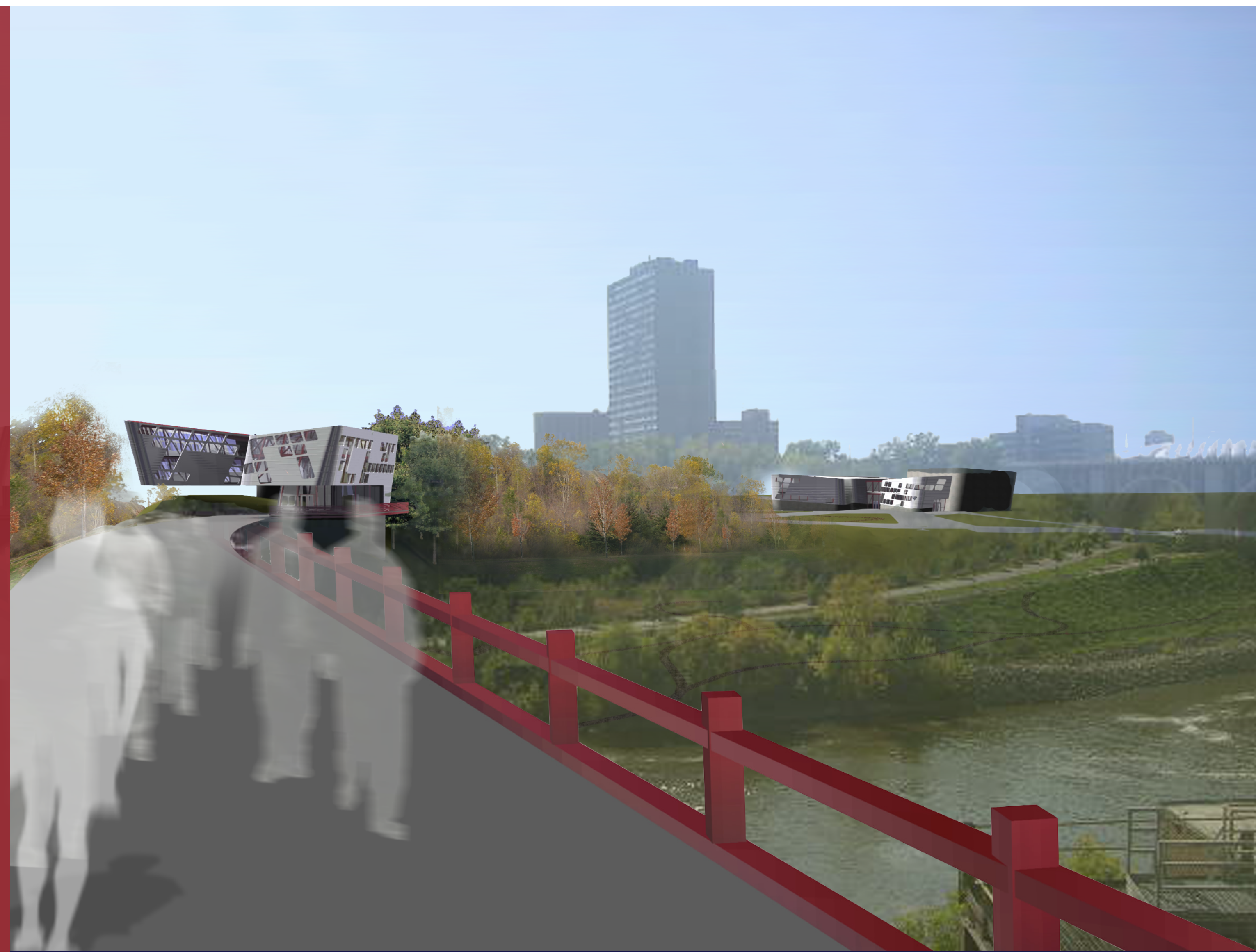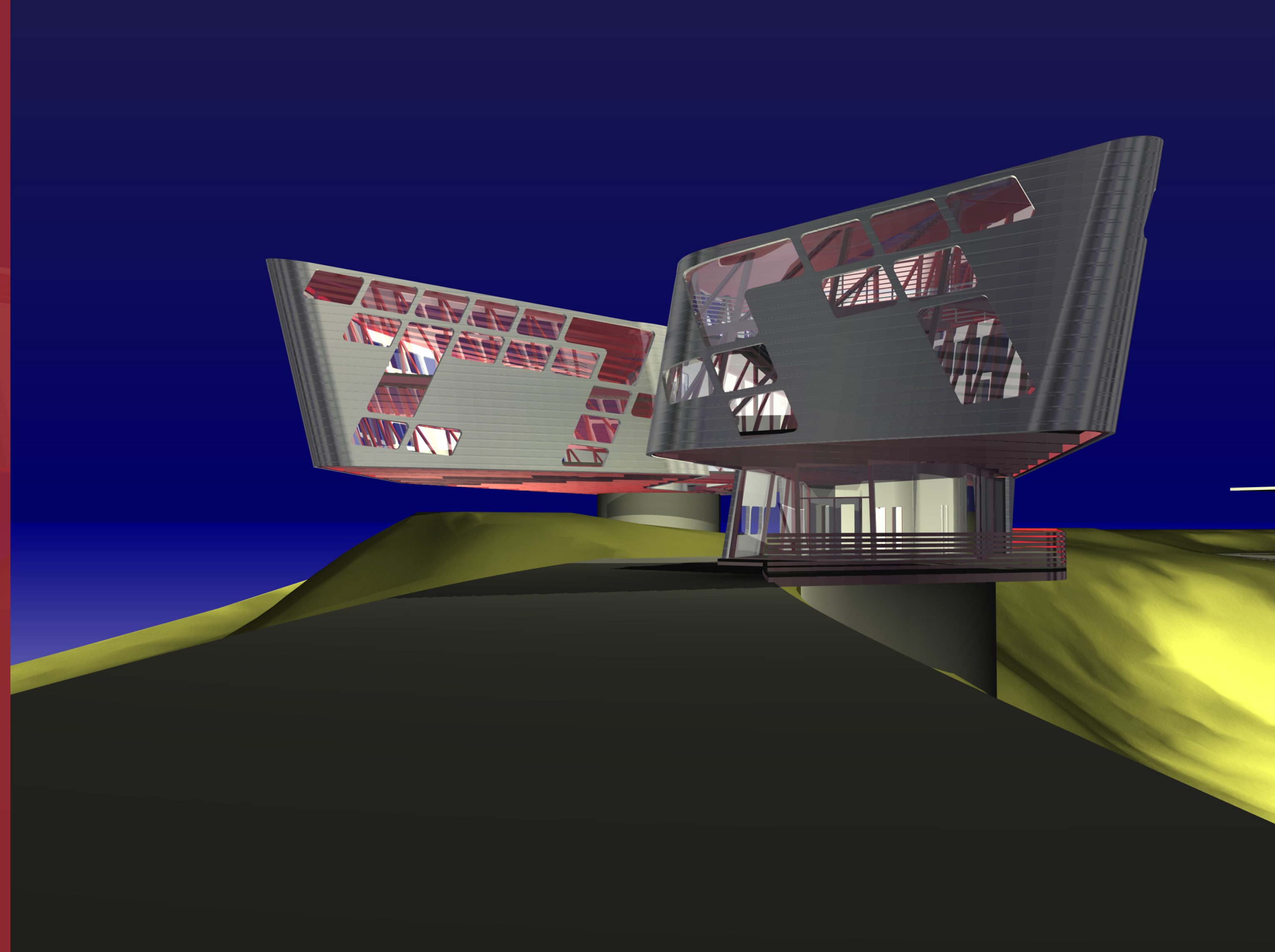**1**

2

typologizing the project

Learning through interaction and collaboration is increasingly becoming important in the way of advancement within the world of academics. Interdisciplinary programs provide students the opportunities to take lessons from disciplines outside of their own. Working with professional industry allows students to learn from those within the field. Working with community groups allow students to make a difference in the communities which they live. As one of the top researching universities in the country, the University of Minnesota has for a long time been a leader in creating connections between university programs, community groups, and professional organizations.

The University of Minnesota is also becoming a leader in the technological advancement of computer practices. Through programs such as the Digital Technology Center and the Digital Design Consortium, students and faculty have the opportunity to collaborate between departments to research, educate, and create outreach programs for computer graphics and visualization.

It is through research and development of programs like these that a new collaboration has come upon the design profession. The need for sustaining our natural environment and its resources is becoming more and more important in our changing world. Designers need to look to nature and its systems for inspiration of design and structure. A new way of design is becoming necessary. A new relationship between architects and engineers will help solve issues of efficiency in design.
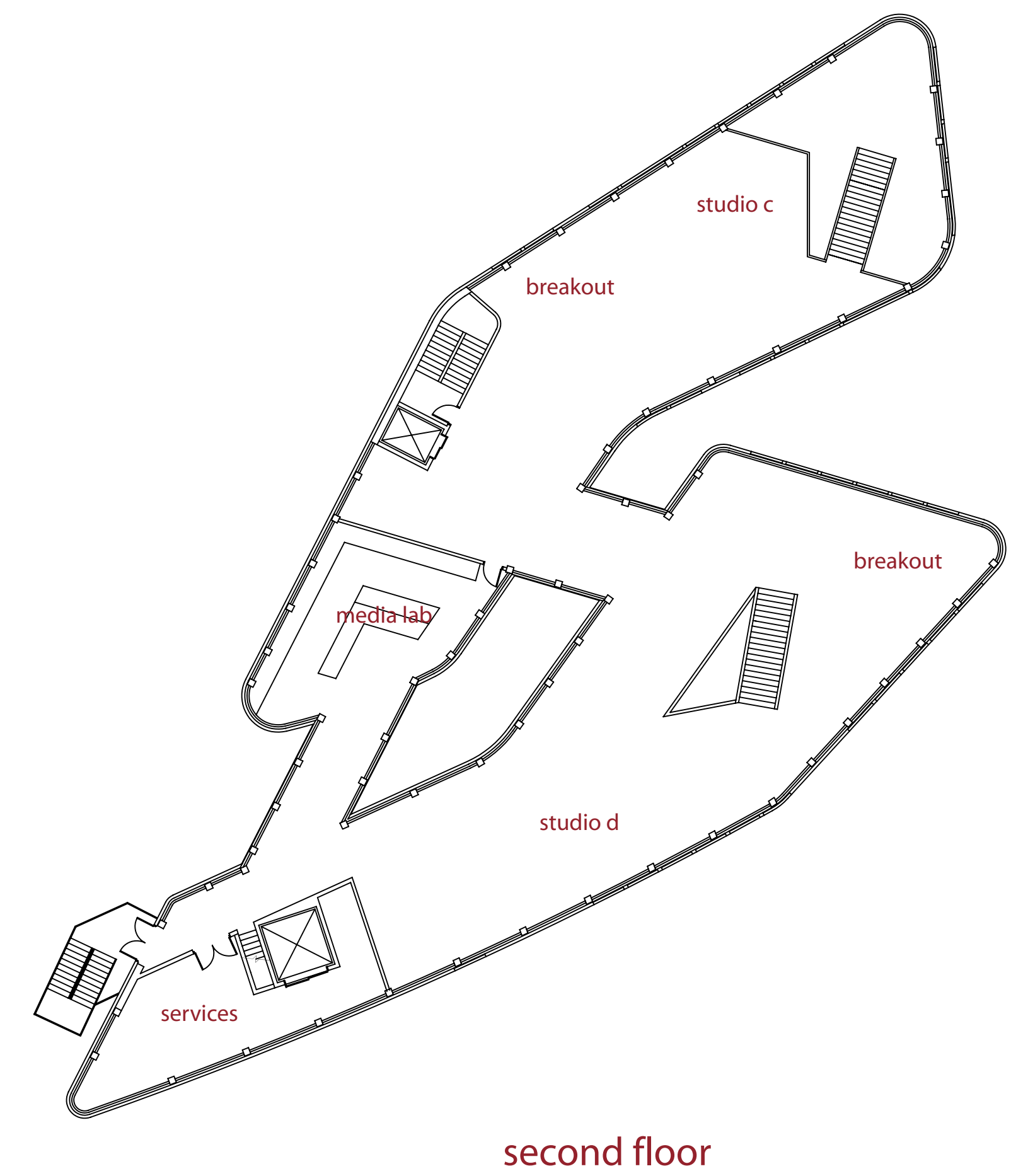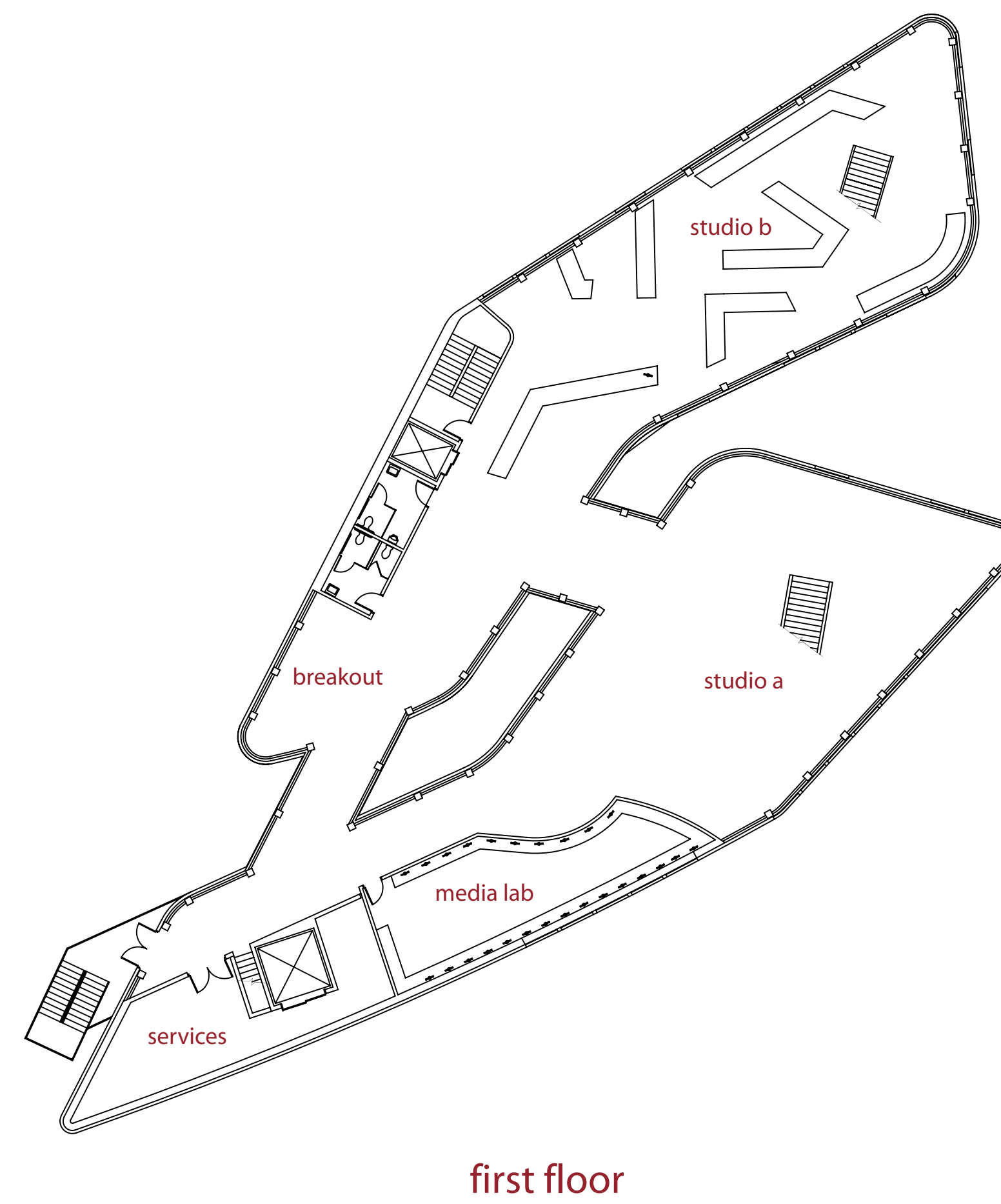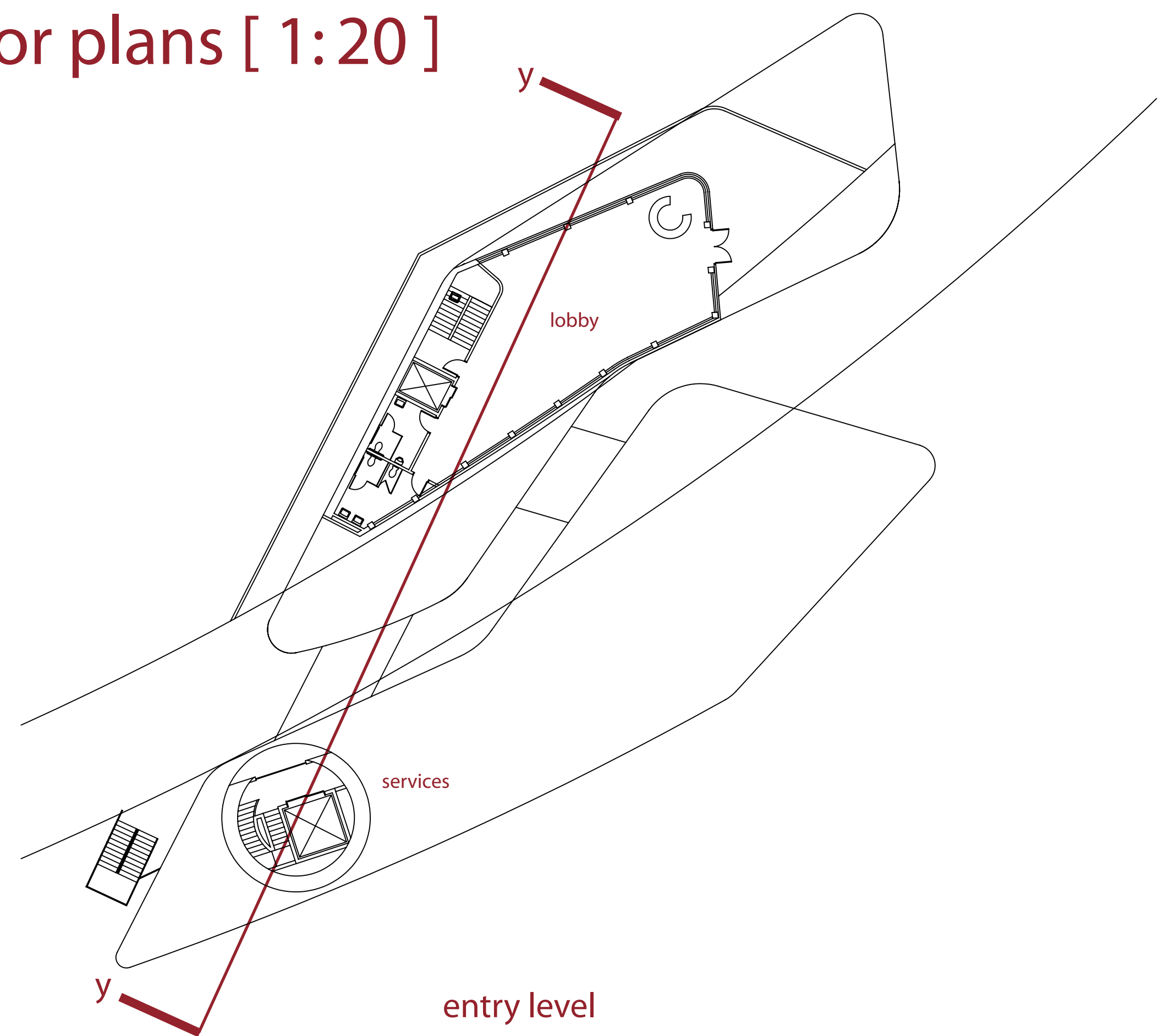
Through a program such as this, architects and engineers will have the ability to use new technologies in the digital design era to create structures of profound efficiency. The program will focus on the use of the computer and technology as a tool for development, not as a replacement for human knowledge and understanding. The program will involve members of the architecture and engineering programs at the university, as well as design professionals, and guest researchers. The program will become a gateway between academia and industry. A place where students can learn from professionals and professionals can learn from students.

The program will also become a link to the community, both physically and conceptually. The site for the project lies within the center of the University of Minnesota and the downtown business area of Minneapolis. By moving the program to an intermediary site, the program will become the center of academia, business, and community. The design will show the public the efforts being made to sustain both their local community and the world wide community. The majority of the site will be preserved and renewed for use by the community. the public will also be invited to come into the institution and learn of the advancements of design and its effects on them and the places in which they live, work, and recreate.
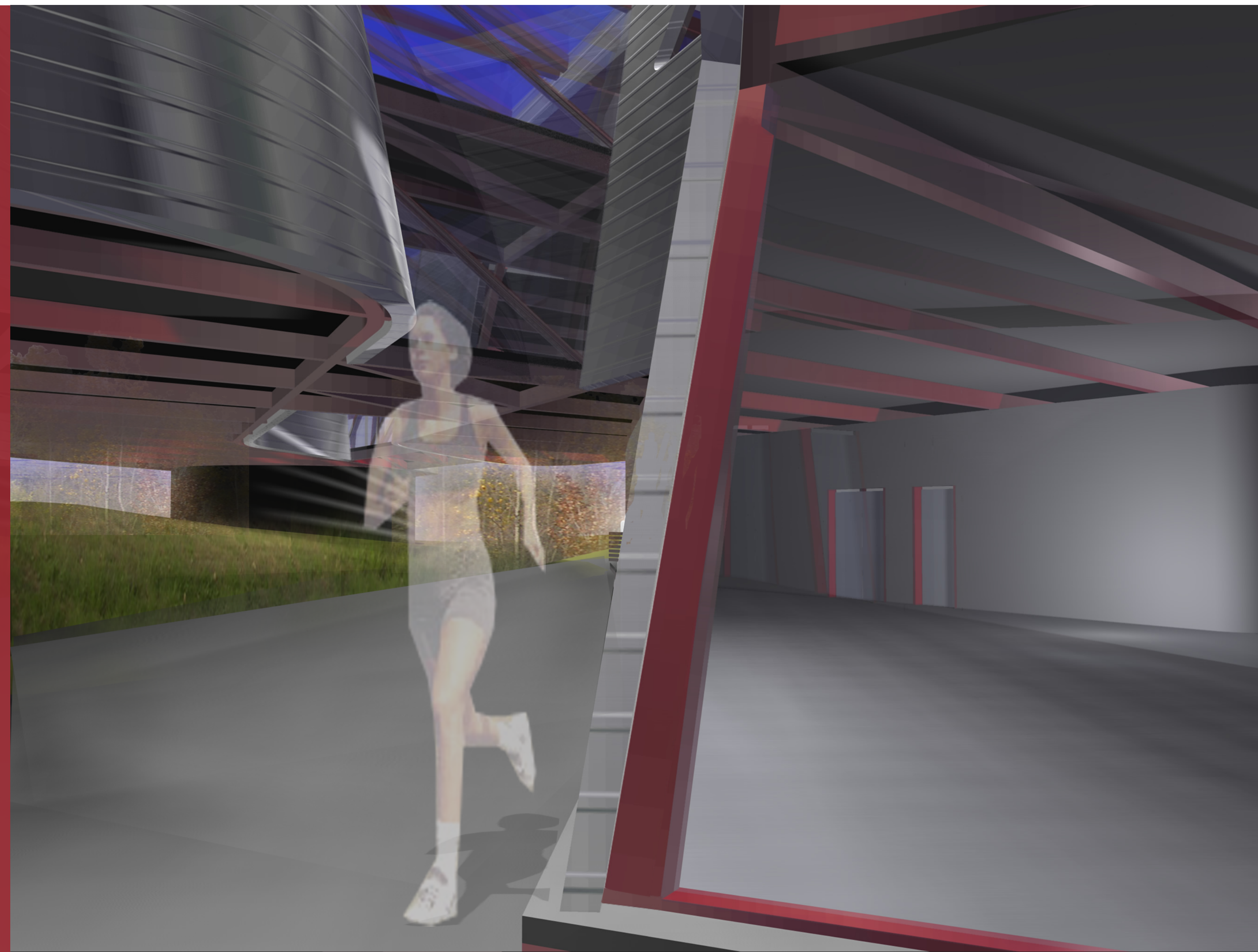
7

studio floor plans [1:20]

y

lobby

services

y

entry level

studio b

breakout

studio a

services

media lab

first floor

studio c

breakout

breakout

media lab

studio d

services

second floor

3

4

the buildings

The design of the site is meant to alter the perception of its users as they approach from different directions and at different times during the days and seasons. Each person experiences the space in their own unique way. The goal is to achieve a dynamic experience that brings the spaces to life

The auditorium building sits on the ground and acts as the connection point for both buildings. It's typology and physicality is directed toward community members. Pedestrian paths radiate out toward the river and pedestrian bridge. The existing condition of this area of the site is a depleted parking lot. The ground soil has been contaminated by its years housing a coal gasification facility, making the renovation of this site posible.

The studio building sits on top of the bluff and is defined by it's flowing forms and flying structure. The building is meant to frame the views looking into the site and across the river. By reducing the footprint to minimal connection points, most of the site and vegetation was left untouched. The slight curve in the building facade makes the building appear to be floating in air. It is connected to the ground by two large concrete cylinders which are the base for the structural system. By turning the building into two large and two adjunct box trusses, the structure becomes a counterweighted lever, allowing the building to soar over the bluff

the site

The master plan for the site is derived from the need for the community to retain the land as a park. Currentely the site is owned by the parks district but has been undeveloped due to lack of funds. As a collaboration project, the community will get its parks while being provided a look into the world of design, and a link to the future. The center of the site is a large open green area which will be used as a park which is a continuation of the parks district to the east. Meandering paths bring users into the center of the site allowing them to explore.
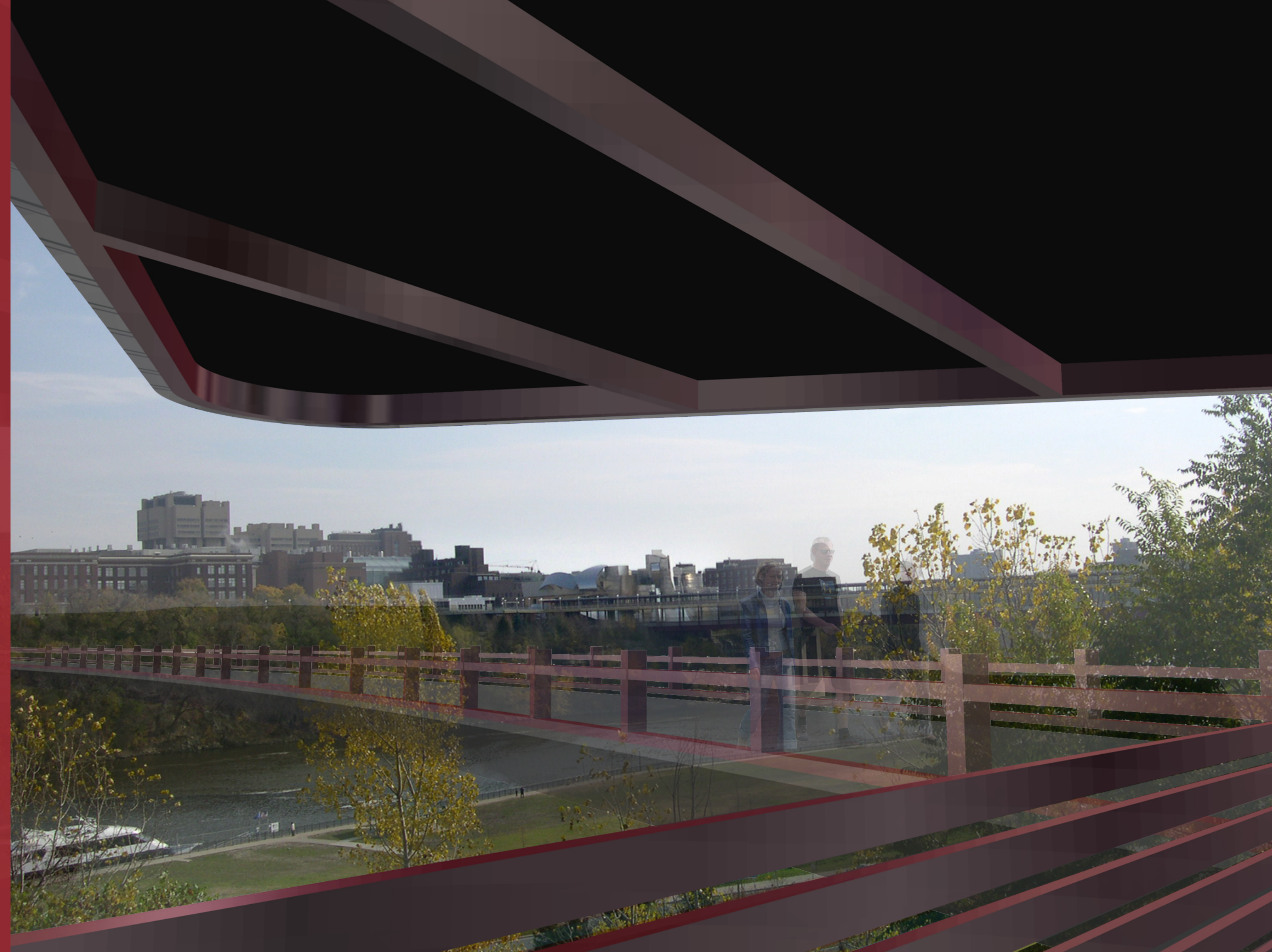
architecture in its purest state attempts to reduce structures to their simplest form. it attempts to create a spiritual place in which mass and void interact with their surroundings. it creates a place where the unnecessary objects are forgotten and one can appreciate the voids left by their absence.

architecture is created by two sets of rules. by defined quantitative knowledge, results and goals, and by emotion and desire. spaces comes from within the designer. from internal perceptions of what a space should convey. just as a physical space can illustrate an emotion, so too can an emotion illustrate a physical space. it is with knowledge of human emotions that a space becomes defined. but it is with only human emotion that a space comes to life.

from the materialistic point of view, all that can exist is mass and void. but it exists only through the realization of its existence. does a spirit not exist? or is it just the body of the human creating and manipulating space that exists? how than can an architecture relay an essence or feeling if feeling and spirit do not exist? our perceptions become a connection between the built and subjective world. what's forgotten however is the difference between the existence of a material object and that of a soul or spirit. one might make the claim that the only way something can exist is if it has the ability to experience emotions. the ability to feel pain, to hurt, to cry or laugh. a building cannot feel pain. it cannot be hurt by another person. its emotion cannot change. it's steady. the building relays a feeling. but it cannot change a person. it can not solve social or psychological problems. it can only hope to inspire and spark emotion. to reflect emotion. the site's emotion is defined by its users. the building and site are a 'gateway.' our actions must consider how one is perceived or meant to feel within these spaces. the environment must be positively charged, so that it becomes the reflection of emotion. it must interact, rather than react. it must burn. it must leave its users with a perception of spirituality, and connection to the world of existence.

studio interior

auditorium pre-function

[action]

[existence]
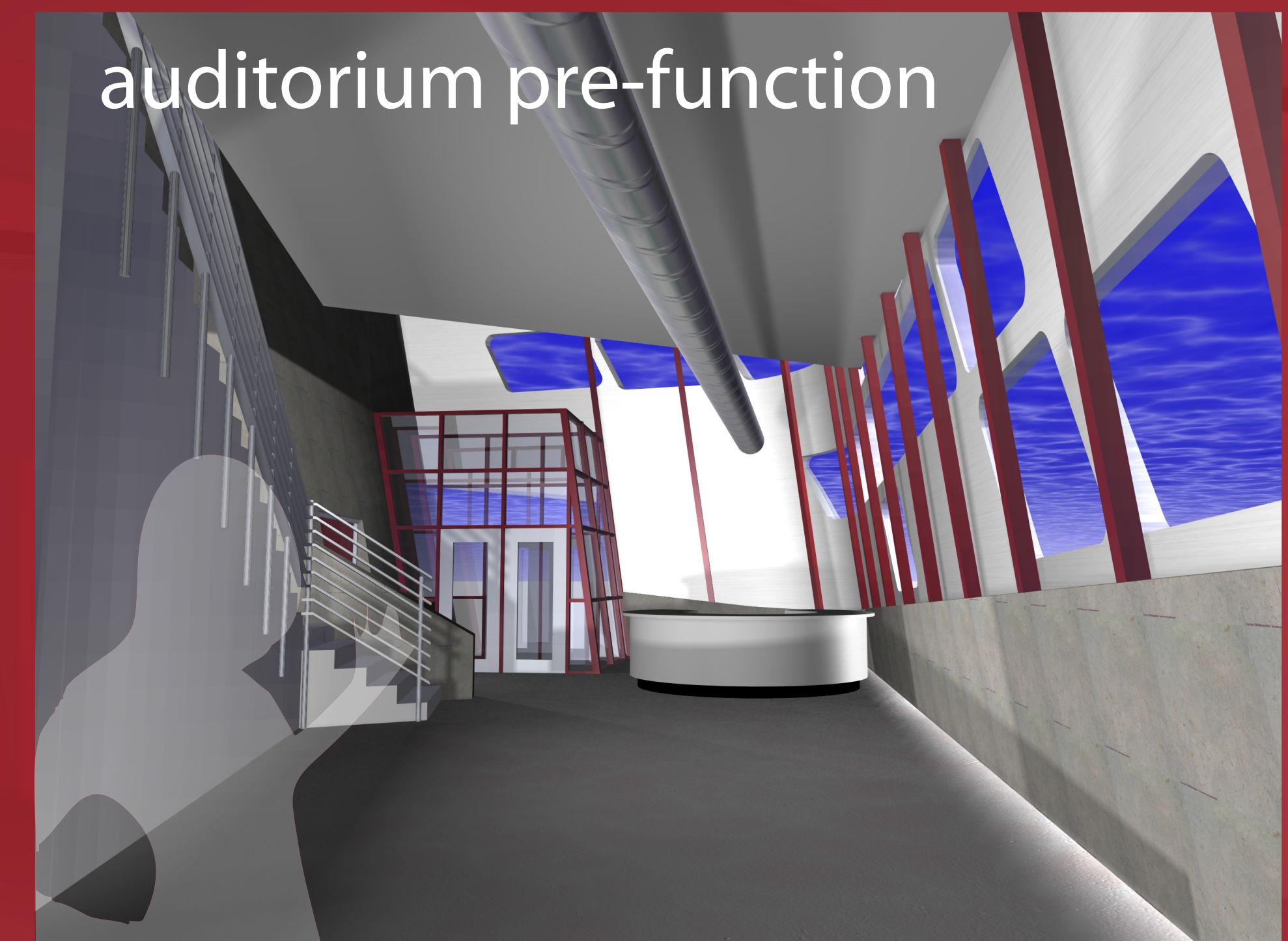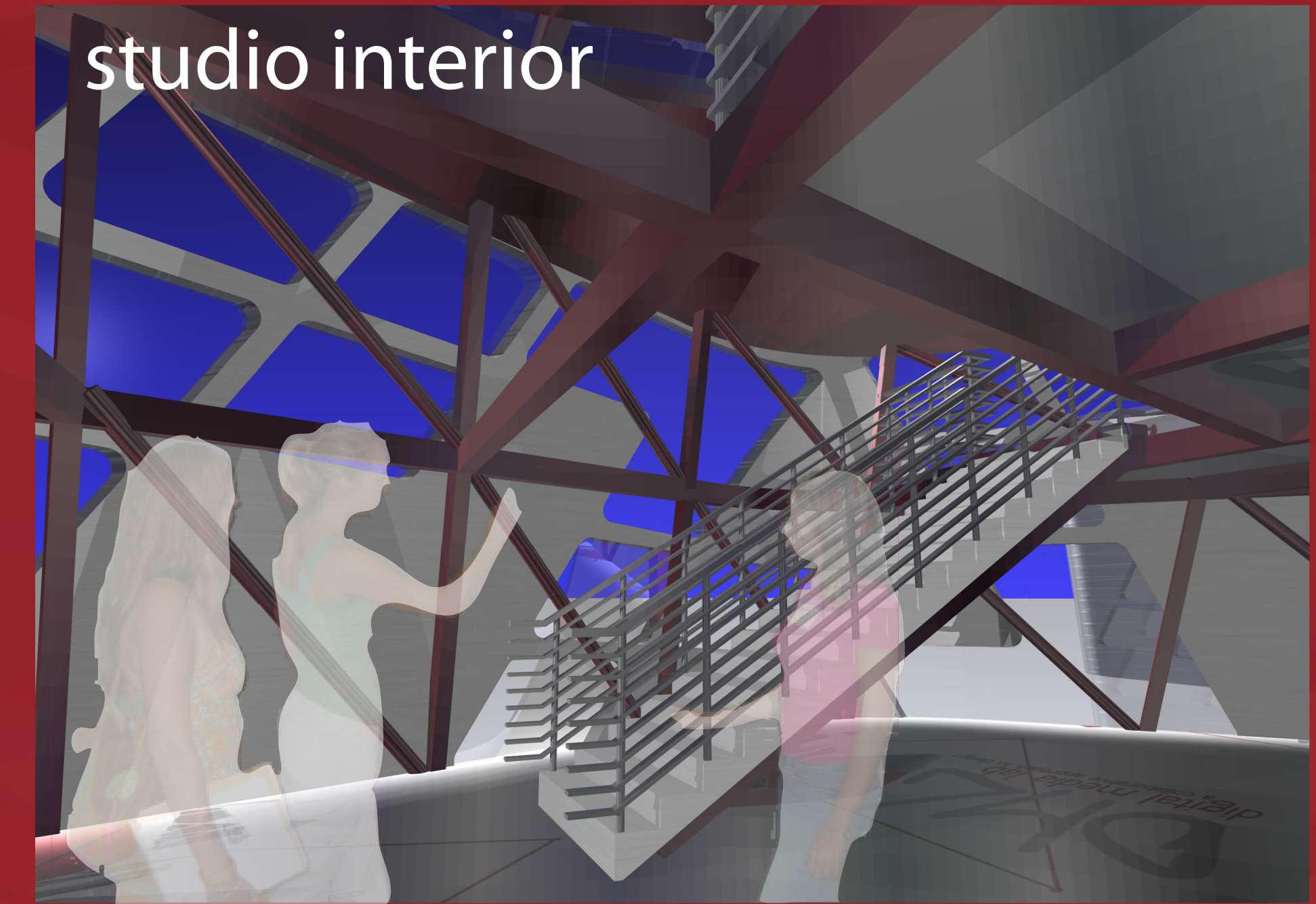
[perception]

DML
digital media lab
a collaborative approach to design
on Gasworks Bluff Minneapolis, Minnesota
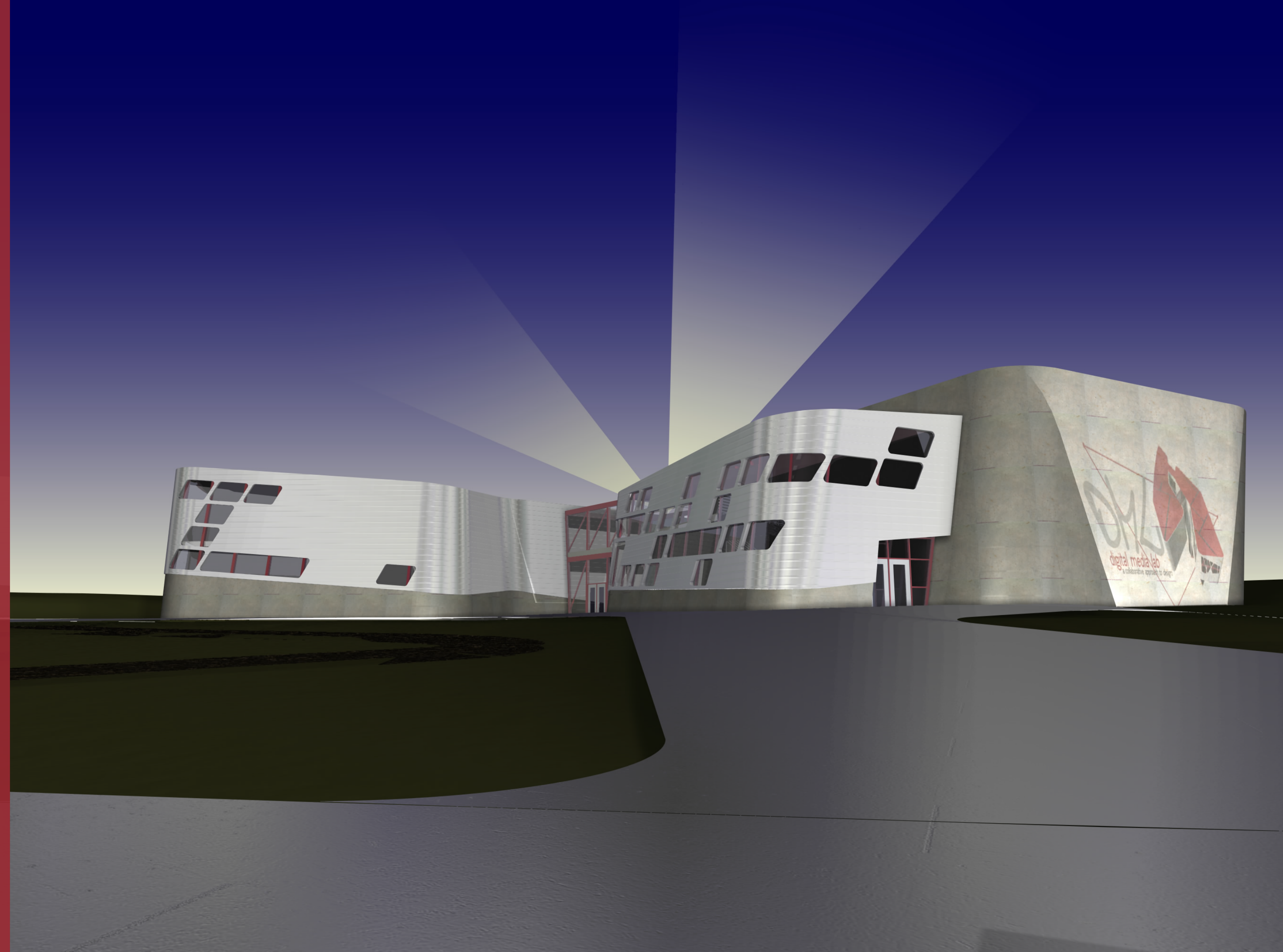
an undergraduate design thesis by Derek Kohlhase

5

6
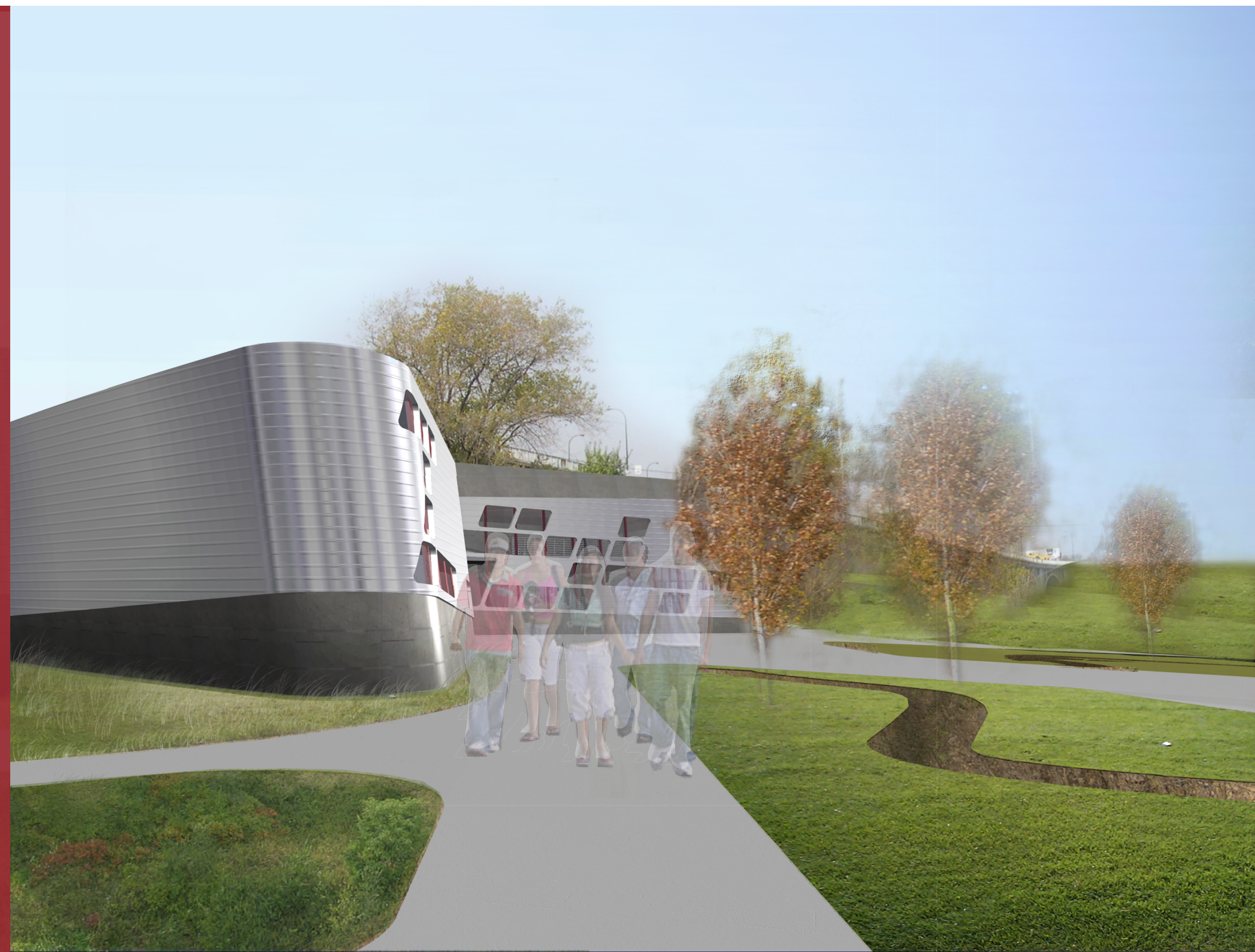
auditorium floor plans [1:20]

x

auditorium

prefunction

lobby

services

workshop/lab

x

first floor

section xx [3/32" = 1']

gallery

auditorium

master plan [1/64″ = 1′]

north
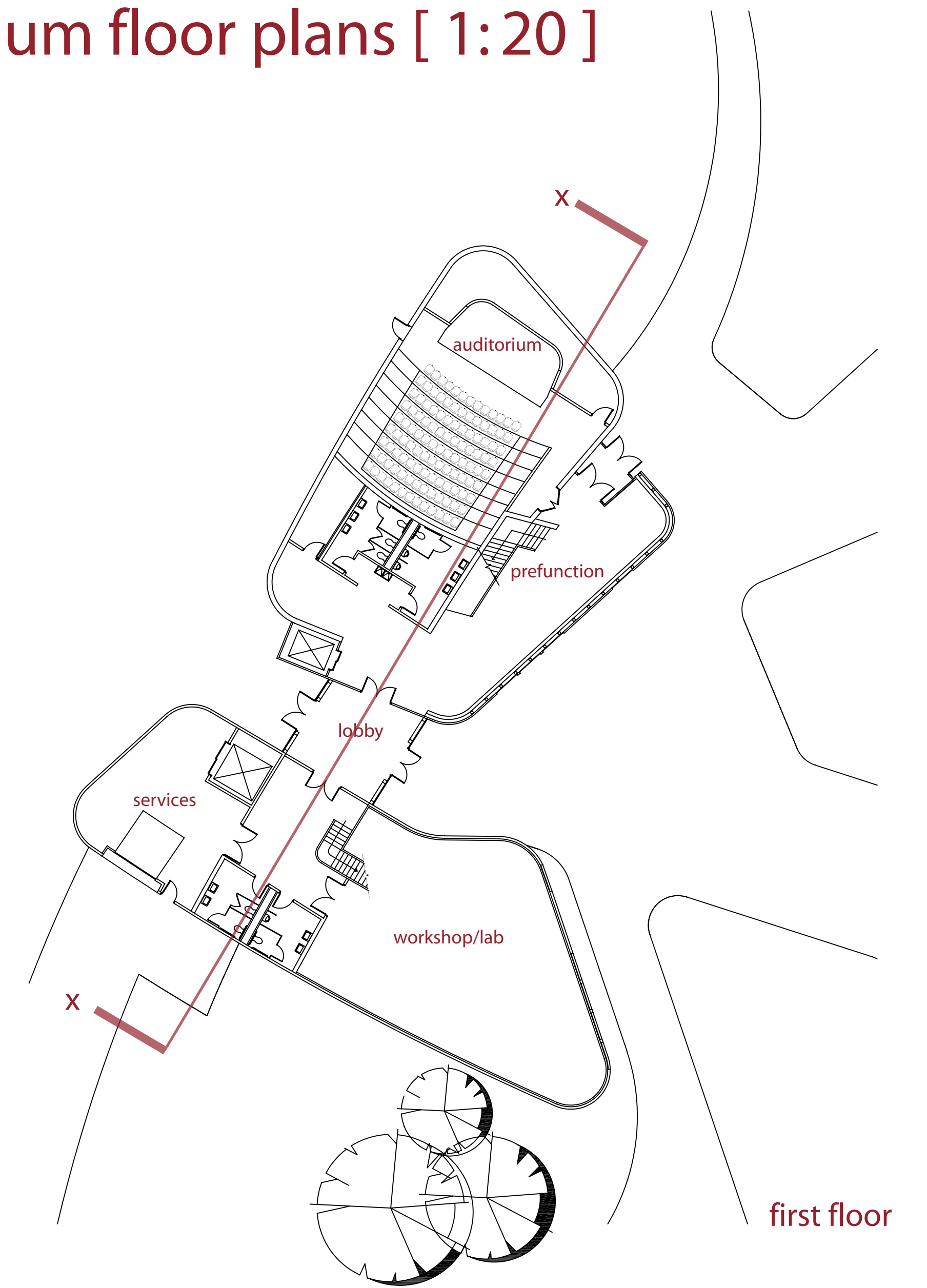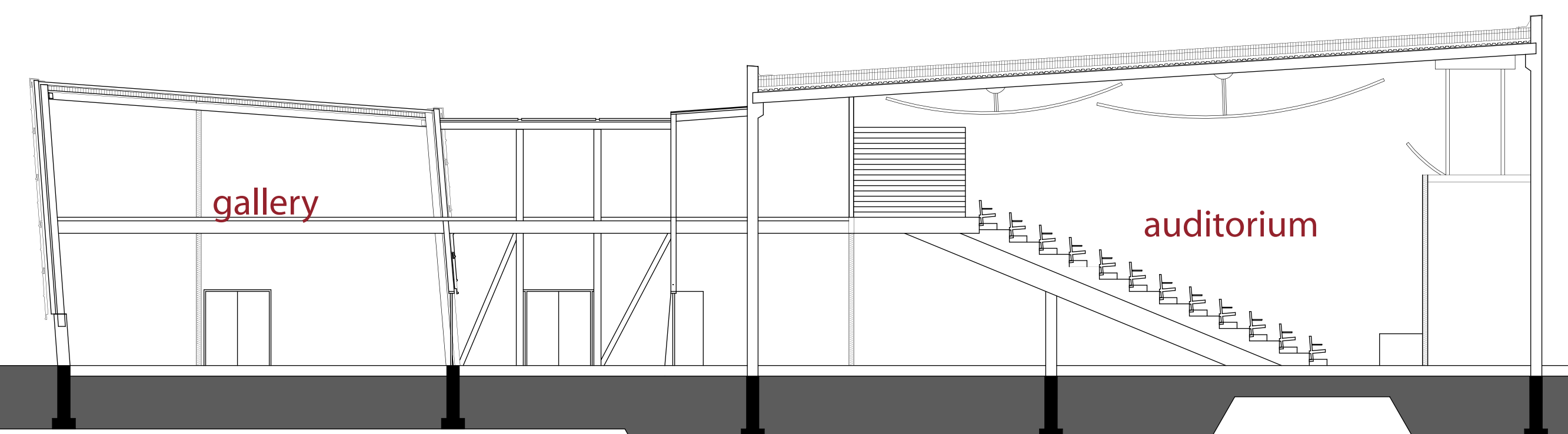
university of minnesota
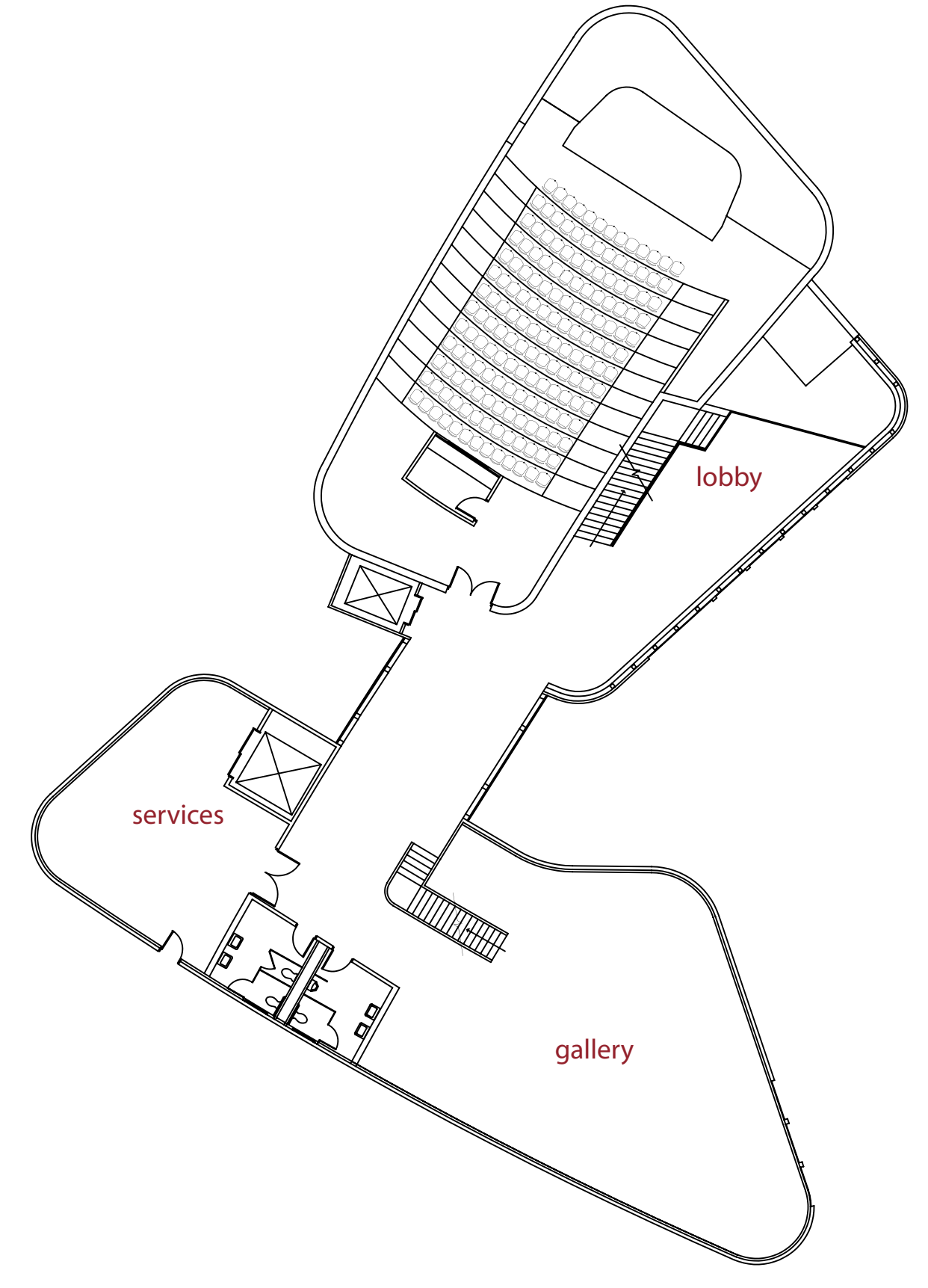
downtown minneapolis

riverside parks

1

2

3

4

5

6

7

second floor

lobby

services

gallery

section yy [3/32″ = 1′]

media lab

studios

services

lobby