## THE PENNSYLVANIA STATE UNIVERSITY SCHREYER HONORS COLLEGE

#### DEPARTMENT OF ARCHITECTURE

### ART RESTART

art as a mechanism of revitalization in urban neighborhoods

EMILY HALM Spring 2012

A thesis
submitted in partial fulfillment
of the requirements
for a baccalaureate degree
in Architecture
with honors in Architecture

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#### abstract

the United States has held the successful when the artists work is reputation of growth, and for that opened up to the public, and in the reason architects and city planners central northside neighborhood of have been trained to "think big." Pittsburgh, there is a museum that Even in times of recession, like has used this approach to begin to the one we face now, many designers rejuvenate the area. This museum, may continue designing buildings The Mattress Factory, began with the as they always have, consoling vision of Barbara Luderowski, who themselves with the idea that obtained ownership of an abandoned "things will turn around, they mattress factory, hoping that it always do." But what if things don't would open up opportunities to get better, but go down a totally create her art at a larger scale. different path? Cities around In order to support her work there, the US are facing drastic changes she started a food co-op based out caused by deindustrialization, and of the building, which brought globalization, causing people to this amazing, flexible workspace to move out. These forces will very other like-minded artists. Soon likely never allow American cities the Mattress Factory evolved into to grow at the same rate they did a place where artists from around in the past. As, city populations the city could create room-sized art shrink and remaining residents installations without limitations. move themselves closer to the city And the public was invited to observe, center, entire urban areas are left expanding their knowledge of the abandoned. We as designers, are city's art scene. Now, the museum forced to fight our instincts and has expanded to several building "think small" as we address what to throughout the

places has been adopted by artists, who have been taking up buildings But the neighborhood is still in rejuvenation of many abandoned area.

Up until this point in history These projects have been particularly neighborhood, do with these deserted places now. beginning to reinvigorate the area, and encouraging the progress An interesting approach to abandoned of the art movement in the area.

piece by piece, using them as homes and dire need of help, with a prevalent studios; working, living, mending, supply of run-down and abandoned all at the same time, using the buildings and issues with public building elements as an outlet for safety, there needs to be more of a their artistic expression. These push in this direction towards the projects are usually no larger than arts. A block of abandoned buildings a single dwelling unit, but where one at the gateway to the neighborhood artist finds a canvas, other artists would be the ideal testing follow. What has resulted in many grounds for The Mattress Factory instances, is a community-wide to use as an expansion location.

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academic vita

#### thesis statement

The returning of a neighborhood to move and communicate, allowing to its former glory, is a common artists residents to become better trend in many American cities often known in a community and propagating ignited by the arts. The run- the artists' spark of initiative. down sides of town tend to attract artists because they can acquire As a plan of action, architects large areas for work space at an need to think about how to improve affordable rate. The spaces that a neighborhood for artist use in artists find are usually not set up several siting scenarios: as a studio when they get it, but construction infill, adaptive reuse they see the potential and put the of existing buildings, and sites work in to improve whatever building they take over. As a result, the buildings. neighborhood that at one time was largely vacant is lived in again, and INFILL As artists are not often occupied by owners that take pride inclined to take on the daunting task in the place that they live. When of new construction, a museum can other city dwellers see that this serve as the patron that creates a is the direction a neighborhood is framework for artist to personalize. going the remainder of real estate Both museums and artist can become is bought up for its desirability more visible in the community as "up and coming." Businesses also through the use of missing teeth in see the potential and lease space, which make the neighborhood even more desirable to live in and allow those from outside the community a EXISTING BUILDINGS The existing reason to visit.

has helped many areas get back up on their feet, but as society becomes connected through such tools as the automobile and the Internet, we need to think of ways that we can adapt this process for our new pattern PUBLIC INTEGRATION social and mobile urban society? The resources to pull from. architecture can be informed by the ever increasing desire for artists

integrated into public spaces and

blocks as a holding place for mobile galleries.

artists' tradition of remodelling run-down buildings for studio space This artist spark of revitalization can be improved by integrating this program with public spaces, hollowing out portions of the old increasingly mobile and socially building fabric and designating them places that artists and community members can connect.

Designating of living, and ultimately make a public sites throughout a community farther reaching impact on urban as places where mobile galleries improvement. How can architecture can temporarily reside activates work with the artist's spark to these areas with spontaneous events improve the revitalization process of community interaction, while at for our changing contemporary, the same time giving artists more

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### research & documentation for area of focus

area of focus summary

There are several areas of study of urban shrinking by researching an understanding of the root causes

that can be drawn upon as guidelines demographic, sociological, and for redeveloping the block and economic resources. In order creating portable local artist to strengthen the identity of galleries. I have studied theories the local crafts community, I of urban development, and determined have drawn on theories of place what types of design interventions ownership and community influenced enliven or hinder a neighborhood's design and interventions. Research identity. I have analyzed the effect has been done on how to properly that urban shrinking will have on "store" architectural spaces until these theories. I plan to develop they are ready to be reused.

#### research & documentation for area of focus

discussion of findings from literature review

Shrinking Cities Robert Fishman and Philipp Oswalt

This book explains the new challenges Projects in the book emphasize the that planners now face with the issue transitional treatment of buildings. of shrinking cities. It examines Interventions are often temporary, causes on an international scale easy to remove when a better purpose by making case studies of several for the space is determined. cities faced with the problem and singling out one defining cause in The use of artistic interventions the issue to the public eye.

as an artist canvas, often in a way that put the building on a path to renovation.

each case. The book proposes that within the site would work very well one solution could be the use of in the Northside neighborhood of artistic interventions that brings Pittsburgh, where there is already a growing artist community. Connection to the existing contemporary art Several of the projects featured in museum in the vicinity would get the this book use abandoned buildings building stock back into the public eye.

The Death and Life of Great American Cities Jane Jacobs

This book focuses on urban planning will help my site gain ownership in the 20th century, revealing some of the flaws that had developed with the modernist view to city planning. Jacobs argues that the modernist movement in planning turns its back to the community that it is developed in, stripping the influence of the human being away from the urban environment. Although this book was written when rapid growth was still occurring in cities, it has helped me determine what methods of planning I should avoid and what

within the community.

The site is neighboring a large portion of the city that has been cleared by the urban renewal movement of the 1950s. In response, my project's goal is to re-enliven the block, as well as create a strategy for the areas that have been damaged by urban renewal, attempting to get the community to activate these spaces again.

# research & documentation for area of focus

questions & theoretical issues raised

What has caused the urban population to shrink?

#### Deindustrialization means...

- + Very few people work in factories.
- + More people are unemployed.
- + More of the available jobs will require education or training time.

#### Suburbanization means...

- + There will be more people in the city during the day than at night.
- + More people will depend on transportation.
- + City residents are more likely to be invested in the city.
- + City residents are more likely to be unable to leave the city.

#### Declining Birth Rate means...

- + The population is getting older.
- + The population is getting more diverse.
- + There will be more 1-2 person households, many of which will be elderly people.
- + There will be larger amounts of immigrants and people that don't speak English.

#### Globalization means...

- + People will be more familiar with international customs.
- + More people will need to know a second language.
- + Jobs could require more travel or dual residence.

What does an environment with less people cause?

#### People can have more private space.

- + Occupied dwellings in the outskirts will become farther apart.
- + Similar businesses will consolidate.
- + People and business will move towards the center.
- + Price of living will decrease and expendable income will increase.
- + Buildings and places are abandoned.

# research & documentation for area of focus architectural issues

How can neighborhood design become influenced by the new (old) residents?

What do we do with abandoned buildings and places?

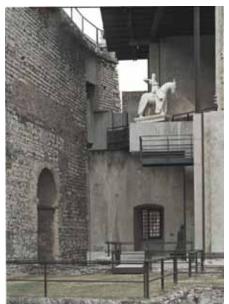
Is there an alternative to demolition?

Can we design embodied space in buildings?

If they must be neglected, how do we prepare them?

# research & documentation for area of focus

architectural precedents castelvecchio: carlo scarpa



Castelvecchio is a classic example of intertwining the texture of historical building fabric with new architectural elements. Scarpa used interventions to create spacial compositions that drew the eye to the texture of the old and put the spotlight on the museum's art.



morphosis: contempo casuals



This adaptive reuse of an old church for use as a retail space creates a new structure that is inserted into the old domed chamber. The old and new work together in composition.

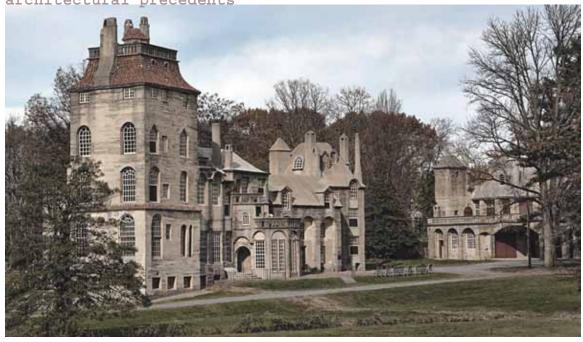


site: laurie mallet house
This residential renovation blends artifacts
of the home's resident with the walls, making
a statement about the memories held there.



# research & documentation for area of focus

architectural precedents





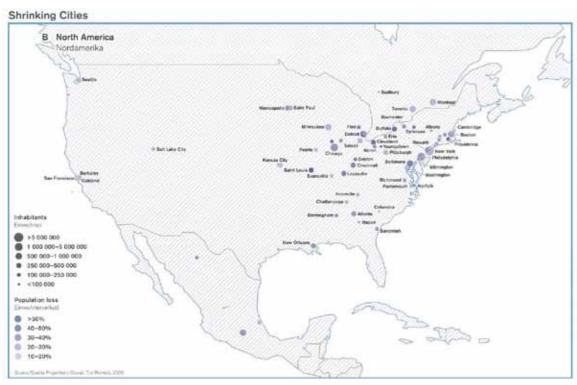
Fonthill Castle Doylestown, Pennsylvania Henry Mercer





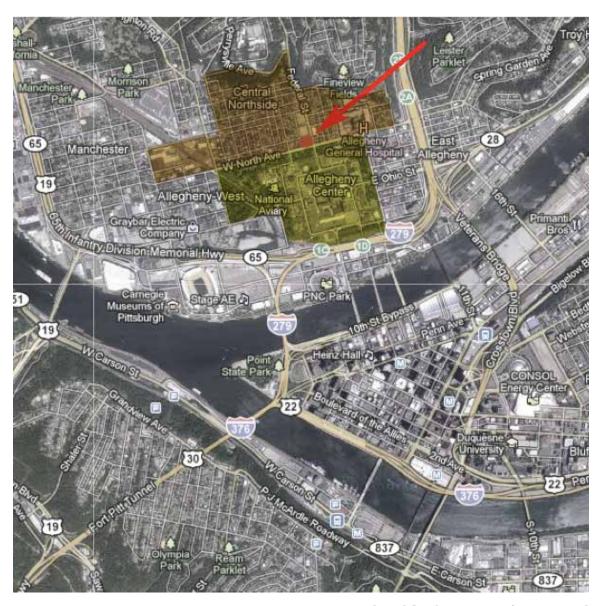
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aerial photos & maps of site



Pittsburgh is indicated here as having a population of between 250,000-500,000 people but it has lost 20-30% of its residents. This map stresses that this phenomenon is a trend that has affected most US cities.

aerial photos & maps of site



The block I am interested in redeveloping is located in the Central Northside neighborhood of Pittsburgh. It is also on the border of the Allegheny Center neighborhood. These neighborhoods are on the North Shore of Pittsburgh, across the river from the downtown area.

# site and context information aerial photos & maps of site



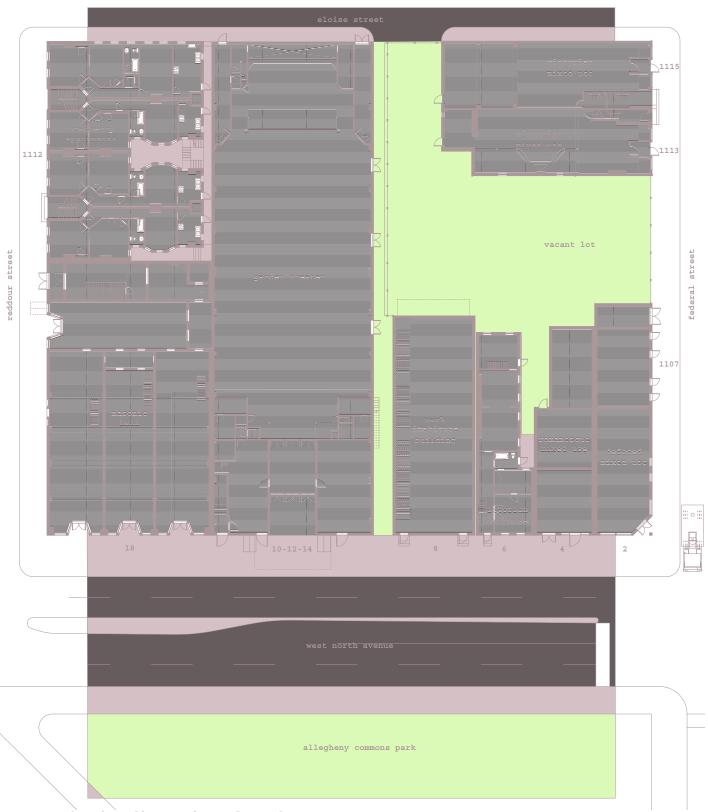
aerial photos & maps of site





(top) A Pittsburgh city map from 1830 shows the development of the Northside as a separate town across the river. (bottom) The Sanborn maps for the site show reveal the time period when significant buildings were built and what occupancies existed.

aerial photos & maps of site



The immediate site plan shows the footprints of existing buildings on the block along with street addresses.

# site and context information site documentation



The Garden Theater Block

site documentation









- 1. 1113-1115 Federal Street
- + Built ca. 1880
- + Historical Use: Homes and Businesses of Frederick Schreiber + Historical Use: Drug Store and Charles Gumbert
- + Second Empire style
- 2.1107 Federal Street
- + Built ca. 1910
- + Historical Use: Businesses of brothers, Michael and Joseph LaScola
- + Mixed style

- 3. 2 West North Avenue
- + Built ca. 1880

  - + Mixed style, originally Italianate
  - 4. 4 West North Avenue
  - + Built ca. 1880
- + Historical Use: Apartments, grocer
- + Richardsonian Romanesque style

site documentation

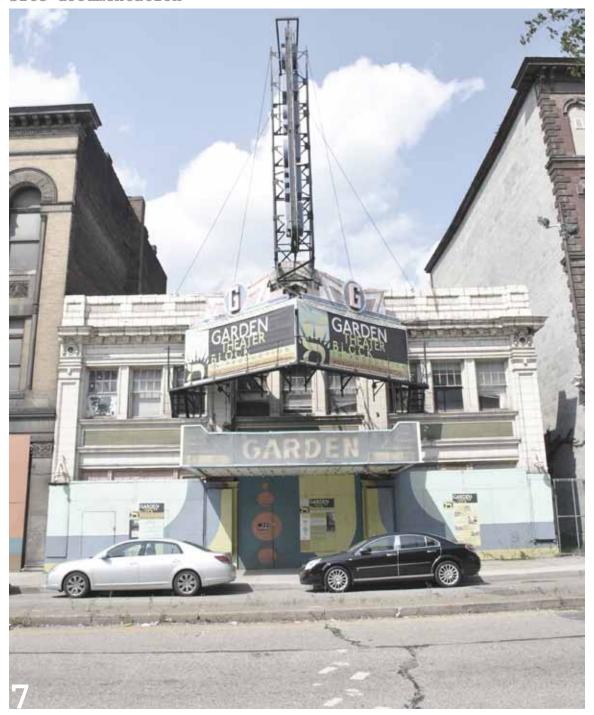




- 5. 6 West North Avenue
- + Built ca. 1870
- + Historical Use: Private Residence
- + Victorian style

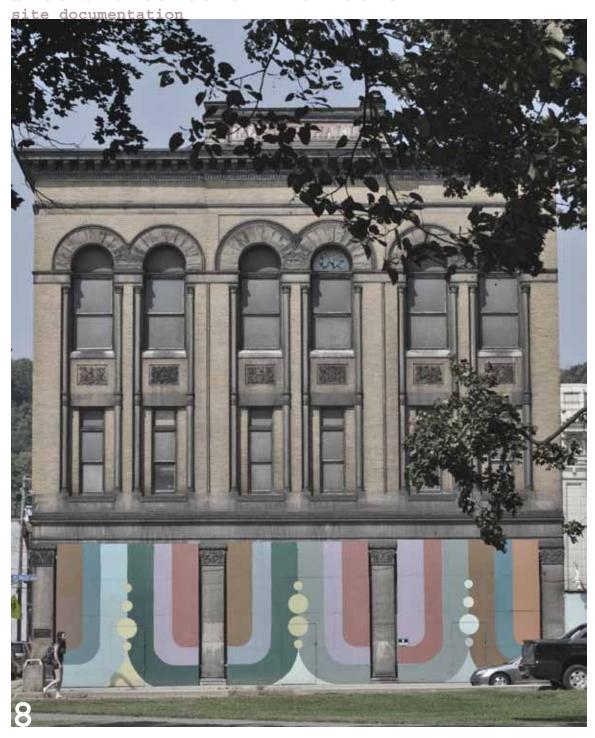
- 6. 8 West North Avenue
- + Built ca. 1884
- + Historical Use: The Park Institute
- + Mixed style

site documentation



# 7. The Garden Theater 10-12-14 West North Avenue

- + Built 1914
- + Historical Use: Movie Theater, Shops, Ice Cream Parlour
- + Classical Revival style



- 8. Allegheny Masonic Hall
- 18 West North Avenue
- + Built 1895
- + Historical Use: Meetinghouse
- + Romanesque Revival style

site documentation



site documentation







community anchors







the mattre actory







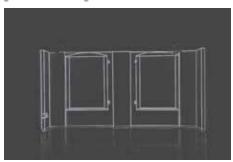


the neighborhood :
the artists' flare
on the street

site documentation



barbara luderowski:director
para-site:pablo valbuena







the mattress factory : room-sized environments, created by in-residence artists



the mattress factory : a community source of renewal

A contemporary art museum in the neighborhood, The Mattress Factory, has become a catalyst for artist creativity here, and this organization's mission of renewal through art serves as inspiration and a counterpiece to this design project.



my offering
than htay maung



light recordings natalia gonzalez



garden installation winifred lutz

site analysis

case study: pittsburgh

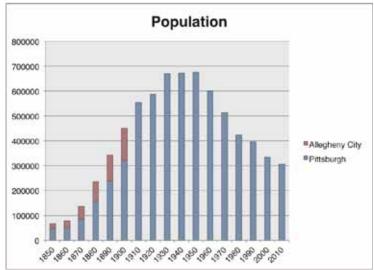




A common trend in urban areas across the US is the emptying of cities of their residents because of the deindustrialization, suburbanization, and globalization of society. places experienced unprecedented growth during the industrial revolution, but as industry slowed and moved abroad, there was less reason to move to the city. Also, the adoption of the car as the main form of transportation allowed people to reside outside of the city limits. As a result, the city has been left with a stock of buildings for which there is no one to occupy, or take care of. These buildings are left to deteriorate with age and ill-maintenance until they are judged unsuitable for renovation and demolished.

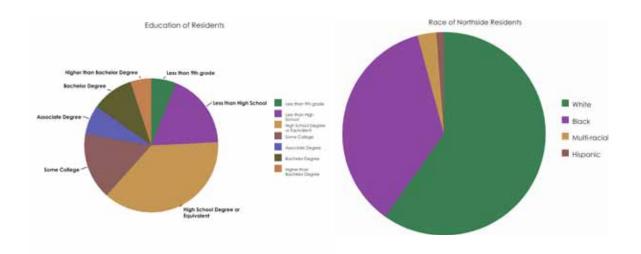
Pittsburgh is a ideal case study of what happens to an urban environment left to this cycle of abandonment. As residents decentralized after the steel industry dwindled, entire neighborhoods were left in a state of disrepair. There is a strong draw to the suburbs, which offer more space and better schools.





The population has shrunk by nearly 50% in the last 50 years. The surplus of building stock in the city has made it a desirable living destination for artists who are looking for cheap, flexible space to start out.

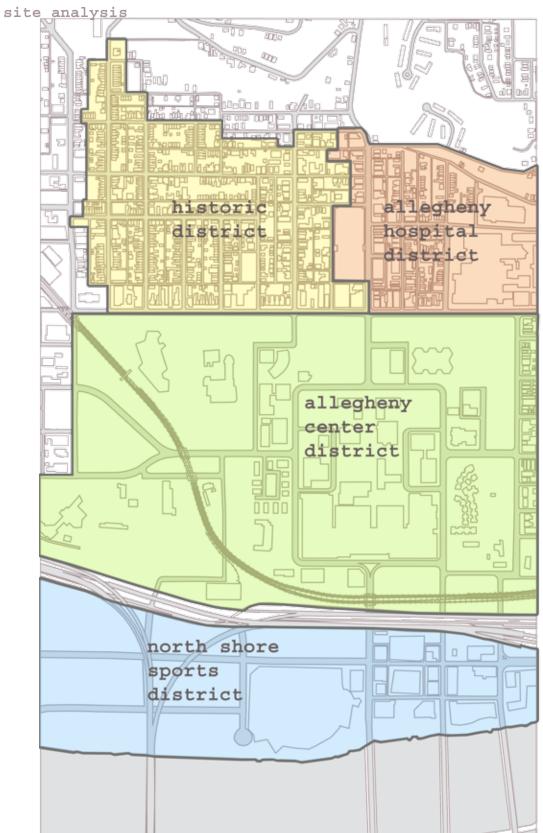
site analysis

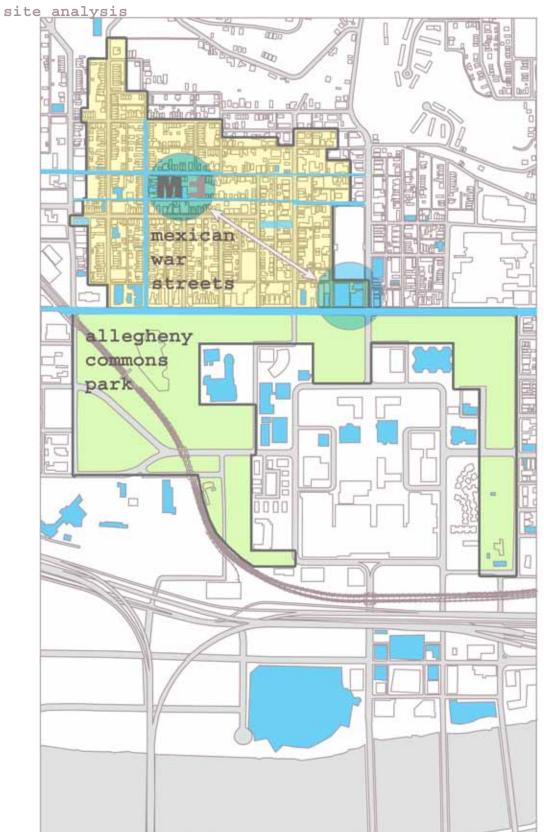


Northside Demographics + 48,000 residents live in the Northside, composed of 18 neighborhoods.

- + Many neighborhoods are heavily segregated by race and income:
  - + White Neighborhoods: Troy Hill, Summer Hill, Spring Garden, Brighton Heights, North Shore
  - + Black Neighborhoods:
    Northview Heights, Manchester
    + High Rate of Poverty:
    Northview Heights, Allegheny
    Center (Commons)
  - + Youngest Neighborhoods: California-Kirkbride, Allegheny Center (Commons), Fineview
  - + High Unemployment: California-Kirkbride, Northview Heights
  - + High Occupancy: Summer Hill, Chateau, Brighton Heights, Spring Hill-City
  - + High Vacancy: Allegheny Center, North Shore

- + Over 27% of Northside residents are under 20.
- + 15% of residents have a bachelors degree, 11% less than the Pittsburgh average.
- + Average neighborhood household incomes range from \$7,440-\$39,018.
- + The North Shore is considered an outlier, where the average is \$70,000.
- + 23% of residents are living under the Federal Poverty Limit.
- + Official Unemployment Rate is 5.1%, but only 50% of Northsiders over 16 are employed.





points of interest

#### site and context information site analysis

around the neighborhood that attract allowing them to reach as many large amounts of people for events. people as possible. These places offer opportunity for

There are many points of interest artist to interact with the public,















points of interest

site parameters

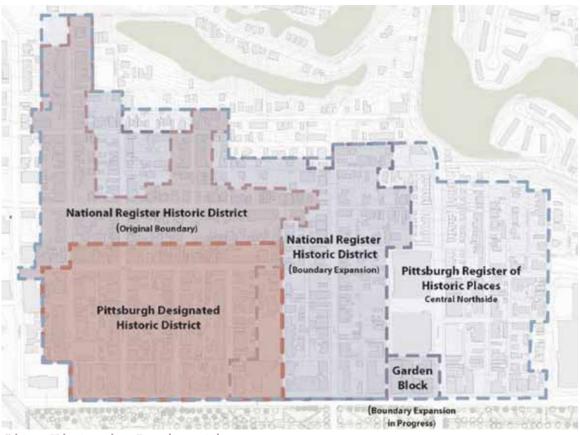
Site Zoning Designated LNC Local Neighborhood Commercial

"The purpose of the LNC District "All types of residential is to maintain the scale and development are permitted by diversity of neighborhood right serving commercial districts, promote and enhance the smaller quality of life of adjacent institutions, residential areas and maintain restaurants and retail sales." compatibility with residential development through reduction of adverse impacts associated with commercial uses."

in the LNC District, as are scale financial offices,



site parameters



Site Historic Designation

Currently designated as eligible for inclusion in the National Register as of 2009

City pursuing inclusion in the existing National Register Historic District

The Garden Theater is designated eligible for inclusion in the National Register as of 1995.

Garden Theater is designated as a Local Historic Landmark as of 2008.

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program type & description





The ideal uses for the block are yet to be determined, but until that time, something temporary can be housed there.



Several arts initiatives have been enacted by German artist to experiment with abandoned spaces, living an working there without the bounds of economic, physical or institutional constraints.

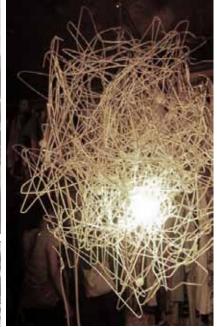




temporary city : art installations

The elsewherians in Greensboro have started a similar initiative, utilizing an abandoned fabric and junk shop to create and recreate art with the found material within. They have created a living museum.







client precedent:
elsewhere artist
collaborative

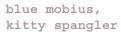
program type & description



gayle marie we sculptor



kitty spangler quilt artist





river #2, karen kaighin



karen kaighin, photographer



king of the hermits, andy kehoe

local artist: refocusing
on artists in the city

tea set II ceil sturdevant







programmatic elements

existing buildings: a backdrop for social interaction

ART IN THE OPEN The block needs to be inhabited again for it to have any chance of surviving demolition. If local artists were allowed to inhabit the vacant buildings, they would become the set of eyes needed to keep the buildings from falling apart.

The existing fabric remains unplanned because the artist inevitably will make the modifications needed for his work. Instead, the architect can concentrate designing a set of public spaces within the block, accommodating the need for the community and the local artists to interact. For the architect, the buildings in the block become a single stereotomic mass that can be chipped away according to cues from the existing building elements.













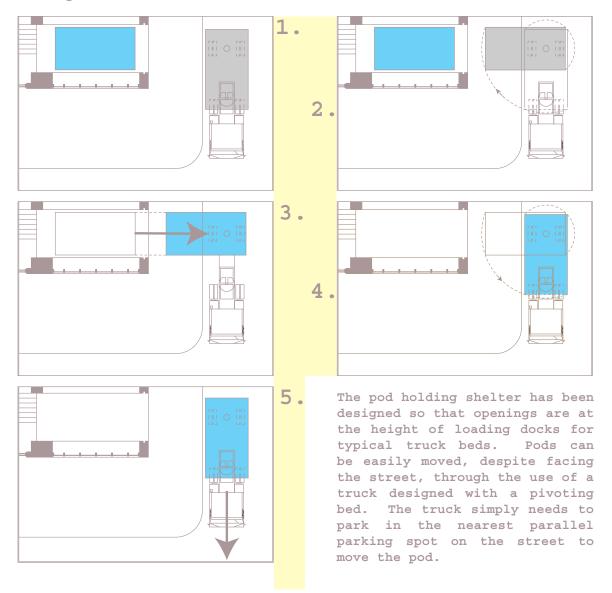
OLD/NEW SKIN In homage to the old building fabric, the new skin that will be used to close up cuts in the existing buildings will mimic the old plaster and lathe walls. Expanded steel screen panels, painted white, create similar condition to new plaster walls. They will rust and need to be painted. Layers will build up and chip, similar to the plaster inside. The panelized system can be easily changed when new openings are necessary.

### final design project

programmatic elements

The mobile gallery is a simply constructed, one-room box, ready for artists to modify as needed to display artwork. On a normal basis the gallery pod resides in a larger holding shelter that both protects and displays them. The holding shelters are sited on vacant lots throughout the neighborhood. Construction of the pod shelters serve as infill for lost building fabric, filling in the blocks' missing teeth.

Allowing the pods to be transportable by truck gives artists a chance to take their gallery show to where people will be, giving them more exposure than attempting to attract visitors to a static location. There are several areas around the neighborhood that would be ideal sites for the gallery pods to reside temporarily, first infiltrating the park across the street, and expanding out.



final design project programmatic elements historic district

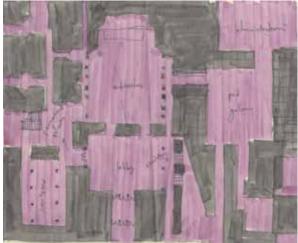
### programmatic elements

```
(Solid) Existing Building Fabric:
+ all repurposed as artist studios until other uses are filled in
+ existing water utilities serve as bathrooms and washing stations
+ existing vertical circulation is maintained to connect levels
     Garden Theater:
           studio space......8040 sq ft
           water utilities.....300 sq ft
           vertical circulation...500 sq ft
     Masonic Hall
           studio space.....8000 sq ft
           vertical circulation..1630 sq ft
     Bradberry Apartments:
           studio space......10930 sq ft
           water utilities.....3260 sq ft
           vertical circulation...960 sq ft
     8 West North Avenue Building:
           studio space......4840 sq ft
           vertical circulation..1790 sq ft
     6 West North Avenue Building
           studio space......2810 sq ft
           water utilities......150 sq ft
           vertical circulation...230 sq ft
     4 West North Ave:
           studio space......4500 sq ft
     Federal Street Buildings:
           studio space......9100 sq ft
           vertical circulation...810 sq ft
     TOTALS:
           studio space......48220 sq ft
           water utilities.....3710 sq ft
           vertical circulation..5920 sq ft
(Void) New Public Spaces:
+ new public spaces are hollowed out of the inner block
+ where new public spaces intersect existing building footprint, surfaces will
 be stripped down to the bare structural elements
+ studios are enclosed with new walls as needed.
     Entry/Foyer:.....1790 sq ft
     Atrium......1690 sq ft
     Cafe.....1070 sq ft
     Meeting Nooks.....870 sq ft
     Auditorium......2140 sq ft
     Pod Gallery.....3160 sq ft
     TOTAL.....13030 sq ft
(Infill) Mobile Pods:
+ 'missing teeth' in the block will be infilled with mobile gallery pods, along
 with framework to store them.
+ pods will be removed by truck, accessed by street or service alley for
 travelling exhibits.
     Pods......15 @ 120......1800 sq ft
     Framework......1390 sq ft
     TOTAL.....3190 sq ft
```

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final design project
studies or devices revealing architectonic ideas





old vs. new:

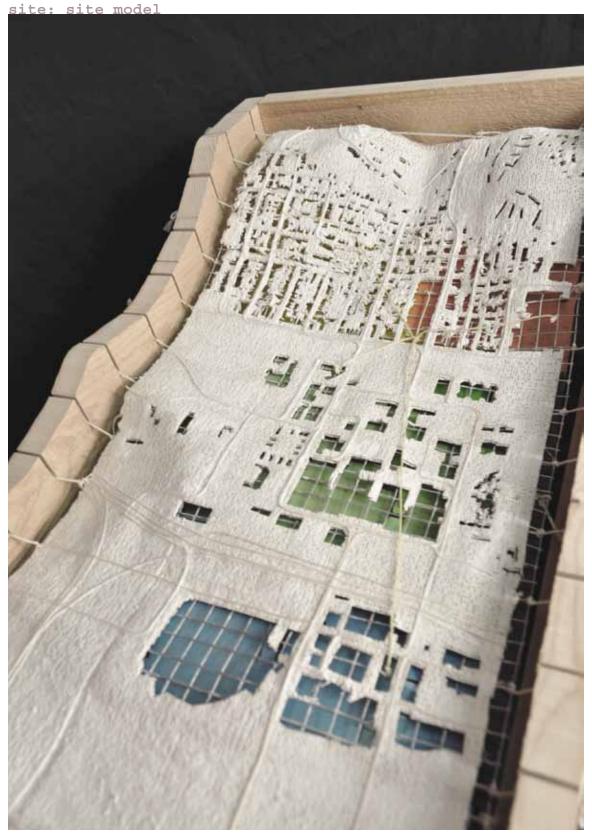


final design project site: site model





final design project site: site model



final design project building plans



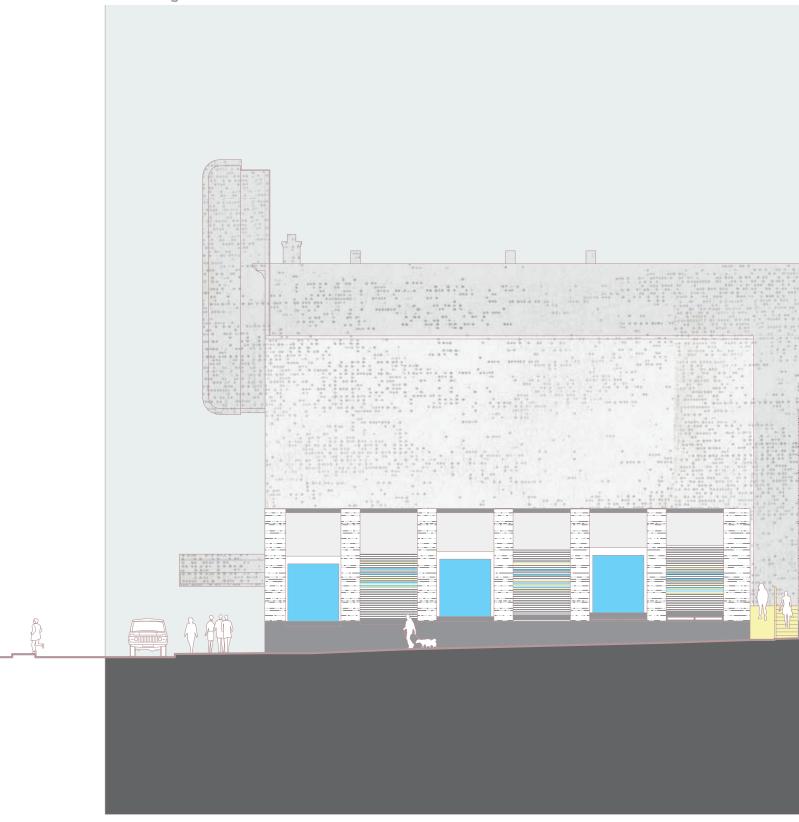
### final design project building elevations





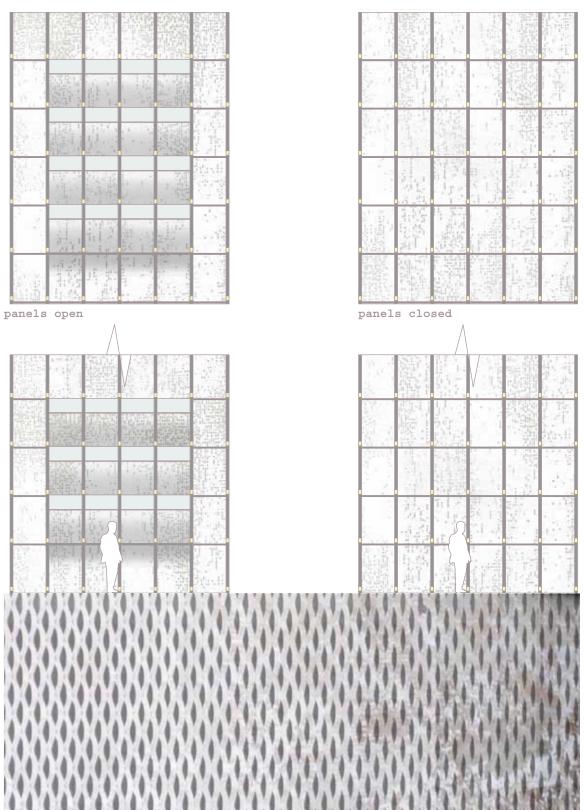
south elevation

final design project
building elevations



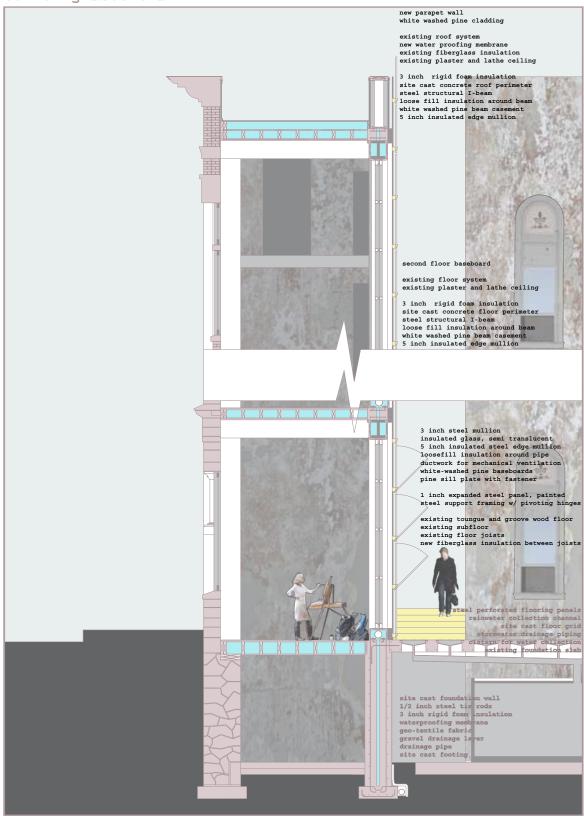


### final design project building elevations

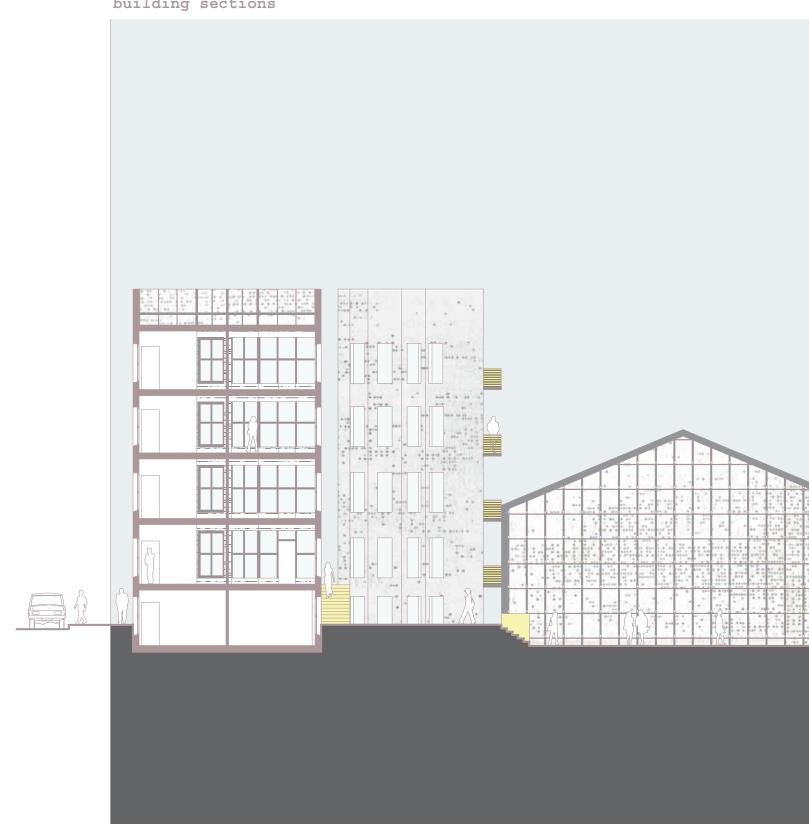


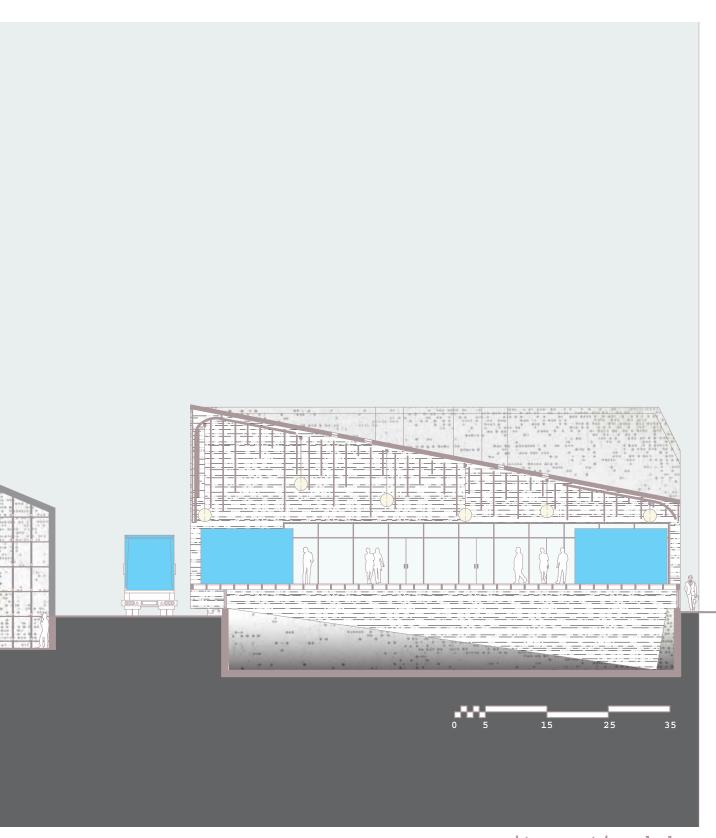
### final design project

building sections



## final design project building sections

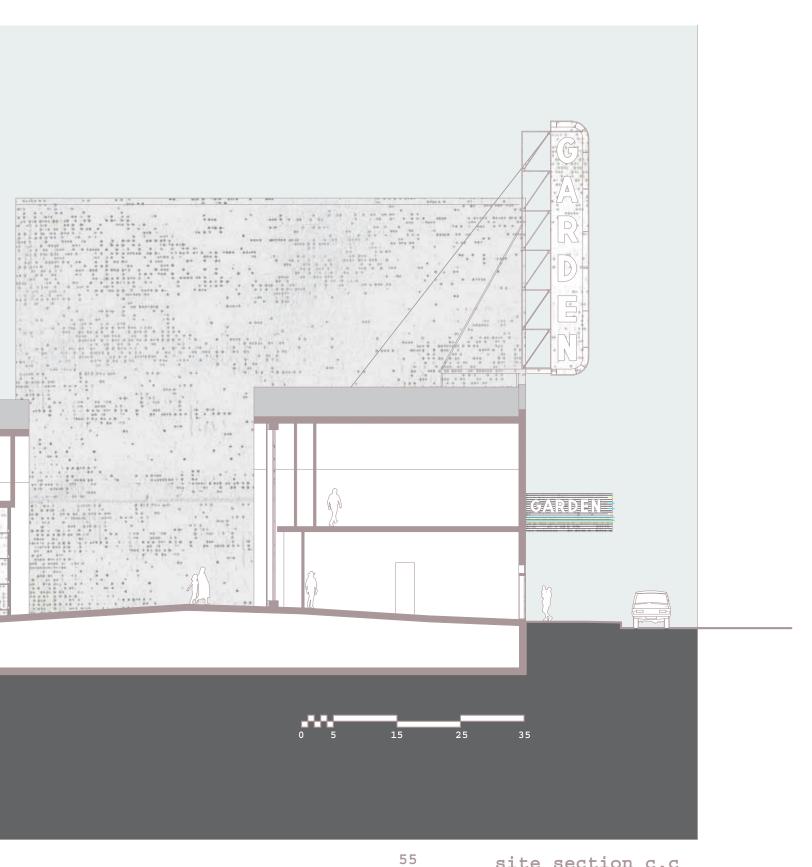




site section b.b

### final design project building sections







entrance design



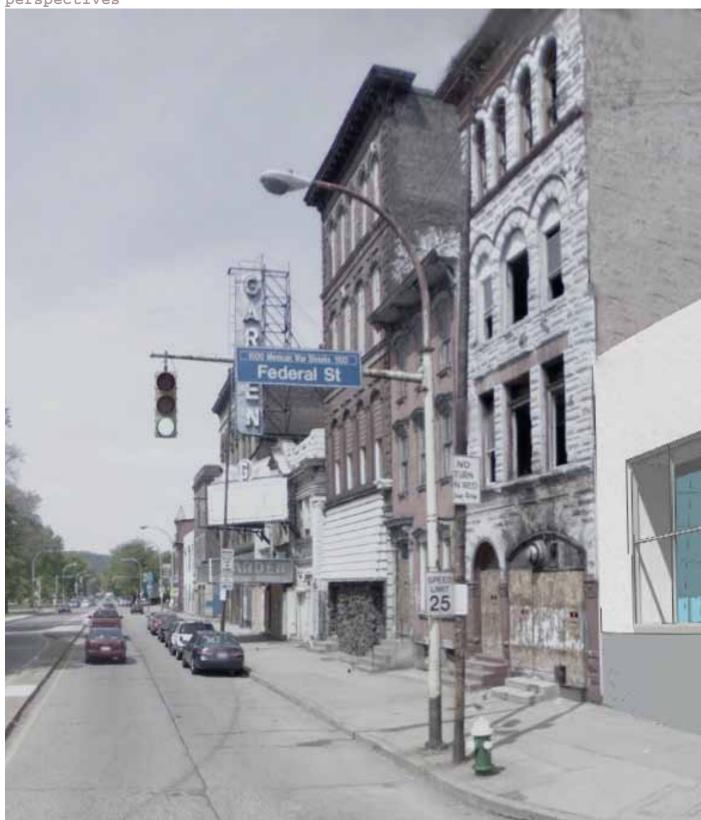
view of outdoor theater



view of masonic courtyard



entrance to gallery





exterior gallery view

final design project perspectives

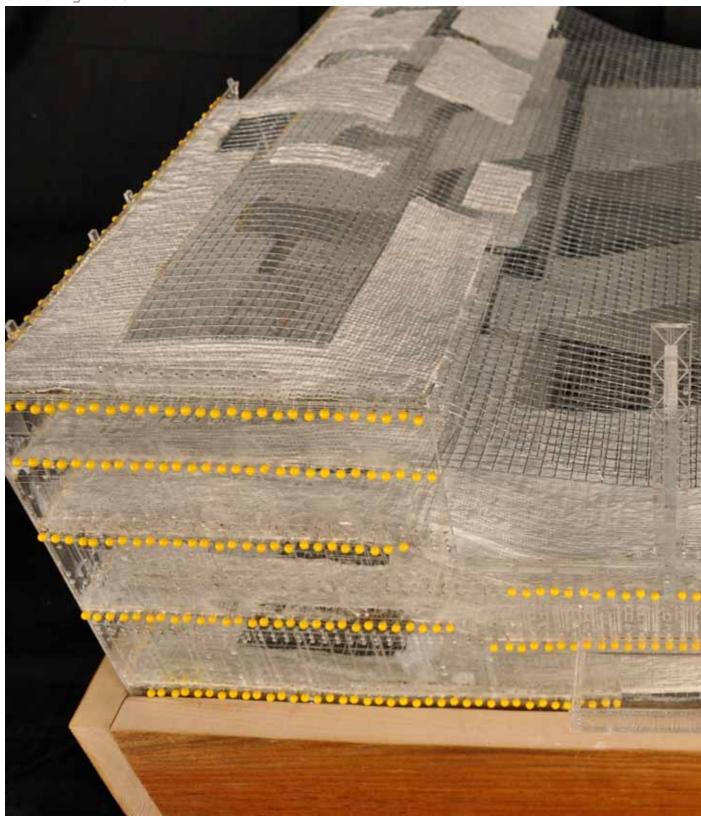


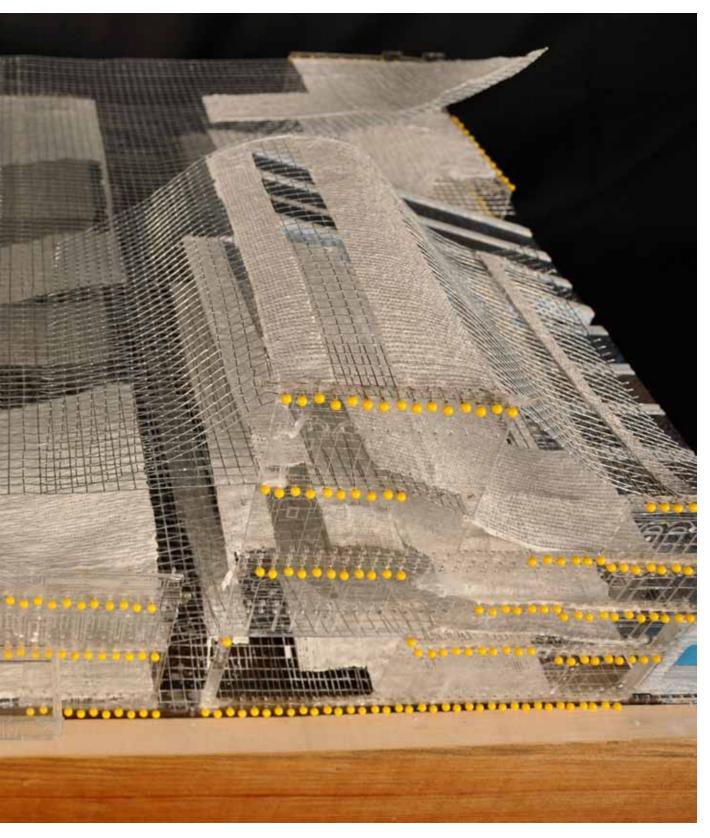


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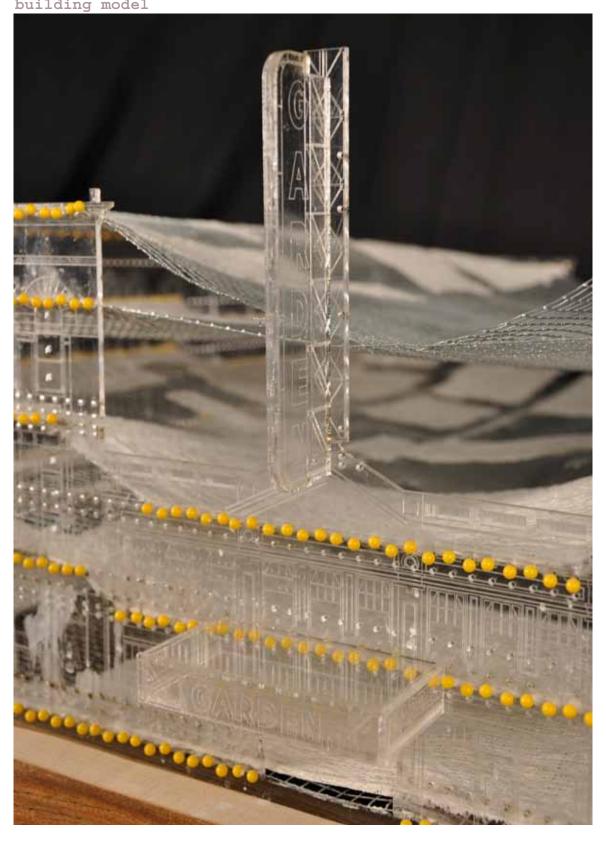
interior gallery
view

final design project building model

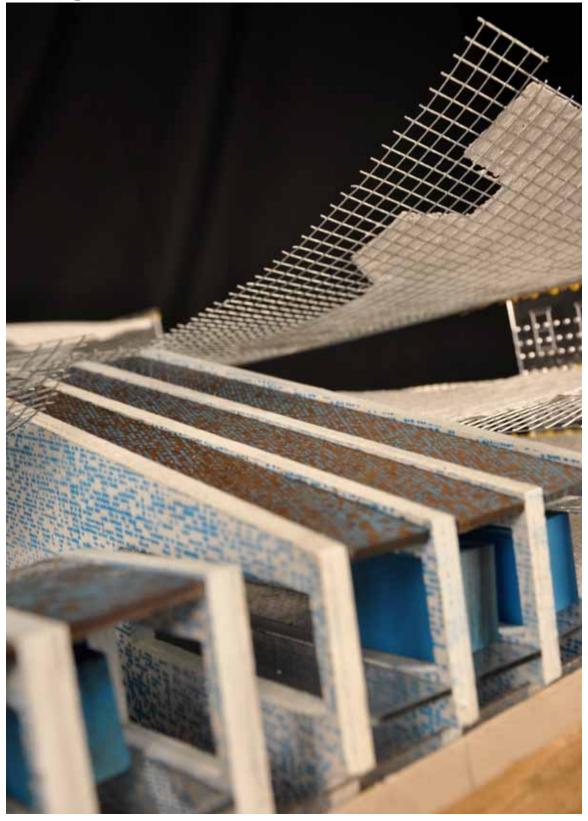




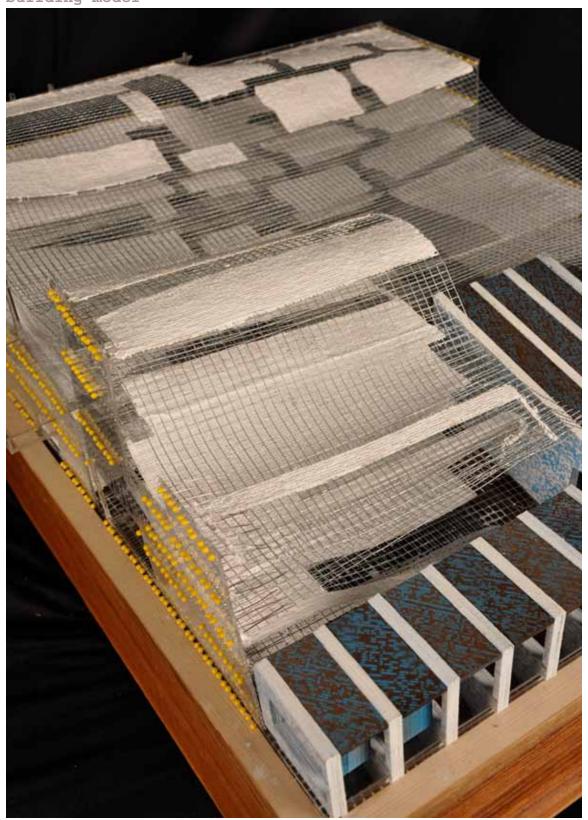
final design project building model



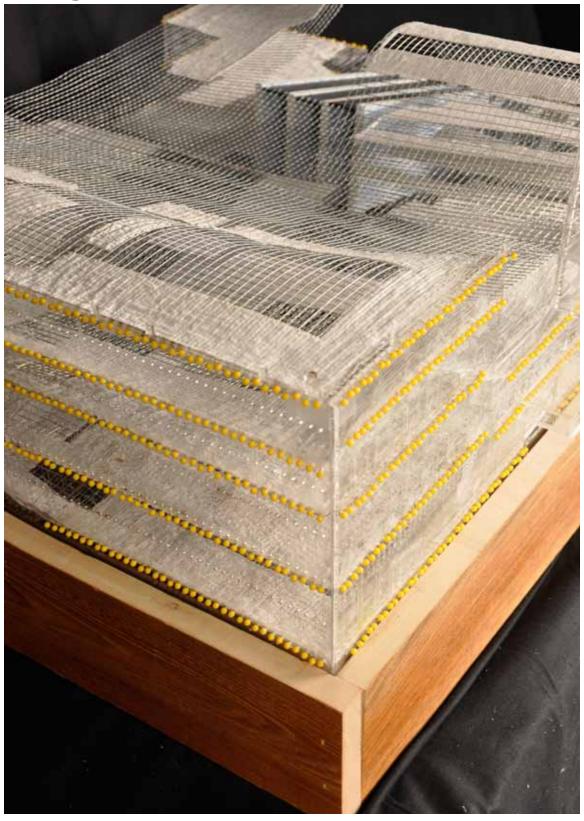
final design project building model



final design project building model



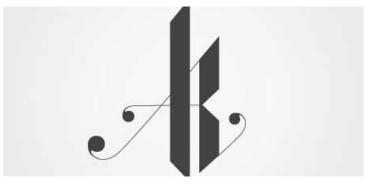
final design project building model

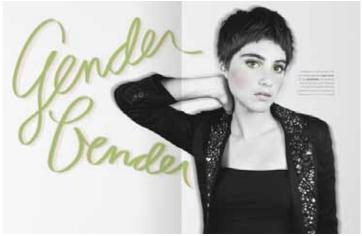


final design project conceptual gallery models













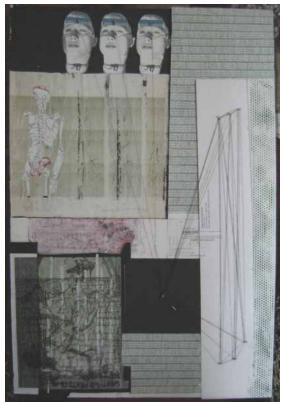
# final design project conceptual gallery models





final design project conceptual gallery models







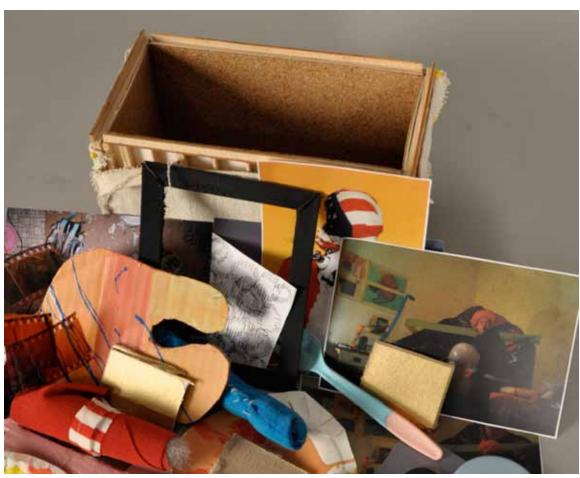




anna brewer

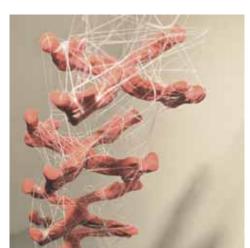
# final design project conceptual gallery models





# final design project conceptual gallery models











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### final design project

conceptual gallery models







conclusion: the arts crawl experiment

The mobility of the pods allows them to become informed by the environments they find themselves in. For example, if the gallery visits a school, the artist can create projects to do with students. The projects then can become part of the travelling gallery, or even become a part of the artist's future pieces.

To demonstrate how productive the simple act of moving the artist to a publicly activated space can be, I traveled with a mini pod to Arts Crawl, a university art's college event, and asked passers by to make something for me. The reaction from the community was very positive and produced over 40 mini art pieces in less than 2 hours.

final design project conceptual gallery models





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## Emily Halm

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#### Education

{The Pennsylvania State University}

University Park, PA Schreyers Honors College Student Bachelor of Architecture, 5<sup>th</sup> year standing

{USGBC/LEED 200 Level Training Workshop}

February 2010

+ Qualified to take the LEED Green Associate Exam without additional training.

#### Work Experience

{Penn State Design Services}

University Park, PA

Architectural Intern, May 2010-July 2010

- + Prepared construction documents for building remodeling projects that updated existing mechanical systems and increased energy efficiency.
- + Prepared LEED documentation in many credit categories including Water Efficiency, Materials and Resources, and Indoor Environmental Quality.
- + Participated in BIM organization meetings and generated strategies for implementing BIM and Revit in a multidisciplinary setting.

### {Pennsylvania Historical Museum Commission}

Harrisburg, PA

Architectural Intern, June 2011-August 2011

- + Created construction drawings and specification sets tailored to the needs of specific preservation projects.
- + Converted hand-drawn documents to AutoCAD format and built additional base drawings for the specific needs of projects, saving the office thousands of dollars in architectural drawing service fees.

#### Activities

{SEED, Students for Environmentally Enlightened Design}

Penn State Student Group, Spring 2010-Present

- Founding member and served as Vice-President
- + Organized and conducted meetings of members, encouraging the student body to learn about green building technologies.
- + Created activities for member participation, allowing members to apply knowledge of sustainable technologies in group design projects.
- + Researched grant/funding opportunities for group projects, allowing students to gain personal experience with sustainability experiments.
- + Organized group visits to sustainably-minded architecture firms, opening correspondence with experts in the sustainable building field.

Current Ongoing Project: African Book Project/SEED Library

+ Self-sustaining library recycled from shipping container slated to be sent to Africa.

#### Skills

Proficient in InDesign, Illustrator, Photoshop, AutoCAD 2011, Revit Architecture 2011, formZ, Microsoft Office, LEED documentation, hand-drawing and painting {especially ink and watercolor}, screen-printing, and D-SLR photography.