

Stockholm City Library Extension

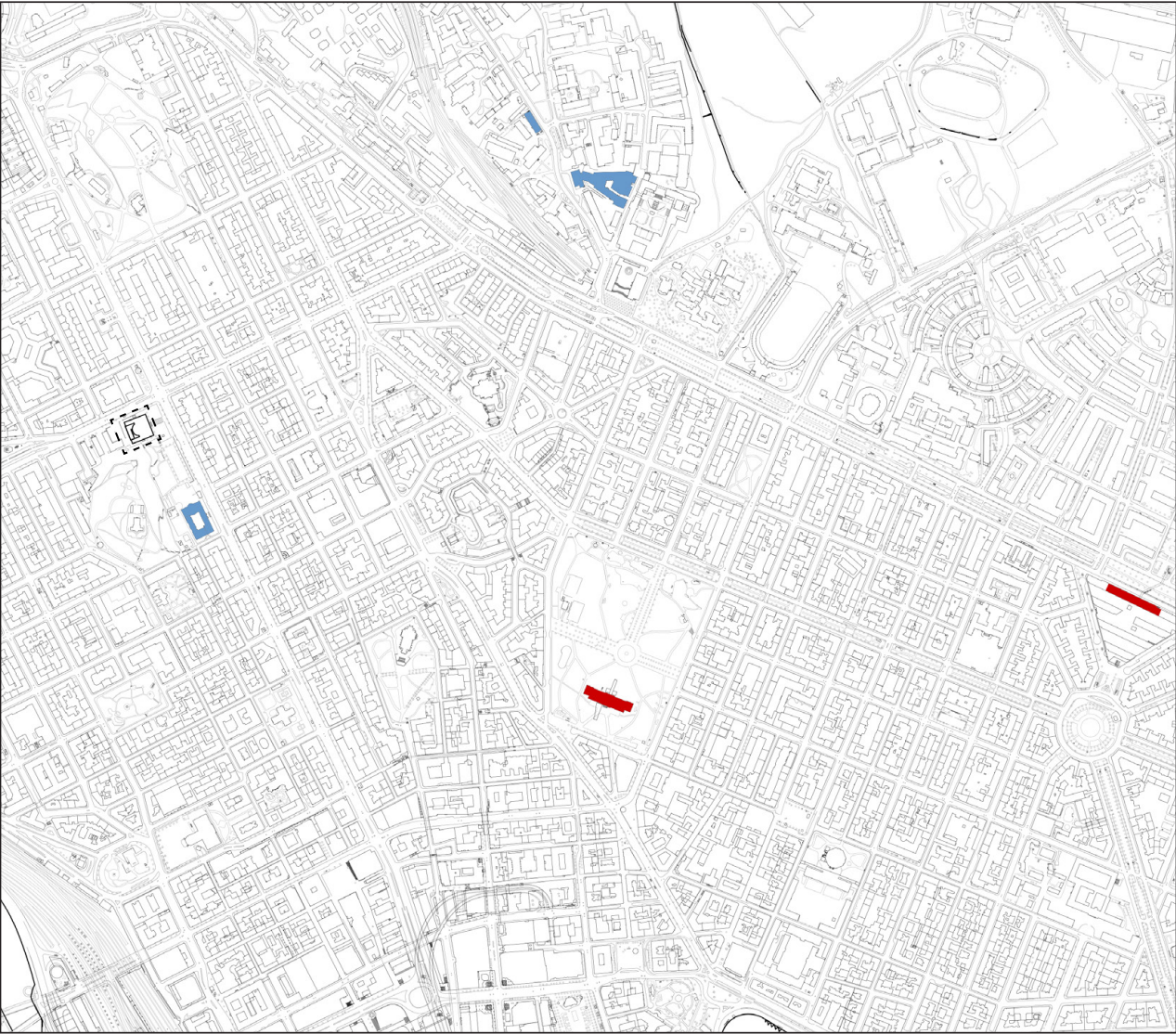
A urban sanctuary for reading and learning

2023/24 Graduation Project

Lenore Liu

Design Mentor | Susanne Pietsch
Technology Mentor | Matthijs Klooster
Research Mentor | Sereh Mandias

Site

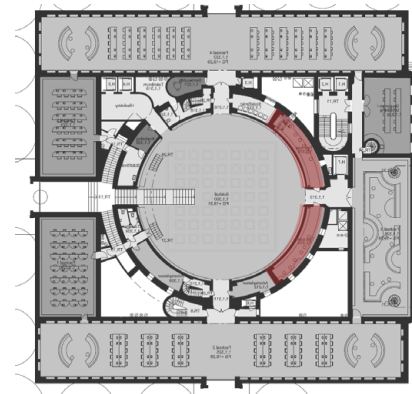
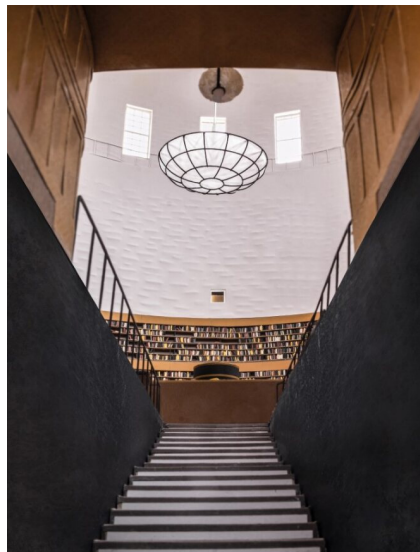
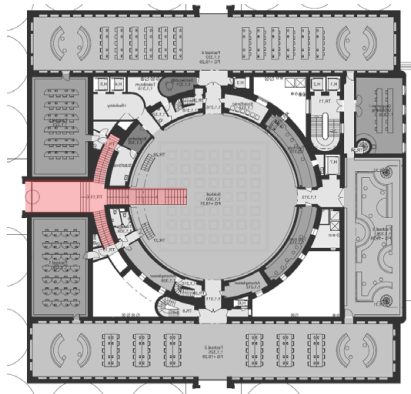


Site plan | Distribution of public libraries | Limited Public Library

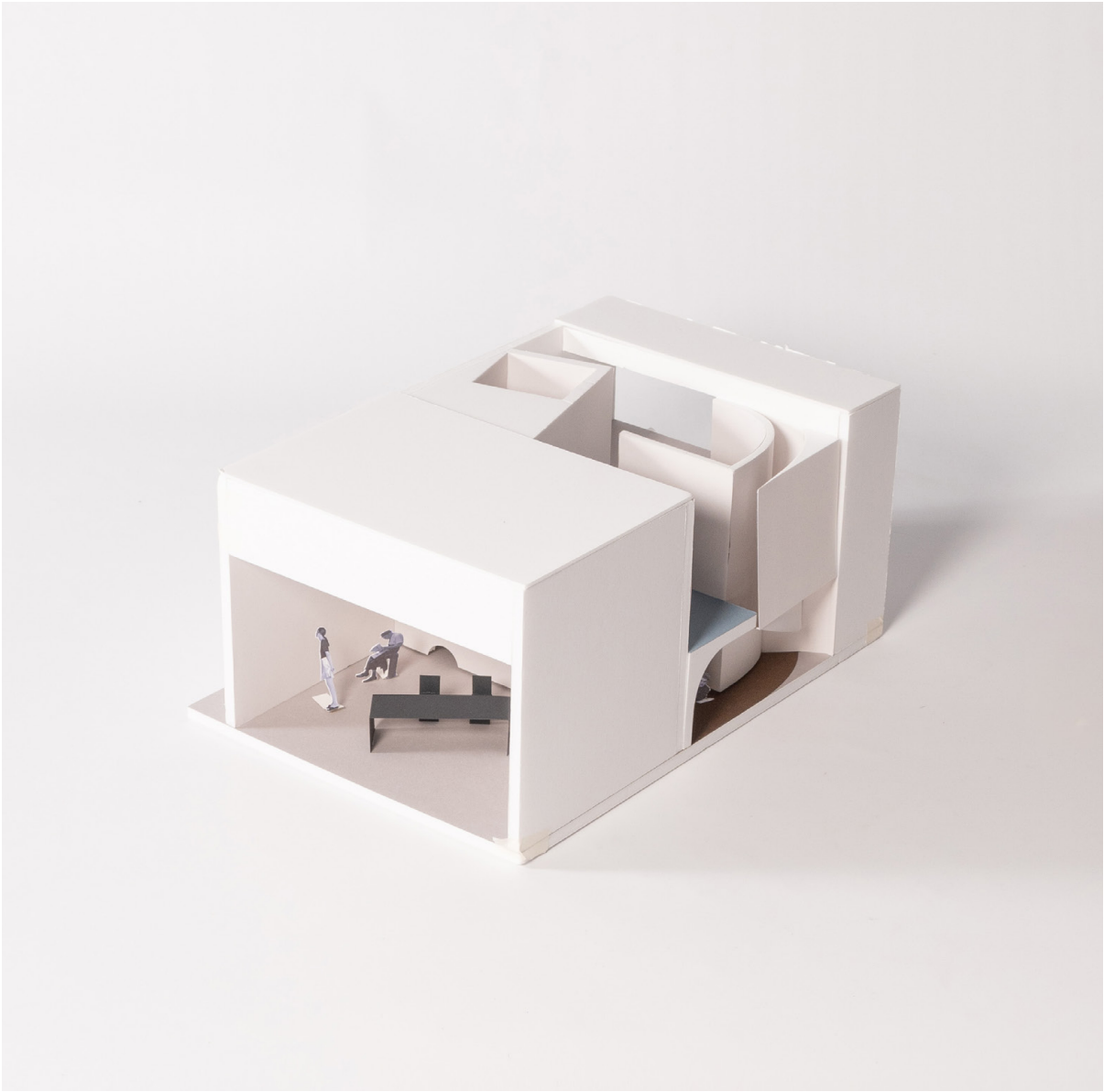


Urban pattern | Stockholm City Library(Isolated) and the enclosed urban blocks

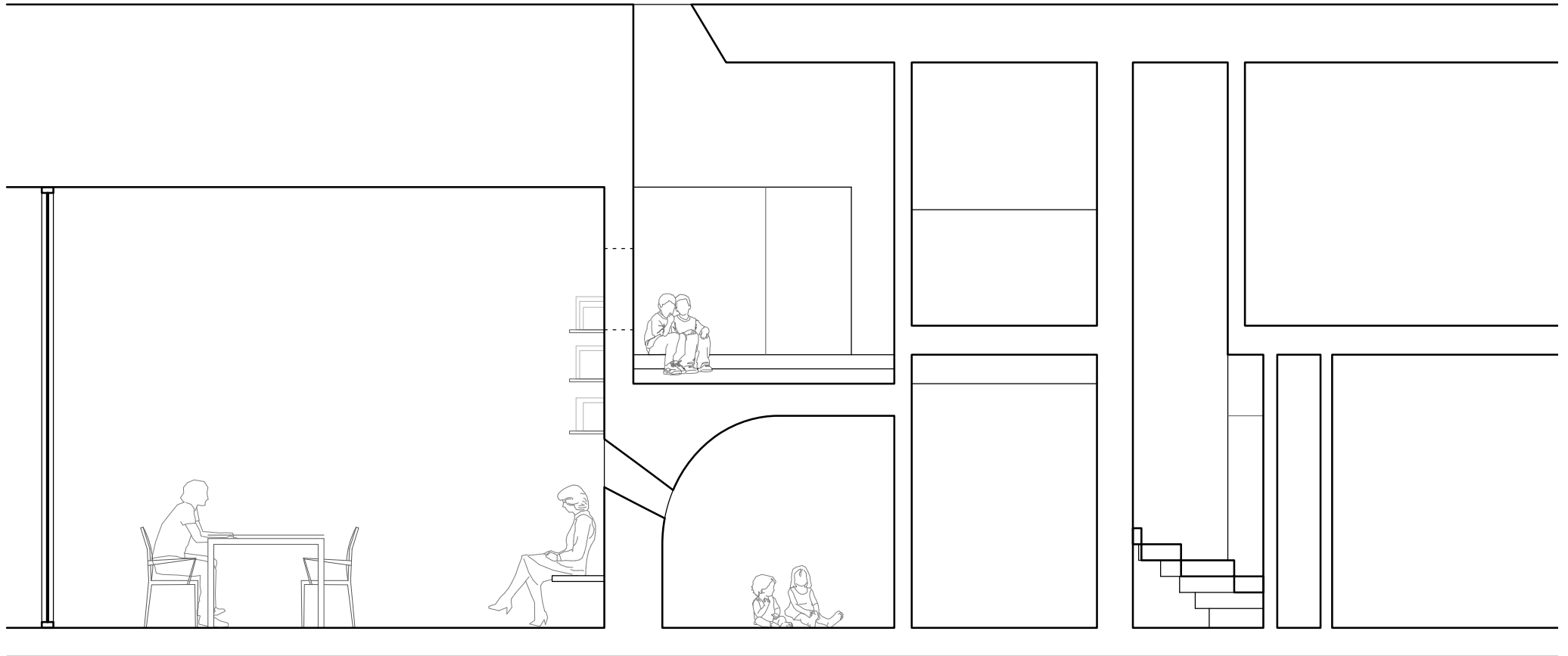
Poché



1:25 model study (group) | Poché



1:25 model study | Imaginary room within a library



Section | Imaginary room within a library | Interplay of spaces with different scales



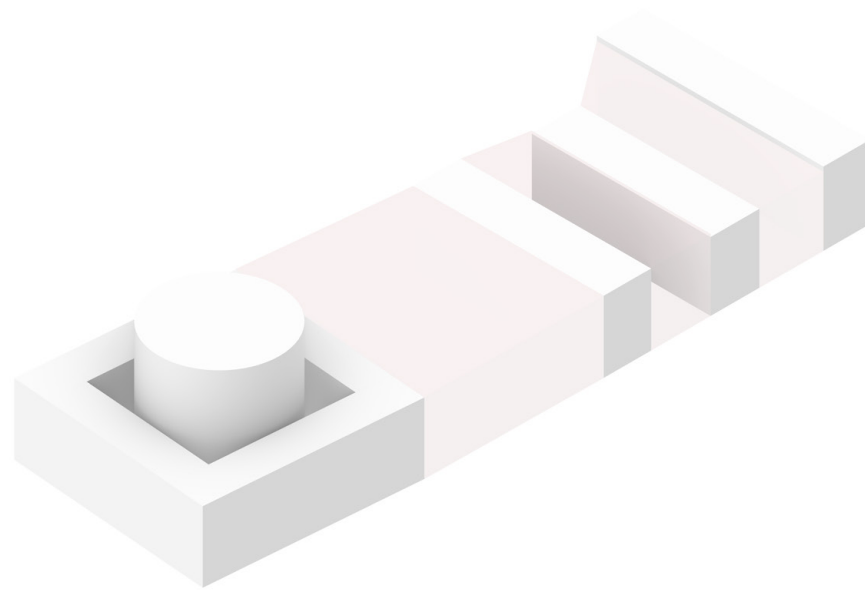
Model photo | Public reading space



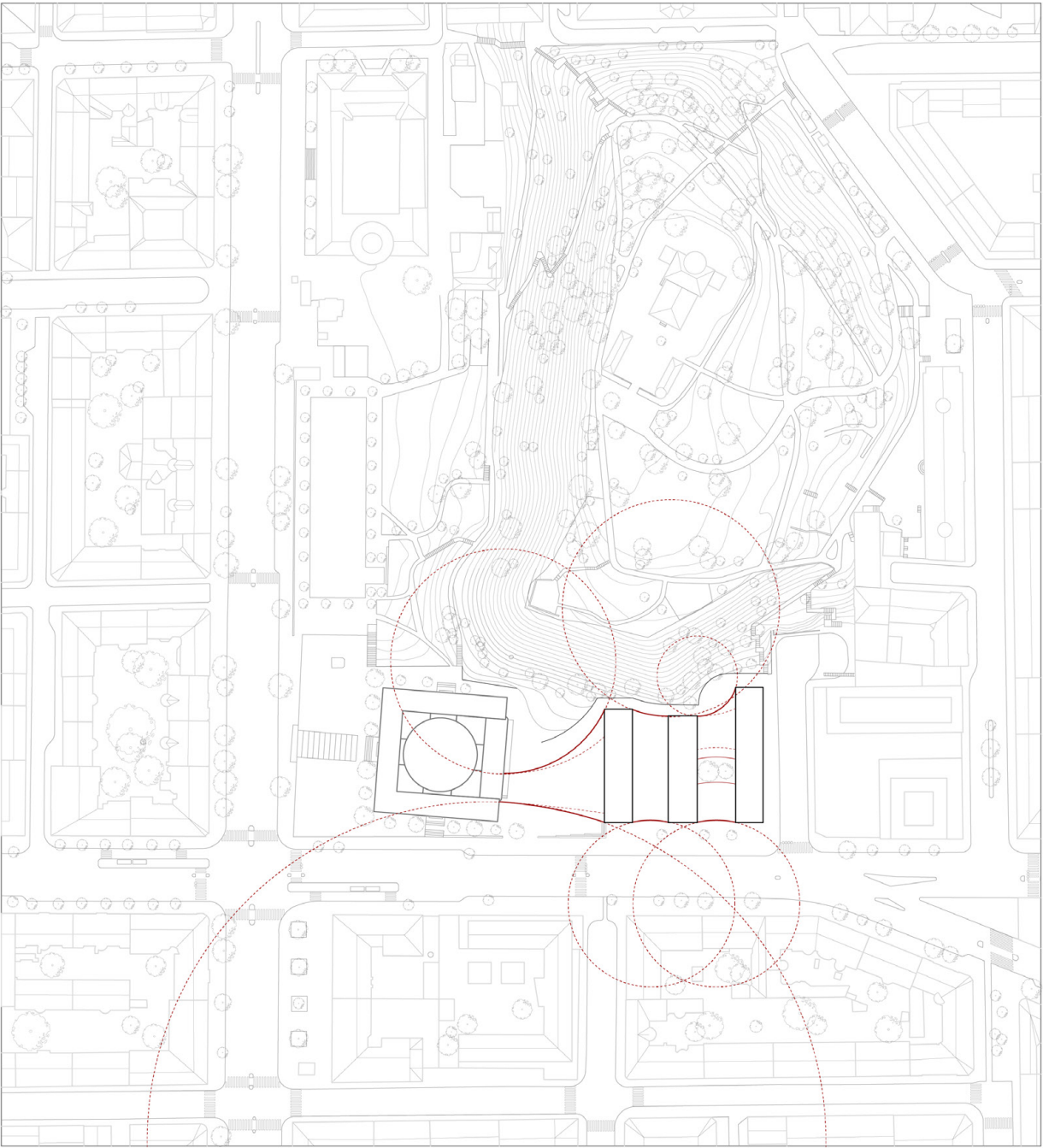
Model photo | Children's library



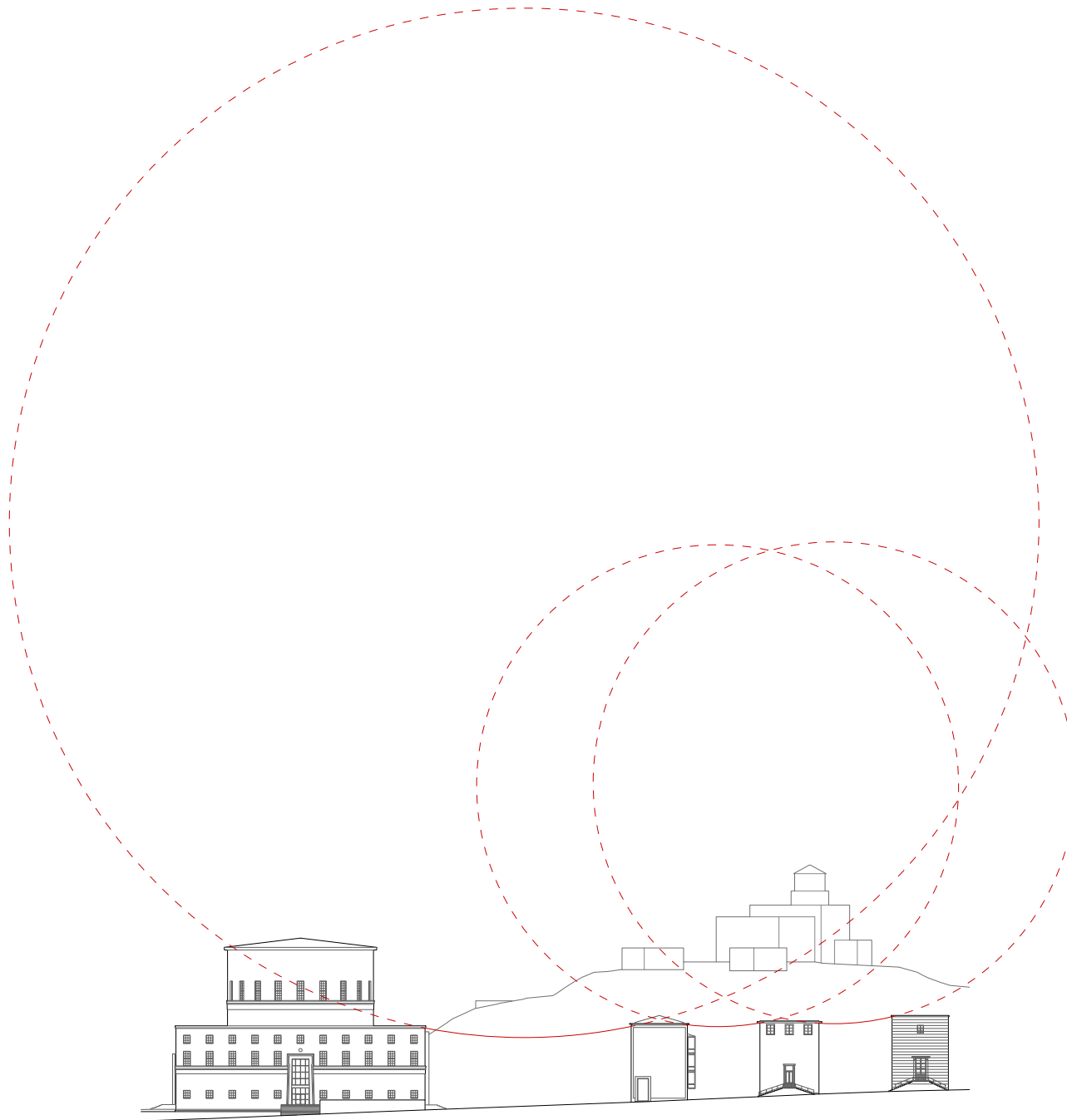
Approach



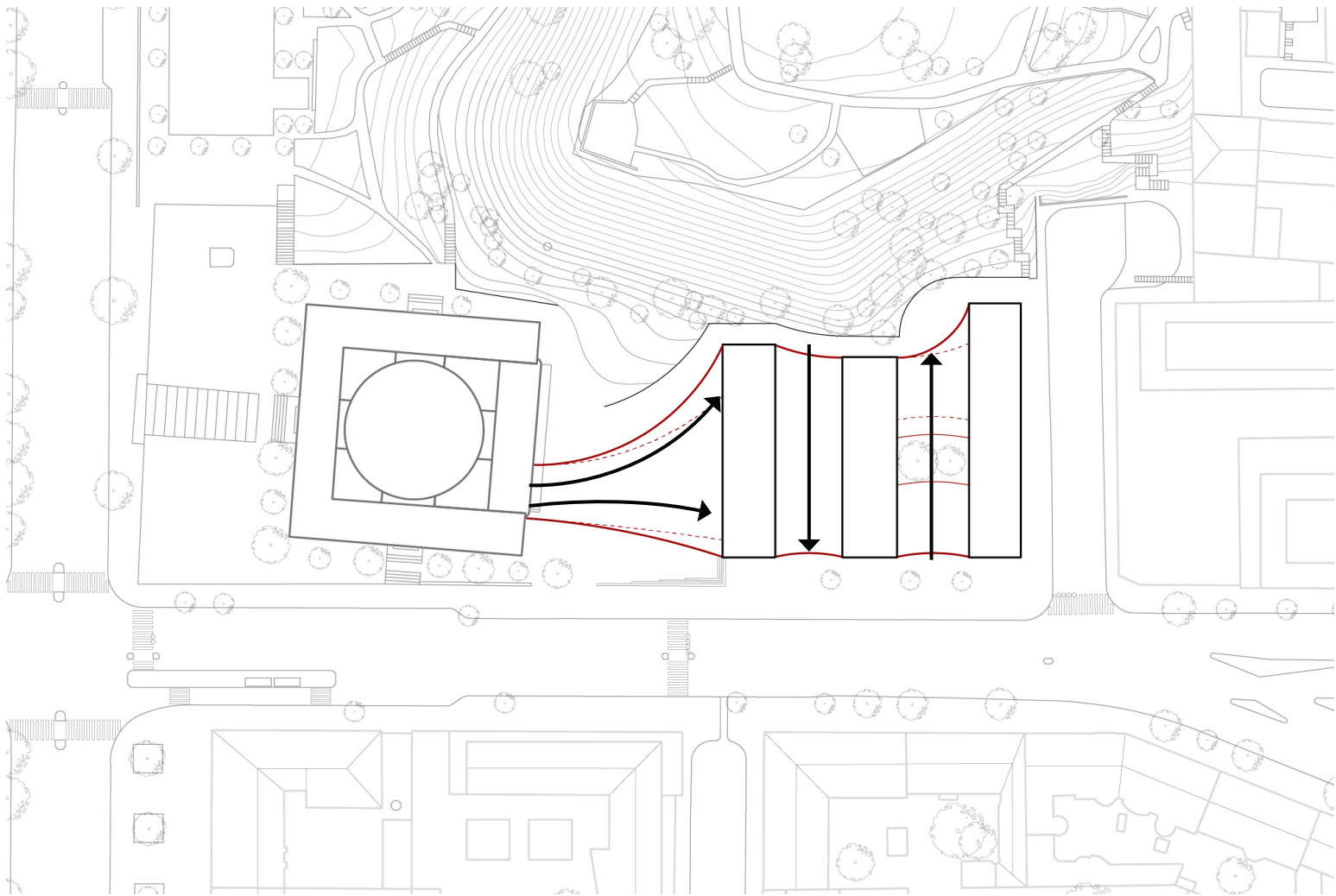
Concept | add new volume to enclose the library block



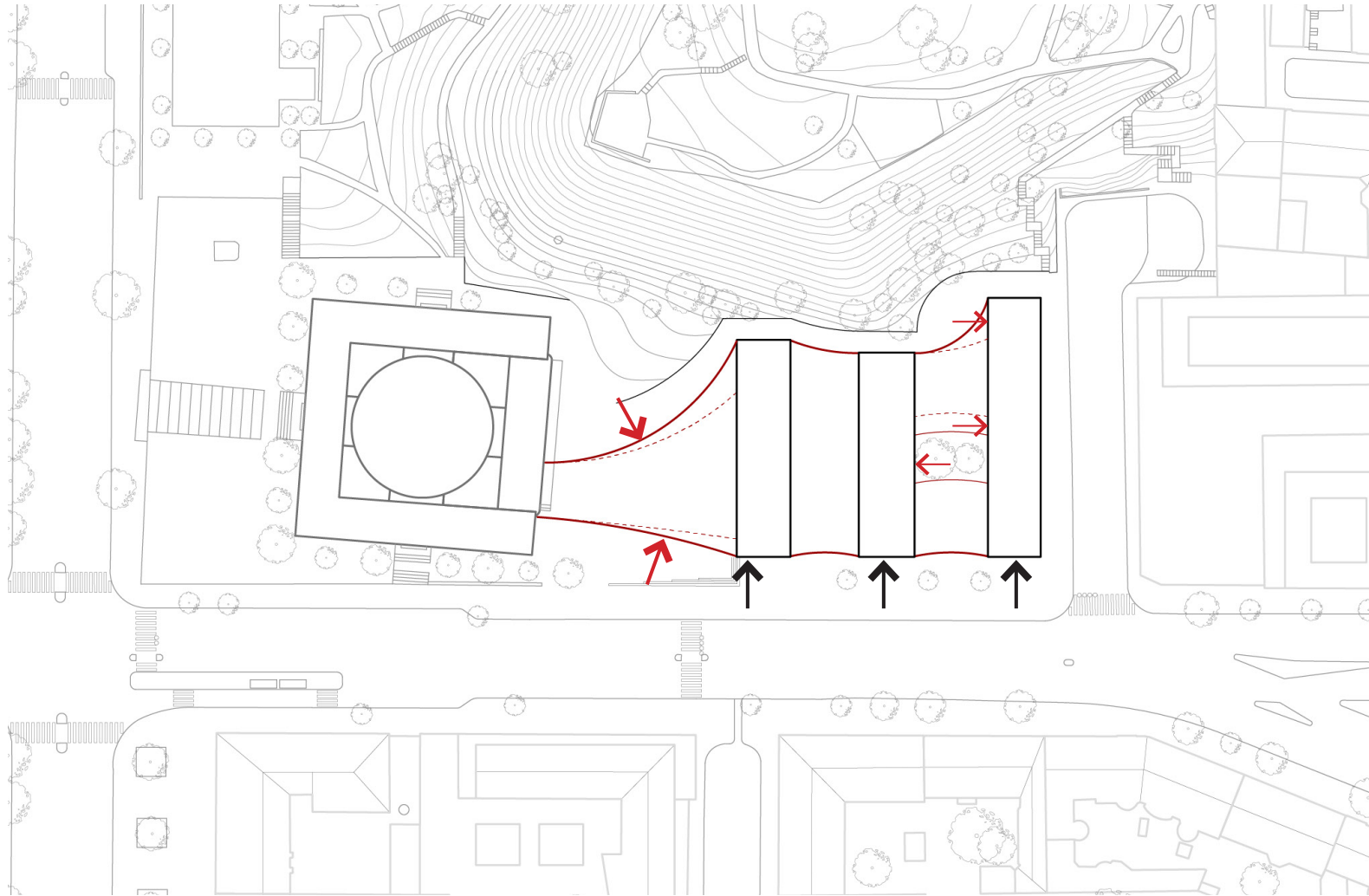
Concept | Free form curves connect existing buildings



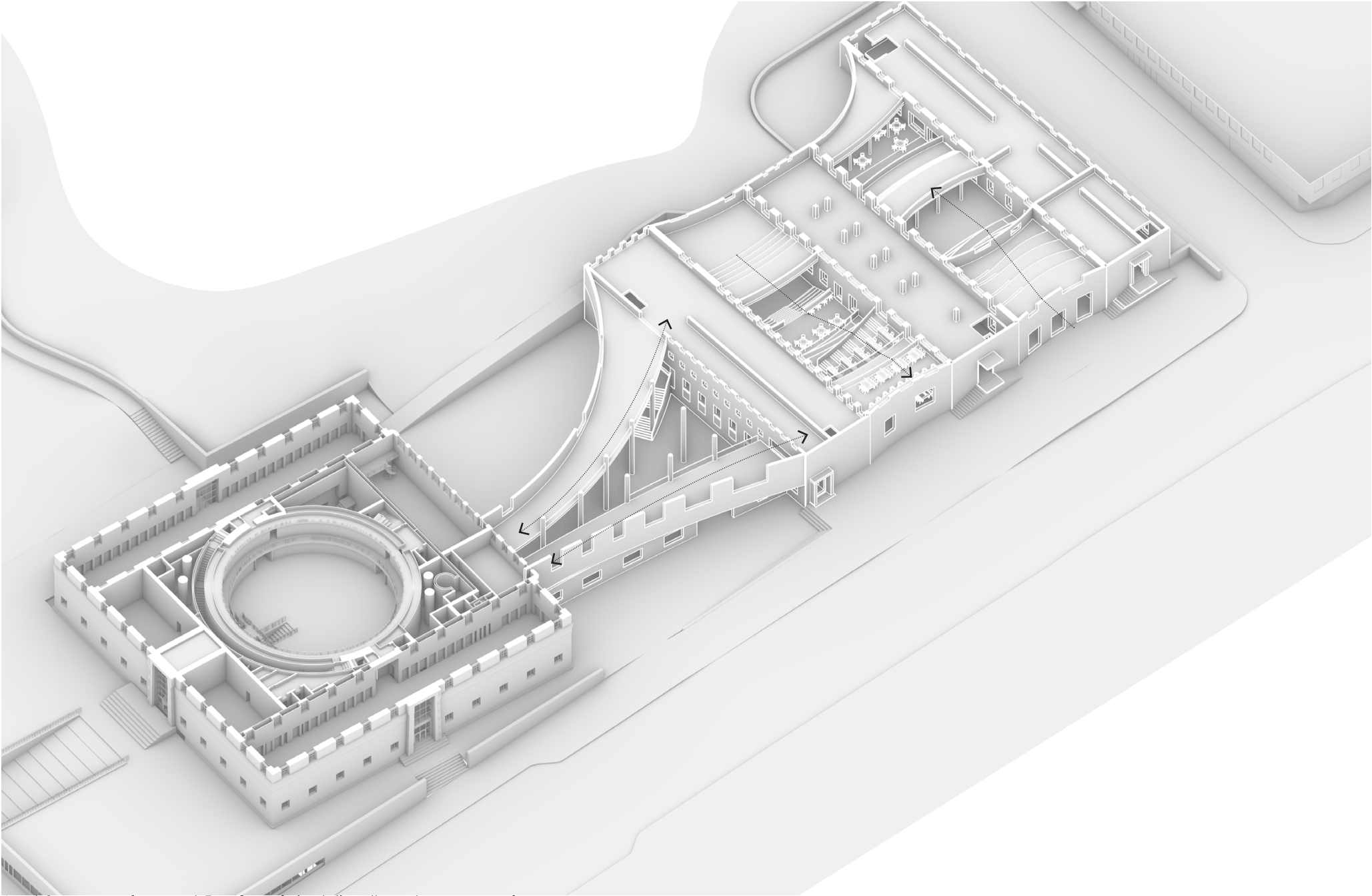
Concept | Free form curves to collaborate the height differences of each existing buildings



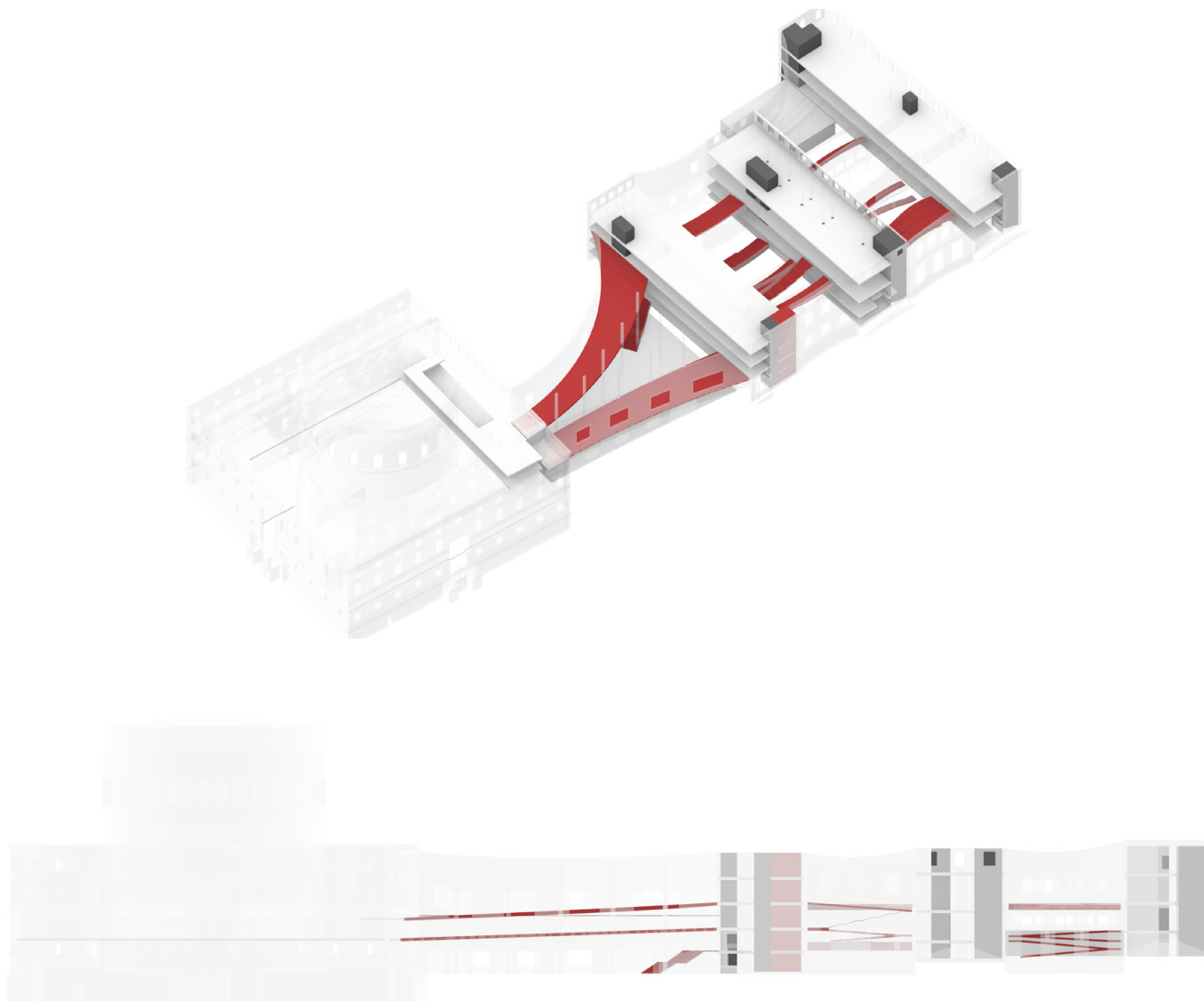
Concept | each space leads the circulation towards a direction that connects with the surrounding



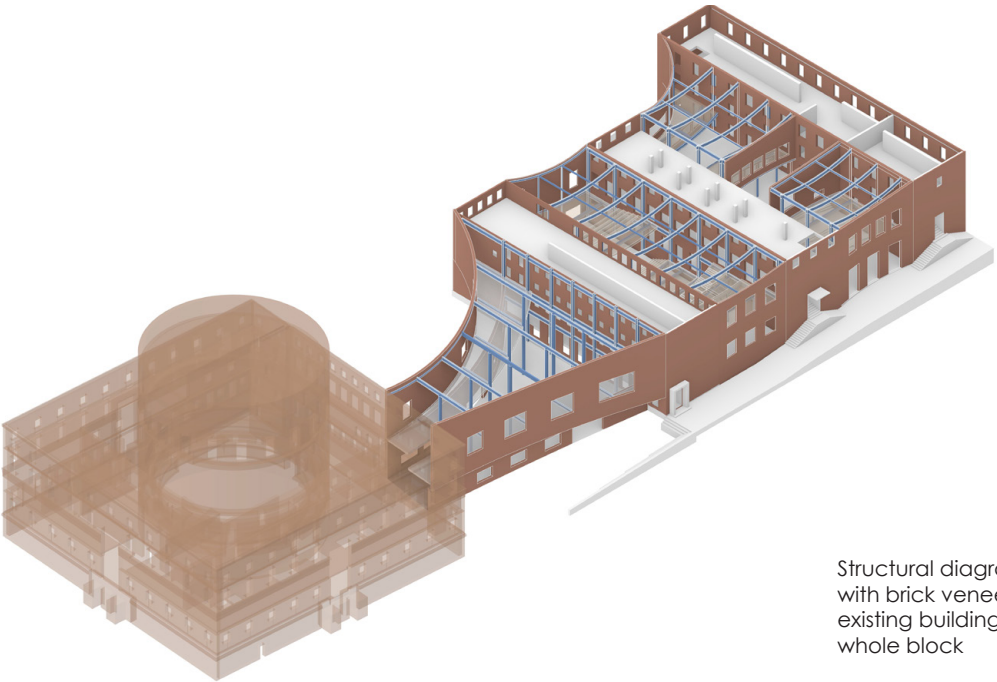
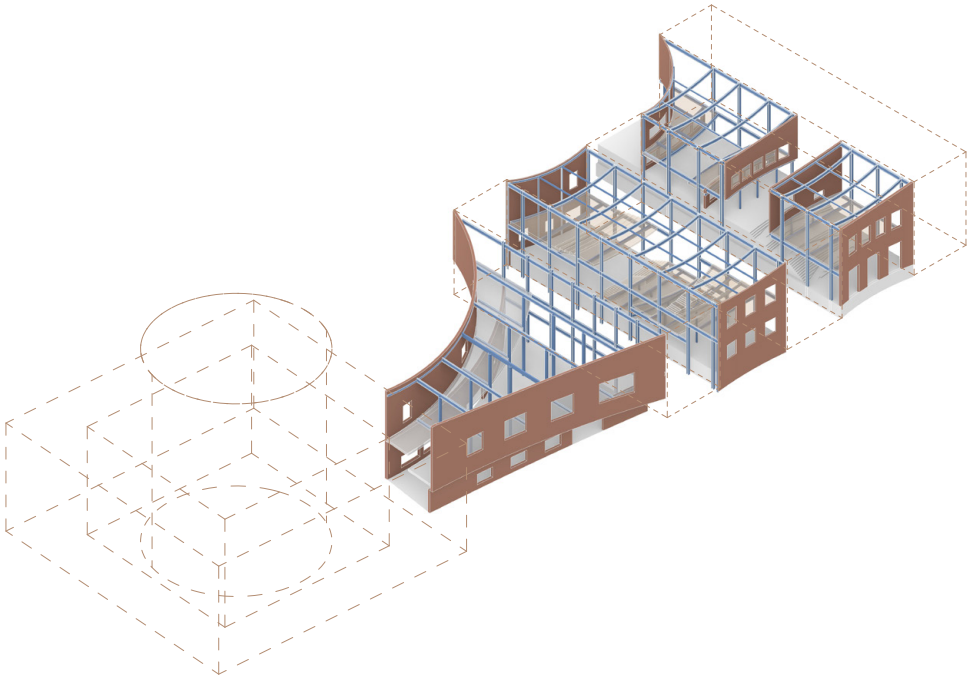
Concept | Entrances of the existing buildings are kept with new added entrances form a permeable building block



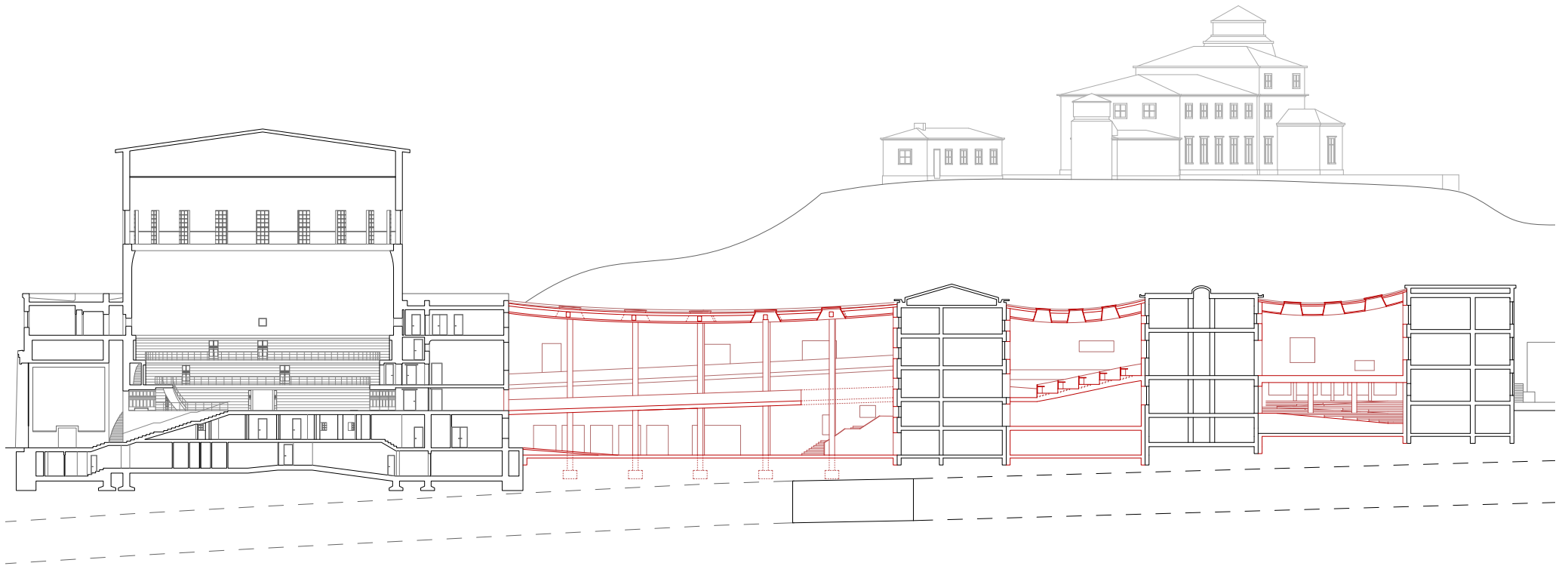
Axo | Sequence of spaces | Free flow of circulations through sequence of spaces



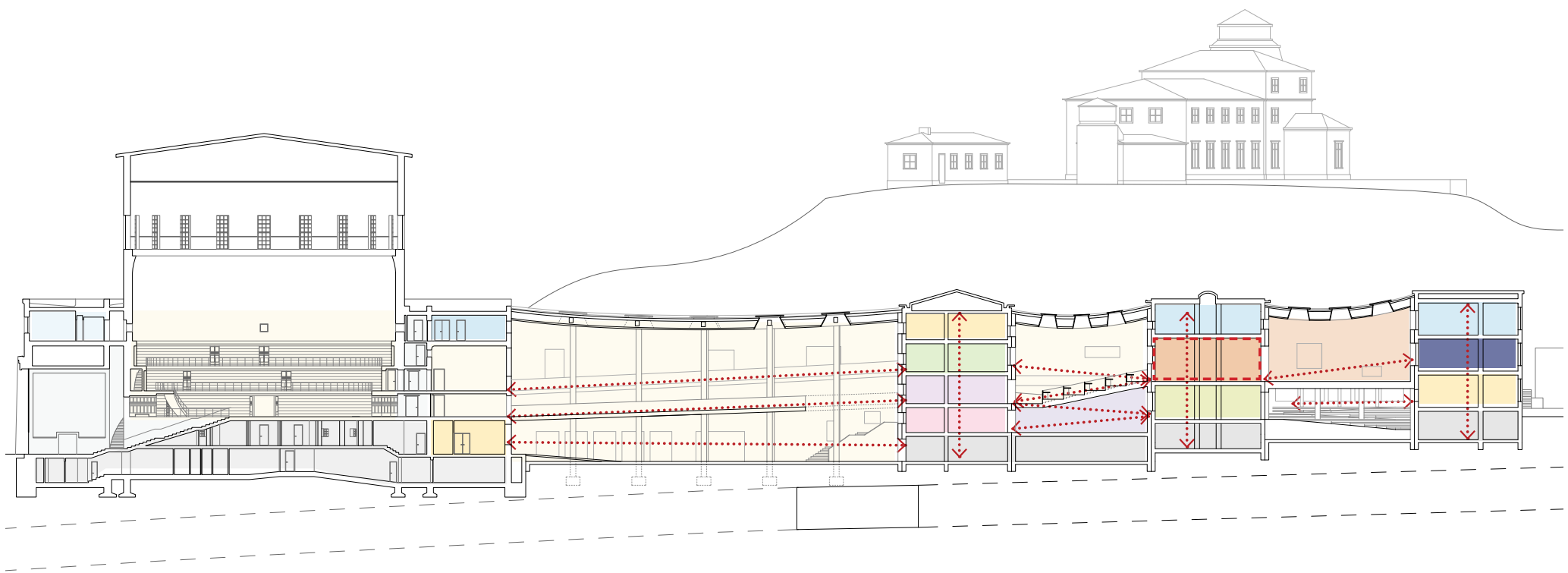
Circulation diagram | Vertical circulation -existing staircases of the annexes | Horizontal ramps connect the existing buildings together



Structural diagram | Lightweight steel construction with brick veneer wall added in between the masonry existing buildings | continuous facade wrap around the whole block

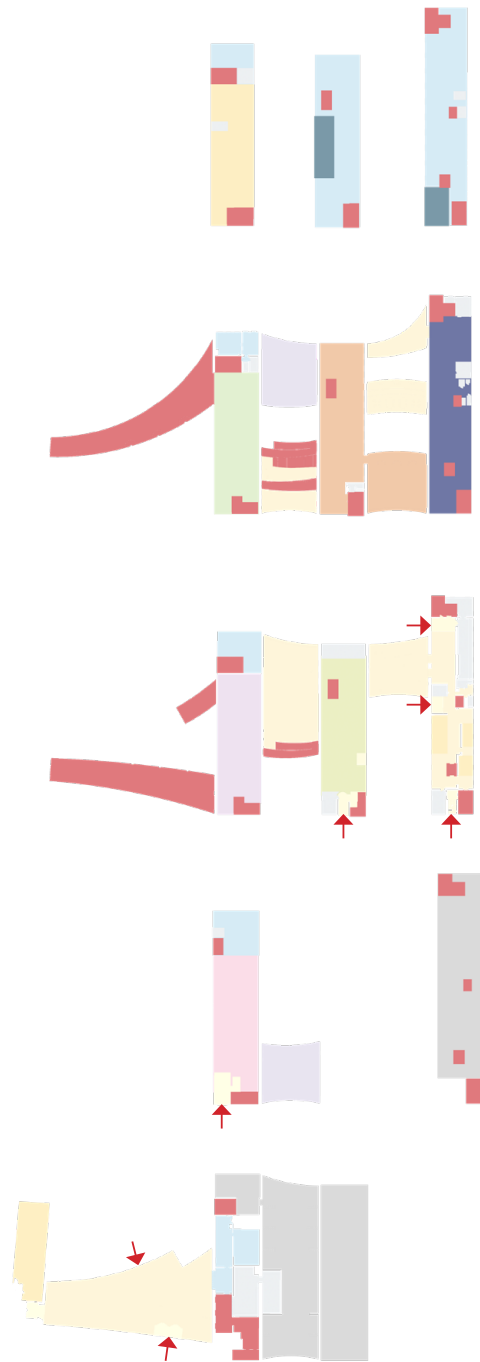


Long section | New added spaces and the existing

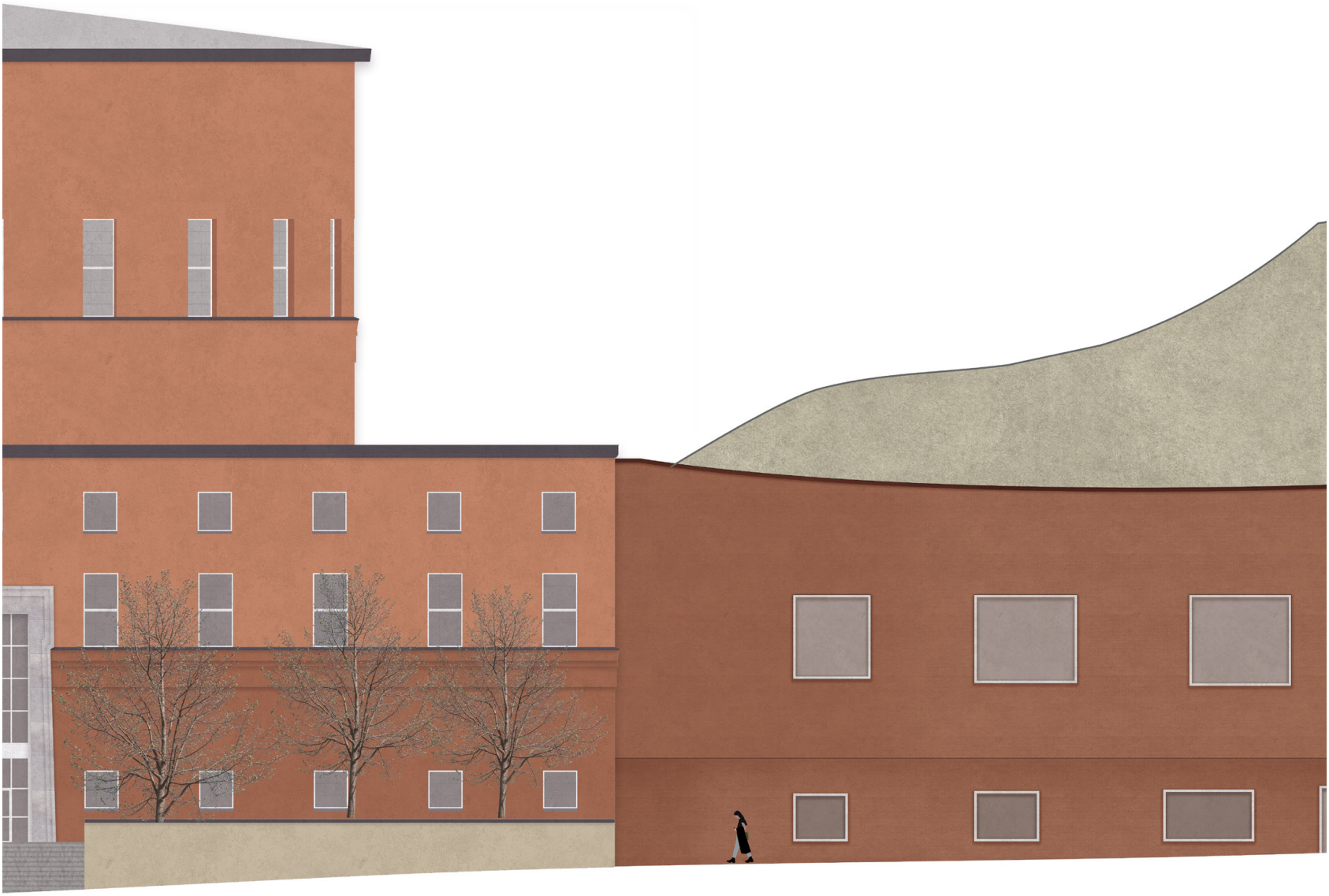


- | | | | | |
|-----------------------|---------------------|--------------------|--------------|------------|
| Office | Foreign | Natural/Technology | Group room | Service |
| Archive/closed stacks | Children's library | People/Country | Public space | Plant room |
| Fiction | Workshop/Auditorium | Arts | Circulation | |

Function distribution | Added space as public reading space, existing as the book repository for different book collections

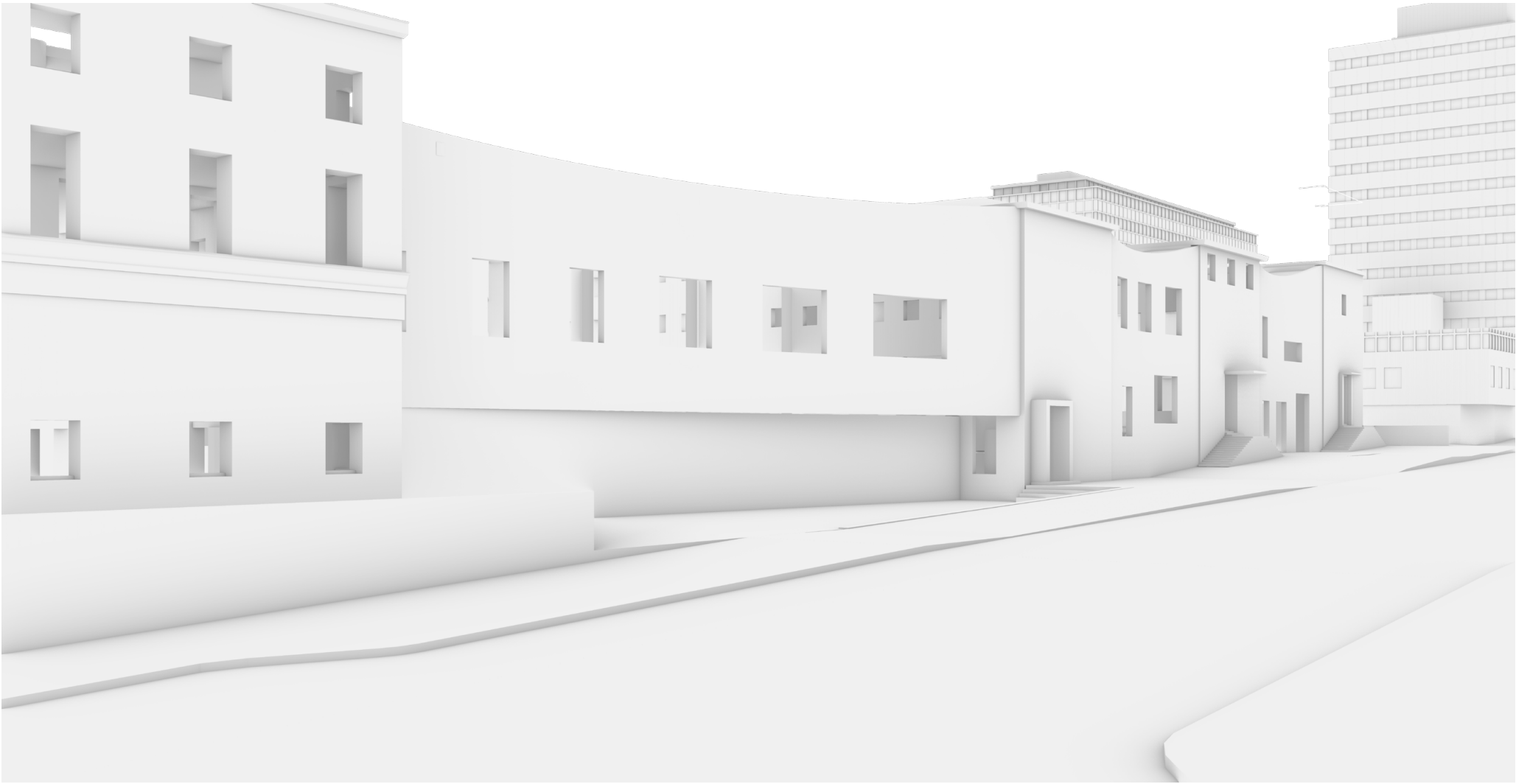


- Office
- Archive/closed stacks
- Foreign
- Children's library
- Natural/Technology
- Ppl/Country
- Fiction
- Workshop/Auditorium
- Arts
- Group room
- Public space
- ↑ ● Entrance hall
- Circulation
- Service
- Plant room

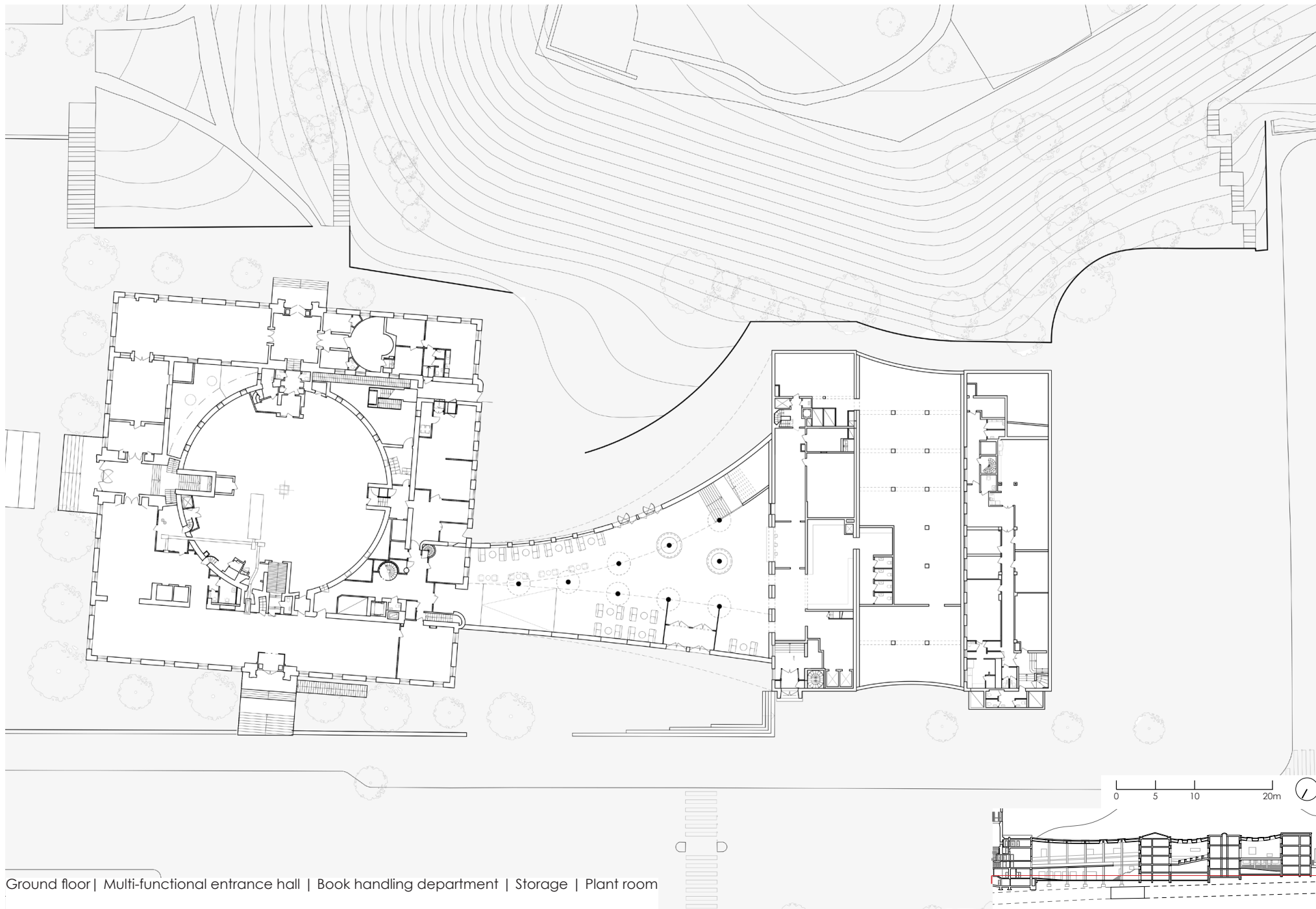


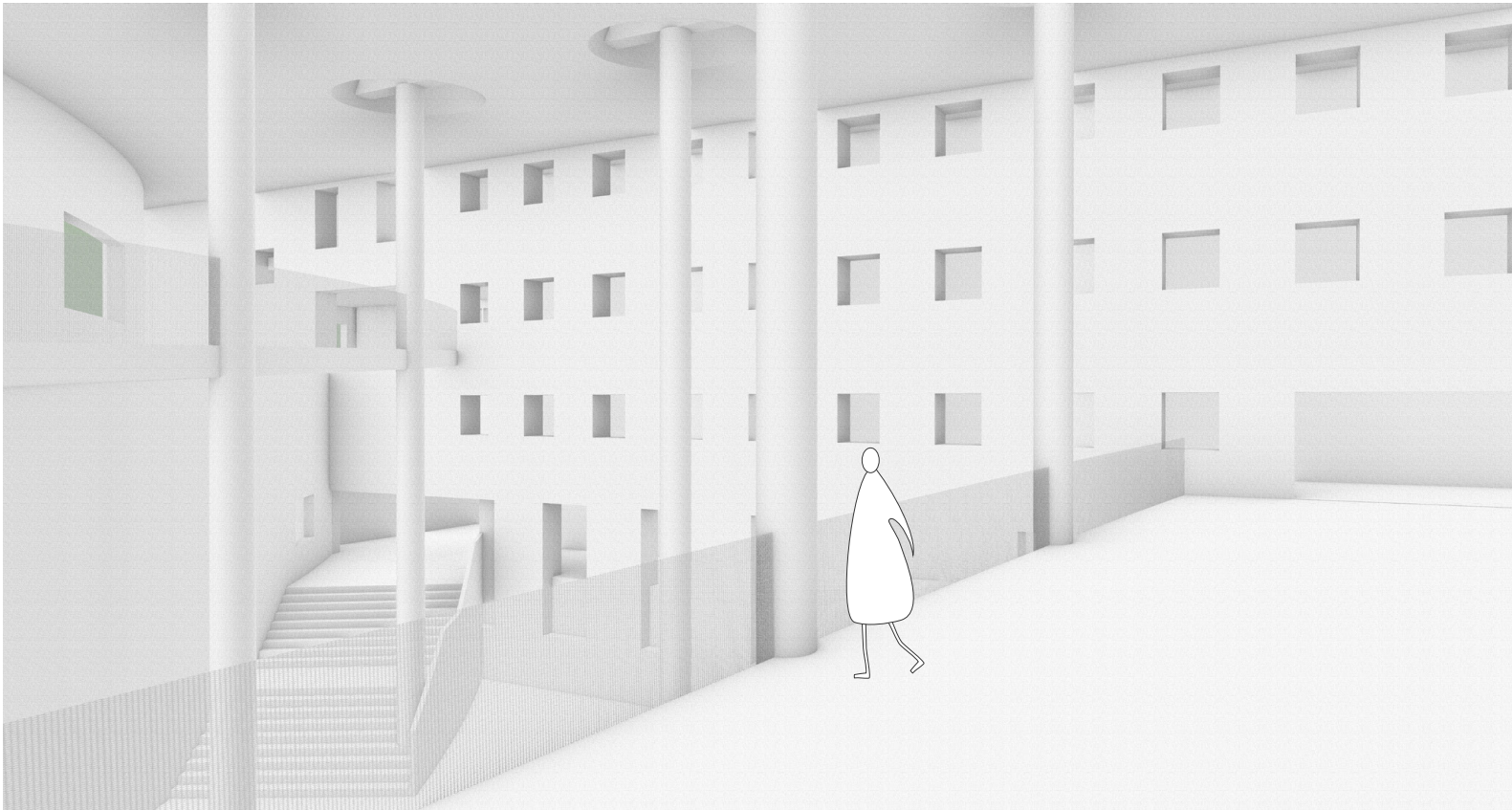
Facade Material | The new building has a brick wall facade rendered with similar color of the main library in a darker shade | Continuation of the Asplund's main library but still highlights it

The new Library

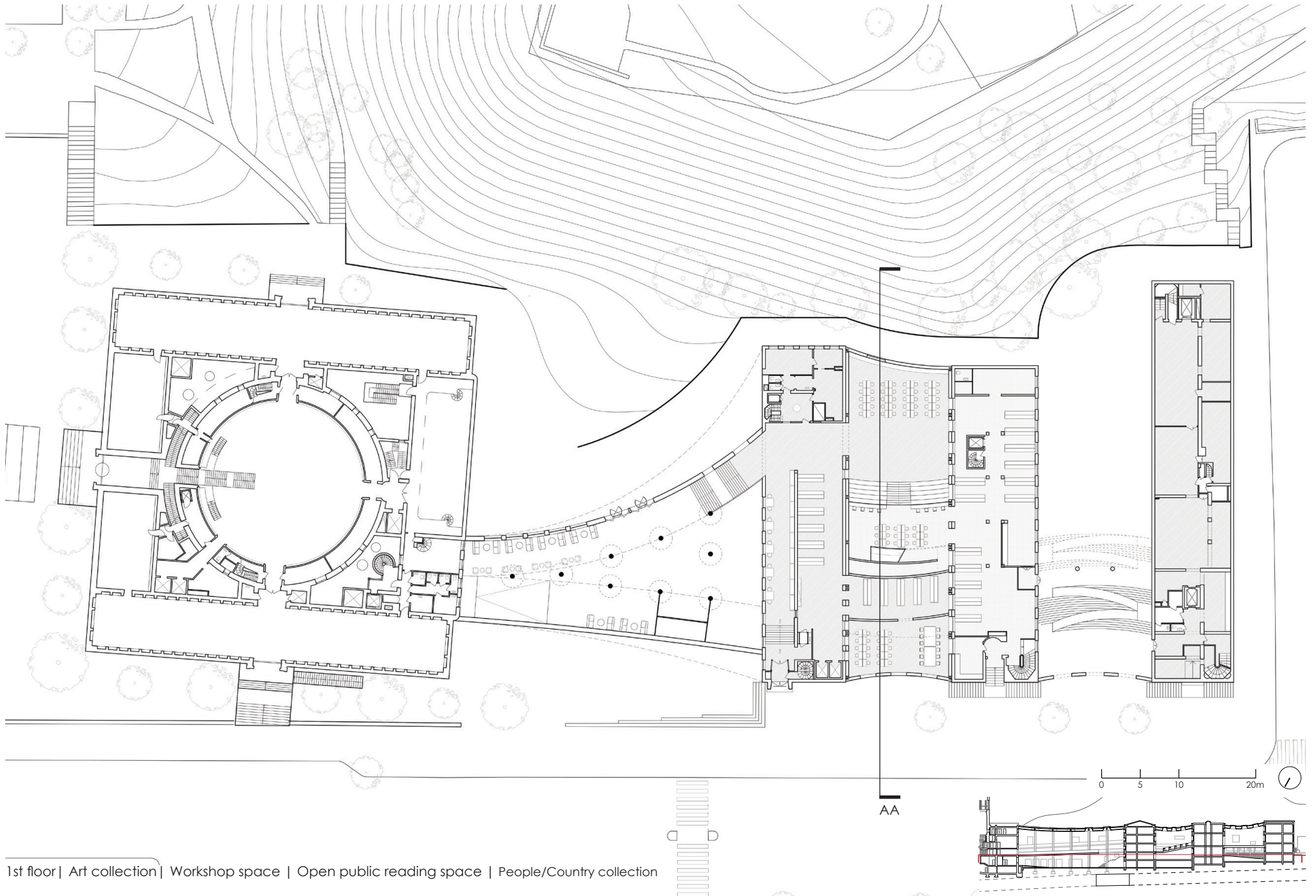


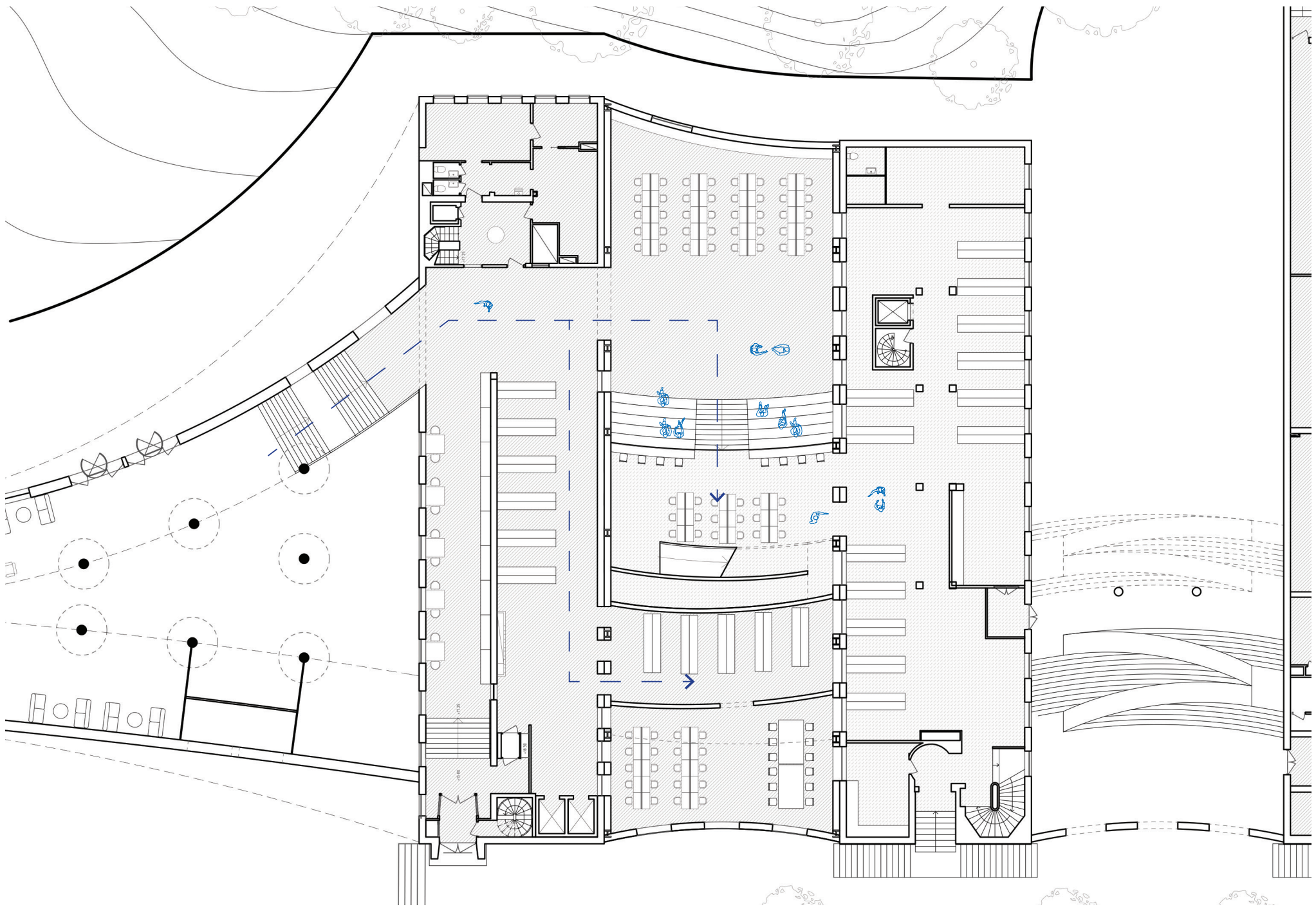
Street view | Approaching the entrance hall





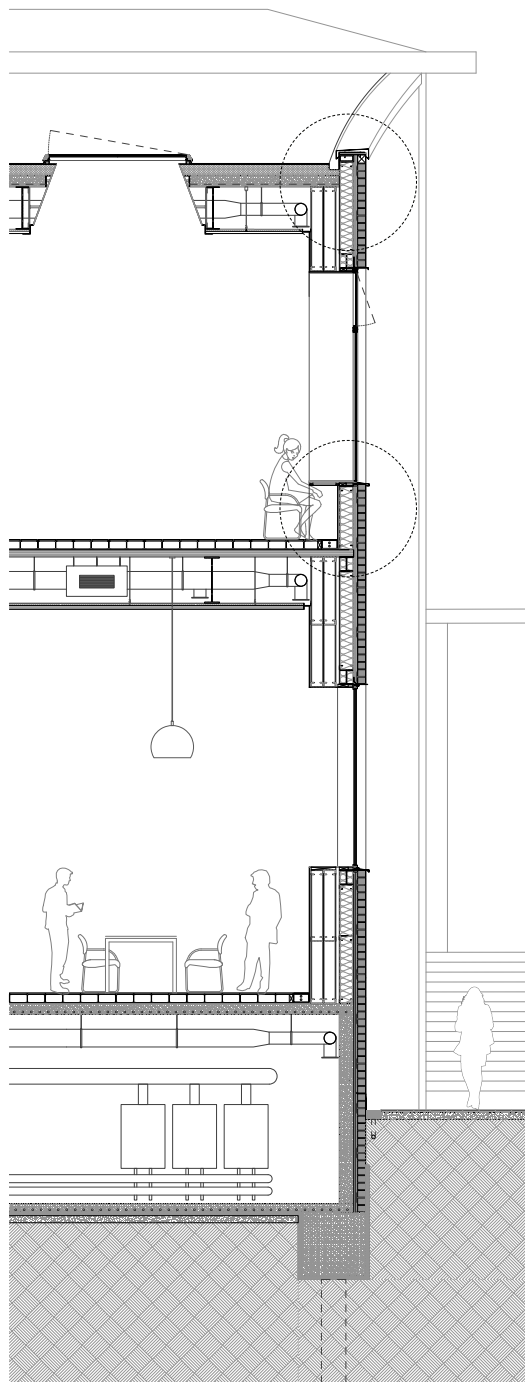
Interior collage | Entrance hall | Converge and diverge the circulation from annex and main library | Multifunctional space |







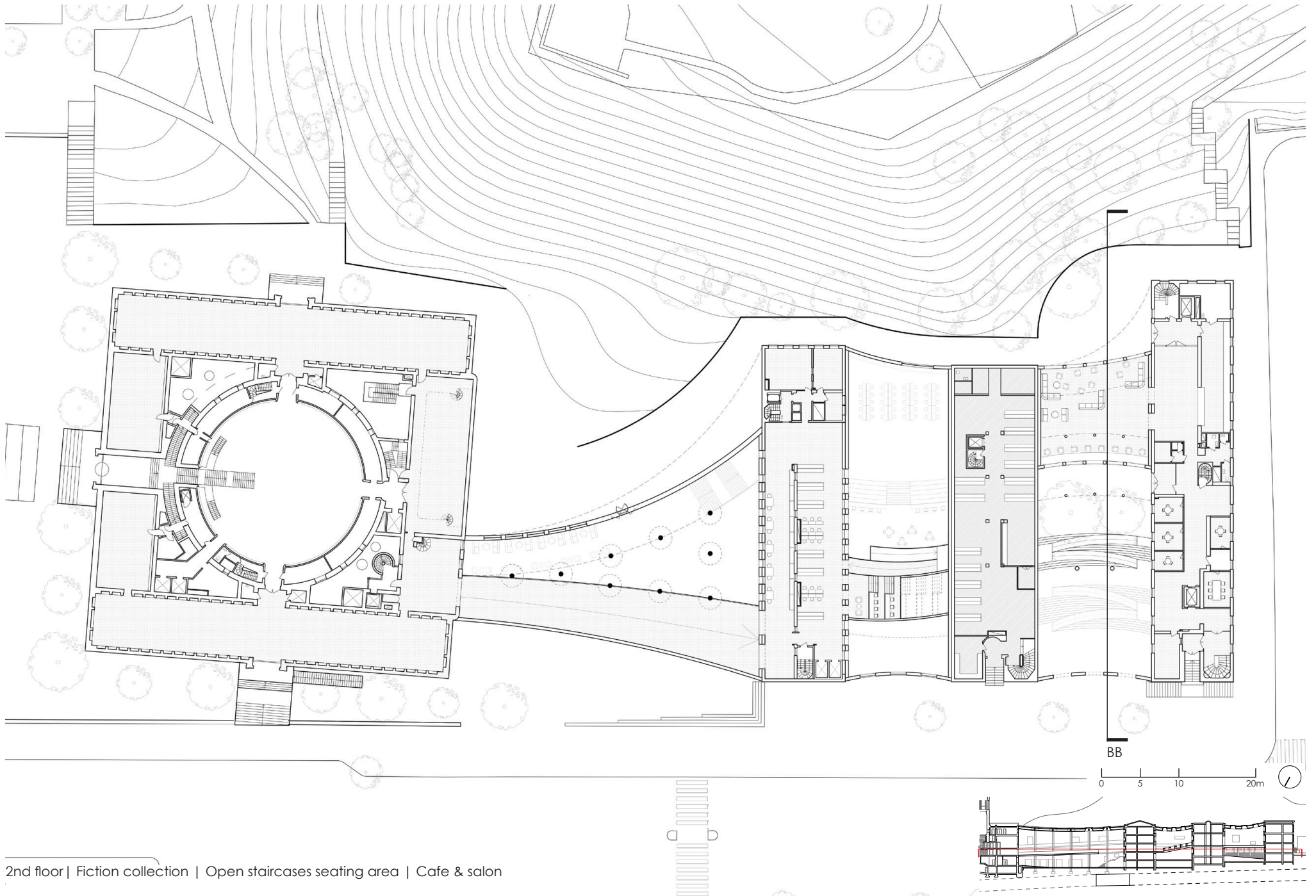
1:50 Model | Large open public reading area with ramps and platform connecting to different levels



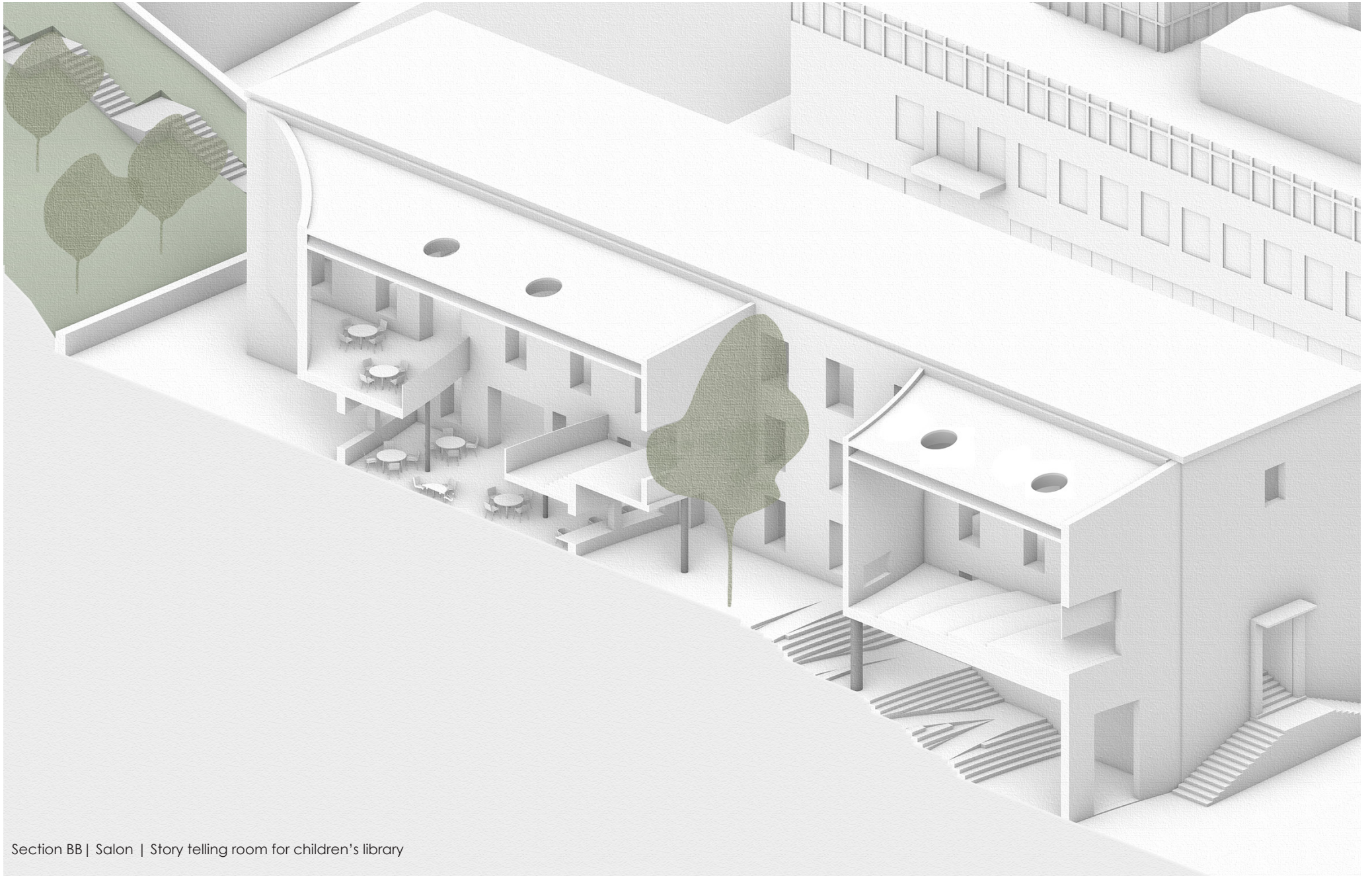
Facade Section | Relationship between interior and exterior



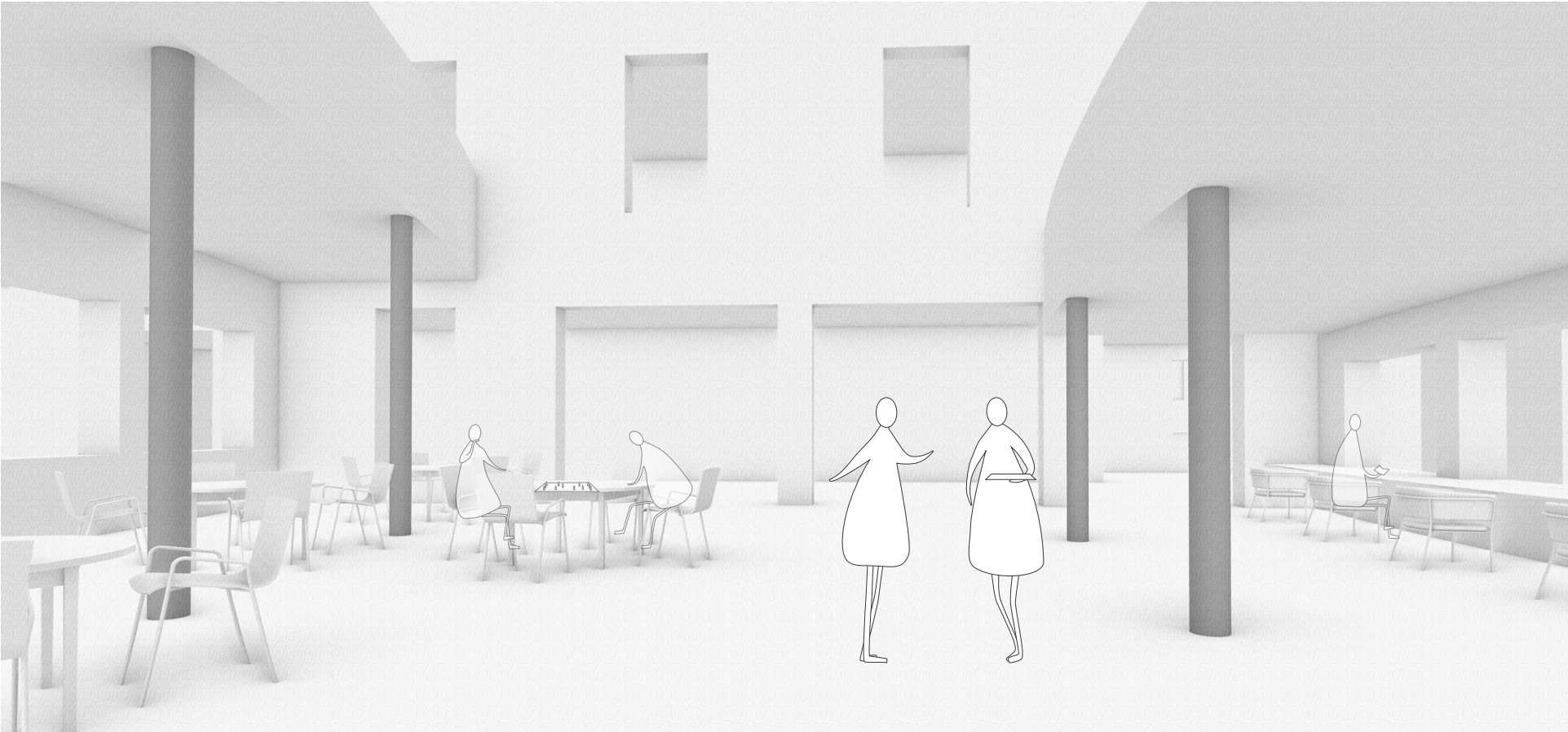




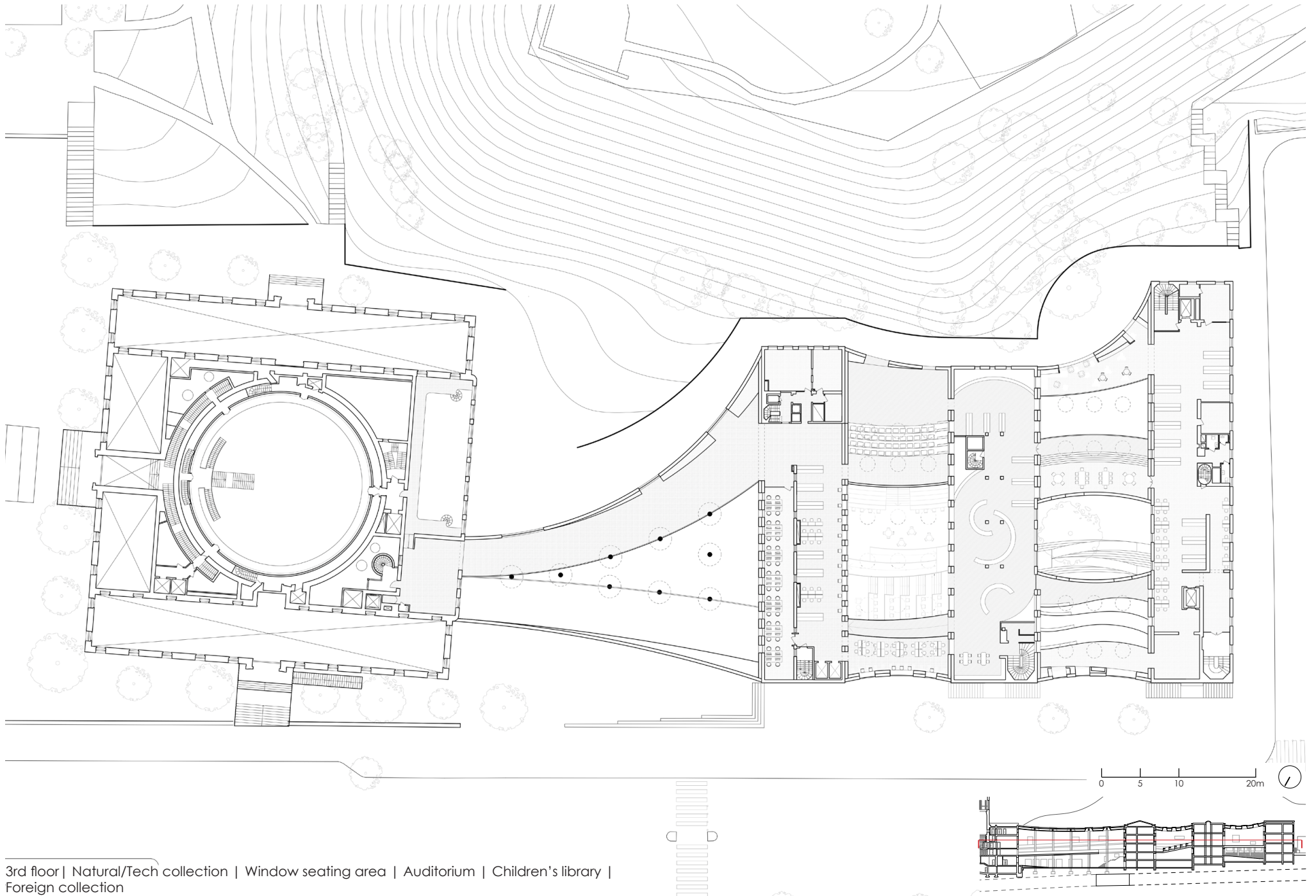


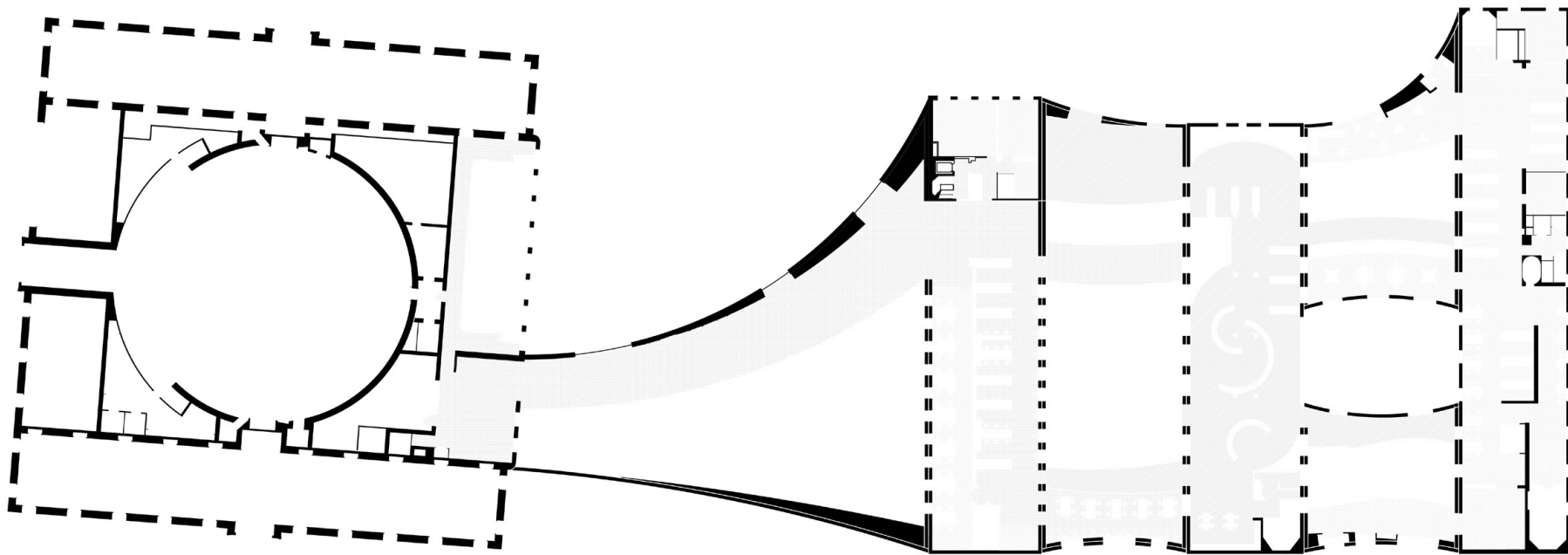


Section BB | Salon | Story telling room for children's library

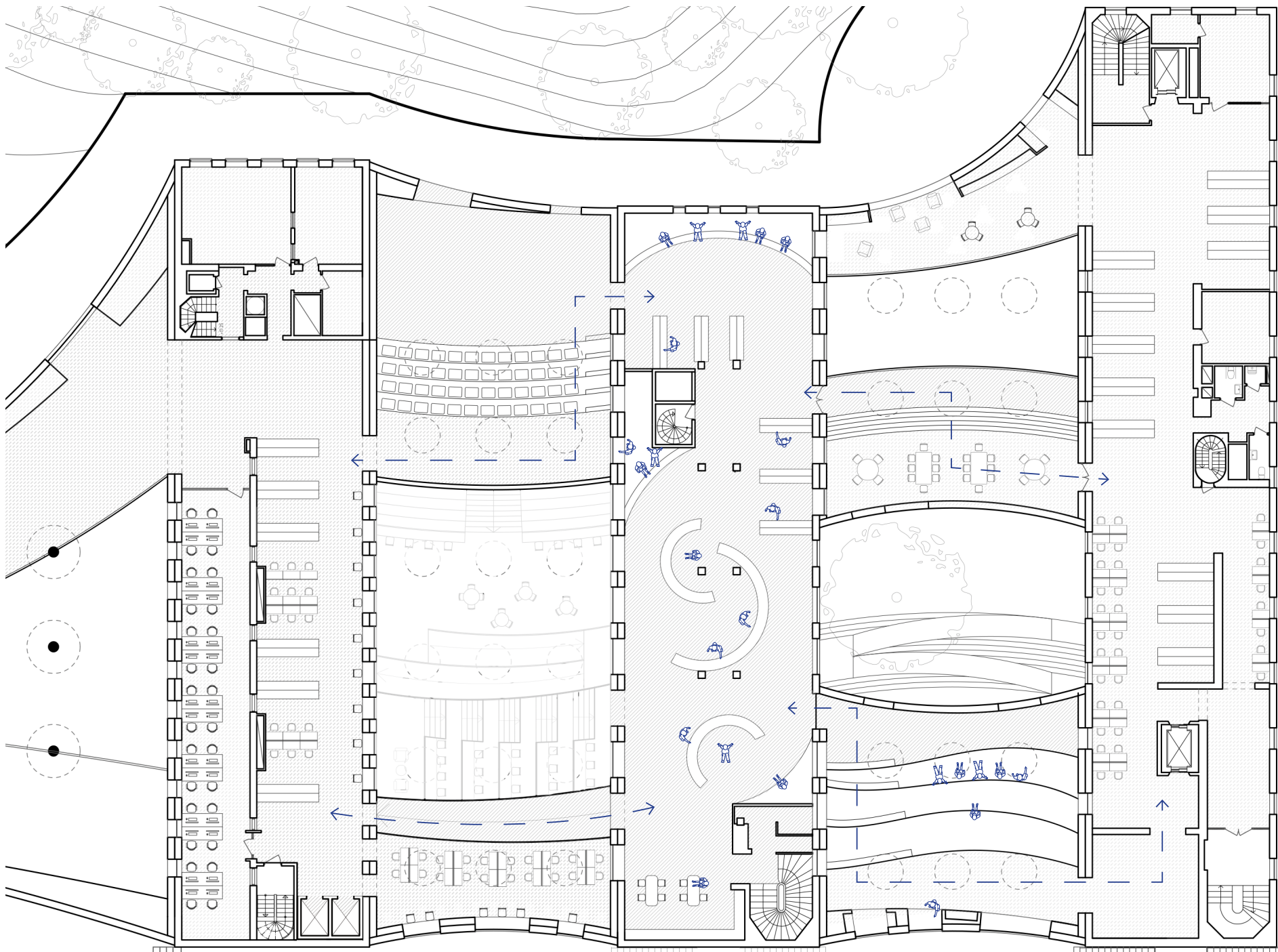


Interior collage | Cafe and Salon | A place surrounded by nature to allow engagements and conversations between different social groups to happen



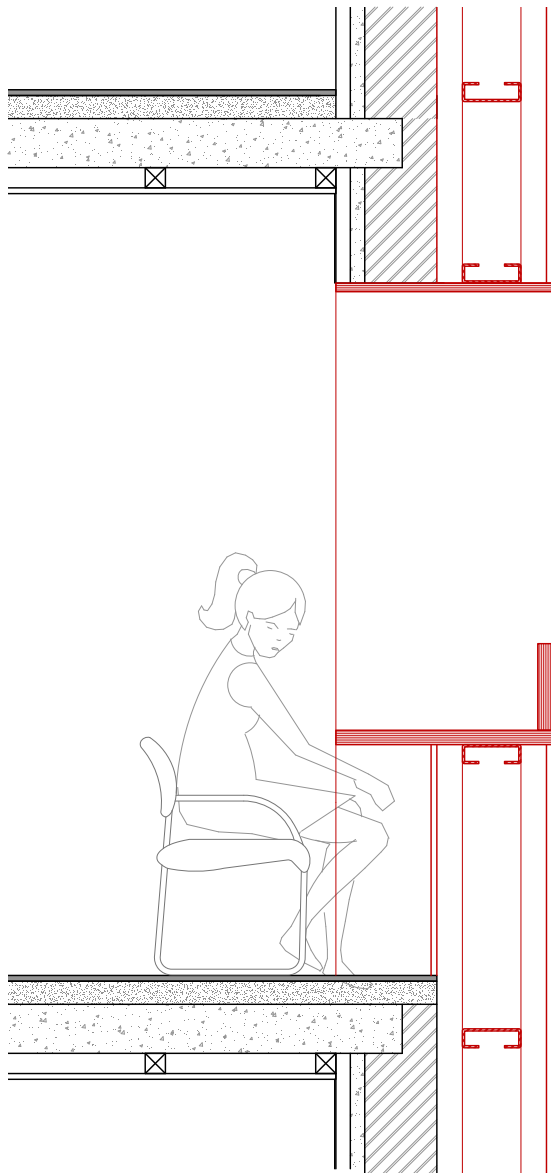


3rd floor | As the wall thickens, it creates poche space within it for people to stay



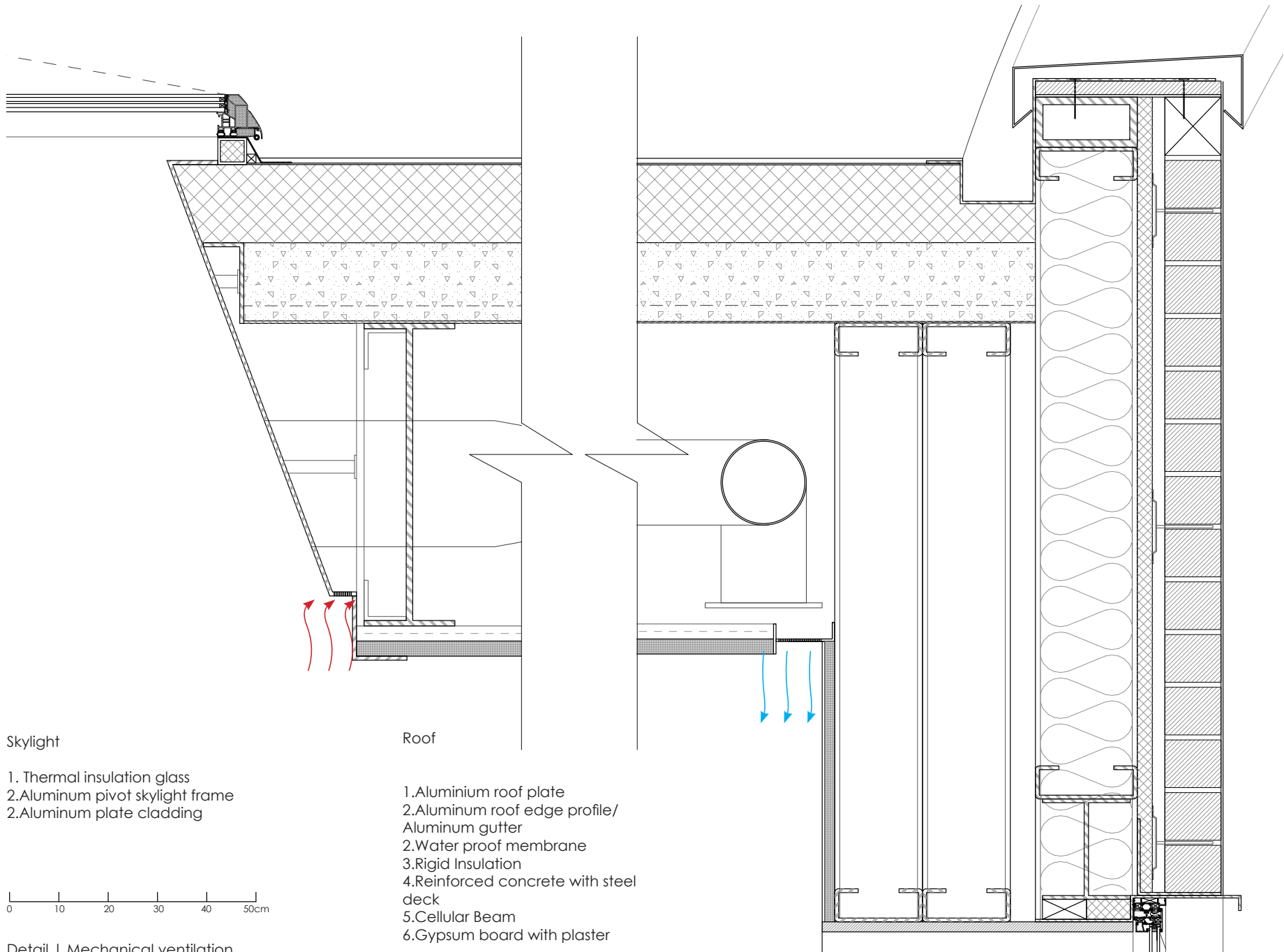


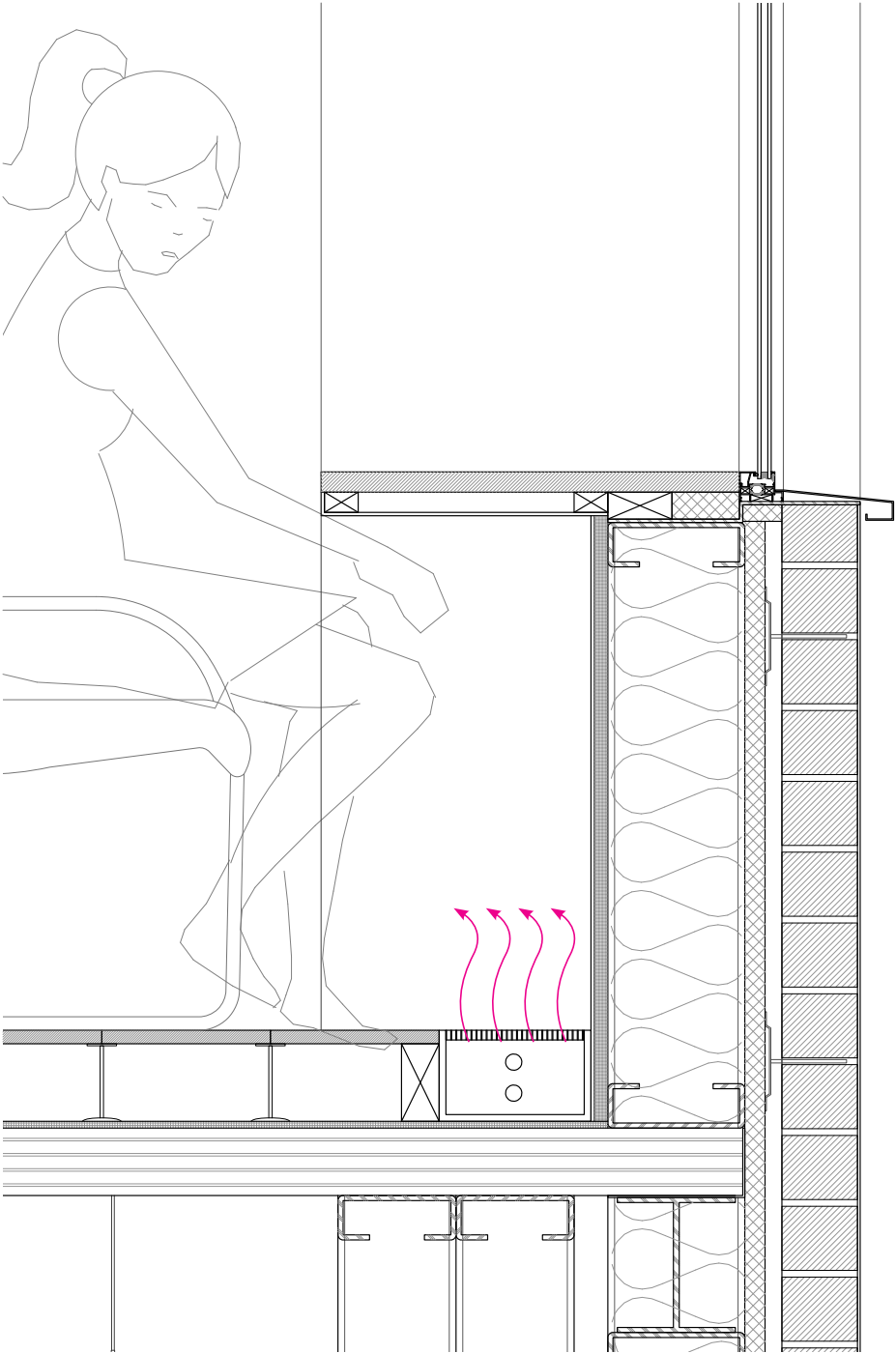
1:50 Model | Children's Library | The curved modular bookshelves are arranged around the existing columns to form space for reading, the original window openings of annex building become the seating space for children



Annex 1 window section | 1:50 Model | The exterior wall of the annex become the interior wall to the in between space | Window openings become individual seating space

Details & Climate





Window

- 1. Aluminum window profile
- 2. Thermal glazing

Facade/Seating area

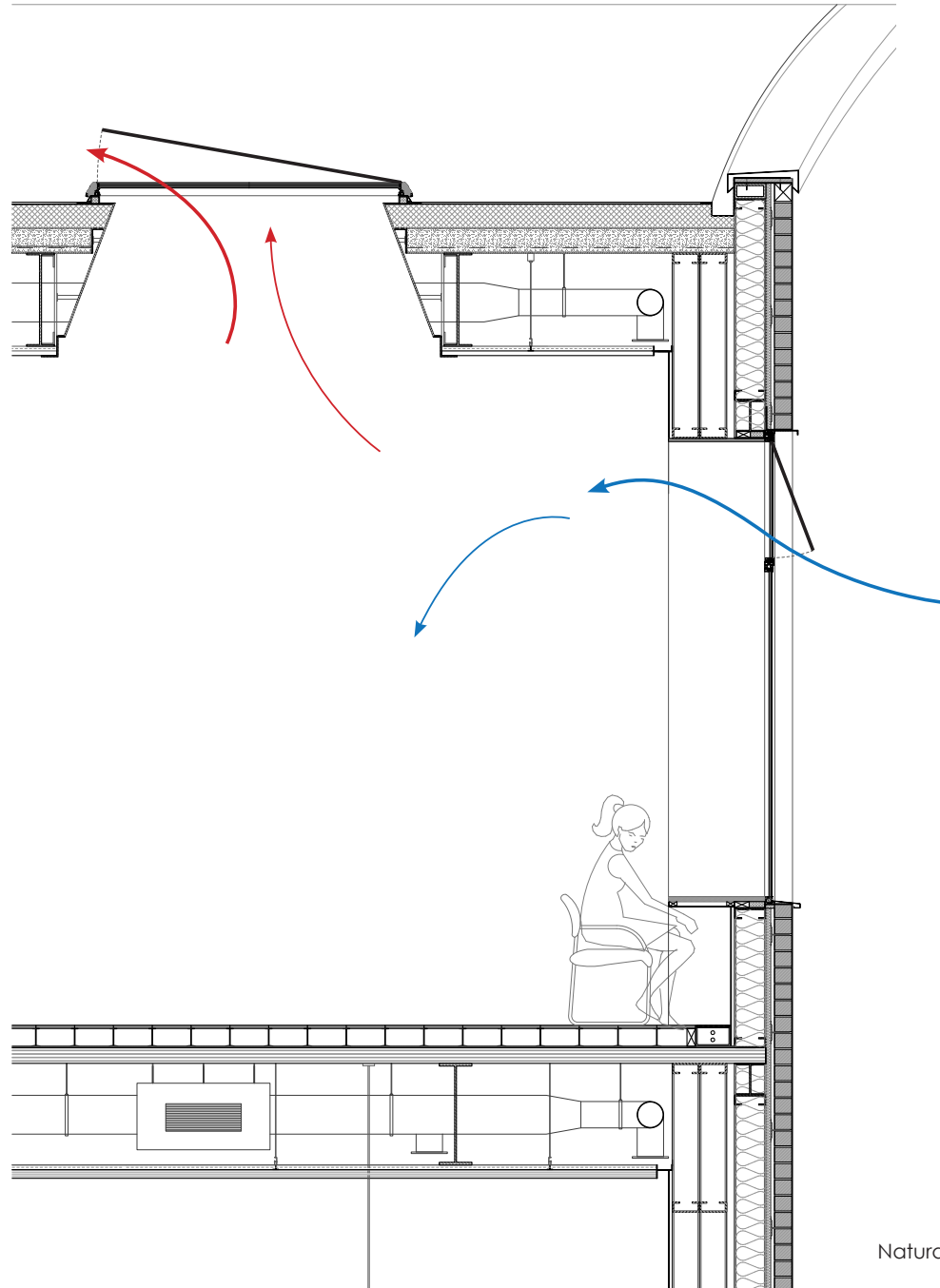
- 1. Wall render
- 2. Brick veneer
- 2. Cavity
- 3. Rigid insulation
- 4. Steel stud wall with insulation
- 5. Gypsumboard with wall finish
- 6. Wood desk top with steel frame

Floor

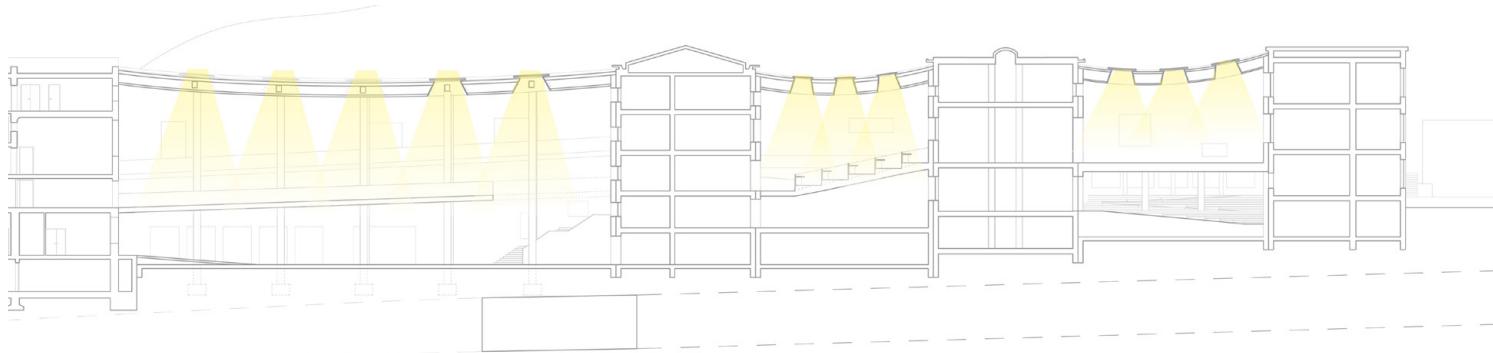
- 1. CLT floor on steel cellular beam
- 2. Raised floor system with wood surface
- 3. Corner radiator for heating



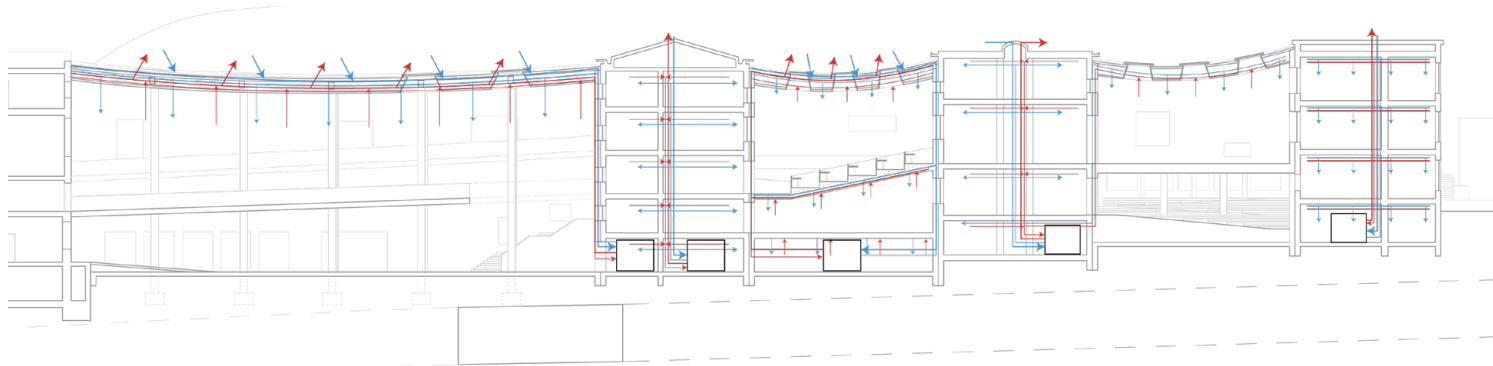
Detail | Floor heating



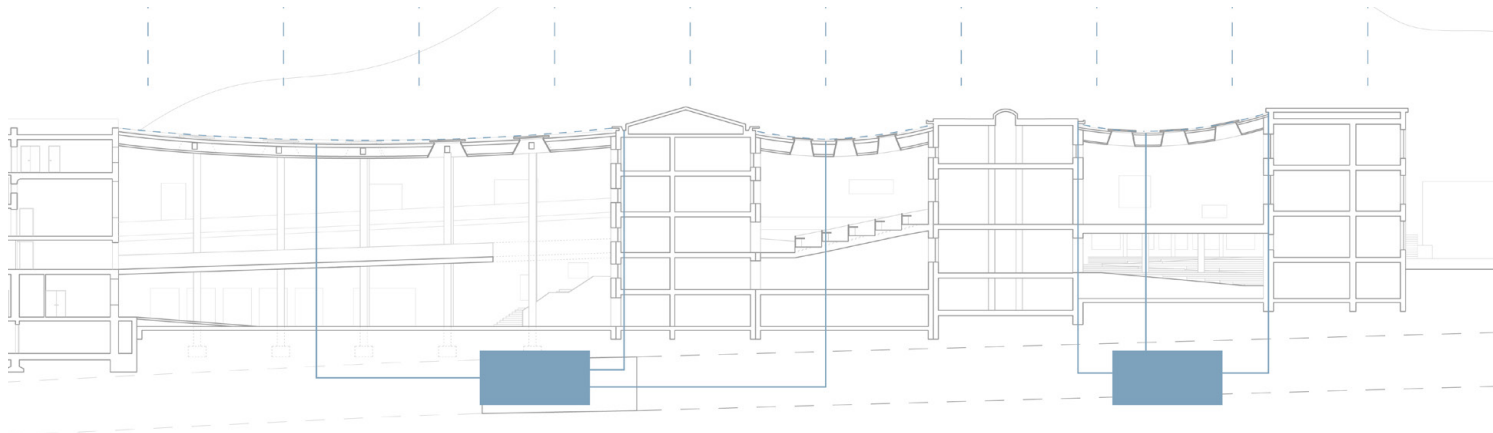
Natural ventilation | Operable window and skylight



Skylight | natural light into the space



Mechanical ventilation ducts | air in/out from the roof



Rainwater | flow to the lowest point of the roof through voids in the facade into the ground

