

SOCIAL ADAPTATION

CHANGING THE BUILT ENVIRONMENT



Overview

Introduction

Technology and
Social Media

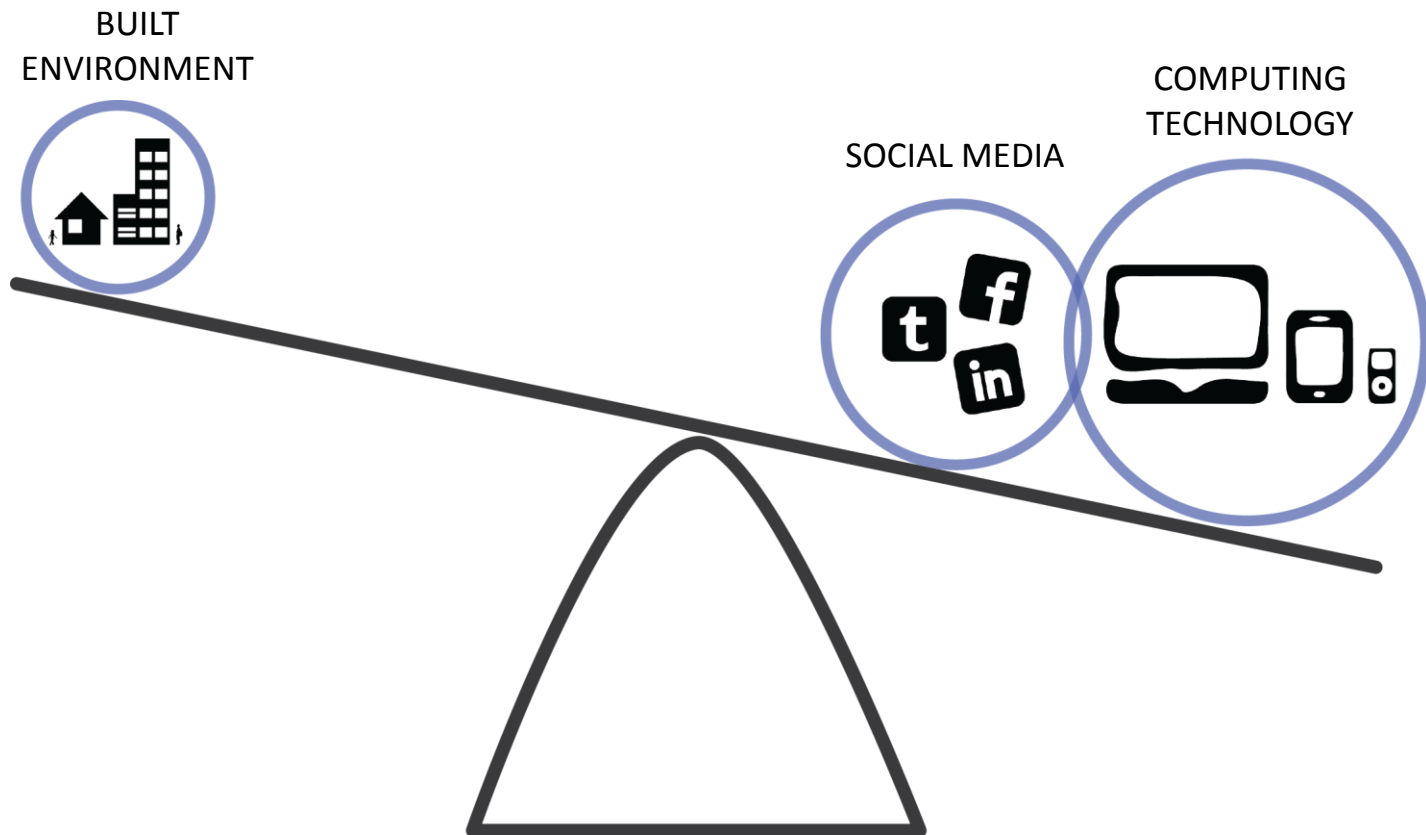
Site and
Influences

Design
Exploration

Q & A

Technologies significantly affect human ability to control and **adapt** to their natural environments.

Social media is a means of interaction among **people** in which they **create, shape, and exchange information and ideas** in virtual communities and networks.

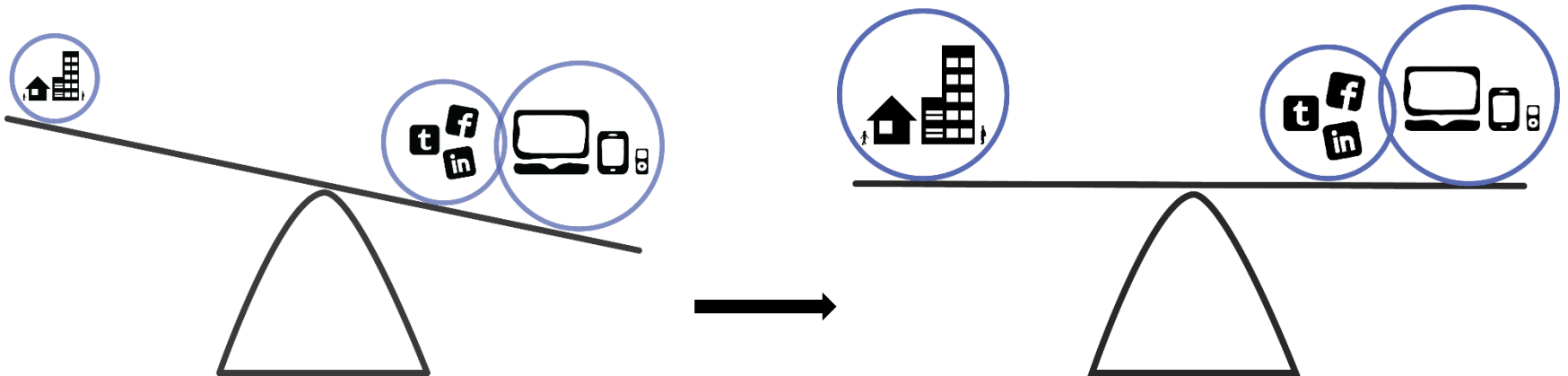


The 2014 Budget...

Provides **\$300 million** for research and development on innovative building efficiency technologies and the ongoing introduction and enforcement of appliance efficiency standards that save consumers and companies money while improving performance.

Proposes **\$4.0 billion** for the multiagency Networking and Information Technology Research and Development

Proposes **\$754 million** for National Institute of Standards and Technology which promote U.S. innovation and industrial competitiveness by advancing measurement science, standards, and technology





PROBLEM STATEMENT

How have computing technology and social media changed the way we envision the built environment?

THEORETICAL PREMISE

Because our culture is exploding with technological advancement and social media is so widely prevalent, the character of design needs to reflect the character of today's society.

JUSTIFICATION

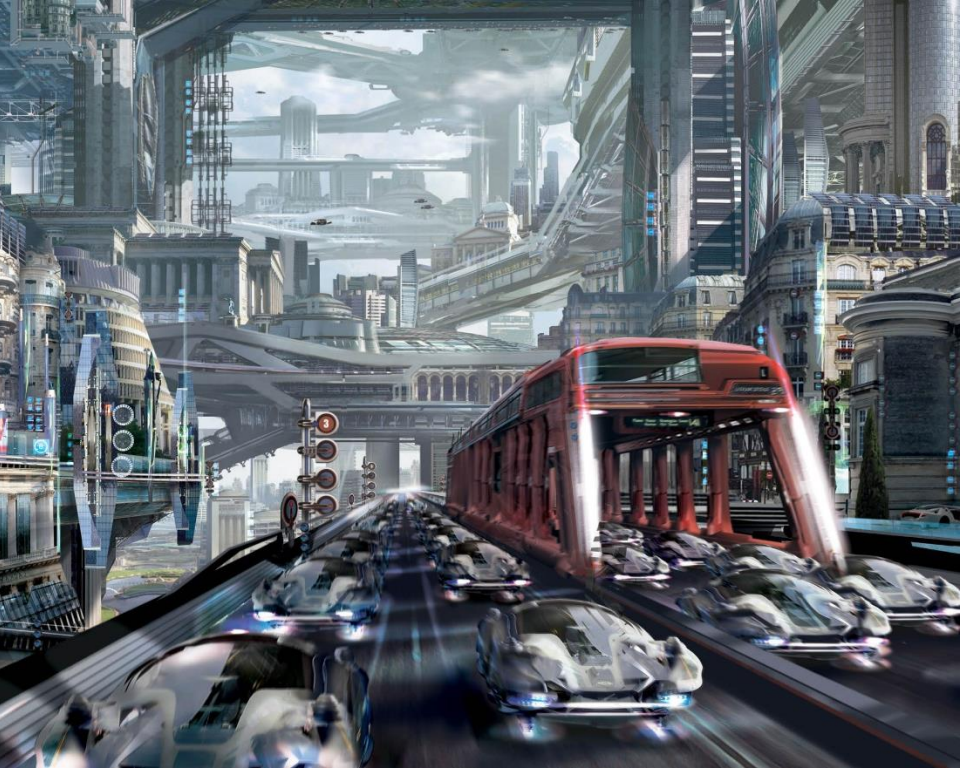
As society embraces the changes in computing technology and the access to social media, it must also allow a change of character in the built environment. Technological advancement provides a deeper consideration of—what can be? Or what needs to be? Likewise, with the overwhelming access to social media at our fingertips, we must strive to use this resource as a learning tool rather than a social crutch.

TYOLOGY

Mediatheque in Grand Forks, ND

Mediatheque (media-tek)

A contemporary, fluid space of modern technology designed for users to learn, educate, and showcase their knowledge



...as society embraces the changes in computing technology and the access to social media, it must also allow a change of character in the built environment.

...the character of design needs to reflect the character of today's society.





However...

Times are changing, and we live in a digital world that is complex and fast-paced.

Whether we like it or not...

Computing technology and social media are elements in our society that continue to persuade and inform our daily life decisions.



...what about the negative effects?



obesity

dangerous

unhealthy



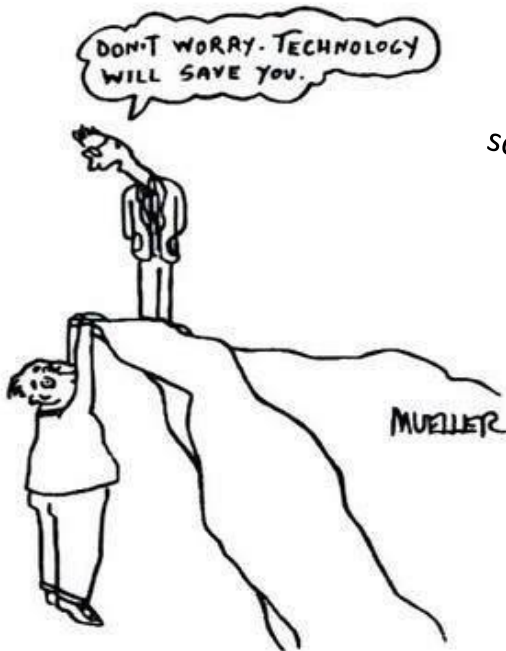
cyber strangers

isolation

I AM TRYING TO
ADD MORE FRIENDS

expensive

...what about the negative effects?



scapegoat

unreliable

annoying



TO COMPLAIN ABOUT THE USER-UNFRIENDLY
NATURE OF THIS SELF SERVICE MENU, PLEASE
USE THE PHONE KEYS TO DESCRIBE YOUR
CONCERN IN ESSAY FORM.

fear of change

addictive

...they don't outweigh the positive!



user-friendly blogs learn education new
technical university managed research
apps market research consulting
interested software engineering
phone system timely love
living tech management data library
editor photography travel customer
detailed science development culture
ideas accommodating inventive
storage professional

...they don't outweigh the positive!

instant knowledge access expert news
information media strategist
ease energy gadgets international
production connectivity entertainment sports
social analyst meeting products
mobile support innovation
industry architecture universal available
business service entrepreneur follow worldly
web marketplace
marketing medicine services process design
database creative process
stay in touch communication people

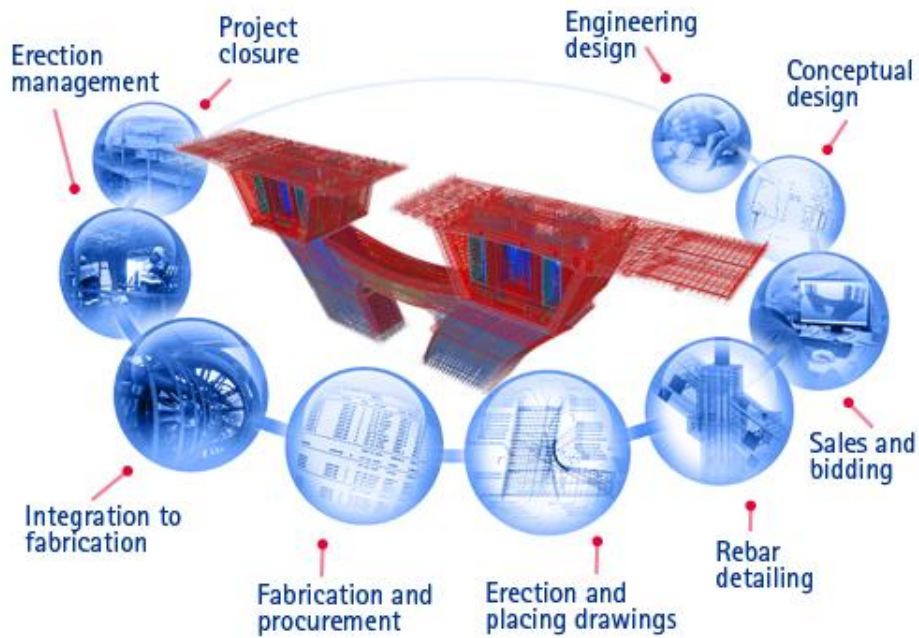




WE MUST NOT BE AFRAID OF CHANGE;



BUT RATHER EMBRACE IT AND KEEP
MOVING FORWARD



The technological shift in today's culture has proven to change the way people live and the way businesses operate.

In this new digital age, there should be a way that architecture can reflect this trend yet be able to adapt to its constant change and development.

Employ smart technologies, sustainable solutions, lasting materials, prefabricated elements and spaces that provide social interaction

People are influenced and intrigued by technology, and the built environment offers an empty canvas to showcase this curiosity



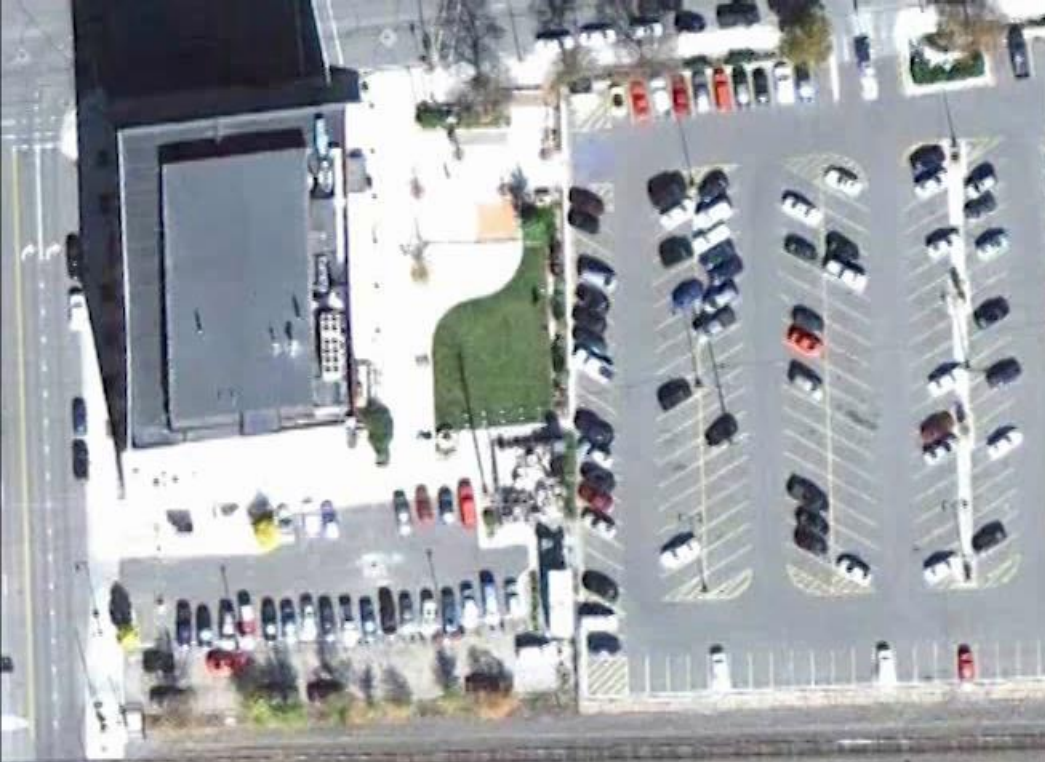
THE FUTURE IS ~~TECHNOLOGY~~
~~PEOPLE~~ PEOPLE MAKING WISE
DECISIONS ABOUT
TECHNOLOGY.

Grand Forks, North Dakota is growing quickly, and the built environment needs to support this growth by providing modern needs.

Grand Forks needs such a facility to help it stay current, interconnected and competitive in today's society.

A Mediatheque will be a place where cultures alike come together to be educated, and where built design can be examined and displayed for the community and its visitors.

A Mediatheque will help the emerging community provide culture, a place to be, and a downtown destination and hub to further boost the liveliness of the area.

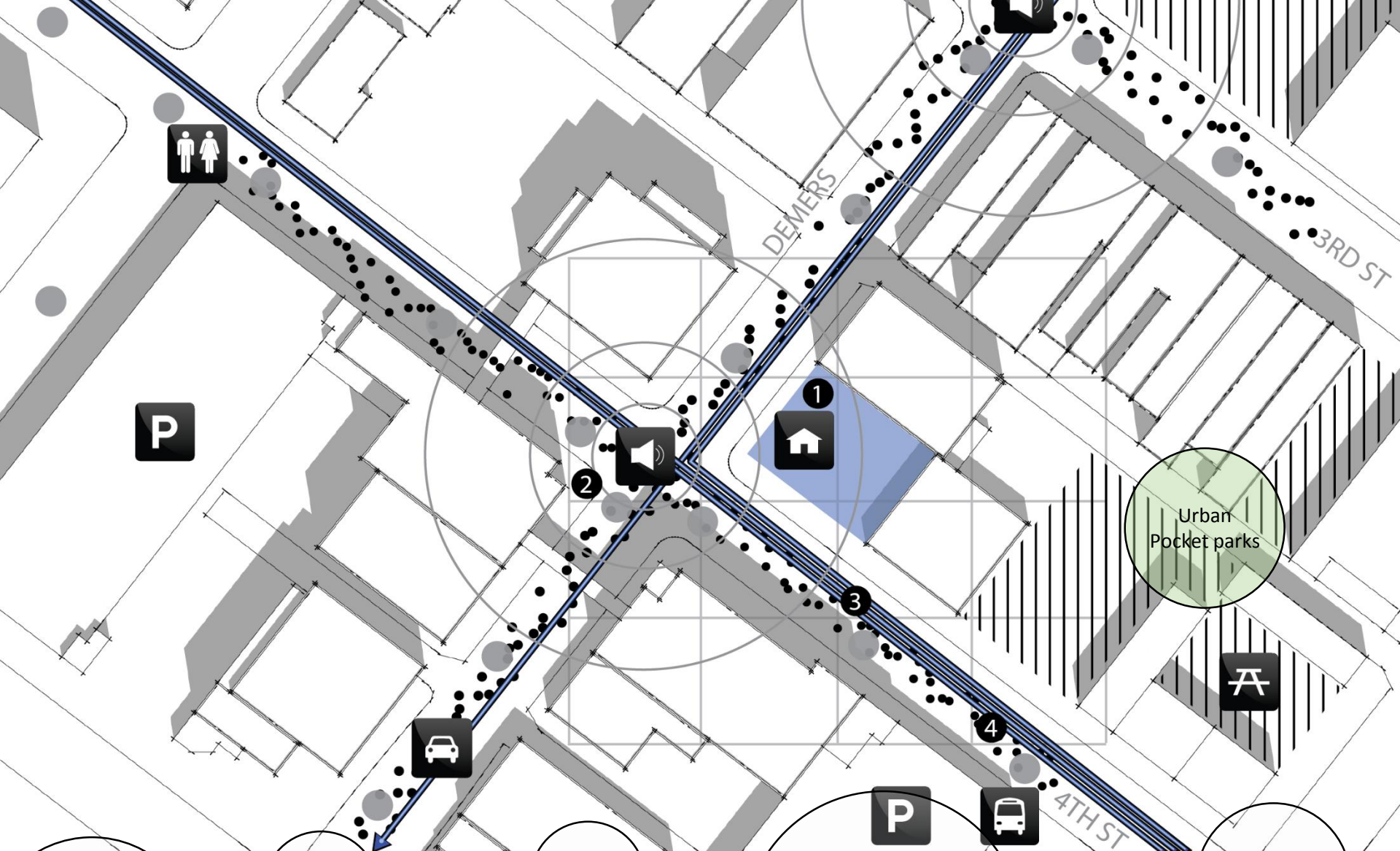


EAST GRAND FORKS

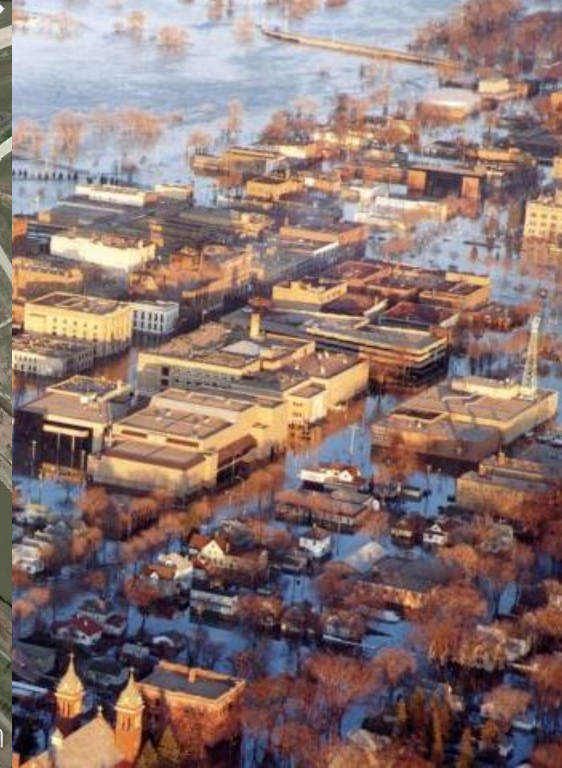
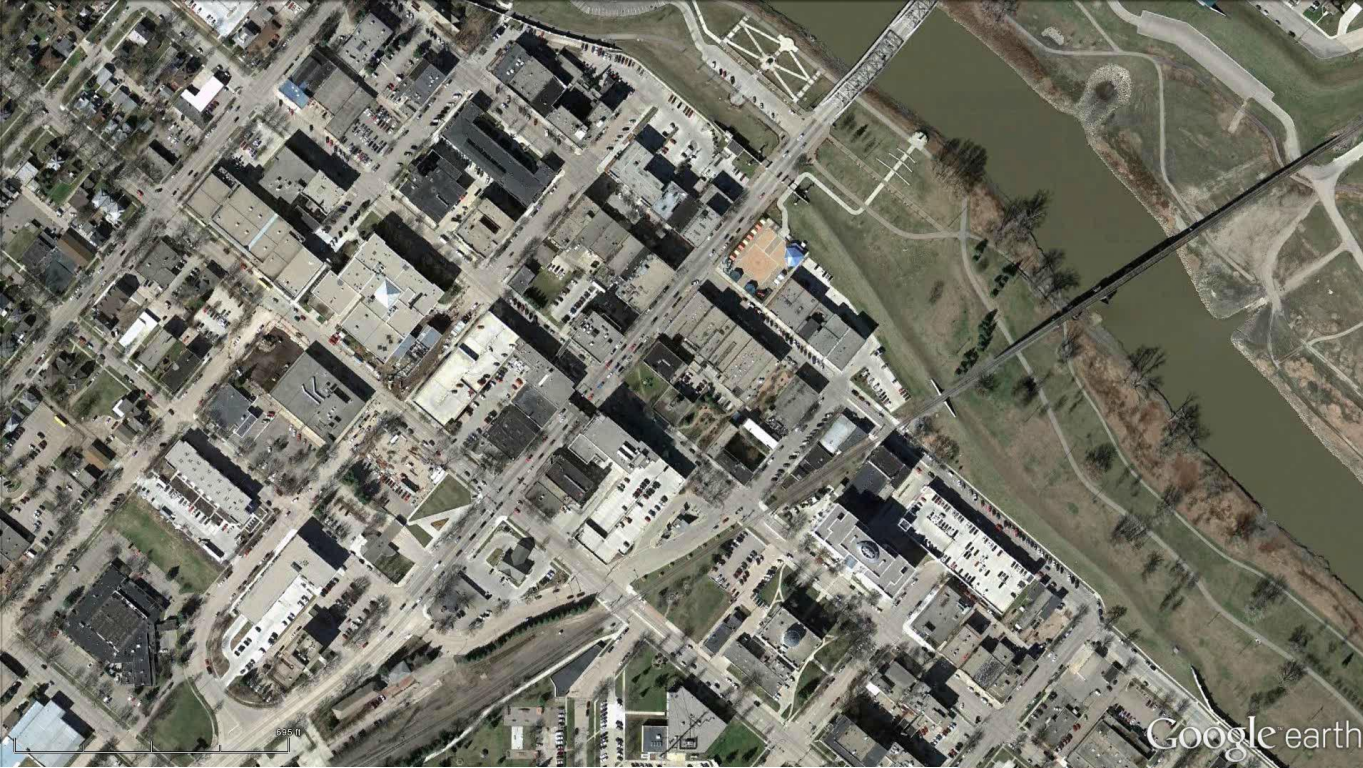


SITE

GRAND FORKS







Suburbanization.

Decentralization of the city causes a shift in how the downtown is visualized and occupied.

A surge of one-story strip malls and superstores become the cities economic and social center.

The cities downtown center is ignored and left unmaintained.



Post Flood.

The flood did offer the city an opportunity to **plan, rebuild and energize** its economy.

Major urban planning and construction resulted in:

985 single-family dwellings

594 townhouses

1,328 multi-family units

213 commercial structures

56 public buildings

Revitalization.

Since the flood, the downtown in Grand Forks has been **revitalized** by redevelopment, investment, and a renewed interest in living and working.

Downtown Design Review Board created to establish a plan of redevelopment and **infill** to the downtown area.

Re-imagined downtown will result in new multi-family units, restoration of historic buildings, upgraded infrastructure, streetscape enhancements, unique public art spaces and mini pocket-parks.

URBAN
POCKET-PARK
CONNECTIONS

Continue to Revitalize.

CONNECT

People to Site



People to People



People to Ideas



EDUCATE

Individuals



Culture

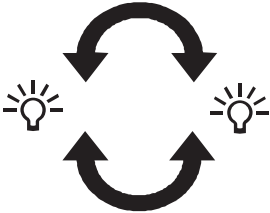


Built Environment



EXCHANGE

Ideas and Information

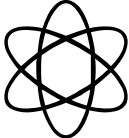


ADAPT

To digital culture

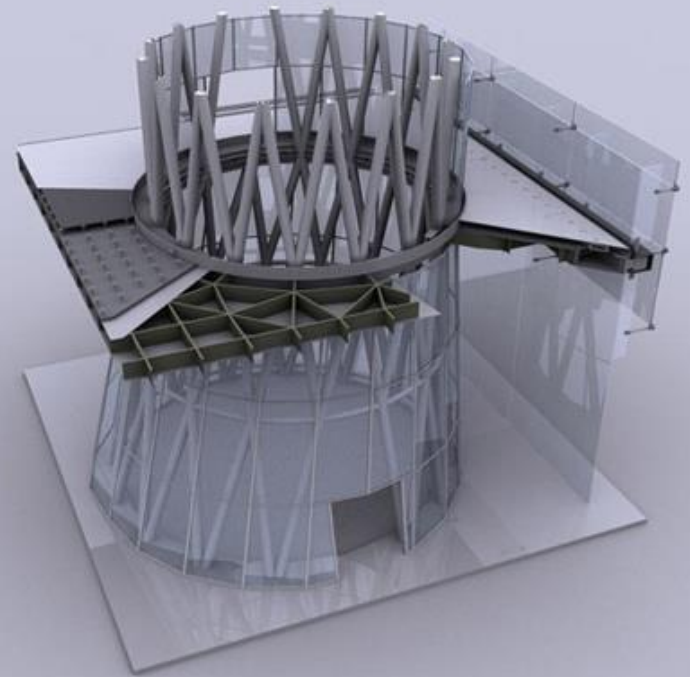


To function use



To current environment





The Mediatheque is a genuine building in terms of **transparency**; strong in-out correlation enables a well-defined description before getting in the building.

Vertical tubes are structure and also act as circulation that allow users to **interact** with the building.

Extremely fluid space with full views of the city and an abundance of natural light.

Sendai Mediatheque

Toyo, Ito
Sendai, Japan





Vibrant atmosphere around the atrium creates a **social interaction network**.

The design is centered around the users.

Space is so open that you can really see and **interact** with other people.

But at the same time there is a feeling of intimacy in the small corridors.

IT University

Henning Larsen Architects
Copenhagen, Denmark





Natural light.

Core circulation and atrium is designed to **guide** the user but also have the luxury to **socialize**.

Core twists from floor to ceiling **connecting** the galleries like a piece of artwork.

Tel Aviv Museum of Art – Amir Building

Preston Scott Cohen, Inc.

Tel Aviv, Israel



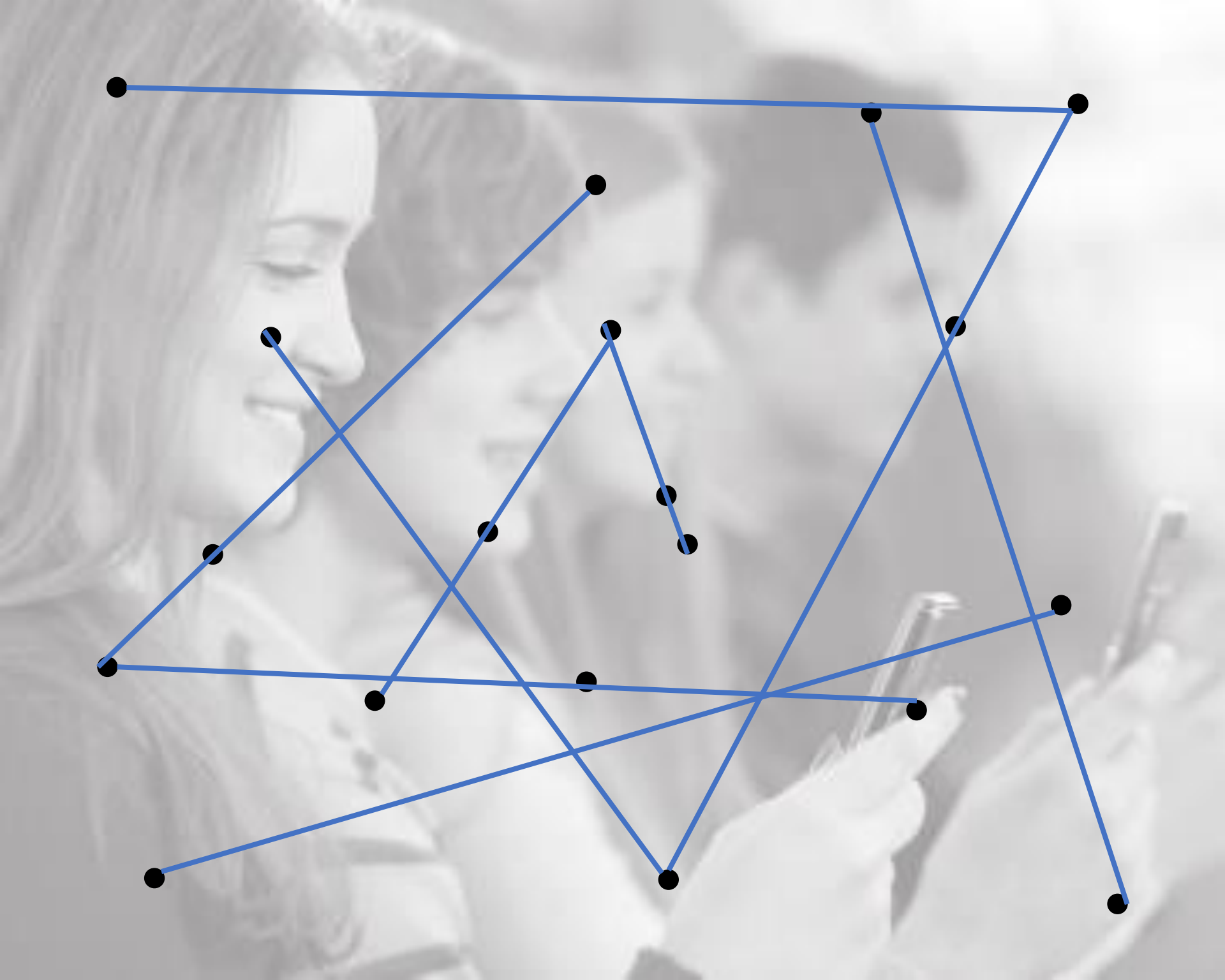
Thesis goals.

To create a **sense of place** in an urban environment that is continuing to rebuild and regain its historical entity.

To explore how today's built environment can be shifted towards a more **social** and **technological** realm.

To provide a place for people to **educate** and instill the notion of technology in the built environment.

To design a structure that has the ability to **adapt** to a myriad of functions it will hold.



Major Program Elements

INTERACTIVE GALLERY

A compilation of digital media for public hands-on interaction

FLEXIBLE BREAKOUTS

Adaptable spaces for public and private use

CLASSROOMS

MULTI-MEDIA STUDIOS

RETAIL

Technological products and miscellaneous souvenirs

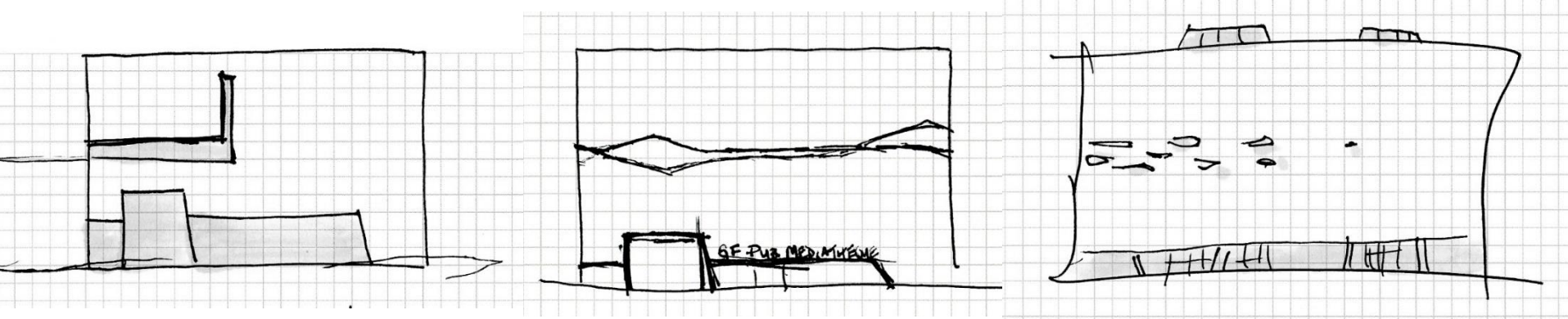
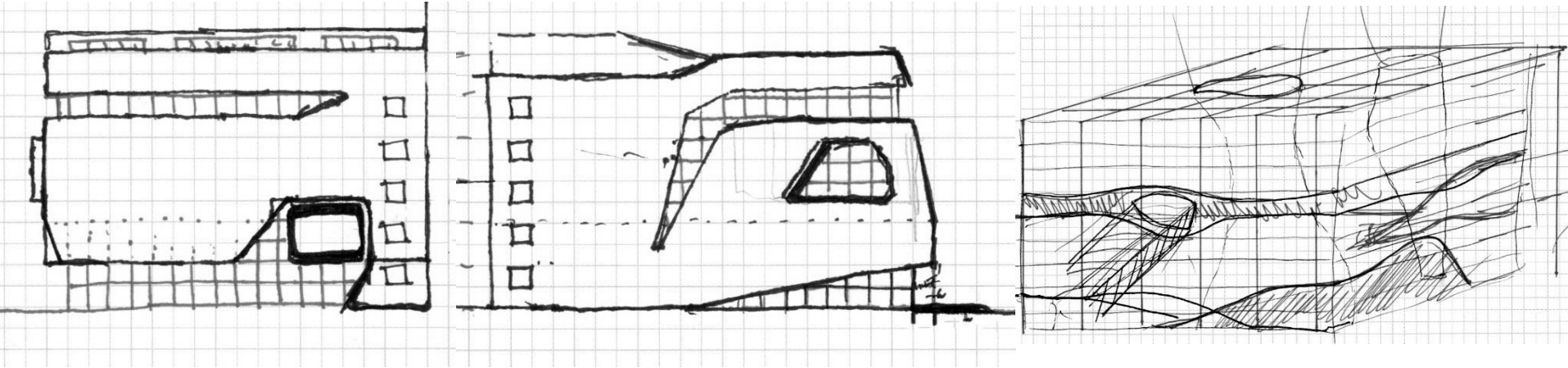
CAFE

CORE STRUCTURE

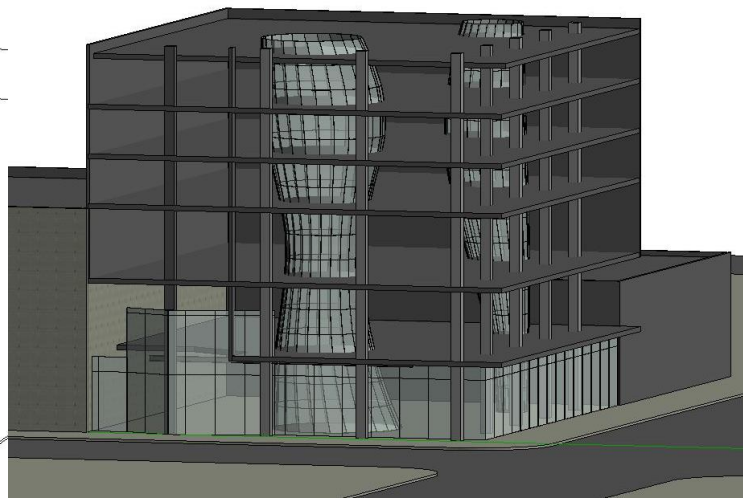
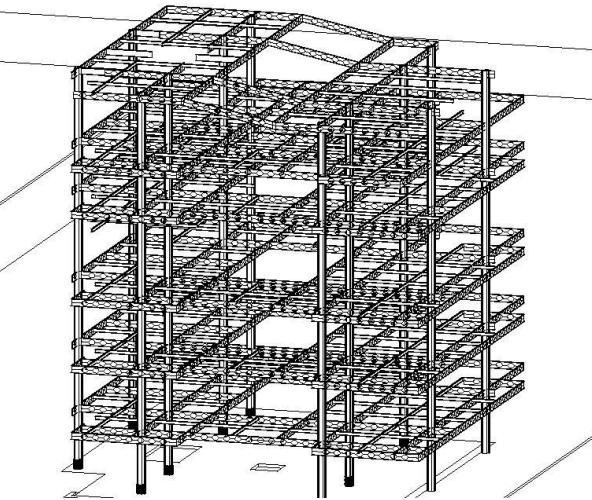
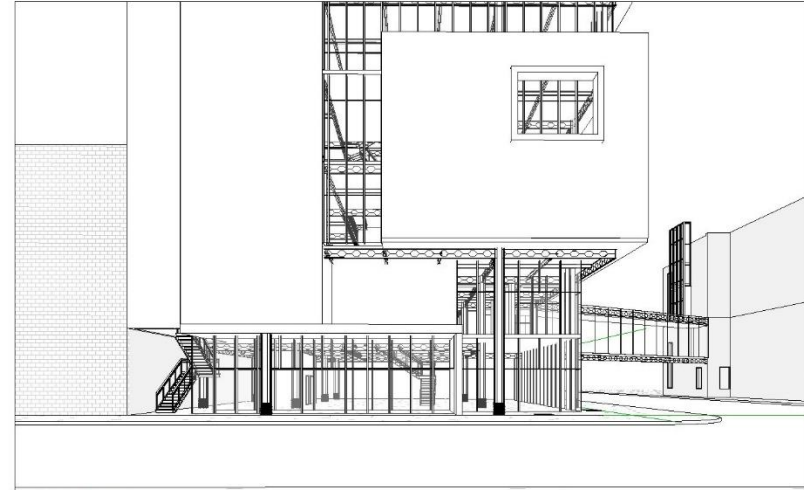
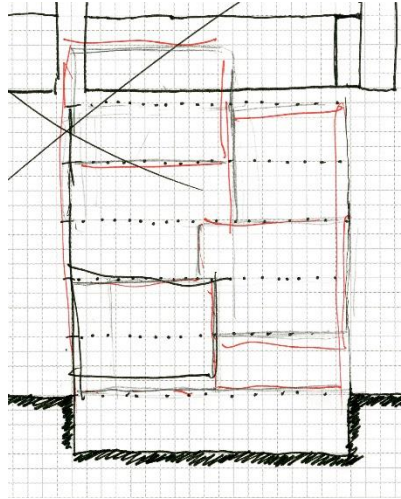
Physical and visual circulation connection

SKYWAY

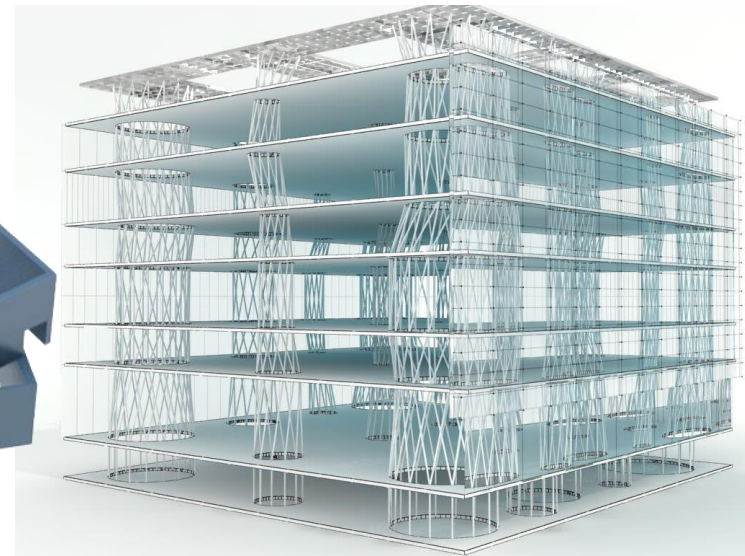
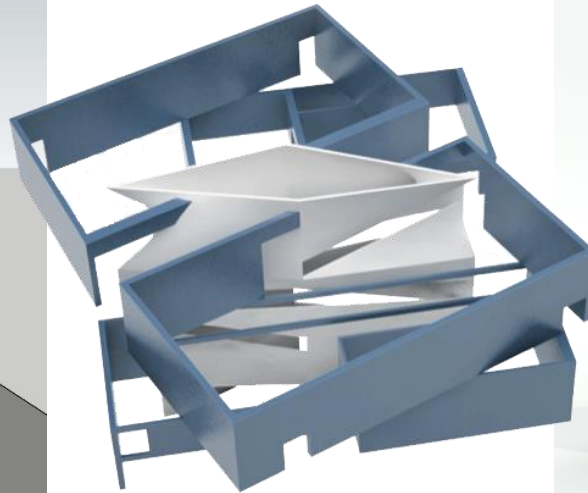
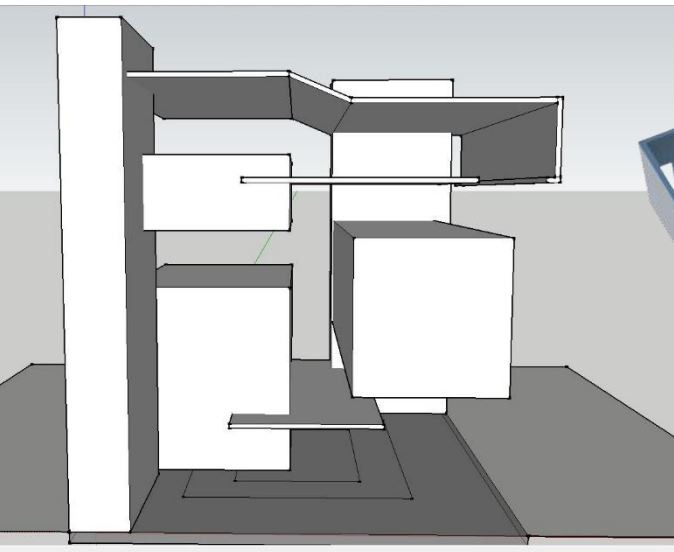
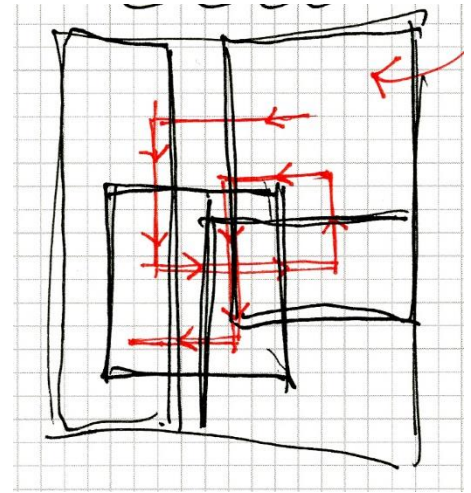
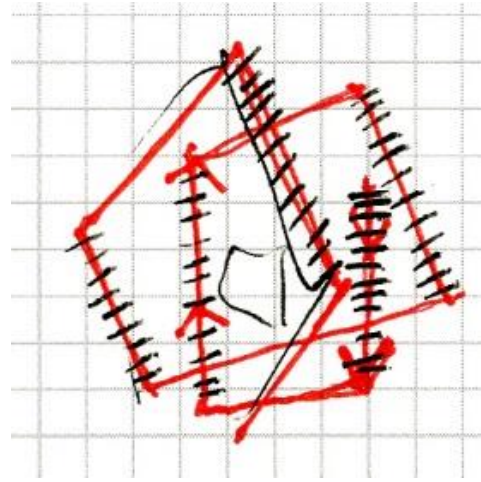
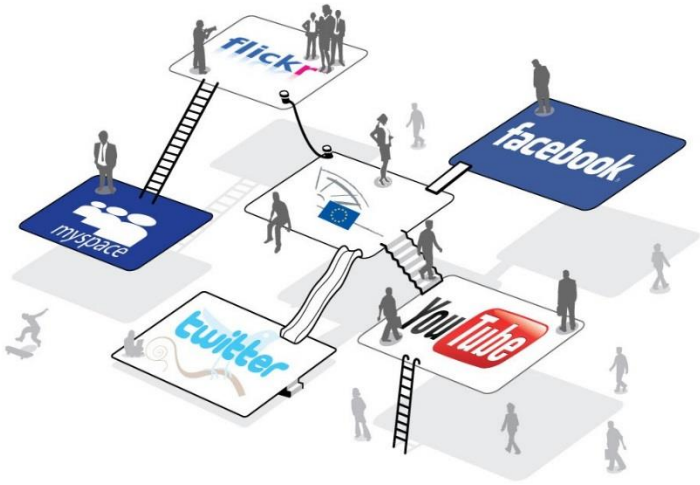
Sketches and Influences.



Sketches and Influences.



Sketches and Influences.



DEMERS AVE ELEVATION



4TH STREET ELEVATION



EXHAUST
STACKED VENTILATION RELEASED OUT ROOF THROUGH ALUMINUM LOUVERED PANELS

SKYLIGHT
LARGE NATURAL LIGHT WASHES IN AND BOUNCES THROUGH ATRIUM UNTIL REACHING ENTRY LEVEL

PAN JOIST FLOOR SYSTEM
CONCRETE ONE-WAY SYSTEM WITH CUSTOM FORMS CORRELATING WITH DIRTT WALL SYSTEM

DIRTT ENVIRONMENTAL SOLUTIONS © WALL SYSTEM
PREFABRICATED TECHNOLOGY WITH COMFORT AND FUNCTION OF THE 21ST CENTURY ABLE TO ADAPT TO ANY CLIENT'S NEEDS

EXTERIOR GLAZING
FLOOR -TO-CEILING PANES OF PILKINGTON SOLAR-E™ PLUS BACKED BY ASHLER SPIDER CONNECTIONS

SUN SHADE PARTITIONS
ORIENTED ON SOUTHWEST FAÇADE, PARTITIONS RUN ALONG A TRACK AND ARE COMPLETELY USER-OPERATED FOR PERSONAL COMFORT

SKYWAY TO PARKING GARAGE
CUSTOM SITE-CASTED CONCRETE STRUCTURE WITH FLOOR-TO-CEILING GLAZING

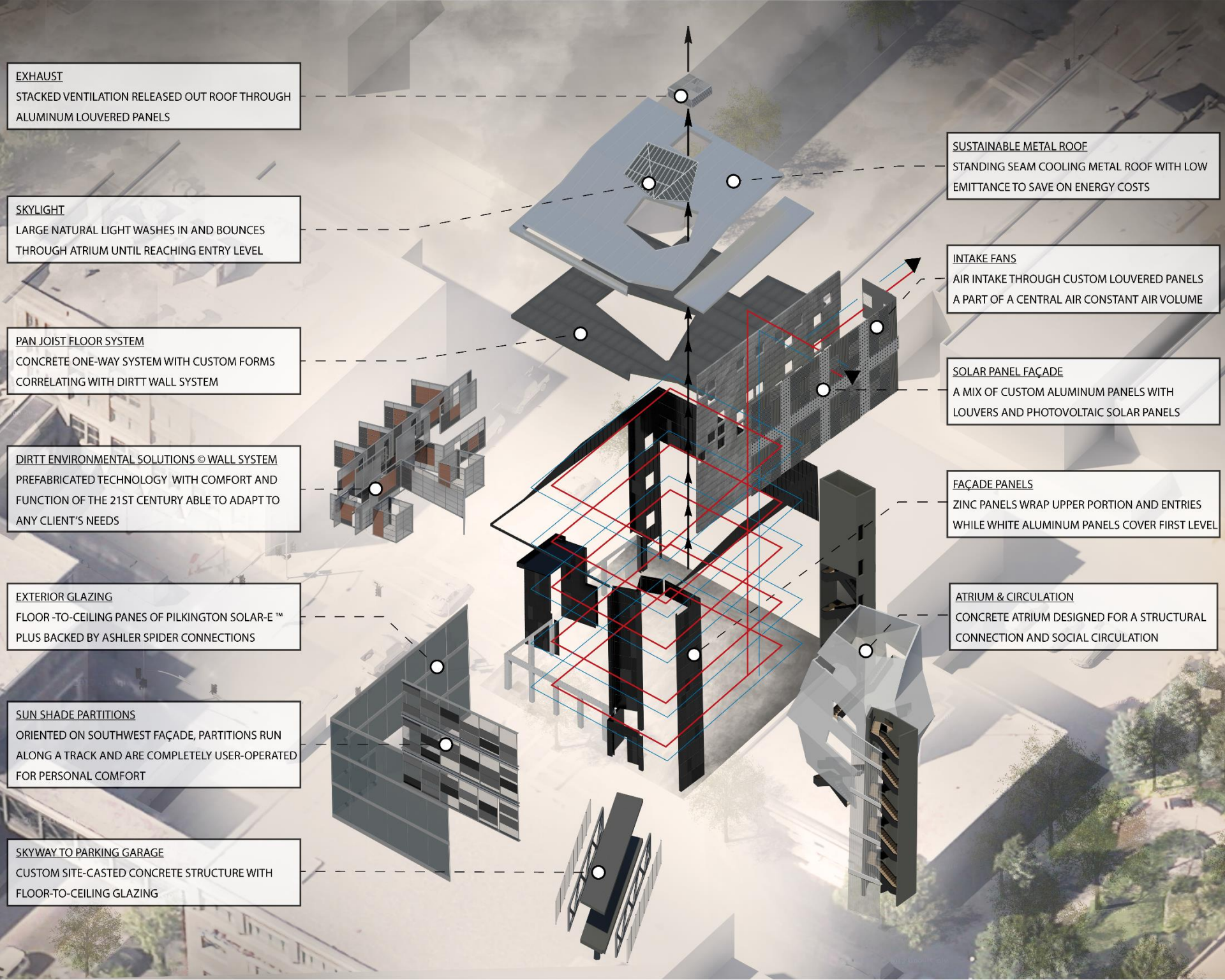
SUSTAINABLE METAL ROOF
STANDING SEAM COOLING METAL ROOF WITH LOW EMITTANCE TO SAVE ON ENERGY COSTS

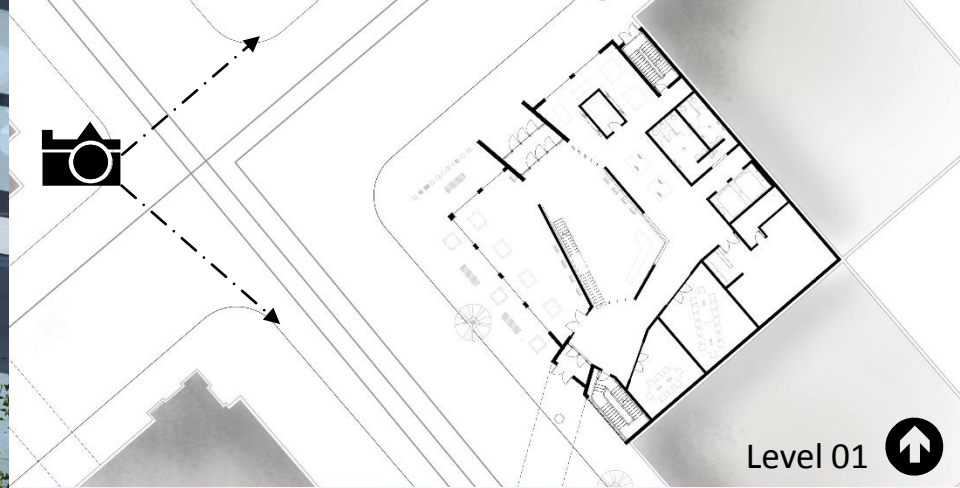
INTAKE FANS
AIR INTAKE THROUGH CUSTOM LOUVERED PANELS A PART OF A CENTRAL AIR CONSTANT AIR VOLUME


SOLAR PANEL FAÇADE
A MIX OF CUSTOM ALUMINUM PANELS WITH LOUVERS AND PHOTOVOLTAIC SOLAR PANELS

FAÇADE PANELS
ZINC PANELS WRAP UPPER PORTION AND ENTRIES WHILE WHITE ALUMINUM PANELS COVER FIRST LEVEL

ATRIUM & CIRCULATION
CONCRETE ATRIUM DESIGNED FOR A STRUCTURAL CONNECTION AND SOCIAL CIRCULATION





Level 01 



NORTHEAST ENTRY



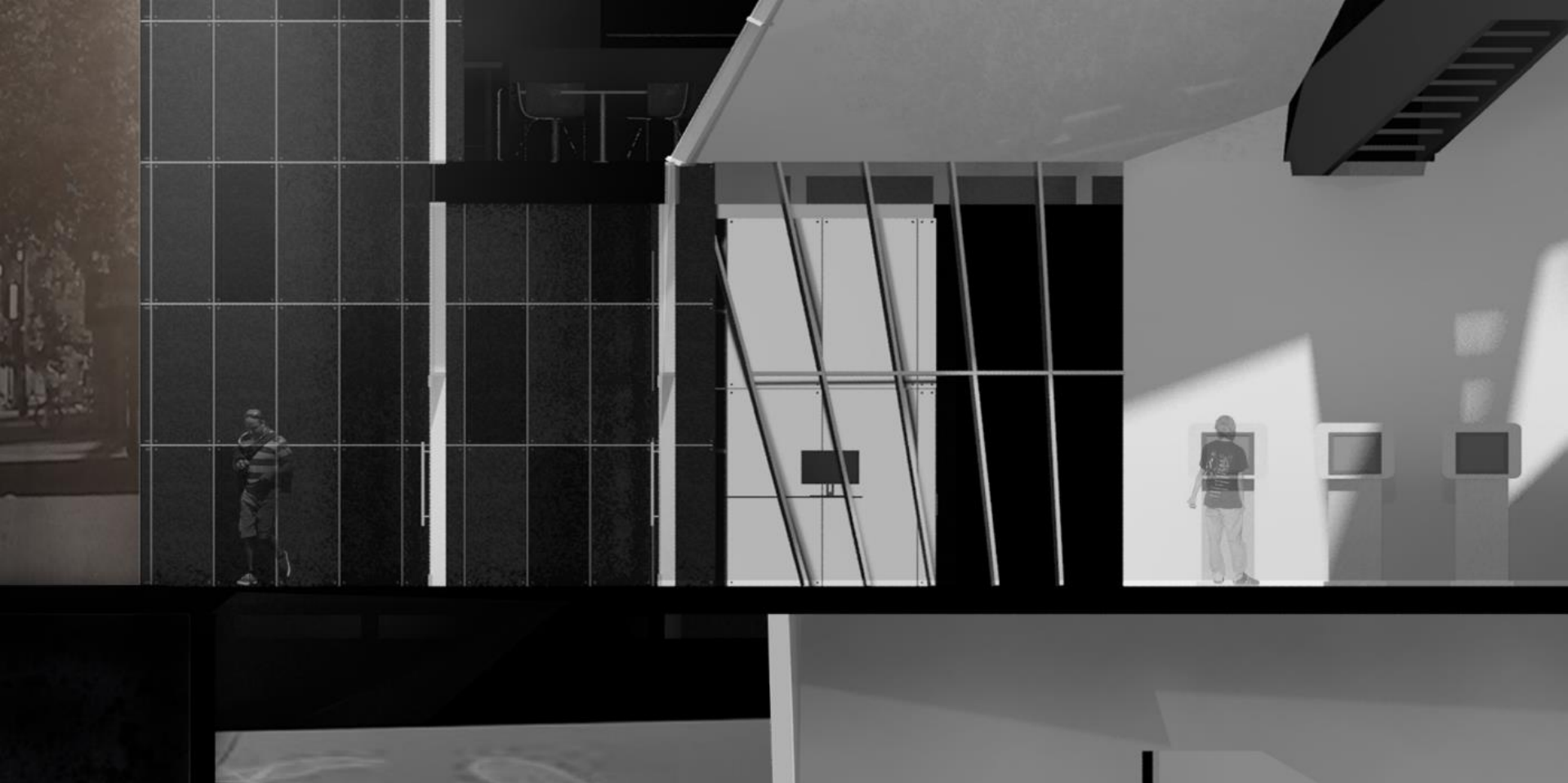
SOUTHWEST ENTRY



- 1.1 – ATRIUM
 - 1.2 – INFORMATION
 - 1.3 – INTERACTIVE GALLERY
 - 1.4 – RETAIL/SHOWROOM
 - 1.5 – CONFERENCE ROOM
 - 1.6 – MAIL/STORAGE
- 6,200 SQ.FT.



ENTRY SEQUENCE



- 1.1 – ATRIUM
 - 1.2 – INFORMATION
 - 1.3 – INTERACTIVE GALLERY
 - 1.4 – RETAIL/SHOWROOM
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 - 1.6 – MAIL/STORAGE
- 6,200 SQ.FT.



INTERACTIVE GALLERY

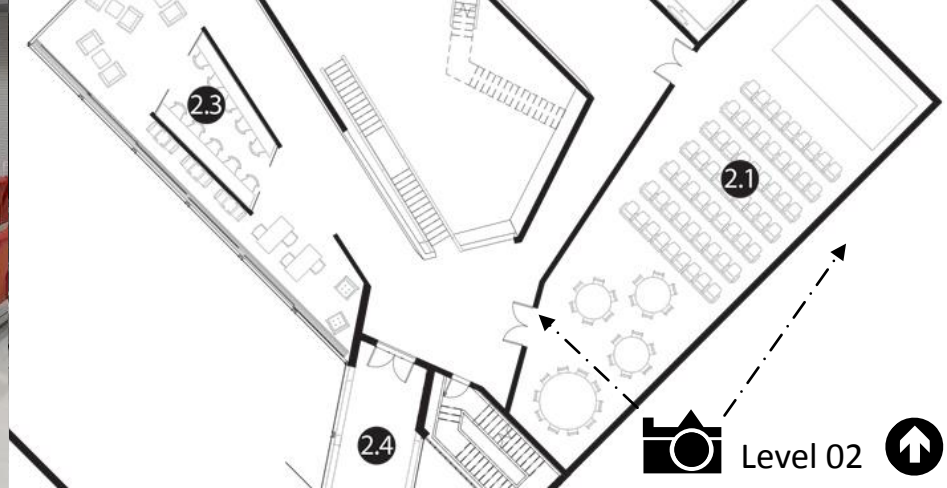


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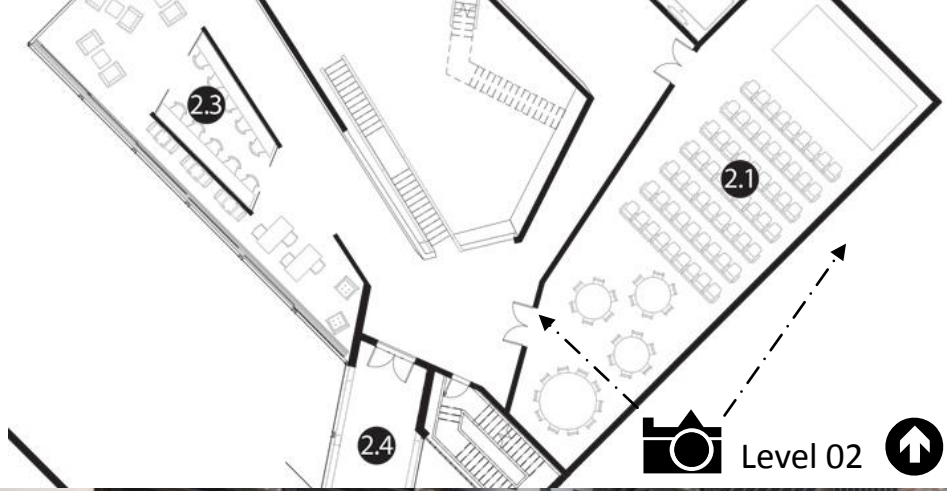
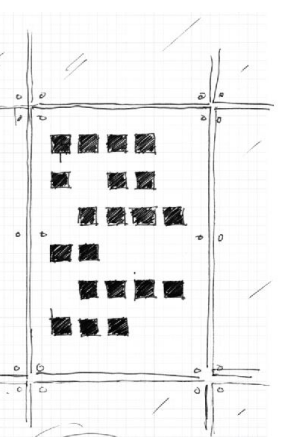


- 2.1 – MULTI-PURPOSE CONFERENCE
 - 2.2 – CAFE
 - 2.3 – DIGITAL LOUNGE
 - 2.4 – SKYWAY
 - 2.5 – PUBLIC PARKING GARAGE
- 5,950 SQ.FT.





MULTI-PURPOSE CONFERENCE



MULTI-PURPOSE CONFERENCE

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DIGITAL LOUNGE AREA



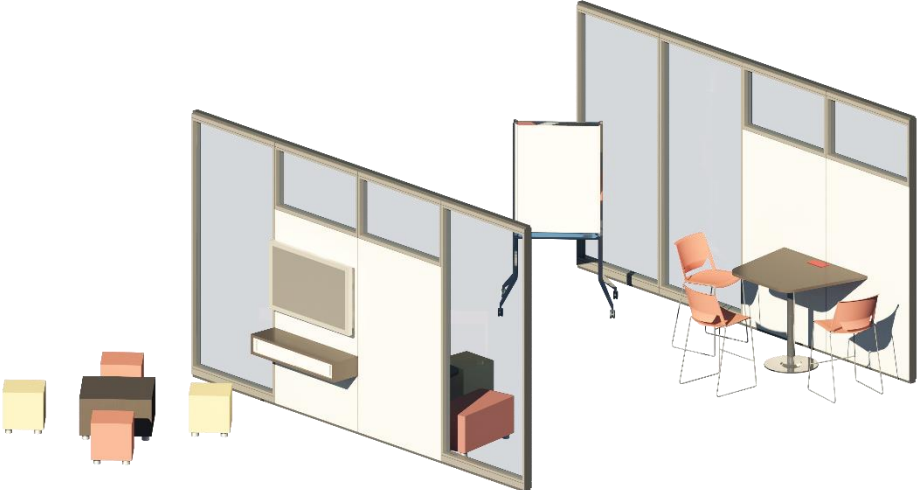
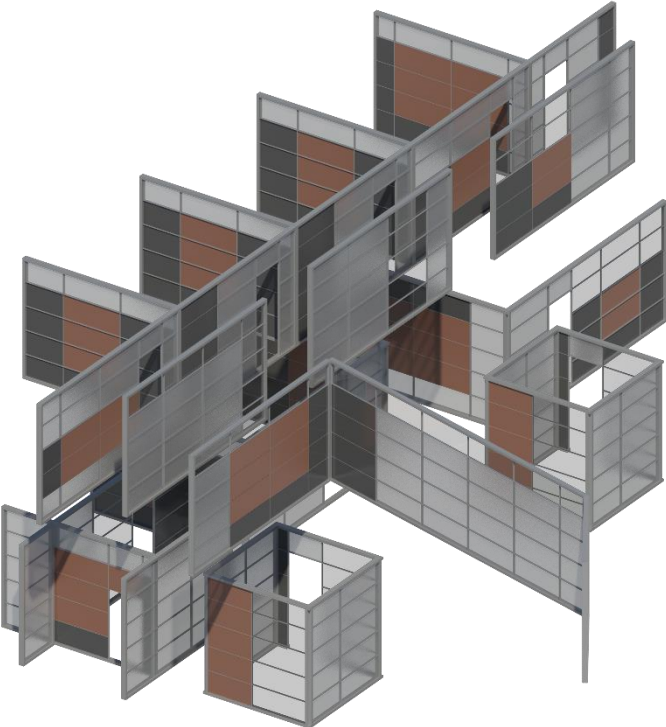
3.1 – ADAPTABLE BREAKOUTS
3.2 – OPEN SEATING
3.3 – CLASSROOM
6,550 SQ.FT.



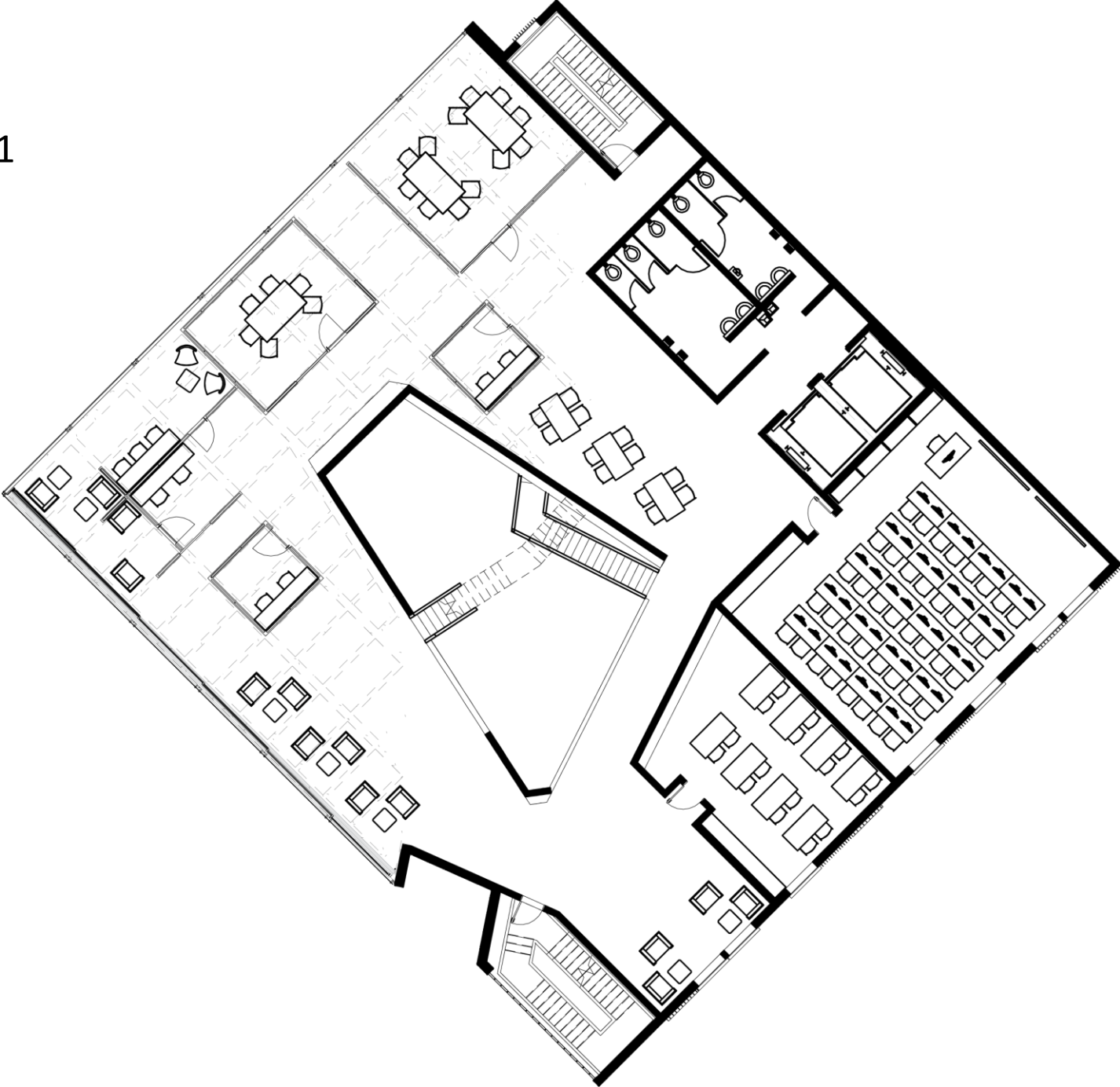
DIRTT WALL SYSTEM



DIRTT WALL SYSTEMS



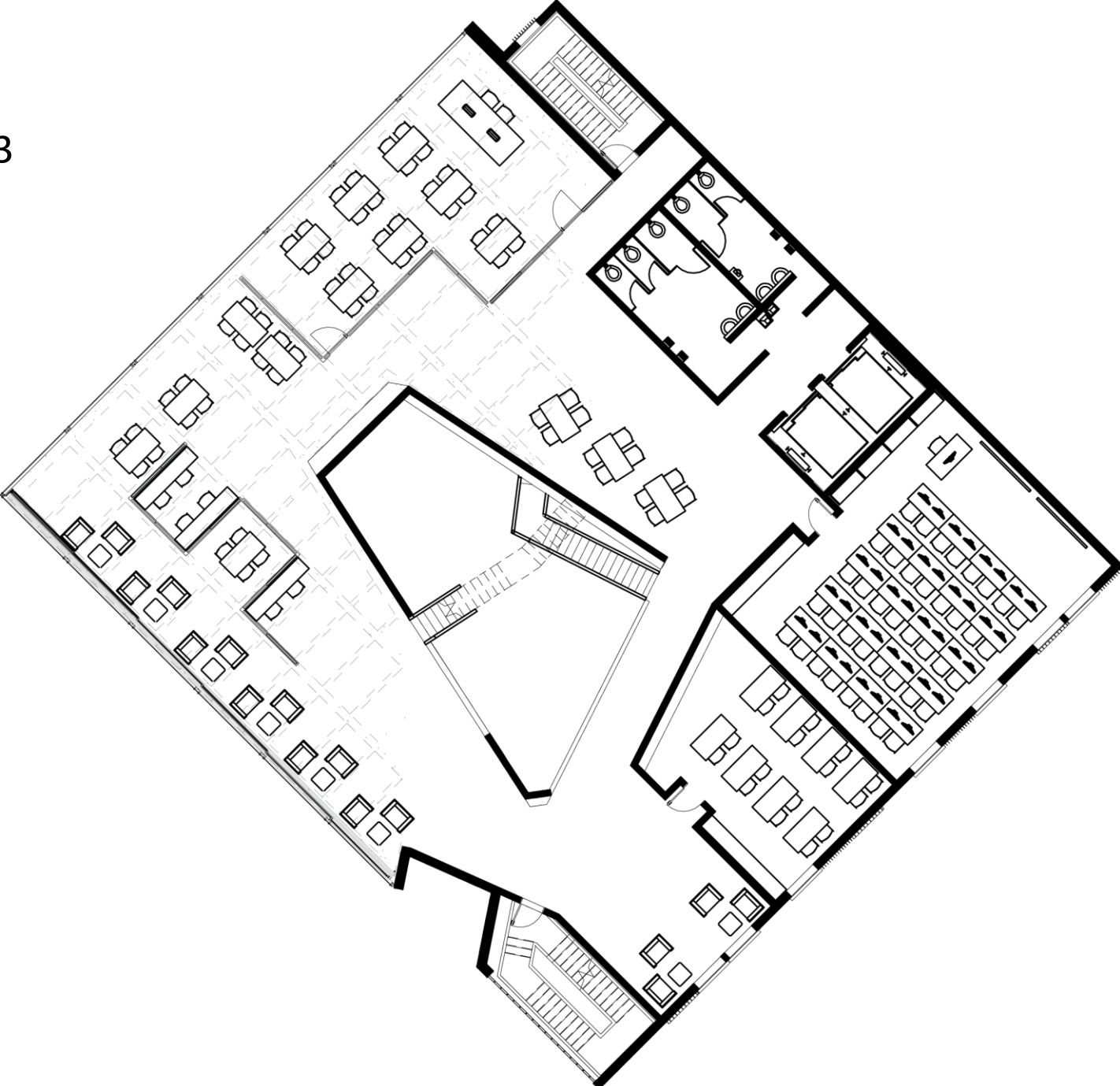
OPTION 1



OPTION 2



OPTION 3

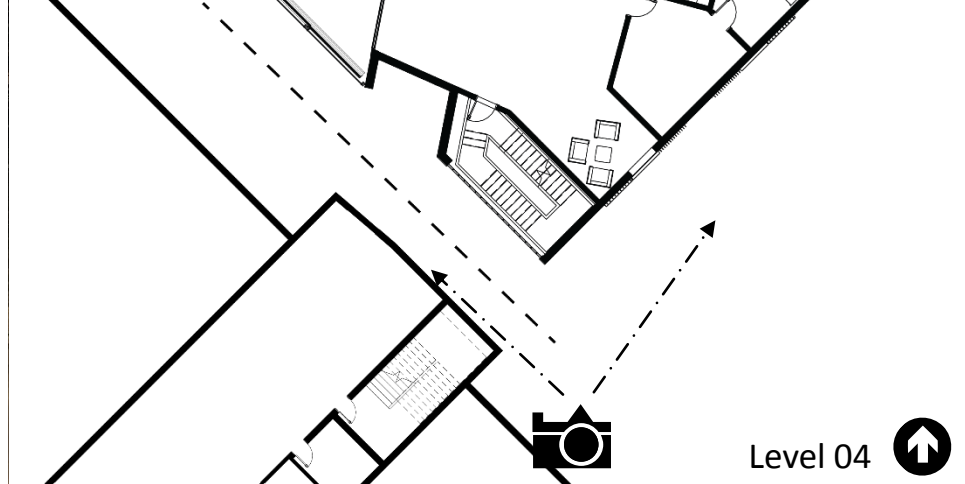
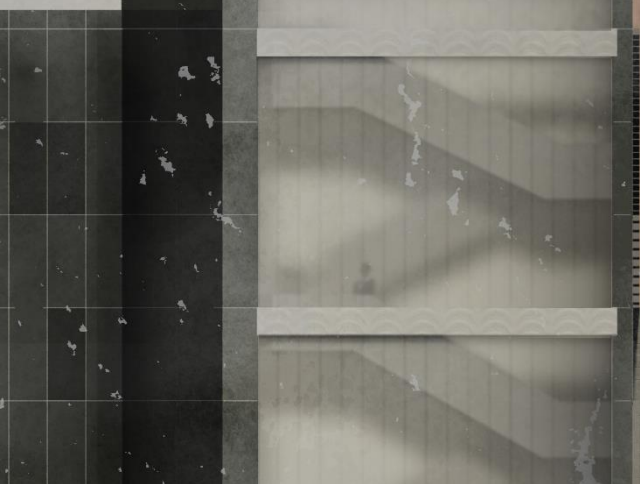


SMALL CLASSROOM



- 4.1 – ADMINISTRATION
 - 4.2 – BREAKROOM
 - 4.3 – MECHANICAL
 - 4.4 – SERVER
 - 4.5 – STORAGE
 - 4.6 – CONFERENCE ROOM
- 6,500 SQ.FT.





Level 04



- 0.1 – WORKSHOP
 - 0.2 – MULTIMEDIA STUDIO
 - 0.3 – DIGITAL STUDIO
 - 0.4 – INFORMATION
 - 0.5 – DIGITAL EXHIBITION
 - 0.6 - STORAGE
- 6,200 SQ.FT.



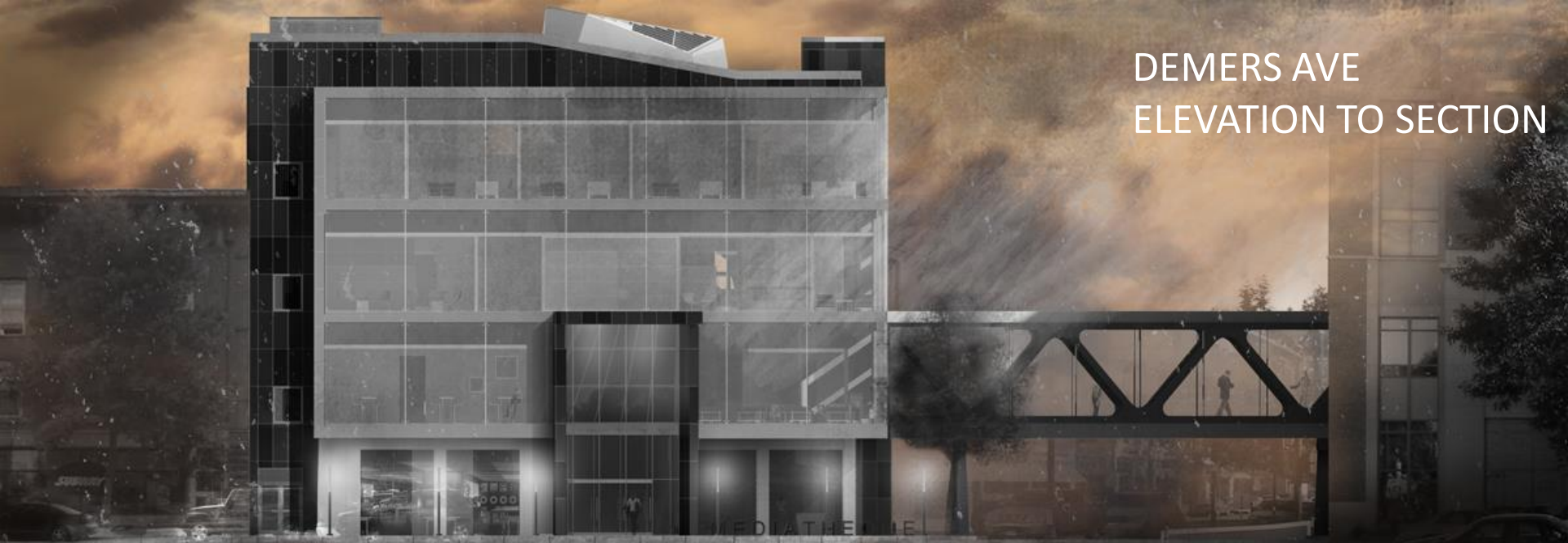
DIGITAL EXHIBITION



- 0.1 – WORKSHOP
 - 0.2 – MULTIMEDIA STUDIO
 - 0.3 – DIGITAL STUDIO
 - 0.4 – INFORMATION
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- 6,200 SQ.FT.



DEMERS AVE
ELEVATION TO SECTION



4TH STREET ELEVATION TO SECTION



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