

# Evolving Community

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2006-2007  
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30 April 2007

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## **Abstract**

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Establishing a residence is an ongoing event for most. Individuals will have multiple spaces that they inhabit during their lifetime. They move from one location to another due to a variety of different influences and occurrences.

In making objects adaptable they can become bland and begin to lack character or an identifiable identity different from that of another. How can an adaptable housing unit be created as to where each unit is distinctly different from the rest. Does this individuality lie in material use, unit shape and size? Does a modular building or prefabricated building lie in the answer? In an urban environment where land comes at a premium how do you make these units so that they can interact with one another and the existing infrastructure of the city?

Intrinstly a mobile lifestyle contradicts community. People want a sense of permance as well as that ability and freedom to move as they want or need to. How can a sense of community be instilled into those of a nomadic lifestyle?

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## Project Summary

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Attending to the idea of a mobile lifestyle became evident to consider where these housing units would end up. Considering the movement of people in urban places and to and from them placing the project in an Detroit makes sense. Finding a site that allows for adequate transportation to and from for the housing units is also an essential requirement.

The project is a permanent structure to house the mobile housing units, with the intention that these units would be placed in varying locations, country and world wide, each responding to its specific site circumstances. The structure is to become light and airy to allow for it to have minimal presence and the housing units themselves become more evident to those who see the project.

The structure will reflect its intensity or lack of use. This will help people to grow a relationship with the project and begin to interact and notice the continuous evolution of the site. Varying light, shadows, framed views, and color patterns will all be evident in the filling and emptying of the structure.

Connection to the surrounding community is also a necessity. In attempting to create a sense of belonging for the mobile residents. As the mobile residents are not part of a true tangible community trying to help facilitate community among themselves and permanent residents of the city are a necessity. These interactions start to occur between them through both retail spaces that provides services and goods as well as through civic/ park space. These spaces will promote individuals to visit the site and randomly come in contact with one another.

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# Thesis Paper

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"You say the word *house* and it means so many different things to different people,"<sup>1</sup> Moshe Safdie. A house itself does not constitute anything more than a place that provides some degree of shelter. Yet as in the title of the autobiography of Polly Adler, *A House Is Not a Home*<sup>2</sup>, a home carries with it many more qualifying characteristics that can vary from one individual to another. A home carries with it a place, perhaps a family, the land which the home is situated on, the sound of a door opening, memories of events which have occurred there during your lifetime.

A home is like that favorite old T-shirt you refuse to get rid of. When it was new in the store it was just like any T-shirt its basic principles consisting of a thin material to fit around your torso with a hole for the head, and short sleeves. Variations occur in color and graphics but it still is recognized as a T-shirt. That favorite T-shirt carries with it the perfect fit, the memories of the various events that have occurred while you were wearing it, the paint splatter referencing back to the time you painted the house with your dad. Maybe it is the preference of how you appear while clothed in it. The house imitates the fundamental things the T-shirt provides when you first get it. The house is a structure that provides shelter for individuals to live in and keep personal belongings. Where as the home mirrors the favorite T-shirt, within it are the stories that come rushing back to you when you think about it, it instills a specific feeling within you when you are inside.

According to the U.S. Census Bureau about 1 in 6 Americans move each year, and the average American moves 11.7 times in a lifetime.<sup>3</sup> The question then arises; can a sense of home be created in the

# Thesis Paper

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opposing want or need of a nomadic lifestyle? When an individual claims a specific home its detailed characteristics and history establish its difference from another home. Can these pieces be facilitated to carry with an individual in the fullest capacity? The recognition of the fundamental responsibilities of a home will allow for a mobile housing units to carry with it similar characteristics of a permanent home. A home provides a place to return to with familiarity and ownership. Secondly a home provides the opportunity for a place to keep personal belongings.

A home allows a person the chance to express themselves individually. The materials, shape, orientation all help to make it one of a kind something that its owner can relate to themselves and express who they are to others. When designing mobile architecture it becomes necessary to think about moving constraints and in doing so things can become relatively repetitious and bland. In reducing the mobile unit down to singular spaces it becomes easier to manipulate during transit and at the same time allows for the organization of the individual pieces to form a unique arrangement on the site. The chance for exterior individuality can still occur in material and color but individual units of the whole mobile housing unit work on a module.

The module allows for ease in the joining of the pieces together. In making a housing unit capable of disassembling it also makes it much simpler in adding and subtracting space. If a couple decides to start a family and doesn't have the space in their home required to add a child the typical solution is to move to a larger house or add onto their current home. The construction is messy, expensive, and can cause many headaches. If adding a room is simply that, just connecting another room to an existing home then the need to leave a

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home behind is removed. Similarly, if the need for less space arises in their lives then the removal of a room is as simple as the addition.

In addition to an individual having a sense of belonging and familiarity within their home they typically find him/herself part of community where similar aspects can be found. When in this limbo of continuous temperance to a specific location a person finds themselves in a revolving door of establishing their self in a community where they are both contributing and utilizing what it has to offer to its citizens.

What is the importance in the sense of belonging to community and then how do you attempt to instill that into individuals who are constantly trying to be a community? People in a community usually hold similar ideas, share common characteristics, rely on one another for companionship, assistance, and criticism. Singularly humans struggle, it is impossible for a single individual to provide everything that they need to reach their true potential and capabilities.

"'Oasis' notes that "One of the more appealing aspects of the mobile home lies in its capability to demand social interaction. Temporary communities, formed when like-minded travelers converge on a single location, provide an oasis of nourishment for the lonely nomad."<sup>4</sup> Within in that lies the idea of what community is; like-minded individuals. Individuals cannot have community forced upon them but a catalyst can be created. A single environment within a city created where members of this migrant lifestyle can settle is the initial spark to facilitate interaction. Simply having this commonality amongst one another will allow for an understanding and acceptance to those issues of the lifestyle that are more awkward or controversial. As some people

# **Thesis Paper**

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may have a problem living within 10' of a neighbor or not having a true private exterior space of their own, these are issues which one would be willing to accept in choosing such a lifestyle.

An environment which merges public and private spaces allows for there to be an increased chance of unplanned meetings among the individuals that utilize it. Within in the housing of the mobile residence this type of situation can be heightened by creating interaction through circulation spaces. This interaction can occur on many different levels. This can be done by creating causing the housing units to react and respond to the circulation spaces in various ways. An individual who has to pass underneath a specific housing unit or walk directly next to another will begin to create a remembrance with these activities and are likely to come into some type of contact with the individual who lives in the home. Another degree of interaction can occur in the placement of public spaces sporadically placed throughout the housing. These places could constitute relaxing, gathering, dancing, any of various activities.

People will continue to move to meet their varying needs and people will continue to strive for a place of comfort that they can return to. By providing a housing that is adaptable and mobile this helps individuals to combat to very opposing issues. In unison to counteracts the opposing idea of community upon an intangible lifestyle.

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## Lot-Ek MDU (Mobile Dwelling Unit)

New York, 2002

The intriguing element of the Mobile Dwelling Unit was the projects exploration into mobile habitation in an urban setting and the use of existing transportation systems for moving the units.



The MDU comes with many restrictions in what it provides. The only available differences are some interior features, placement of the sliding sub volumes, and its color. There is no opportunity for the addition of more or less space. If the occupants of the unit find that their needs change, the harbors don't give you the chance to be a varying dimension. This is in addition to the fact that the Units alone do not offer a way to add additional square footage.

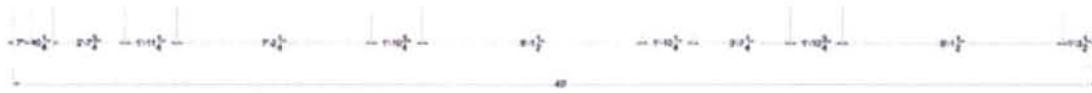
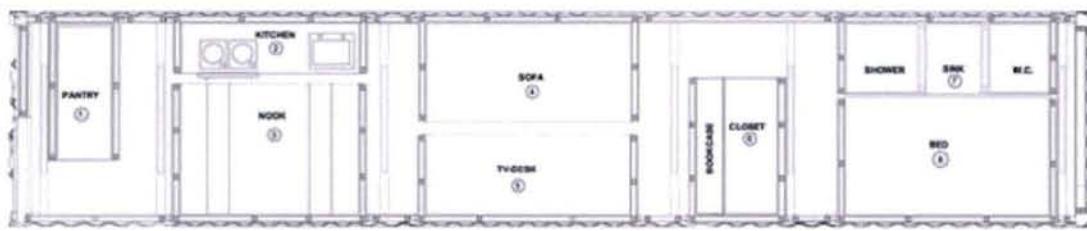


Sliding Sub volumes  
Allow for more  
space and ease of  
transportation





One of the strongest aspects of the project exists in Lot-ek's engineering in an existing object that already has a transportation system. There is not the building of a completely new idea but the adjusting of an existing idea for a new use.

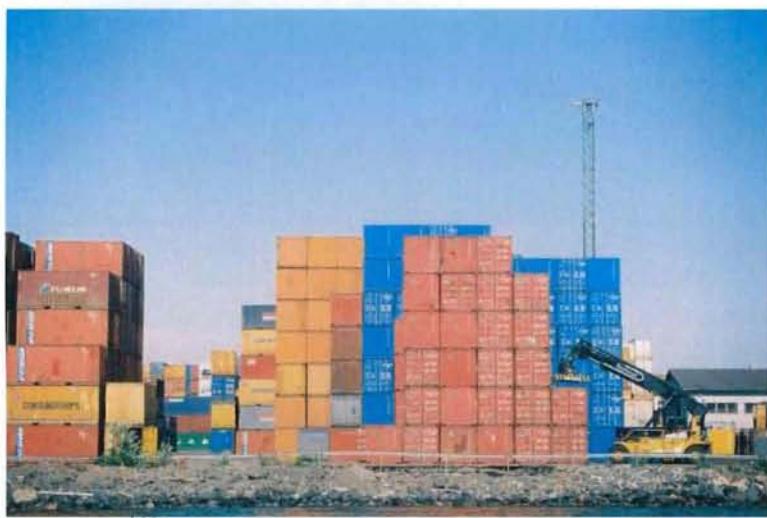
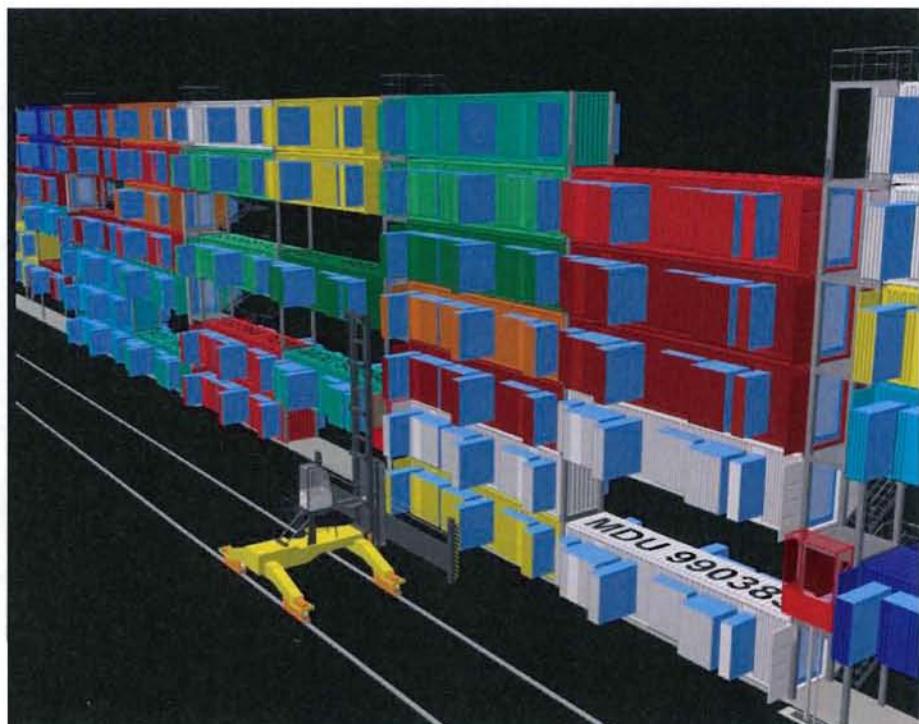


The simplicity in the transformation of the MDU from opening and living to closed for shipping makes the idea capable to all with a little skill of training.

## MDU Harbors

Lot-ek proposed that upon the arrival of the units to its new site it would be plugged into a "MDU Harbor", a structural skeleton that the MDUs are lifted into and plugged into providing necessary utilities. Vertical circulation is provided for the occupants to reach their unit. The harbors cause an isolating effect. The harbor has no interaction with the existing city, it is described more as an individual structure with no relation to its surroundings. The harbors also do not provide for any communal areas that would help allow the nomadic individuals to feel part of a community.

One stimulating characteristic of the "MDU Harbor" is with the stacking of all the units and the openness of the harbor's structure the arriving and leaving of units would become very visible and create new patterns with the varying colors of each MDU.



Lot-ek speaks of the reuse of the storage container as using "artificial nature", not necessarily worried about the recycling aspect, it is simply an additional benefit, and however the idea ends with the storage container. The harbors are completely new built structures, could there have been a way that the MDUs could have used the existing building inventory or some other readily available objects?

## Habitat 67

Montreal, Quebec

Architect:  
Moshe Safdie, 1967

The ability of Safdie to create a strong sense of community within a multi-residential building using a module unit and the appearance of complete randomness is what makes the project so successful.



[www.GreatBuildings.com](http://www.GreatBuildings.com)



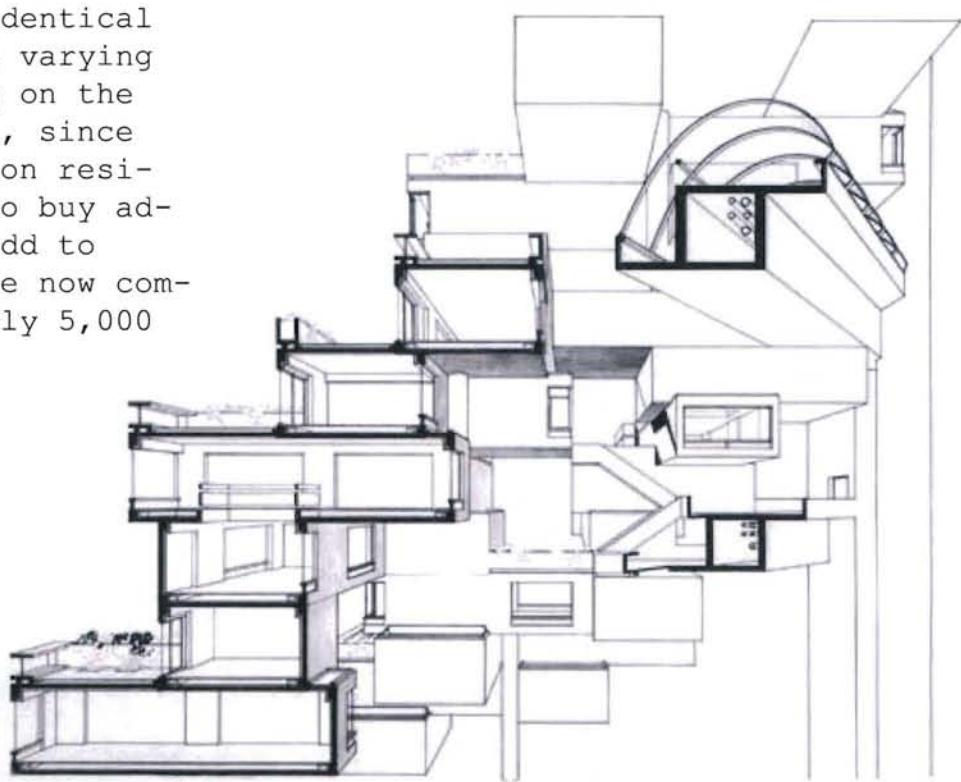
Habitat 67 promotes a strong awareness of community for its residents by providing places and activities for them to interact with one another. It also provides circulation space that causes individuals coming to and from their home to mingle when passing paths; you are unable to go straight to or from your house isolating yourself.

## Habitat 67



The module becomes an obvious core of the Habitat 67 but in the end the conglomeration of identical pieces creates a very chaotic and random appearance helping to remove the repetitive similarity of each housing unit.

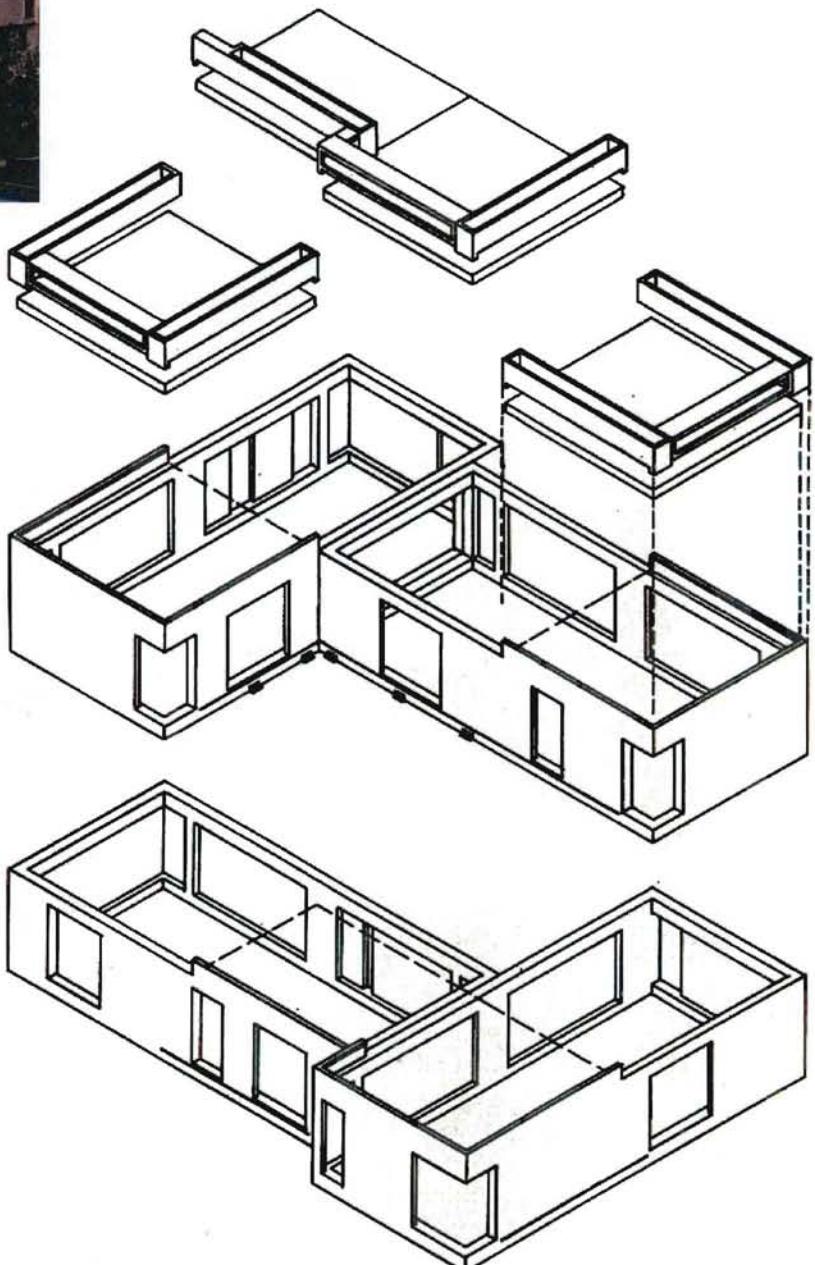
Safdie took a single identical unit and allowed for a varying housing size depending on the need of the individual, since its initial construction residence have been able to buy additional modules and add to their dwelling with one now composed of 8 units, nearly 5,000 sf.



## Habitat 67



Although the strong community exists within itself, Habitat 67 does not attempt to create an interaction with the surrounding citizens. Although lacking commercial and industrial needs the project seems to be focusing on creating some type of residential utopia.



Stacking Modules

# Portable House

California, 2003

Architect:  
Office of Mobile  
Design (OMD)

## Example of Single Module

Overall dimensions: 12'x40'

### Programmed Spaces:

1 Bathroom	48 sq. ft.
1 Bedroom	126 sq. ft.
Kitchen	75 sq. ft.
Family Room	158 sq. ft.
Outdoor deck space	

Total Square Footage 480 sq. ft.

"This kind of architecture is redolent of times when the parts that made up a dwelling were easily manipulated and could be adapted to a very wide variety of conditions"

Portable House focuses on the principle of being able to adapt, relocate and reorient itself to meet changing environments. It's contractible and expanding sub-volumes allow for the addition of space and reduction in space, during transportation.



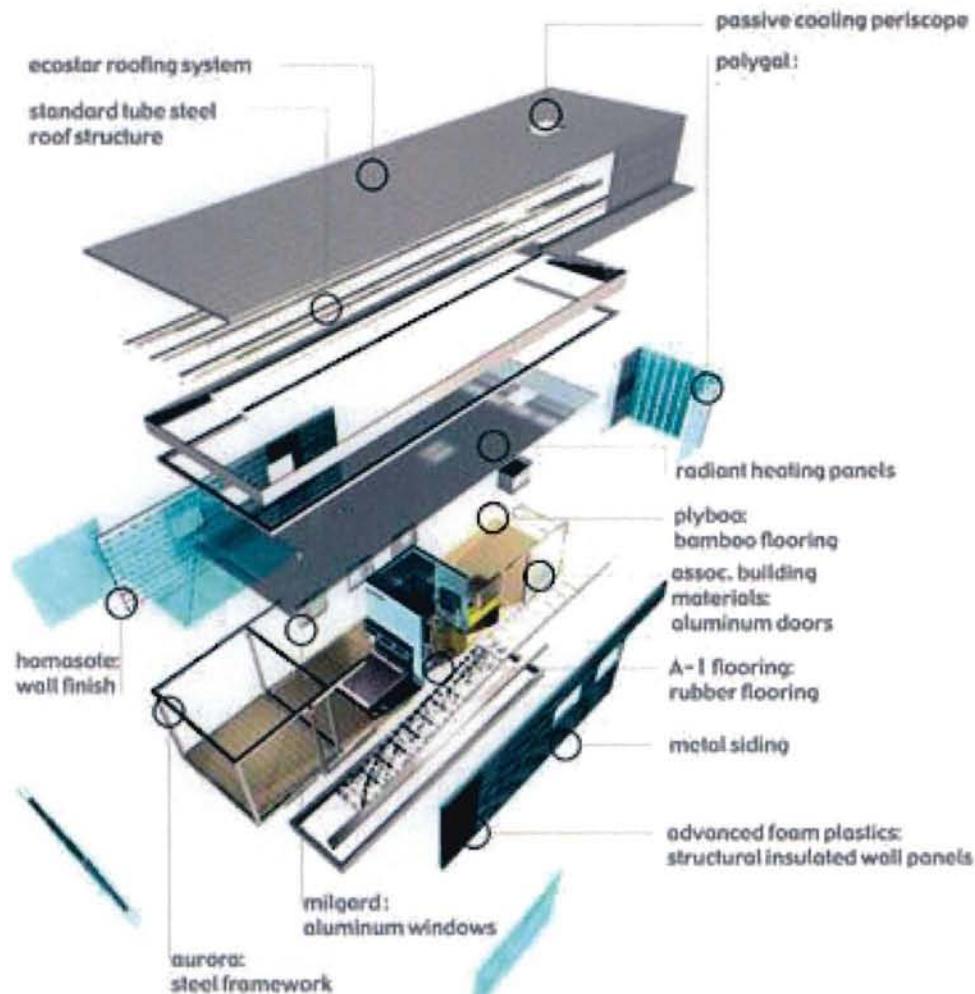


The project helps to further my investigation of modular, mobile, and transformable housing. The project also deals with the ability of the units to come together and to form common and private spaces through their manipulation.

"Individual portable modules can be connected with others to create an expanded living space"



## Portable House



The Portable House can create exciting and interactive social spaces when individual owned units are grouped together to create courtyards and side yards. At the same time an owner with multiple units can be arranged to create separate, private space acting as an extension of the house.



The modules can be oriented to take advantage of views and weather.

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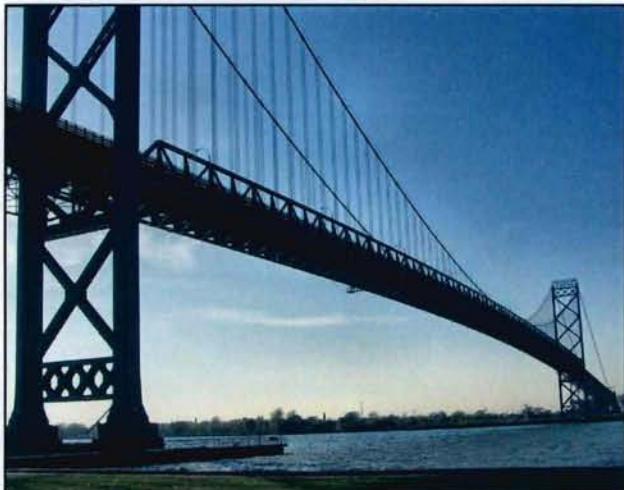
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## Considered Sites

Michigan Central Station  
Detroit, MI

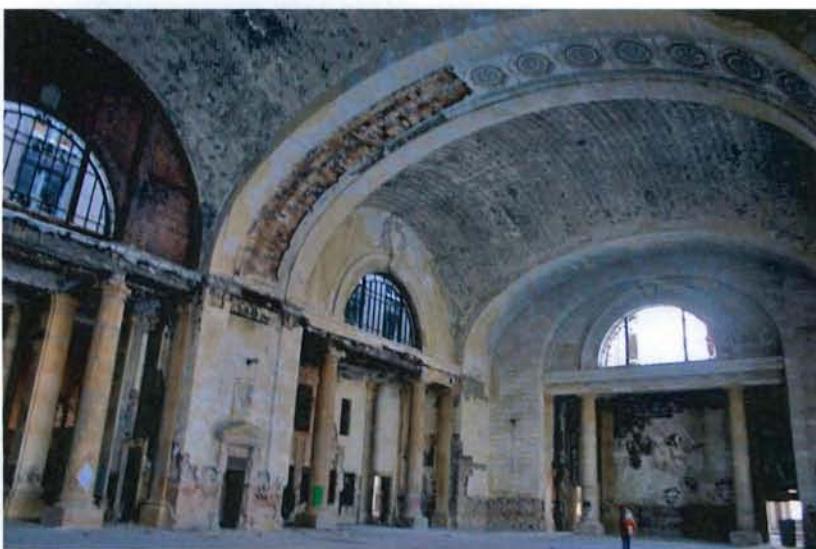


Michigan Central Station  
Detroit, MI



Michigan Central Station as a possible site. The building offers a location in Corktown, a neighborhood of Detroit rich in history but it has experienced a large decline in economy and population, the train station was formally a bustling iconic center piece of the area. The large open floor plan of the first floor provides a wonderful location to create a civic and social interaction. The buildings large volume provides opportunities to be a supporting structure to mobile units and house permanent residents.

The site is situated only 1.3 miles from the center of downtown Detroit remaining relatively involved in the cities activities. The concern of the transportation of the mobile units can be easily addressed being on the former railroad tracks, just off the



## Considered Sites

Cleveland, OH



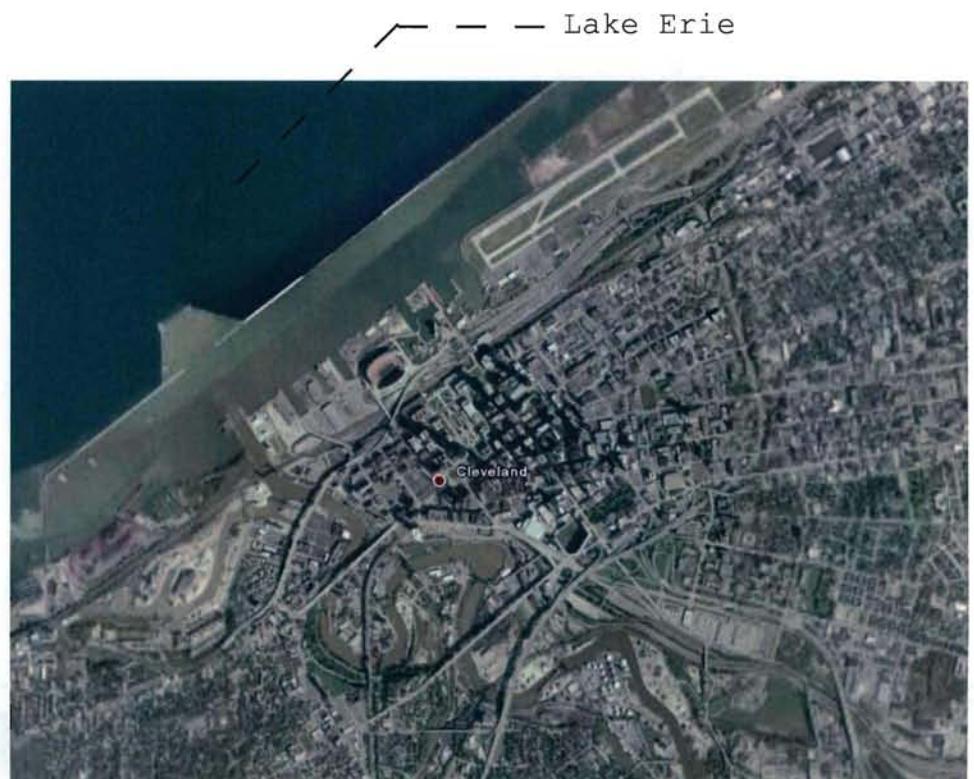
Cleveland provides a city which was thriving and one of the top cities in the country during the middle of the 20th century but has been on a downward spiral. Recently the city has begun a turn around slowly rebuilding the building infrastructure and creating attractions to draw people to visit.

1950 Population: 914,808 6th Largest US City

2000 Population: 478,403 33 Largest US City

Population loss of 48%

Cleveland lost 11% of its population  
in the period from 2000 to 2005.



"Despite former Mayor Campbell's 2003 initiative to boost the city past the 500,000 mark, it appears now that Cleveland is on track to drop below 400,000 residents by this time next year."

## Actual Site

Jefferson Ave. & Orleans Block  
Detroit, MI

Originally I had looked at using the entire area between Jefferson Ave. and Atwater St.. Allowing the project to become a connection between the two edges of the East Riverfront, the area along the Detroit River bounded by The Ambassador Bridge, Belle Isle and Jefferson Ave. I also looked at the inclusion of the Dry Dock Engine Works Building (now known as Globe Trade Company Building) in attempting to connect directly to the existing infrastructure.



## Actual Site

The former dry dock at the end of Orleans St. provides an excellent location for housing units being transported by water to be brought to site with minimum land transportation.

only a min from multiple expressways, both I-375 and M-10.

The site situates itself just down the road from the Tri-Centennial State Park and the Chene Park amphitheater, two locations that can help foster human interaction. It also locates itself right at the end of the Dequindre Cut, the former railway with the proposed resurrection as a pedestrian parkway. It lies just over  $\frac{1}{2}$  mile east of the Renaissance Center downtown.



Dequindre Cut Entrance



Chene Park



## Actual Site

In trying to help the mobile and permanent residence of the city interact and draw them to use the site of the project the surrounding community becomes essential in what its activities and use are. The surrounding area of the site currently does not provide much but has a very bright future. Not only are there the Riverwalk development and Tri-Centennial Park but the development of many multi-use residential projects promotes the area will be very busy.



Chene East Multi Use Development



Atwater Lofts Project

Detroit Riverfront Project introduces pedestrian traffic within the general vicinity of the site as does the Tri-Centennial Park. Both helping to draw people into the area.



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## Project Program

The project remains focused on being a place in bringing a mobile community with its mobile housing units into the inclusion of a cities social and civic economy. The project suggests the connection to an existing permanent building to serve as an anchor to the overall space for the mobile unit structure. The structure to contain the mobile housing units is to be an attachment and addition so that the two independent pieces intertwine and share space creating a singular whole.

The housing becomes an abstract ever changing sculpture that will engage the public and prompt them to interact and explore the various spaces and differences that are produced. The housing becomes part of a public community.

The creating of a retail and market space begins to help provide another way for the citizens of the mobile community and the cities permanent residents to intermingle and act as one. This becomes a way to not force upon the idea of interaction. These being a place of need to the residents would allow for them to come together in a more casual and what would seem like an accidental manner.

The civic space acts as more than park space but provides both soft-scape and hard-scape equally and interlinking with the retail functions and the housing. There is no definite separation of space but a mix of the uses in all spaces of the project. The interior spaces roll to the outdoor space, as well the outdoor space continues to the interior with a seamless transition. Circulation space between the housing links directly to the anchor building and directly to various sections of the outdoor civic space, still allowing for there to be privacy for each resident.

The project also strives to help connect the automobile oriented Jefferson Ave. to the pedestrian planned Tri-Centennial State Park and the Riverfront. The space becomes a way to meander from Jefferson at a leisurely pace. This also becomes important with the idea that most of the mobile residents are likely to rely on public transportation and how that can link itself to the site.

Also with the numerous residential projects in planning for the area the space also works as a transitional space from housing, to civic/ park space, and to the retail/ commercial space of the Rivertown, working as a mixing pot and a centralizing node. The development would help to work as a way to connect the riverfront park to the planned development of the Dequindre Cut redevelopment into a green walkway.

# Project Program

<b>Mobile Housing</b>	<b>83,000 sf.</b>
- Space to house housing unit	80,000 sf.
- Circulation space between units	2,000 sf.
- Mechanical	1,000 sf.
 <b>Retail/ Commercial</b>	 <b>35,000 sf.</b>
- General store space	30,000 sf.
- Storage	4,000 sf.
- Mechanical	1,000 sf.
 <b>Administration Offices</b>	 1,600 sf.
- Leasing Offices	800 sf.
- Mail Room	300 sf.
- Restrooms	300 sf.
- Circulation/ Mechanical	200 sf.
 <b>Gathering Spaces</b>	 5,000 sf.
 <b>Park/ Civic Space</b>	 20,000 sf.
 <b>Parking</b>	
- 80 Parking spaces	36,000 sf.
 <b>Housing Units</b>	
- Housing Unit A	400 sf.
- 1 Bedroom	
- 1 Bathroom	
- Living Area	
- Kitchen	
- Housing Unit B	600 sf.
- 1 Bedroom	
- 1 Bathroom	
- Living Space	
- Kitchen	
- Study	
- Outdoor Space	
- Housing Unit C	800 sf.
- 2 Bedroom	
- 1 1/2 Bathroom	
- Kitchen	
- Living Area	
- Dining Room	
- Outdoor Space	

## Project Program

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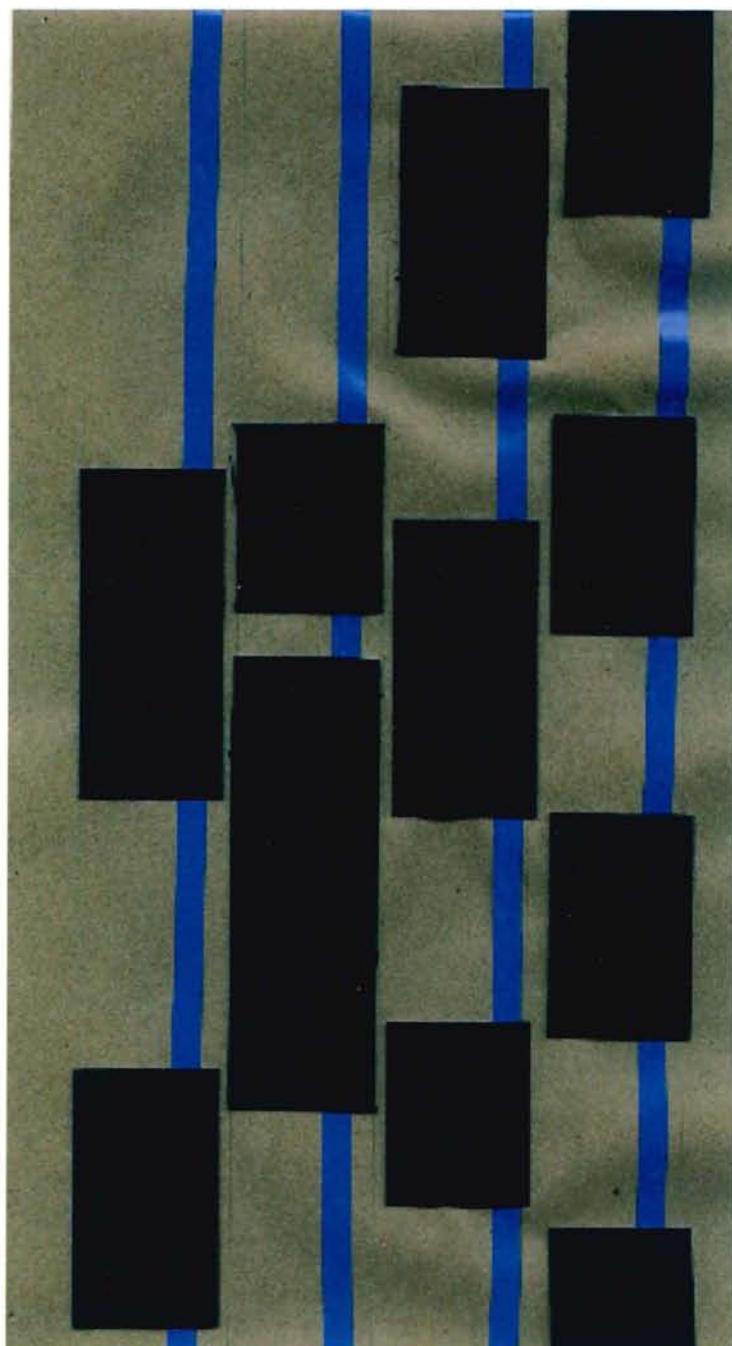
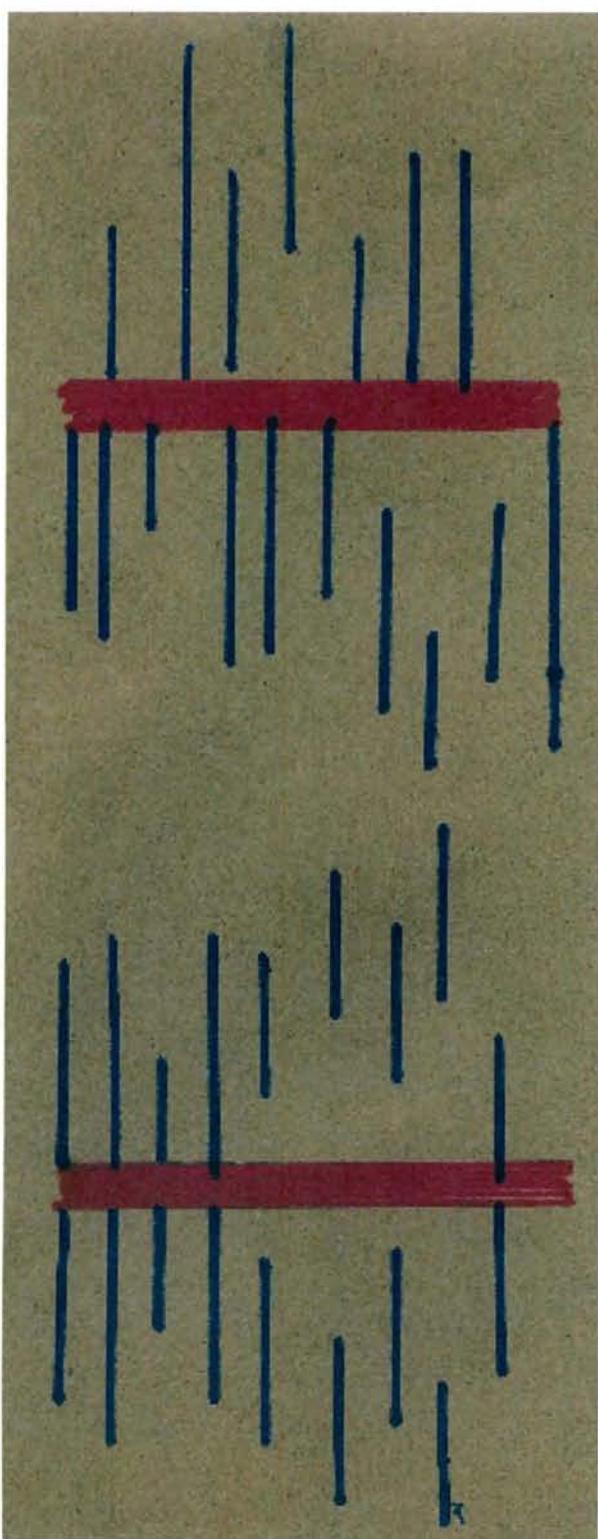
- Housing Unit **D** 800 sf.
  - 2 Bedroom
  - 1 1/2 Bathroom
  - Kitchen
  - Living Area
  - Dining Room
  - Outdoor Space
- Housing Unit **E** 1,000 sf.
  - 2 Bedroom
  - 1 1/2 Bathroom
  - Kitchen
  - Living Area
  - Dining Room
  - Study
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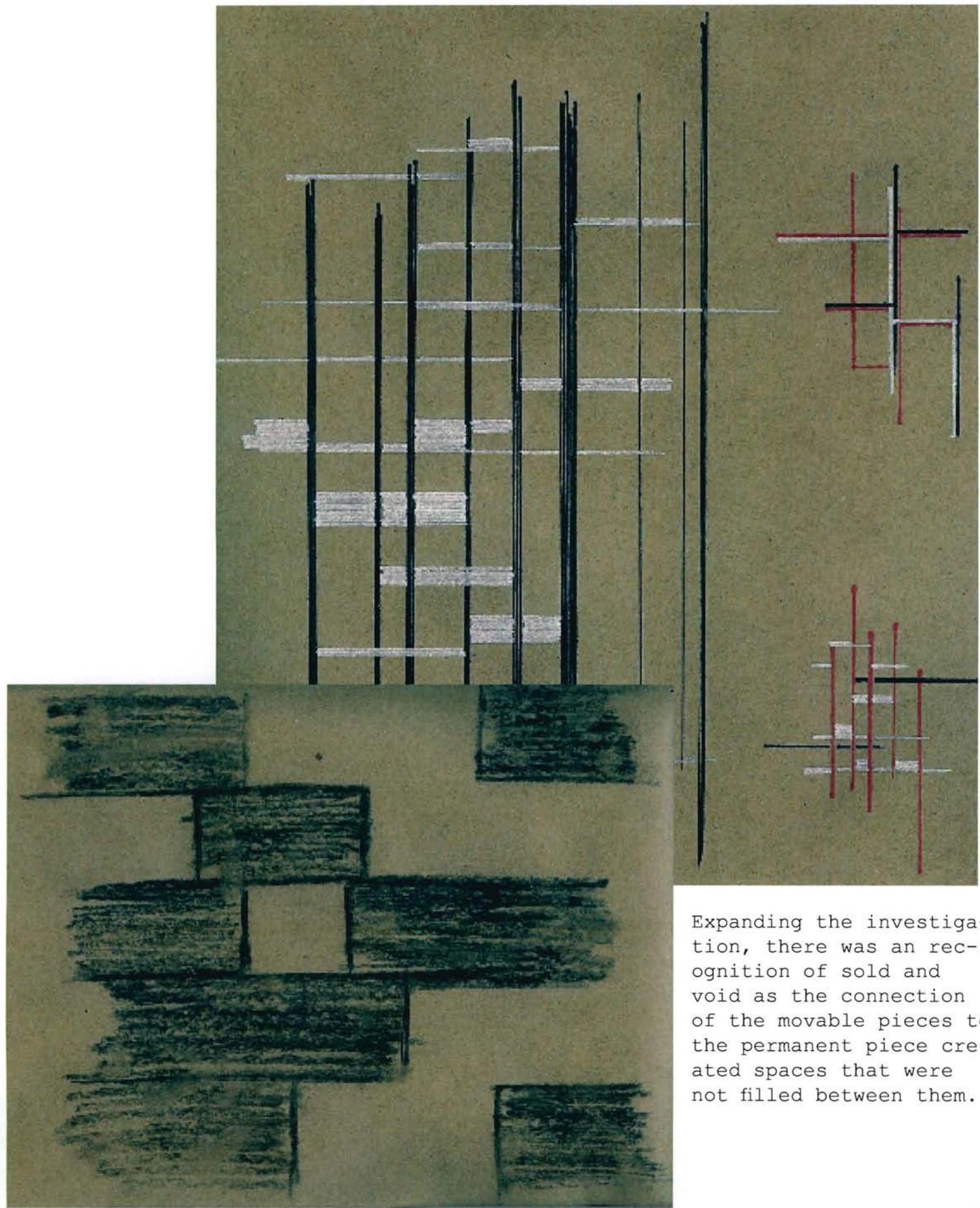
## Design Process

A series of studies examined the repetition of a module interacting or interfacing with a constant strand. This was an attempt to visualize how varying pieces that would come and go would attach to a permanent structure.



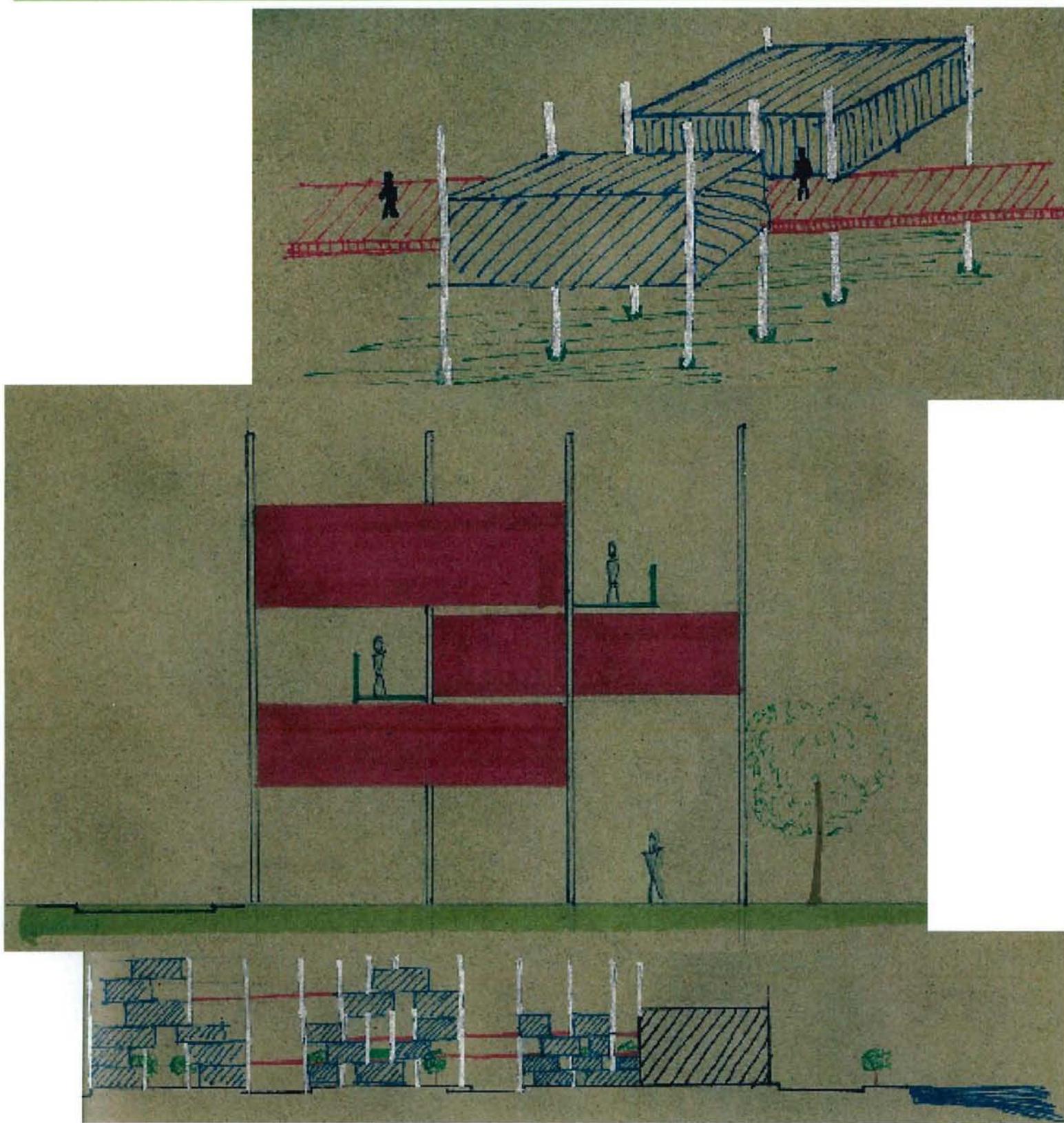
The permanent strands began to be imagined as circulation spaces between the added and subtracted spaces.

## Design Process



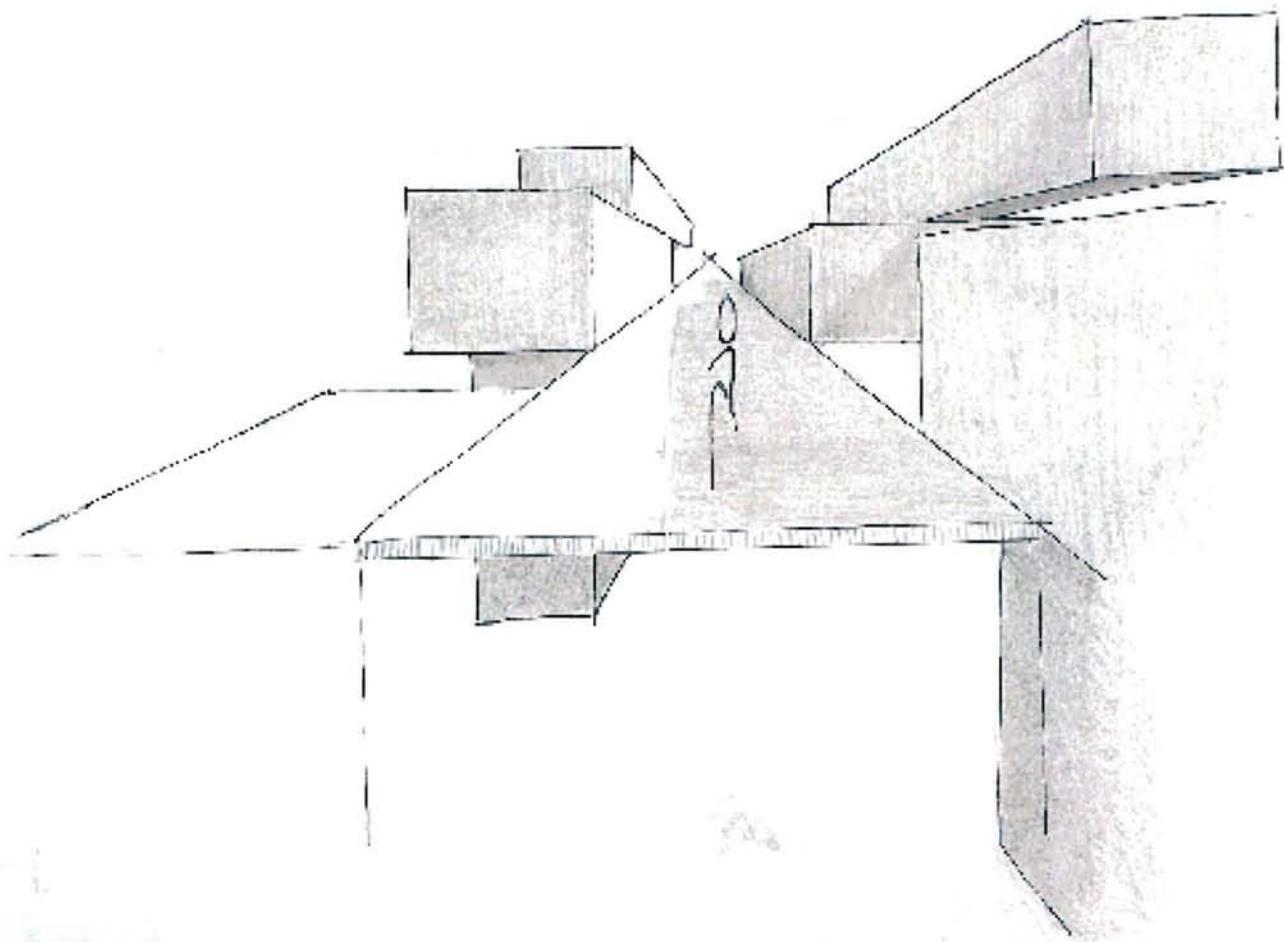
Expanding the investigation, there was an recognition of solid and void as the connection of the movable pieces to the permanent piece created spaces that were not filled between them.

## Design Process



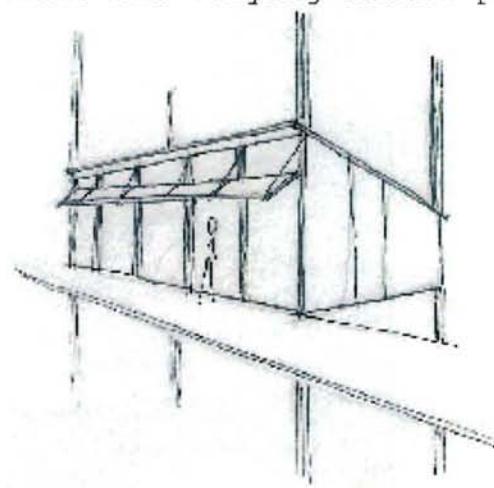
Abstracting the previous studies into three dimensional form examined the creation of void spaces in the z dimension and not only the x and y. It started suggest varying heights of housing units that would create spaces of inhabitation below the housing units on the ground floor and between the housing units in possible circulation spaces.

## Design Process

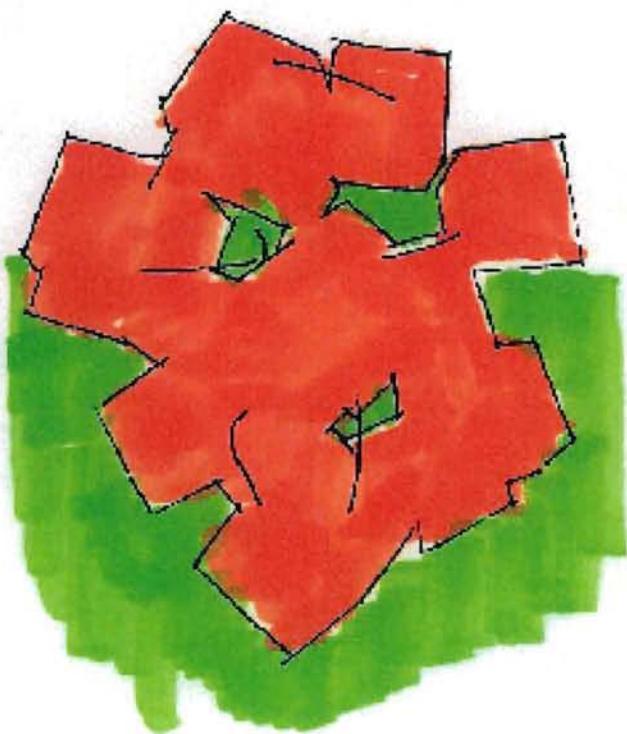


A rendition of a possible center corridor of circulation flanked on both sides with housing units. As the housing units stacked on both sides it begins to create solid and void spaces. Places where people looking to the space could see individuals passing along the circulation path. At the same time the variation in housing unit locations would begin to frame specific views and varying shadow patterns.

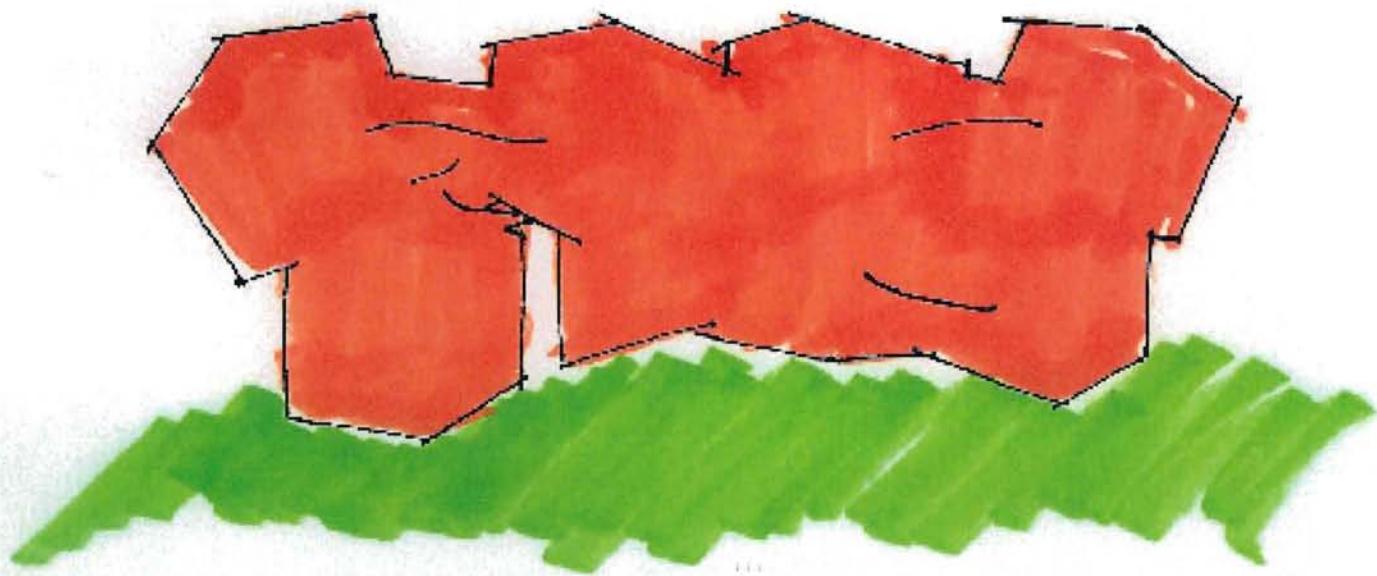
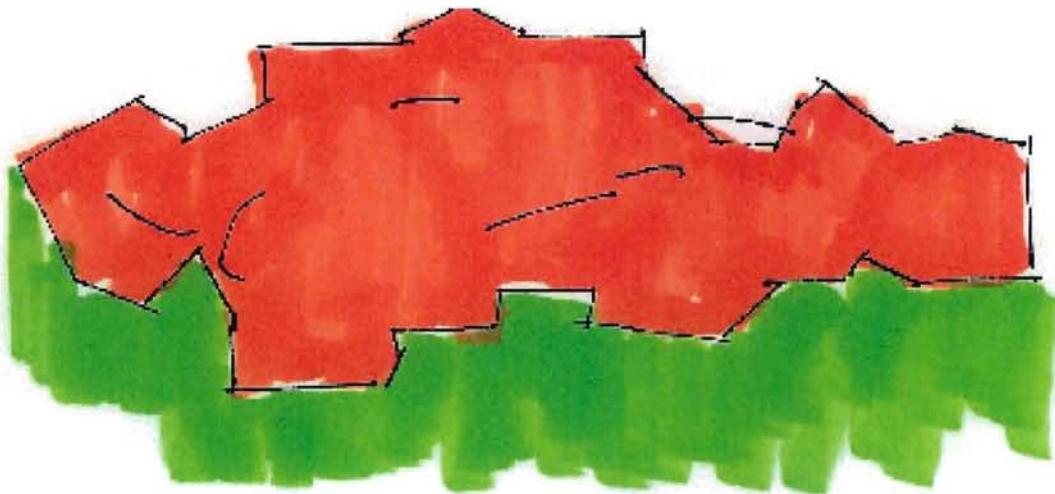
The structure that holds the housing units is represented as thin vertical members in an attempt to reduce the structure to a minimum. Reducing the structure was an attempt to make it seem as though the structure disappeared when empty.



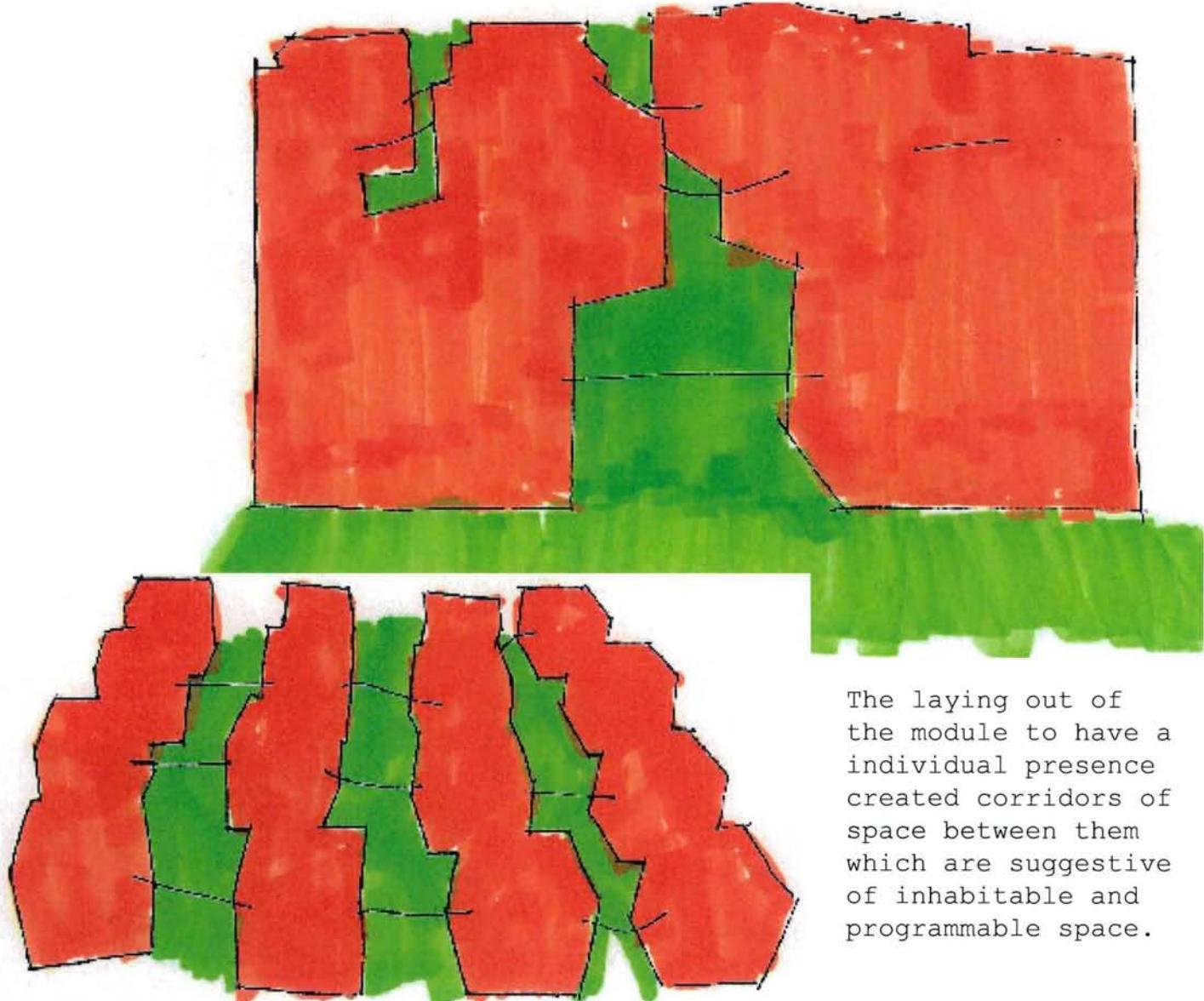
## Design Process



This study was inspired by Moshe Safdie's Habitat 67. Habitat 67 was able to create complex composition of a module which allowed for the creation of varying spaces and masses. The study was not an attempt to create actual form but only suggestions of a module and work to create something which does not reflect the module but a singular mass.

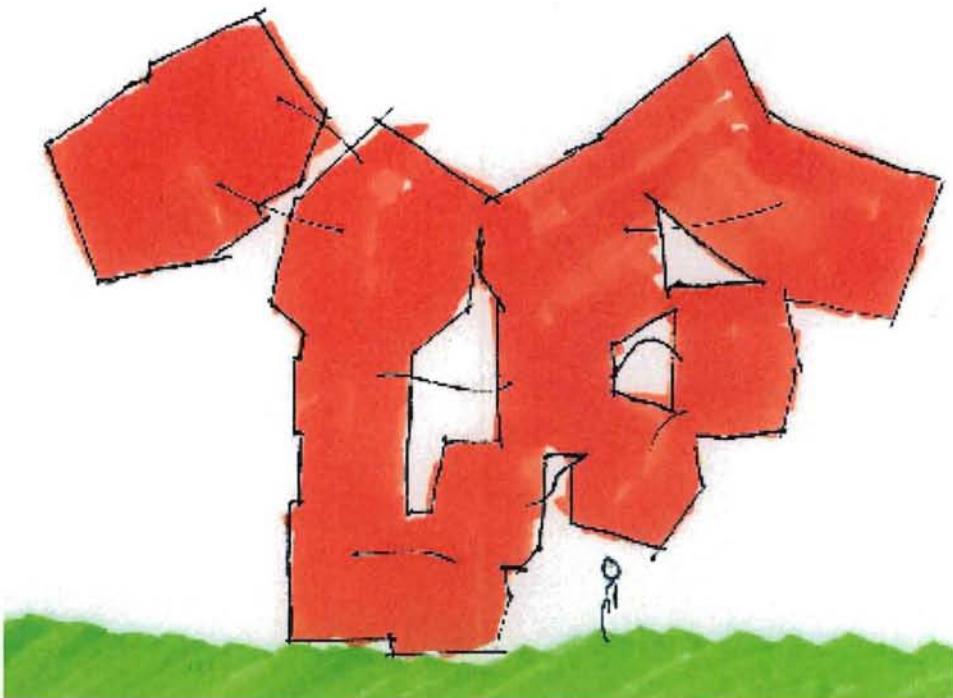


## Design Process



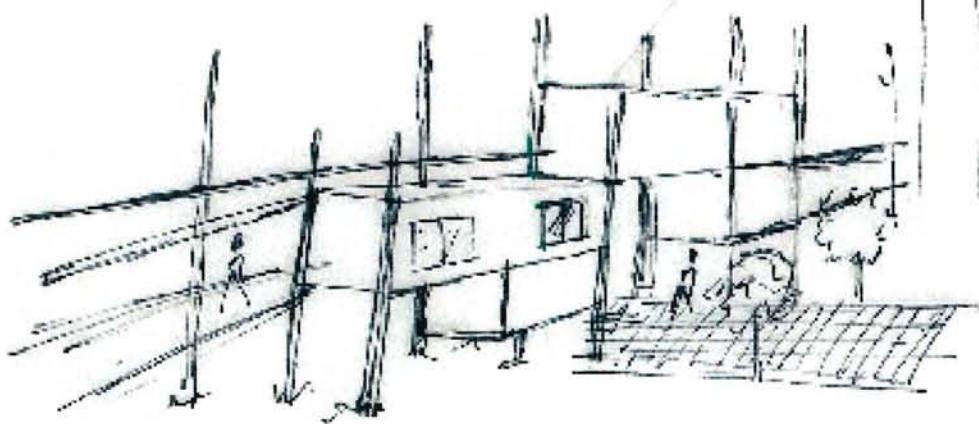
The laying out of the module to have a individual presence created corridors of space between them which are suggestive of inhabitable and programmable space.

The cantilevering of modules over the other creates spaces underneath that suggest possibilities of places for entry or relaxing in the shade. This also shows voided spaces between the modules which do not reflect the module shape or size but the voids are a reflection of the composition of the modules together.

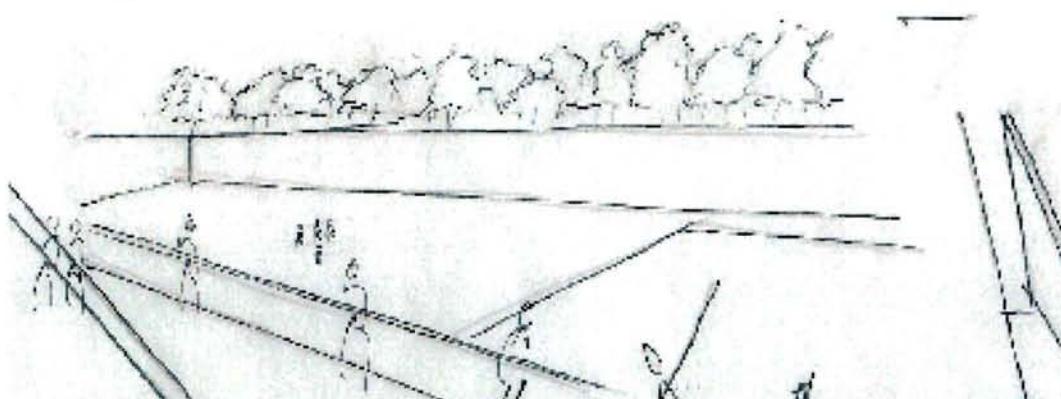
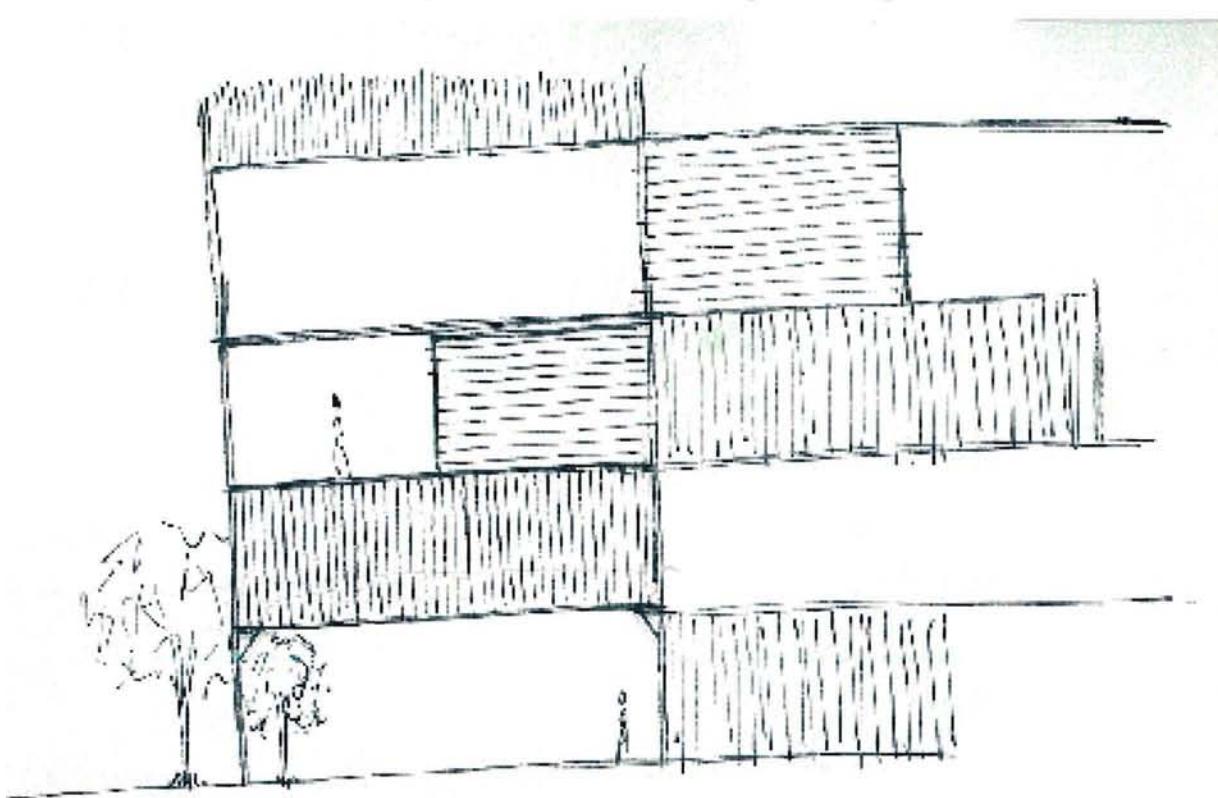


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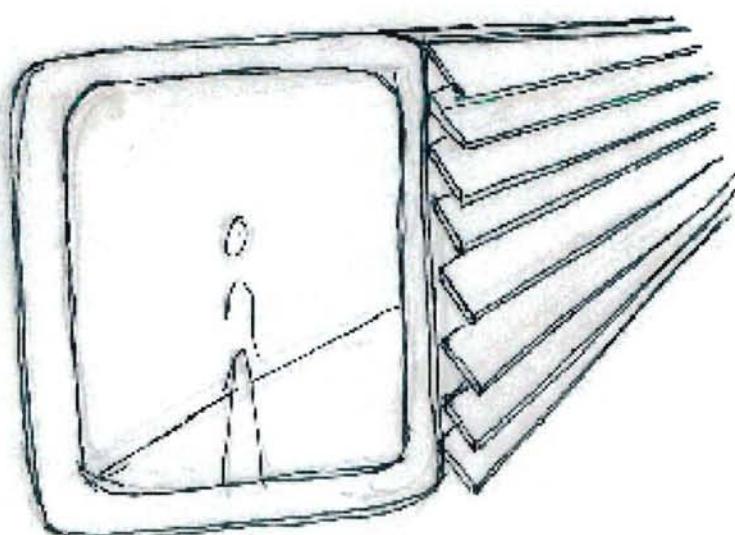
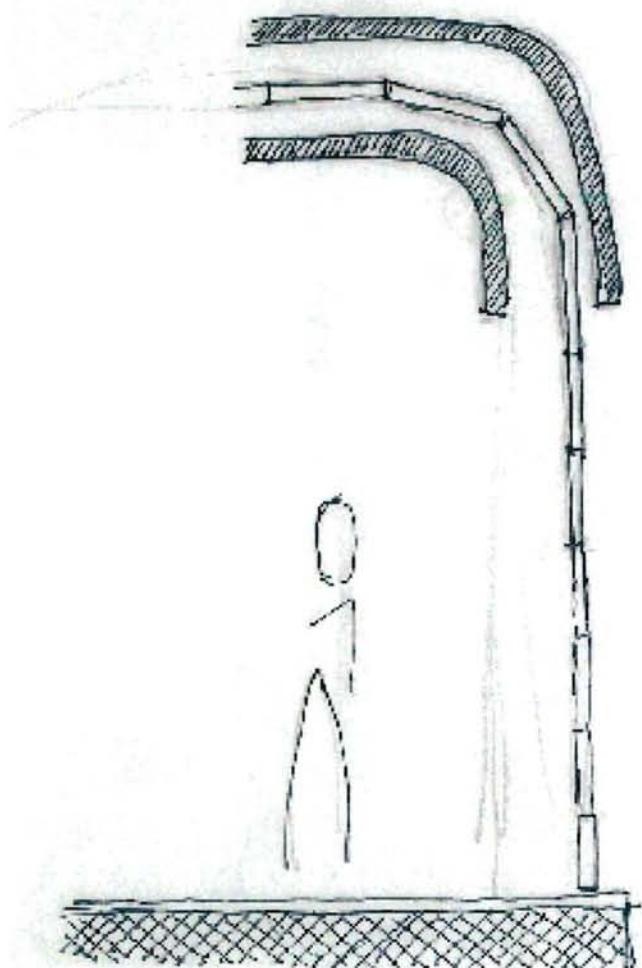


A more formal study facilitated by the previous study. Here spaces for passing through and under the housing units are created as a way for people to have more interaction with the structure if they are not directly living in it.



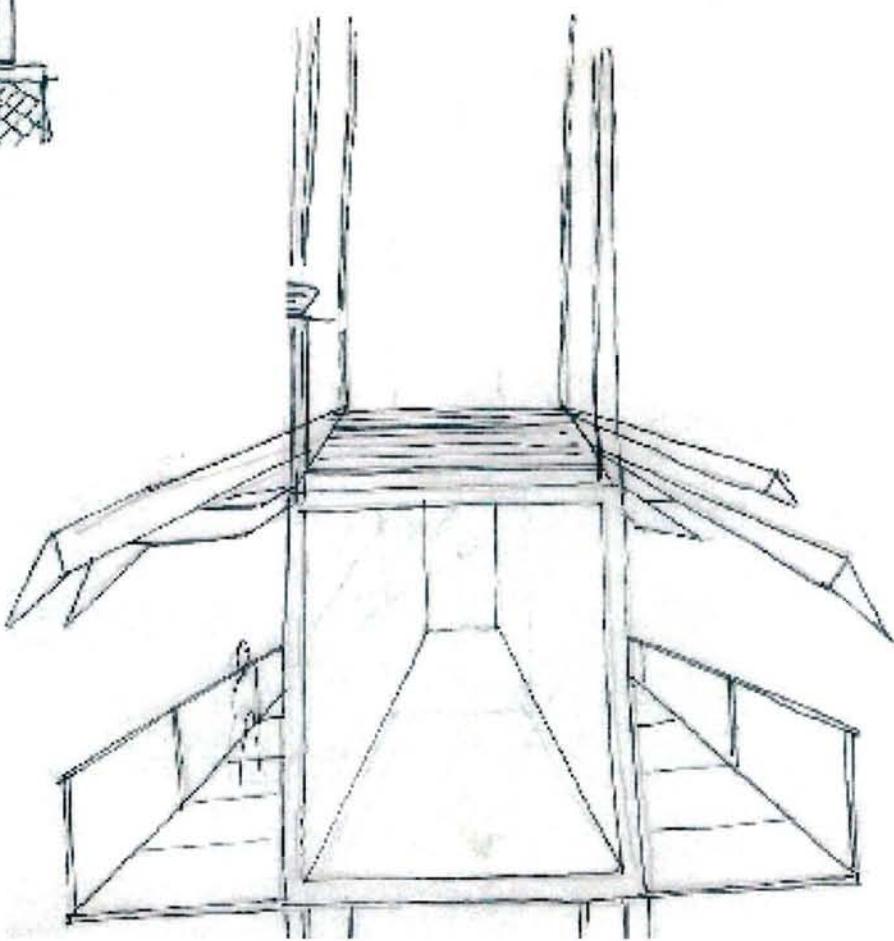
The development of the site have raised and lowered spaces throughout so that its intensity of use is visible and the entire project becomes a stage.

## Design Process

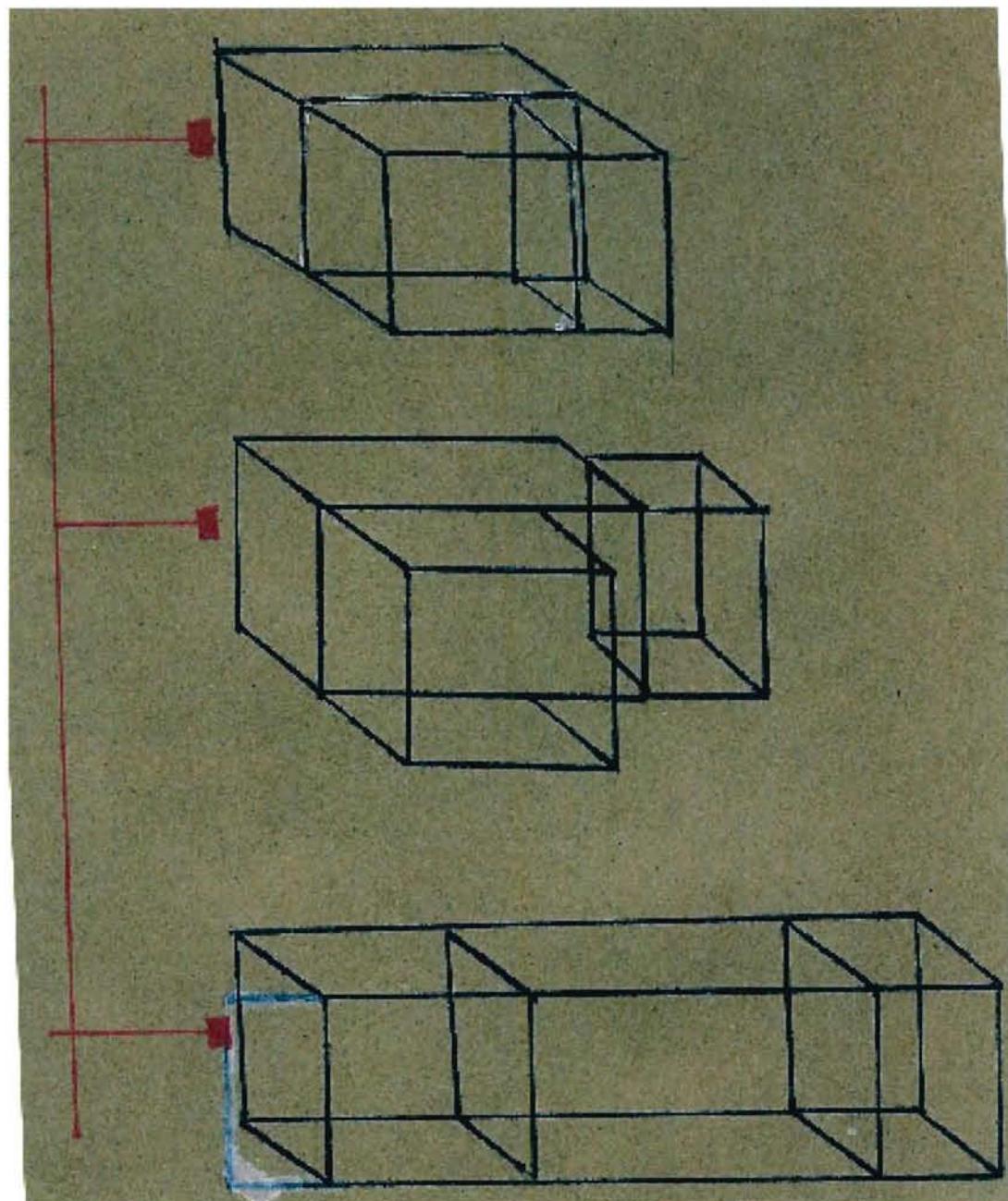


Privacy becomes a concern and creating louvered windows allow for light and fresh air to circulate through the housing unit but at the same time will help to restrict views from surrounding residents and people passing by.

With the housing units being mobile there becomes the concern of the unit transforming in order for it to be transported. Above shows an example of an overhead door that retracts into the roof of the unit to roll away and allow for connection from one piece of the housing unit to another. Right, examines the unfolding of the walls of the housing unit to create a canopy that would cover the circulation space surrounding it.

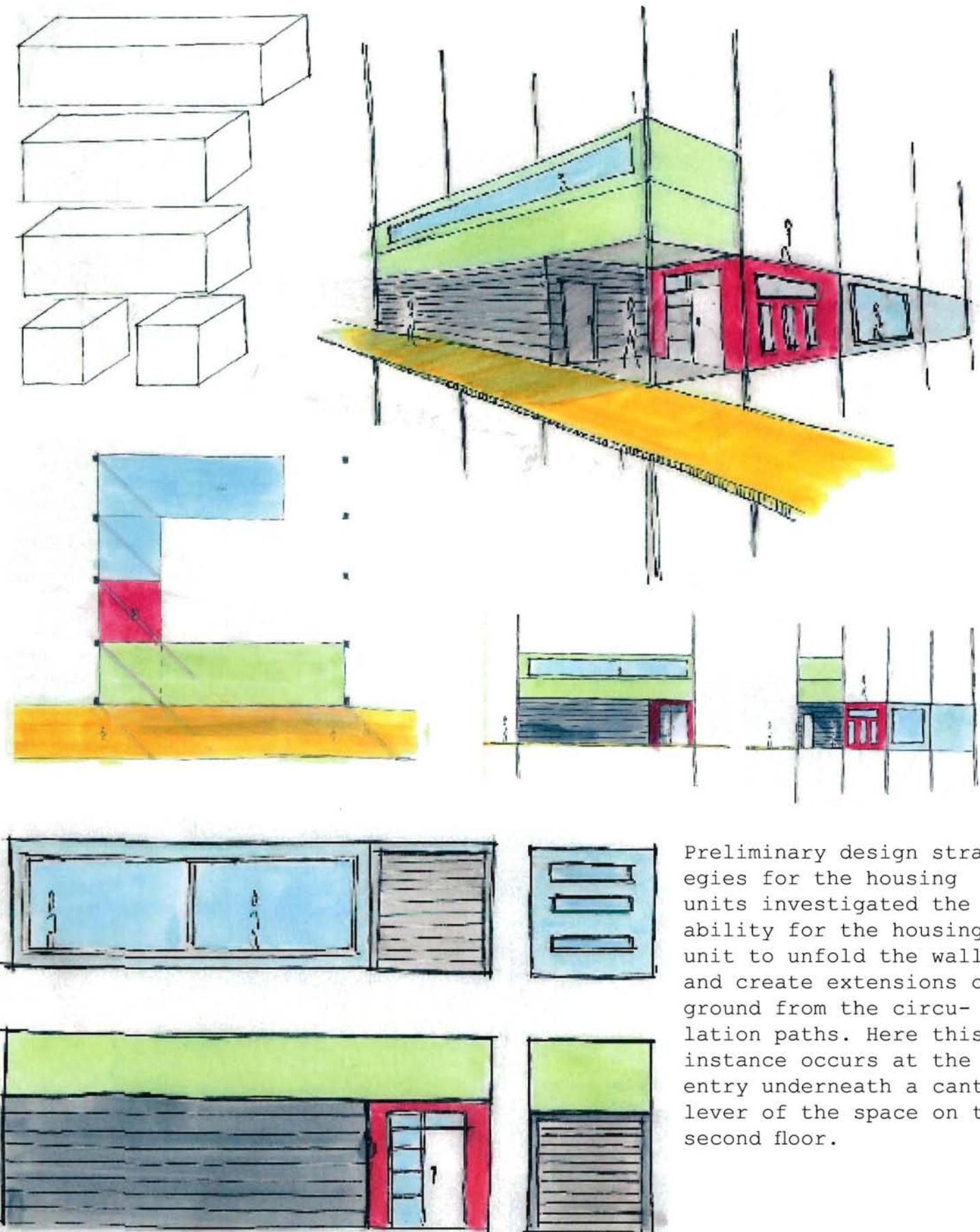


## Design Process



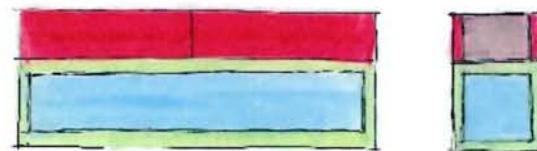
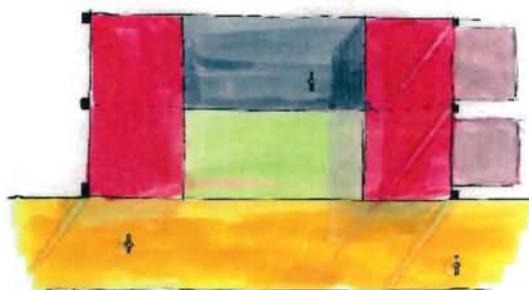
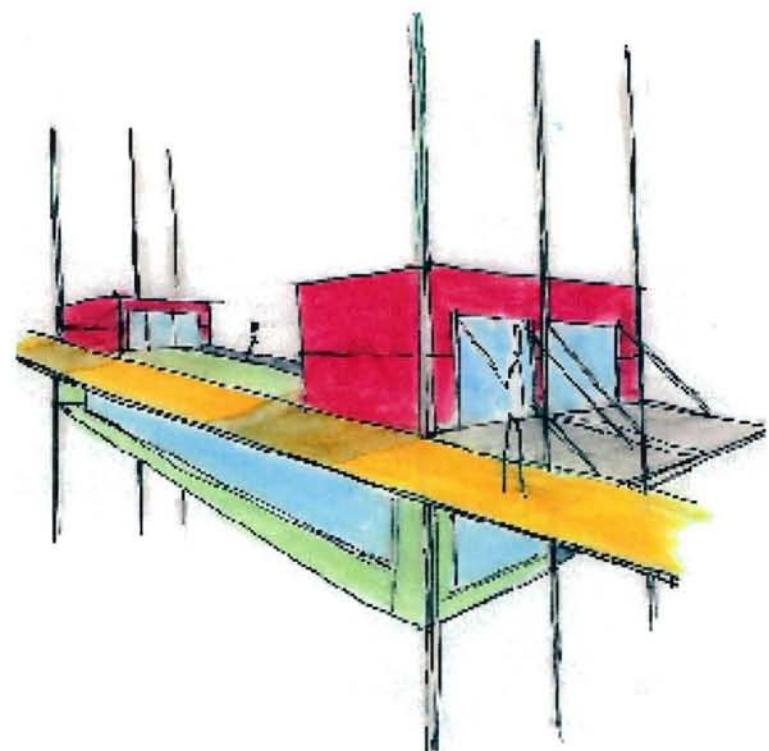
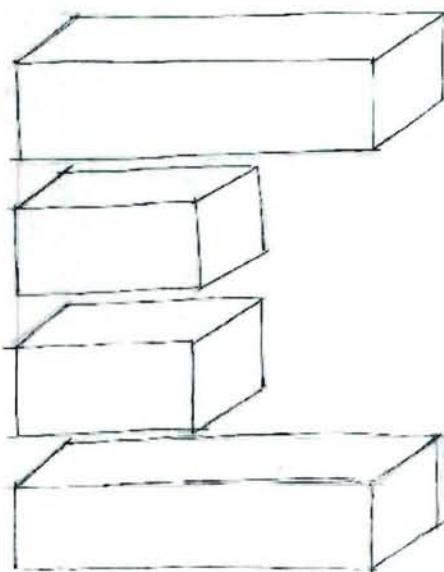
In dealing with a mobile housing unit it becomes necessary for the unit to meet specific dimensions. State laws require that the maximum size of an object traveling on the road cannot exceed 10' in width or 40' in length if it does not want to have specific traveling requirements. Height is also a concern in making sure that it can fit underneath power-line, traffic lights, and underpasses. A foldable housing unit allows for the space of the unit become more unique and create more usable indoor and outdoor spaces. By folding though it is allowed to return to a manageable dimension for transportation.

## Design Process

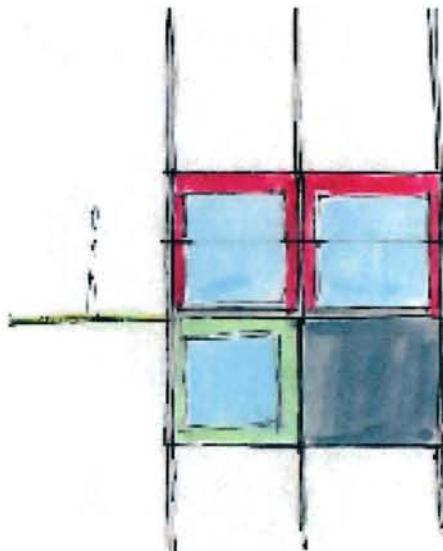
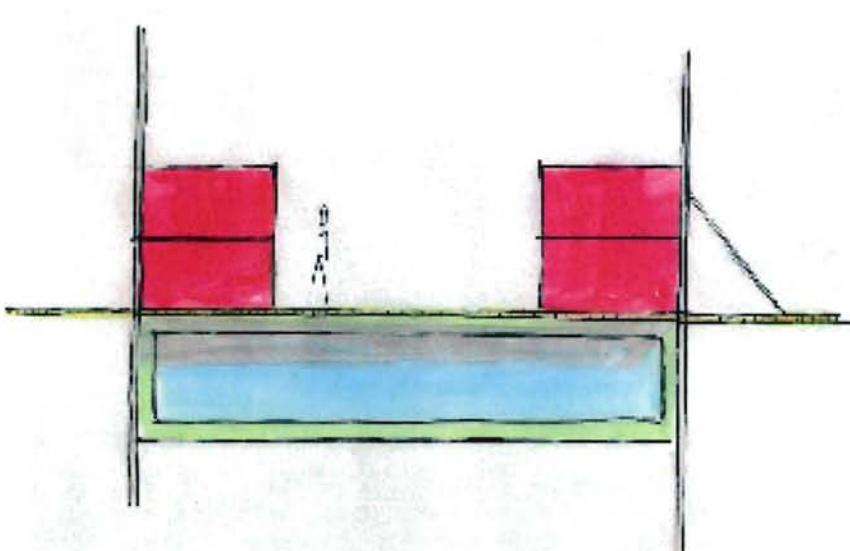


Preliminary design strategies for the housing units investigated the ability for the housing unit to unfold the walls and create extensions of ground from the circulation paths. Here this instance occurs at the entry underneath a cantilever of the space on the second floor.

## Design Process



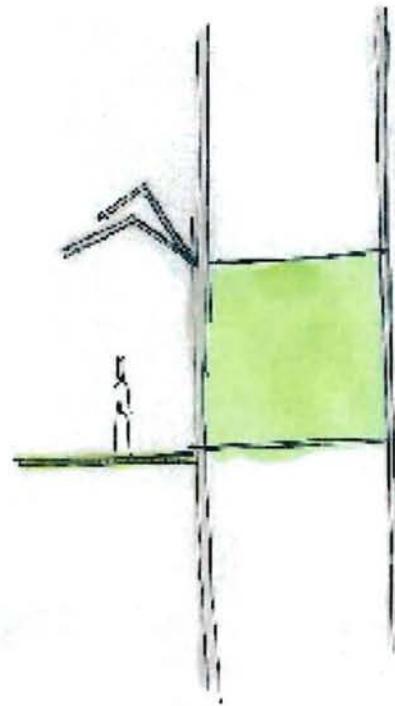
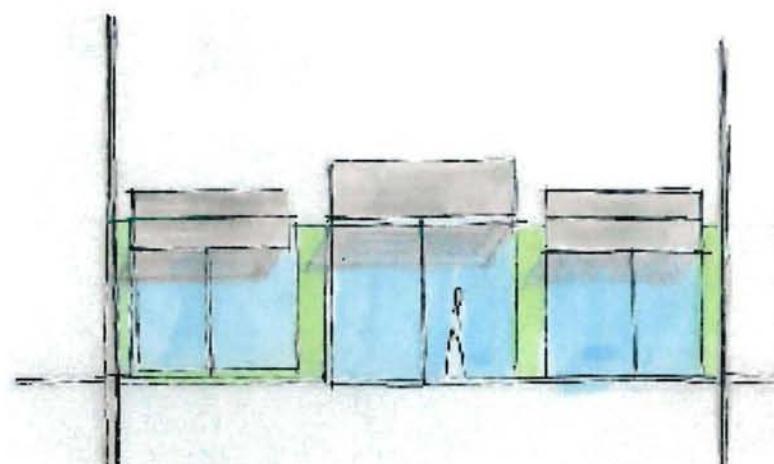
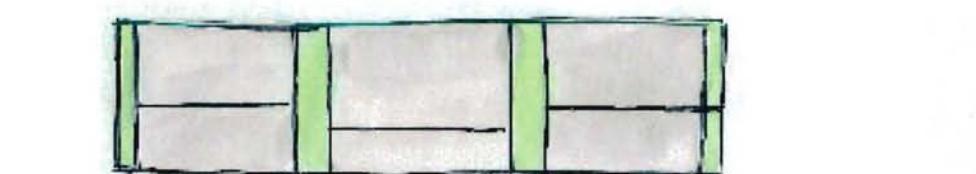
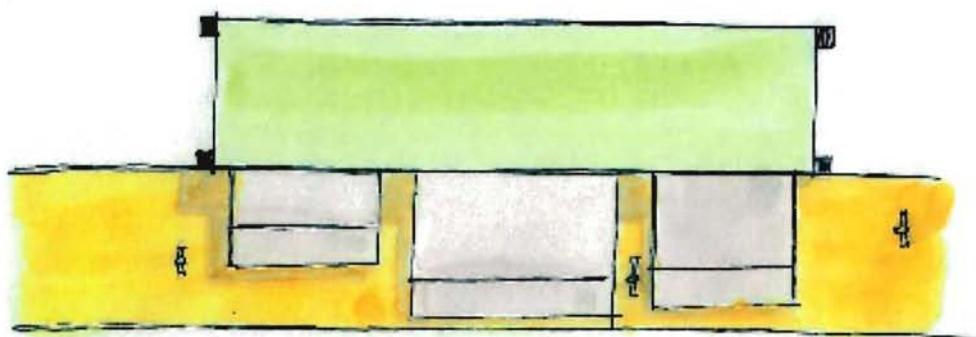
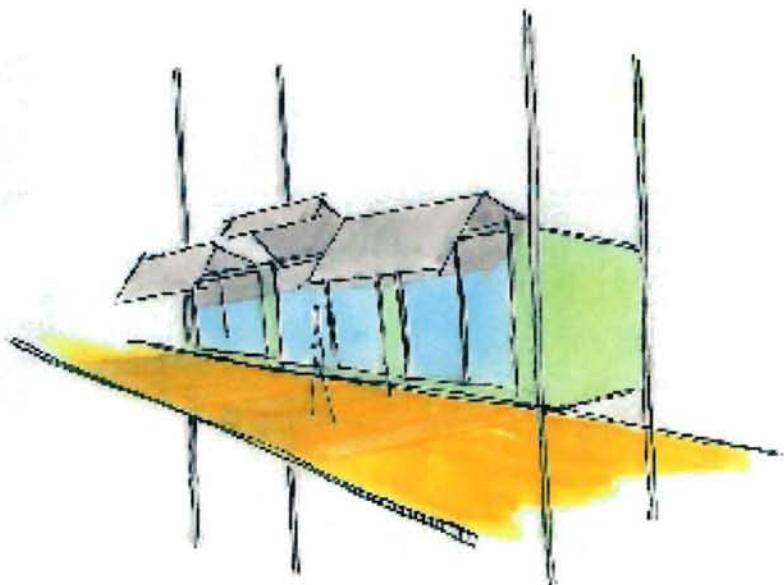
Investigation of this unit looked at placing units below the circulation space to extend the circulation space into a large outdoor area. It also helps create less of a wall along the circulation path.



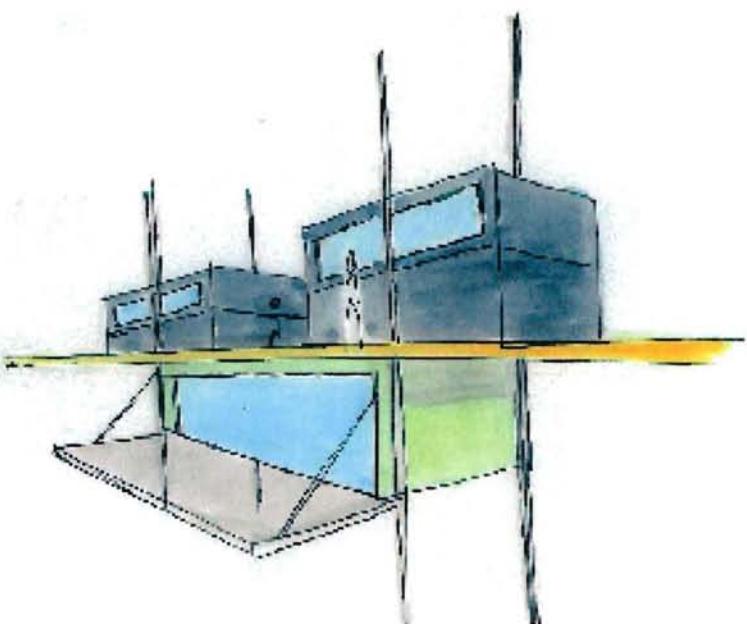
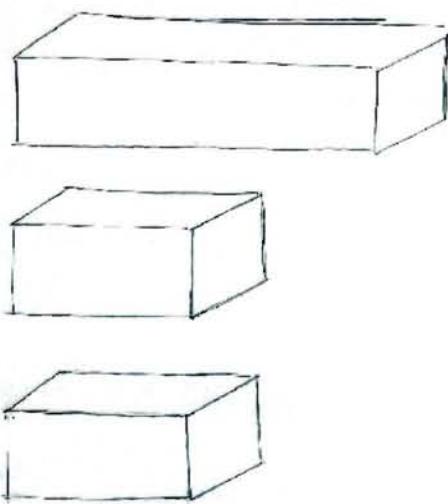
## Design Process



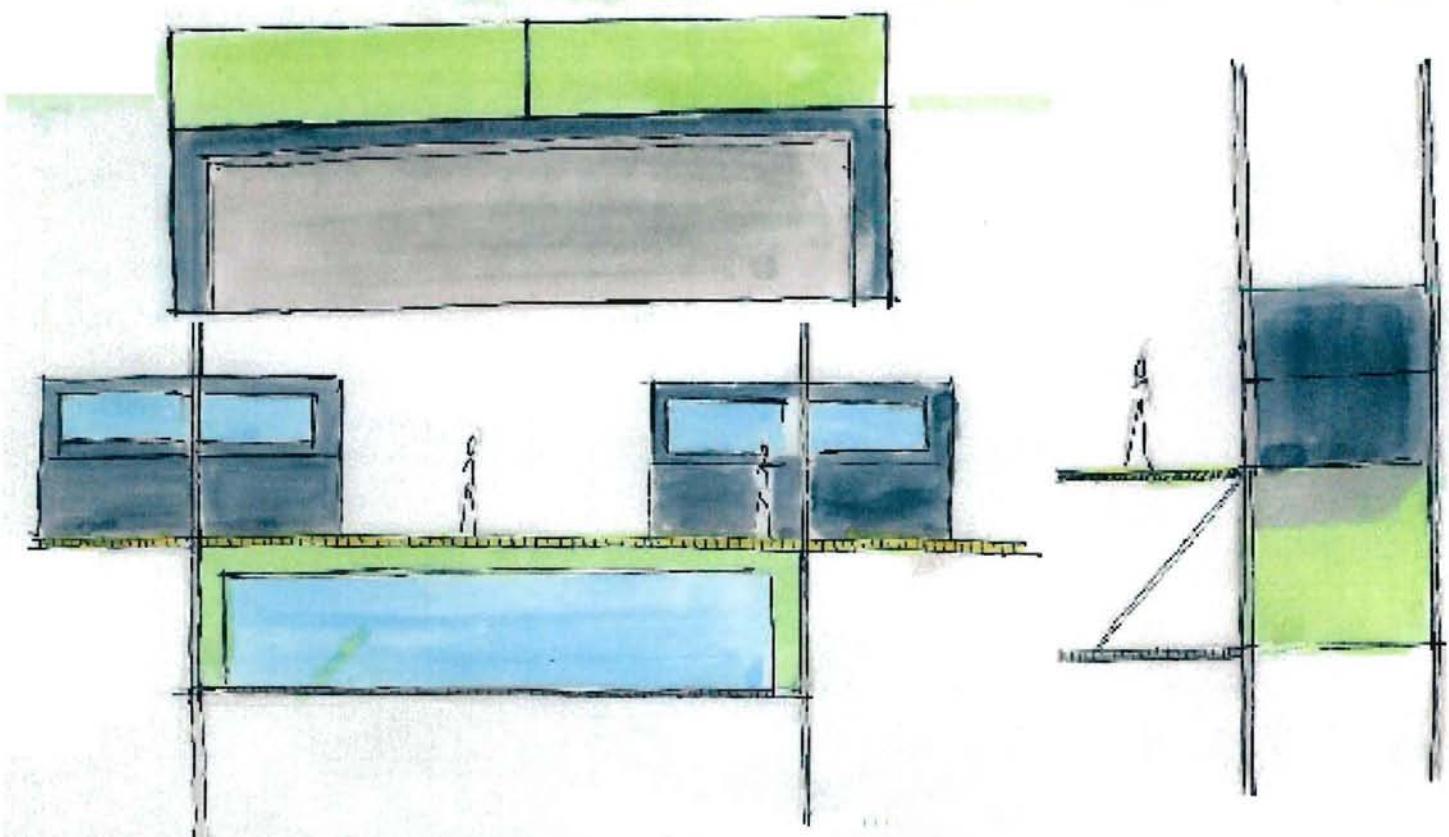
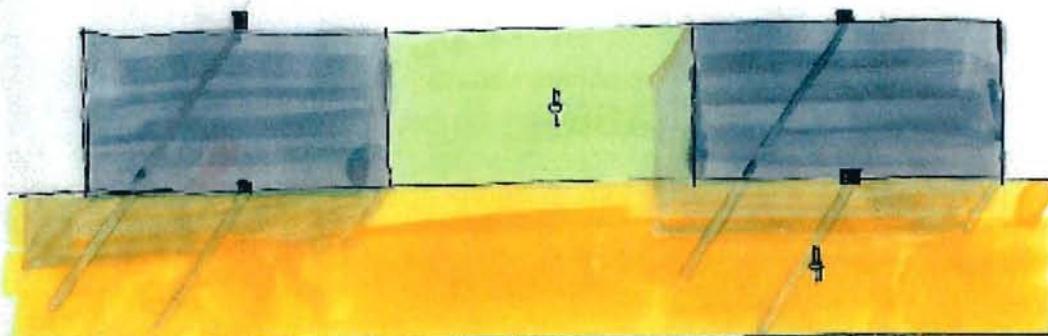
Trying to create interaction with structure as a way to help facilitate awareness of the coming, going and changing of the structure. Here the housing unit has wall panels that unfold to create canopy space over the circulation path.



## Design Process



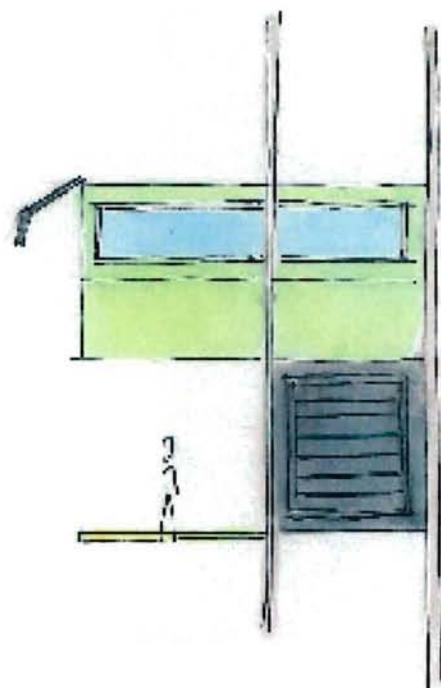
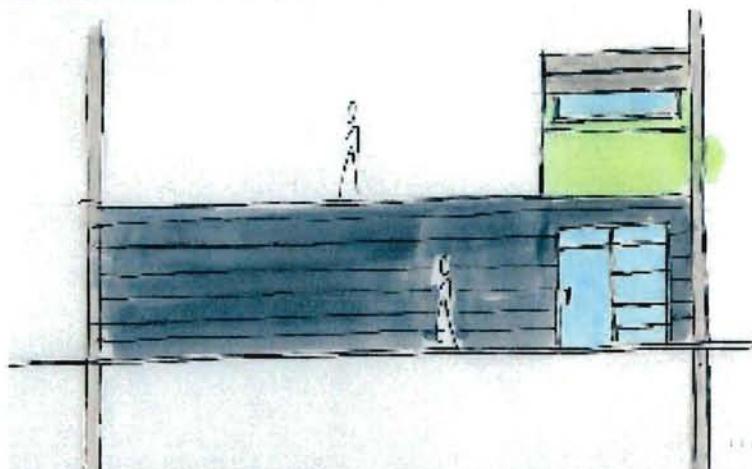
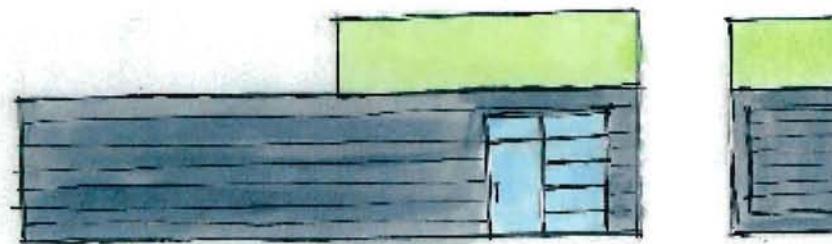
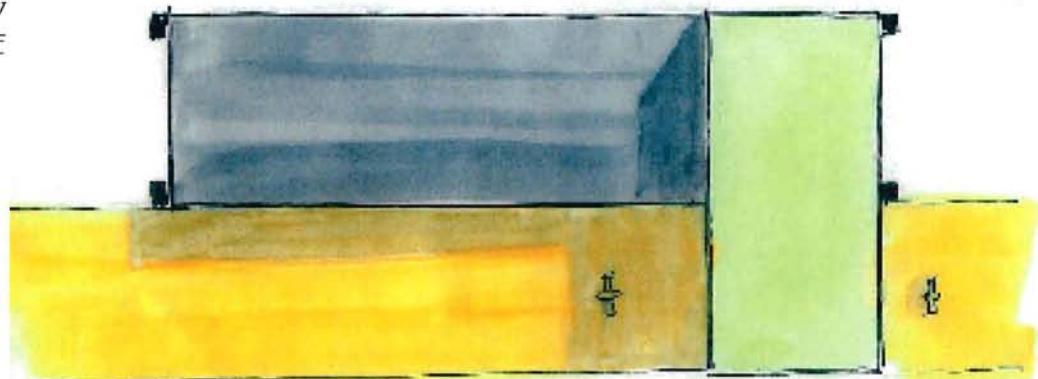
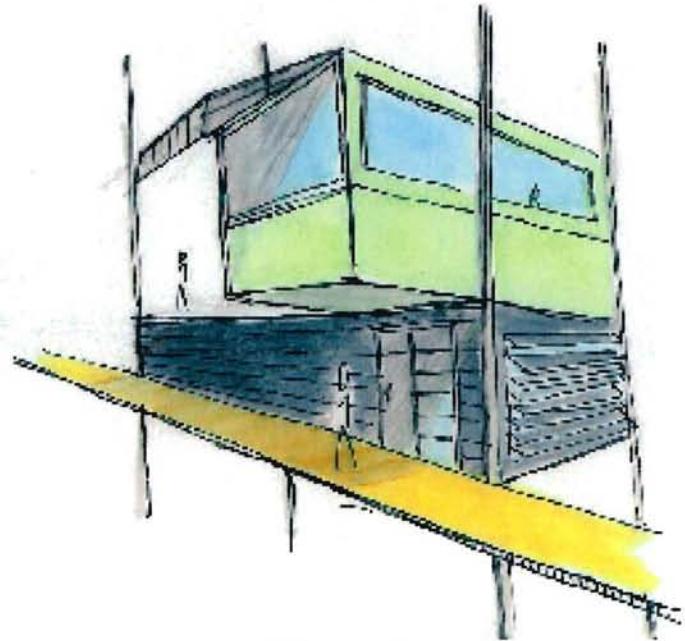
Another study in interacting with the structure looked at using the circulation path as a roof over a private outdoor space created by the suspension of a wall along side the bottom of a unit.



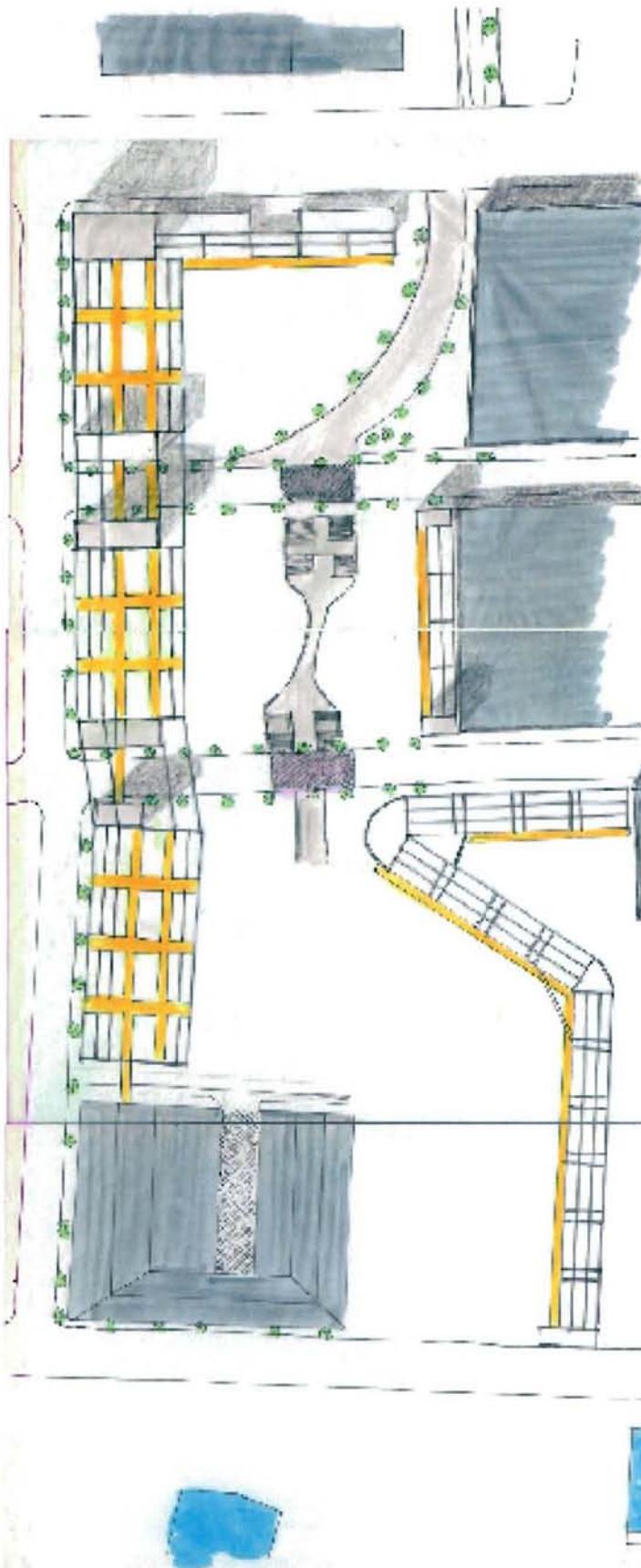
## Design Process



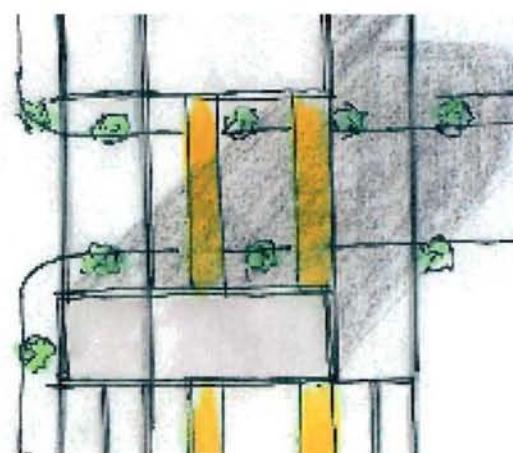
The possibility of private space can be created through the unfolding of the housing unit. Here that space is created in an outdoor roof space by the rotating of the second floor unit. The rotation also creates an interaction with the circulation path by cantilevering across it and creating a canopy space at the entry of the unit, a place to get out of the weather.



## Design Process

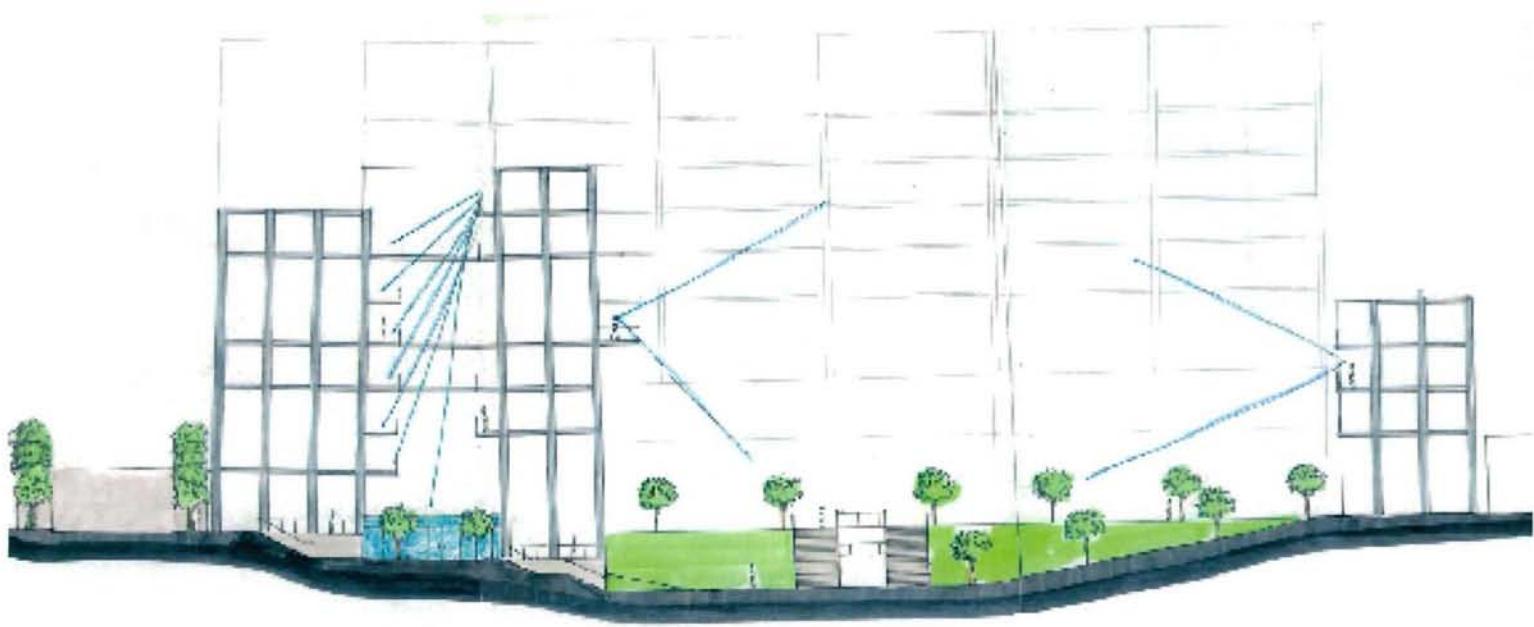


This plan examined the master planning of the entire 3 blocks between Jefferson Ave. and Atwater St. at the Detroit River. The structure for housing the units was placed along the street to help create a street front as the surrounding existing buildings do. The structure bridges the streets to allow for a crane rail system to pass from one end to the other. The cranes are for the raising and lowering of the housing units up and into the structure. The space on the interior of the site is programmed to be a park/ civic space. Left void of much designated program so that it is free for variations and development by its users. The civic space also attempts to link the Tri-centennial Park at the river to The Dequindre Cut Parkway at the north end of the site.



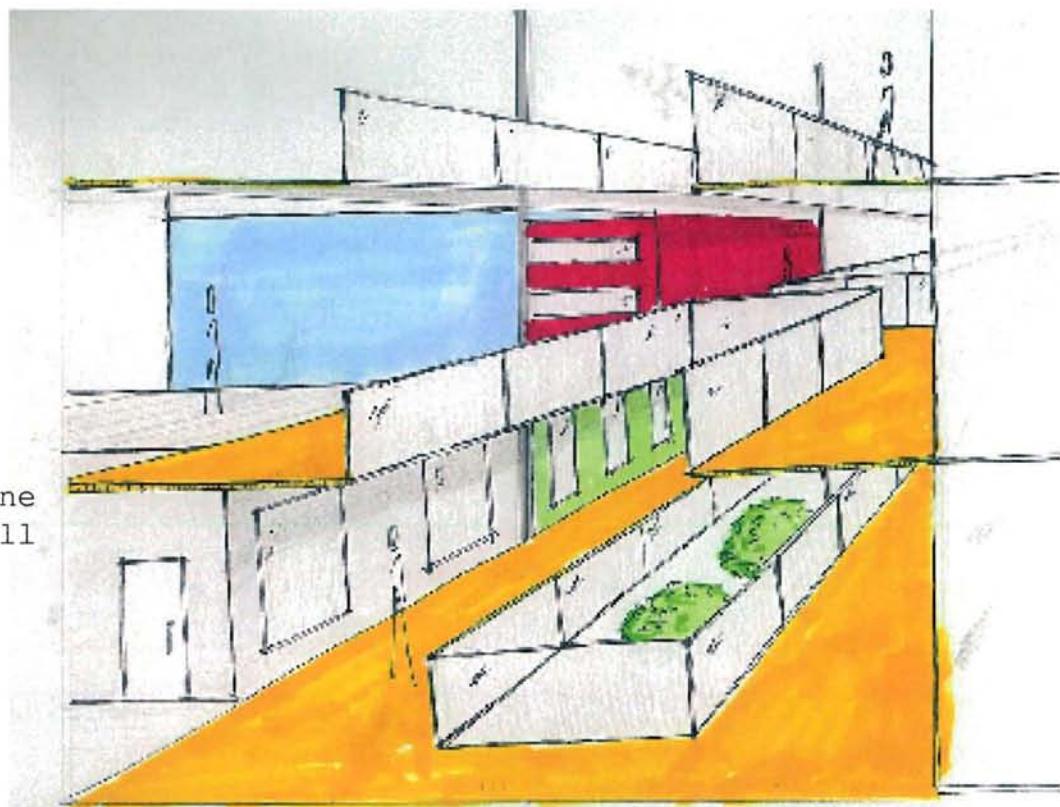
Circulation space and structure designed to cross over streets.

## Design Process

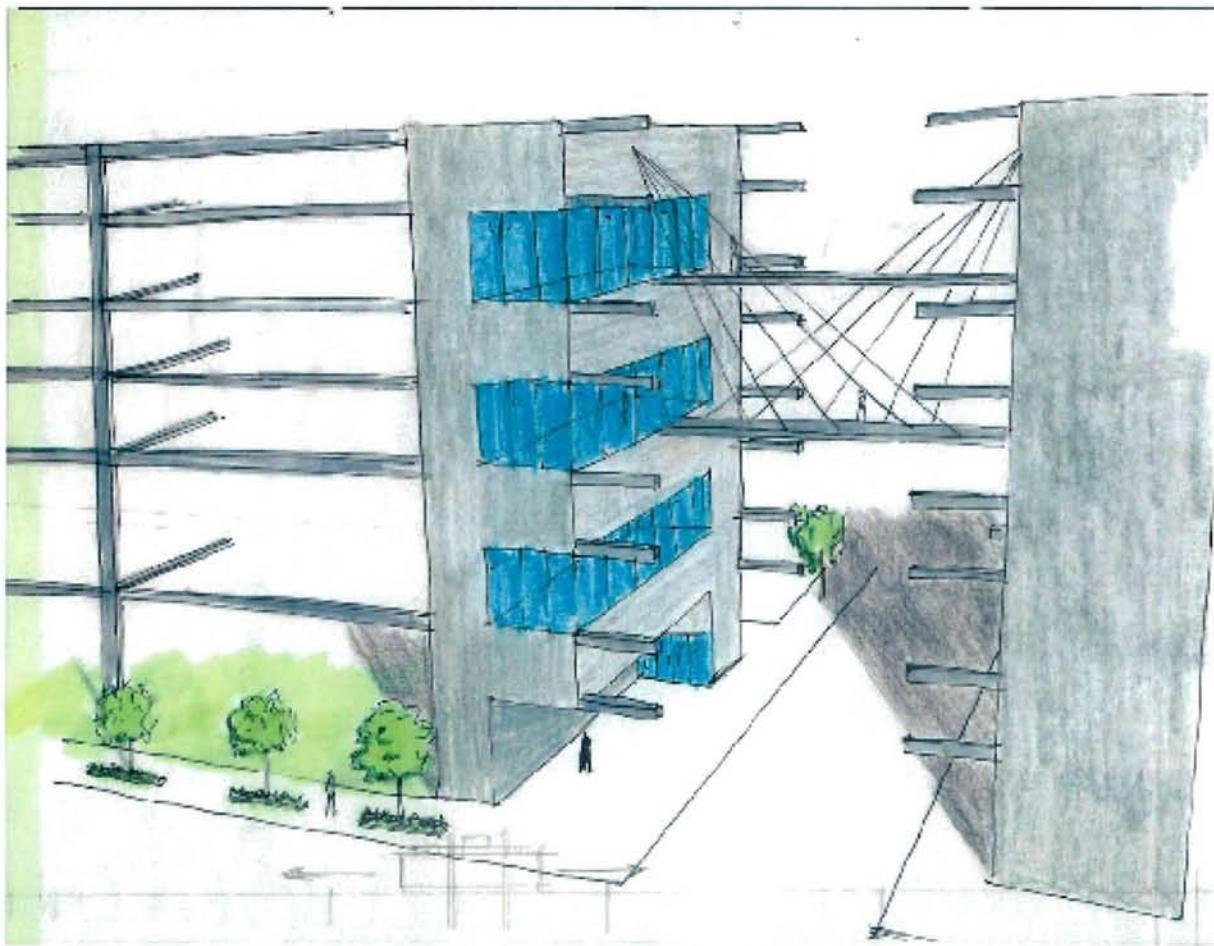


Laying out the site and structure vertically is just as important as the laying out of it in plan. The desire for the users or the housing space and the civic space to view the projects intensity of use and evolution makes the variation in height a great way to facilitate this. Visible in the site section above you can see the site lines from various balconies allowing the residents to see others living in the structure through center vertical corridors. The sculpting of the land also helps to create higher points along the street and lower spaces at the center of the site.

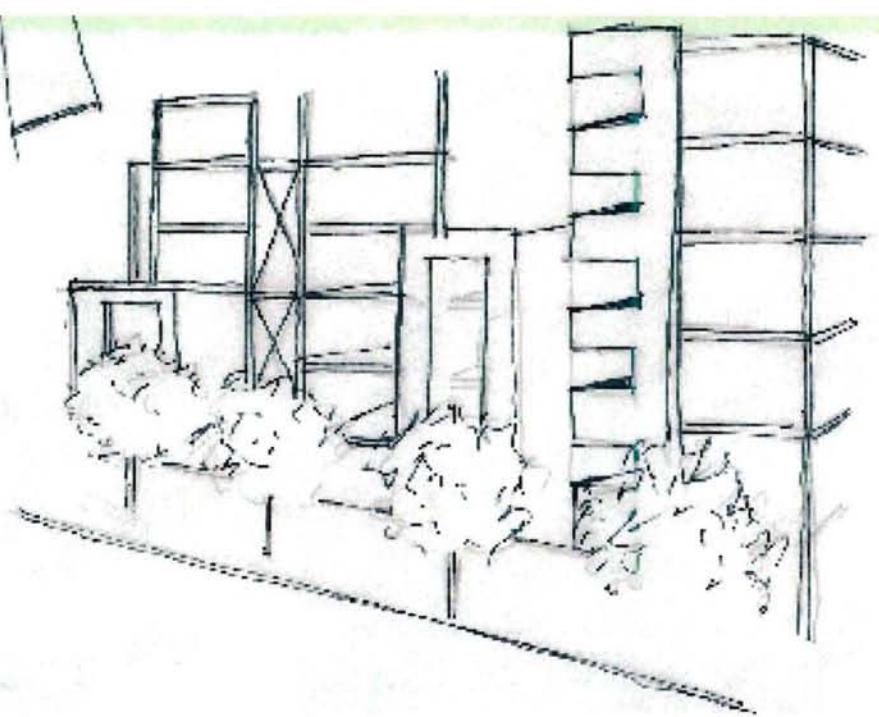
Center corridors allow visibility from one floor to another as well as all the way to the ground floor.



## Design Process



In attempting to leave the structure of the housing units to a minimum there still require the need for vertical circulation cores, mechanical spaces, and possible permanent gathering spaces for the residents. The varying of solid and void in the corner nodes reflects the forms the housing units create as they fill the structure. Here raised horizontal circulation crosses streets, connecting one structure to another. This allows for an individual to progress through the entire site without leaving the structure.

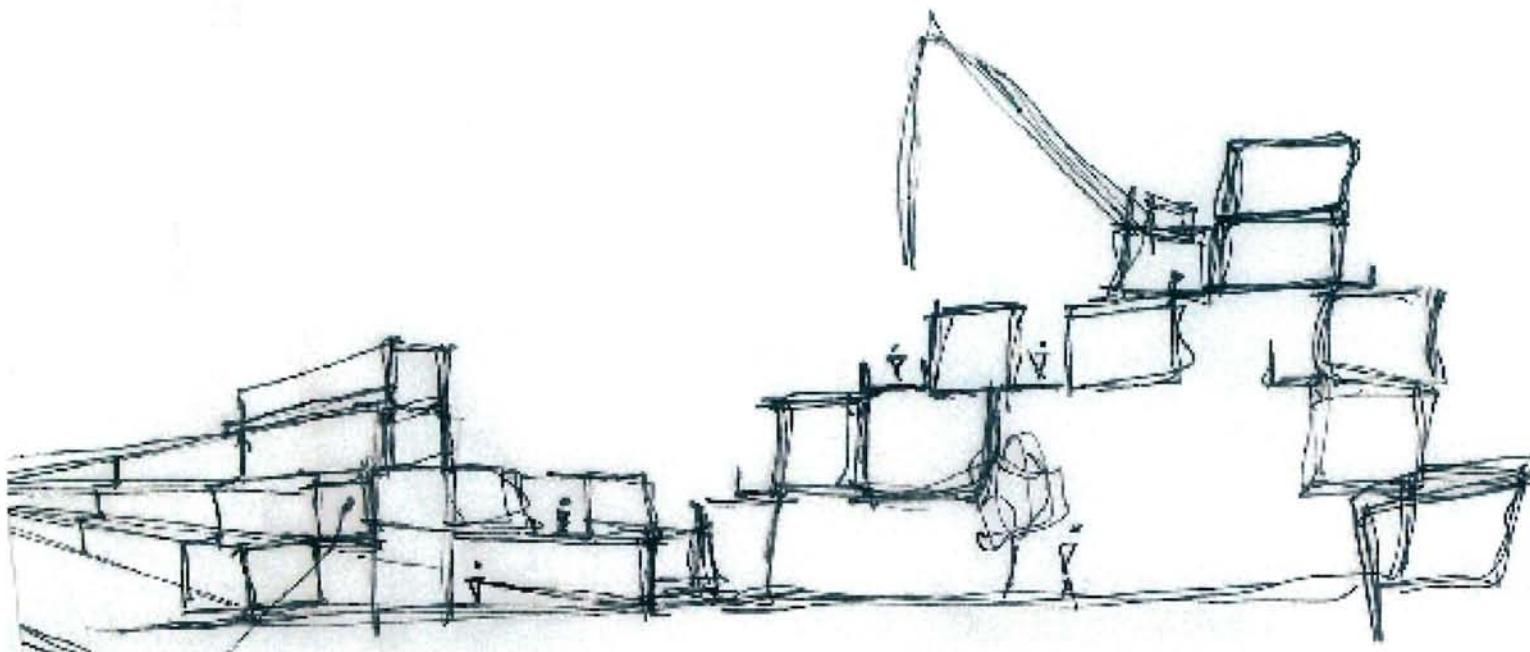
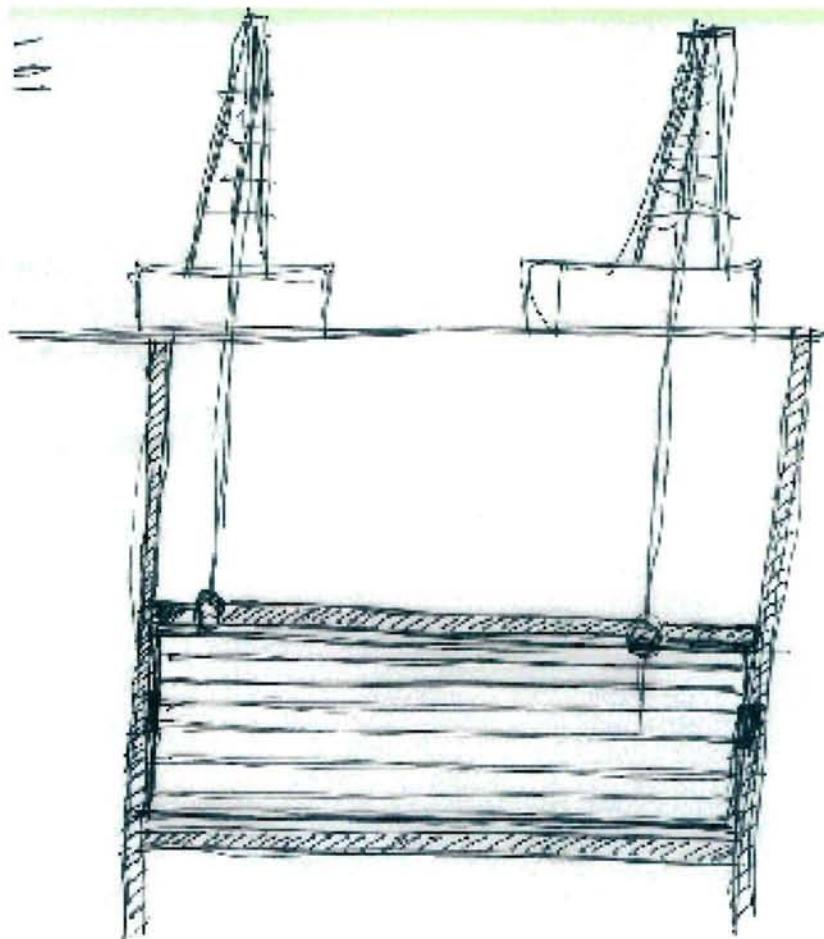


## Design Process

Working with stacking the housing units in a vertical arrangement consideration for the layout of the housing units was looked at. This was necessary to make sure that you could remove one housing unit without having to disturb another one.

The idea of a crane system to raise and lower the units gives a simple solution to the raising and lowering. By placing the cranes on a rail system they can move back and forth along the structure from where the structure are picked up and to the point in which they are placed.

The terracing of the structure allows for the units to remain accessible for installation and removal.

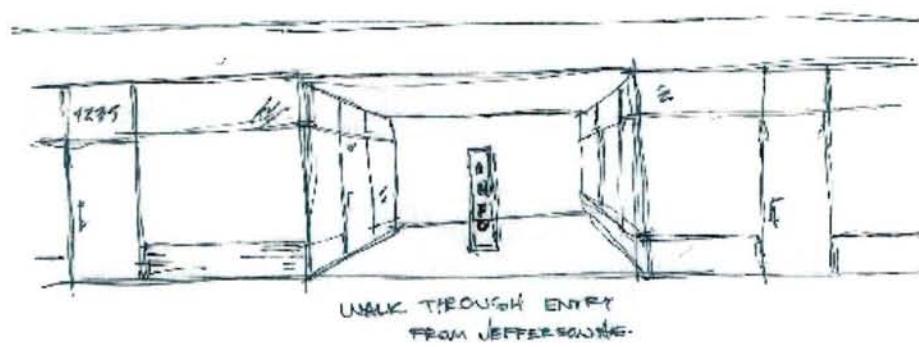


## Design Process

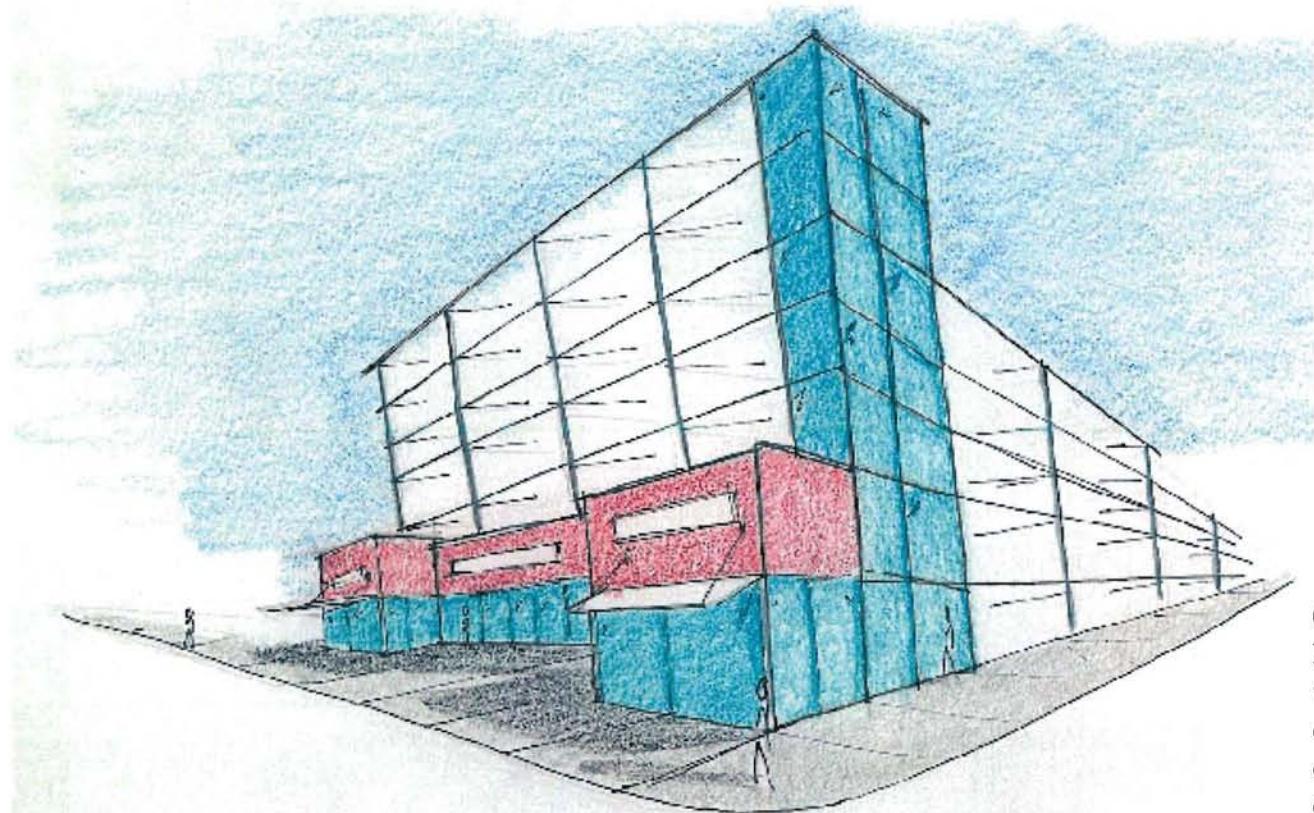
Recognizing the need to provide some privacy to the residents and the want for an additional reason for people other than the residents to visit the site 1st floor retail provides an answer to both issues. The first floor retail can provide services to the residents of the mobile housing as well as those who live in the surrounding area. The retail space also elevates the housing to the second floor, this makes it so that people aren't walking up to people houses and invading their privacy. The retail space also can work as a walkout providing a connection to the street and the civic space.



Walkout retail space provides site connection

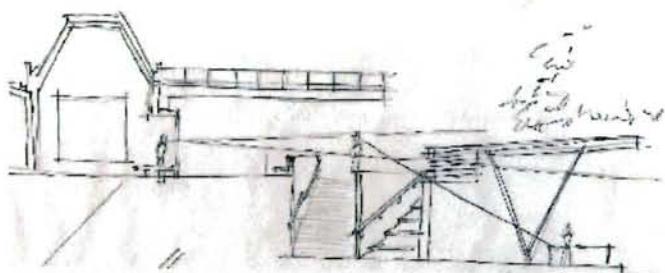
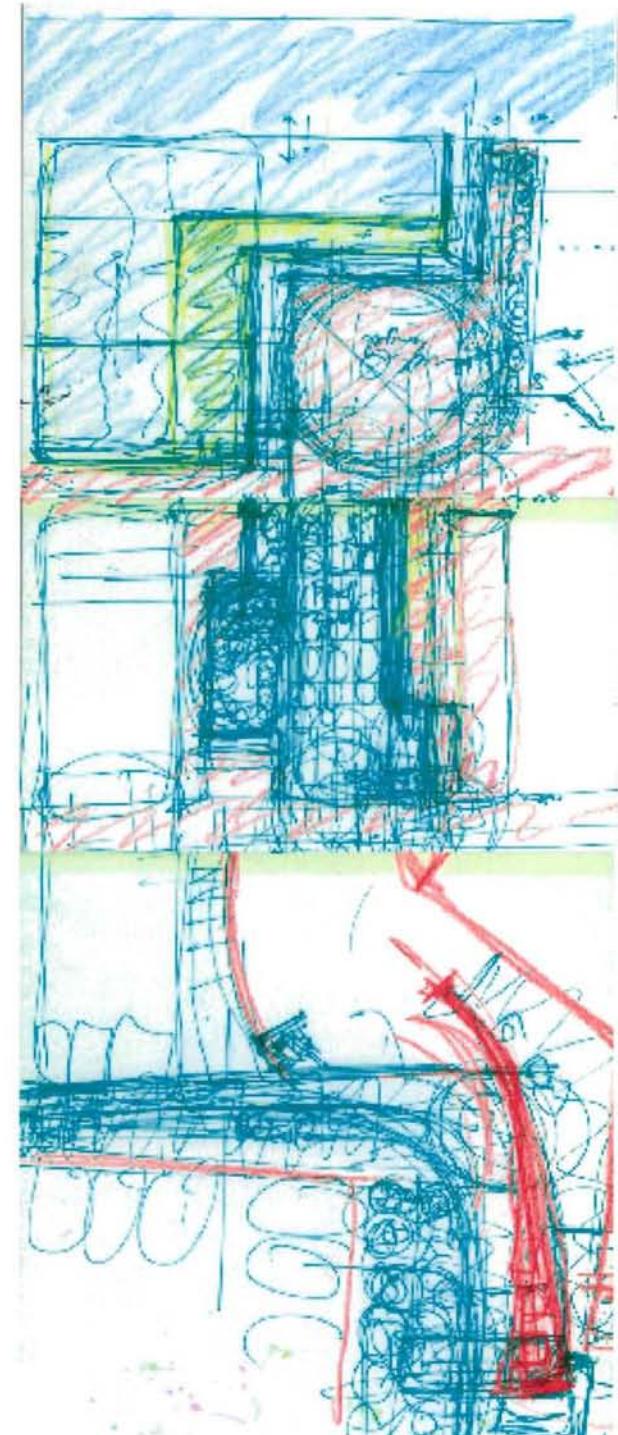


WALK THOUGH ENTRY  
FROM JEFFERSON.

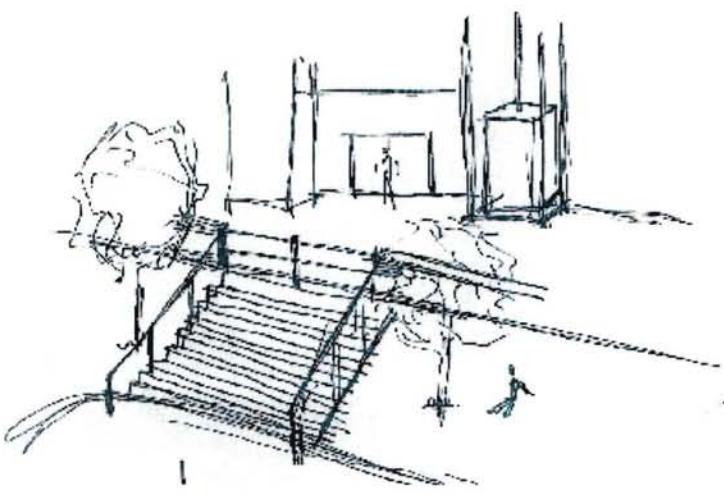
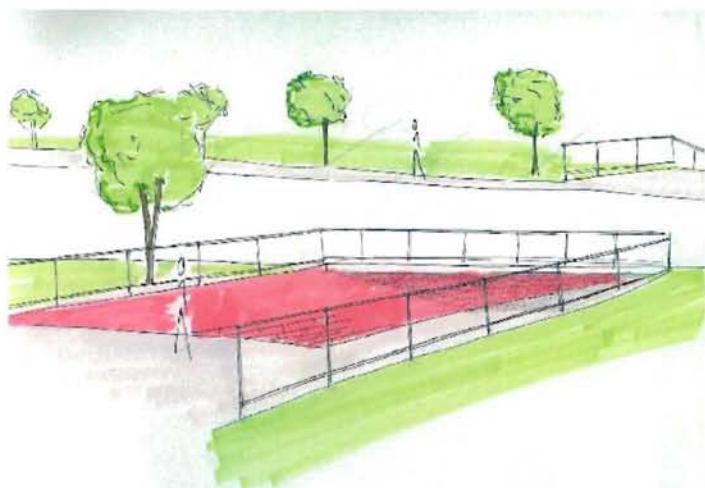


Glass facades help to continue the open feeling of the project.

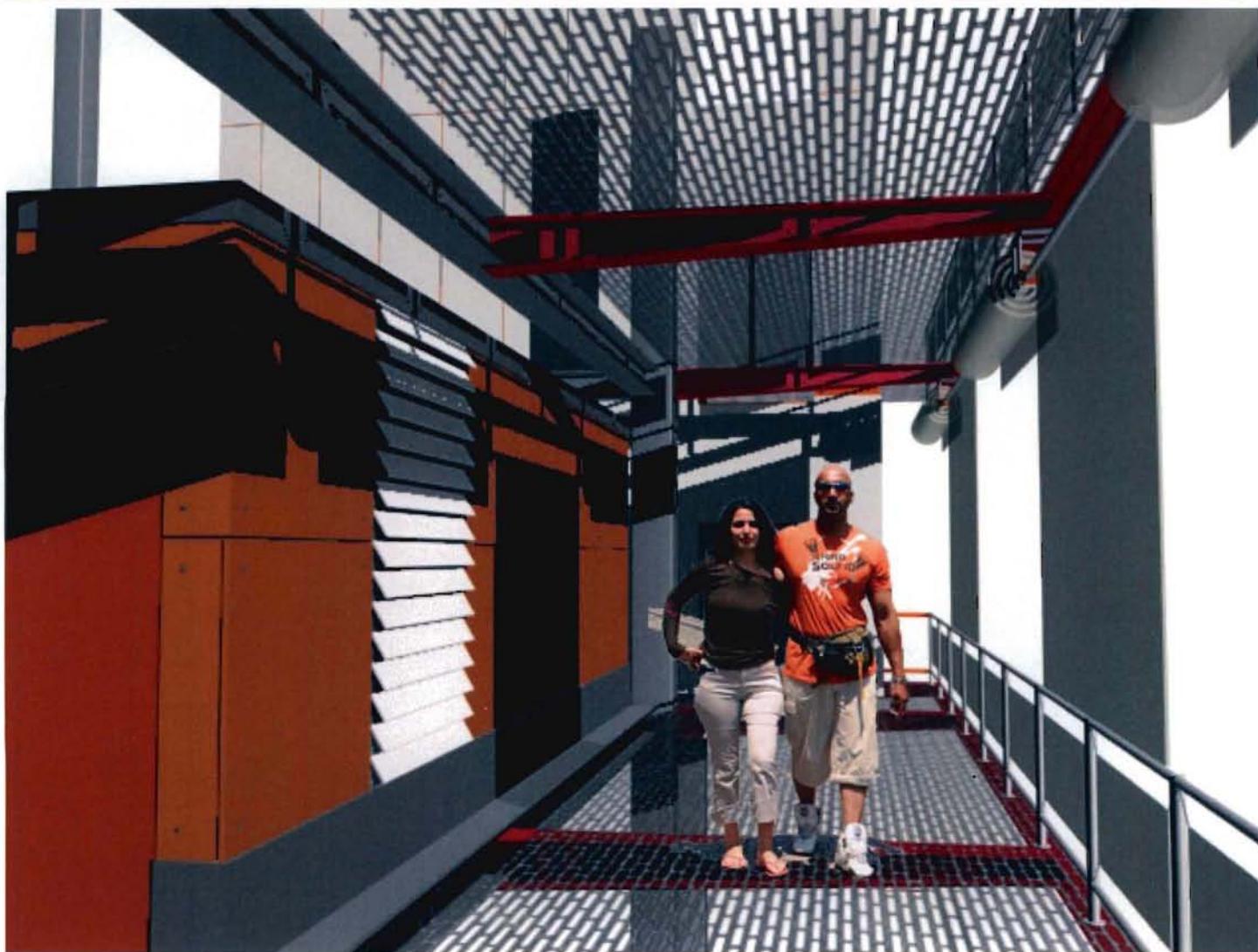
## Design Process



Creating a density through the site helps to make the actual built structure as well as the landscaping feel as one cohesive whole as opposed to separate entities. Placement and organization of the pieces of site also were looked at to help provide a central path through the site from the pedestrian scale of the riverfront to the vehicular scale along Jefferson Ave. Terracing of the space also allows for the space to become an interaction of above and below and the true ground level become more questioned. This allows for the individual engaging in the project to examine the whole site and feel as though they are always in a part of one whole project.



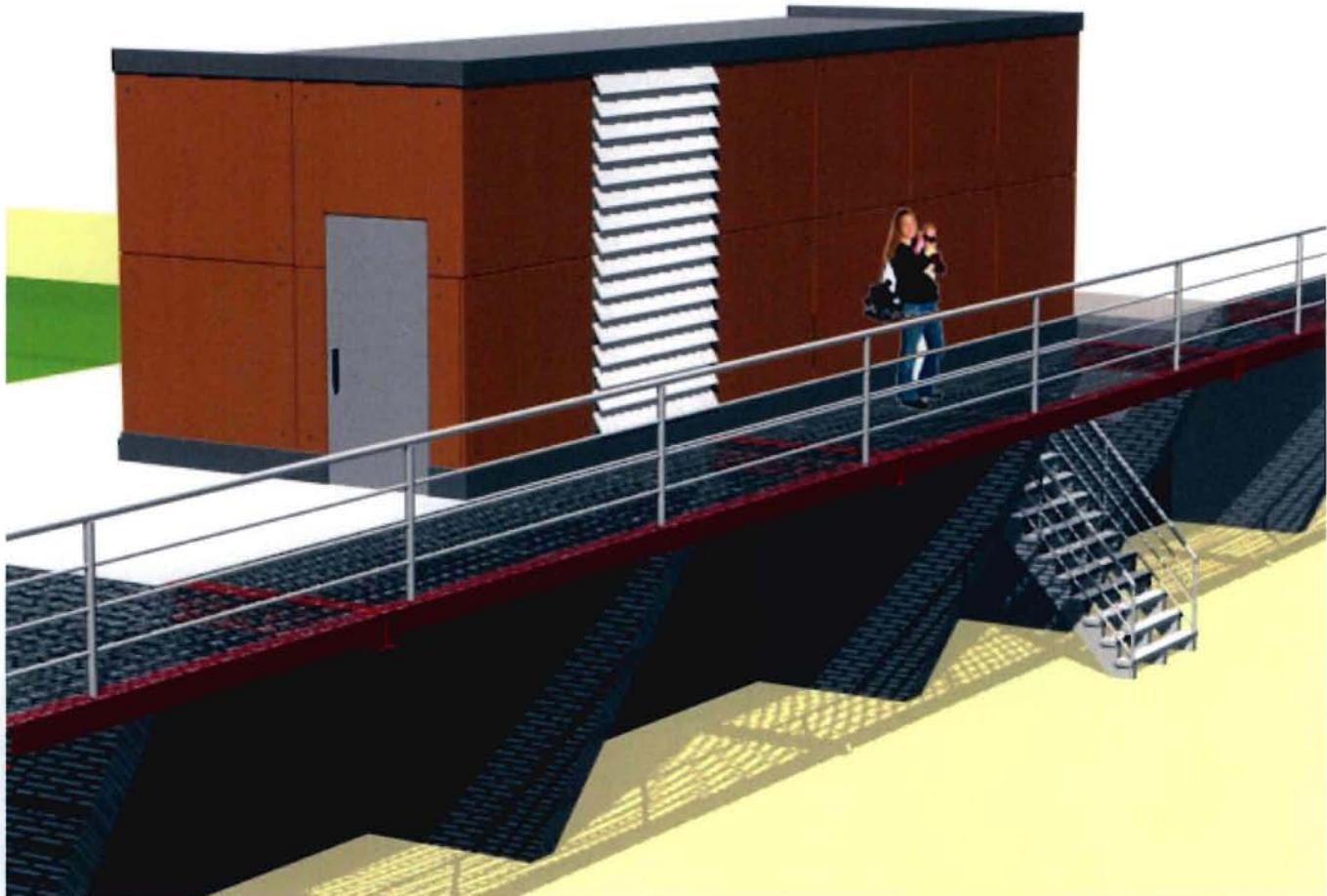
## Design Process



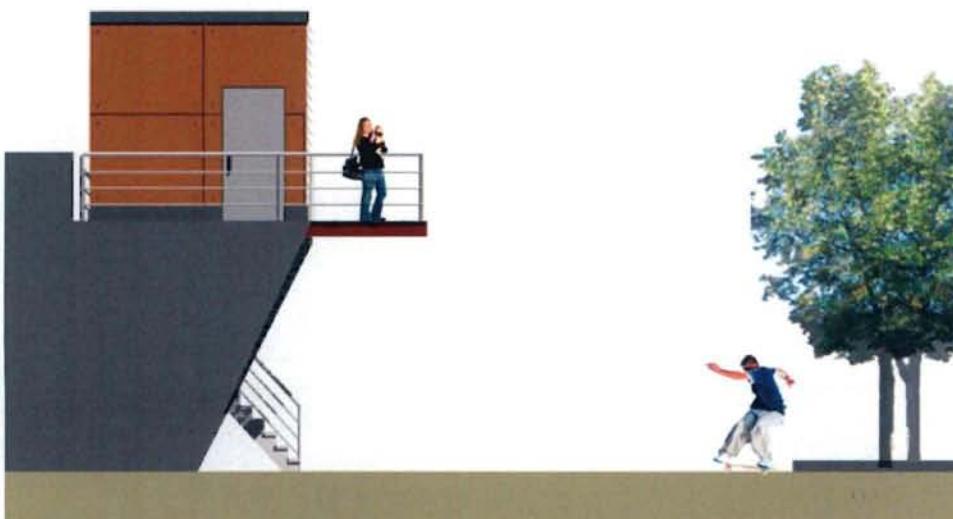
A mesh flooring for circulation space allows for the transmission of light through the floor. This helps make the floor feel lighter and also allows for individuals to see activity above and below them. Semi transparent retractable panels along the circulation path allows for residents to create some privacy and block unwanted light but leaves a silhouette of activities behind so that it remains visible.



## Design Process



Low level structure that meets similar requirements allows for the scale of the project to work at a smaller, more human scale. The structure cantilevers to provide usable space below it. These spaces can be programmed as the resident deems necessary. It could be used for parking, or as an outdoor private space. It however once again provides some privacy by being elevated from the ground. It being elevated also helps to create the variation of height maximizing views to and from the space.



# Design Process

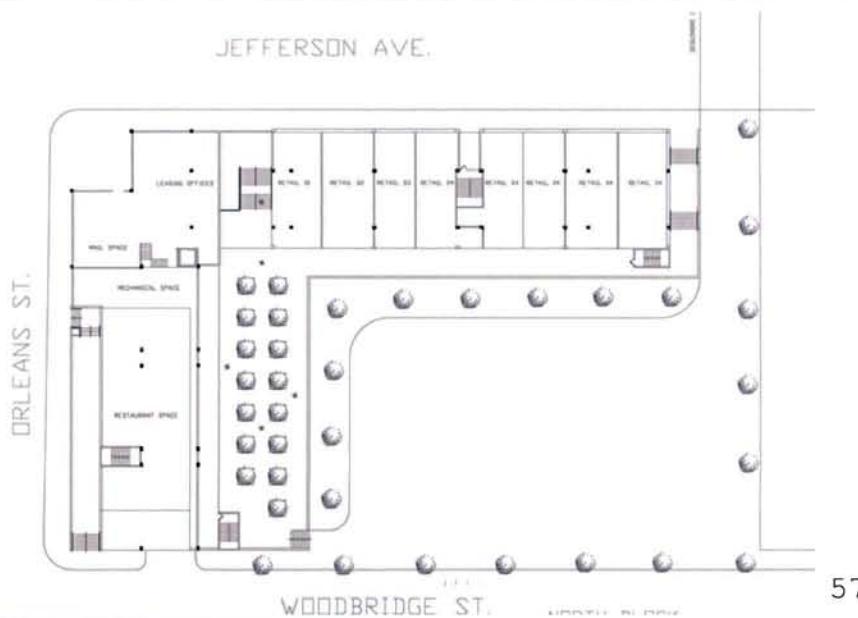
## SITE PLAN

Laying out the site with variation of the structure created a complexity that makes the project more difficult than necessary.

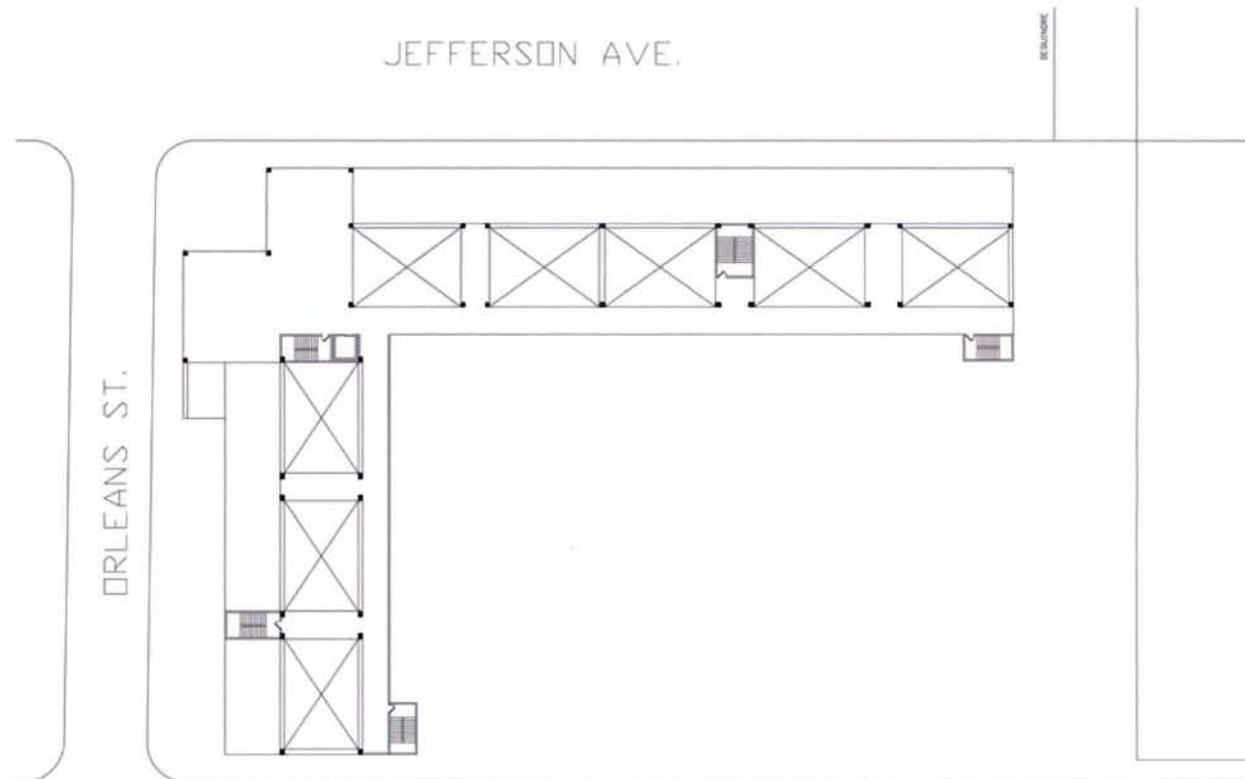


## NORTH BLOCK FIRST FLOOR PLAN

The first floor plan of the north block reflects the civic and retail nature of the project. Here are all the spaces that are designated to help draw individuals to use the project.



## Design Process



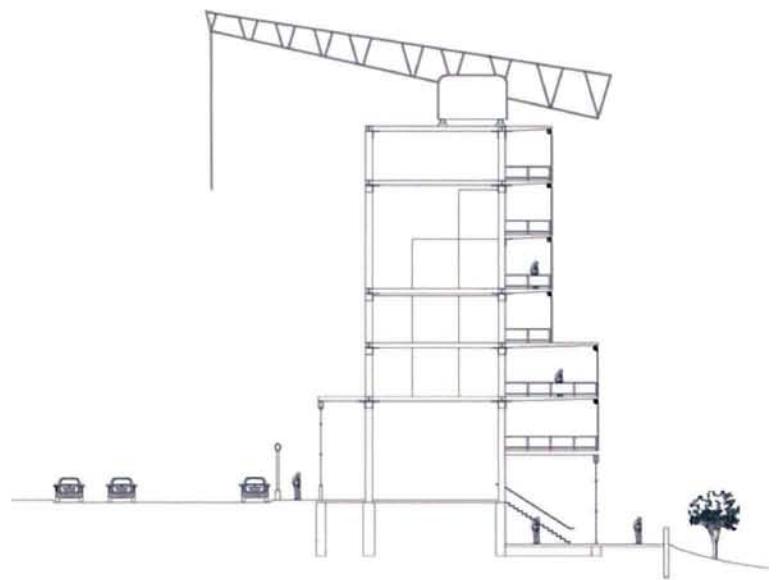
Trying to leave a versatility of space for varying sizes of housing units a creation of specific spaces were created for each unit. Whether your space filled the entire space or not the whole space would be designated to that resident.

Accommodations for parking took advantage of the sloping terrain on the northern block. The entrance off of Woodbridge makes the requirement of sloping into the underground parking minimal. The Mechanical rooms are also placed on the north part of the structure. Being underground helps to reduce noise also.

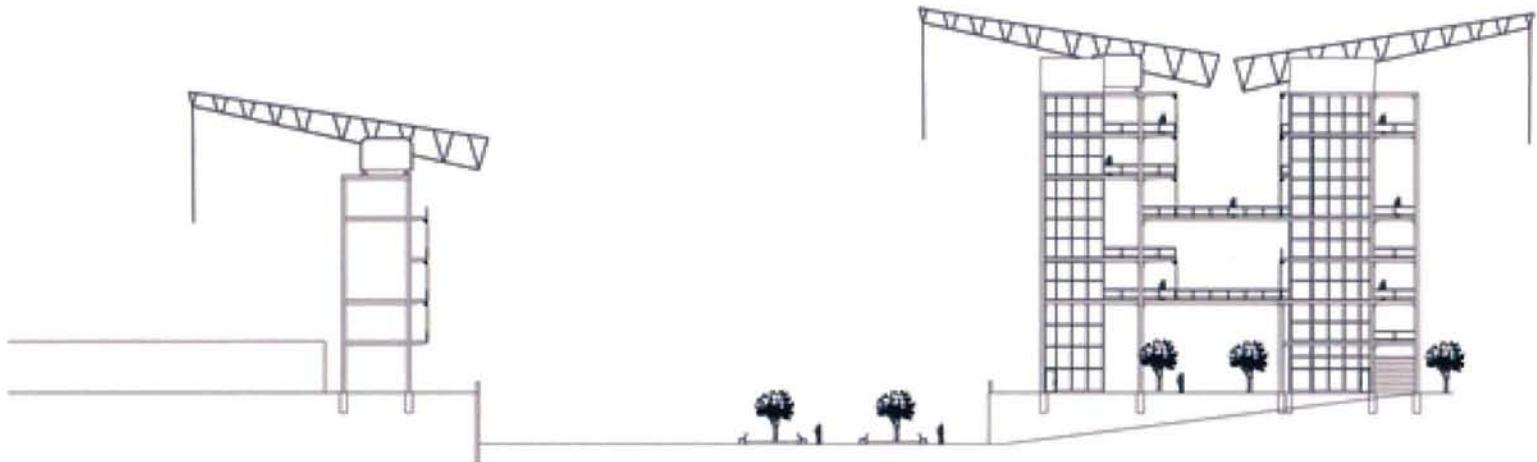


## Design Process

Sloping terrain and interaction between structure and landscape develop to create a singular project. The structure becomes very permeable for light and wind. With only the floor and minimal vertical structural members the structure is can be seen straight through when empty.

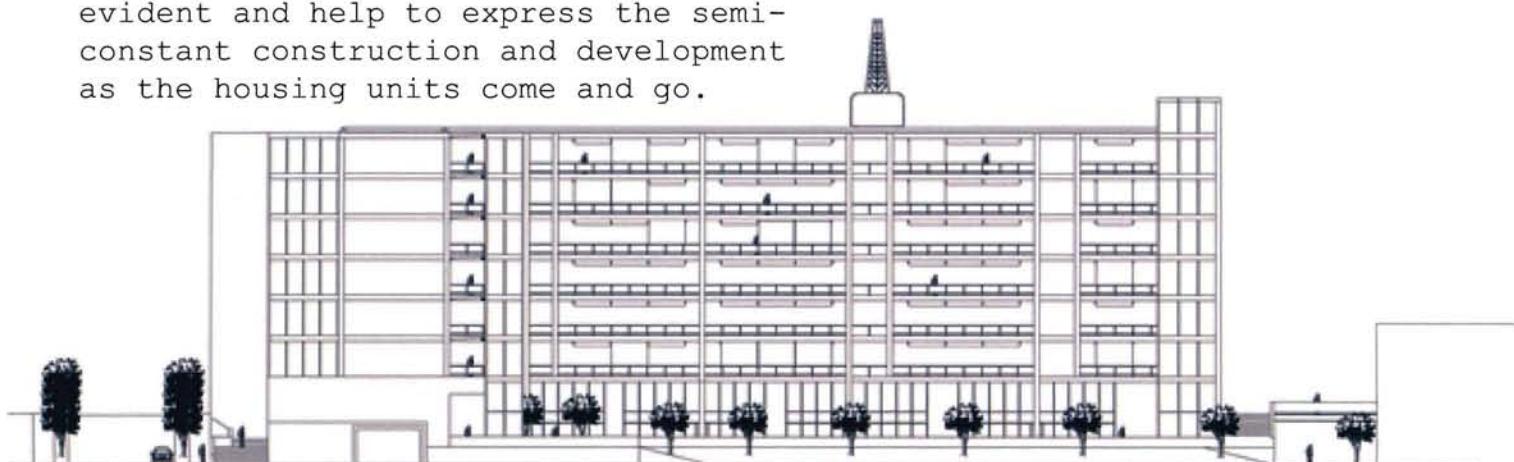


North Block Site Section



Middle Block Site Section

The presence of the cranes become very evident and help to express the semi-constant construction and development as the housing units come and go.



North Block Elevation From Woodbridge

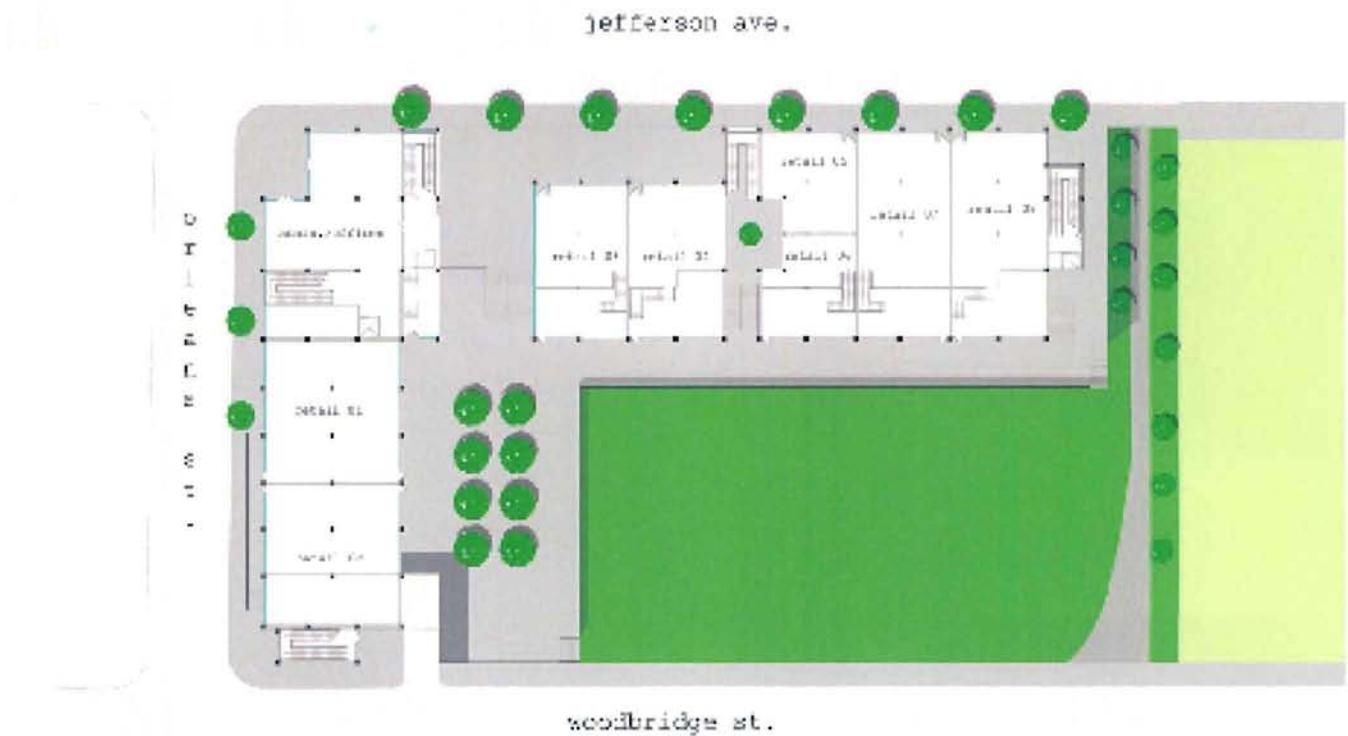
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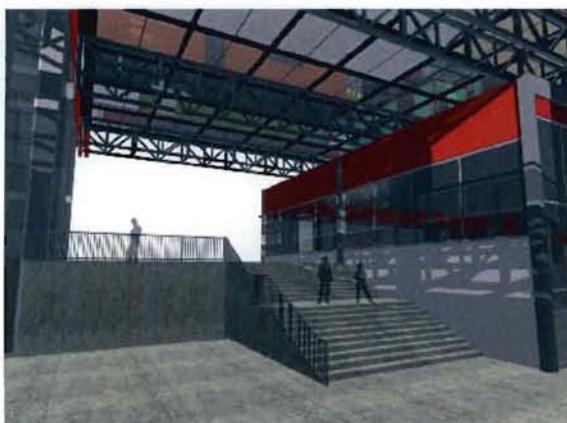
## Final Project



# Final Project



The final floor plan orients itself to provide a civic/ park space on the backside of the site. This space also provides for a starting point or ending to the Dequindre Cut Parkway where people can gather and rest. The first floor also provides retail spaces, fronting the streets, to help bring more people to use the site.



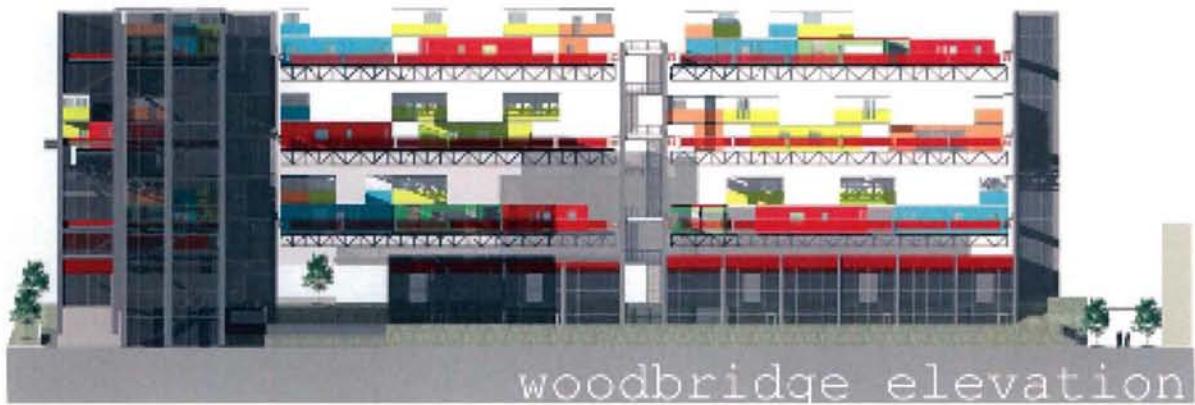
Pass Through From Jefferson Ave.  
to rear of site



Retail Store Fronts along  
Jefferson Ave.

## Final Project

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The structure that houses the housing units is left open with minimum facades to allow for the housing units to be visible. The circulation spaces and other enclosed parts of the building, such as the administration and retail spaces, are comprised with glass facades. The glass facades allow for the activity and use of the space can be seen by those passing by or using the space. The project becomes a stage of sorts. The stage allows for other people to become involved in the changing of the space and start to create a relationship with its ever changing abstraction.



# Final Project



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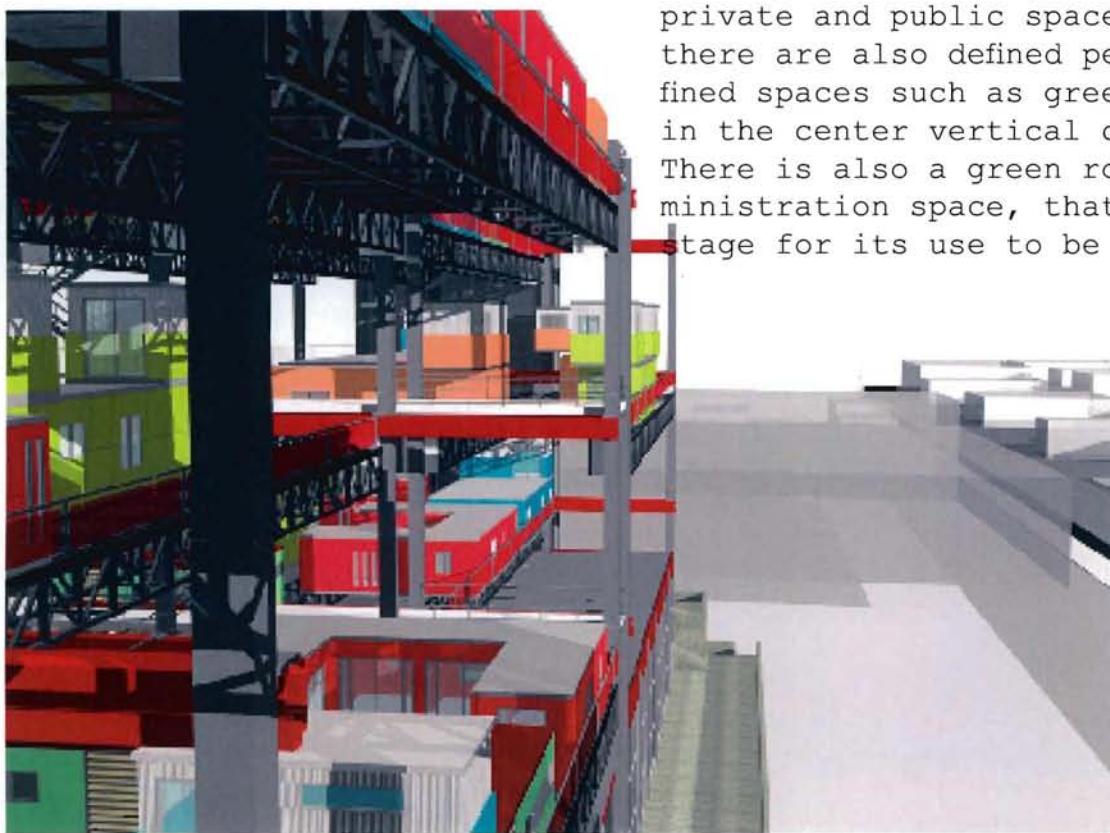
The spaces in between the housing units provide instances where the residents begin to share space. Depending on how the units fit together can cause unique spaces that become shared or independently private for a specific resident. The residents would have the opportunity to chose the location of their unit allowing for the dictation of the space they will create and share.

## Final Project

Public green space in the center vertical circulation core.

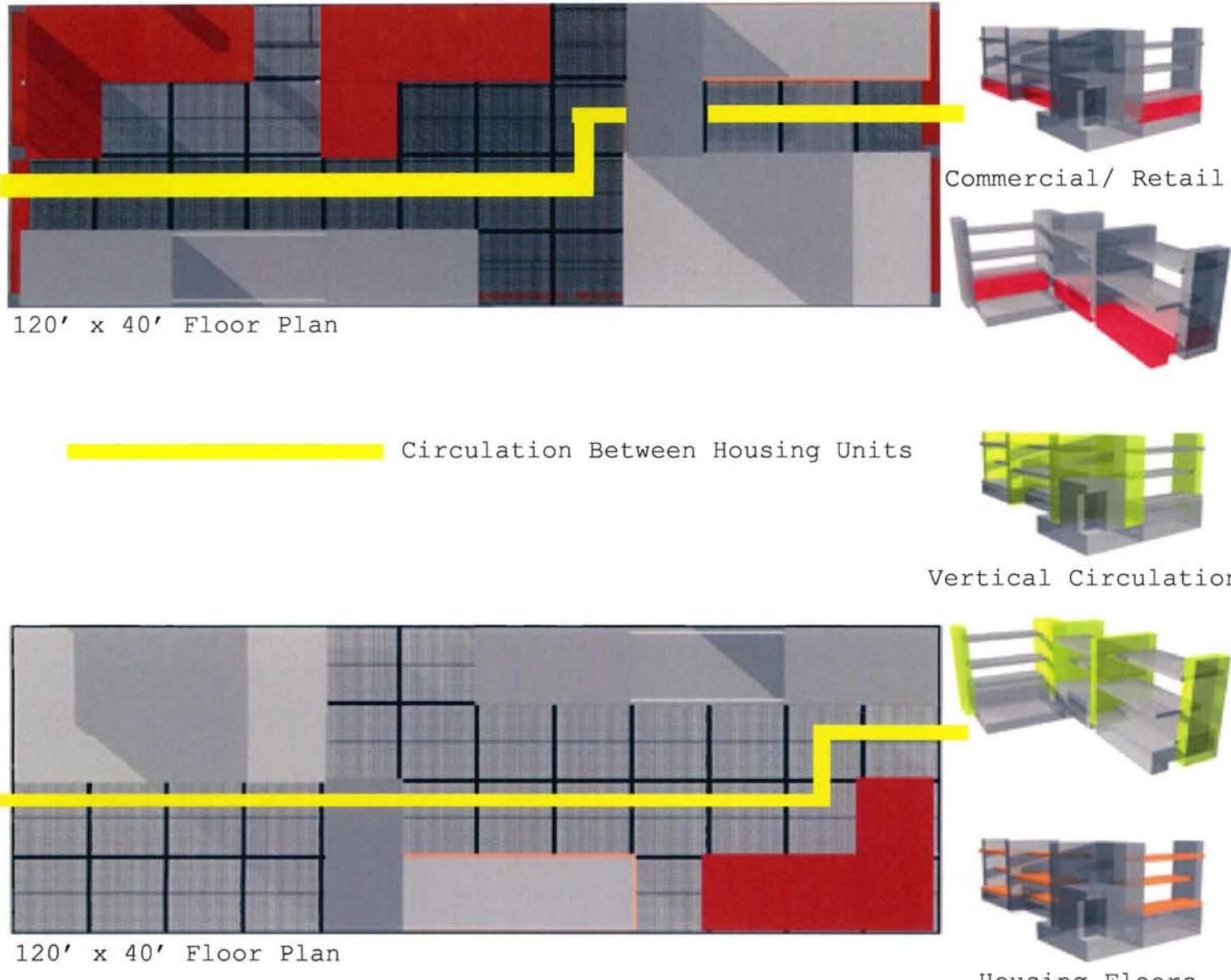


Although the housing units define their own private and public spaces between them there are also defined permanent spaces. Defined spaces such as green roofs that exist in the center vertical circulation core. There is also a green roof above the administration space, that sets itself as a stage for its use to be on display.



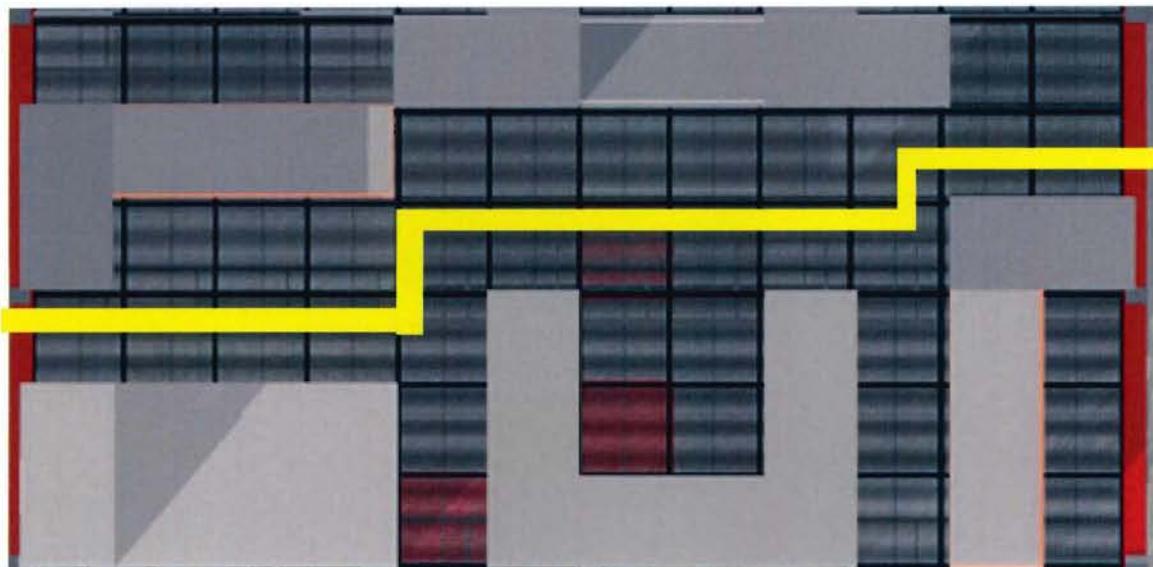
View from within to structure to surrounding area.

# Final Project

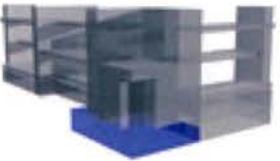


The only requirement in the placement of the units is a minimum of 10' between them. This allows for some personal space and to not completely block an individual's windows or doors. This also guarantees allowable space for horizontal circulation across housing floors and between the housing units. You can then also see the spaces created between them and how some space would instinctively become private while others would definitely remain more public shared space. The programming of these spaces would be dictated by the residents.

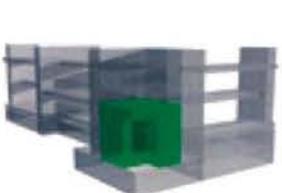
# Final Project



120' x 60' Floor Plan

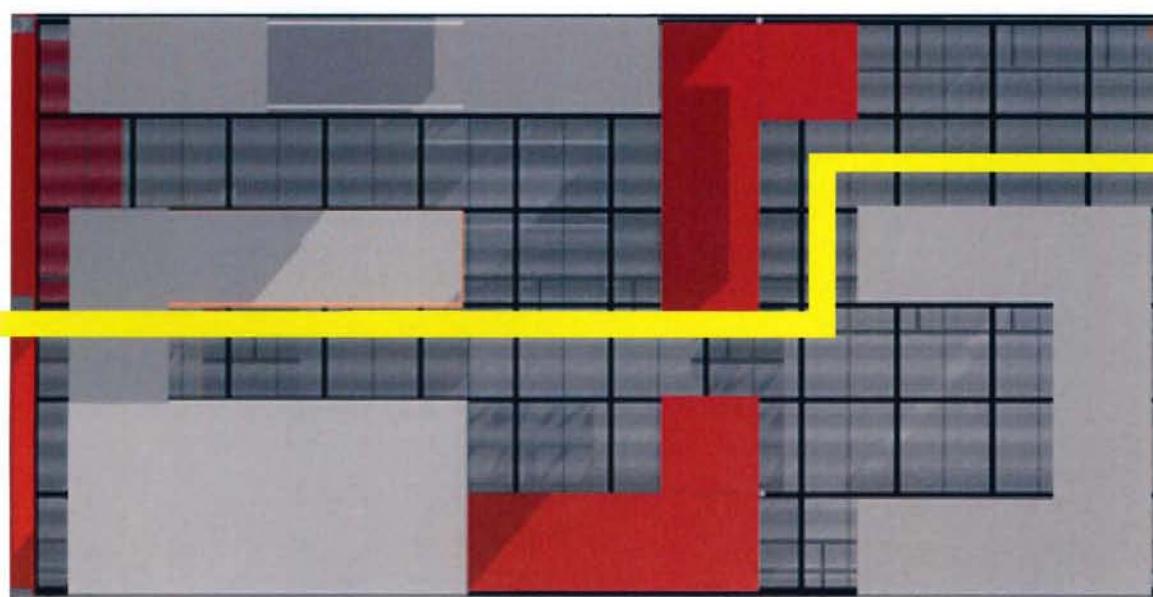


Mechanical

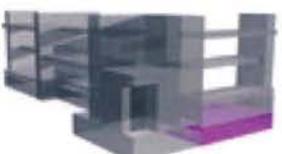


Administra-

Circulation Between Housing Units



120' x 60' Floor Plan

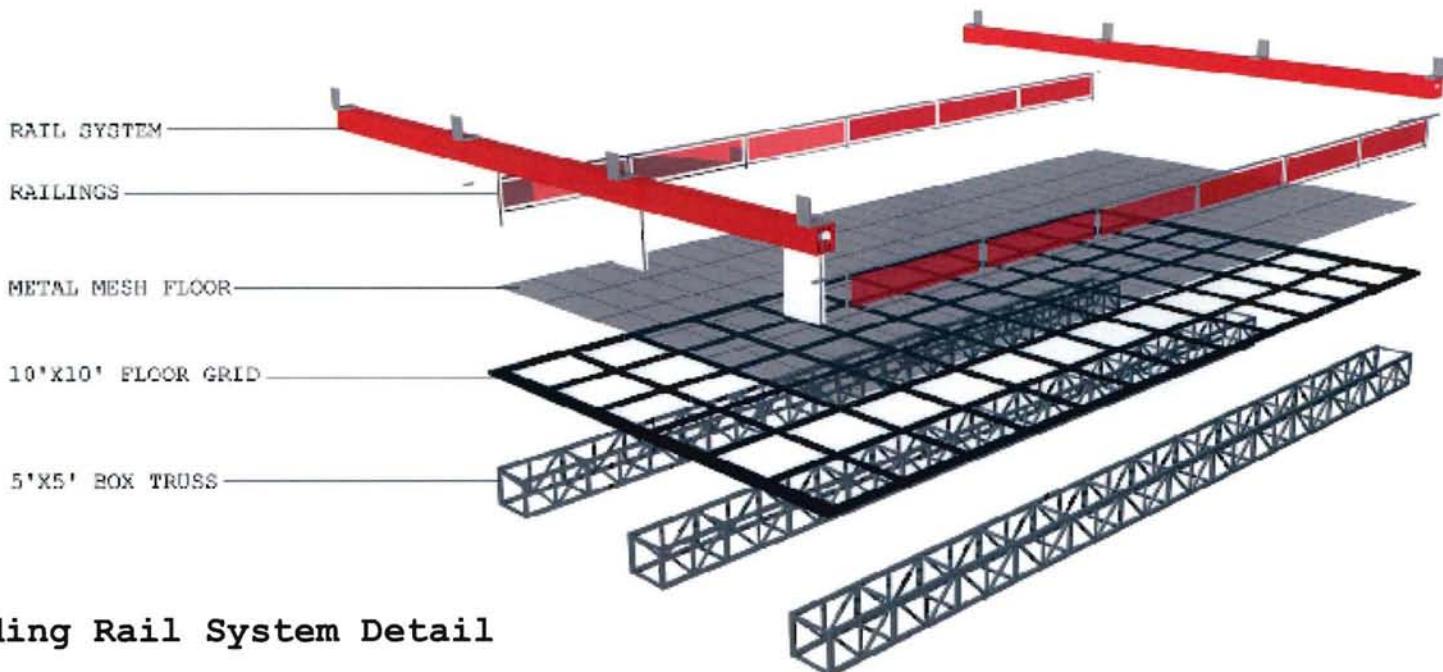


Parking



# Final Project

Exploded Floor Assembly



Sliding Rail System Detail

SQUARE COLUMN

STEEL ANGLE

STEEL CHANNEL

STEEL CHANNEL

METAL PANEL

10' METAL GRID

5' BOX TRUSS

The housing floors consist of a metal mesh placed upon a 10' x 10' steel support grid which rests upon 5'x5' steel box trusses. The metal grid and mesh allow for light to penetrate through the floor to the housing units below it. The flooring system is also connected to a sliding rail system that allows the floor to slide 30' to allow for ease of placing the housing units into the structure by crane.

# Final Project

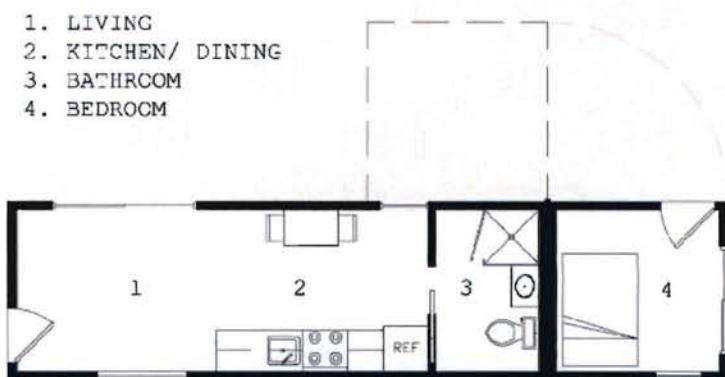
Housing Unit **A**  
400 sf.



Housing Unit A is a single bedroom unit. It folds into an L shape creating a more defined space on the rear of the unit. This space allows for the owner to place it within the structure and have a private space for themselves. The Louvered window on the side of the unit helps to allow privacy within the unit, considering the proximity of other housing units and the walking of people past.



**Floor Plans** 3/32=1'-0"



# Final Project

Housing Unit **A**  
400 sf.

Elevations 3/32=1'-0"

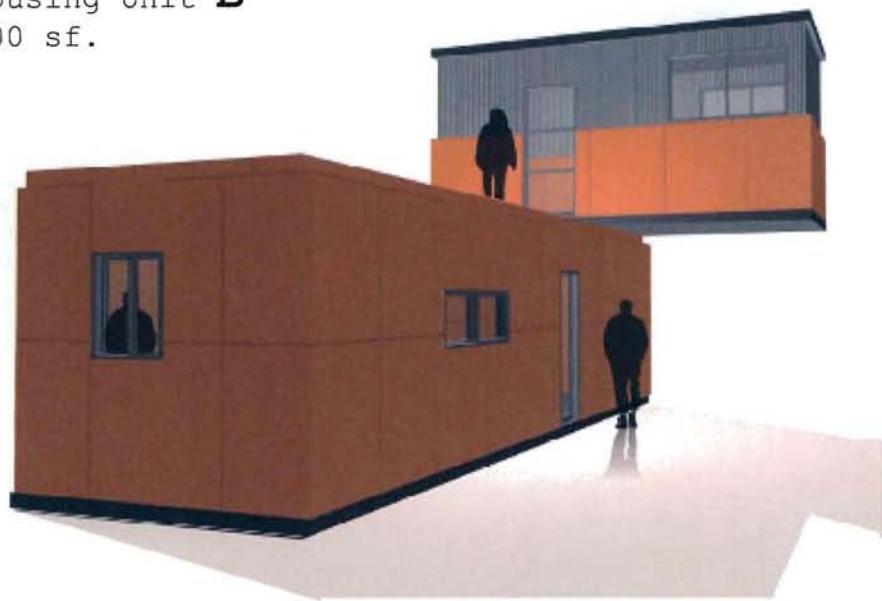


Unfolded On-site

Folded for transportation

# Final Project

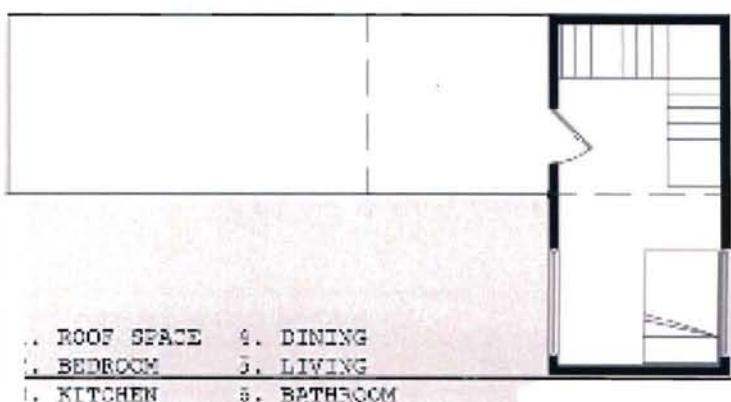
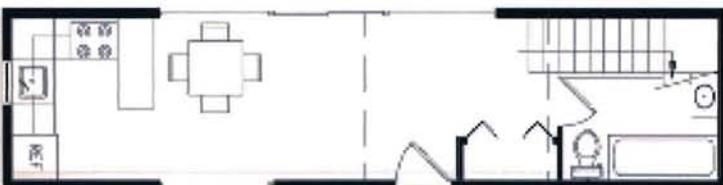
Housing Unit **B**  
600 sf.



Unit B has a second floor that expands from 5' to 10' once placed on-site. The second floor then pivots to create an outdoor roof space as well as a cantilevered covered space on the first floor.



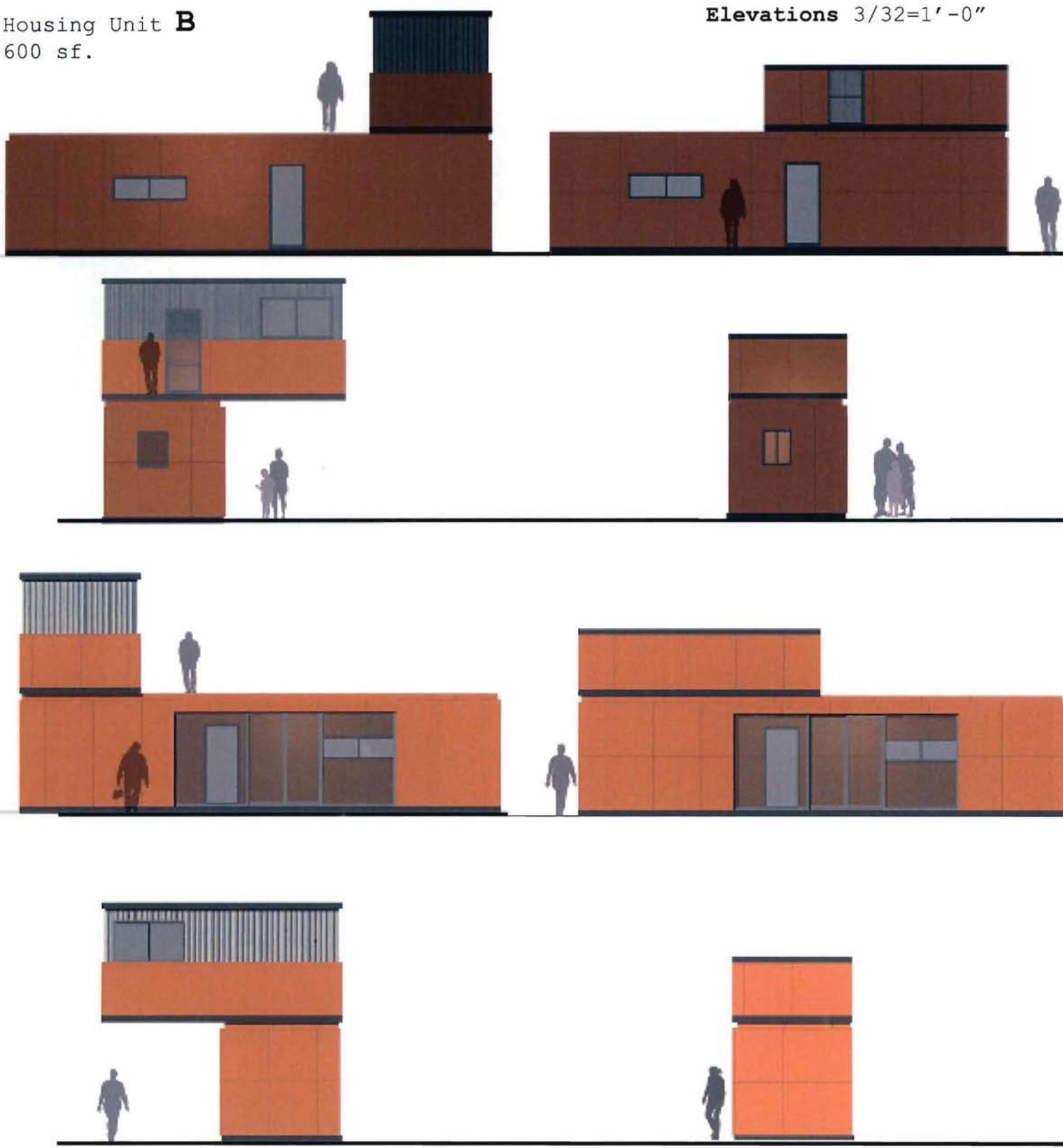
Floor Plans 3/32=1'-0"



# Final Project

Housing Unit **B**  
600 sf.

Elevations 3/32=1'-0"



Unfolded On-site

Folded for transportation

# Final Project

Housing Unit C  
800 sf.

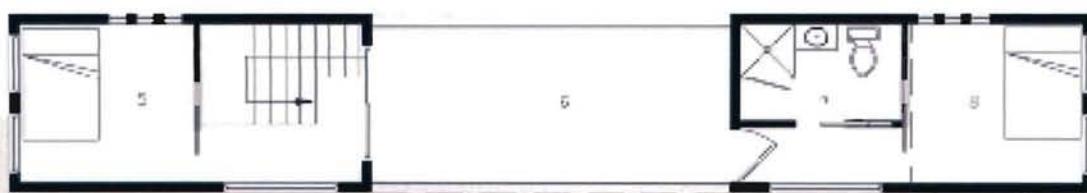


Unit C has a second floor that slides apart creating 2 distinct second level spaces as well as a outdoor roof space. It then in return creates 2 cantilevered spaces on the first floor, providing protection from the weather.



- 1. BATHROOM 1
- 2. LIVING
- 3. KITCHEN
- 4. DINING
- 5. BATHROOM 1
- 6. ROOF SPACE
- 7. BATHROOM 2
- 8. BEDROOM 2
- 9. BEDROOM 2

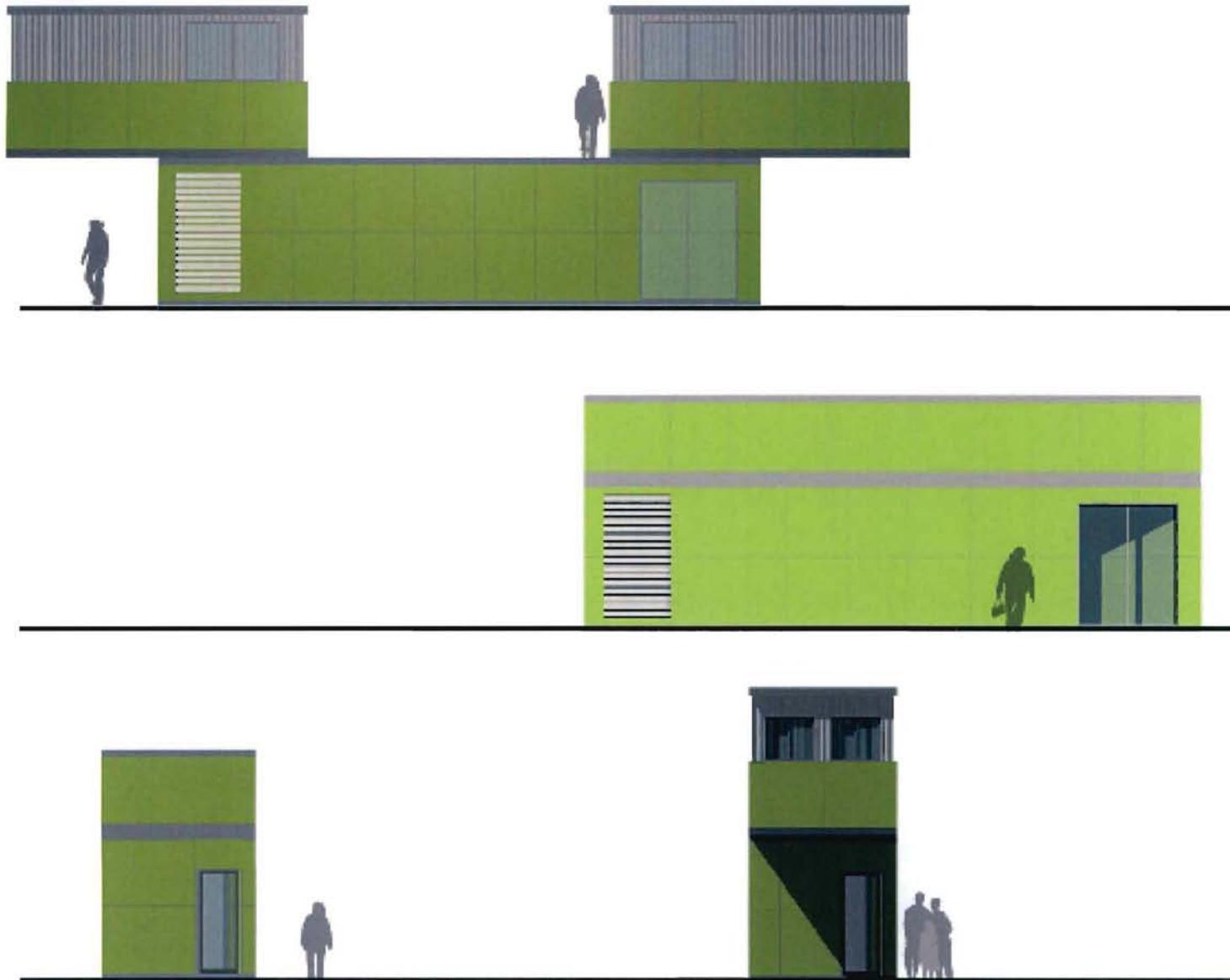
**Floor Plans** 3/32=1'-0"



# Final Project

Housing Unit C  
800 sf.

Elevations 3/32=1'-0"



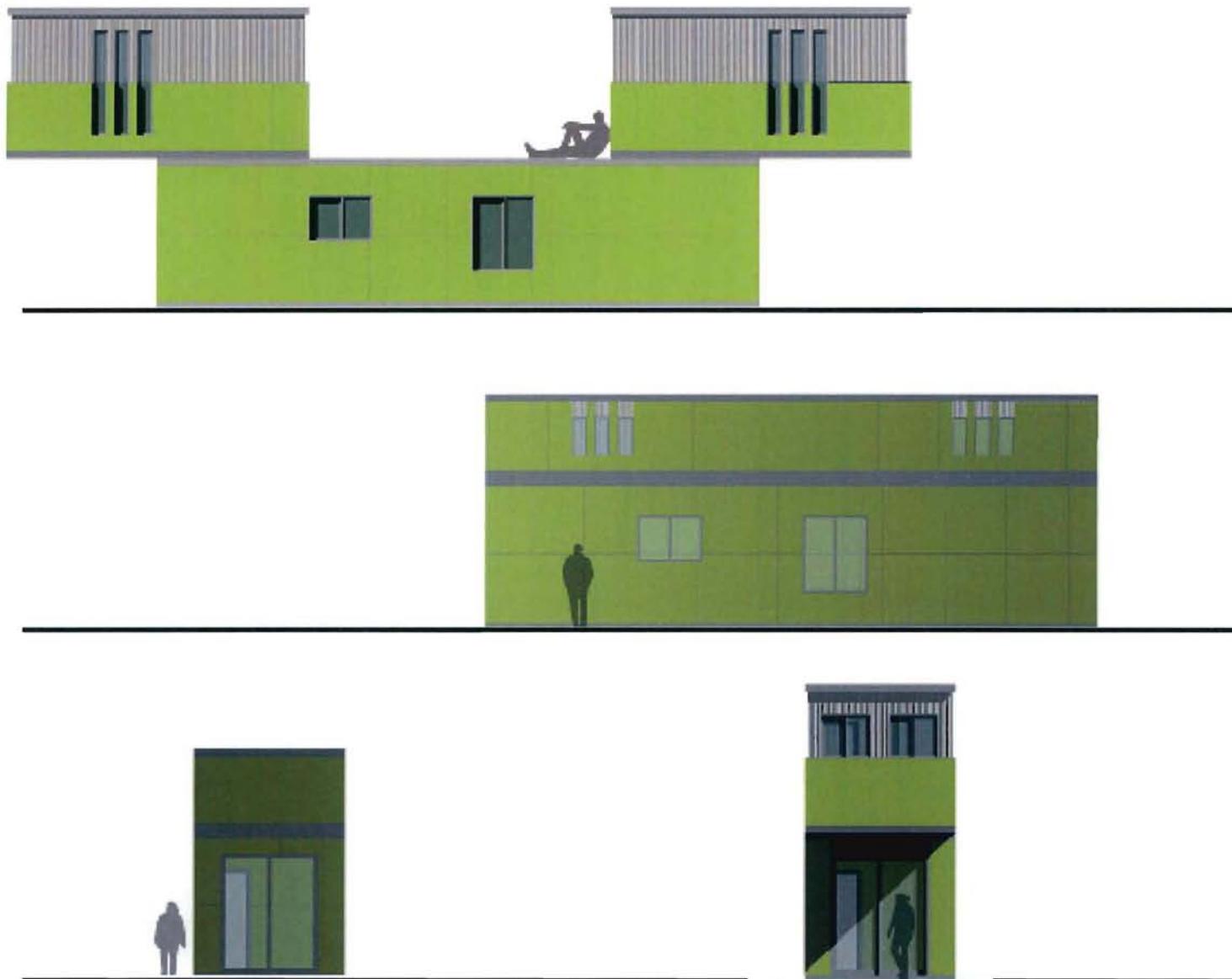
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# Final Project

Housing Unit C  
800 sf.

**Elevations** 3/32=1'-0"

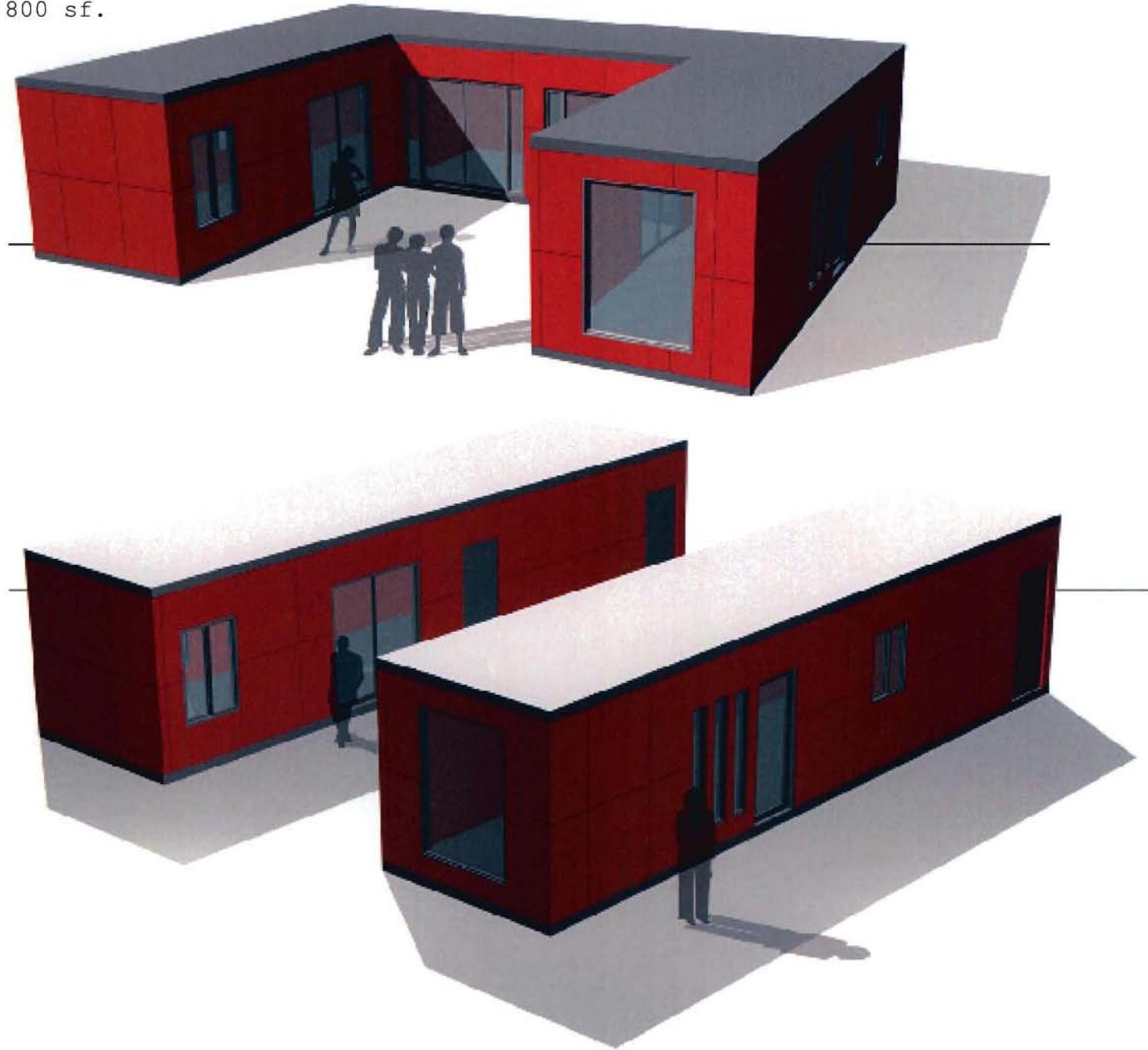


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## Final Project

Housing Unit **D**  
800 sf.

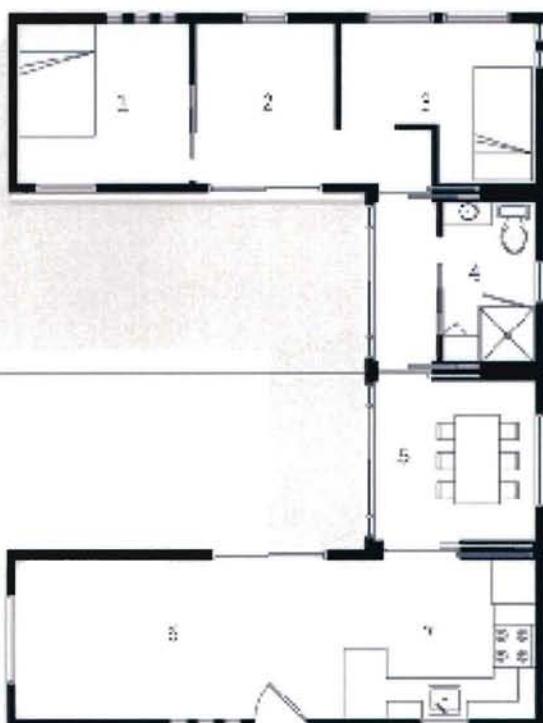


Unit D creates a larger single story living space. The on-site U arrangement that it creates helps to define a definite private space. The walls of the unit that face into the courtyard like space are clad predominately in glass, attempting to allow the residents living space to flow right into it and become an extended part of the home.

**Floor Plans** 3/32=1'-0"

# Final Project

Housing Unit D  
800 sf.



1. BEDROOM 1    5. DINING  
2. STUDY            6. LIVING  
3. BEDROOM 2      7. KITCHEN  
4. BATHROOM



Floor Plans 3/32=1'-0"



Elevations 3/32=1'-0"

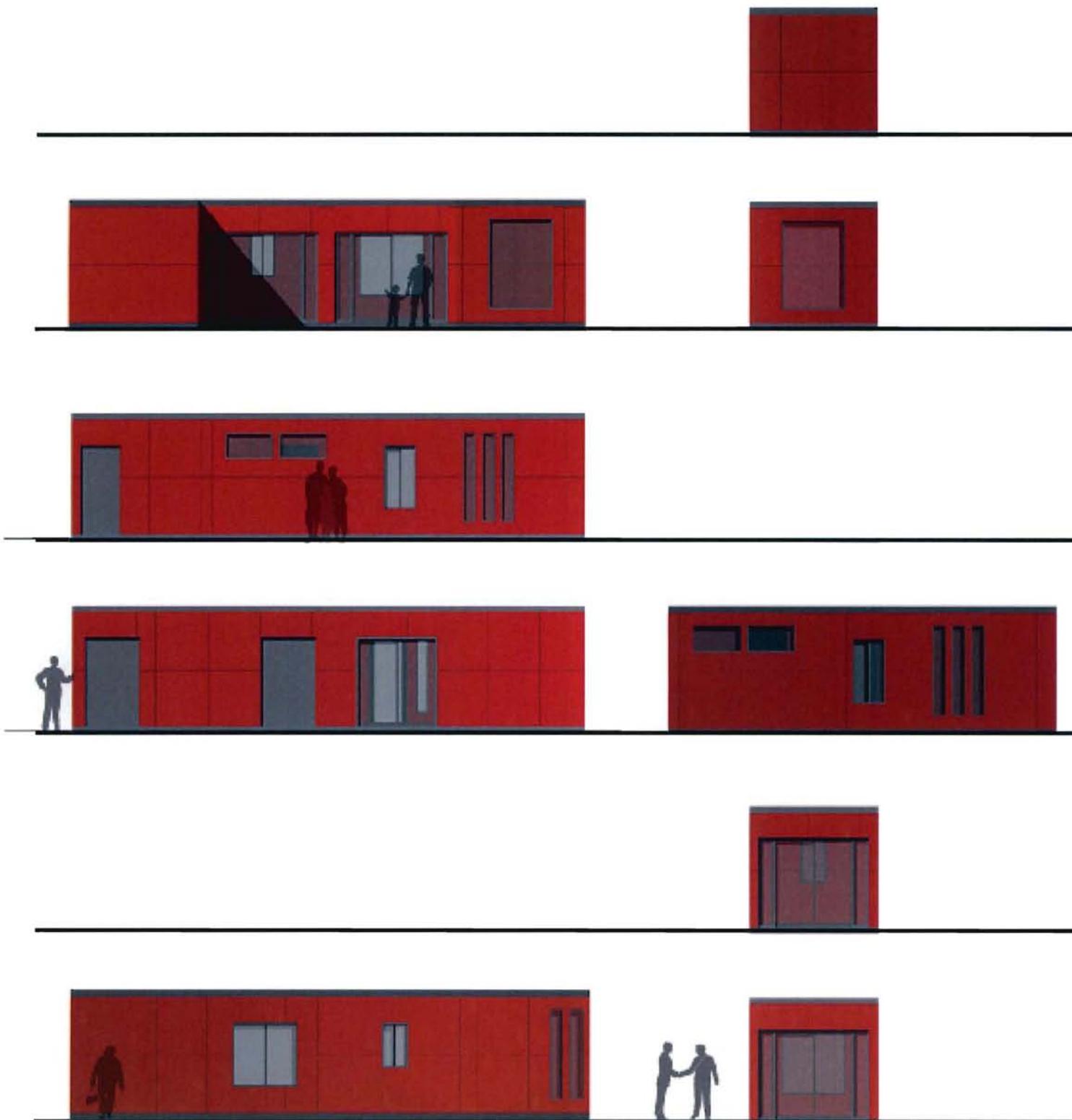
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# Final Project

Housing Unit D  
800 sf.

Elevations 3/32=1'-0"



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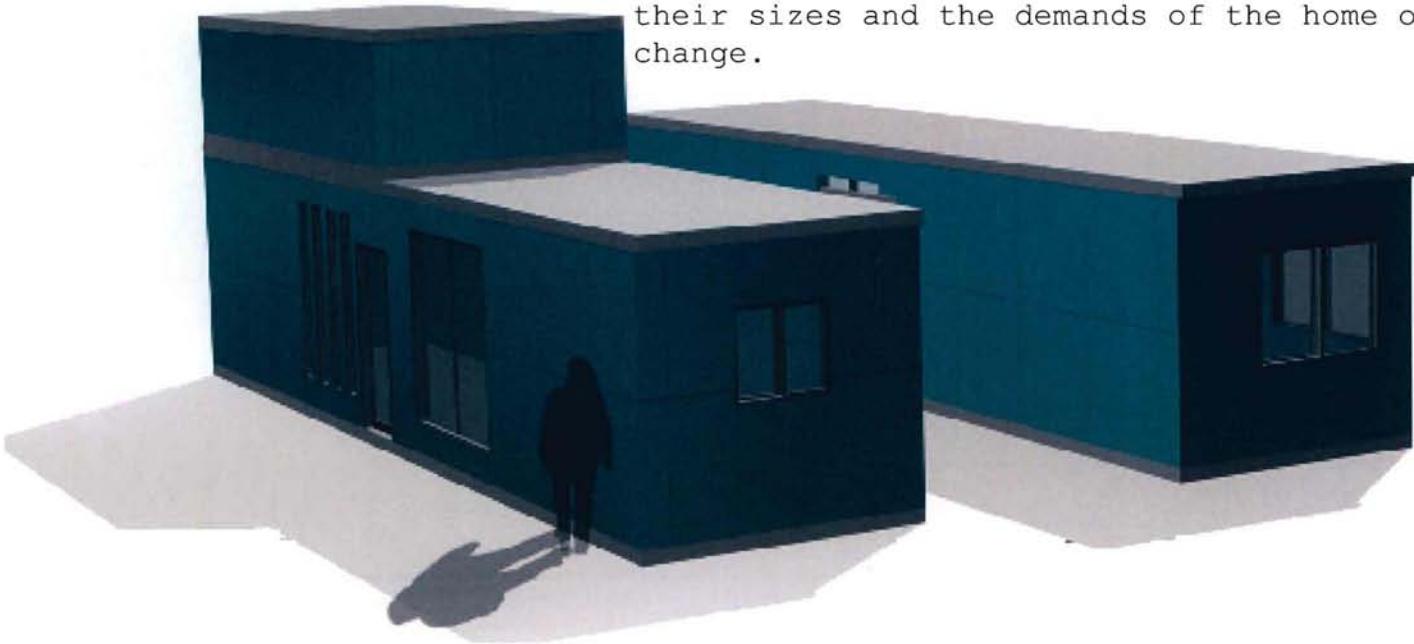
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## Final Project

Housing Unit **E**  
1000 sf.

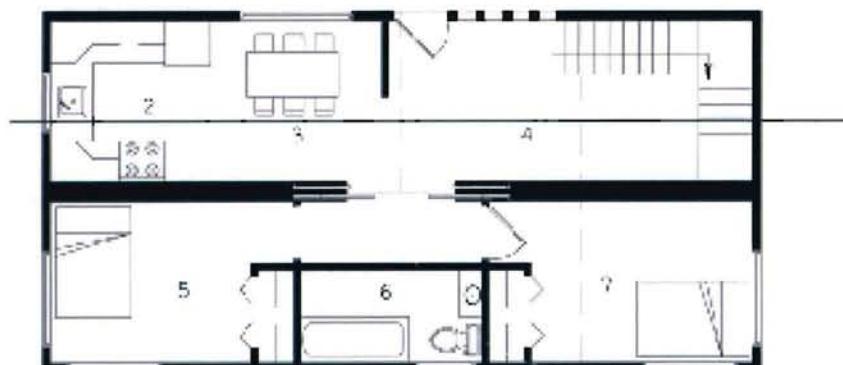
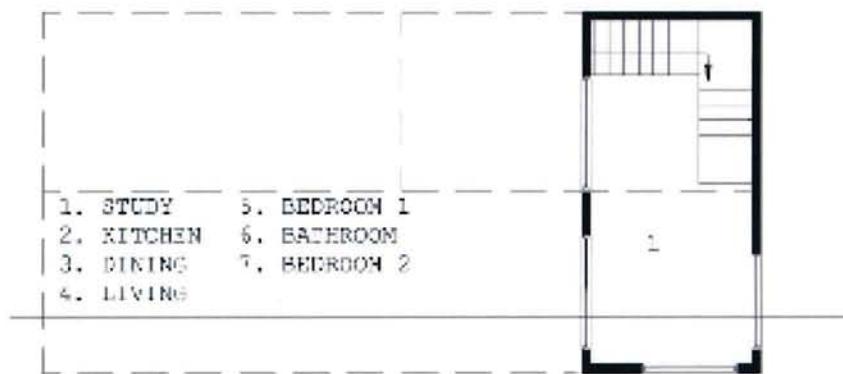


Unit E represents an opportunity for individuals to add space to their unit. One part of the unit is identical in form to that of Unit B. By adding an additional 10'X40' Unit underneath the cantilever the residents gain an additional 400 sf. of space. This shows an example of how the housing units can expand and reduce their sizes and the demands of the home owners change.

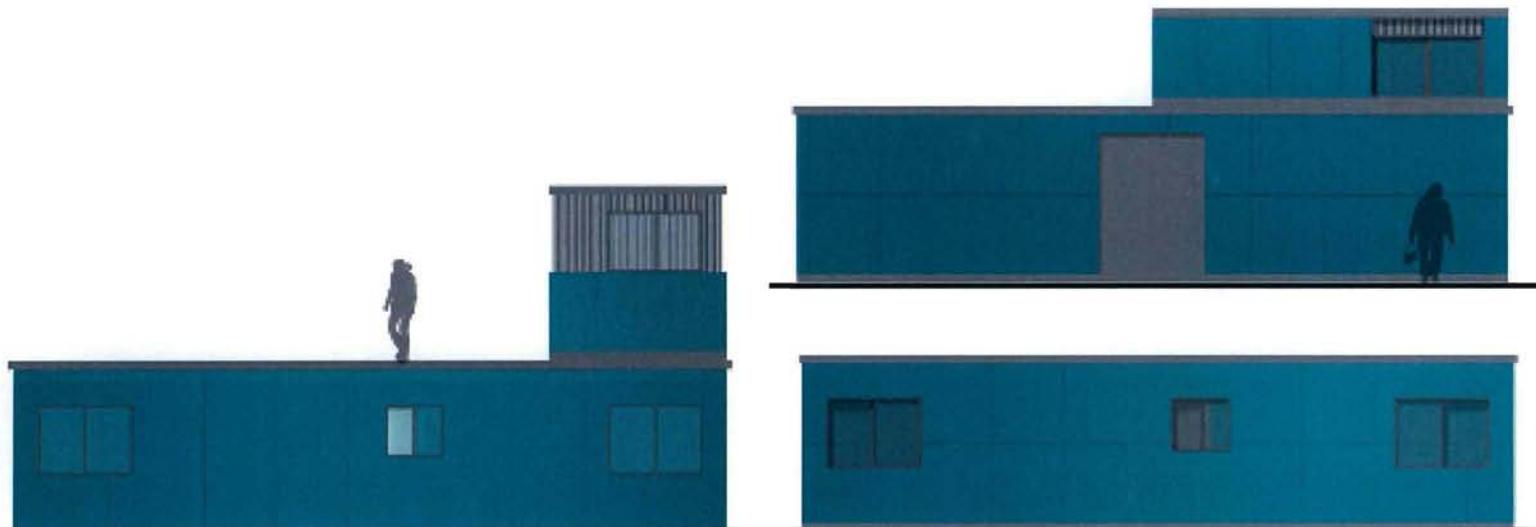


# Final Project

Housing Unit **E**  
1000 sf.



Floor Plans  $3/32=1'-0''$



Elevations  $3/32=1'-0''$

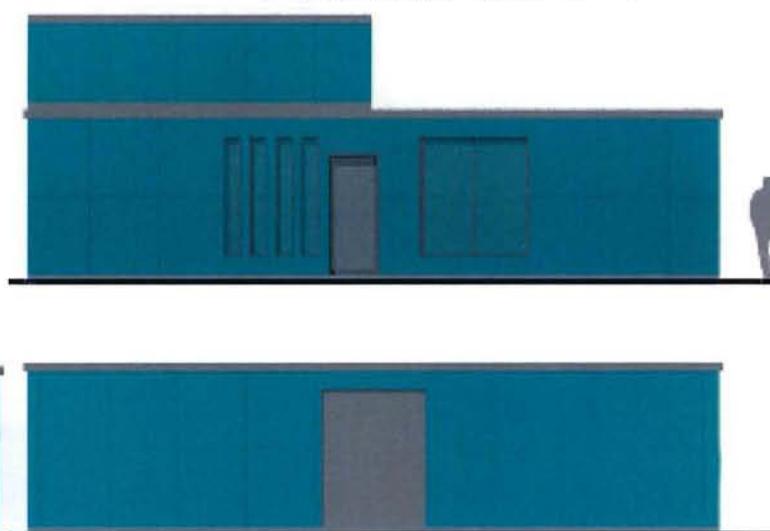
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# Final Project

Housing Unit D  
800 sf.

Elevations 3/32=1'-0"



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## Conclusion

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Starting with the original thesis I don't know if a true thesis statement was ever established. A clear viewpoint was never established and this in return complicated the projects mission. I feel that if a true position on whether the trend to mobile housing was good or bad was stated in the beginning then the project would have been stronger in arguing for or against something. As it stands it just "is".

Another issue that wasn't answered in attempting to set forth the direction of the project is whom is actually going to live in this lifestyle. By establishing a list of individuals whom would live this lifestyle there becomes a more distinct and narrowed list of objectives that the project needs to address. This list of objectives would also help to facilitate the ways in which to help promote community amongst the residents. Currently the project stands open ended to who partakes in this life and return leaves the programming of spaces vague and perhaps under developed.

The design process truly helped to send this project in varying directions. I think that it battled through many preconceived notions that through the process became evident couldn't exist. An example of this would be minimalist approach towards the structure that I had taken at the beginning. It became obvious this structure would have to be quite large and complicated. It then became an investigation in how to minimize that structure and how to make the structure that did exist less evident.

One preconceived idea that also faulted the project I think even till the end was the assumption that housing unit would be coming and going from the site at a regular pace. However the reality of the

## Conclusion

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project is that most people would probably stay for quite an extended amount of time. This then raises questions of how this reflects the structure and things that it provides. Do individuals who are living here for a longer time need different things than those that were assumed to be spending less time on the site?

I question at the end if perhaps the infinite number of organizations for the housing unit within the structure makes these too complicated? Should there be more permanent parts of the structure that the housing units interact with, that as they grow, come, and go change the space that all the residents interact with?

Mobile housing is a difficult thing because its desires for freedom it contradicts the individuals want and need for permanence and a sense of belonging.

## Endnotes

- "... with buildings often sited in an area with no thought as to why and how"  
- Leave Us Alone
- "It is not just about the relationship of people to their places; it also creates relationships among people in places."  
- Leave Us Alone
- "We should be concerned about this goal to create relationships between people."  
- Leave Us Alone
- "All that is temporary desires permanence."  
- A House of Parts
- "... particular circumstances of the west bank, where Palestinians are confined to low ground levels, sandwiched between the hillsides, air rights and the under ground aquifers claimed by the Israelis."  
- A House of Parts
- "... a real dedicated and personal dwelling with the continuity of their own possessions, though with a changing view from the window."  
- Portable Architecture
- "... to provide shelter and foster the activities that are accommodated. The way in which it achieves this should not be comprised by its portability and the user should not have to suffer inferior standards simply because the building happens to be movable.  
- Portable Architecture
- "Our worry is that the house must be designed for the people, rather than the people for the house."  
- The Modular Number Pattern
- "New urbanists 'speak of community and neighborhood as physical rather than social activities, as if community resulted from the built form rather than from people who inhabit it.'"  
- Shaping The City
- "The presumption ... that neighborhoods are in some sense "intrinsic," and that the proper form of cities is some "structure of neighborhoods." That neighborhood is equivalent to "community," and "community" is what most Americans want and need."  
- Shaping The City
- "Intermediate space can occasionally act as a stimulus for metamorphosis."  
- The Philosophy of Symbiosis
- "The mobile dwelling represents a desire for a familiar space in a new and unfamiliar environment."  
- Move House
- "... not all mobile homes are cheap alternatives to a permanent property."  
- Move House

## Endnotes

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- “Oasis acknowledges that one of the more appealing aspects of the mobile home lies in its capacity to demand social interaction. Temporary communities, formed when like-minded travelers converge on a single location, provide an oasis of nourishment for the lonely nomad, while also aiding innovation in the design of all kinds of mobile dwellings.”  
- Move House
- “The scale of our homes should be as varied as the spatial needs of their inhabitants.” States Shafer. “It is those needs rather than government regulations and consumption that should determine house size.”  
- Move House
- “Starter homes and commercial units assembled from ready-made kits use the walls for reinforcement, an act that transforms them from segregating barriers into instruments of inclusion.”  
- Move House
- “We drop culture and that how we erase culture.”  
- Tom Sachs
- “A city where many buildings are just temporary fixtures constructed to serve limited purpose and then demolished.”  
- Move House
- “... the transportability of the modules will encourage homeowners to sell their unwanted units instead of destroying them.”  
- Move House
- “By splitting the home into interconnecting modules, Cremier has designed a system that can fully exploit assembly line production and transport distribution.  
- Move House
- “Since the units can be combined in different constellations, the house can be adapted to suit its setting.”  
- Parasite Paradise

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