

Cooperative Modalities of Timber Housing

Thomas Provost
Architect & Assistant Professor
University of Detroit Mercy SACD

Sustainability concepts in architecture continue to push incremental improvements in manufacturing, construction, and project delivery—avoiding the **systemic overhaul** needed to address environmental and economic crises. Real change requires challenging laws that enforce low-density, car-dependent communities.



This is difficult in North America, where car ownership often signals economic and social mobility, and even more so in Detroit, where the cultural legacy of the automotive industry is reflected in its urban form.

Today, Detroit faces a housing landscape shaped by destruction from urban renewal, mortgage crisis abandonment, and population shrinkage. The result is vast land availability and deep economic inequality.



2M —> 600K



UTOPIA



URBAN RENEWAL & HIGHWAY EXPANSION

Given homeownership is the main source of wealth for many Detroiters, can we **expand access** to affordable housing in pursuit of housing equity?

espaizium ≡

|○| Menu

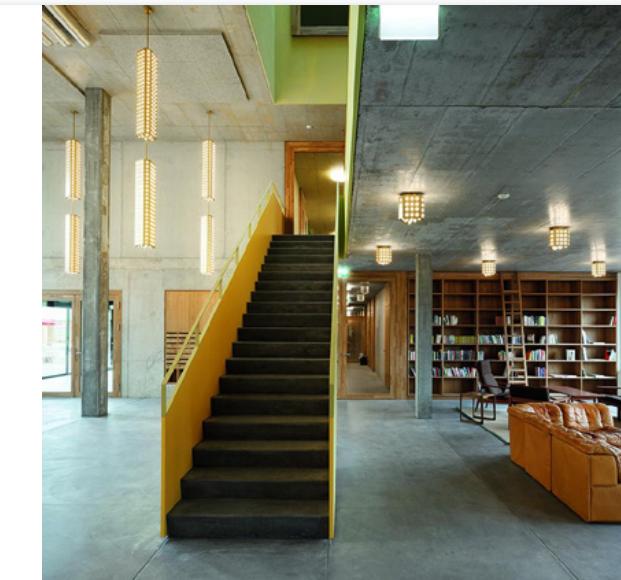
The Role of Cooperatives in the Provision of Affordable Housing: an introductory overview

Testo originale in inglese, a corredo dell'articolo "Il ruolo delle cooperative nell'offerta di alloggi a costi contenuti", pag. 21 numero 1/2018 Archi.

ARCHI COOPERATIVE DI ABITAZIONE

19-02-2018 Data di pubblicazione
21-02-2018 Revisione

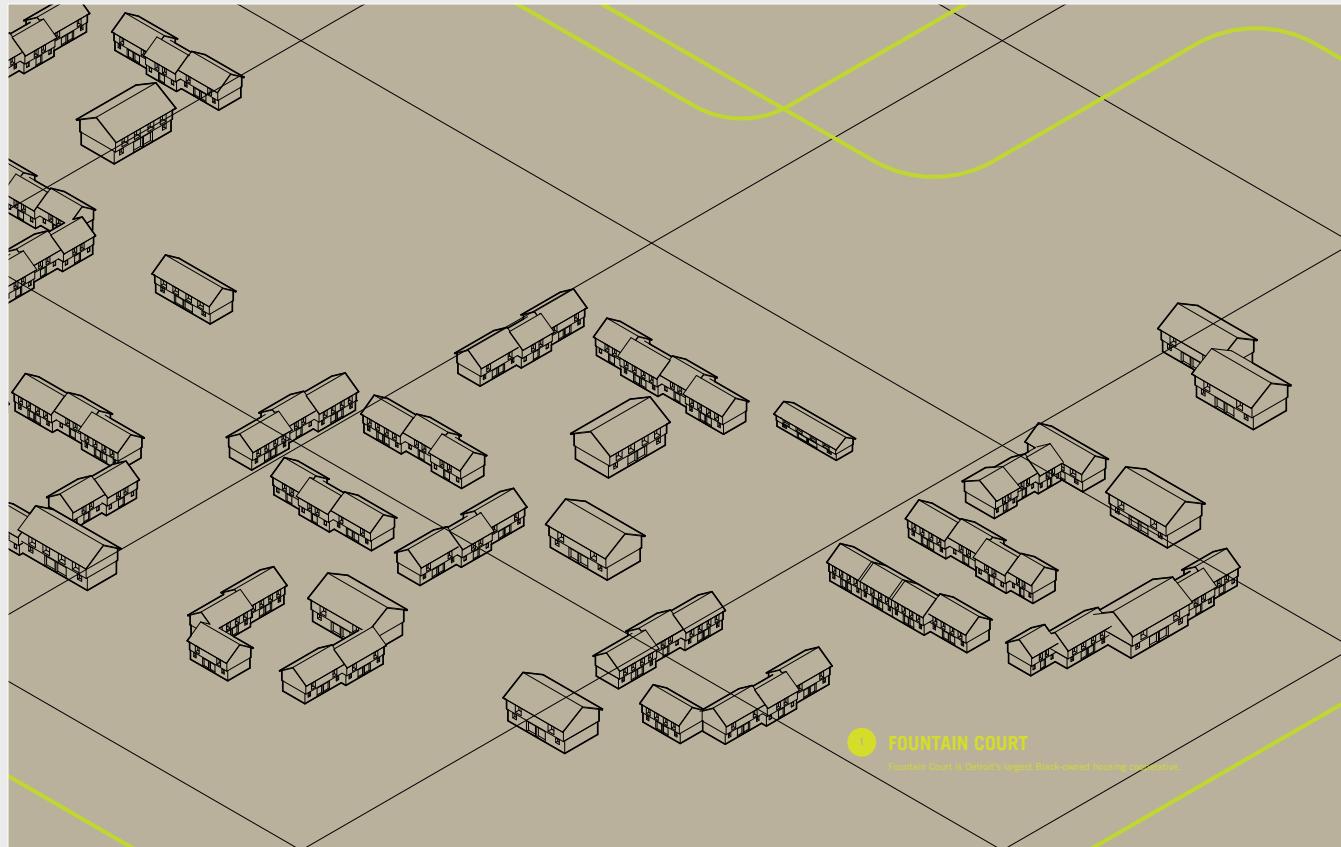
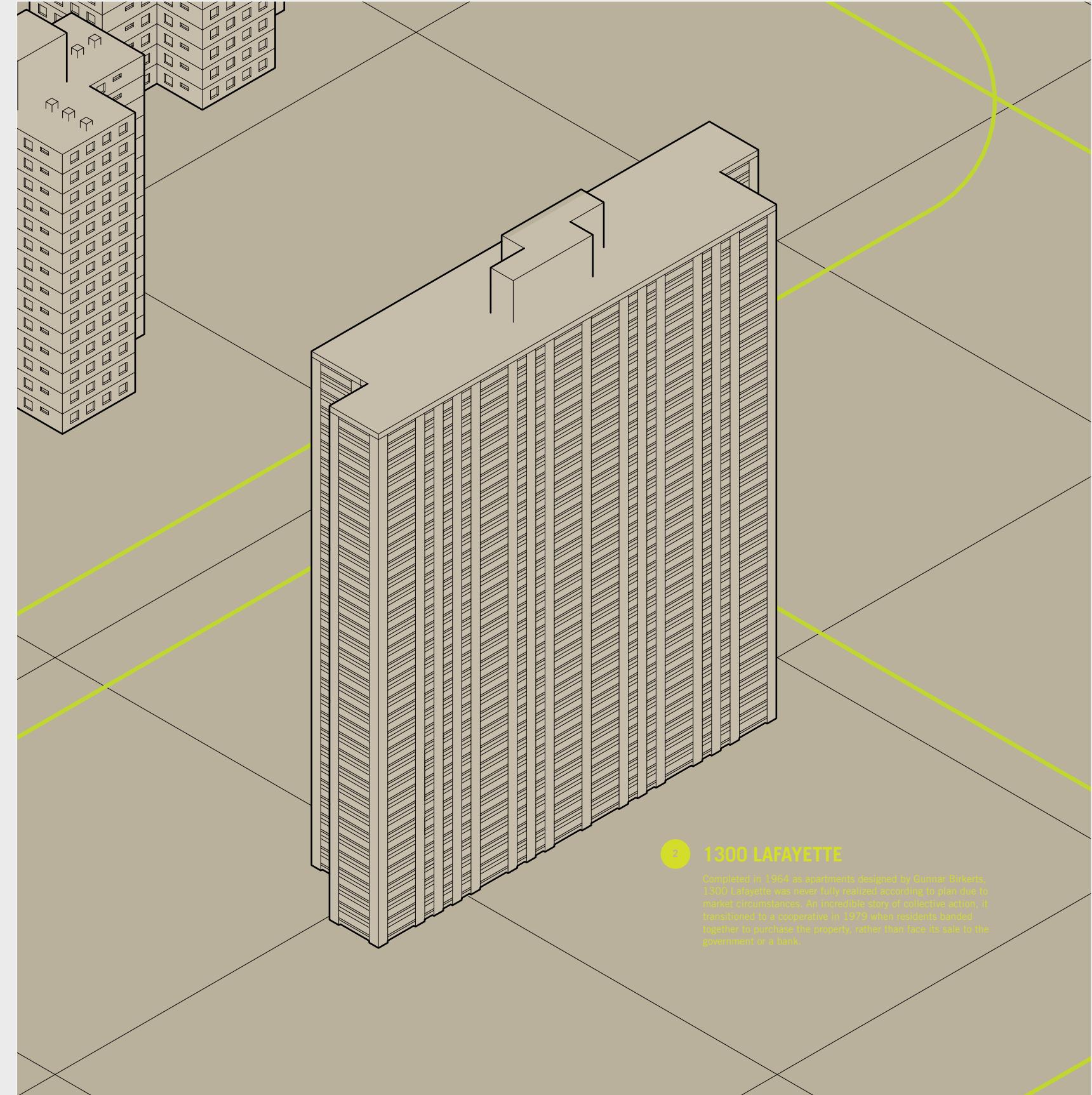
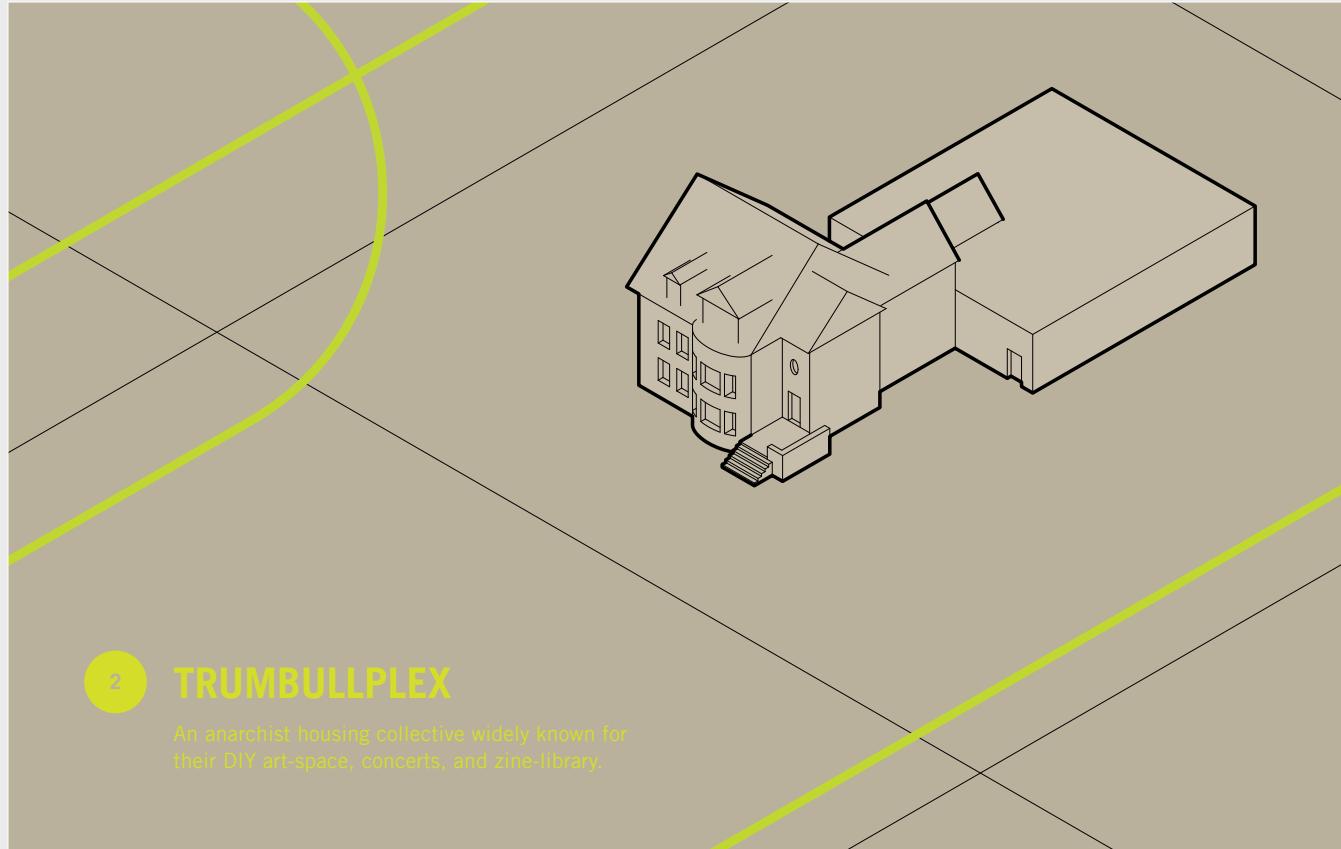
Daniela Sanjinés
Dottoranda, ETH Zurigo
Jennifer Duyne Barenstein
Antropologa sociale, Dr. phil. Senior Researcher ETH Zurigo

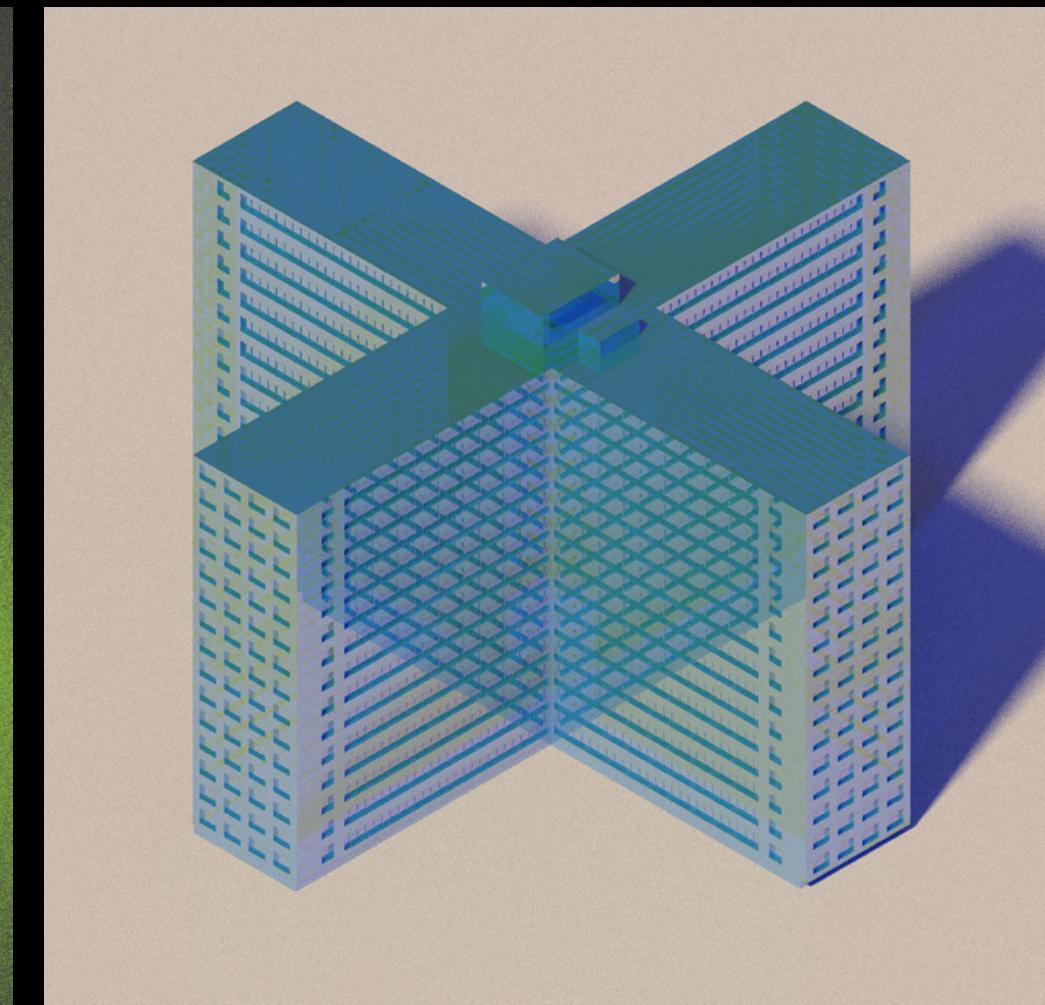
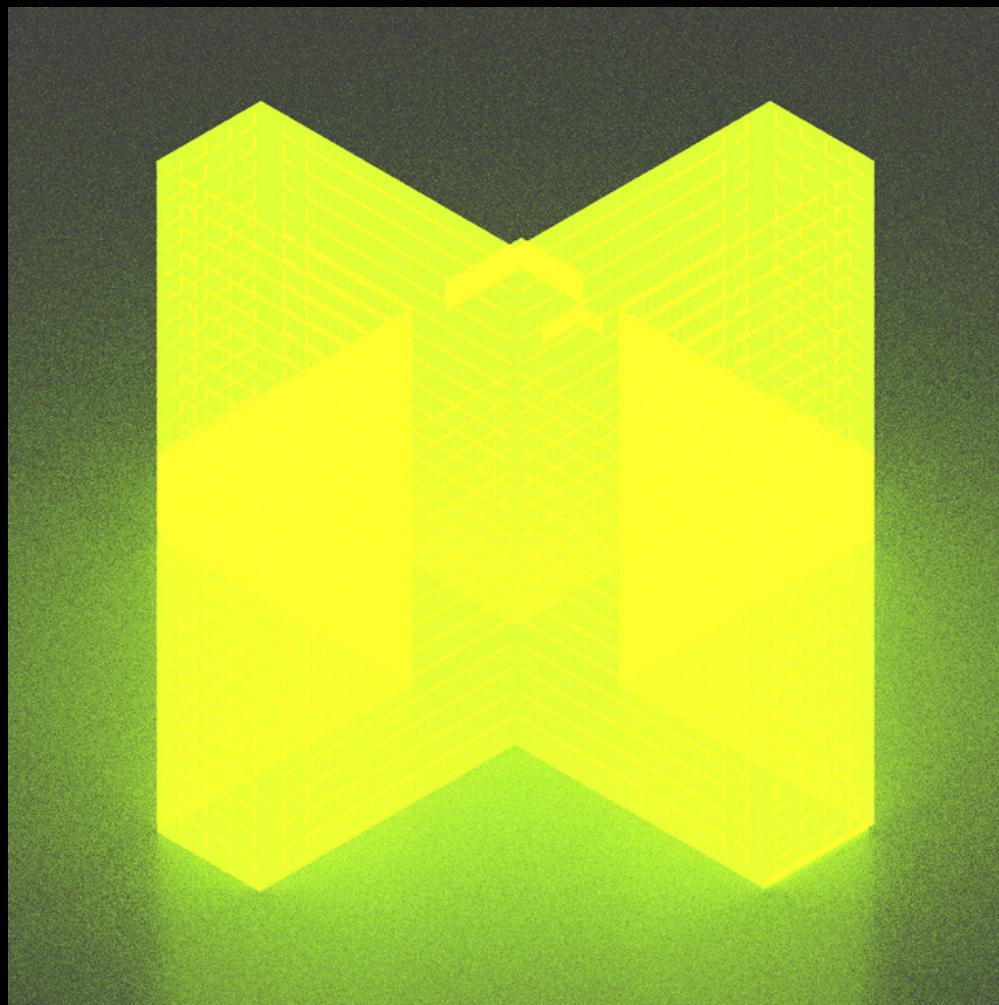
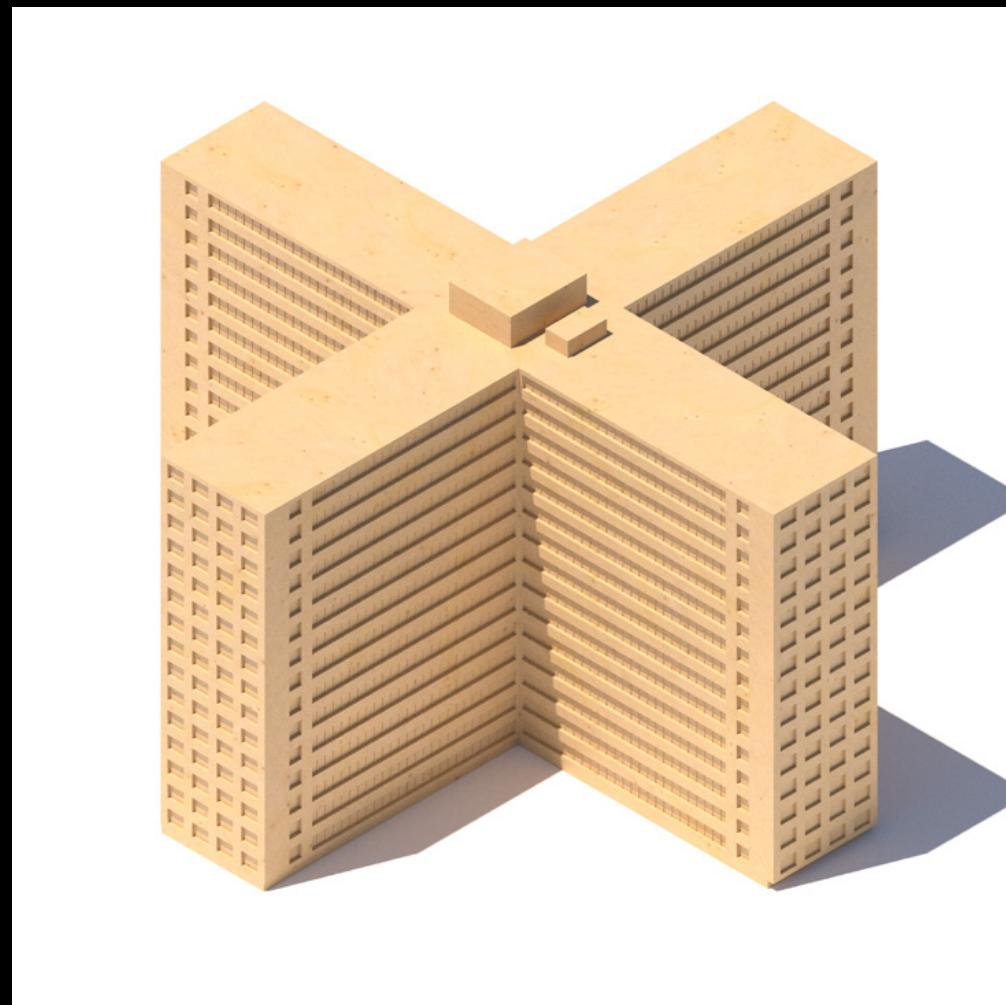


Müller Sigrist Architekten, Complesso abitativo e commerciale Kalkbreite, Zurigo.
Foto: Martin Stollenwerk

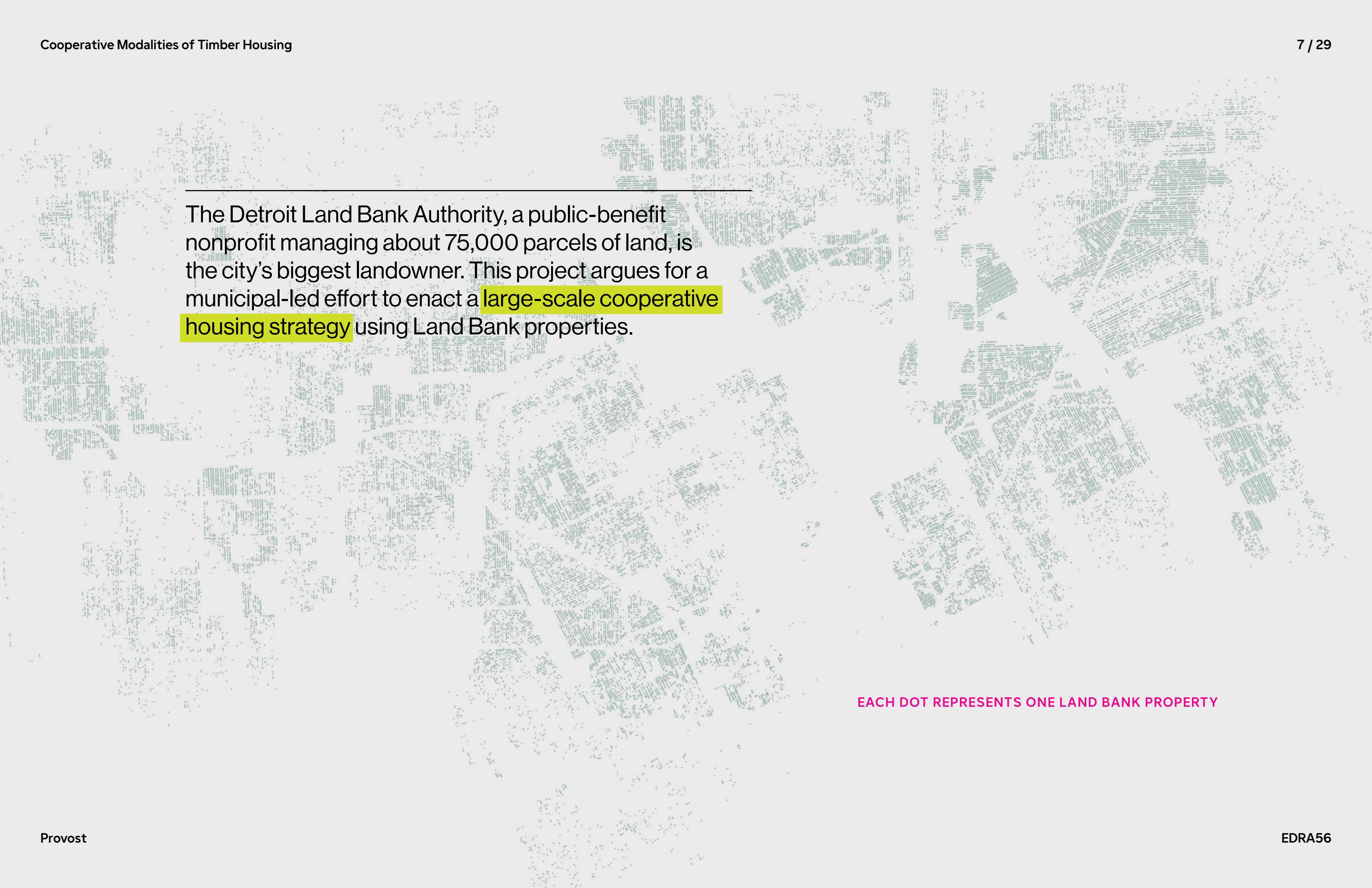
co

COOPERATIVE MODELS





River House Co-op Triptych

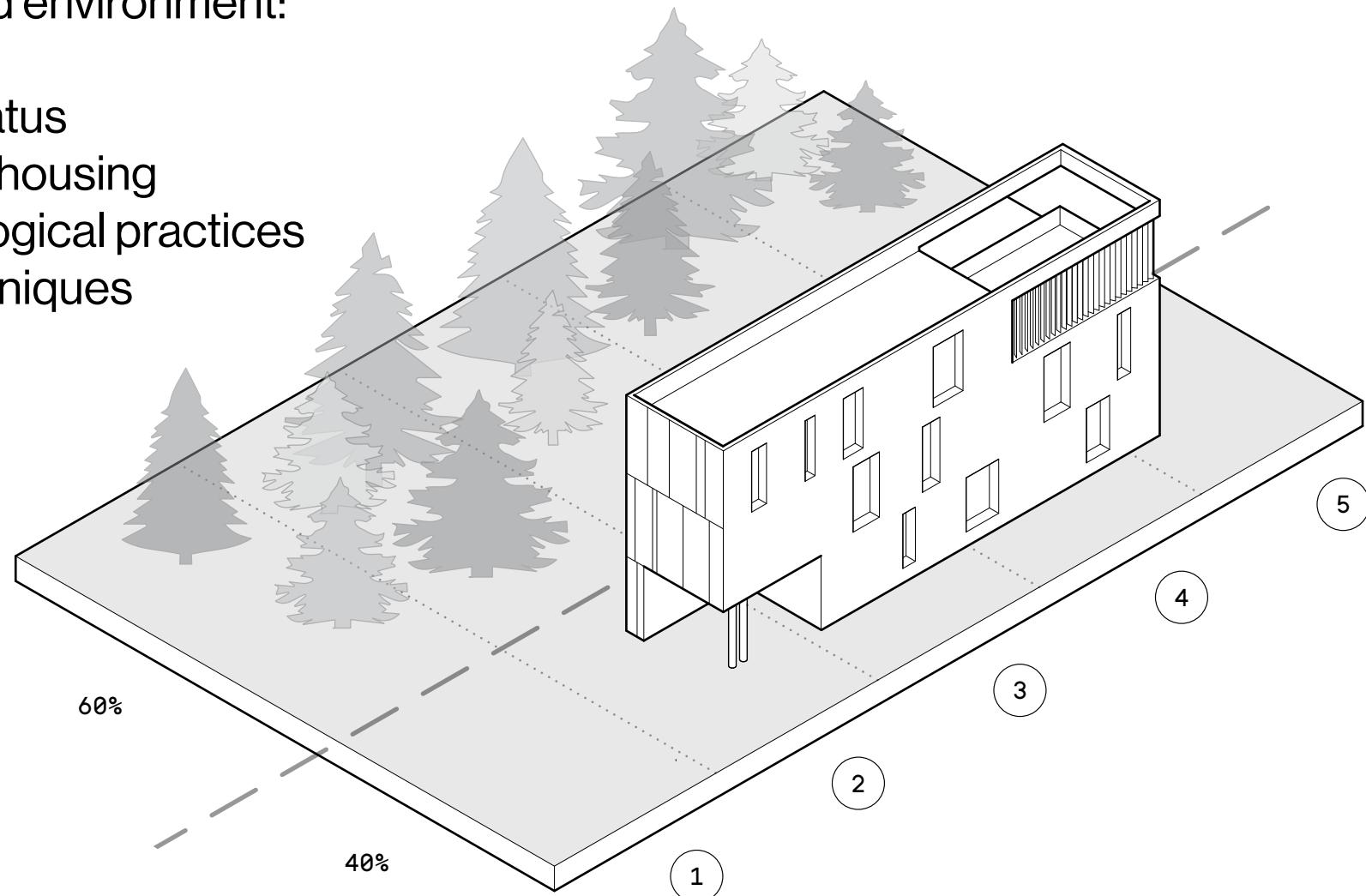


The Detroit Land Bank Authority, a public-benefit nonprofit managing about 75,000 parcels of land, is the city's biggest landowner. This project argues for a municipal-led effort to enact a large-scale cooperative housing strategy using Land Bank properties.

EACH DOT REPRESENTS ONE LAND BANK PROPERTY

Parcels would be rezoned **R-0 (r-zero)** to ensure perpetual care for community and environment:

- land must maintain nonprofit status
- support for dense, cooperative housing
- % allocated for restorative ecological practices
- use of low-carbon building techniques



MANY PROPERTIES EXIST AS CLUSTERS OF 5 OR MORE

Mass timber offers a promising path—yet current timber-forward designs remain expensive, exclusive, and largely disconnected from social change.

central

f i n X

CATEGORIES + LOCATIONS + AWARDS EVENTS NEWS PODCAST

Silicon Valley's Plug-and-Play Mass Timber Fix for Housing Crisis

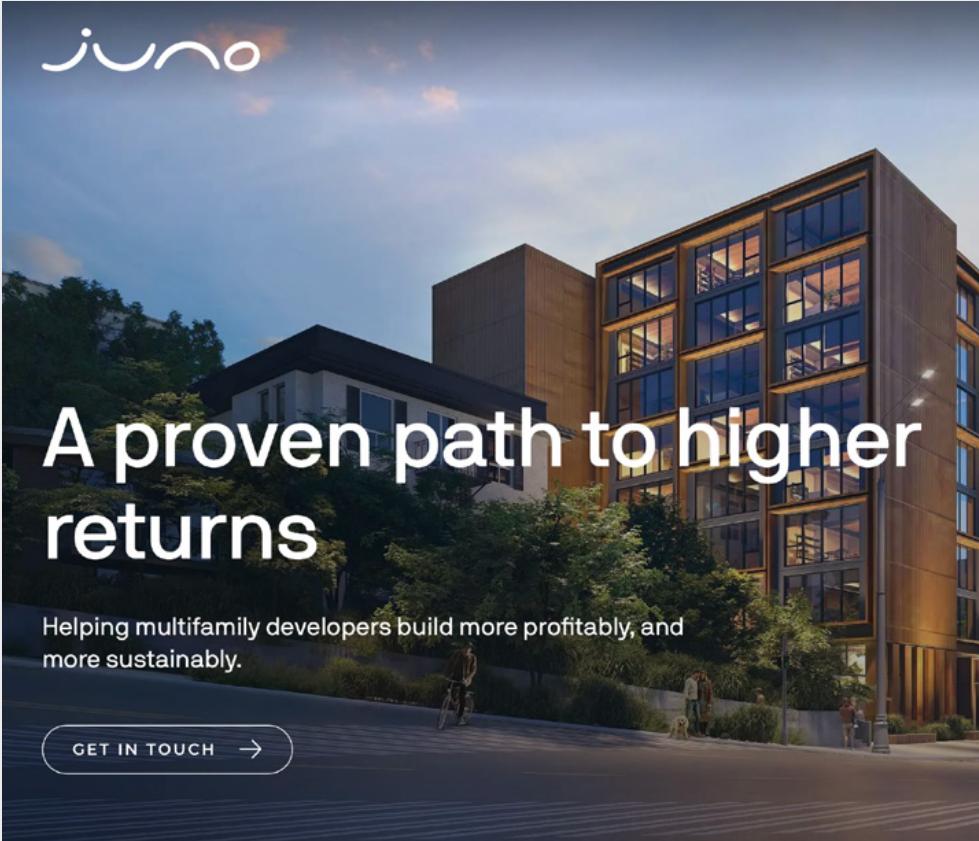
Former Apple design director launched a mass-timber housing company "to bring productisation to the built environment"

JASON ROSS MON 01 JUL 24



Juno East Austin has gained national attention for its use of pre-designed MTC components that can be assembled quickly onsite.

juno



A proven path to higher returns

Helping multifamily developers build more profitably, and more sustainably.

GET IN TOUCH →

Santa Rosa Ave | Santa Rosa, CA

208 units, Market-rate multifamily
Juno Mass Timber System



The Reserve at Eastwood | Fort Myers, FL

324 units, affordable housing
Service: Owner's Representation



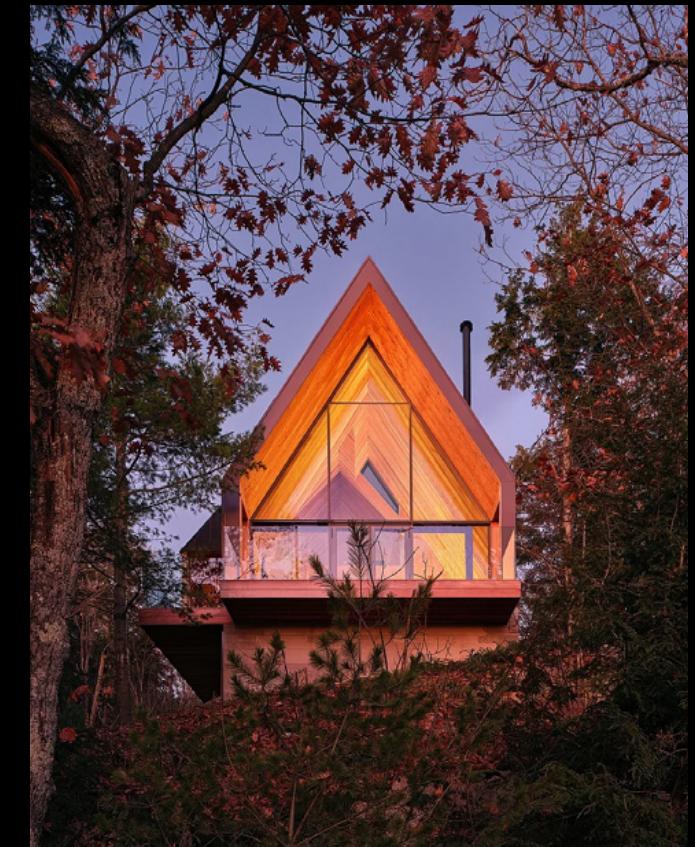
This project explores how specific applications of timber construction can support cooperative housing. Using **design-as-research** and **critical practice** methodologies, it challenges social norms and political contexts through architectural artifacts—drawings, models, installations, diagrams, timelines, and visualizations.

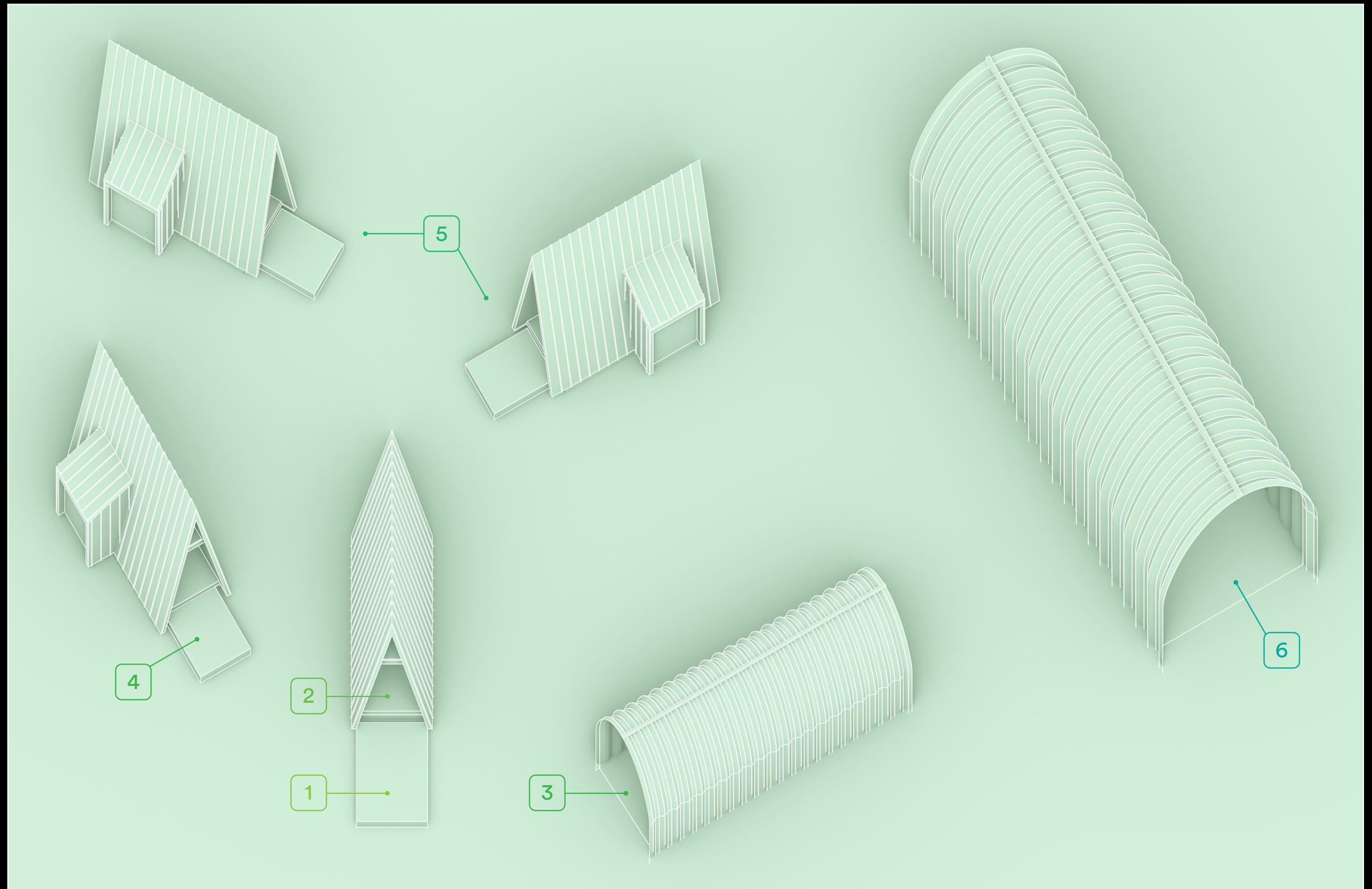
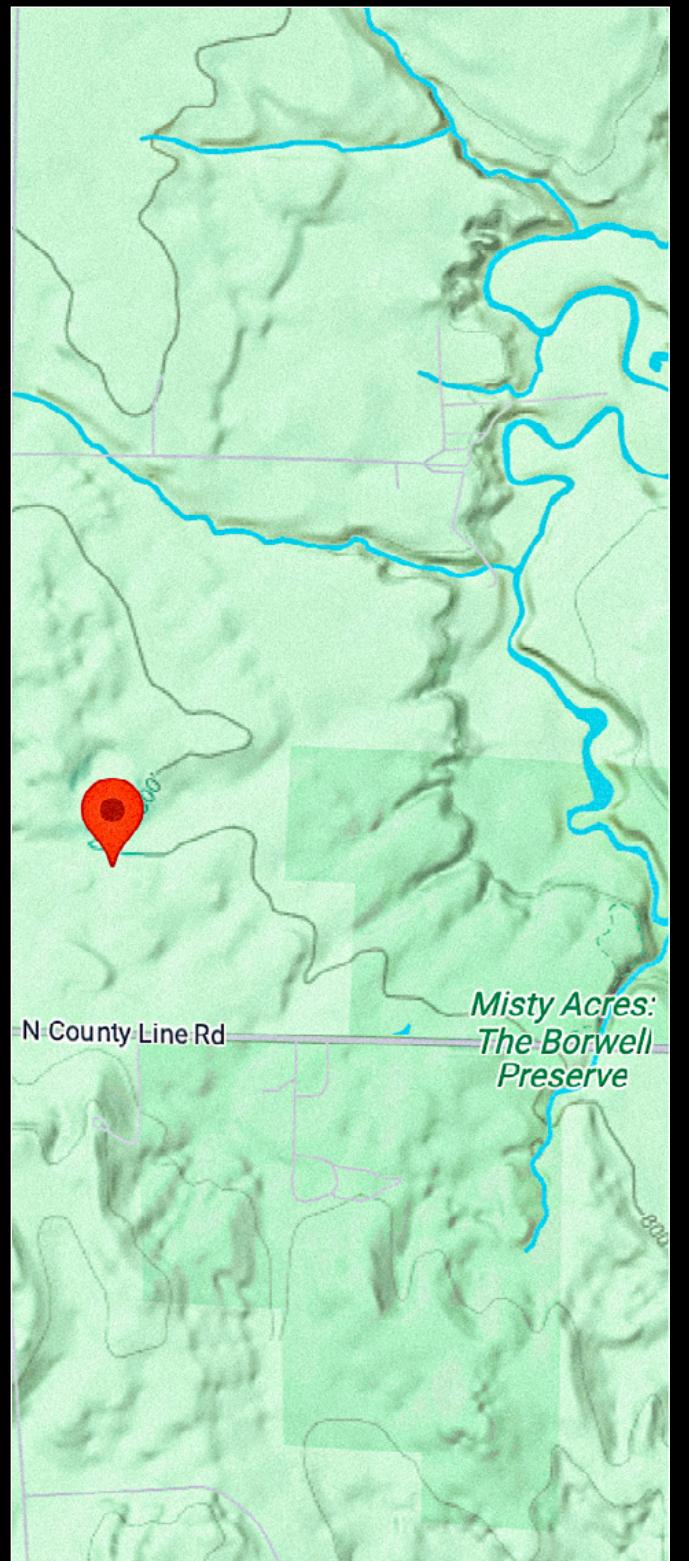


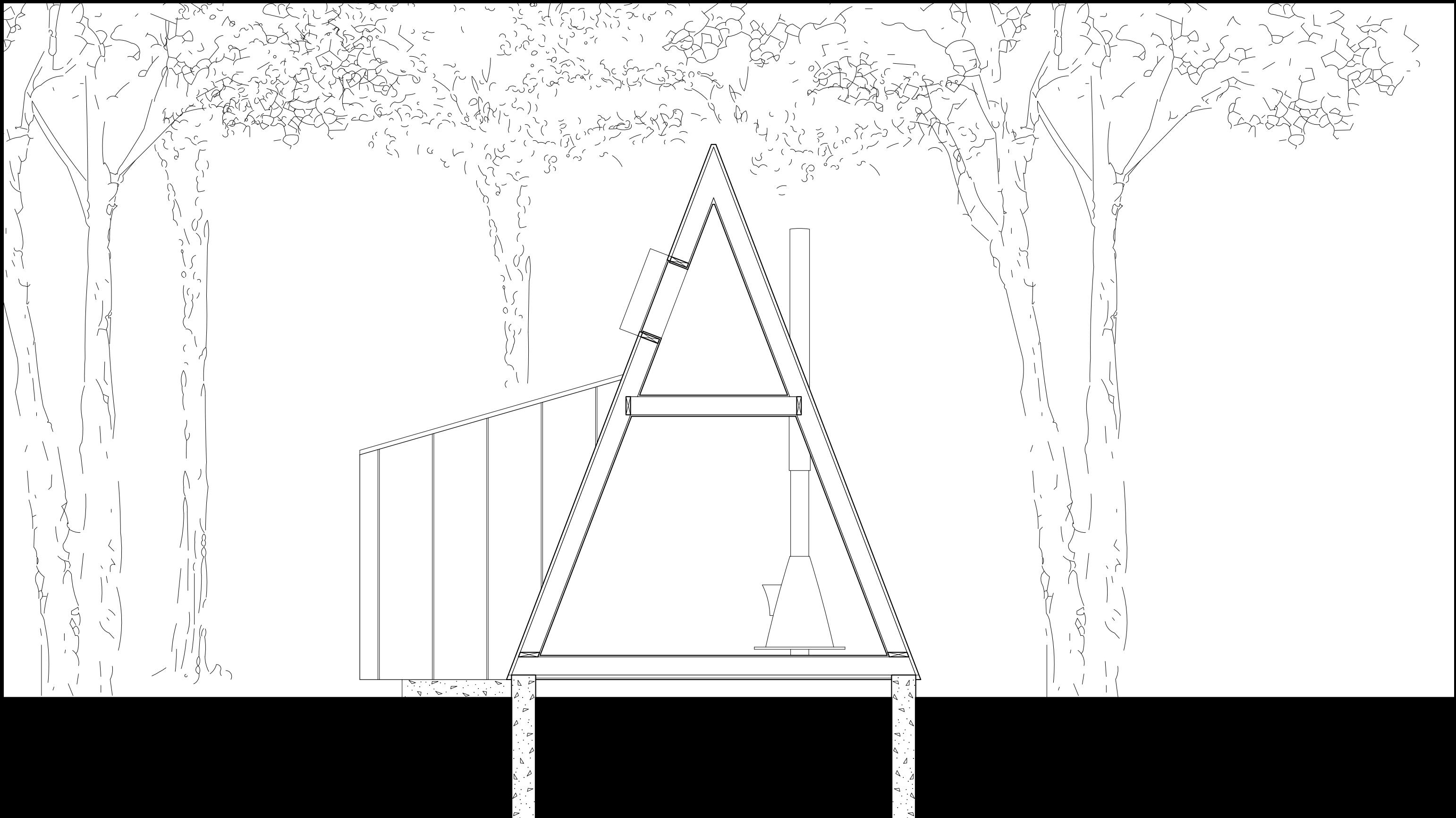


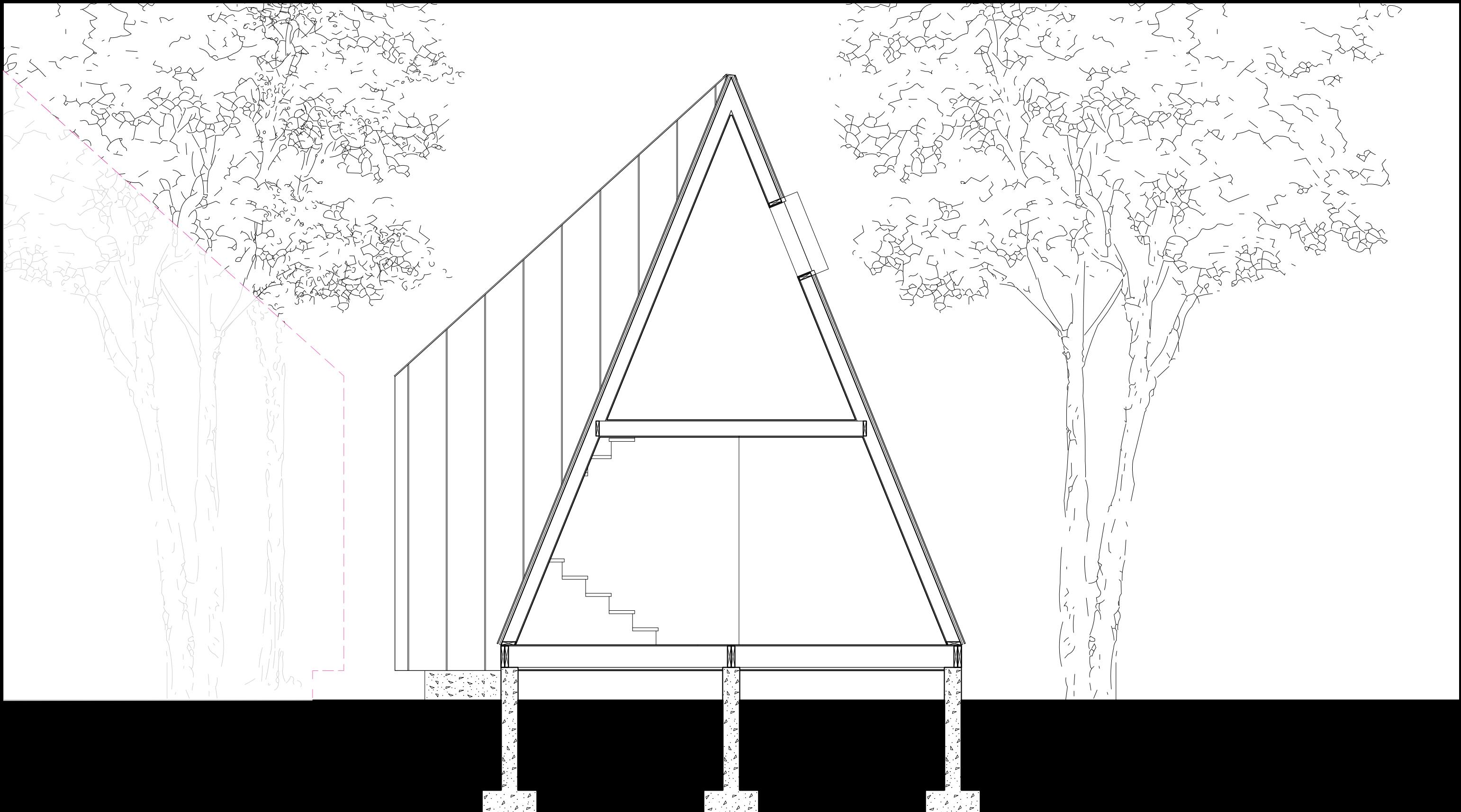
A farming

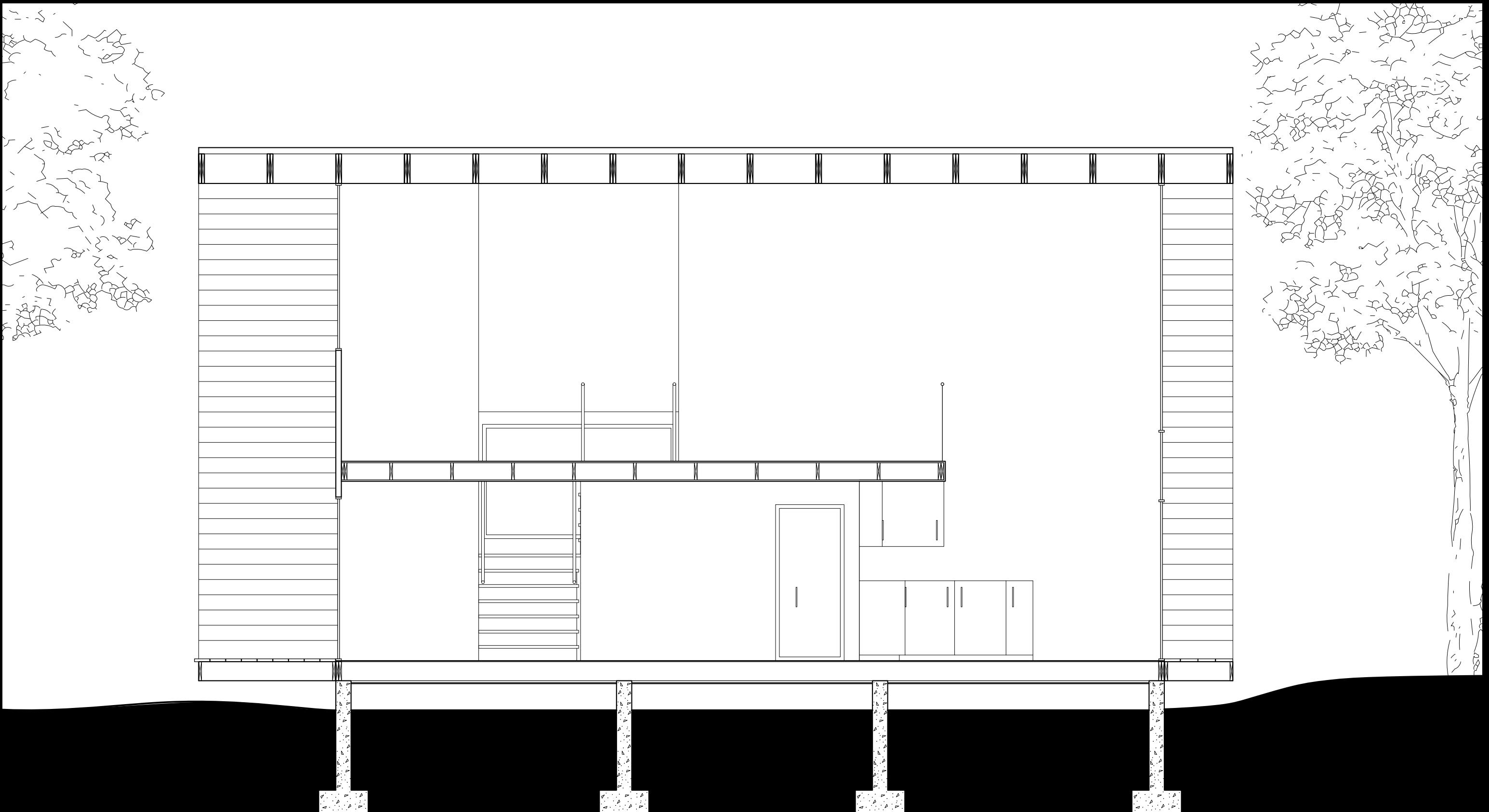
A-frame co-op











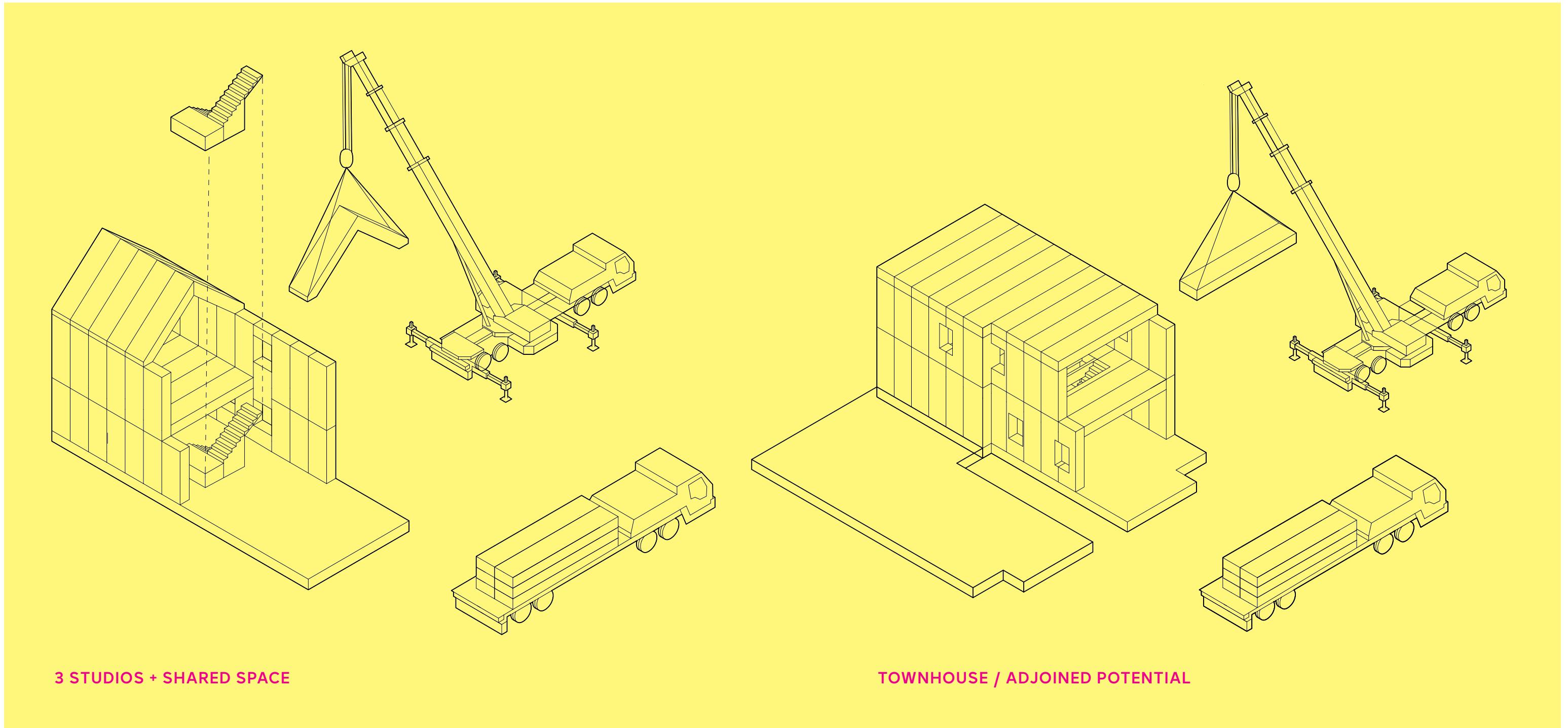
Small

Barn



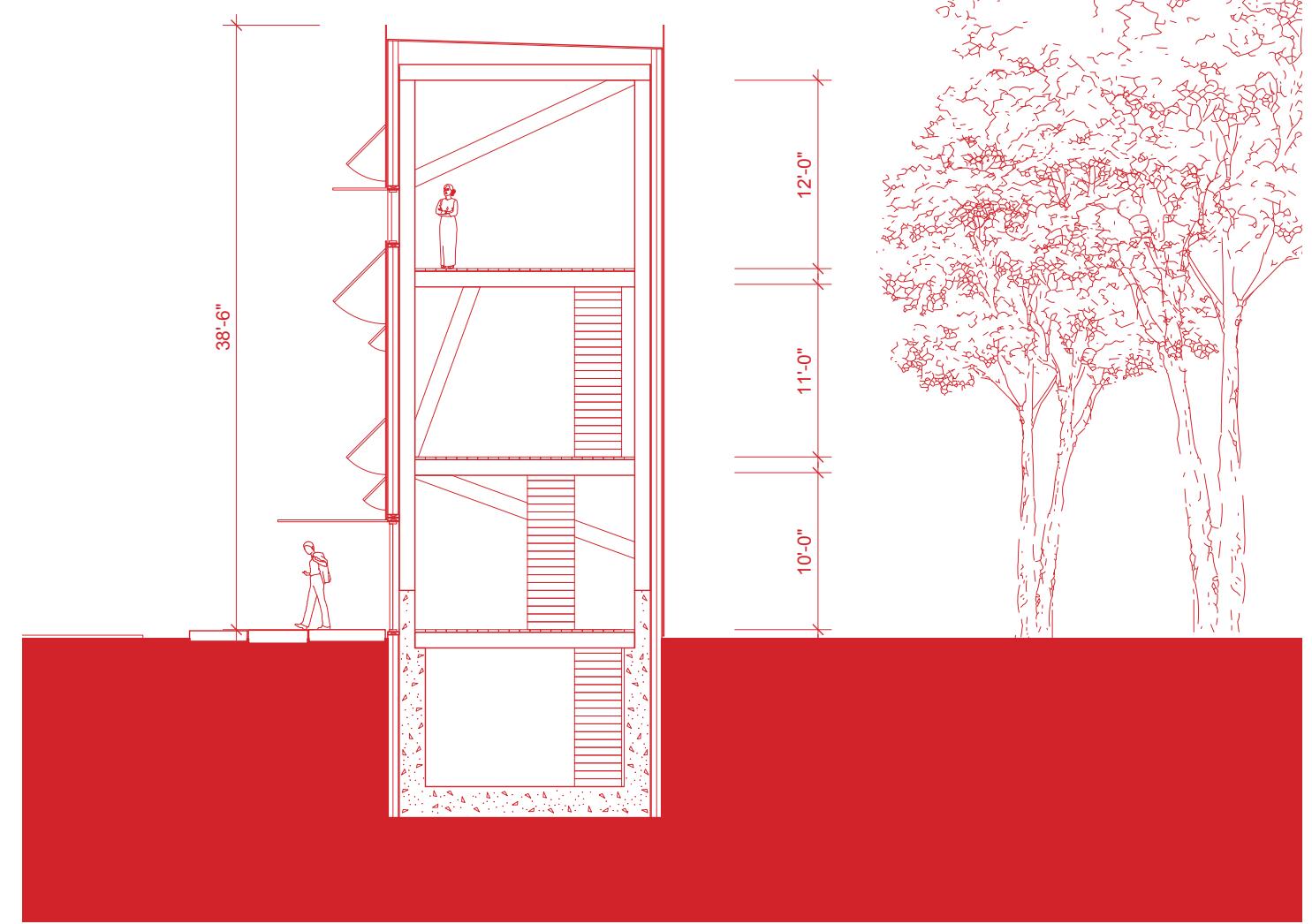
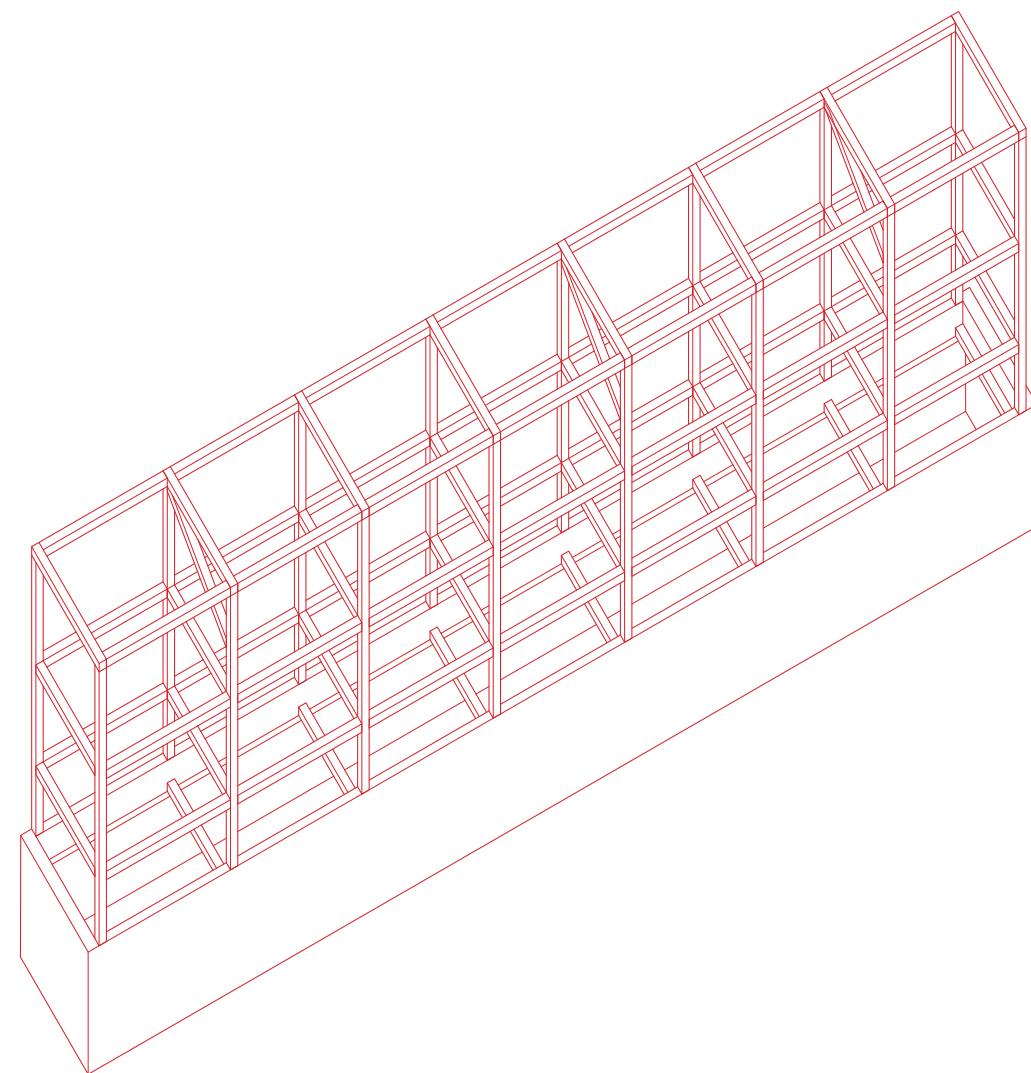
Prefab

Modules

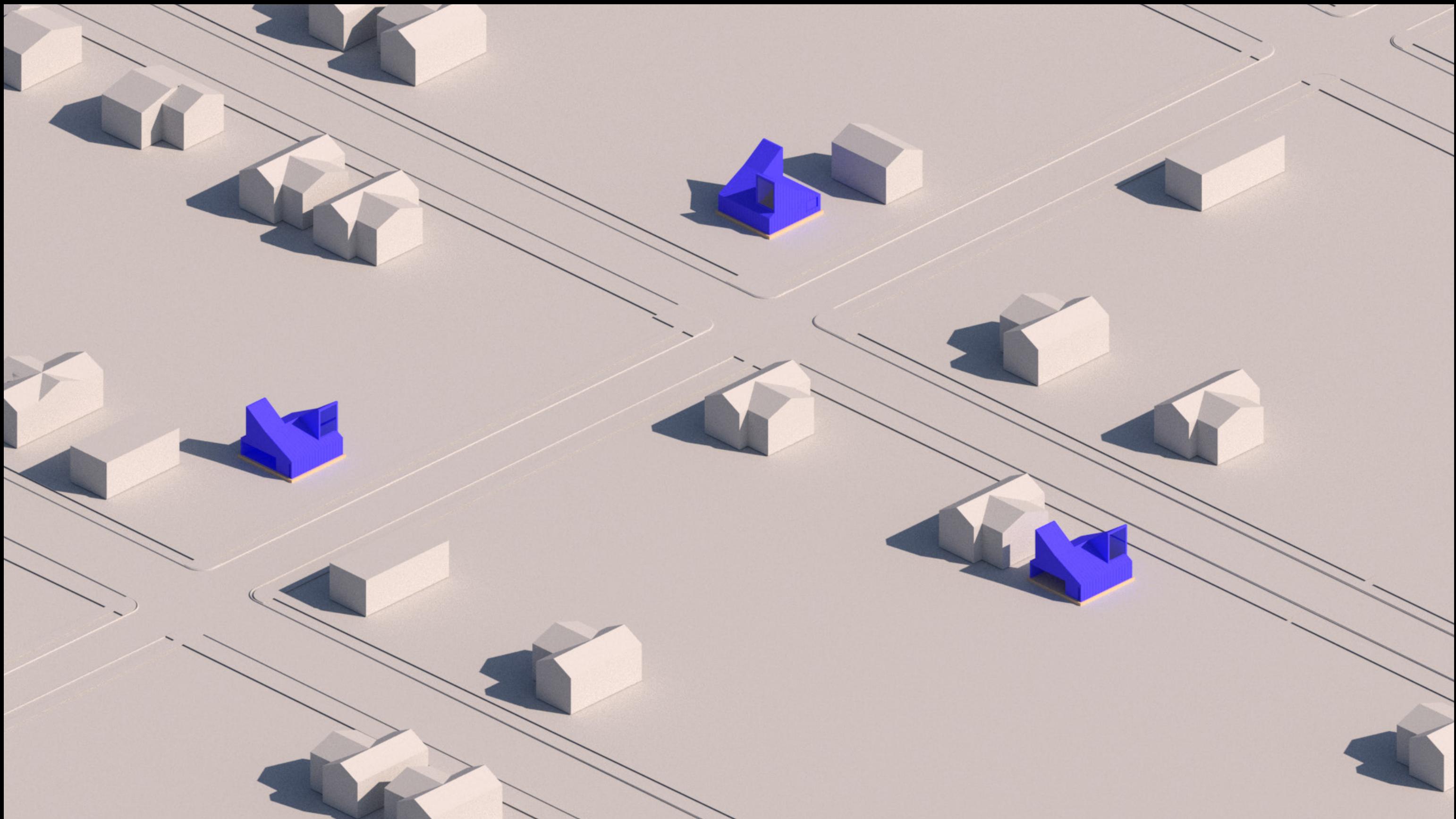


Glulam

Wall House



Big garage



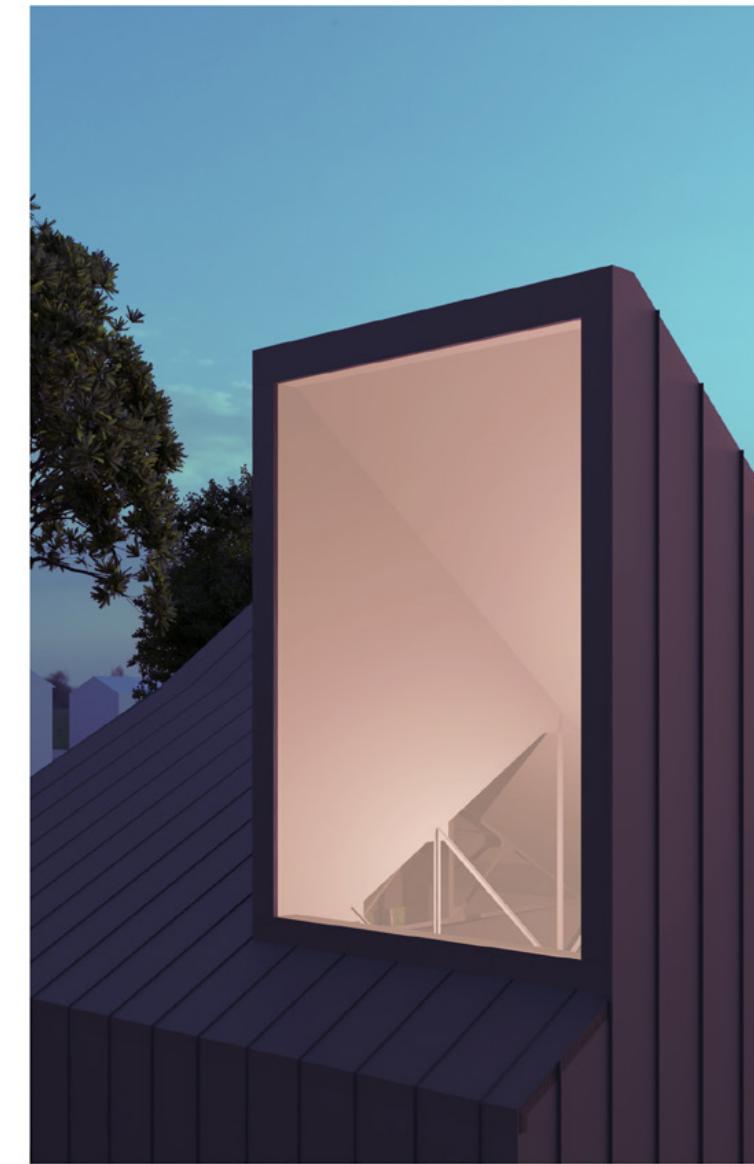




Thank you

Dean Dan Pitera (\$)
University of Detroit Mercy Professors Union (\$)
Joshua Budiongan (R-Zero Co-PI)
Sayyid Hamid (RA)
Matt Hammill (RA)
Phil Jurkowski (RA)

Fellow panelists, EDRA, UAA, ACSA



Thank you