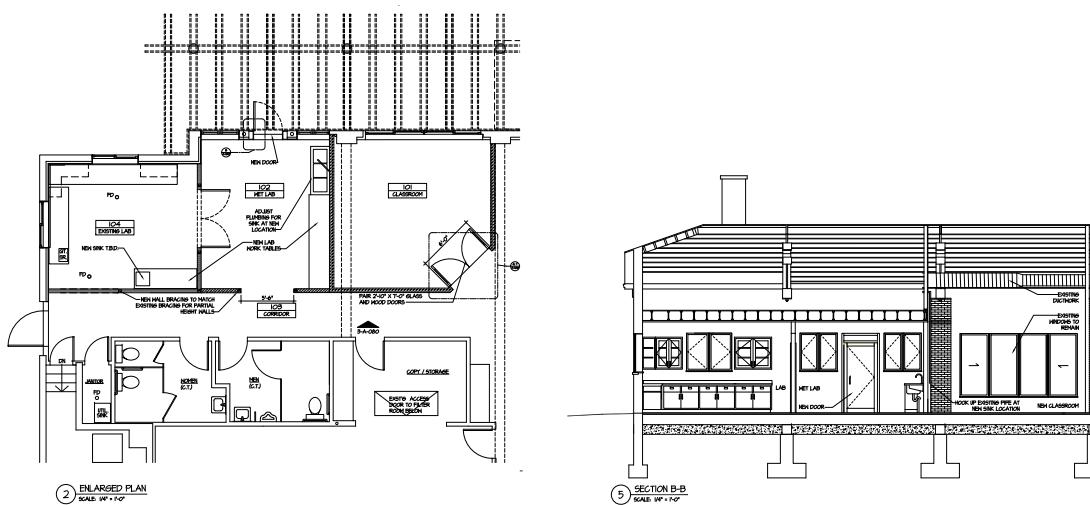




*Boston Society of Architects Timber Competition Entry*

Professional +  
Volunteer Work  
RIBA Stages 1-7  
1  
Estuary  
Research Center

Yonkers, New York  
New classroom and lab design (~150 m<sup>2</sup>) for Sarah Lawrence College's estuary research center at the mouth of the Saw Mill River. Worked under project architect guidance from conception through construction. Modeled in Revit + drawn in Autocad. Modeling the existing building helped us foresee and avoid potential issues during construction



Rendered model view

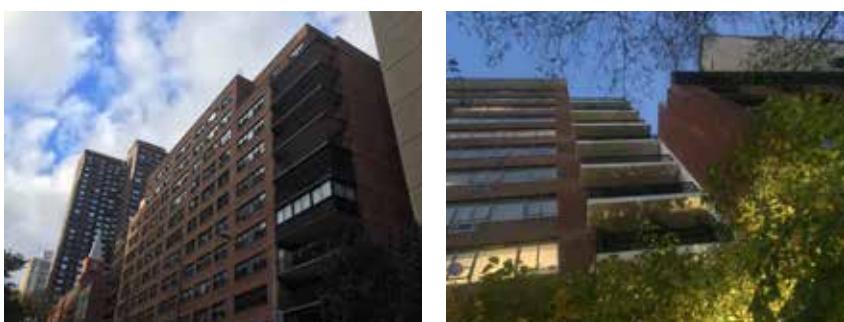
Built classroom

2 Design-Build  
New York City

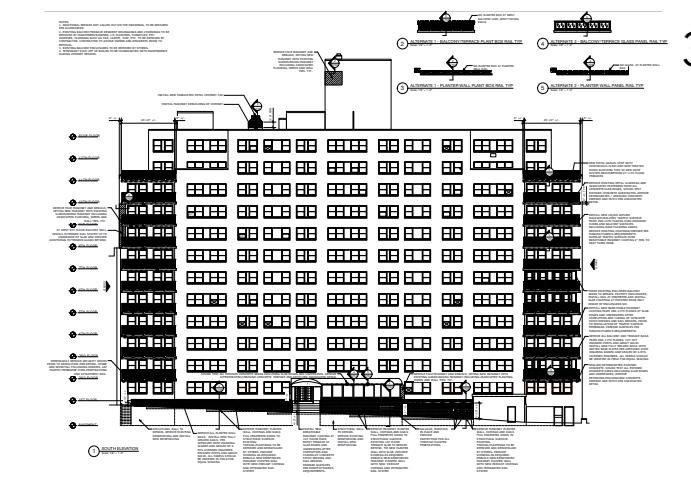
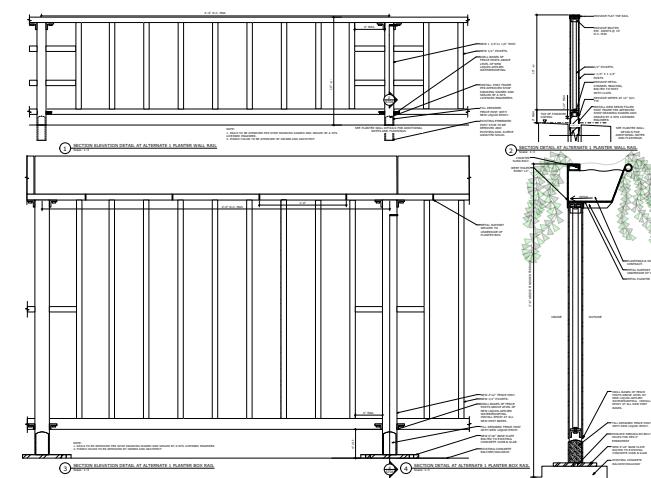
Red Rabbit Break Room, Design Build Volunteer Project Open Architecture NYC. Worked with a team of designers to improve the breakroom for a local company. Worked from early design through construction.



Red Rabbit Break Room, Design Build Volunteer Project



Existing and finished facade/terrace alteration



3 CTA Architects  
New York City

Responsible for working on a team for design, construction documentation, administration, and observation for the alteration of existing multifamily buildings and schools in New York City. Attended meetings and worked with city bureaucracies in the interest of designing public work.

# Professional Work

Hastings-on-Hudson, NY

RIBA Stages 1-7

Christina Griffin

Architecture Studio

Residential

1

Responsible for creating + collaborating on Revit models for client meetings, presentations and general design + construction drawings for contemporary home alterations. Project sizes ranged between kitchens and alterations and extensions of homes.

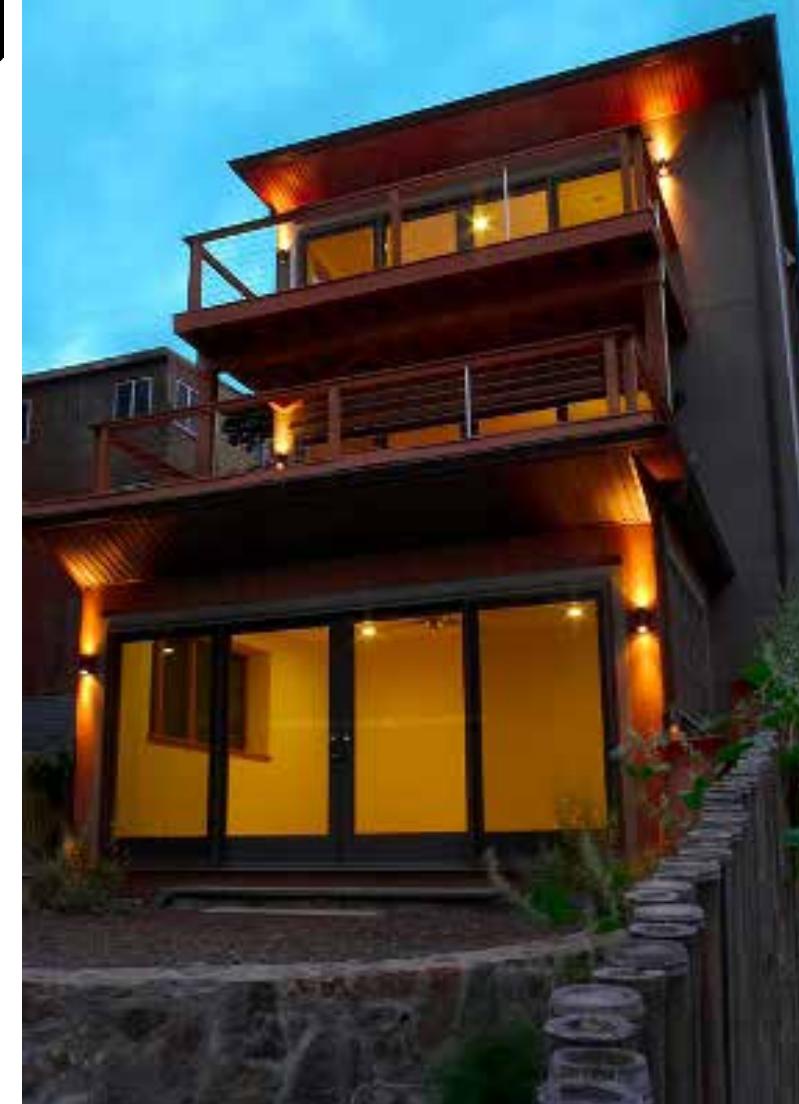
Community Center 2  
for Residential  
Planned Town

Responsible for presentation drawings and renderings in Revit for AIA award winning submissions and client meeting presentations. Project was a collaboration with a design team to create a sustainable suburban development. Renderings show the community center for the town.

Multifamily  
Housing

3

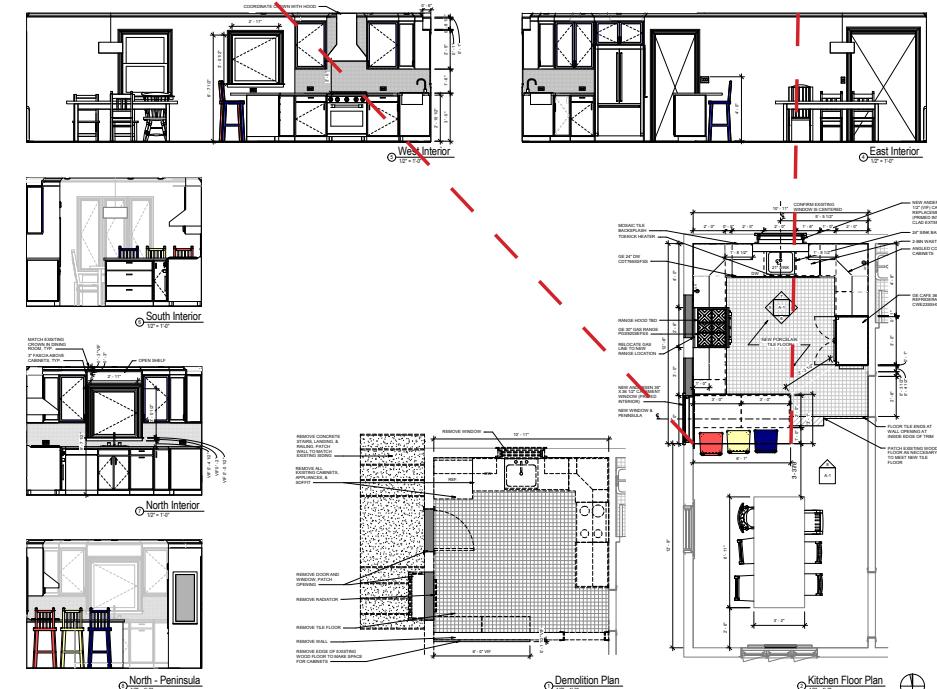
Responsible for building 3d models and producing rendered presentation views for town planning and zoning board presentations. Viewsheds from a scenic trailway were important local laws we needed to consider in the design phase.



Materials research + schematic design model for LEED home. Later worked on planning and construction submission drawings and early construction work prior to leaving for college.



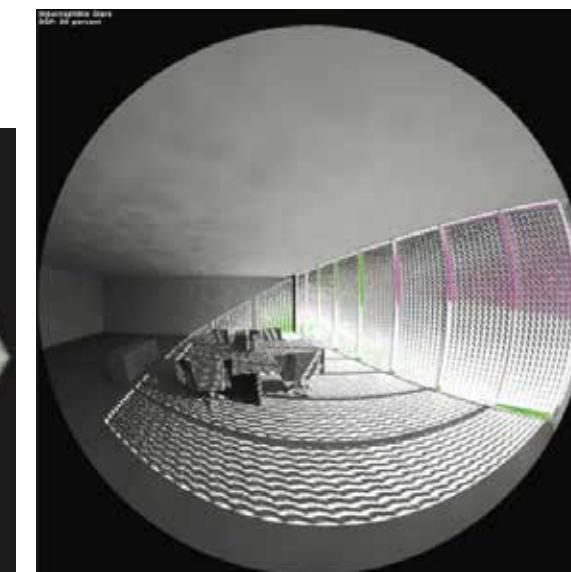
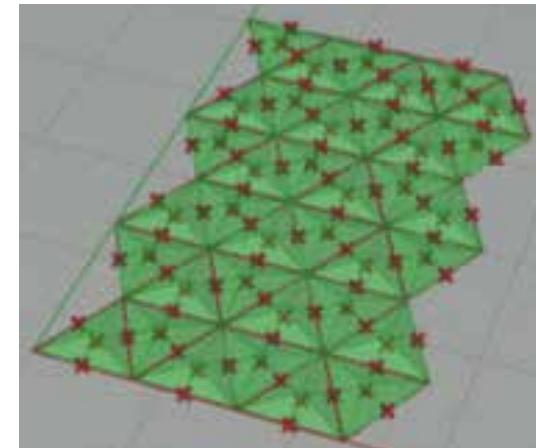
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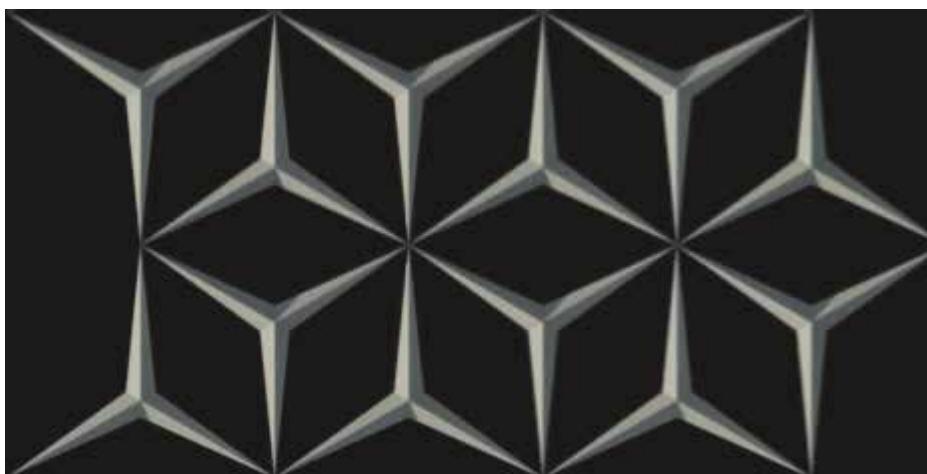
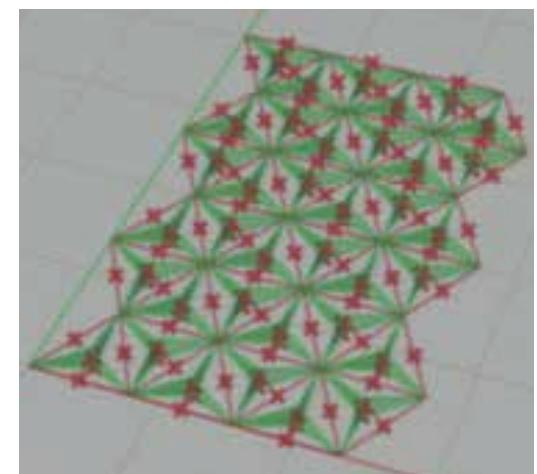
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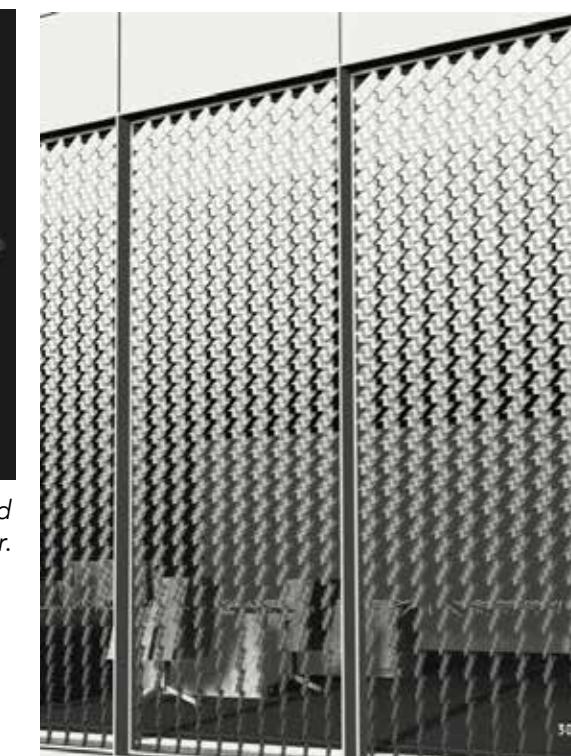
## Shading Design



Glare studies



Aedas Al-Bahar shaded facade study reverse-engineered using Rhino and Grasshopper.



Adaptive facade study modeled in Rhino and Grasshopper/ Diva in independent study with professor.

# Design Analysis

## Art Gallery Daylight Study

Art galleries need a standard consistent light level of 200 lux. By adding light scoops that double as wind breaks on the green roof above, lighting needs are met without electric lighting for most of the hours of occupation, (section by teammate, Yara Gamal). Rhino/Grasshopper/Ladybug Tools.

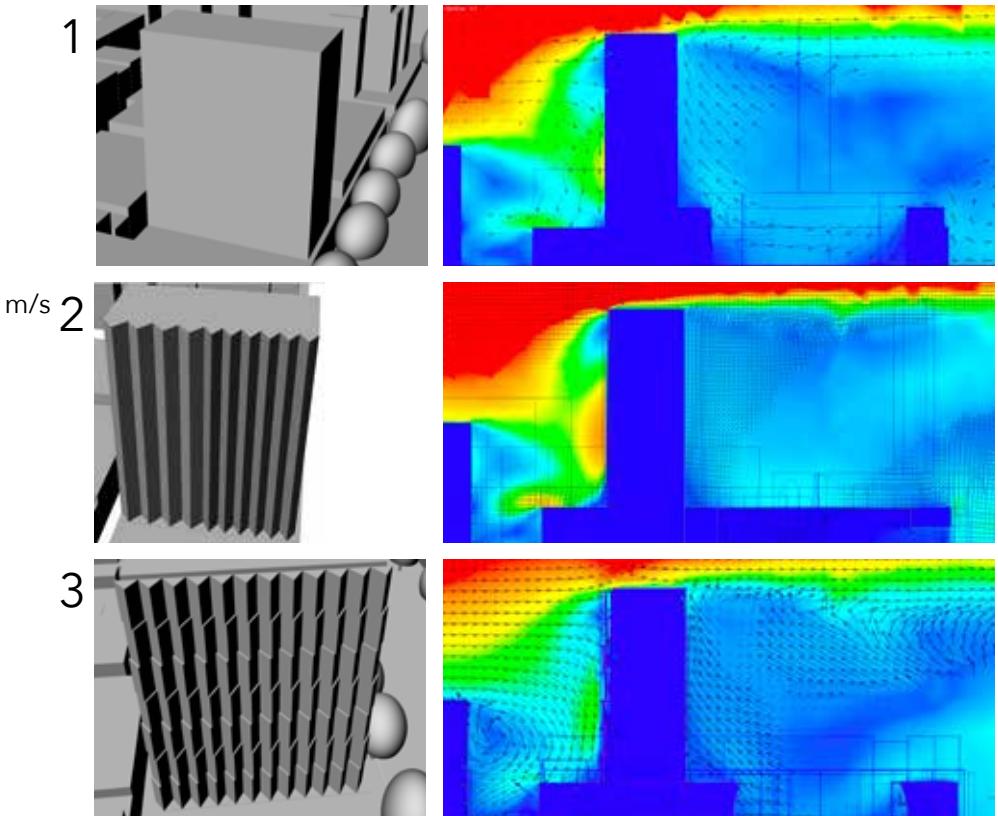
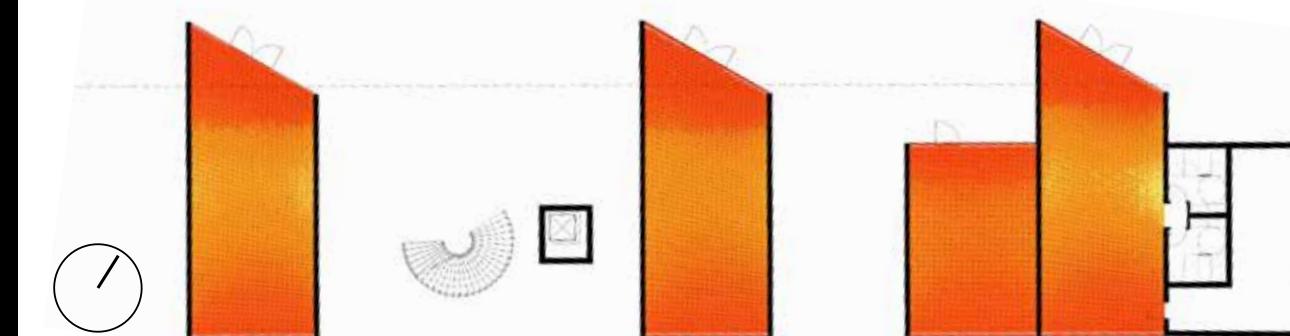
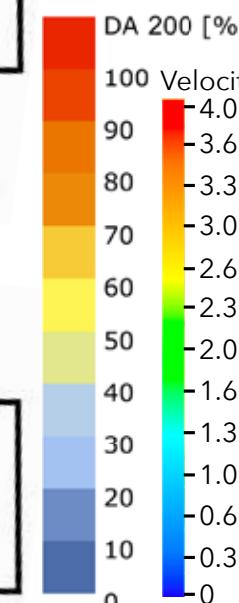
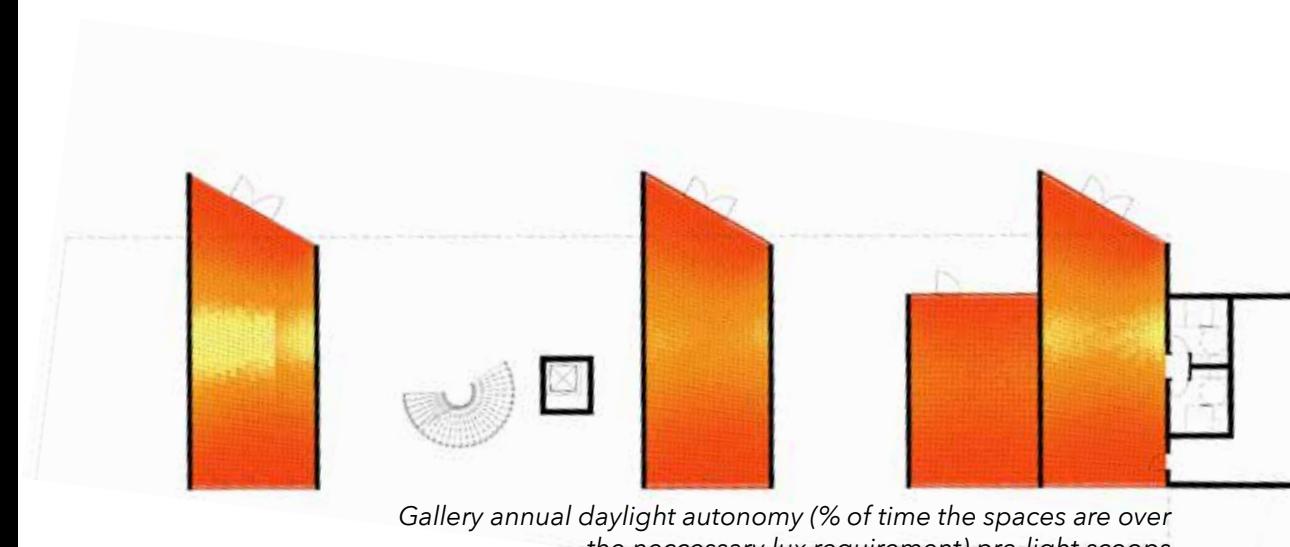
## Wind Studies

Interventions were tested on the elevation facing prevailing wind for an existing apartment building in London.

**1** The existing shear facade creates uncomfortable conditions on the podium when winds are high, and high pressures on the facade system components.

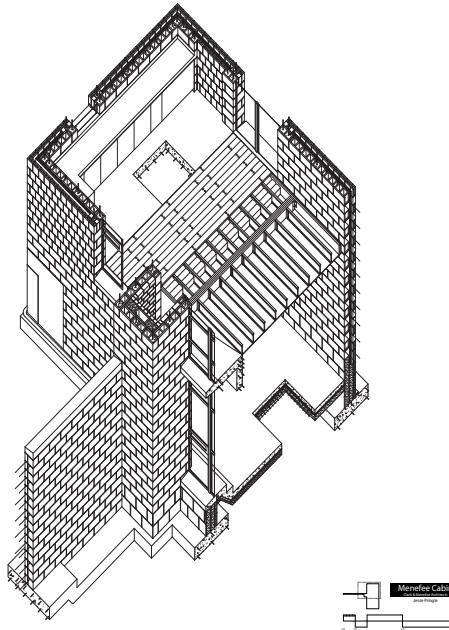
**2** Adding vertical sawtooth channels makes conditions even worse with higher pressures on more of the facade and worse conditions on the podium.

**3** Offsetting the vertical channels has the effect of reducing wind pressure along the entire facade and podium when compared to the other options.

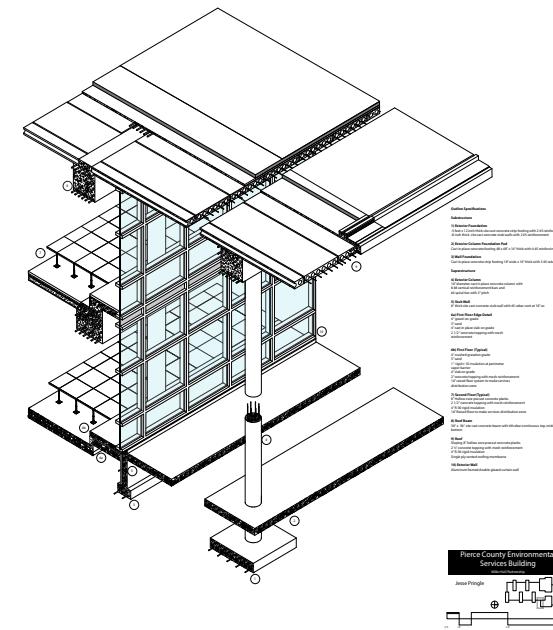


# Models + Drawings

University at Buffalo



Axonometric drawn in AutoCAD



Isometric modeled in Revit



3d section of adaptive facade modeled in Rhino and Grasshopper in independent study with professor Jin Young Song



Models designed using Revit/Rhino and lasercut/3d printed/hand cut models.

