

DESIGN STUDIO



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ARCH 302

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NAAB Criteria

SC.5 Design Synthesis

Develop the ability to make design decisions within architectural projects while demonstrating synthesis of user requirements, regulatory requirements, site conditions, and accessible design, and consideration of the measurable environmental impacts of their design decisions.

Evidence of this can be found on the following pages:

- Site Research - Spread: 2,3
- Sustainable Technology - Spread: 8,9
- Floor Plan Drawings - Spread: 7,8,9
- Building Section Drawings - Spread 10,11

SC.6 Building Integration

Develop the ability to make design decisions within architectural projects while demonstrating integration of building envelope systems and assemblies, structural systems, environmental control systems, life safety systems, and the measurable outcomes of building performance.

Evidence of this can be found on the following pages:

- Building Section Drawings - Spread: 10
- Enlarged Wall Sections - Spread: 9
- Exterior Renderings - Spread: 8,12,13,14

ADAPTIVE REUSE

Adaptive reuse (also called building reuse) refers to the repurposing of an existing structure for new use.

Maintains cultural heritage

It's a form of historic preservation. It restores culturally significant sites that would otherwise be left to decay or demolished.

Speeds up construction

Building a new structure usually takes significantly longer than rehabbing an existing building.



Over **145 million tons** of C&D debris were sent to landfills in 2018

More than **75%** of all construction waste from wood, drywall, asphalt shingles, **bricks** and clay tiles ends up in landfills

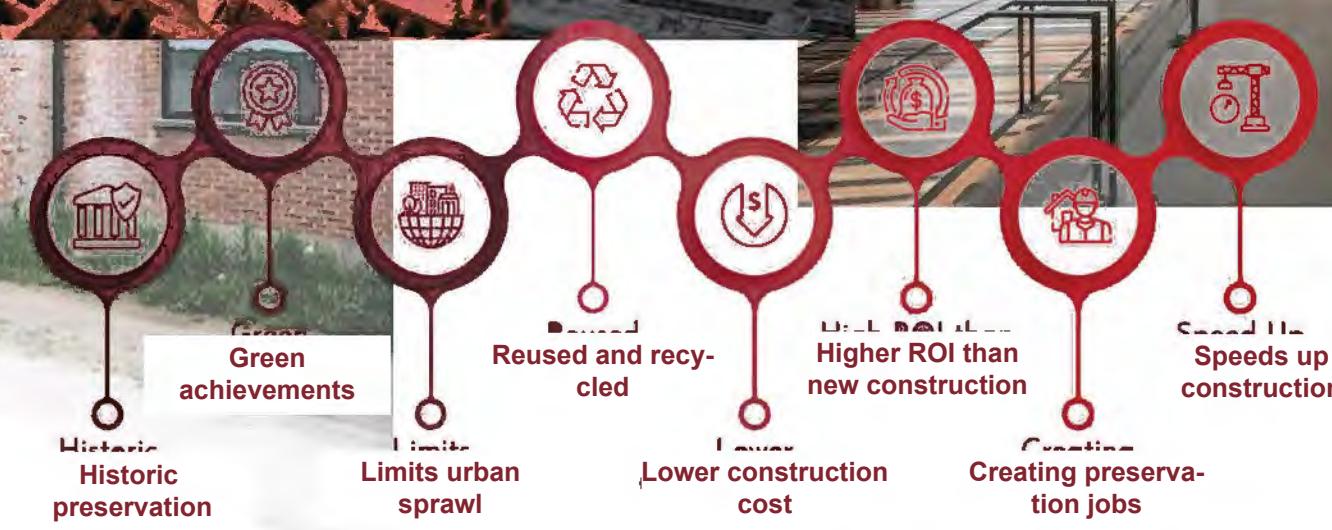
Popular with the community

Communities appreciate the historical preservation of significant buildings in their neighborhood and new unique landmarks.



Building-related construction and demolition debris account for **26% of all non-industrial waste** generated in the United States.

Embodied carbon is projected to make up **49% of the total carbon emissions** of global new construction between now and 2050.



Project example:
Hanzas perons, Latvia

Old train station turned into a concert hall

600 million tons of C&D debris were generated in the United States in 2018, which is more than twice the amount of generated municipal solid waste.

MODEL PROCESS EXPLORATION

CONCEPT MODELS



LAYERING



BLEND



NESTING



CONCEPT
ARTICULATION
+ EXISTING

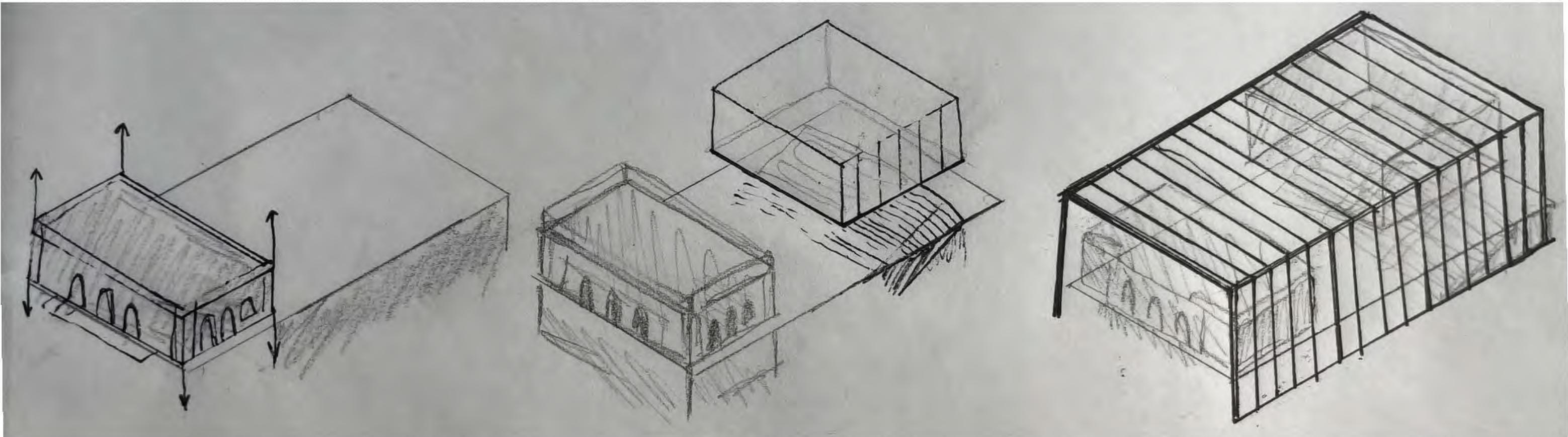
MIDTERM MODEL - 1/32" scale



By the midterm, the design had a well-articulated placement and separation of programmatic spaces, but lacked architectural moves to facilitate intuitive circulation related to the program.

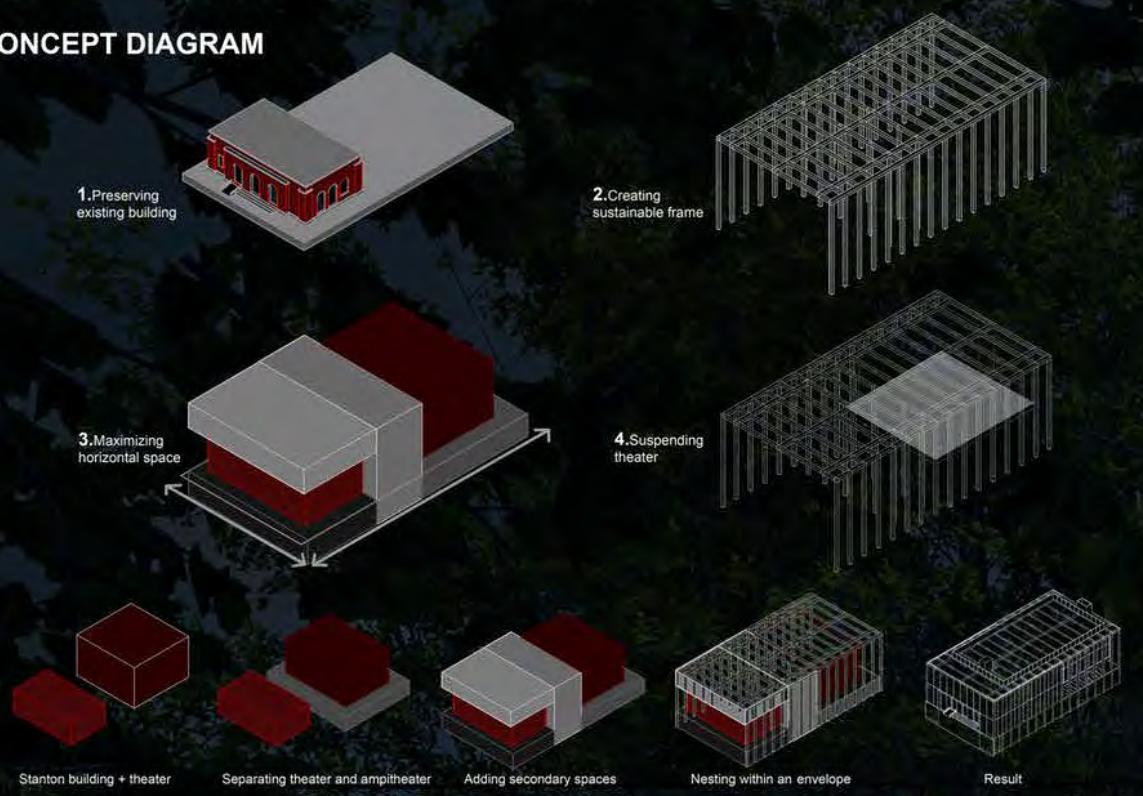
STANTON REIMAGINED

BY REVITALIZING THE ABANDONED STANTON
STREET BUILDING, OUR PROJECT TRANSFORMS
A NEGLECTED LANDMARK INTO A VIBRANT
COMMUNITY HUB

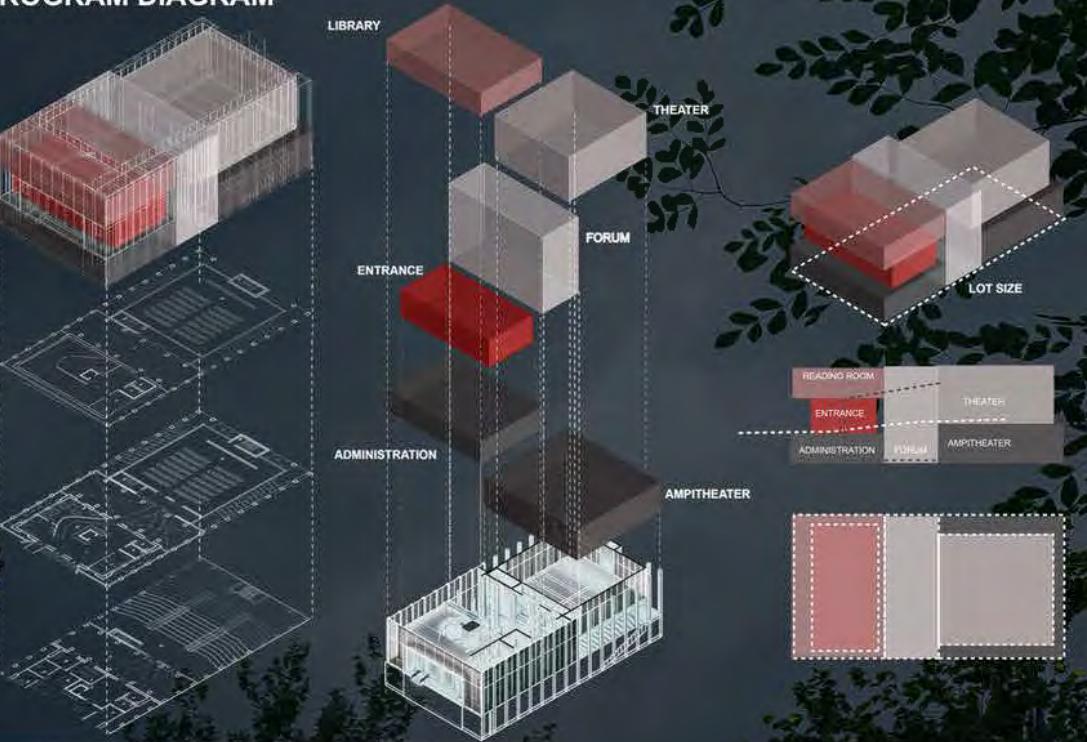


A mass timber shell is nesting over the existing structure, holding within it a suspended theater. Our design aims to create unique and sustainable spaces for a community theater, a cozy reading room, and an amphitheater for the public. Adaptive reuse provides new life to the historic building, while honoring its legacy and contributing to a more resilient and inclusive urban fabric.

CONCEPT DIAGRAM

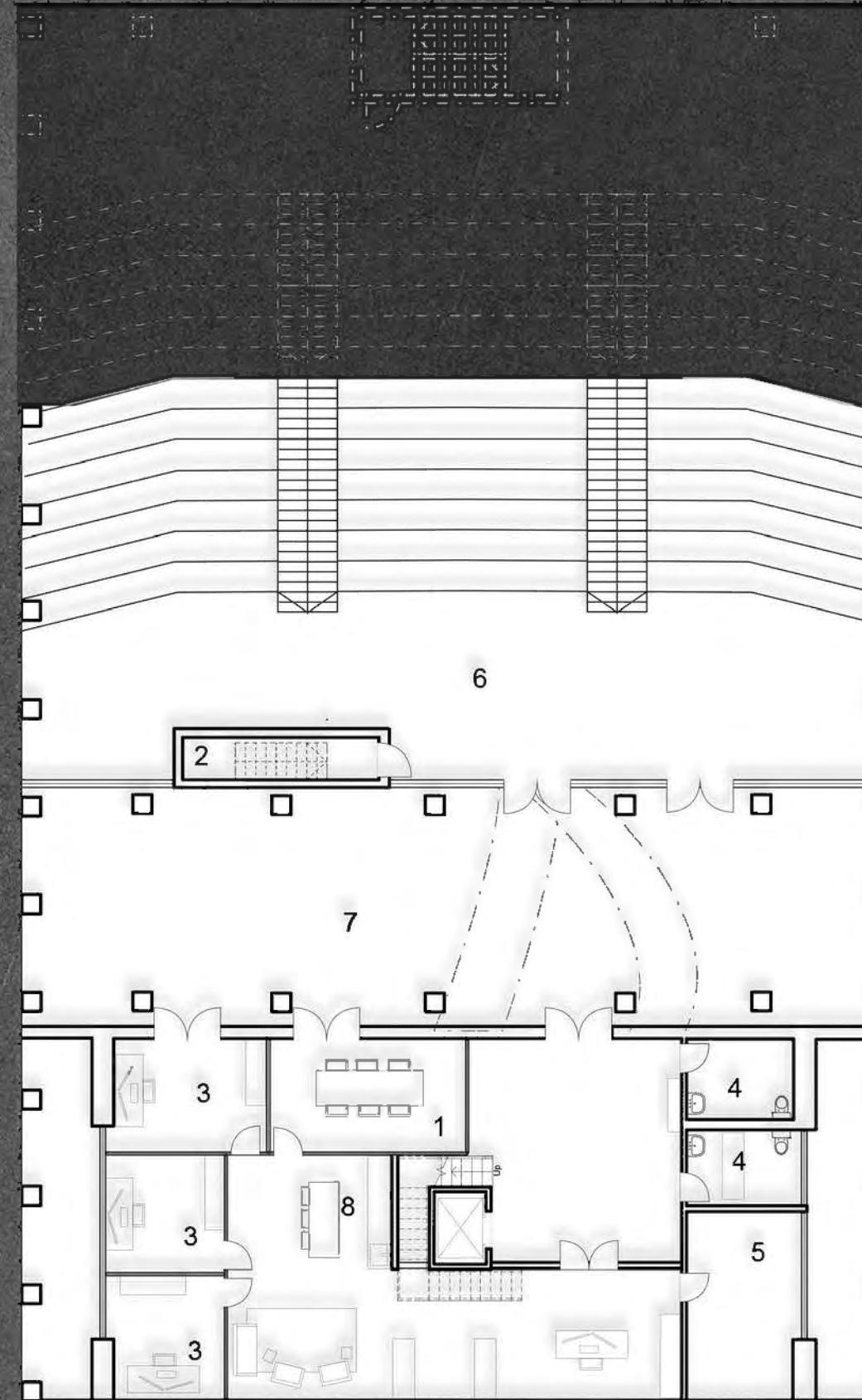


PROGRAM DIAGRAM

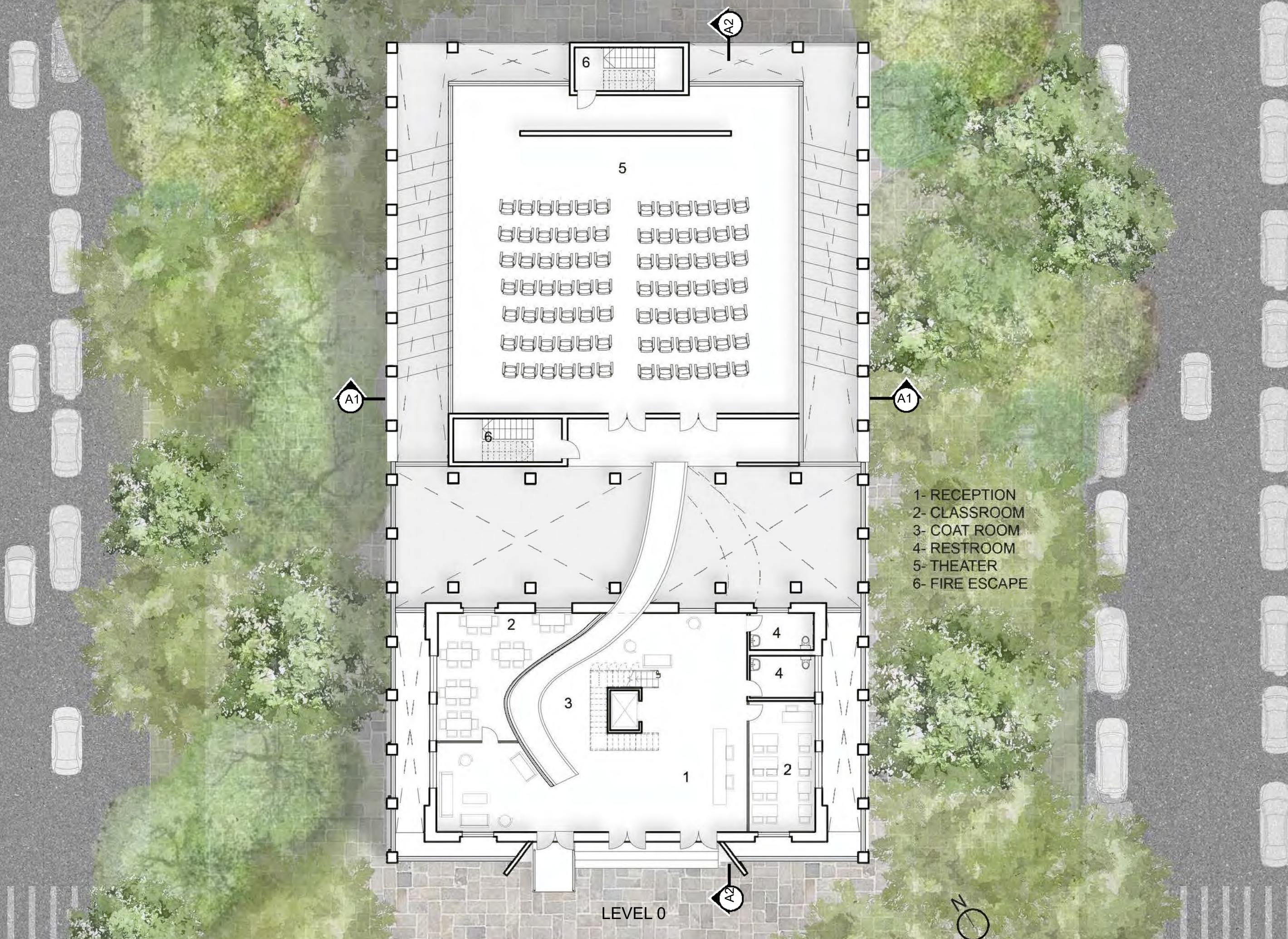


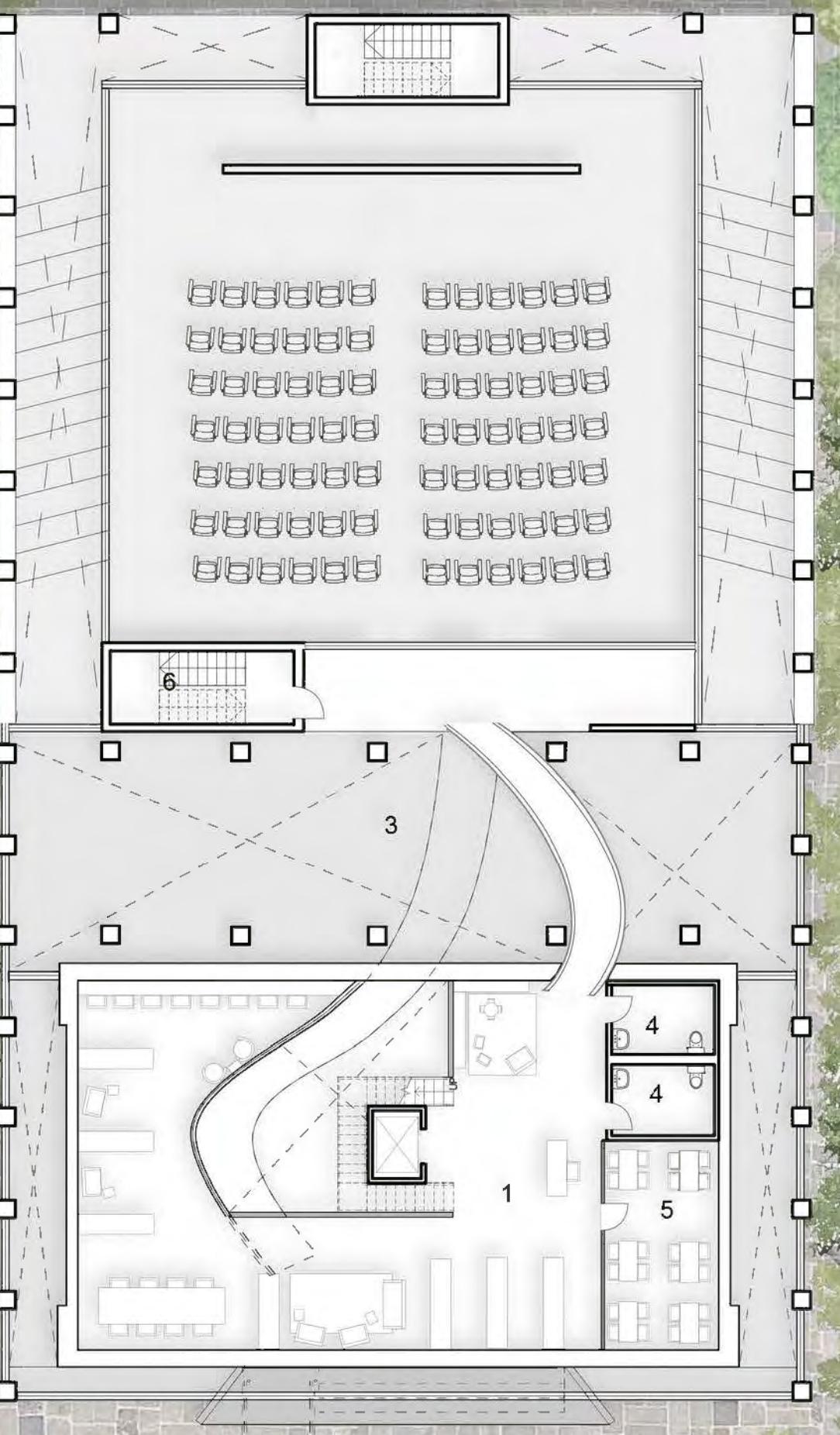
EXTERIOR ELEVATION

PLAN DRAWINGS



- 1- CONFERENCE ROOM
- 2- FIRE ESCAPE
- 3- OFFICE
- 4- RESTROOM
- 5- MAINTANANCE ROOM
- 6- AMPITHEATER
- 7- FORUM
- 8- KITCHENETTE

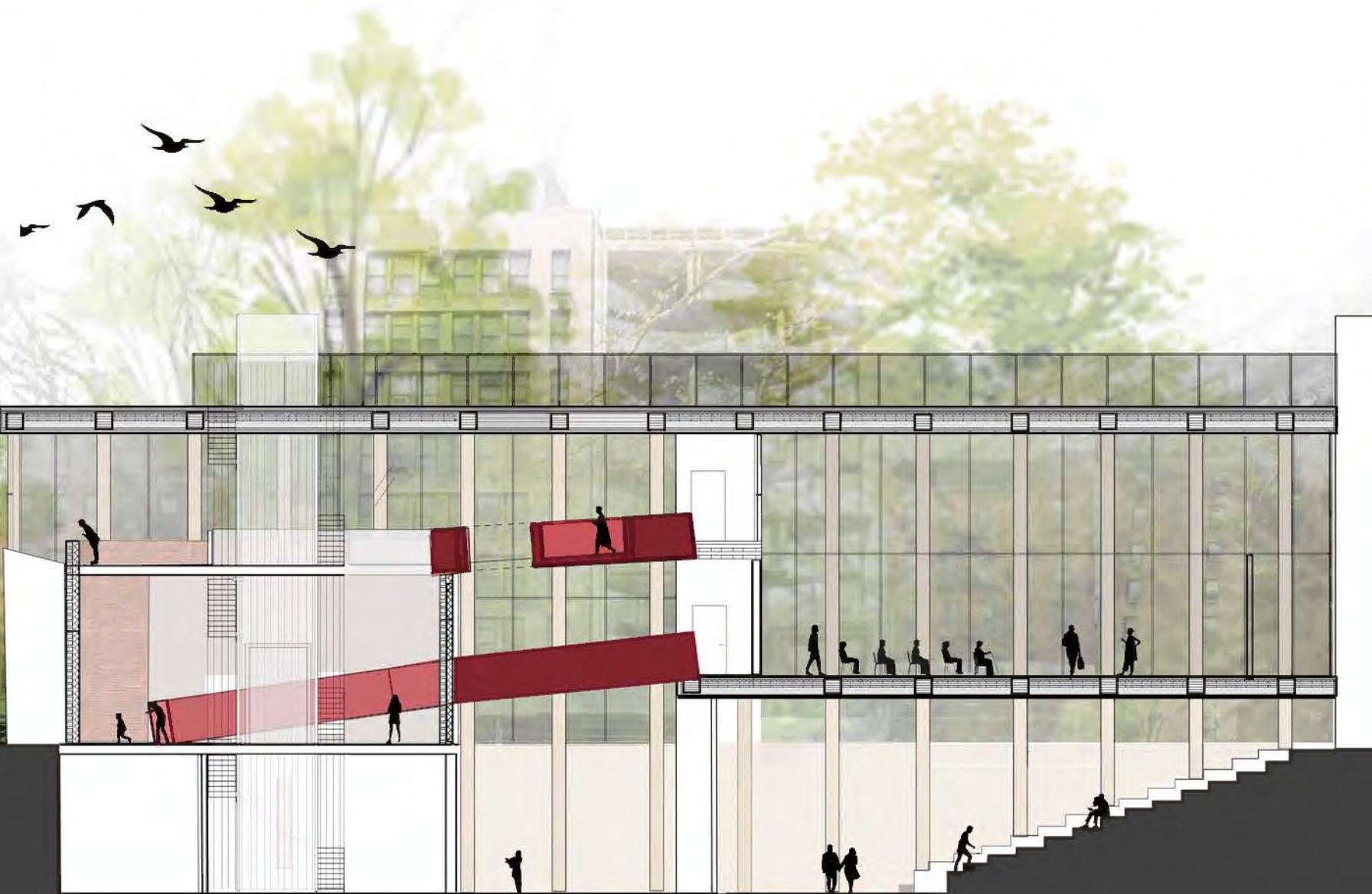


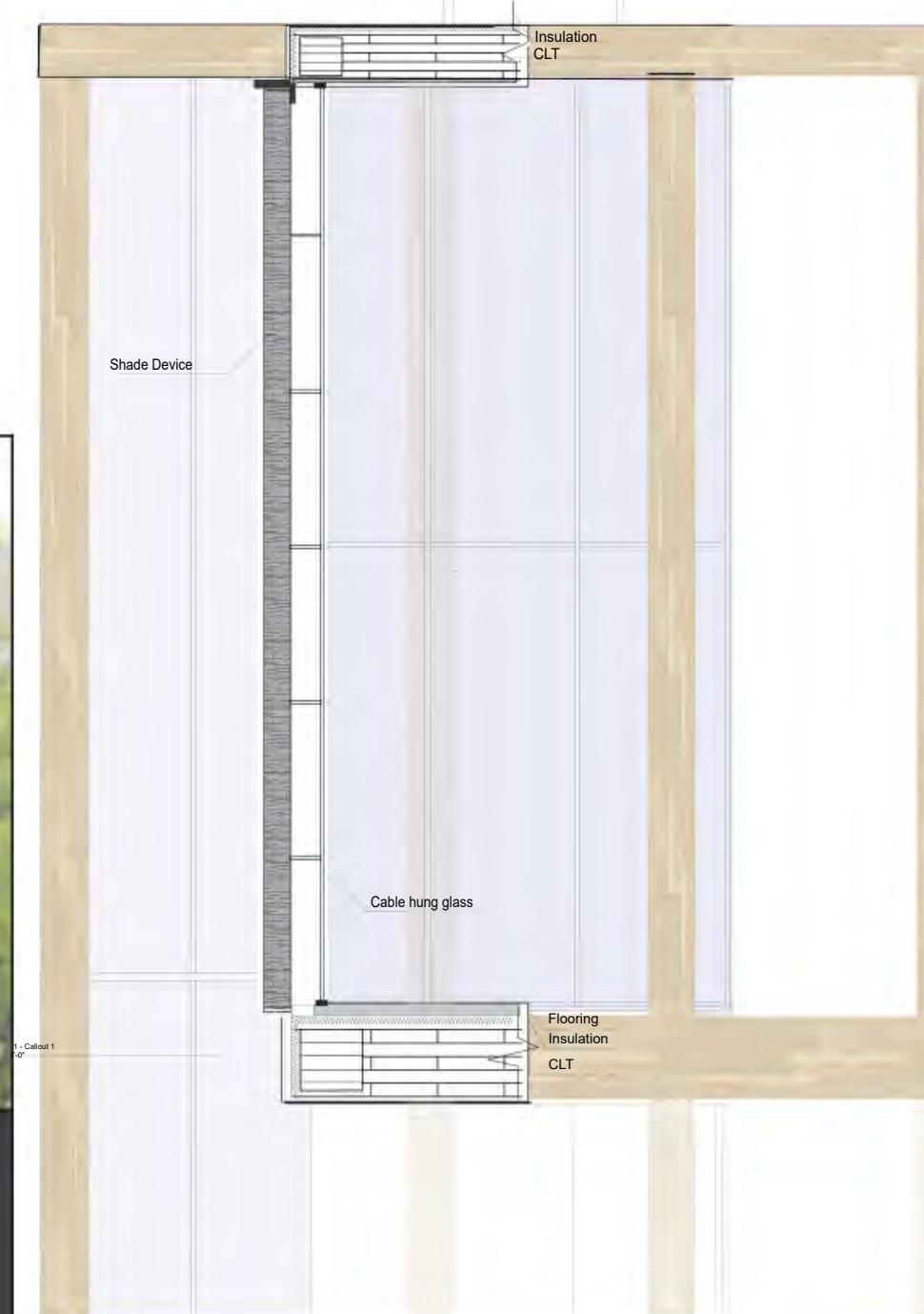
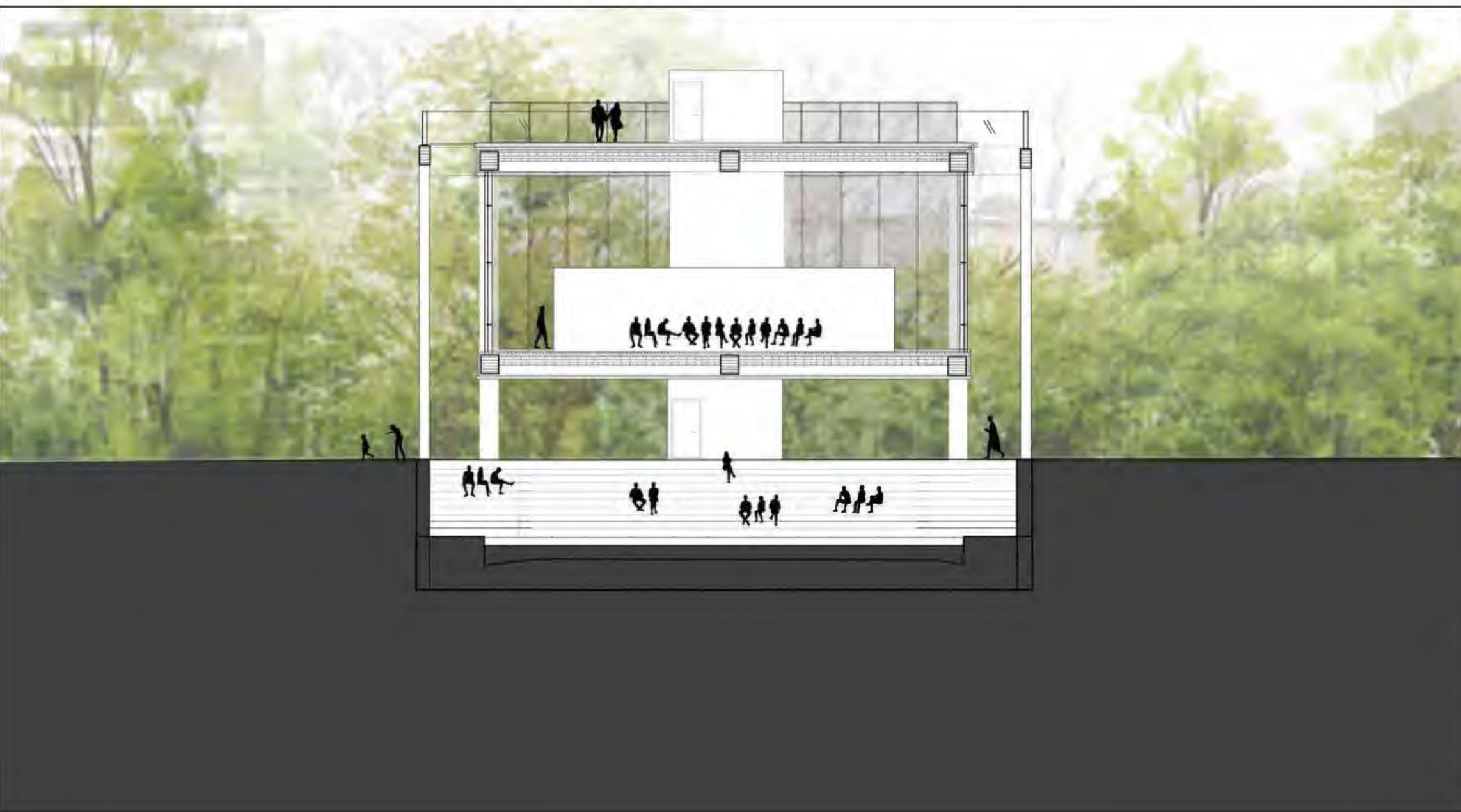


LEVEL 2

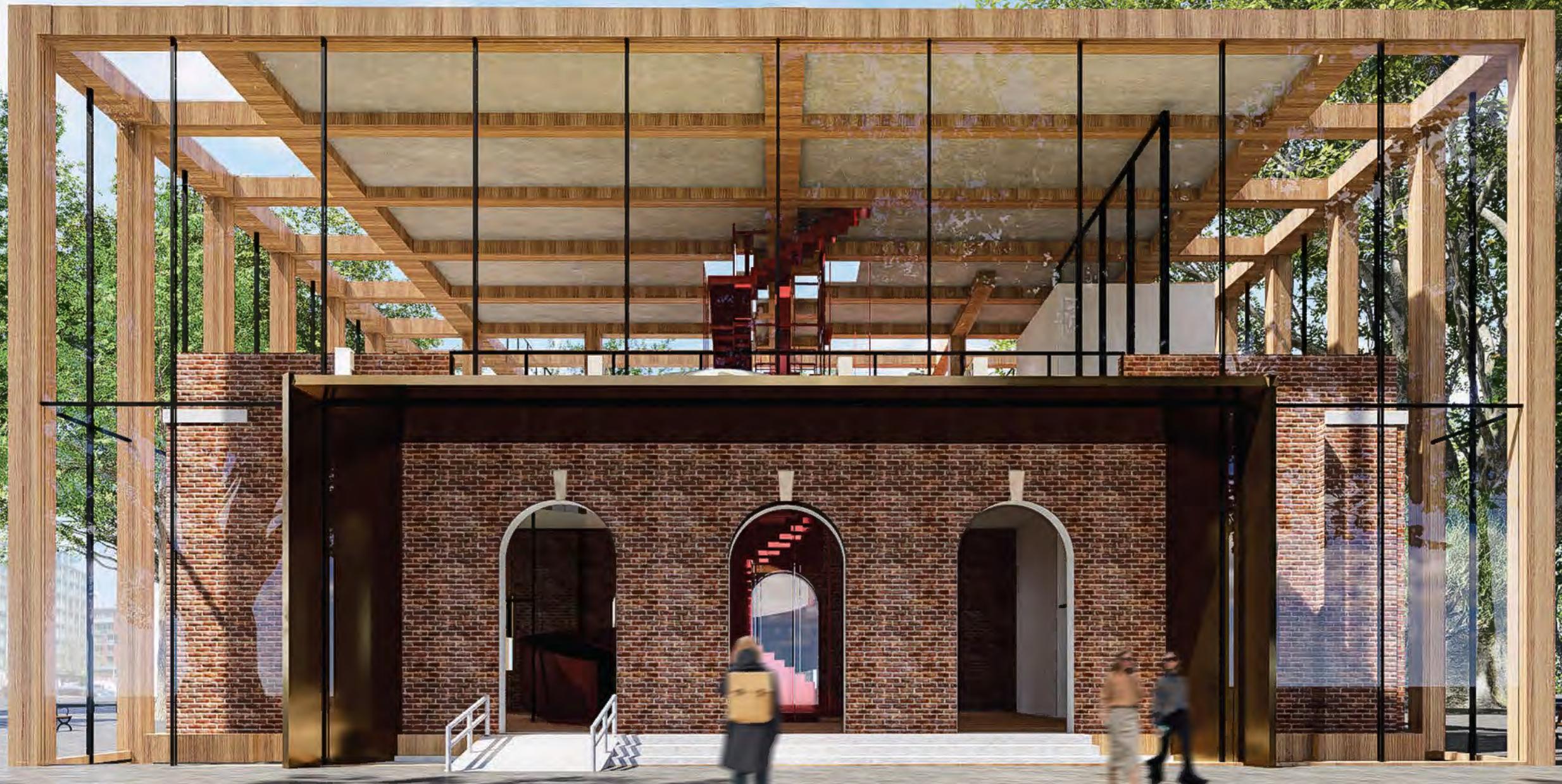
- 1- LIBRARY
- 2- FIRE ESCAPE
- 3- FORUM
- 4- RESTROOM
- 5- CLASSROOM

BUILDING SECTIONS





EXTERIOR ENTRANCE PERSPECTIVE



THEATER PERSPECTIVES

INTERIOR THEATER

EXTERIOR AMPHITHEATER



The theater spaces were the central programmatic anchors that guided the overall design of the community center

After designating a significant portion of the square footage to preserving the footprint of the existing historic building, a strategic decision was made to stack and split the two required theater spaces - one indoor theater suspended above an outdoor amphitheater. Providing flexible exhibition space that could accommodate a variety of events was a key priority for serving the diverse needs of the surrounding communities.

FORUM (CONNECTING SPACE) VIEW

A consistent challenge was seamlessly and respectfully integrating the existing structure into the new construction. The design had to strike a careful balance between preserving the historic character of the site while introducing contemporary elements to meet the community's needs.

The design features a deep multipurpose space topped with expansive bridges, aiding an effortless flow between spaces. The composition of all materials facing each other in this "forum" space visually connects the old and new structures in a functional way. The use of complementary materials and textures helps blur the lines between old and new, creating a cohesive whole. The bridges not only facilitate circulation but also frame views of the existing structure, celebrating its presence within the new design. This central gathering space acts as the confluence where the past meets the present, inviting users to appreciate the site's rich history while enjoying modern amenities.





FINAL MODEL @1/8TH SCALE

MATERIALS.....REPRESENTATIVE

CHIPBOARD.....EXISTING- brick
below ground- concrete

BASS WOOD.....CLT FRAME/
STRUCTURE

MUSEUMBOARD.....NEW- PLASTER
WALL/ROOF



