

Minima Maxima

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Thesis submitted to the faculty of the Virginia Polytechnic
Institute and State University in partial fulfillment of the
requirements for the degree of

Master of Architecture

October 7, 2019
Blacksburg, Virginia

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Abstract

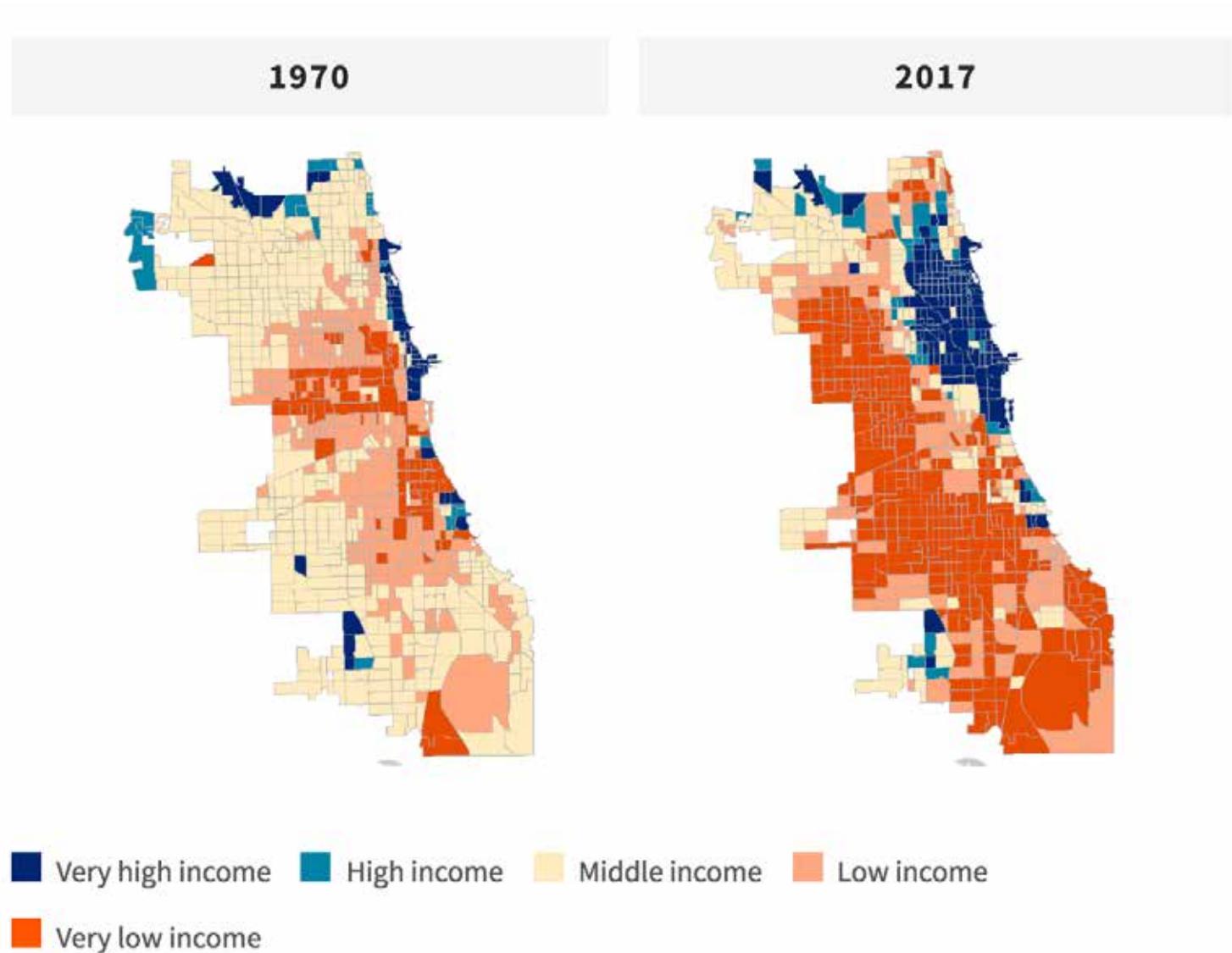
Architecture can provide unique, experiential spaces at varying sizes. In situations of housing scarcity or lack of affordability, design becomes imperative in crafting spaces that, while spartan and minimal, allows for variation and individuality to arise. In the context of an urban intervention, architecture can unite the city and the people by offering space for the city and creating an active community for its occupants. This thesis uses a micro-apartment complex in Chicago overlooking a park and elevated subway tracks to show how architecture and design can provide dignified spaces of any size.

Acknowledgements

I would like to thank my committee, Heiner, Frank, and Dave for their counsel, support and above all patience. Greater and longer than all of us expected.



Fig.1



Maps show average individual income by census tract.

Source: Voorhees Center, University of Illinois at Chicago

Fig. 2

The housing landscape of Chicago, and major cities around the country, has skewed greatly toward building luxury condos and apartments to seek great returns by investors and developers. As a consequence, rents and home prices have increased, pushing out lower-income people and creating greater income disparity and segregation.

Historically, in order to accommodate the influx of workers to urban areas, boarding and worker houses were quickly constructed in industrial centers for factory workers and transients. Rooms were small and were tightly crammed into each floor to house as many workers as possible.

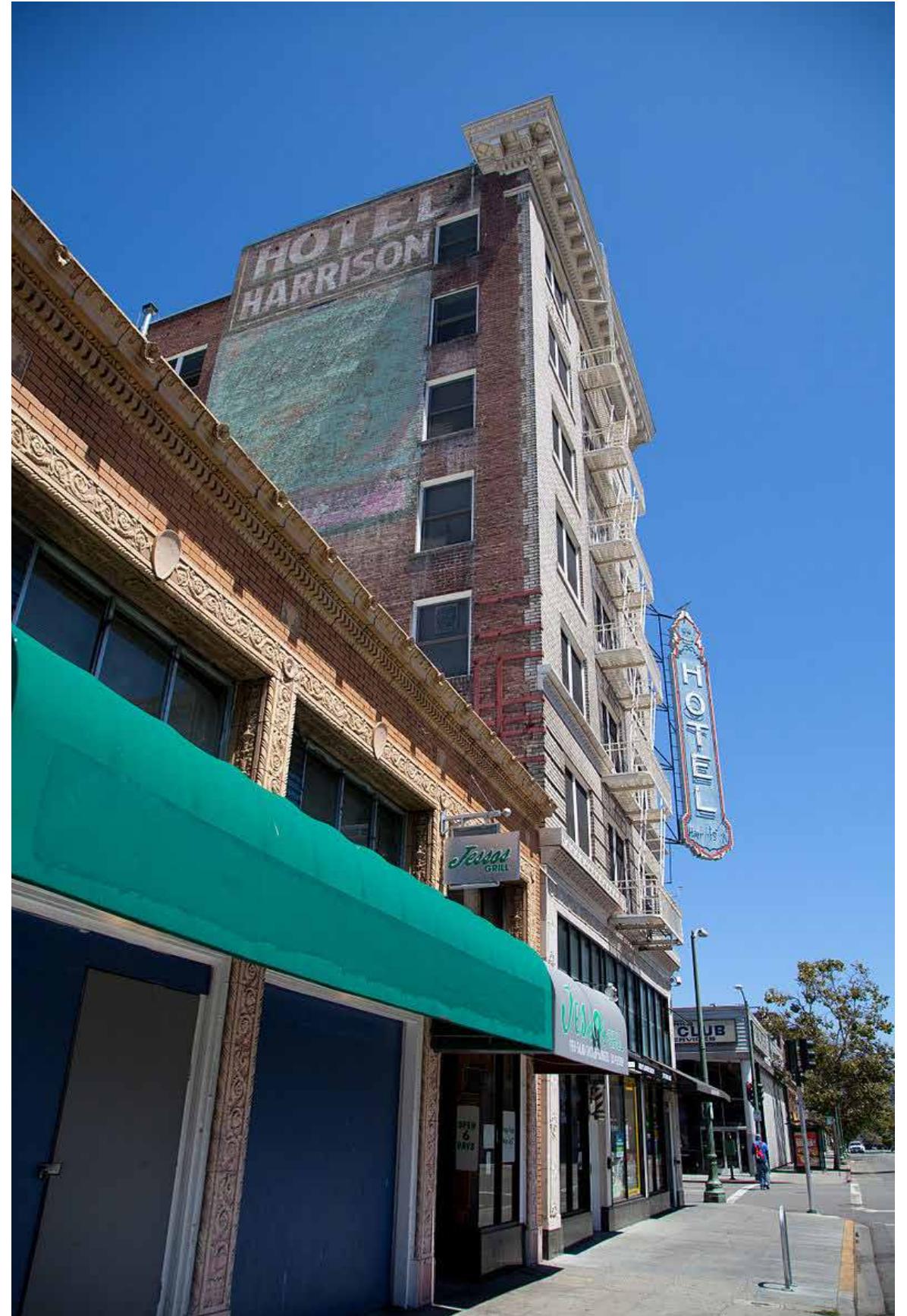


Fig. 3

Typical floor plan

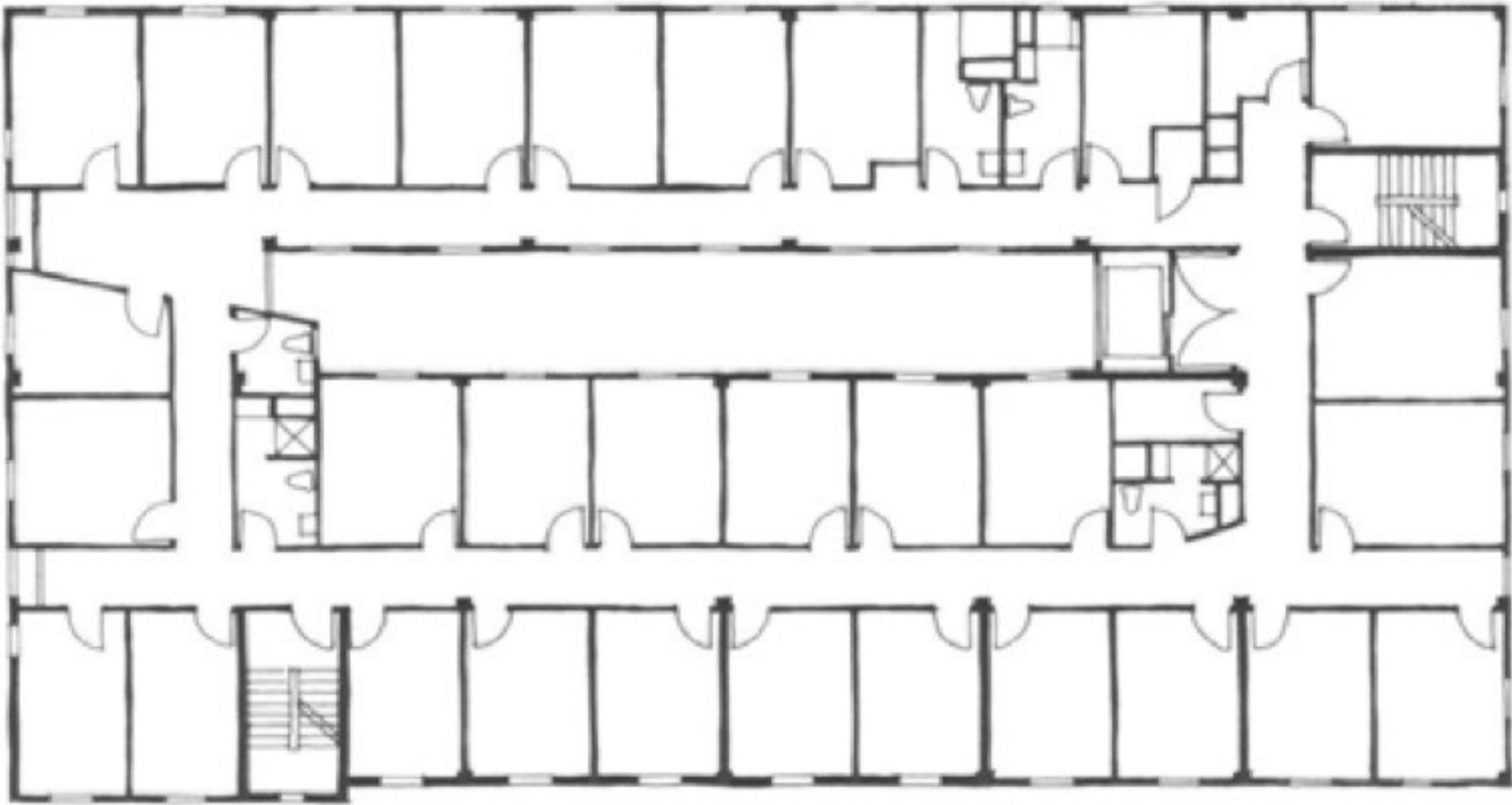


Fig. 4



Fig. 5

Globally, affordable housing shortages in urban areas have led to the creation of slums within or at the outskirts of major cities. In places like China, entire families are packed into small subdivided apartments that are less than 50 square feet.



Fig. 6

More modern attempts at affordable housing schemes have tended towards communal living. PodShare, a co-living company, offers open bunks in San Francisco and Los Angeles, with residents sharing common areas like bathrooms and kitchens. The lack of privacy with residents closely put together with no curtains or dividers is meant to encourage social interaction and community building.

This type of living arrangement appeals to a specific group that can tolerate the loss of privacy in exchange for a more social environment. Taking minimal living spaces to its extreme limits the appeal of such a lifestyle and the scalability of the typology.



Fig. 7

A better type of accommodation is needed in the face of a growing urban housing crisis. Attempts abroad have yielded fruitful results. The Olympic Village in Munich was transformed into affordable student housing in which the students have made into their own by decorating exteriors and interiors. The complex consisted initially of over 800 units, arranged to form narrow village-like streets and piazzas where communal activities can happen.

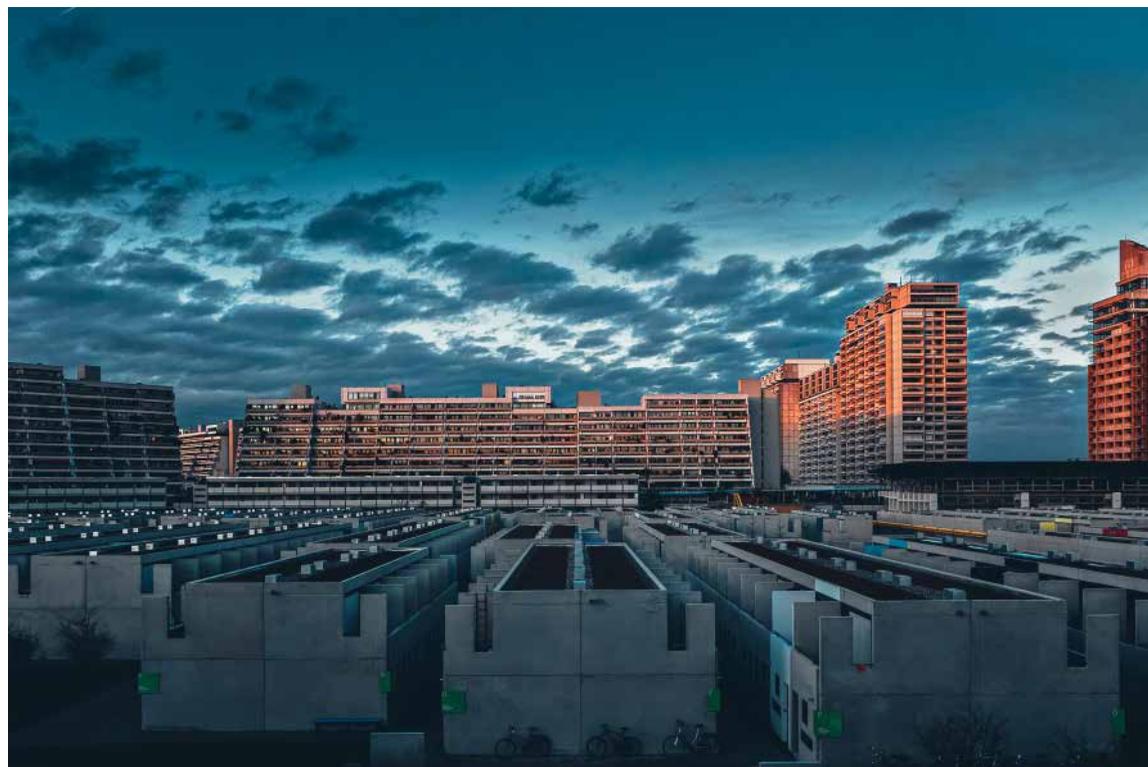
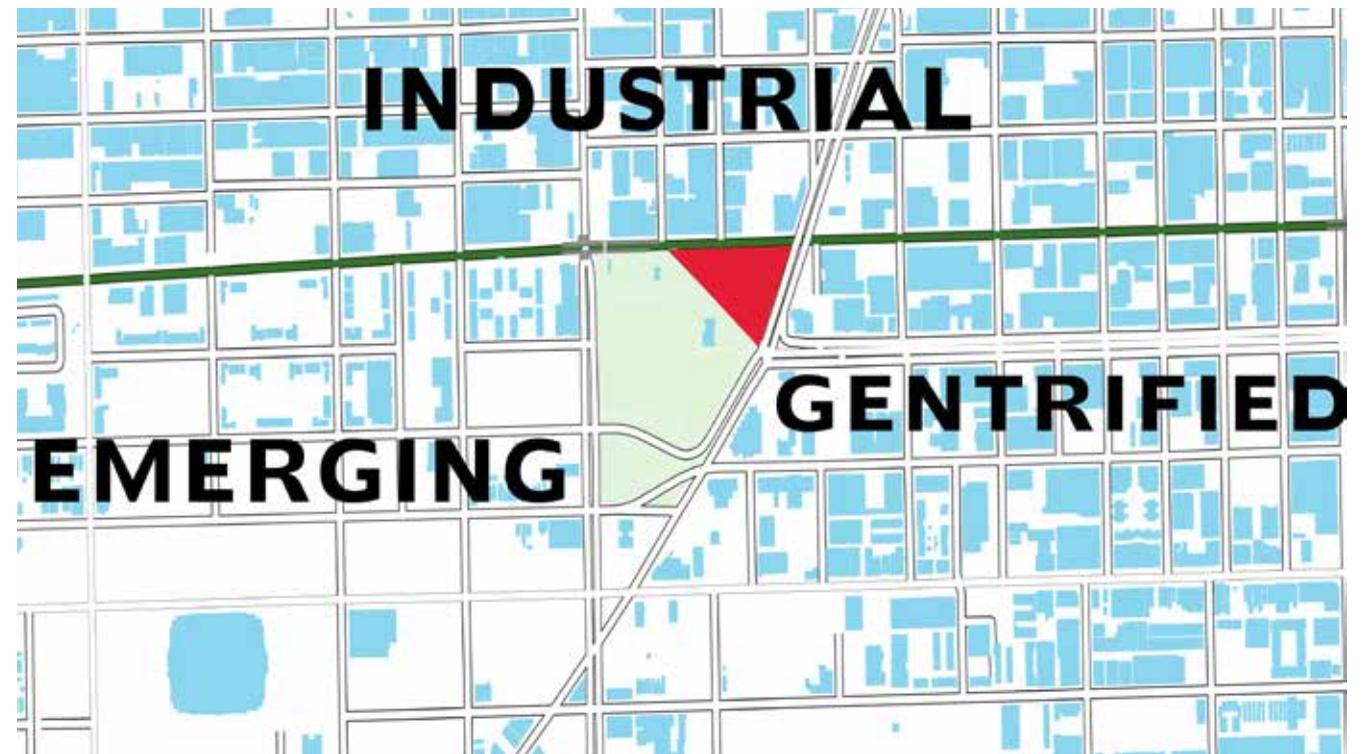


Fig. 8



Fig. 9

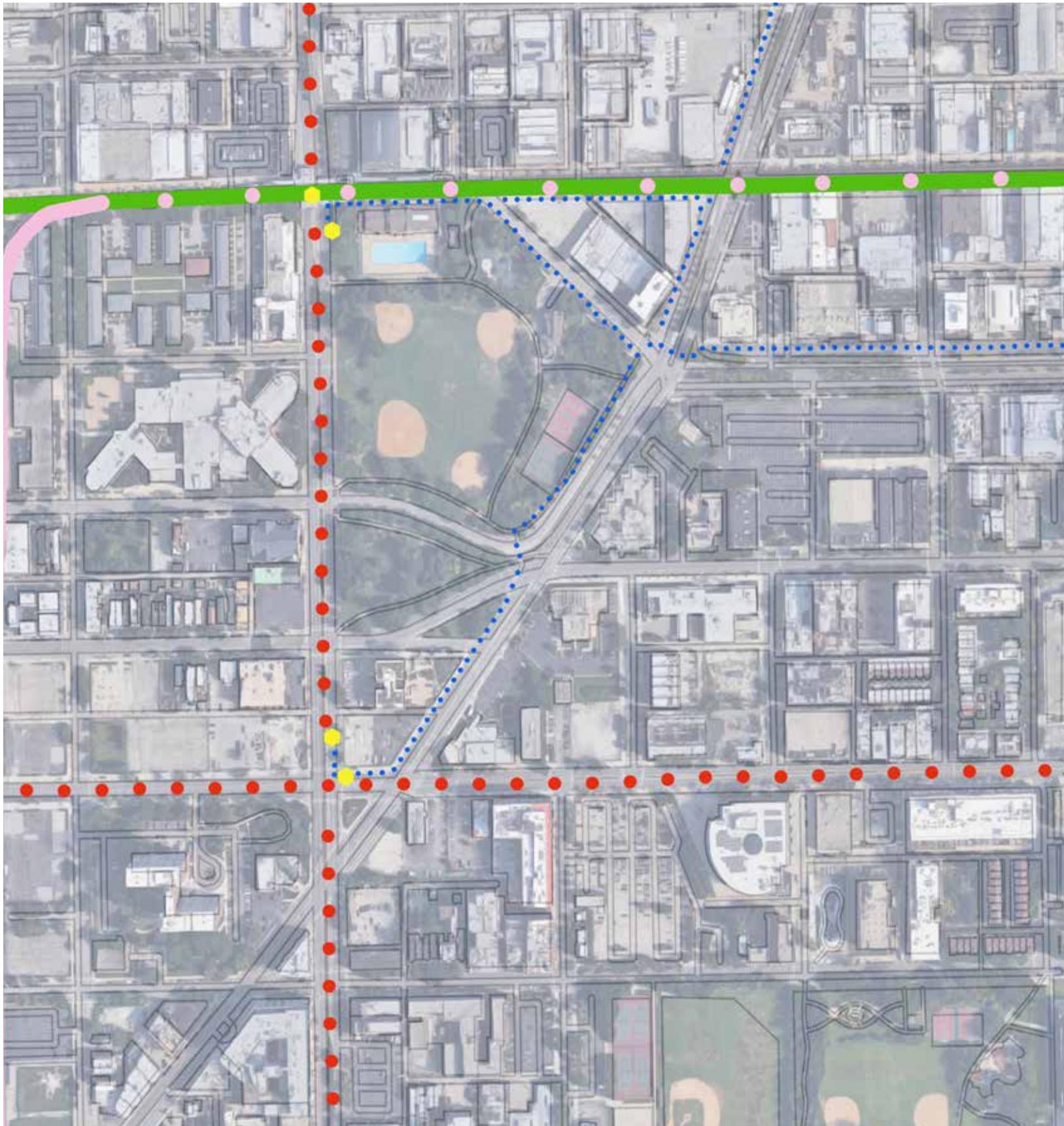
The history of the “four plus one” in Chicago shows modern attempts at affordable dense housing. Considered a building type unique to Chicago, four plus ones usually took up single or double lots and built with a concrete platform with surface parking and wood-framed upper floors. They were built as economically as possible as most consisted of studio and one bedroom units which catered to singles, young couples, and the elderly. Community opposition in the form of preserving community character changed the building codes to halt the development of this type of housing.



Site

The site is located on the west side of Chicago on a triangular lot bounded by elevated tracks to the north, Odgen Avenue to the east, and Union Park to the south. Union Park is named in recognition for the birth of the international labor movement in Chicago. On May 4th 1886, a clash with police, anarchists and other leftists erupted while protesting for a eight-hour workday after a bomb exploded killing officers and protesters. The origin of May Day, celebrated on May 1st, was created in recognition of these protests. Currently, the park hosts cultural events and concerts along with providing general recreational facilities.

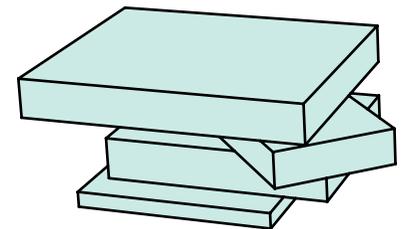
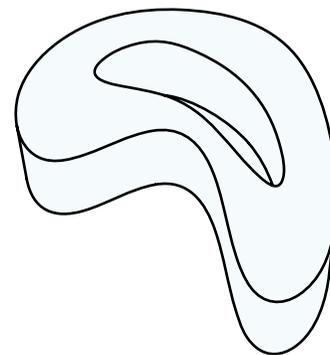
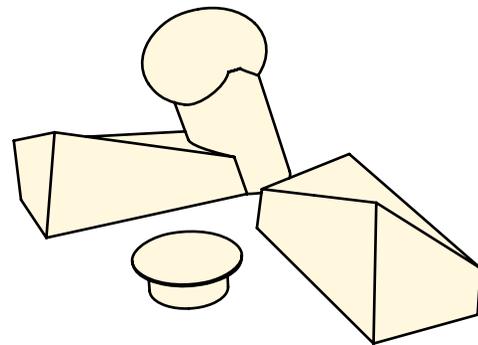
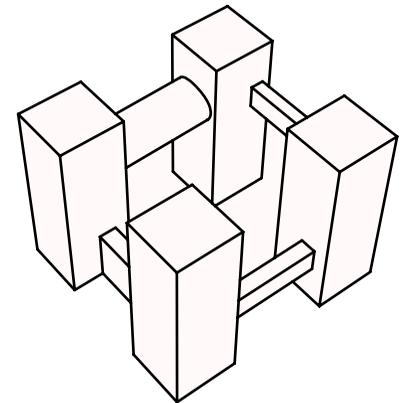
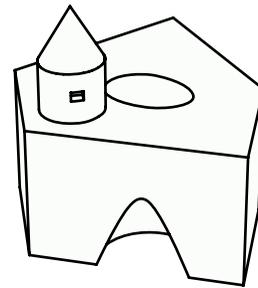
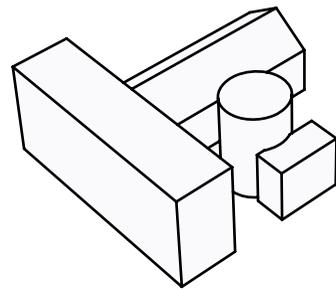
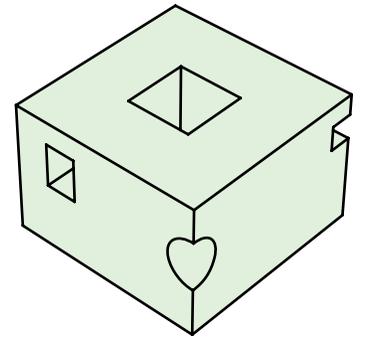
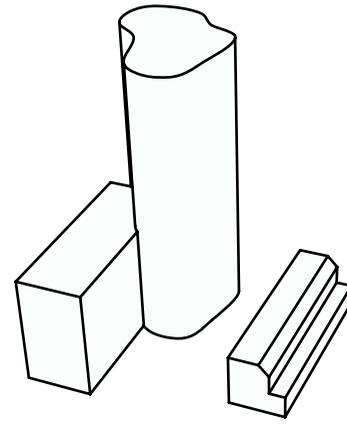
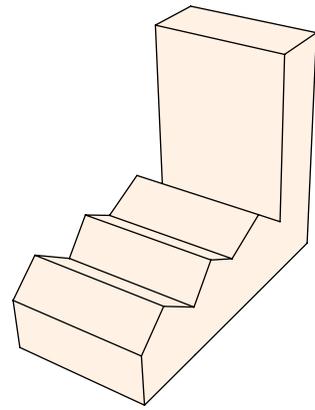
The CTA tracks just to the north of the site create a border between the park and the more industrial buildings of the neighborhood. The neighborhood at large is undergoing tremendous change as the old industrial base is being replaced with residential lofts and creative businesses including many architecture firms.



- CTA Lines
- Bus Lines
- Transit Stops
- Approaches



Fig. 10



A triangular site provides challenges towards developing form. There is a desire mold the building to the site or fighting against it to offer a contradictory reaction to the site. Due the site being adjacent to open parkland and a view of the skyline, it was important to emphasize these views developing the form.

In extending and augmenting the park into the site, a large open public to be used for congregation and other activities leads toward a curved form around the perimeter of the site.



Fig. 11

Formerly, the site was home to a manufacturer of harps. The form of a harp turned out to be an ideal form for the site with the branches and the harmonic curve creating a large open space for public use.

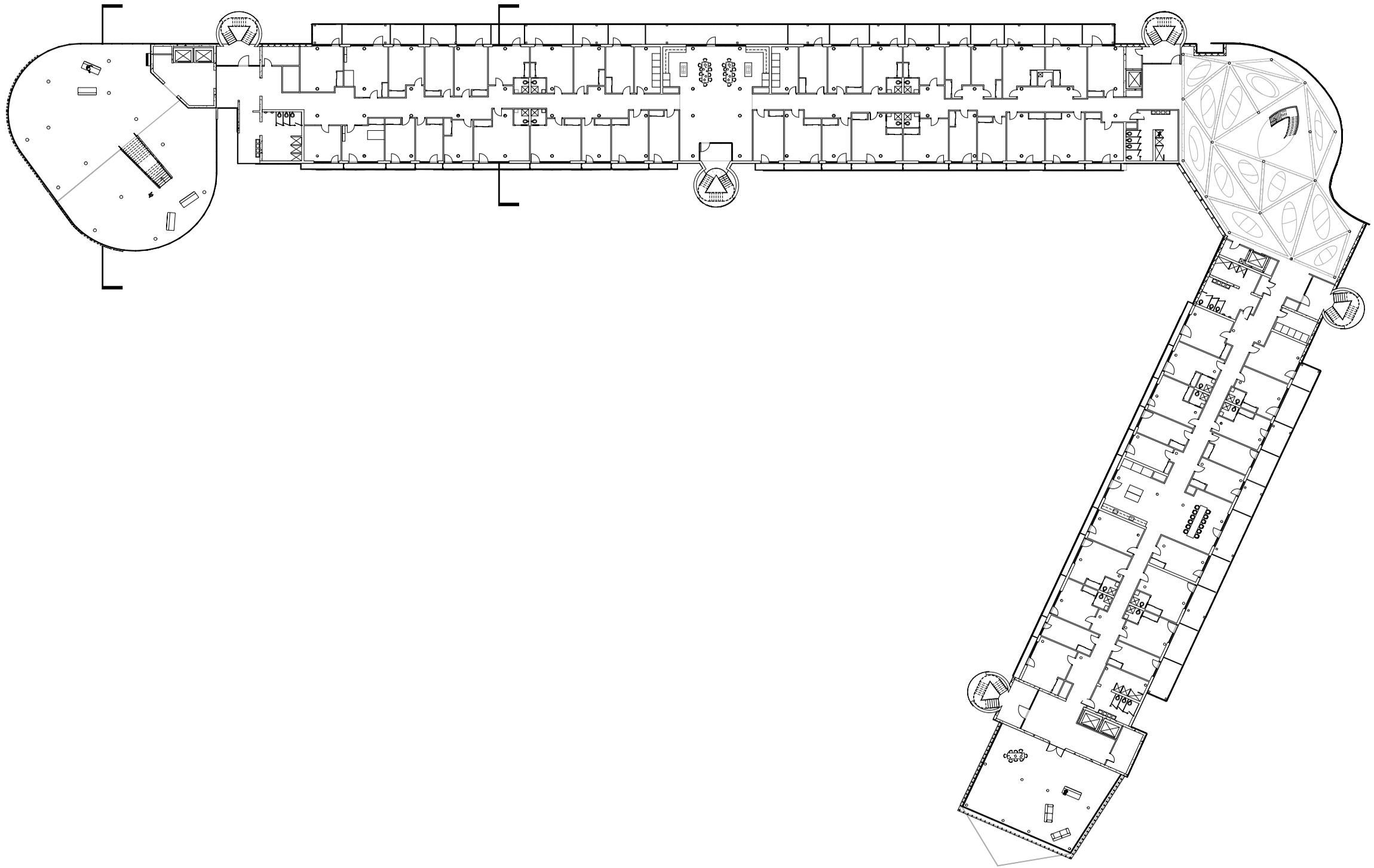


The result is a form that allows a large public plaza to be offered to the park and community while providing the units plenty of light and views.

Site plan and shadow study

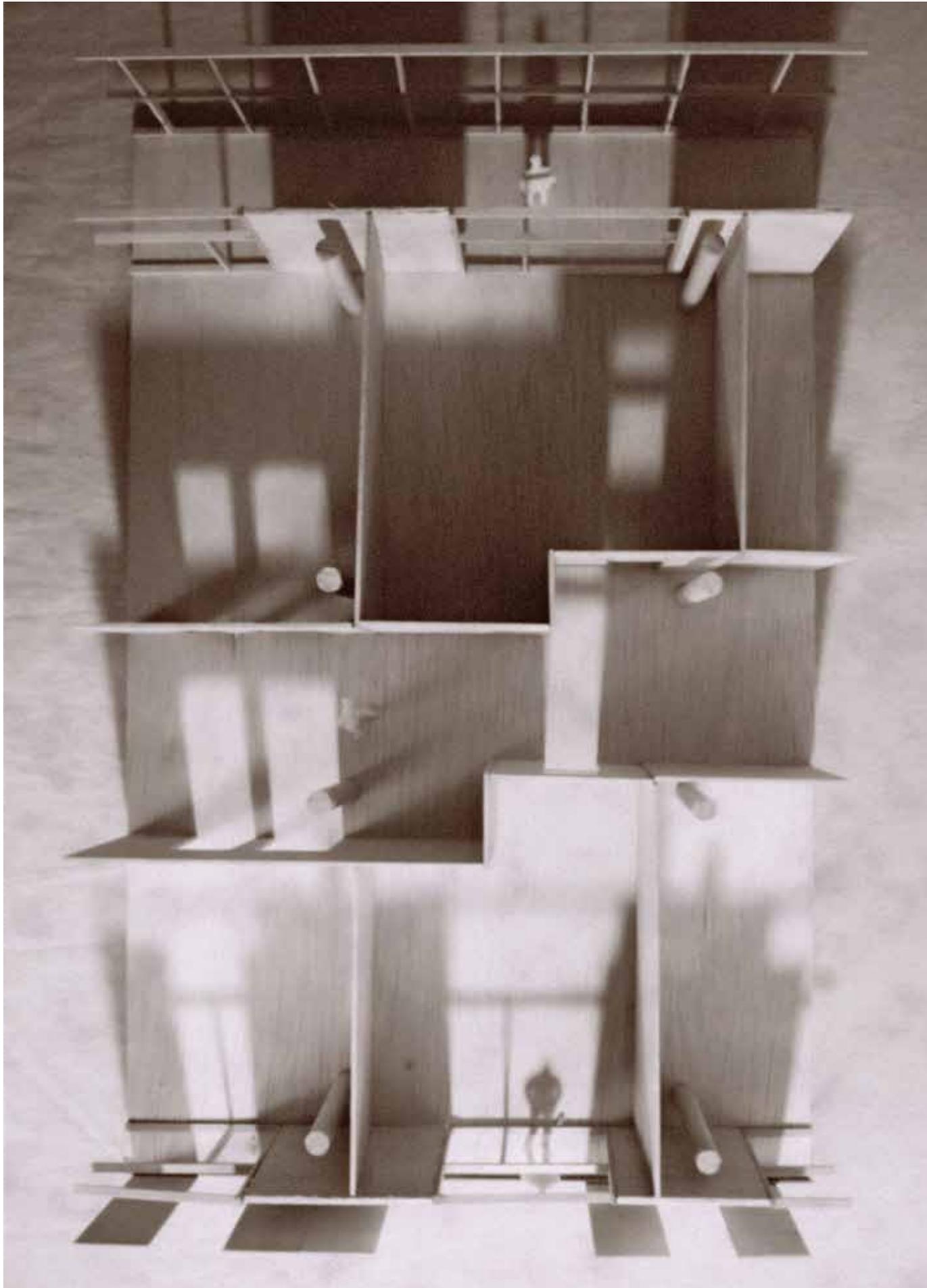


The ground floor is used as a market hall to serve the public and residents.



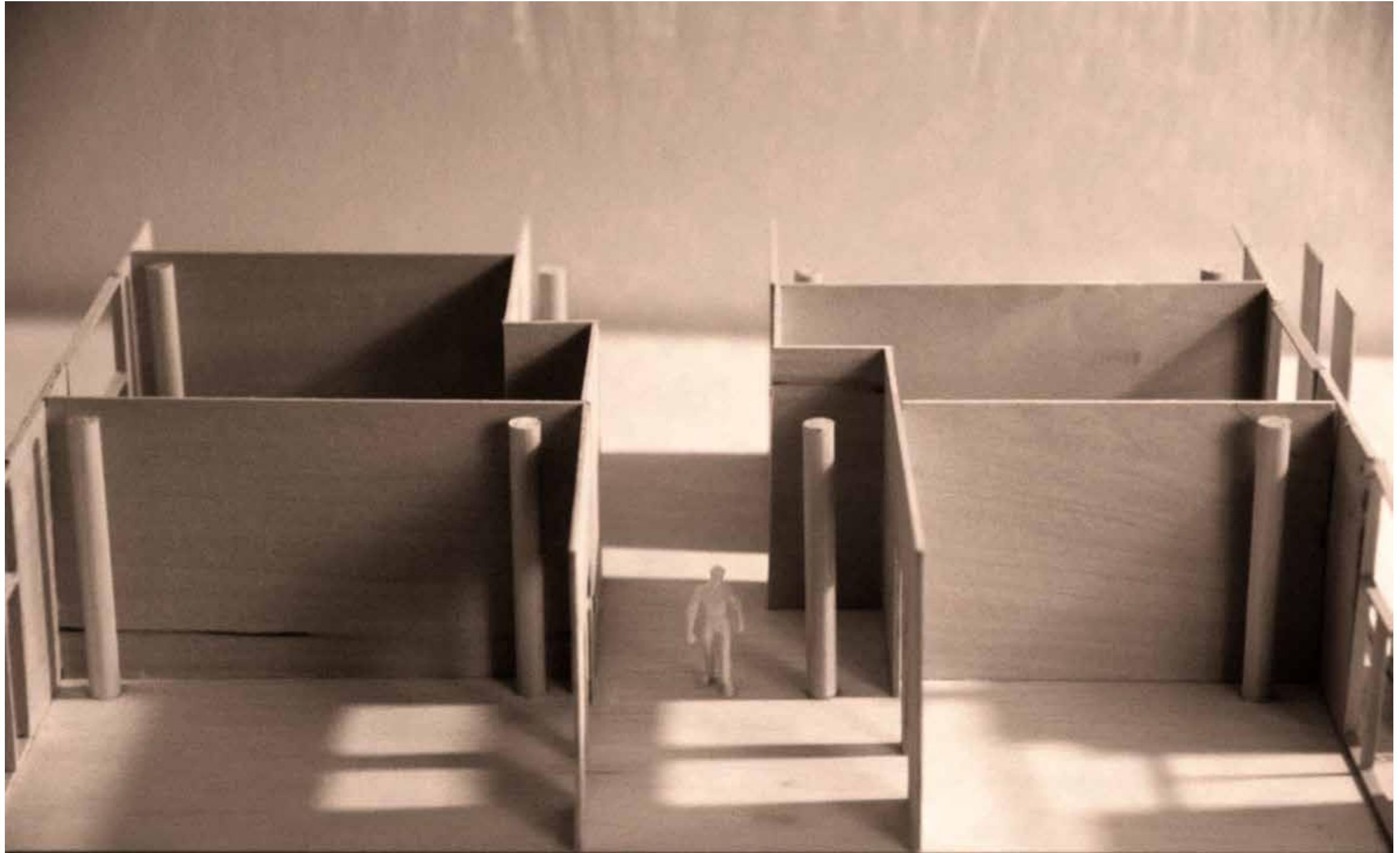
The residential floors are separated with rooms, service areas, and communal areas at the ends and the curve of the building.

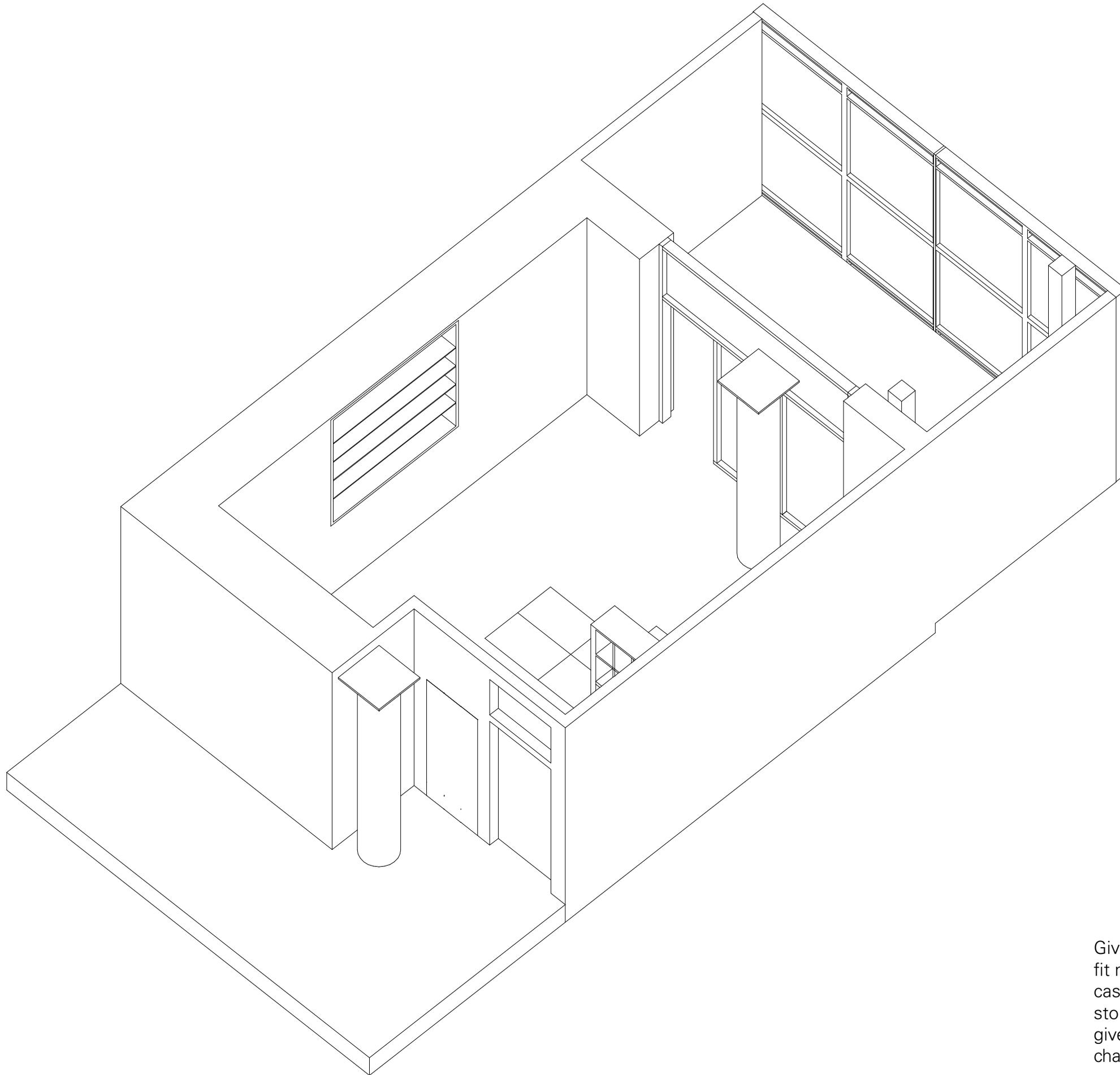
Typical residential floor plan



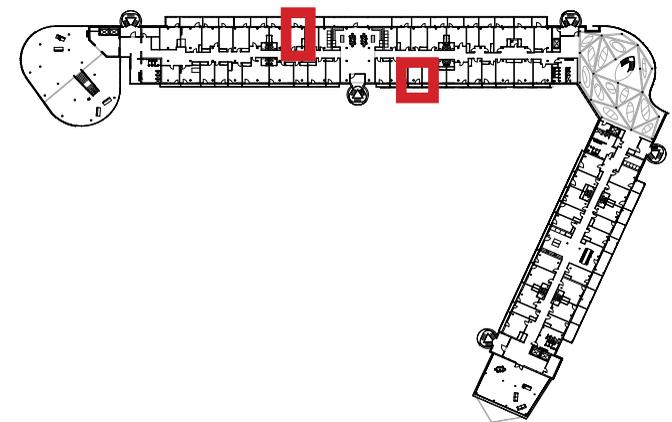
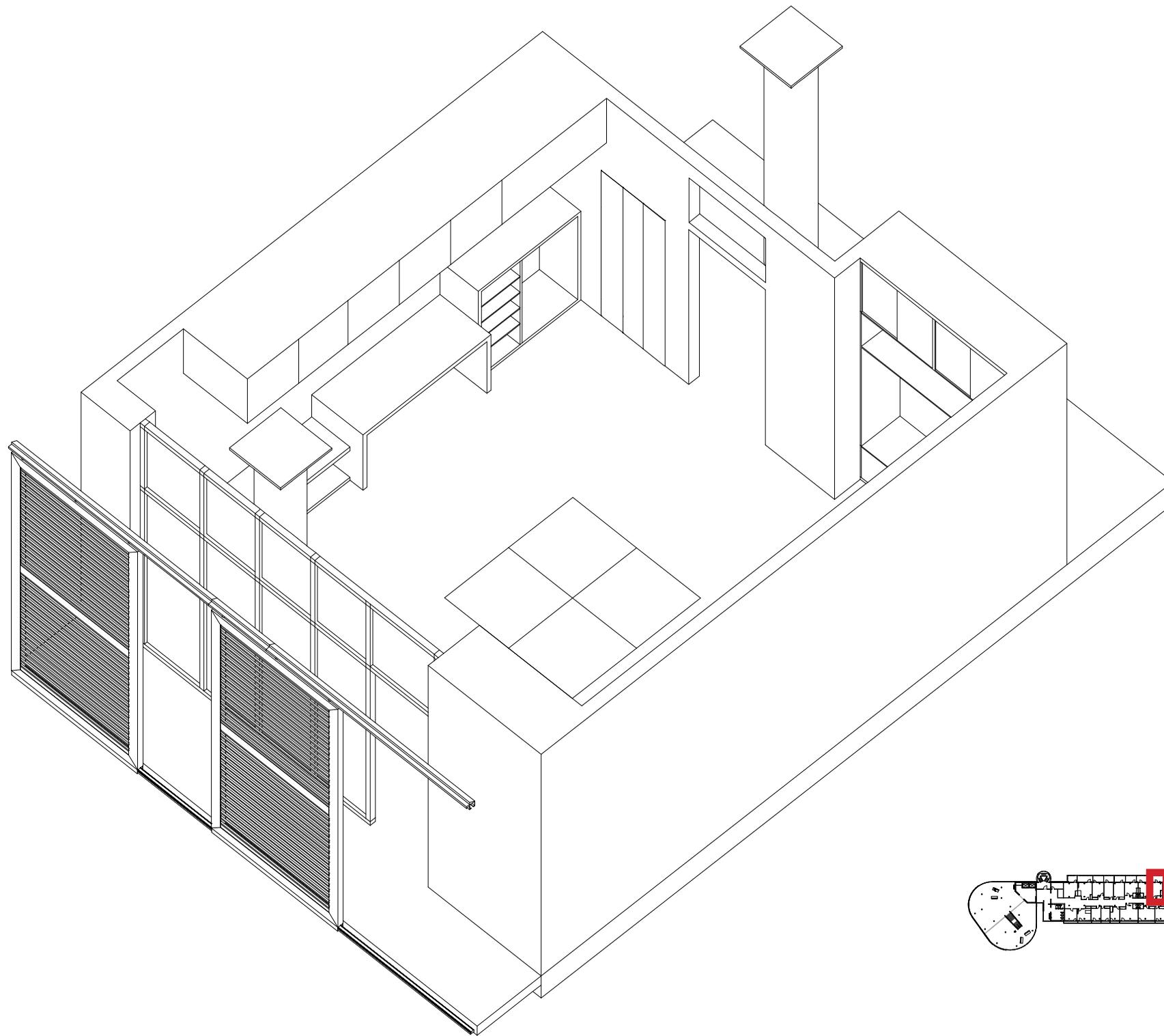
Rooms

The rooms are small but respond to their orientation. Plaza facing rooms feature moveable shutters that allow the resident to block harsh light. The rooms facing the tracks and street is buffered by a winter garden which blocks out noise while also offering more space to those rooms.





Given that this style of housing may fit more transient individuals, built-in casework give these rooms ample storage for resident's belongings and give each unit a distinct individual character.

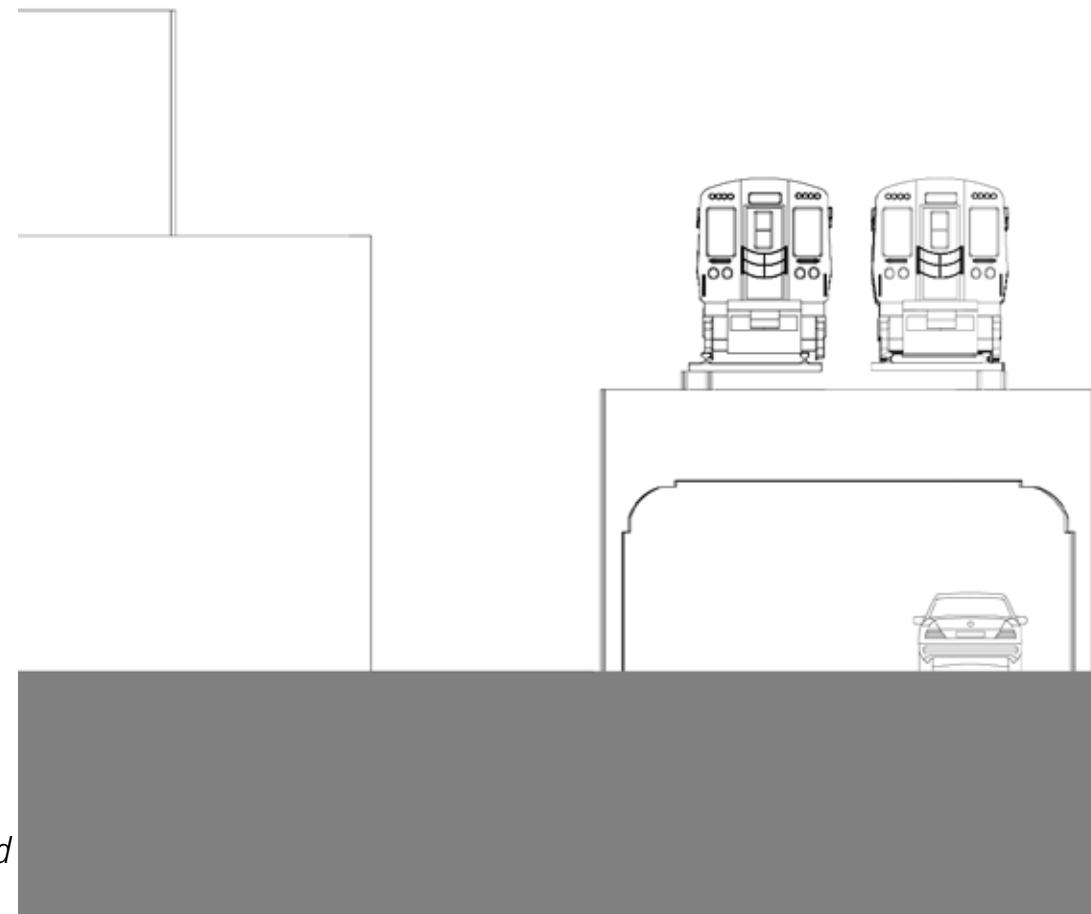


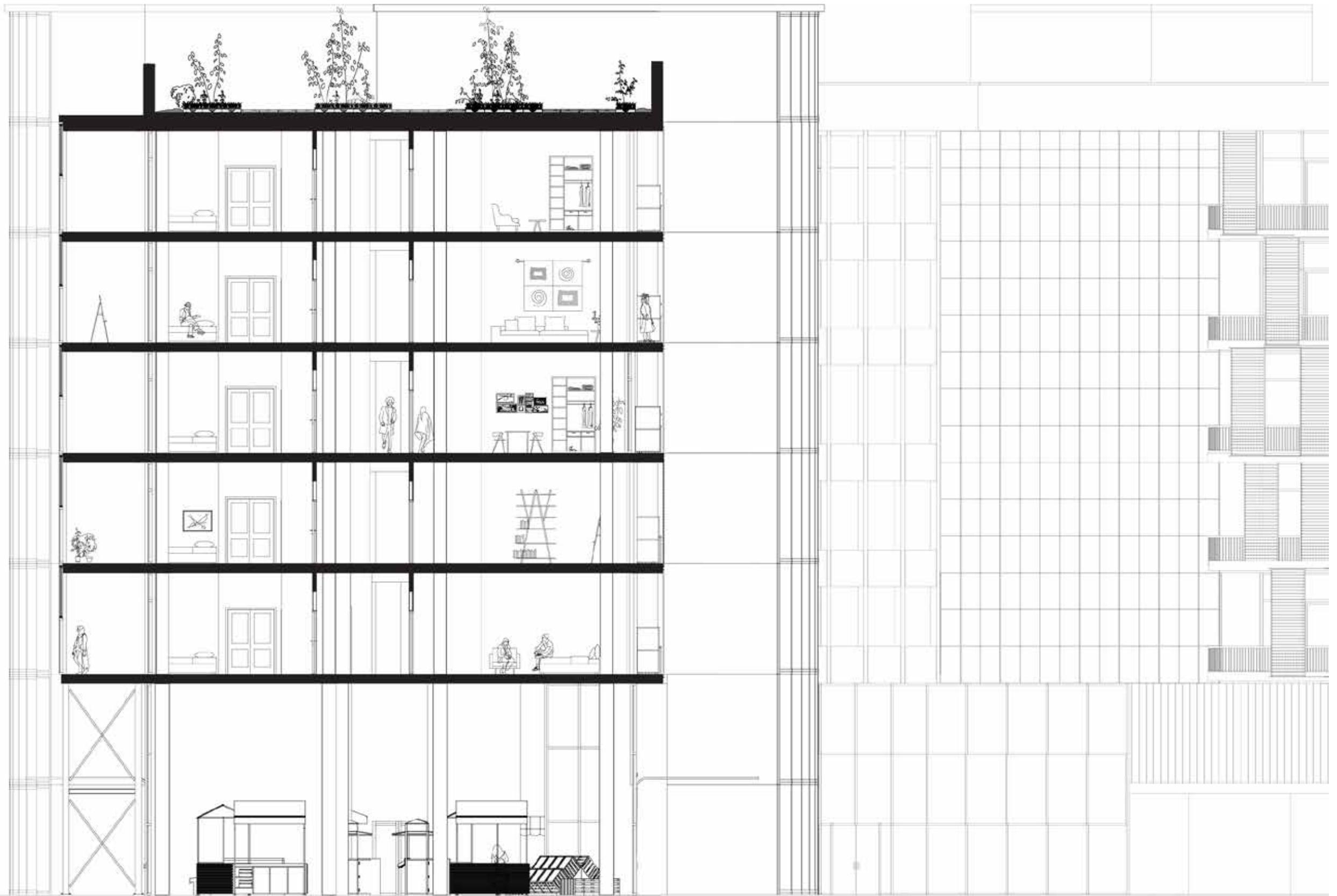
L: Typical unit facing north to the "L" tracks.

R: Typical Unit facing south towards Union Park.

Taken together, these rooms and communal spaces offer a retreat from urban life while also still connecting residents to the city at large with the plaza, parks, and market serving as a gathering place for citizens of Chicago.

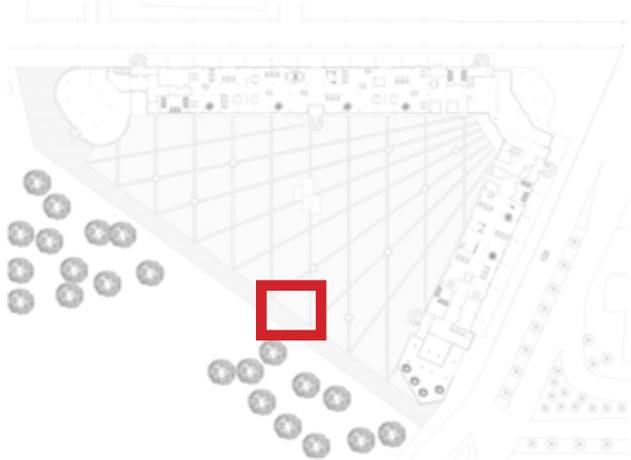
Section through residential and market space.





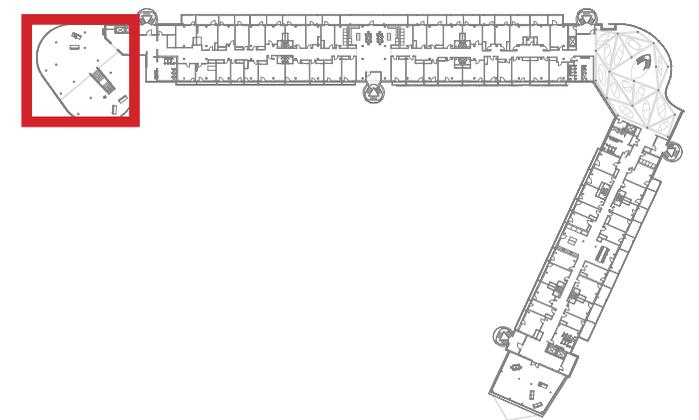


View of plaza from Union Park





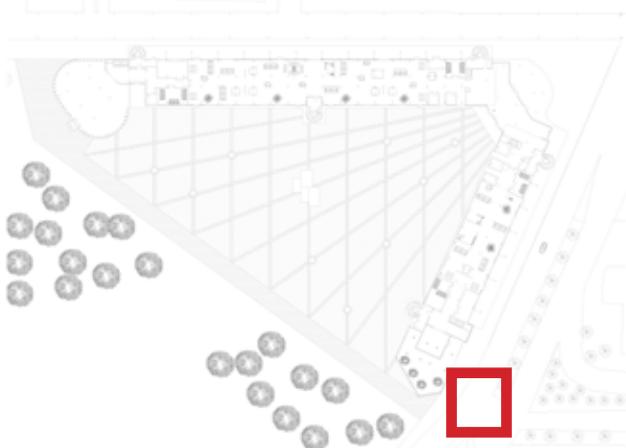
View of downtown Chicago from communal space.

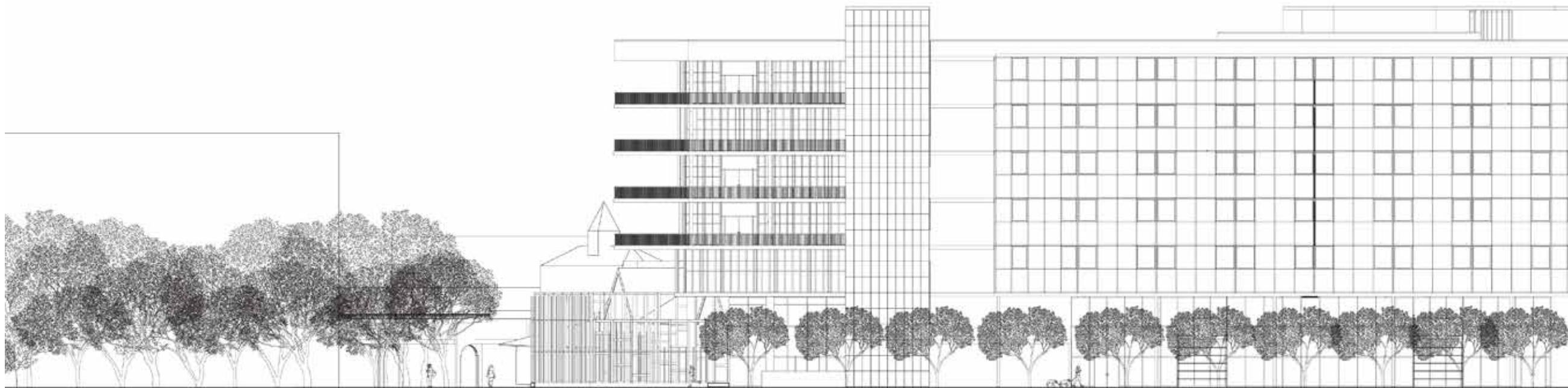


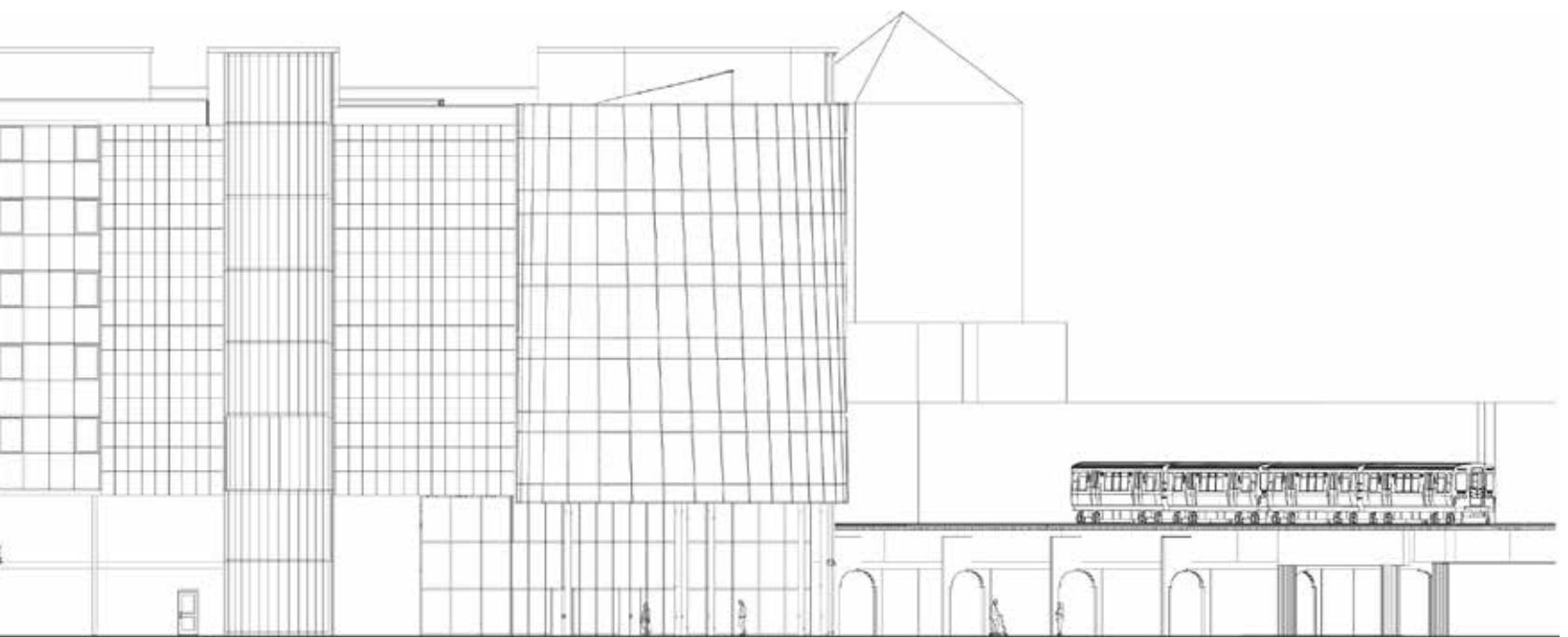




View of building from Odgen Avenue



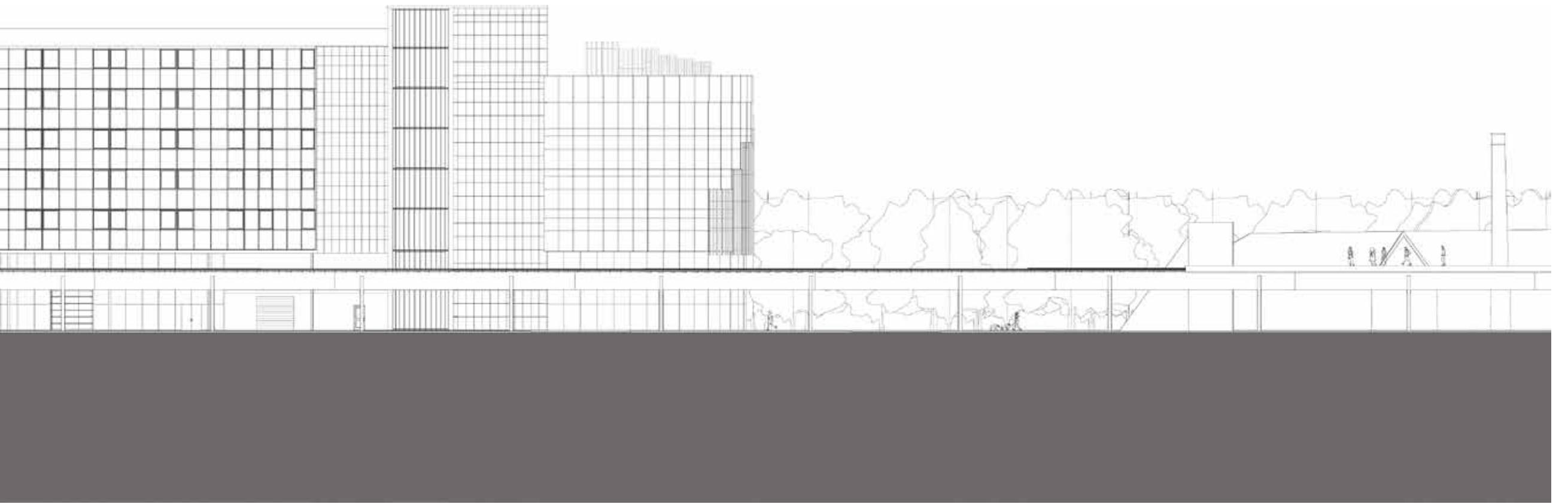




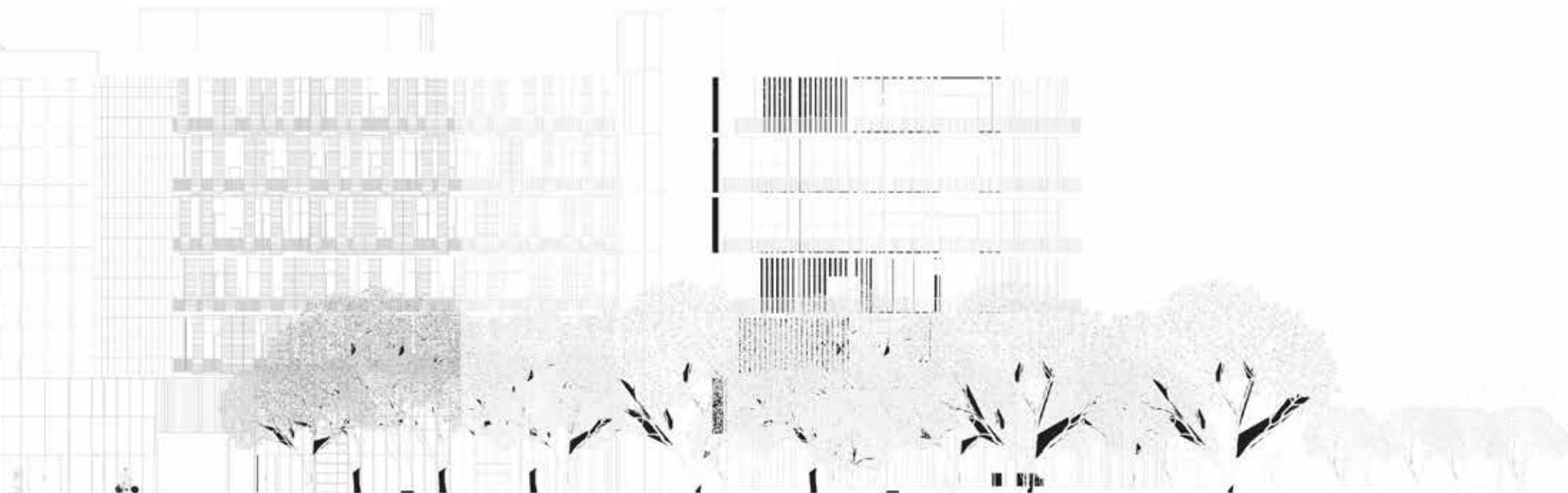
East Elevation

North Elevation









Southwest Elevation



Appendix of Images

Fig. 1. Blakeley, Chris. "pillars of the community" <https://search.creativecommons.org/photos/0da60935-2c8a-4619-ae13-ae4eab79e82>. CC BY-NC-ND 2.0 Fair use.

Fig. 2. Comparison of Income Levels by Census Tract 1970 and 2010. Voorhees Center, UIC. Accessed August 17, 2019. <https://voorheescenter.uic.edu/>. Fair use.

Fig. 3. Roth , Almon. The Harrison Hotel, an SRO Hotel in Oakland, California. Wikipedia, July 28, 2012. https://en.wikipedia.org/wiki/Single_room_occupancy#/media/File:Harrison_15th_Sts_Historic_District.jpg. CC BY-SA 3.0, Fair use.

Fig. 4. Erickson, Glenn. "Simone SRO Hotel, Downtown Los Angeles, CA" <https://search.creativecommons.org/photos/a5c561d4-6716-4b7b-9a66-0b2fe7c26e42>. CC BY-ND 4.0, Fair use.

Fig.5. Himbeerdoni, "Hong Kong - apartments" <https://search.creativecommons.org/photos/eb5faa41-da47-4247-b23c-d3eb82a54b2f>. CC BY-NC-ND 2.0, Fair use.

Fig 6. Boullosa, Nicolas, "podshare". Facebook, January 2, 2016. <https://search.creativecommons.org/photos/e34ed9e2-898e-47f3-8b78-703e36fd9be1>
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Fig. 7. Contrast, High. Wikipedia, June 1, 2012. https://commons.wikimedia.org/wiki/File:Olympic_Village_in_Munich_in_June_2012.jpg. CCA 3.0, Fair use.

Fig. 8. Frank, Nick. "Olympia Habitat. <https://inspiration.detail.de/report-renewal-of-the-student-apartments-at-the-olympic-village-in-munich-103535.html?lang=en>.
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Fig. 9. Example of a "Four-plus-One" in a Chicago Neighborhood. Google Maps. Accessed October 2, 2019. maps.google.com. Fair use.

Fig. 10. Pamorama of Union Park in Chicago. Google Maps. Accessed October 2, 2019. maps.google.com. Fair use.

Fig. 11. Pedal Harp. Wikipedia. Accessed September 19, 2019. https://en.wikipedia.org/wiki/Pedal_harp#/media/File:Harfe-Museum_für_Kunst_und_Gewerbe_Hamburg-1995.245.png. Public Domain.

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