MICHAEL TAYLOR design portfolio

ASSOC. AIA, LEED AP BD+C

education

Master of Architecture + Urban Design Certificate — May 2013
University of Maryland

Bachelor of Science in Architecture — May 2008
University of Maryland

professional experience

Zavos Architecture+Design — July 2008 - Aug. 2011
Frederick, MD

Freelance Design — May 2011 - Present
University of Maryland

UMD Graduate Assistant — Jan. 2012 - May 2013
University of Maryland

teaching experience

Design Studio Critic — Summer 2012
University of Maryland

Software Tutorial Seminars — Jan. 2012 - May 2013
University of Maryland

Guest Lecturer
University of Maryland — Summer, Fall 2012

software proficiency

Revit	Photoshop	Dreamweaver
AutoCAD	InDesign	ArcGIS
SketchUp	Illustrator	Microsoft Office

organizations, certifications, + awards

Department of Energy Solar Decathlon 2nd Place Overall — Oct. 2007
National Council of Architectural Registration Boards (NCARB) — Aug. 2008
American Institute of Architects (AIA) — Sept. 2008
Leadership in Energy and Environmental Design Accredited Professional (LEED AP BD+C) — Sept. 2009
U.S. Green Building Council (USGBC) — Sept. 2009
Certified Passive House Consultant (CPHC) Training Program — Aug. 2010
Passive House Alliance United States (PHA-US) — Oct. 2012
Ed Bacon Student Design Competition Special Jury Prize — Jan. 2013
Congress for the New Urbanism — Feb. 2013
AIA-PV Emerging Professionals (EP) Committee — March 2013

MICHAEL TAYLOR

ASSOC. AIA, LEED AP BD+C

[e] mtaylor9@umd.edu
[p] 443.340.2750
[w] www.michaeldavidtaylor.com

academic

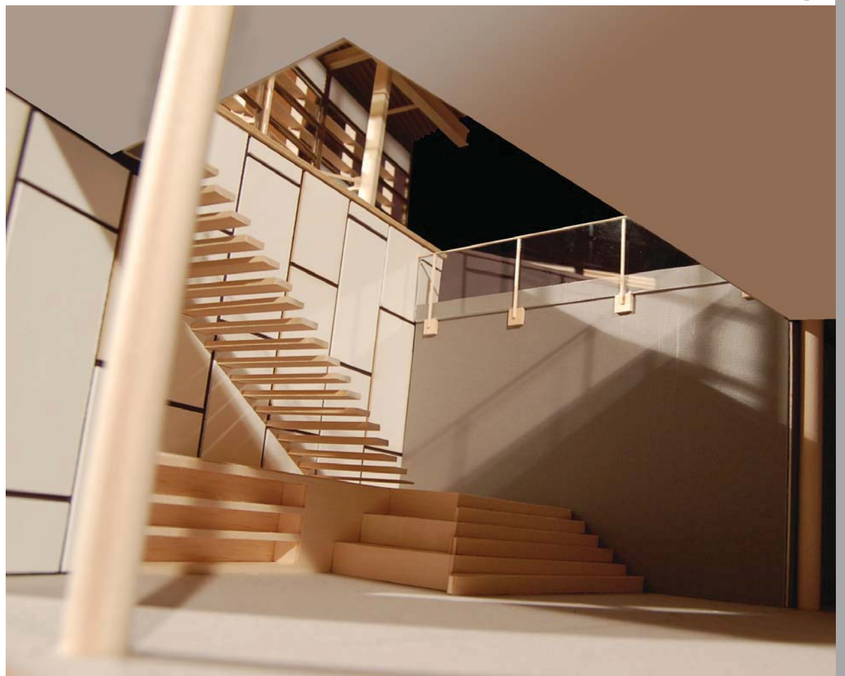
purpose:

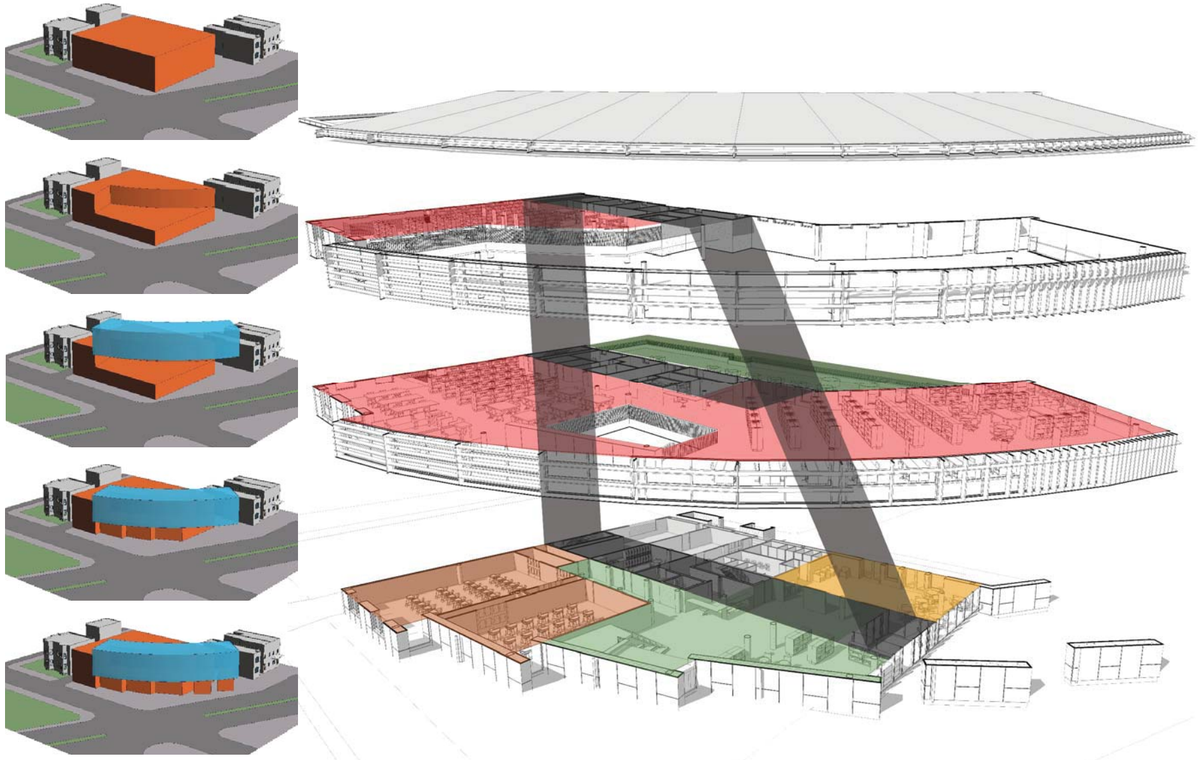
Graduate design studio project focused on the tectonic nature of building design. The program requirements included a 20,000 sq.ft. public library on a corner site in Washington D.C. at the intersection of Vermont Avenue and T Street.

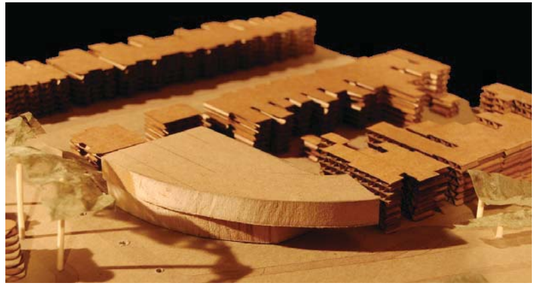
design solution:

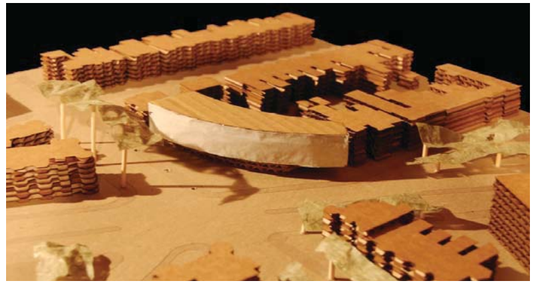
I focused on the exploration of massing studies, structural and mechanical systems integration, and sustainable building strategies. Throughout the design process, I consulted with the mutidisciplinary design team at ARUP. The project culminated with the completion of a detailed half inch-scaled sectional model of the design which highlighted the structural detailing and building systems integration.

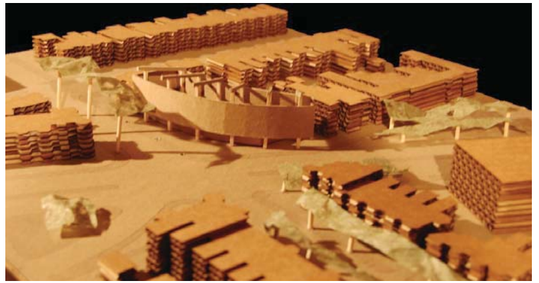
Benjamin Banneker Memorial Library

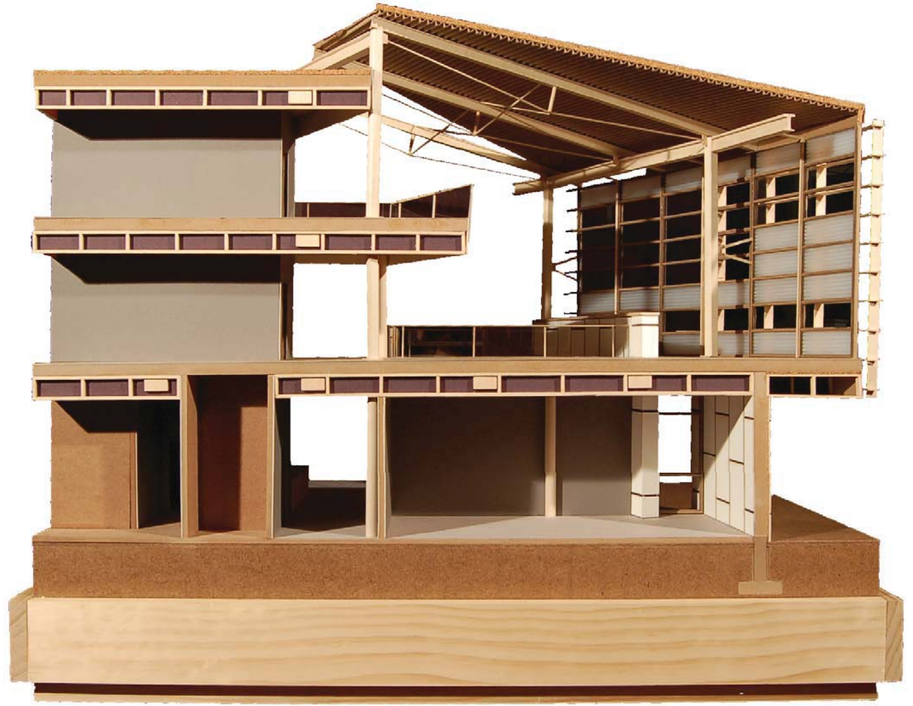












academic

purpose:

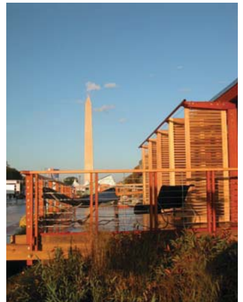
Undergraduate design / build competition. The 2007 Solar Decathlon, sponsored by the US Department of Energy, gives universities from around the globe a chance to compete in designing a 800 sq.ft. solar-powered home. The University of Maryland design team featured a cross-disciplinary group of individuals including architecture, engineering, english, and computer science majors in both undergraduate and graduate programs. Strong scores throughout the competition allowed the UMD LEAFHouse to place second overall in the competition.

photography courtesy of faculty advisor, Ms. Amy Gardner

2007 Solar Decathlon LEAFHouse

leaf house
at the University of Maryland

I, along with two colleagues, lead the landscaping team for the University of Maryland's LEAFHouse. Working as a team to meet tight time constraints we successfully assembled a beautifully designed landscape on the National Mall in Washington D.C.



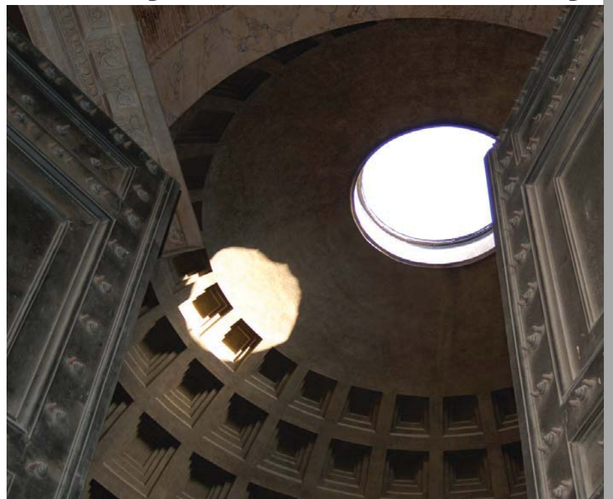
photography courtesy of faculty advisor, Ms. Amy Gardner

academic

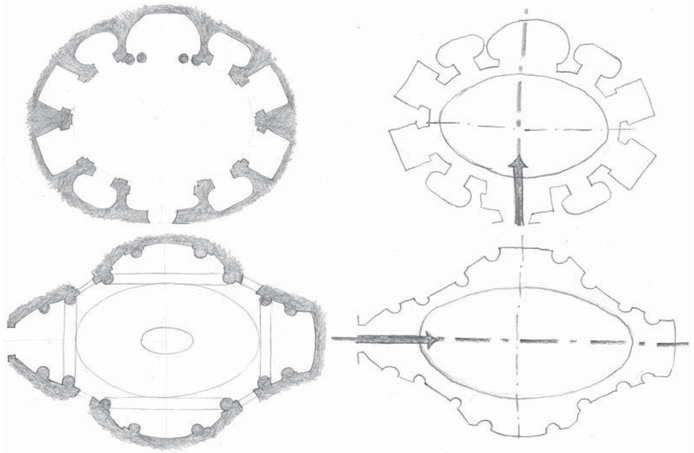
purpose:

Undergraduate semester abroad in Italy during the summer of 2007. Our group began the trip with a week in Florence followed by a month in Rome. We then traveled to northern Italy where we visited Venice, Vicenza and Como. This valuable experience allowed me to explore, first hand, the environment in which these historic masterpieces exist. During the trip I studied contextual relationships and developed my photography and sketching skills by documenting my experience. This is one of the most memorable experiences of my life and was a great addition to my undergraduate studies at the University of Maryland.

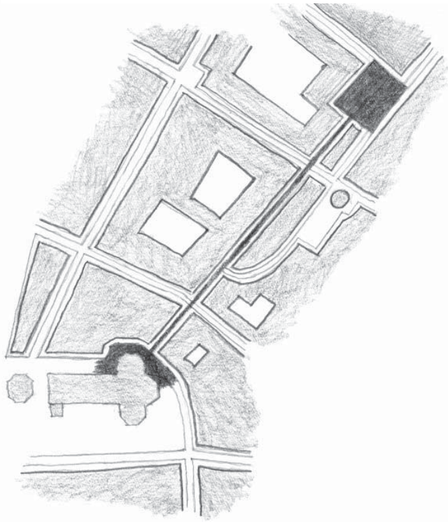
Study Abroad: Italy



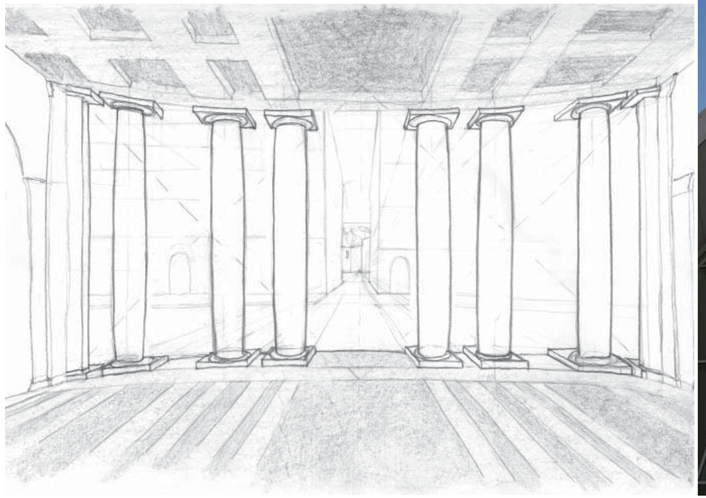
Tempietto



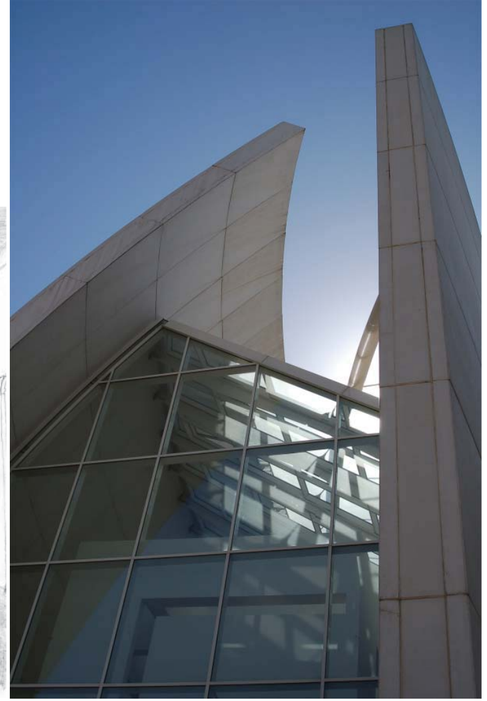
Comparative Analysis
Sant' Andrea al Quirinale
San Carlo alle Quattro Fontana



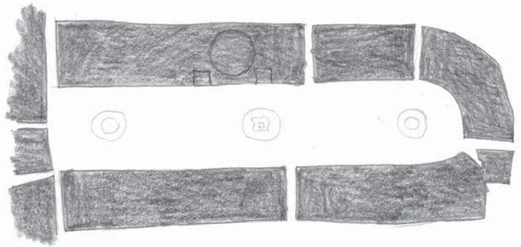
Promenade Analysis
Duomo
Piazza Santissima Annunziata



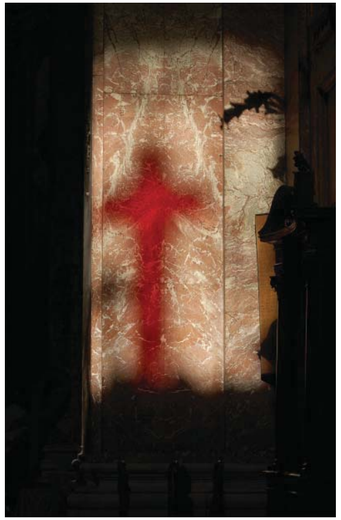
Palazzo Massimo

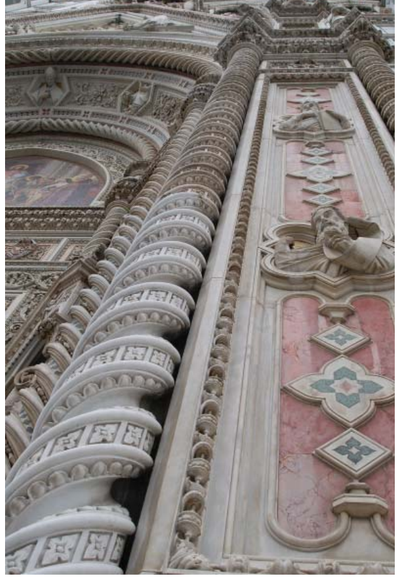


Jubilee Church

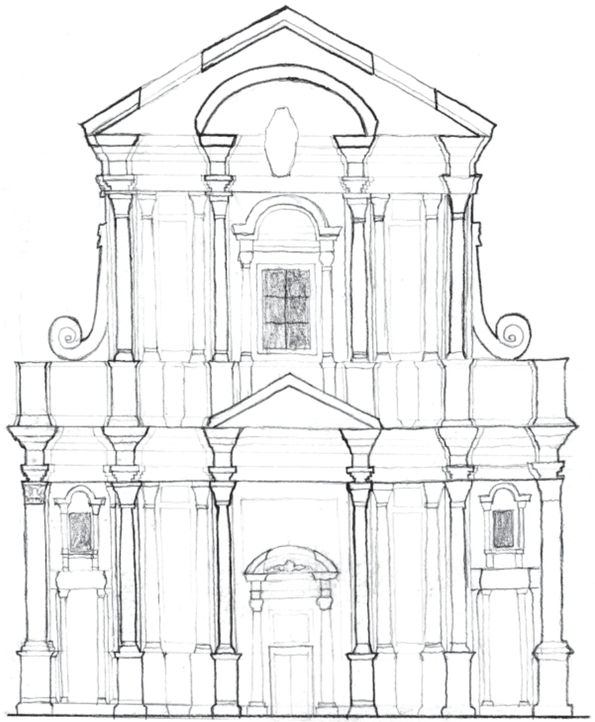


Piazza Navona

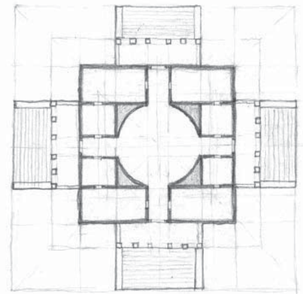


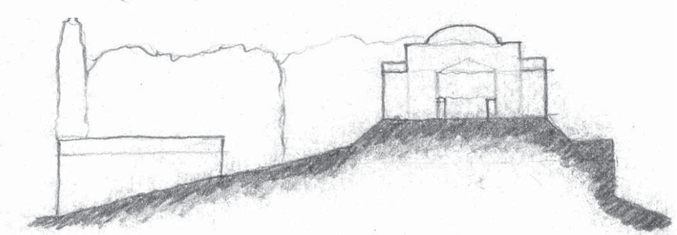


Santa Maria del Fiore



Santa Maria in Campitelli



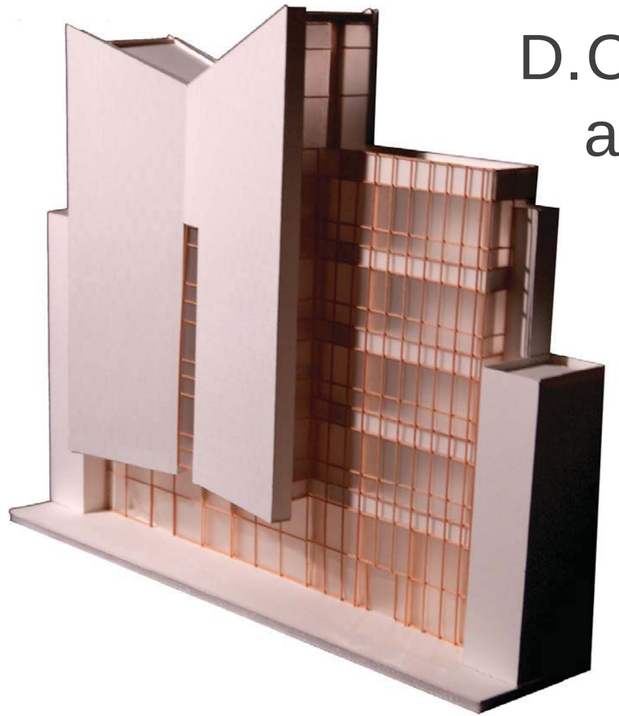


Villa Rotunda

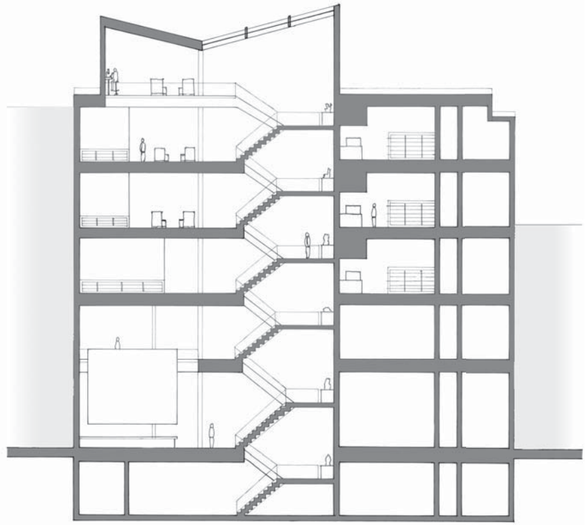
academic

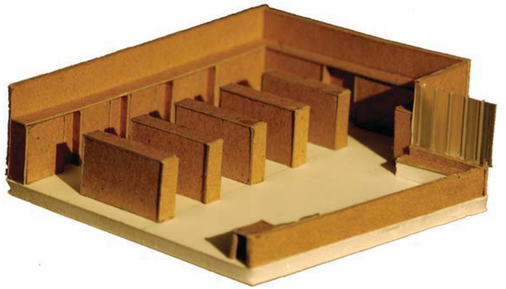
purpose:
Undergraduate design studio project exploring the tectonic design solutions for a library program within the limitations of a challenging Washington D.C. infill site.

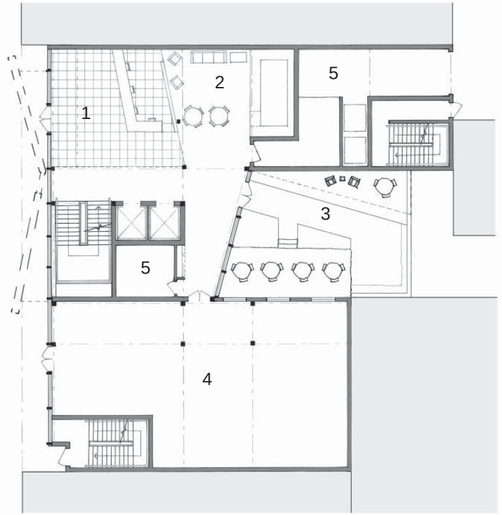
design solution:
For the street facade I created a series of models and elevation studies to create a balanced composition of solid and void. Through an investigation of individual spaces with vignettes and physical models I developed furniture, lighting, and material finishes for each of the programed spaces.



D.C. Public Library at Penn Quarter

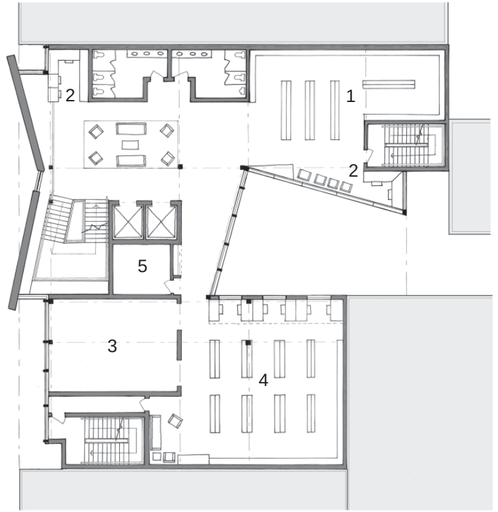






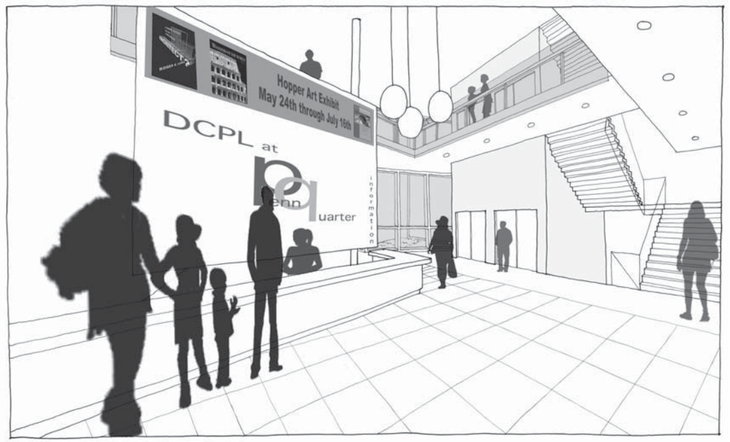
Ground Floor Plan

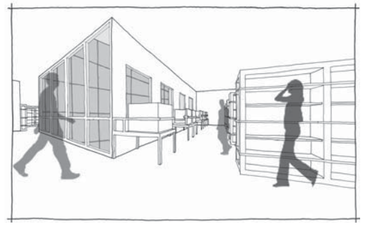
1. Entrance Lobby
2. Cafe
3. Outdoor Courtyard
4. Commercial Space
5. Service Space

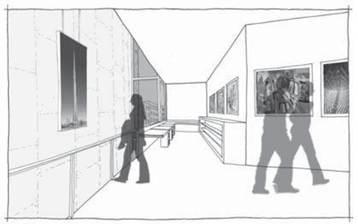


Typical Floor Plan

1. General Collection
2. Individual Study Space
3. Reading Room
4. Special Collection
5. Service Space







academic

purpose:

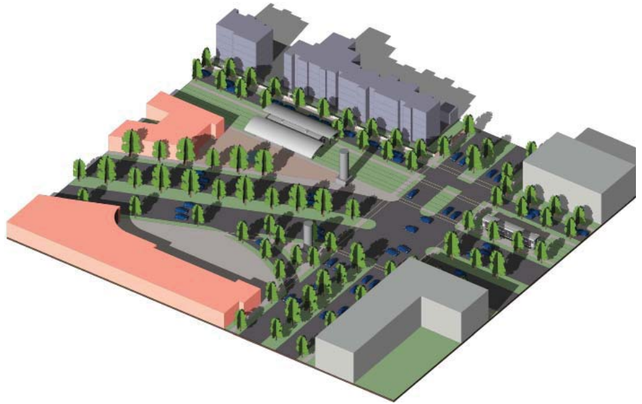
Graduate design studio project exploring urban design solutions to the expansive amounts of housing being constructed in China under the strict solar exposure mandates. The project focused on a neighborhood within Binhai, China for 30,000 residents.

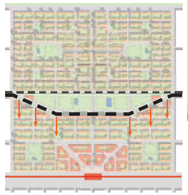
design solution:

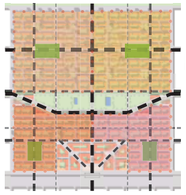
This studio was completed under the direction of architect Daniel Solomon, whose firm also confronted the same design challenges of this exercise. The new city of Binhai is rapidly being constructed to house millions of new residents. I explored multiple scales in the design process - the urban design, neighborhood, block, building, and unit. Not only was it critical to create a well-organized parti and solar code-compliant buildings, the design also needed to fit into the larger context of the new Binhai city development.

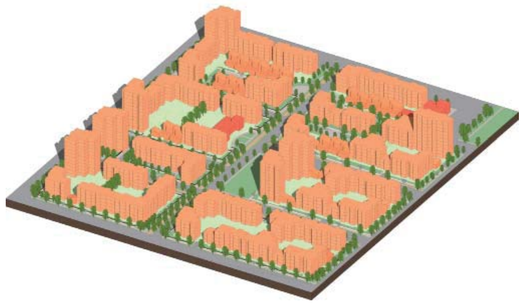
Urban Housing Development

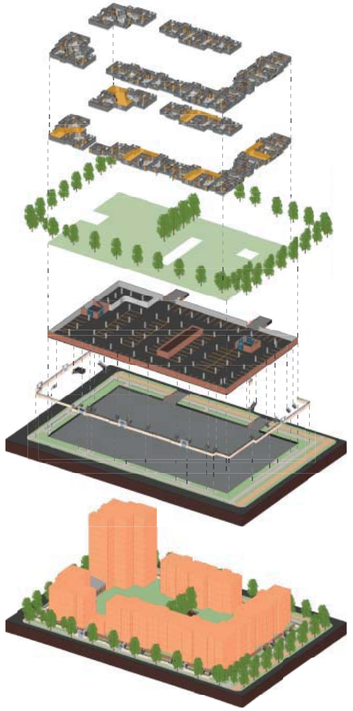
Binhai, China



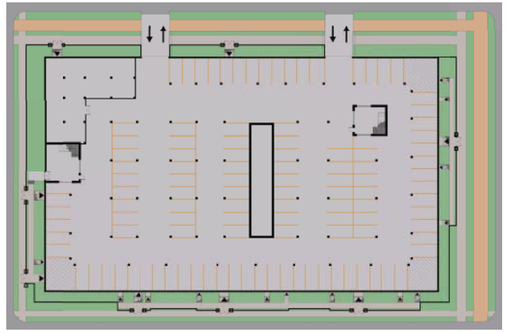








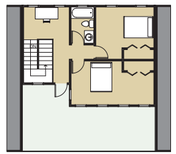
podium/
ground fl



parking level

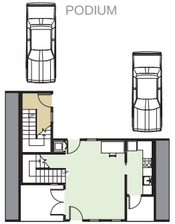
typical
residential street

typical
boulevard



third fl

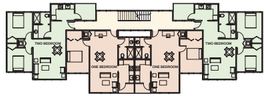
second fl



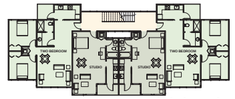
ground fl

STREET

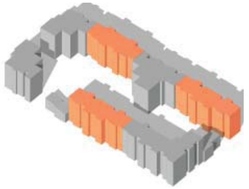
stacked townhouse units
two bed units : 2



bldg. a
one bed units : 2
two bed units : 2

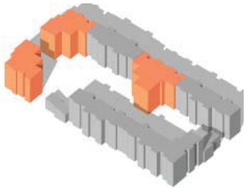


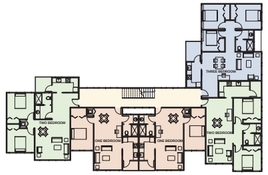
bldg. b
studio units : 2
one bed units : 2



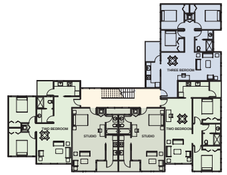
bldg. c
studio unit : 1
two bed units : 2
three bed unit : 1

bldg. d
studio unit : 1
two bed units : 2
three bed unit : 1

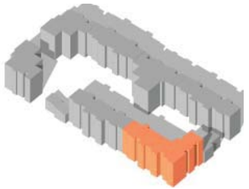




bldg. e
one bed units : 2
two bed units : 2
three bed unit : 1



bldg. f
studio units : 2
two bed units : 1
three bed unit : 1



academic

purpose:

Graduate urban design studio project looking at a design solution to repair the disconnected transportation networks along the Schuylkill River waterfront surrounding the historic 30th Street station. This design project was completed by a group of eight graduate architecture students as an entry to the 2013 Ed Bacon Student Design Competition. We won a Special Jury Prize for the Most Realistic Design Proposal.

design solution:

Our team sought to revitalize the 30th Street Station district by knitting together the urban fabric to create an organized sense of arrival. We sought a realistic approach that managed the existing transportation intersections. The intervention highlights a new n/s axis along 30th Street and a greenway following the overhead CSX rail line.

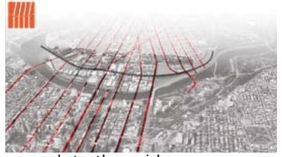
The studio was completed under the direction of Professor Matt Bell, FAIA, and with support from Professor Emeritus Roger Lewis, FAIA.

[images of my personal work are noted by a red square in the lower left corner]

A New Schuylkill Waterfront

Philadelphia, PA

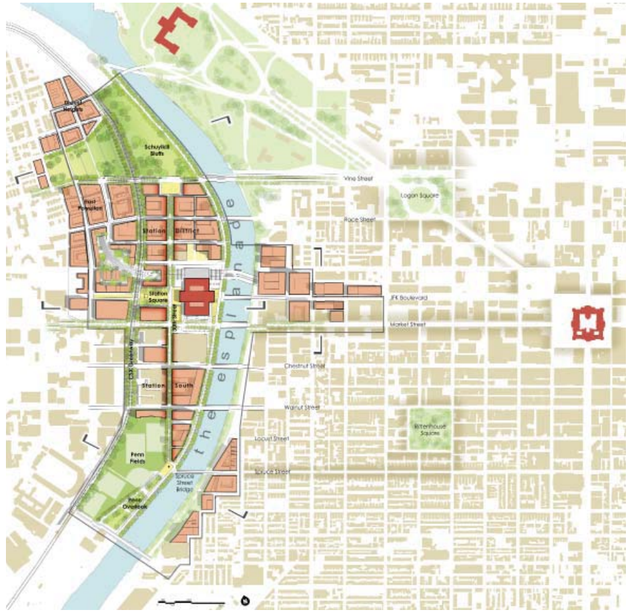
emphasize existing axes



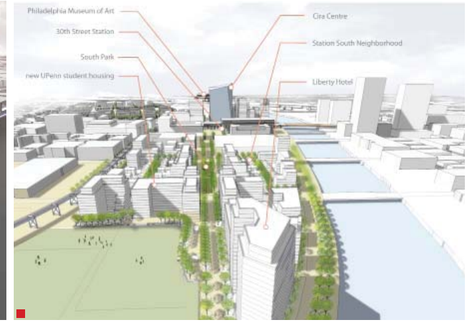
complete the grid

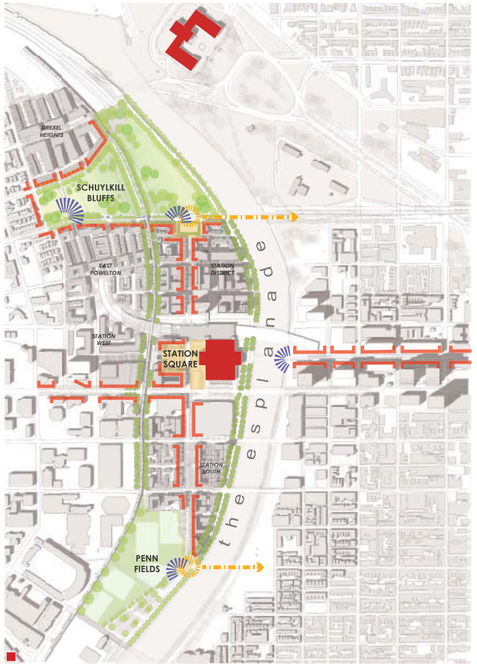
extend the green network

create a river walk

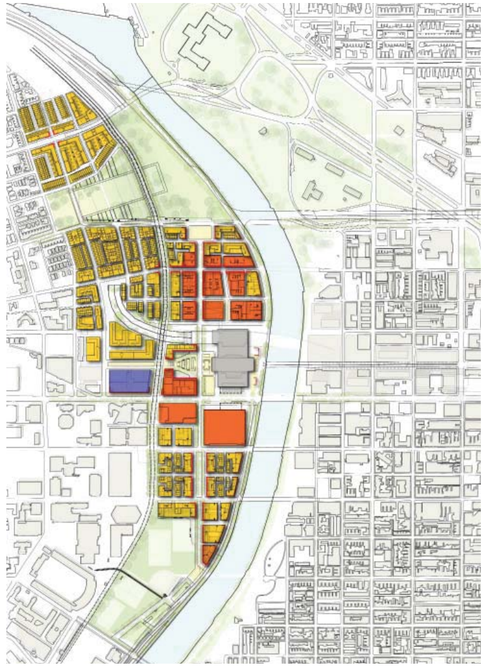


After creating our design at the urban level, we each looked at an individual piece of our urban design plan in more detail. We created a comprehensive zoning plan and height restrictions based on our desired density for each area. I focused on the southern-most portion of the site near the athletic facilities of UPenn.





Places Diagram



Zoning Diagram

VIDA Senior Living Center

Washington D.C.

program:

A five-story senior-living building includes 36 single-occupancy units, a first floor community center, and a green roof terrace.

design solution:

Our design team creatively developed a scheme that achieved the desired density on a tight infill site on Missouri Avenue in NW Washington D.C. We were challenged with restricted zoning parameters and specific programmatic needs for this senior population.

The design team was awarded a Green Communities Grant to help fund the sustainable aspects of this project which were achieved through exterior material selection, shading devices, and a habitable green roof terrace.

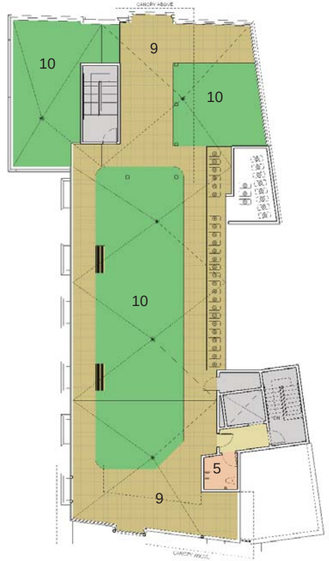
My role in this project included site visits, construction drawings, design team meetings, and consultant correspondence.

[All images used in this section are of my personal work for the project. Images are the property of ZA+D]

Typ. Unit Plan

Ground Floor Plan

Typ. Floor Plan



Roof Terrace Plan

1. Lobby
2. Office Space
3. Community Room
4. Kitchen
5. Bathroom
6. Resident Unit
7. Laundry Room
8. Community Space
9. Walking Space
10. Green Roof Planting

program:

A 2,000 sq.ft. addition and kitchen renovation to a single family residence in Gettysburg, PA.

design solution:

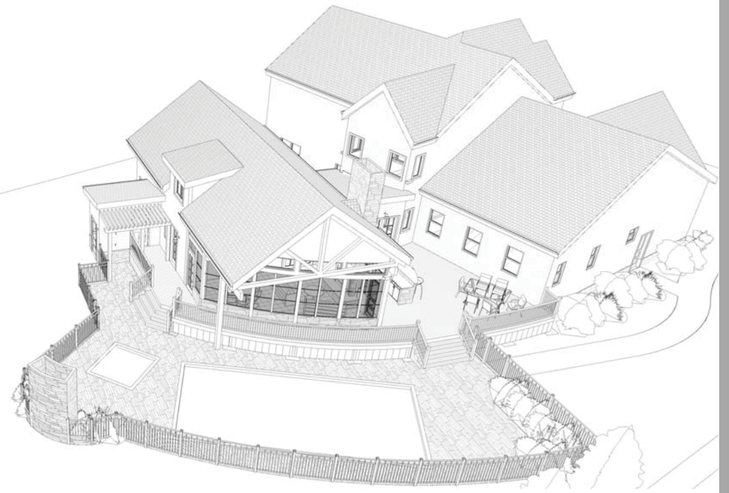
The new addition provides a unique private indoor/outdoor sequence of spaces. Featured spaces include a breakfast room, a master suite, and a three-season screened porch. Continuing outdoors, we included a series of landscaped and hardscaped spaces linked by a new deck, pool, and spa.

My responsibilities for this project included completing an existing site survey, design development, construction documents, materialresearch, and bidding negotiations. I also participated in owner meetings and various other project correspondence.

[All images used in this section are of my personal work for the project. Photographs are from construction administration archives. Images are the property of ZA+D]

Private Residence

Gettysburg, PA

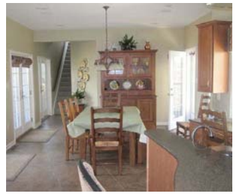


Existing Conditions

Construction Details

Completed Landscape

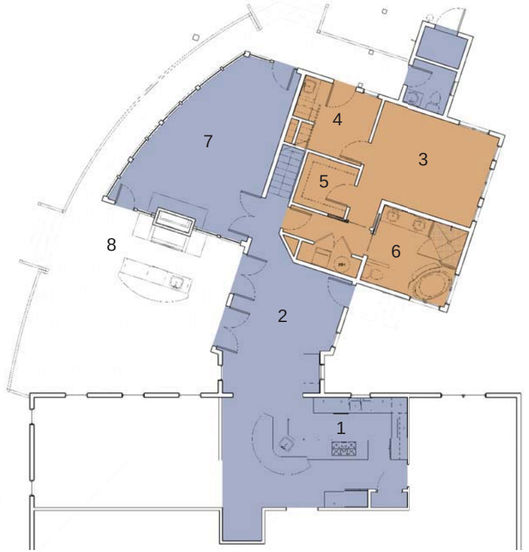
Completed Addition



Completed Interior

Completed Sun Room

1. Renovated Kitchen
2. Breakfast Room
3. Master Bedroom
4. Sitting Room
5. Walk-in Closet
6. Master Bath
7. Sun Room
8. Outdoor Kitchen / Patio



Addition / Renovation Plan

purpose:

Digital three-dimensional modeling is a powerful tool that allows a visual client to see an accurate representation of their project. At ZA+D I frequently took the lead of creating graphics for new project proposals. I used Revit software to generate and manipulate these detailed models. Through my work on these proposals I was able to continue to refine my design skills and quickly represent a proposed idea.

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Digital Representation

Frederick, MD

Net-Zero Development

Gettysburg, PA

Commercial Rehabilitation

Frederick, MD

Youth Center

Frederick, MD

Religious Center

Washington D.C

Multifamily

program:

A new 35,000 sq.ft. NCAA regulation gymnasium and fitness center will be the new site for the Hood College Blazers basketball and volleyball teams and student fitness center.

design solution:

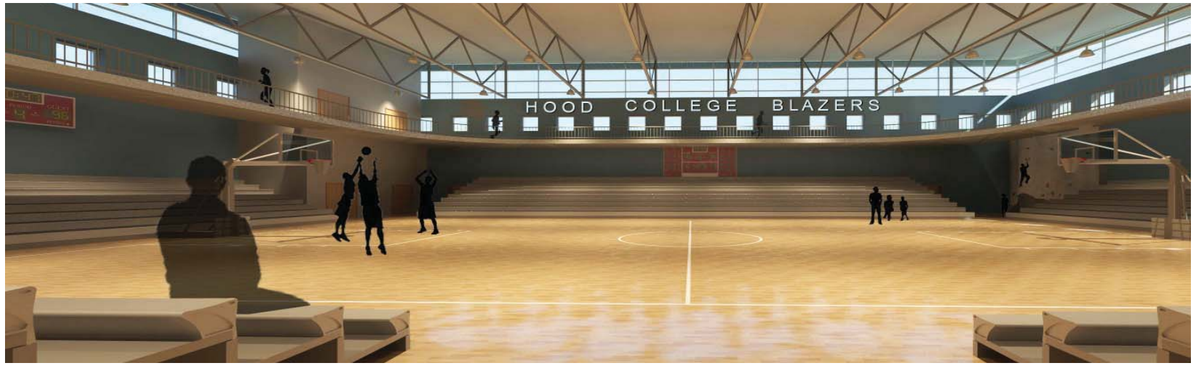
Our design team focused on generating a contextual exterior appearance that fit within the historic downtown campus environment. We divided the massing of this large program into two distinct pieces, a contemporary mass for the gymnasium and a contextual university mass for a state-of-the-art student fitness center.

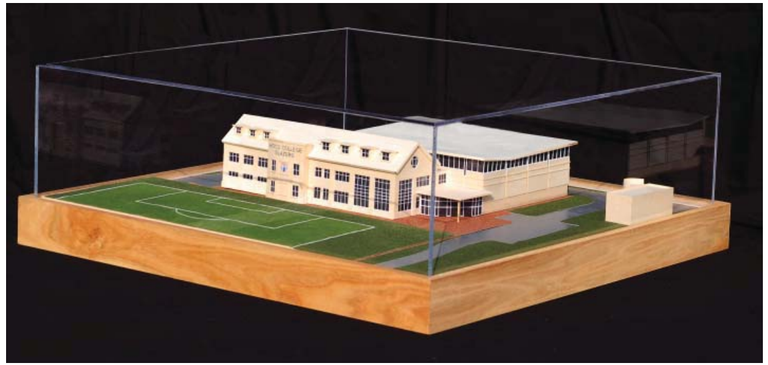
My roles in this project started with creating digital renderings for the design-build proposal which our team developed with a local general contracting company. In addition to working with the design team on developing construction documents on a tight project schedule, I also constructed a detailed 1/16" scaled model of the building and site for a university fundraising gala event.

[All images used in this section are of my personal work for the project. Images are the property of ZA+D]

Hood College Gymnasium and Fitness Center

Frederick, MD


HOOD COLLEGE BLAZERS



freelance

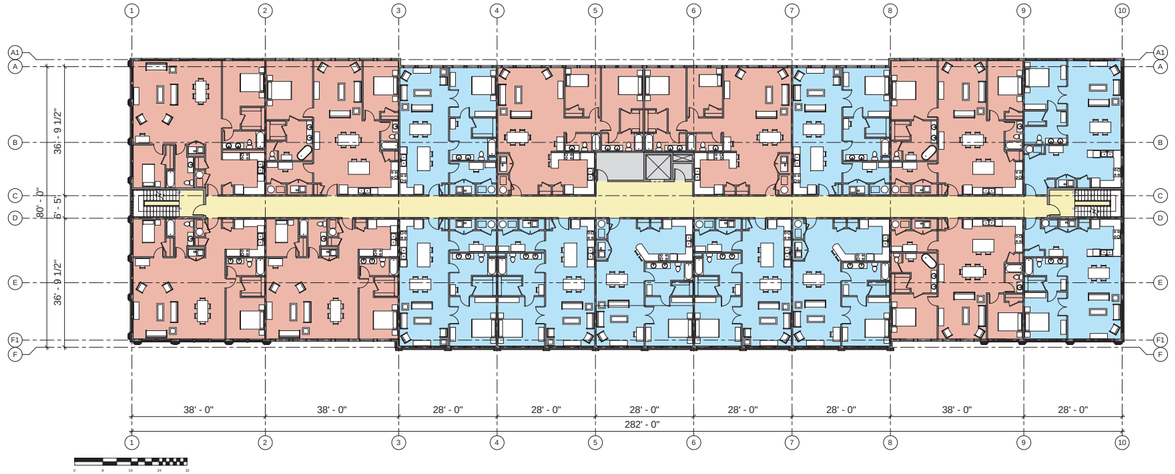
program:

I was commissioned by an entrepreneur who wished to translate his love for the SoHo cast iron building facade into a replicable freestanding loft-style apartment building. The final deliverables for this study were a set of schematic plans, elevations, and renderings to portray the client's vision to potential investors.

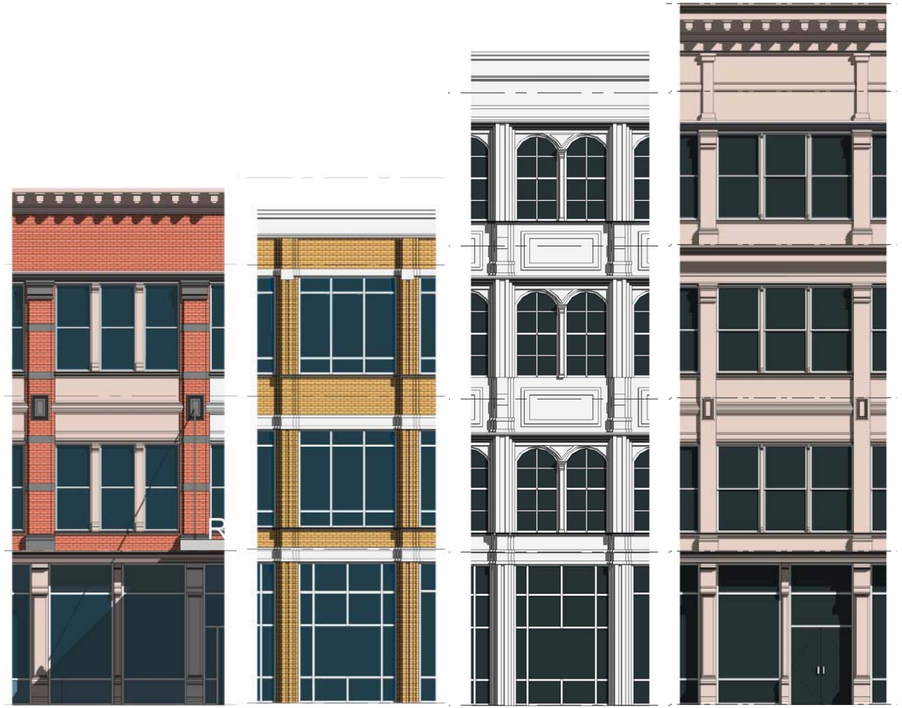
design solution:

I began by laying out an efficient floor plan of one and two-bedroom units. Through site visits to local cast iron buildings and a trip to Lower Manhattan to see the beauty of these buildings I was able to better understand the client's vision.

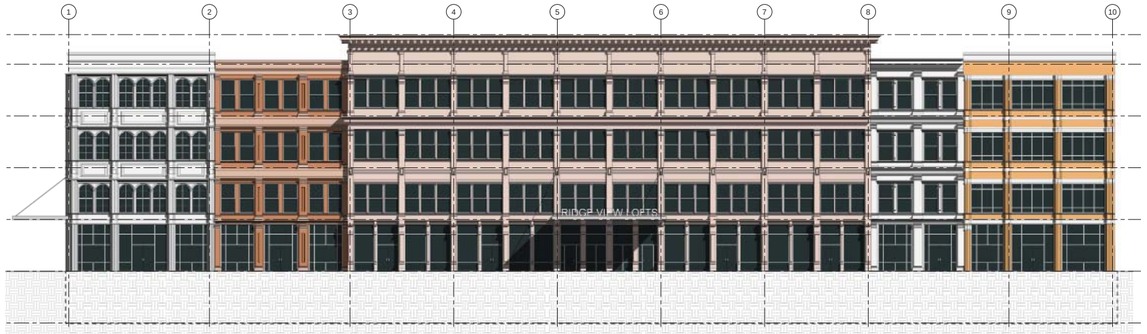
SoHo Inspired Lofts

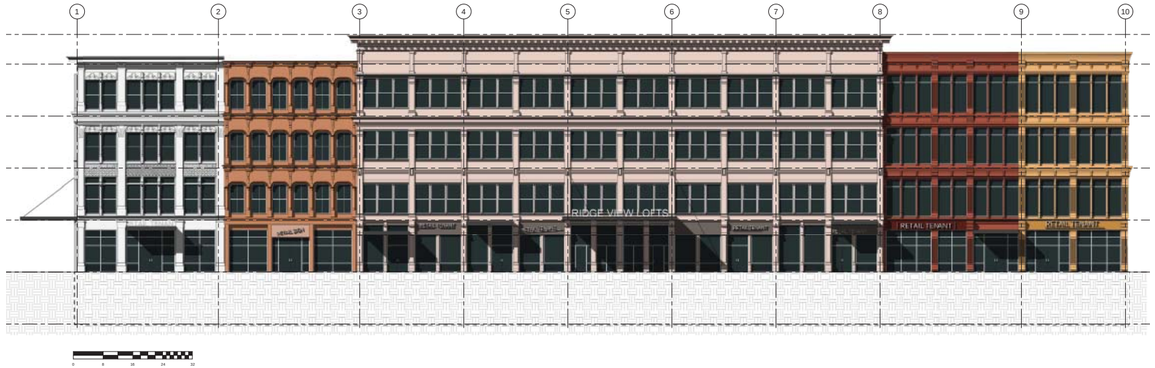


Typical Floor Plan



These digital renderings of individual bay studies represent the varied facade treatments that I developed. The client's vision was to create a cohesive interior floor plan with a segmented facade to replicate the rich character of the narrow SoHo building lots.





I created multiple iterations of elevation studies to satisfy the client's request for the appearance of the facades. Upon review of early studies the client realized the need for a fourth floor to express the verticality of this style of building.

Through a dialogue with the client I was able to manipulate the building design to fit his vision. By using three-dimensional digital representation I was able to quickly modify and update changes to the model for new renderings. I found this to be very helpful in working with a client who needed realistic representation in order to express his vision.

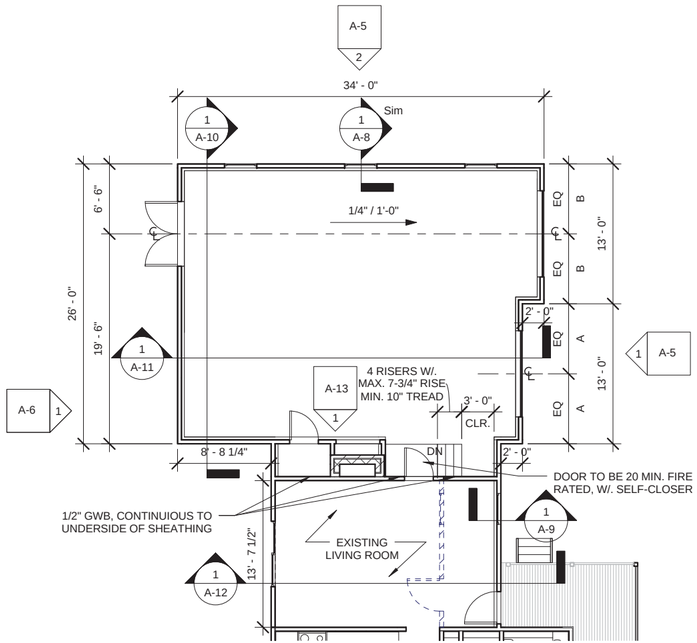
freelance

program:
A 1,000 sq.ft. two-car garage and living room addition.

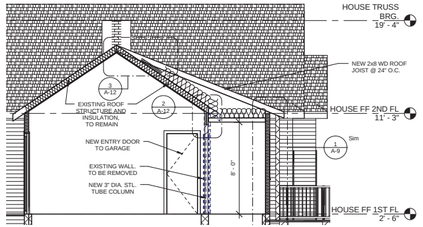
design solution:
A simple and contextual design solution satisfied the clients' desire to keep the garage addition from appearing overwhelmingly large and out of place. Instead this complementary design makes the garage well fit for the home.

I played many roles in this project from designer, to project manager, to general contractor, and even a laborer. Through construction observation and getting my hands dirty with professional tradesmen and inspectors this small project was an outstanding learning experience in building design and construction early in my career.

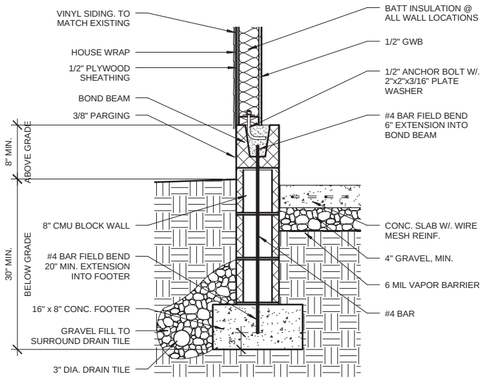
Private Residence
Mount Airy, MD



Addition Floor Plan



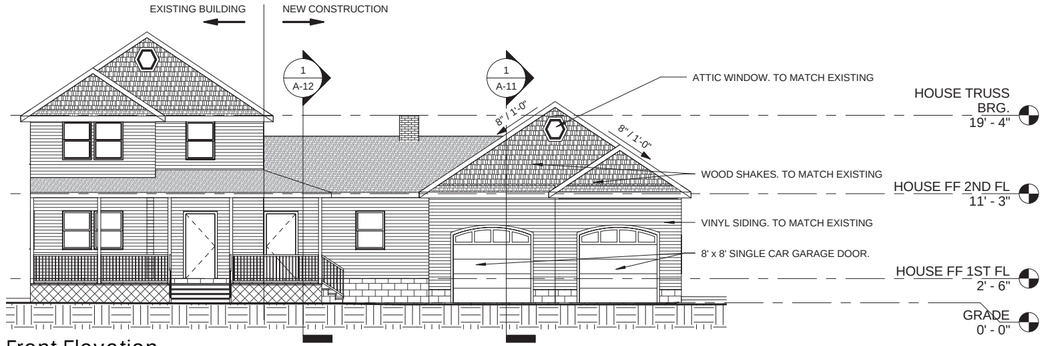
Living Room Addition Section



Foundation Detail

Model View of Front Elevation

The three-dimensional Revit model was helpful in letting the client visualize a realistic image of the end product. I independently created a set of construction documents for permitting and contractors. I also assisted in construction scheduling and material purchasing.



Front Elevation

Being an active part of the construction site is something I have always enjoyed. Through observation and documentation of this project I learned many helpful lessons regarding the means and methods of construction. Creating relationships with the different tradesmen allowed me to learn more about the many different building construction trades.

Before

Completed

MICHAEL TAYLOR

ASSOC. AIA, LEED AP BD+C

[e] mtaylor9@umd.edu
[p] 443.340.2750
[w] www.michaeldavidtaylor.com