

PERFORMANCE

ARCHITECTURE

**A Center for the Performing Arts
at The Ohio State University**

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Thesis submitted to the faculty of the Virginia
Polytechnic Institute and State University in partial fulfillment of the requirements for the
degree of

Master of Architecture
In
Architecture

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ABSTRACT

PERFORMANCE ARCHITECTURE is not just an empty phrase, but the description of a full-bodied design solution through the relationship shared by form and function. Form is the source that provides an impression - of the space, of the performance, or of the experience. Function is the resource - for the space that becomes a classroom, an office, a conference room, a practice room or studio, and the performance hall. This thesis is a Center for the Performing Arts, and as a building that provides for a variety of needs, it responds by embodying a diverse range of design solutions for each space within.

PERFORMANCE
FORM
ARCHITECTURE



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FOUNDATIONS FOR DESIGN

The foundation is the groundwork for my thesis. A set of buildings that I have researched and used as a model for design solutions through gesture, form, facade, and aesthetics. These buildings serve to enhance the cultural identity for the academic, local, and regional communities; as was my intention for the Center for the Performing Arts at The Ohio State University.

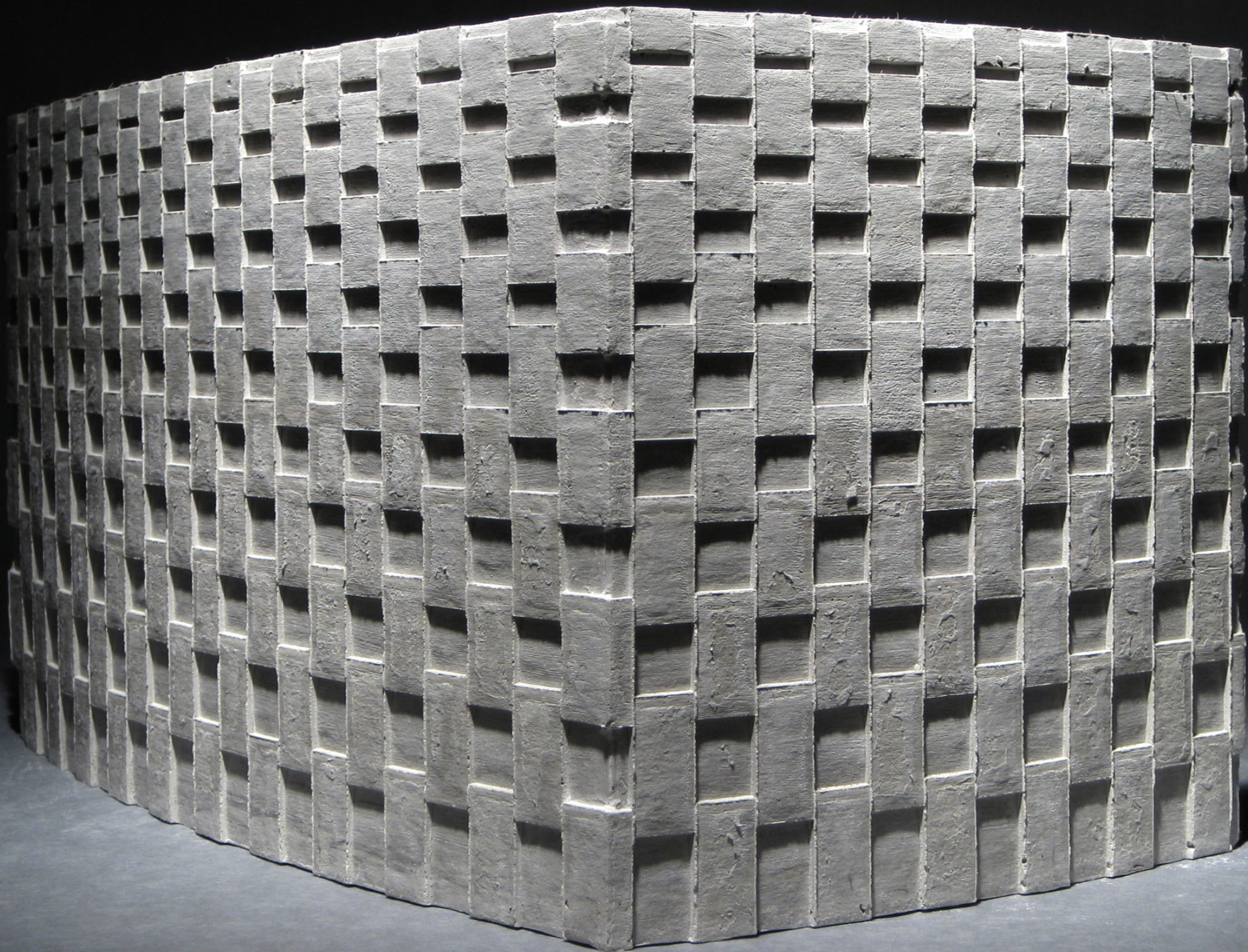




Figure 1 - Ferguson Center for the Arts
Christopher Newport University
Newport News, Virginia
[used with permission]



Figure 2 - School of Music
University of South Florida
Tampa, Florida
[fair use]



Figure 3 - Orange County Performing Arts Center
Costa Mesa, California
[fair use]



Figure 4 - Cobb Energy Performing Arts Centre
Atlanta, Georgia
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PARTI

The parti is the basic scheme or concept before the design. An initial series of solutions through drawing, model, and photography that allowed me to develop the concept and to begin the design of a Center for the Performing Arts.

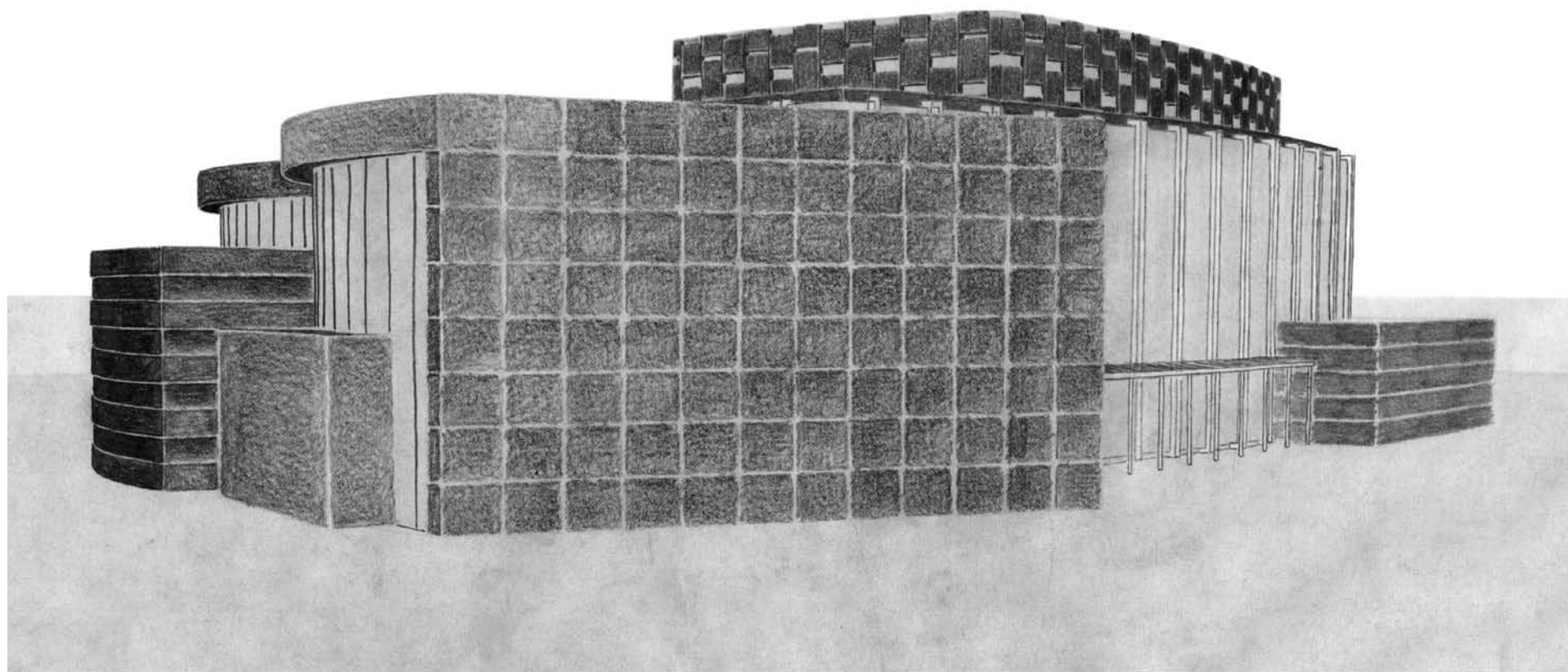


Figure 5 - Concept Sketch #1

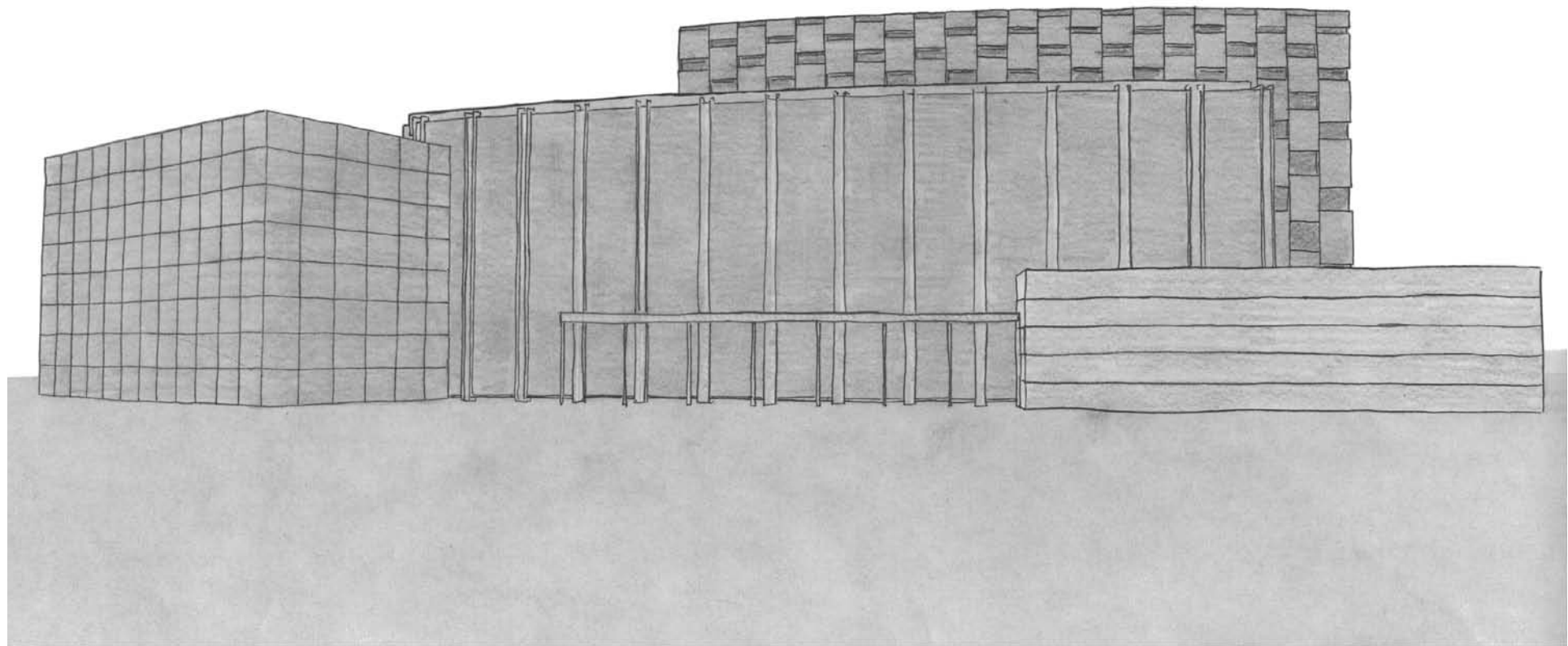


Figure 6 - Concept Sketch #2

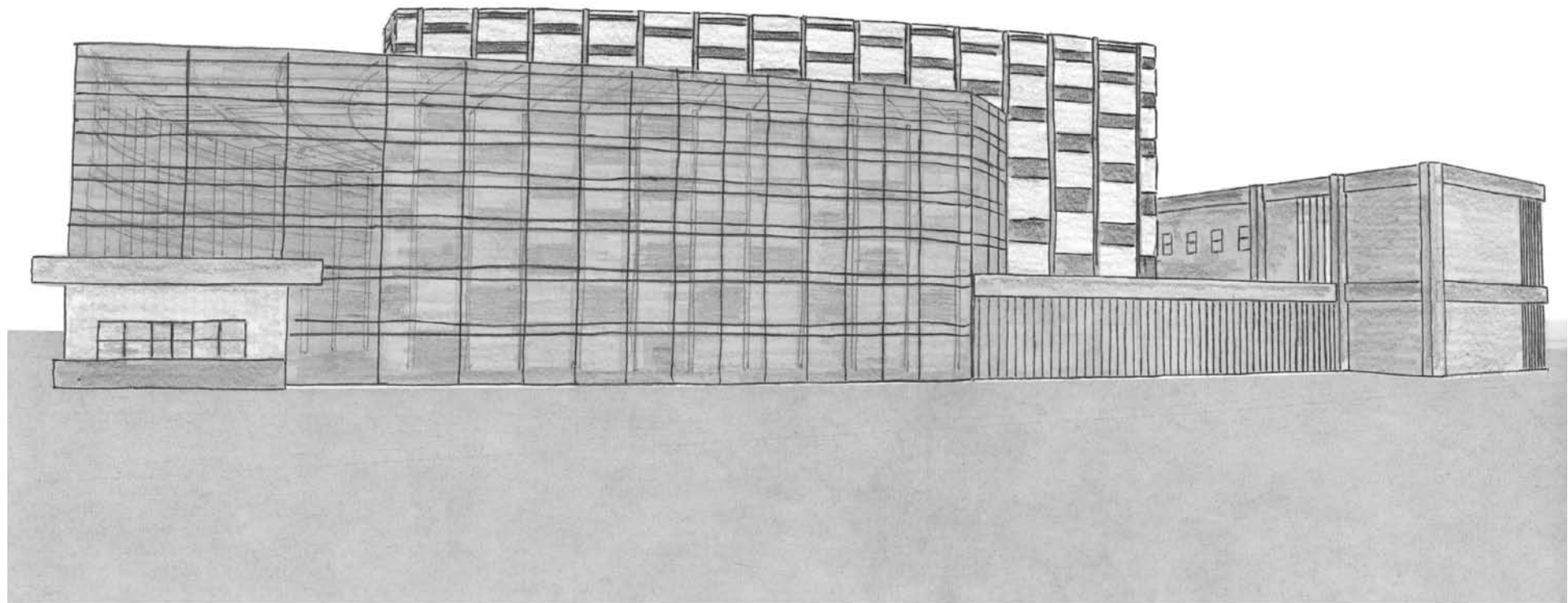


Figure 7 - Concept Sketch #3

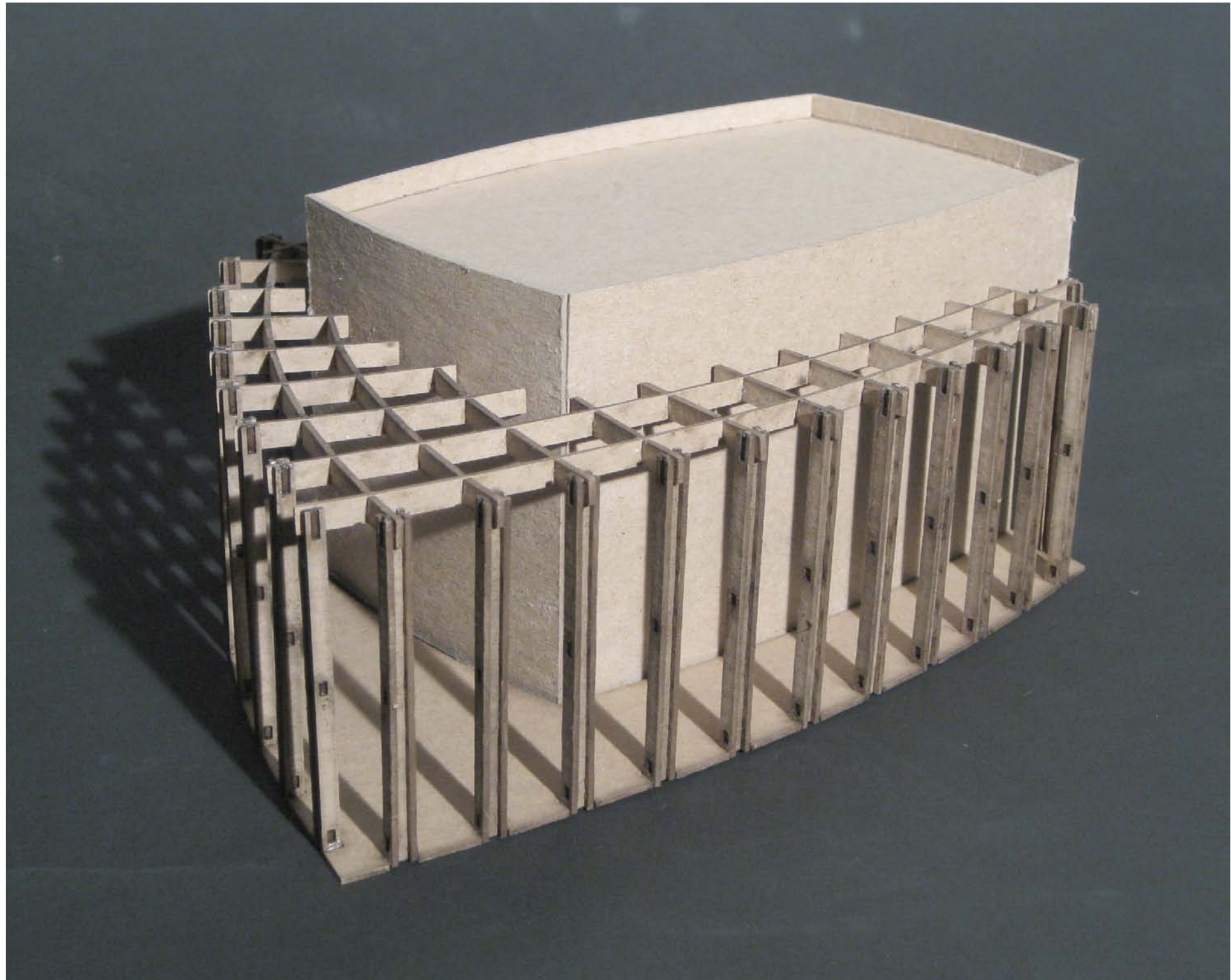


Figure 8 - Concept Model #1 Performance Hall and Lobby

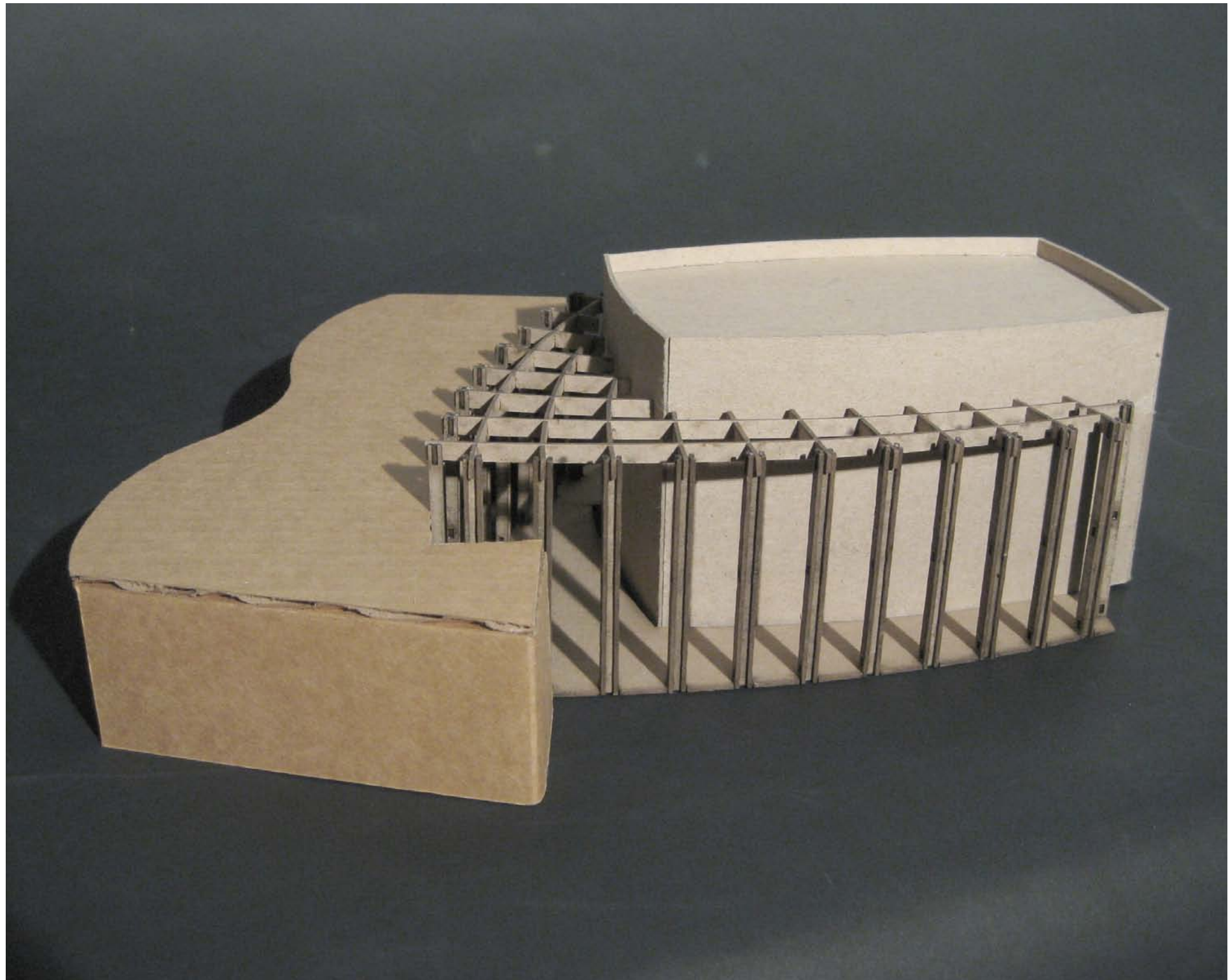


Figure 9 - Concept Model #1 Performance Hall, Lobby, and Academic Building

FACADE

Facade can be defined as a superficial appearance or illusion of something. In architectural terms, the facade can be recognized by the difference in material - masonry, metal, glass, stone, wood, and others. For the Center for the Performing Arts, I researched a series of systems that allowed me to create a design solution that is a combination of many systems.

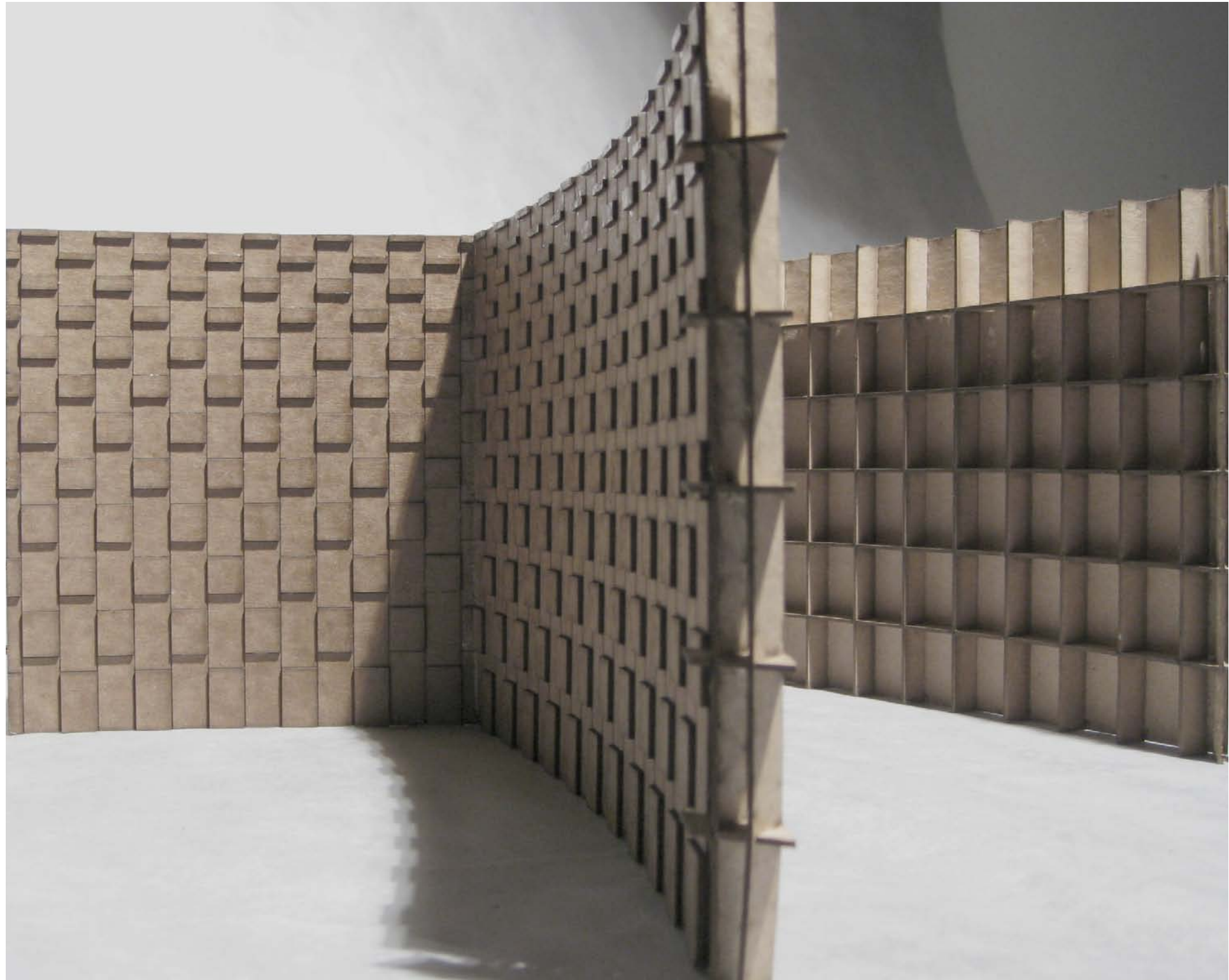
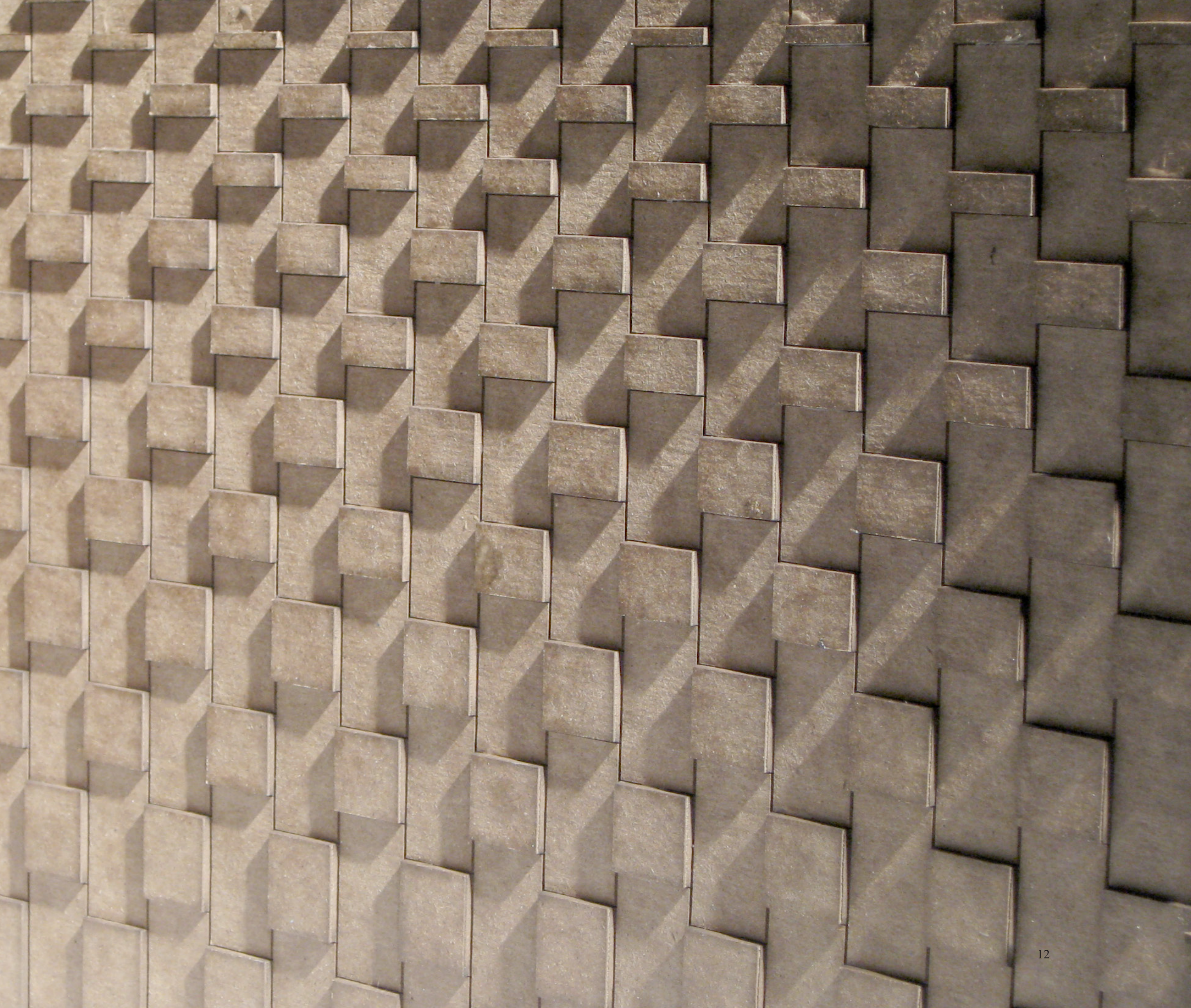


Figure 10 - Rockite Model Formwork



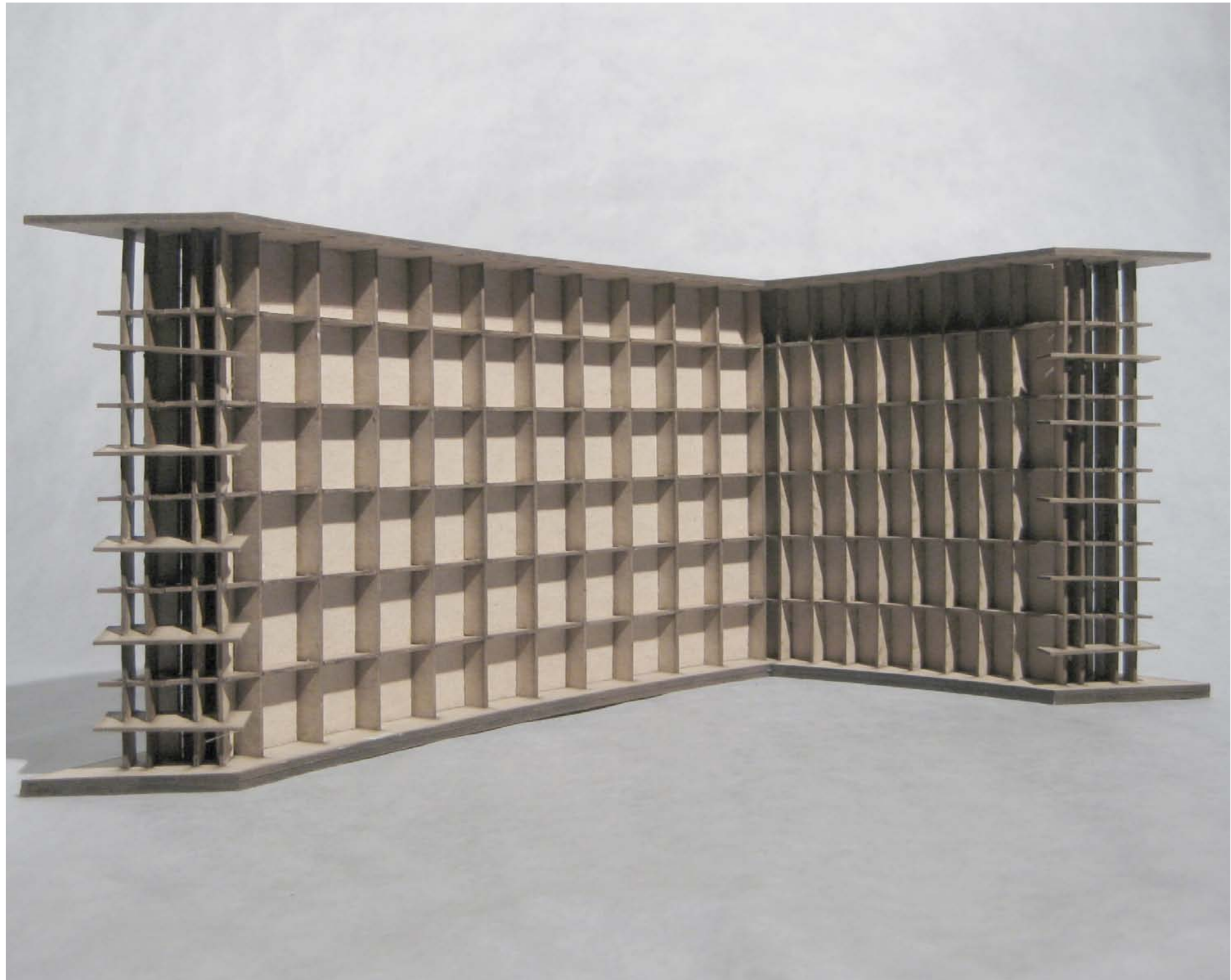


Figure 12 - Rockite Model Formwork Assembled

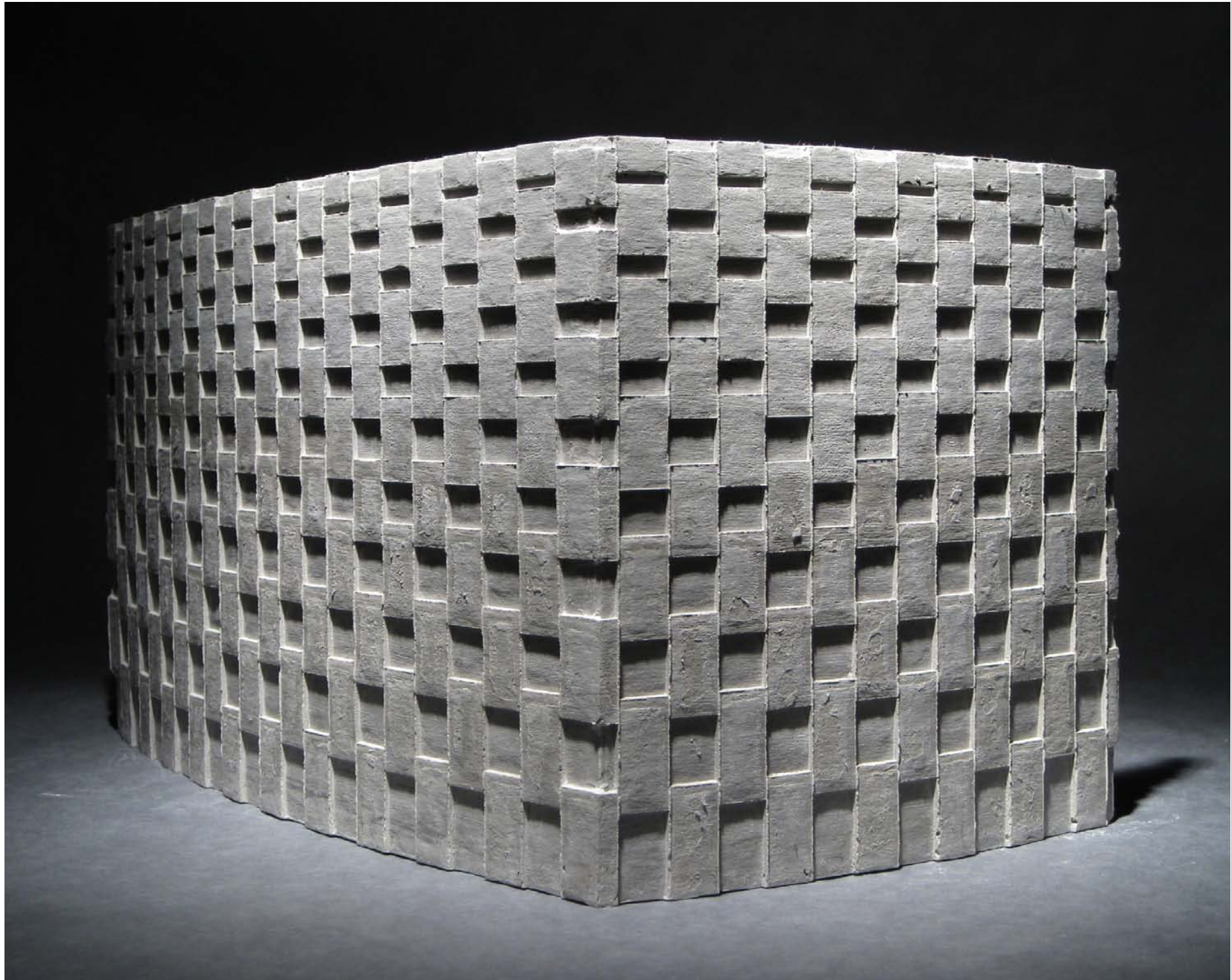


Figure 13 - Rockite Model



Figure 14 - Chipboard Model #1 Light Panels

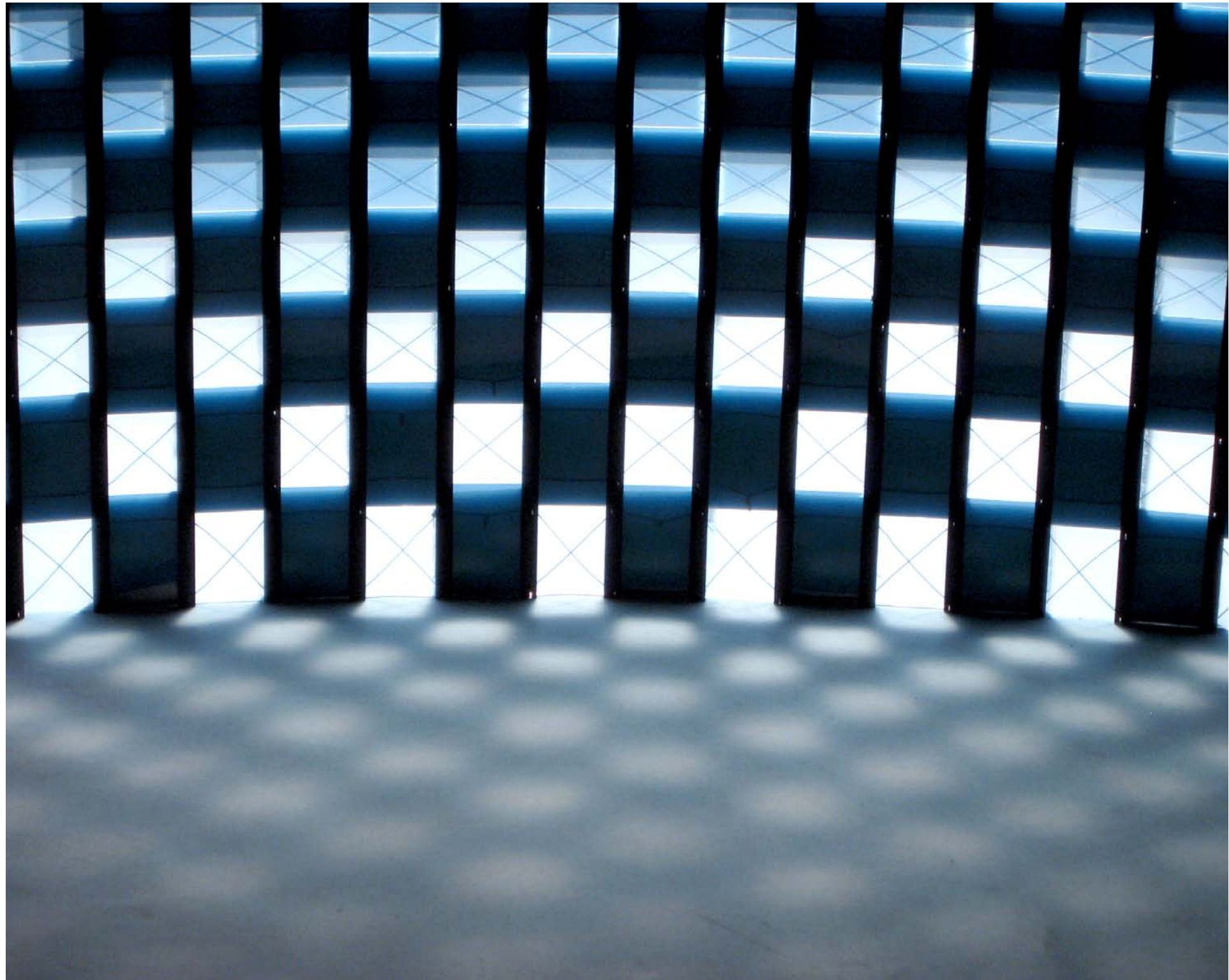


Figure 15 - Chipboard Model #1 Light Panels Illumination Study

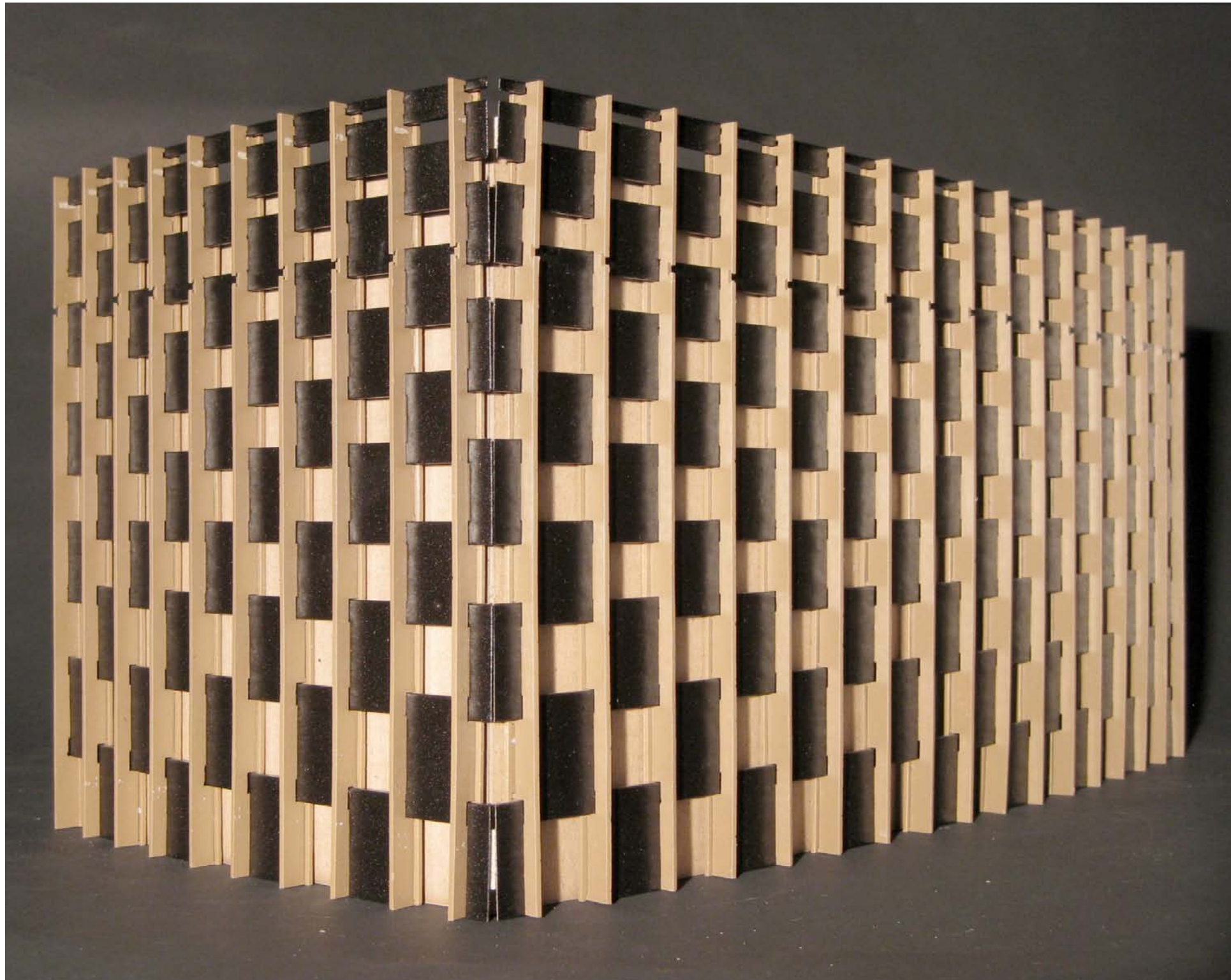


Figure 16 - Chipboard Model #2 Color Study

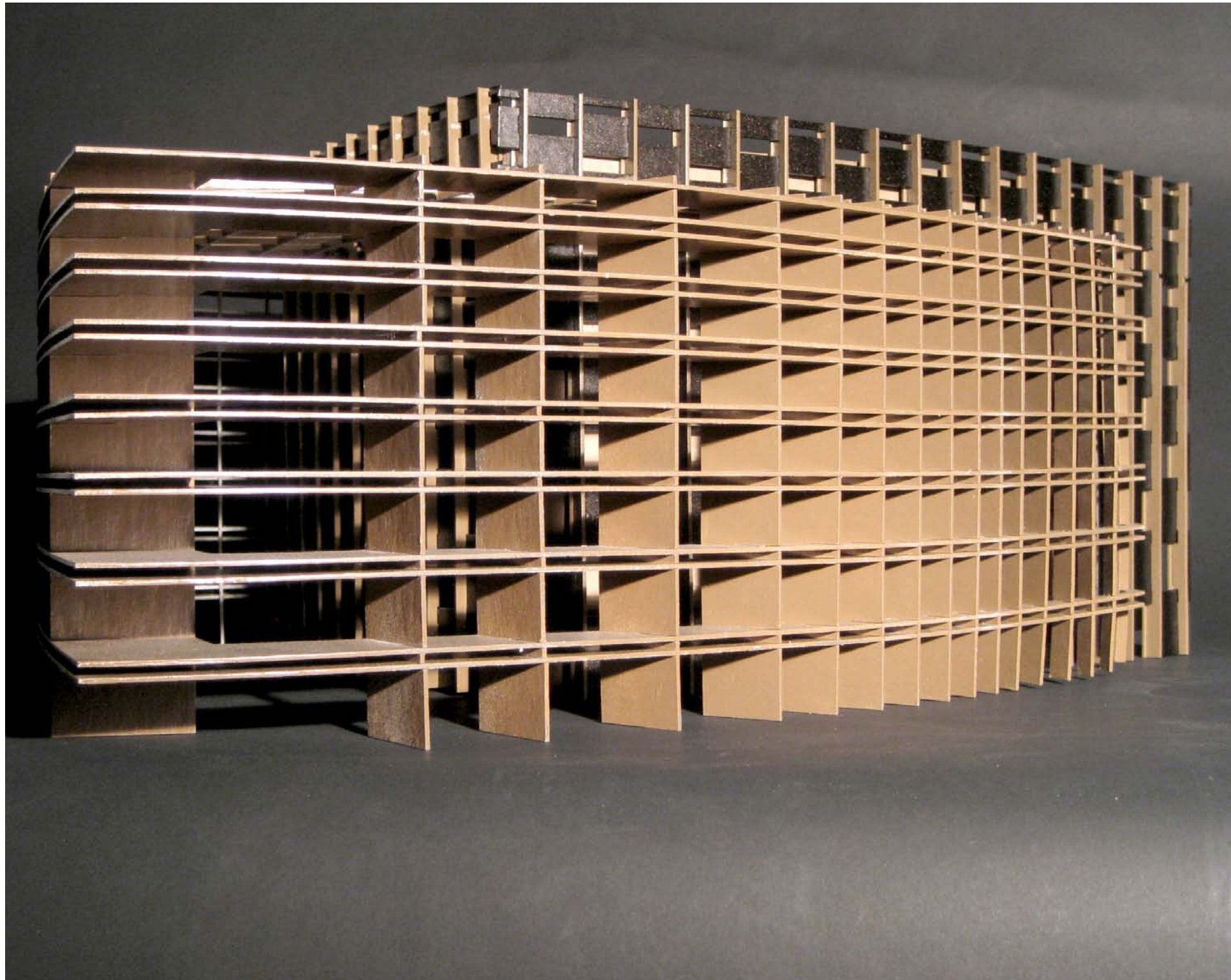


Figure 17 - Chipboard Model #2 with Lobby Framing

CAMPUS

The Ohio State University is a major comprehensive university in Columbus, Ohio. As a major land grant university, Ohio State is also a national resource. Its fundamental purpose in teaching, research, and public service - is to enhance the quality of human life through developing the individual capacity for enlightened understanding, thinking, and acting. The quality and diversity of its instructional programs and resources afford able students the opportunity to elect programs of unusual strength in the traditional university disciplines, as well as interdisciplinary programs which reflect new ways of organizing knowledge and new approaches to contemporary problems. Equality of opportunity is a basic philosophy of The Ohio State University. In the exploration of new ideas and in the preparation of citizens for their roles in a changing society, the University represents a human commitment - an expression of aspiration of people to better themselves and the world in which they live.



Figure 18 - Wexner Center for the Arts
[fair use]



Figure 19 - Knowlton School of Architecture
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Figure 20 - Drinko Hall The Moritz College of Law
[fair use]



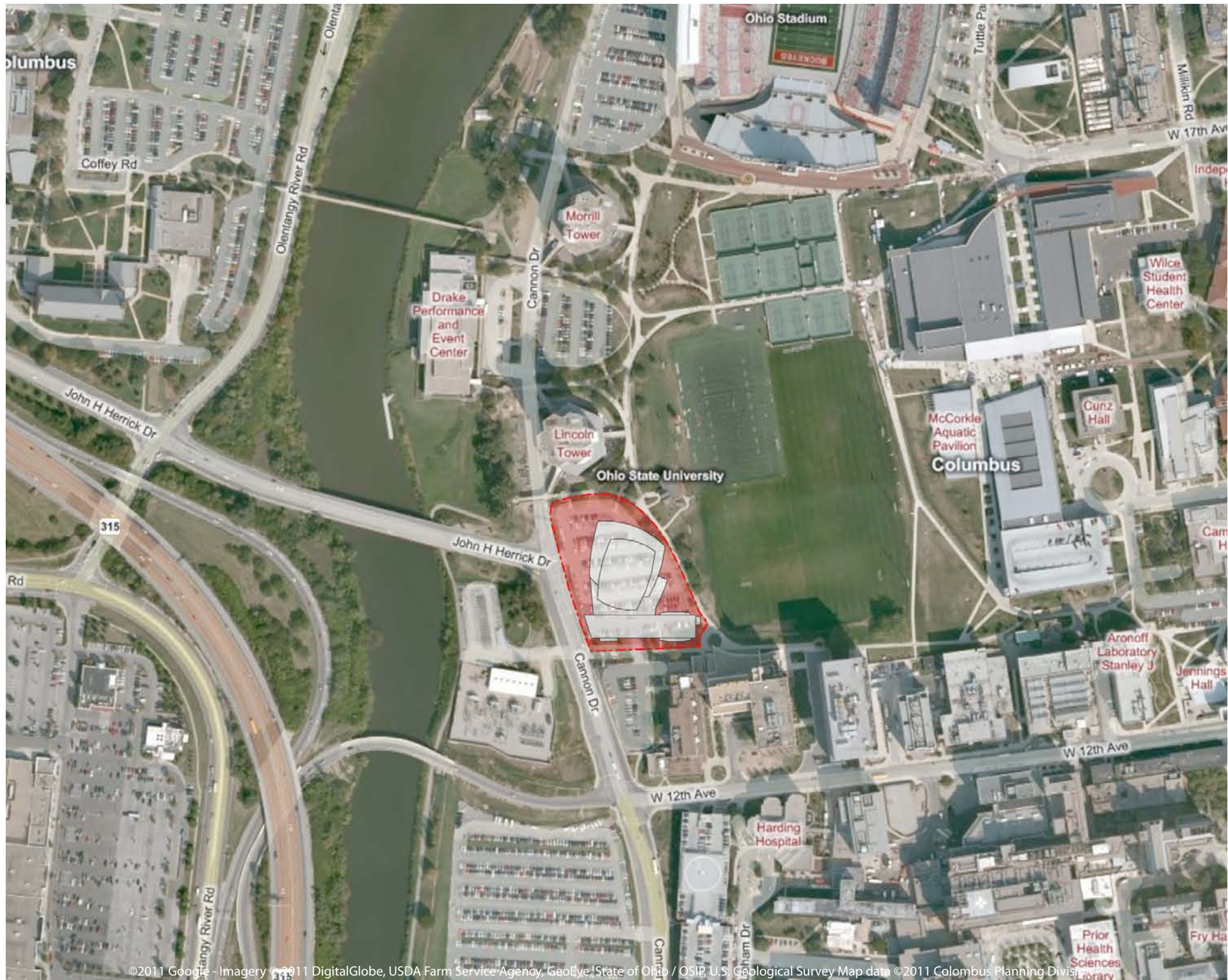
Figure 21 - Scott Laboratory Mechanical Engineering
[fair use]

SITE

The site chosen for the Center for the Performing Arts is in the heart of The Ohio State University campus, in Columbus, Ohio. Located just east of Cannon Drive, at the intersection of John H. Herrick Drive. The site also resides just east of the Olentangy River and the Olentangy Freeway, major thoroughfares for water and land transportation. The site currently provides approximately 100,000 square feet of parking lot for the surrounding buildings. In alignment with the campus growth and need for parking structures, the flat and impervious site can be easily adapted for the project.



Figure 22 - Site Elevation West Exposure



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Figure 23 - Site Analysis
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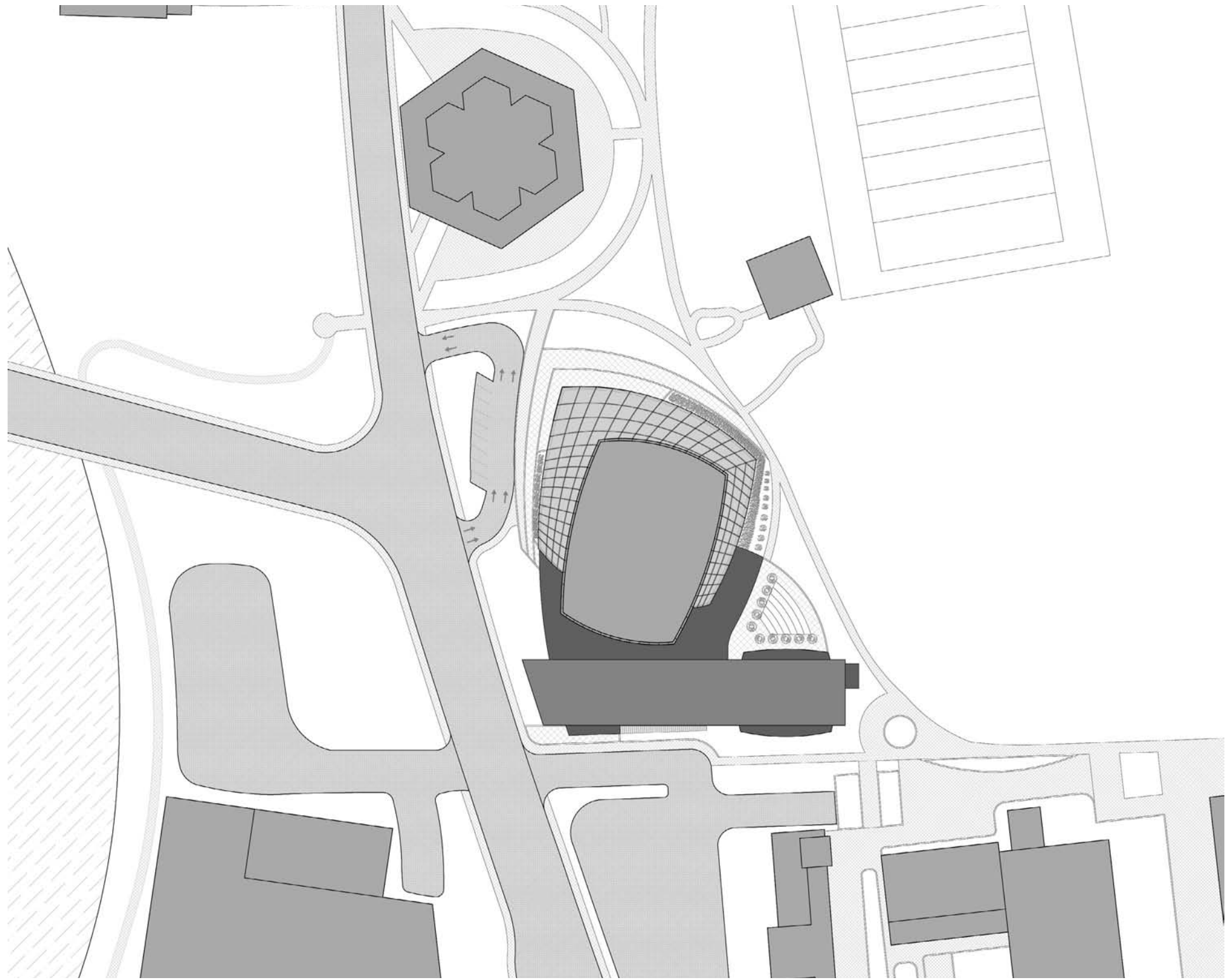


Figure 24 - Site Plan Proposed Conditions

DESIGN

The Center for the Performing Arts provides approximately 30,000 square feet of academic space for classrooms, practice rooms, studios, meeting rooms, offices, support space, and a 400 seat performance hall. The building also houses a 1200 seat performance venue, surrounded by an open lobby to contain the spectators before and after, and during the intermission. The performance venues are responsive environments that utilize acoustic wall panels, adjustable fabric draperies, and adjustable sound deflectors hung from the ceilings to cater to the needs of the space. Depending on the type and scale of the performance, the responsive acoustic panels and draperies can be adjusted to reflect or absorb the sound as needed. The 400 seat performance hall is a design solution for the everyday needs on the academic level. The 1200 seat performance provides a design solution for performances of grande scale, for the academic, local, and regional communities.

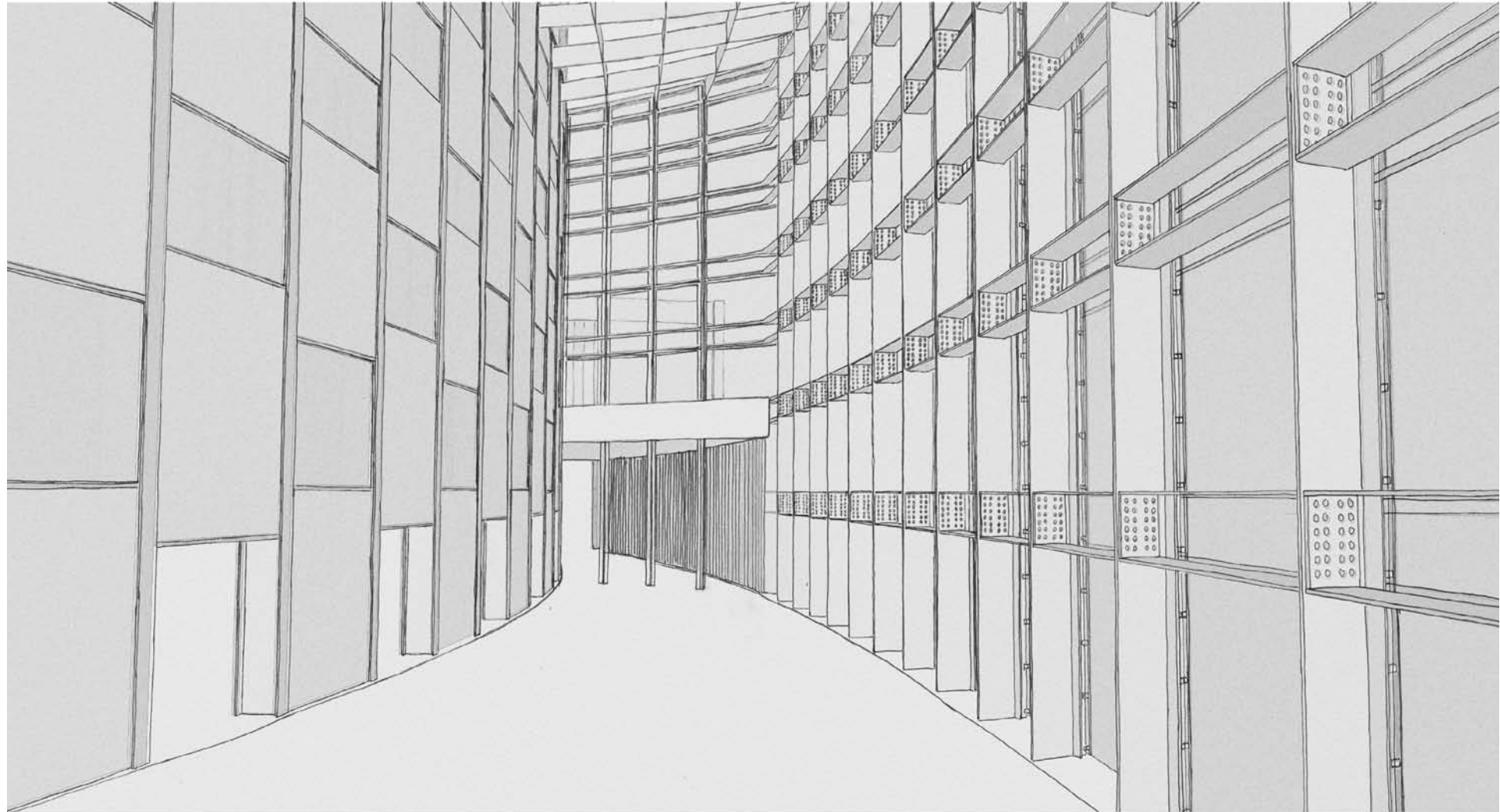


Figure 25 - Performance Hall Lobby

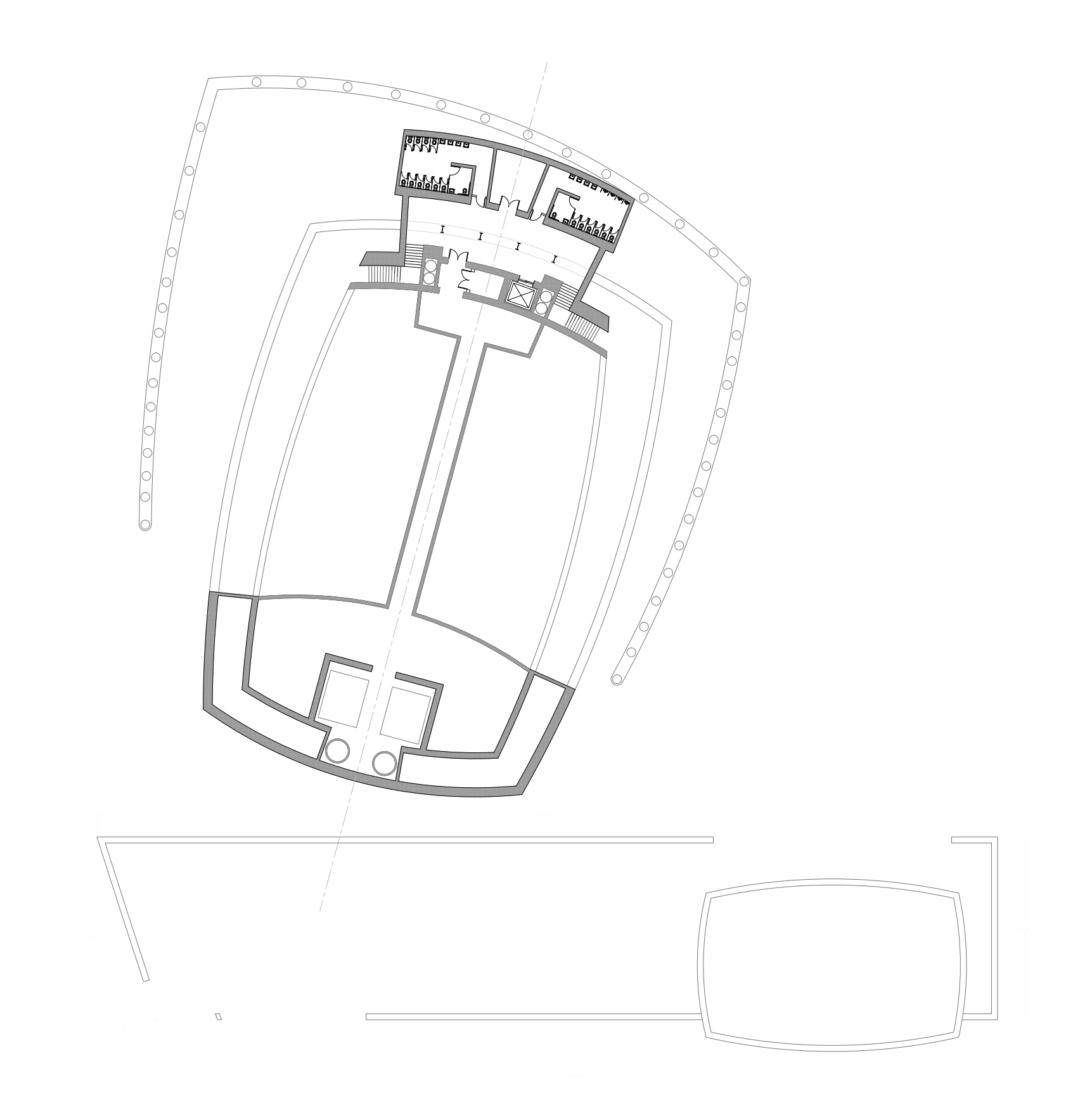
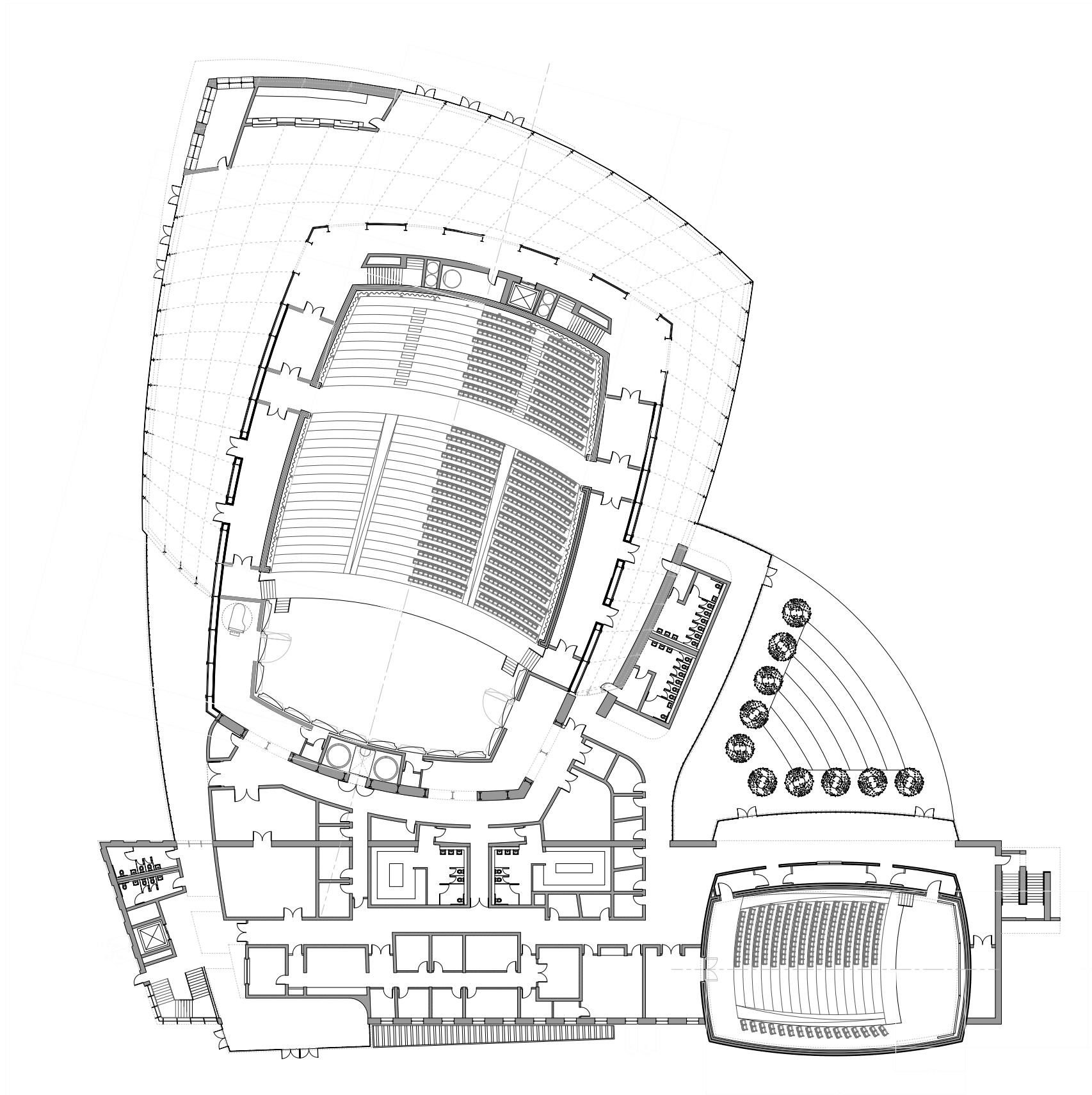


Figure 26 - Basement Floor Plan



FT 5 10 20 50

Figure 27 - Ground Floor Plan

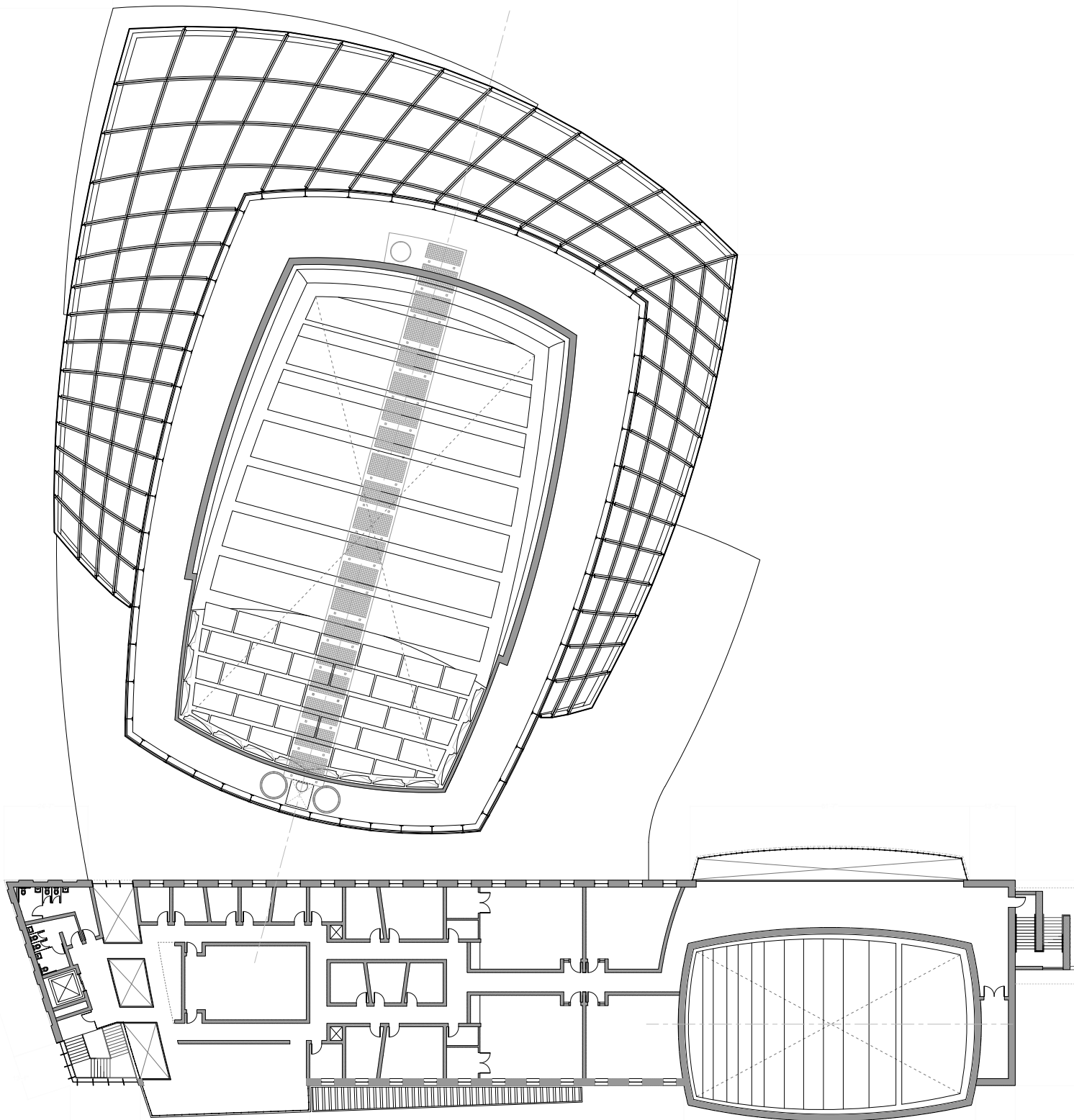


Figure 28 - Second Floor Plan

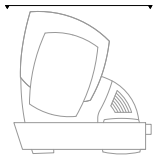
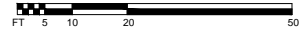
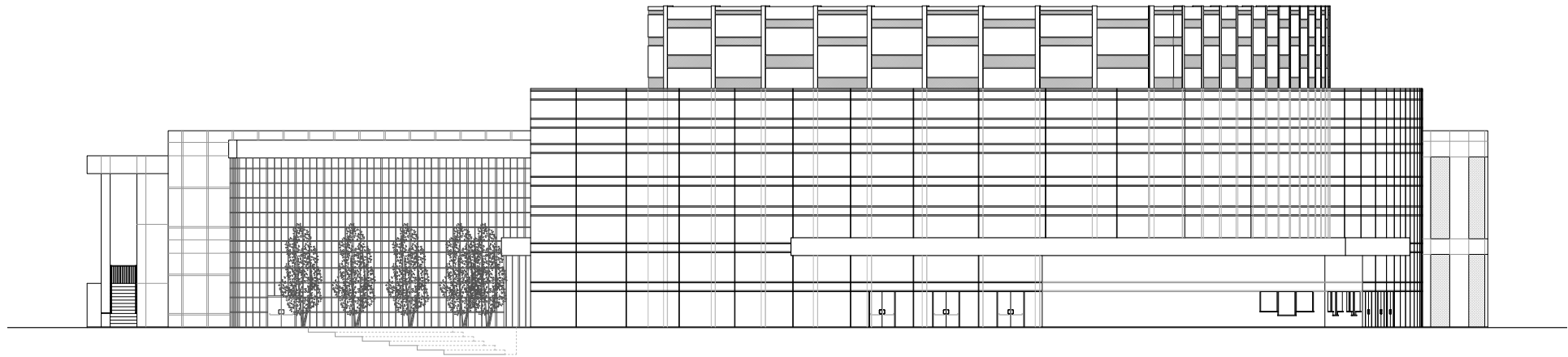


Figure 29 - Elevation North Exposure

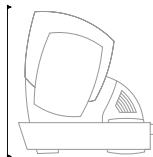
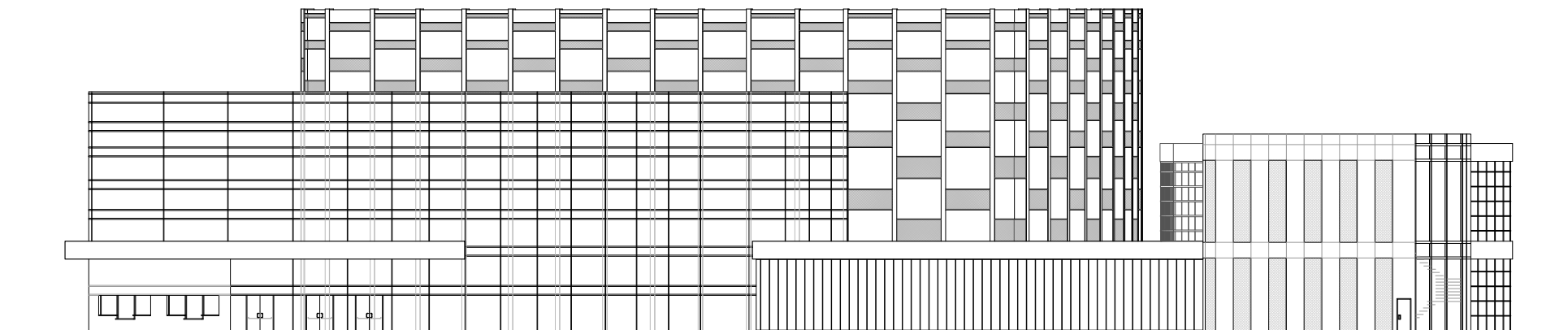


Figure 30 - Elevation West Exposure

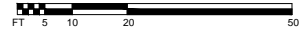


Figure 31 - Elevation South Exposure

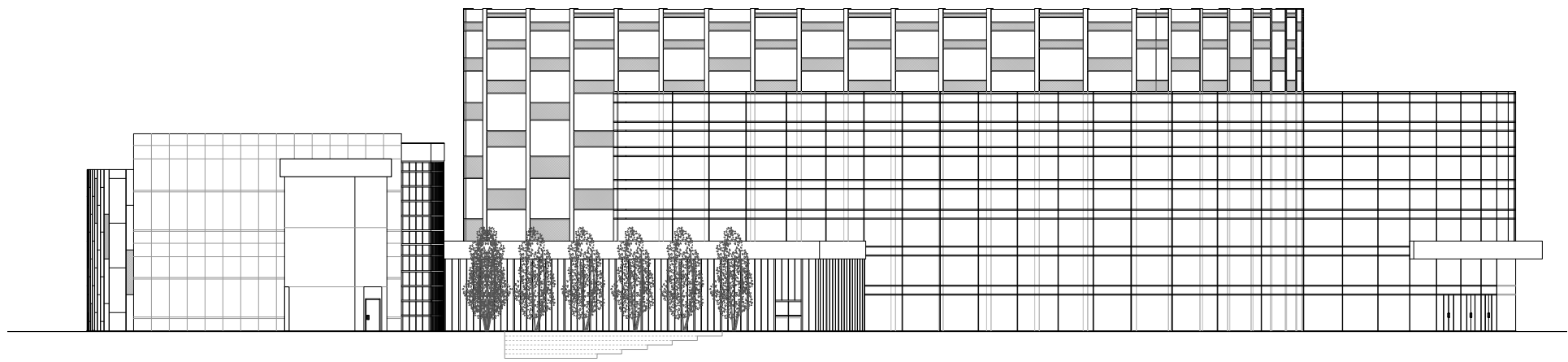
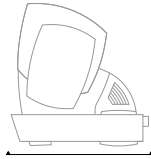


Figure 32 - Elevation East Exposure



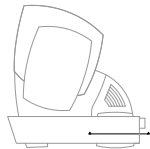
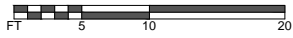
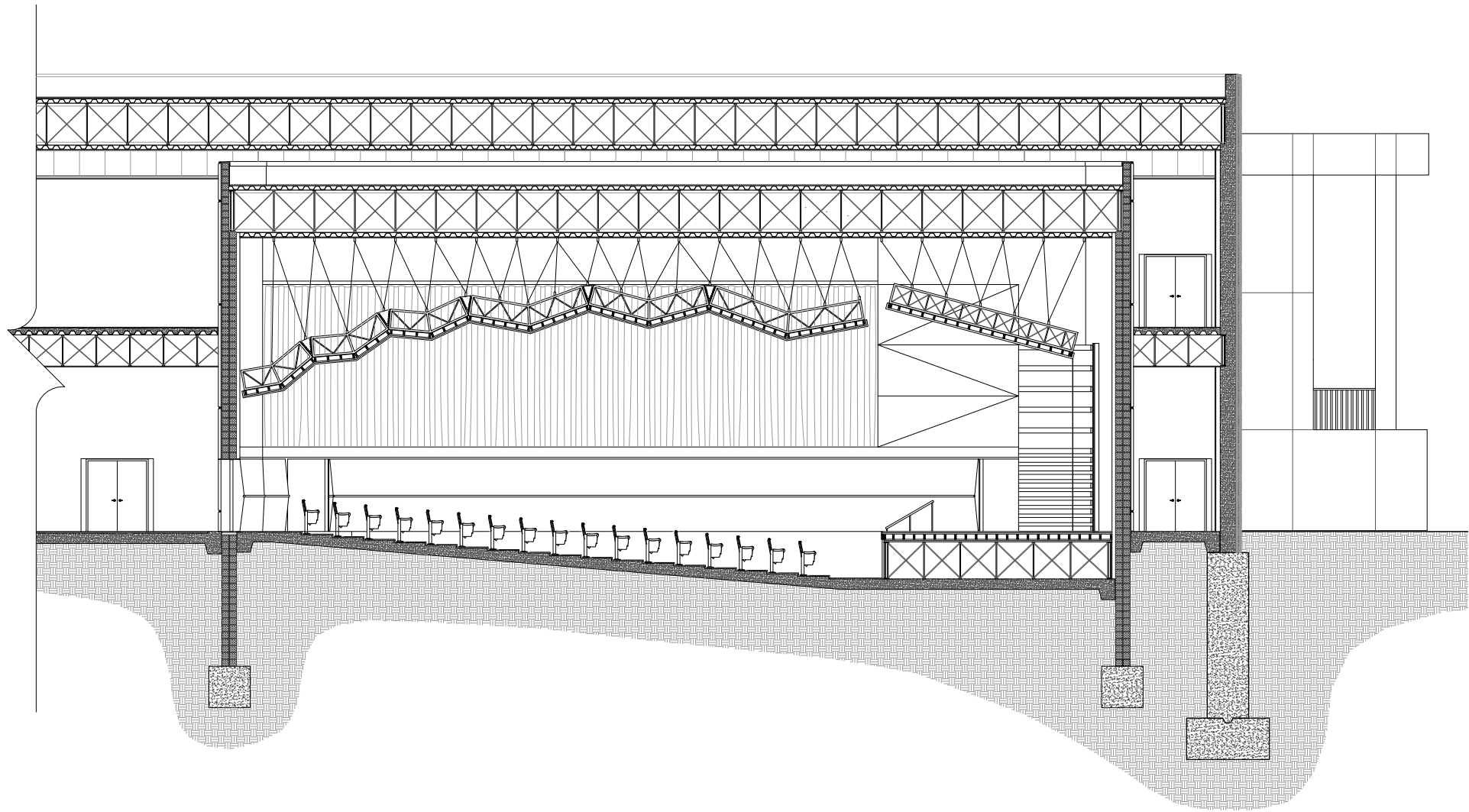


Figure 33 - 400 Seat Performance Hall Long Section

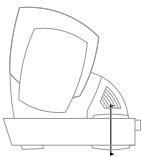
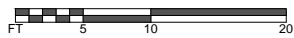
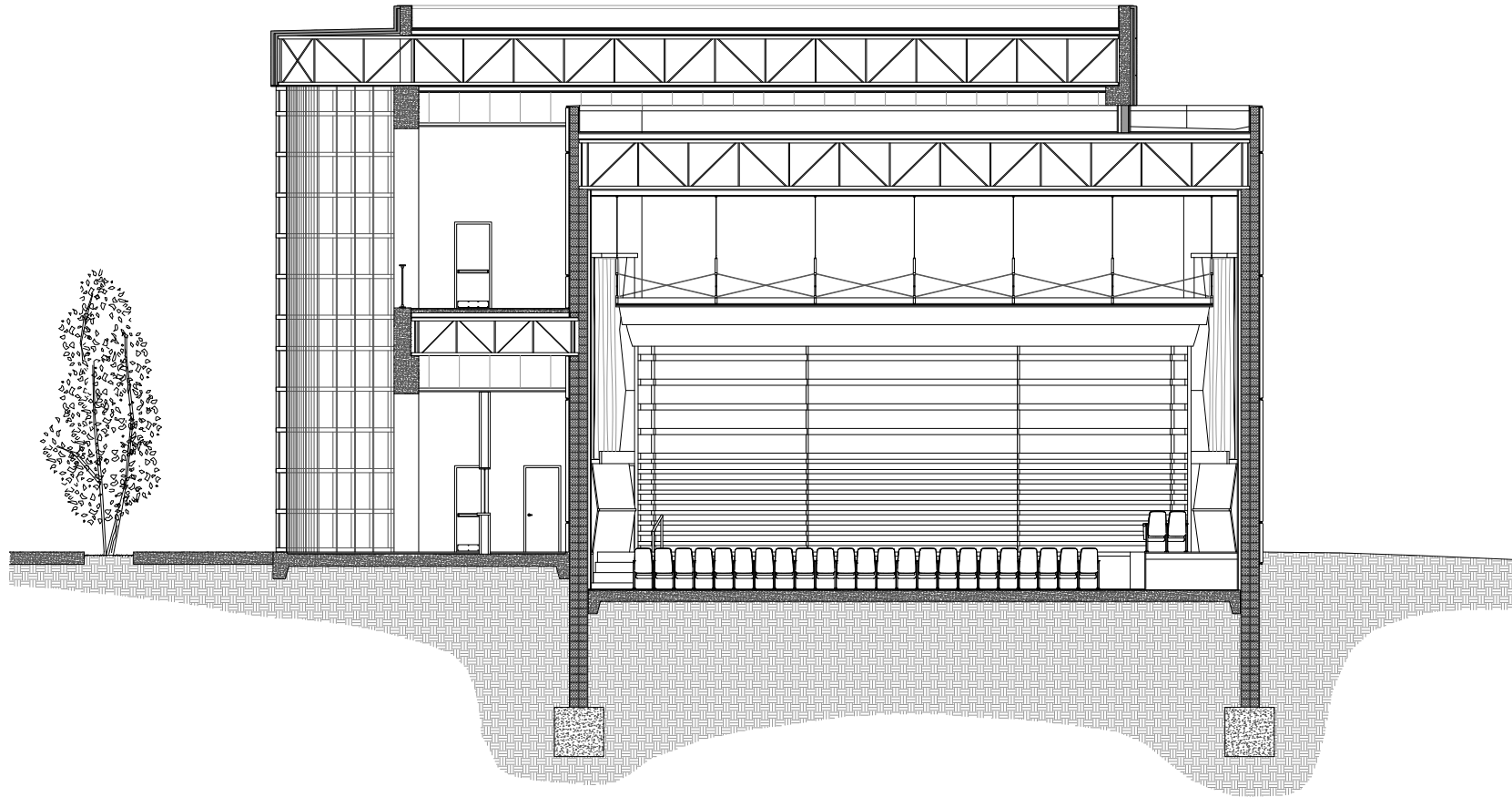


Figure 34 - 400 Seat Performance Hall Short Section

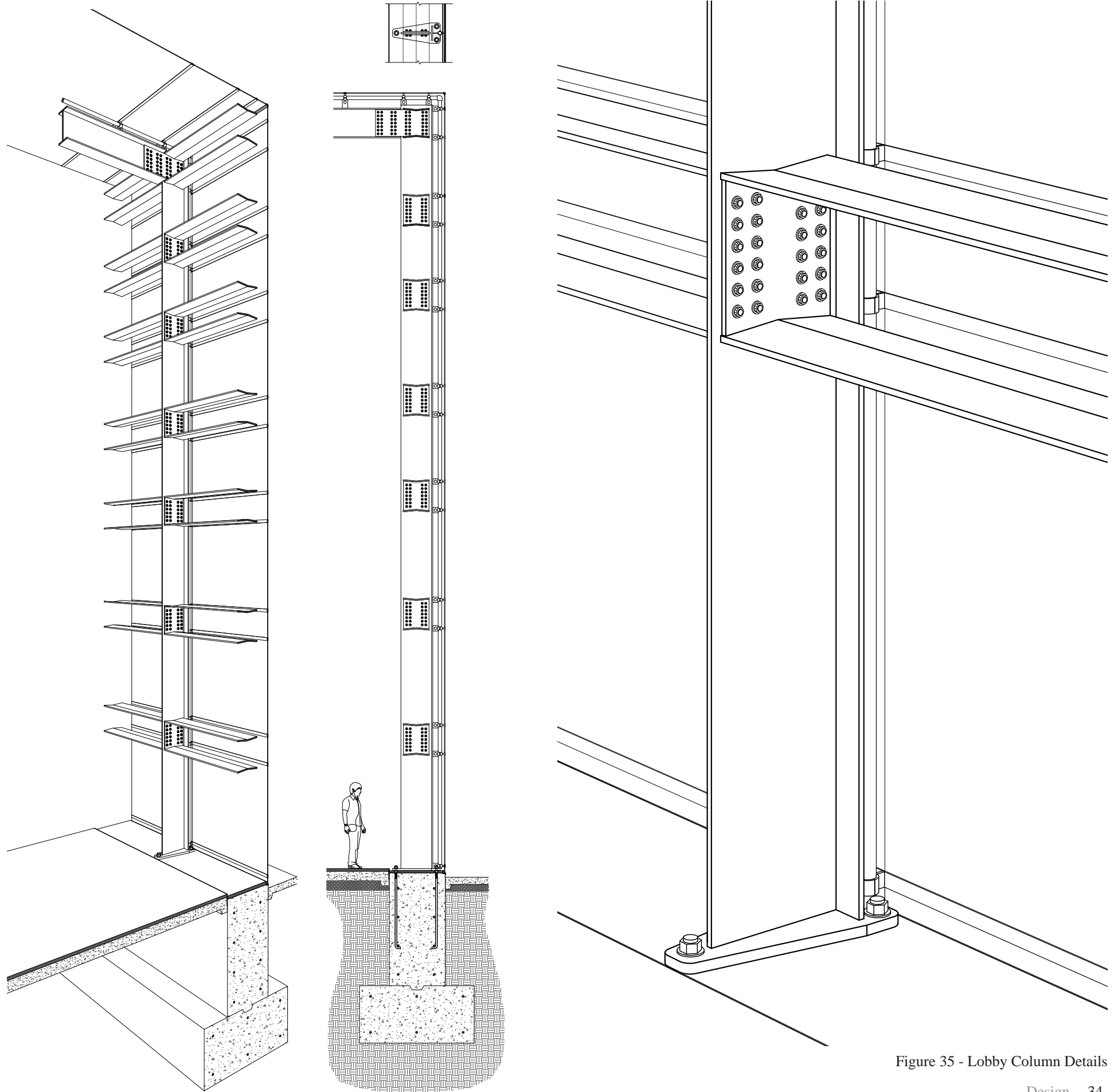


Figure 35 - Lobby Column Details

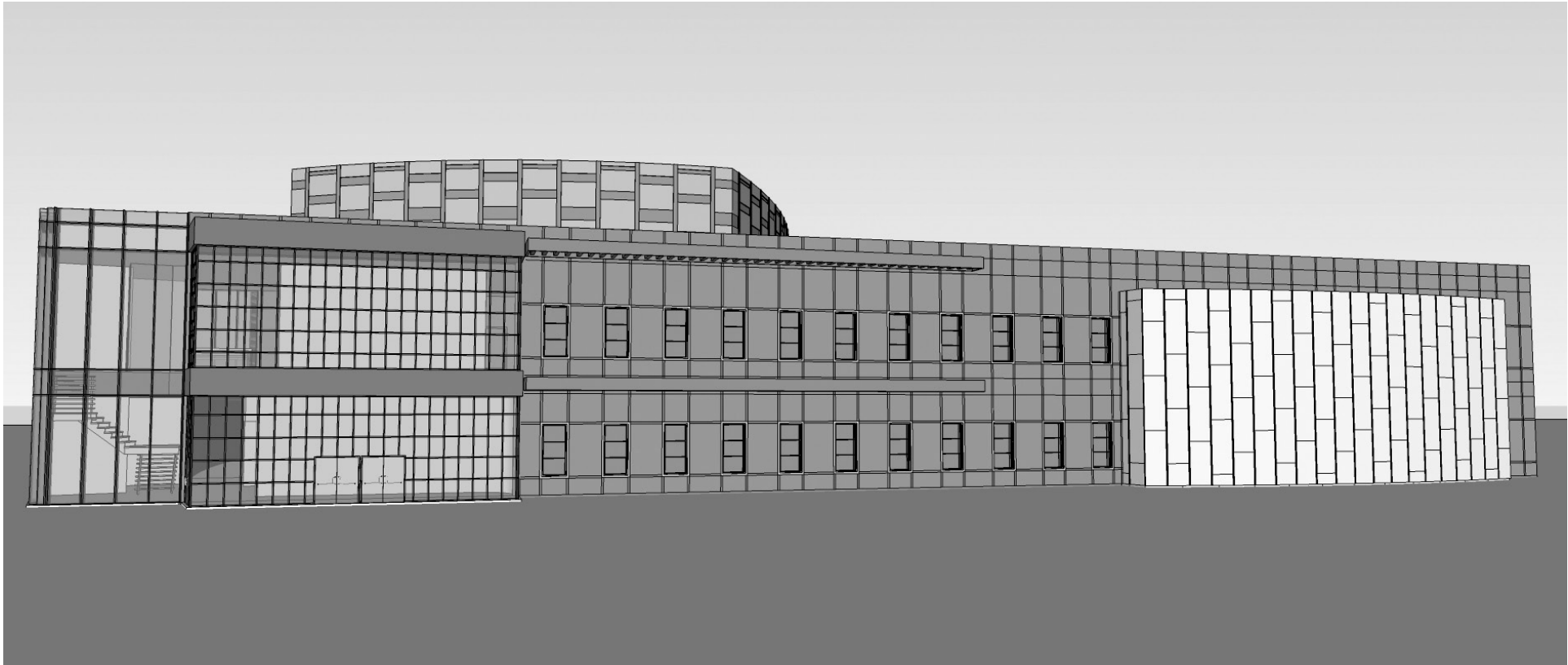


Figure 36 - Computer Model South Exposure

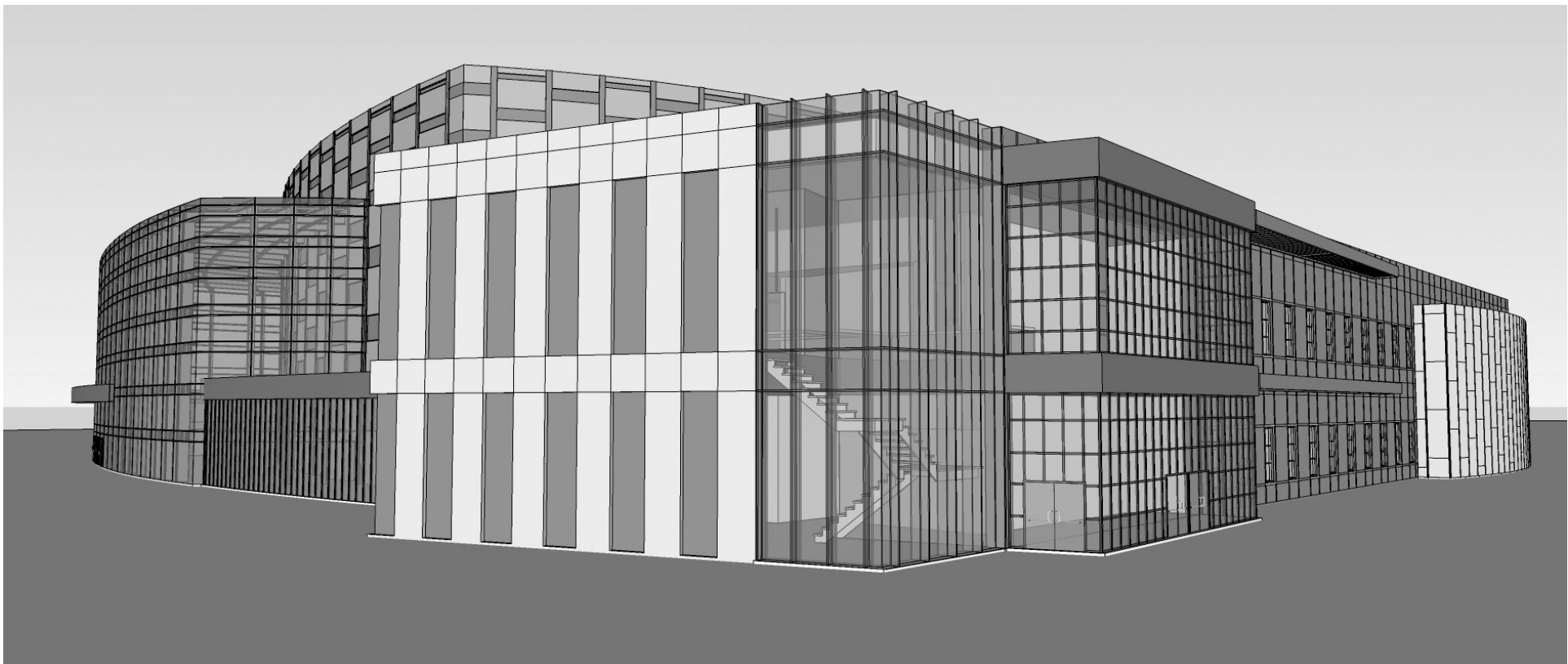


Figure 37 - Computer Model Southeast Exposure

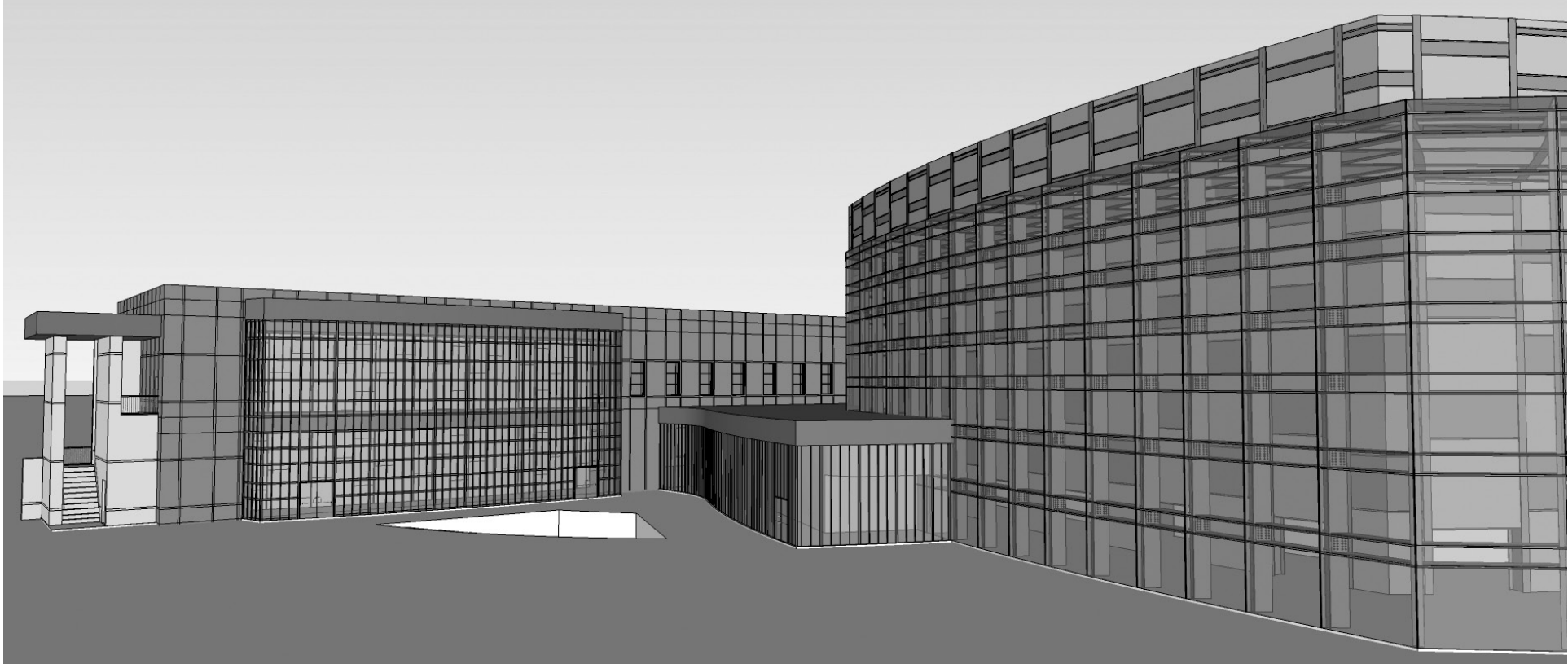


Figure 38 - Computer Model Northeast Exposure

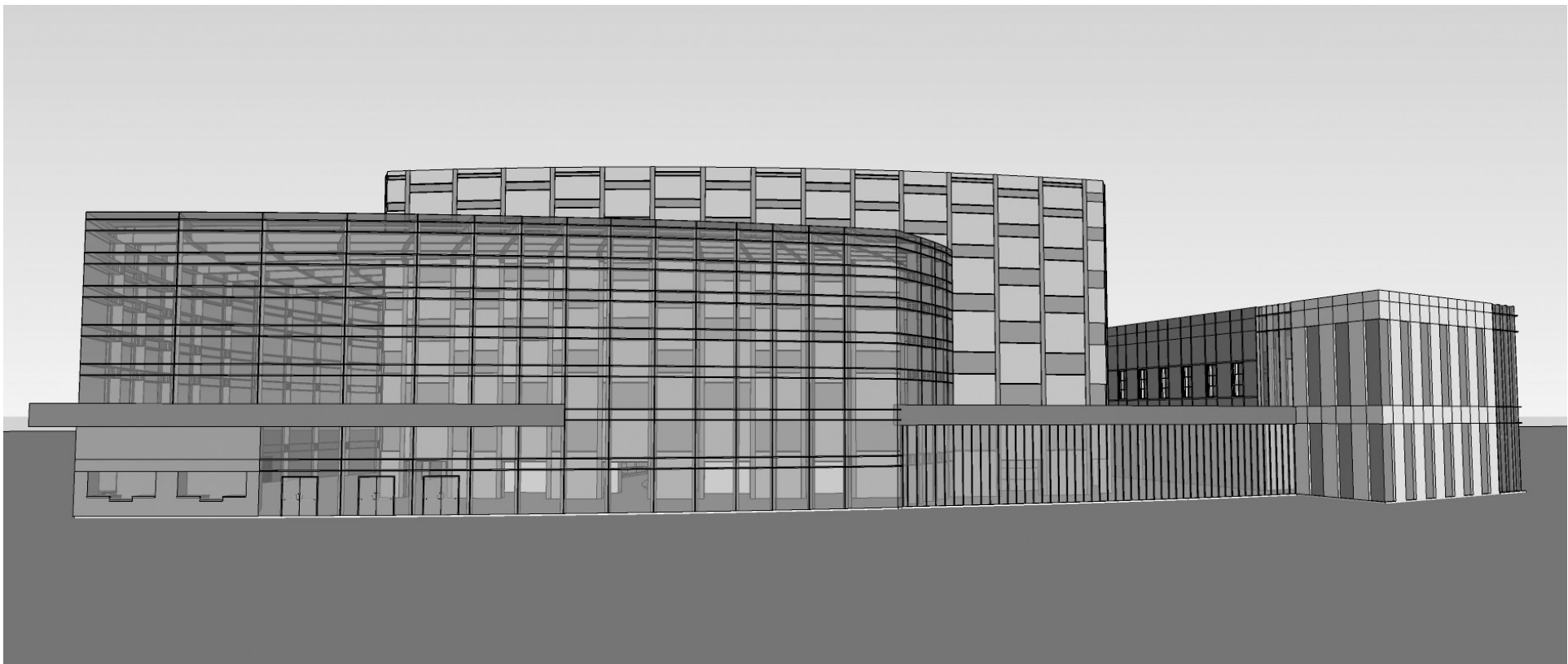


Figure 39 - Computer Model West Exposure

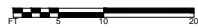
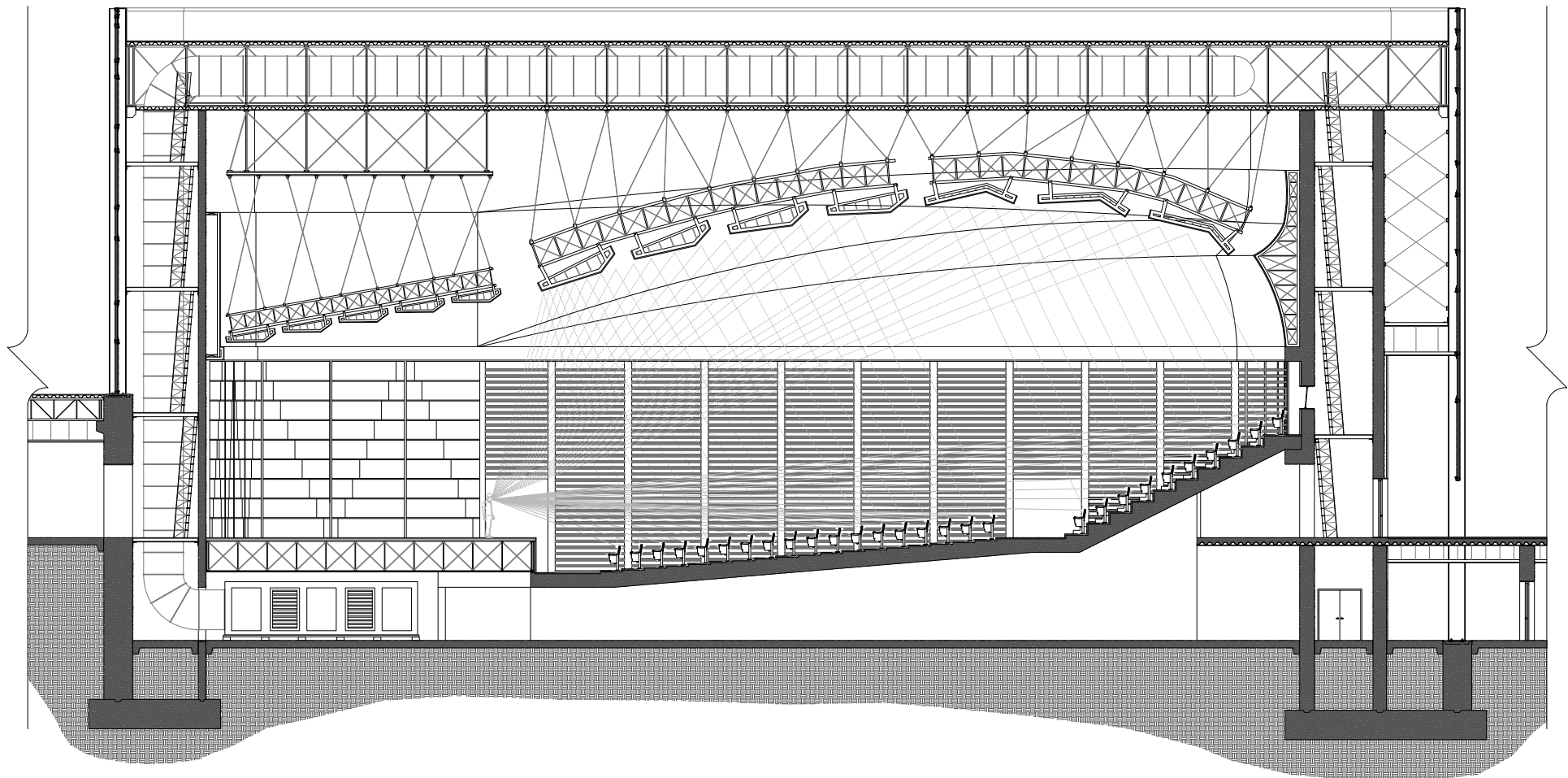
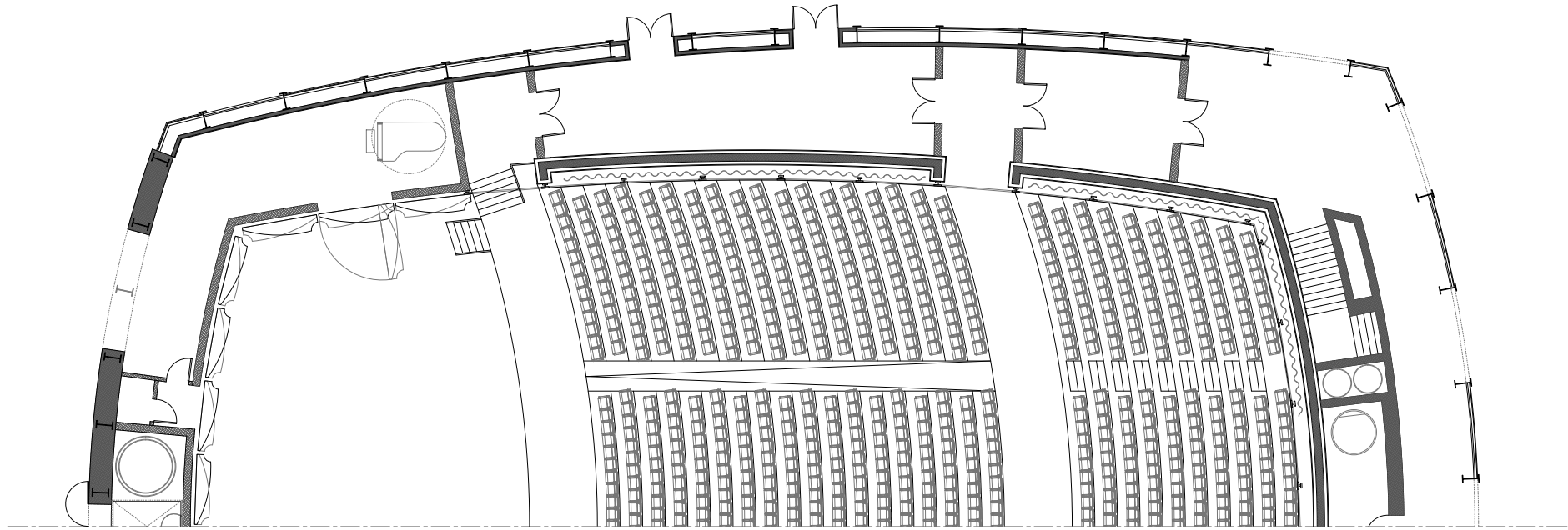


Figure 40 - 1200 Seat Performance Hall Enlarged Plan & Long Section

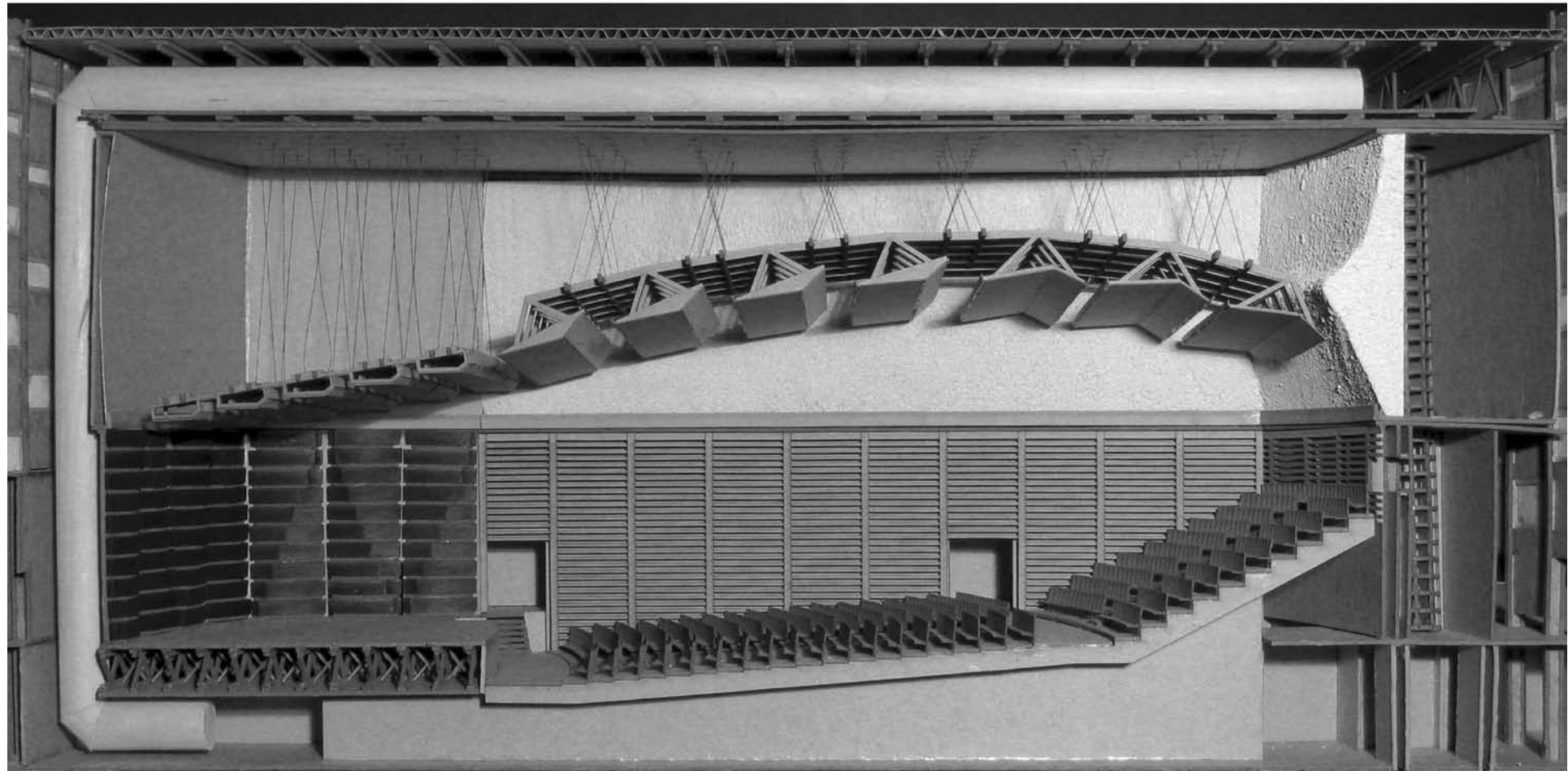


Figure 41 - 1200 Seat Performance Hall Long Section [Physical] Model

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