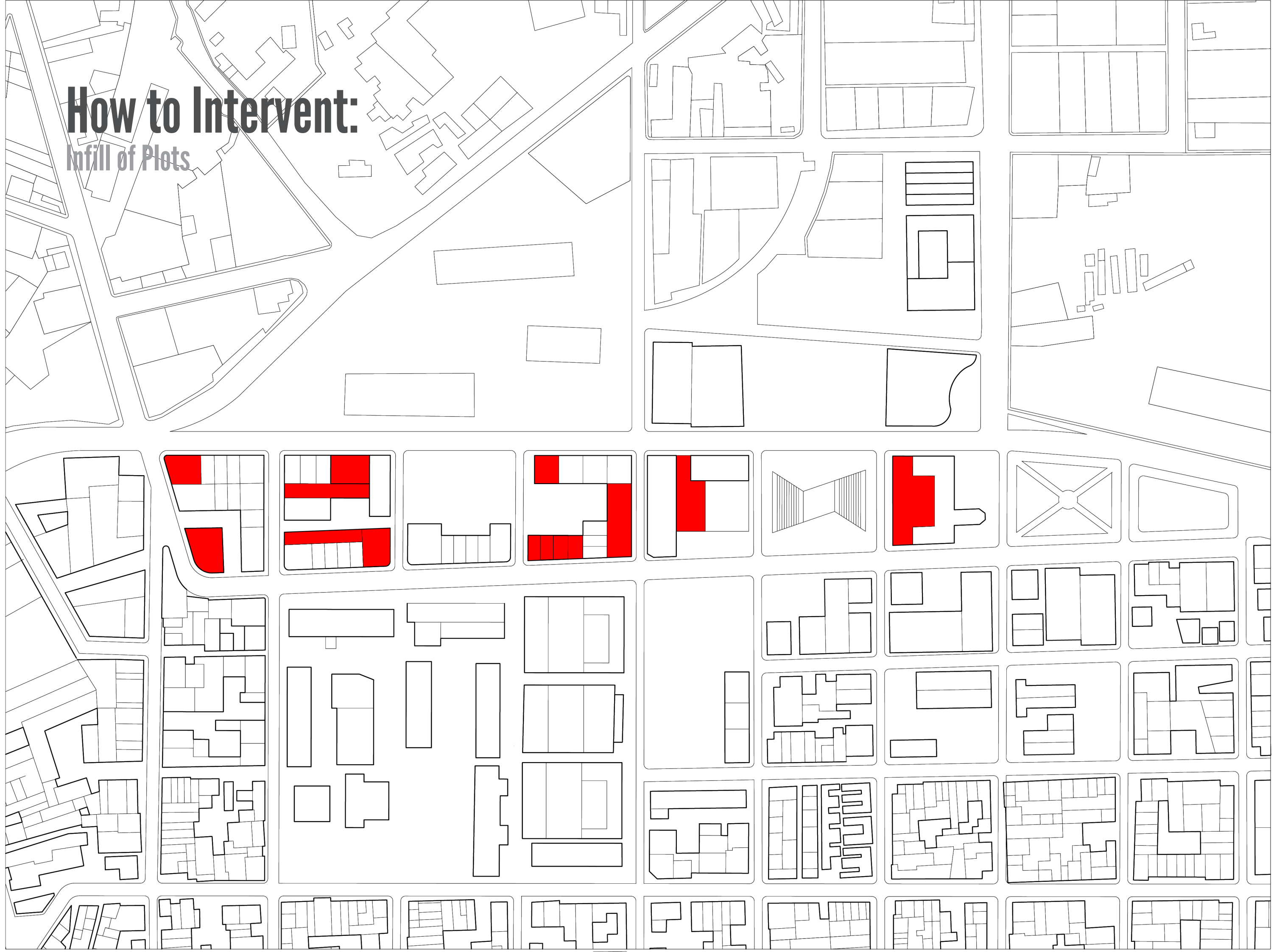
How to Intervent:

From Strategies to Architectural Language



How to Intervent:

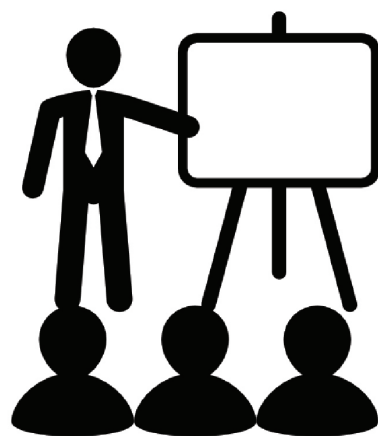
Infill of Plots



What to Intervent:

Cultural Programs extracted from Case Studies

1. TRAINING



- Arts

- Music Studio x4600 sqm.
- Instrument Practice Space x5400 sqm.
- Dance Studio x2500 sqm.
- Gym x1500 sqm.
- Studio Theater x11000 sqm.
- Visual Art Workshop x21000 sqm.

- Business

- Lecture Rooms x81000 sqm.
- Classrooms x2400 sqm.
- Multimedia Room x1300 sqm.
- Fabrication Laboratory x3400 sqm.
- Library x1400 sqm.

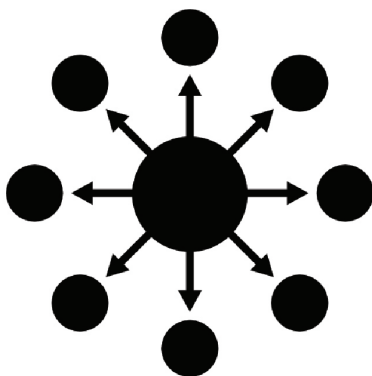
2. PRACTICE



- Workshop

- Warehouse Rental x8500 sqm.
- Construction Workshop x1250 sqm.
- Craft Workshop x6200 sqm.
- Costume Workshop x2100 sqm.
- Material Library x1100 sqm
- Storage Space x2200 sqm
- Office Space x2.....2000 sqm
- Start-Up Incubators x3.....1000 sqm
- Administration Office x2.....250 sqm
- Conference/ Meeting x2.....100 sqm
- Product Exposition x1800 sqm

3. EXCHANGE



- Exhibition

- Gallery<-> Bar x51000 sqm.
- Market x2.....4000 sqm.
- Auction Space x1.....200 sqm.
- Archive x2.....500 sqm.
- Museum x3.....2500 sqm.

- Performance

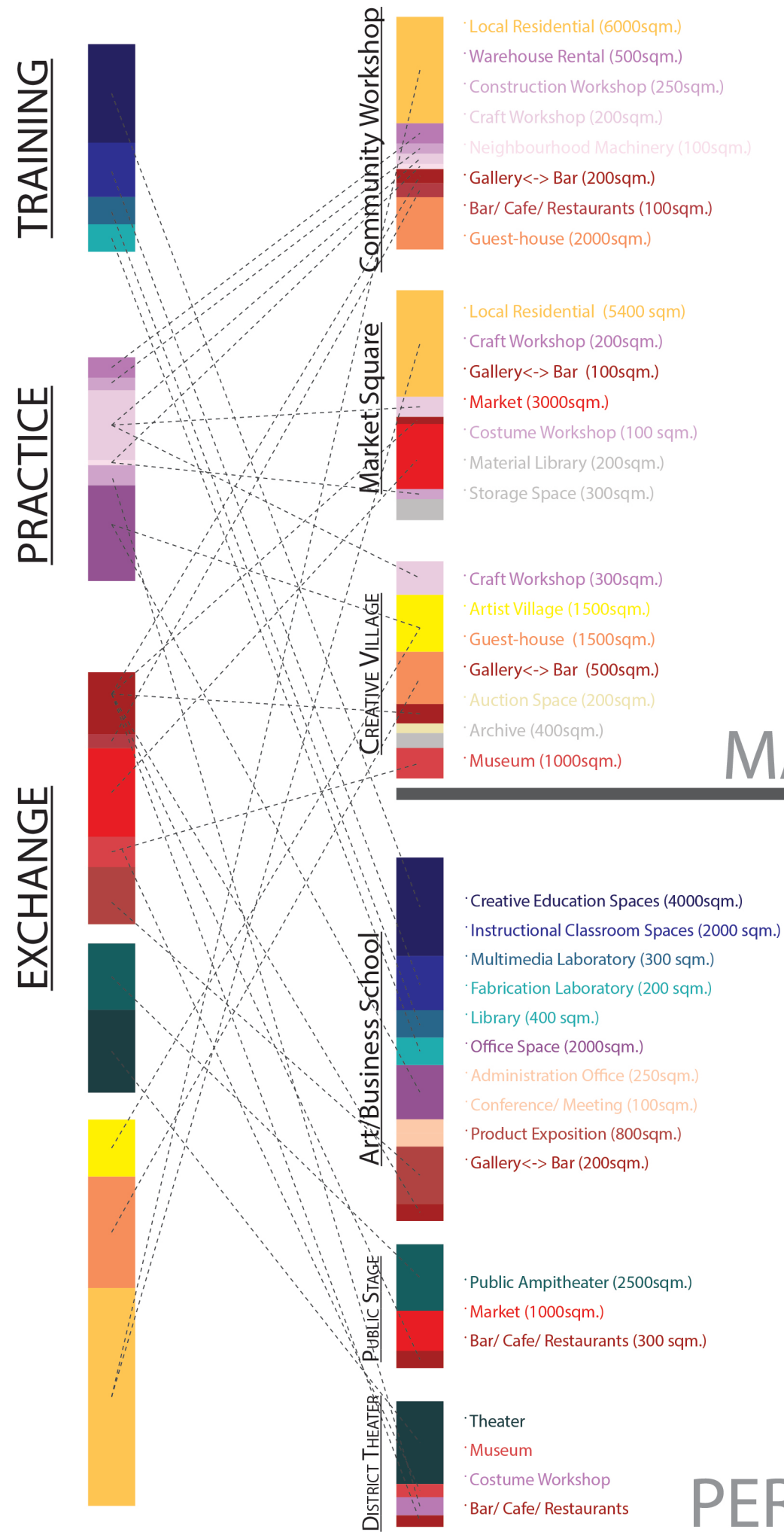
- Theater x1.....2500 sqm.
- Public Ampitheater x1.....2500 sqm.
- Square/ Park x4.....4000 sqm.

- Retail

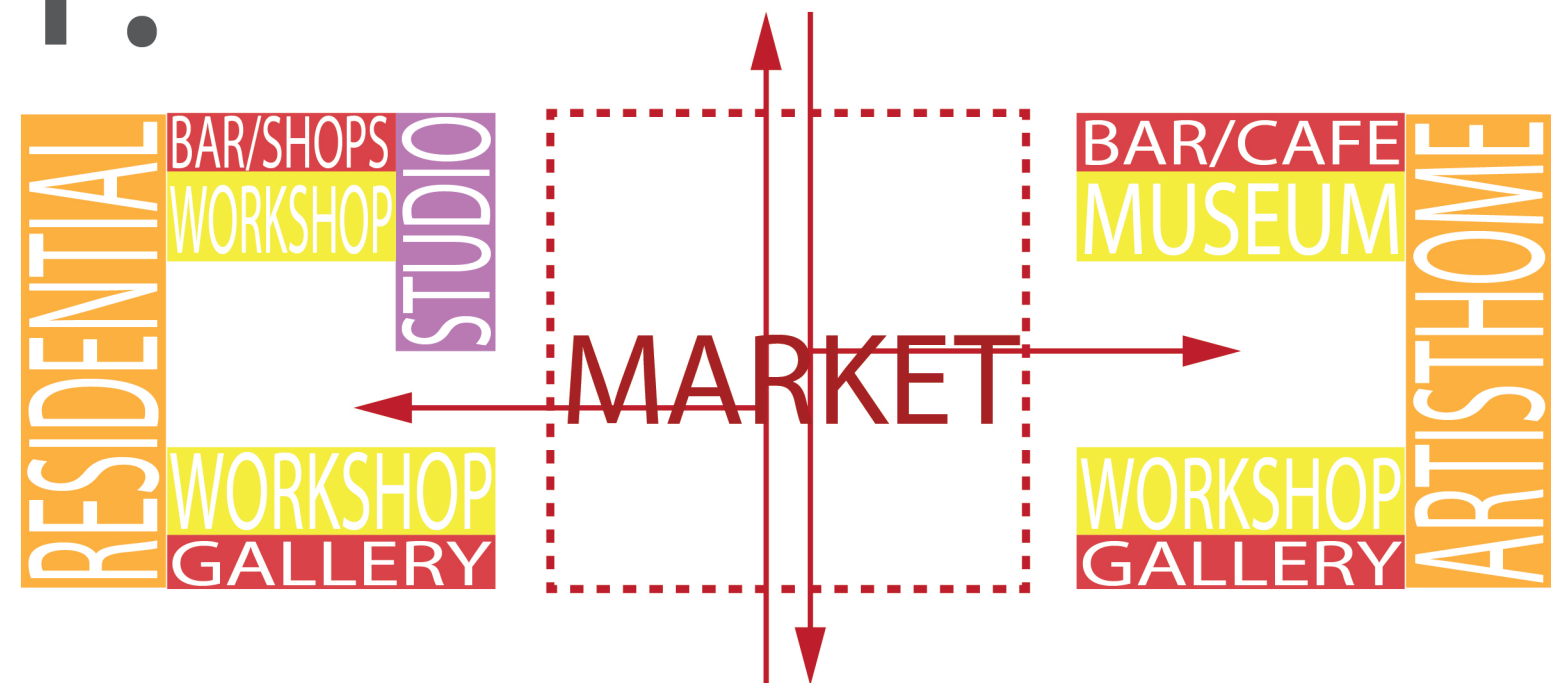
- Bar/ Cafe/ Restaurants x5.....500 sqm.

- Accomodation

- Artist Village x45.....2500 sqm.
- Guest-house x80.....4500 sqm.
- Local Residential x22511000 sqm.

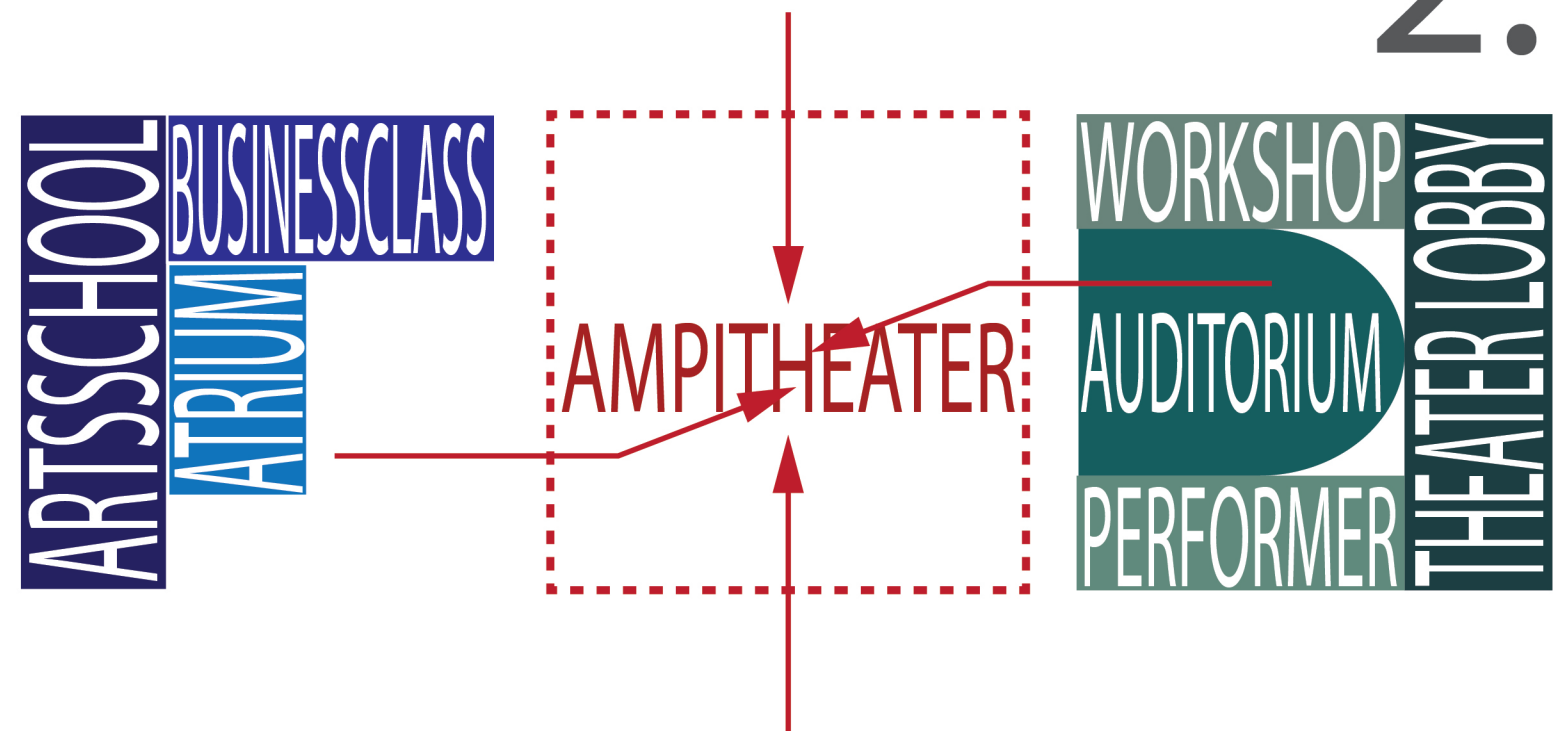


1.



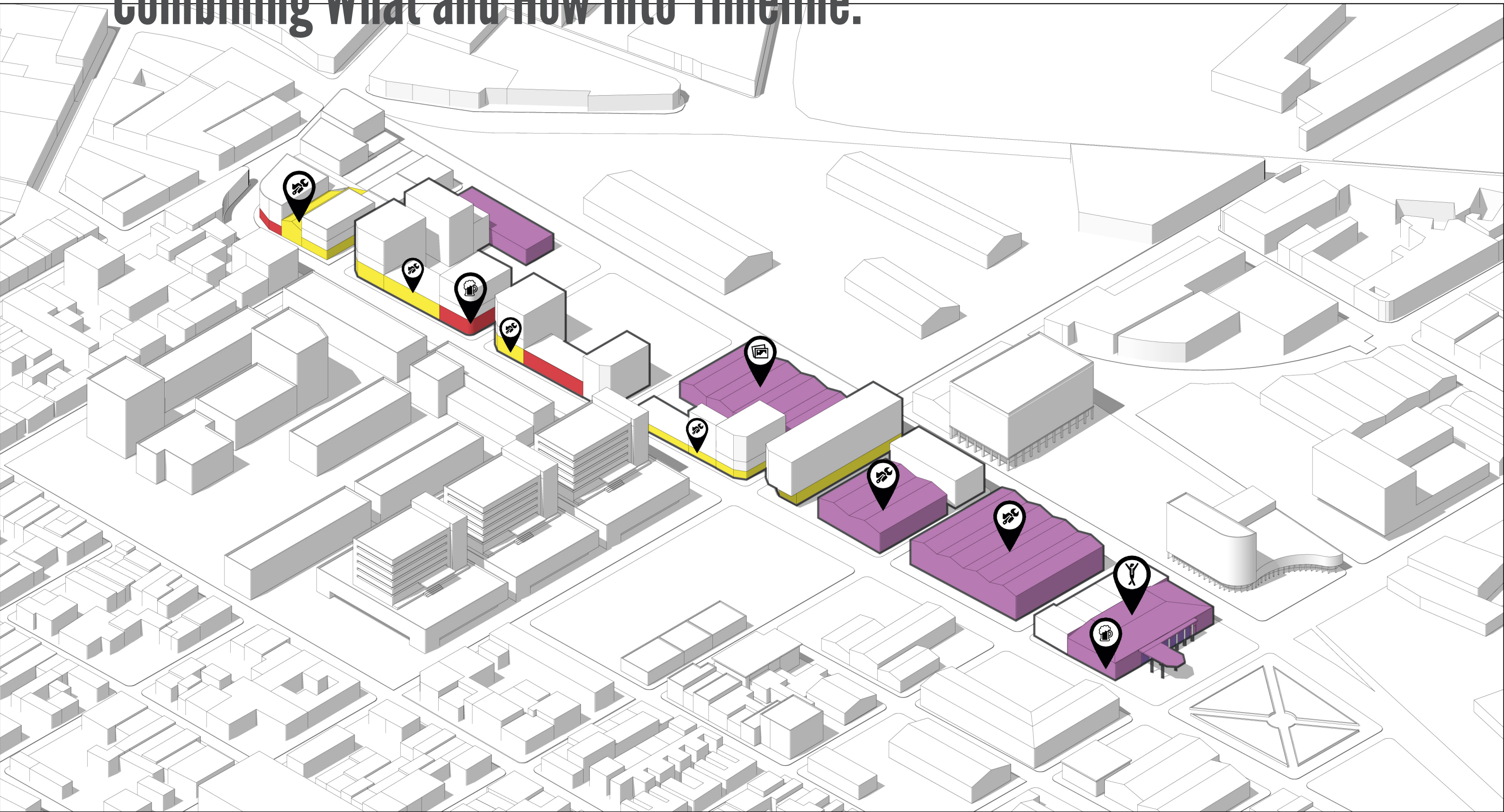
MARKET SQUARE (distribute)

2.



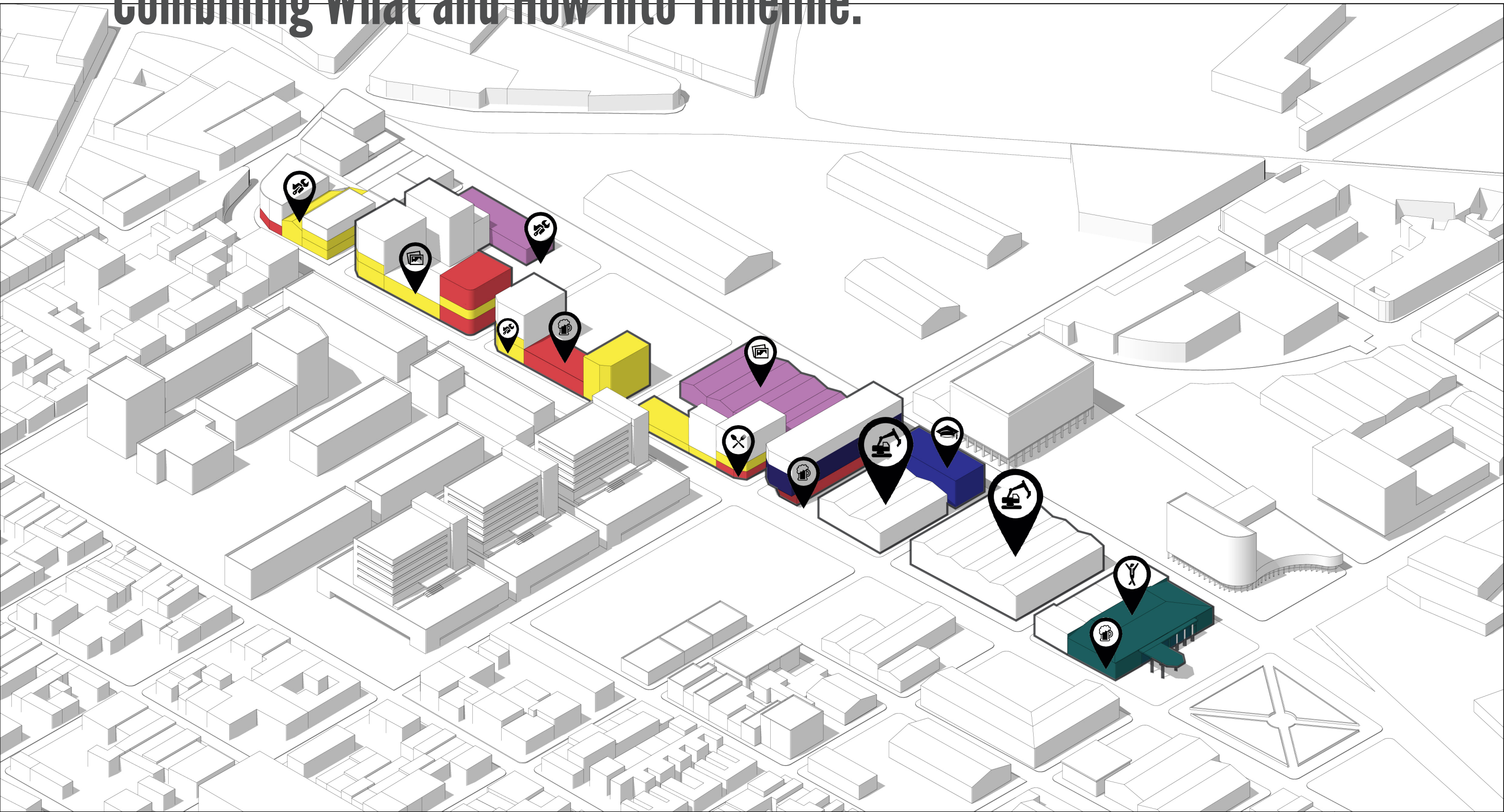
PERFORMING SQUARE (concentrate)

Combining What and How into Timeline:

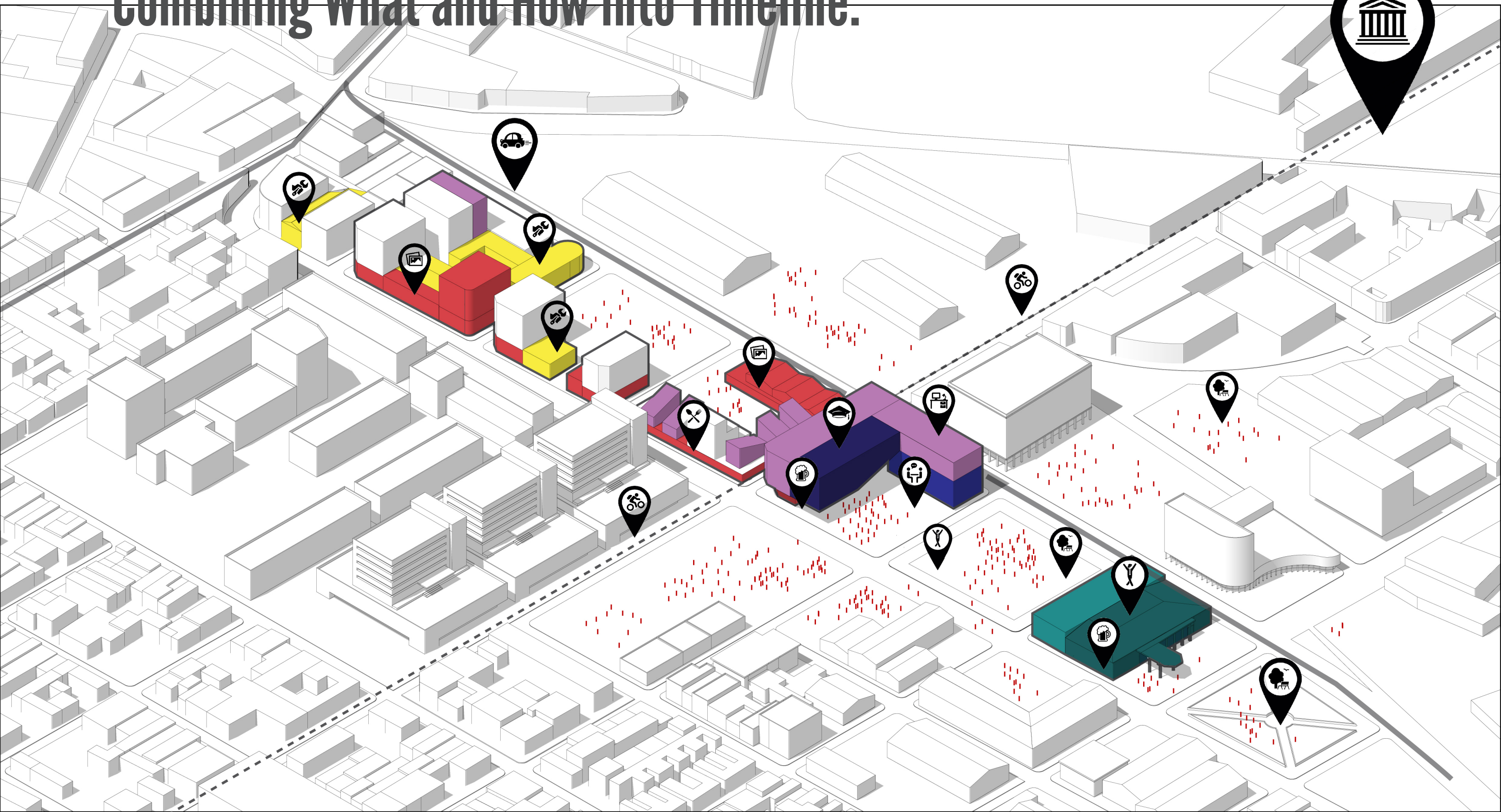


in 5 Years, the ground floor spaces of the strip could be reoccupied with retail, empty warehouses could accommodate practical workspaces both being too expensive and competitive in other parts of city now available to new private entrepreneurs and creative class.

Combining What and How into Timeline:



in 10 Years, the Occupation of the structures would go vertically, institution is formed to organize different spaces and warehouses as intermediate construction center.



in 20 Years, When Cultural District achieved a balance between Practical Space, Event Stage and Local Business.

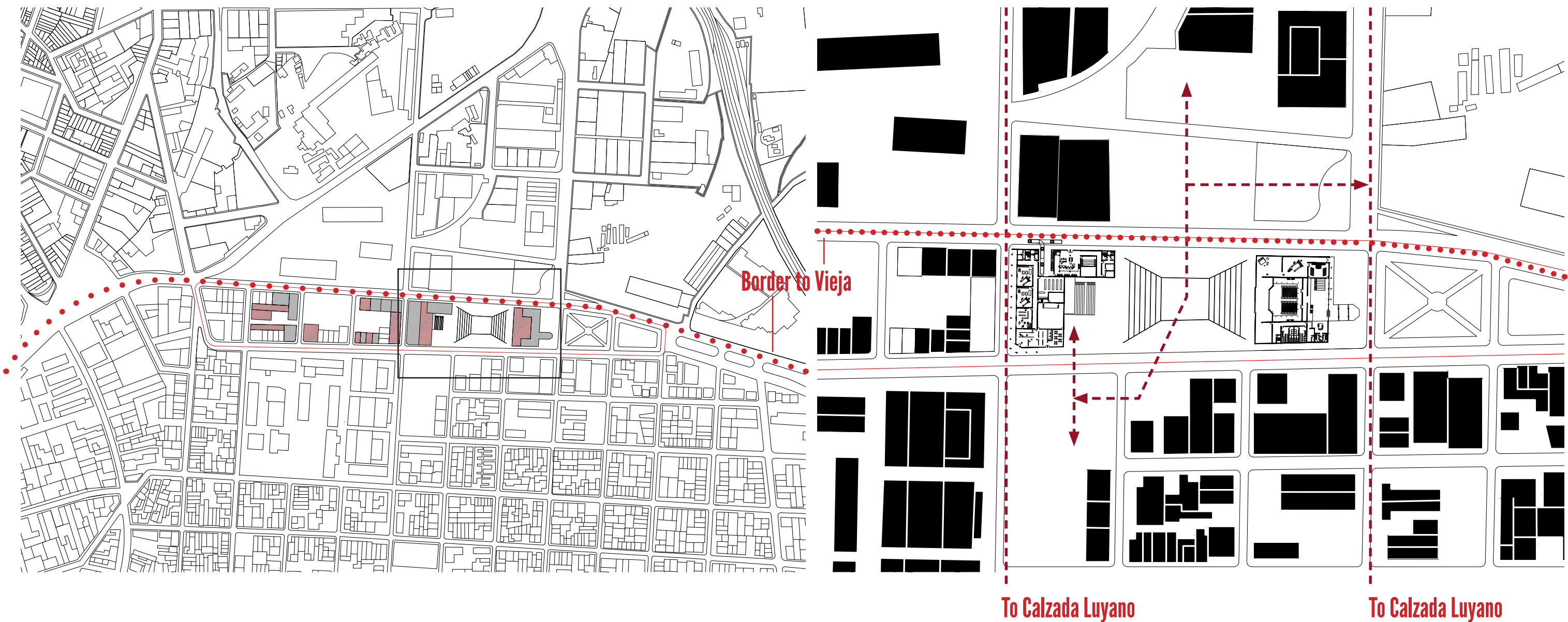
04

Architectural Scale of Intervening

Cultural Institution & Community Theater
(Former Fabrica and Gas Station)

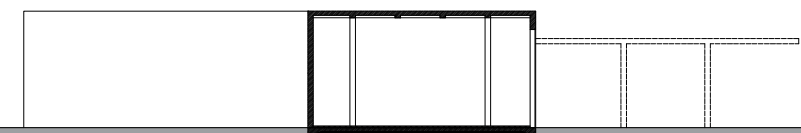
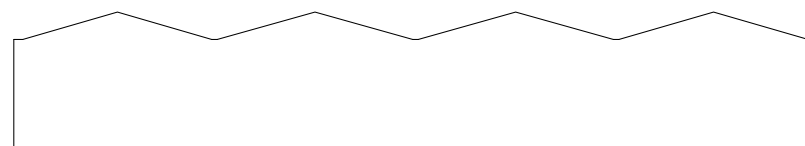
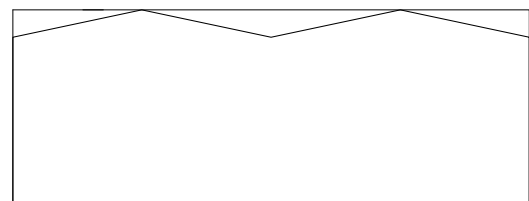
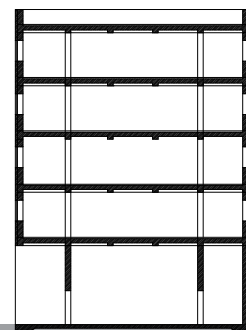
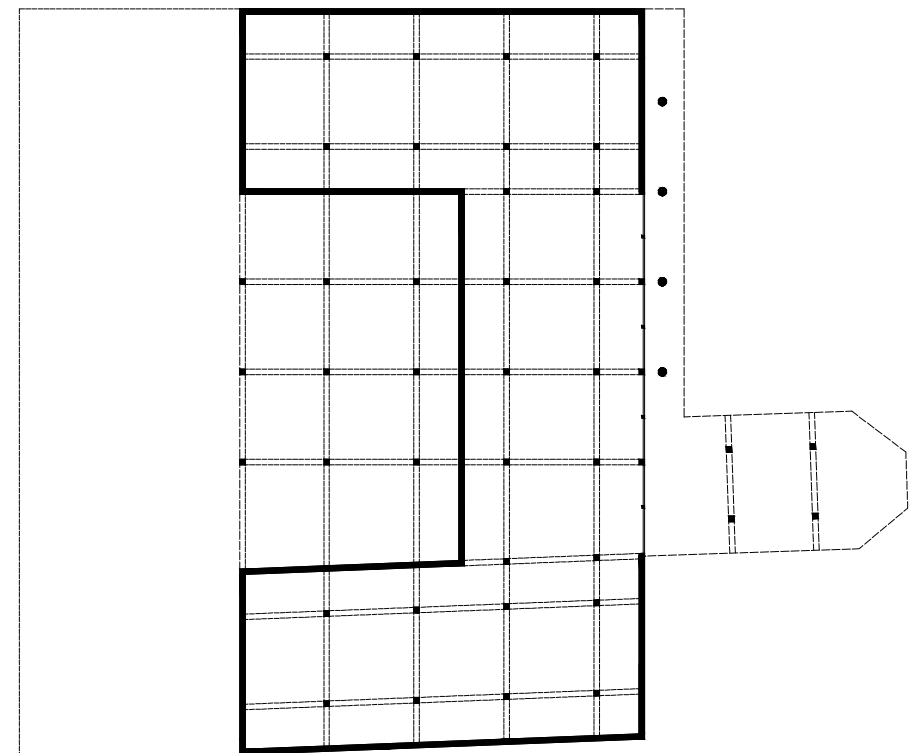
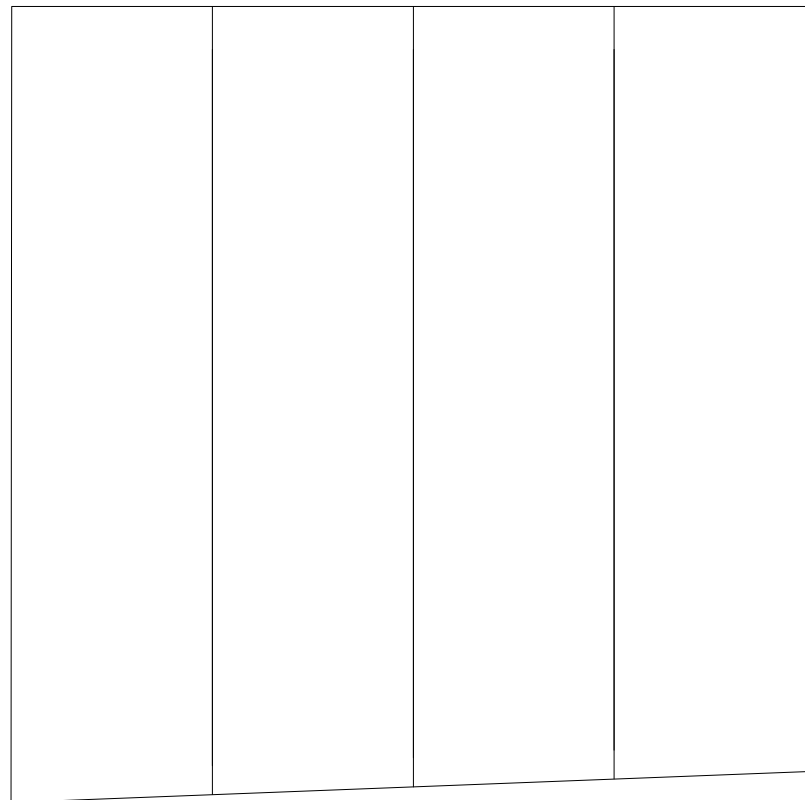
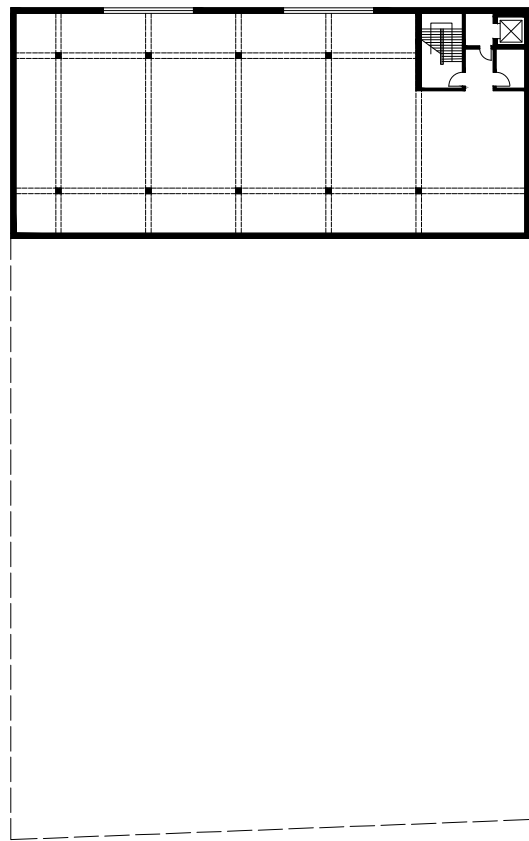
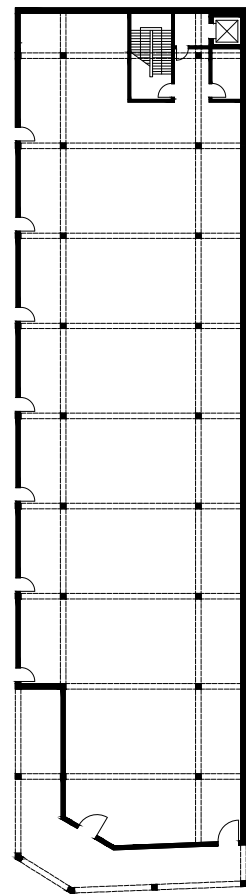
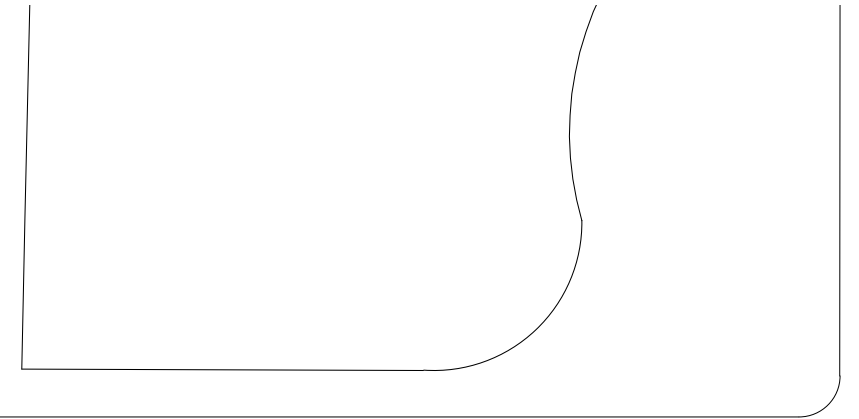
- Spatial Arrangements**
- Material & Performances**
- Structural Composition**

Specific Site Location:



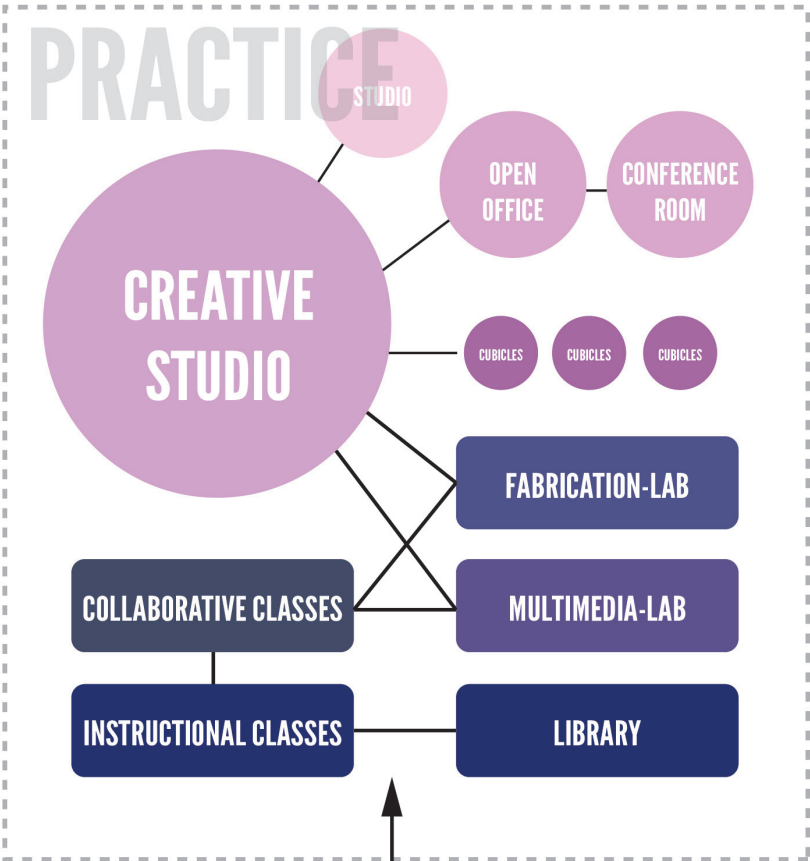
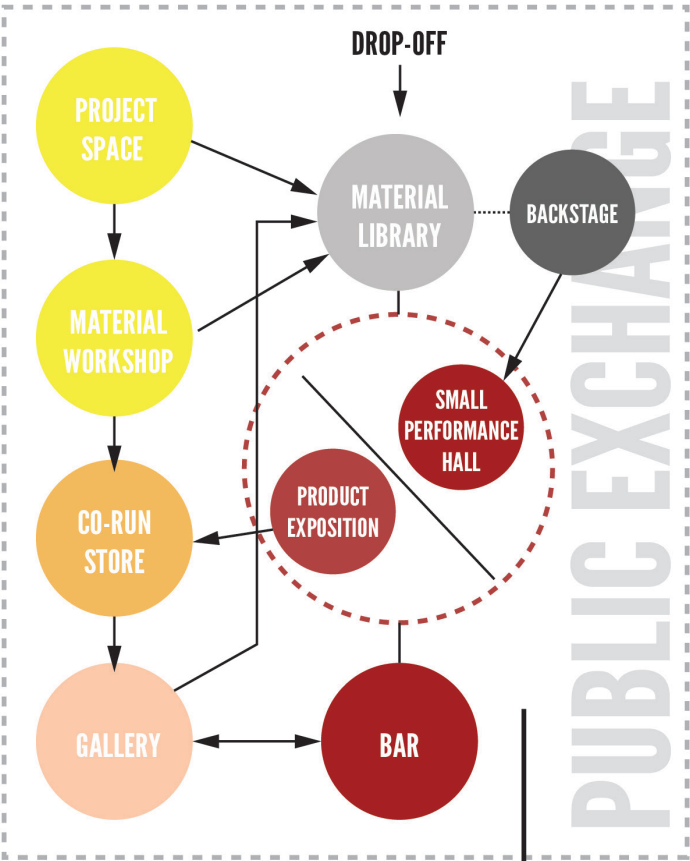
Existing Site Condition:

Vacant Fabrica Building and Low Volume Gas Station

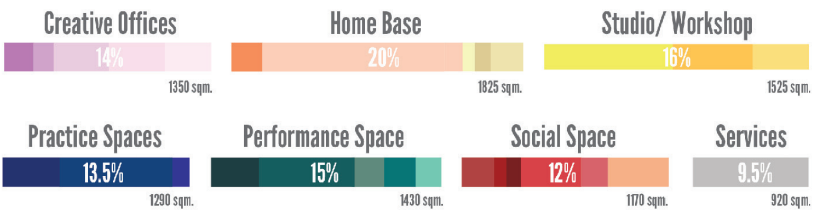
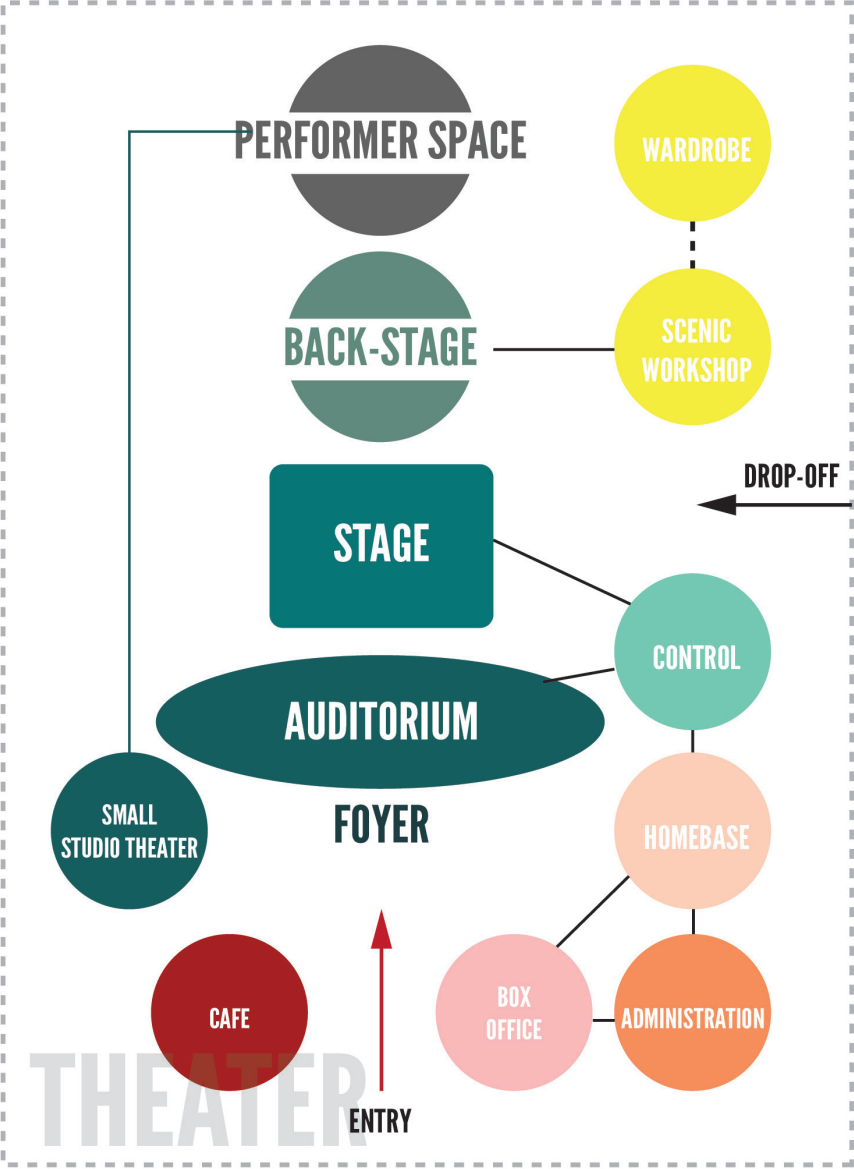
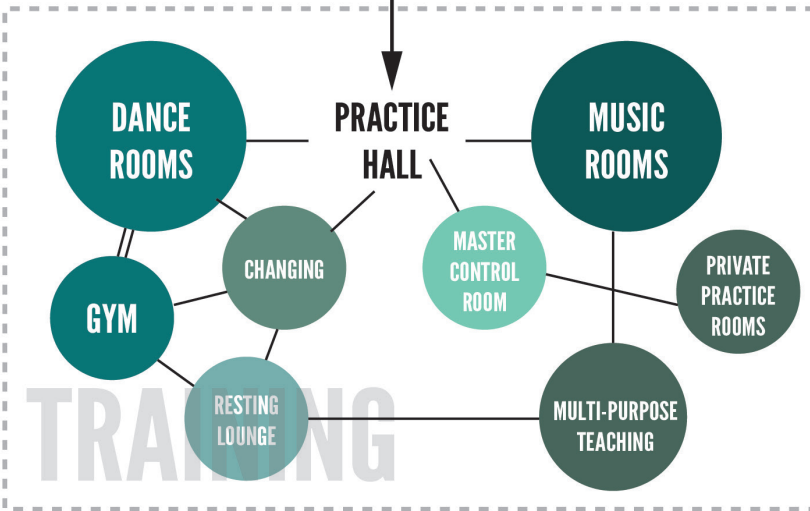


Diagrammatic Program Implantation:

Vacant Fabrica Building and Low Volume Gas Statio



INSTITUTE **FOYER** also the entrance



Diagrammatic Program Implantation:

Vacant Fabrica Building and Low Volume Gas Statio

Social Programs

Gallery

Concept Store

Workshops

Performing Arts

Extension

Co-Working Studios

Educational

5/F
Creative Co-Work Spaces

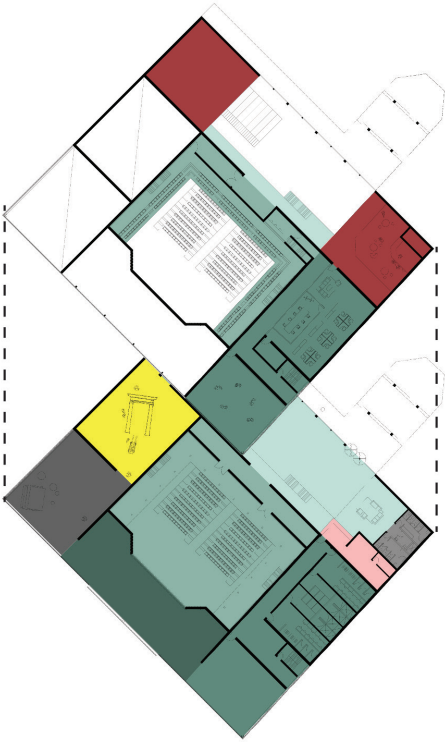
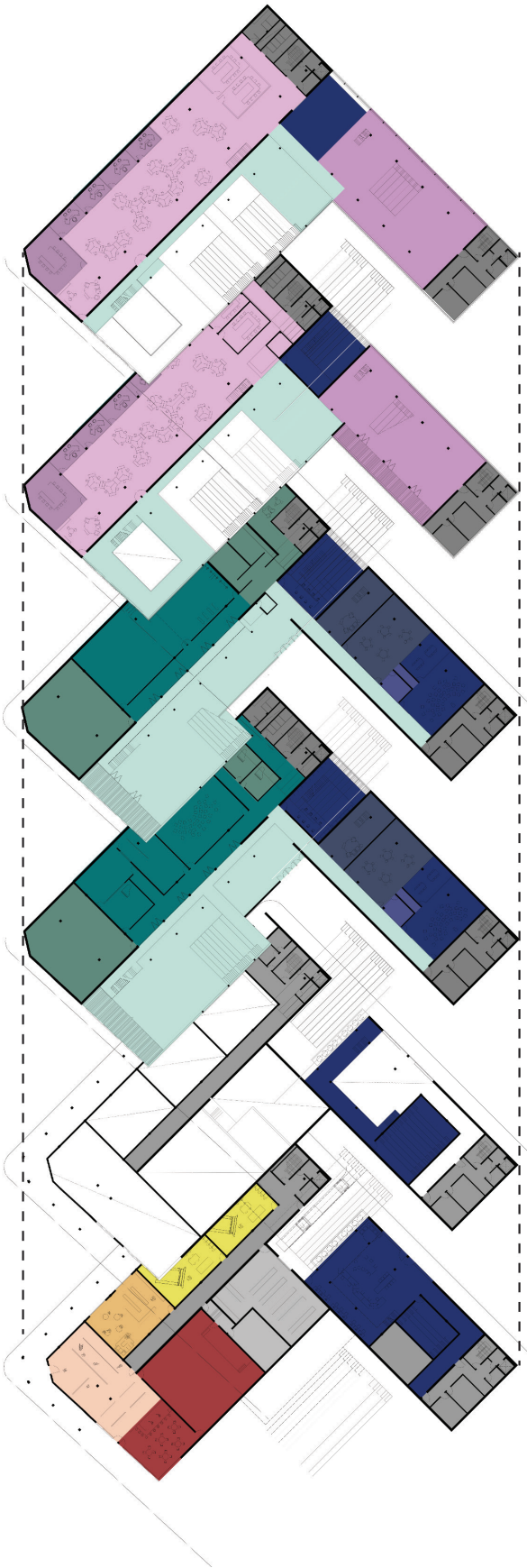
4/F
Creative Co-Work Spaces

3/F
Educational Spaces, Foyer Extension

2/F
Educational Spaces, Foyer Extension

1/F
Double Ceiling Space

G/F
Practical Workshops, Display, Social

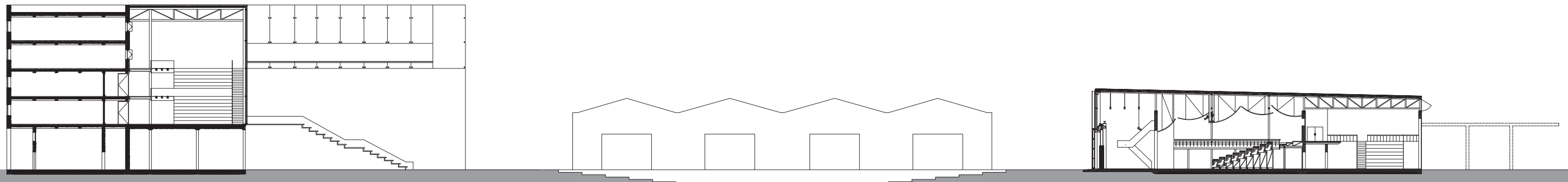
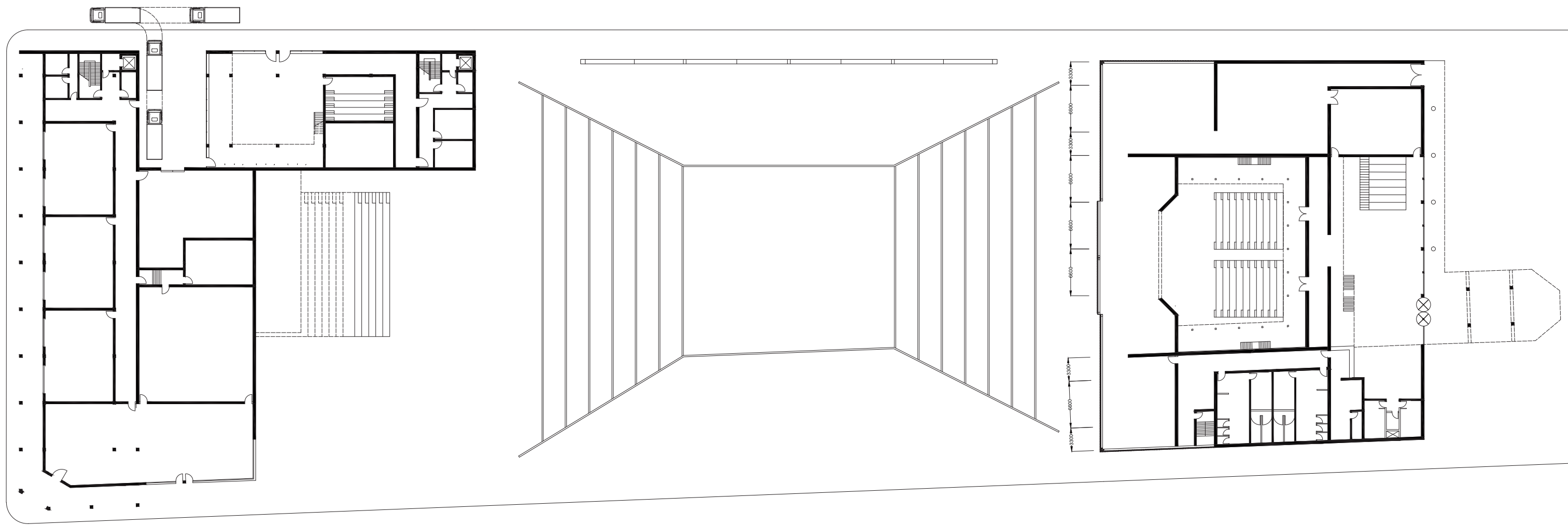


1/F
Balcony, Cafe, Practice

G/F
Social, Workshop, Performer Spaces

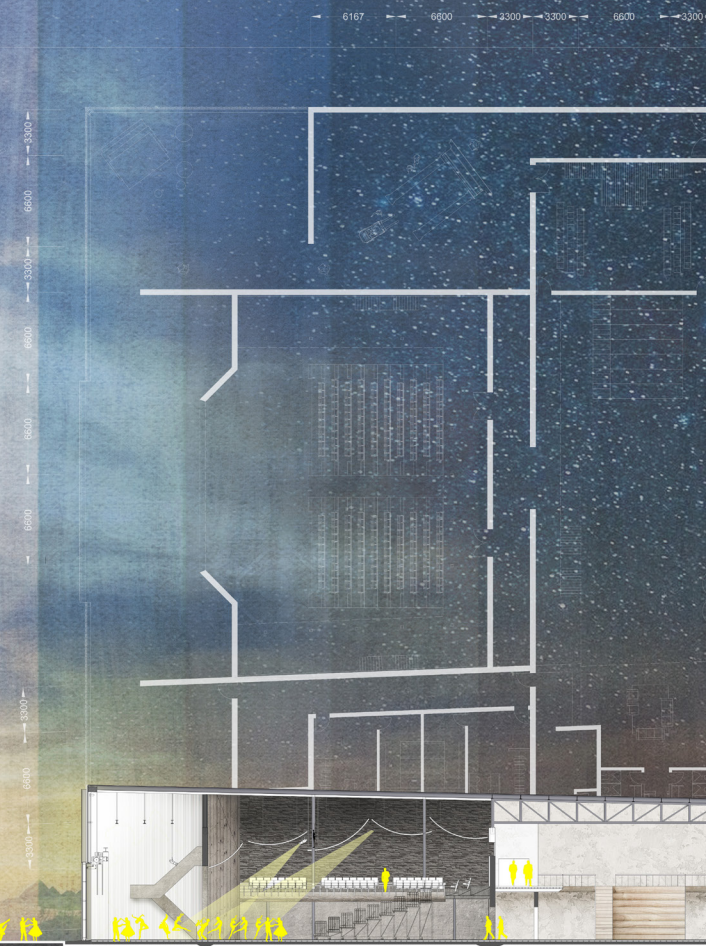
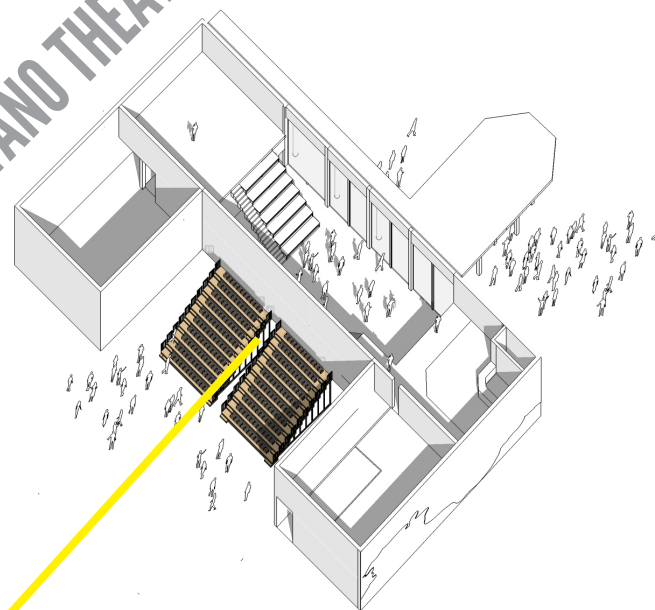
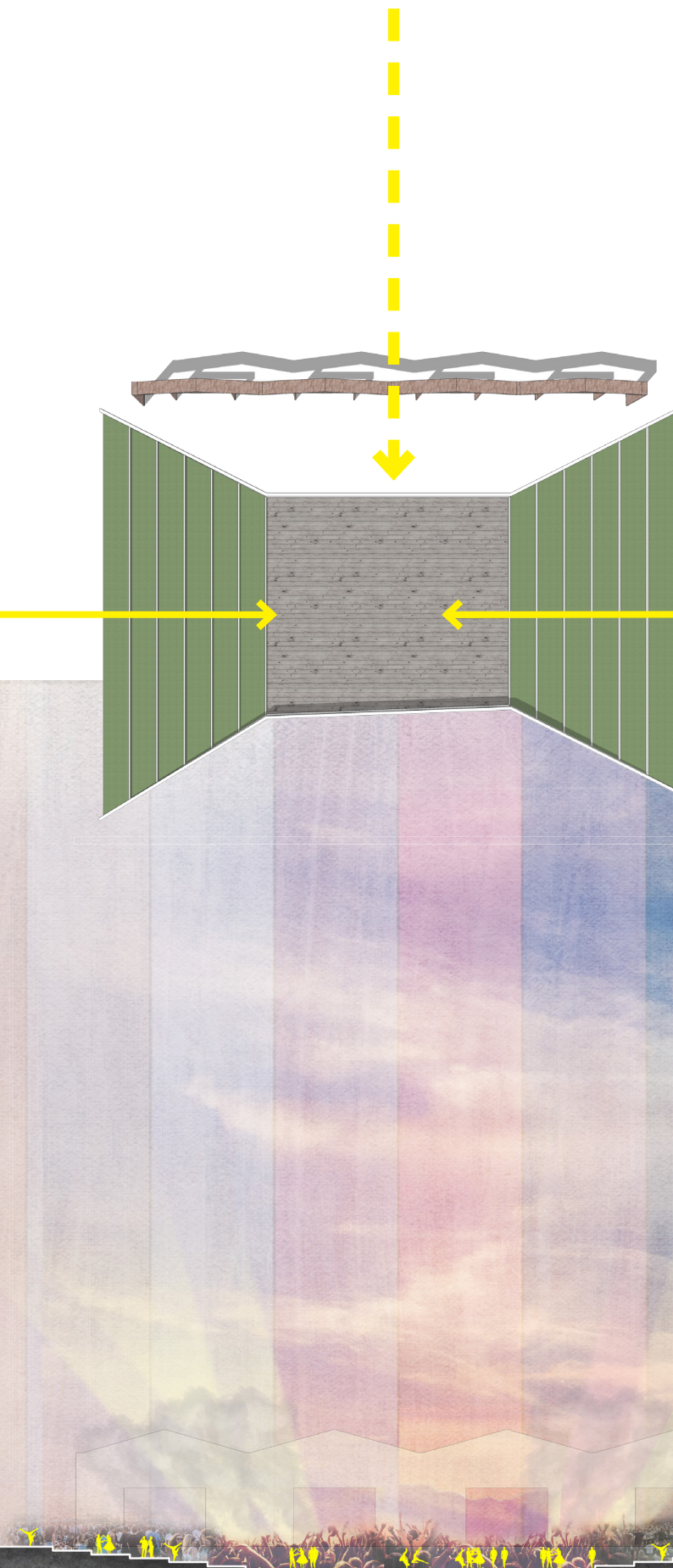
Revitalized Plan:

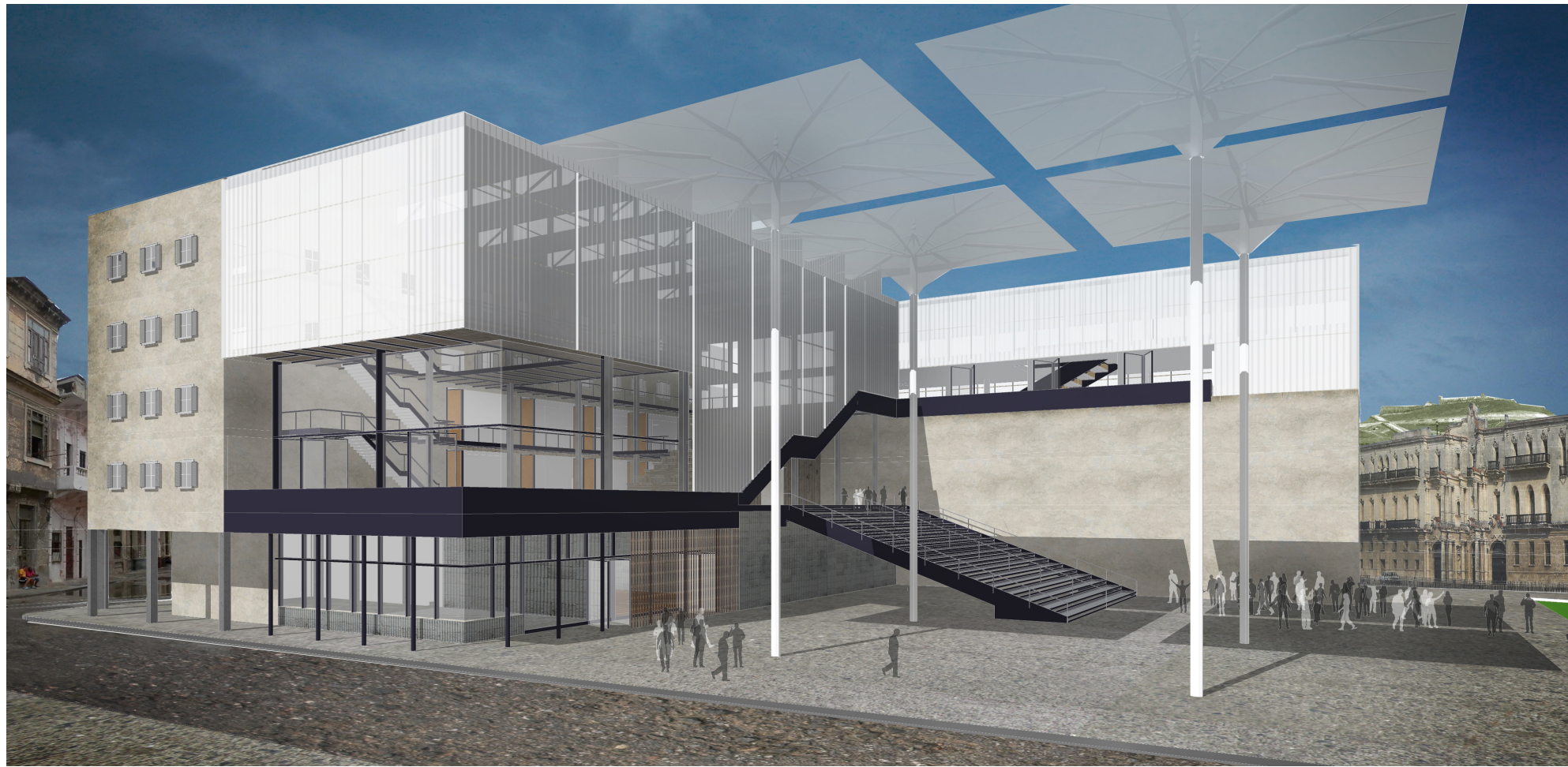
Extension to Old Structure as new shelter for Cultral Ecology



CULTURAL INSTITUTE

LUYANO THEATER





DAY

Rental Public Workshops
Performing Arts Education
Co-Working Spaces

DAY
Public Market
Park and Recreation
Theater as Practice Space





NIGHT

Foyer becomes Auditorium space
Active Bar and Gallery

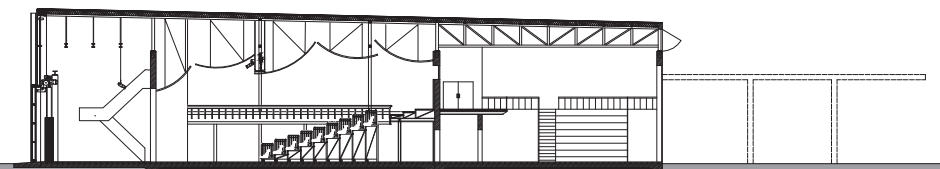
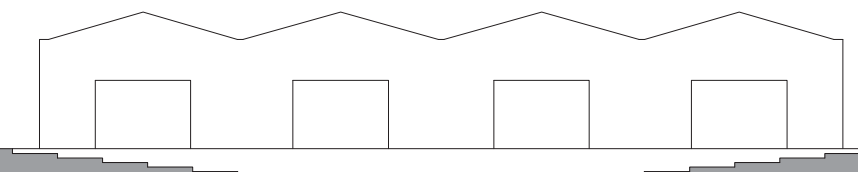
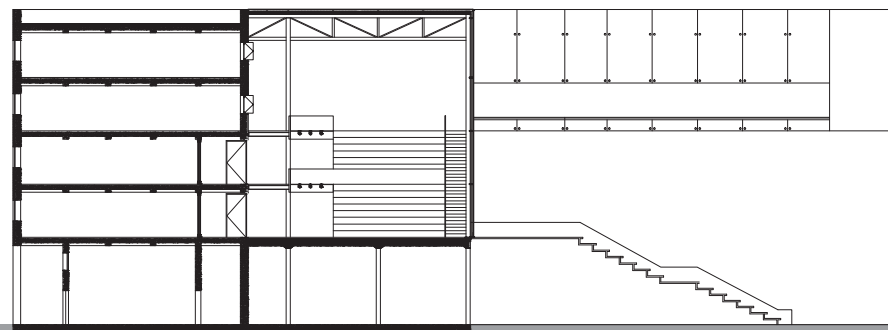
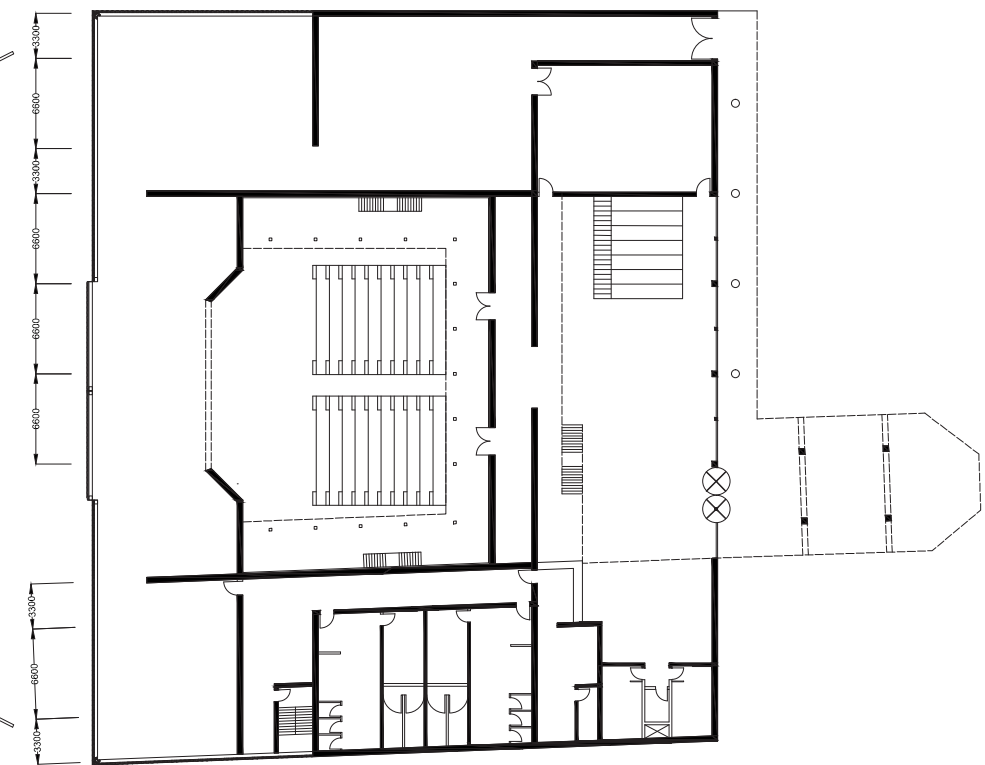
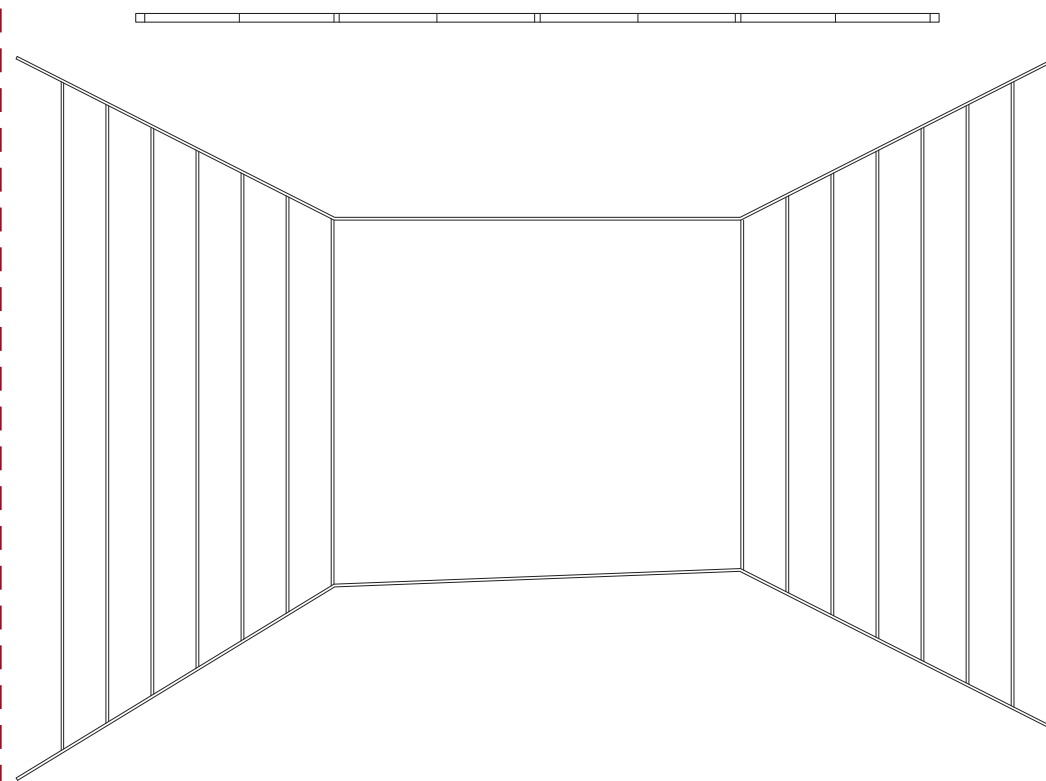
NIGHT

Superimposing Stages
LIVE Music, Art Festival



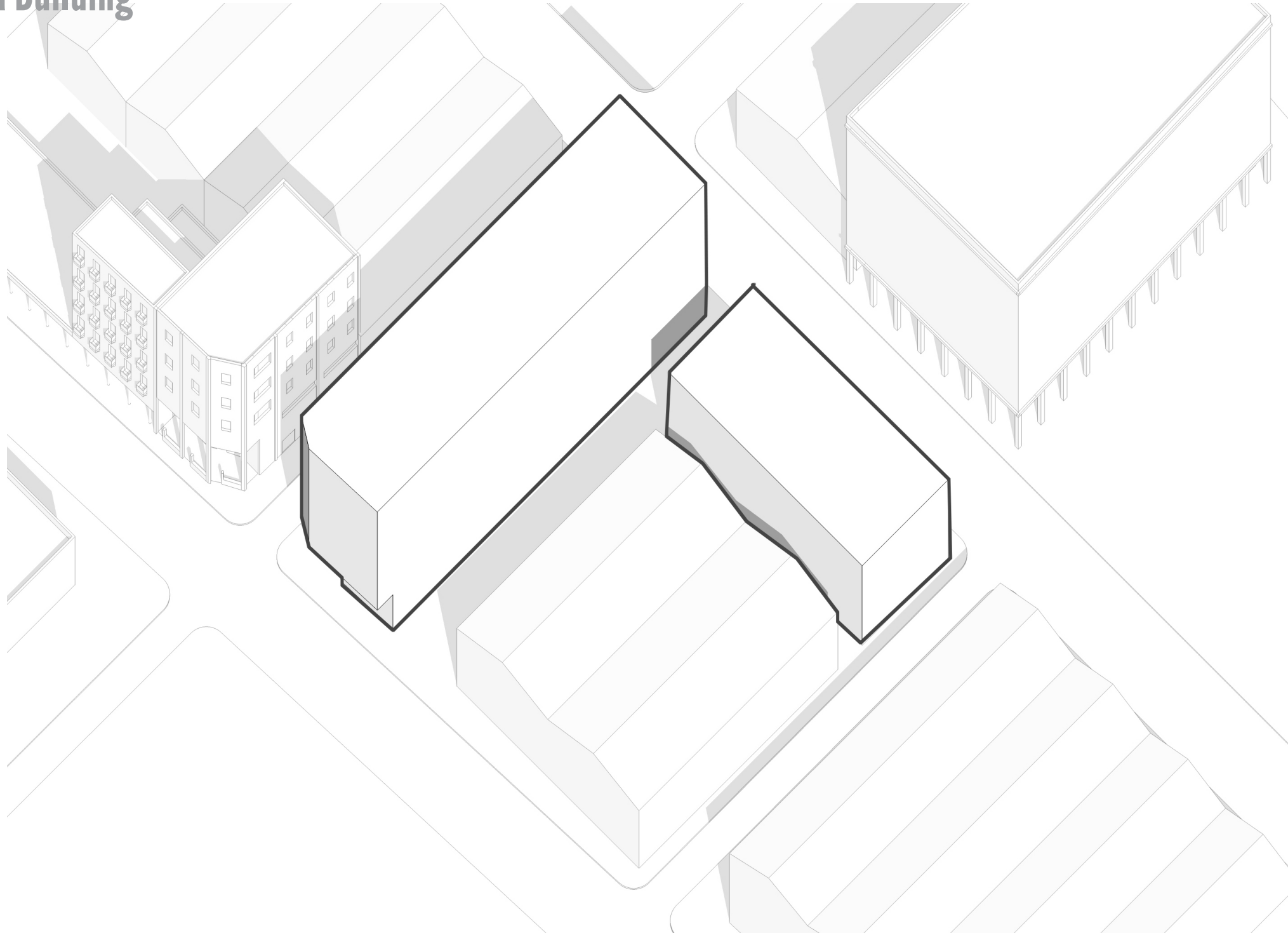
Revitalized Plan:

Extension to Old Structure as new shelter for Cultral Ecology



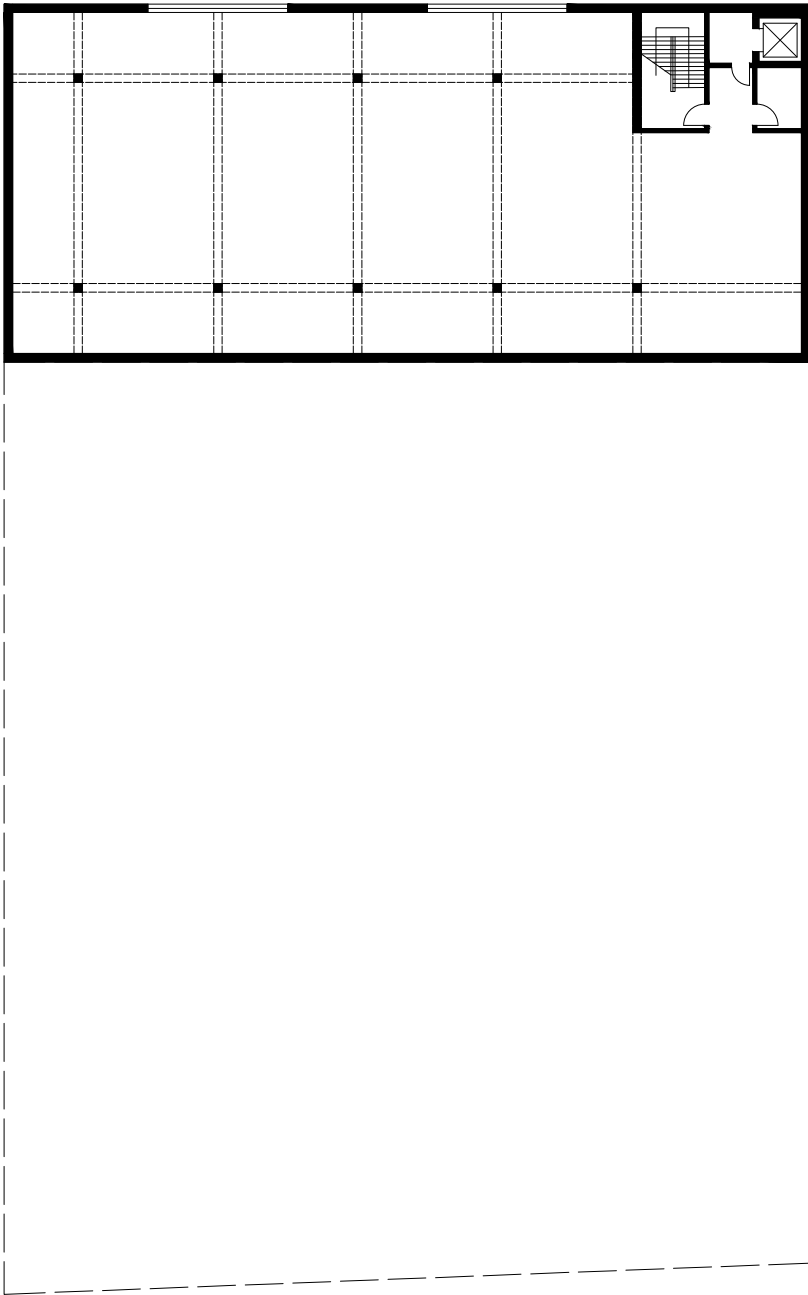
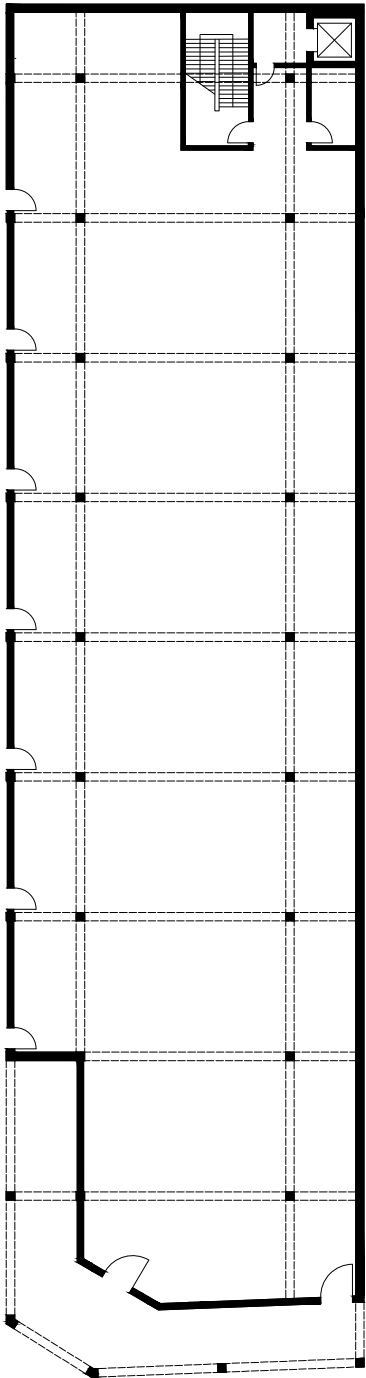
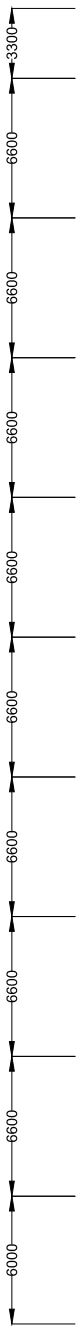
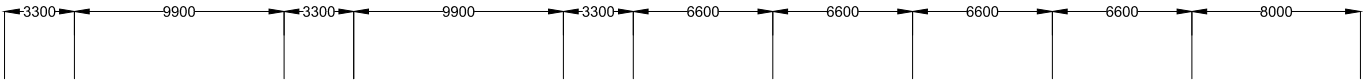
Existing Building Condition:

Vacant Fabrica Building



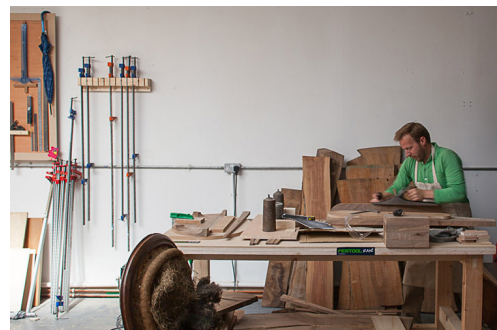
Existing Building Condition:

Vacant Fabrica Building



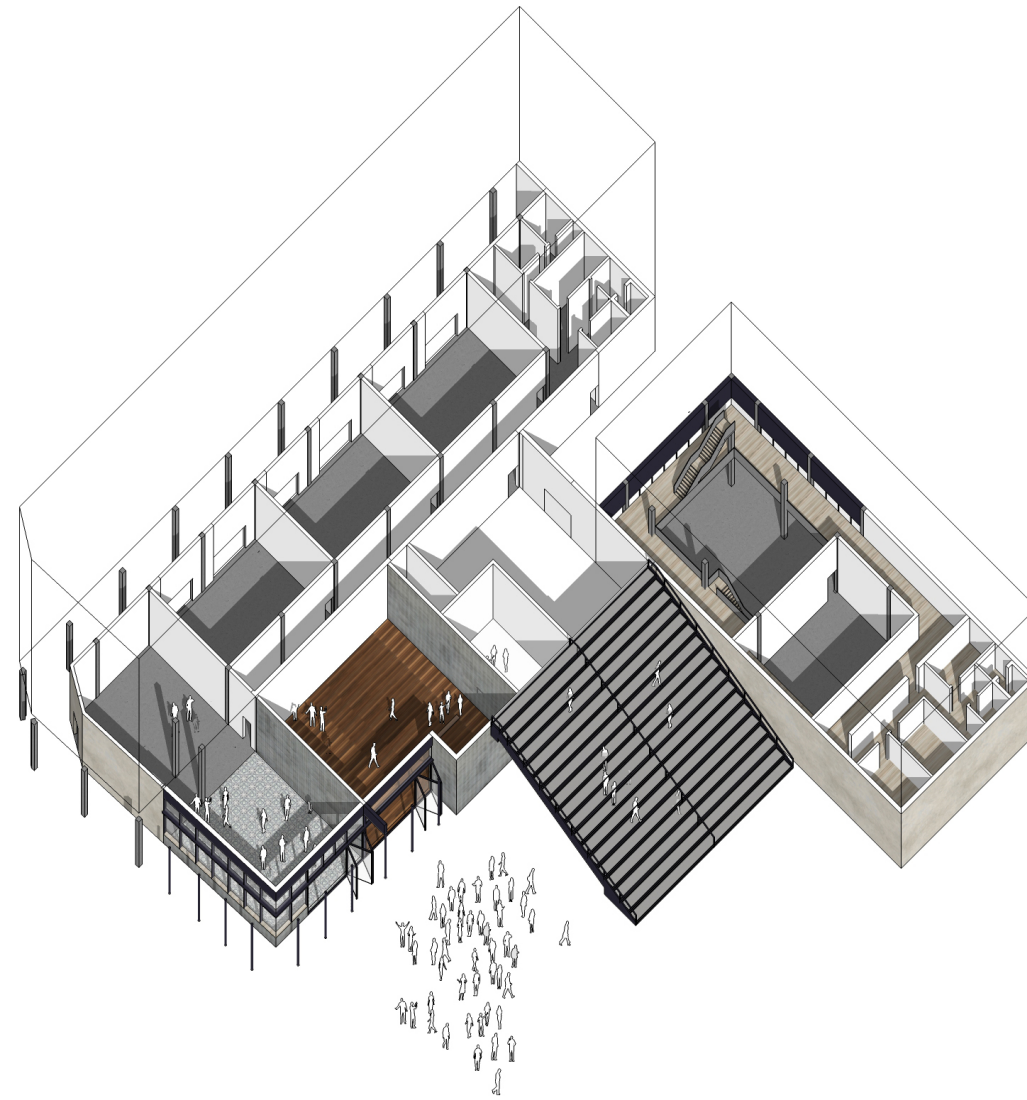
Vacant Fabrica Building

1. Studio for Rent
2. Concept Store
3. Gallery Space
4. Project Space
5. Lecture Room
6. Toilet



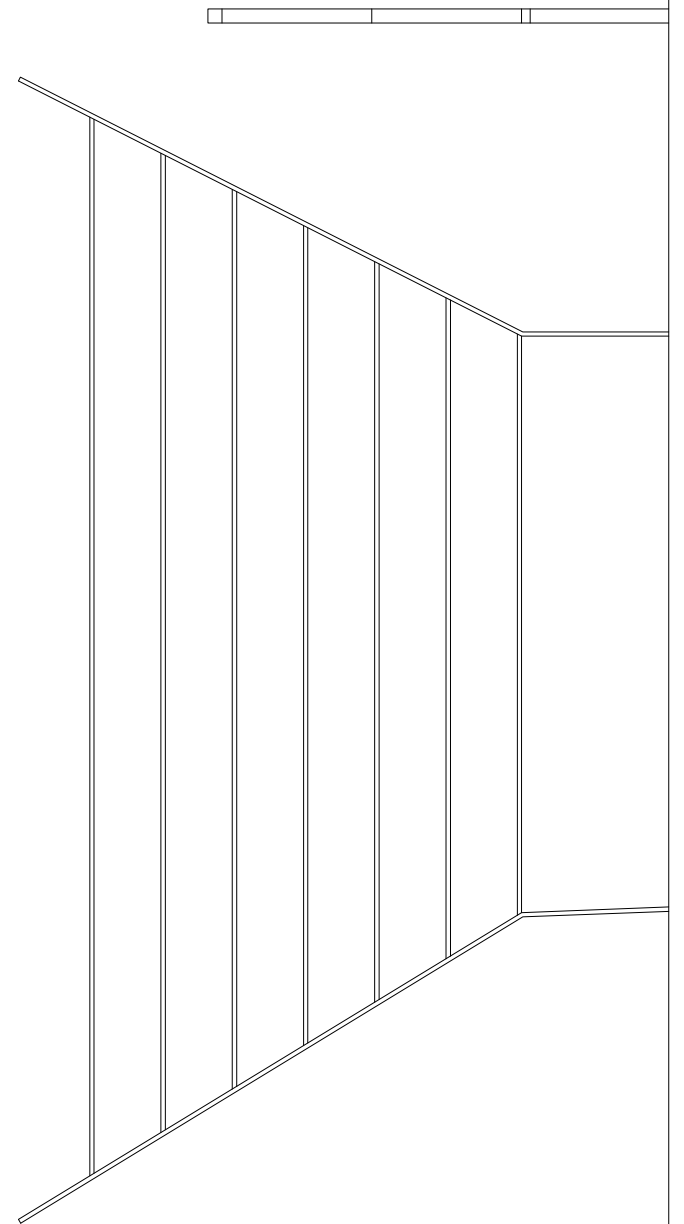
Building Extension:

Completing the Cycle of Cultural Exchange



Completing the Cycle of Cultural Exchange

-
- This architectural floor plan illustrates a building layout with various rooms and circulation paths. The plan is oriented with a north arrow pointing towards the top-left corner. Dimensions are provided along the top and left edges: 3300, 9900, 3300, 9900, 3300, 6600, 6600, 6600, 6600, 6600, 8000.
- The rooms are numbered as follows:
- Room 2:** A large open-plan area on the left side, featuring a long table and chairs, and a staircase.
 - Room 3:** A small room at the bottom left, containing a desk and chair.
 - Room 4:** A large room in the center, containing several long tables and chairs.
 - Room 6:** A large room in the center, containing several long tables and chairs.
 - Room 7:** A small room adjacent to Room 4, containing a desk and chair.
 - Room 8:** A room at the top center, containing a desk and chair.
 - Room 9:** A room at the top right, containing a desk and chair.
 - Room 10:** A room at the top right, containing a desk and chair.
 - Room 11:** A room at the top center, containing a desk and chair.
- The plan also shows a central corridor system, a staircase, and a parking area with two cars. A red line with arrows indicates a primary circulation path, starting from the top left, moving down the left side, and then turning right into the central corridor. A yellow line with arrows indicates a secondary circulation path, starting from the bottom left, moving up the left side, and then turning right into the central corridor. A dashed yellow line indicates a path leading from the bottom right towards the central area.

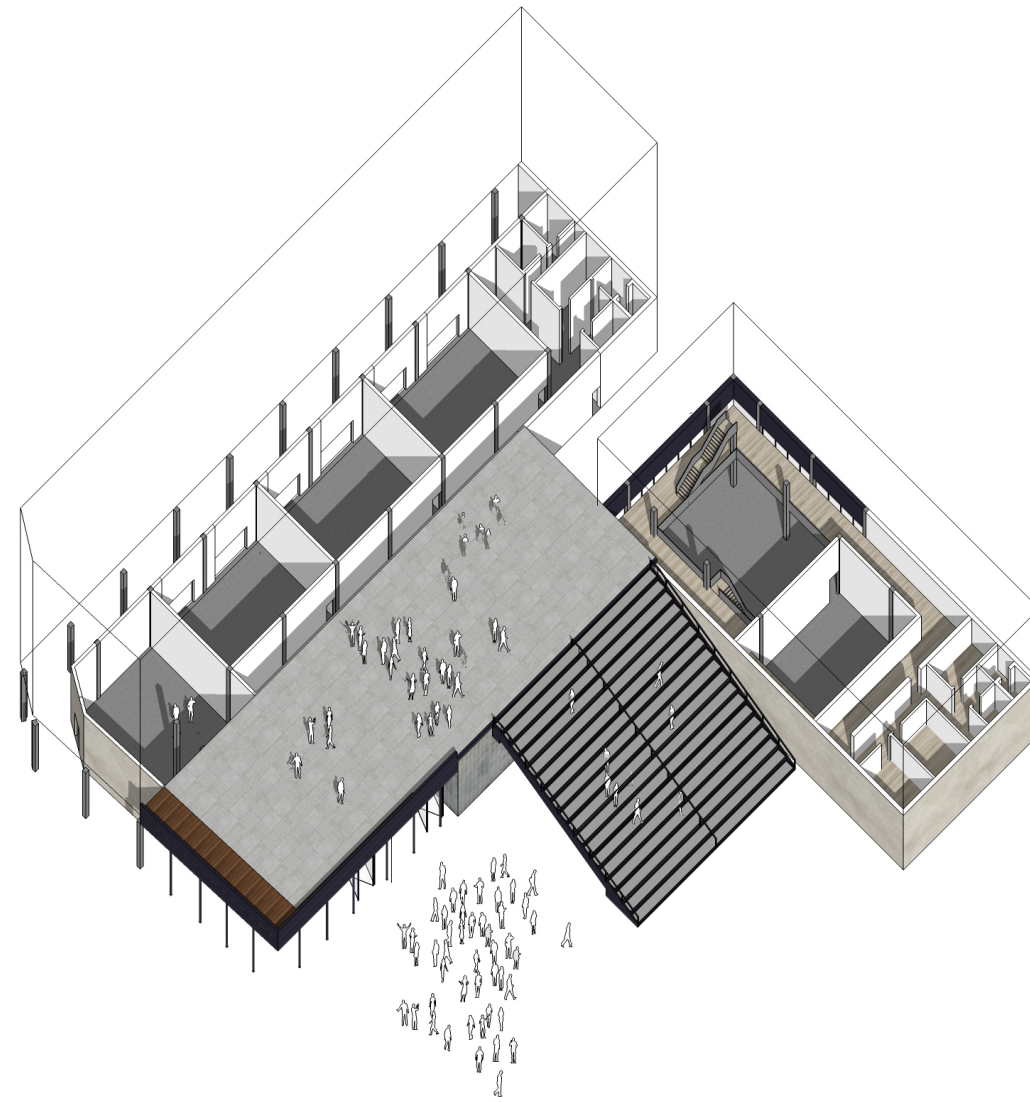




Entrance- Square

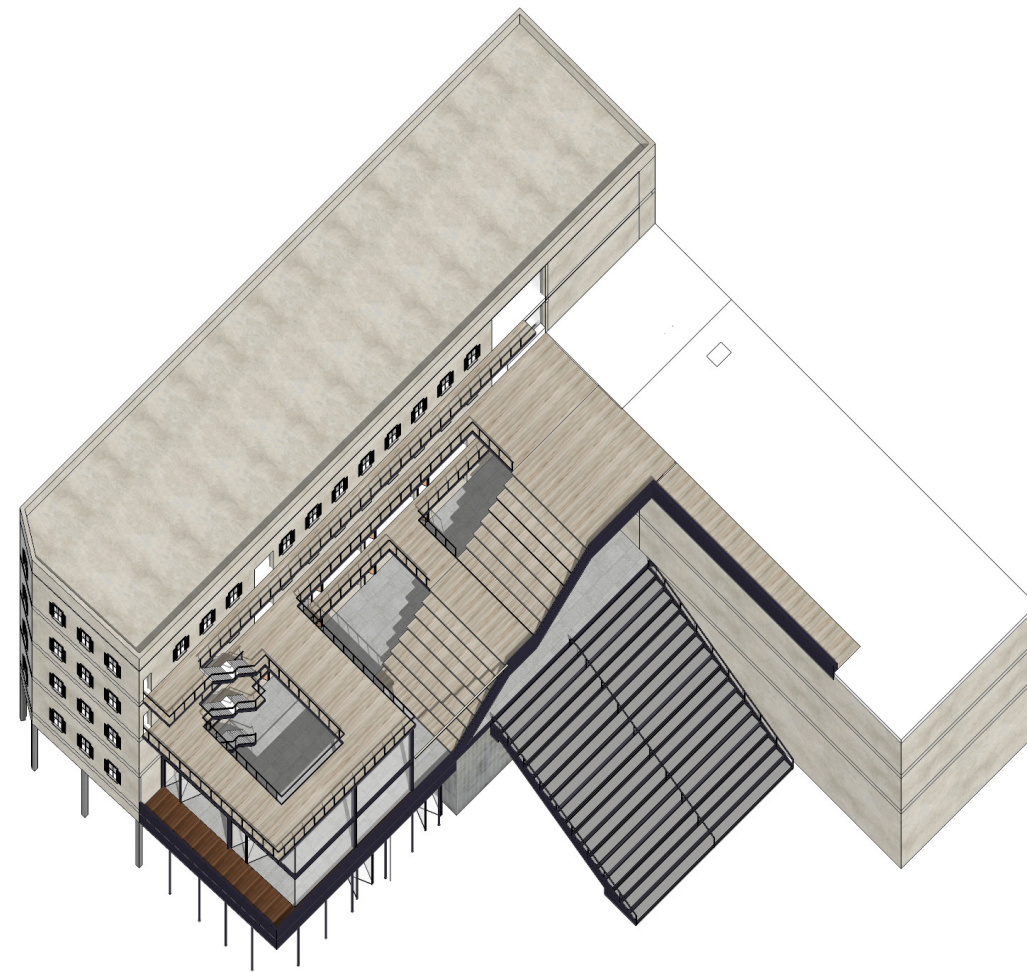
Building Extension:

Terraces



Building Extension:

New Circulation and Spatial Connectivity



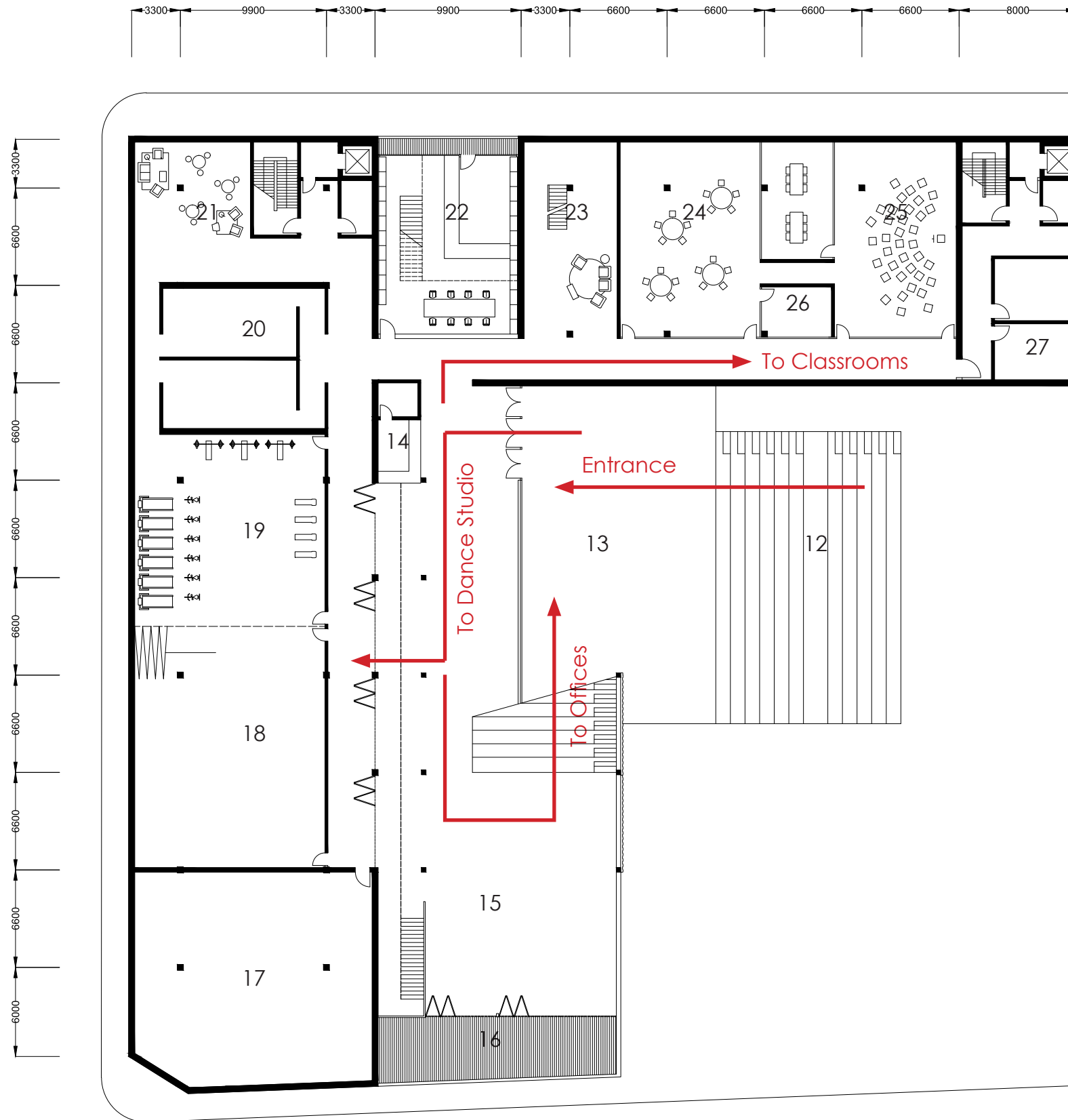


Loma del Burro/ Luyano



Level of Institution, 1st Floor

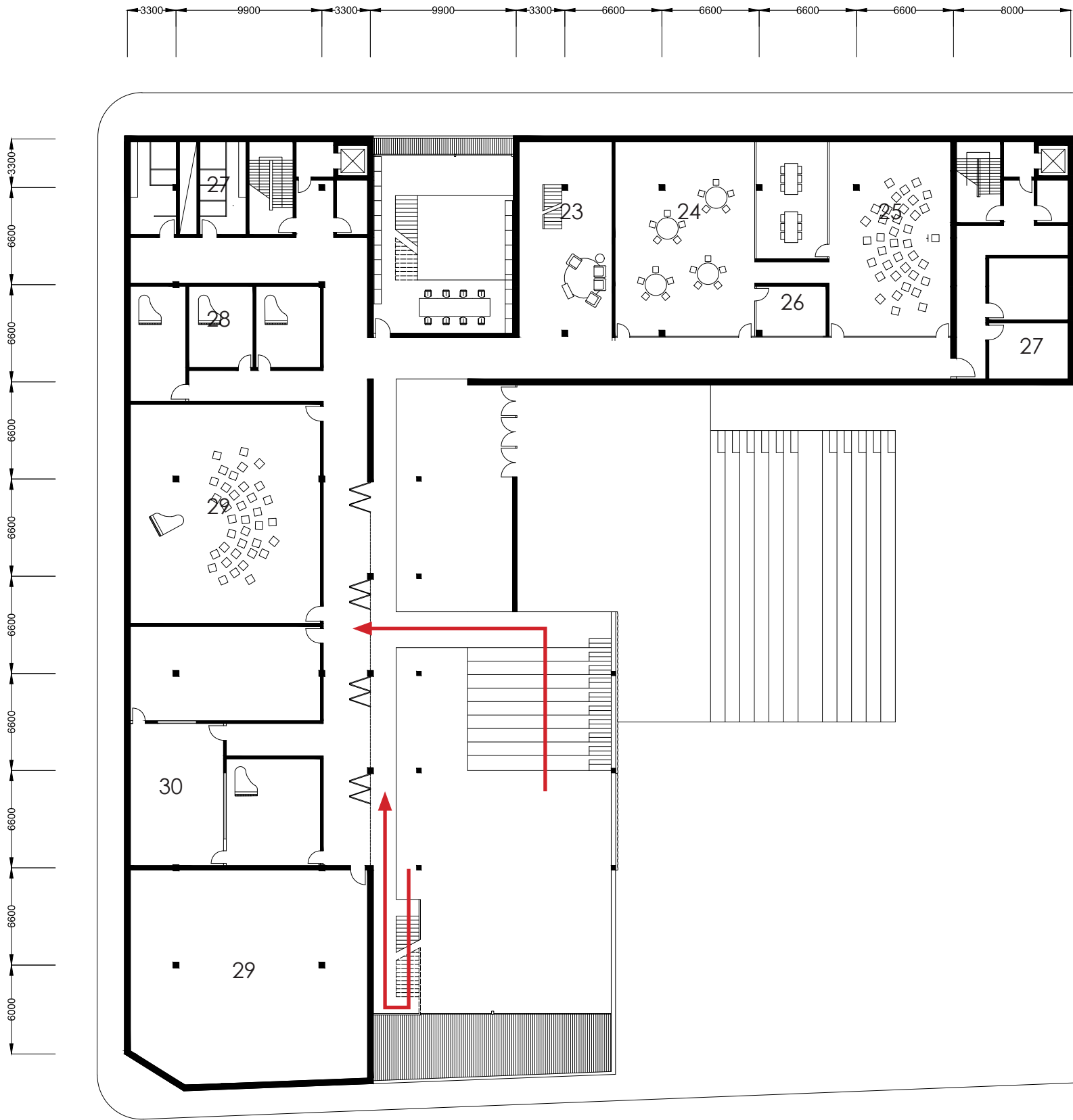
12. Amphitheater
13. Entrance
14. Service Counter
15. Auditorium
16. Balcony
17. Dance Studio
- 18,19. Multi Purpose Activity Room
20. Changing Room
21. Lounge
22. Library
23. Common Area
24. Project Space
25. Instructional Space
26. Fabrication Lab



Level of Institution,

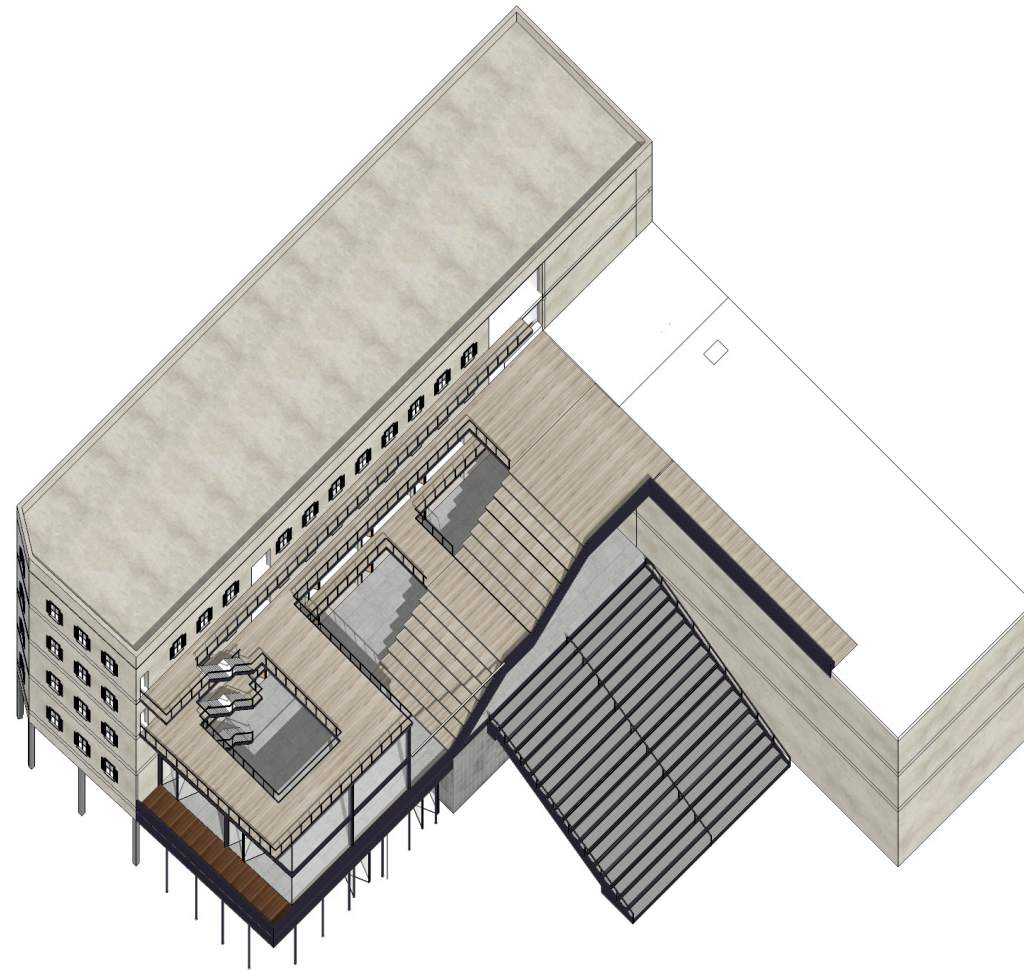
2nd Floor

- 23. Common Area
- 24. Project Space
- 25. Instructional Space
- 26. Fabrication Lab
- 27. Toilets
- 28. Music Rooms
- 29, Large Music Classrooms
- 30. Control Room



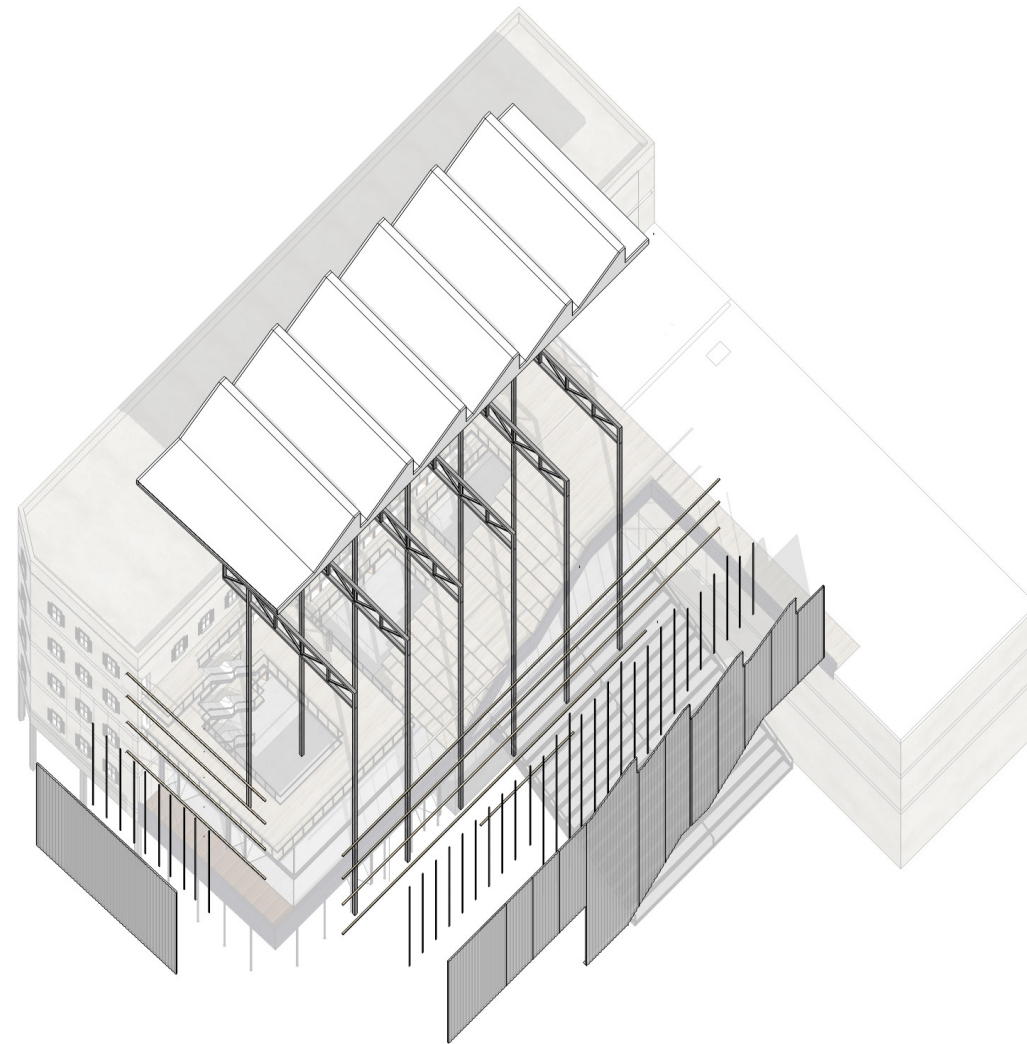
Building Extension:

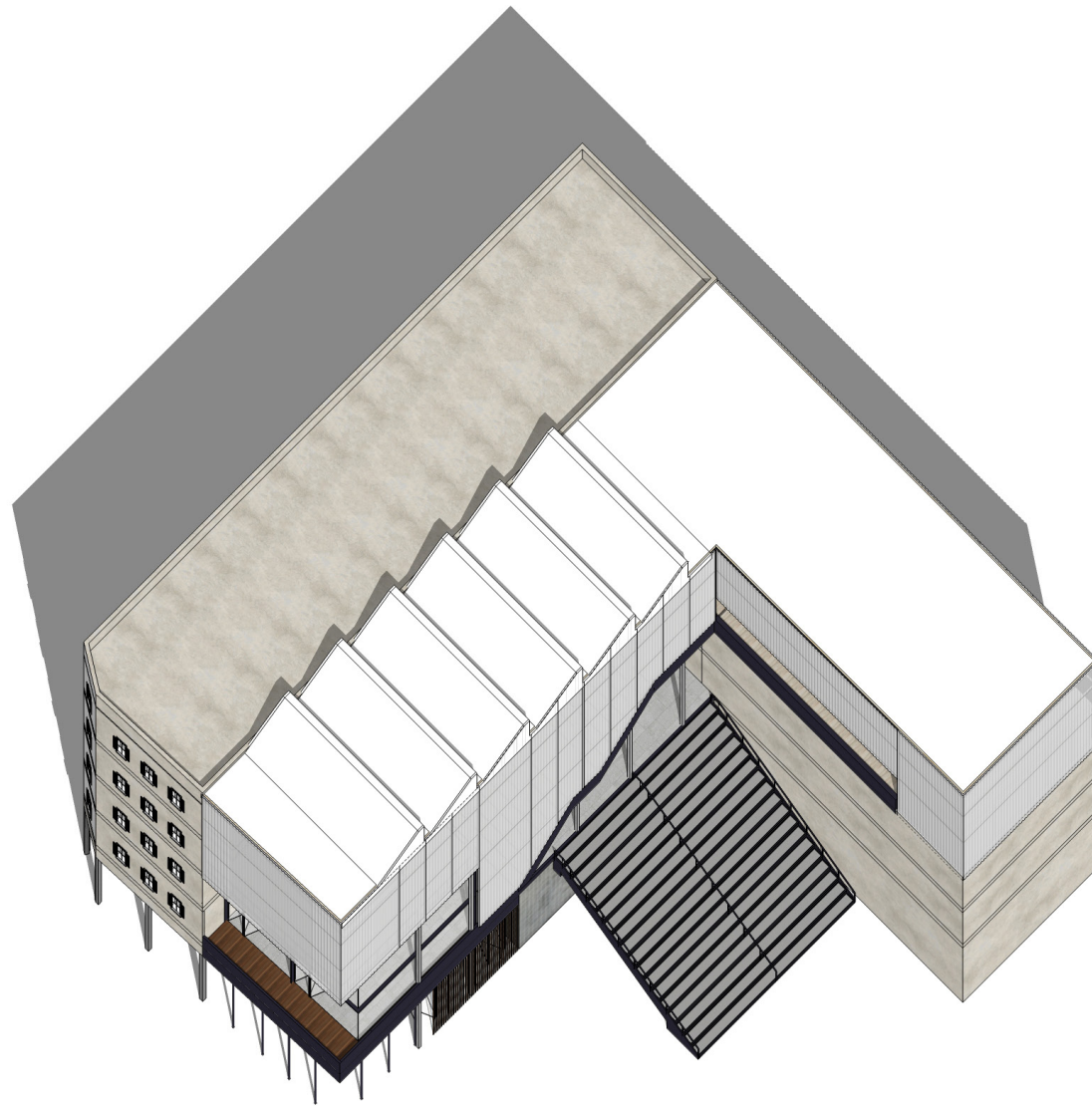
New Circulation and Spatial Connectivity



Building Extension:

New Skin and Roof to Improve Climatic Performances



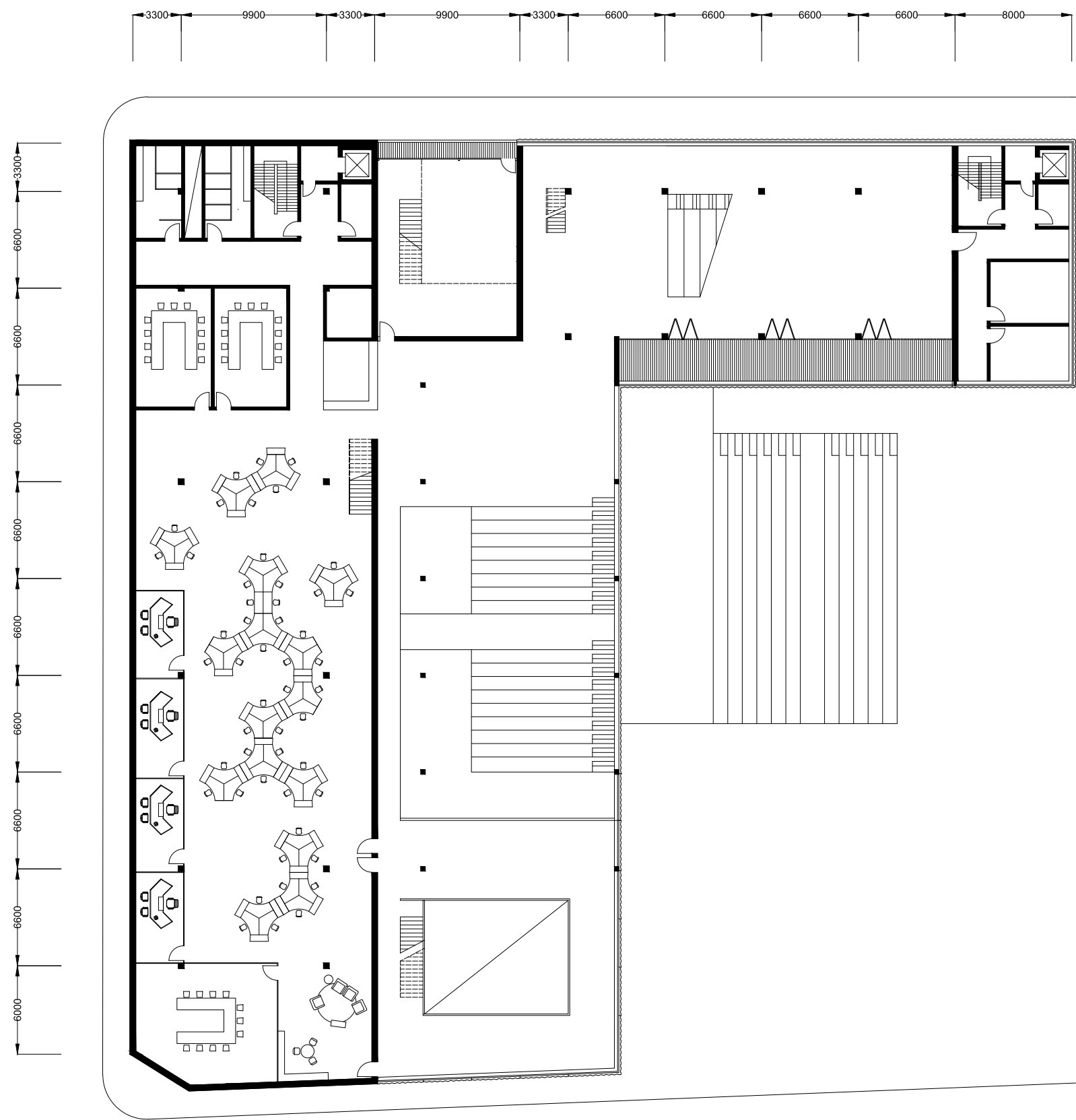






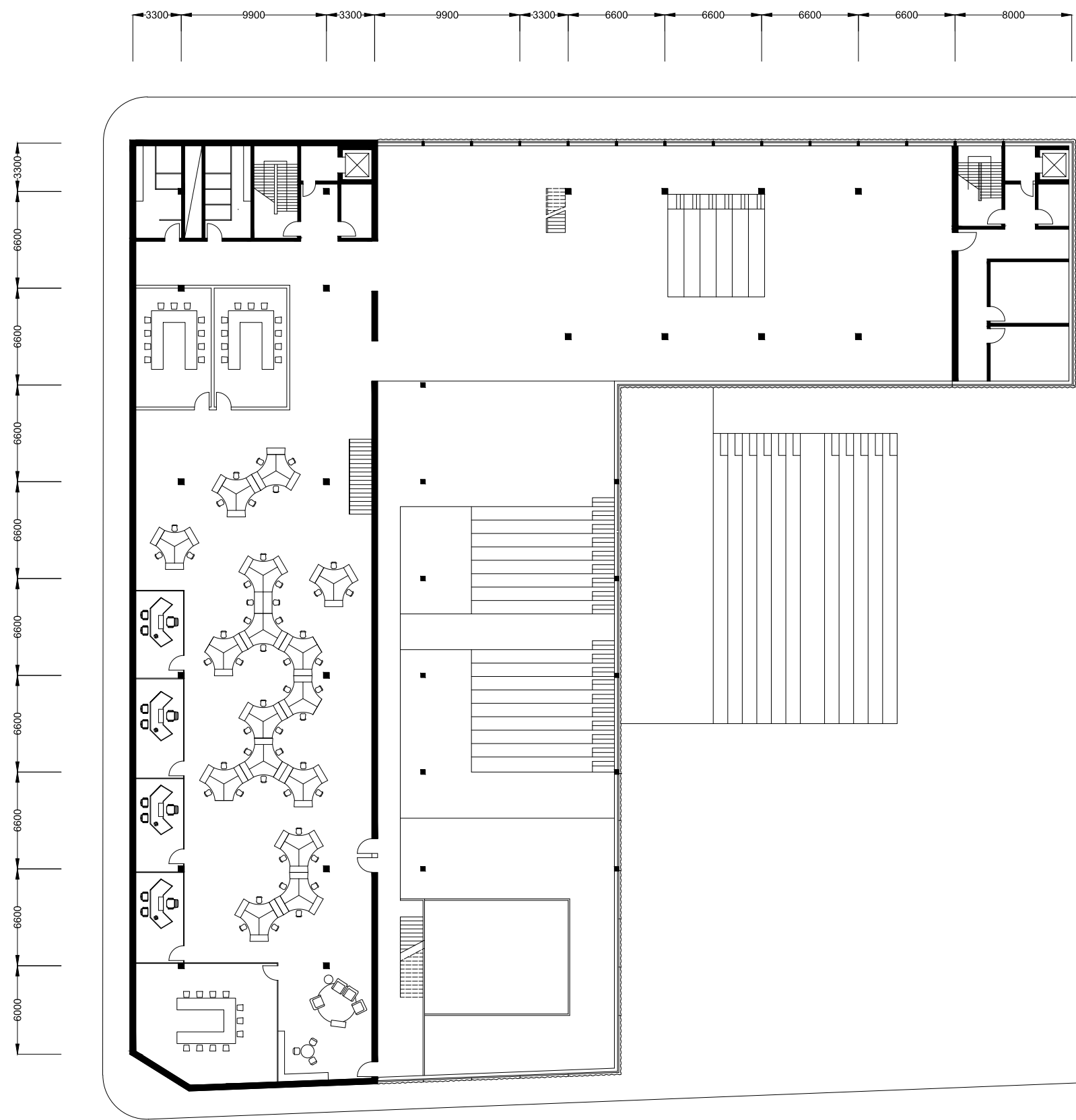
Level of Creative Offices

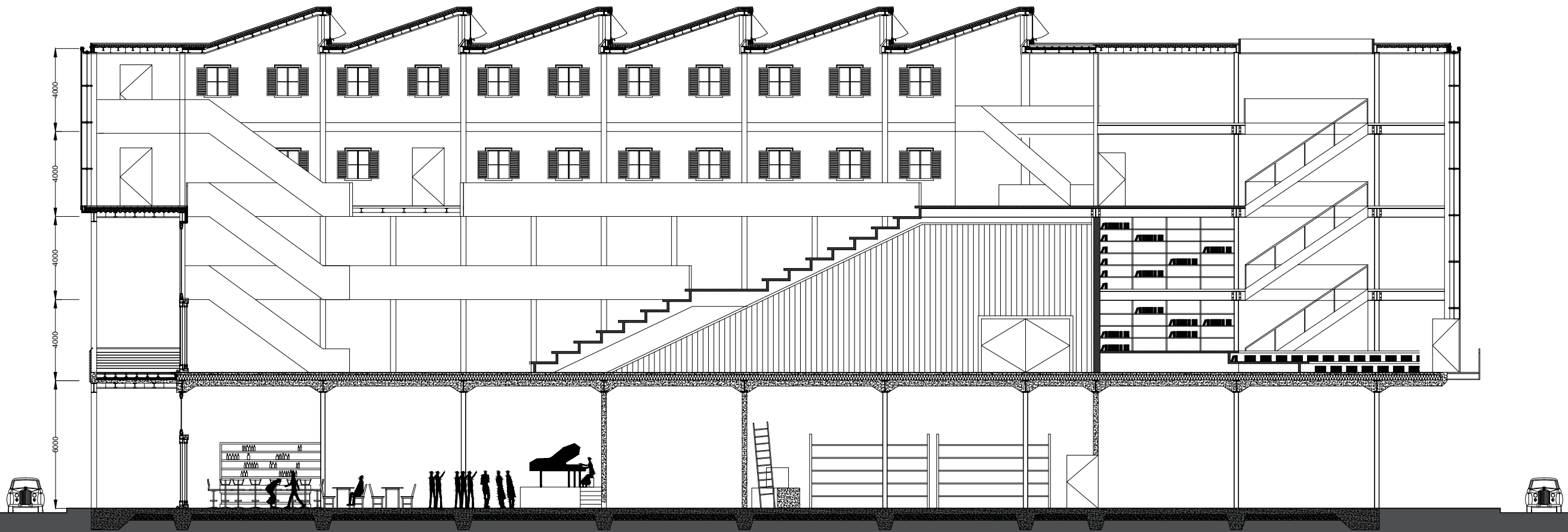
3rd Floor

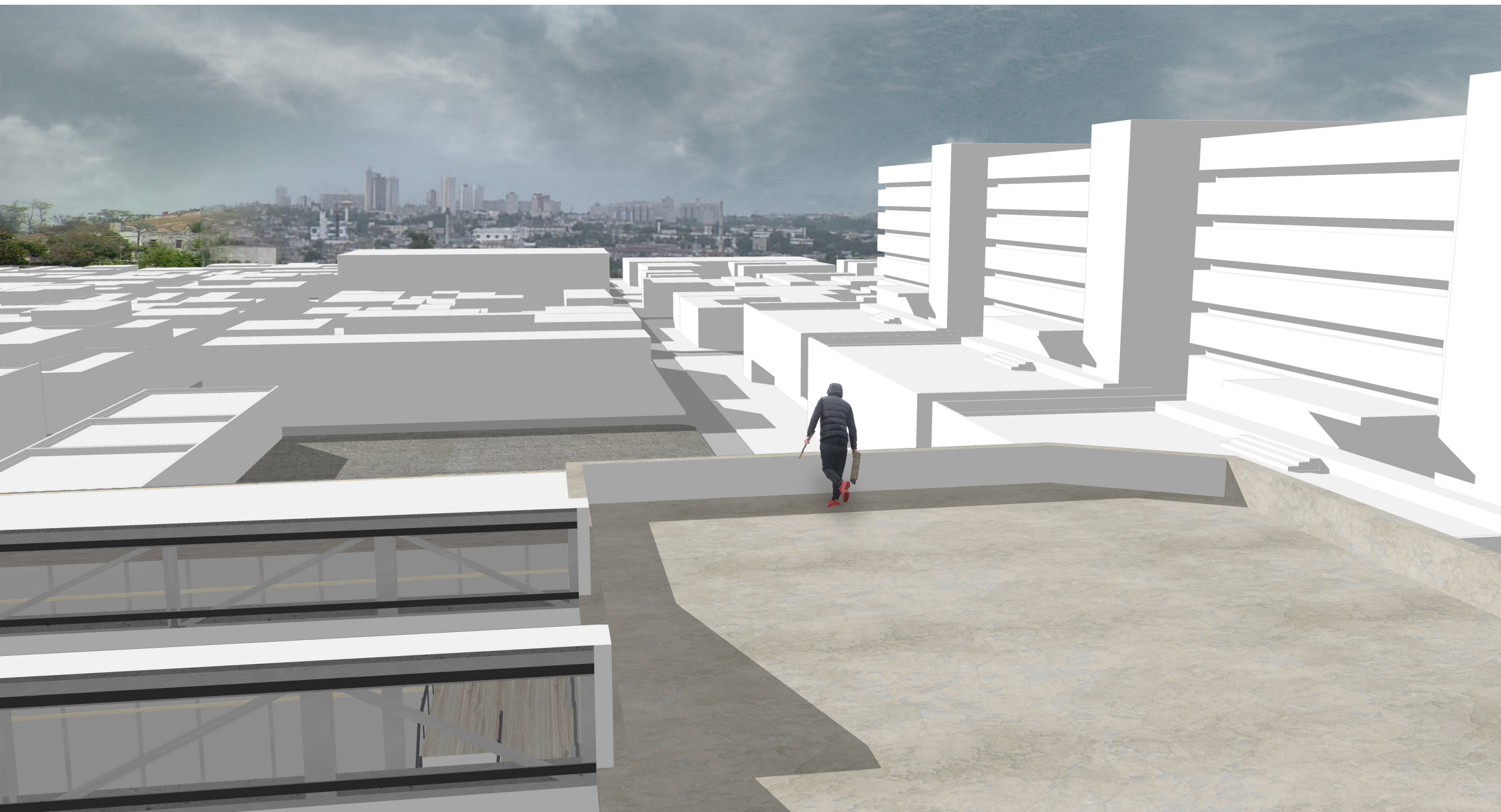


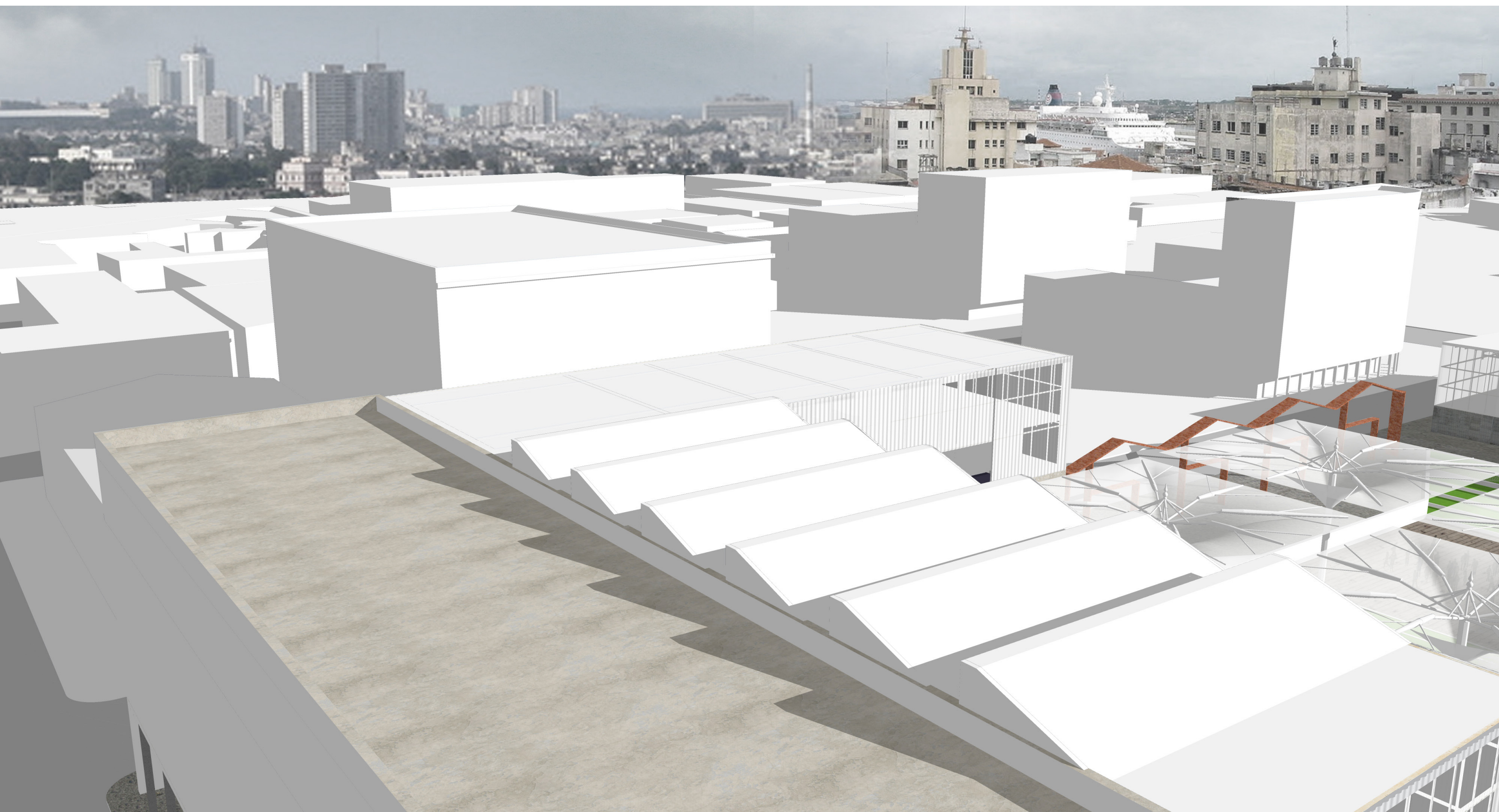
Level of Creative Offices

4th Floor



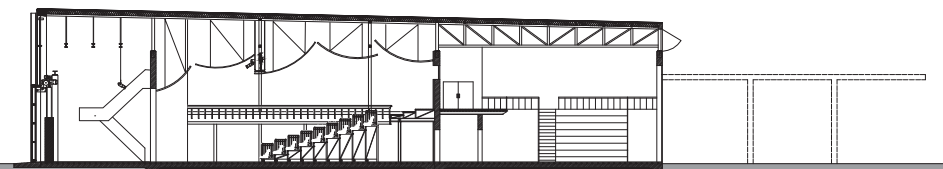
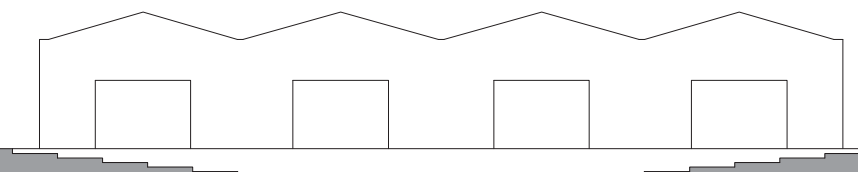
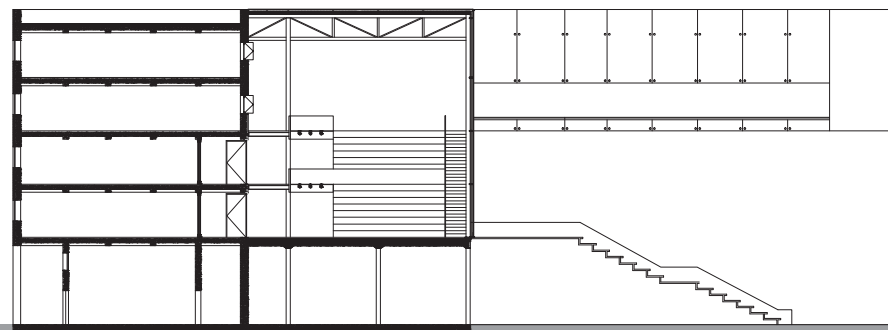
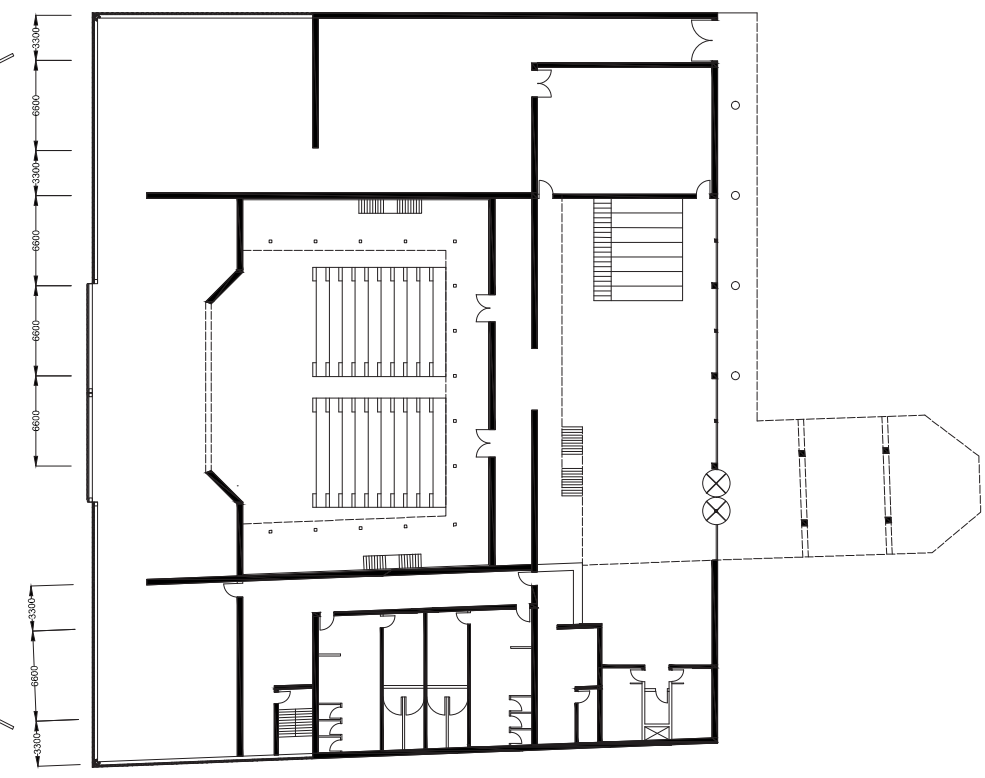
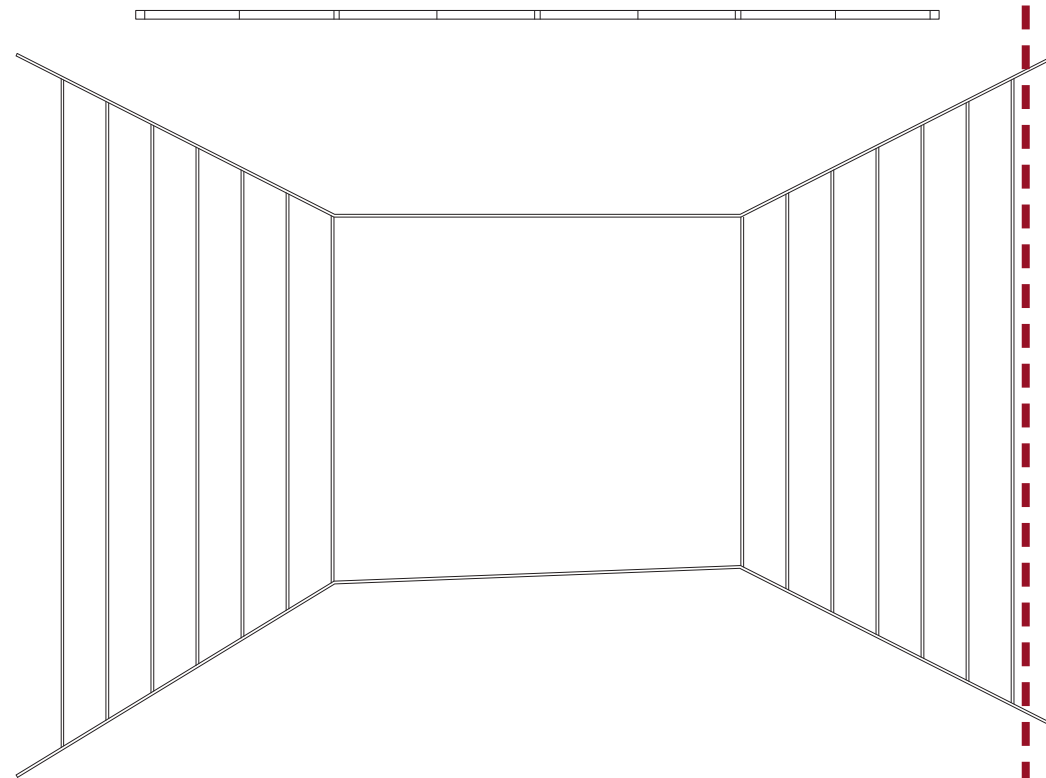
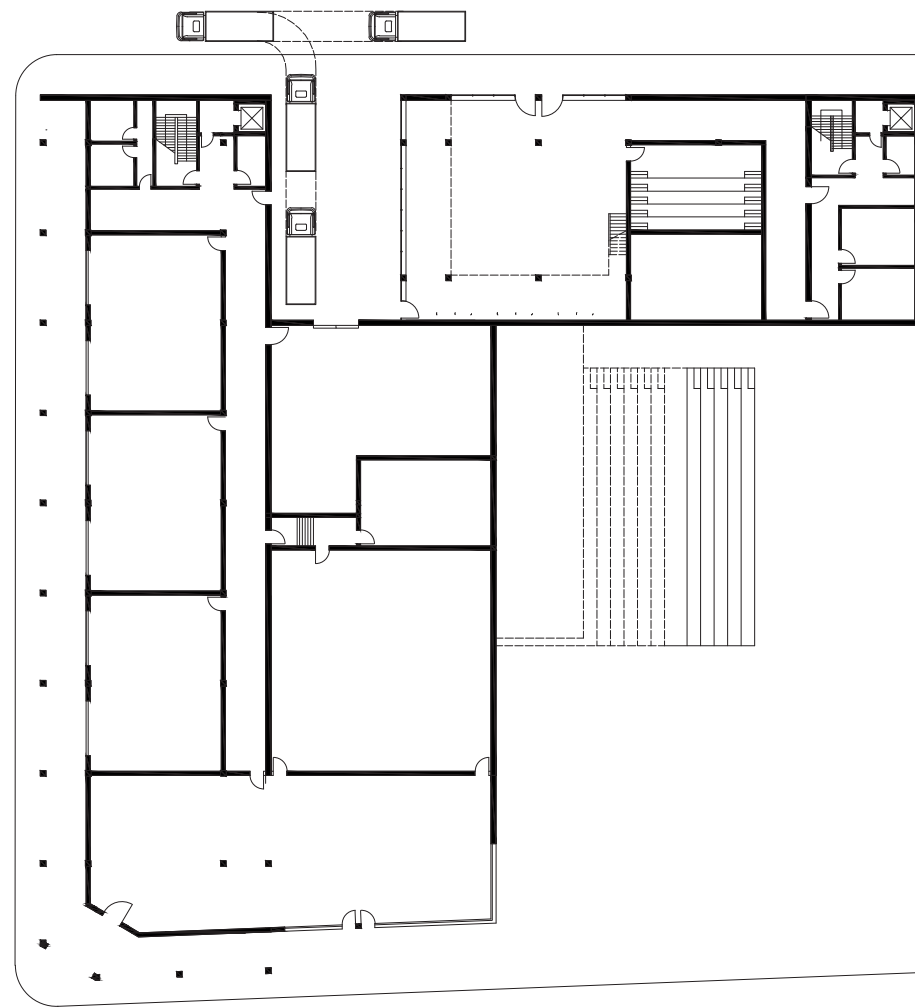






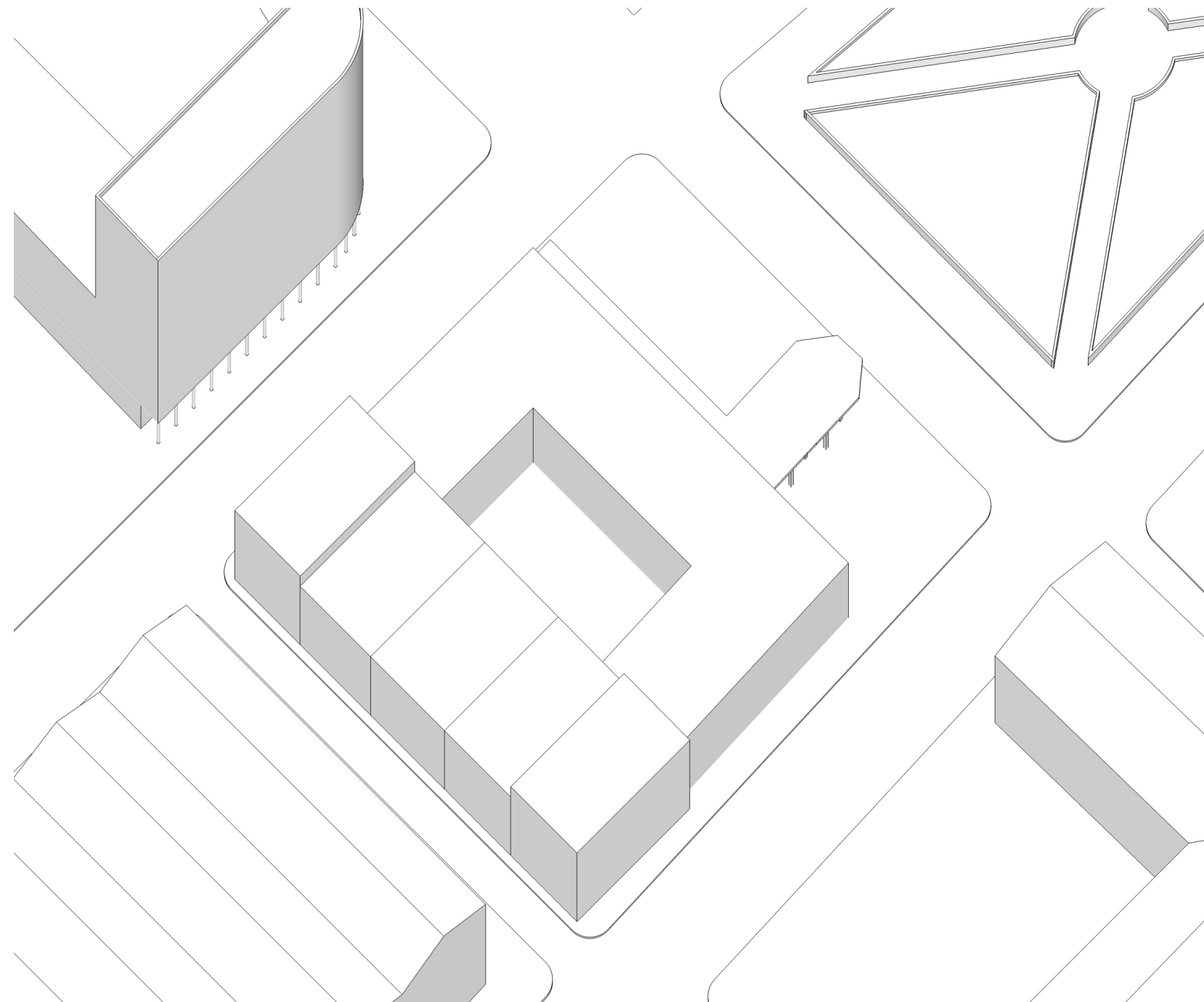
Revitalized Plan:

Extension to Old Structure as new shelter for Cultral Ecology



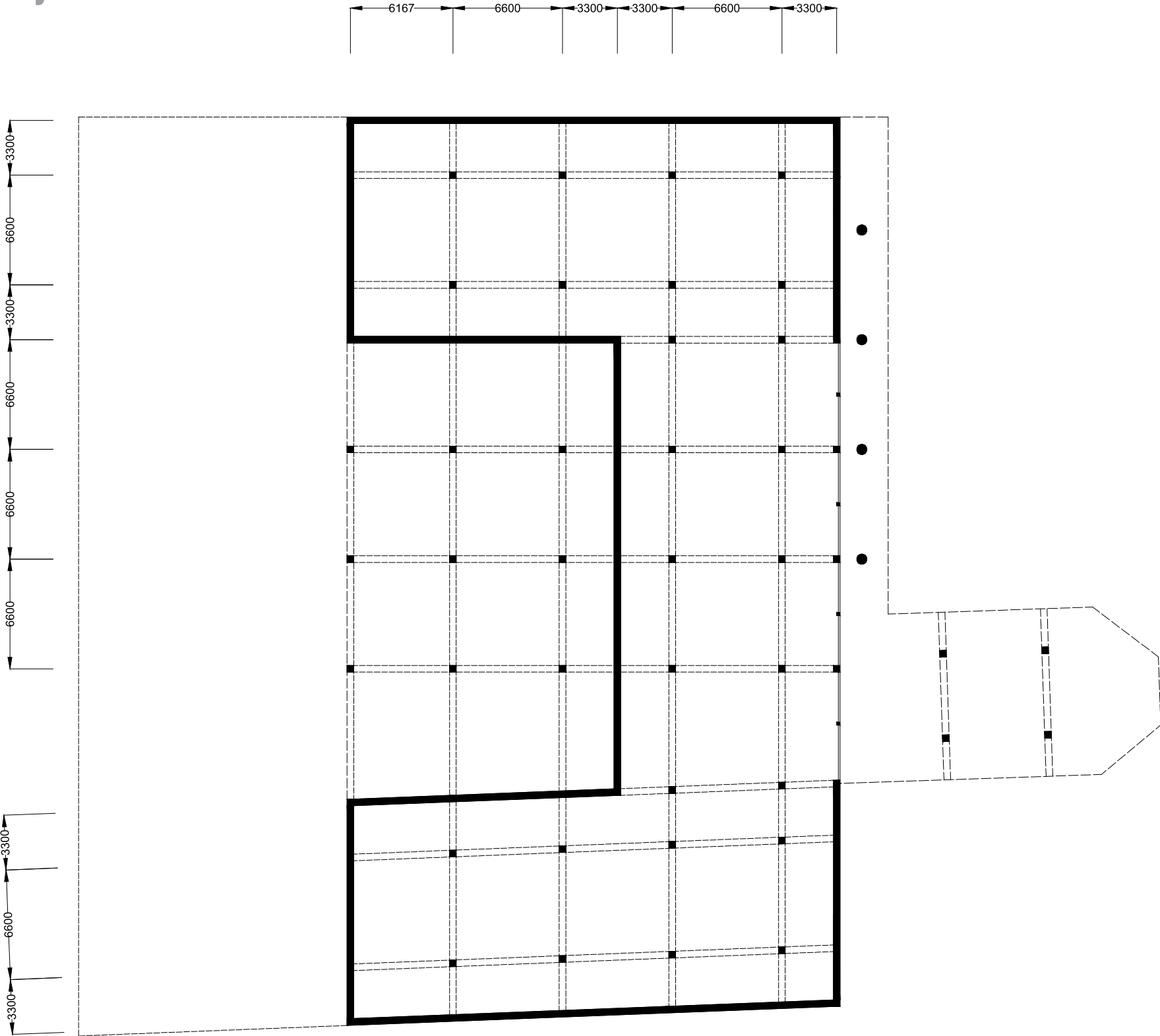
Existing Building Condition:

Gas Station at Traffic Conjunction



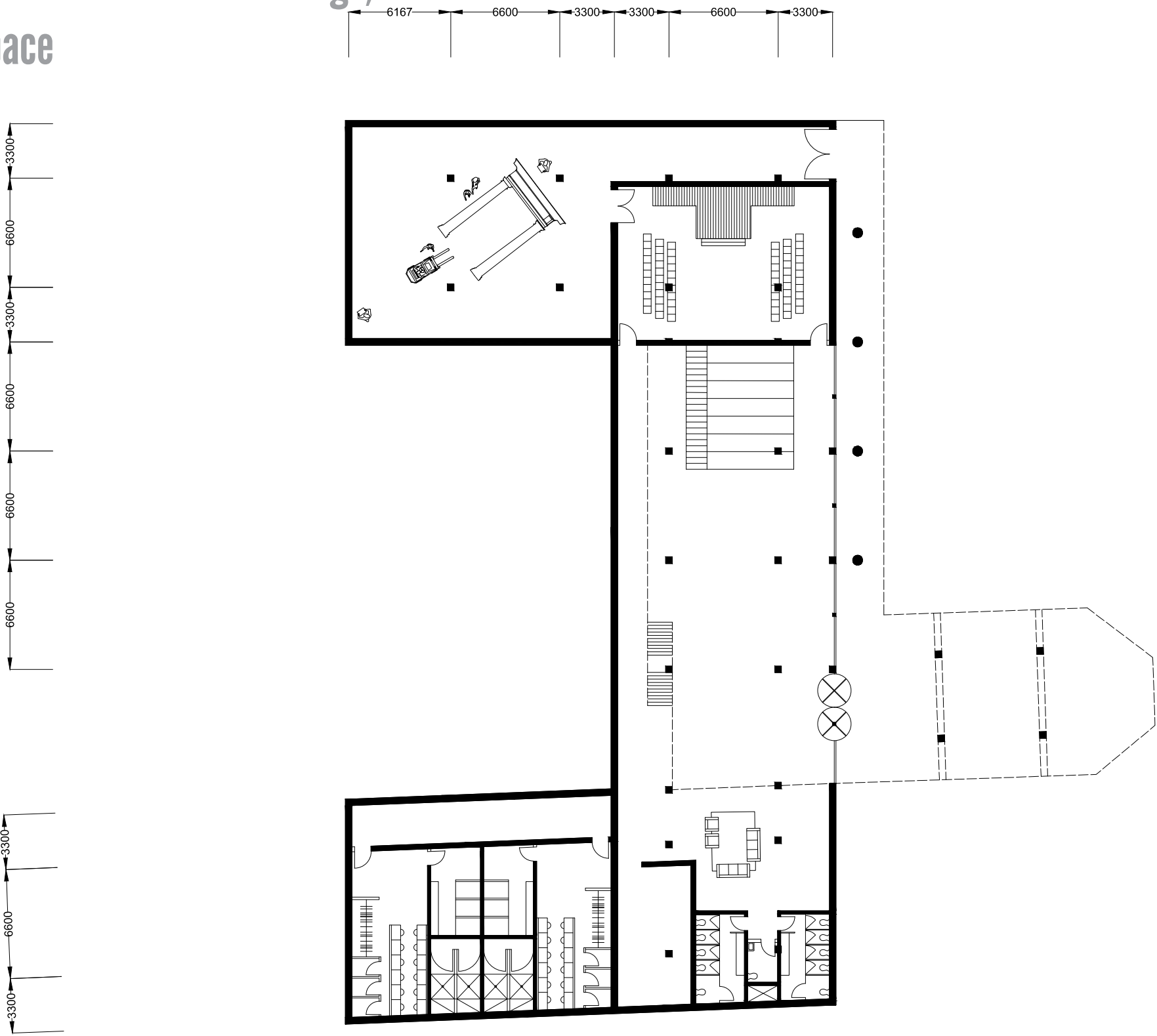
Existing Building Condition:

Gas Station at Traffic Conjunction



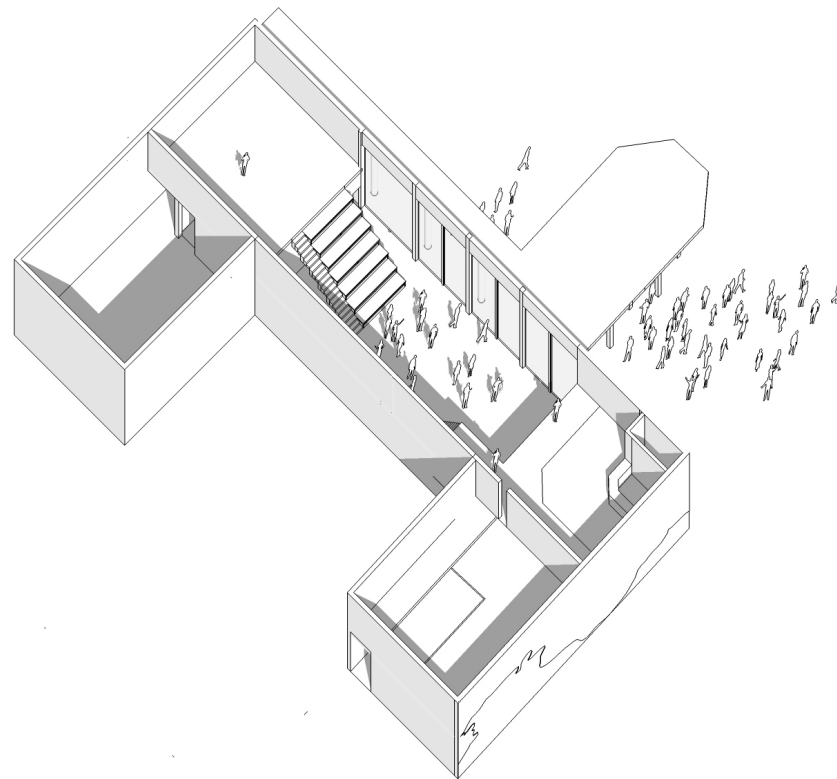
Transition Plan

Workshop Spaces and Performer Room in Wings,
Foyer as Performing Space



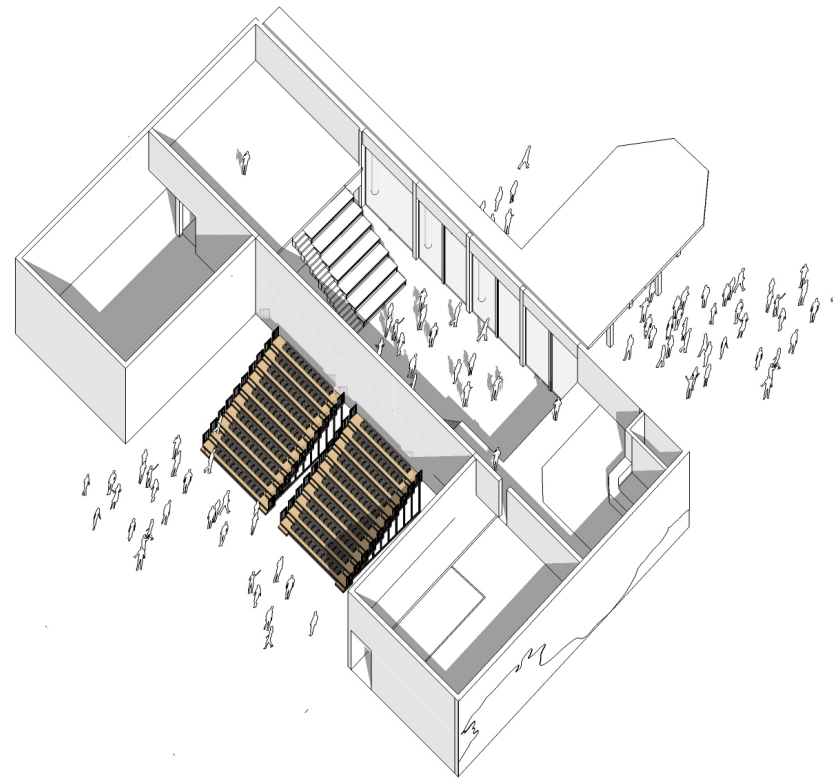
Transition Plan

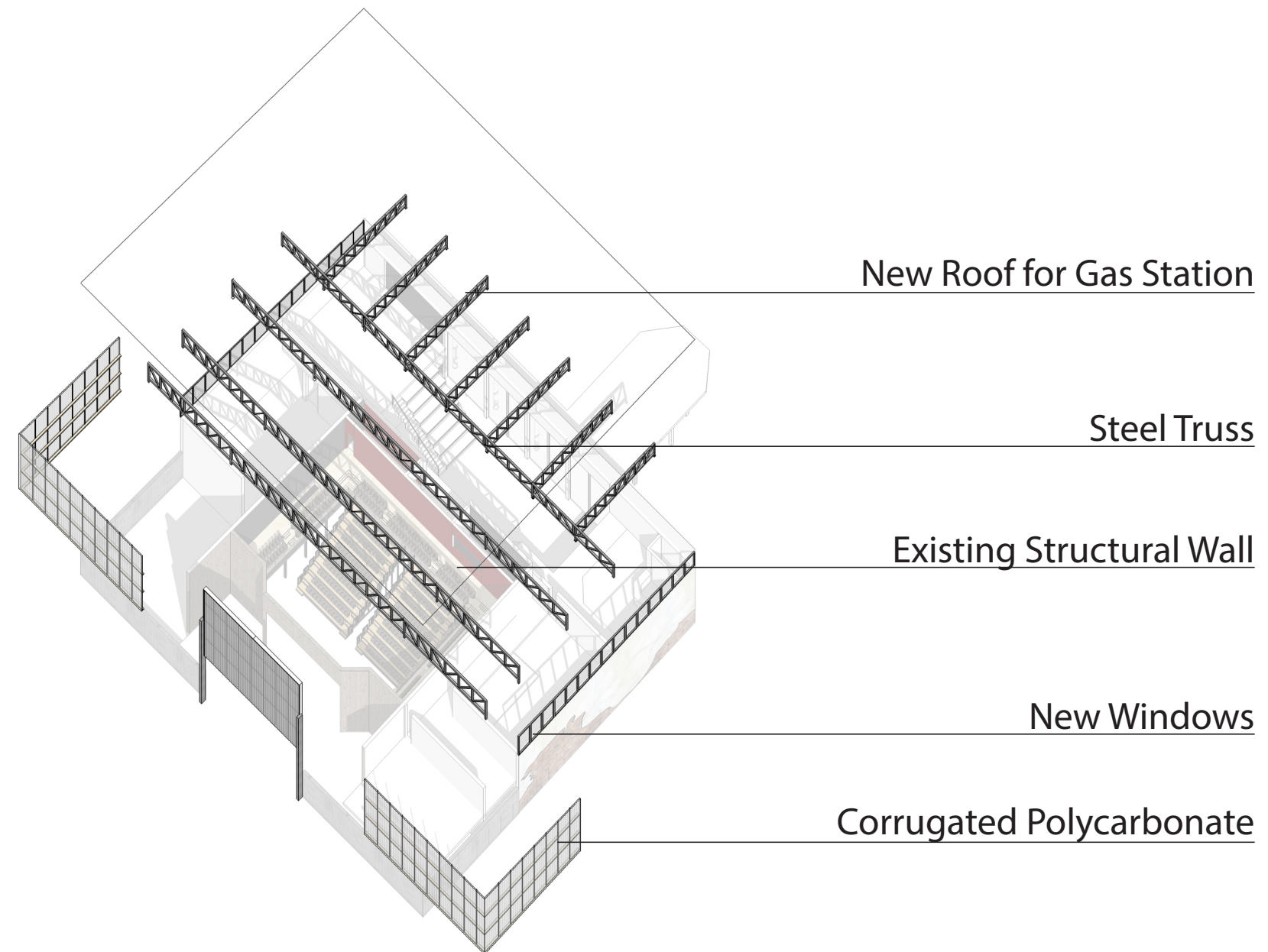
Workshop Spaces and Performer Room in Wings,
Foyer as Performing Space



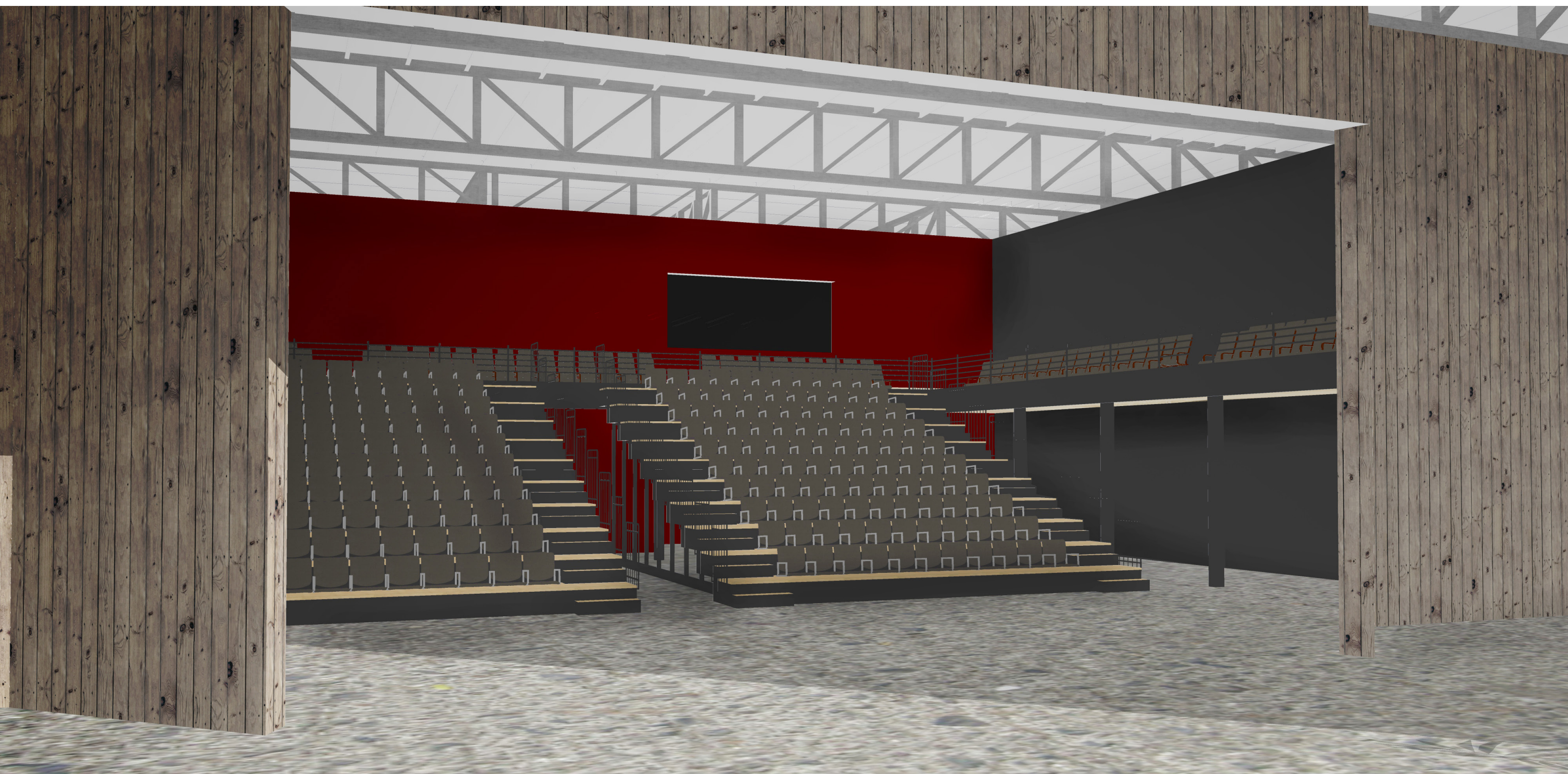
Transition Plan

Retractable Seats as Outdoor Installations to
Claim Courtyard Space





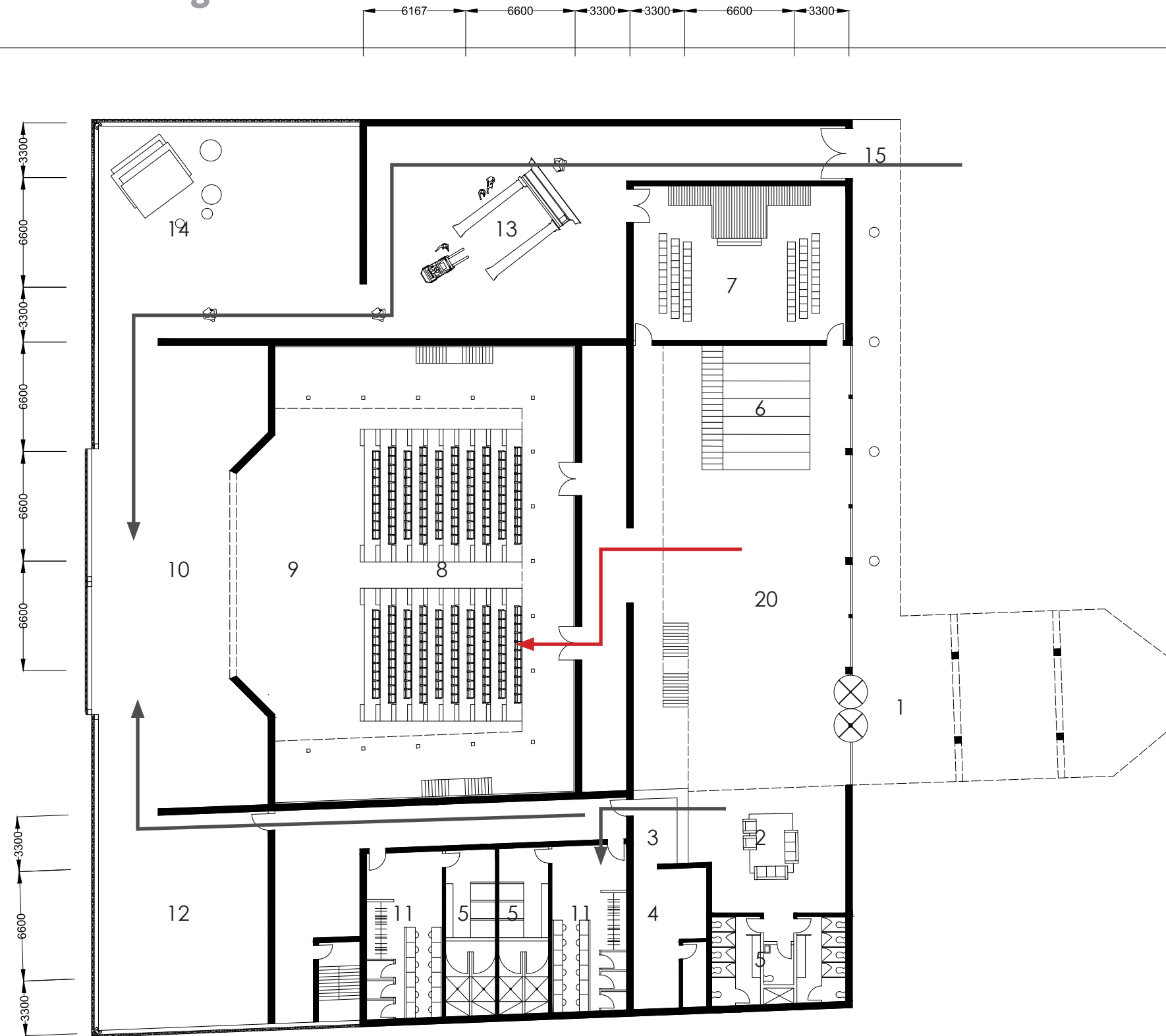




Extension Plan, Gf

Converted Gas Station as Event Stage

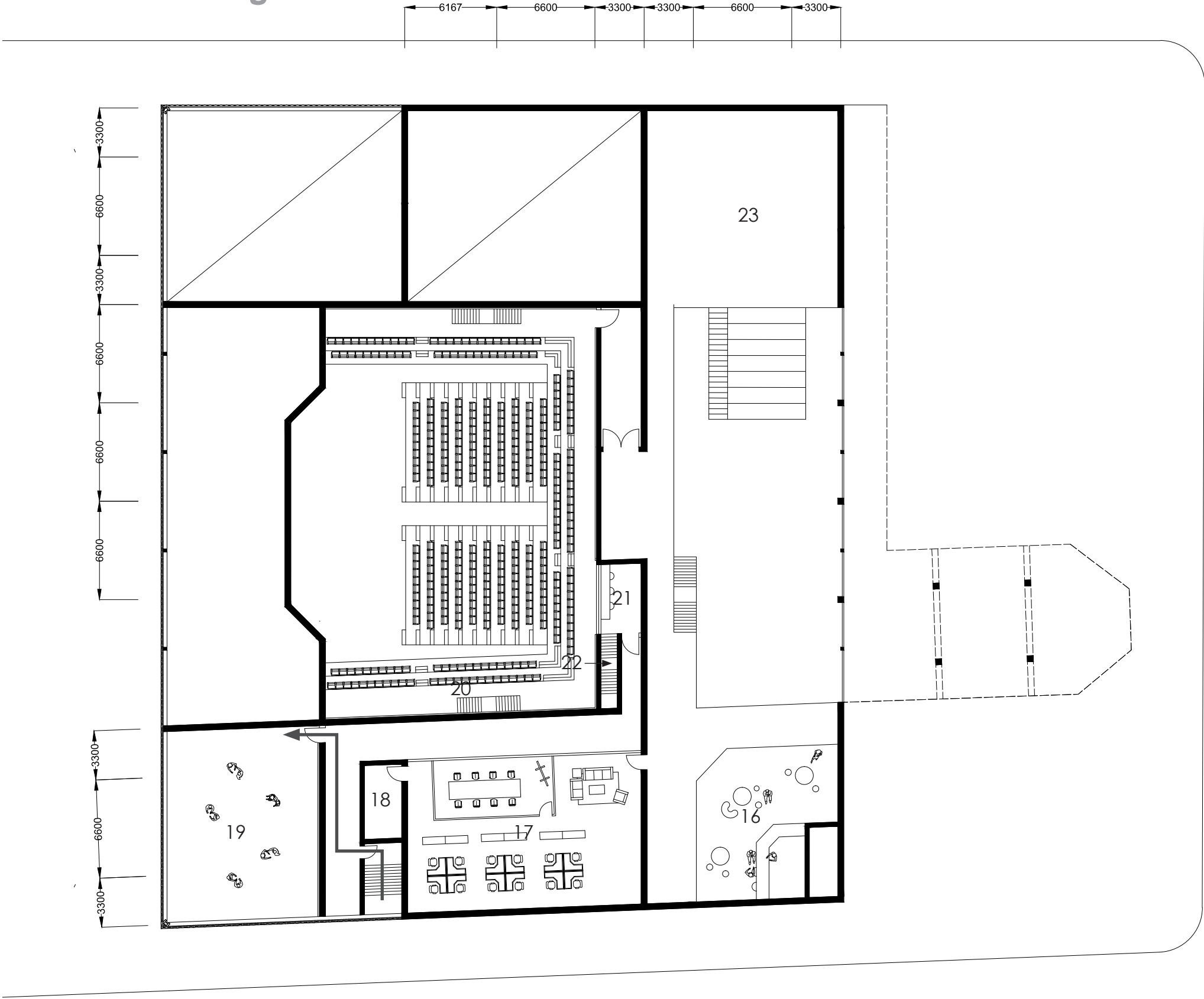
1. Entrance
2. Foyer Lounge
3. Reception
4. Cloak Room
5. Toilets
6. Foyer Steps (secondary performing space)
7. Small Studio Theater
8. Main Auditorium
9. Stage
10. Backstage
11. Changing Rooms
12. Green Room
13. Workshop
14. Scenic Deck
15. Dropoff



Extension Plan, 1f

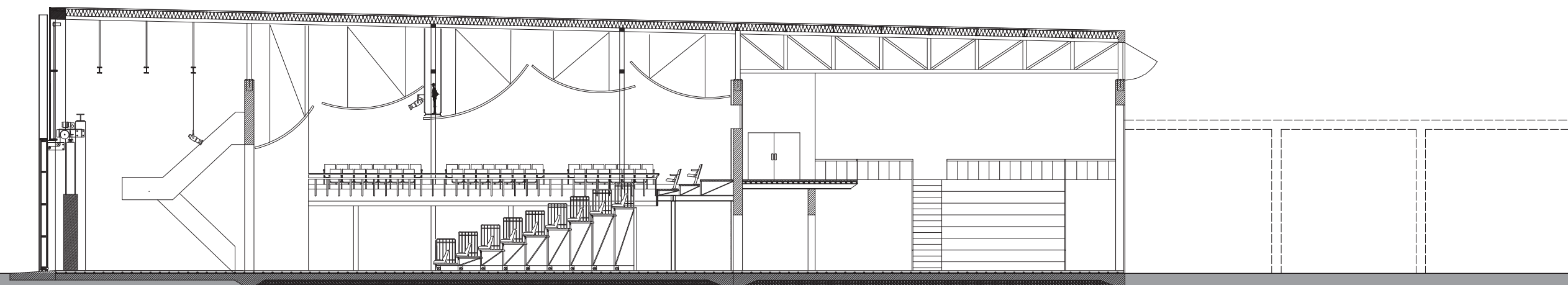
Converted Gas Station as Event Stage

- 16. Cafe
- 17. Offices
- 18. Toilets
- 19. Practice Room
- 20. Balcony
- 21. Control Room
- 22. To Catwalk
- 23. Exhibition





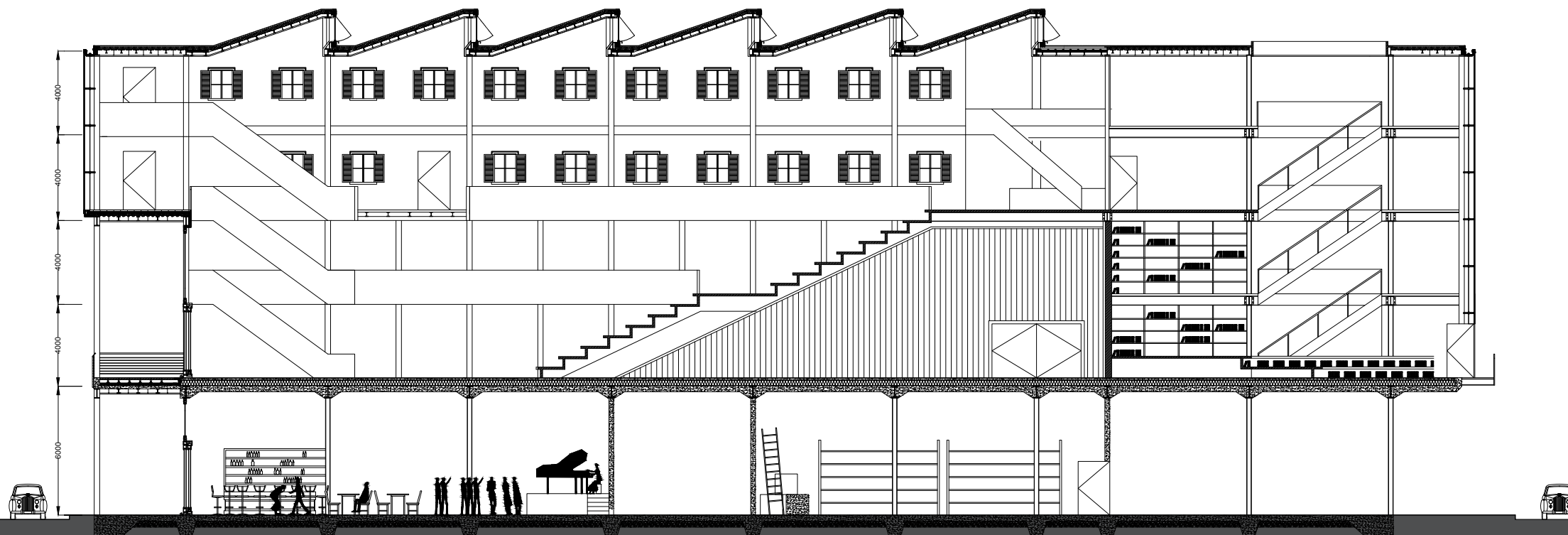
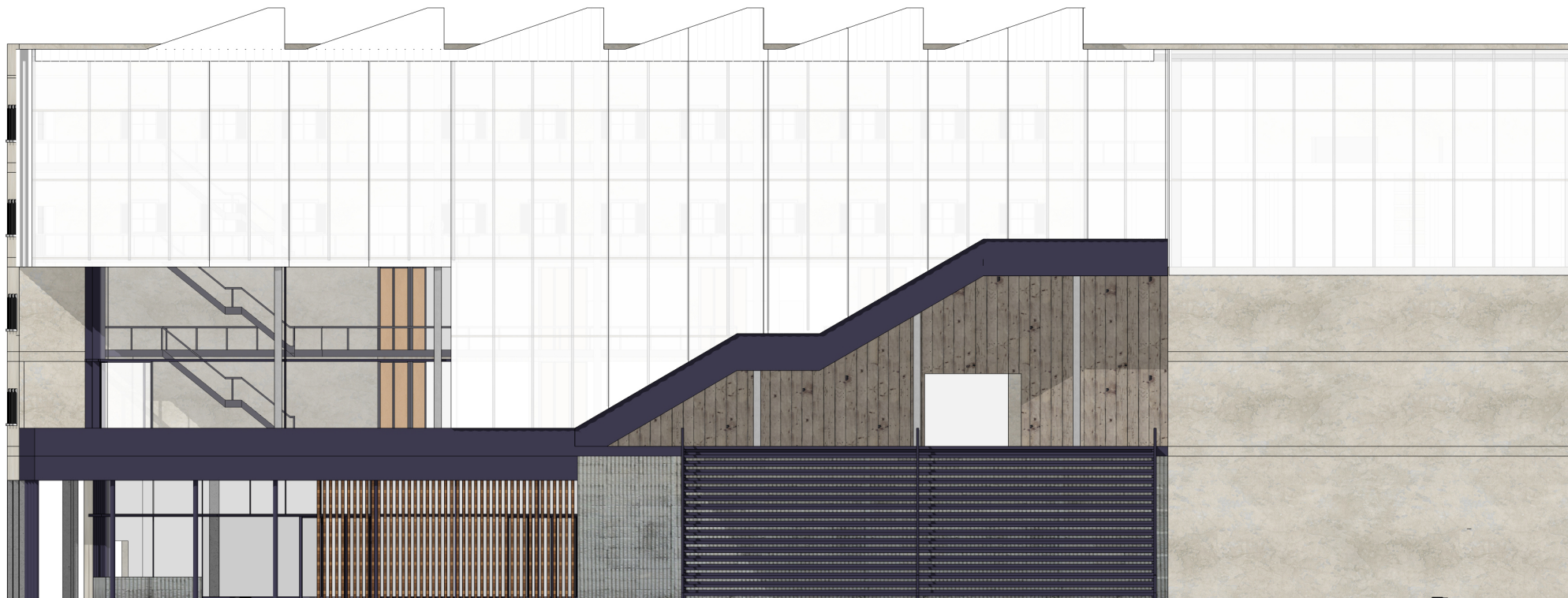
I



- Spatial Arrangements
- **Material & Performances**
- Structural Composition

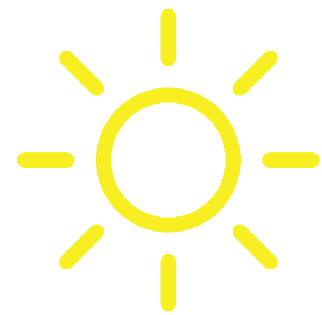
Materiality

East Facade



Performance

Improved Interior Micro Environment



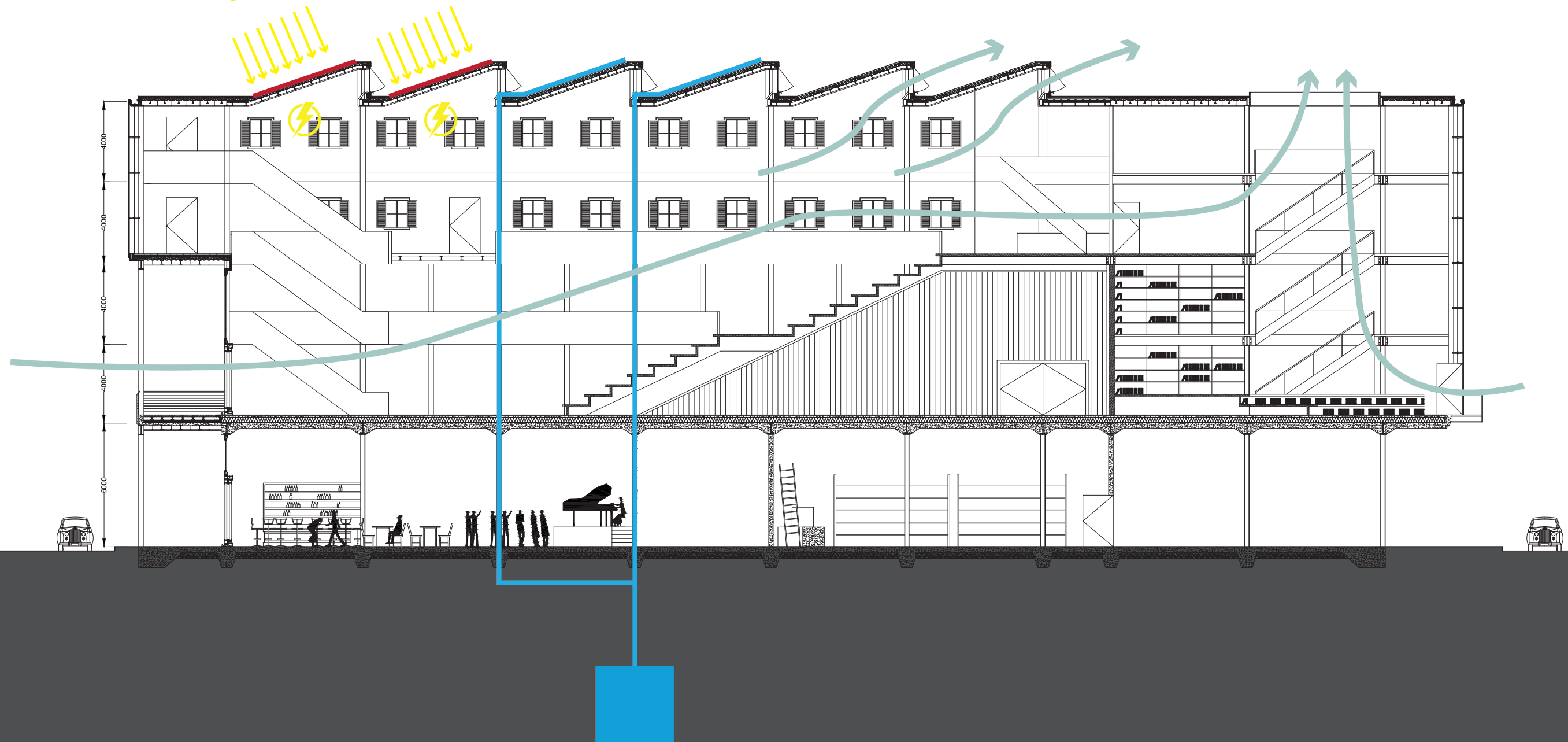
Solar Radiation



Rainwater Harvest

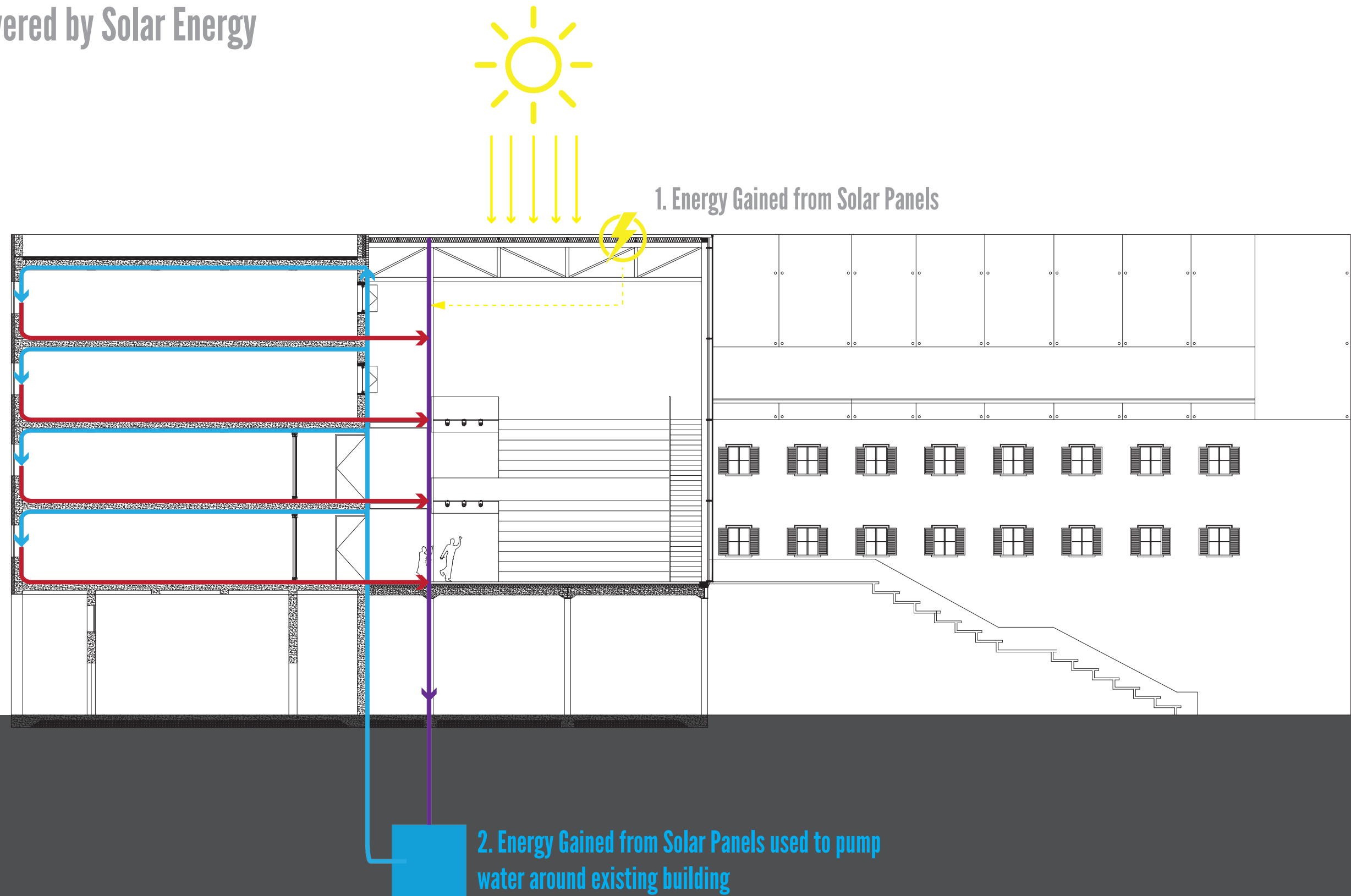


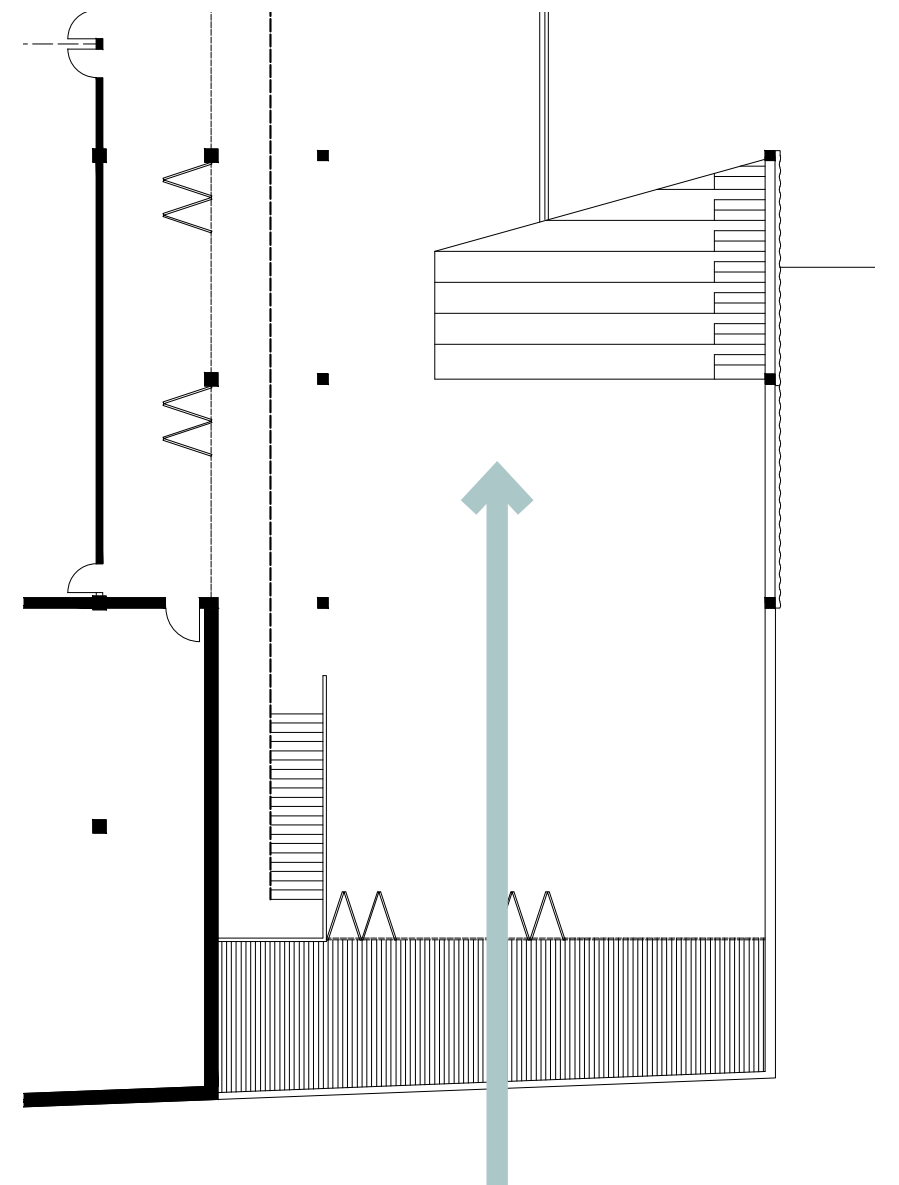
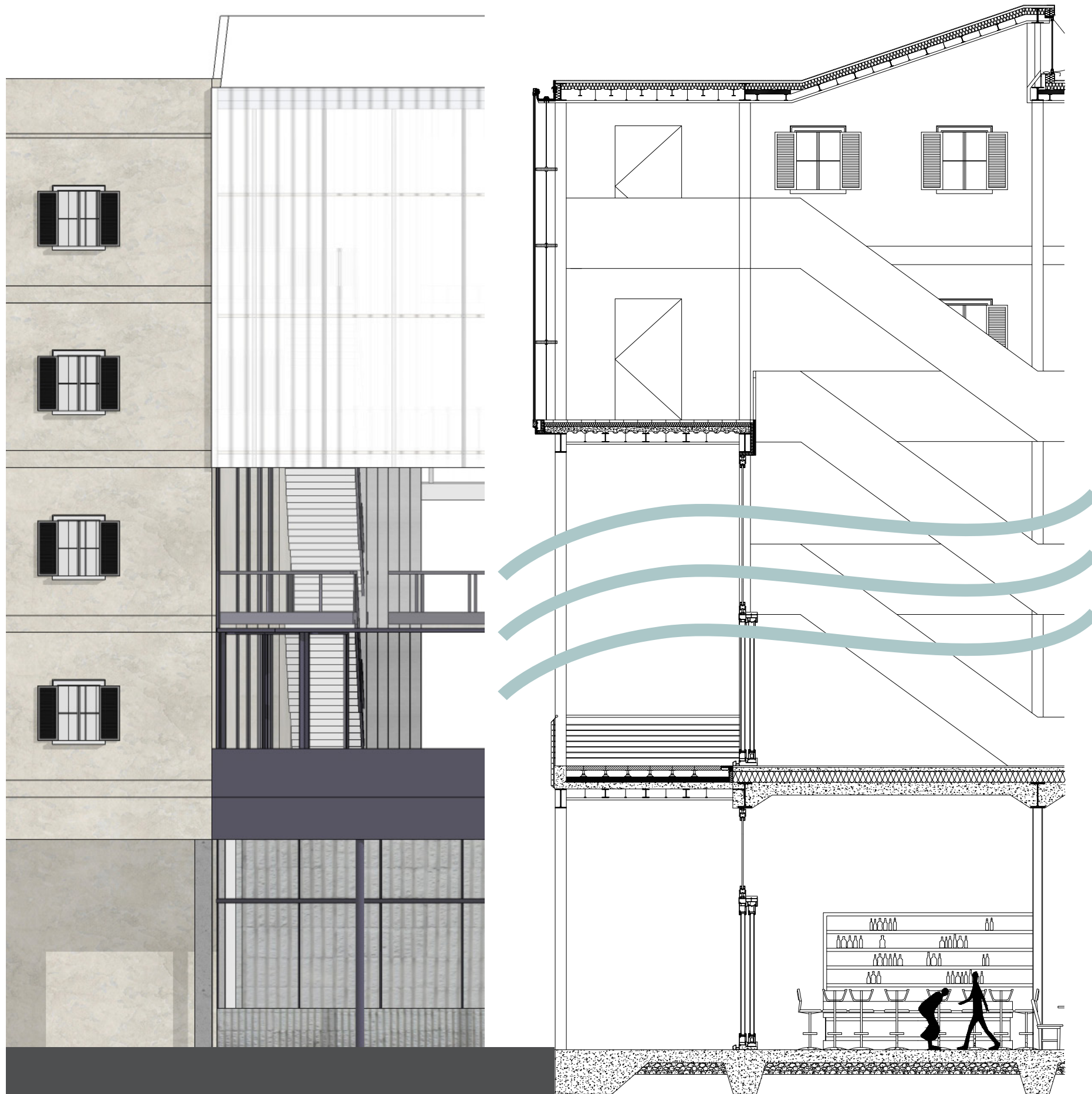
Ventilation



Performance

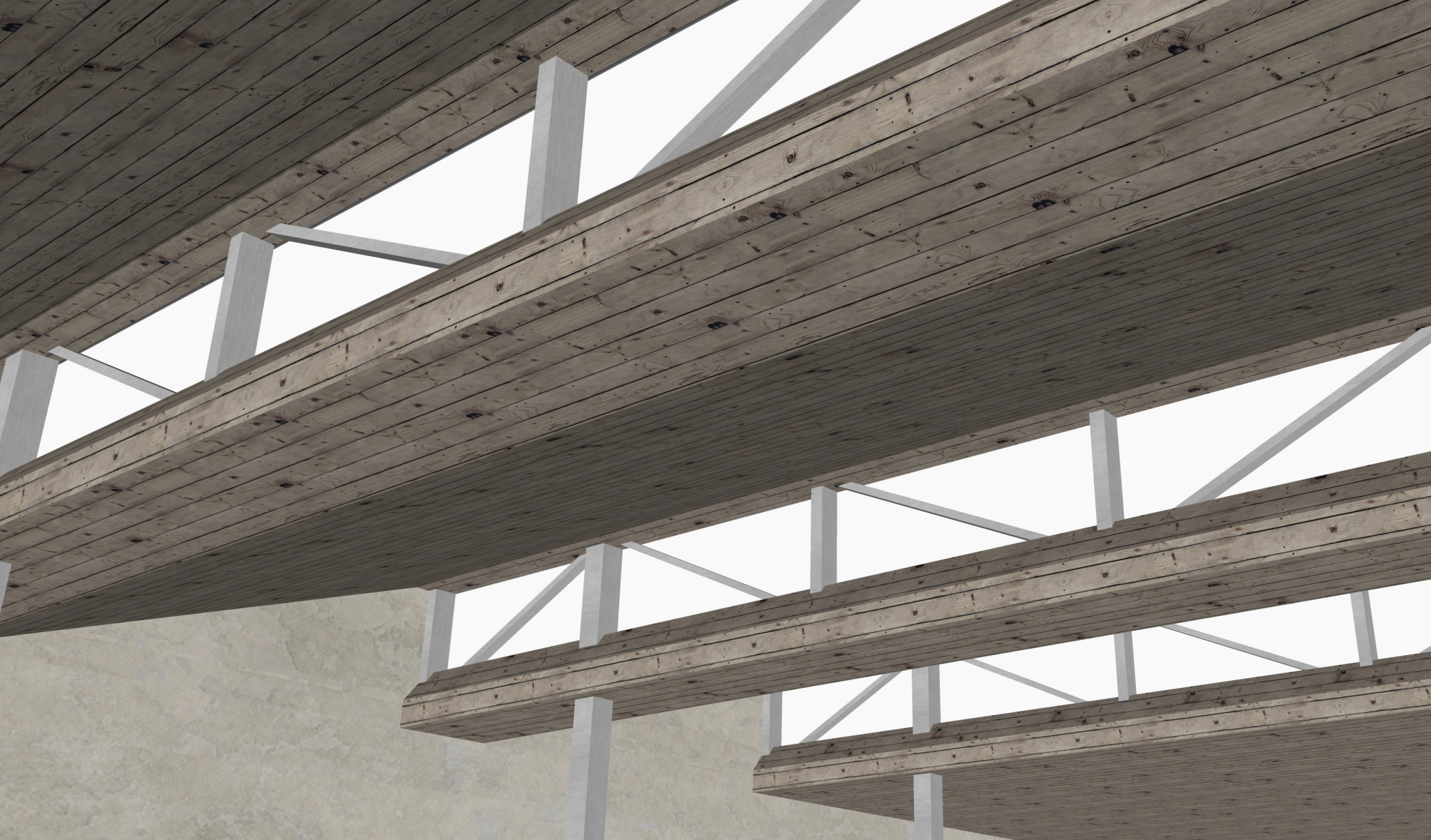
Water Cycle for interior Temperature regulation,
Powered by Solar Energy





Performance

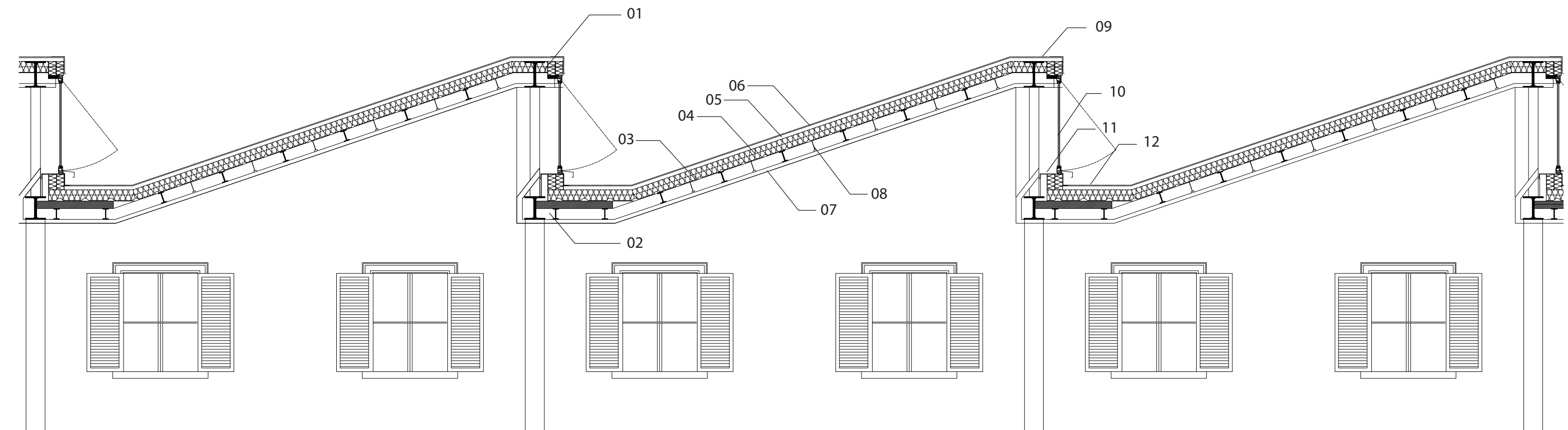
Operable Facade and Balcony for Ventilation



Performance

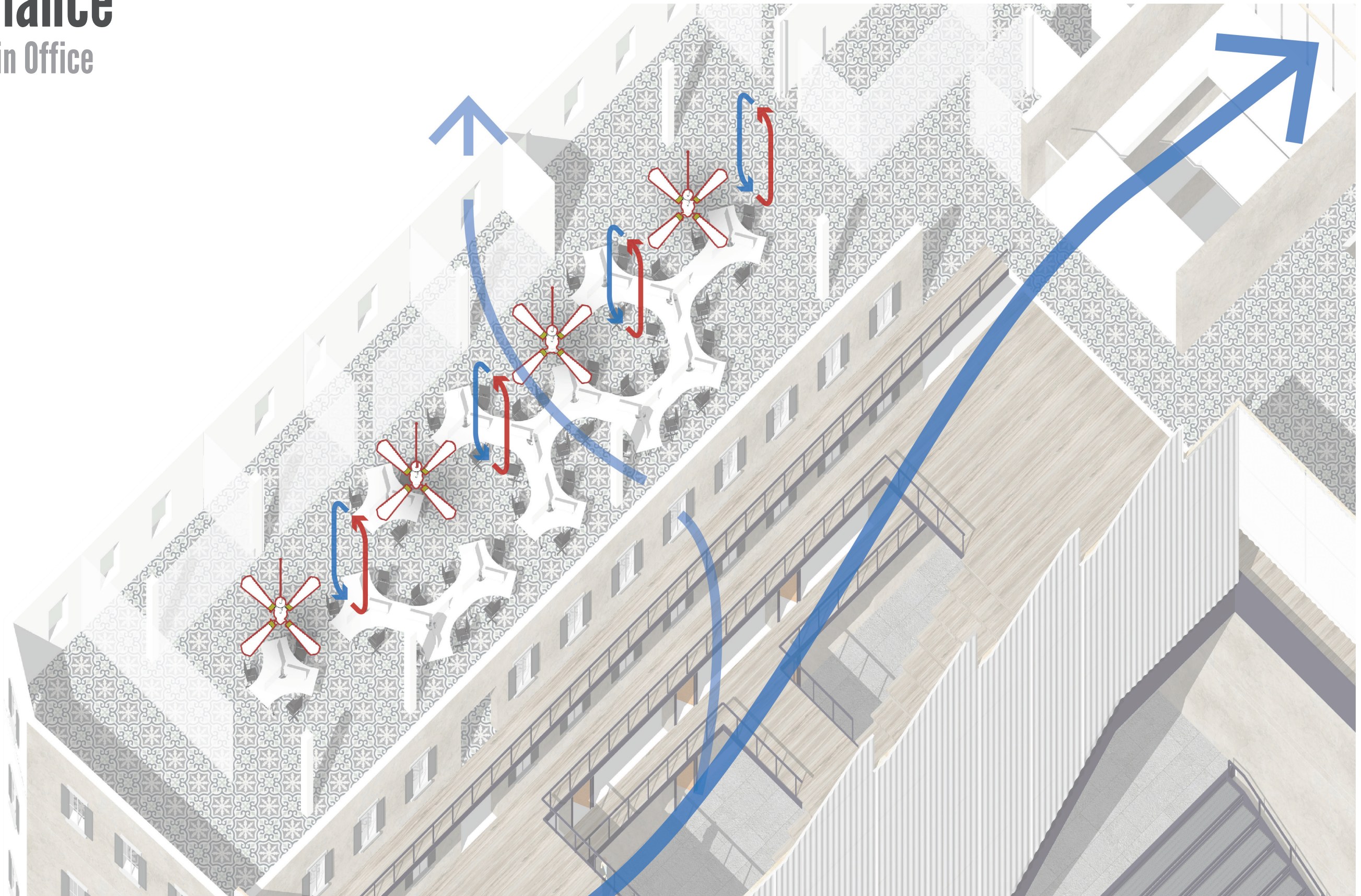
Saw-tooth roof,
Indirect Solar Gain and Ventilation Chimney

- 01 Steel Beam
- 02 Metal Purlin
- 03 Steel Tray
- 04 Photovoltaic Membrane
- 05 Thermal Insulation 100mm
- 06 Thermal Insulation 60mm
- 07 Pine Battens 40mmx 20mm
- 08 Fixings
- 09 Possible Lighting
- 10 PVC White Roof Membrane
- 11 Glazing
- 12 Gutter



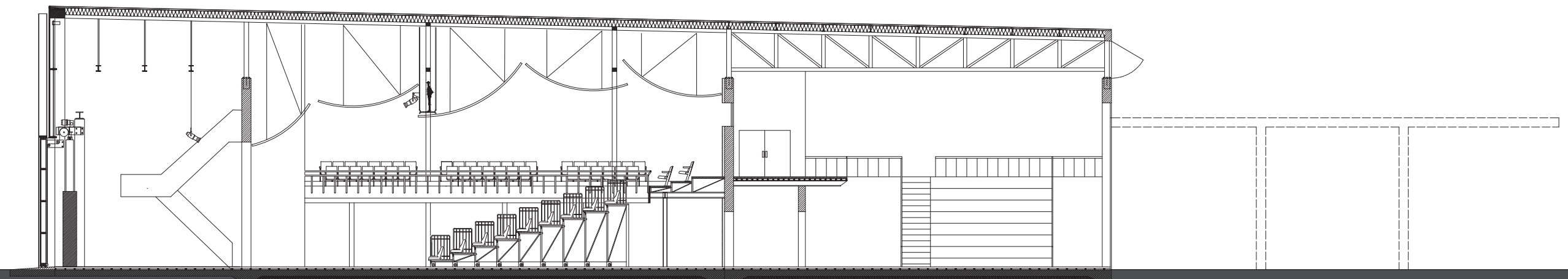
Performance

Ceiling Fans in Office



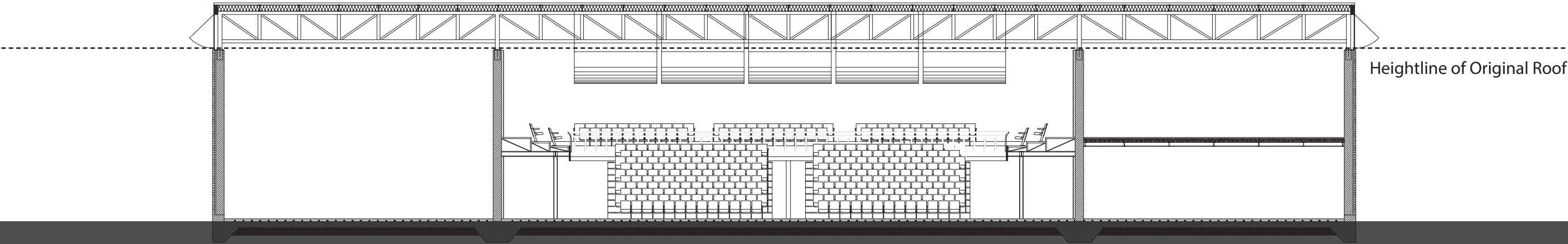
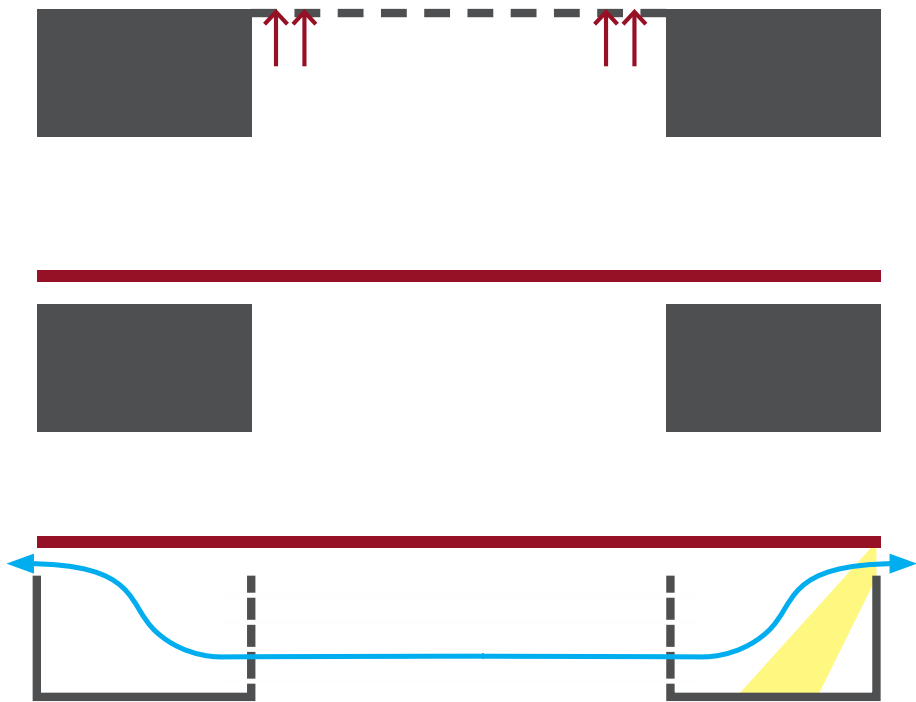
Materiality

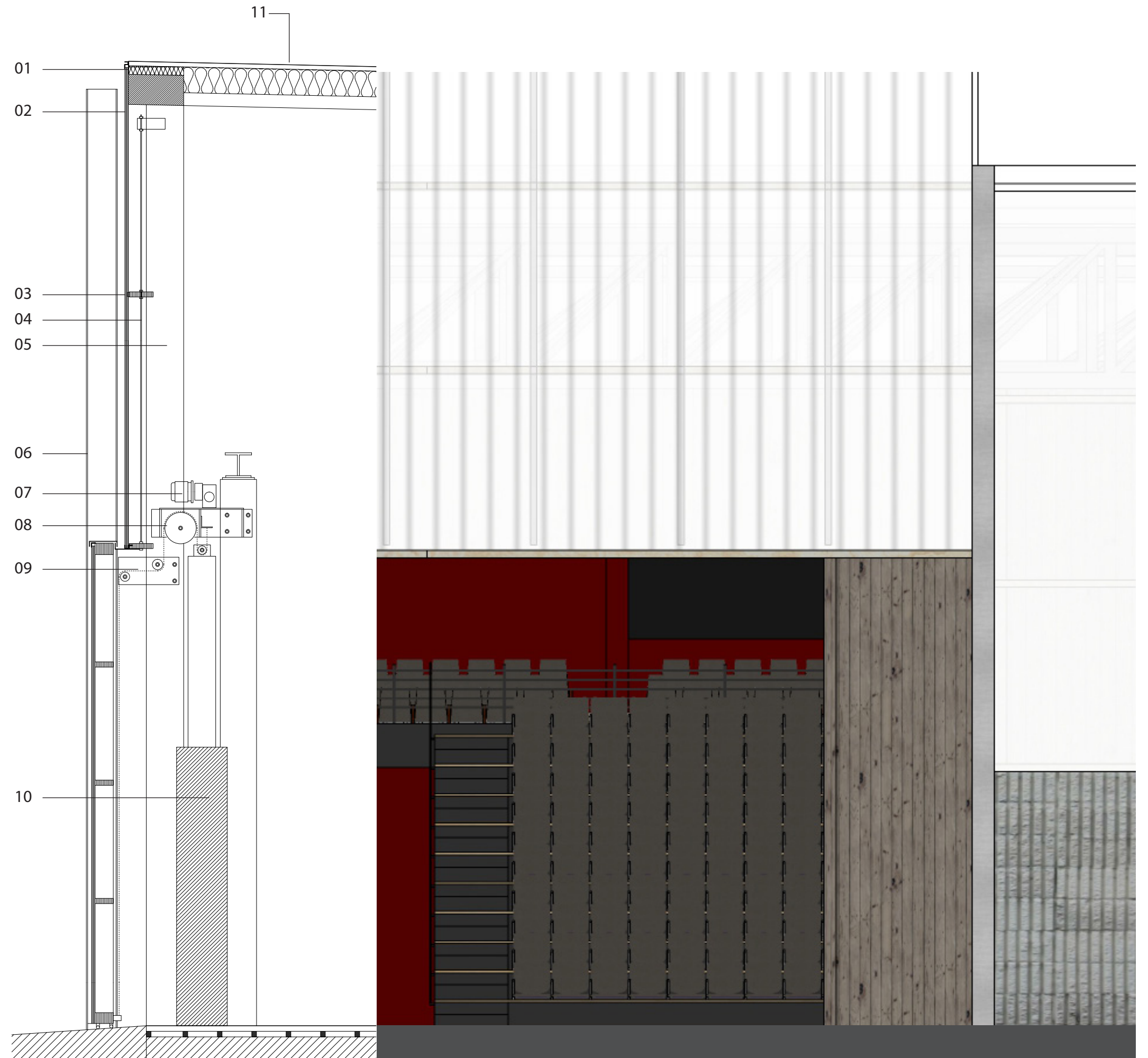
South Facade



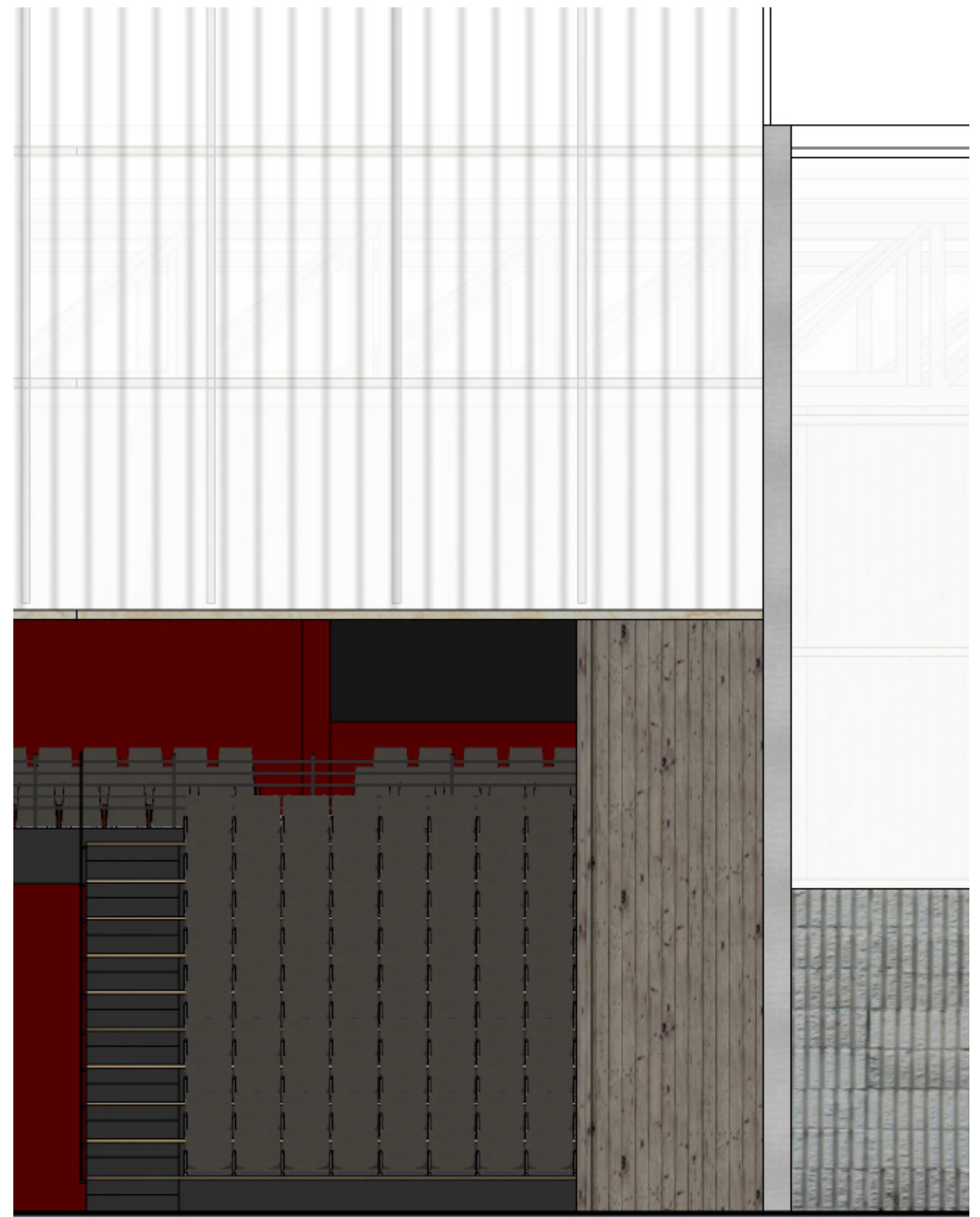
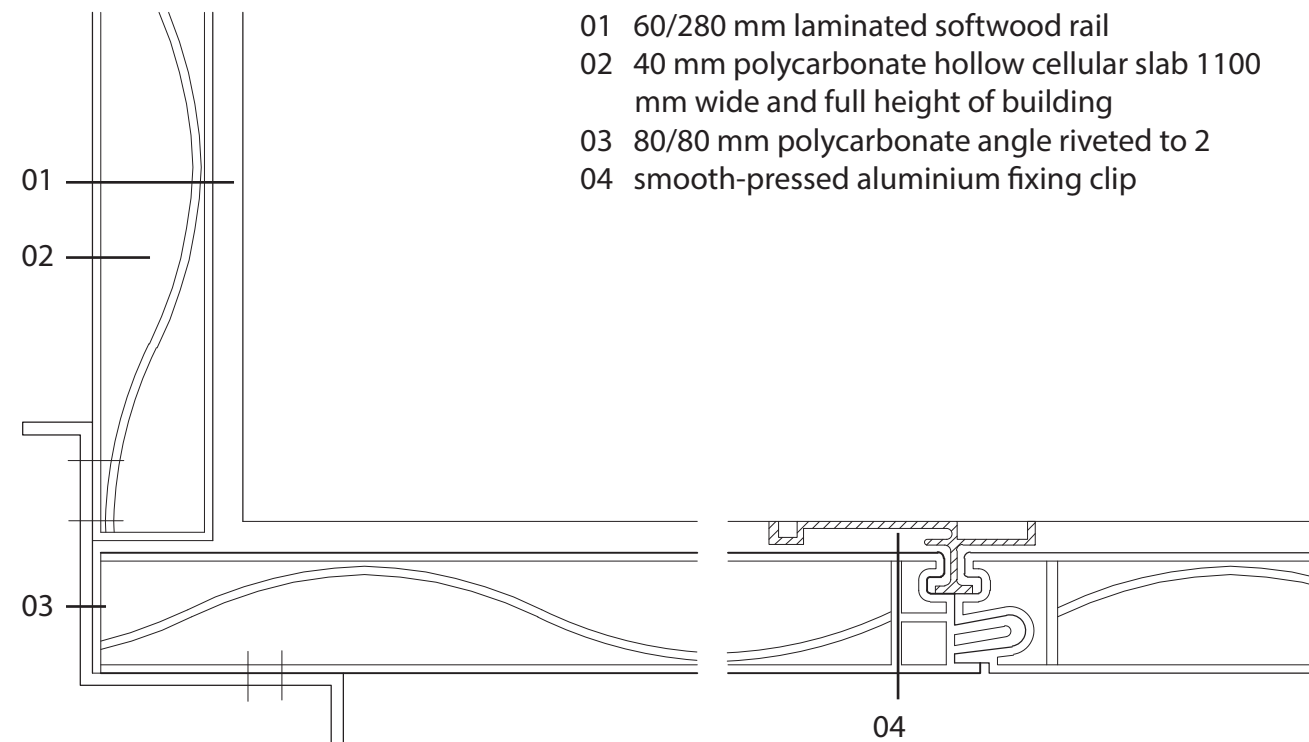
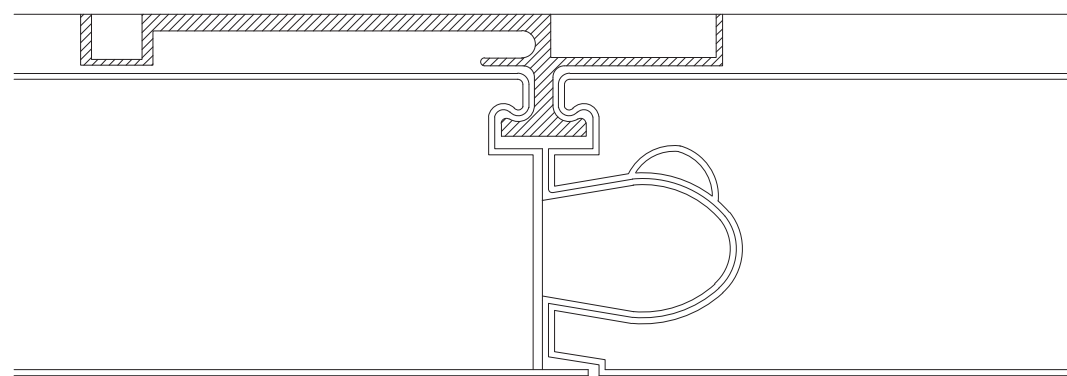
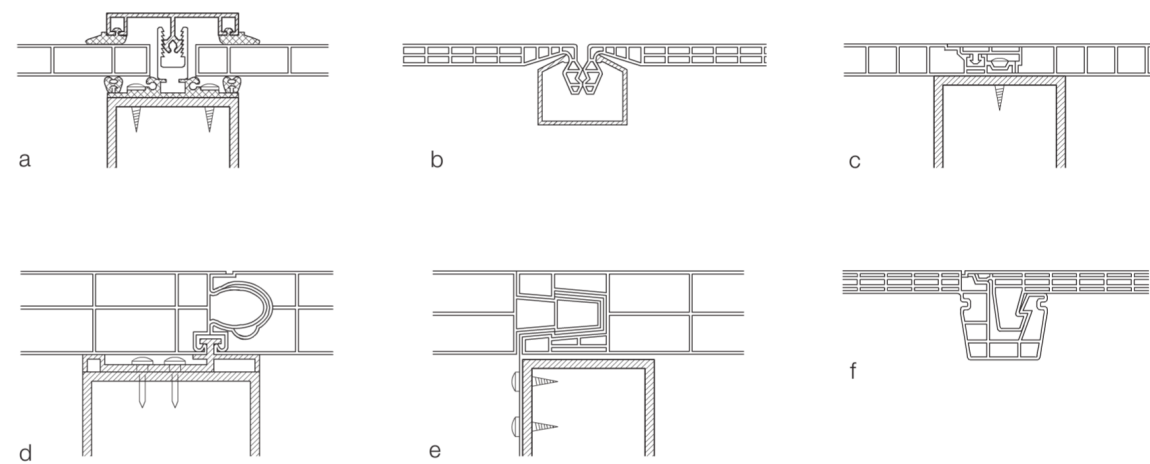
Performance

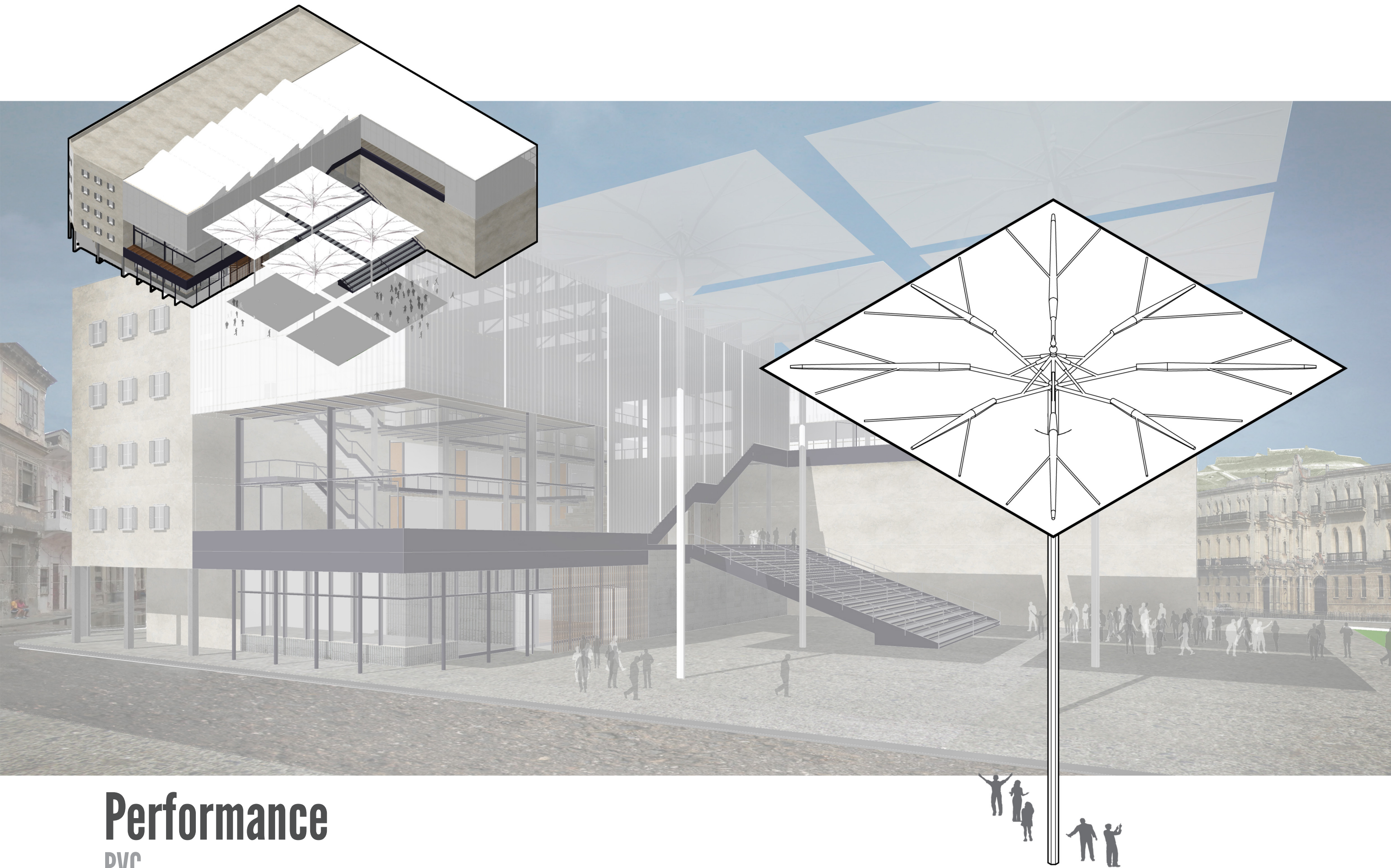
Elevated New Roof



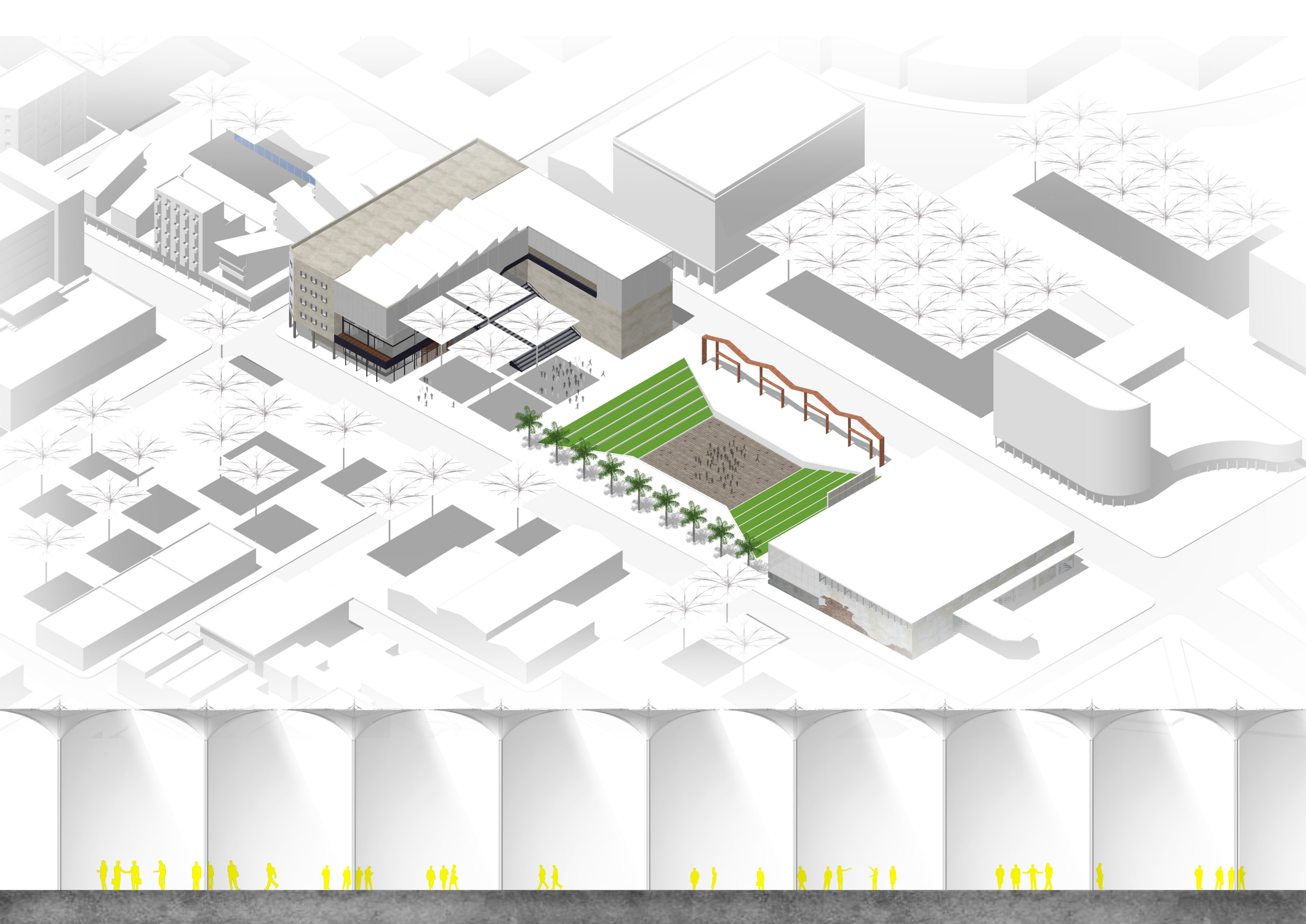


- 01 Sheet aluminium capping, bent to suit,
2mm, semi-machined finish
- 02 Polycarbonate multiple-websheets, 40x500mm
U-value= 1.65 W/m²K
- 03 Glulam rail, spruce, 60x280mm
- 04 Round steel bar, 12mm dia
- 05 Steel Column
- 06 Steel Section/ Track
- 07 Motor for vertical lift door
- 08 Door Driveshaft
- 09 Door Drivegear
- 10 Counter-weight
- 11 PVC White Roof Membrane





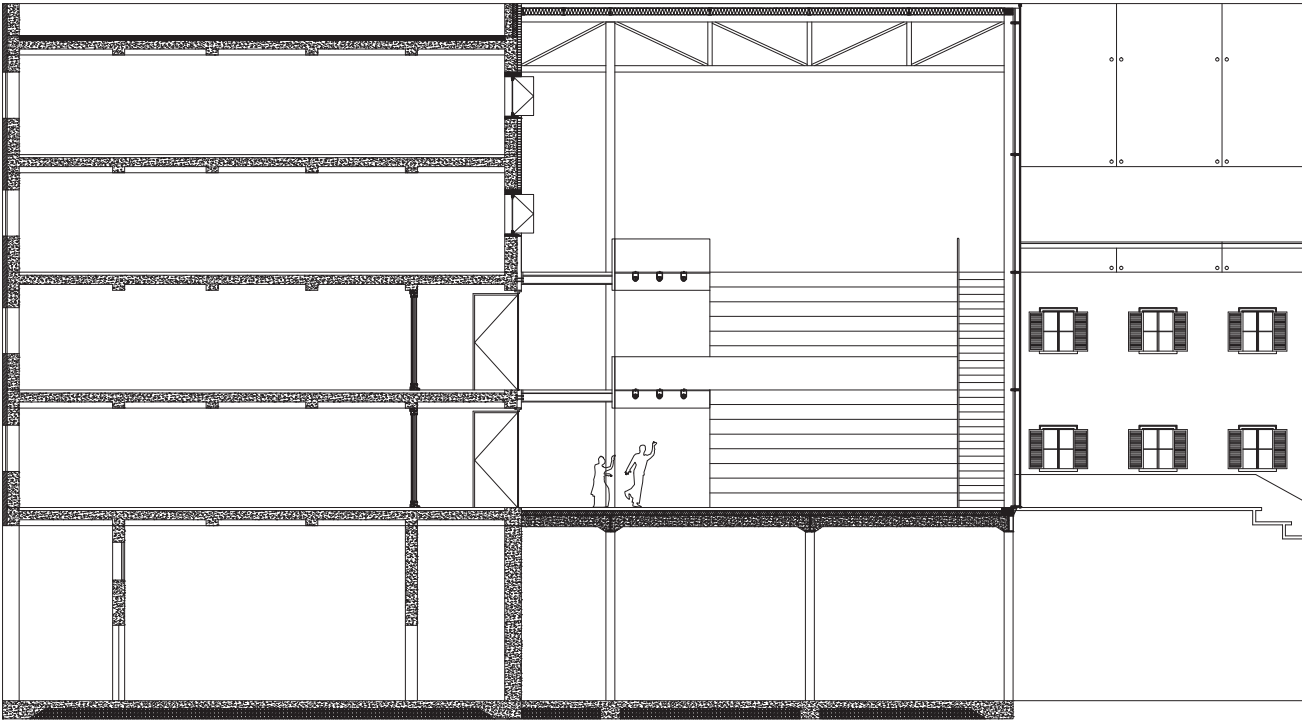
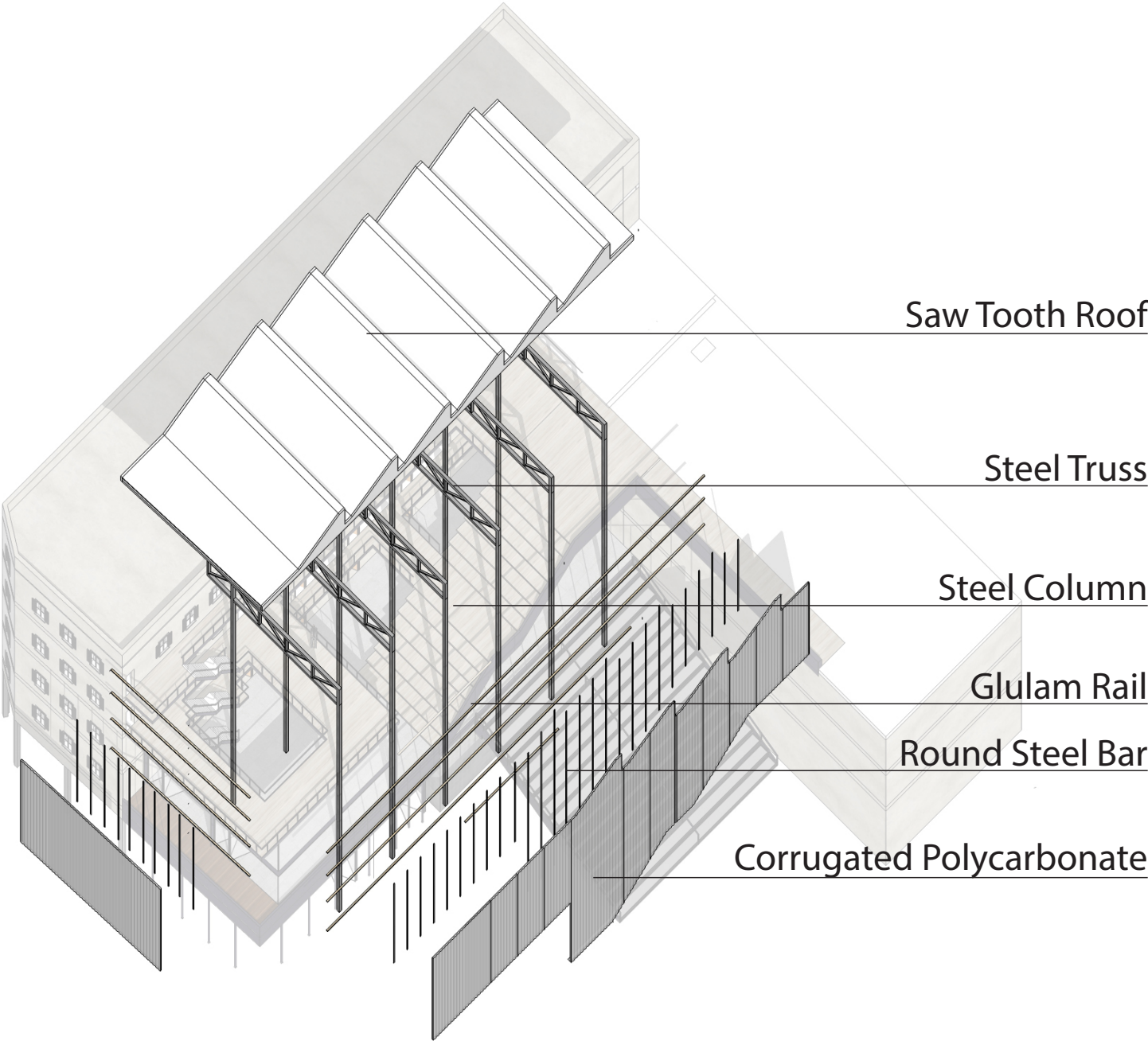
Performance
PVC



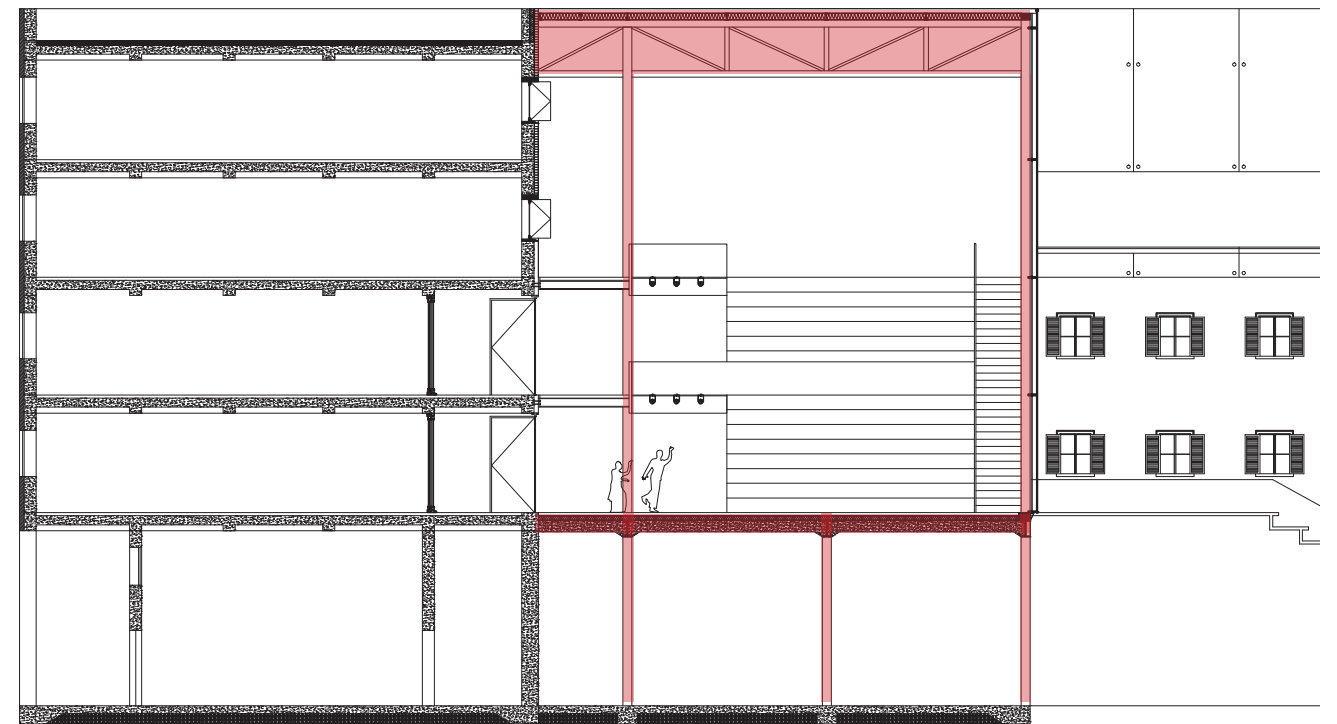
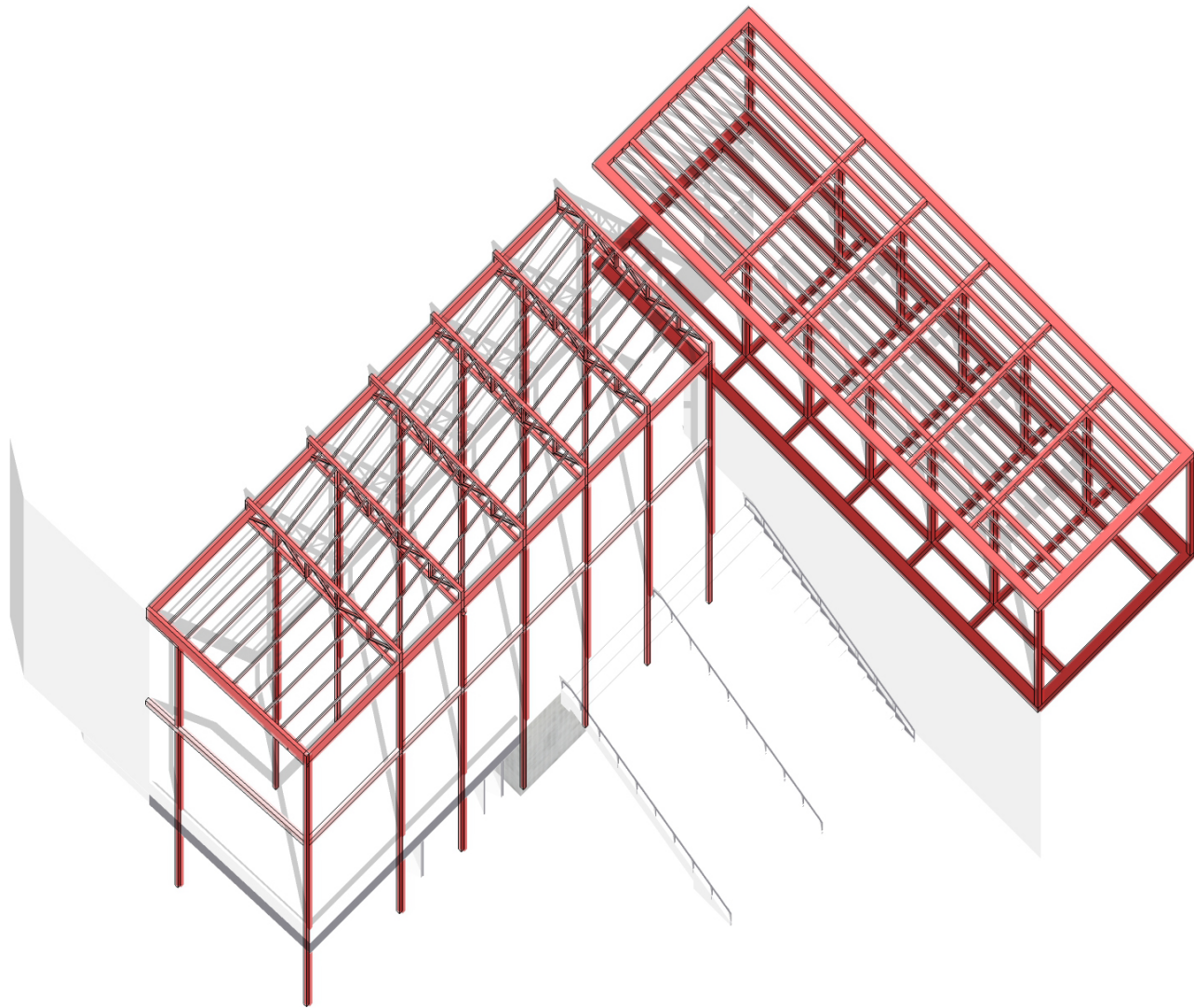
- Spatial Arrangements
- Material & Performances
- **Structural Composition**

Structural Composition

Cultural Institute

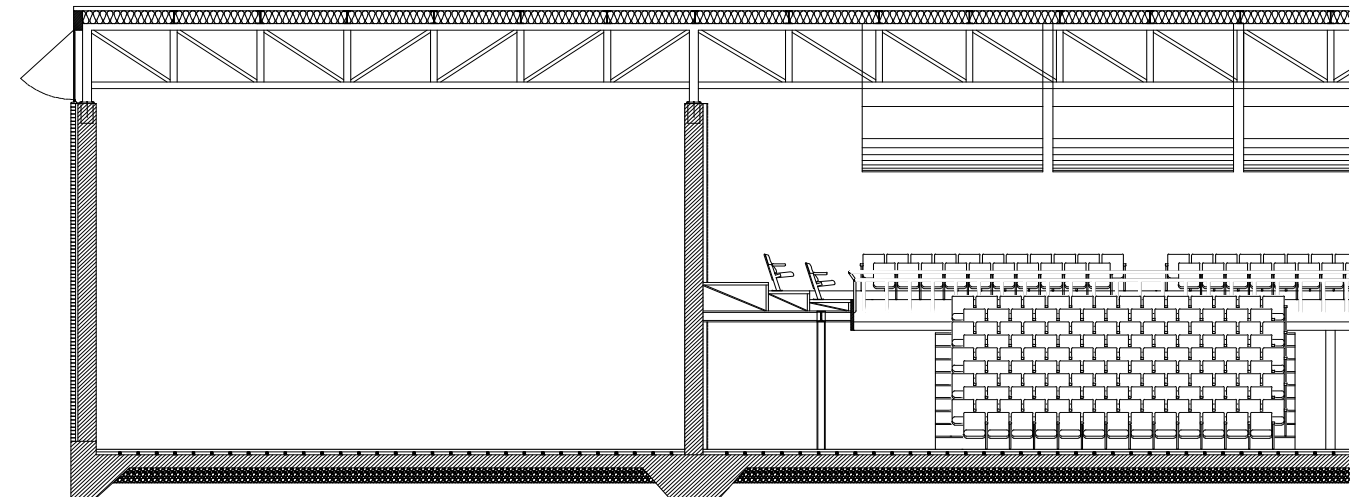
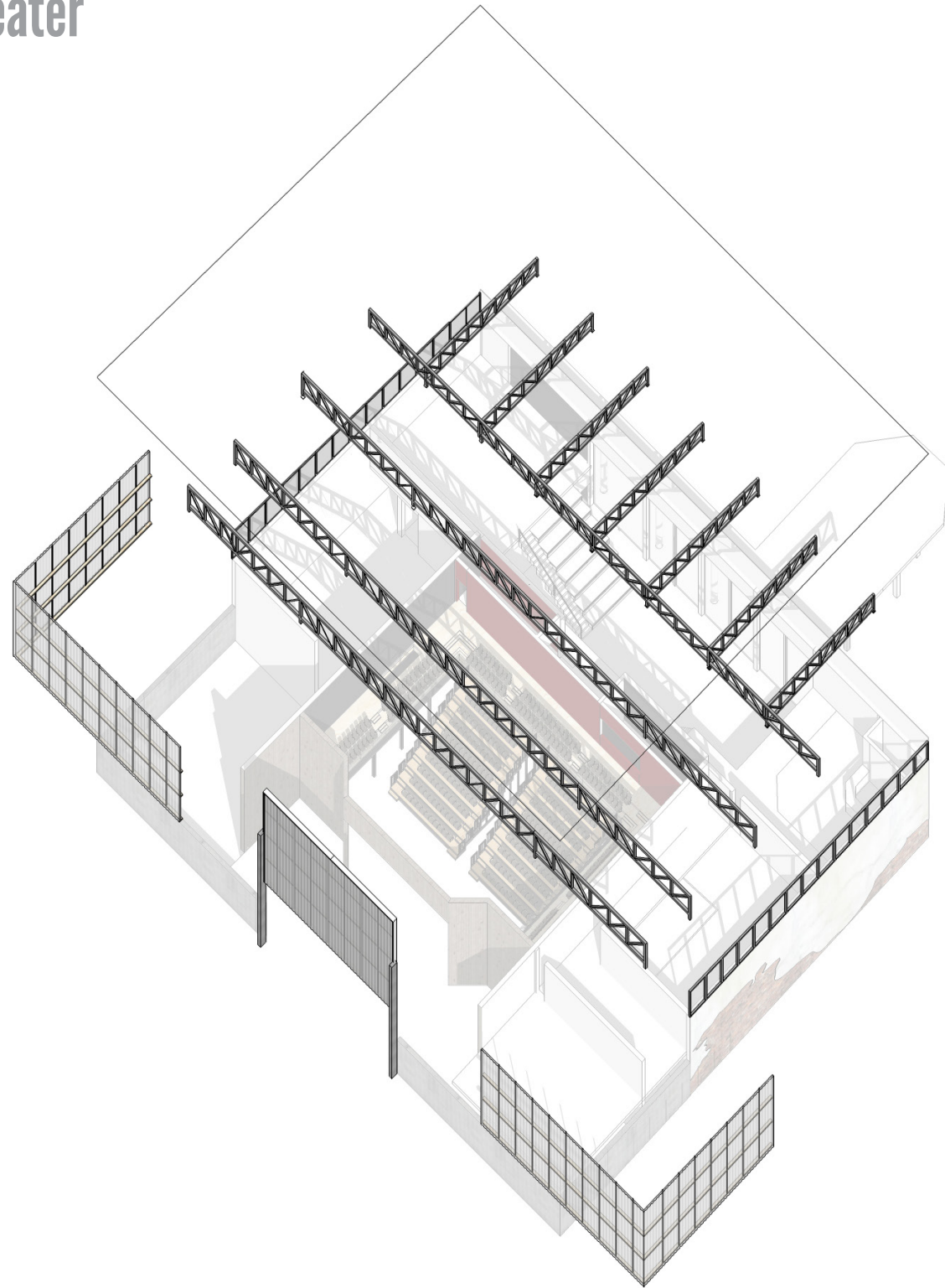


Structural Composition

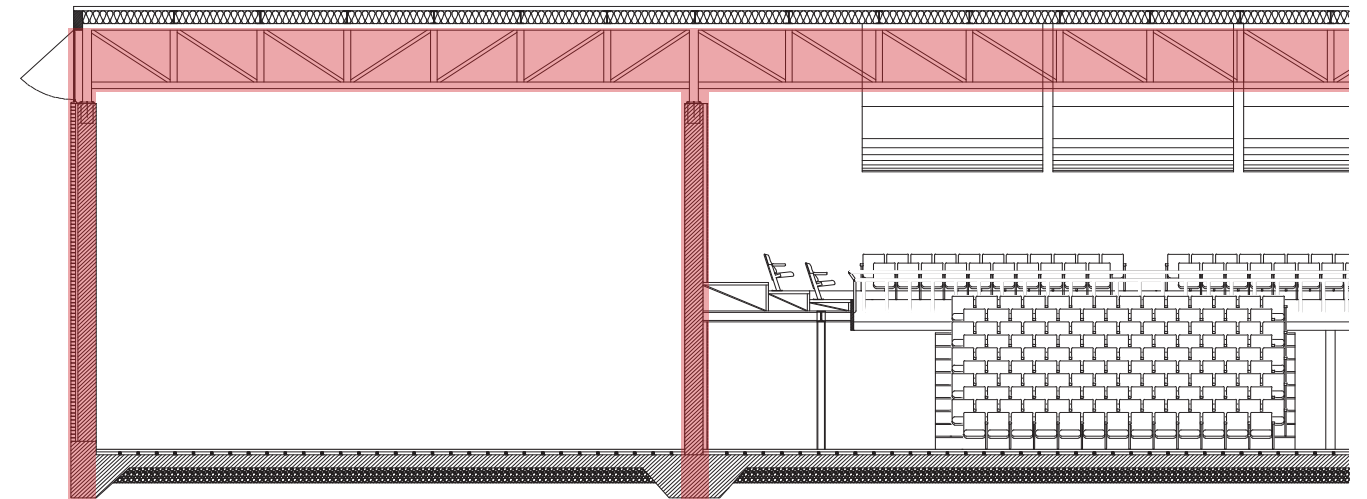
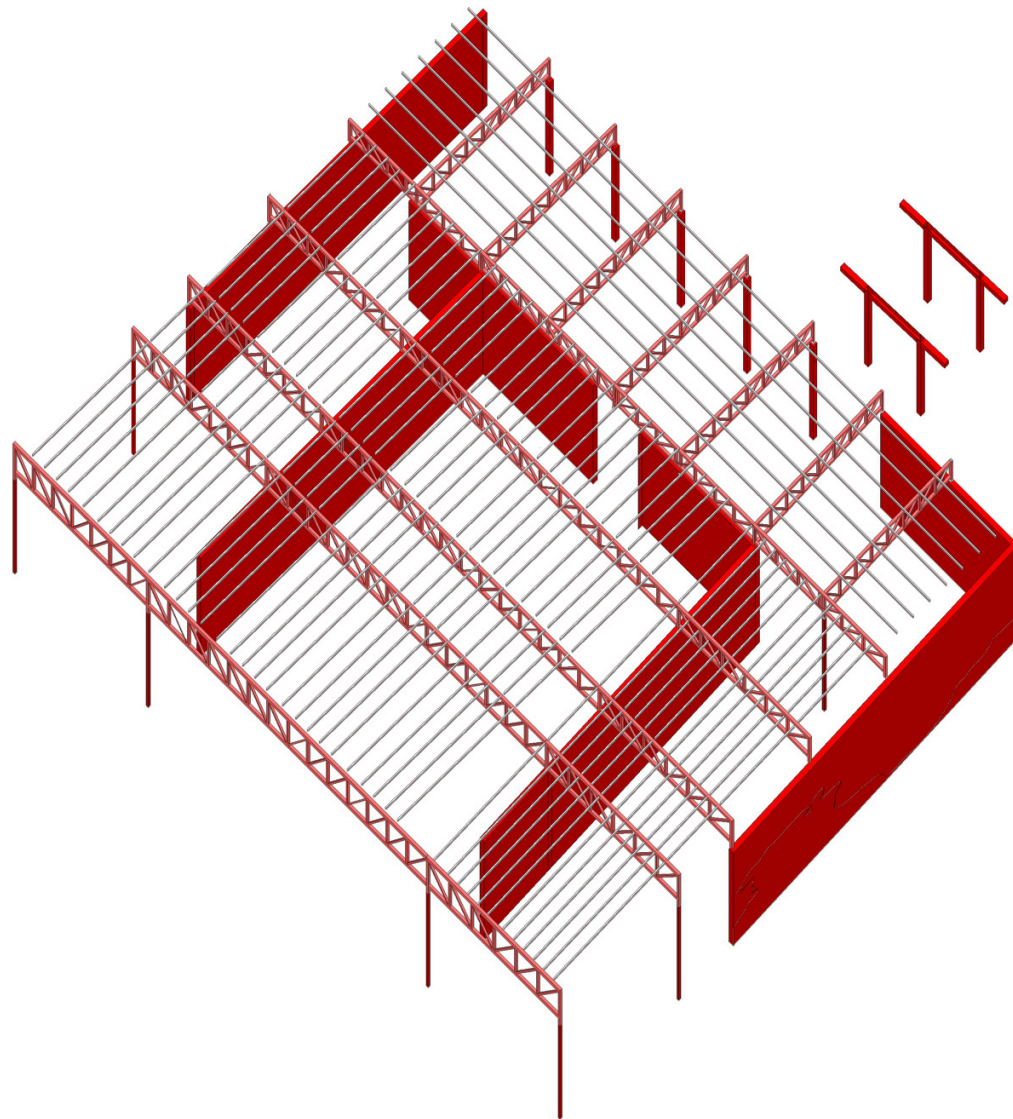


Structural Composition

Theater



Structural Composition



05

Future Implication

**How Expansion of Cultural District influences Havana's
Urban development Process**



in 20 Years, When Cultural District achieved a balance between Practical Space, Event Stage and Local Business.



