The House of Fairy Tales

A History as a fairy tale for European Dream

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Public Realm_Brussels
Delft University of Technology

Yea Jung Choi

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02. Situation (Change Heirarchy, Change Scale)
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08. Structure / Materiality
09. Building Performance
10. Perspectives

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‘European Dream’

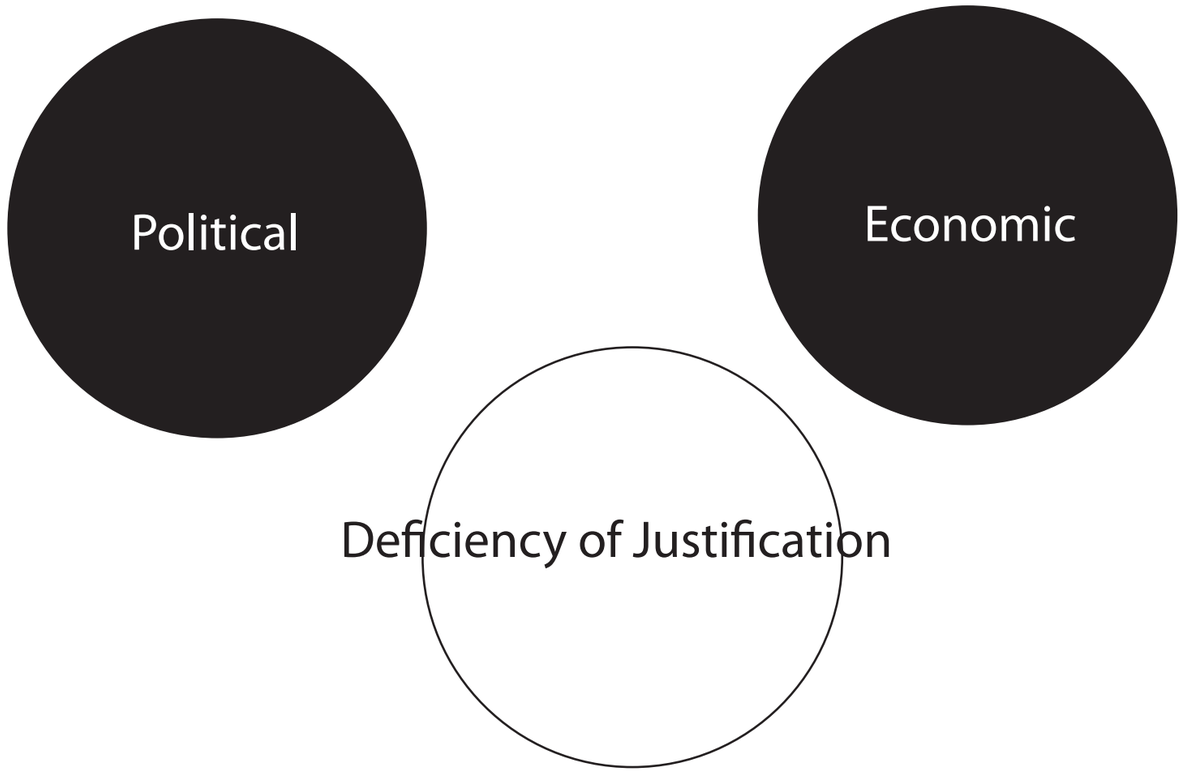
‘American Dream’ from ‘The New World’ to be declined as an ‘Old Vision’
‘European Dream’ from ‘The Old World’ to be emerged as an ‘ New vision’

As defined by Jeremy Rifkin, European Union as the first postmodern government body with economical superpower rivialing a potential to be a world leading political power

Deep play;
Connectivity;- Dutch people's quest for gezelligheid (meaning a cozy, inclusive environment)
Sustainable Development;
Respect for Human Right etc.

The New Vision, ‘European Dream’ being drived from ‘The Old World’s Various Historical Background’

‘Brussels’ as a symbol of European Dream,



‘Brussels’ bacame a transnational capital which was built on two pillars, Political, and Economic.
As the tales of King Auther’s Sword made them great kingdom.

Brussels has European Union without European Dream, thus, Impatus achievement caused deficiency of connectivity and sustainable devalopment, which considered as a essential element for the new vision.

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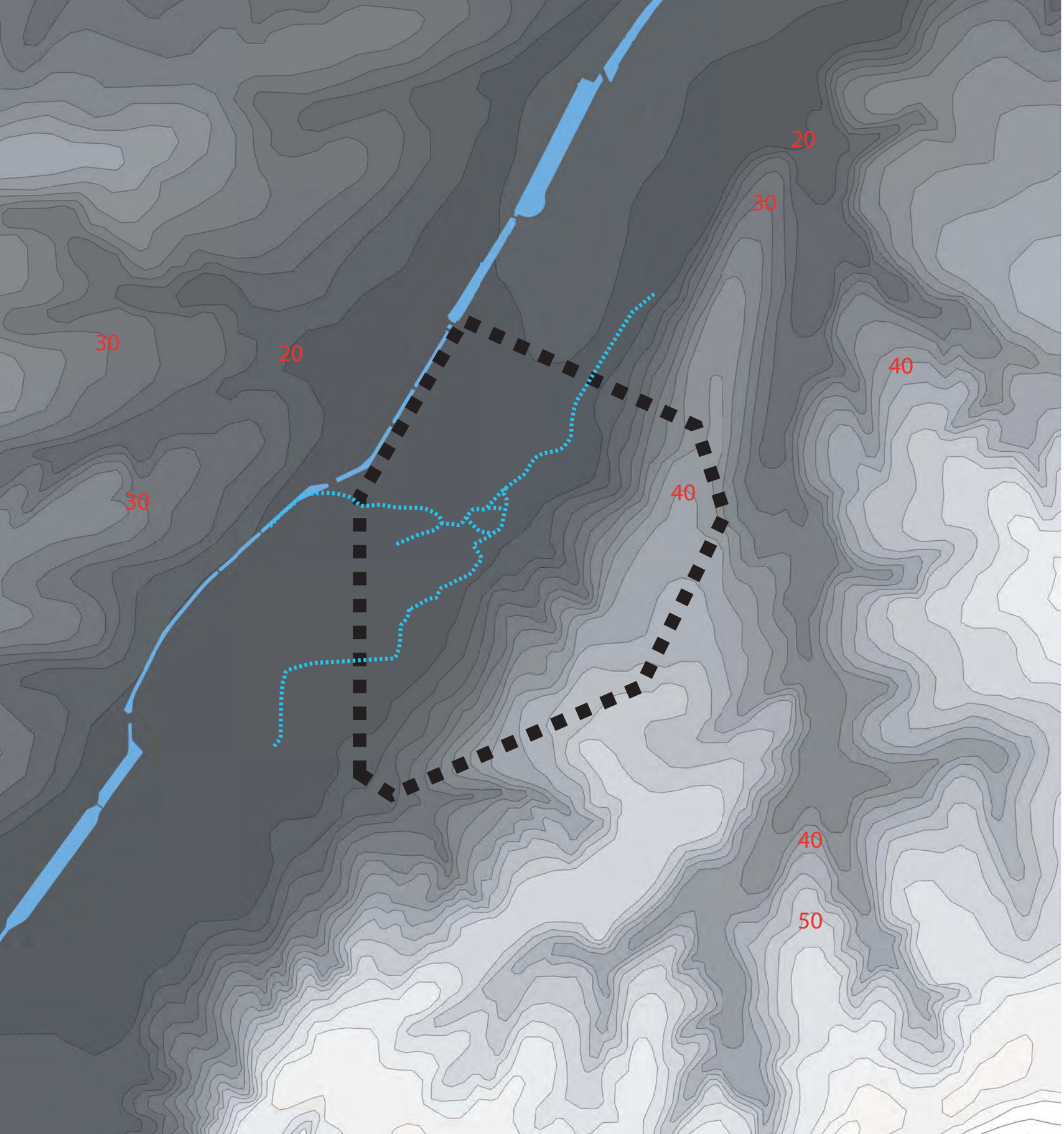
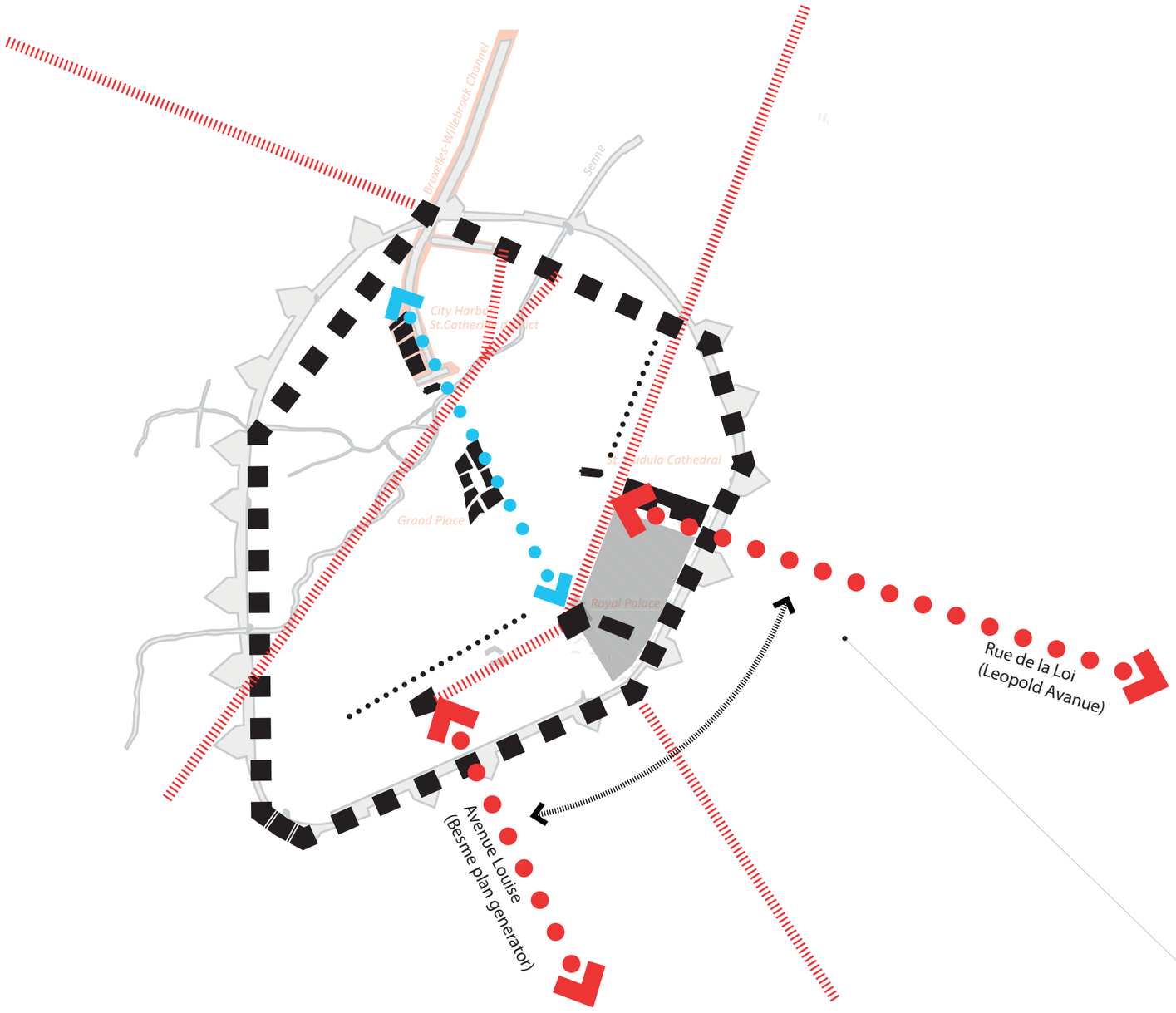
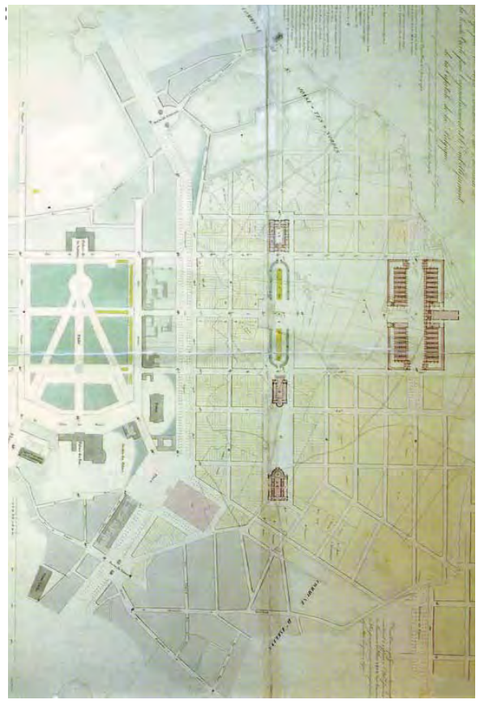


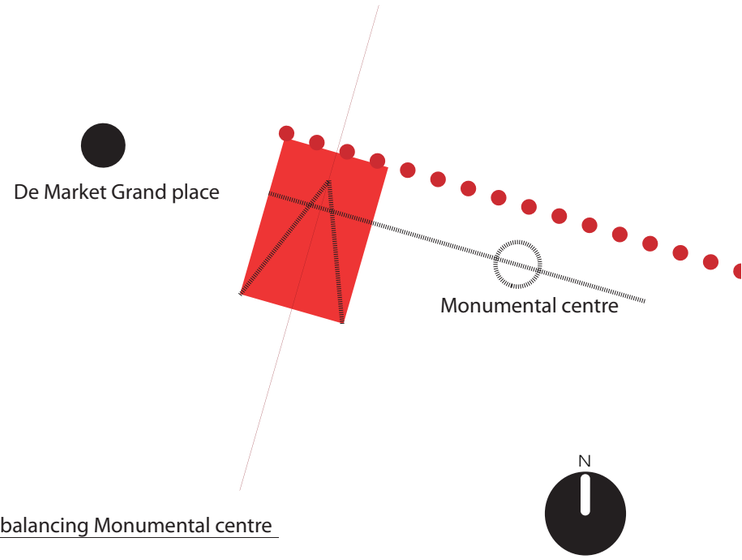
TOPOGRAPHIC DIFFERENCE

Brussles grows on the right side of the zenne river





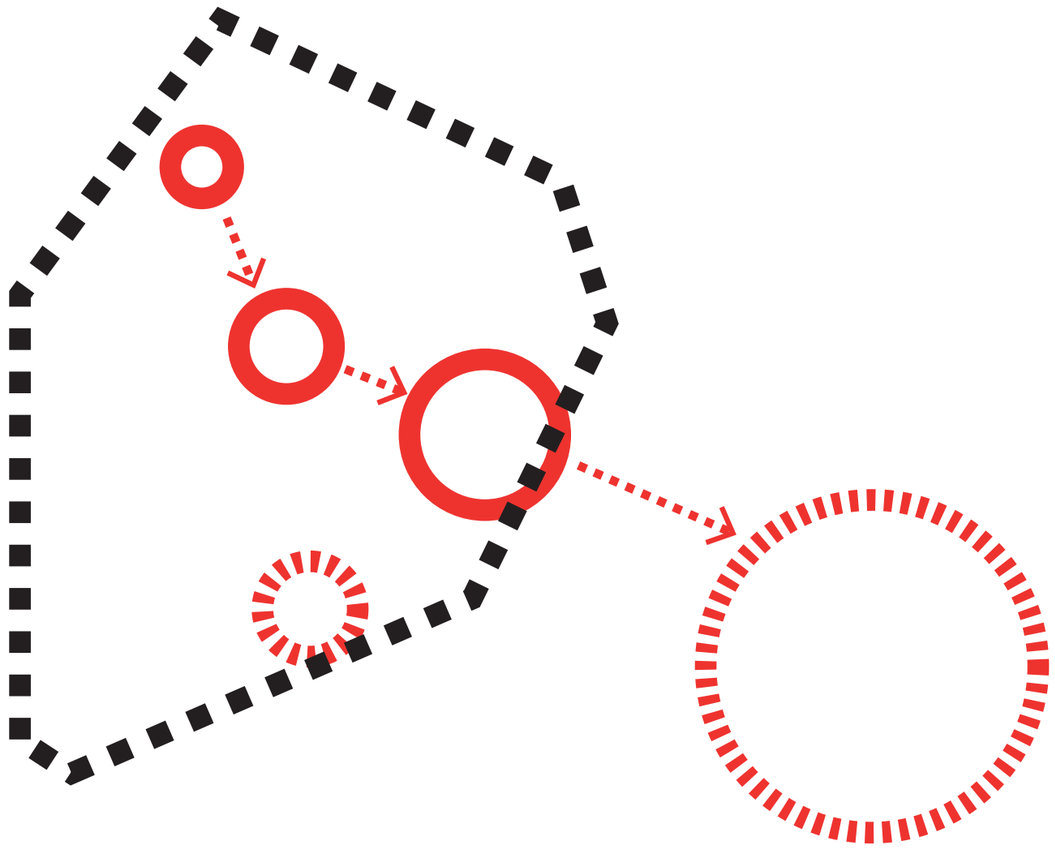
Suburban expention project for Quartier Leopold by Tilman-Francois Suys in 1838



Counter balancing Monumental centre

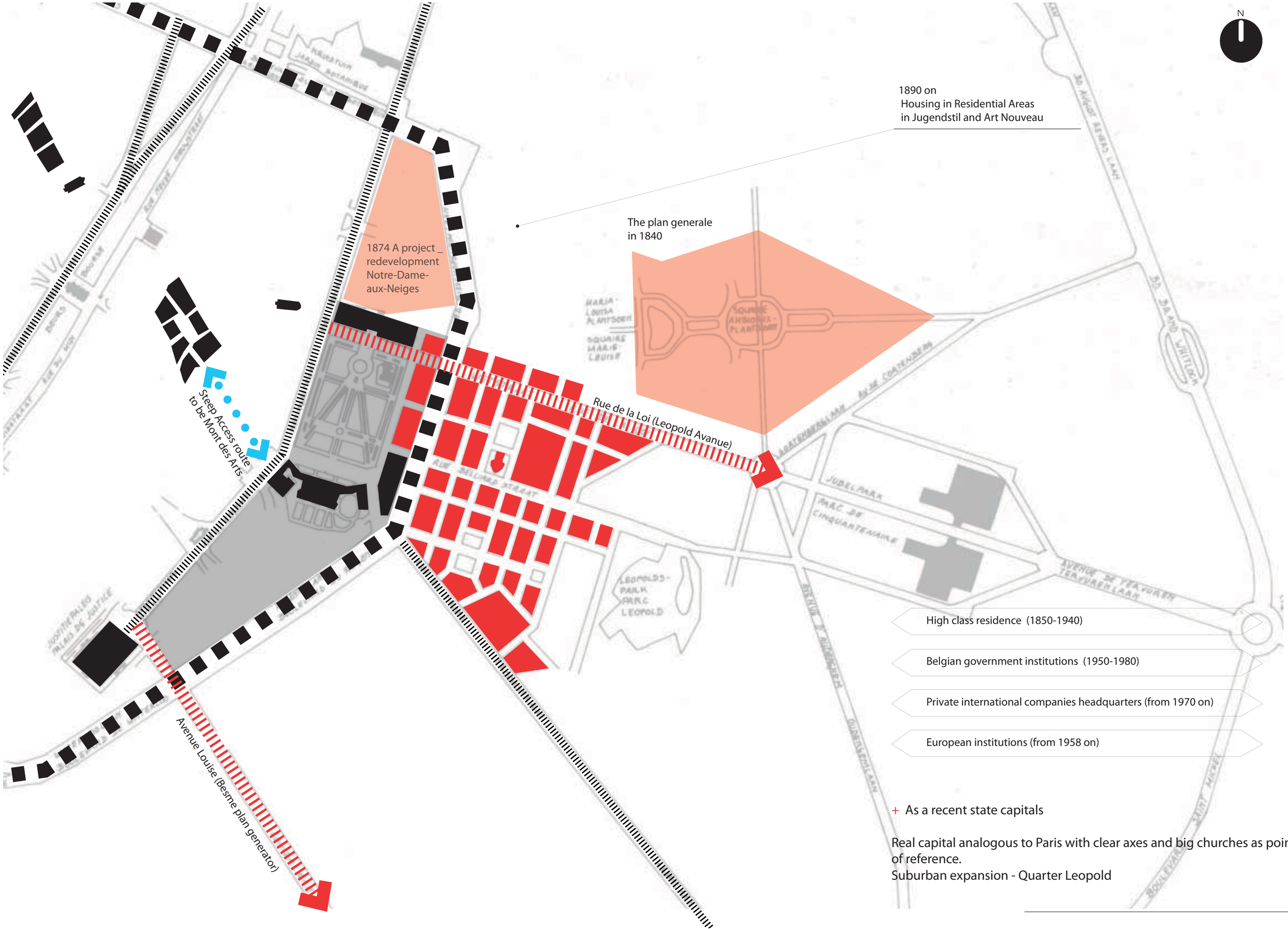
\+ In the nineteen century

Real capital analogous to Paris with clear axes and big churches as points of reference.
Suburban expansion - Quarter Leopold



HIERARCHY AND SCALE CHANGES

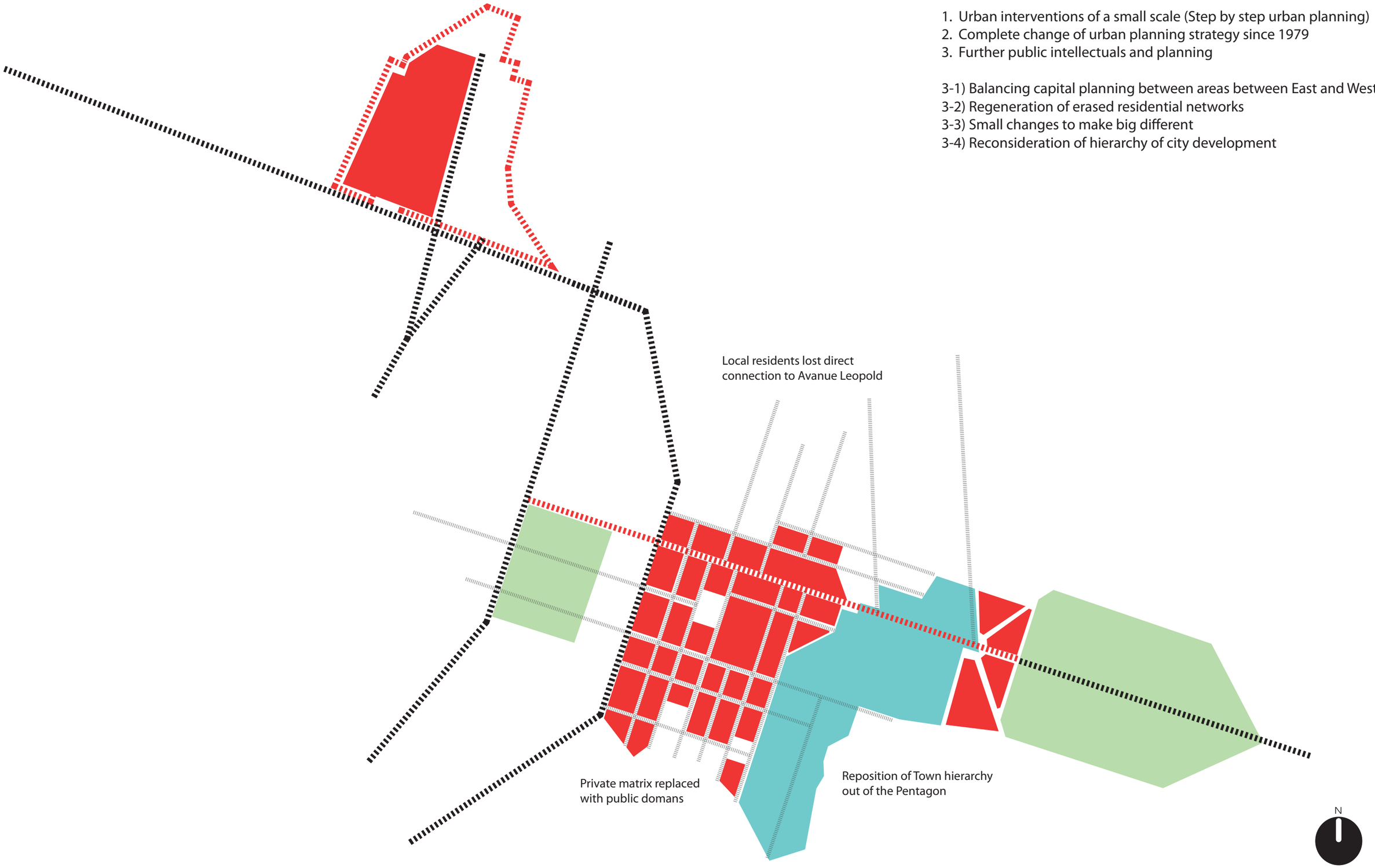
Local Hierarchy has been moved from East to West.


N
1890 on
Housing in Residential Areas
in Jugendstil and Art Nouveau
The plan generale
in 1840
1874 A project _
redevelopment
Notre-Dame-
aux-Neiges
Steep Access route
to be Mont des Arts
Rue de la Loi (Leopold Avanue)
Avenue Louise (Besme plan generator)
High class residence (1850-1940)
Belgian government institutions (1950-1980)
Private international companies headquarters (from 1970 on)
European institutions (from 1958 on)
+ As a recent state capitals
Real capital analogous to Paris with clear axes and big churches as points of reference.
Suburban expansion - Quarter Leopold

+ Learning from mistakes

1. Urban interventions of a small scale (Step by step urban planning)
2. Complete change of urban planning strategy since 1979
3. Further public intellectuals and planning

3-1) Balancing capital planning between areas between East and West
3-2) Regeneration of erased residential networks
3-3) Small changes to make big different
3-4) Reconsideration of hierarchy of city development



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PHASED DEVELOPMENT

#1. Existing Urban Condition,
Recongnition of core local position

PHASED DEVELOPMENT

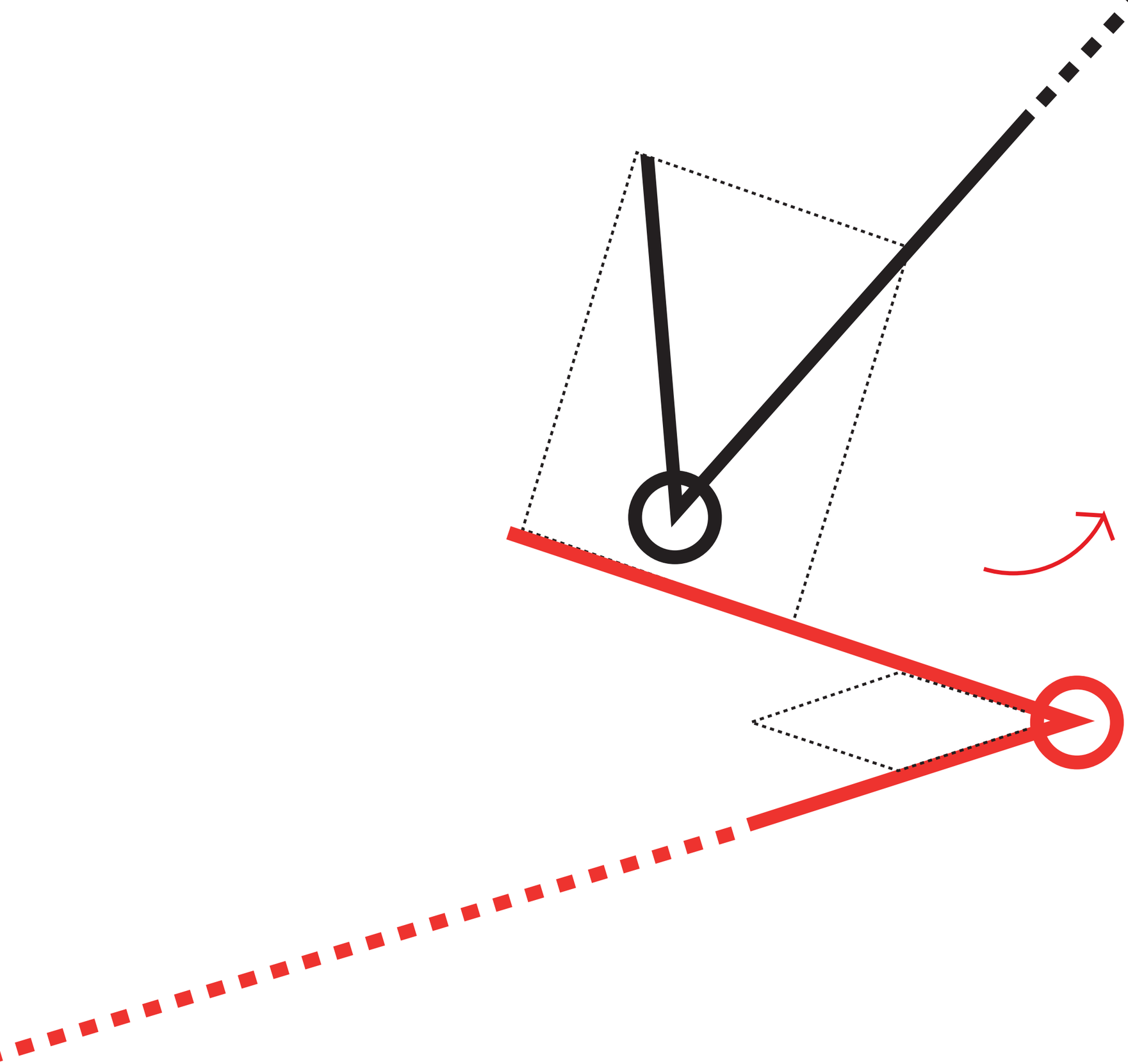
#2. Axis Extended to New Intersection

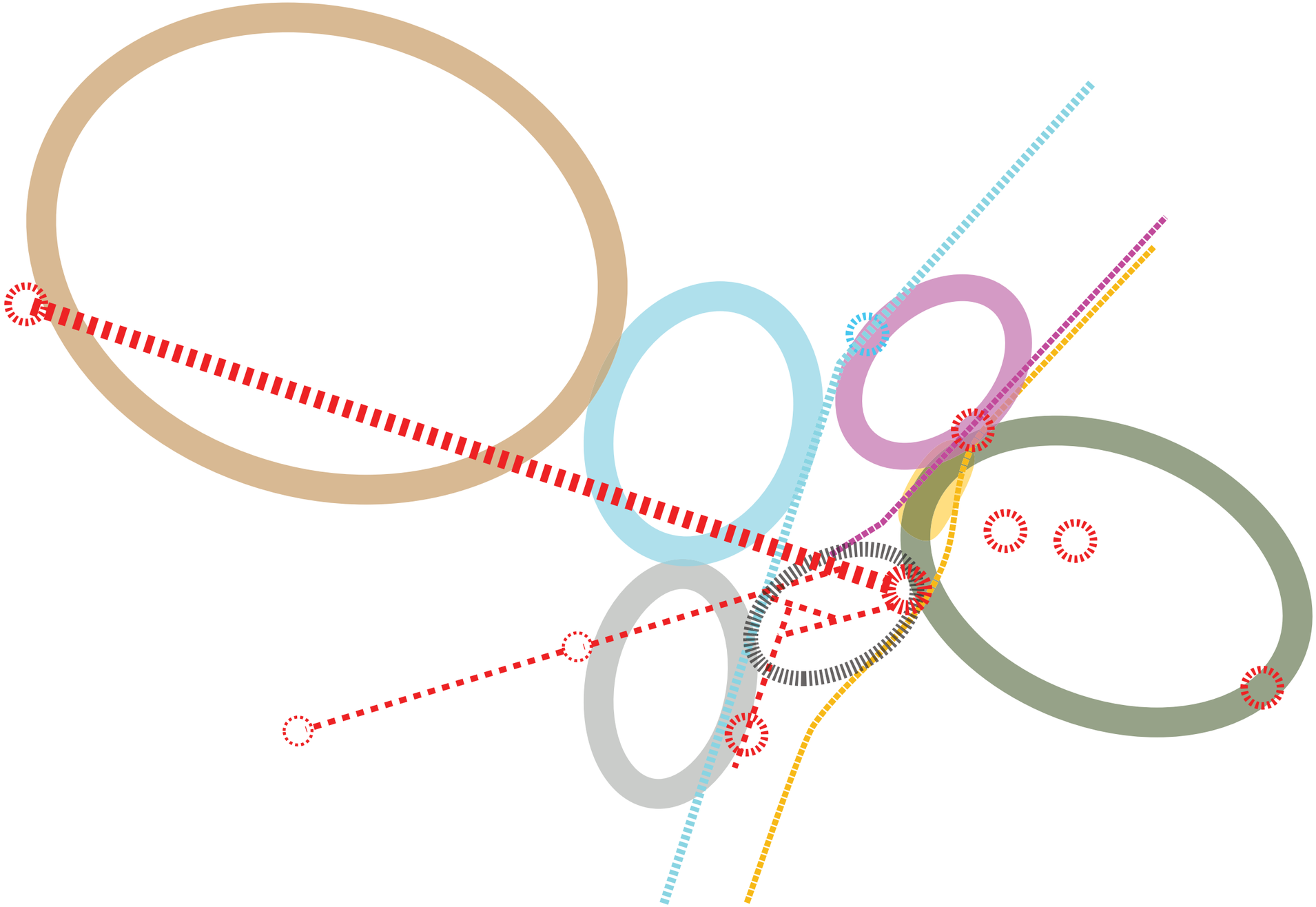
PHASED DEVELOPMENT

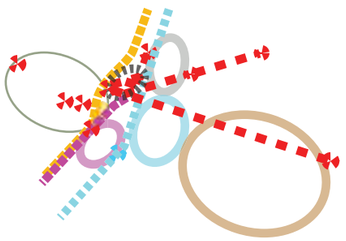
#3_Creating Urban Cavity
and Reinforcing Historic Values

PHASED DEVELOPMENT

#4 New Axis through Historic Sector
to outer residential area







VALUE ASSESSMENT

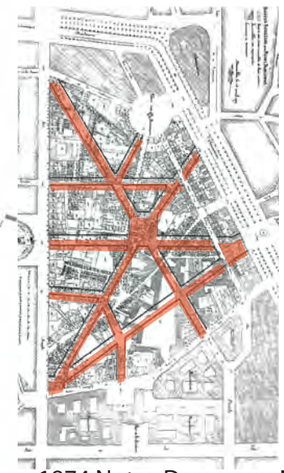
+ 1300-1350

+ Around 1600

+ 1902, Mont des Arts

+ 1893-1954, Railway connection

+ 1773 to 1780 Park de Park de Bruxelles.



+ 1874 Notre-Dame-aux-Neig

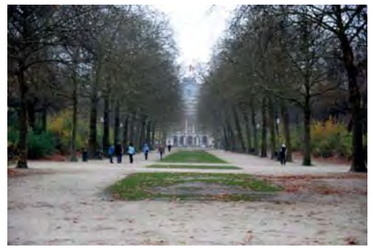
+ Town hall and Grandplace 1401

+ Historic main west-east route

+ Statue du bourgmestre Charles Buls de Bruxelles de 1881-1899

+ St. Michiel & St.Gudula cathedral 11 century

+ 1898-1931, Mont des Arts



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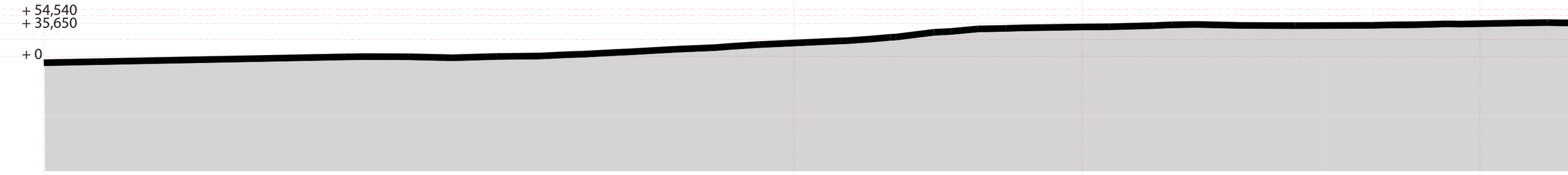
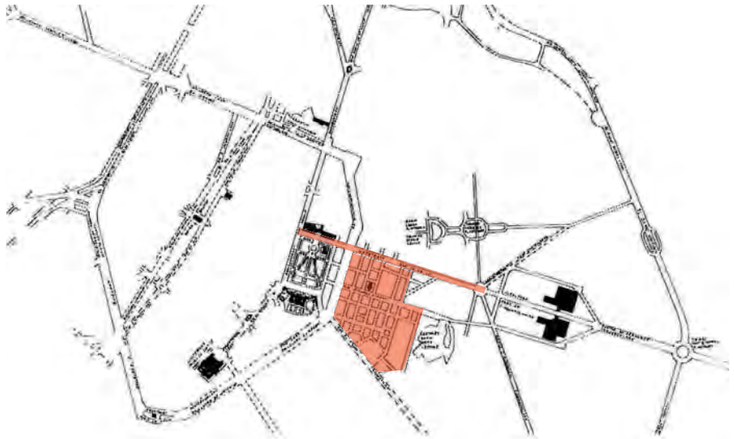
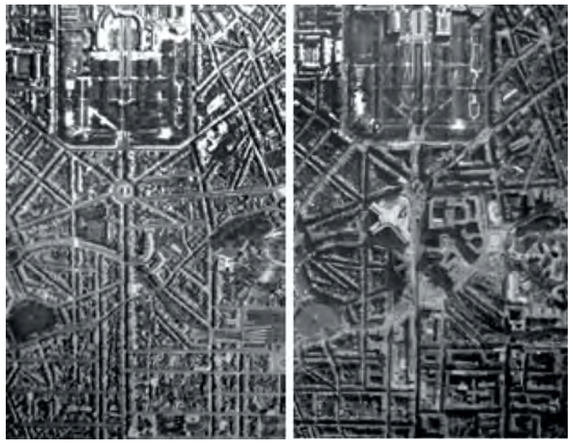


Site Section

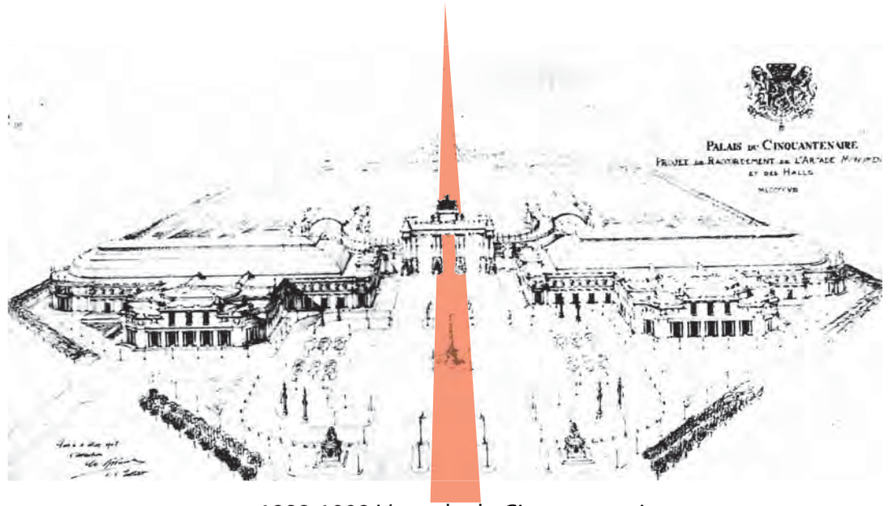
VALUE ASSESSMENT



+ 1838 Leopold Quarter and Plan Generale



+ 1957-1986 Eurioean Capital Zone and European Quarter



+ 1888-1908 L'arcade du Cinquantenaire.

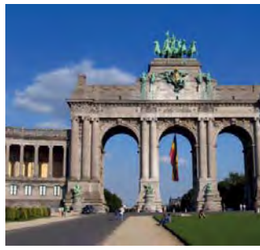
+ European Quarter Bussiness district.

+ European Commission

+ European Paliment

+ Cinquantenaire from Rui de la loi

+ Parc du Cinquantenaire



+ L'arcade du Cinquant

+ 54,540

+ 35,650

+ 0

Site Section

New public domain, Redirecting Axis

Axis through Notre-Dame-aux-Neiges

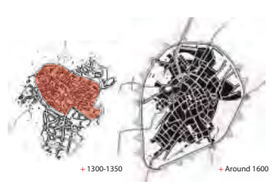
New public domain, Redirecting Axis

+ Urban Intervention Plan

Connection with Intersection point

Historical public governing sector

Business park on European Quarter



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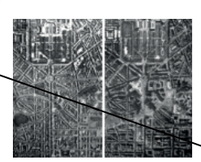

+ 1957-1986 Eurioean Capital Zone and European Quarter

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+ Value Assessment

+ Town hall and Grandplace 1401

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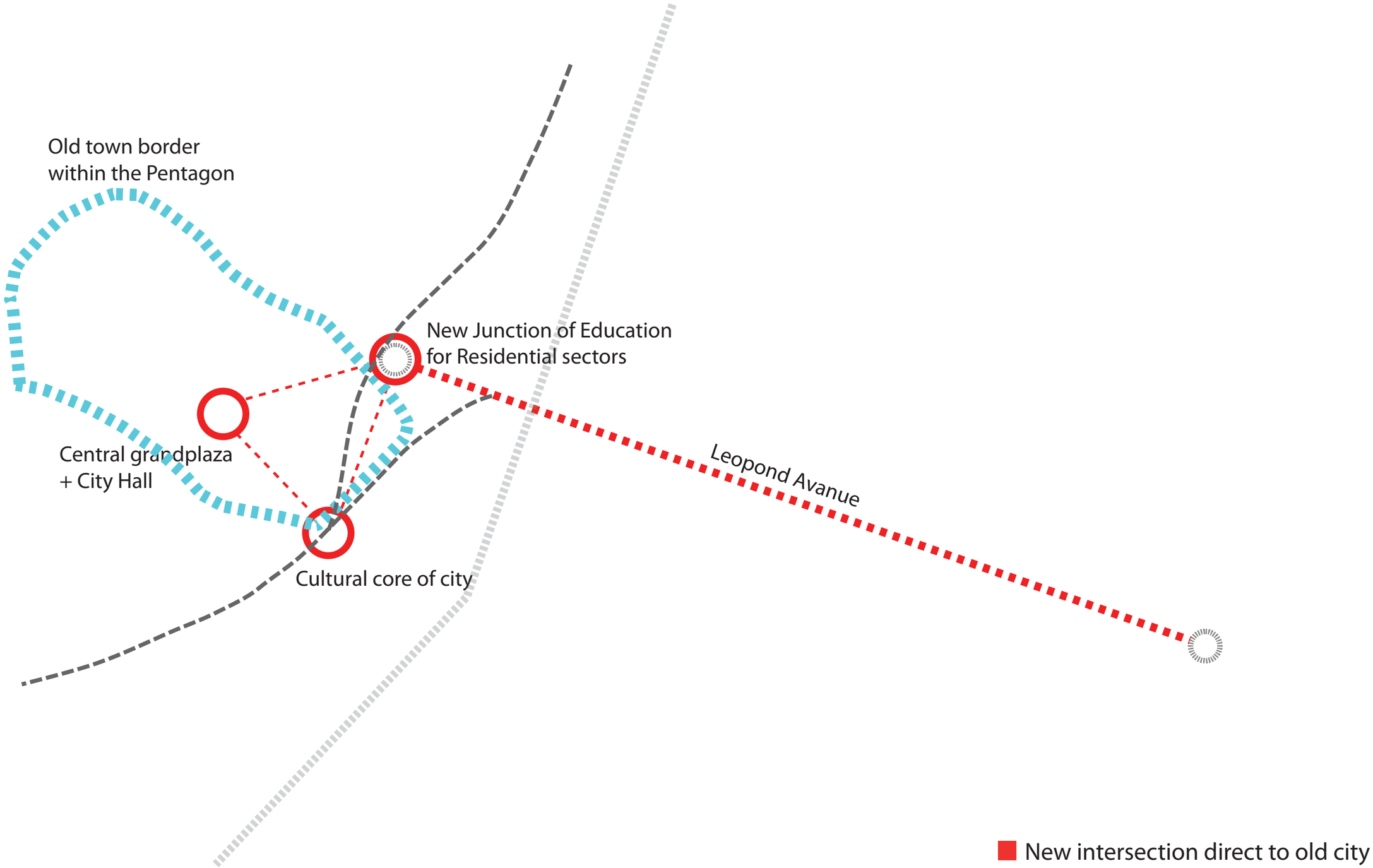
+ L'arcade du Cinquantenaire

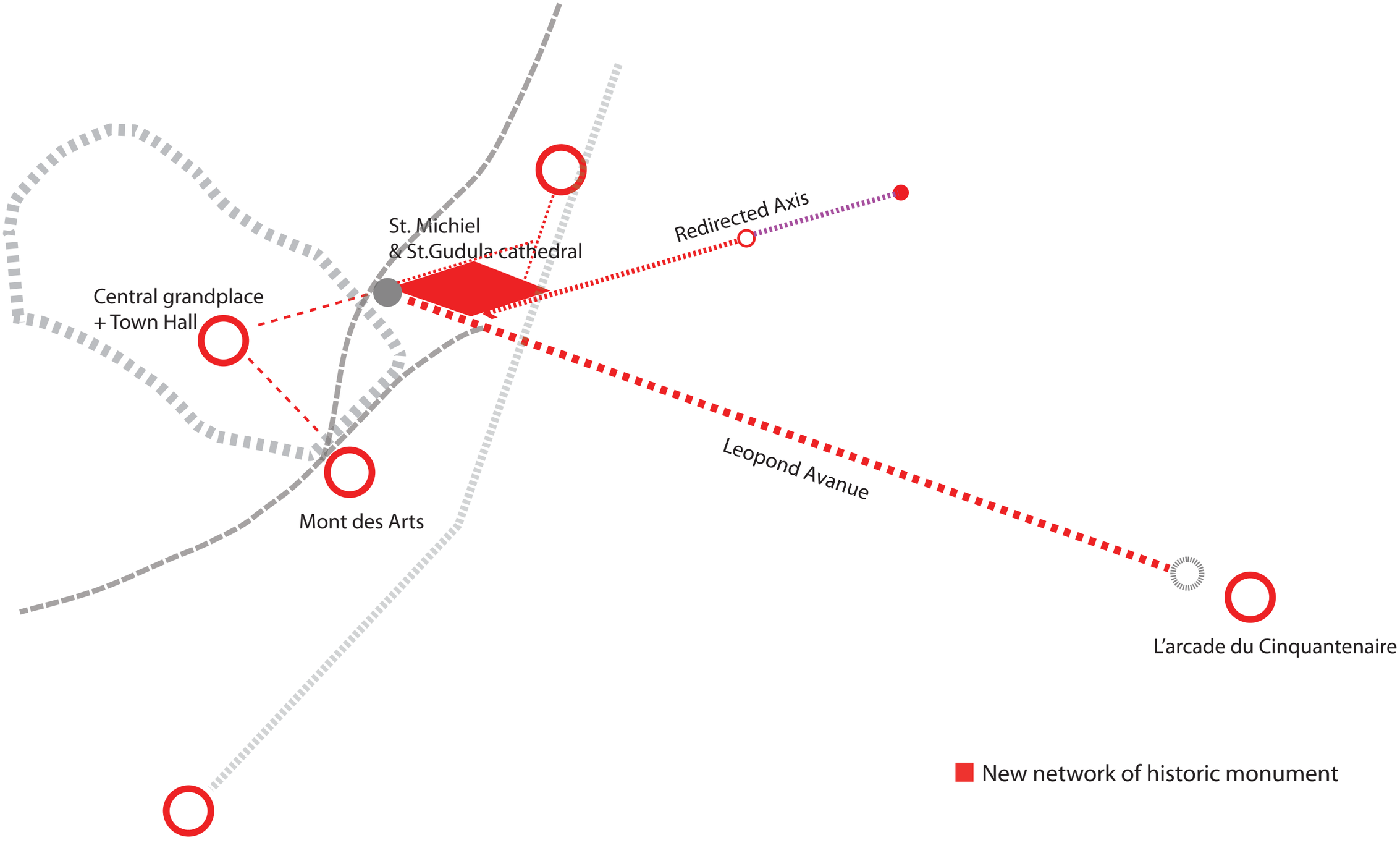
+ 1886 Avanue Tervueren , View of Cinquantenaire

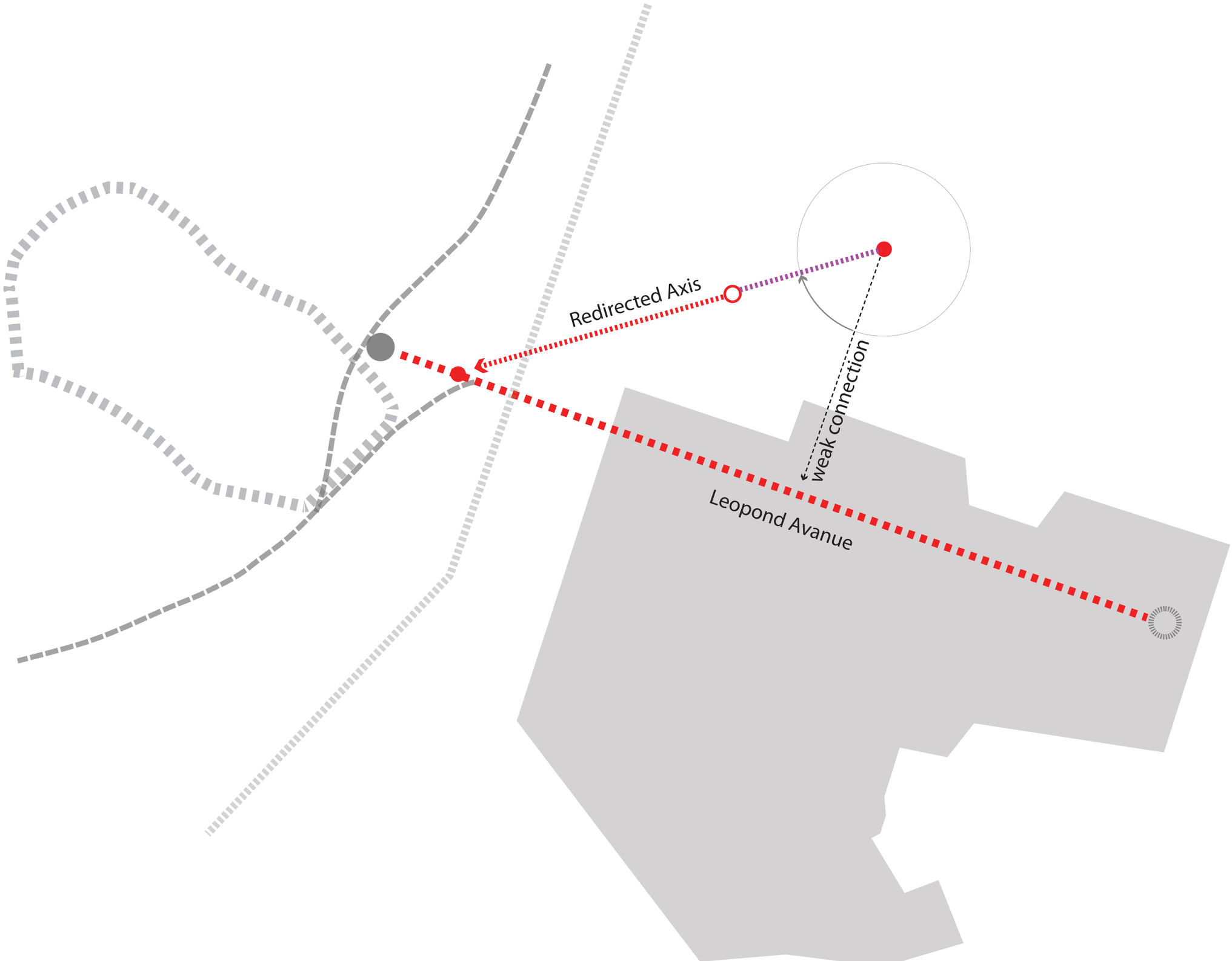
Site Section

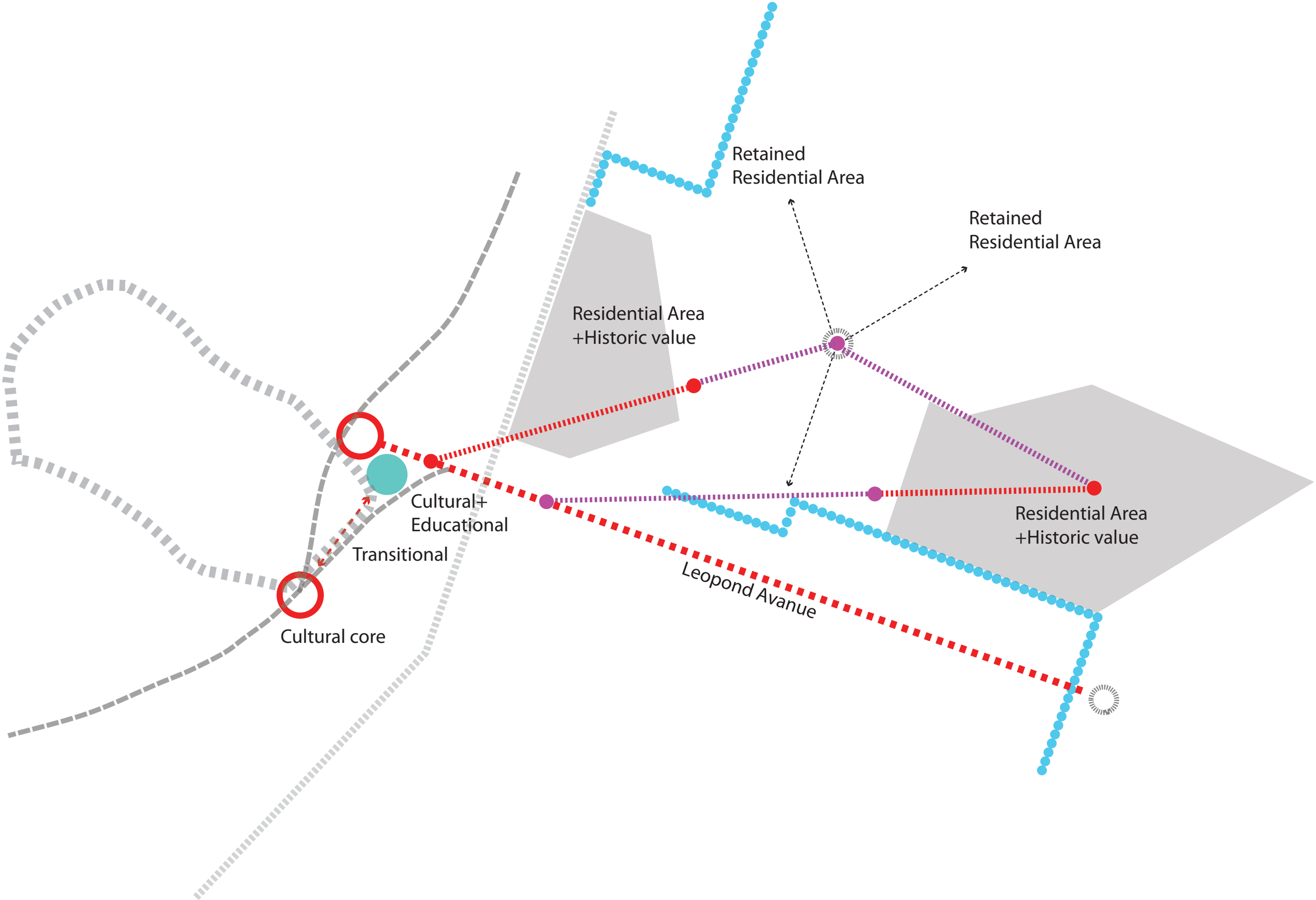
N

Urban Composition


Old town border
within the Pentagon
New Junction of Education
for Residential sectors
Central grandplaza
+ City Hall
Cultural core of city
Leopond Avanue
New intersection direct to old city


St. Michiel
& St.Gudula cathedral
Redirected Axis
Central grandplace
+ Town Hall
Mont des Arts
Leopond Avanue
L'arcade du Cinquantenaire
New network of historic monument


Redirected Axis
weak connection
Leopond Avanue


Retained
Residential Area
Retained
Residential Area
Residential Area
+Historic value
Cultural+
Educational
Transitional
Residential Area
+Historic value
Leopond Avanue
Cultural core

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Site Location

Site Context

Domestic Retails(Town City)

Office Sector

Public Sector

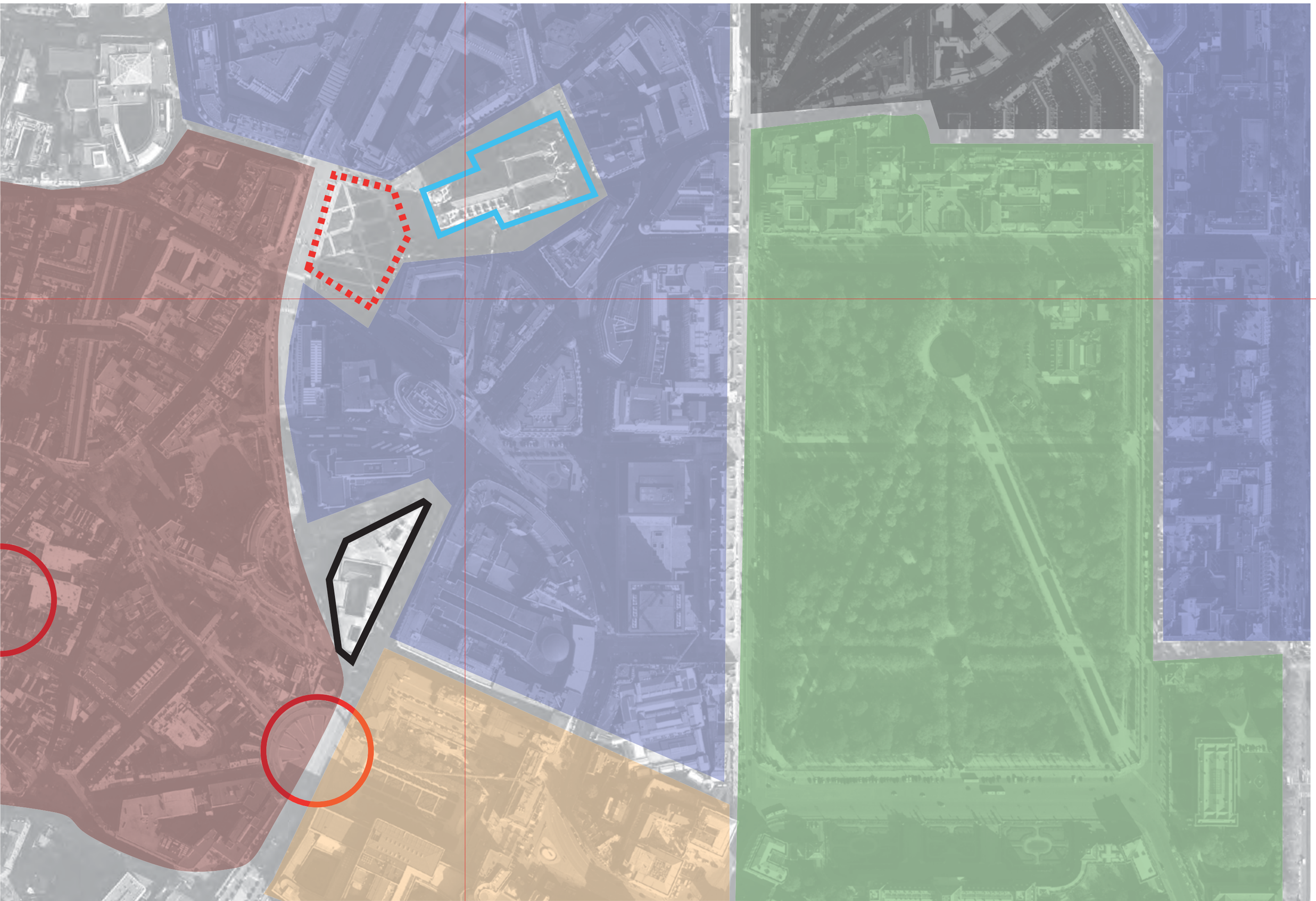
Residential Area

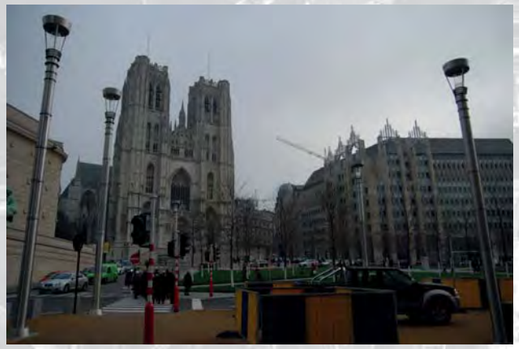
Cultural Sector

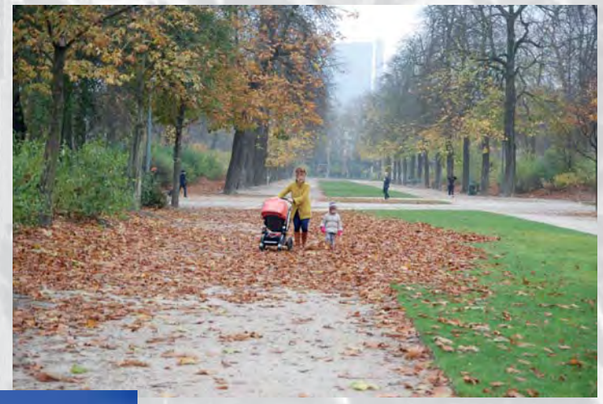
Monumental Historic Church

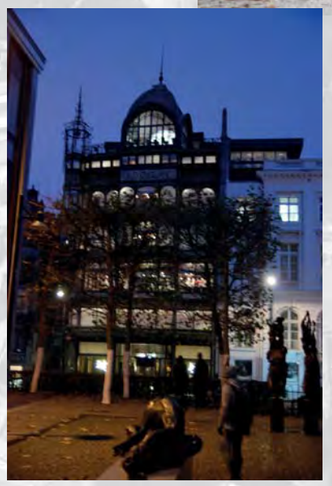
Mid-Train Station of Brussels

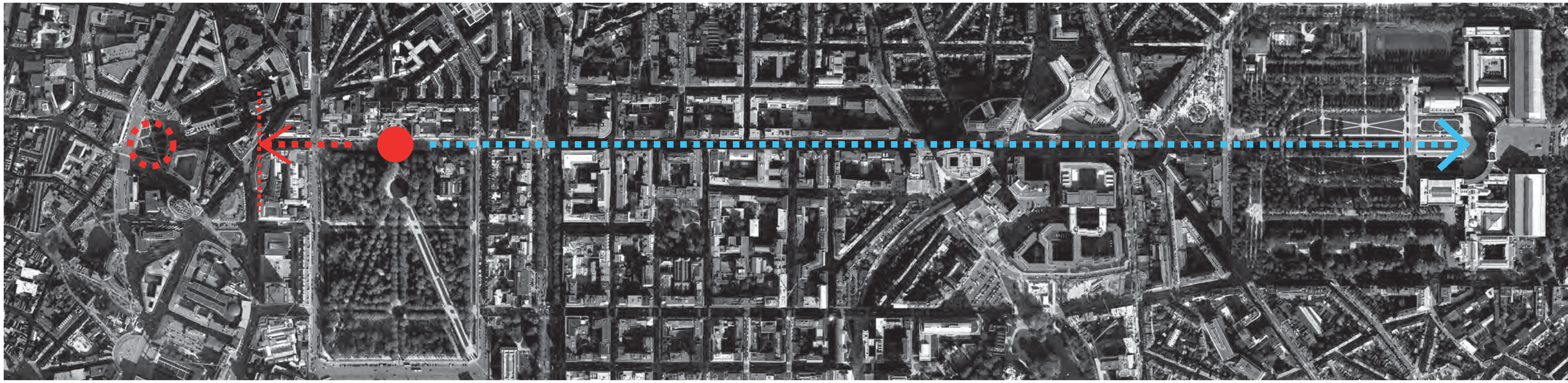
Open Public Space

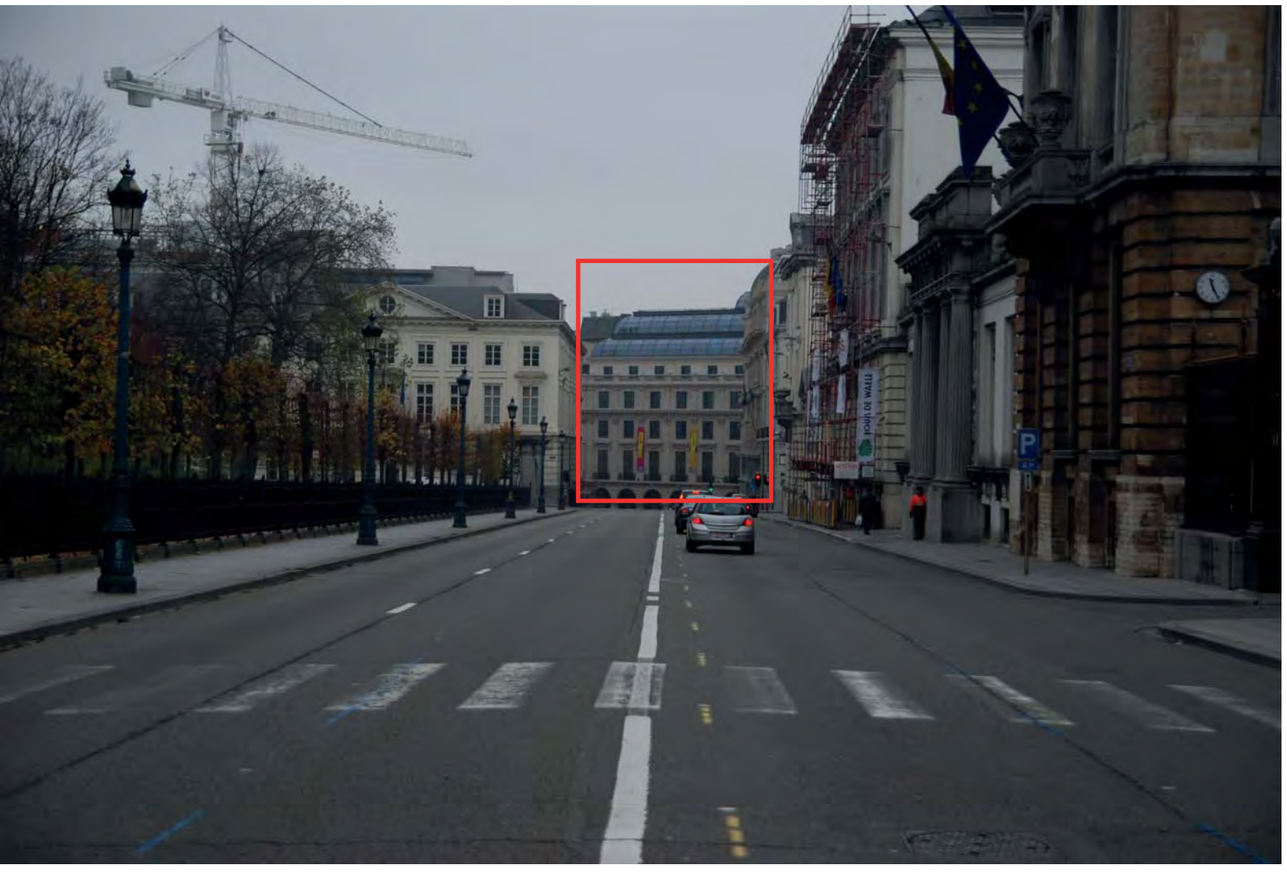


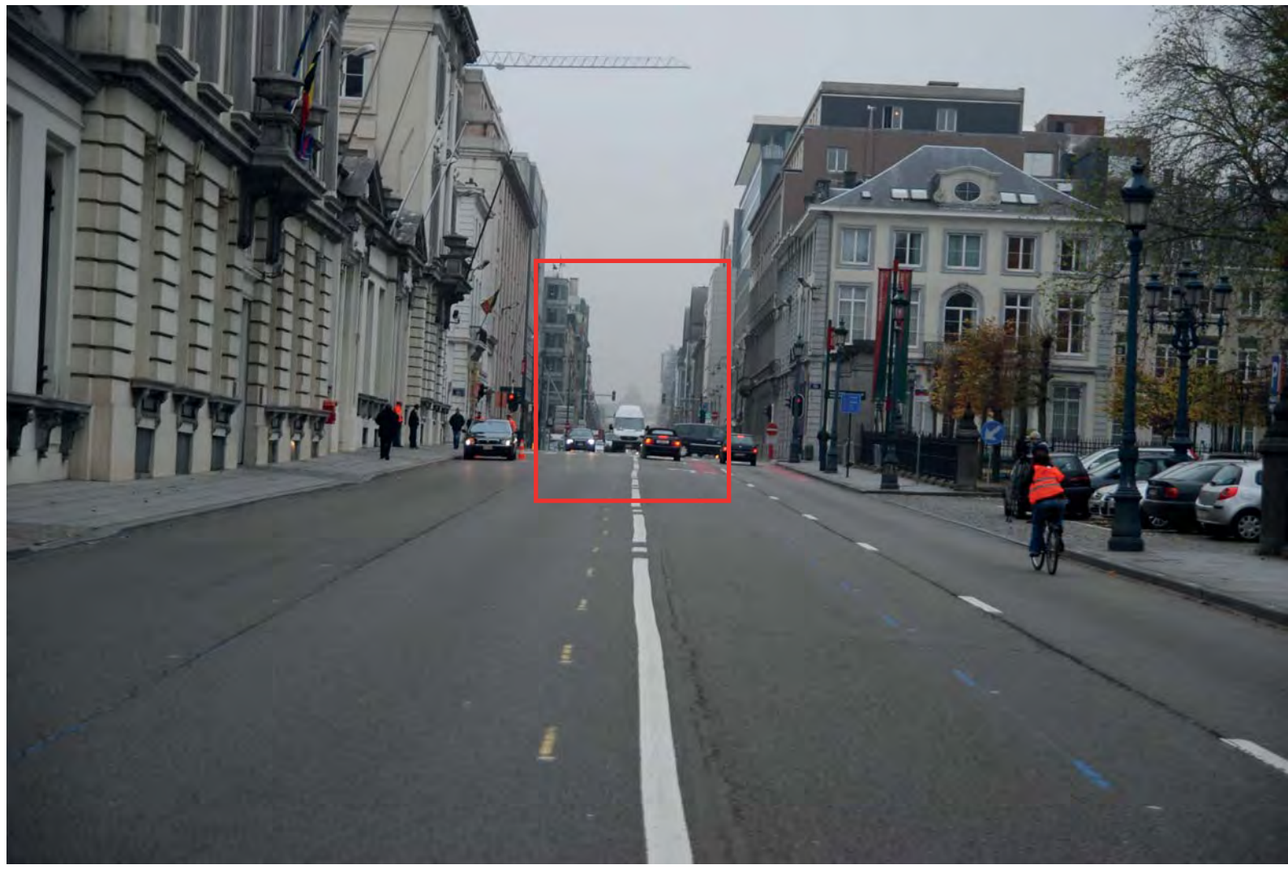


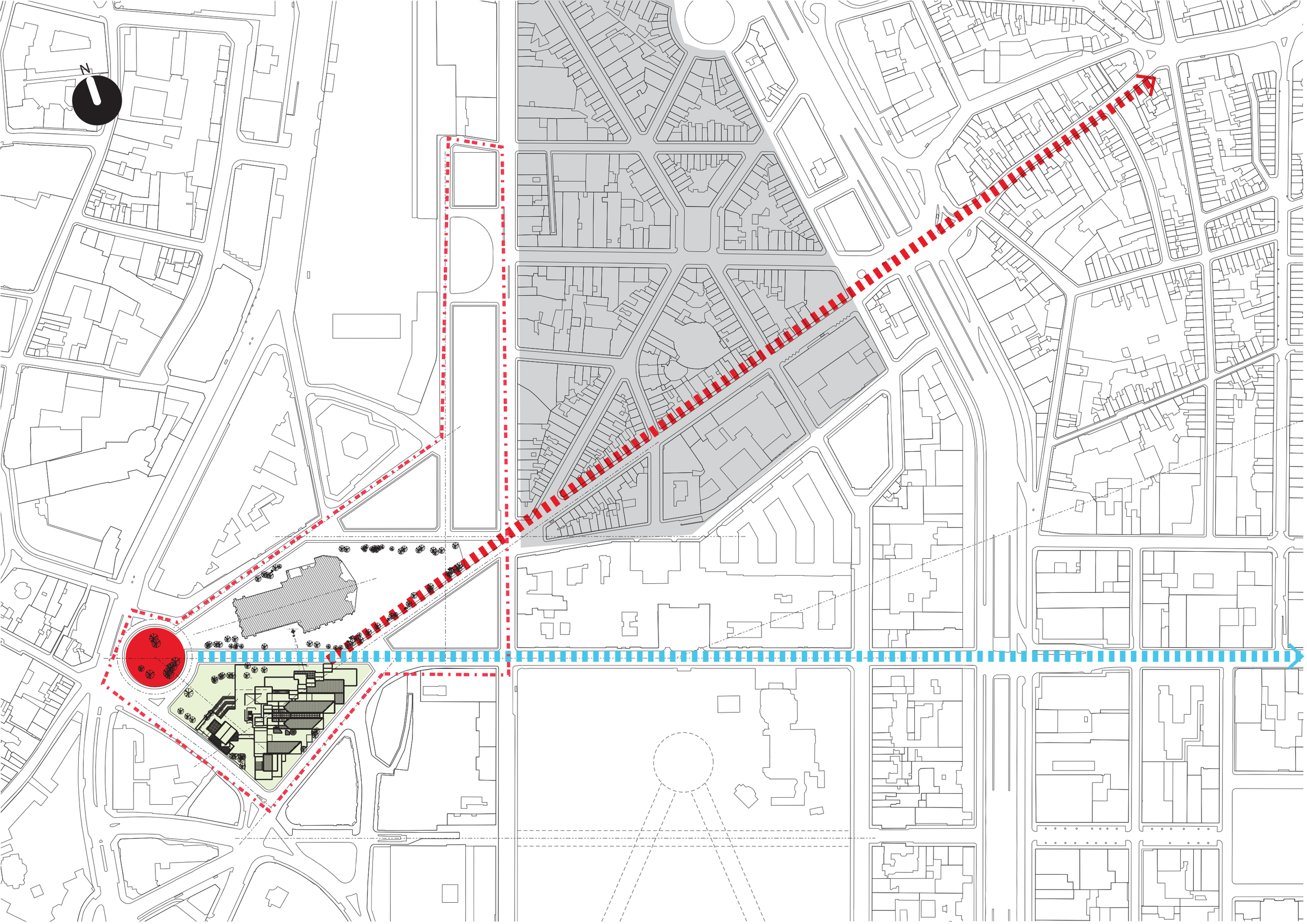








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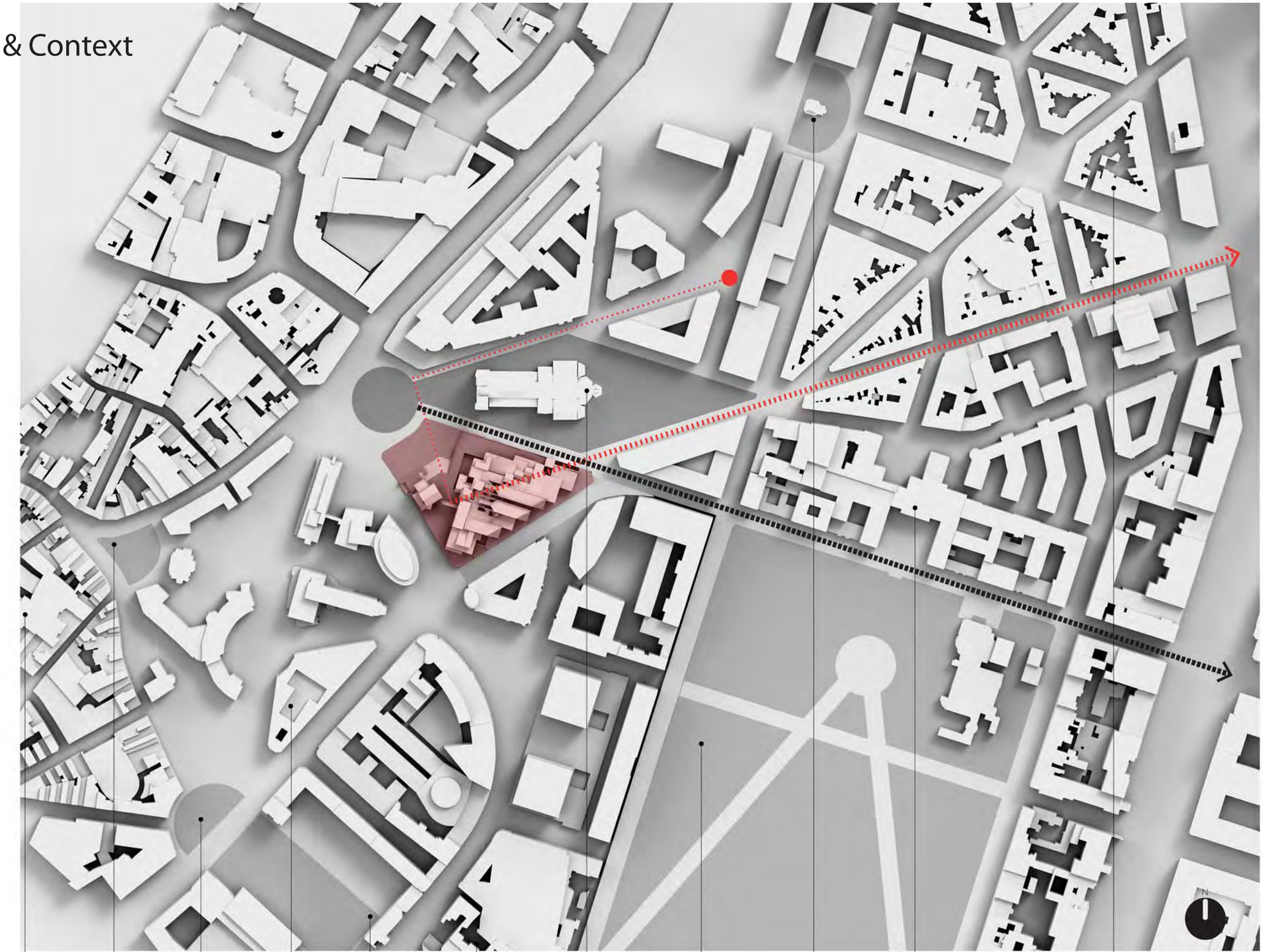
Site Plan & Context



Town Centre, Brussels

Statue du bourgmestre Charles Buls de Bruxelles de 1881-1899

Place de l'Albertine / Albertinaplein Brussels

Brussels Midi Railway Station

1898-1931 Mont des Arts

Mont des Arts Instrument museum

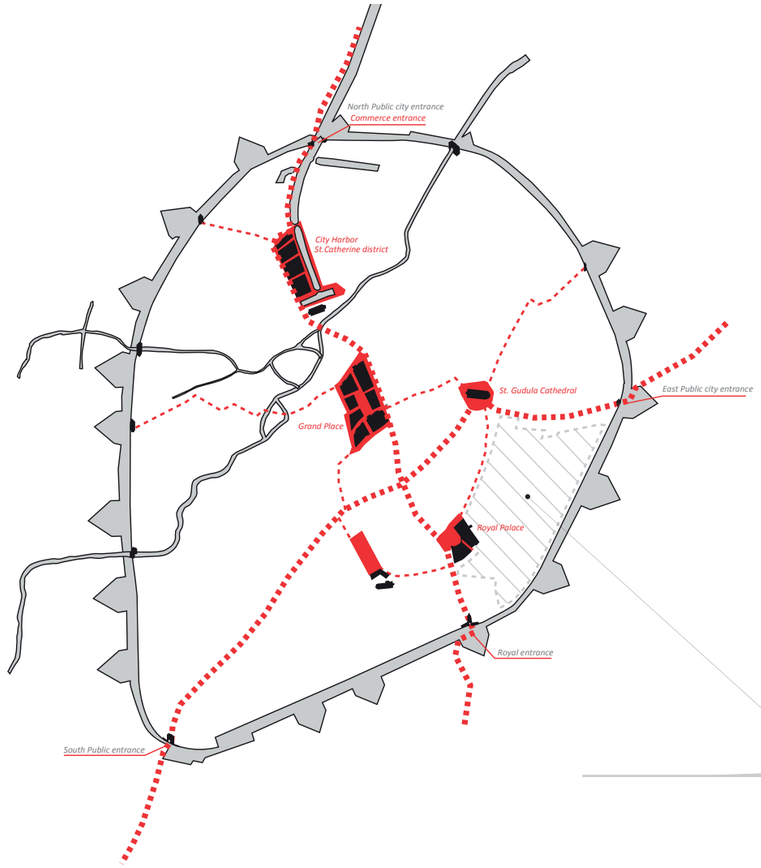
St.Michiel & St.Gudula cathedral 11 century

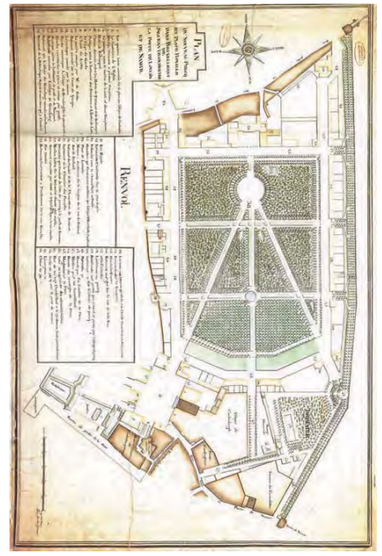
1773-1780 Park de Bruxelles

Place du Congres between 1850 and 1859

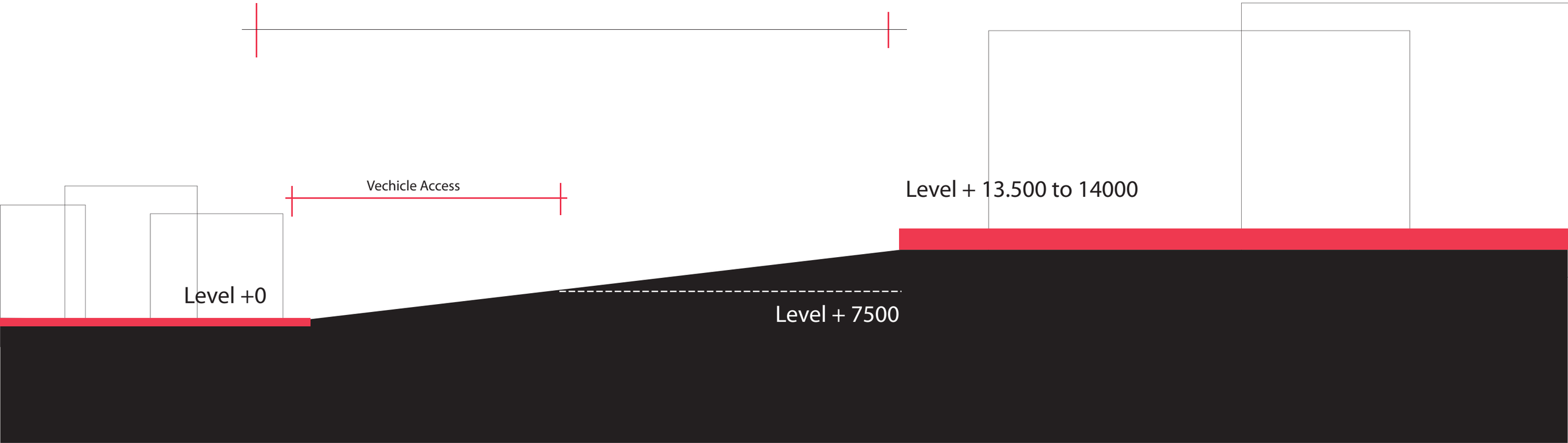
Belgian Federal Parliament

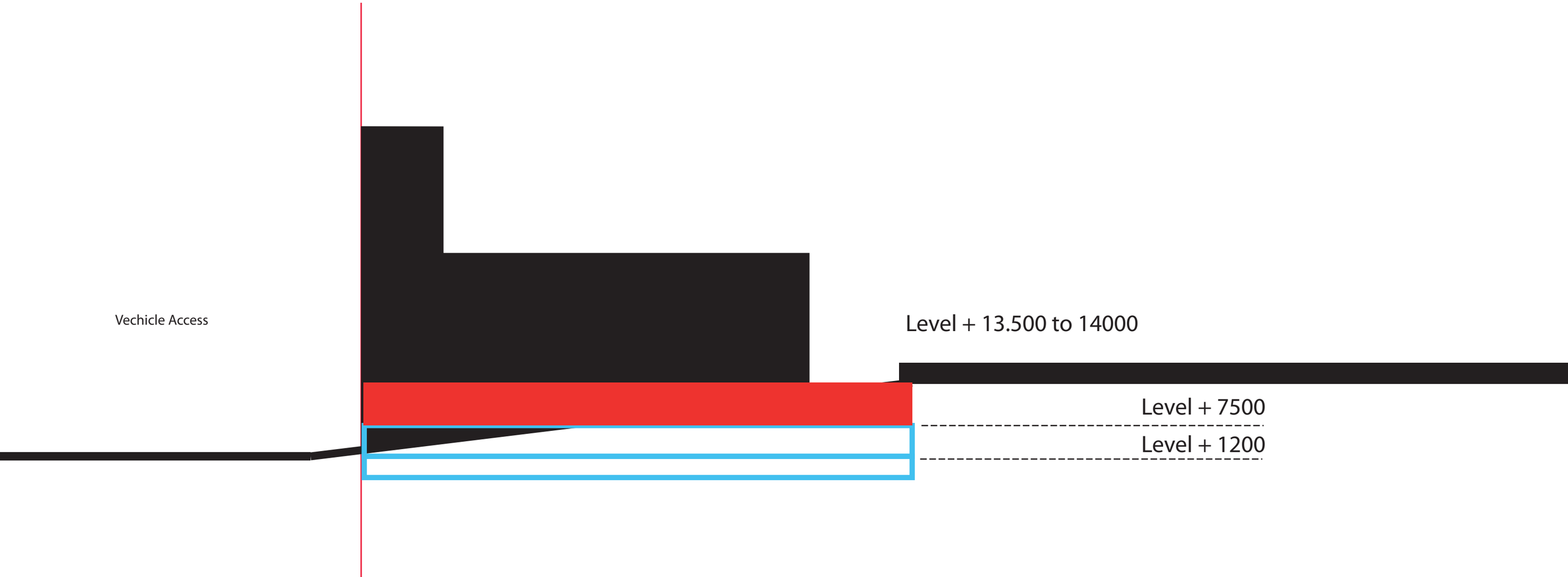
Ville de Bruxelles Quartier 1874 Notre-Dame-aux-Neiges





Flatten region to create a regional hierarchy




Vechicle Access
Level + 13.500 to 14000
Level + 7500
Level + 1200

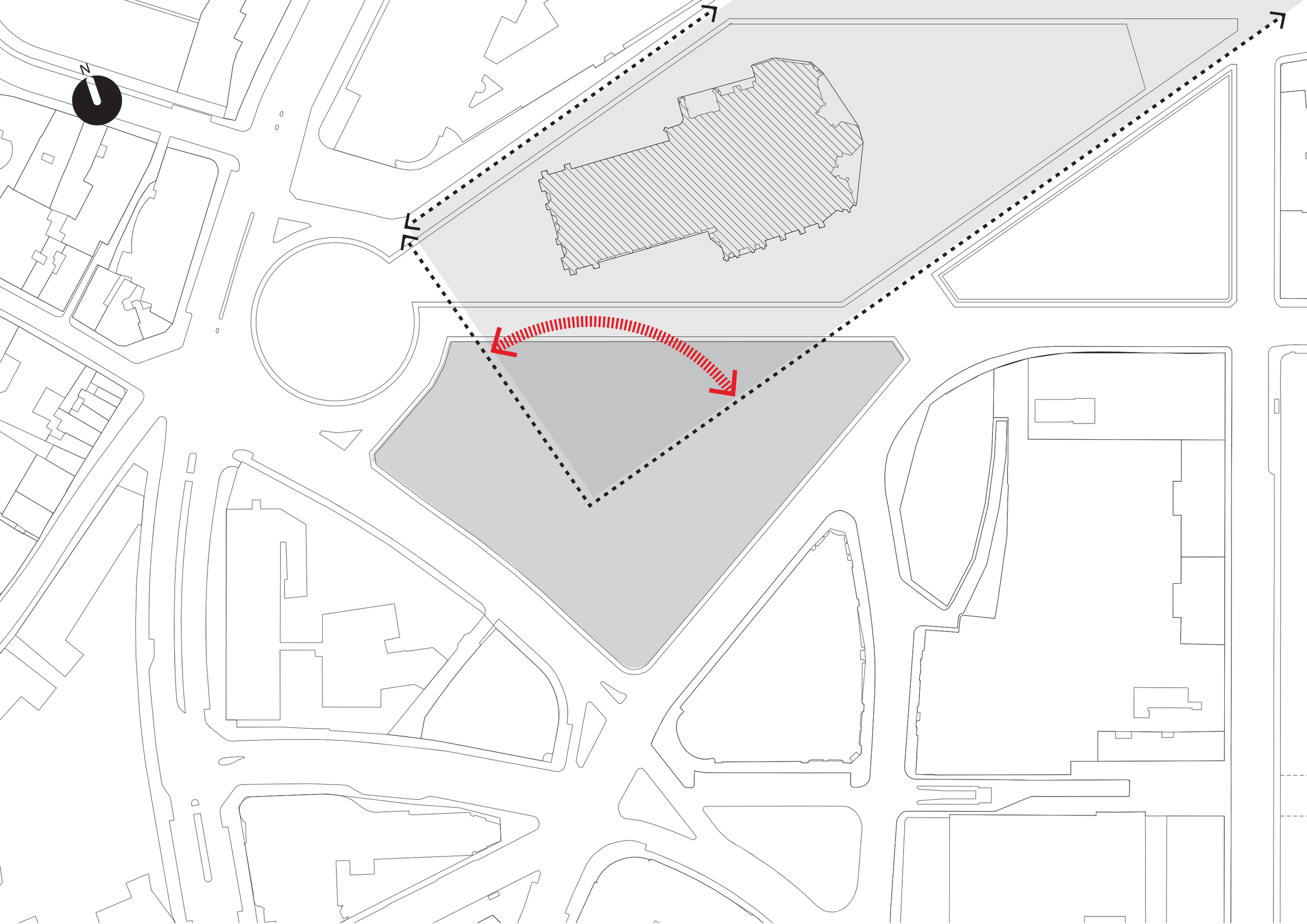
N

W

E

Avenue Leopold

Site Acessibility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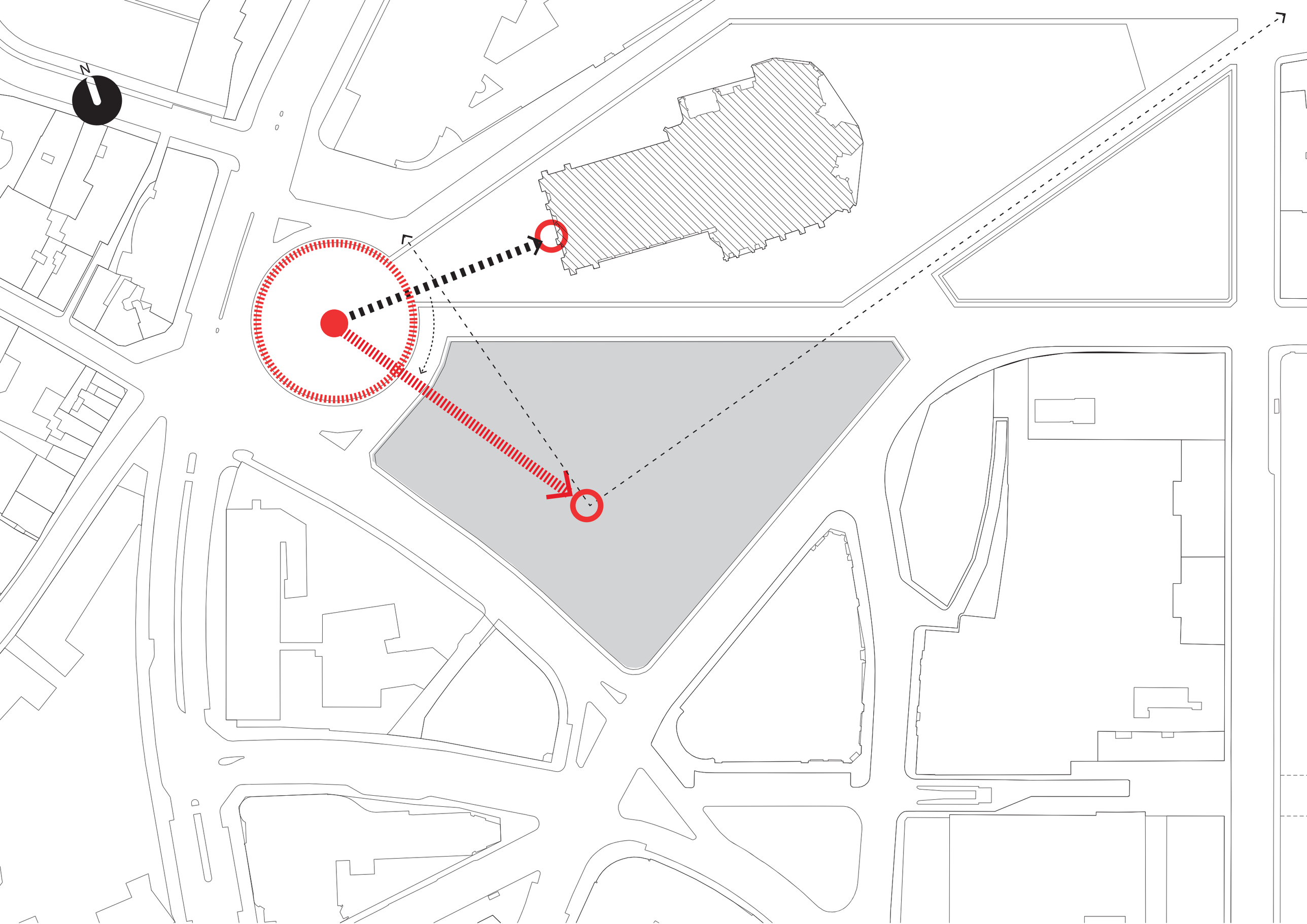
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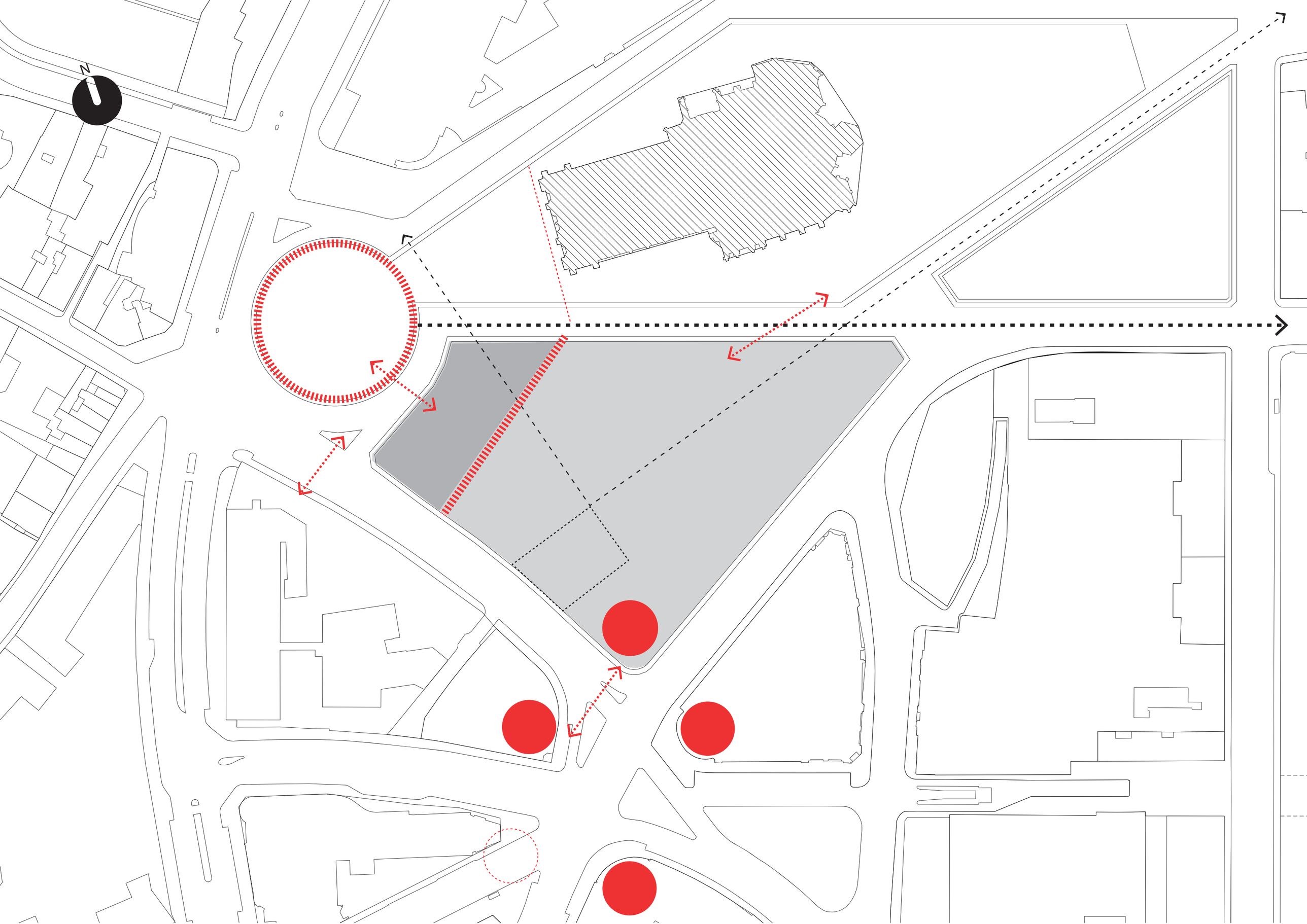
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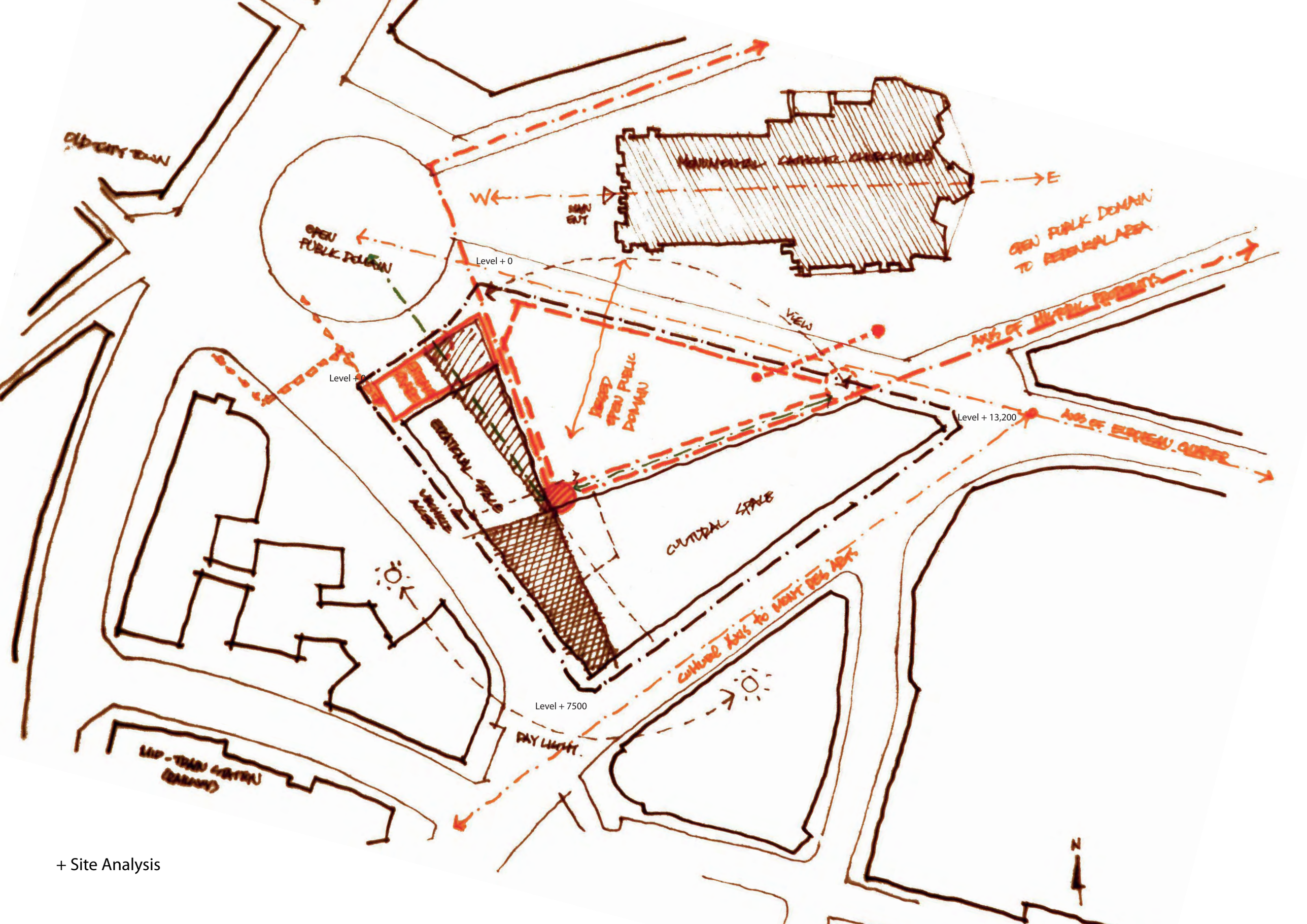
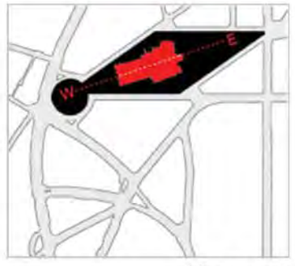


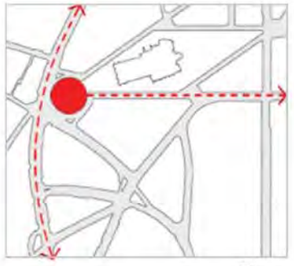
+ Site Analysis

Site Analysis

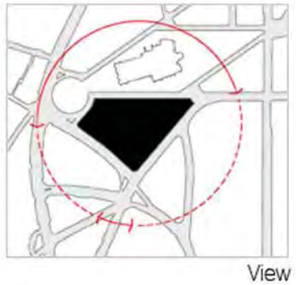
Site



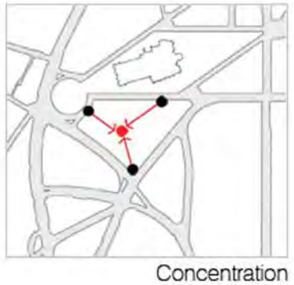
Monument

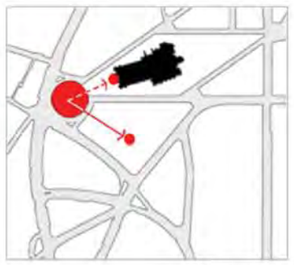

Flow

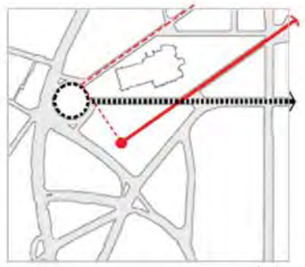
Slope

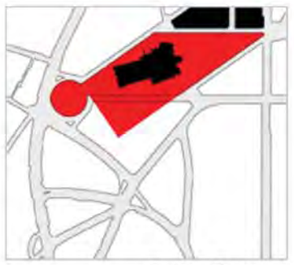

View

Accessbility to site


Concentration


Entrance


Axis


Public Domain

Division involved

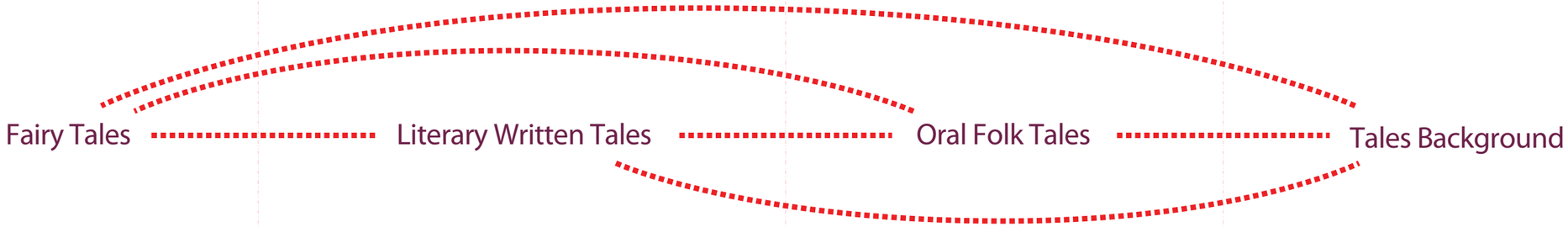
Site in Use

Induction of Matrix Leopold

Grid in Use

01. Position
02. Situation (Change Heirarchy, Change Scale)
03. Urban Strategy / Small Change for Big Difference.
04. Site Analysis
05. Design by Narratives
06. Design Parti
07. Spatial Configuration/Circulation
08. Structure / Materiality
09. Building Performance
10. Perspectives

Images of Reflection

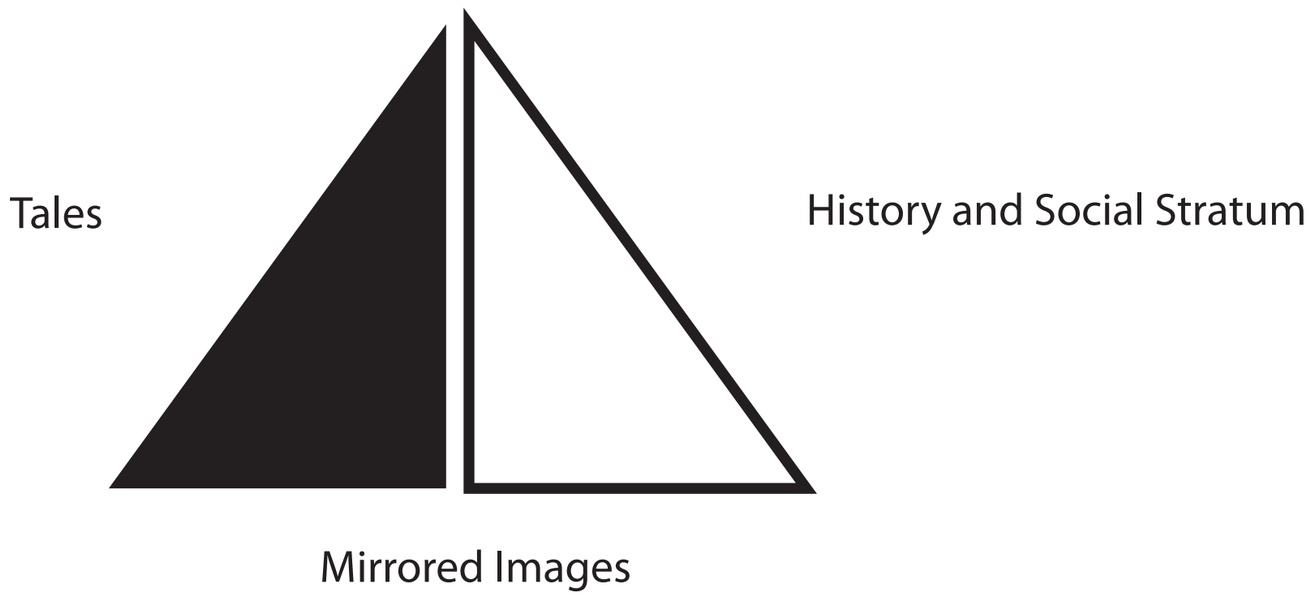


Adapted wrtten tales with Authors
Fairy Tales for Children
Reflected Background in adaptation period
Various intriguity by different storyteller

Initial wrtten tales from Oral Folk Tales
Fairy Tales for Adults or Children
Reflected Background of written period
No longer Folklore, but to become static in that version

Tales informed by word of mouth
Folklore Literature
Reflected Background of Tales transmission
Ethic, Traditional thought, a sense of value
Ethic Emotion, Ethic Culture
Fundamental emelemts for Arts and literature

Historical behind -story
Cultural Aspects
Social Stratum
Spiritial Aspects
Relious Aspects
Ethic Aspects.



Design by Narratives

01. SCENERIOS

'History to be constructed as a fairy tales through Journey'

02. Setting
Journey through history of Brussels

03 (F)Actors
Reflection of urban images of Local development
Increase layers to get into far deep spatial defference in Complexity
Scales (Local to Giant)
Return to Human scales

977 First Axis

Main Stream

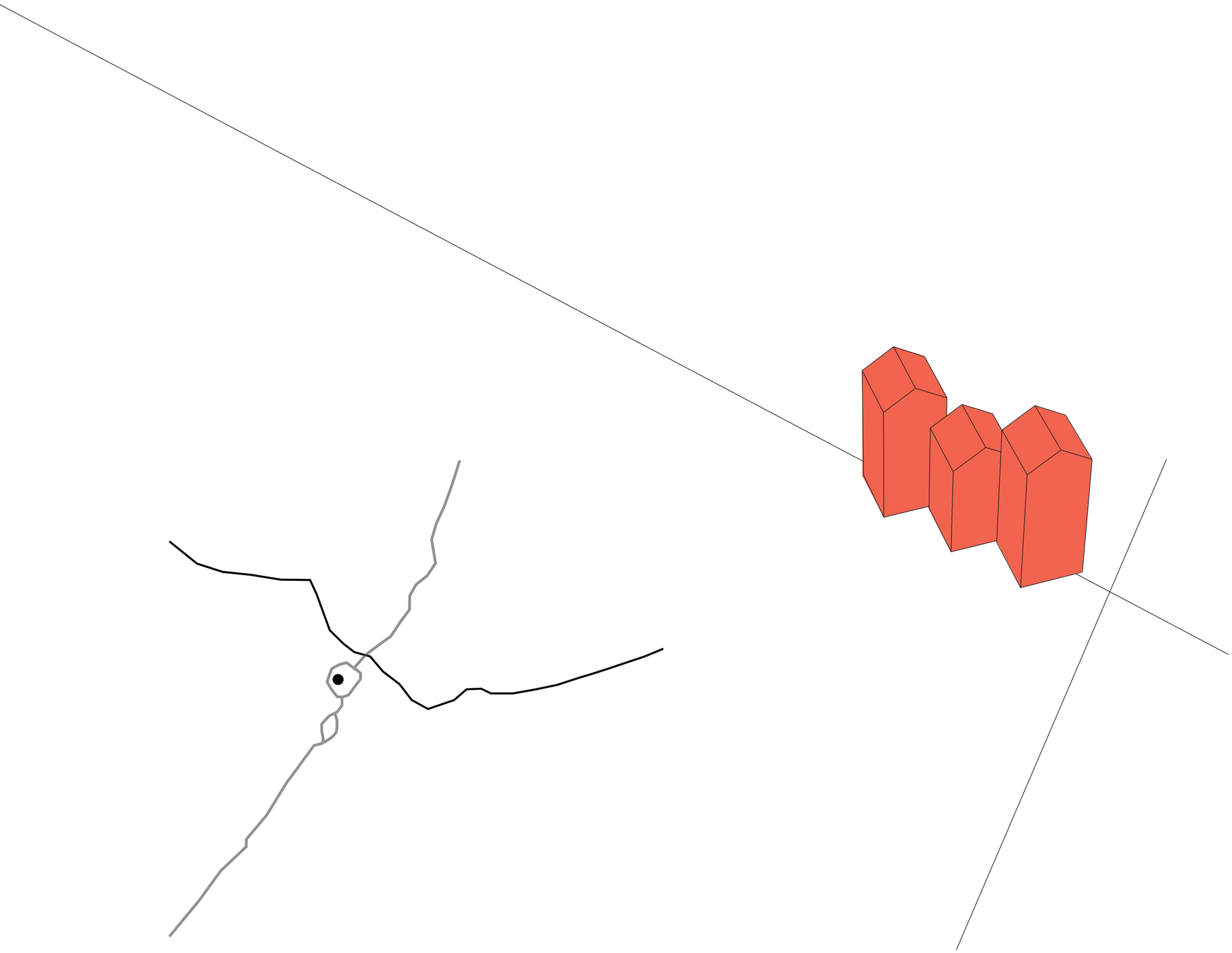
New Axis to historic residintial Area

Main Stream and Access

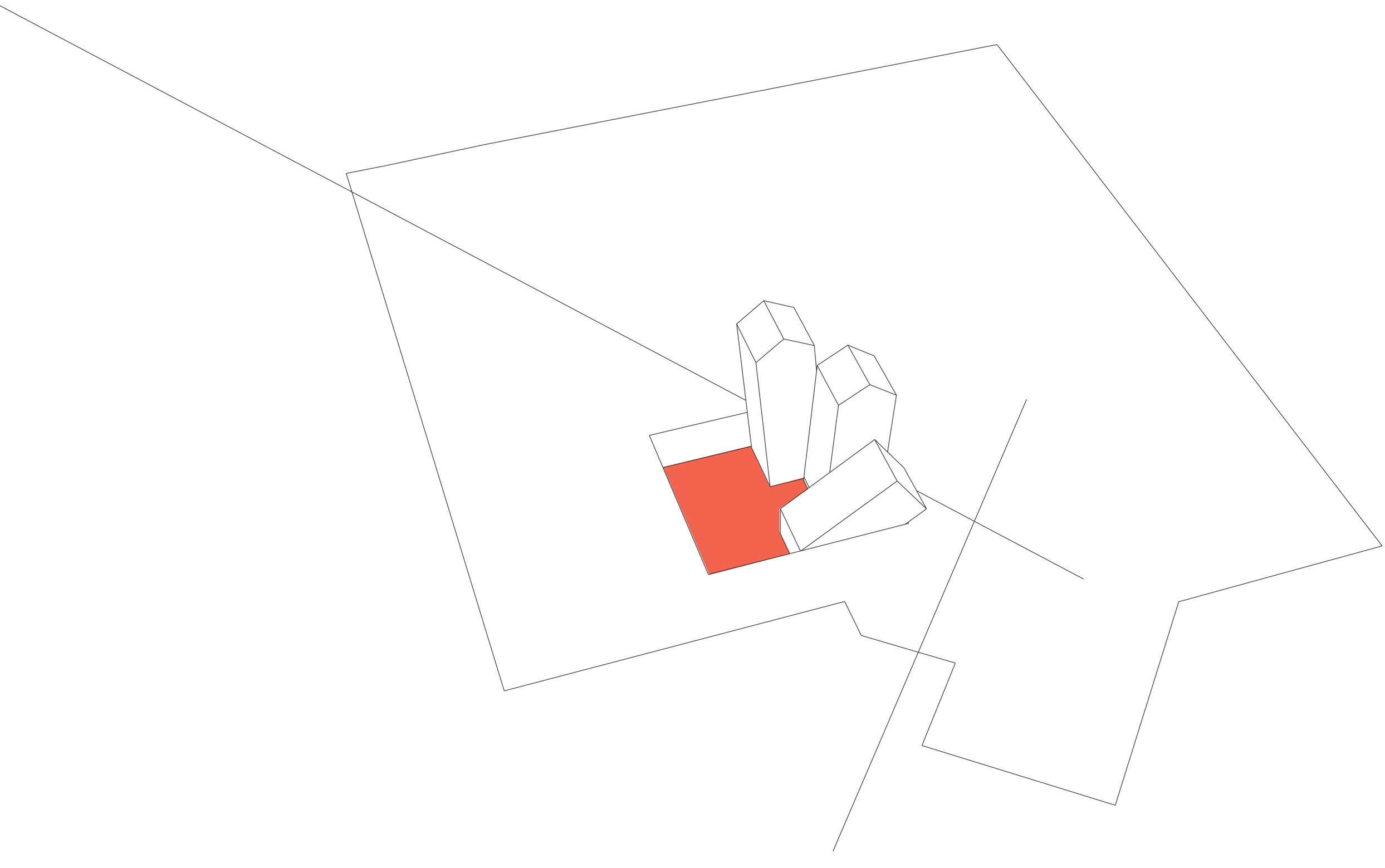
Main Access
Route

977 First Village

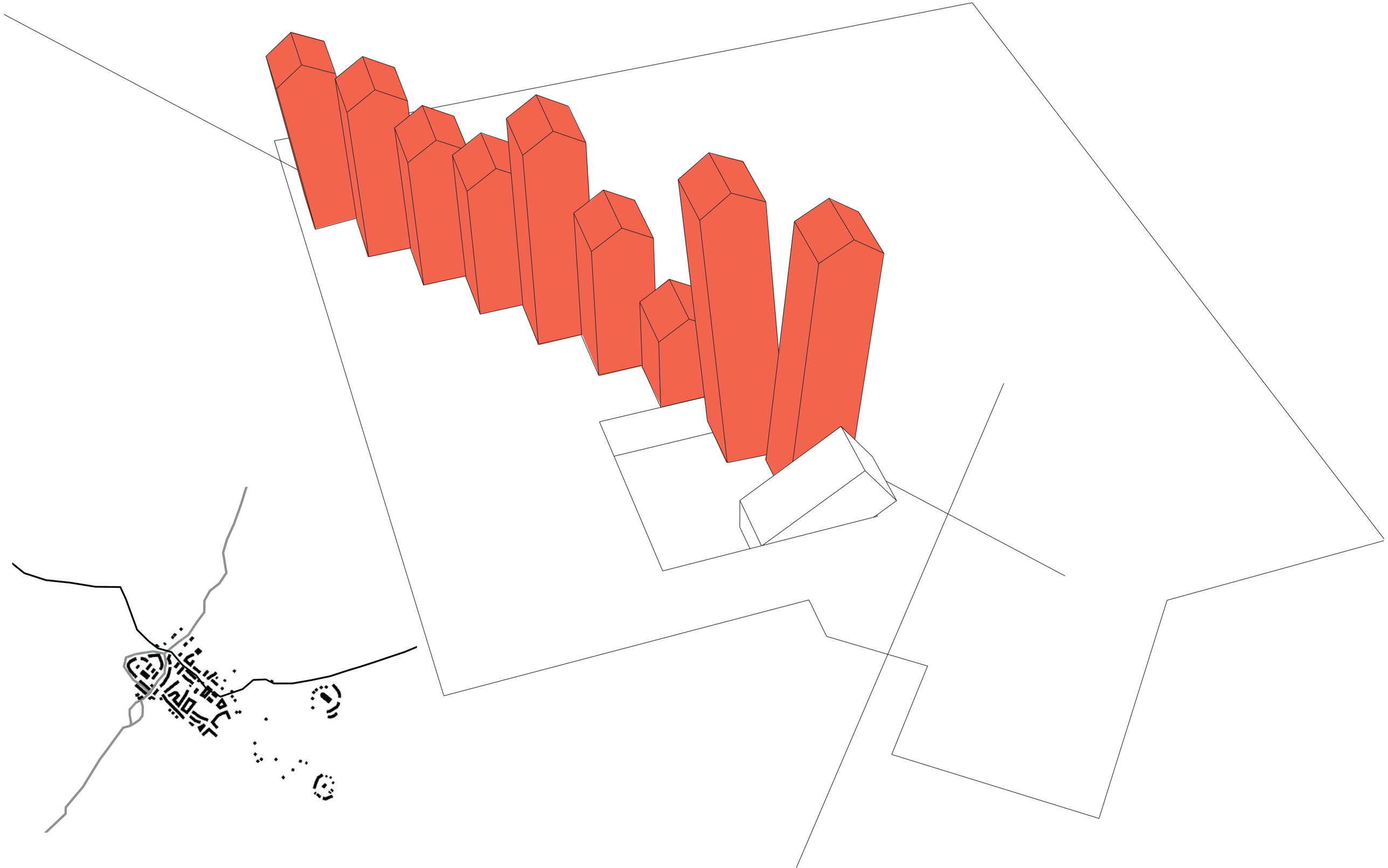
Beginning at Intersection



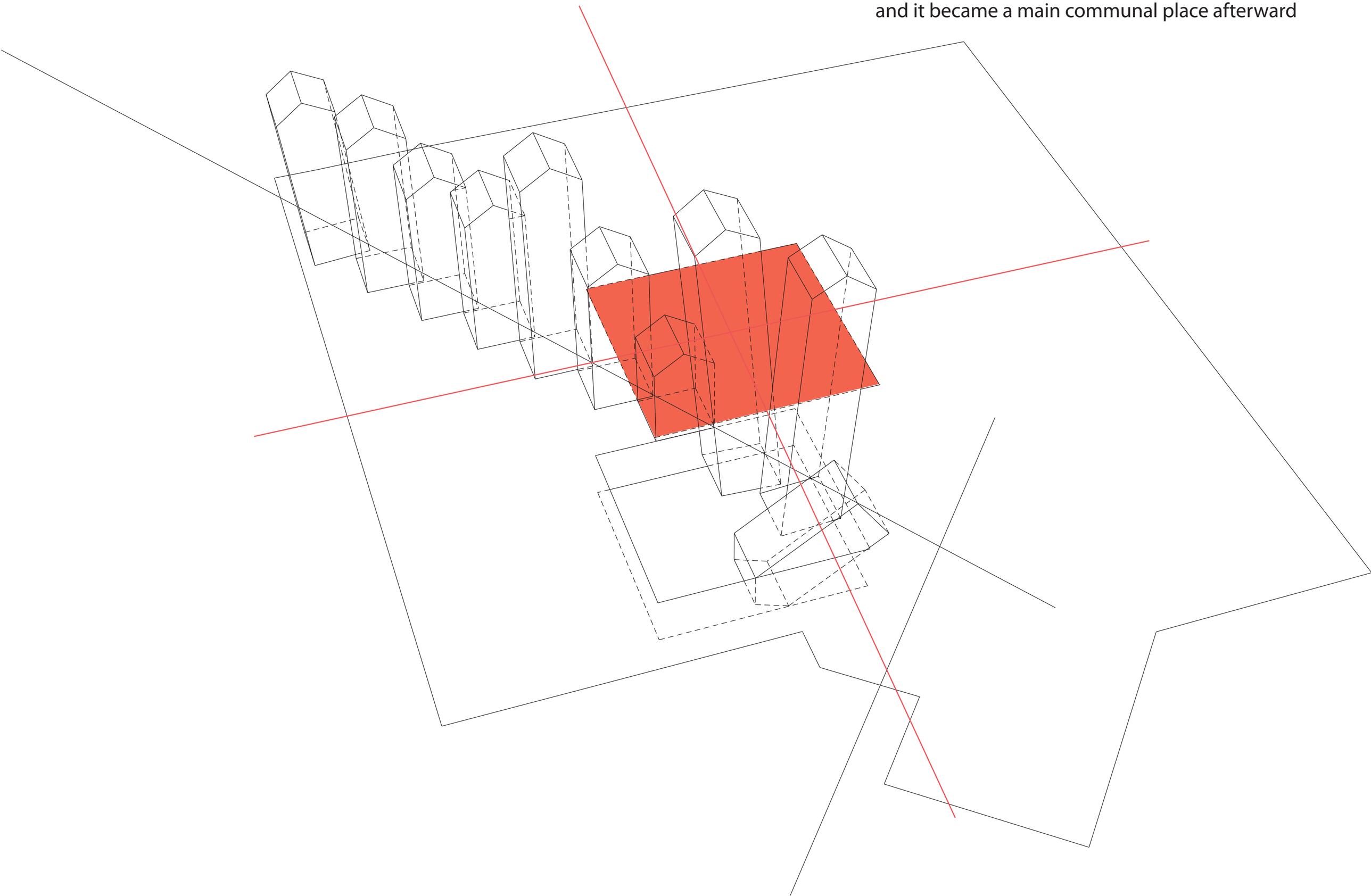
977 “Brussels” drived from a word
‘Broekzele’ which mean First Village on a Marsh



Since
1000 Town growed along main stream toward East



Since
1000 Market Squre generated in the central region
and it became a main communal place afterward



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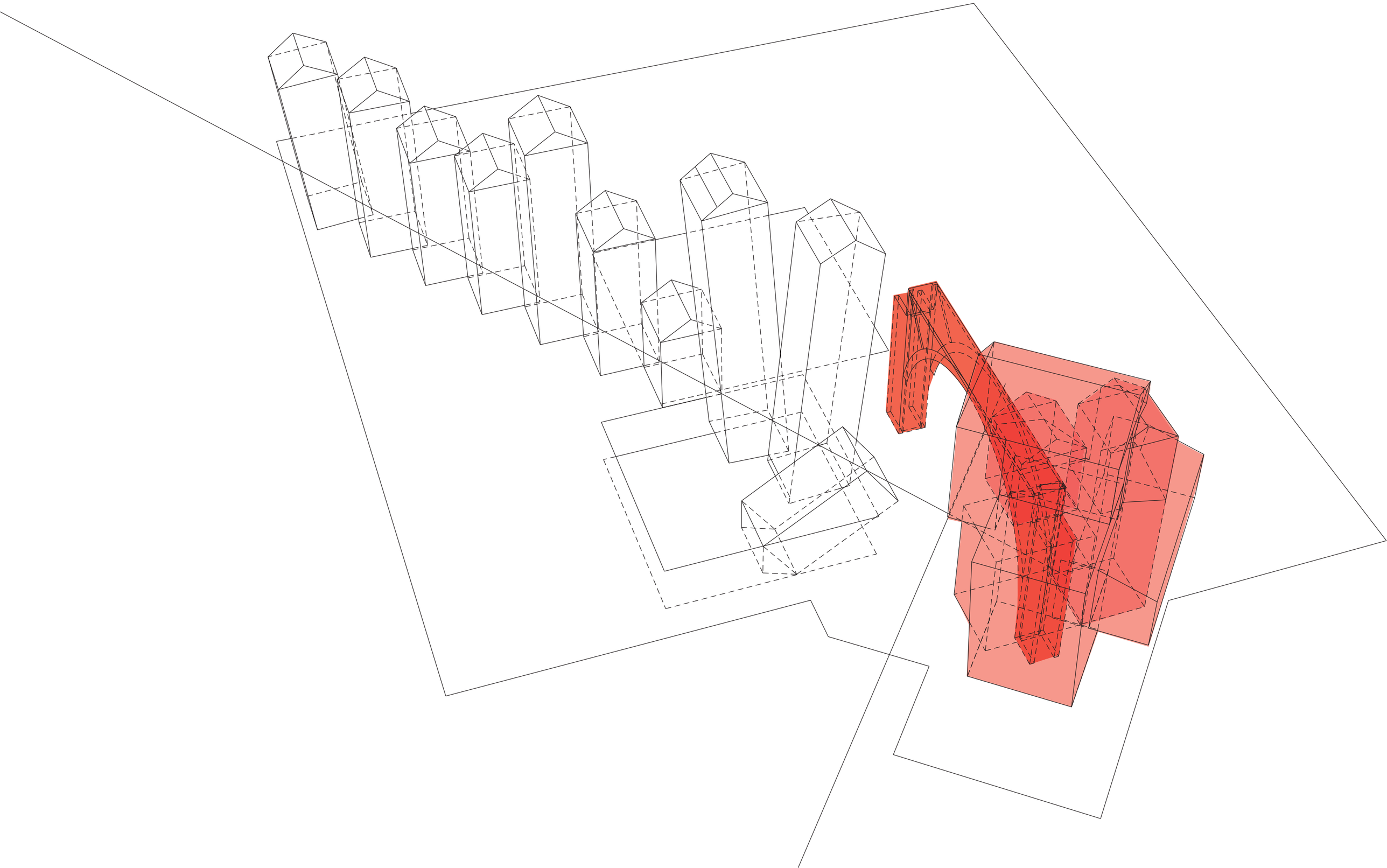
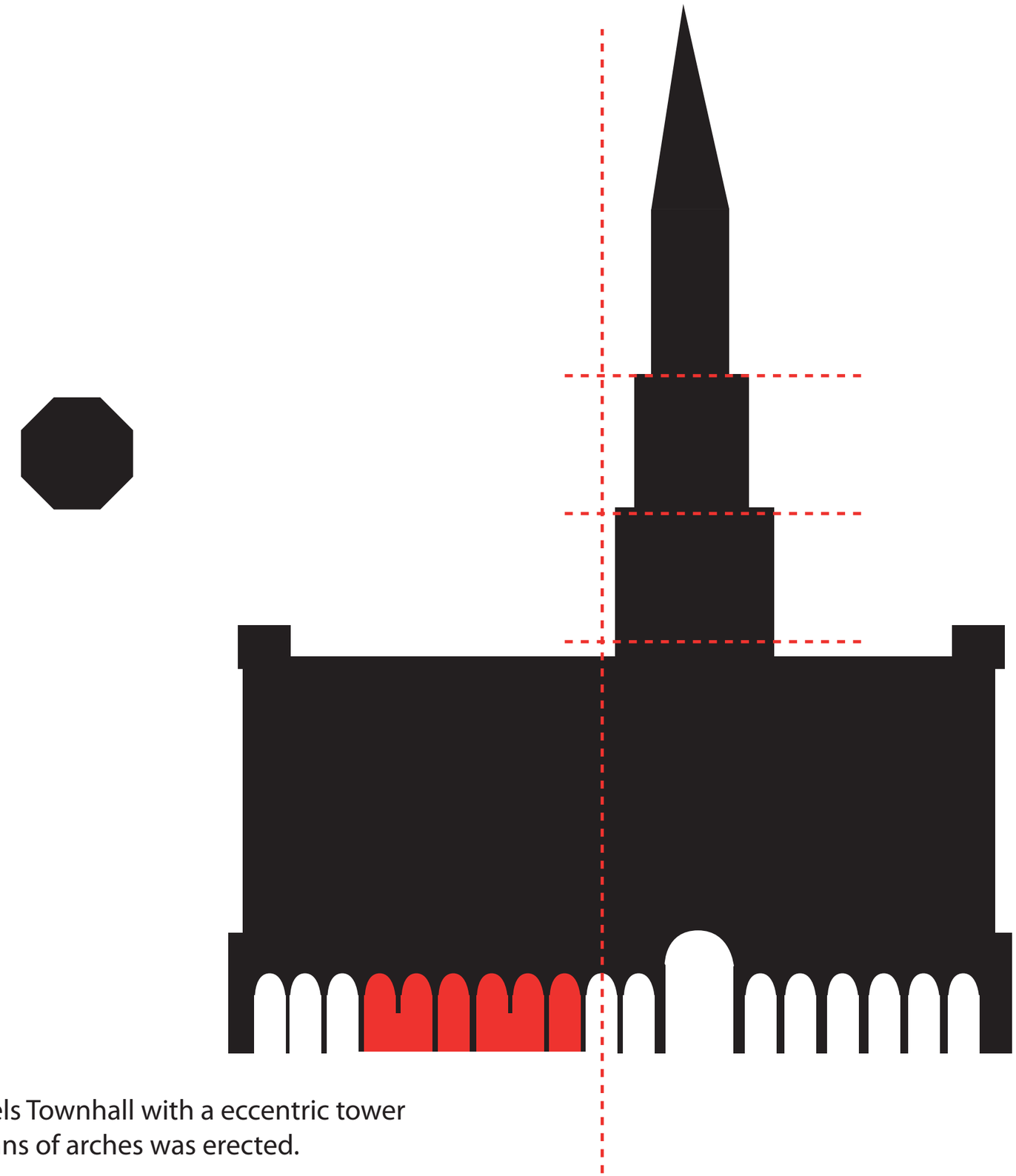
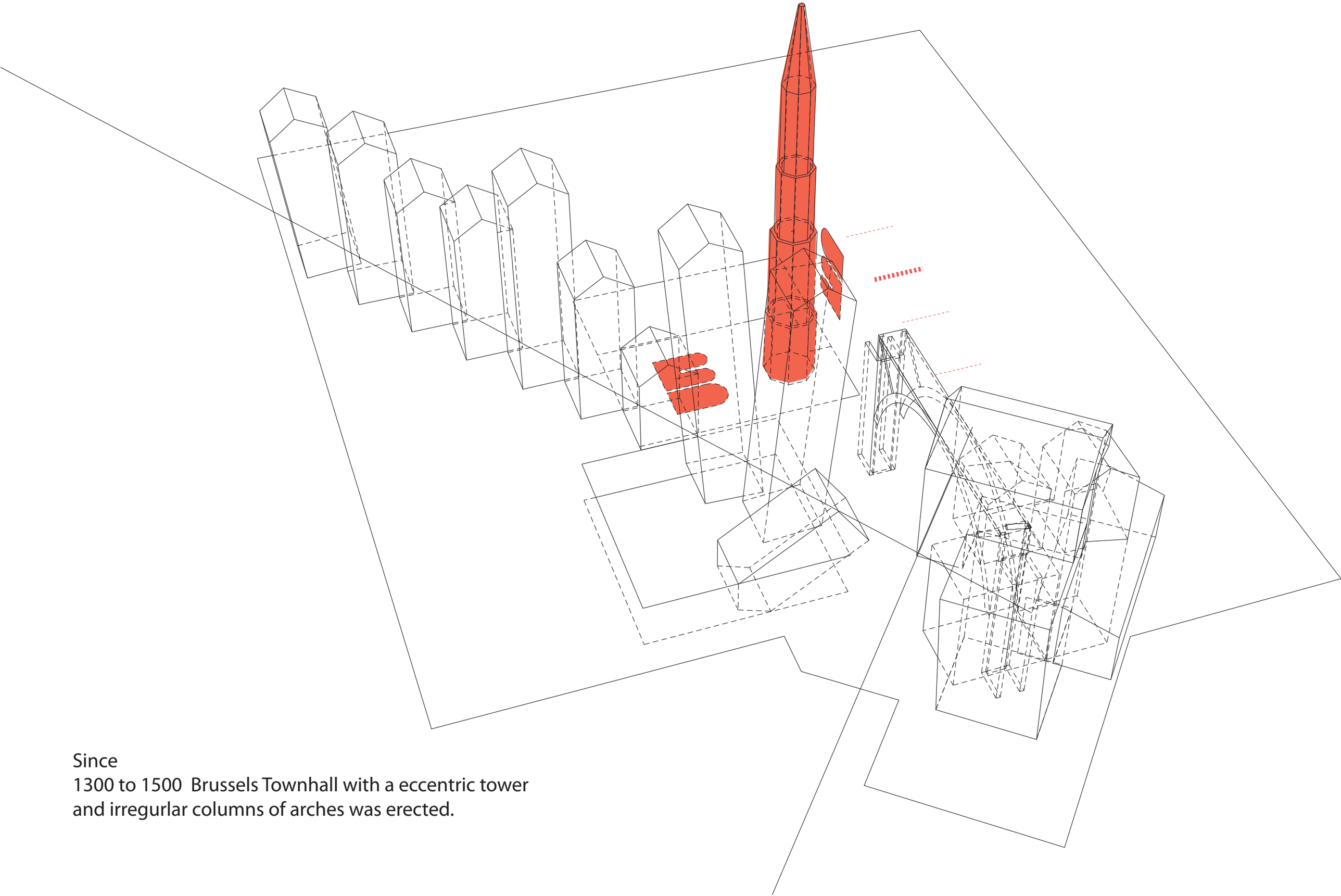




Since
1300 to 1500 Brussels Townhall with a eccentric tower
and irregurlar columns of arches was erected.



Since
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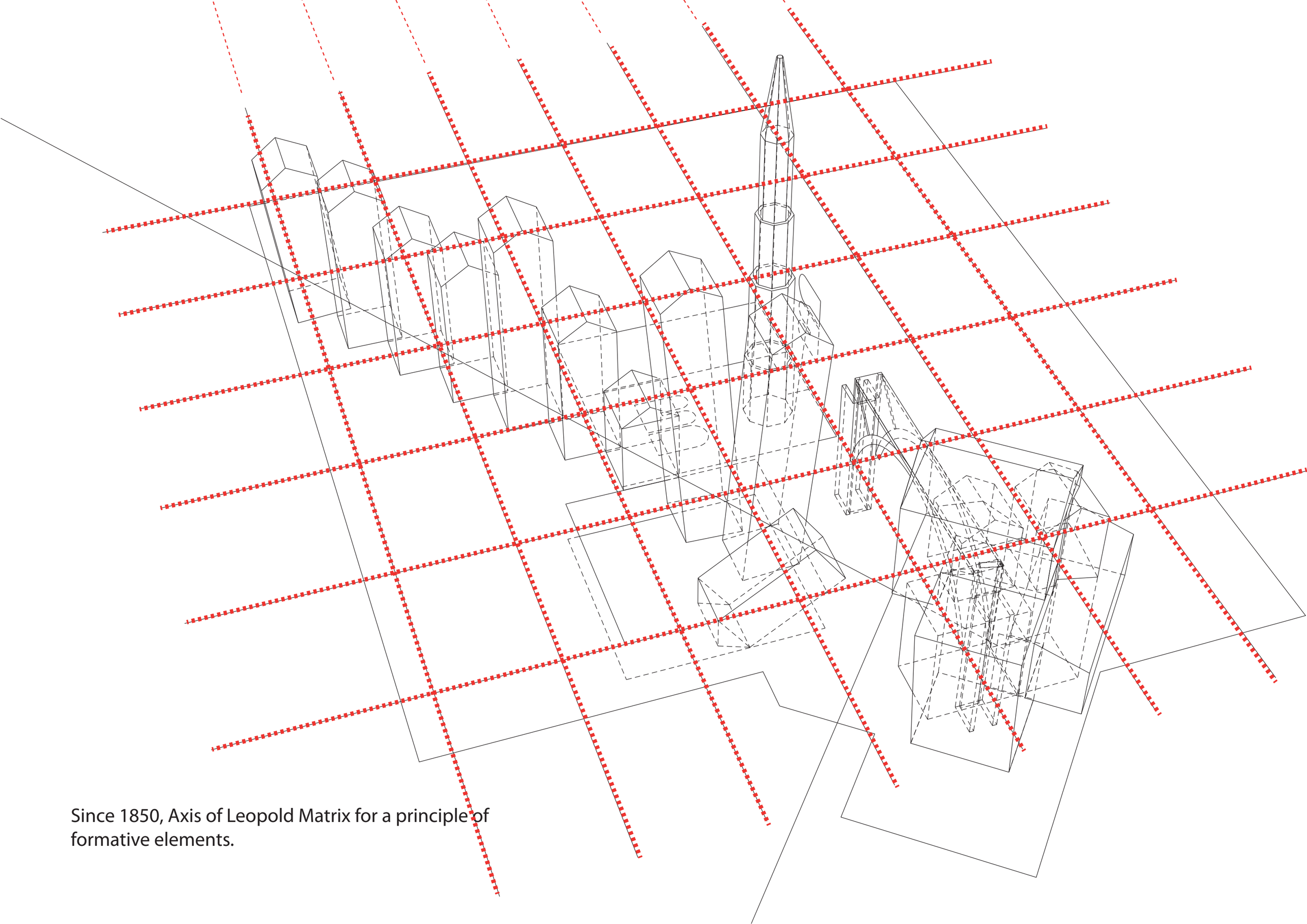
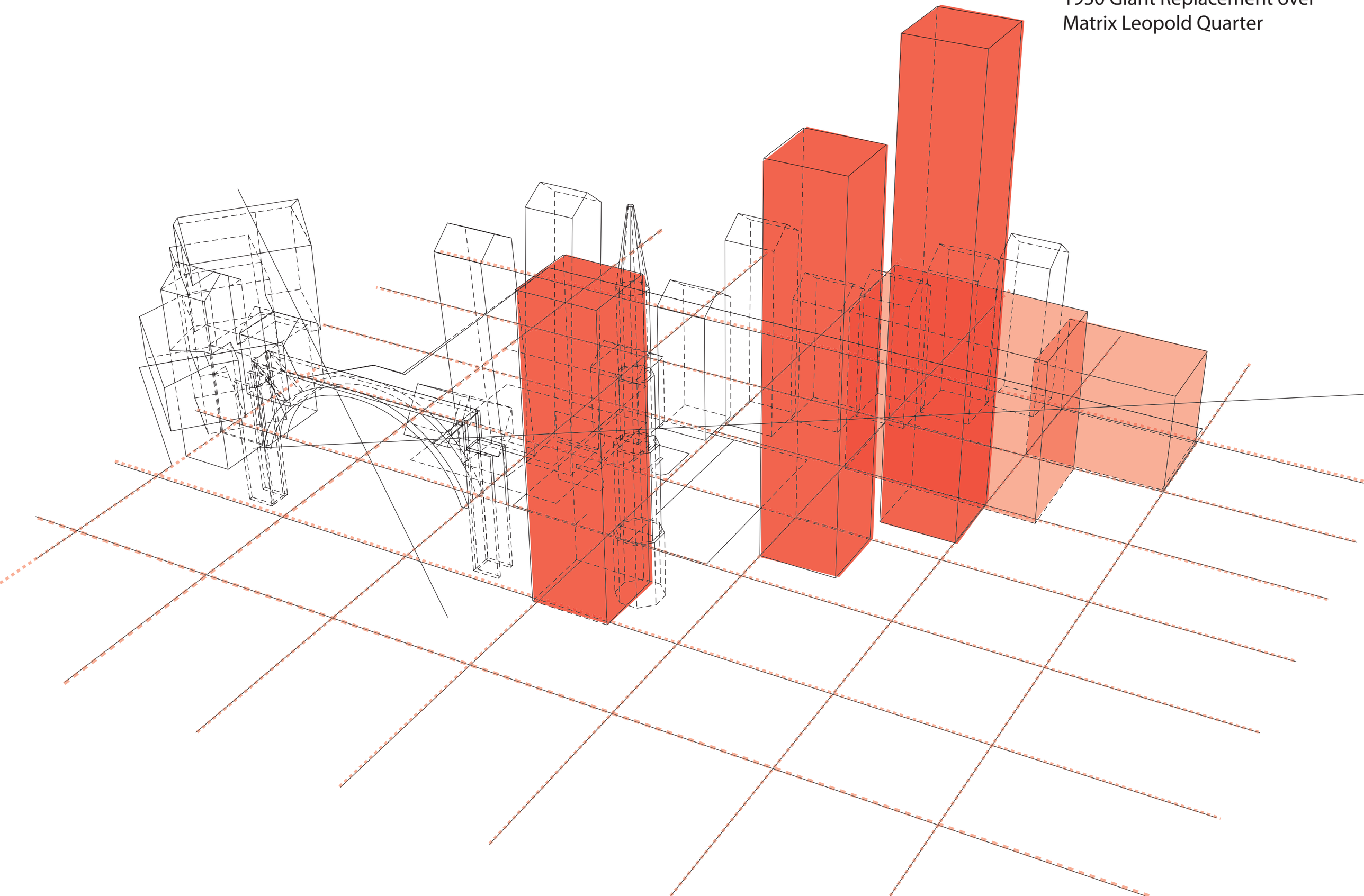
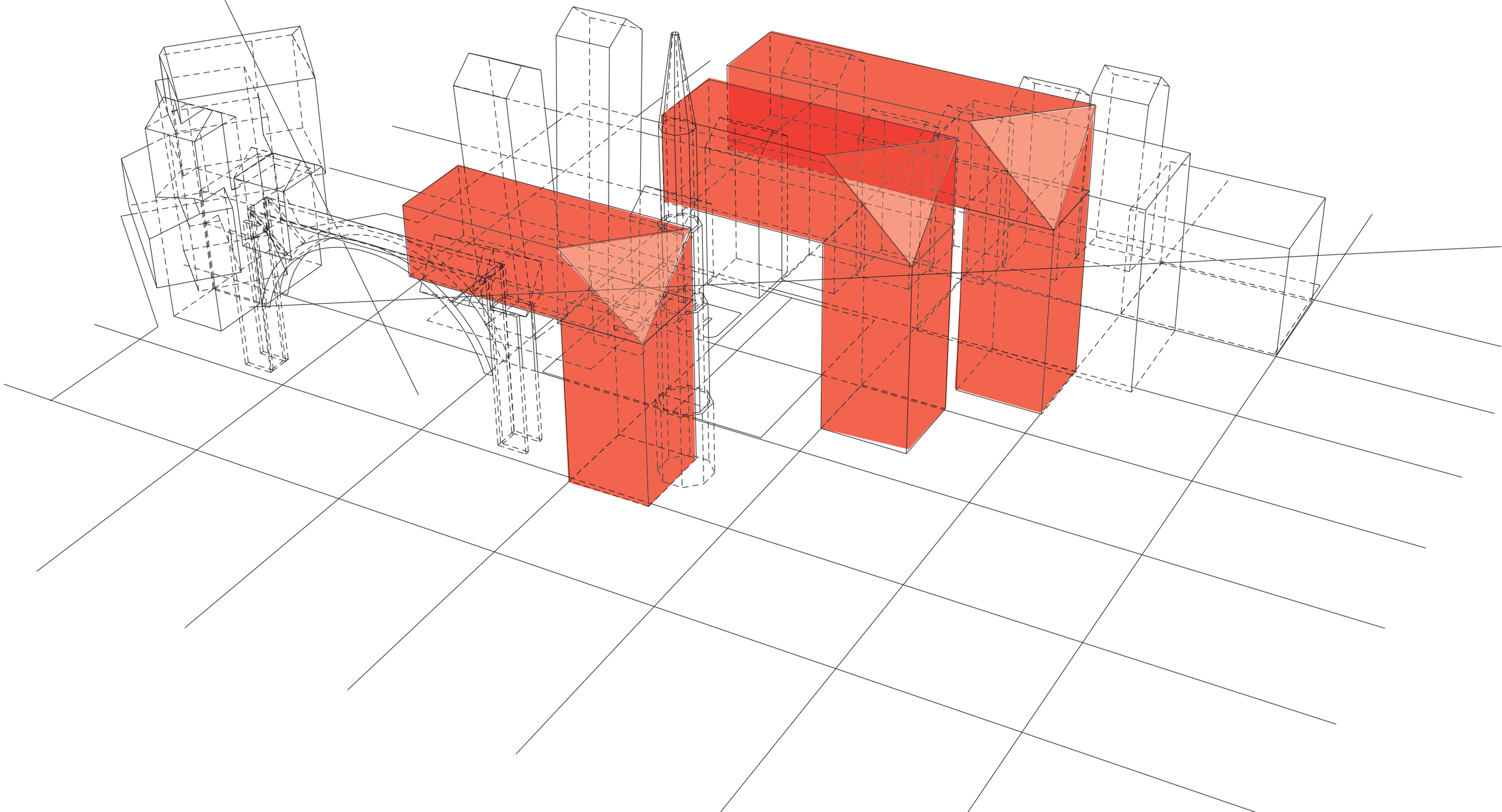


Since 1850, Axis of Leopold Matrix for a principle of formative elements.

1950 Giant Replacement over
Matrix Leopold Quarter



1970 Giant Replacement over
Matrix Leopold Quarter



Connectivity inbetween Human scale of residential with overgrown Giant scale

Image of Mirrored Roof to be facades

01. Position
02. Situation (Change Heirarchy, Change Scale)
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07. Spatial Configuration/Circulation
08. Structure / Materiality
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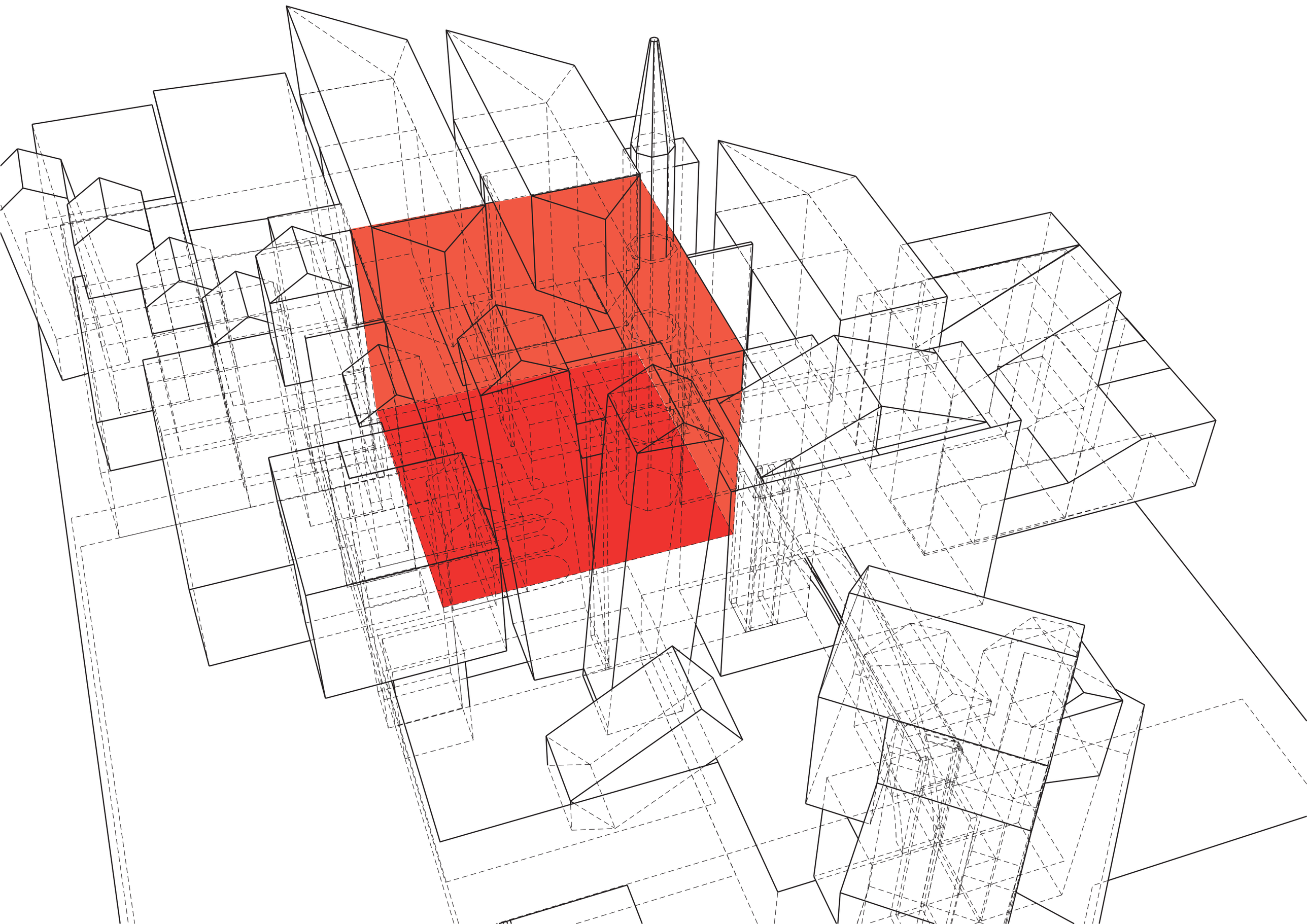
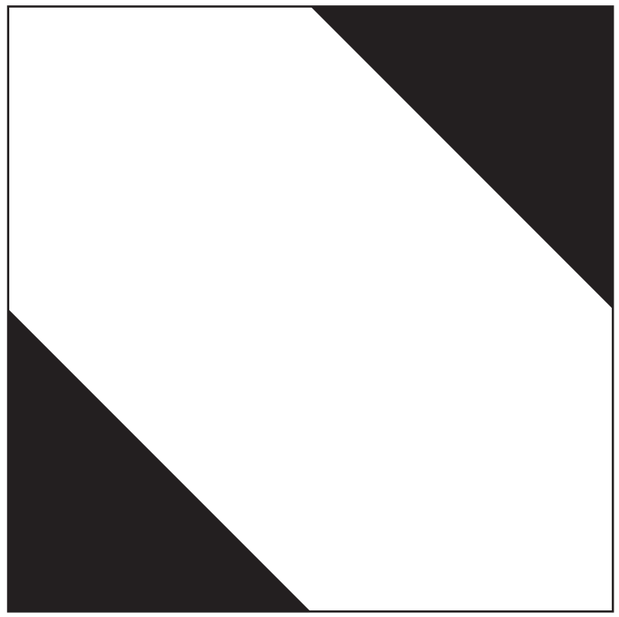
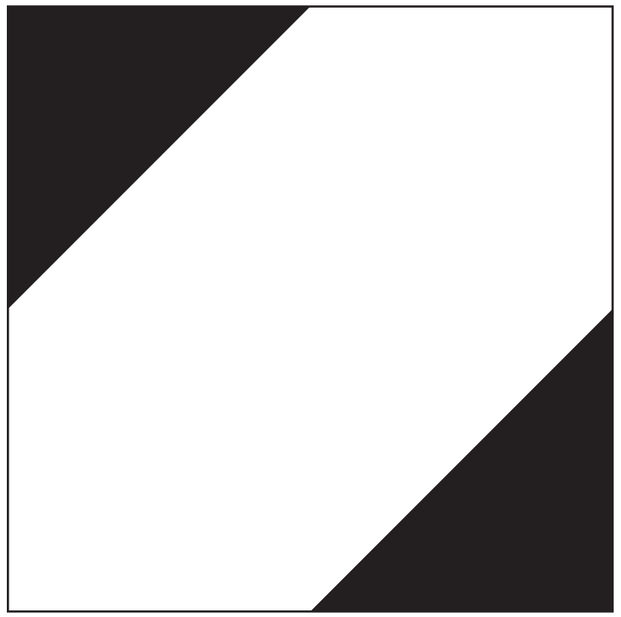
10. Perspectives

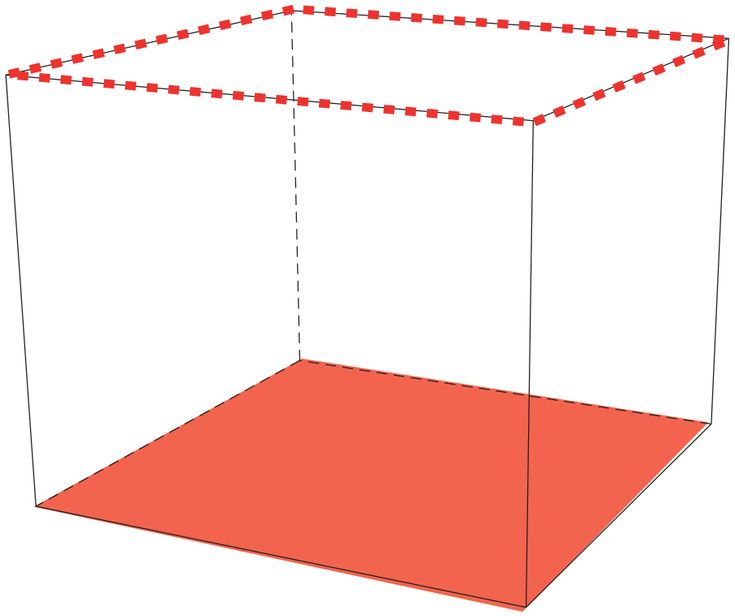




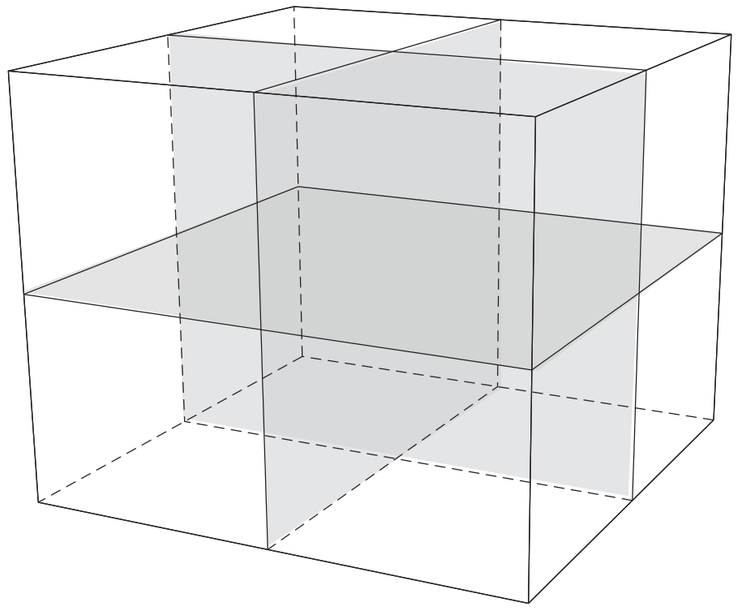
Parti_Plan



Parti_Section

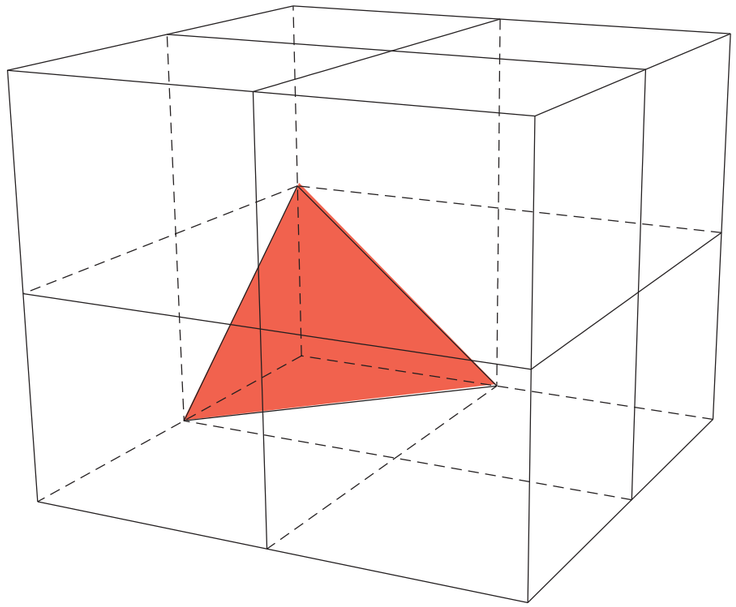


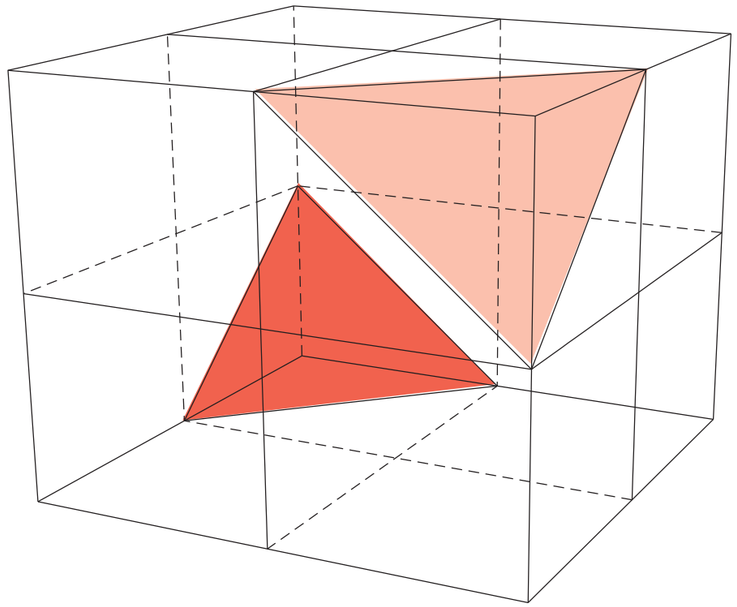
Creation of Fundamental



Fundamental Sub divisions in X,Y,Z axises

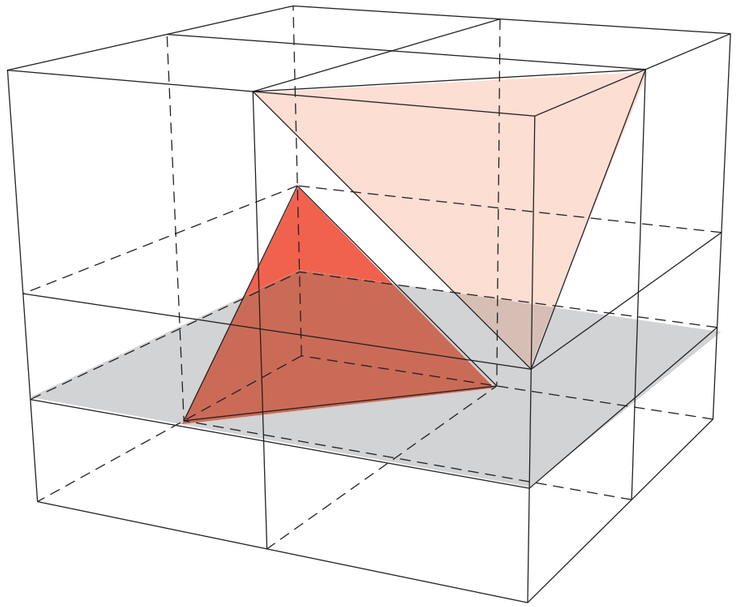
Layers are used as a fundamental spatial design element in complexity.

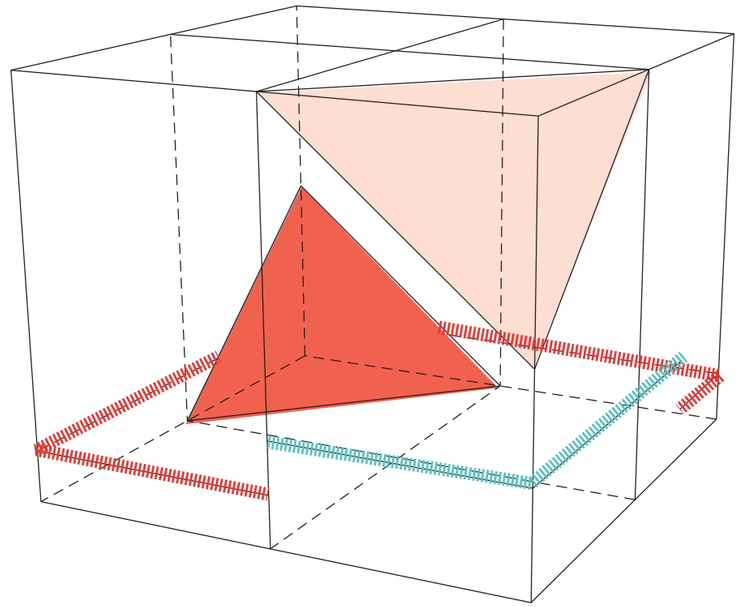




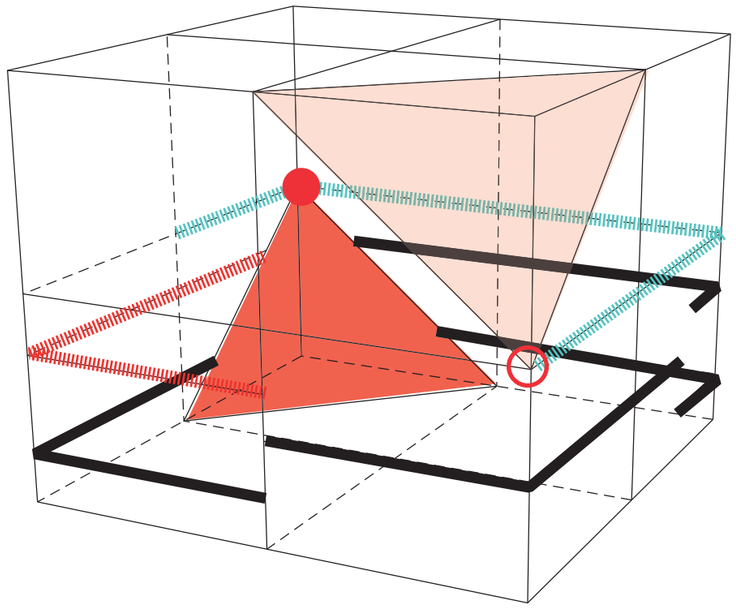
Main Access Bottom Part

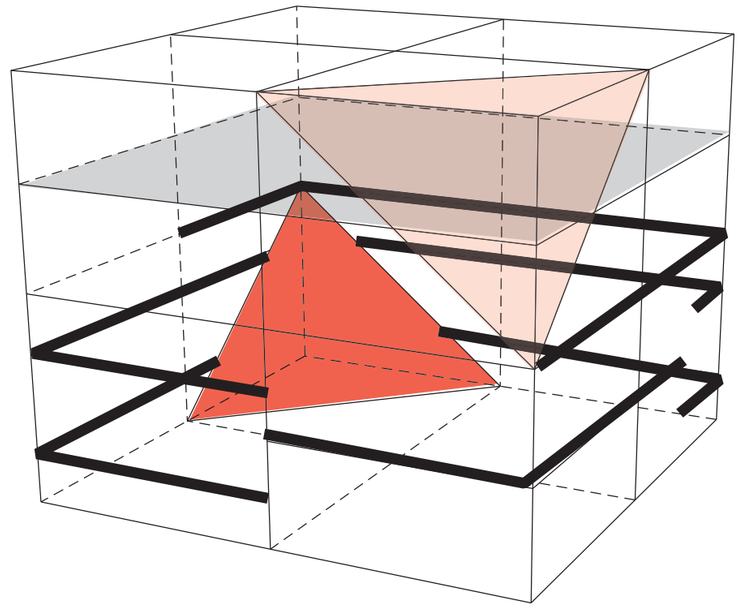
Fliped stiar connection is designed at a bottem conner area

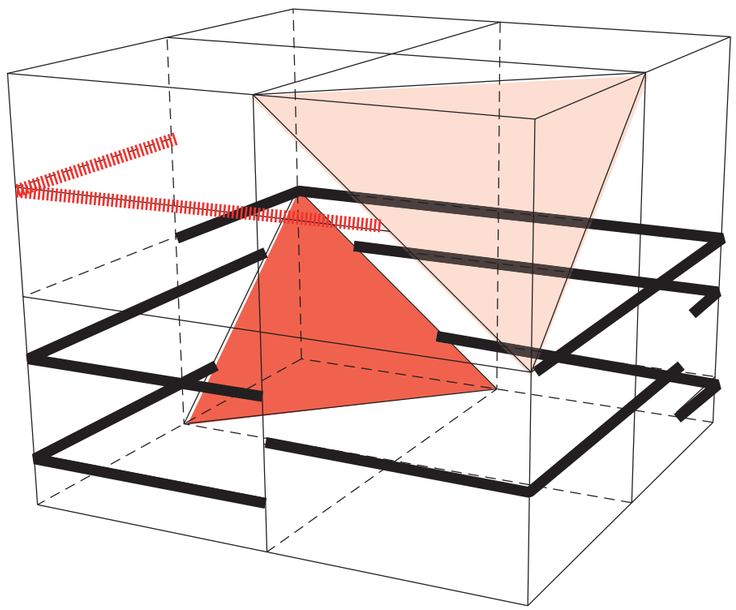


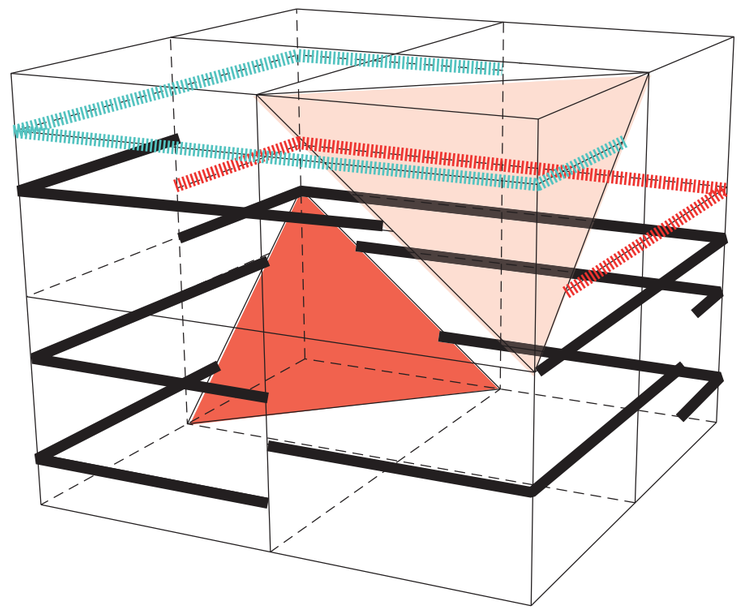


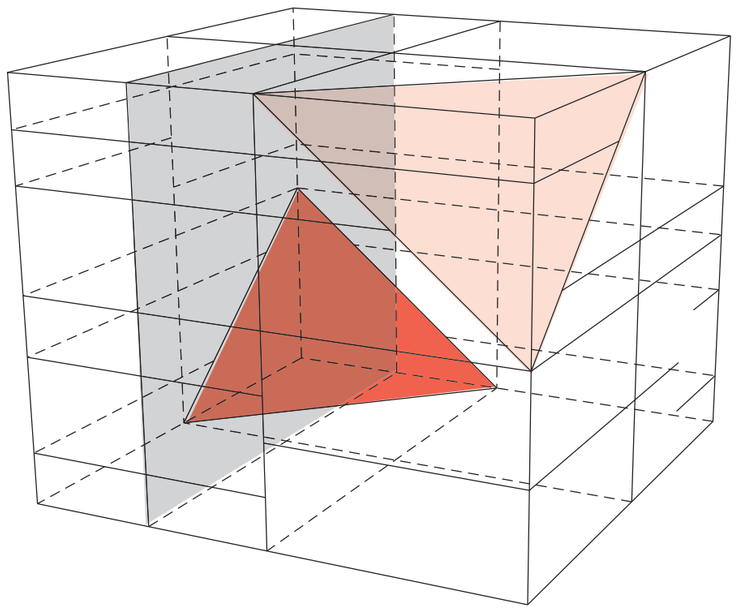
Horizontal Layers





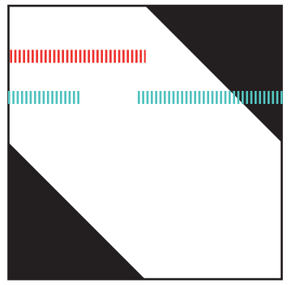


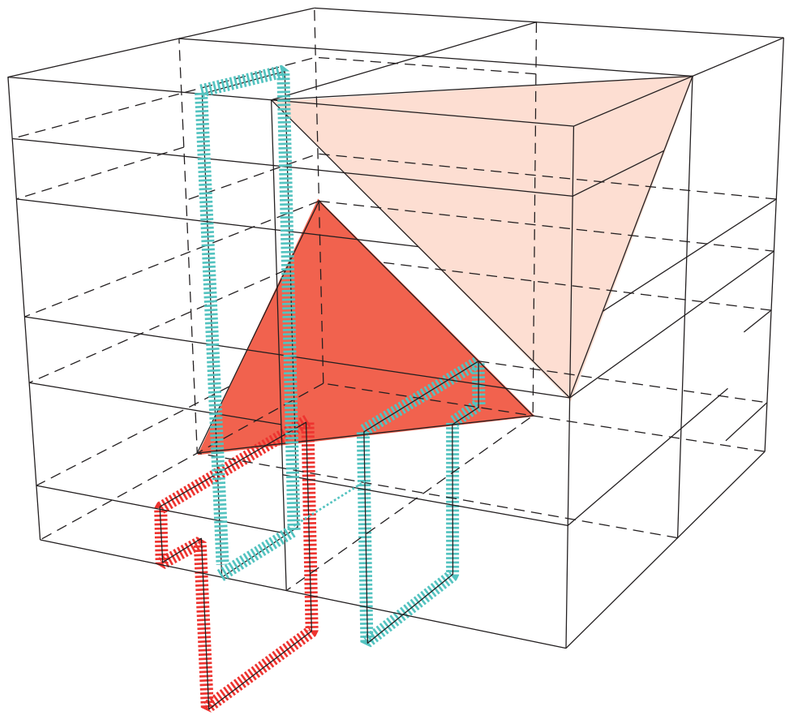




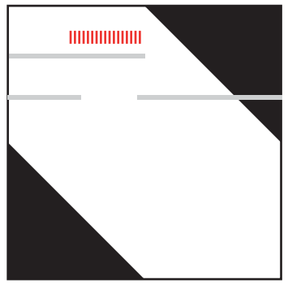
Vertical Layers arranged on one side

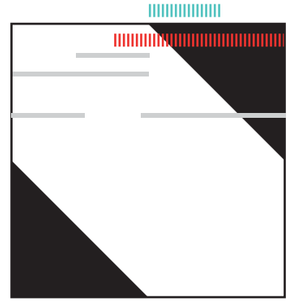
Vertical Layers along Y Axis

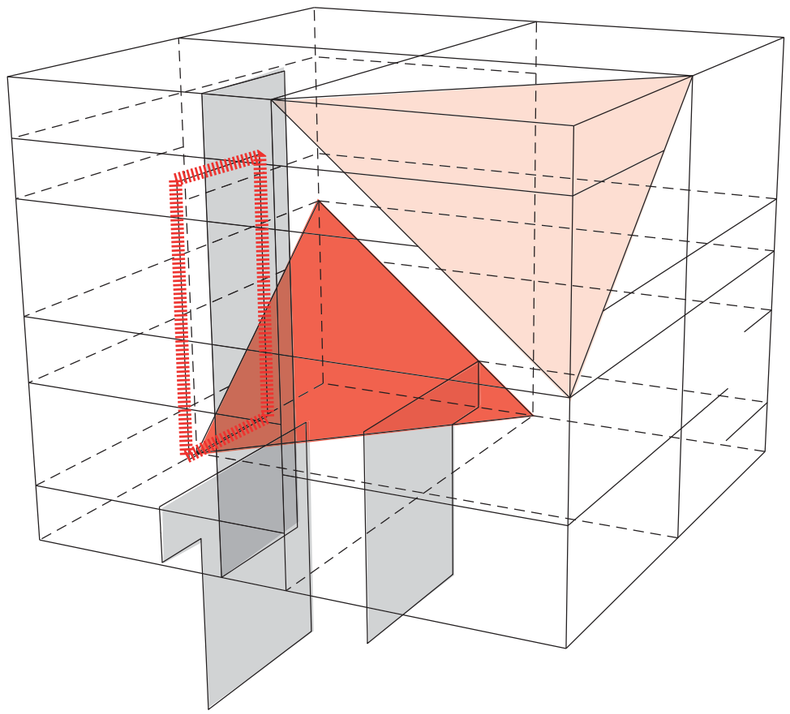


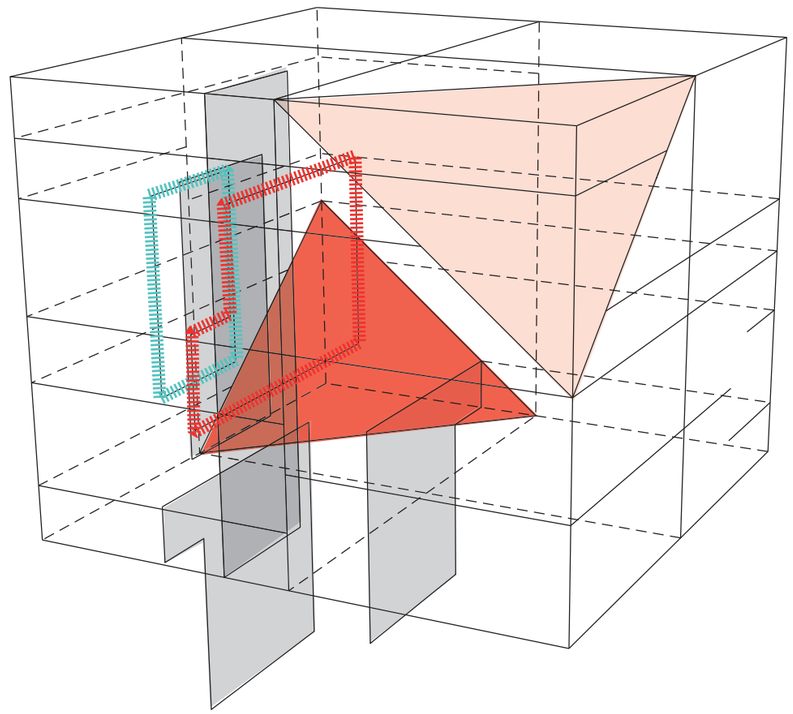


Layers spilited up into two in order to provide it with spatial depth

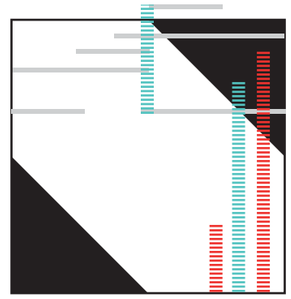


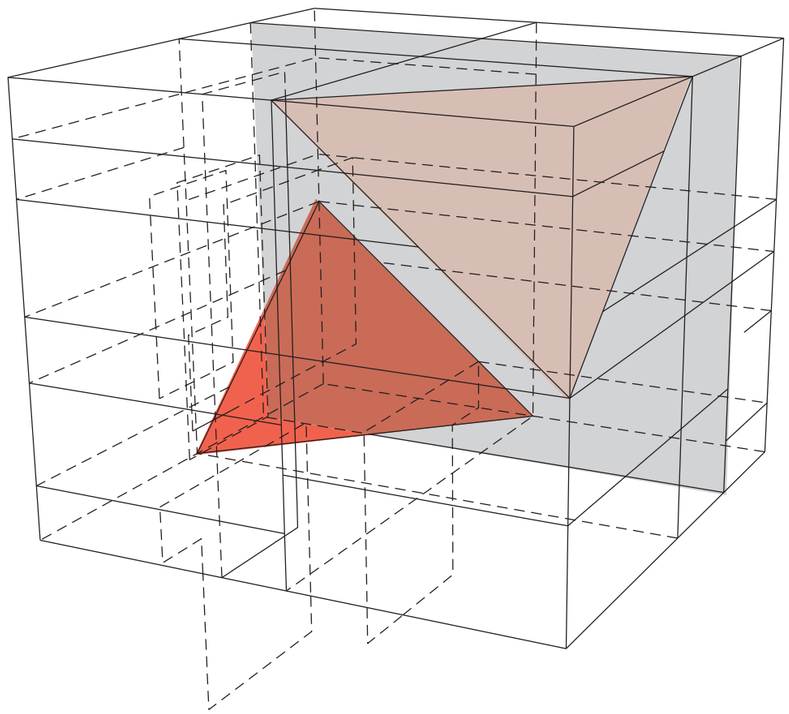


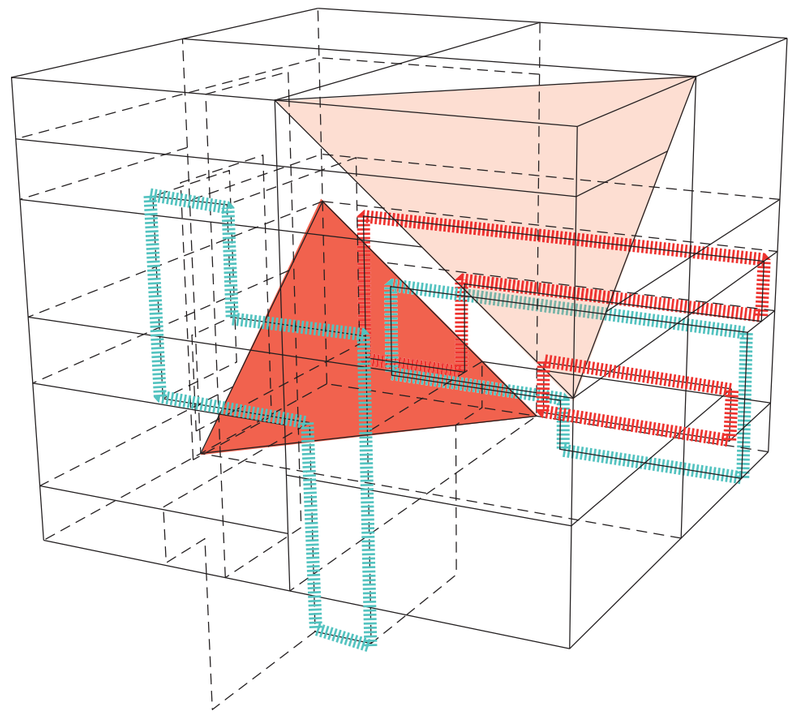




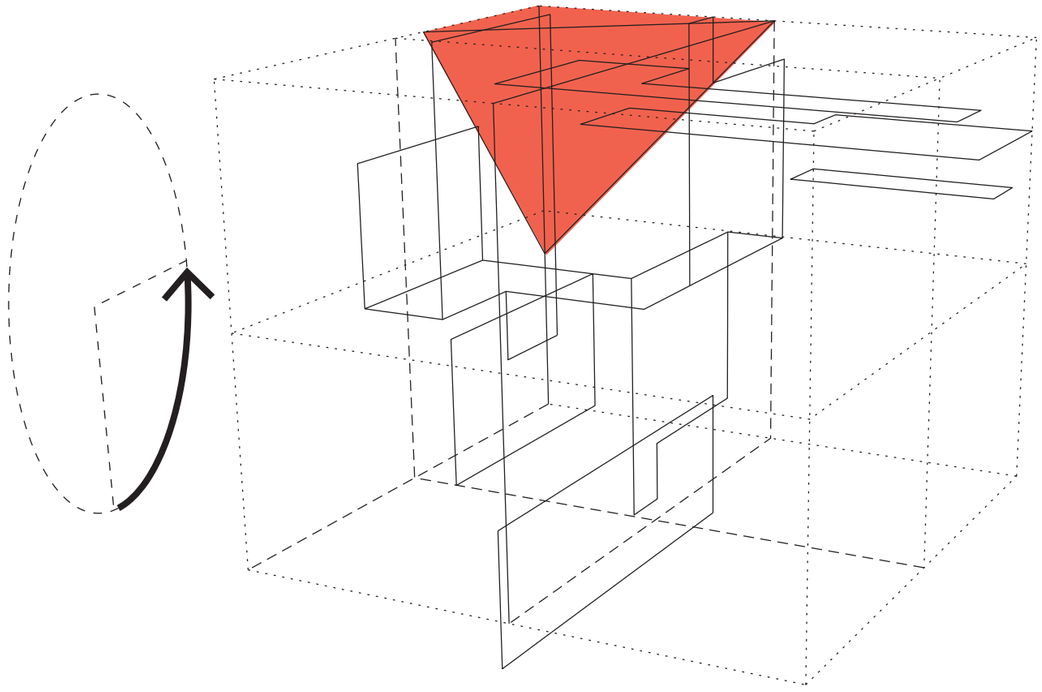
Layer on Y axis are kept increased upto 5th layer.



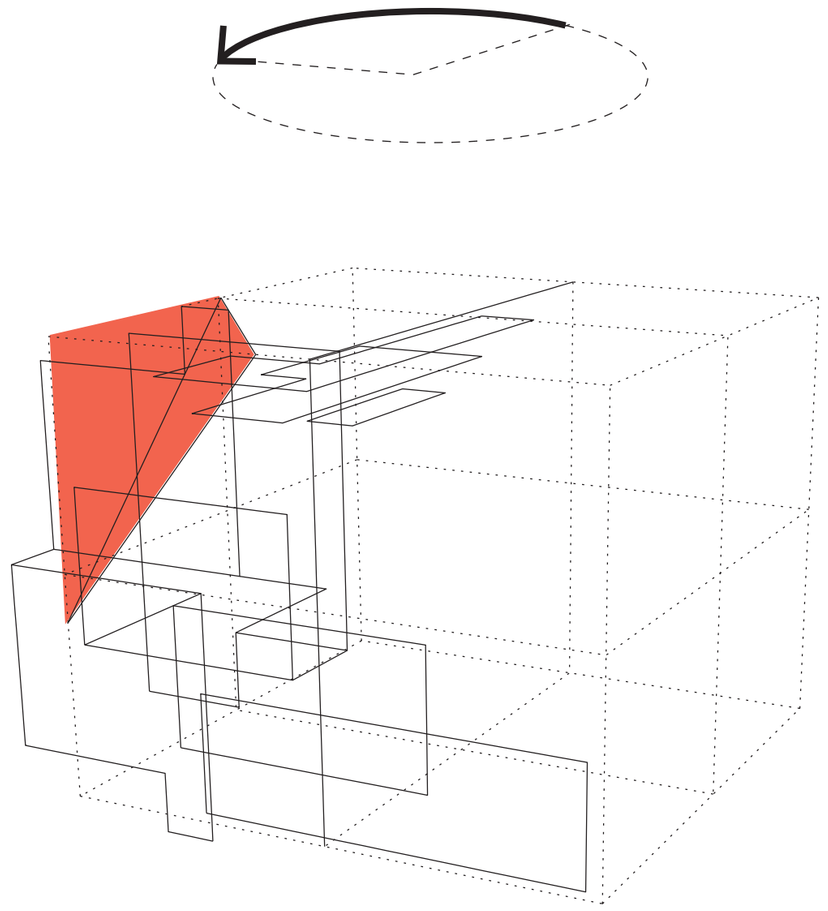




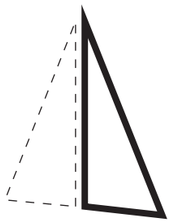
Layer on X axis are kept increased

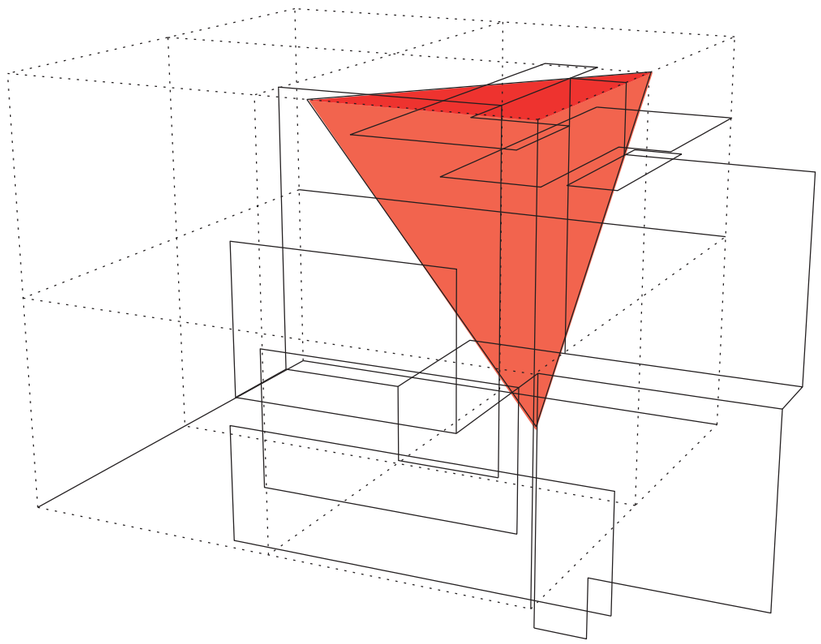


Layers on axises X and Y are rotared 90 degrees.
along Axis “X”

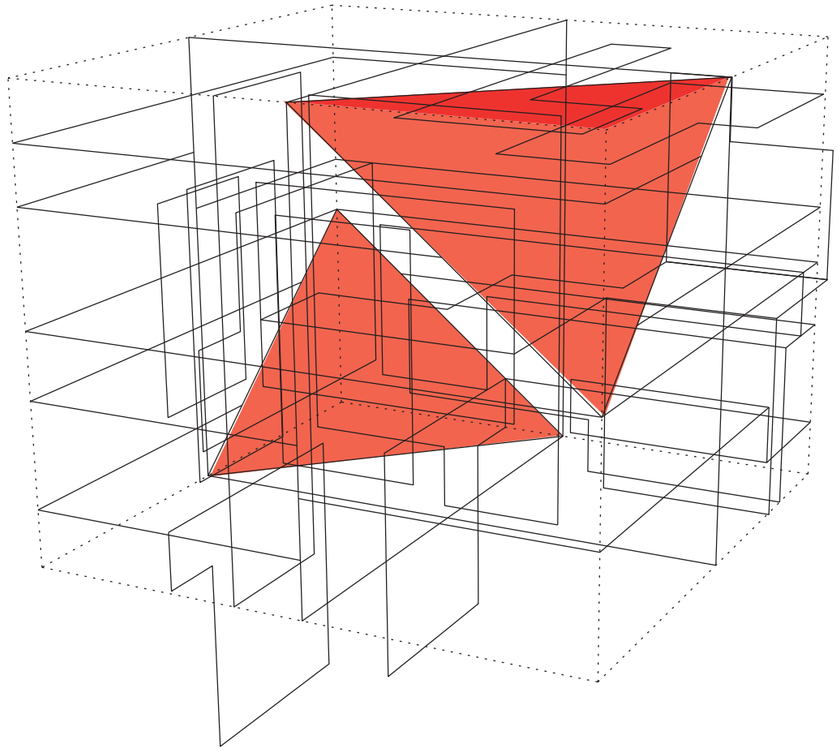


Rotated Layers are rotated 90 degrees along Axis “Z”





Layers which rotated along X and Z Axis flipped along axis Y.



Two main access cores are organised. which provide space with spatially mirrored plans.
Section become plan, wihch becamed mirrored plan

01. Position
02. Situation (Change Heirarchy, Change Scale)
03. Urban Strategy / Small Change for Big Difference.
04. Site Analysis
05. Design by Narratives
06. Design Parti
07. Spatial Configuration/Circulation
08. Structure / Materiality
09. Building Performance
10. Perspectives

Fairy tales-Retail

Closed storage /Stock

Loading / Unloading

Fairy Tale Shop

Fairy tales-Exhibition Space

Loan out and Disposal

Acquision

Loading Packing

Unloading Unpacking

Inspection

Workshop

Conservation

closed storage open access storage

Labelling, Marking and Measuring

Exhibition

Photography

Data collection

Public Space

Performance and Story-telling

Delivery of Costume/ Material

Costume/ Material store

Stage Access

Performance organization

Performers space

Delivery of Secnery

Clothing Rental

Stage

Scene Dock

Arrive

Enter

Lobby security

Orient

Ticket

Muscians Spaces

Adtorium

Depart

Exit

Shop

Public Space

Managerial space

Firay tales-Informative Space

Firay tales-Education & Research

Book Store

Public space

Workshop

Research

Cataloge

Computer

Break

Managerial space

Check out/ Book

Reading

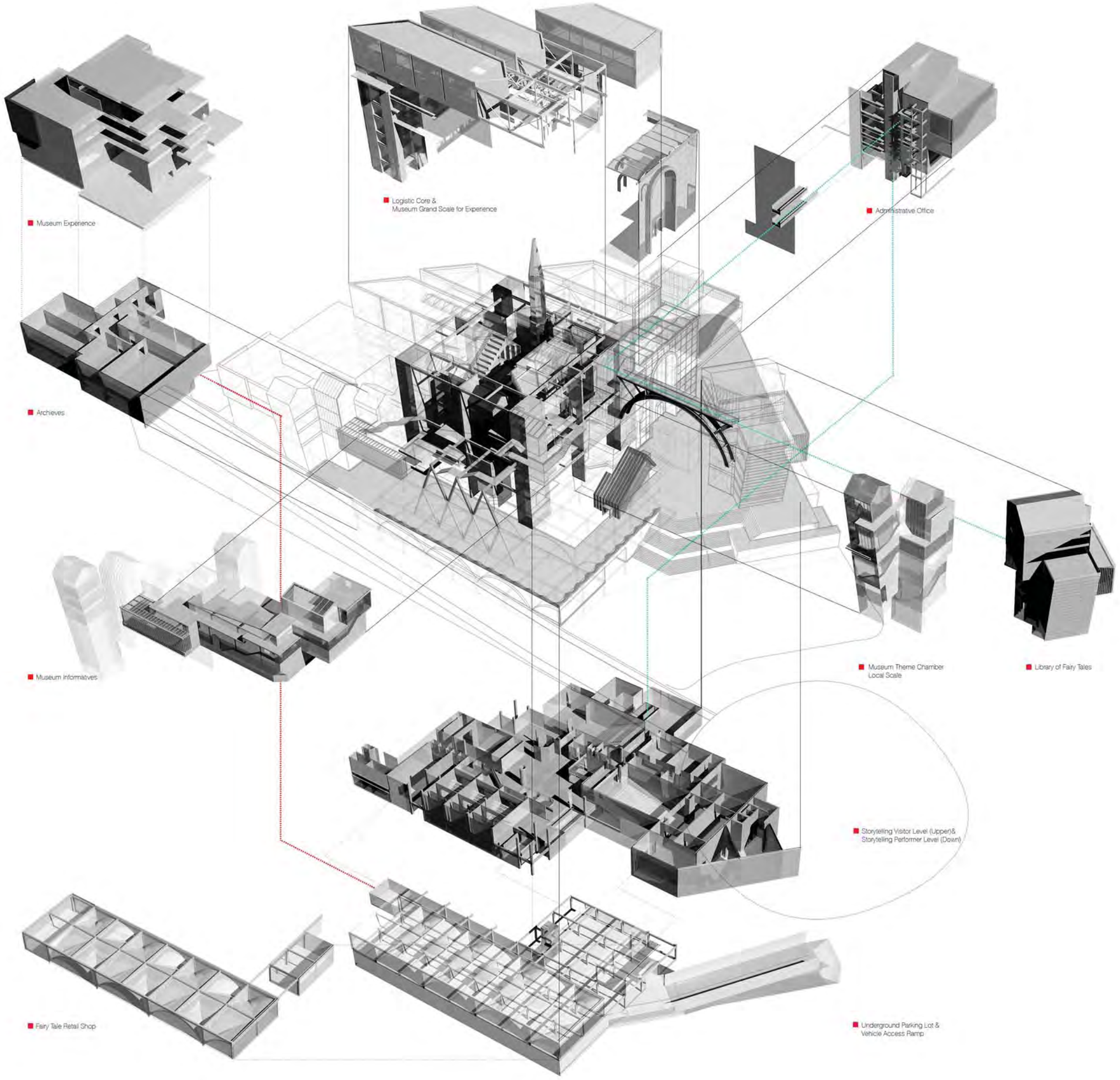
Studying

Labelling, Marking

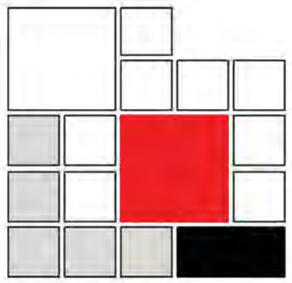
Books

☐ Sequence in Time

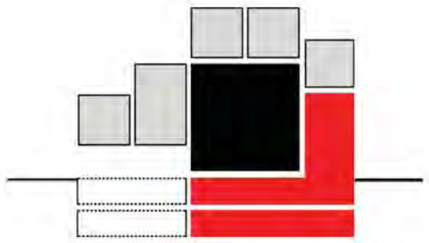
Composition



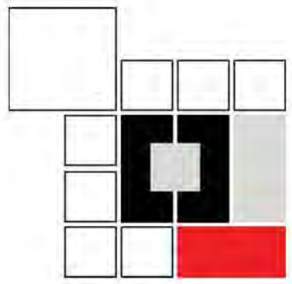
Composition



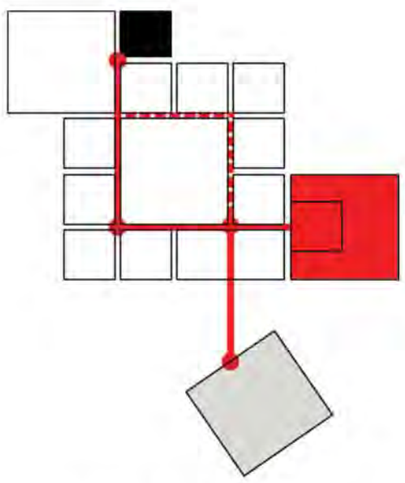
Museum Configuration



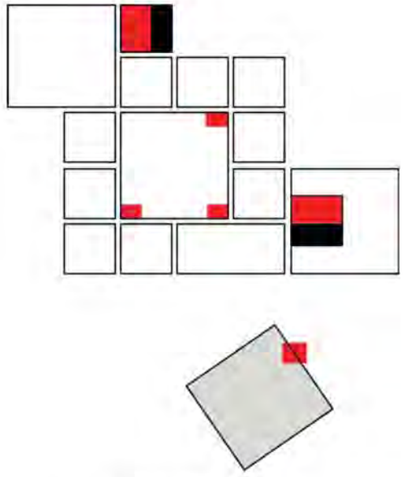
Story Telling Sectional Configuration



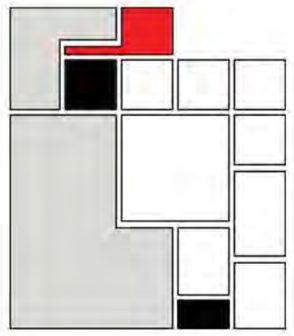
Security



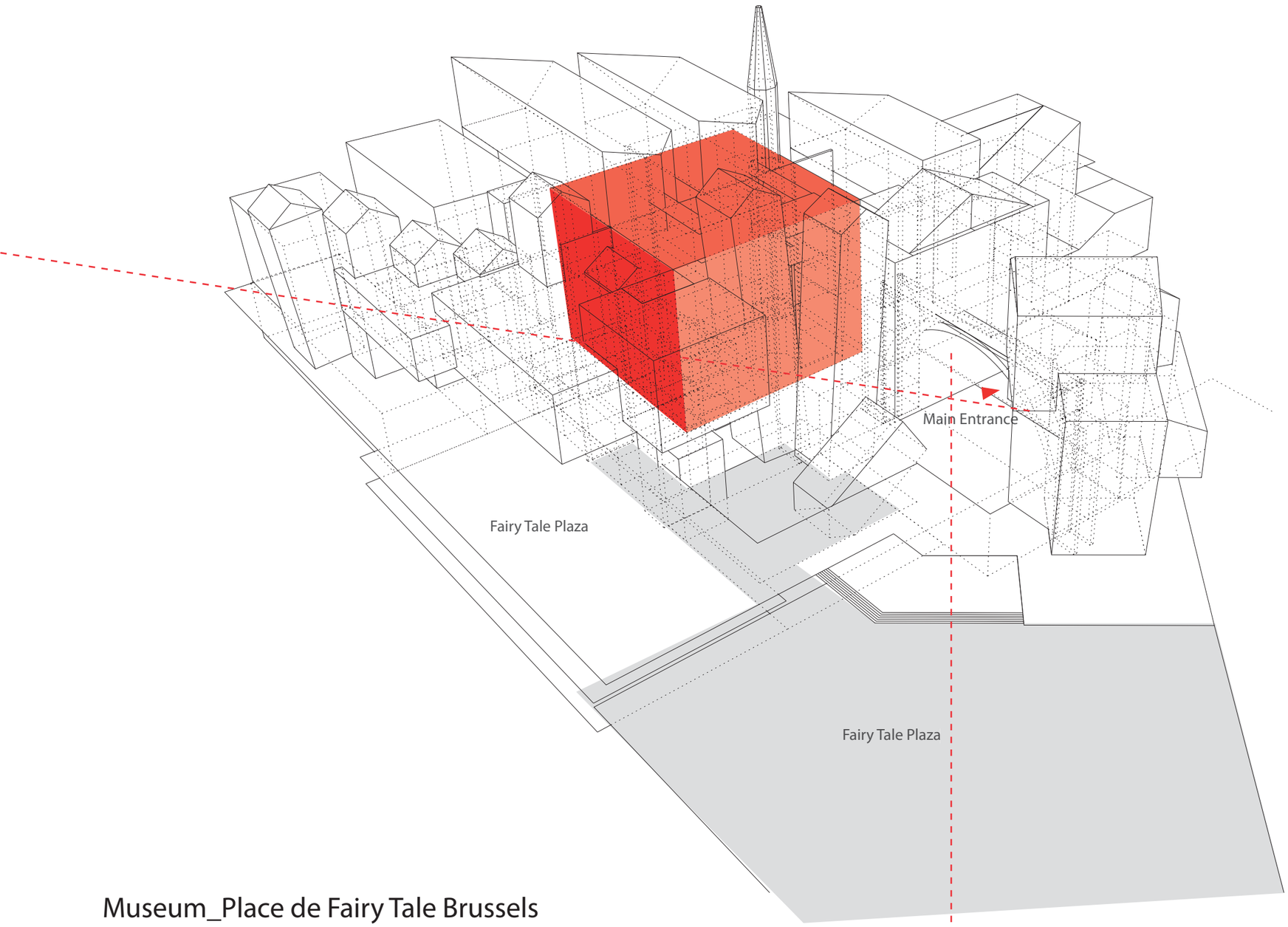
Administrative Connection



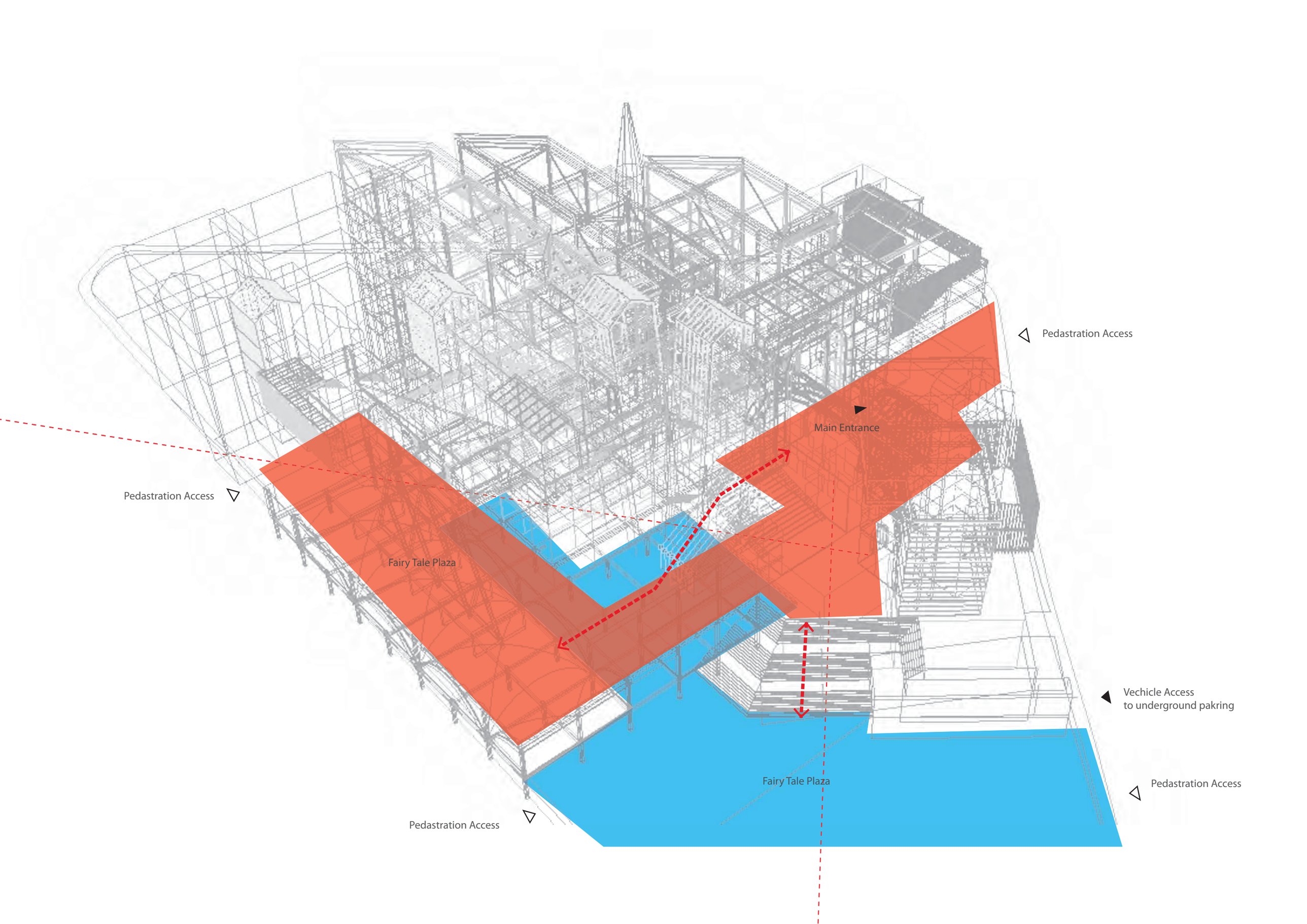
Vertical Circulation

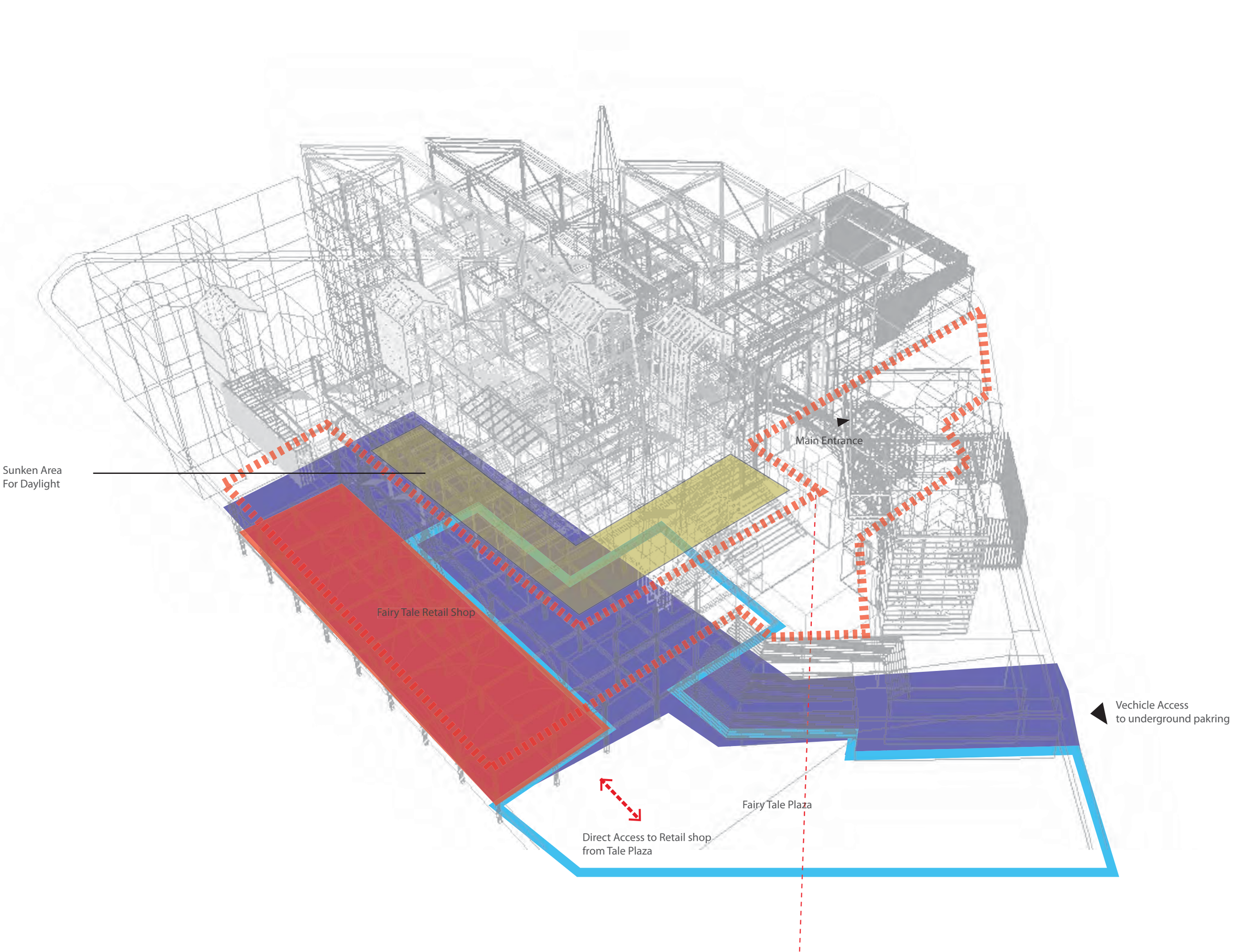


Service Zone



Museum_Place de Fairy Tale Brussels


Pedastration Access
Main Entrance
Pedastration Access
Fairy Tale Plaza
Vechicle Access
to underground pakring
Fairy Tale Plaza
Pedastration Access
Pedastration Access


Main Entrance
Sunken Area
For Daylight
Fairy Tale Retail Shop
Vechicle Access
to underground pakring
Fairy Tale Plaza
Direct Access to Retail shop
from Tale Plaza

N

Fairy tale plaza

Void
Sunken Area

Void

Gallery

Gallery

Gallery

void
Riser

Toplight
Zone

Archieve

Place de
Theme Gallery

Archieve

Archieve

St

St

St

CL

Breakout

Gallery

Void

Void

Informative Gallery

Informative Gallery

Plaza de fairy tales

Exit

Walk out

Place de
Theme Gallery
Belgium

Male Toilets

Female Toilets

Reception

Search

Library Entrance

St

Access
Lobby

Museum Ent

Staff Pod for
Examine tickets

Atrium

Main Entrance

Temp Gallery

Theme Gallery
Belgium

Temp Gallery

Main Entrance Plaza

Theatre Ent

Seats

Void

Void
(open stage)

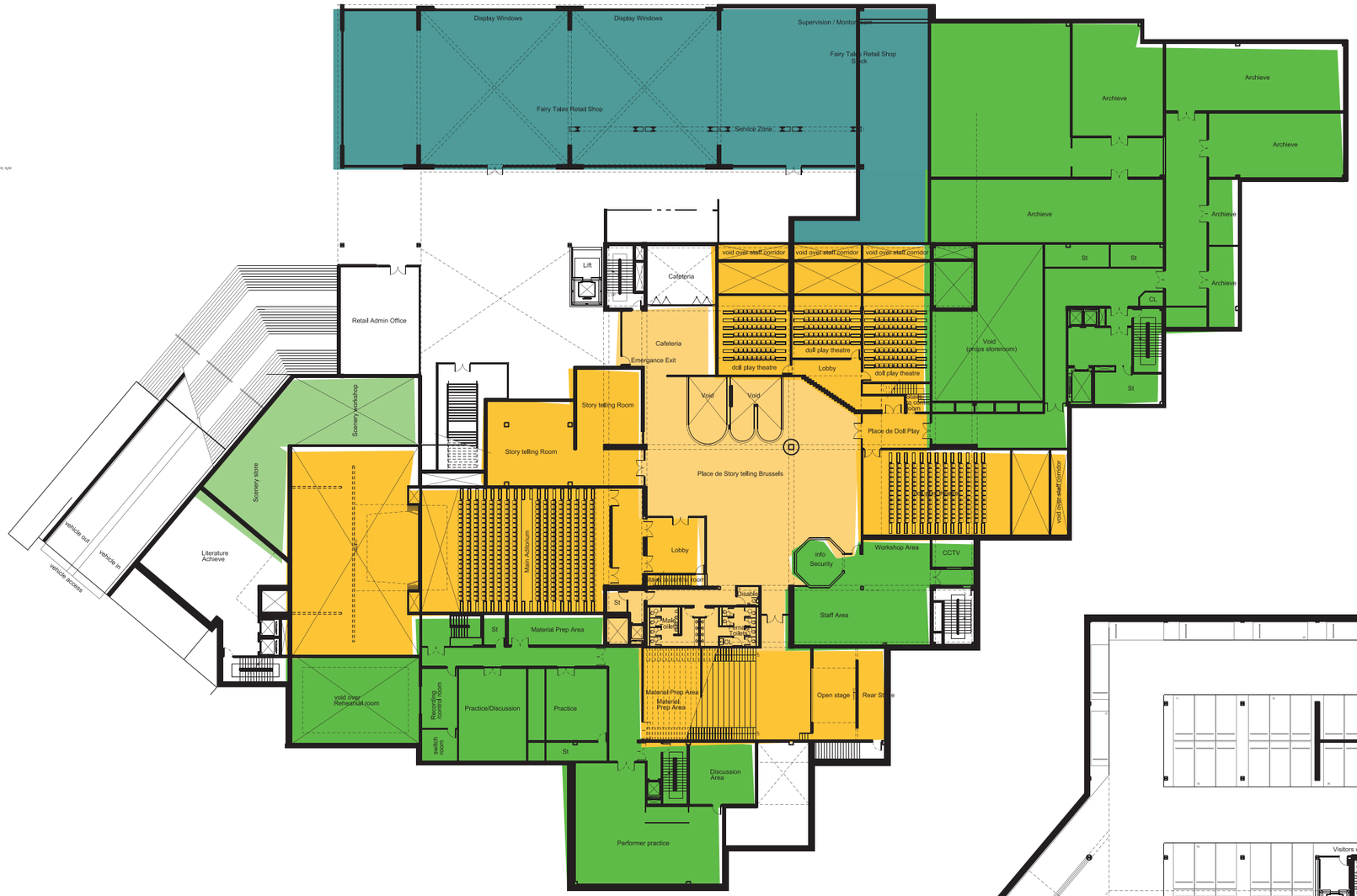
Reception
Ticket Box

Void

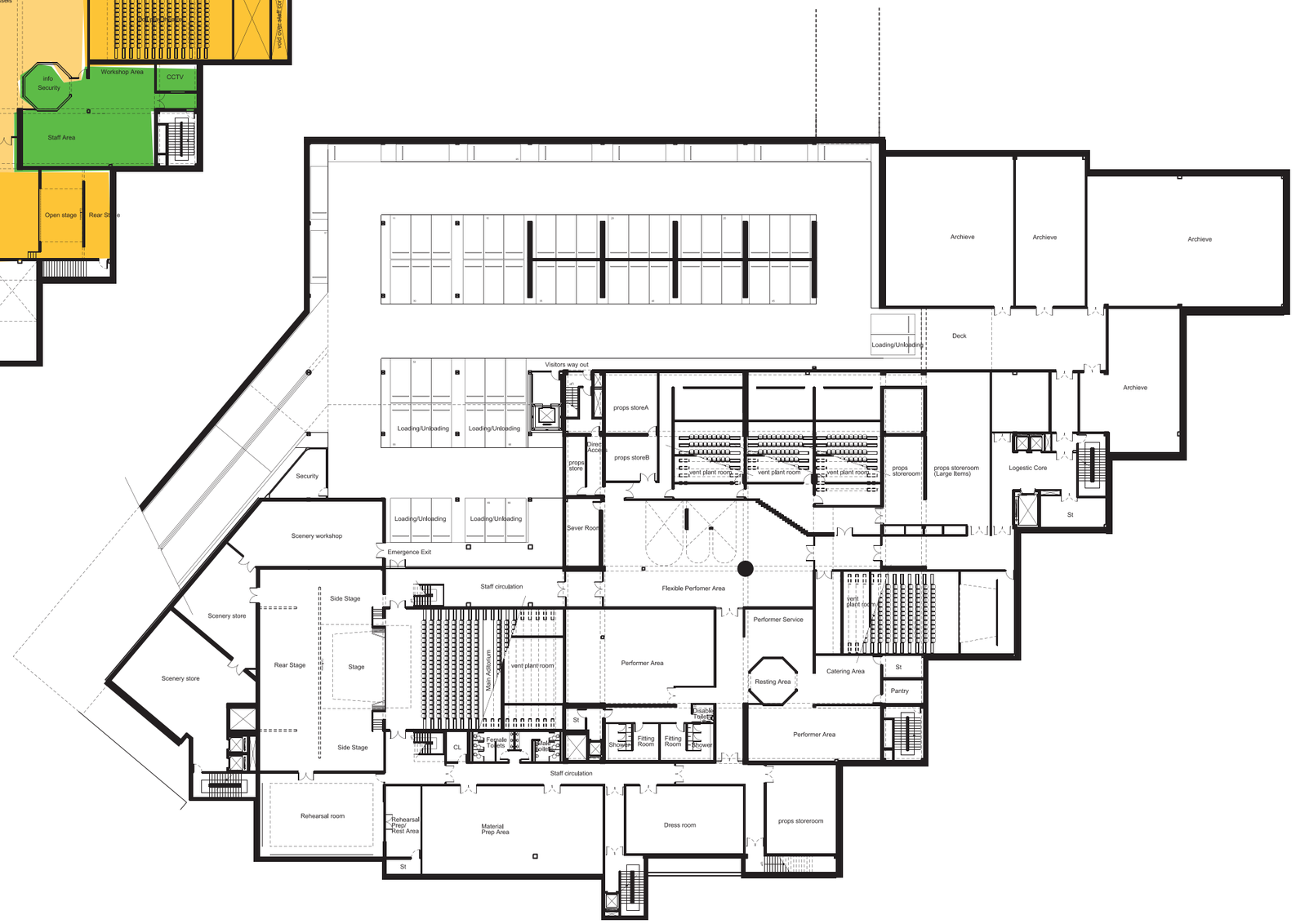
Infodesk

Admin Office

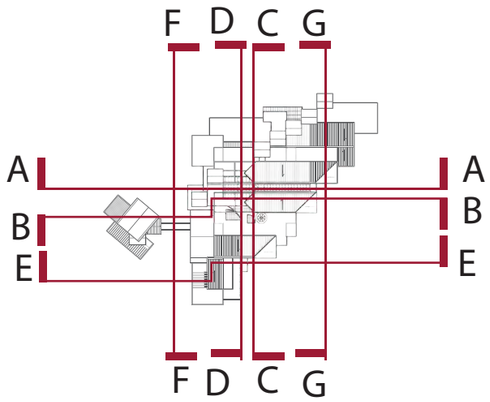
Main Entrance Level +7500



Level +1200 Place de Story Telling (Visitor Area)



Level -3300 Place de Story Telling (Performer Area)


F D C G
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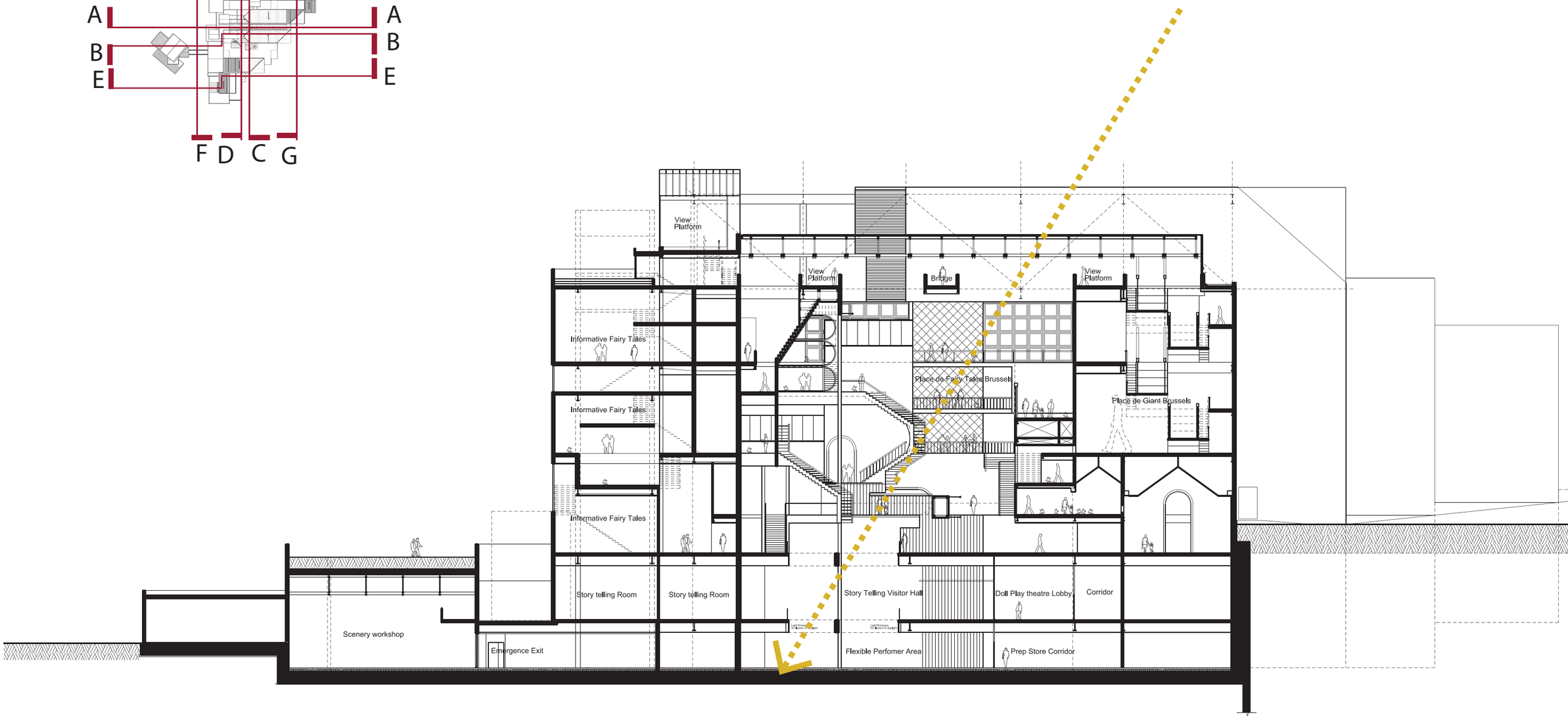
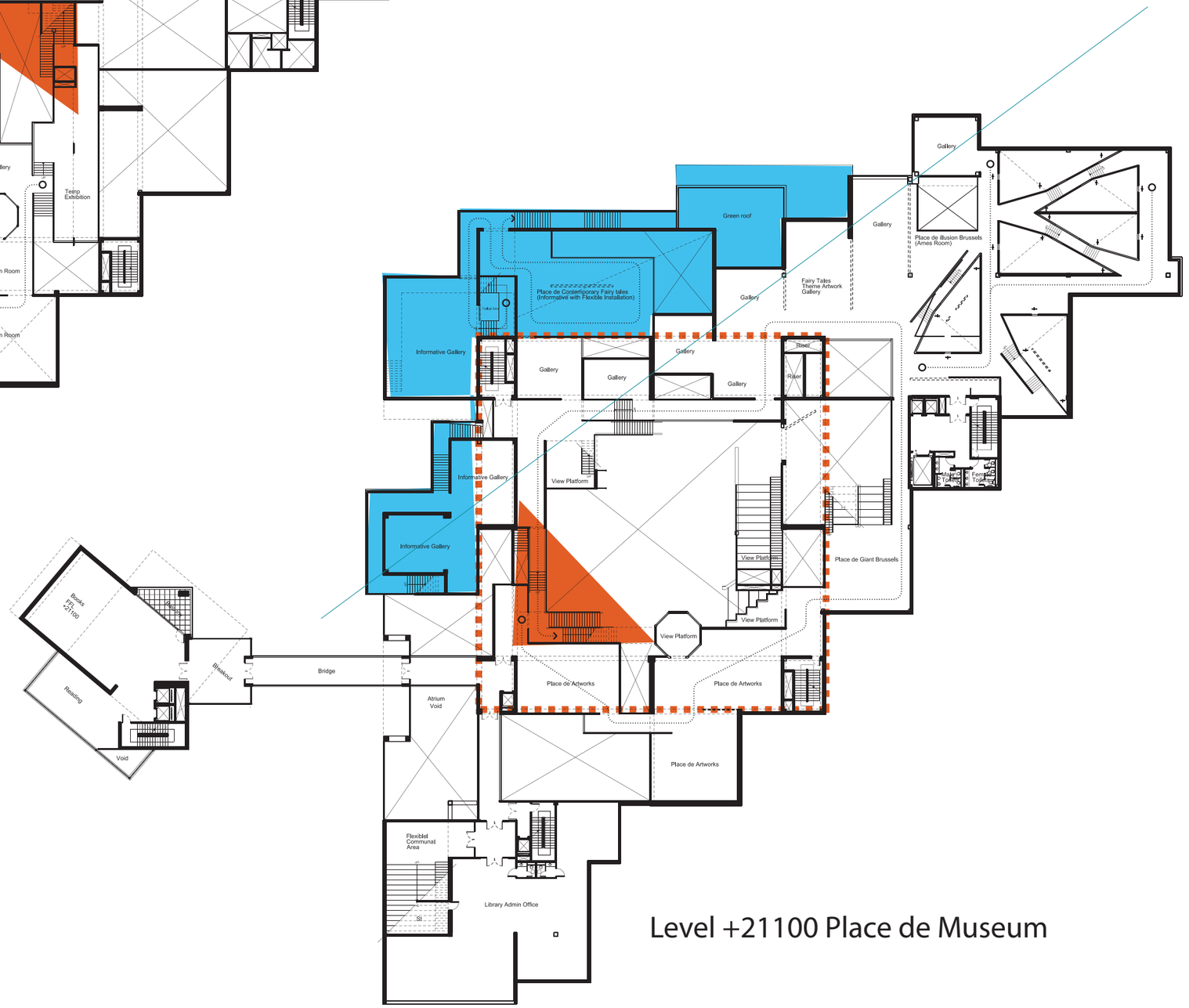
F D C G

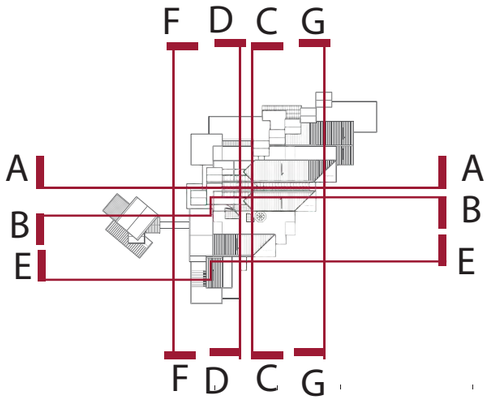

View Platform
View Platform
Bridge
View Platform
Informative Fairy Tales
Informative Fairy Tales
Informative Fairy Tales
Place de Fairy Tales Brussels
Place de Giant Brussels
Story telling Room
Story telling Room
Story Telling Visitor Hall
Doll Play theatre Lobby
Corridor
Scenery workshop
Emergence Exit
Flexible Perfomer Area
Prep Store Corridor

Section AA

Level +12900 to 14100 Place de Museum



Level +21100 Place de Museum


F D C G
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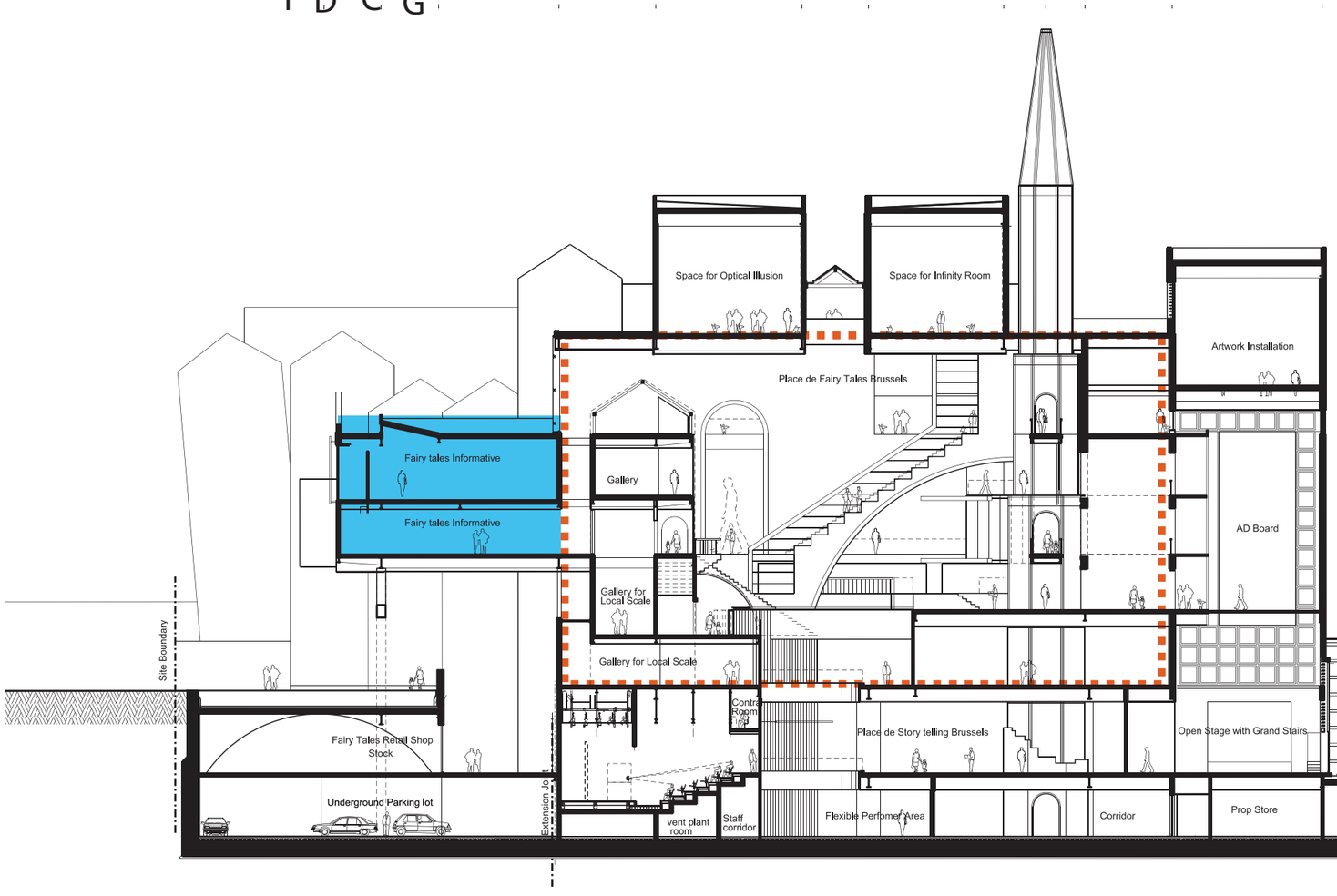
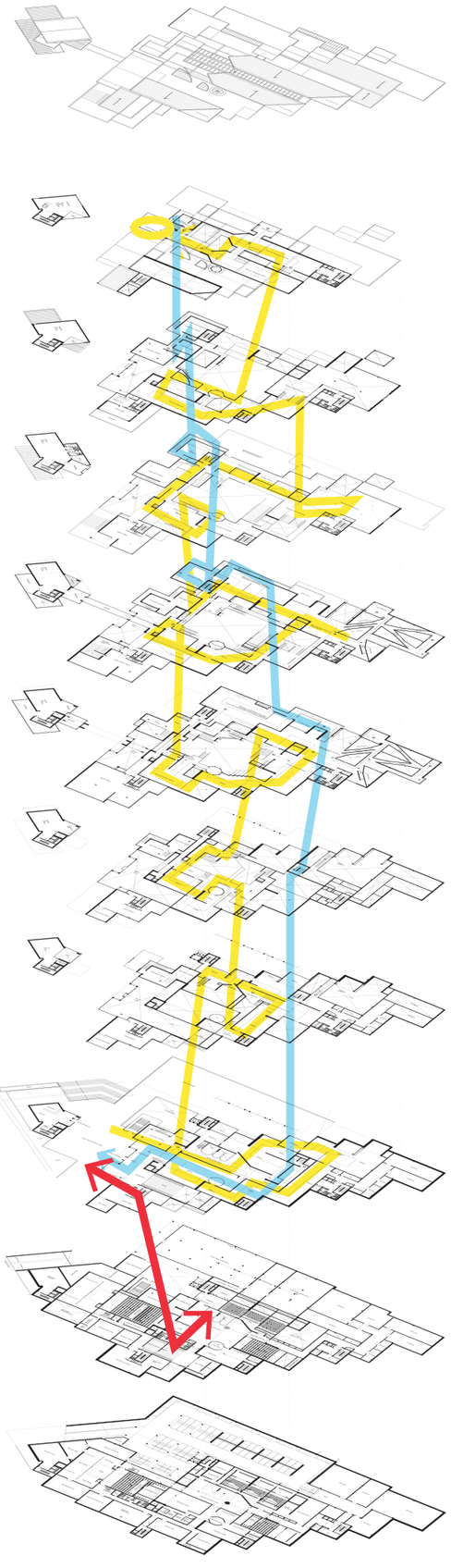
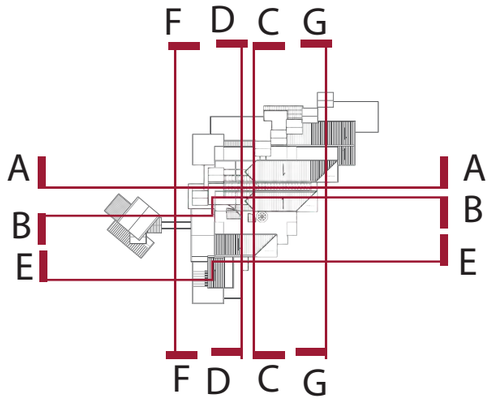
F D C G


Space for Optical Illusion
Space for Infinity Room
Artwork Installation
Place de Fairy Tales Brussels
Fairy tales Informative
Fairy tales Informative
Gallery
Gallery for Local Scale
Gallery for Local Scale
AD Board
Site Boundary
Fairy Tales Retail Shop Stock
Underground Parking lot
Extension Joint
vent plant room
Staff corridor
Contra Room
Place de Story telling Brussels
Flexible Performer Area
Corridor
Prop Store
Open Stage with Grand Stairs
Breakout
Koisk
Site Boundary



Section CC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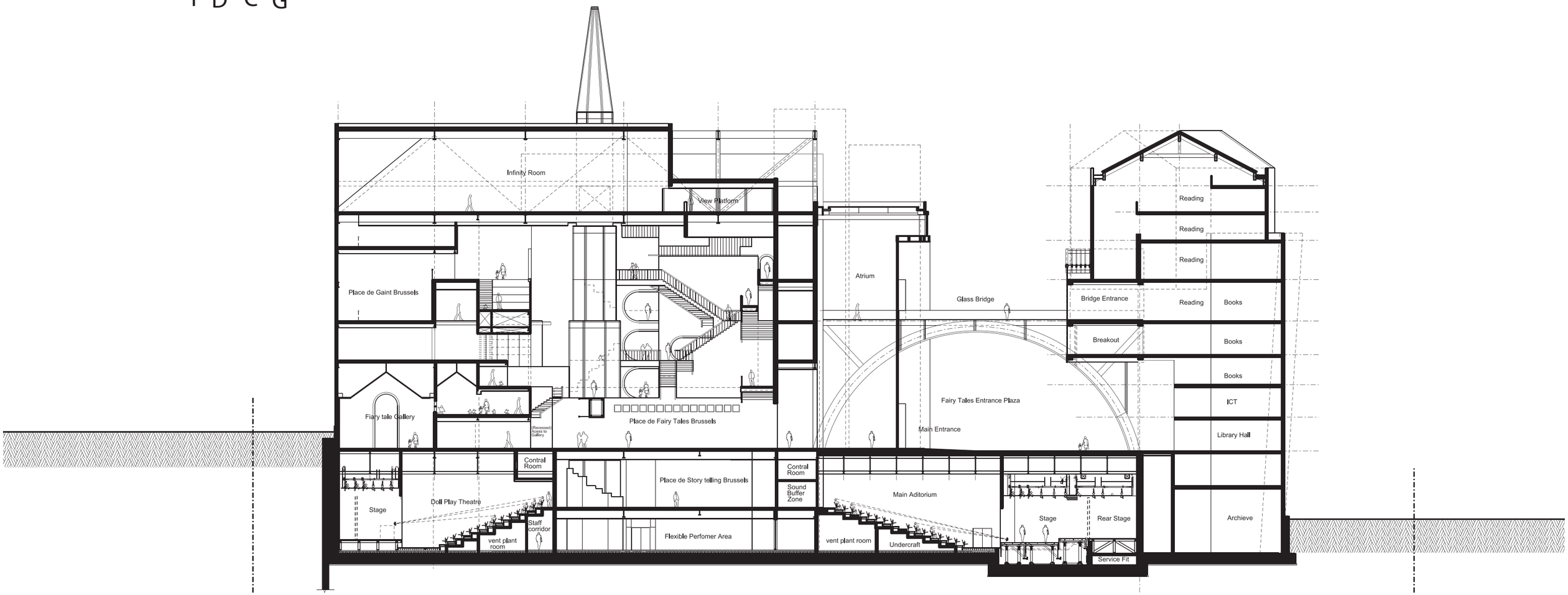
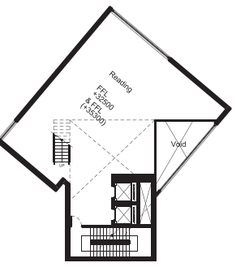
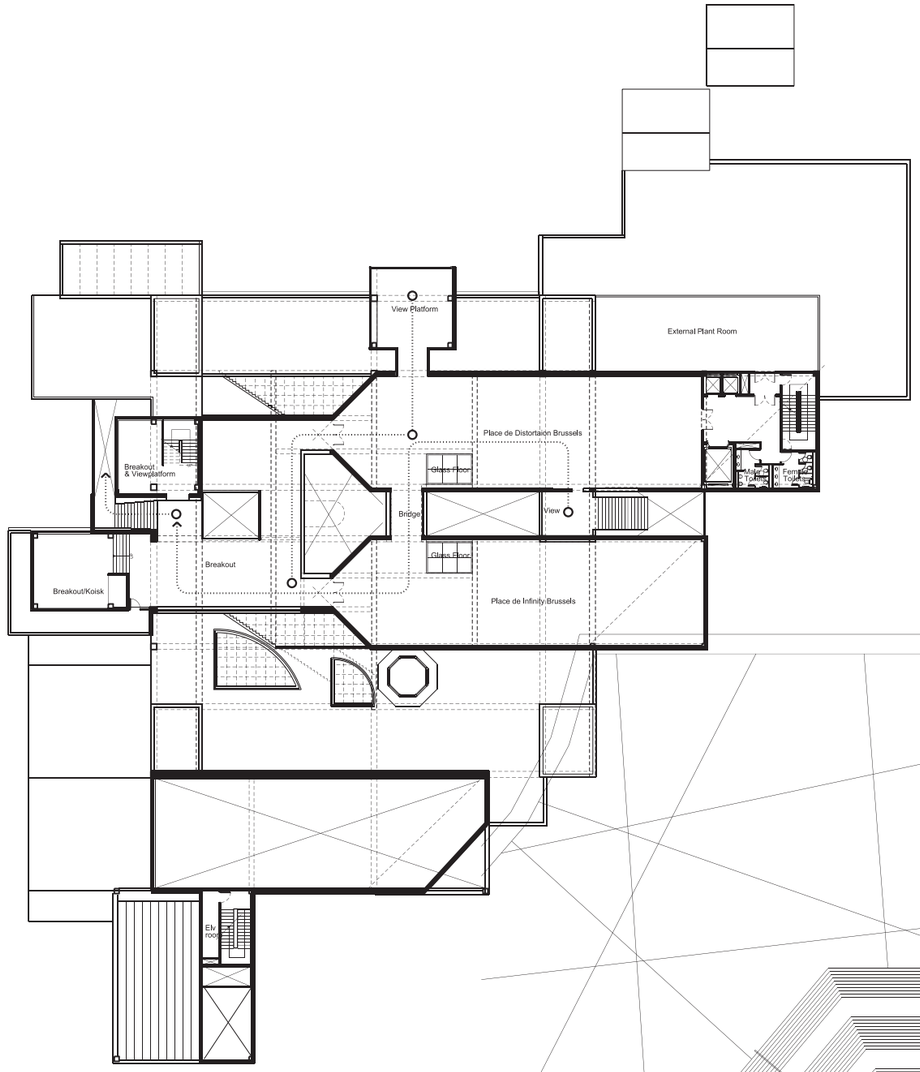

Infinity Room
View Platform
Atrium
Glass Bridge
Bridge Entrance
Breakout
Reading
Reading
Reading
Reading
Books
Books
Books
ICT
Library Hall
Archieve
Place de Gaint Brussels
Fiary tale Gallery
(Recessed) Acess to Gallery
Place de Fairy Tales Brussels
Fairy Tales Entrance Plaza
Main Entrance
Contral Room
Contral Room
Sound Buffer Zone
Place de Story telling Brussels
Main Aditorium
Doll Play Theatre
Stage
Staff corridor
vent plant room
Flexible Perfomer Area
vent plant room
Undercraft
Stage
Rear Stage
Service Fit

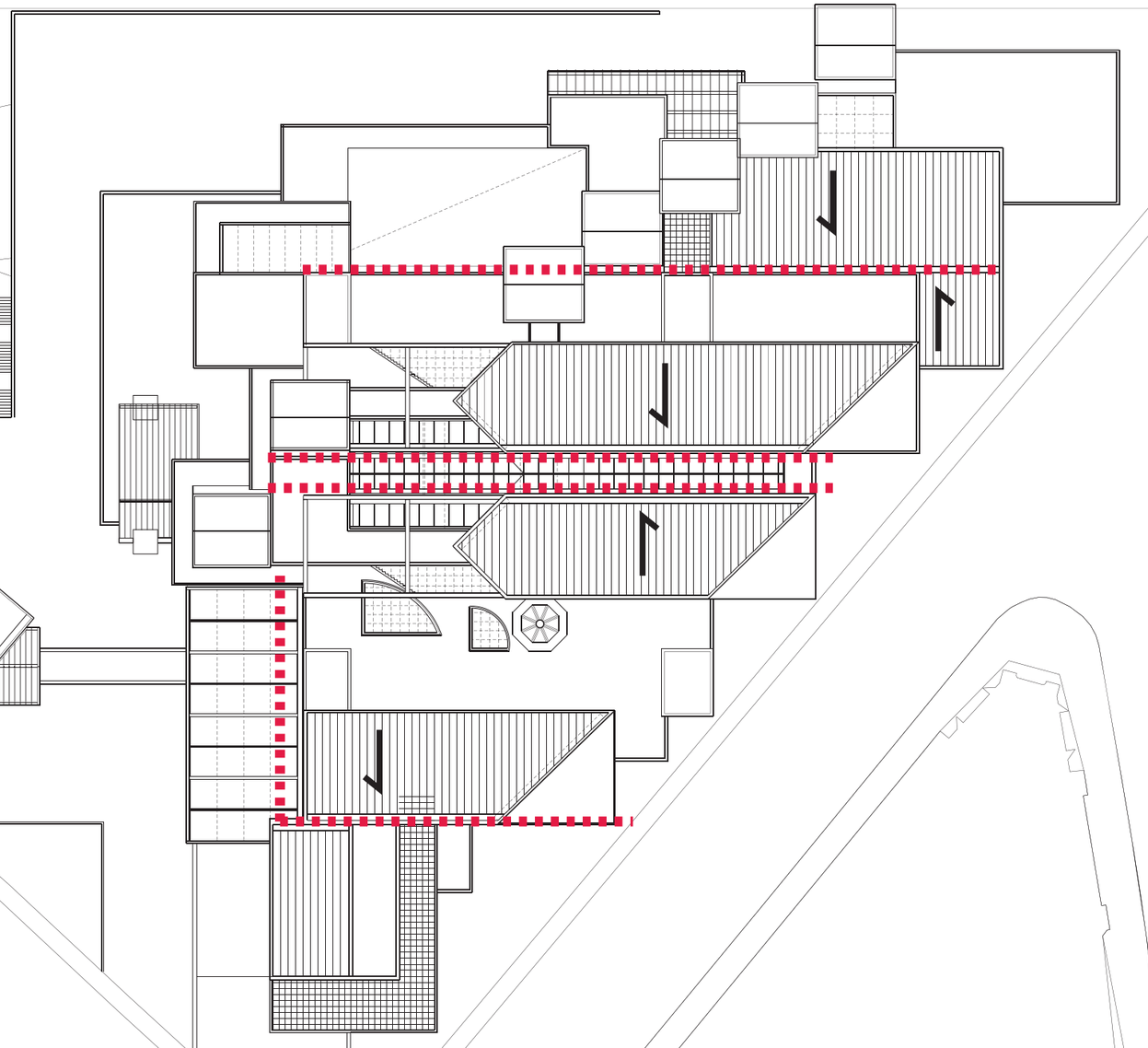
Section BB

N

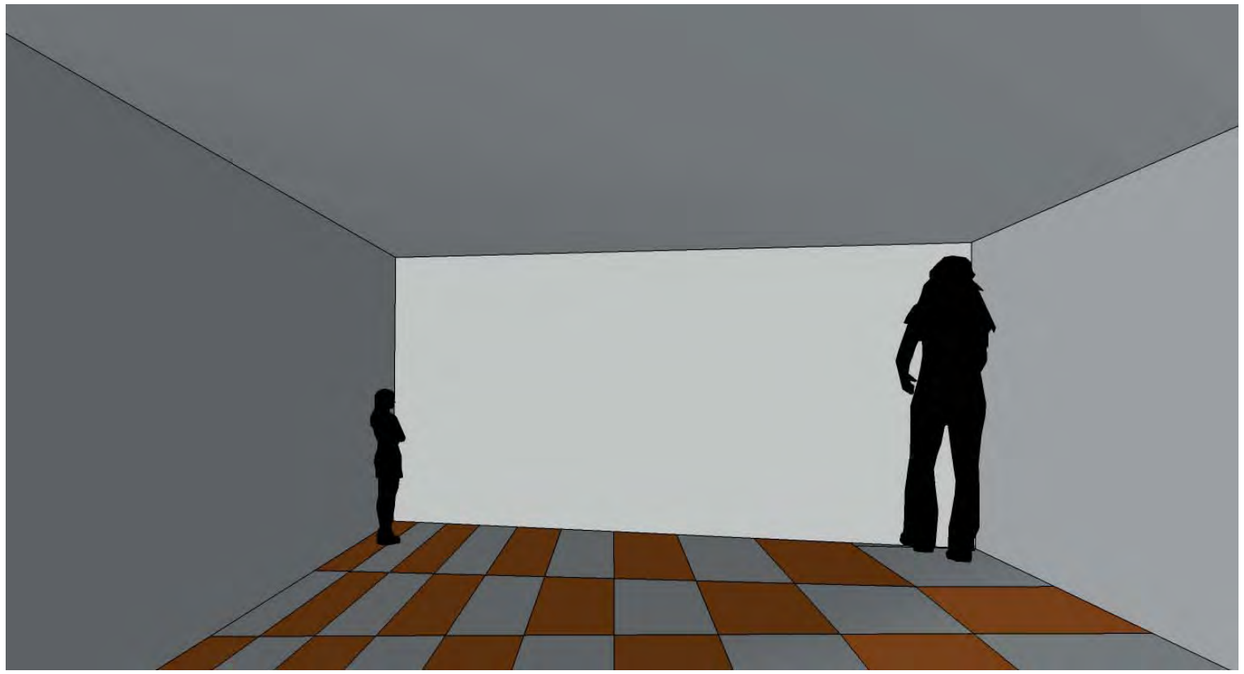


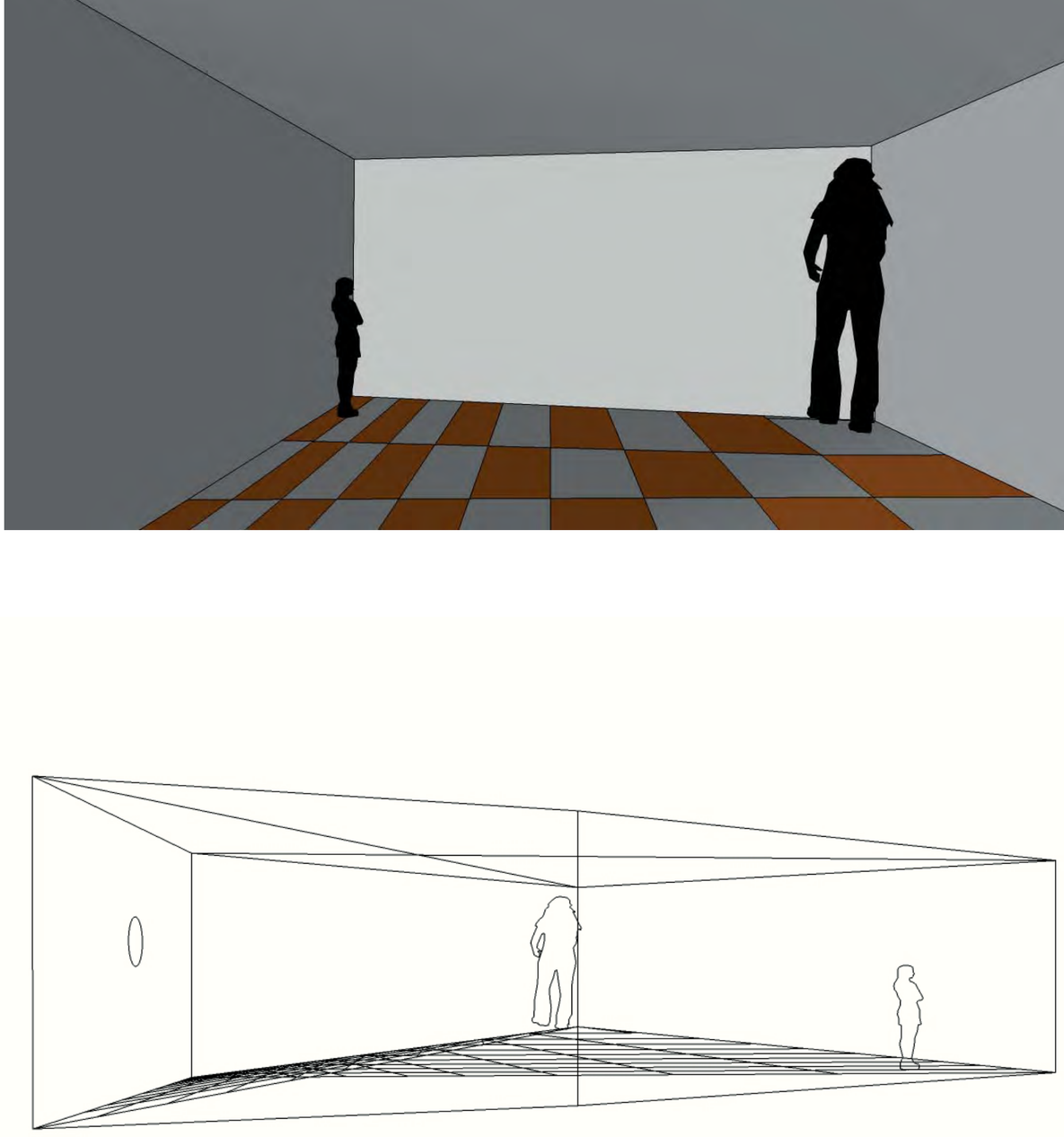


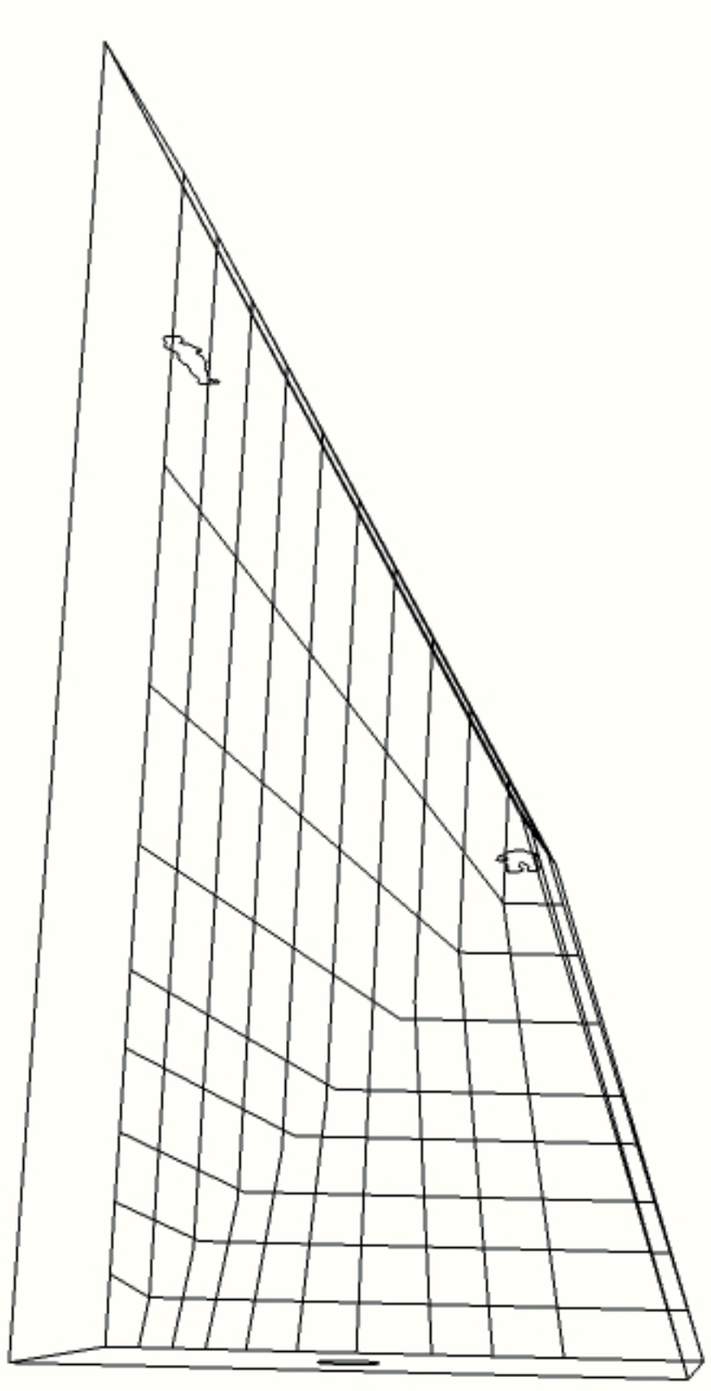
Level +33900 Place de Museum



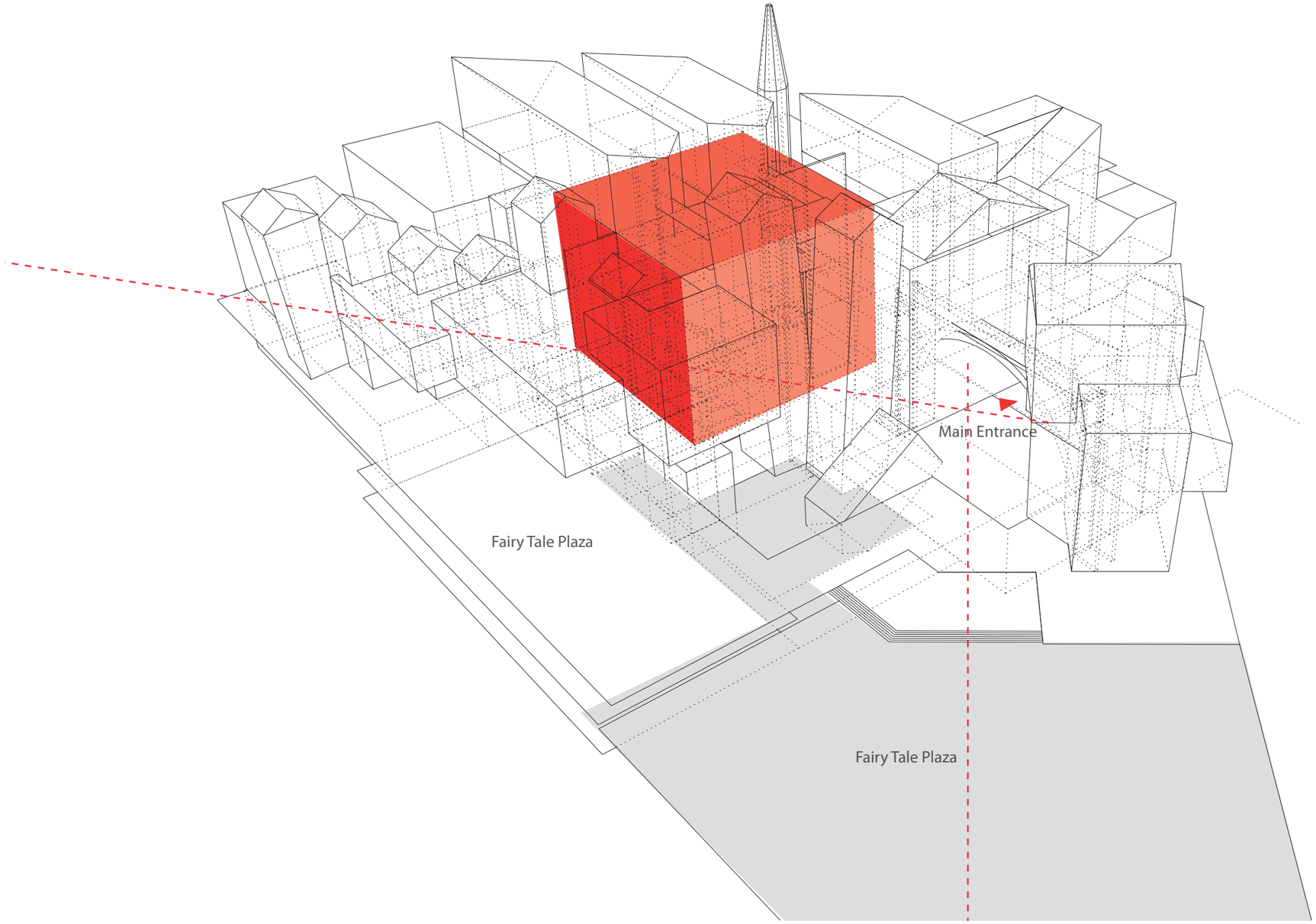
Level +Roof Place de Museum



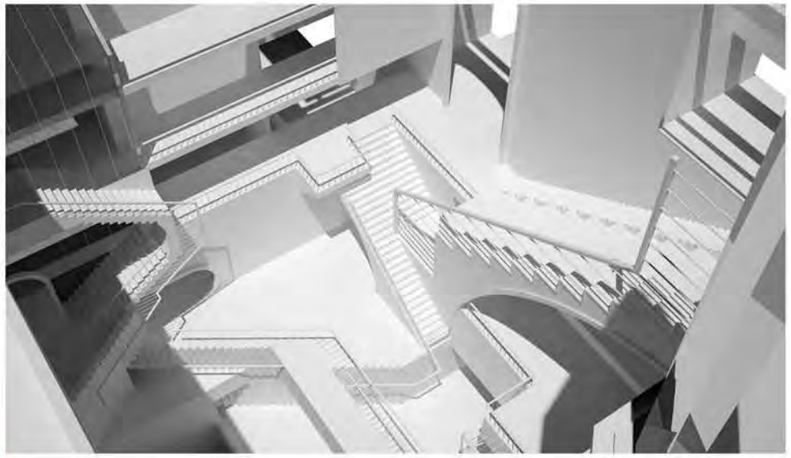




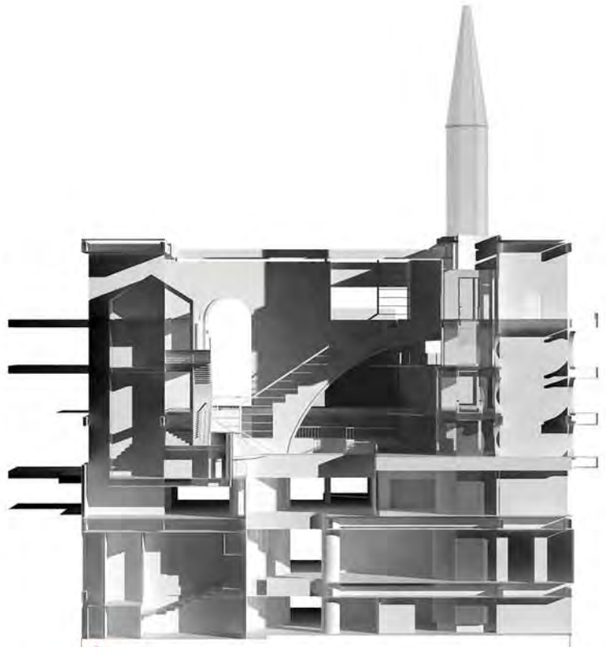
Ames Room Unit Plan Study


Main Entrance
Fairy Tale Plaza
Fairy Tale Plaza

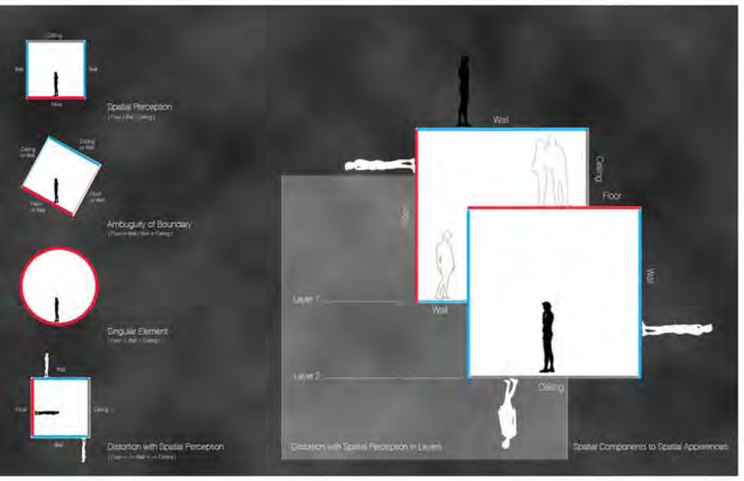
Internal Elevations

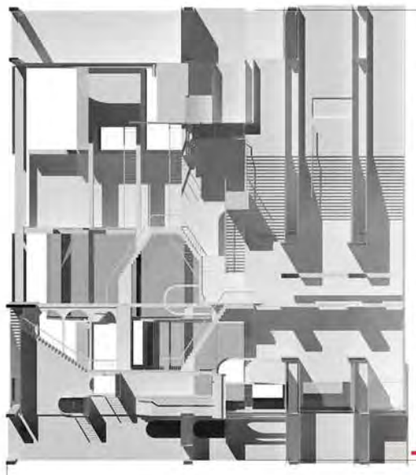


Triangular Access Core A

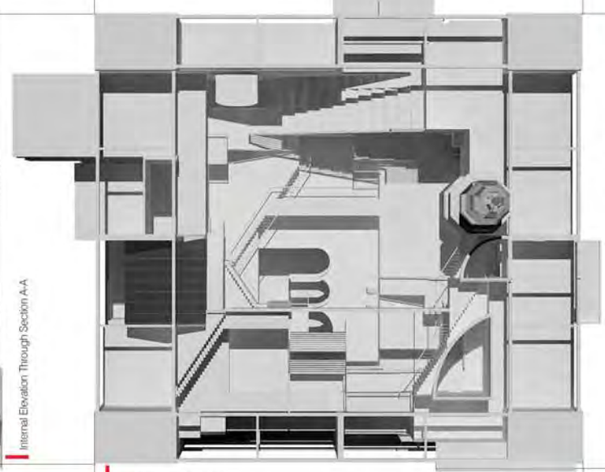


Internal Elevation Through Section C-C

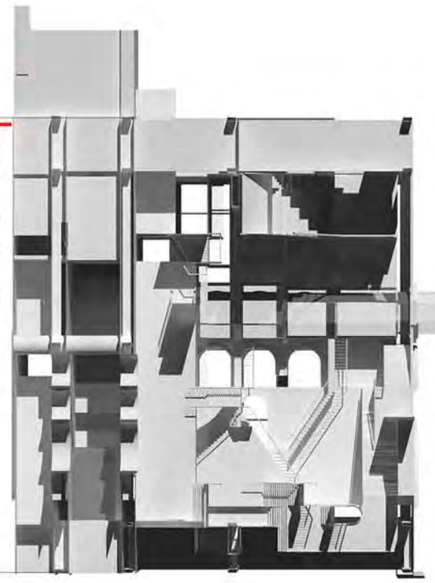




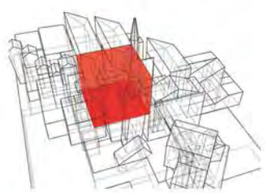
Internal Elevation Through Section A-A



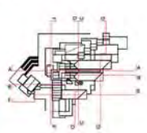
Fairy Tale Cube Plan View



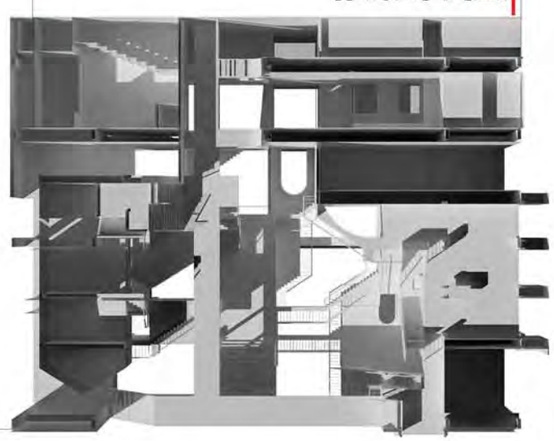
Internal Elevation Through Section B-B



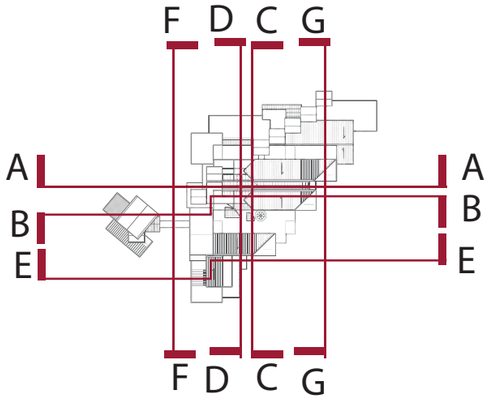
Fairy Tale Cube for Spatial Fantasy



Internal Elevation Through Section D-D



Triangular Access Core B


F D C G
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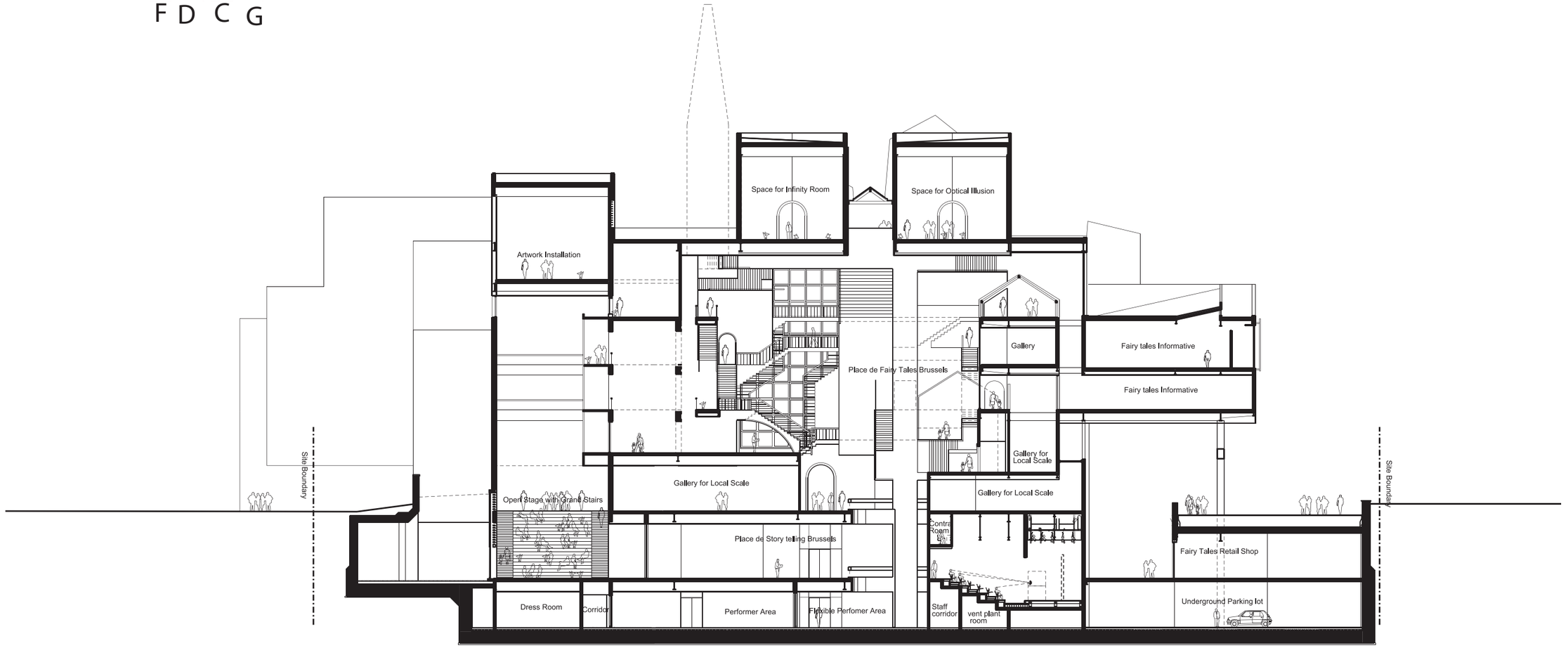
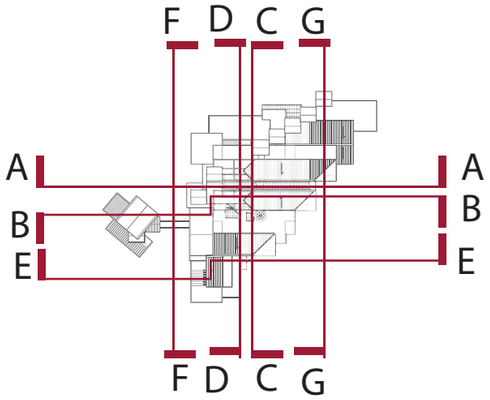
F D C G


Space for Infinity Room
Space for Optical Illusion
Artwork Installation
Gallery
Fairy tales Informative
Place de Fairy Tales Brussels
Fairy tales Informative
Gallery for Local Scale
Site Boundary
Gallery for Local Scale
Open Stage with Grand Stairs
Gallery for Local Scale
Contra Room
Place de Story telling Brussels
Fairy Tales Retail Shop
Site Boundary
Dress Room
Corridor
Performer Area
Flexible Perfomer Area
Staff corridor
vent plant room
Underground Parking lot

Section CC


F D C G
A
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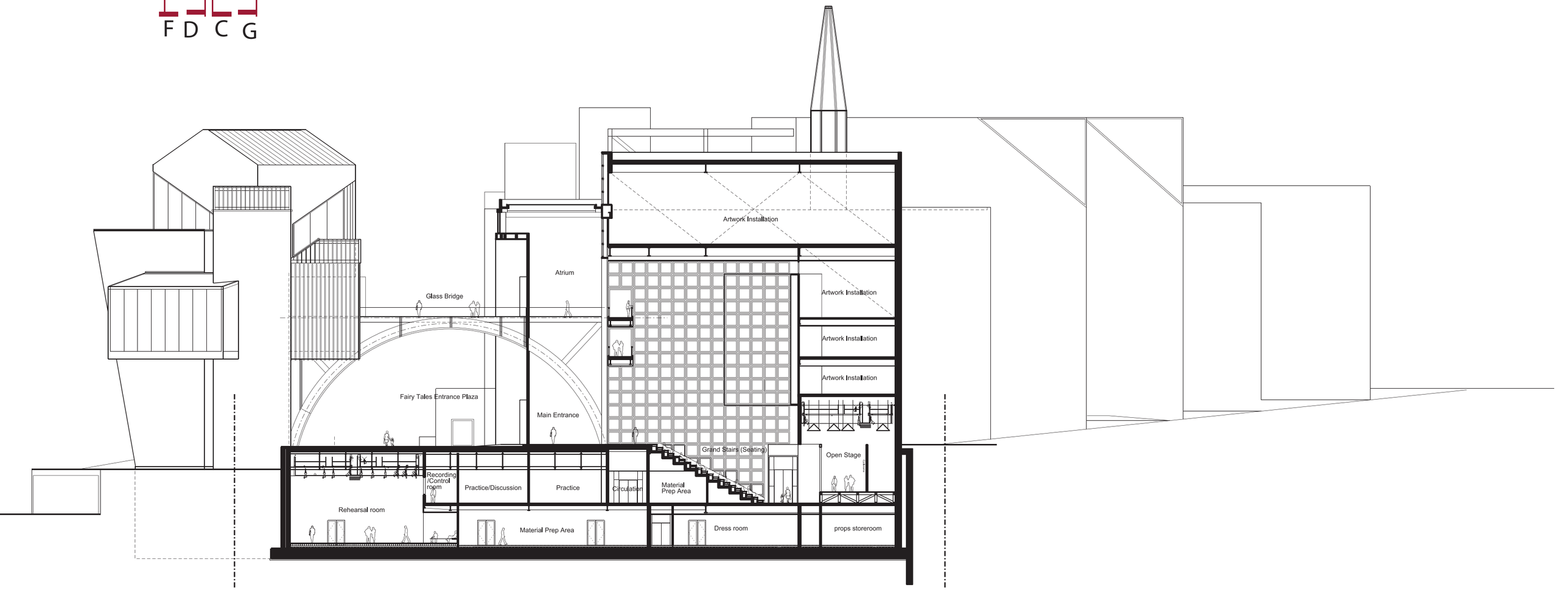
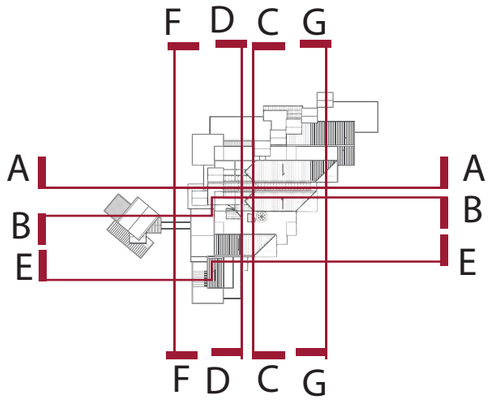
F D C G


Artwork Installation
Atrium
Glass Bridge
Artwork Installation
Artwork Installation
Artwork Installation
Artwork Installation
Fairy Tales Entrance Plaza
Main Entrance
Grand Stairs (Seating)
Open Stage
Recording /Control room
Practice/Discussion
Practice
Circulation
Material Prep Area
Rehearsal room
Material Prep Area
Dress room
props storeroom

Section EE


F D C G
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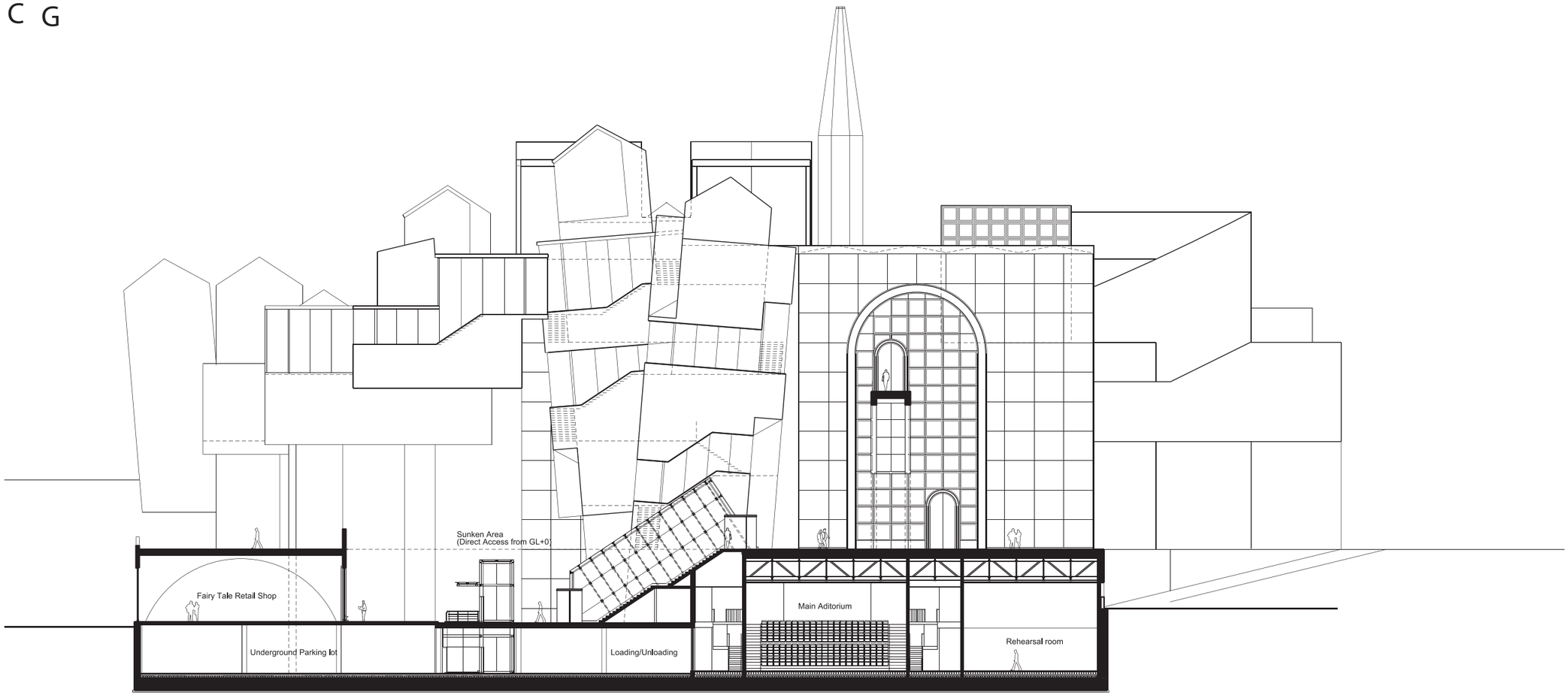
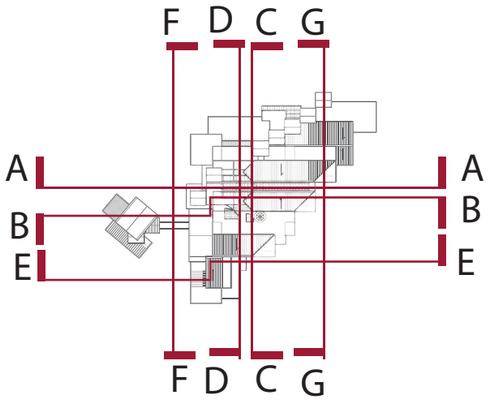
F D C G


Sunken Area
(Direct Access from GL+0)
Fairy Tale Retail Shop
Underground Parking lot
Loading/Unloading
Main Aditorium
Rehearsal room

Section FF


F D C G
A
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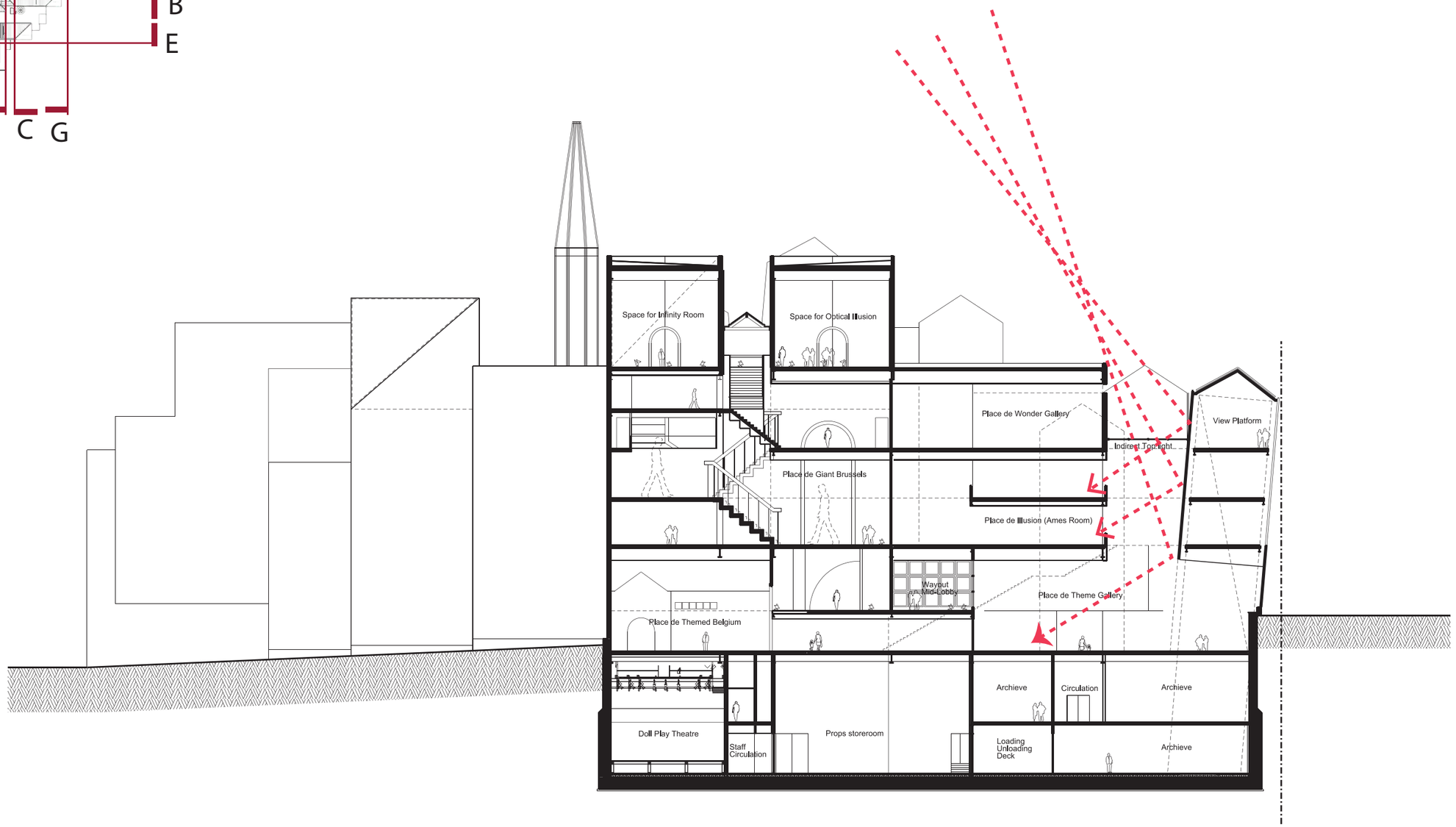
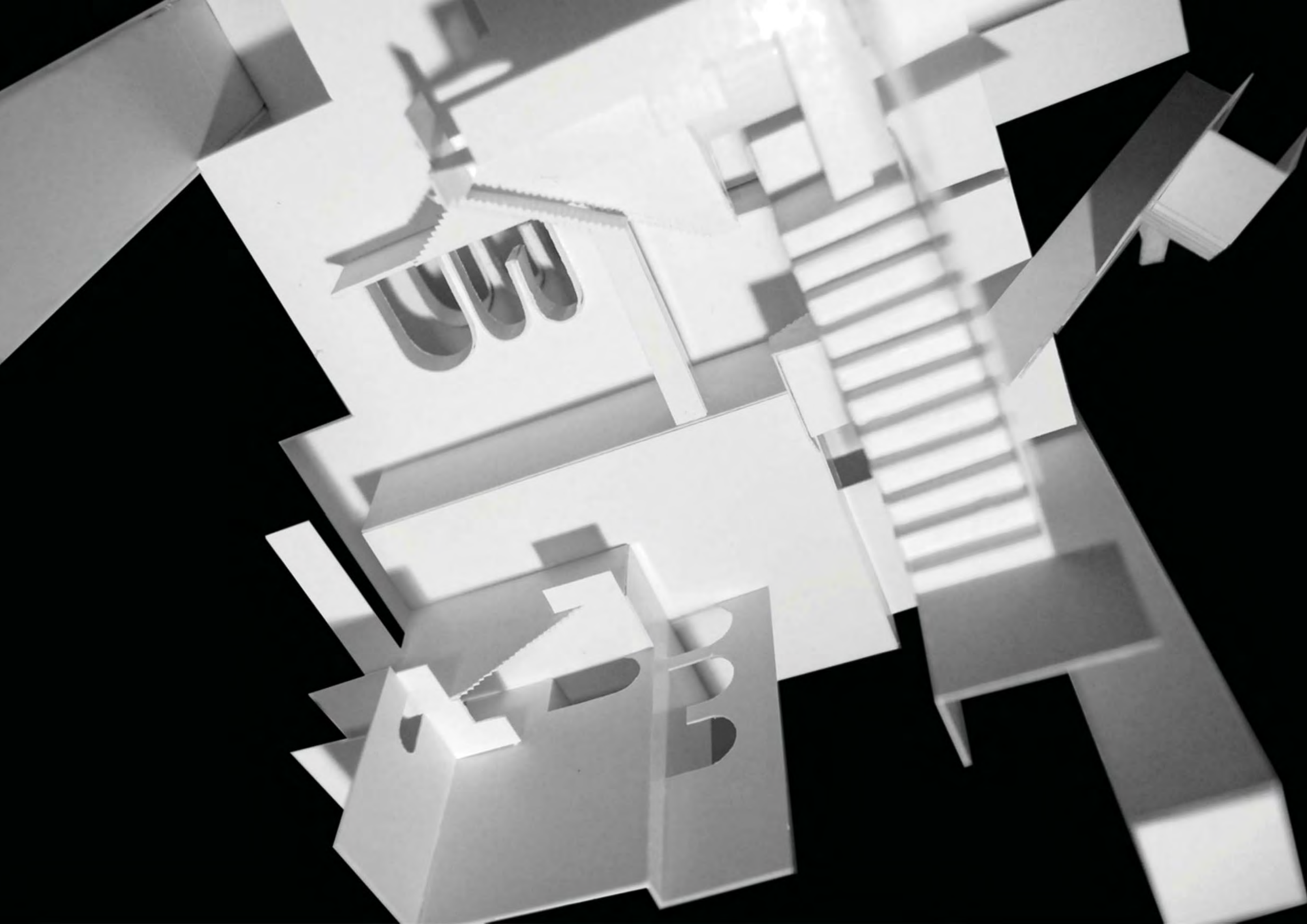
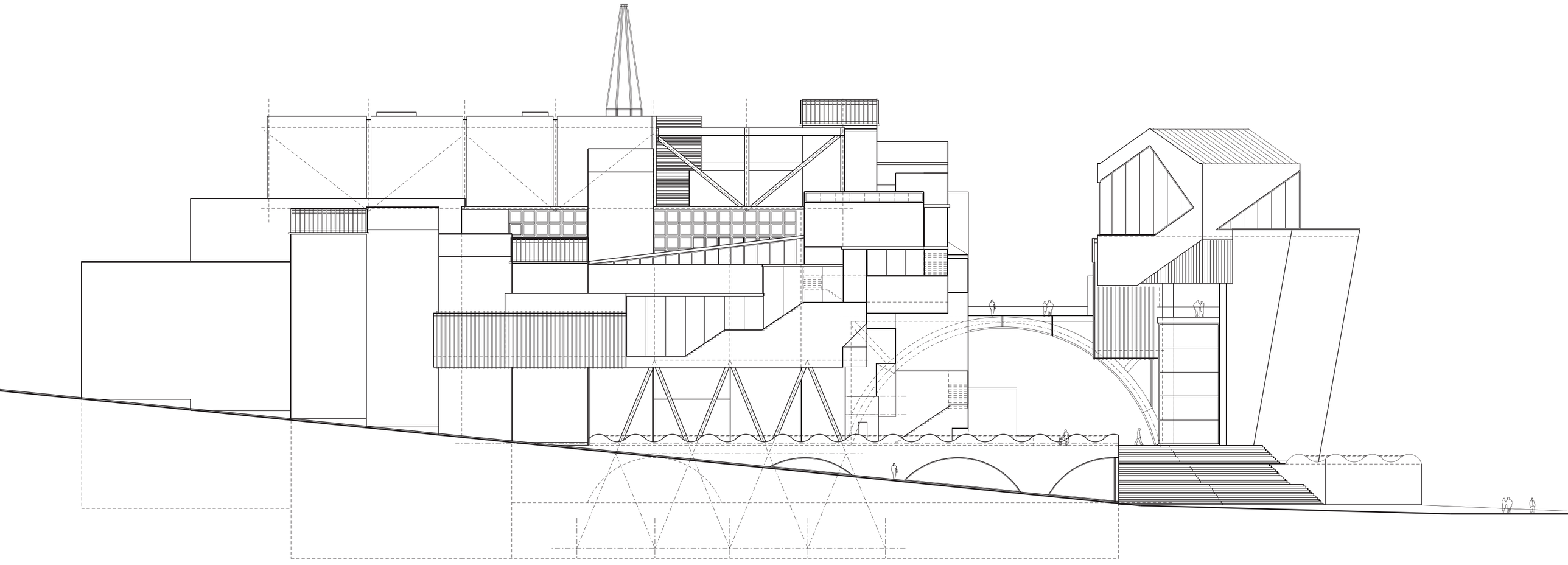
F D C G

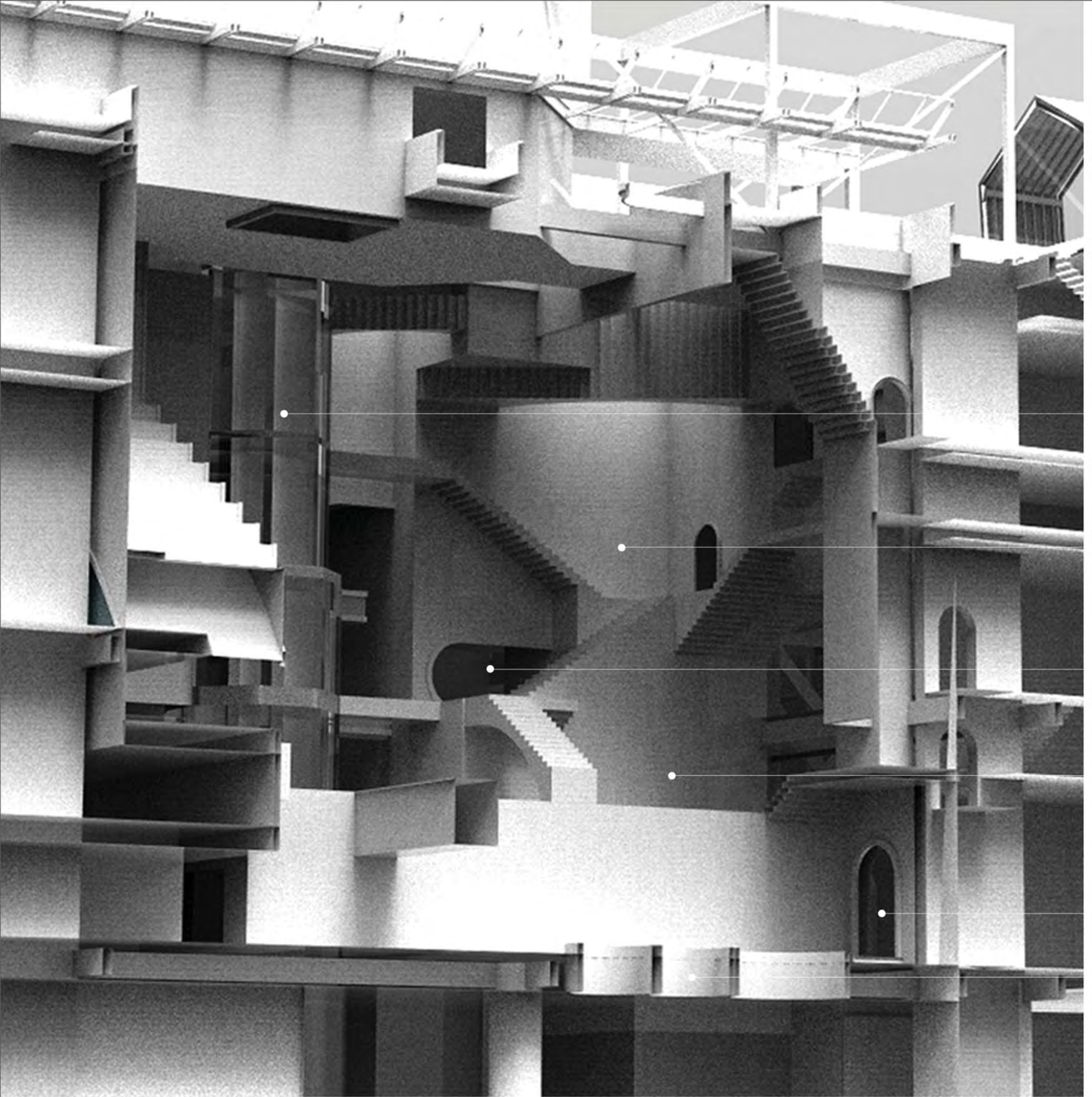

Space for Infinity Room
Space for Optical Illusion
Place de Wonder Gallery
View Platform
Indirect Top Light
Place de Giant Brussels
Place de Illusion (Ames Room)
Waygout
Mid-Lobby
Place de Theme Gallery
Place de Themed Belgium
Archieve
Circulation
Archieve
Doll Play Theatre
Staff
Circulation
Props storeroom
Loading
Unloading
Deck
Archieve

Section GG





North Elevation



Glass Tower (View Platform)

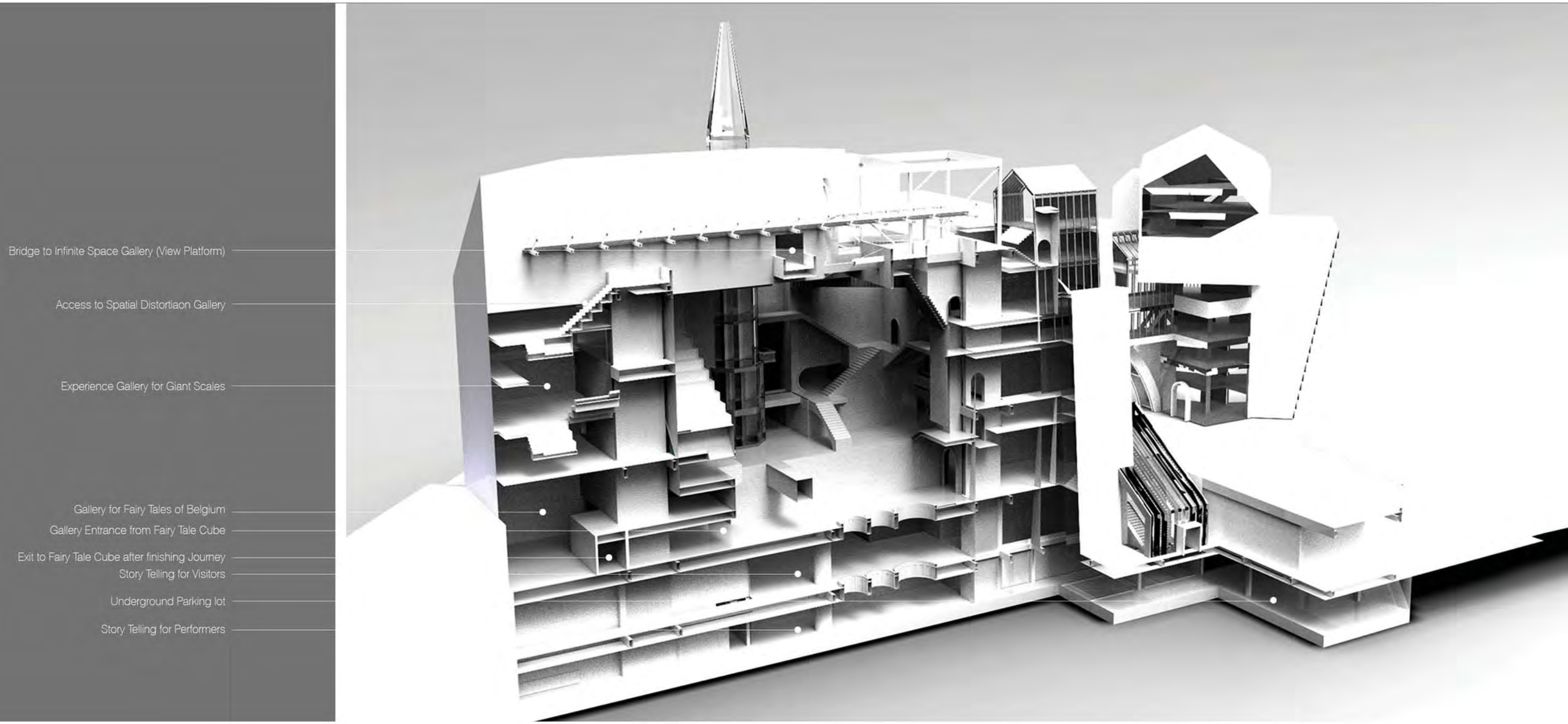
Intersection of Triangular Platform

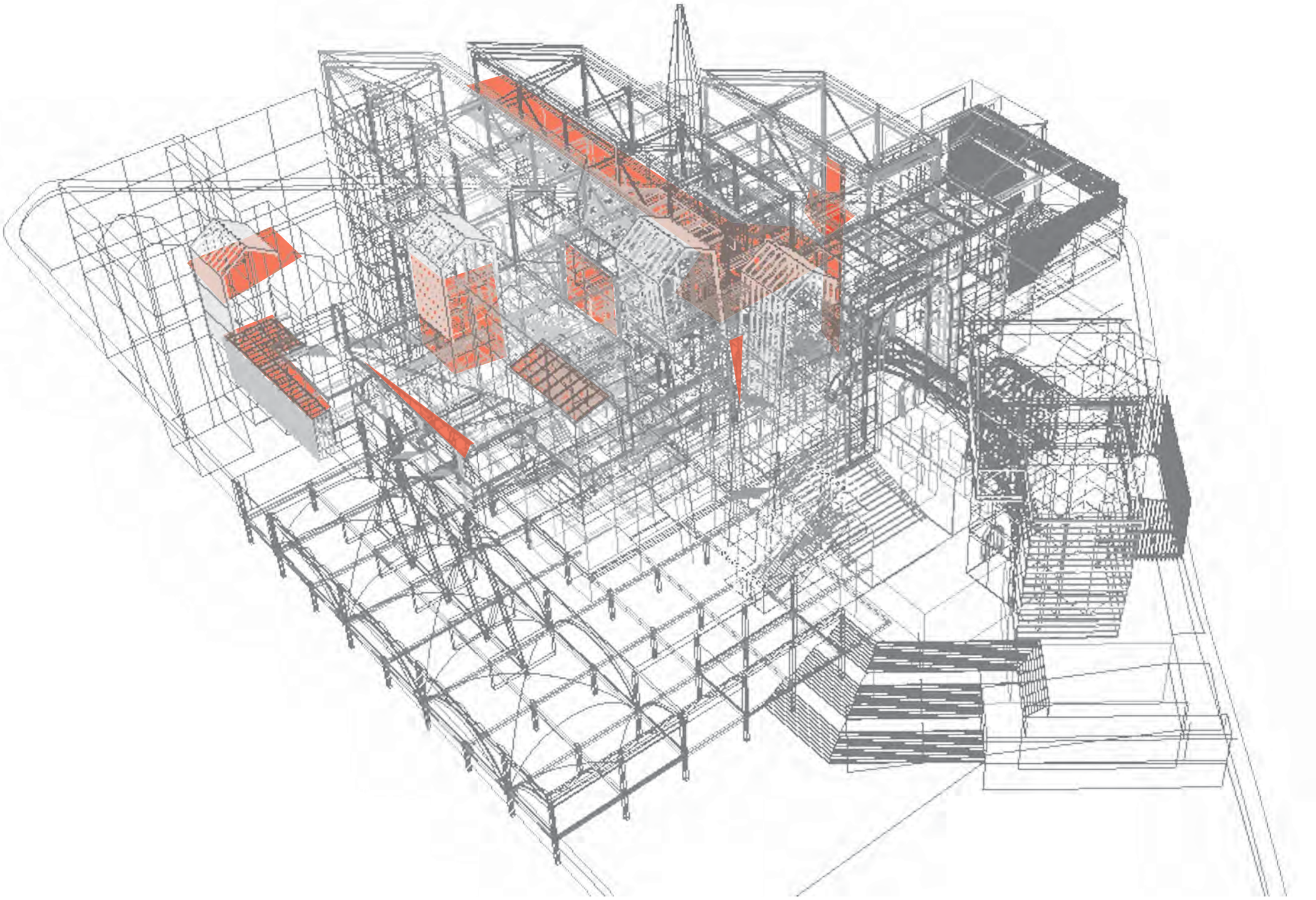
Entrance to Gallery

Temporary Exhibition

Main Entrance to Fairy Tale Cube

Void over Story Telling Space to introduce Daylight


Bridge to Infinite Space Gallery (View Platform)
Access to Spatial Distortiaon Gallery
Experience Gallery for Giant Scales
Gallery for Fairy Tales of Belgium
Gallery Entrance from Fairy Tale Cube
Exit to Fairy Tale Cube after finishing Journey
Story Telling for Visitors
Underground Parking lot
Story Telling for Performers



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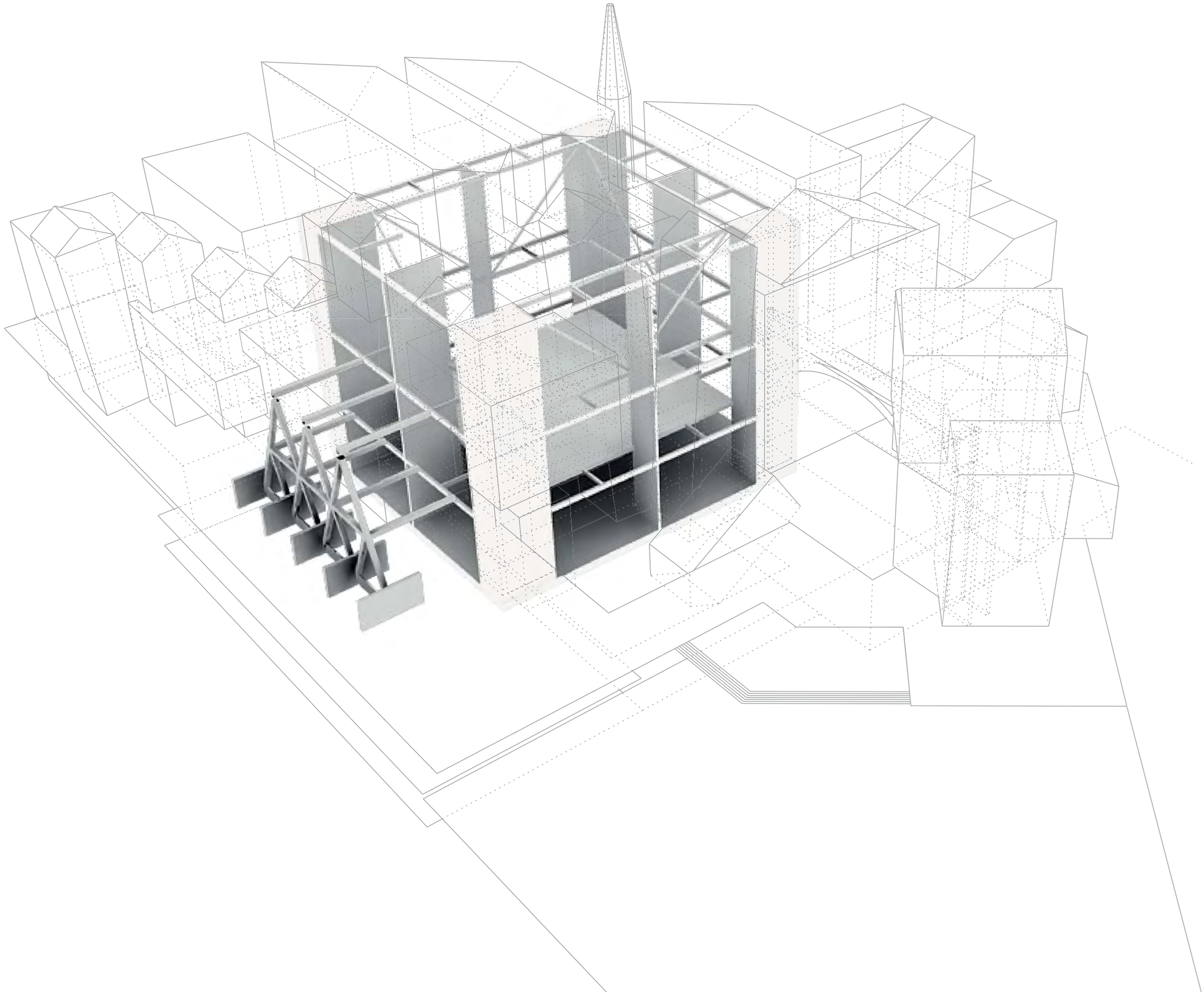
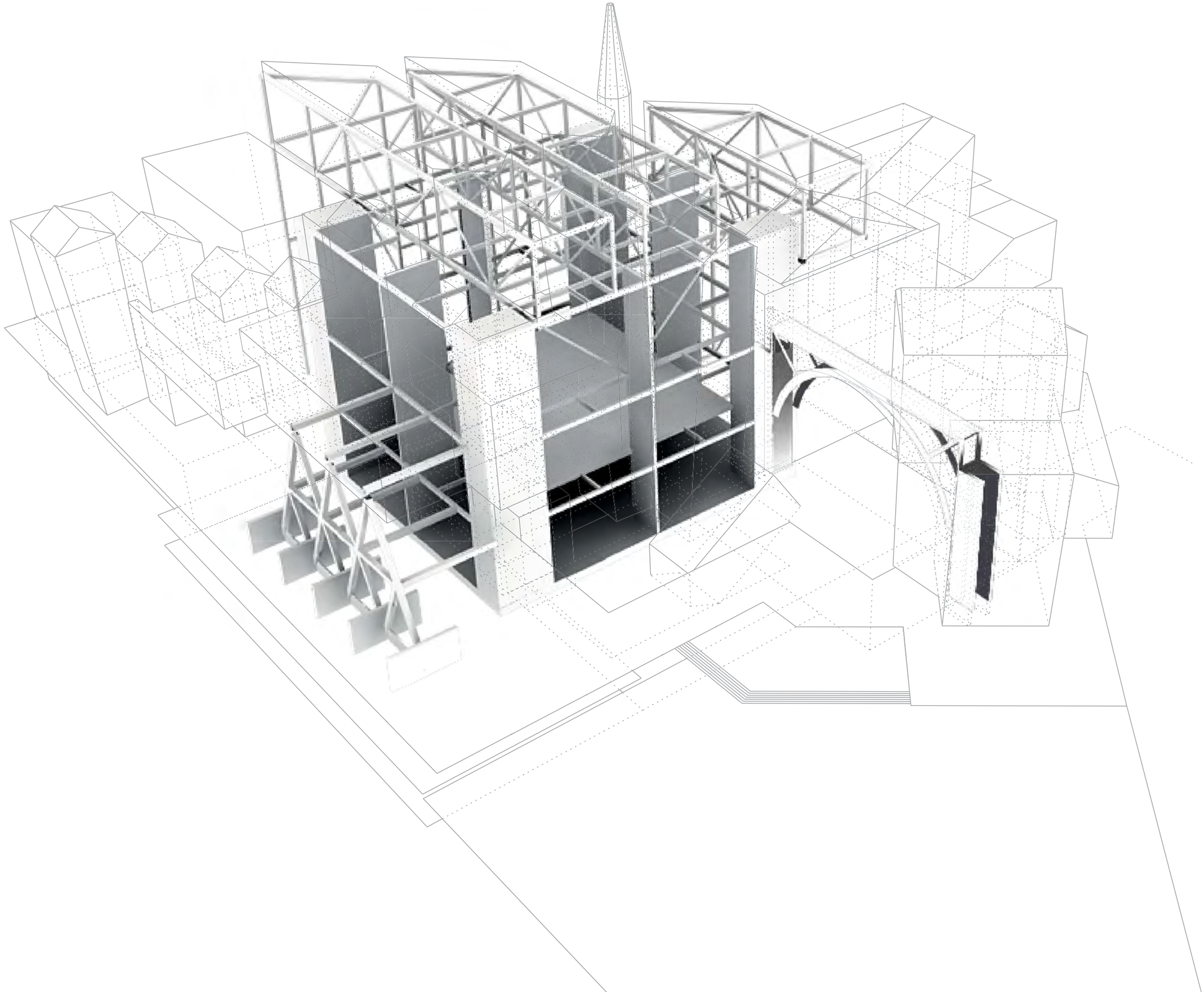


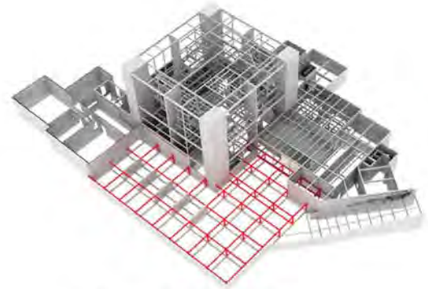


Structural Phases

01.Concrete Bases for Compression

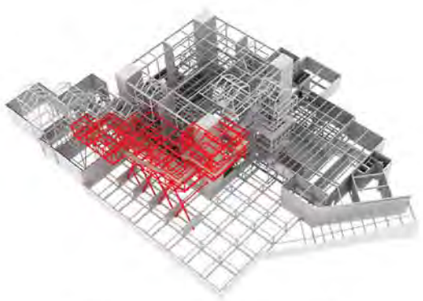
02.Structural Double Frames to Support tensions from Additional Strucutres on both sides.

03. Additional Structures inside Structural Double Frames

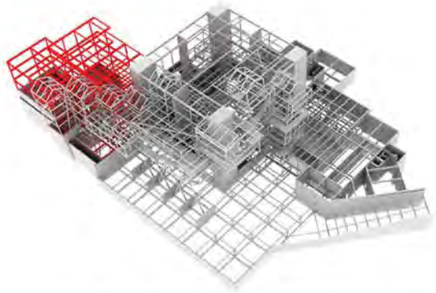


04. Structural Grid laid on the Base for Underground Parking Lots

05. Additional Structures and Selfstanding Structures outside Structural Double Frames

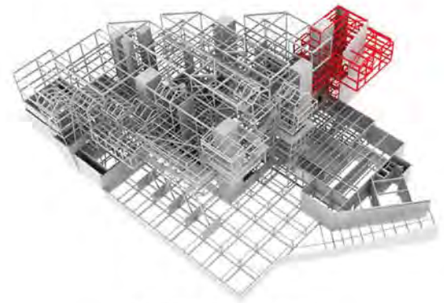


06. Structural Installation between Structural Double Frames and Triangular Truss Support

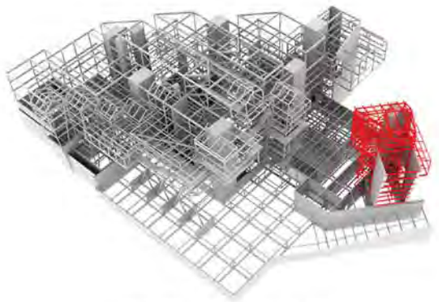


07. Self Standing Structure partially attached to Structural Double Frames

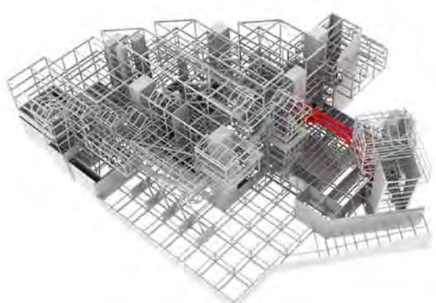
08. Supertruss structured over the top of Structural Double Frames with the Support of Force Flow



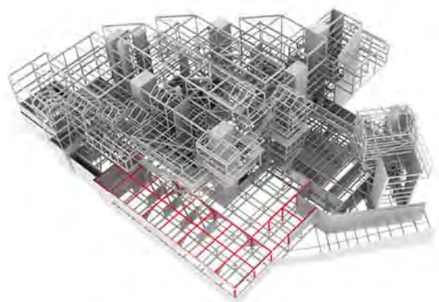
09. Self-Standing Structure with Two Bridge Connections.



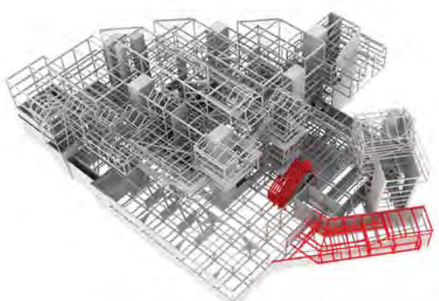
10. Self-Standing Structure with Concrete Structural Base.



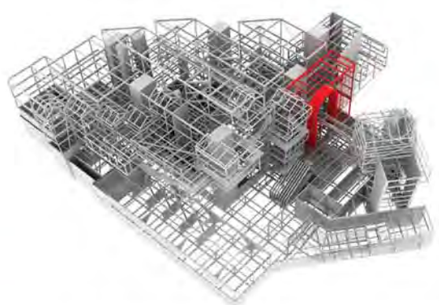
11. Arched Bridge Connection between Concrete Cores



12. Structural Grid with Arch Walls Structured over the Base Grids

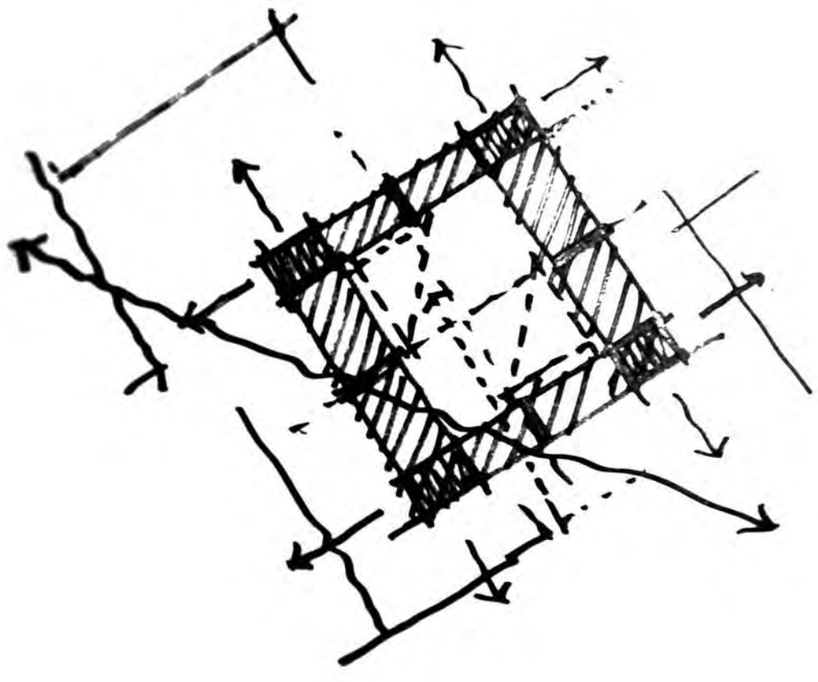


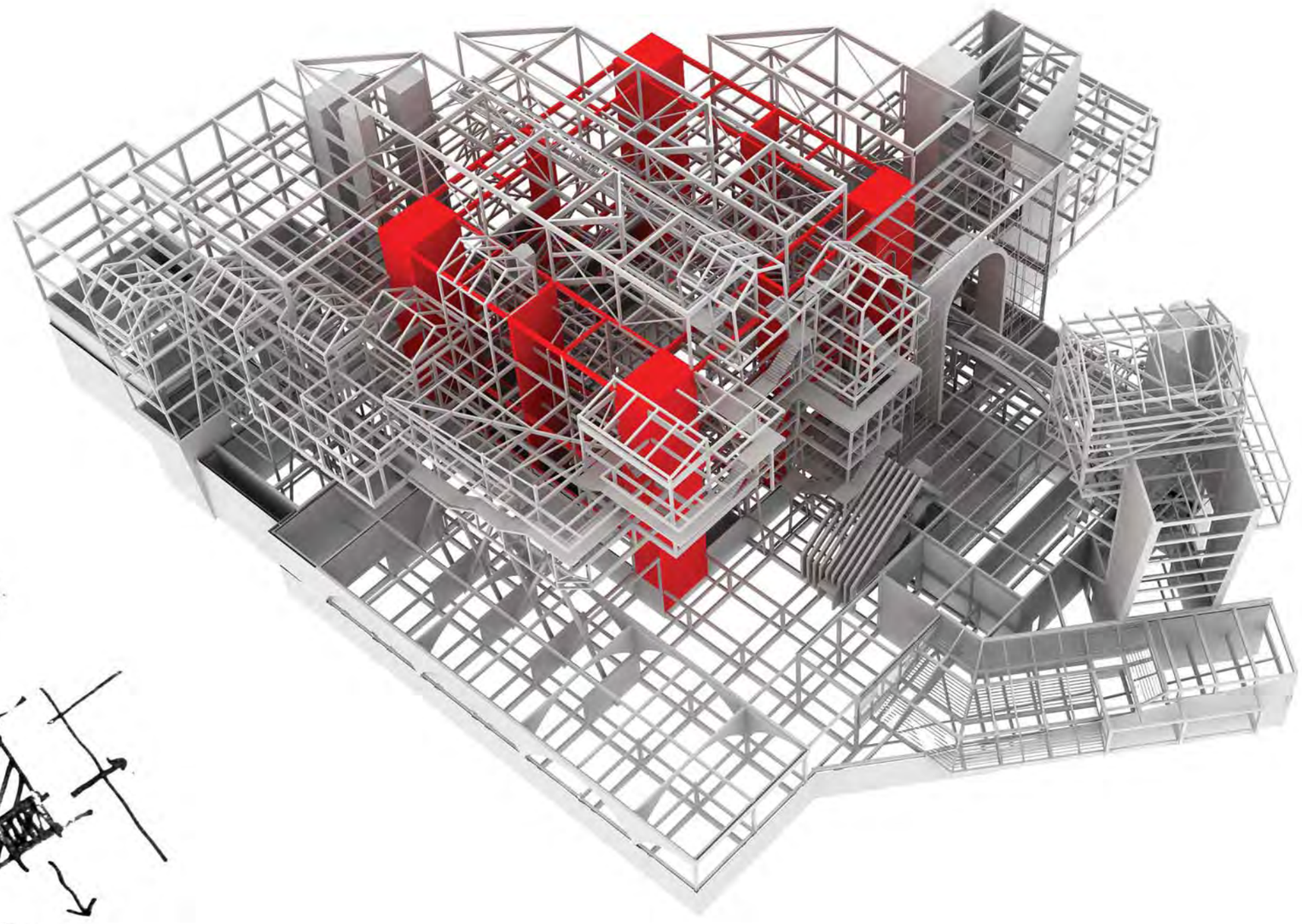
13. Accessbility with Structural Saperation for External Access



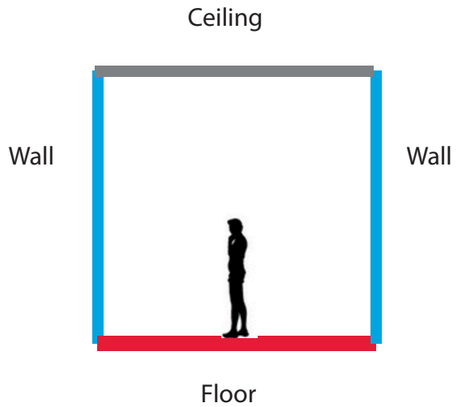
14. Large Open Atrium with Clear Glazing and Frames Installed Inbetween Structural Double Frames and Self-Standing Structure

Structural Composition



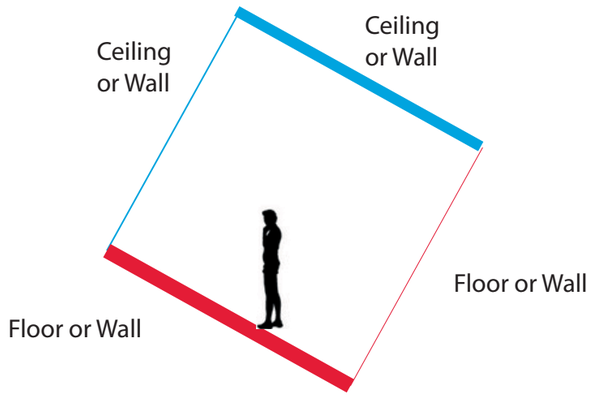


Materiality Scheme for Fairy Tales



Recongition of Space

Floor / Wall / Ceiling

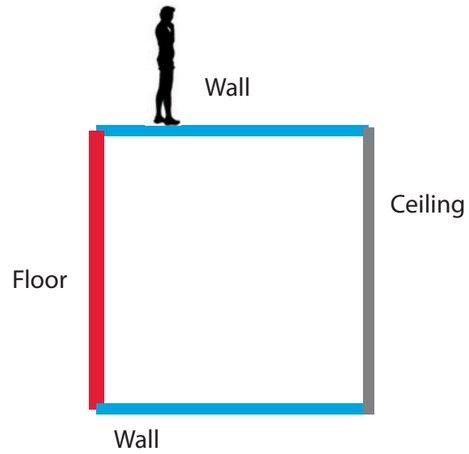


Ambuguity of Boundary

Floor or Wall / Wall or Ceiling

Singular Element

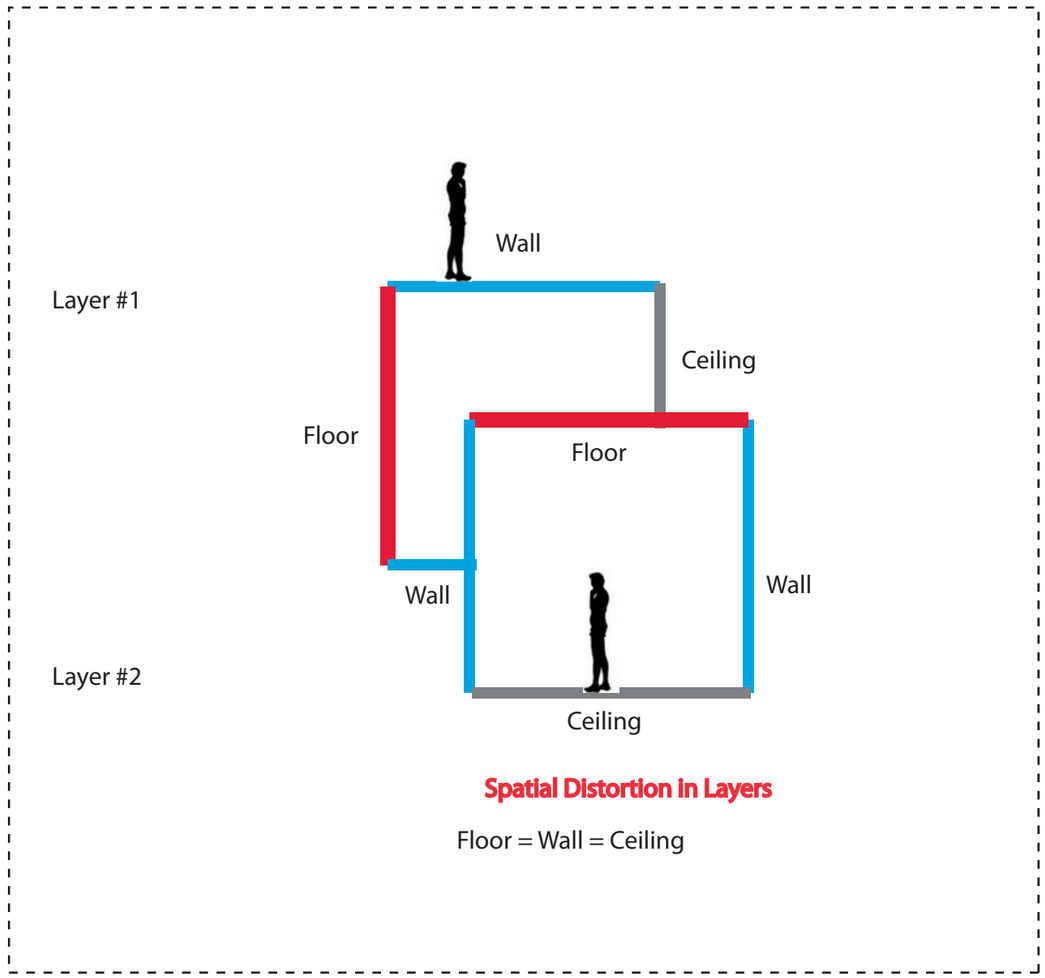
Floor = Wall = Ceiling



Spatial Distortion in Layers

Floor <-> Wall <-> Ceiling

Materialization with external appereance in internal environment with proper thermal comport



Spatial Distortion in Layers

Floor = Wall = Ceiling

<Spatial Component> <Spatail Apperent>

Ceiling → Ceiling, Wall, Floor

Wall → Ceiling, Wall, Floor

Floor → Ceiling, Wall, Floor

Materization in Spatial Distiortion

Gallery

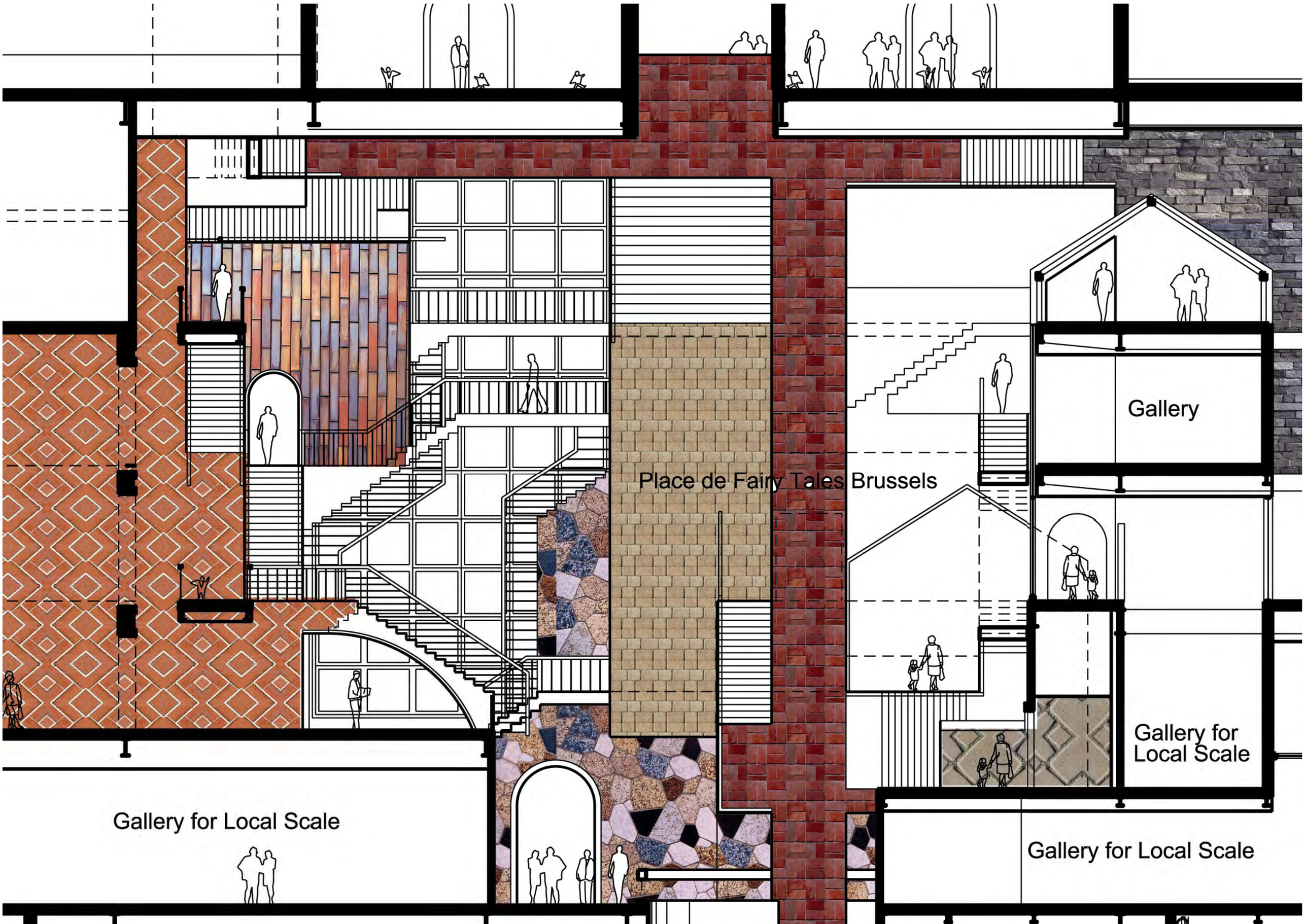
Place de Fairy Tales Brussels

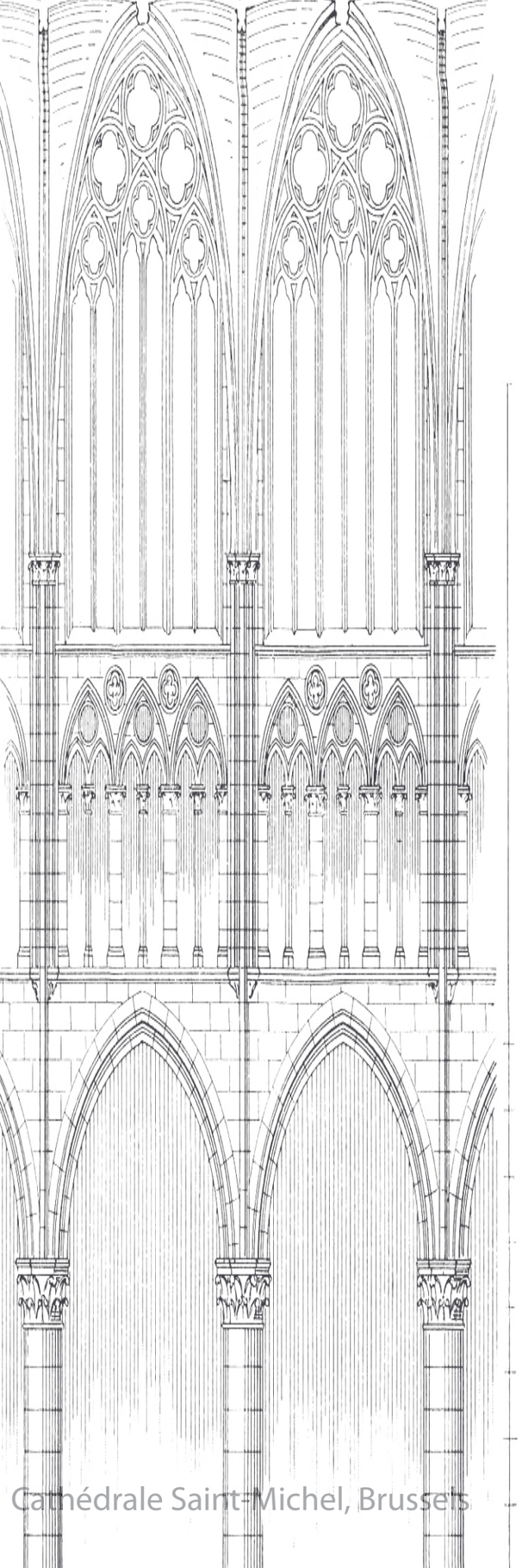
Gallery for Local Scale

Gallery for Local Scale

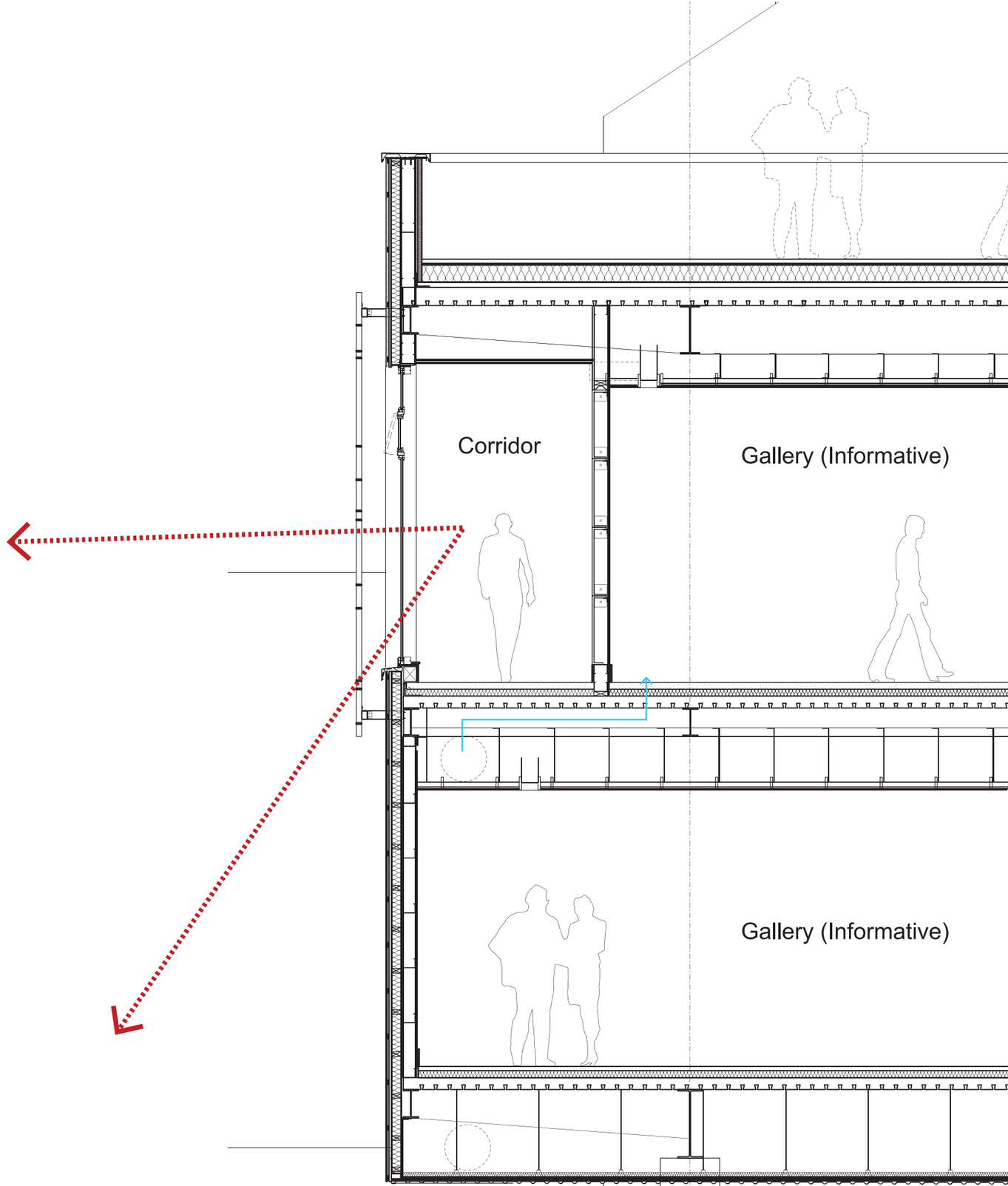
Gallery for Local Scale

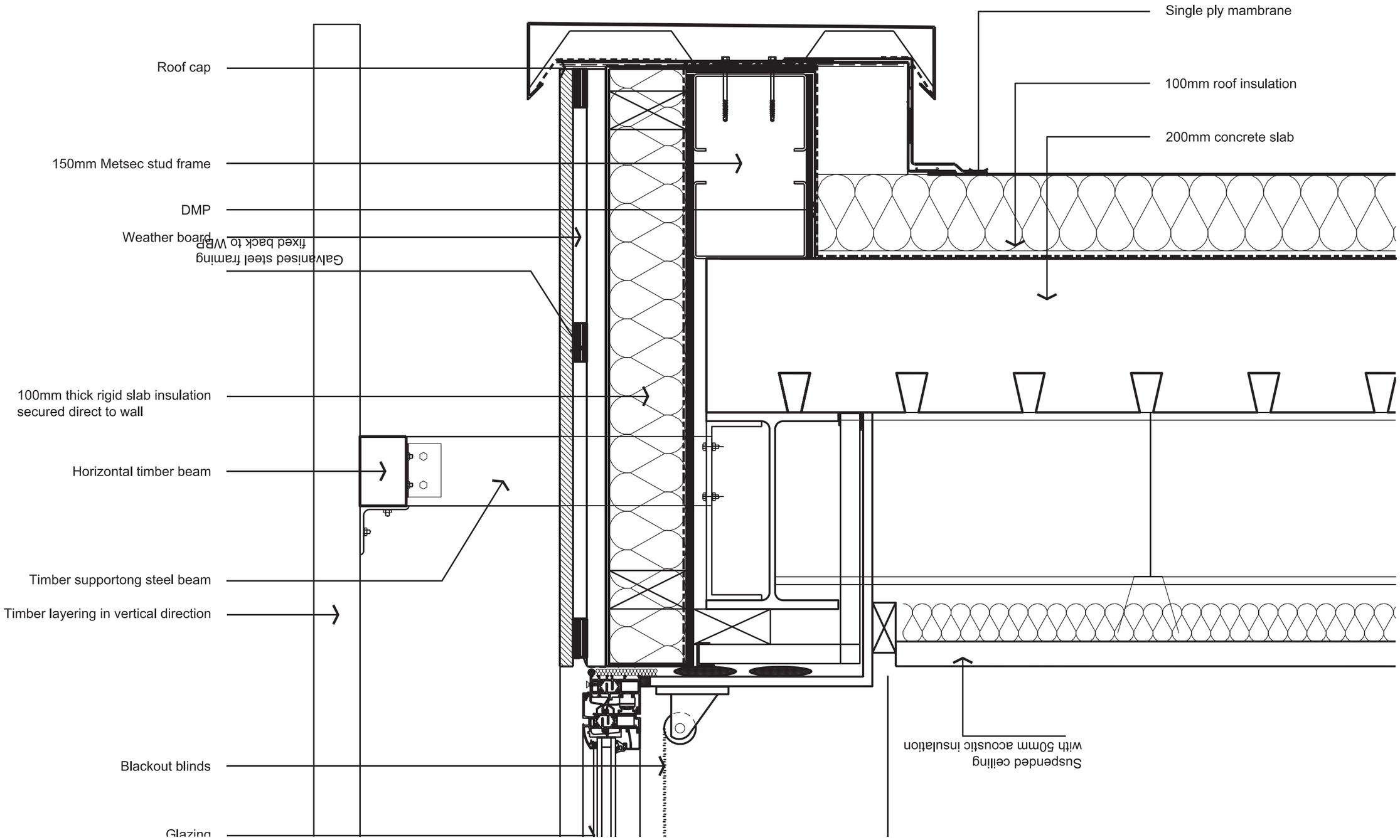
Materization in Spatial Distiortion

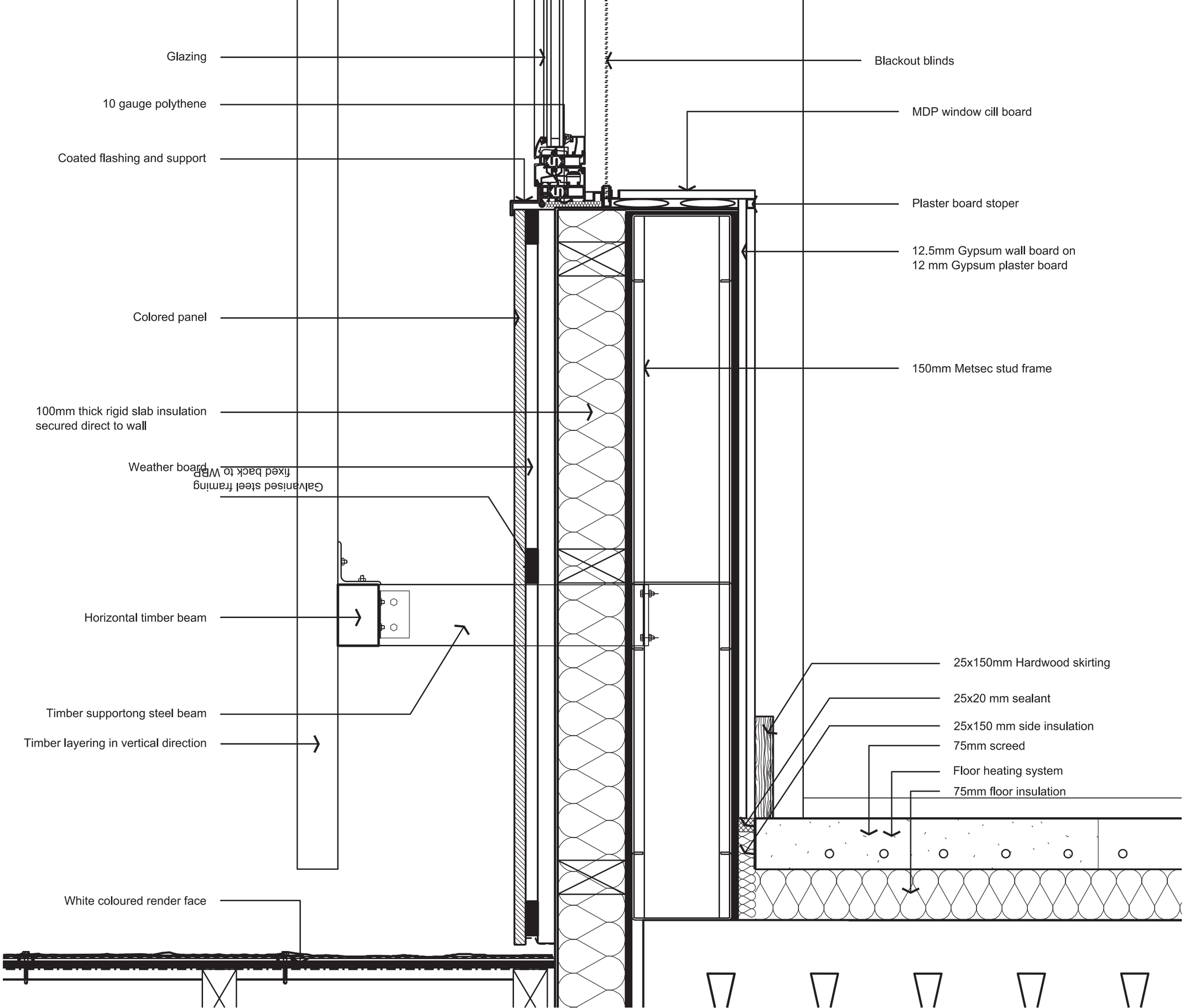

Gallery
Place de Fairy Tales Brussels
Gallery for Local Scale
Gallery for Local Scale
Gallery for Local Scale

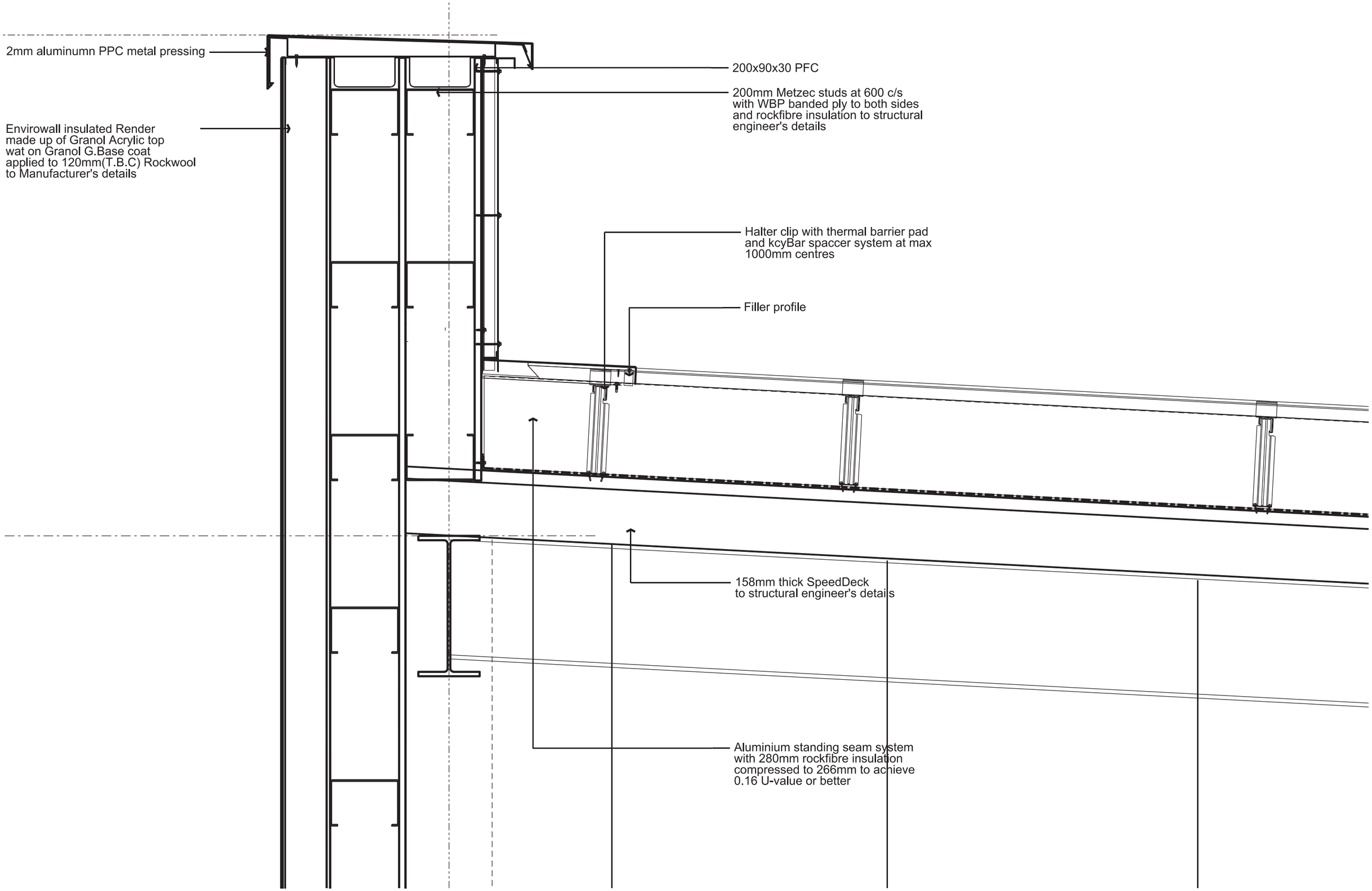


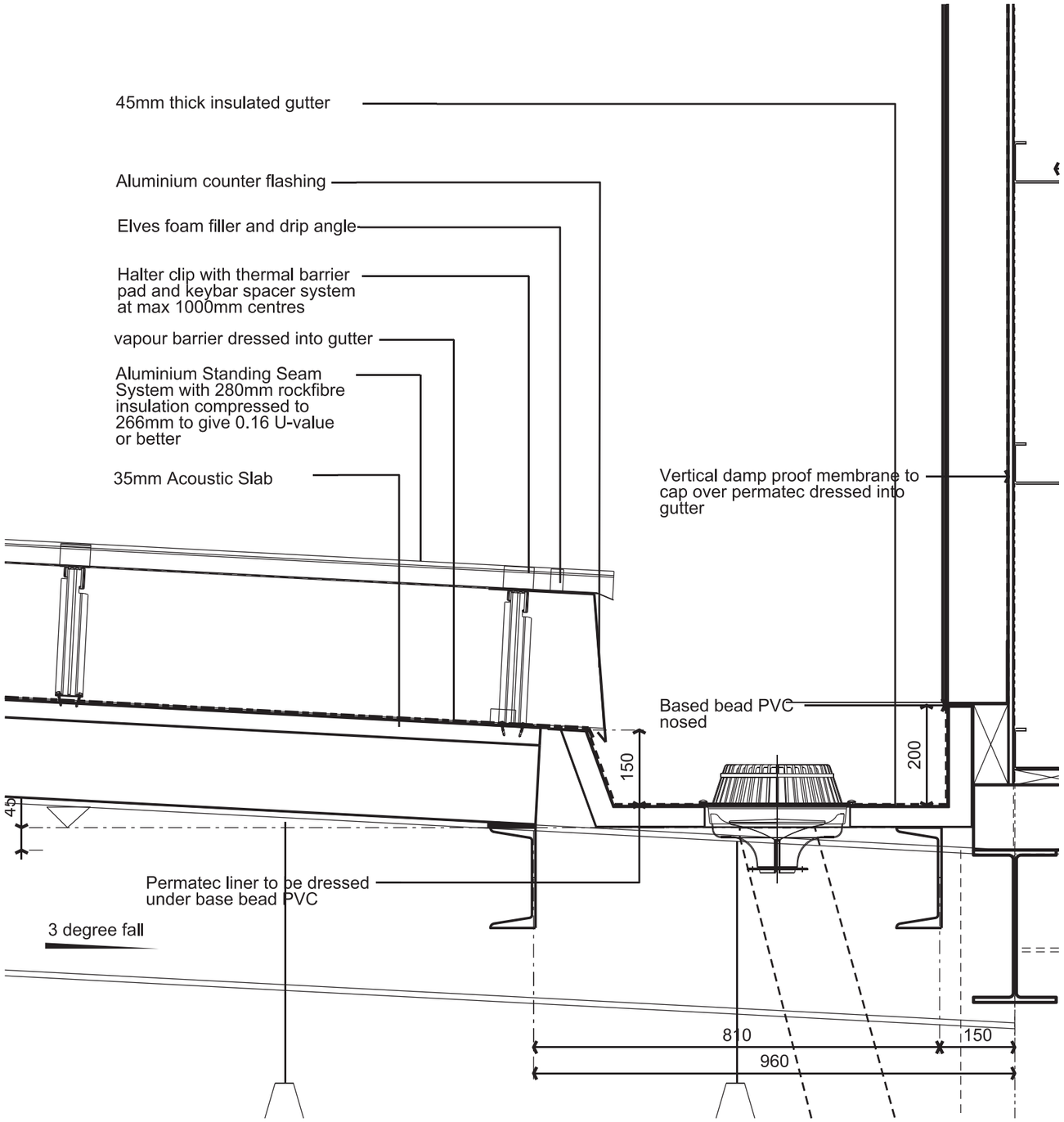
Cathédrale Saint-Michel, Brussels




Roof cap
150mm Metsec stud frame
DMP
Weather board
Galvanised steel framing
fixed back to WBP
100mm thick rigid slab insulation
secured direct to wall
Horizontal timber beam
Timber supportong steel beam
Timber layering in vertical direction
Blackout blinds
Glazing
Single ply mambrane
100mm roof insulation
200mm concrete slab
Suspended ceiling
with 50mm acoustic insulation


Glazing
10 gauge polythene
Coated flashing and support
Colored panel
100mm thick rigid slab insulation
secured direct to wall
Weather board
Galvanised steel framing
fixed back to WBP
Horizontal timber beam
Timber supportong steel beam
Timber layering in vertical direction
White coloured render face
Blackout blinds
MDP window cill board
Plaster board stoper
12.5mm Gypsum wall board on
12 mm Gypsum plaster board
150mm Metsec stud frame
25x150mm Hardwood skirting
25x20 mm sealant
25x150 mm side insulation
75mm screed
Floor heating system
75mm floor insulation


2mm aluminumn PPC metal pressing
Envirowall insulated Render made up of Granol Acrylic top wat on Granol G.Base coat applied to 120mm(T.B.C) Rockwool to Manufacturer's details
200x90x30 PFC
200mm Metzec studs at 600 c/s with WBP banded ply to both sides and rockfibre insulation to structural engineer's details
Halter clip with thermal barrier pad and kcyBar spaccer system at max 1000mm centres
Filler profile
158mm thick SpeedDeck to structural engineer's details
Aluminium standing seam system with 280mm rockfibre insulation compressed to 266mm to achieve 0.16 U-value or better


45mm thick insulated gutter
Aluminium counter flashing
Elves foam filler and drip angle
Halter clip with thermal barrier pad and keybar spacer system at max 1000mm centres
vapour barrier dressed into gutter
Aluminium Standing Seam System with 280mm rockfibre insulation compressed to 266mm to give 0.16 U-value or better
35mm Acoustic Slab
Vertical damp proof membrane to cap over permatec dressed into gutter
Based bead PVC nosed
150
200
45
Permatec liner to be dressed under base bead PVC
3 degree fall
810
150
960

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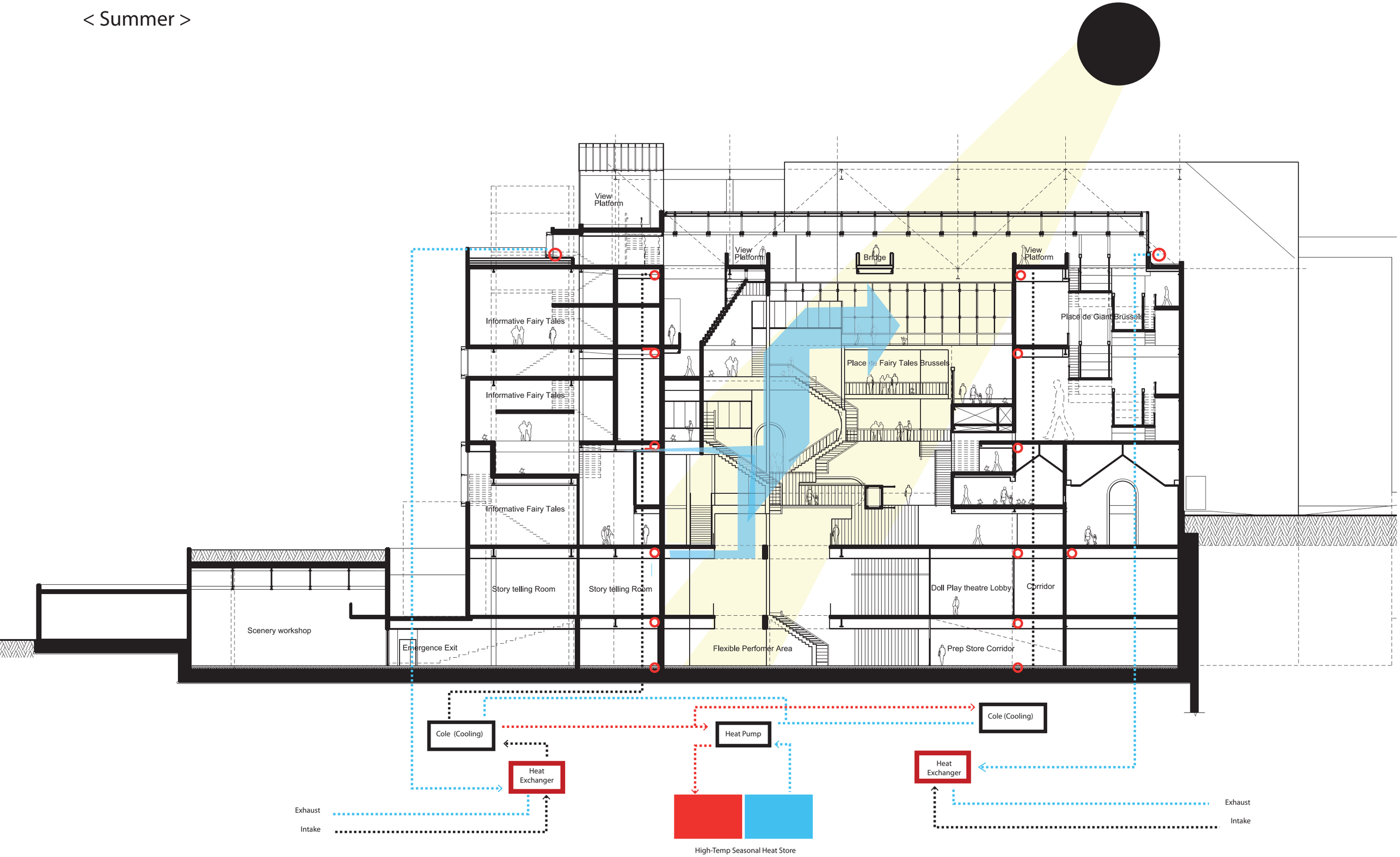
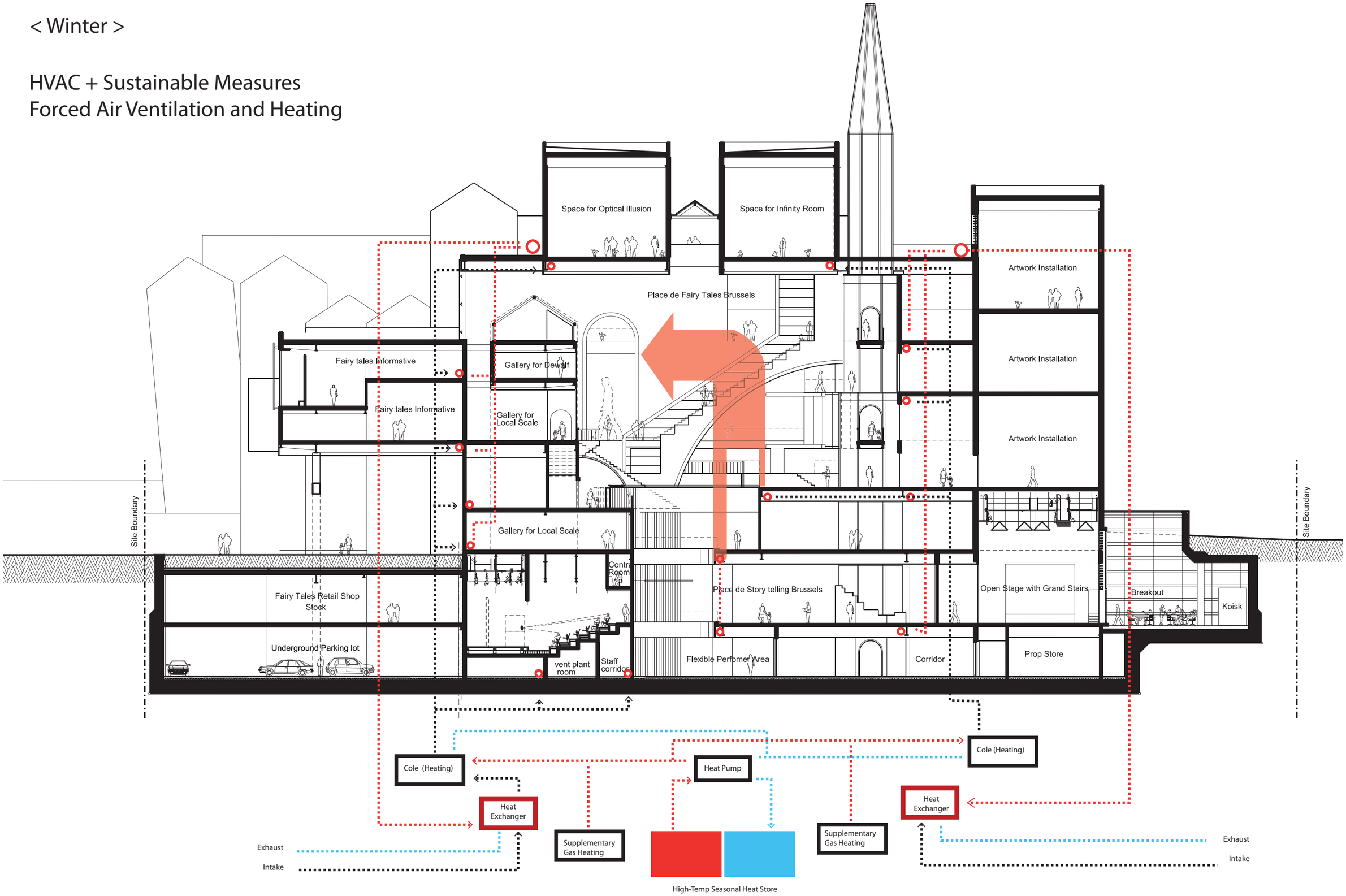
< Summer >


View Platform
View Platform
Bridge
View Platform
Informative Fairy Tales
Informative Fairy Tales
Informative Fairy Tales
Place de Fairy Tales Brussels
Place de Giant Brussels
Scenery workshop
Emergence Exit
Story telling Room
Story telling Room
Flexible Performer Area
Doll Play theatre Lobby
Corridor
Prep Store Corridor
Cole (Cooling)
Heat Exchanger
Exhaust
Intake
Heat Pump
High-Temp Seasonal Heat Store
Cole (Cooling)
Heat Exchanger
Exhaust
Intake

< Winter >

HVAC + Sustainable Measures
Forced Air Ventilation and Heating



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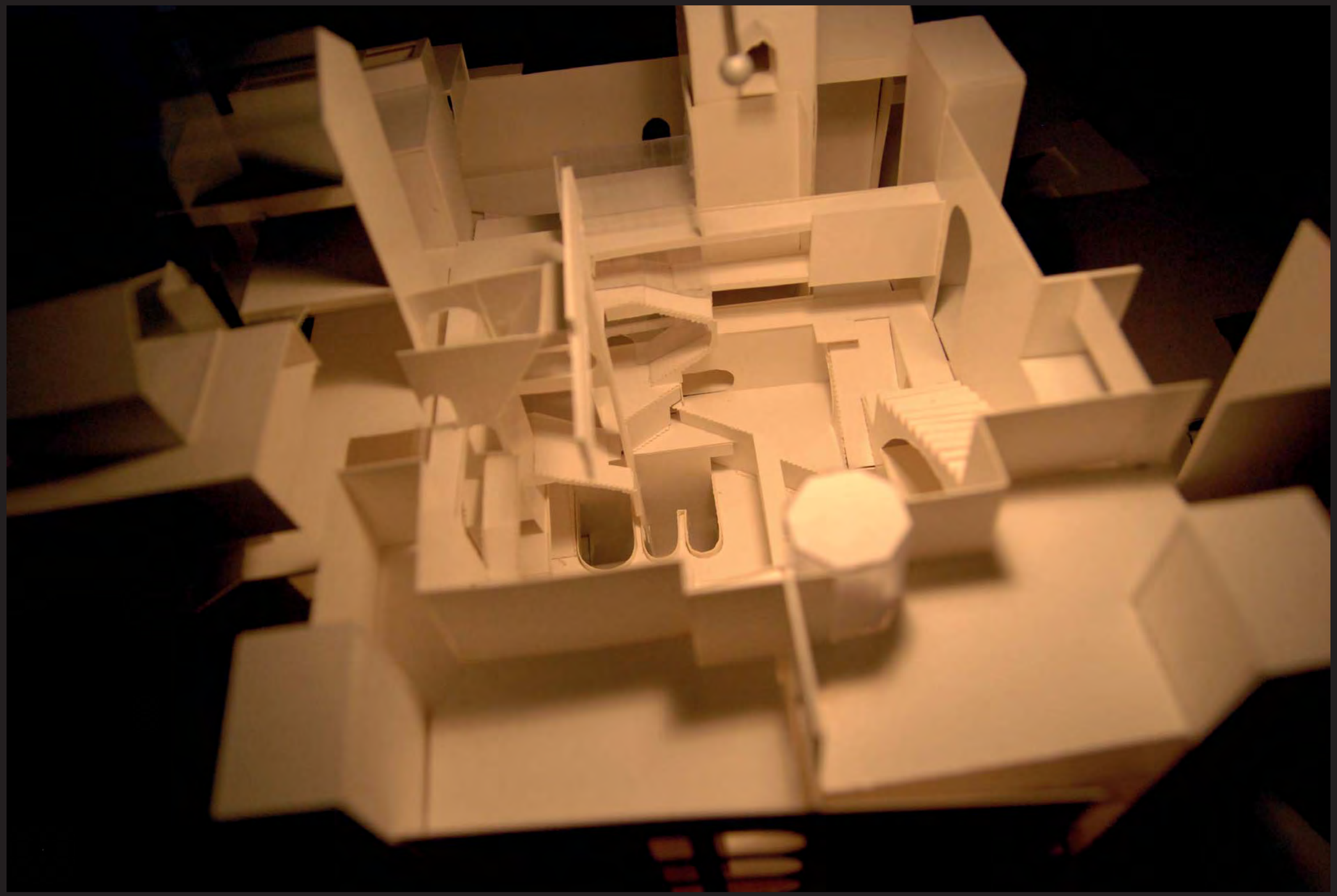
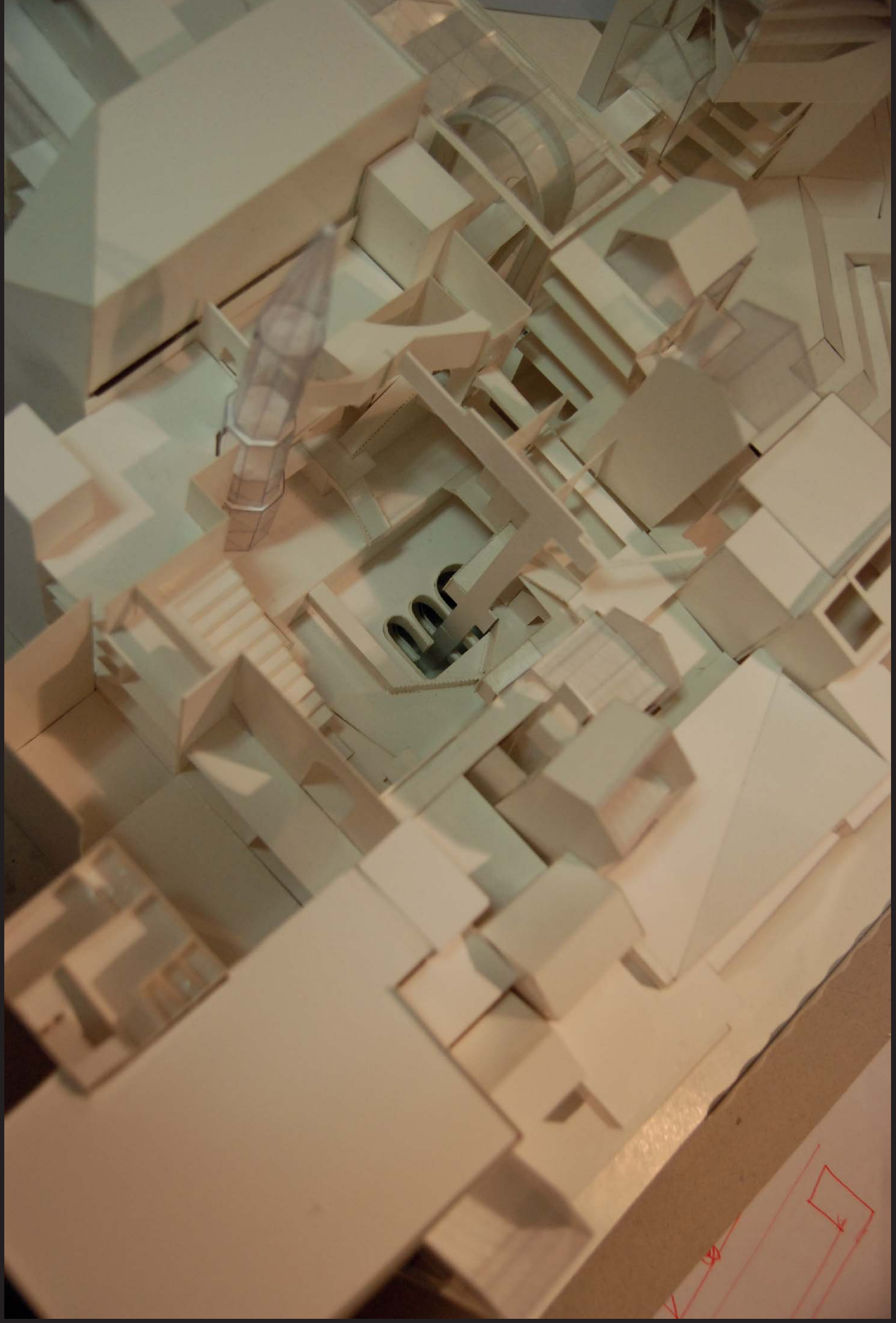
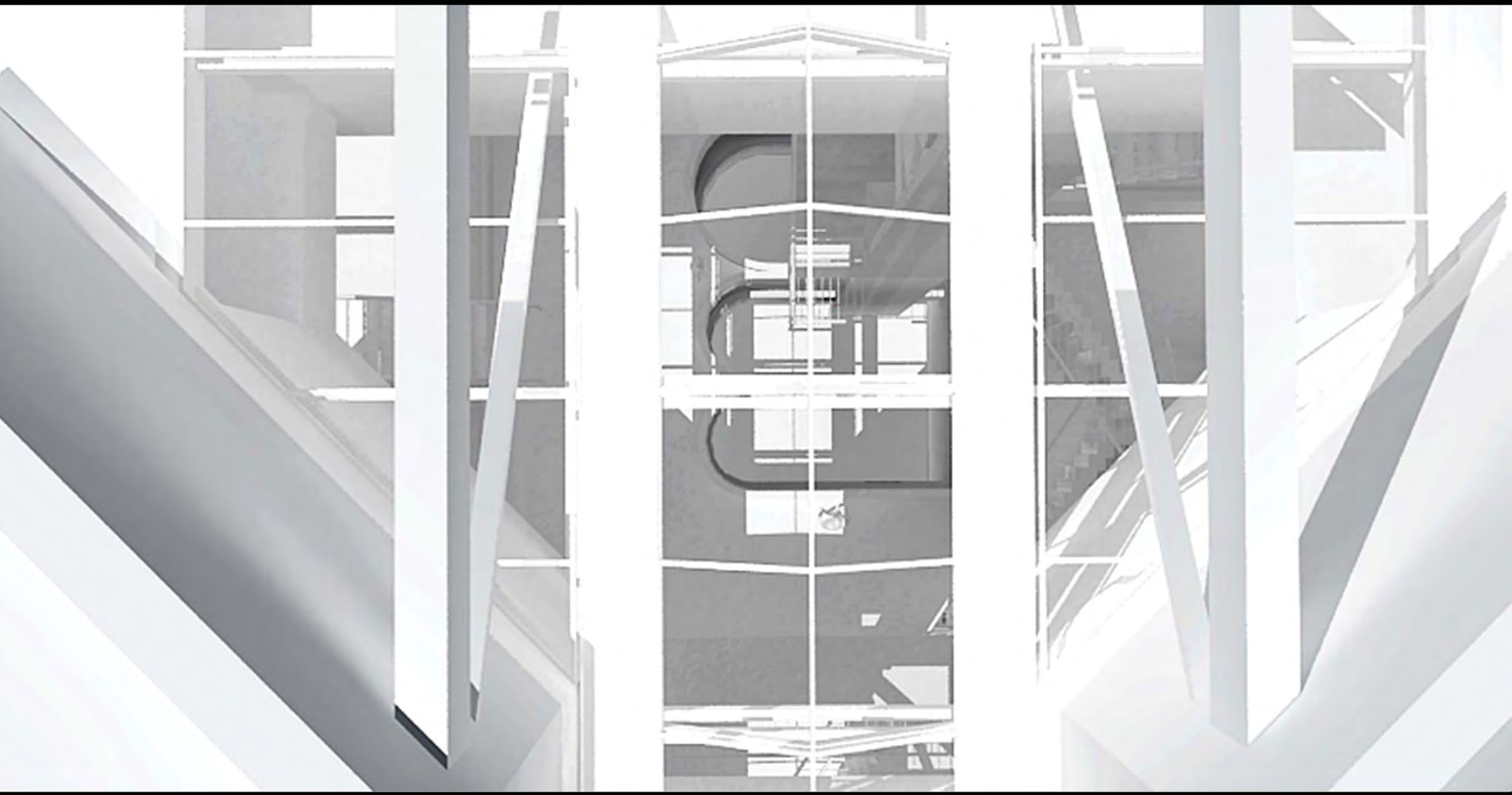
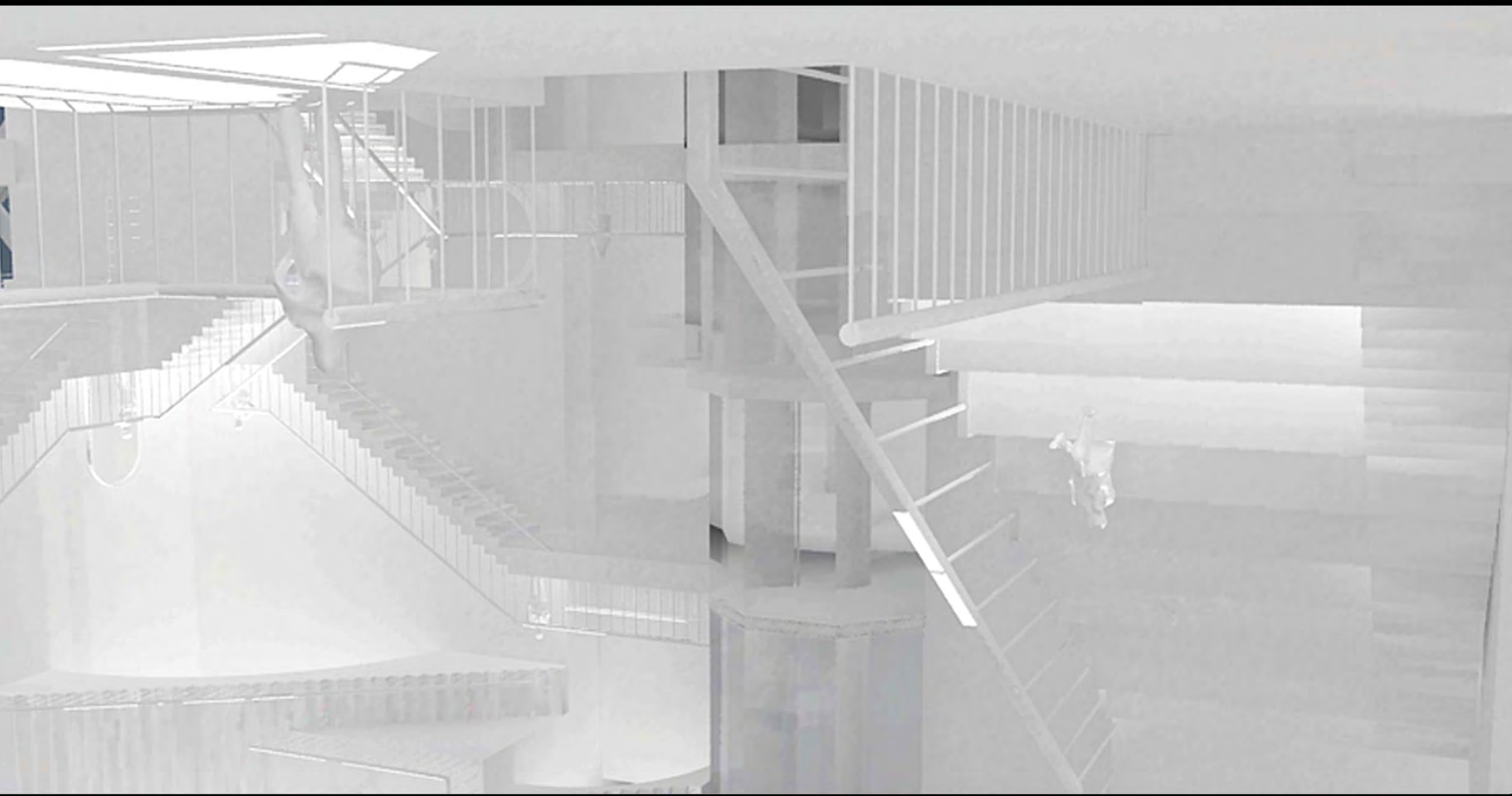
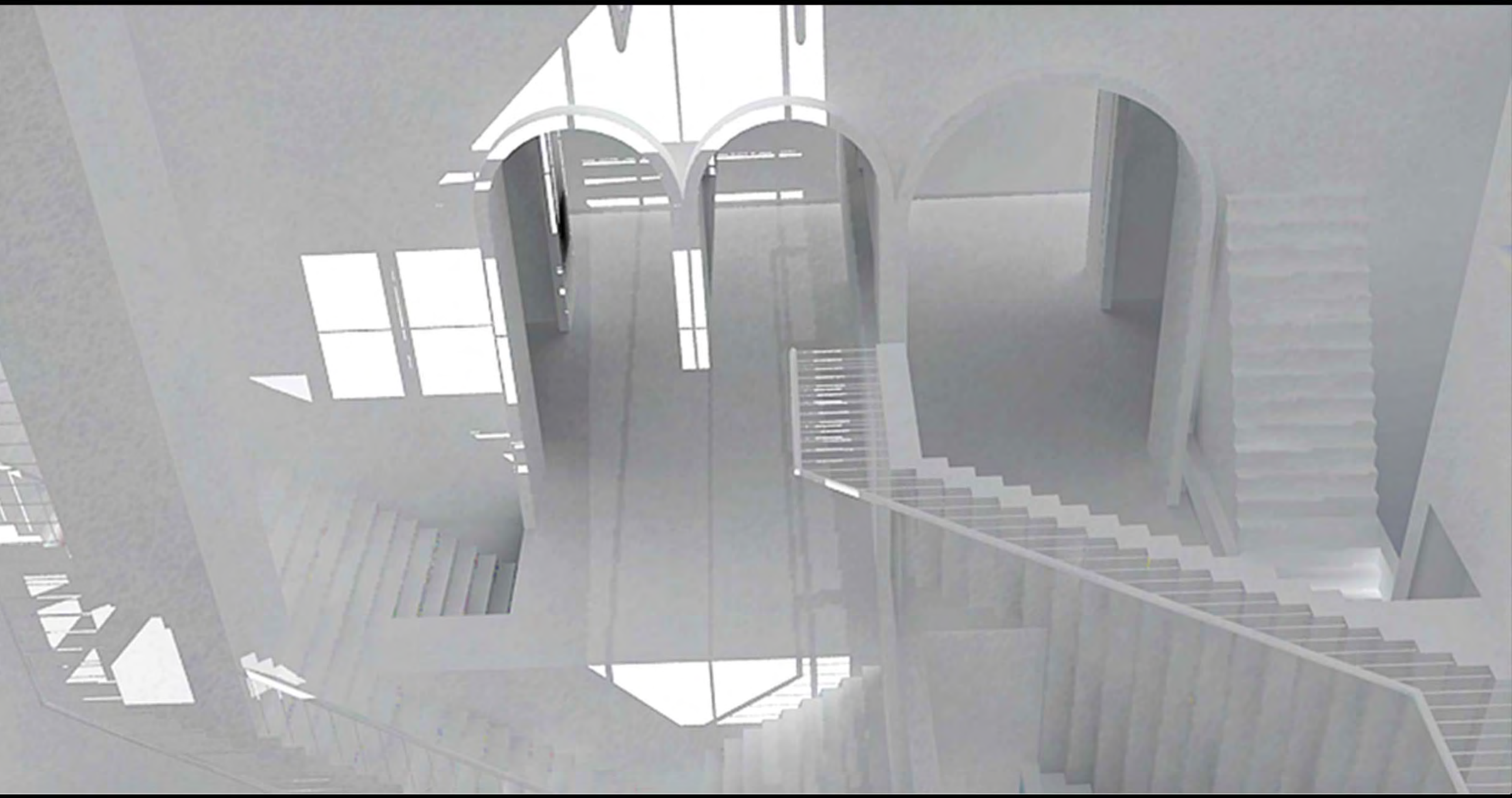
Perpectives











THANK YOU