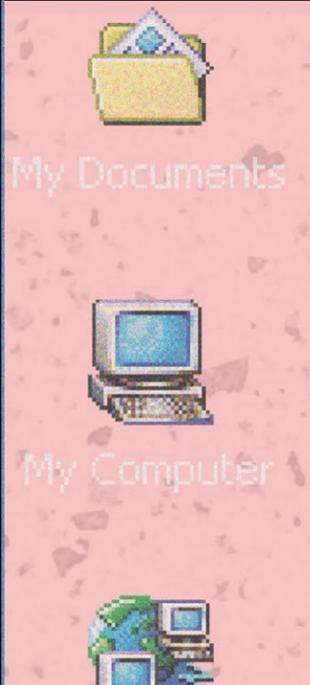


social_infrastructure



- Set Program Access and Defaults
- Windows Update
- Programs**
- Documents
- Settings
- Search
- Help
- Run...
- Shut Down...

- Architecture**
- Critical, Curit
- Historic Preser
- Urban Design
- Urban Planning
- Real Estate Dev

- Studio**
- History
- Building Sci
- Visual Stud
- Core I
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Henderson_Beck
Columbia_GSAPP
2022

social_infrastructure

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social_infrastructure

Social Infrastructure is often presumed to be public property, such as public schools, universities, hospitals, libraries, etc. However, this view is deeply rooted in the US market-driven economy: an economic infrastructure inherently characterized by demand-based revenue streams.

The future of architecture needs to extend beyond the limitations of a volatile economy and shift towards a community-based mindset. In addition to large-scale government intervention, *social infrastructure necessitates architects, developers, engineers, planners, and community members to leverage and appropriate the economic system to work towards a more equitable and sustainable future.*

GSAPP_FALL 2021_ADV V



Bradhurst Senior Affordable Housing

Studio: ADV V

Critics: Victor Body-Lawson,
Richard Plunz

Program: Affordable Housing

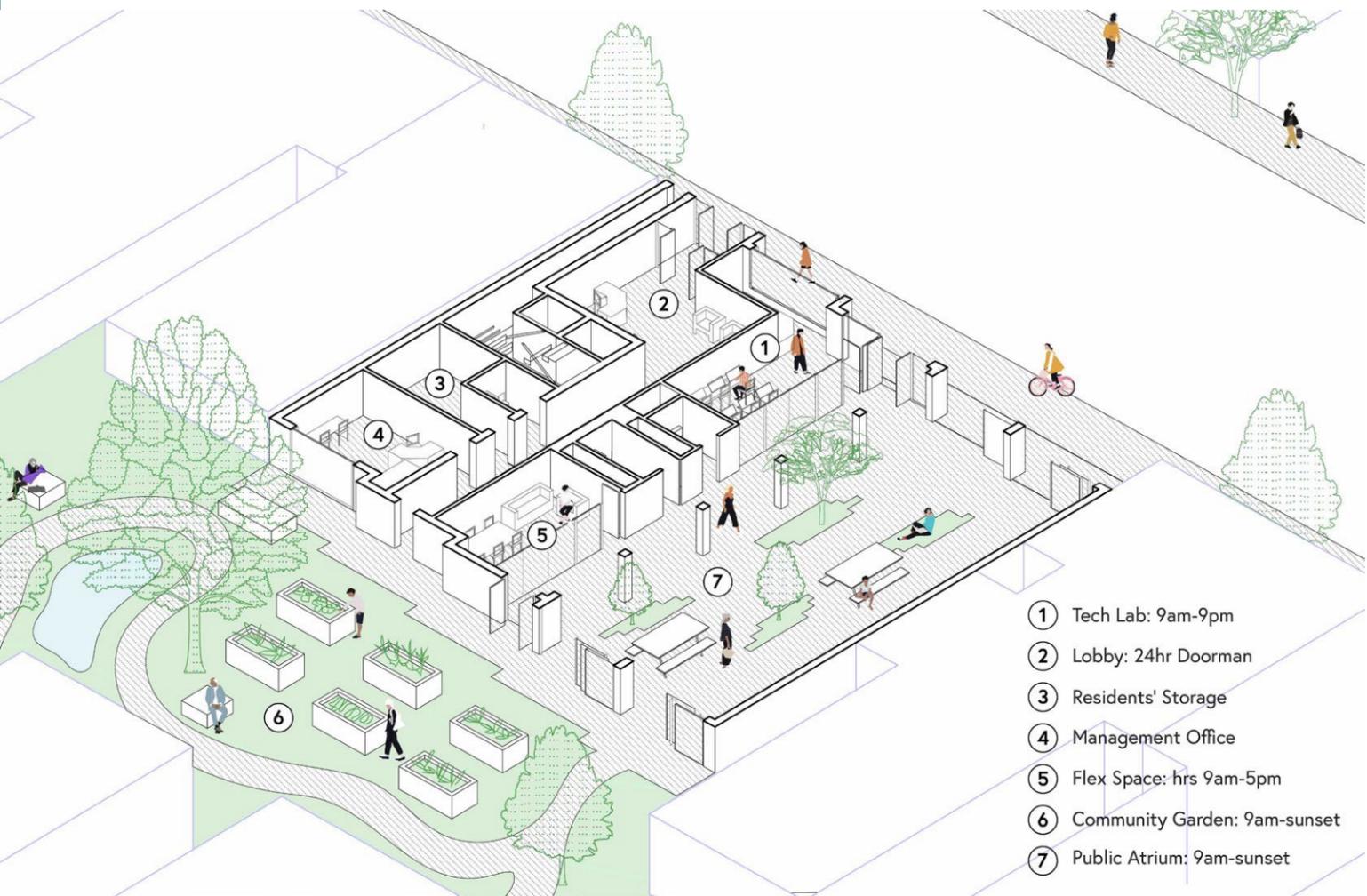
Site: Bradhurst, Harlem, NYC

Size: 42,000 SF



Social Infrastructure_
Affordable Housing





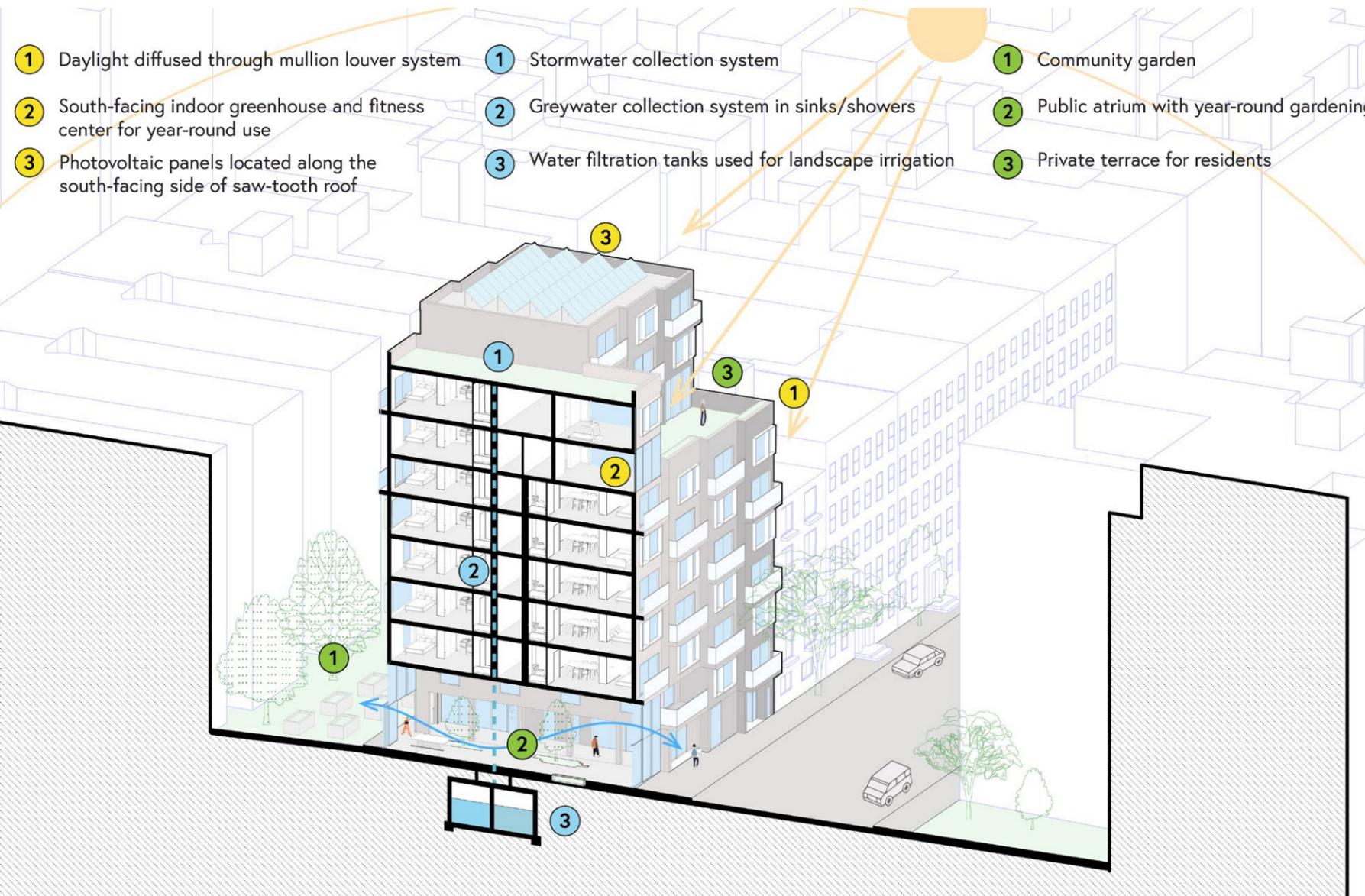
Construction Cost	\$14,887,200
Estimated Financing	100%
Bond 1st Loan	\$7,026,000
HPD First Mortgage	\$3,825,000
HPD Second Mortgage	\$1,912,500
Annual Debt Service	\$396,711
Net Operating Income	\$ 489,131
Debt Service Coverage Ratio	1.23



Program	Gross Square Footage
Residential	34,034/ 63 units
Community Space	3,184
Outdoor Space	5,100
Total Indoor SF	37,218

>affordable_housing

Located in Bradhurst within Harlem, this project examines the financial and architectural viability of an affordable housing project on a contentious infill sight. The project takes advantage of Low Income Housing Tax Credits, a senior affordable housing tax credit (SARA), and various state and local programs to make the project financially feasible. The 63-unit project maximizes the existing FAR and is underwritten at a DCR of 1.23, generating 23% more revenue than monthly debt service.



>affordable_housing

The ground level holds a workforce training facility, including a computer lab equipped for teaching educational programs such as the Flatiron School, a 15-week Coding Bootcamp. These programs give residents the opportunity to enter into the tech industry with only a GED and earn a competitive wage. The street level will also provides direct access to a year-round public atrium and rear lot community garden.



>affordable_housing

the project creates a new typology for providing much-needed affordable housing, offering workforce training facilities, all while respecting the communities desire for maintaining active green space. The facility offers ample south-facing amenities for senior residents, including a terraced garden and ground level recreation space.

GSAPP_FALL 2020_CORE III 

Melrow Affordable Housing

Studio: Core III
Critics: Hillary Sample
Program: Affordable Housing
Site: Melrose, Bronx, NYC
Size: 200,000 SF



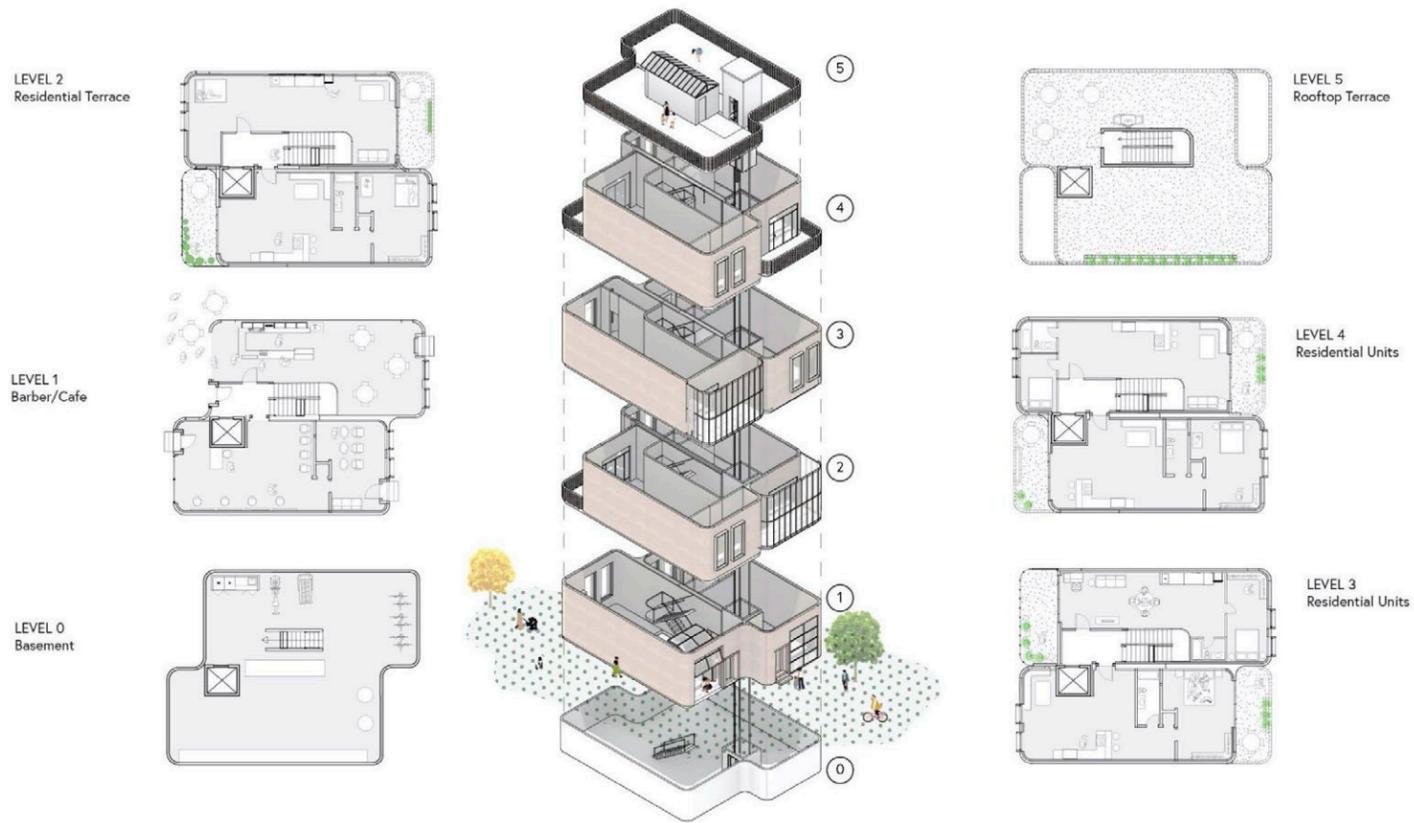
Social Infrastructure_
Affordable Housing



>affordable_housing

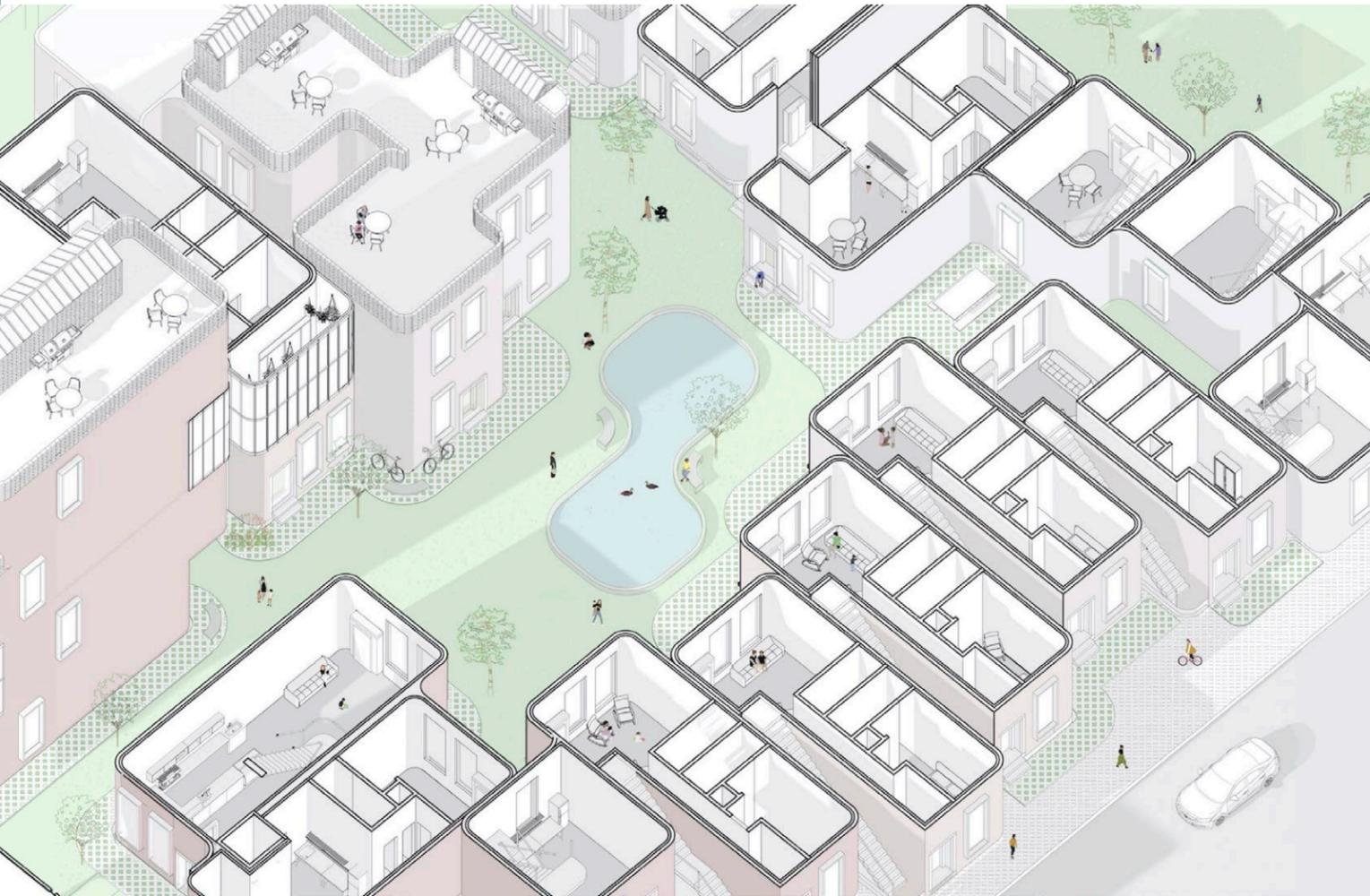
Located in Melrose within the Bronx, this project examines the clustering of units, creating porosity with courtyards and thoroughfares, encouraging moments of interaction with the existing site, and reflecting the scale of Melrose's urban environment. The project takes advantage of New York's Open Door term sheet, which enables affordable rent-to-own opportunities. Eventually, the development converts into a limited equity co-op to reinforce democratic ownership over the property.





>affordable_housing

Although the unit blocks may appear to be uniform on the exterior, four distinct unit typologies unfold on the interior, each defined by different means of egress and apartment layouts created by structural CLT walls and brick cladding. The color and texture of the brick facades fade from burnt red to dark gray, bleeding into the context buildings on East 151st.



>affordable_housing

The staggered units serve to organically envelop the inner courtyards, creating an intimate space with moments of reflection and areas of congregation. Each unit has direct access to these green spaces, reflecting the nature of the collaborative: which is a fostered sense of individual agency and collective ownership. The prefabricated high-quality plywood furnishings such as book shelves and tables nooks wrap around the curvature of the CLT wall, creating warm and inviting natural textures.



>affordable_housing

The project connects the site to the existing community garden extending out from the Bronx documentary center on 151st and nearby public amenities on Courtlandt Avenue. Permeable pavers create meandering pathways that flow through the ground floor, bringing residents to 4 small courtyards. The thoroughfare in the middle of the block creates a lush public “walkway” connecting 151st and 152nd.

GSAPP_FALL 2019_CORE I



Inwood Waterfront Park

Studio: Core I

Critics: Josh Uhl

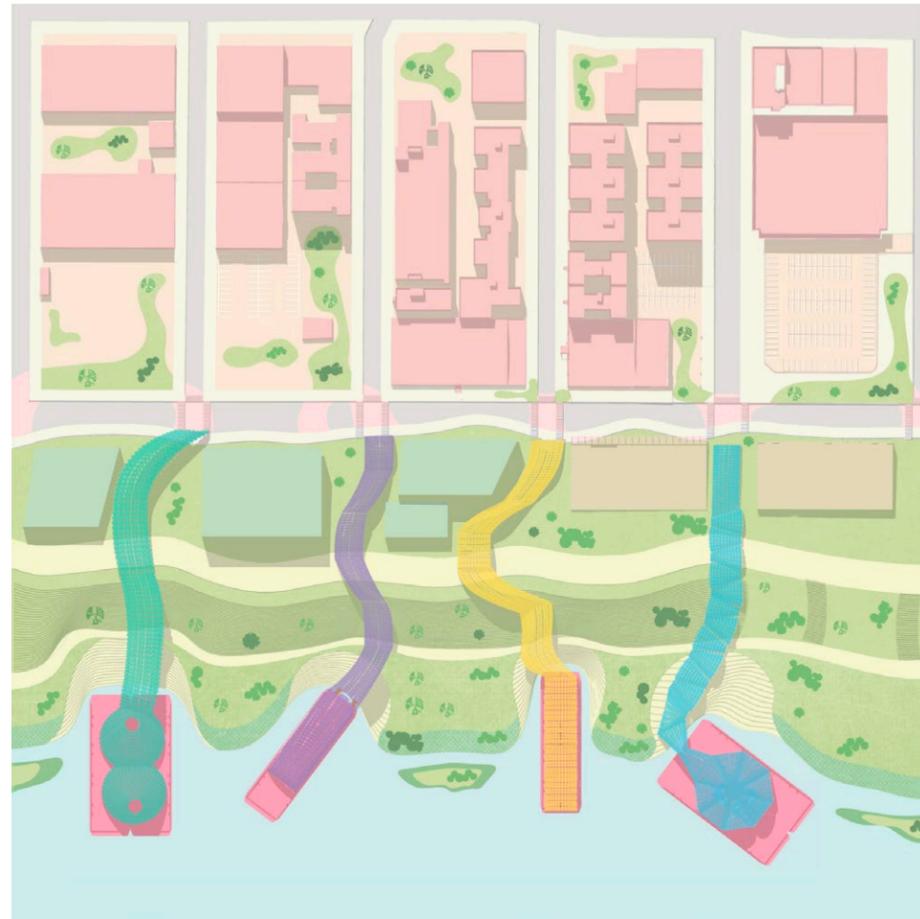
Program: Waterfront Intervention

Site: Inwood, NYC

Size: TBD



Social Infrastructure_
Environmental Justice



>environmental_injustice

By 2100, an estimated 50% of Manhattan's Inwood neighborhood will be several feet underwater. In a warming world, local environmental displacement disproportionately impacts low-income people of color. Inwood is no exception. The proposed artificial wetland serves to mitigate the future impact of rising tides. Existing barges are supplemented with temporary inflatable infrastructure that connect the riverfront to the existing social fabric on the streets.



>environmental_injustice

Recycled plastic provides a lightweight and mobile material for temporary pavilions. The inflatable structures can be easily inflated by low-energy fans and quickly compressed and transported off site. The 1:1 model on the right portrays the viability of this material.

GSAPP_SPRING 2020_CORE II 

P.S. 64 School + Youth Housing

Studio: Core II

Critics: Christoph Kumpusch

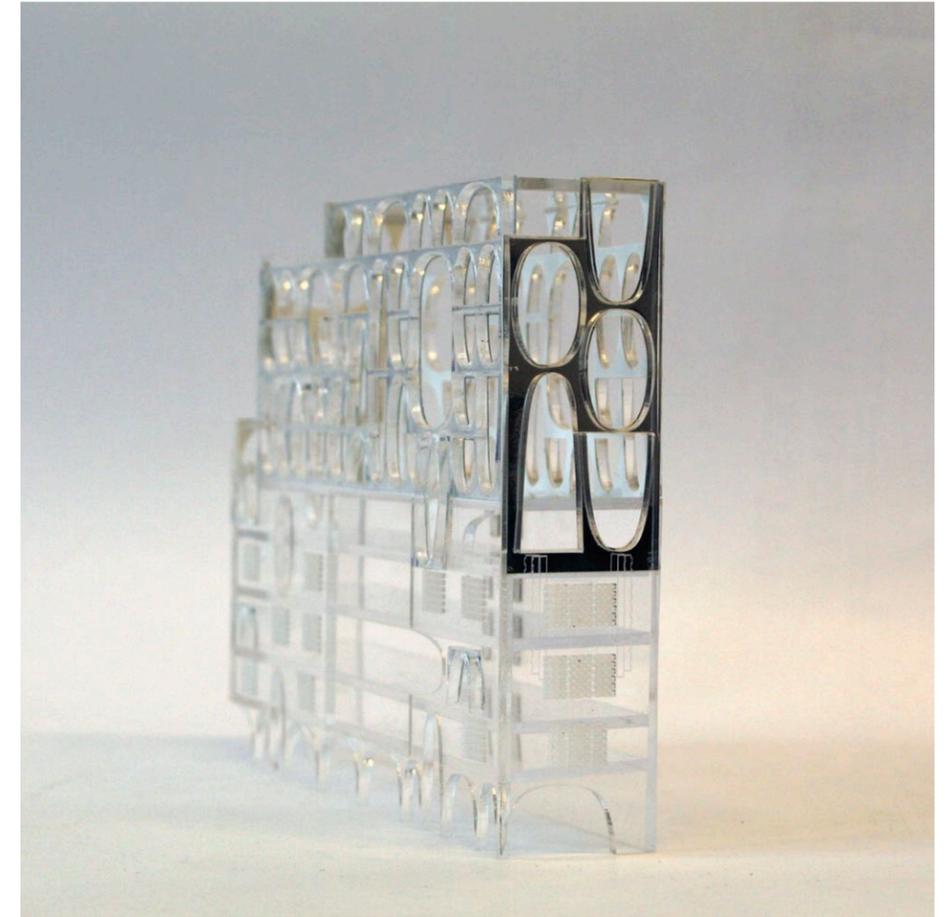
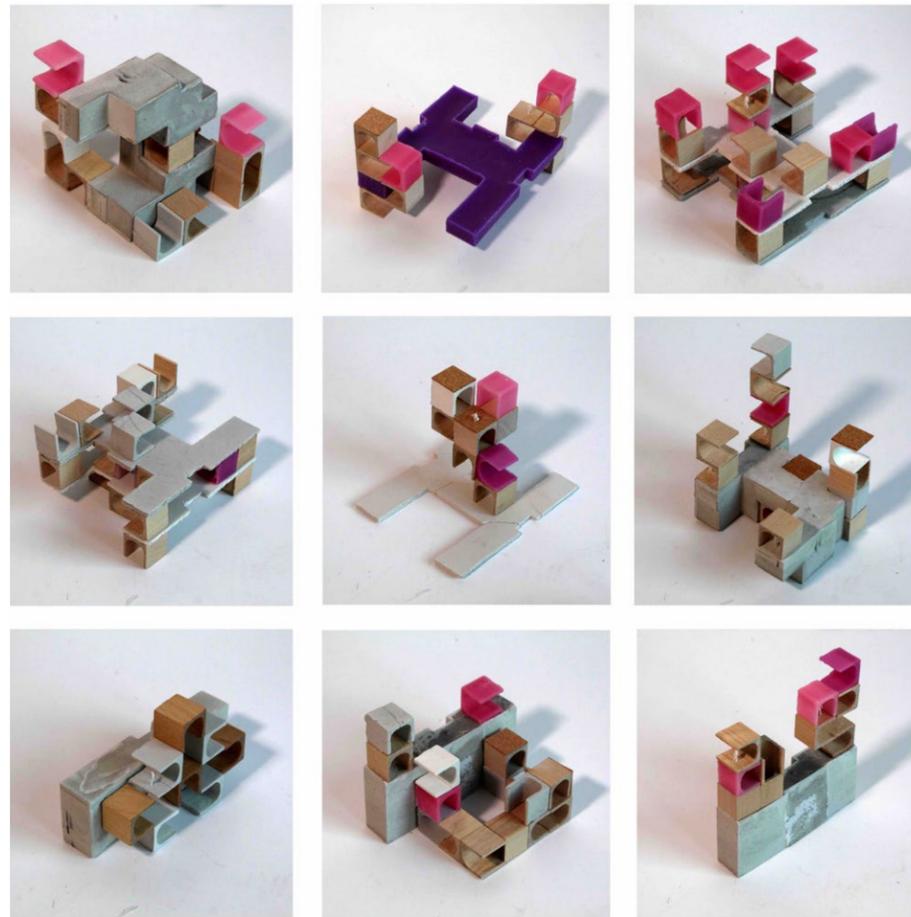
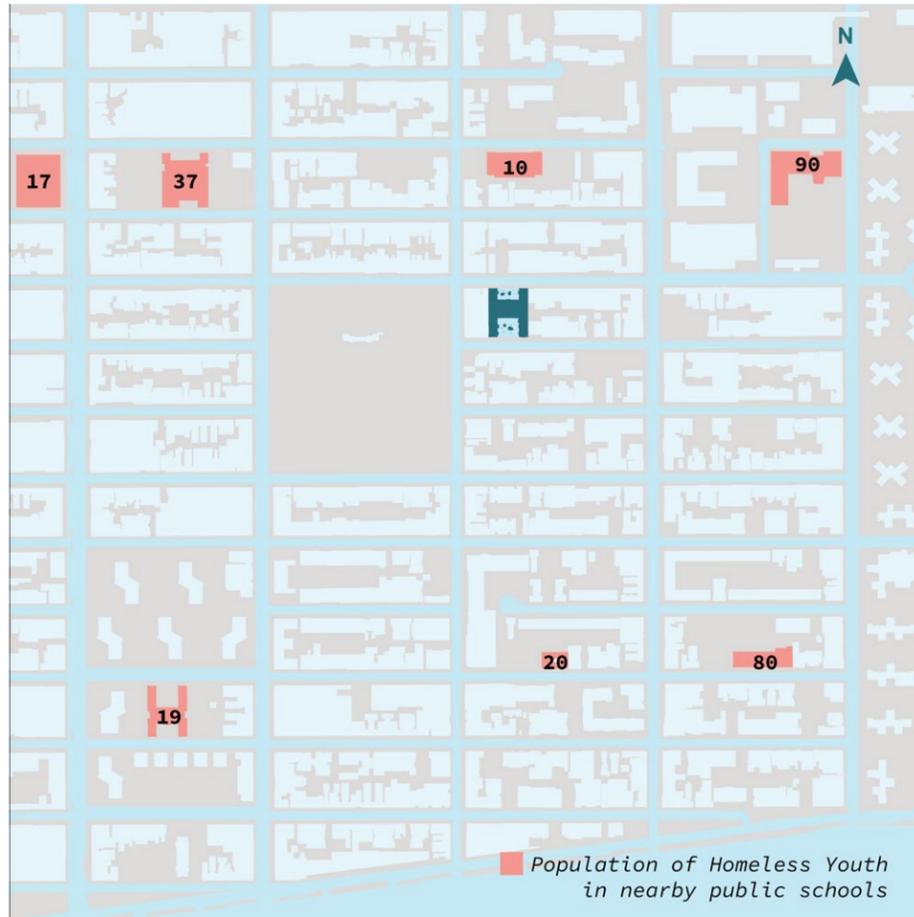
Program: Affordable Housing

Site: East Village, NYC

Size: 100,000 SF



Social Infrastructure_
Education + At-Risk Youth Housing



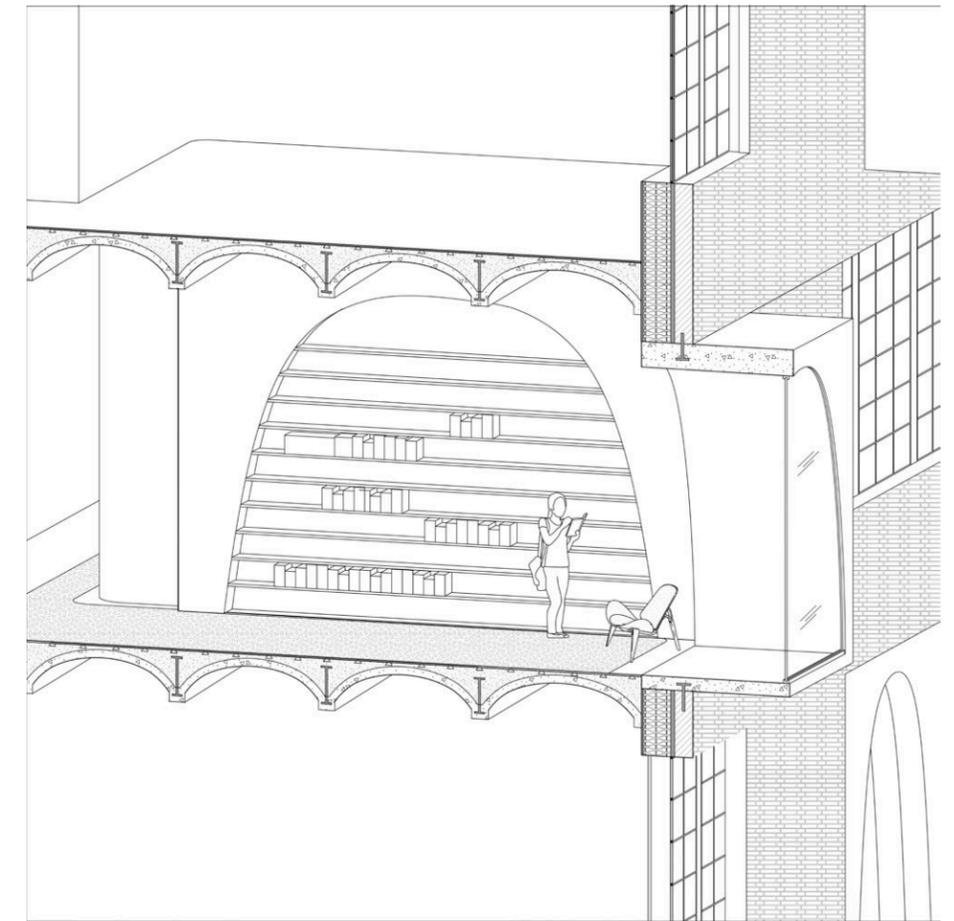
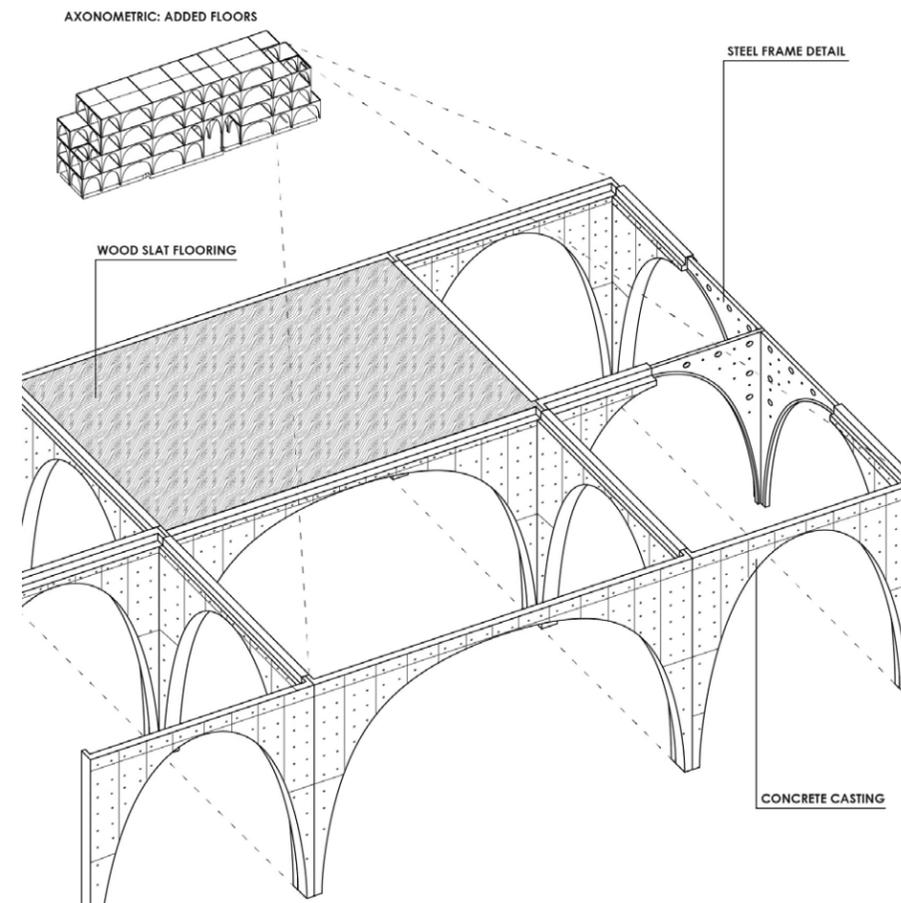
>education+youth_housing_insecurity

10% of students in New York City Public Schools are currently experiencing homelessness. Young homeless New Yorkers are predominantly affected by local displacement, immigration policies, and LGBT related issues. The Sanctuary School is a 1:1 project: in addition to the usual educational functions of a school, it offers a combination of 73 student dorms and 97 affordable housing units for housing 300 students.



>education+youth_housing_insecurity

The playful collages serve to showcase the colorful and childlike moments within the design. Pops of vibrant pastel colors offset the exposed red brick of the renovated PS 64. Vaulted CLT and concrete arches reference the vaulted ceiling used to create the floorslabs in the original PS 64.



>education+youth_housing_insecurity

Vaulted arches are staggered and rotated, creating an exciting entrance to the main level of the school. Precast concrete arches create an easy opportunity to build on top of the existing structure with floorslabs constructed from lightweight CLT panels.

GSAPP_SPRING 2021_ADV IV 

Schaghticoke First Nations Visitor's Center

Studio: ADV IV

Critics: Vanessa Keith

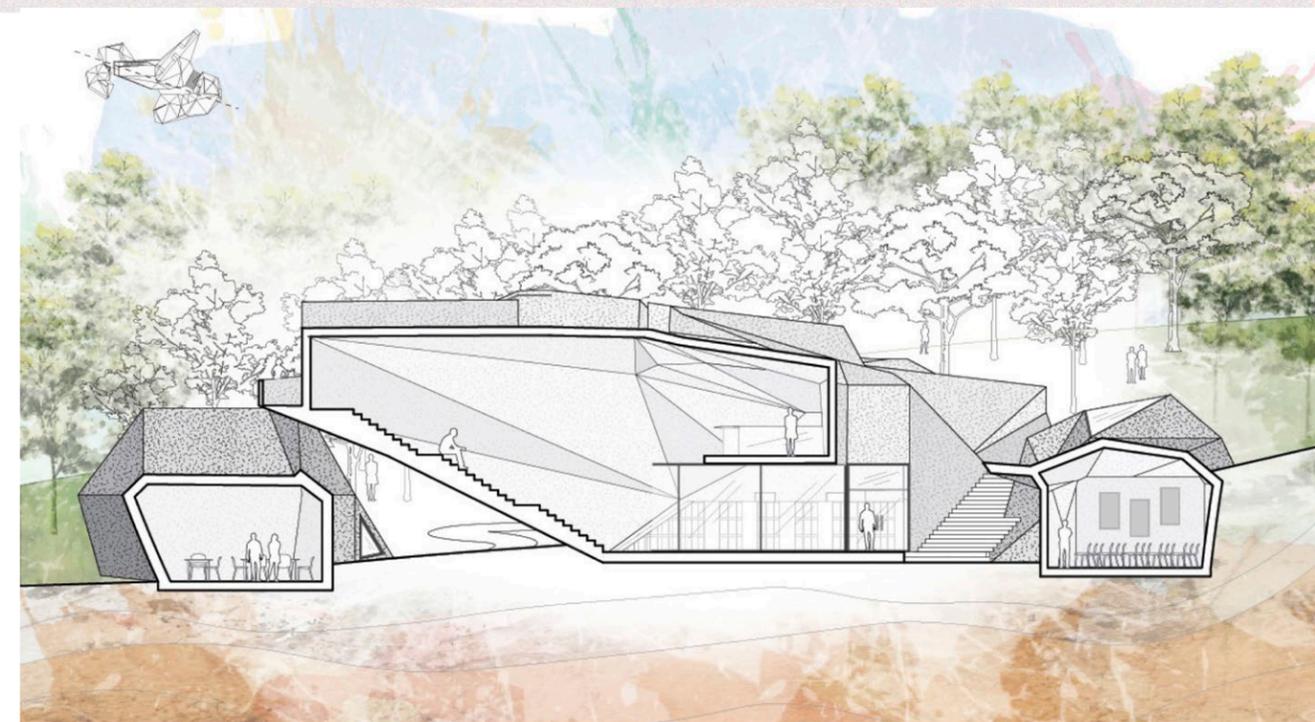
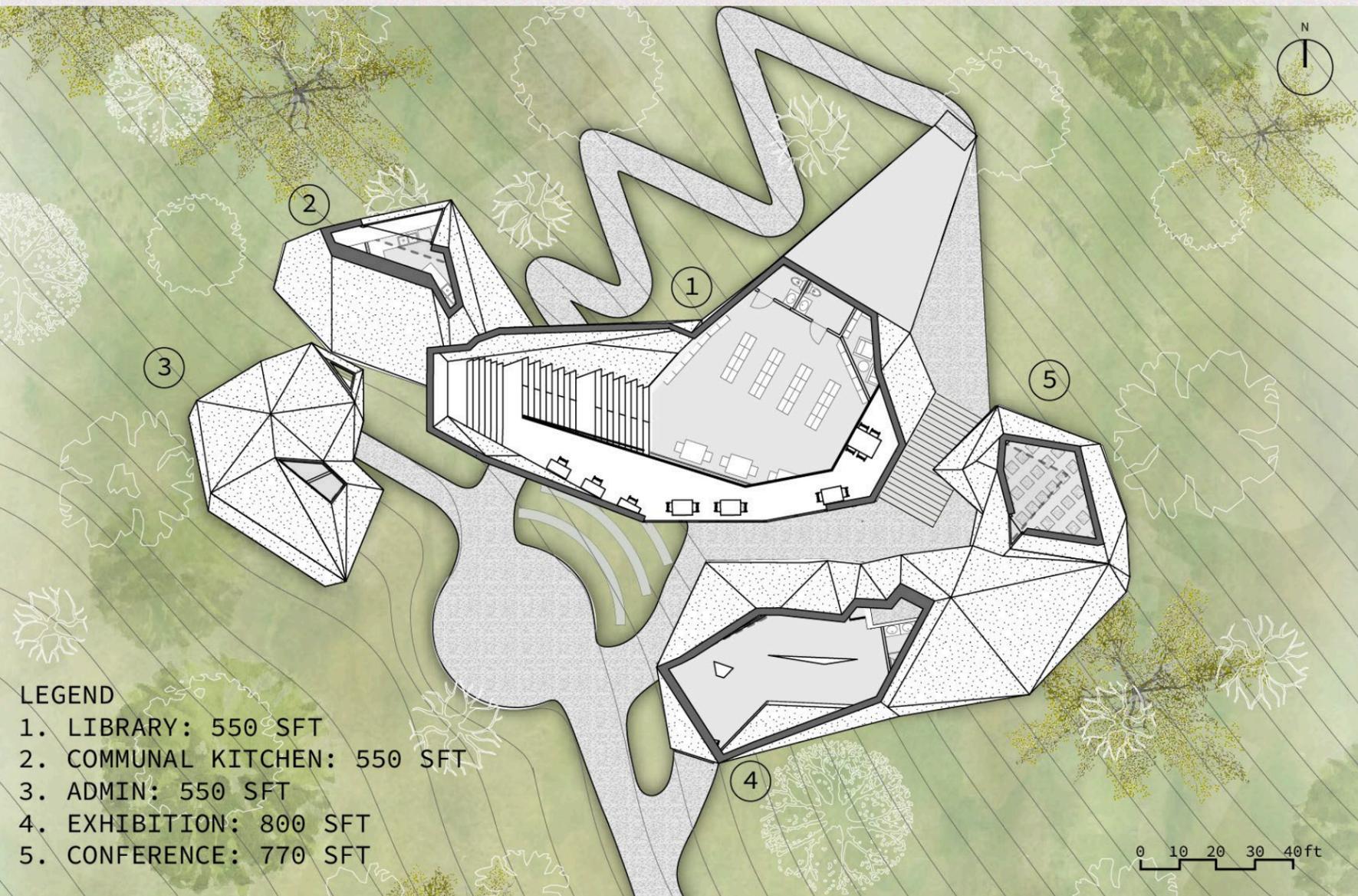
Program: Community Center

Site: Columbia County, NY

Size: 10 acres



Social Infrastructure_
Community Facility



>indigenous_reparations

With the abundance of quartz, its spiritual connection to this land and embedded indigenous knowledge has led us to typology studies for our Main House and Passive House. As the quartz is an energy stone, we wanted to use the materiality of this gem to create a welcoming architectural language.



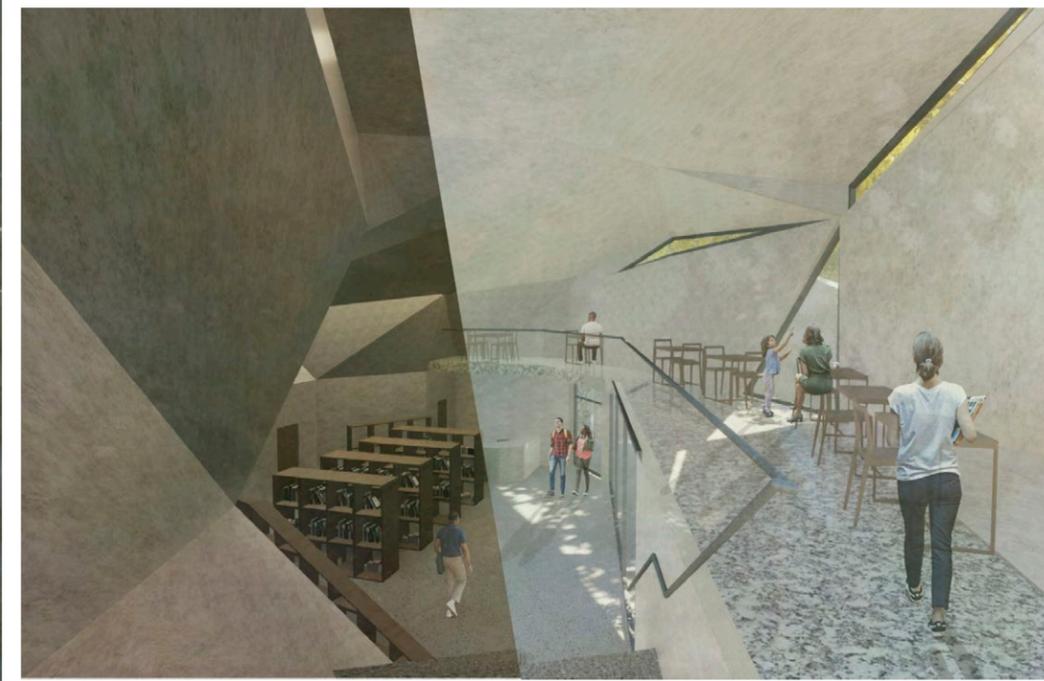
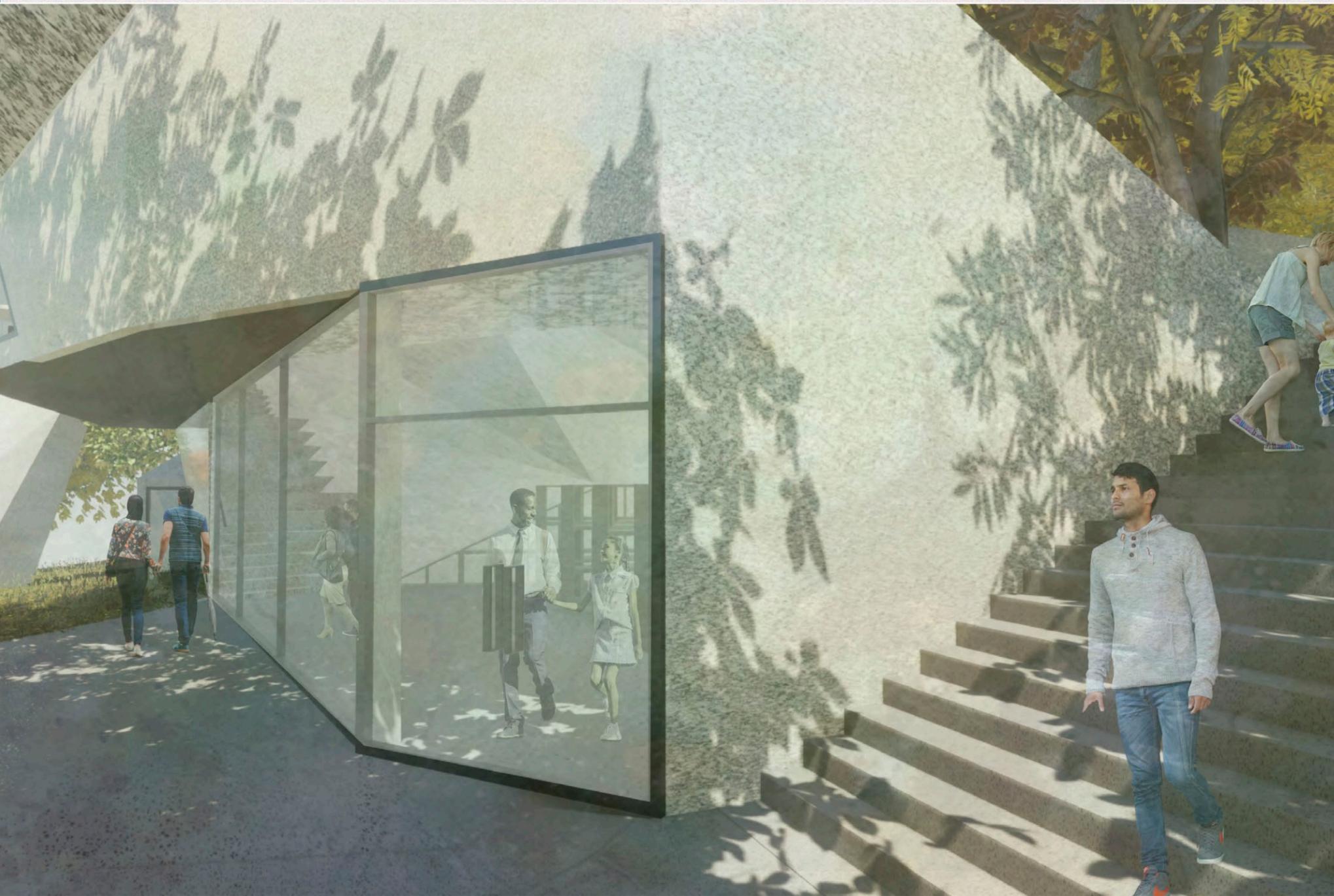
>indigenous_reparations

Easily produceable and a strong insulator mycelium bricks will create the walls of several temporary pavilion at the gateway and provide insulation in our main house and passive guest houses throughout the site. The structures sit on a gradient from open air spaces at the beginning of the road, including an info pavilion and a large green market space to larger enclosed meeting rooms farther down.



>indigenous_reparations

The mainhouse flows out from the topography, creating an opportunity for an overlook of the site along the Hudson Valley. A view of the overlook ramp at the back of the main house which also shows egress from an external stairwell via the Juliet balcony on the mezzanine level.



>indigenous_reparations

The Mainhouse is the hub of the site for public programming including a gallery, library, and conference spaces and programming including a communal cooking and dining space and research center. The interior and exterior space are clad in sustainably-sourced quartz composite material.



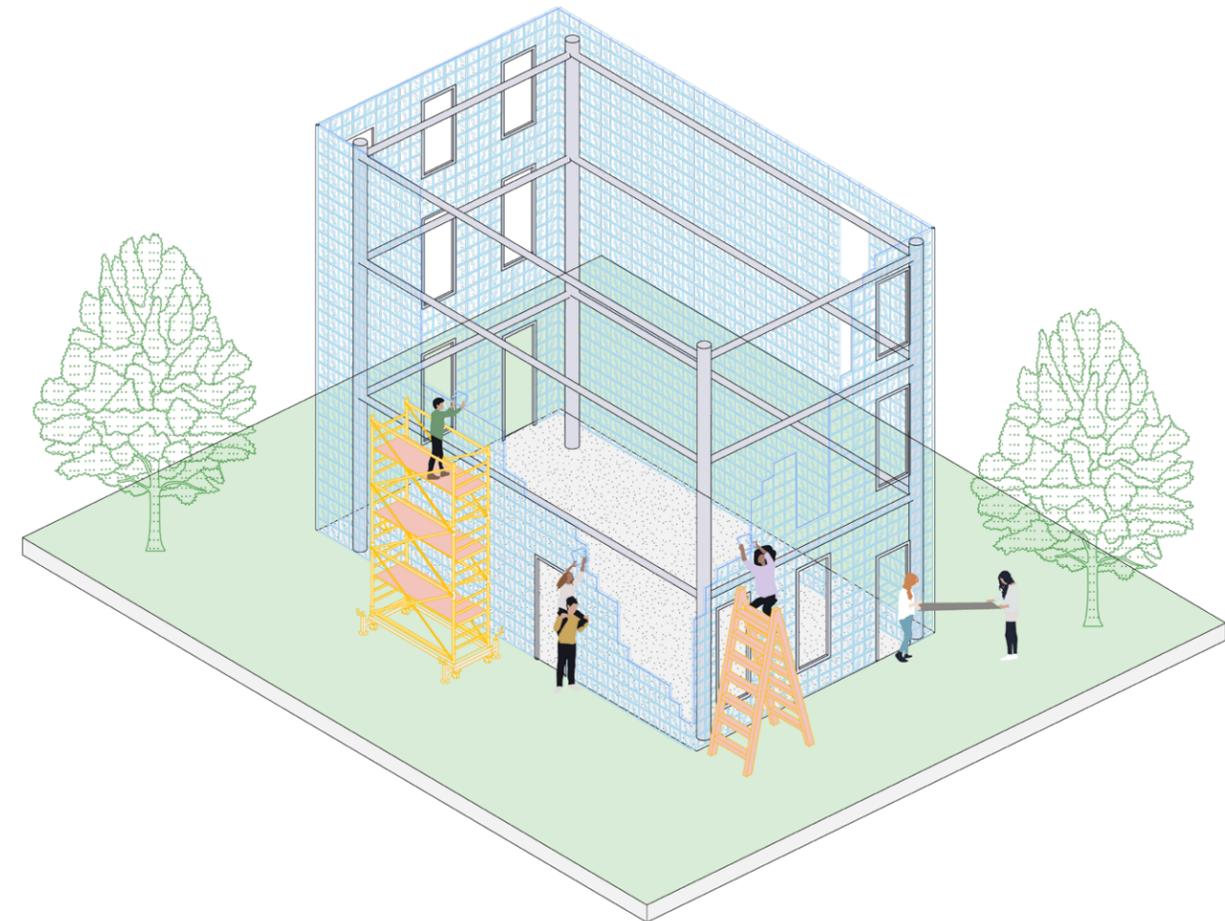
GSAPP_SPRING 2022_ADV VI 

(De)Constructing History

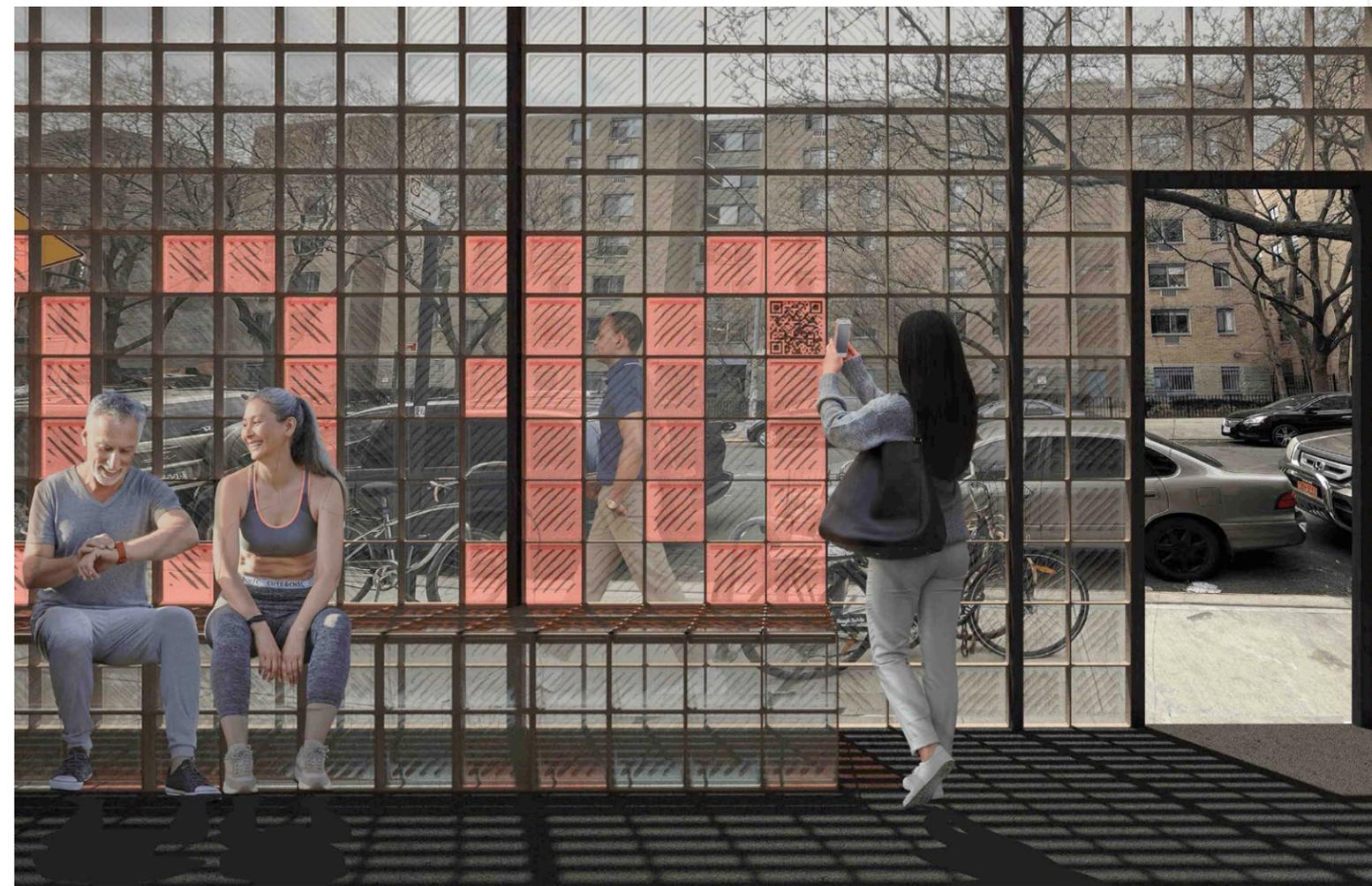
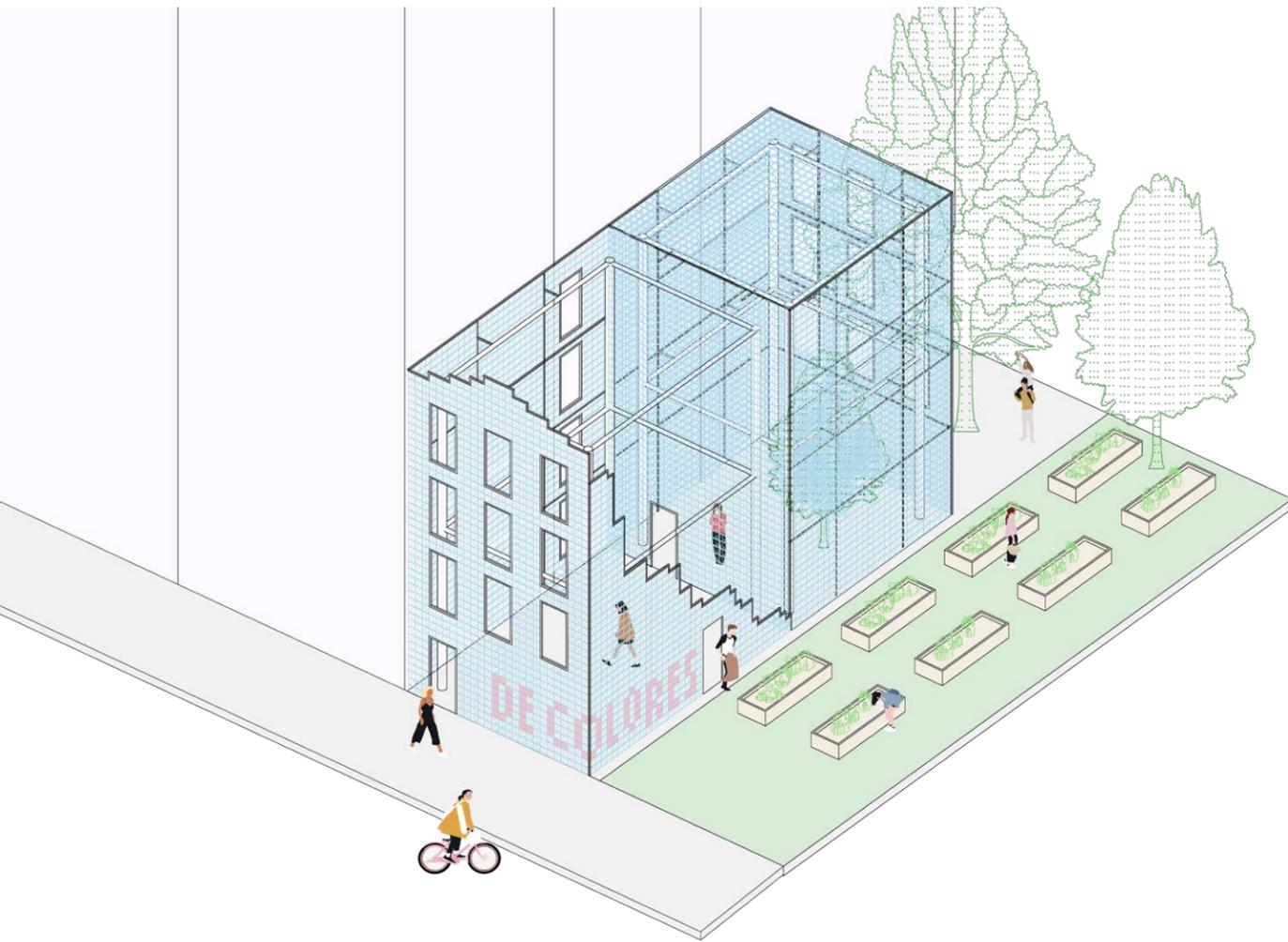
Studio: ADV VI

Critics: Annie Barrett,
Stephen Cassell

Program: Pavilion / Memorial
Site: Various Sites, NYC
Size: TBD



Social Infrastructure_
Memorial / Pavilion



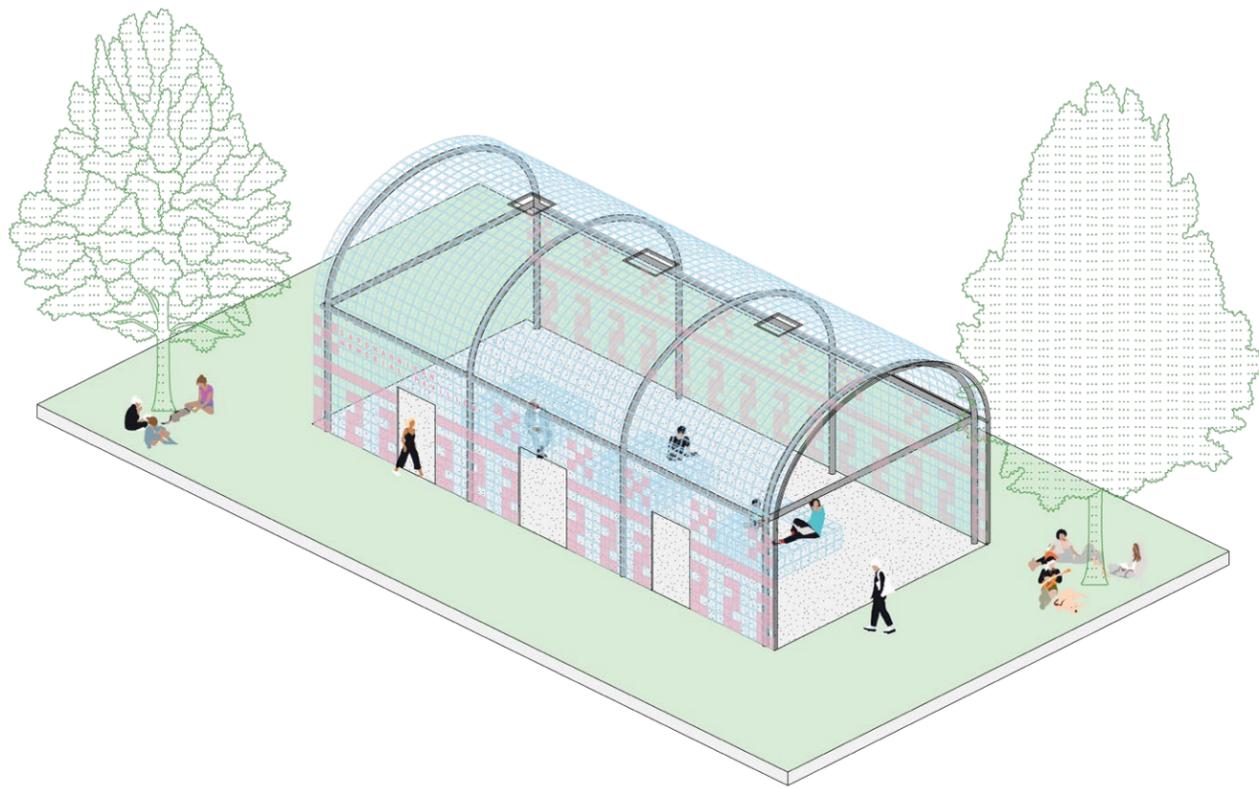
>memorial+pavilions

(De)constructing History: Memorializing New York's Unsung Heros is a community-driven effort for the creation of public memorials in honor of New York City's marginalized communities. The structures seek to uncover the untold, whitewashed, or demoralized histories of black, brown, indigenous, and minority communities.



>memorial+pavilions

The De Colores Community Garden design responds to the site's history and current use among the tightly-knit community. The proposed pavilion includes outdoor gathering spaces which take the physical form of the former tenement building's facade. The project also includes an enclosed greenhouse to extend the site's gardening efforts to provide produce year-round.



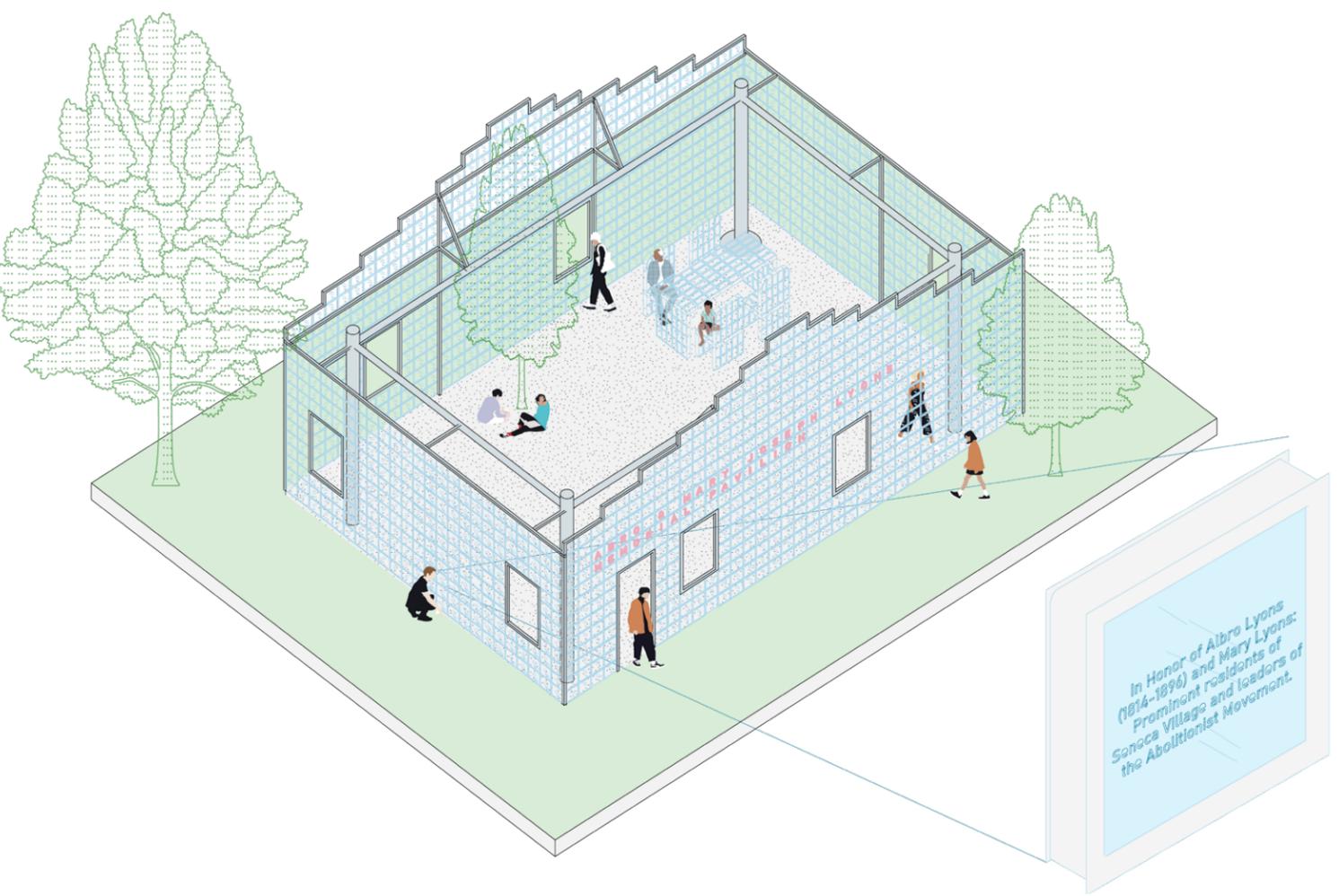
>memorial+pavilions

The Lenape Memorial Pavilion abstracts the traditional indigenous wigwams, creating a semi-covered gathering space for the public. As the site has gone through various stages of takeover and resettlement, the pavilion seeks to honor the history of the original Lenape inhabitants.



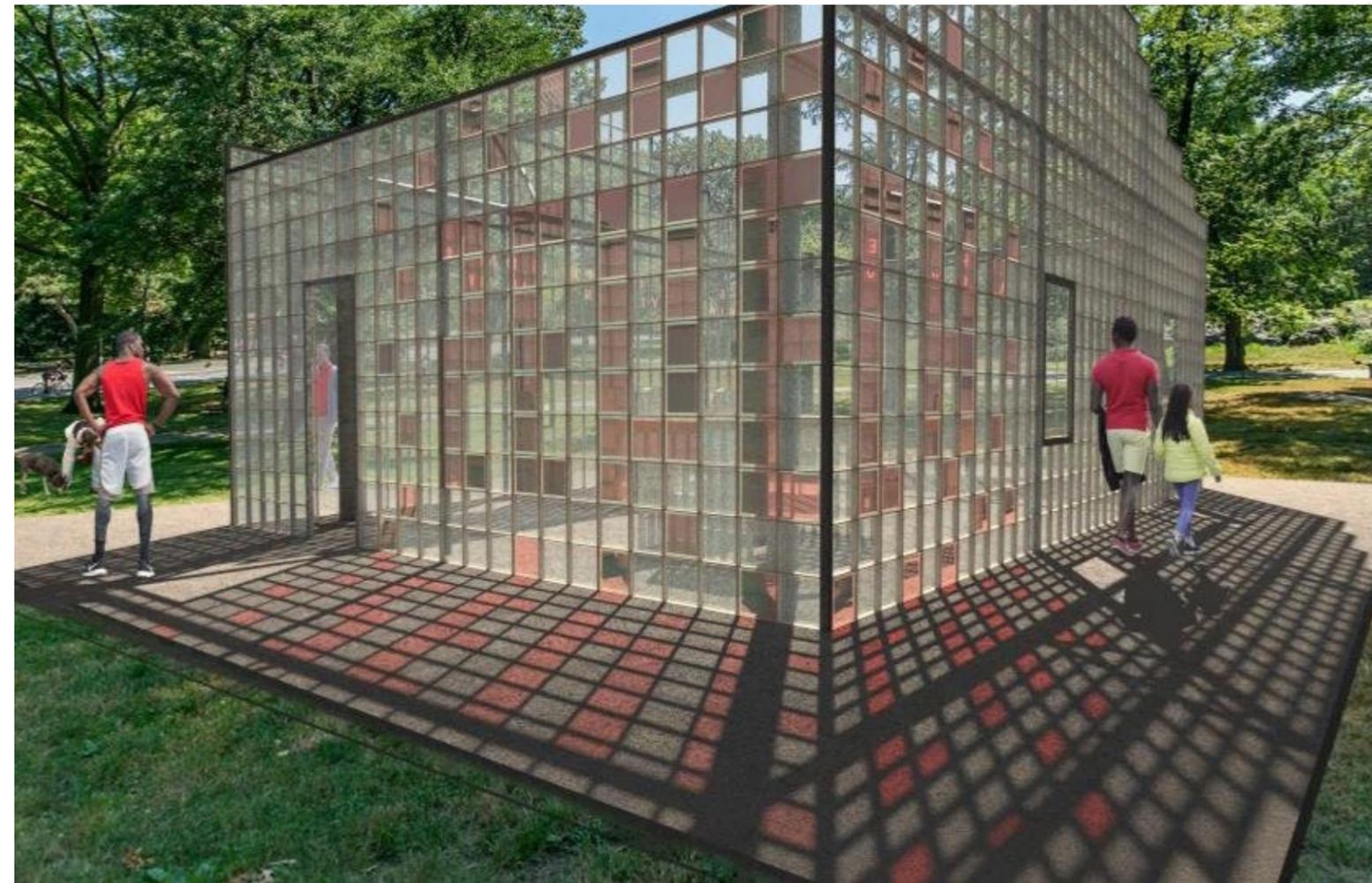
>memorial+pavilions

Washington Square Park, once a farming land and gathering place for the Lenape, transformed over two centuries to one of the most desirable locations to live in early New York. While standing in the park or walking through the streets of Greenwich Village today, it is hard to imagine that this was once an area frequented by the Lenape, which they called “Sapohannikan.”



>memorial+pavilions

As a community consisting of many property owners, Seneca Village came to represent the promise of emancipation. In the election of 1826, during the early days of the Village's founding, only 16 African-Americans voted in all of New York City.



>memorial+pavilions

The proposed pavilion takes the speculative form of one of the home of Ambro and Mary Joseph Lyons. The Lyons were prominent residents of Seneca and active advocates for emancipation. The site has several domestic areas for public gathering while also referencing the previous use of the land. The glass block structure is interlaced with historic artifacts from the site, images of members of Seneca Village, and reference to further resources.

social_infrastructure

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Columbia_GSAPP
2022

My Computer

My Network Places

Recycle Bin

Internet Explorer

D+ Browser

- Set Program Access and Defaults
- Windows Update
- Programs
- Documents
- Settings
- Search
- Help
- Run...
- Shut Down...