



2022

SOPHIA NOVAK

BEHIND CLOSED DOORS

BEHIND CLOSED DOORS

A LOOK AT
TRAUMA-
INFORMED
DESIGN

s.n.



shirazawa
inc.

A LOOK AT TRAUMA-INFORMED DESIGN



"It is not the bruises on the body that hurt. It is the wounds of the heart and the scars on the mind."
-Aisha Mirza

BEHIND
CLOSED
DOORS

A DOMESTIC
VIOLENCE
SHELTER

SOPHIA NOVAK

COMMITTEE
&
STUDIO

Thank you for your patience, time, and encouragement throughout the year. Your kindness and guidance have helped me to do my project topic justice.



KIRK HAMILTON, phd, faia, facha, edac
college of architecture julie & craig beale endowed professor
texas a&m university of health facility design



MICHAEL O'BRIEN, aia, ra
department of architecture
texas a&m university



NANCY DOWNING, ph.d, rn, sane-p, faan
college of nursing center of excellence in forensic nursing
texas a&m university texas a&m health



ANDREW HAWKINS, aia, leed ap, ncarb
department of architecture
texas a&m universty

A REMINDER

Help me to always be grateful and kind, especially
when I do not want to be.

TO MY FAMILY

To my parents, whose love and support have
always carried me through. I can never thank
you enough, I love you to the moon and back.

To my sister, whose never-ending compassion
and energy brightens my life. The true architect
in the family, *I lava you.*

A SPECIAL THANK YOU

To those who took the time to sit down with me and give me crucial insight about shelters and those whose lives are impacted by them.

WHITNEY THOMAS

family abuse center
waco, tx

DARYL CHANSUTHUS

wrap
jackson, tn

JOSHUA DOUGAN

assistant district attorney
general twenty-sixth judicial
district
state of tennessee
jackson, tn

RACHEL ROBERTS

DR. NORA MONTALVO-LIENDO

SHARLA HOSFORD

SHEILA MITCHELL



Healing of body and mind cannot happen when the surroundings do not create a place that properly promotes it.

Why should we care?



Whenever thinking of the motivation behind design, the last factor that comes to mind may be statistics. But when it comes to domestic violence, it is a brutal numbers game. 1 in 3 women and 1 in 4 men in the United States have experienced some form of physical violence by an

intimate partner (ncadv.org). 40.1% of Texas women and 34.9% of Texas men experience intimate partner physical violence, intimate partner rape and/or intimate partner stalking in their lifetimes (houstondomesticviolencedefense.com).

42,494 adult and children victims of domestic violence found refuge in emergency shelters, transitional housing, or other provided services by local domestic violence programs in 2018.

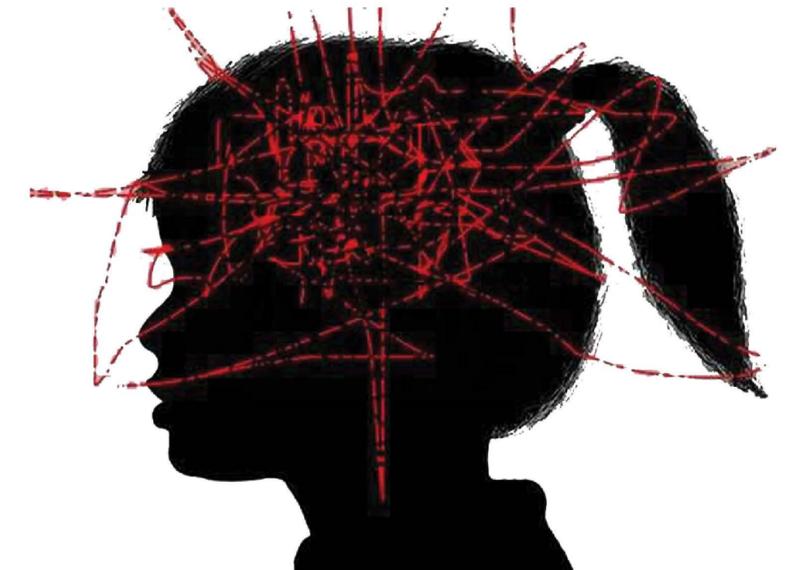
Of the shelters I talked to, approximately 60% were families whereas the other 40% were individuals. The

average family had at least 2 children, and maybe 100 people in a year would stay longer than a week.

In 2013, 31% of victims/survivors of domestic violence were turned away due to lack of resources.

Dear Santa,
 we had to leave our house. Dad was mad. We had to do all the chores. Dad got everything he wanted. → Mom said it was time to leave and she would take us to a safer place where we don't have to be scared.
 I'm still nervous. I don't want to talk to the other kids. Are you going to come this Christmas? We don't have any of our stuff here. Can you bring some chapter books, a dictionary, and a compass and a watch? I also want a very very Very good dad. Can you do that too?

The staggering number of underserved survivors and unmet needs underlined the desperate need for a new shelter model. Texas alone is shockingly underserved, and victims of domestic violence, both men and women, cannot find places to turn to escape. The options that are available to them if they aren't turned away are limited and lack the resources to provide for them fully.





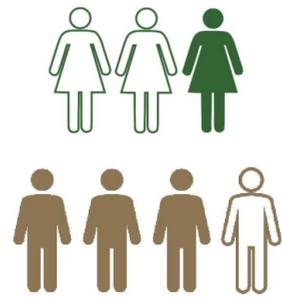
1

RESEARCH

C O N T E N T S



- 1 research
- 2 investigation
- 3 the proposal
- 4 conclusion
- 5 annex



RESEARCH:
motivation



The current shelter model typically has **no integration of trauma-informed design**, leading to a misuse of spaces that inflicts continual emotional stress on the residents. Sadly, they usually provide little to no access to private spaces for survivors to retreat and process their trauma, and perpetuate the **feelings of loss of control of daily routines, secure storage areas, and individuality.**



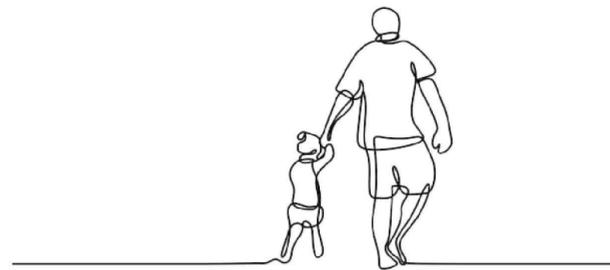
Many times, survivors leave the shelter only to find themselves to be **ill-equipped for a life fully independent of the abuser, and eventually fall into the cycle of abuse anew.** With this in mind, it is little wonder that survivors are wary of leaving their current situations when they are unsure if the world outside will be any more forgiving than the abuse they are already witnessing at home.





2

INVESTIGATION



INVESTIGATION:
trauma + design

Who are the clients? How can we understand their needs?

For me to best tackle this new shelter model and incorporate the elements of trauma-informed design, I had to understand what the client – the survivor – required. What would bring them to the shelter? What aspects would help them to heal, both physically and

mentally? What resources could set them up for success and help them to leave the shelter? And yet there are other clients too: the children of the survivors and the staff who will provide support. What are their specific needs?



The phases

There were three phases of research I pursued before beginning design to better understand my clients: investigation into domestic violence and trauma, architectural case studies, and interviews.

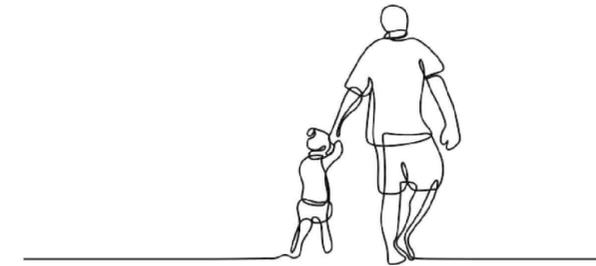
This would inform me of the clients themselves, the architecture, and finally the up-close and personal stories that would give my project the heart and the voice of survivors that had previously gone unheard.

There are 3 types of trauma:

Acute:
single incident

Chronic:
repeated/prolonged. An example would be domestic violence.

Complex:
exposure to multiple traumatic events.



What is trauma?

Not everyone will develop trauma, and if they do, not all symptoms will be long-term. Symptoms may be physical or emotional and may manifest immediately and/or in the future.

A person may find it hard to process what they went through, and if symptoms persist this may be an indication that trauma has developed into a mental disorder called post-traumatic stress disorder (PTSD).

Symptoms

A person may feel a wide array of emotions including denial, anger, shame, numbness, and guilt. Some physical symptoms include headaches, fatigue, and digestive symptoms. Traumatic events can have serious impacts on health at any age, including increasing the likeliness of an individual's chances of smoking, usage of alcohol or illegal street drugs, and attempts at suicide.

What causes it?

Causes

Trauma results from an exposure to an isolated incident or "...a series of events that are emotionally disturbing or life-threatening with lasting adverse effects on the individual's functioning and mental, physical, social, emotional, and/or spiritual well-being (trauma informed care. chcs.org)." The causes can range anywhere from abuse

(physical, emotional, sexual), to neglect, poverty, racism, war, or terrorism. Trauma can occur from a young age or into adulthood, but it has particularly crippling effects on a child's growing brain. This is usually referred to as adverse childhood experiences (ACEs), 62% of adults have at least one ACE, while 25% of adults have three or more ACEs.

Long-term effects

Therefore, adults who did not have to endure trauma in their childhoods are considered to be "wired" differently than those who did, and adults whose brains are built to deal with constant stress often struggle with depression, anxiety, and other problems that relate to emotional regulation. As a direct result, they struggle with personal and professional relationships as well.

Is it treatable?

Treatment

Some treatment options include therapy, body-based techniques to help the mind process, and - when necessary - medication. Even things like self-care, exercise, and mindfulness can be some options for those who have experienced trauma. For those trying to recover, research has proven that even a loving caregiver can help to decrease the effects of trauma symptoms.

Trauma in children

Children are particularly vulnerable to trauma due to their quickly developing brains, and when they are exposed to constant stress due to something like chronic trauma it can affect their emotional, behavioral, and cognitive functioning. Later on this can go on to impact not only their mental and physical health but their emotional development and behavior as well. A child who has been exposed to stressful or harmful situations is also at greater risk for chronic health conditions and/or health-risk behaviors.

Hormones + Stress

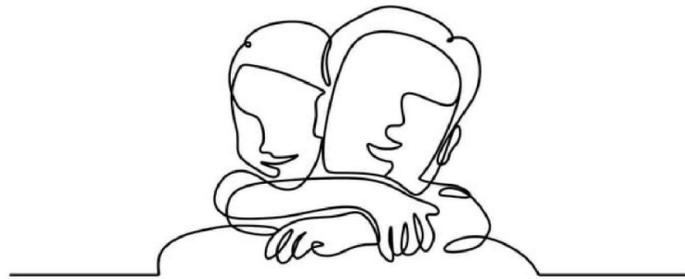
Cortisol and adrenaline are two critical hormones responsible for regulating stress in the body. "Exposure to these stress hormones plays an important role in keeping people safe during times of danger; however, repeated or prolonged exposure is associated with poorer early childhood brain development (traumainformedcare.chcs.org)." Extreme stress like this alters not only the structures of our brains, but even our DNA.



What is trauma-informed design?

The first thing I needed to understand in my investigation is what trauma-informed design entailed. Or, in other words, what exactly was it? "Trauma-informed design incorporates the principles of trauma-informed care: empathy and understanding...The goal of trauma-informed design is to create environments that promote a sense of calm, safety, dignity, empowerment, and well-being for all occupants. "These outcomes can be

achieved by adapting spatial layout, thoughtful furniture choices, visual interest, light and color, art, and biophilic design (e4architecture.com)." According to the Substance Abuse and Mental Health Services Administration, or SAMHSA, "The principles of trauma-informed care include safety, trustworthiness and transparency, peer support, collaboration and mutuality, empowerment, voice and choice, as well as cultural, historical and gender issues (forbes.com)."



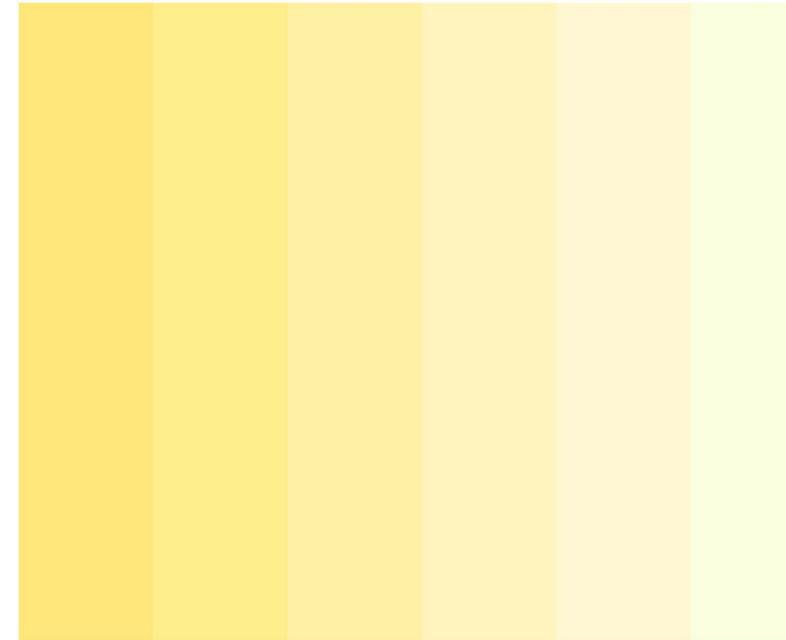
Some Architecture Techniques for Trauma-Informed Design:

This helped me to realize that not all trauma-informed design could be done by architecture alone but must be incorporated into the atmosphere of the shelter itself. This included educating and informing staff of procedures required of them as a means to provide the best healing environment possible for survivors during the entirety of their stay.

The intangible atmosphere can be further strengthened by dynamic and stimulating physical environments that are perceived to be safe and tidy, and other factors to take into consideration are organization, creation of dignified and adequate personal space, and ensuring that user's sense of personal control is never encroached upon.

Note: Consider the use of spaces that allow for privacy and personal space. Spaces should be well-labeled and predictable with clear wayfinding. Natural light is a must without compromising privacy, and dedicated spaces should be consistent in their function.

Use warm white light



A feeling of safety throughout the design should be unwavering, and this can include things such as integration of wider corridors, plenty of light fixtures, or a secure fence or wall around the perimeter of the property. Walls and fences may be seen as public 'barriers' within the community, but they do not have to act as such as long as communication is possible between residents. Social areas where residents can gather to interact and heal are heavily sought after, as are green spaces to break up monotonous corridors and floorplans.

Use cool color palettes





INVESTIGATION:
why don't they leave?

The second question to be addressed, and perhaps the most distressing, is why won't victims just leave?

There are several answers: trauma bonding, their needs (financial, emotional, physical, etc.) are being met, societal factors, fear for their children or pets, or they are trapped in a cycle where they feel safe even though they are not.



Trauma bonding: a bond created with an abuser that develops out of a repeated cycle of abuse, devaluation, and positive reinforcement. It is easier to leave a situation when the environment is continually bad, but in this case the abuse is alternated with kindness and intimacy. Trauma bonds have a cycle of abuse as well as a power imbalance. The victim feels like they are being controlled to the point where they can no longer break free of the relationship or know how to live without it. The victim may make excuses for their abuser and justify their actions in order to rationalize staying in the relationship.



Met needs: Many times the abuser is meeting several needs of the victim and the family. This can include not only the emotional needs, but housing, financial, transportation, and even physical support. Victims fear that once out of the relationship, they will not have the means to continue their lives and support their families without the abuser's help. Financial abuse is commonly used to control victims, where every penny is counted in order to maintain power over every action a victim might make - including any move to leave.

Leaving is not as simple as flipping a switch, and there is often a factor of intense fear when they finally do as the leaving period is when things can turn deadly.

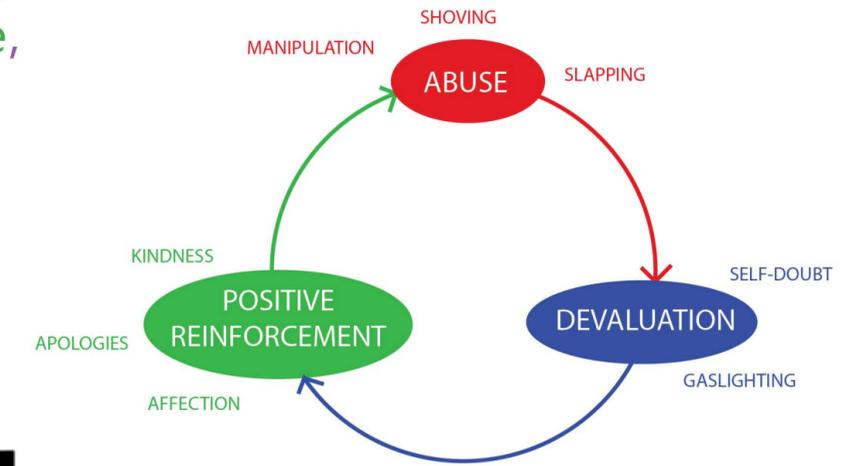


Children + Pets: Victims with children sometimes stay due to the hesitation of splitting up the family unit. They worry that a single parent family will be worse for their children than a family with two parents, even though one may be abusive. Abusers may even use the children or pet as a guilt tactic, or threaten them to keep the victim to stay.



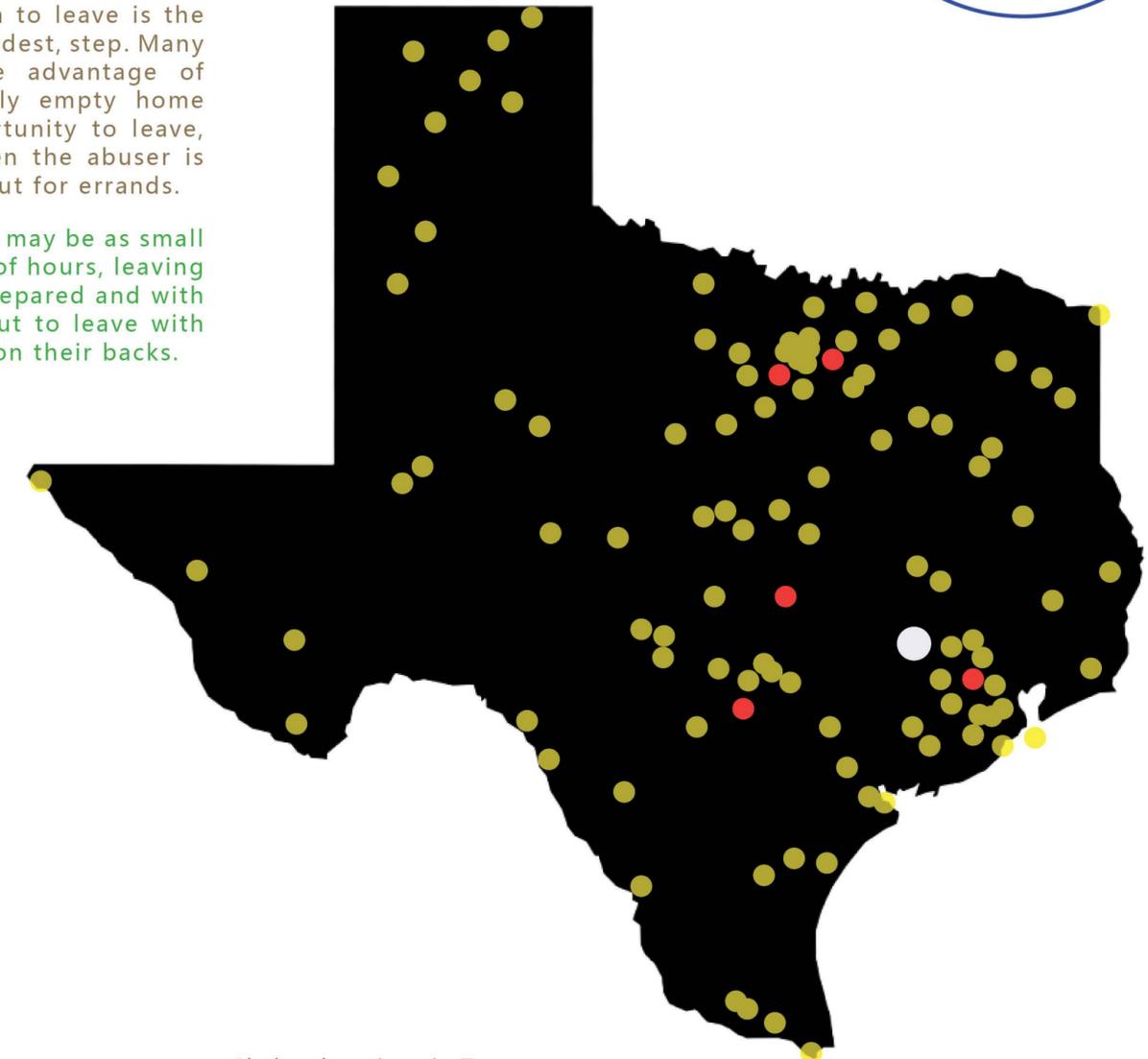
Feeling Safe vs Being Safe: If someone has experienced physical or emotional abuse in their childhood, it is likely to be all they know and what they interpret as love. As a result, they are prone to return to these relationships in their adult life since this is what their brain understands to be familiar and safe.

Domestic violence is all about power and control, and once the victim makes the choice to leave, this is lost.



The decision to leave is the first, and hardest, step. Many victims take advantage of a temporarily empty home as an opportunity to leave, such as when the abuser is at work or out for errands.

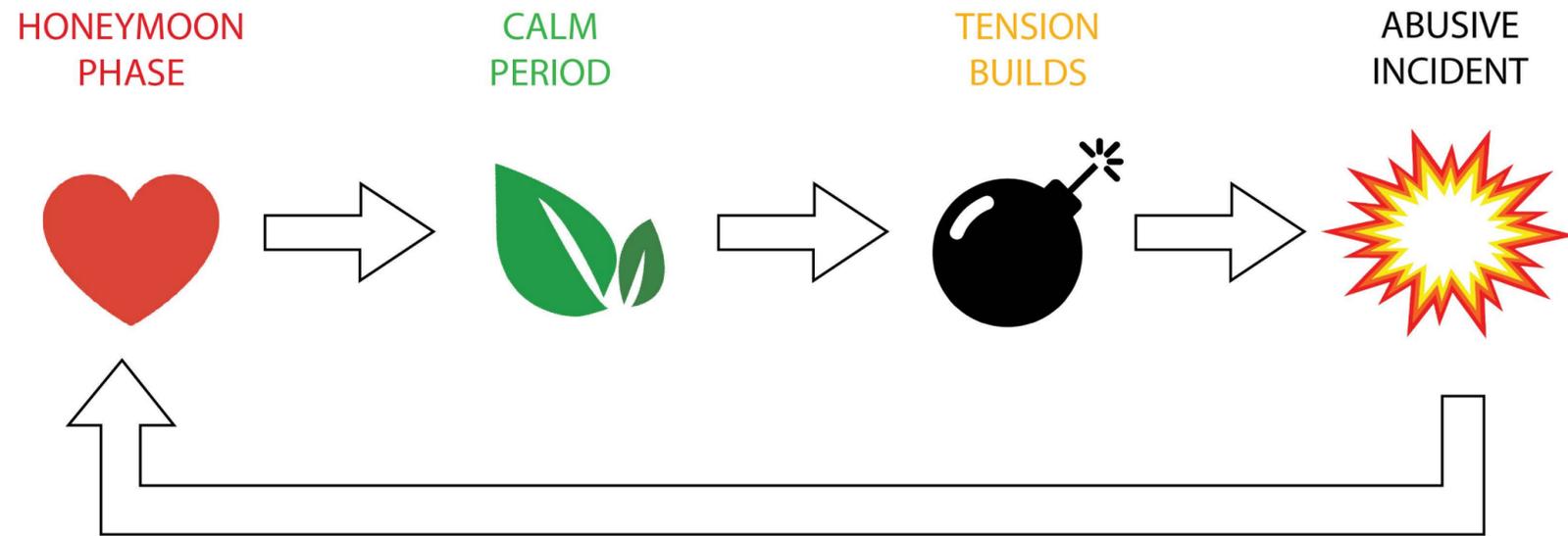
This window may be as small as a couple of hours, leaving victims unprepared and with no choice but to leave with the clothes on their backs.



Shelter locations in Texas

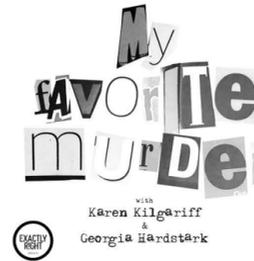


It takes an average of **7 tries** for a victim to leave before they can do so successfully.



If the victim was able to call authorities and have the abuser arrested, some states have a **temporary cooling off period** in which they hold the

perpetrator. This is short-lived, however, and once the abuser is released it may be unwise for the victim to be home when they are free.



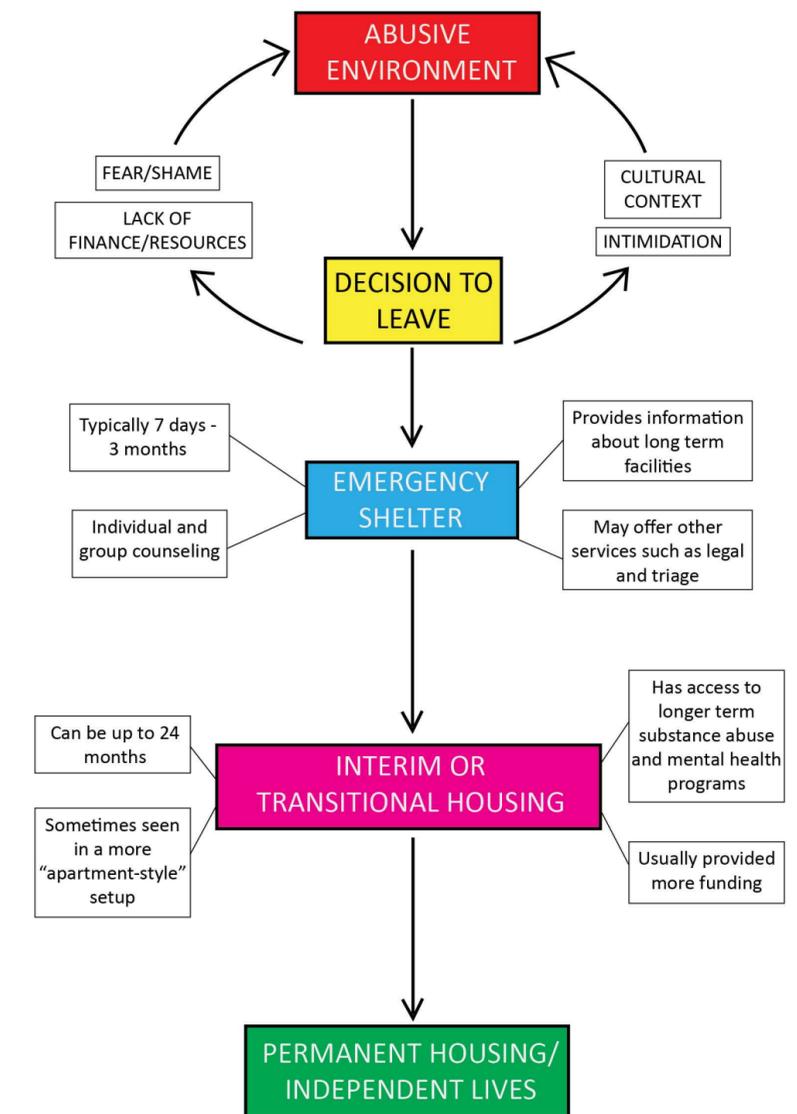
Some podcasts that cover domestic violence stories.



Victims are encouraged to stay a maximum of **3 months** in an emergency shelter. Anything past this amount of time is typically considered transitional housing.



Emergency shelters are generally not equipped with long-term drug abuse or mental facilities. Their job is to provide residents with resources necessary to get the help they need.



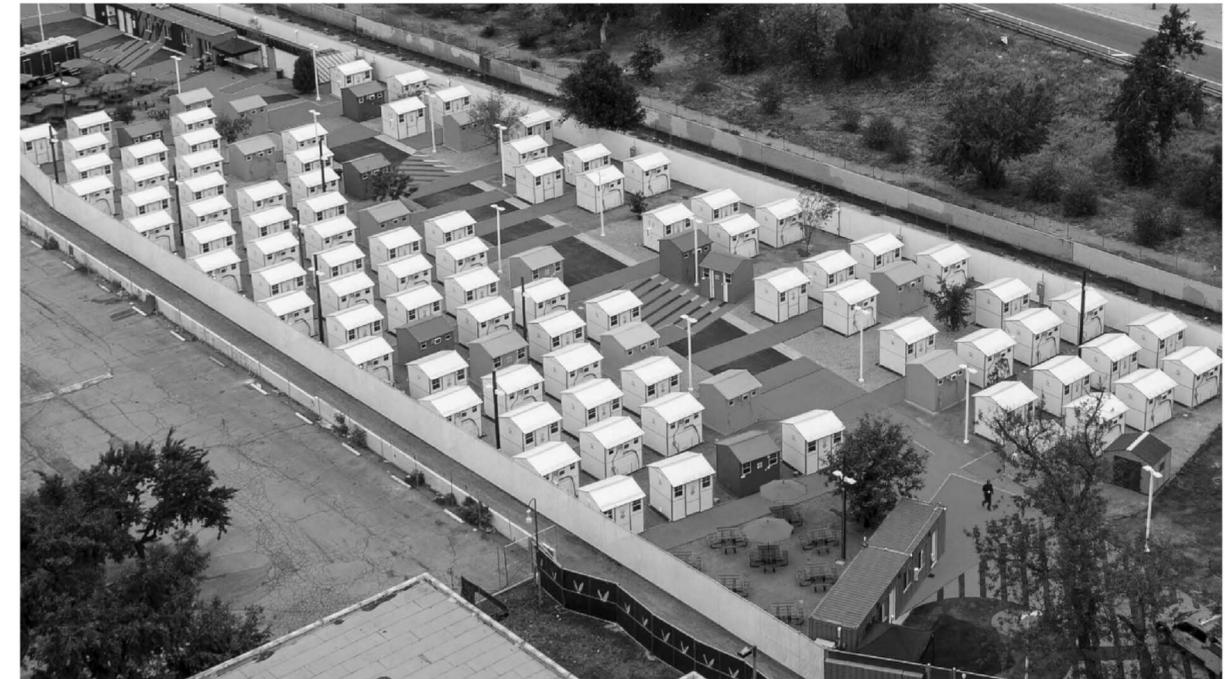


INVESTIGATION:
case studies



Learning from Others

The case studies I chose were Shelter for Victims of Domestic Violence by Amos Goldreich Architecture and Jacobs Yaniv Architects, Home for the Homeless by xystudio, Alexandria Park Tiny Home Village by Lehrer Architects, and Transitional Housing by David Walker Architects. From the Amos Goldreich/Jacobs Yaniv project the essential pieces I wanted to draw from were the interior corridor, the family 'houses', and the courtyard that functions as the 'heart' of the shelter.



This provides less of an overwhelming experience to the residents and encourages interaction between peers in the larger communal spaces. Each of these case studies contained aspects of trauma-informed design that I hoped to integrate into my project: easily navigated space, clear sight lines, increase of a user's sense of safety, biophilic design, low physical effort, and connection and community just to name a few. The xystudio shelter

utilized a bright courtyard, and I hoped to draw from the unique materials it employed – materials that pay tribute to its "rejected" residents. As for the Tiny Home Village wayfinding, organization, and safety are the features I focused on. David Walker Architects drew my attention by breaking down the amount of people using each space to create a more intimate healing environment for the residents.



SHELTER FOR VICTIMS OF DOMESTIC VIOLENCE
amos goldreich
architecture
jacobs yaniv architects
tel-aviv yafo, israel
2018
17,223 sqft



This shelter is one of the few in the world in which was designed and built while in consultation with the staff who would later occupy and run it. It was created to provide refuge to abused women and children, no matter their background or location. Architect Amos Goldreich admires the work of

artist Eduardo Chillidia, and recalled his project "Okamoto", in which he planned to hollow out a mountain. Goldreich involved the idea of stone into his architecture: a rough, protective exterior and a smooth, delicate interior. The central garden would evolve into the therapeutic 'heart' of the shelter.





HOME FOR THE HOMELESS
 xystudio
 janiowice, poland
 2019
 15,985 sqft

The shelter in Jankowice is designed for homeless people who are too healthy to live in a social welfare home yet too 'unhealthy' to go to a regular shelter.

The one-story building blends into the surrounding fields and hills thanks to its wavy roof, hiding it from the nearby road. The site is a former school playground, but now old trees assist in concealing the building. All windows provide stunning

views, and the building is split into three main zones: an entrance (public), 19 resident rooms and bathrooms (private), and 3 caretaker apartments (private).

The residents of the shelter need socialization, so the rooms are purposefully tiny in order to encourage them to leave them during the day and interact with their peers.

The rooms are perfect as 'sleeping cells' and are in direct contrast to the rest of the glazed spaces.

There is a dining and common-room, which the residents are encouraged to help in, and there is a courtyard - which is considered a crucial healing and social area. It is decorated with a colorful mural that breaks the seriousness of the exterior of the rest of the building.

The building is fully ADA accessible and puts ecological materials to use. Facades are made of rejected materials and generous overhangs are provided for residents to sit, smoke, observe, and - most importantly - talk.

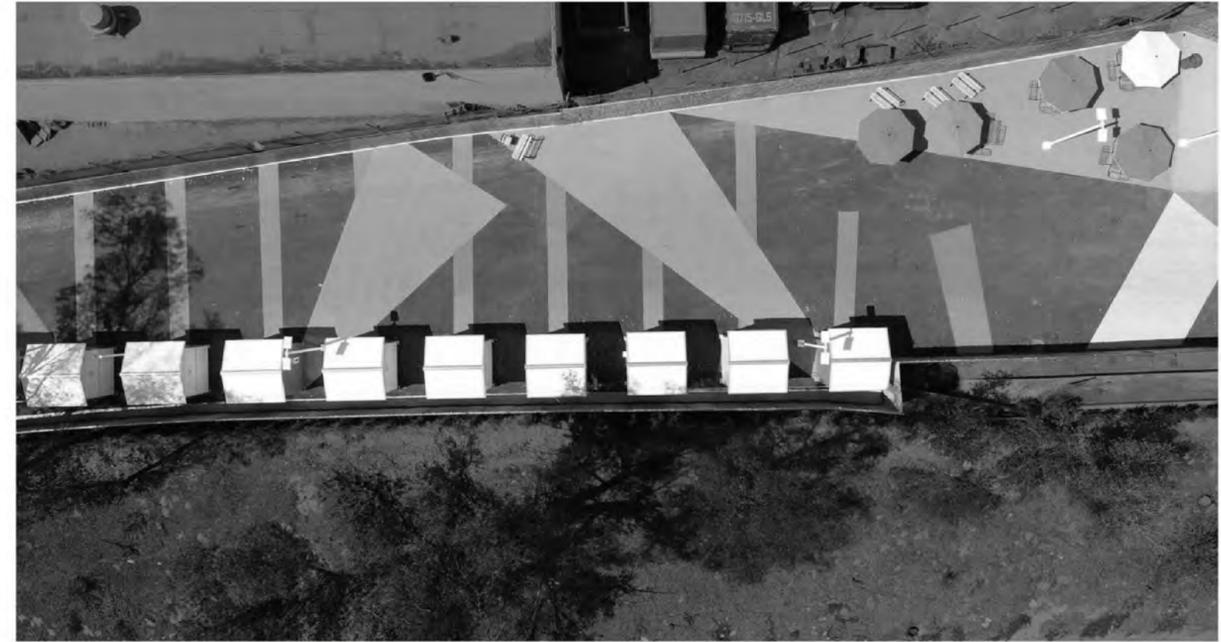


ALEXANDRIA PARK TINY HOME VILLAGE
lehrer architects
los angeles, california
2021
103 units (200 beds)



Alexandria Park Tiny Home Village is a collection of 103 micro homes that provide housing to up to 200 people at a time in Los Angeles. It is located on a narrow North Hollywood plot and is full of brightly colored pavement and gabled shelters. Each shelter is manufactured by Pallet, and is square shaped, 8-foot-wide, and may accommodate one or two people.

The site sits near the 170 freeway, and the project is a collaboration between Lehrer Architects and a team from the Los Angeles City Bureau of Engineering.



The village is arranged like a tiny residential neighborhood, with the cabins in rows on either side of a main street. The asphalt surfaces between the shelters are covered in blocks of yellow, blue, red and green paint. Neighborhood clusters are marked by gravel surfaces.

In order to decide which cabins should be painted and which left white, Lehrer Architects rolled a 3D camera down central street. This enabled them to choose which cabins should function as the landmarks of the village as people walk through the complex.



TRANSITIONAL HOUSING
david walker architects
new york
1987-1989

A program of prototype buildings designed to take single adults and families from shelters into supportive housing followed the fast rise in homelessness in the mid-1980s in the city of New York.

The buildings were organized into eight bedroom 'houses' that formed pairs sharing a toilet and shower room. A kitchen/dining room and double-height living room was then shared by four pairs.



This created a social group consisting of eight residents that was a manageable size and reduced the feeling of an institution inside of the dwelling units. When looking at the buildings in section, the double-height living spaces alternate 'front to back', allowing the upper portion of each living room to slide up behind the kitchen of the unit above.



The kitchen would then receive borrowed light from the band of glass blocks. This prototype would go on to be adapted on four separate sites. Each site was different, creating distinct buildings of four to six stories, depending on how the building block of the house unit needed to be laid out.



INVESTIGATION:
interviews

THE QUESTIONS

Finally, I was able to interview seven individuals ranging from shelter managers to district attorneys who were able to provide invaluable insight into the daily lives of those who live and work at the shelters.

I asked about **logistics**:

What are the architectural programmatic spaces necessary for the running of the shelter? What was a space that they wished they had? What about the location of the shelter, would they change it? What was the biggest security concern?

I asked more **personal** questions:

How do you make the shelter feel more like a home? What does daily life consist of? What is leaving day like, is it a celebration?

THE ANSWERS

There were several concepts that were repeated:

“Give them **space** to breathe and meditate, places for them to regain their control and process their trauma.”

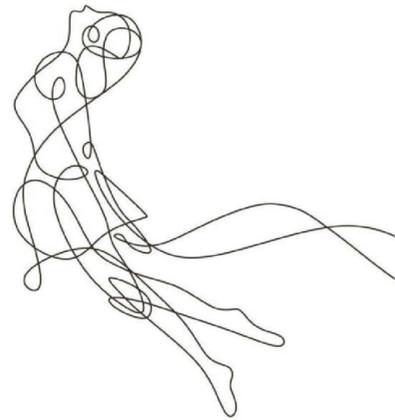
“**Security** is important – you need cameras, locks, fences or walls.”

“**Tradition** is key to make it feel like home with the celebration of birthdays, Christmas, or holidays... not all of the feeling of home is through the built environment.”

Basically, it would be essential for my design to guarantee security to the inhabitants while creating a space where the survivors could regain a sense of individuality, dignity, and control.

How could I provide refuge for survivors to heal from intimate trauma and transition from dependence?

Chansuthus, Daryl, Interview, July 2021 Montalvo-Liendo, Interview, December 2021
Hosford, Sharla, Interview, January 2022
Mitchell, Sheila, Interview, January 2022
Thomas, Whitney, Interview, July 2021



INVESTIGATION: anecdotes

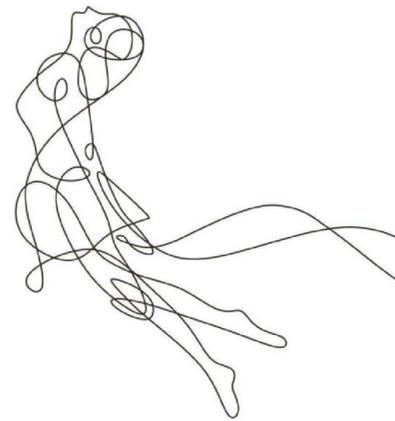
Following the architectural answers were a couple of anecdotes that jolted me back to the reality of why I decided to pursue this specific topic, and reminded me that buildings house souls, not just bodies.

VERONICA'S STORY

One was Veronica, a single mother who left the shelter in Brownsville in 2010 with her three young children. She was confident she would recognize the red flags of any future abusive relationships and assured the staff members, who at that point considered themselves her family as well, that under no circumstances would she return to her ex-husband. After all, he had only been verbally abusive anyways and posed no physical threat to her and her children.

Therefore, the news of her murder was shocking and heartbreaking to all who heard just a few short days later. Her ex-husband had lured her back to his house under the false pretenses of chest pains, only to take her life in cold blood. Her children were left to her brother, and that is when I learned that leaving day at a shelter is not always a celebration when you don't know if or when you'll ever see a survivor alive again.

Narrative shared by
Dr. Montalvo-Liendo



THE TWO BROTHERS

The second story was of two young brothers, aged six and four, who were touring a shelter in Oklahoma with their mother. The six-year-old wandered around an apartment unit until he came upon a closet, to which he turned to his brother and said "Look bubba! Here is a

new safe place for us to hide whenever daddy gets angry." A child as young as six had been through so much trauma in his brief life that he had already developed habits such as this, highlighting the desperate need for trauma-informed design for all ages of survivors.

Narrative shared by
Sheila Mitchell





3

PROPOSAL THE



THE PROPOSAL:
site + context



Above: Ground photos



Above: Site with context (NTS)

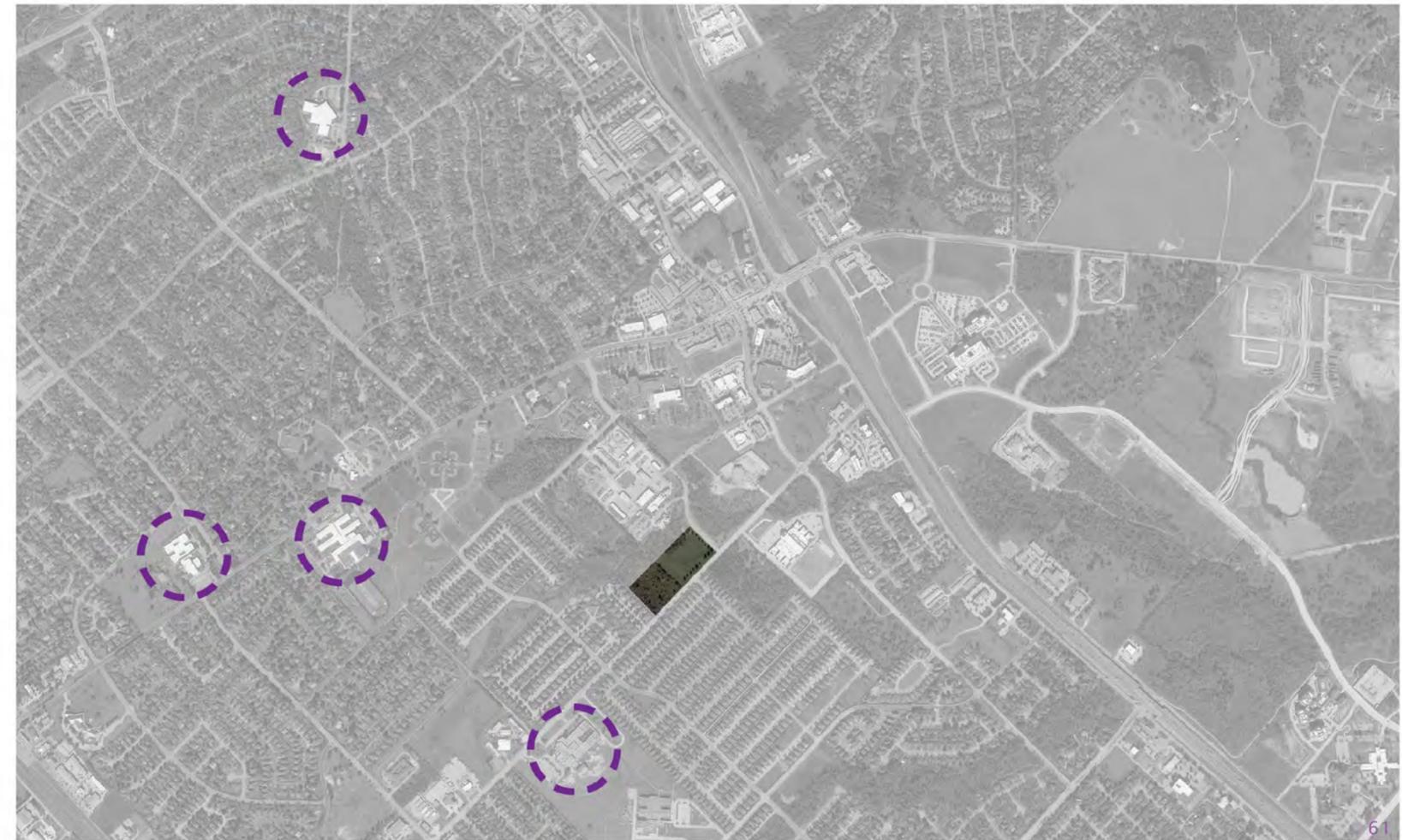
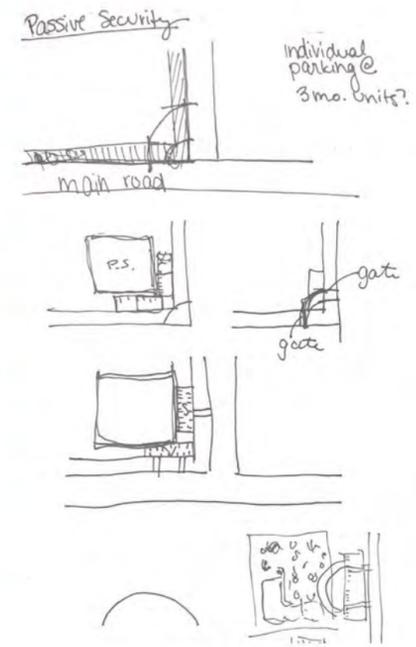
With a prompt so demanding, I needed to take bite-sized chunks and find a place to start based off of the research I had found and the rich information provided by my interviewees. I decided to begin with the site location.



The site needed to be accessible to victims, authorities, hospitals, and amenities alike while having enough room for a vegetation buffer for privacy and noise control is typically desired. Often times shelter staff will pick up victims from hospitals on their first night or perhaps take a resident for special medical visits, meaning proximity to medical facilities is a must.

Above: Site location (NTS)
 Right: School locations (NTS)

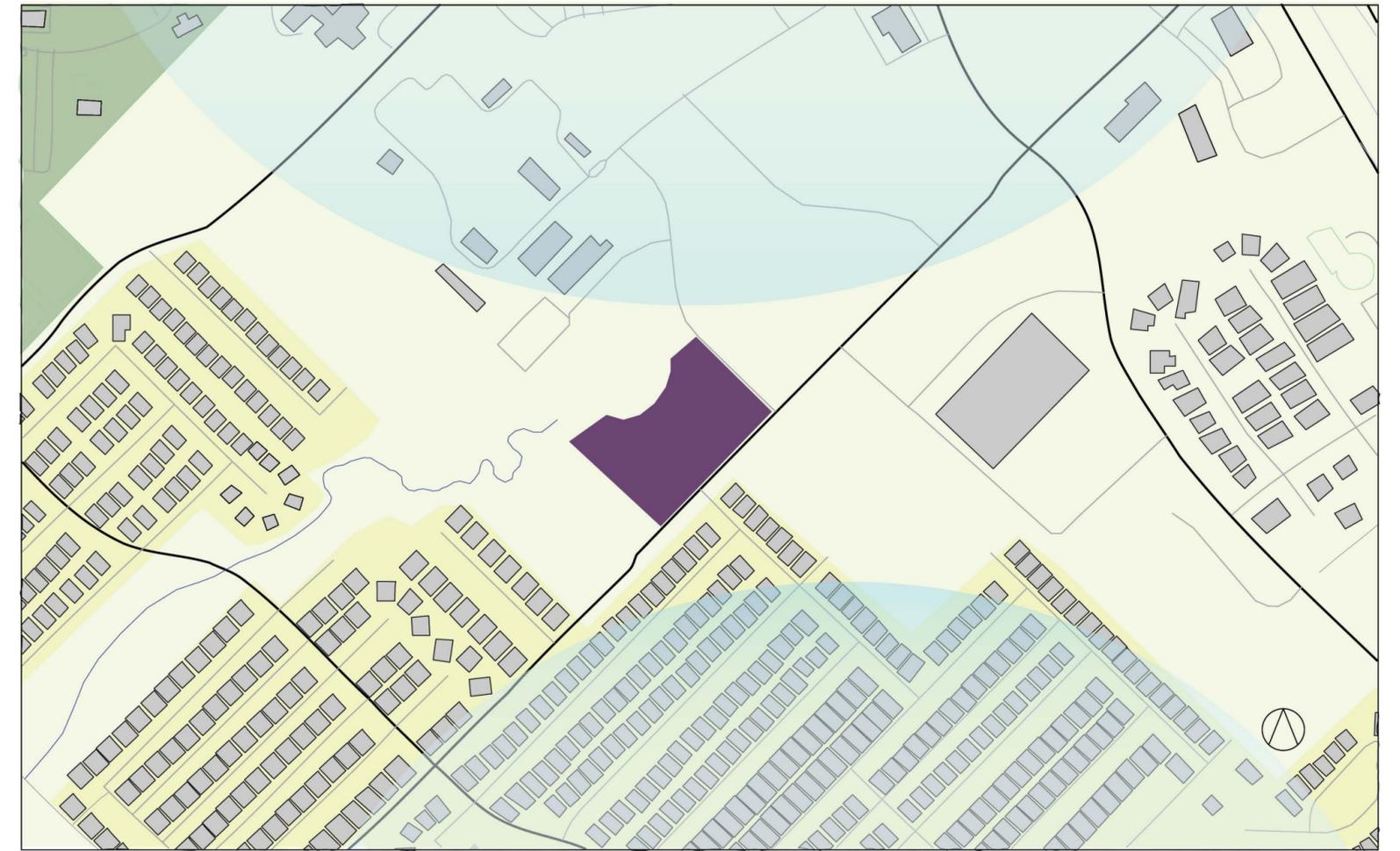
Bordering a residential district would be ideal to maintain anonymity and reduce the chances of expansion into the site (such as if retail were to expand into neighboring plats). Lastly, access to resources such as schools, jobs and public transit is crucial for the success of both survivors and children of the shelter. A concern that is sometimes encountered is that an abuser will follow a victim back to the shelter. This means that winding or blocked roads must be avoided and that a secure perimeter needs to be achievable on site until authorities arrive.





Above: Sun map (NTS)

My site is located on Graham Road in College Station, Texas, slightly Southwest of Baylor Scott and White Medical Center and South of St. Joseph's. The land is sheltered by a light border of trees, and is in close proximity to several primary schools, a middle school, and a high school.

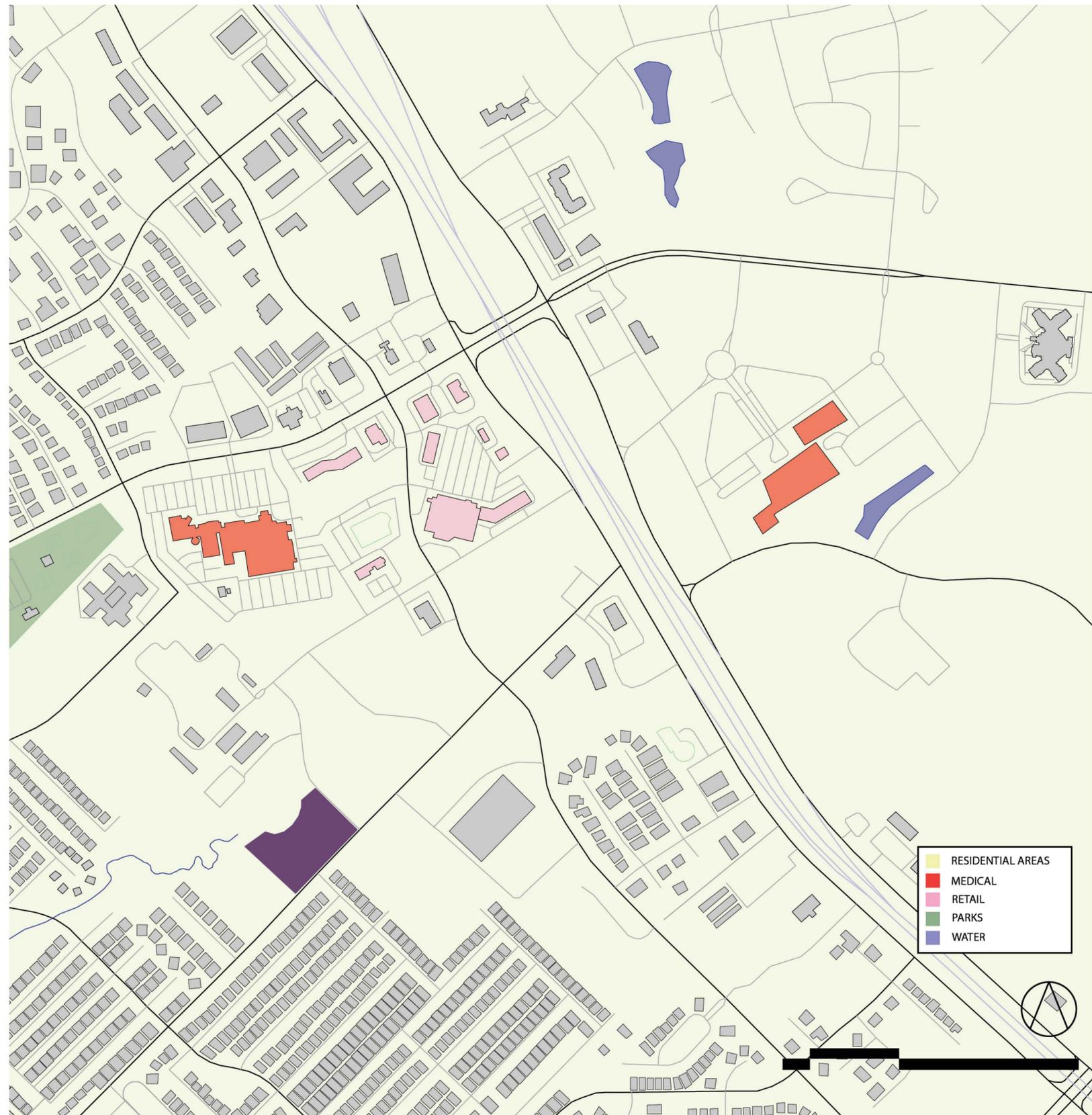


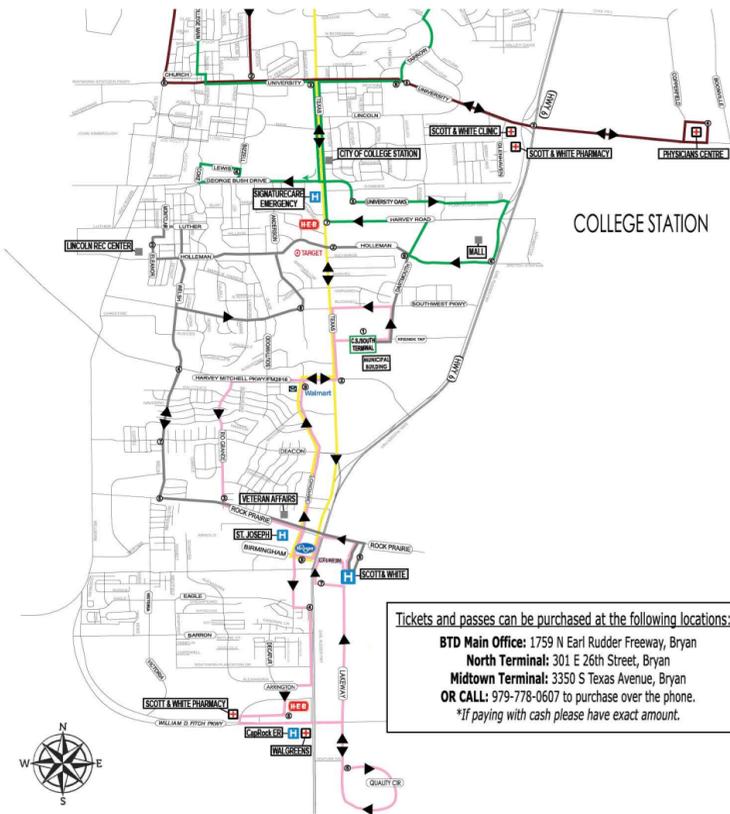
Above: Wind map (NTS)

It is on the edge of a residential and medical districts, provides access to parks and a skate park, and is accessible by the Brazos Transit – which is crucial for survivors who have no access to private transportation. Retails is available to the North, and there are car rental agencies nearby in addition to a food pantry. This safe house will be on the far south-eastern size of town opposite of Phoebe's Home, guaranteeing that both sides of College Station are served.

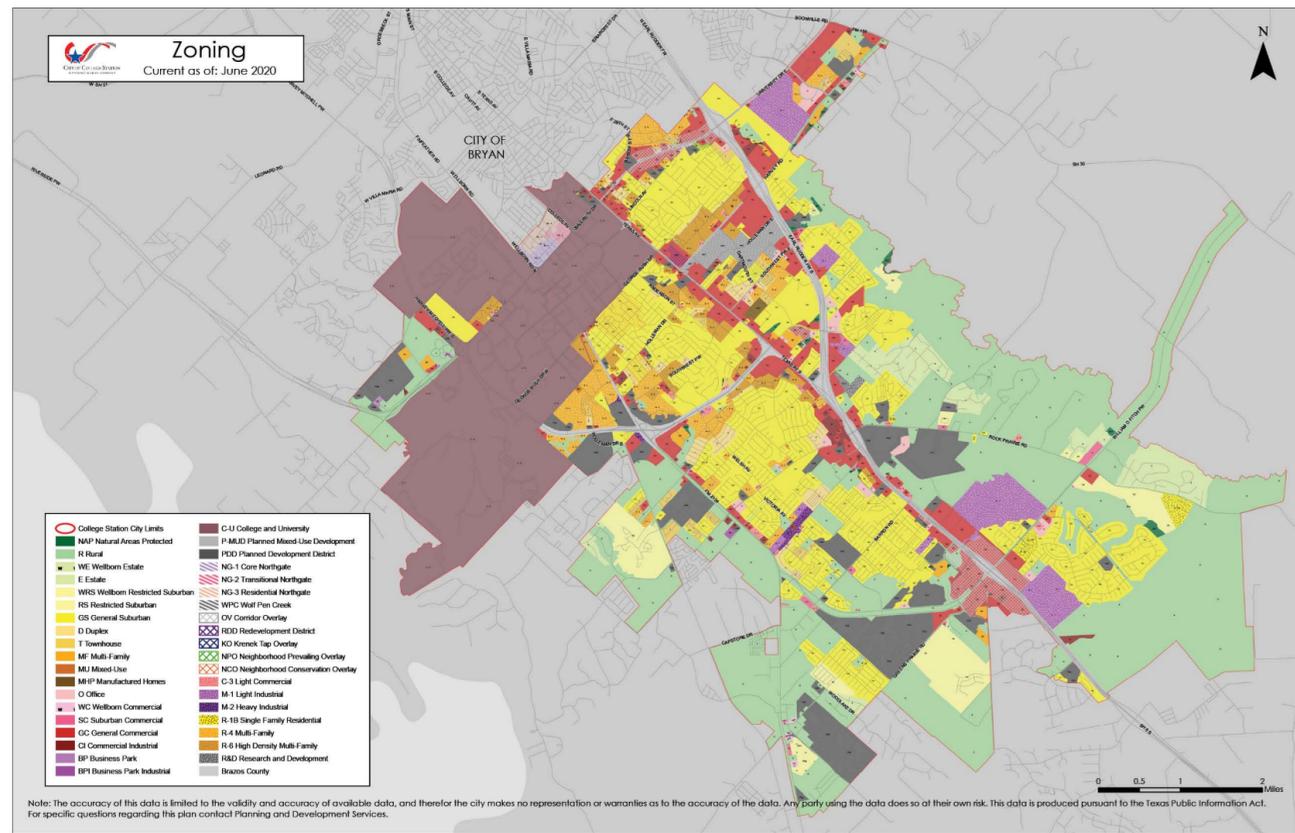
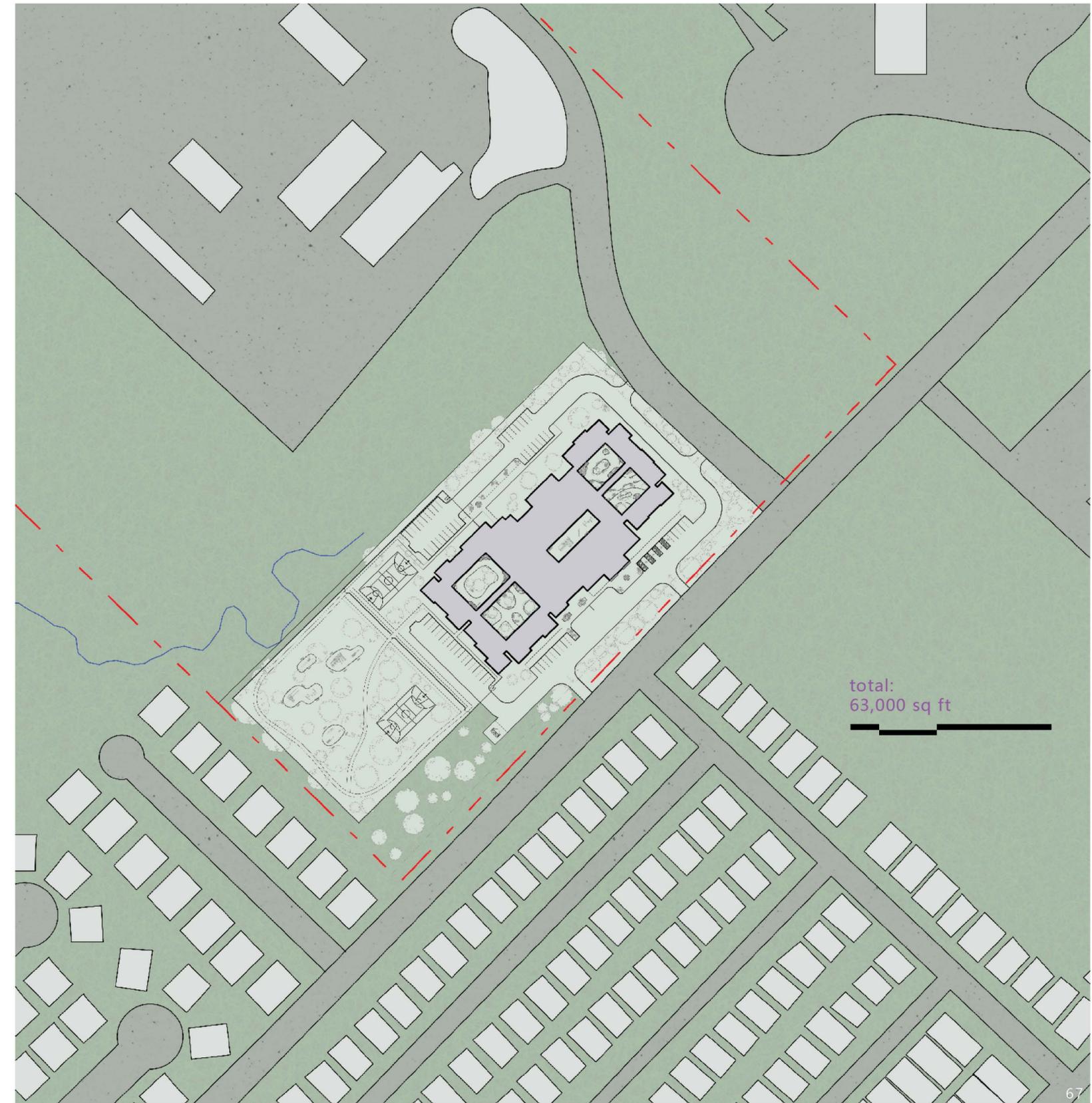
Following Left: Use map

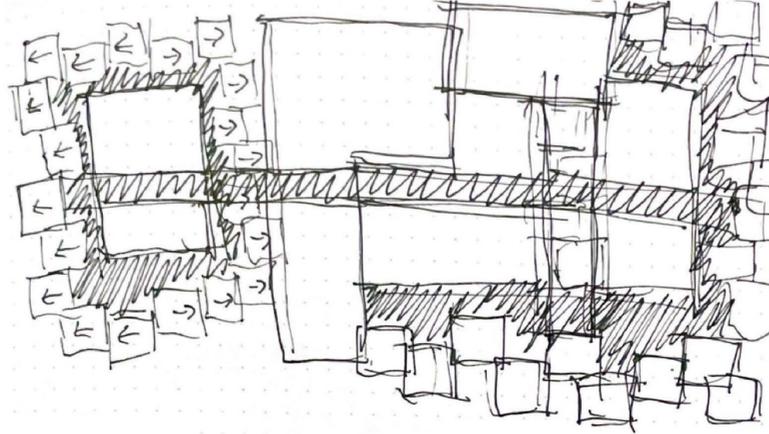
Following Right: Green map





Left: BCS transit map
 Below: Zoning map
 Right: Site map

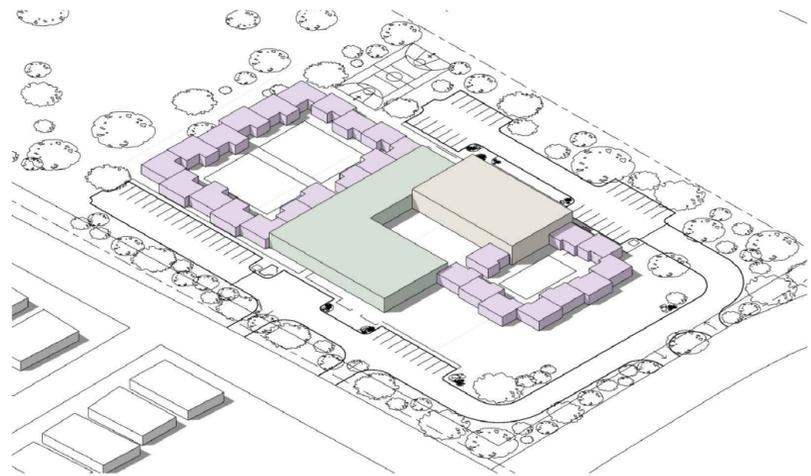




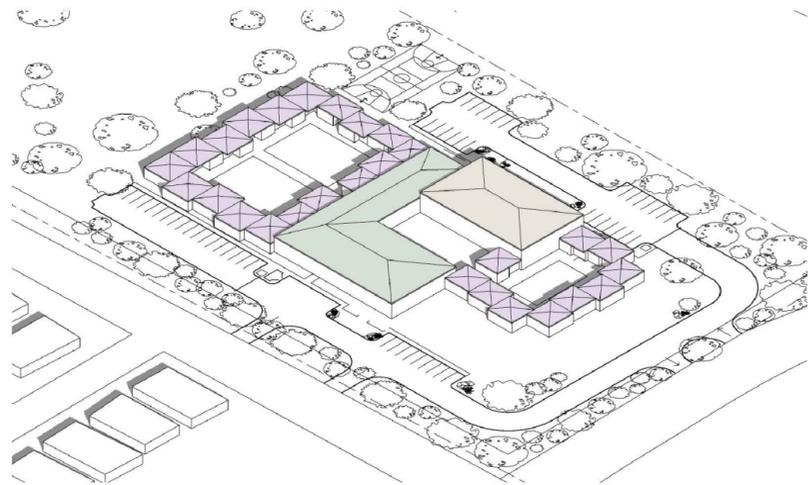
THE PROPOSAL:
program + form

PART I

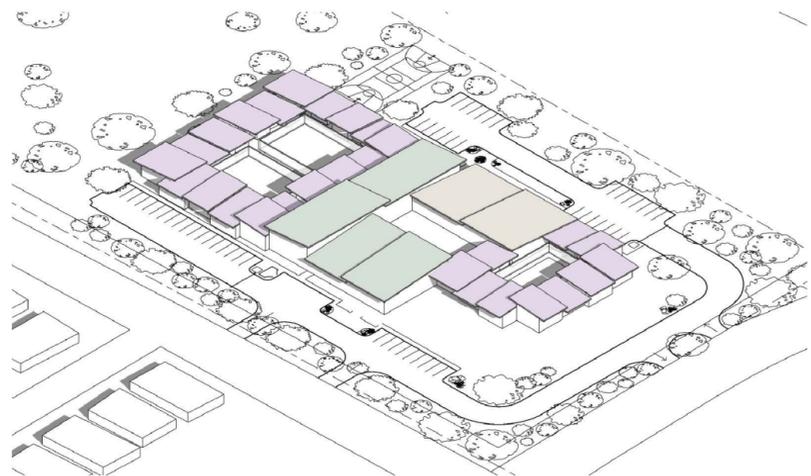
1) Split into programmatic elements



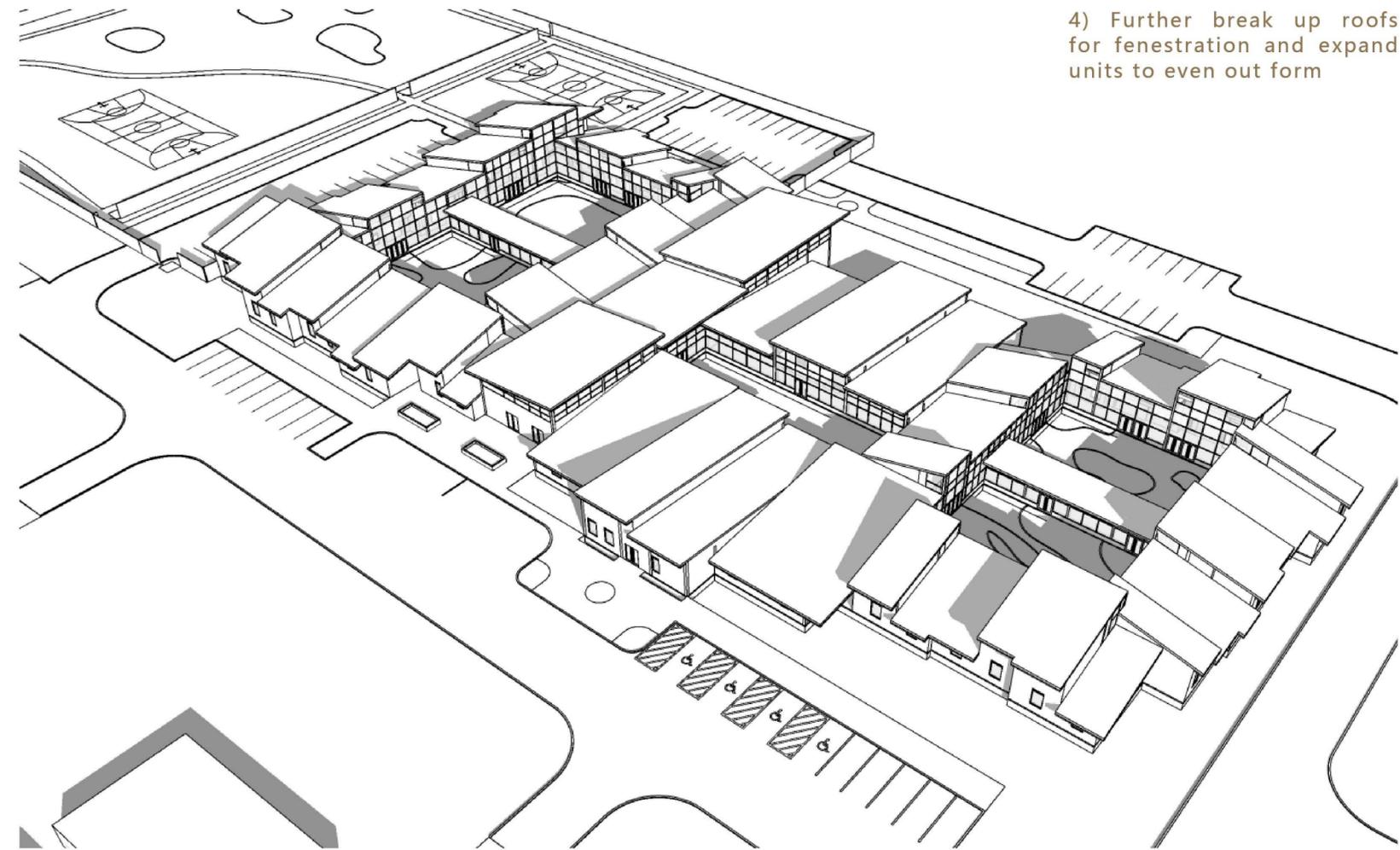
2) Split roofs according to program scale



3) Adjust roofs for natural lighting



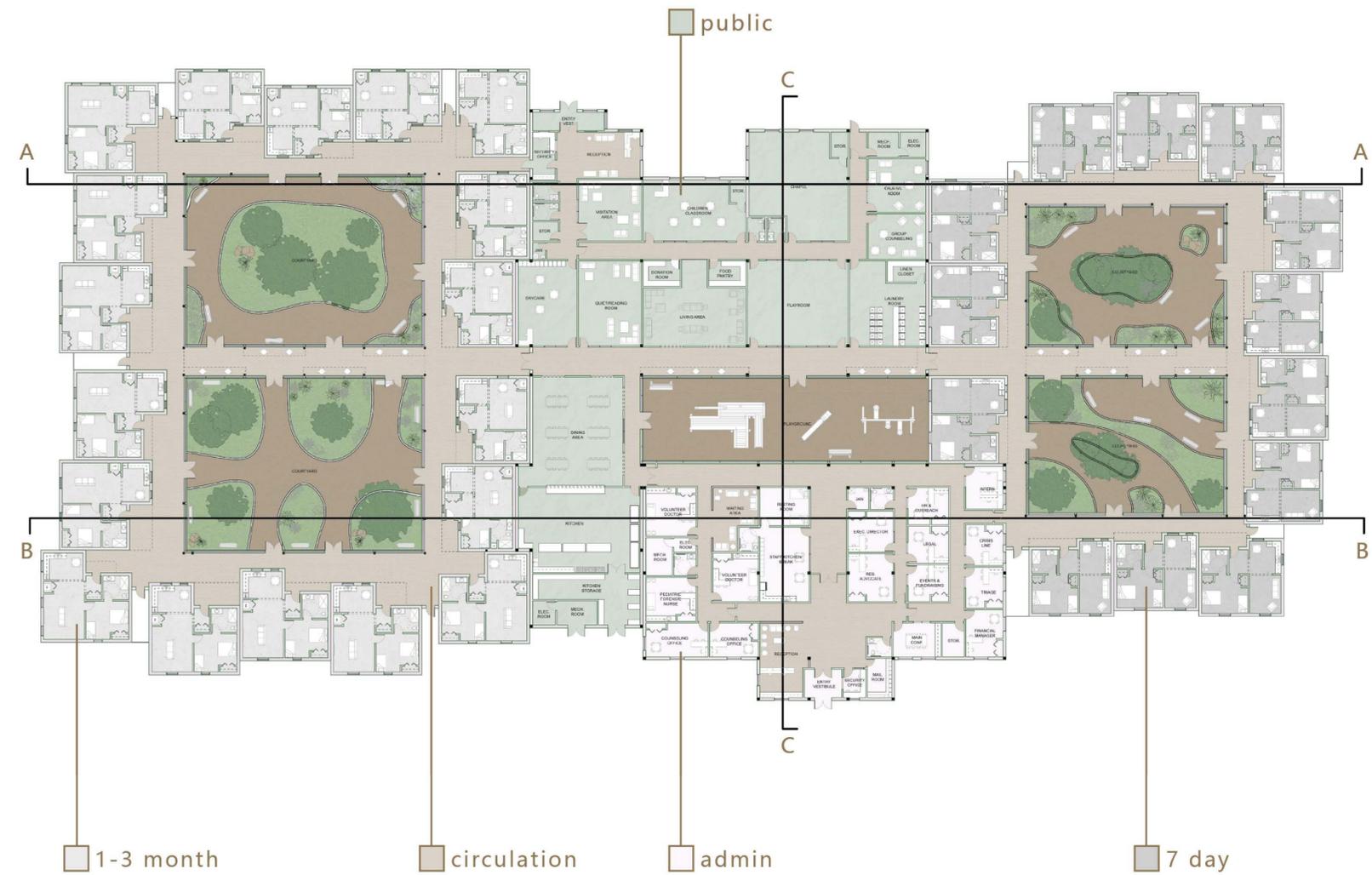
4) Further break up roofs for fenestration and expand units to even out form



THE PLAN

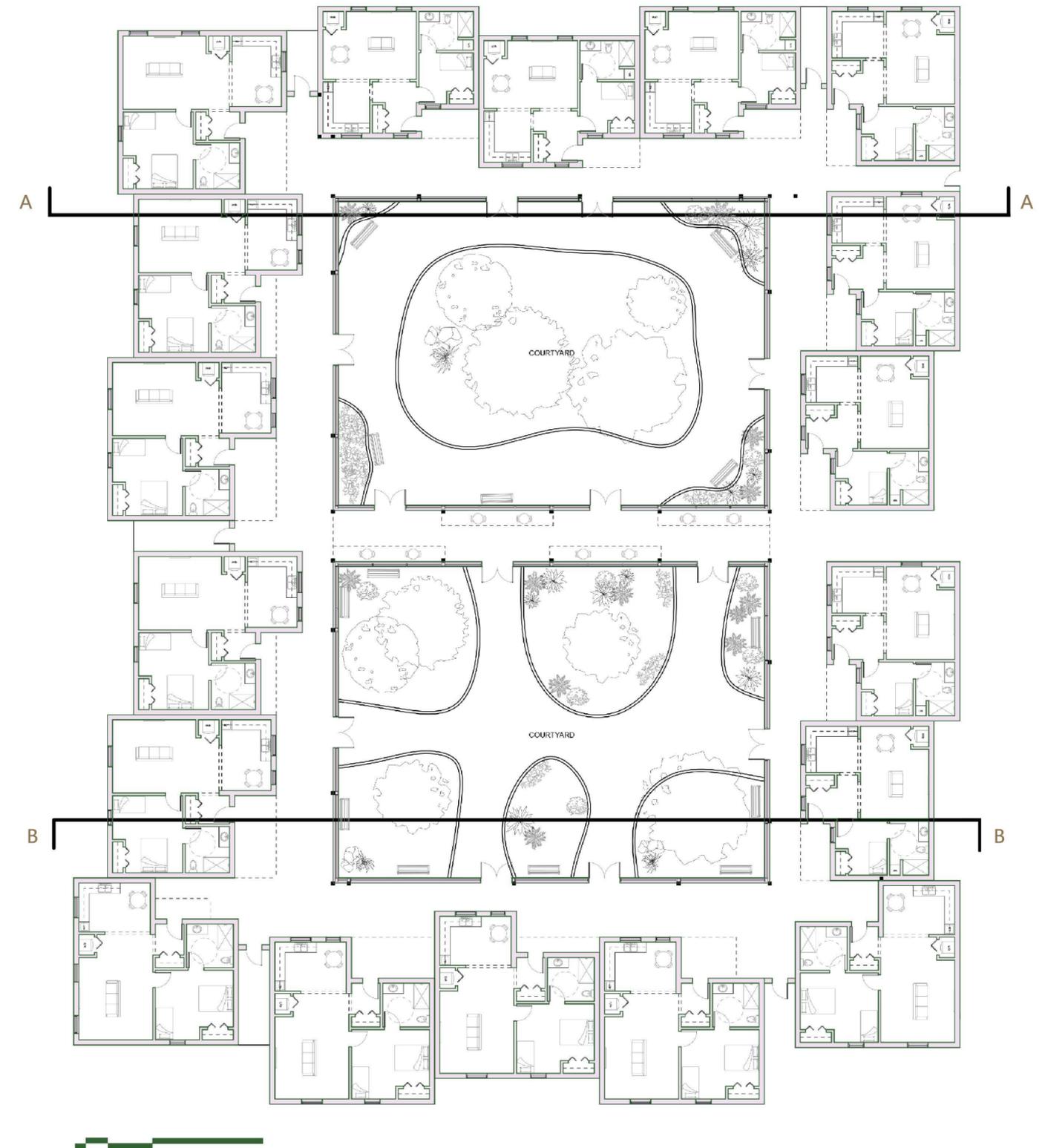
The site is large enough for my building to sprawl across it with ease. The program, based upon the case study of Amos Goldreich Architecture/ Jacobs Yaniv Architects and

a virtual walkthrough of a shelter in Bloomington, Indiana, splits the design into three zones: residential, public and administration.



RESIDENTIAL: 1-3 MONTH

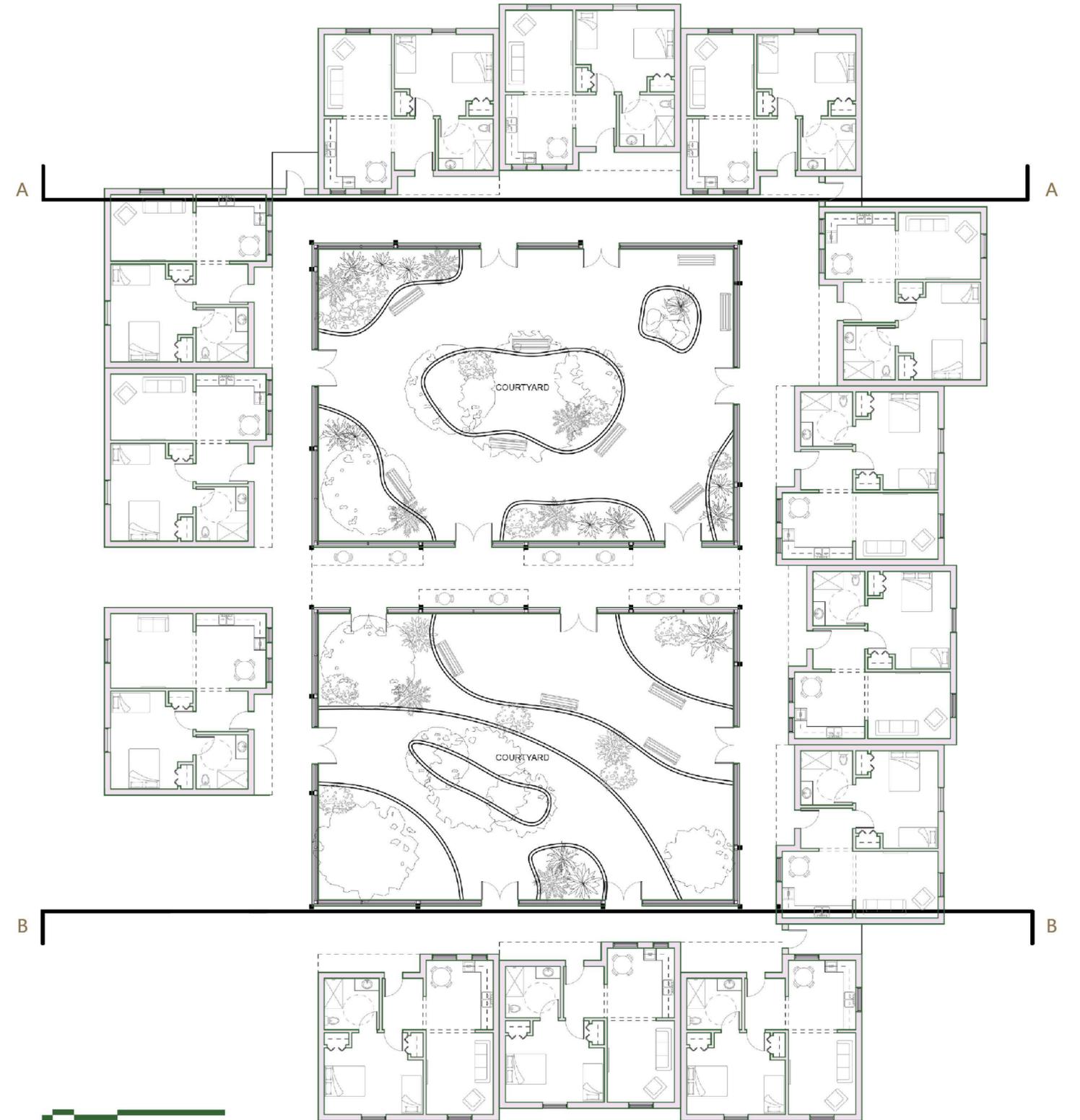
The residential zone divides into 7-day stay and 1-3 month stay, with the 7-day stay hugging the side of the administration and the 1-3 month splitting off to the back side of the public area. This is so that residents staying short term are able to access the programs in the administration easily such as legal and resident advocate offices. The longer-term residents are allowed increased privacy on the far side of the site as they are further along in the healing process and have reduced need for administrative services.



RESIDENTIAL: 7-DAY

The units are staggered and produce a perimeter around the internal road, creating small nooks for semi-private porch areas. The shelter is very much about community,

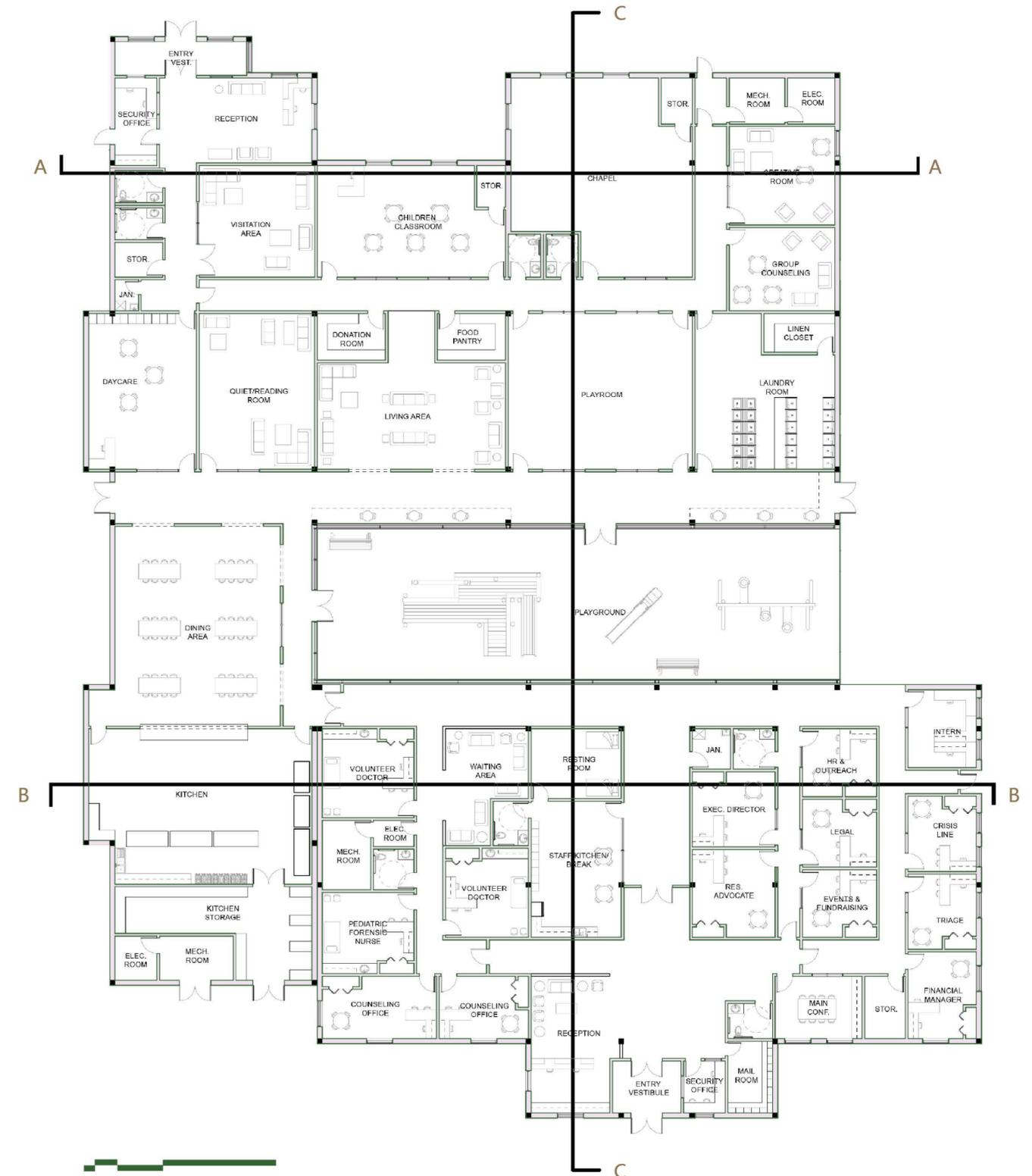
but "To give a group a change to be together, as a group, [a room] must also give the change to be alone, in one's and two's in the same space (Alexander, Ishikawa, Silverstein, 2010)."

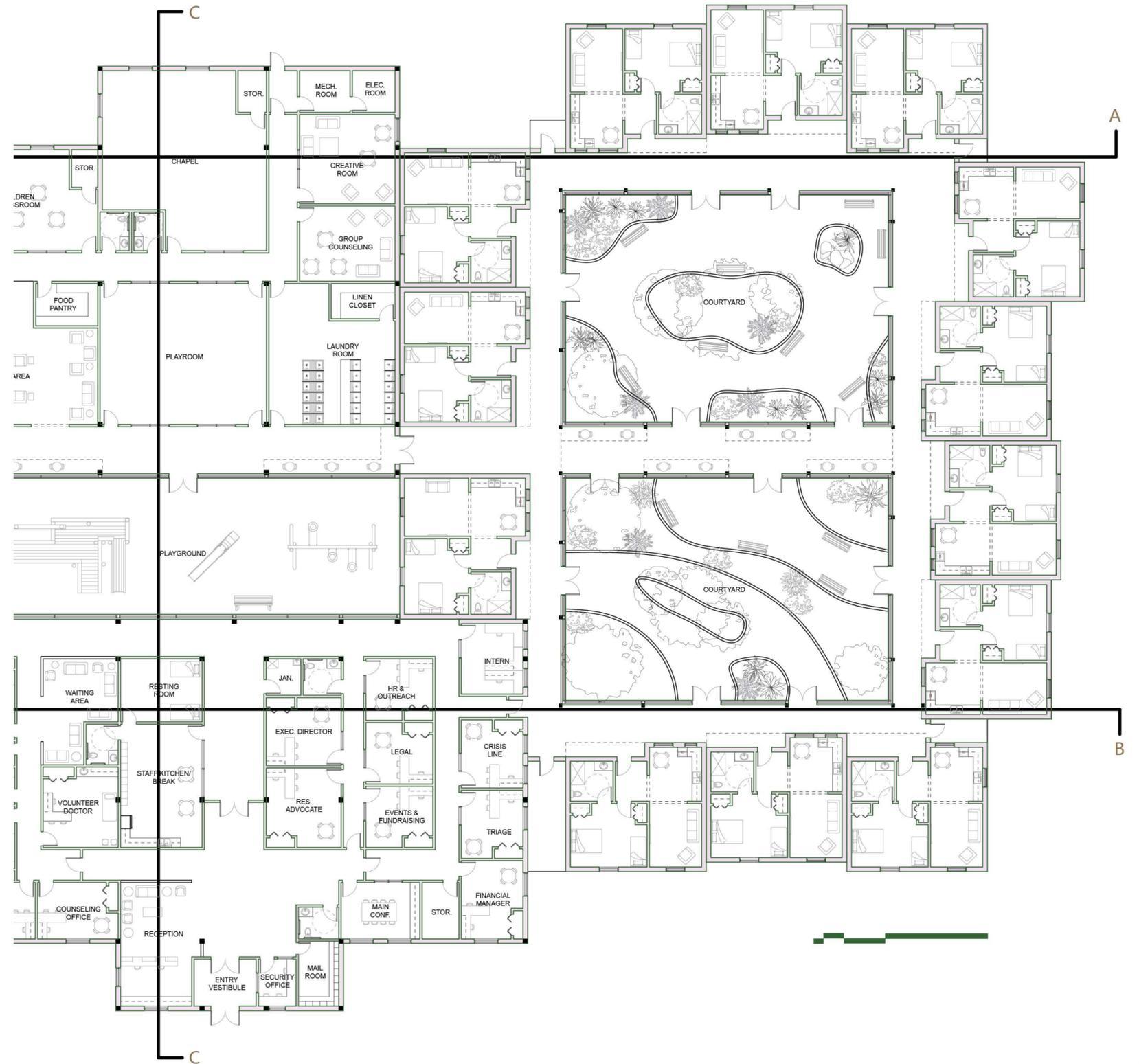
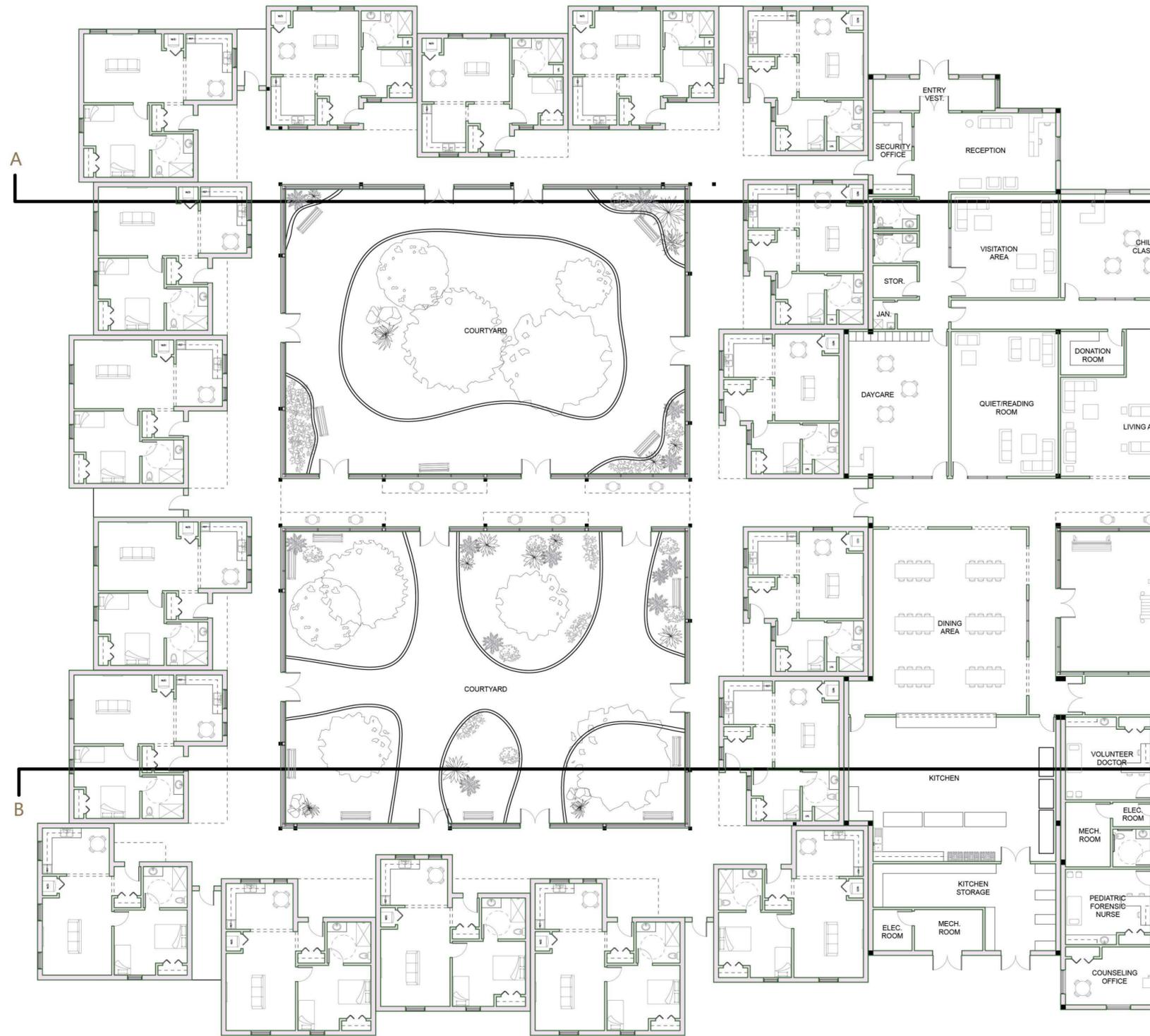


ADMIN + PUBLIC

In the interviews I held many of the individuals expressed desires to have spaces such as a meditation room, daycare, chapel, playroom, creative room, visitation room, forensic nurse space, and classroom added. Along with these, the administration contains all the offices necessary for residents who

need counseling, financial advising, or basic medical care. Staff offices are located there as well, and basic conference rooms. Public houses recreation areas, general living areas such as kitchen and dining, laundry, the chapel, and donation rooms.





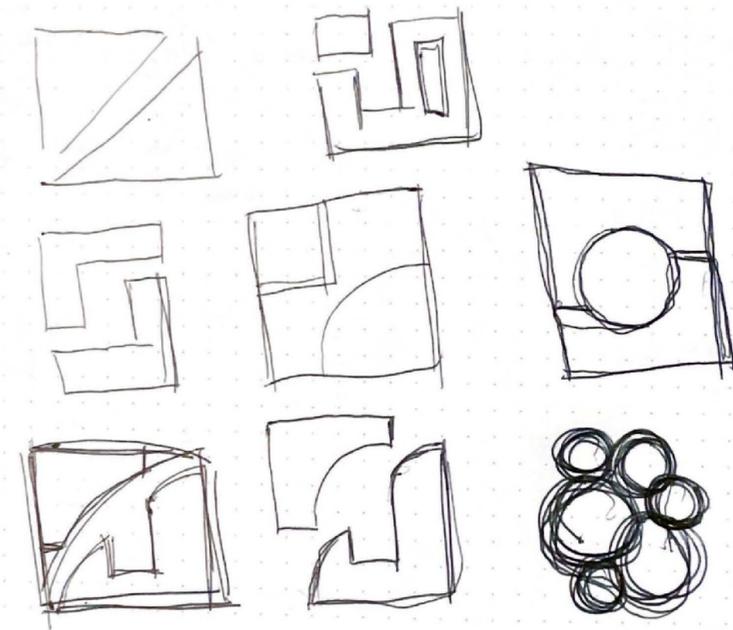
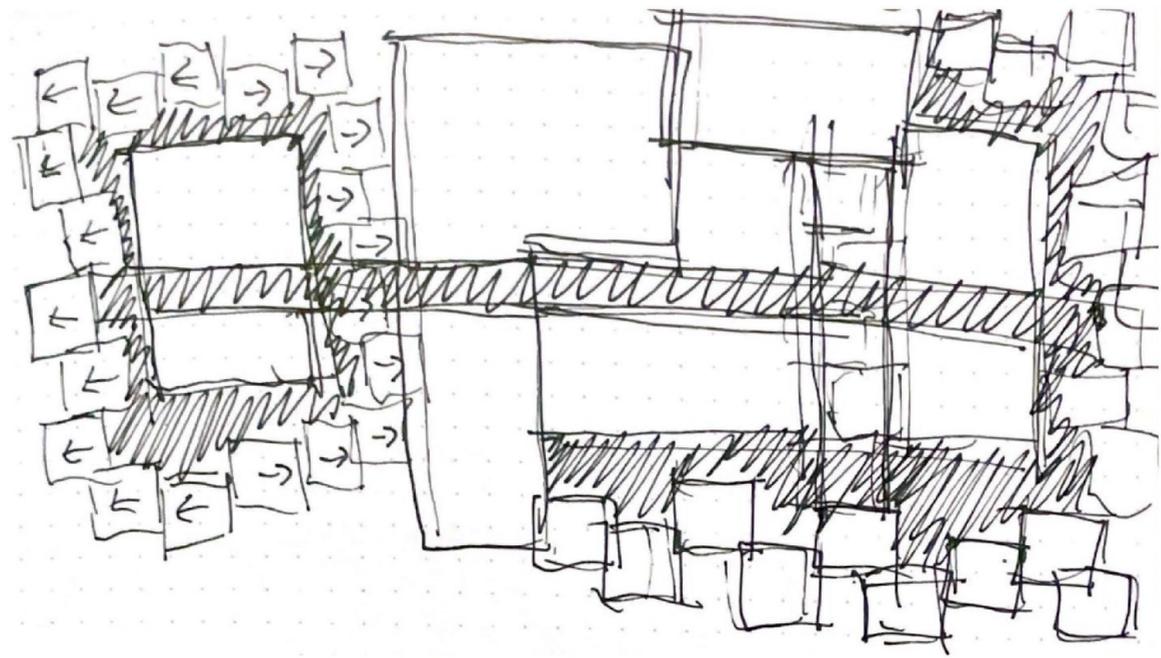
THE BIG PICTURE

Each of the programmatic elements are scaled architecturally: small, medium, and large. The two wings of the plan – residential – naturally break up into the smallest chunks: the units forming a village with an array of monoslope roofs popping up and down in a musical medley of movement. The shorter

middle – administration – comes next: its form producing a simple block stretching across it, the middle one welcoming you into the entrance. Finally, the tallest middle – public – fashions an L shape with six roofs alternating their heights across its length.

Top: North-East Elevation
Middle: North-West Elevation
Below: South-East Elevation





Five courtyards lined with elements are connected by an interior "road" that operates as the major axis and additionally frames the courtyards as an indoor-outdoor transitional space. The courtyards and programmatic

There are spaces along the road to sit and rest or observe, removing sense of urgency and breaking what otherwise would have been an unending corridor.

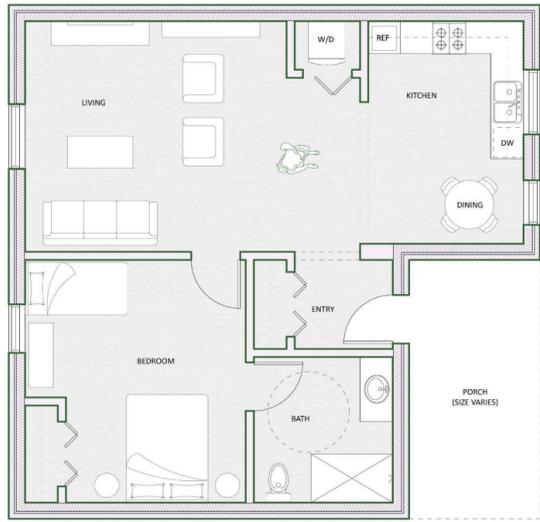


Above: Courtyard interior connection walkway

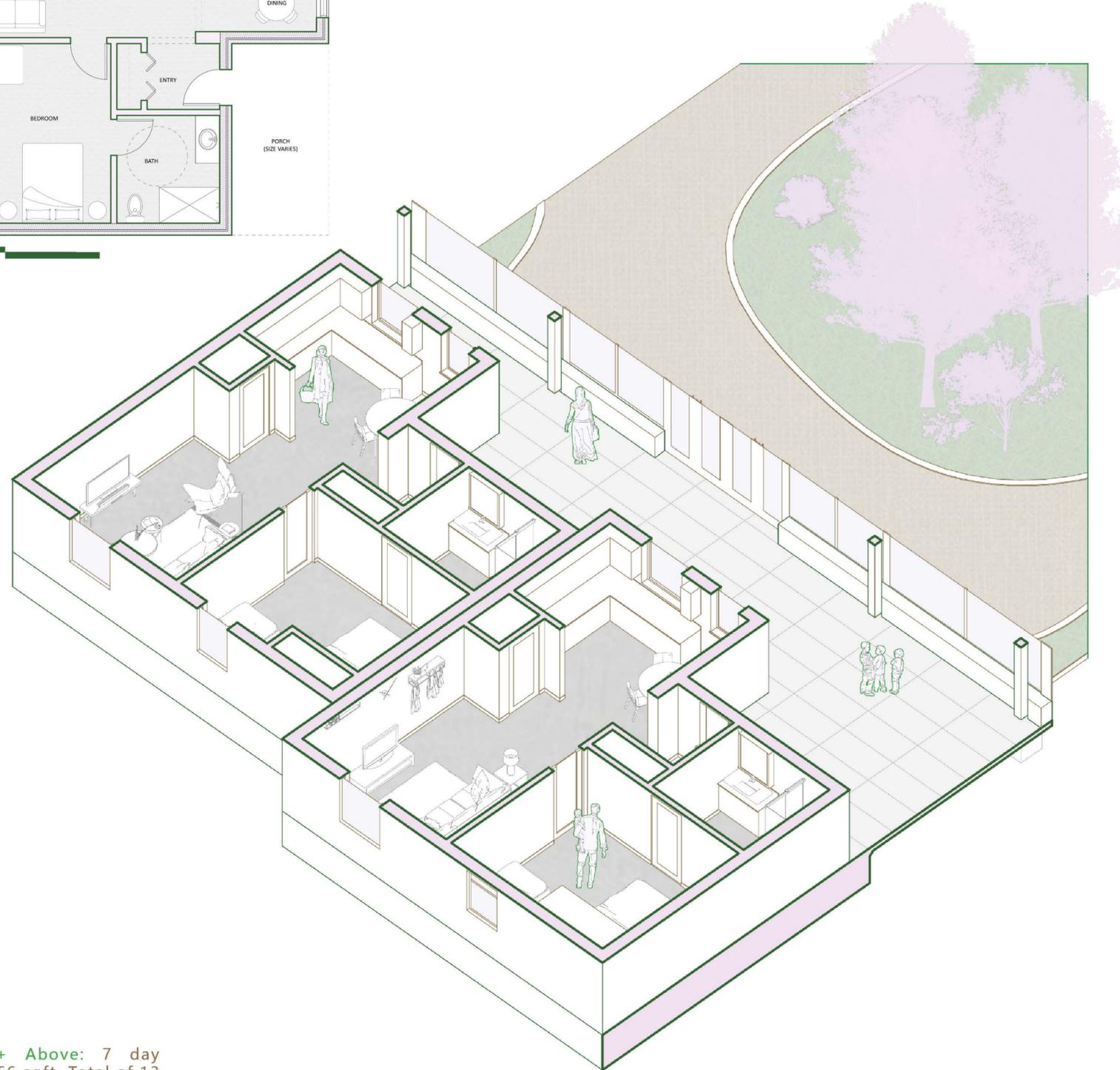
This interior road eliminates the need for exterior pedestrian circulation that could compromise the security of the shelter and provides constant sightlines throughout the residential-road-courtyard areas, providing a feeling of confidence and safety to the residents.



Above: Interior road
+ porch



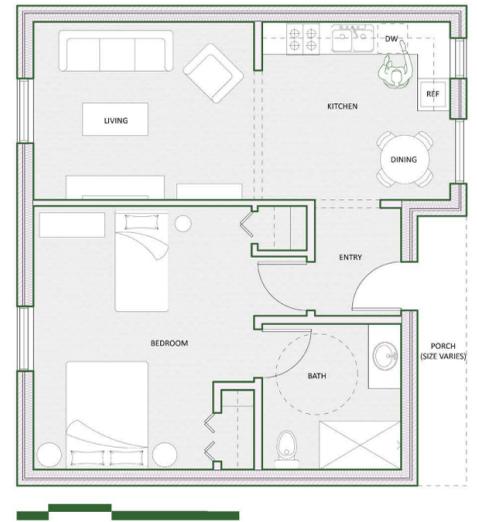
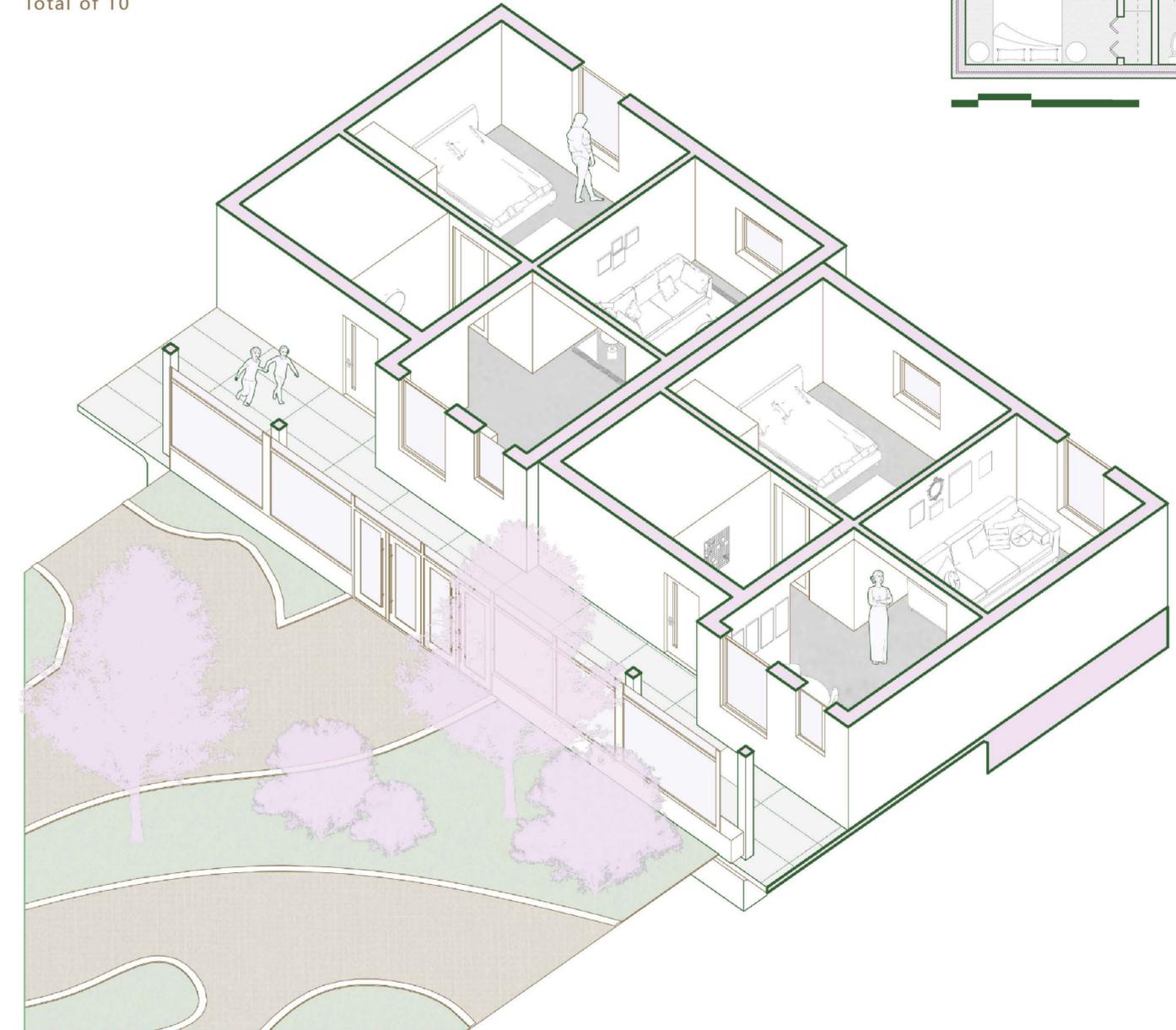
As for the individual units - which range from 733-904 sq ft depending on the duration of the stay - each family is given their own space to retreat and decompress away from the rest of the residents.



Right + Above: 7 day units, 766 sqft. Total of 13

Ample natural light streams in from the front of the unit from the two tall windows that face the street and the courtyard, and the height of the monoslope roof is visible in the kitchen and living room through the exposed trusses.

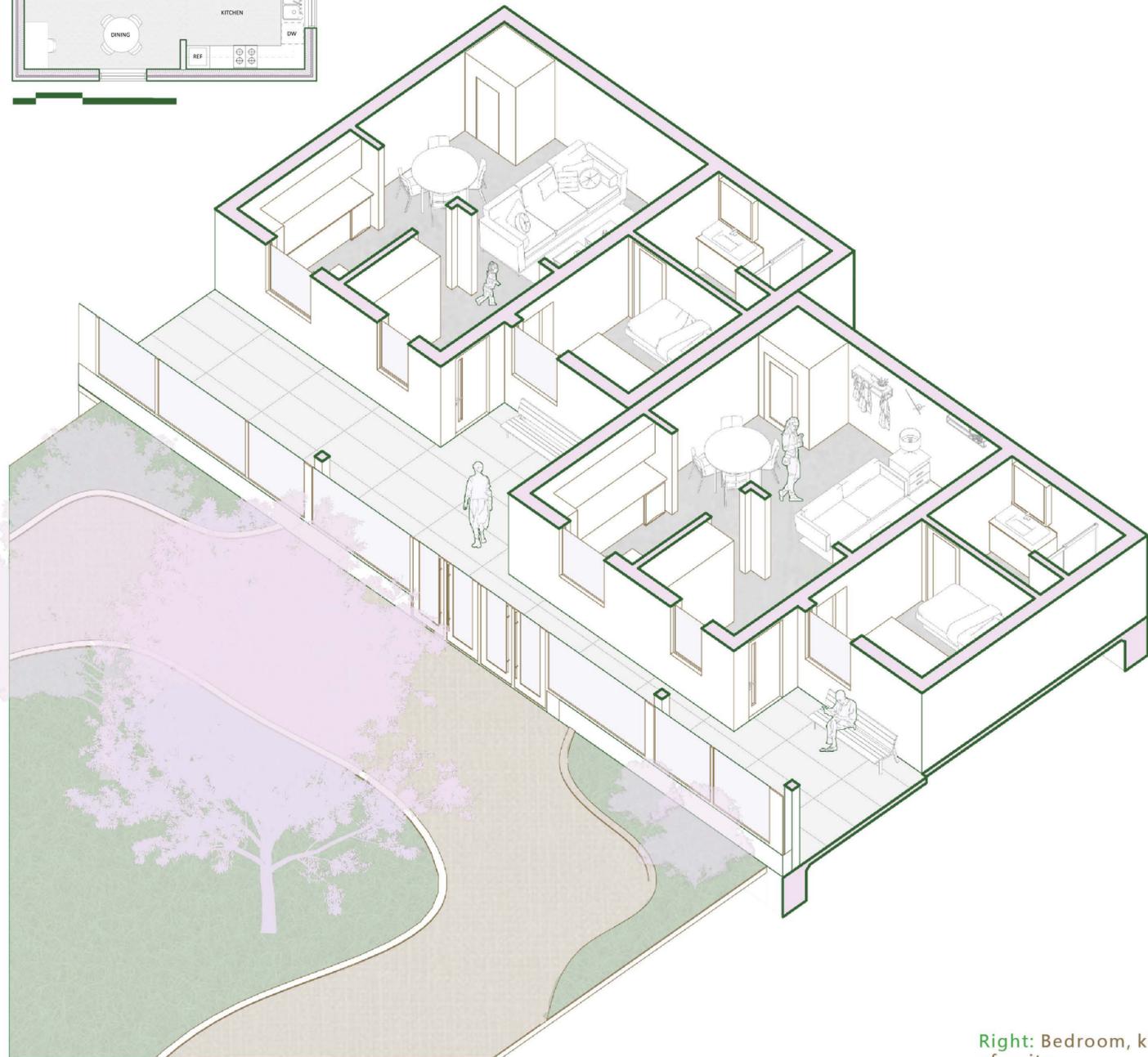
Right + Below: 1-3 month family units, 904 sqft. Total of 10





Left + Below: 1-3 month individual units, 733 sqft. Total of 8

Units consist of one bedroom, one bath, a kitchen, a living room, and an entry. The kitchen is fully equipped, but residents are encouraged to use communal ones in the large public areas and socialize with the other survivors in the shelter once they settle into their surroundings and begin to feel more comfortable.



Right: Bedroom, kitchen, + entry of units

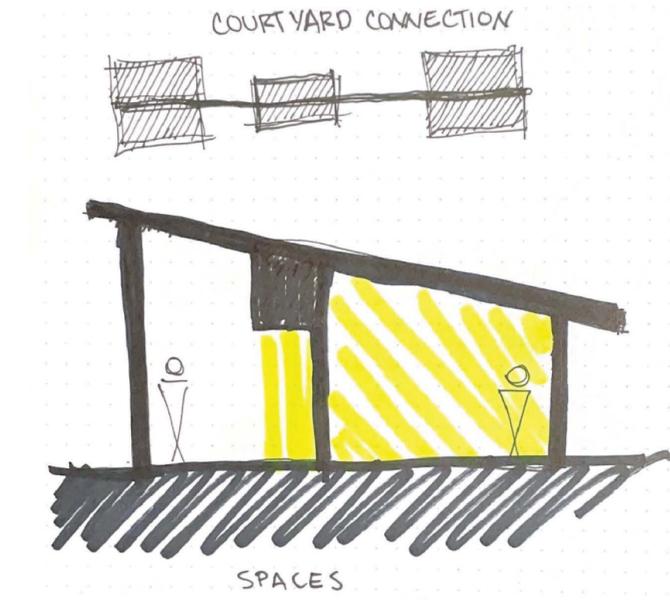
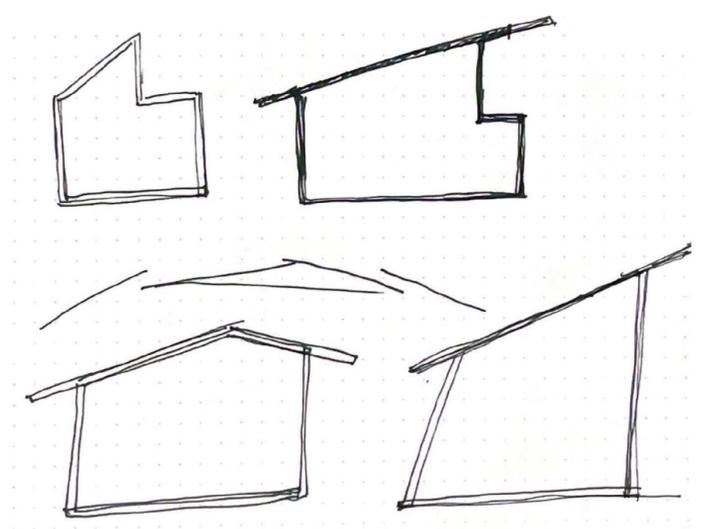
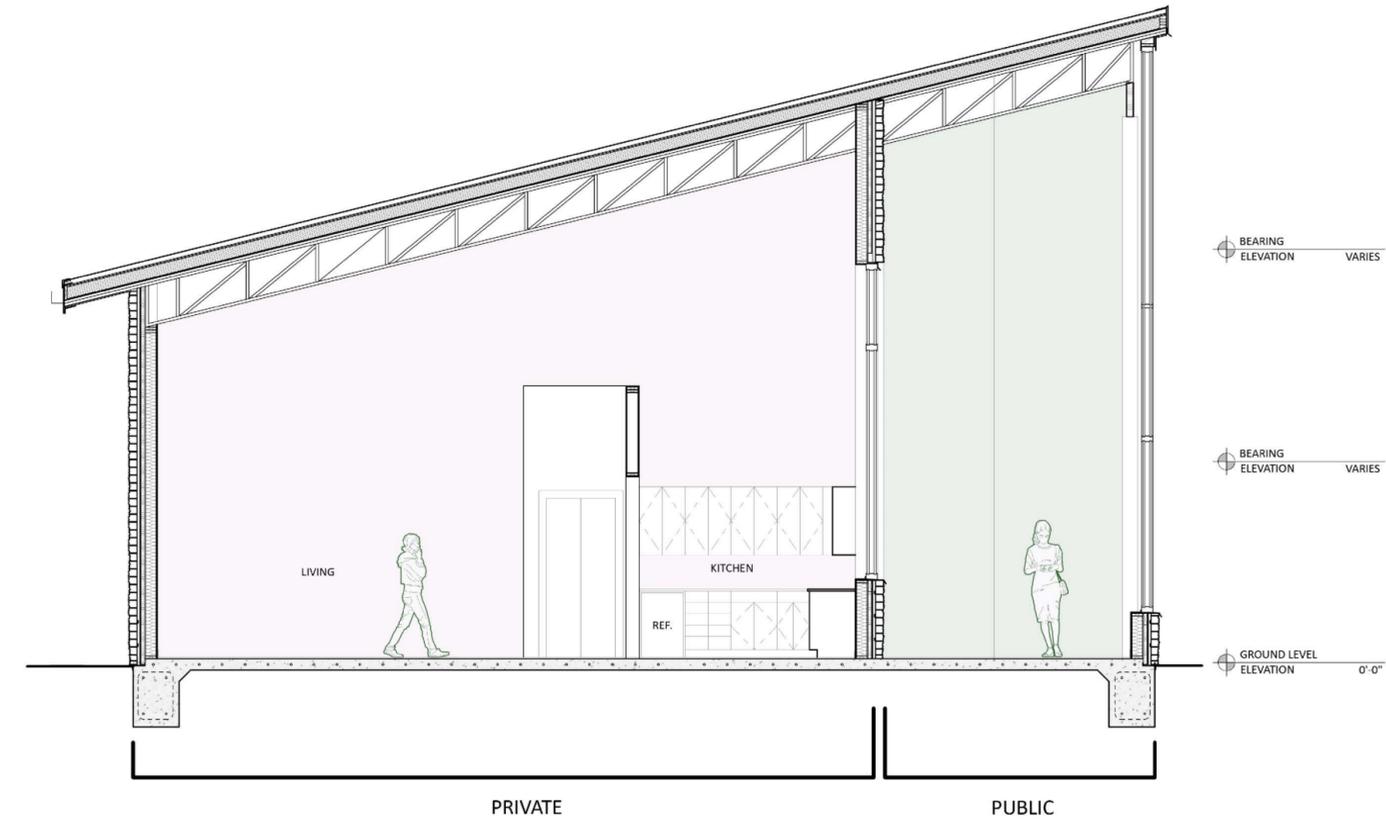
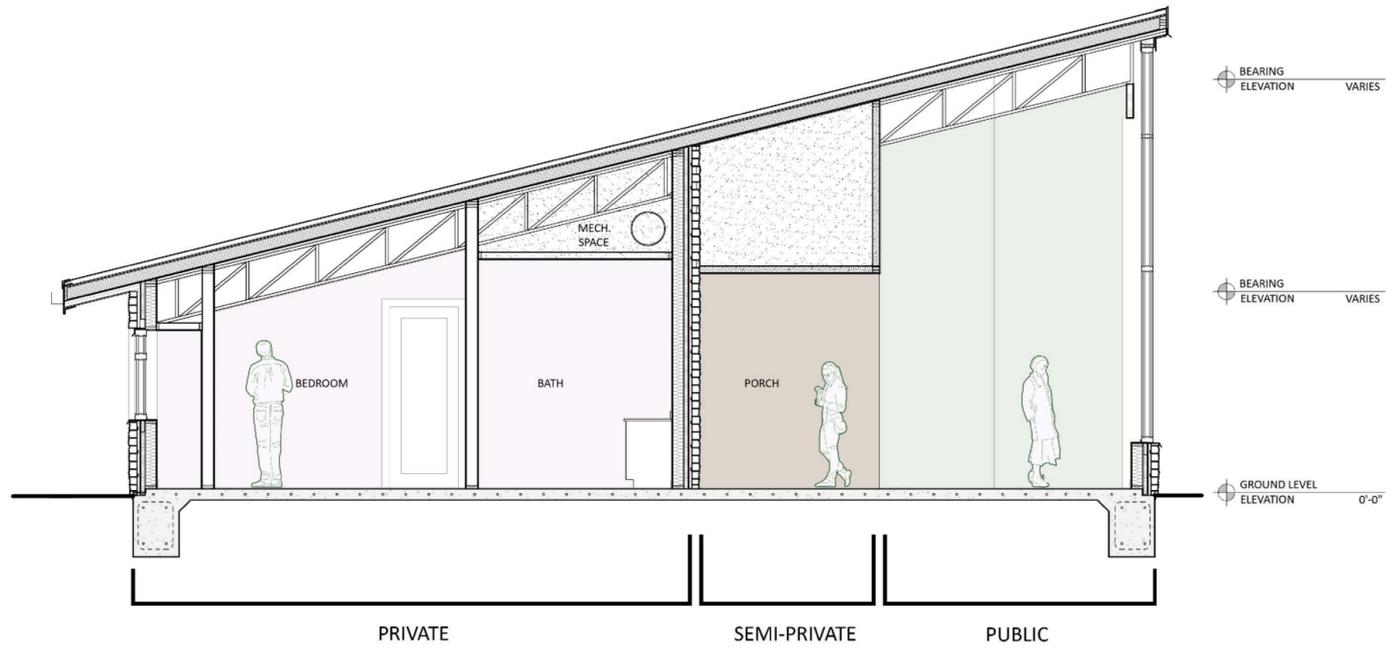
This social time is crucial for the healing process, as no survivor is in the same healing stage as one another and it is essential for residents to share stories.



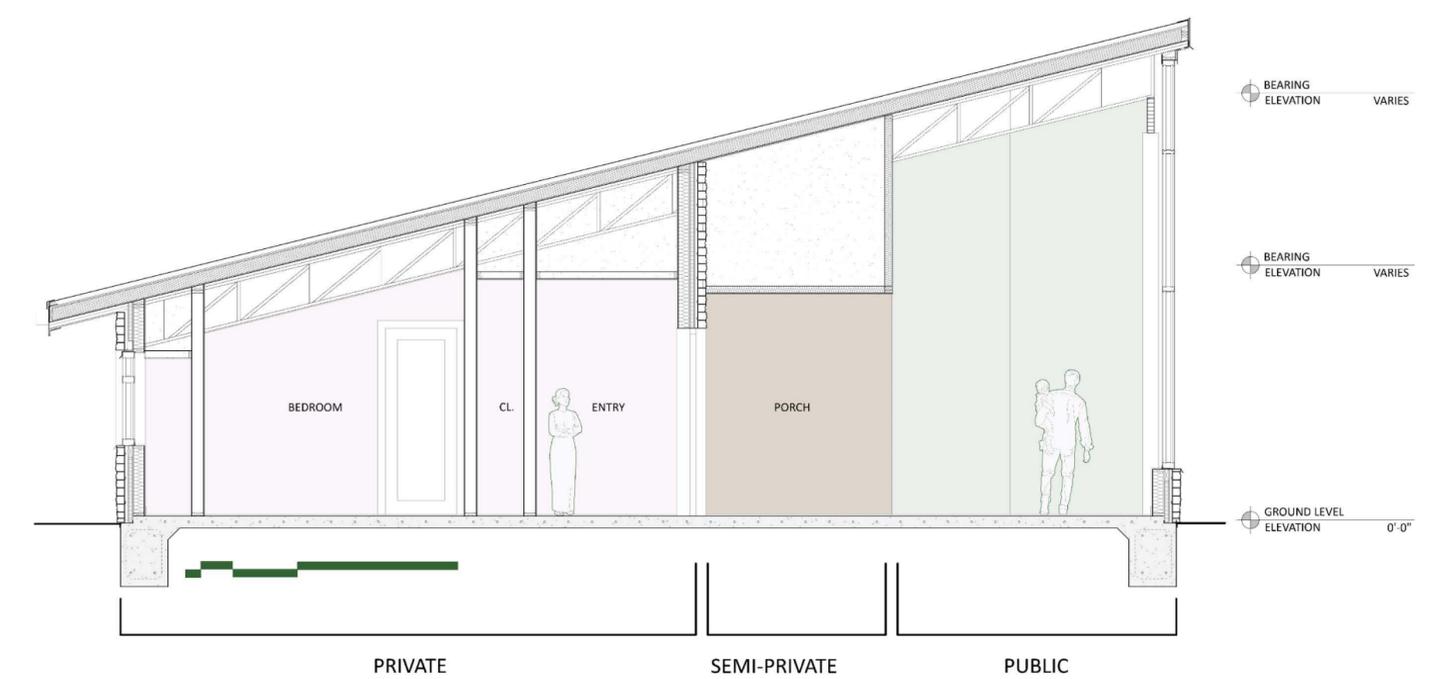
Above: Living space of unit

IN SECTION

The ceilings at the outside porches are dropped versus the continuation of the high, sloped trusses of the internal road, creating an intimate refuge for residents to sit and watch kids or socialize outside their homes. If residents are ready to move out of the private area of their home but not quite prepared for the fully public spaces of the courtyard or dining area, their porch is meant to provide a safe margin for them to test their limits before diving in.



Left + Above: Exploration of spaces through section



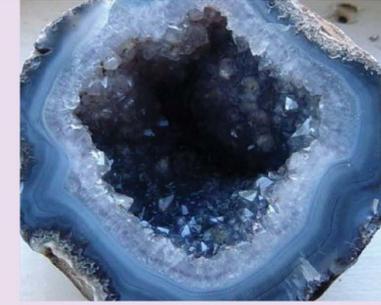


THE PROPOSAL:
materiality & courtyards

GEODES



The architectural materiality is based on the **geode**: a rock that is rough and unassuming on the outside but once cracked open is revealed to have a beautiful and delicate interior with multiple colors.



To emulate this, a rough stone veneer is used on the outside of the building and then is switched to a smooth gypsum board interior. Brightly colored spandrel glass is seen on the upper part of the curtain wall to mimic the various colors of the geode.

The rock is protective of its fragile interior, not wanting to give up its vulnerable inside; much like the survivors of the shelter. Even the motley of roofs can be imagined imitating the uneven rock exterior.

The coarse stone and natural light filtering through the windowpanes of brilliant colors are meant to stimulate different senses, producing contrasting experiences depending on the time of day.



Above: Northeast courtyard + walkway

The plant-rich courtyards provide a source for mental and physical healing, and there are clear views to them from almost any point in the shelter. They function as the five internal "hearts" and encourage social and physical activity of the residents. Since they are fully enclosed within the building, they are free-play area for kids without adults needing to worry about safety.

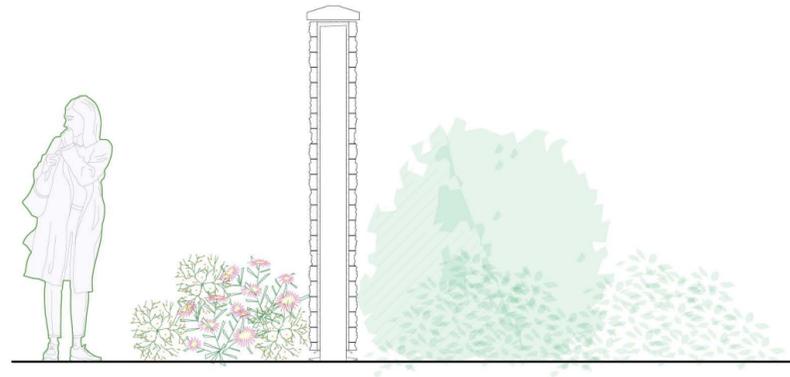


The center-most courtyard promotes a playground for the children, while the other four alternate between walking trails and grassy knoll features. The courtyards introduce greenery into the very middle of the shelter and keep the form from becoming "A monster building - no concern for daylight inside (Alexander, Ishikawa, Silverstein, 2010).





Above: Southeast courtyard + walkway

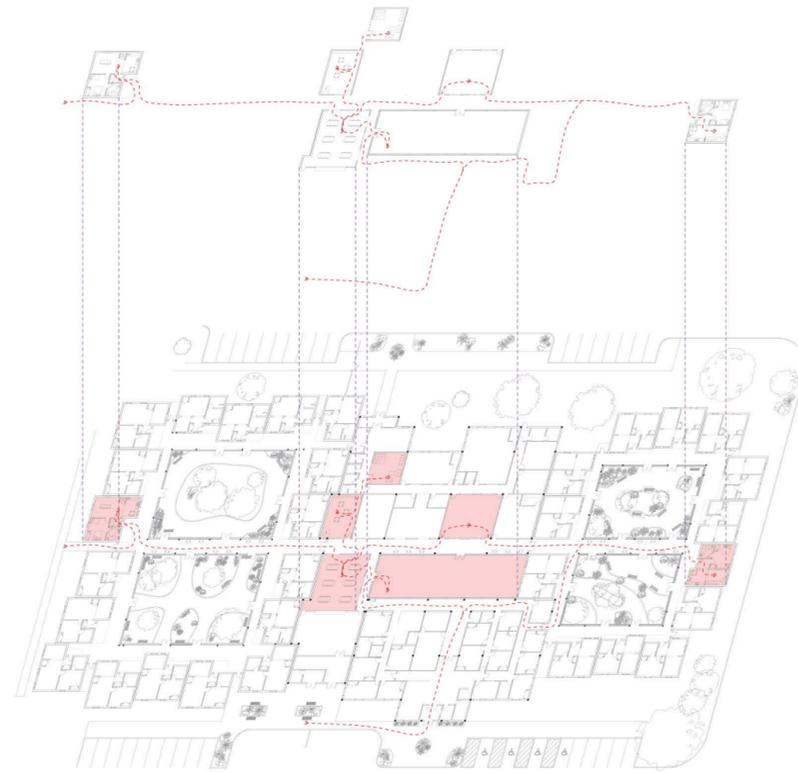


THE PROPOSAL:
security + details

A DAY IN THE LIFE

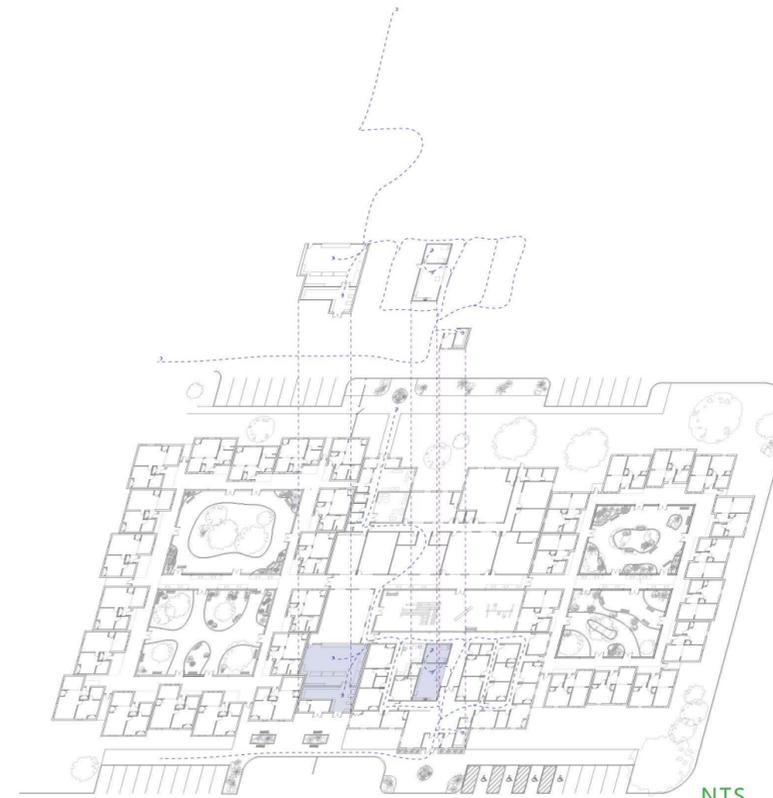
Although the interior road reaches all parts of the plan, this does not mean that anyone can enter any place. Access doors dictate who may reach certain areas, and security is higher in particular areas. Residential areas are accessible only to residents and specific staff, whereas the conference room is available to all public. This is intentionally done to preserve the safety of residents and staff alike, as well as to maintain the confidentiality of survivors and minimize potential break-in points. This strategy

extends to the exterior, where the site is a gated community and approximately half of the staff parking is gated in an effort to protect vehicles from potential abuser threats.



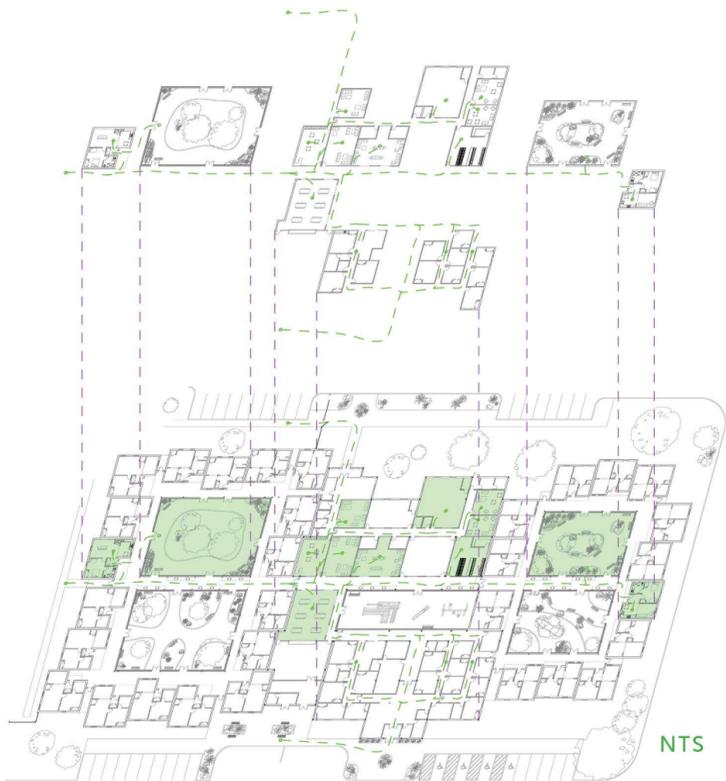
NTS

Above: Example of kids' daily movement



NTS

Above: Example of staff daily movement



NTS

Left: Example of adults' daily movement

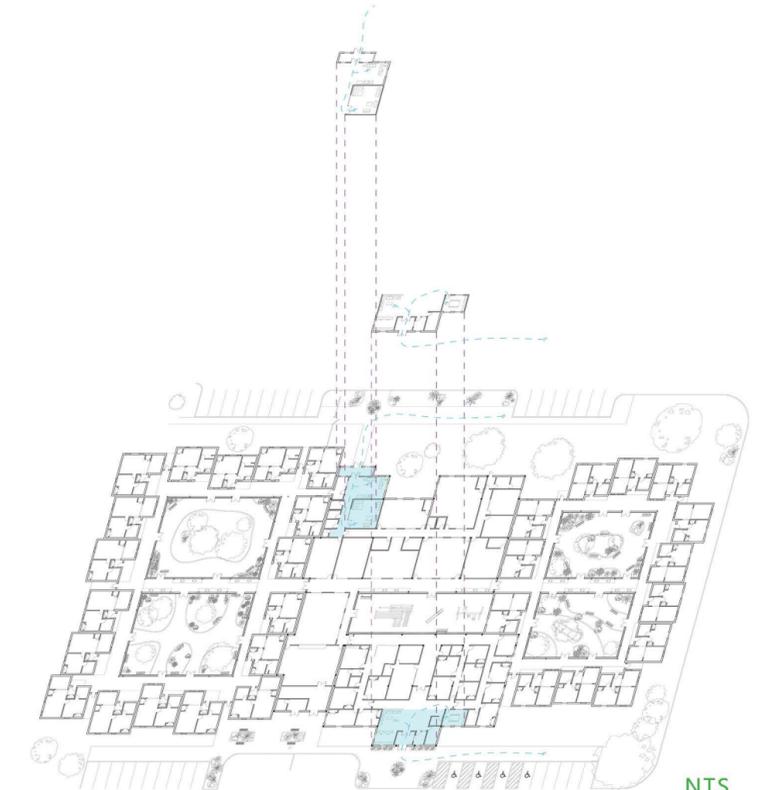
Kids and Adults

Kids and adults who live in the shelter have the greatest freedom with access to almost everywhere in the building. This includes their units, courtyards, public areas, and administration areas as long as it is supervised by staff members.

Staff and Visitors

Next would be the staff members with the second most access to areas, with the only limitation would be that they need permission to enter someone's unit (with the exception of an emergency). Those with the

greatest limitations would be visitors, who are only allowed into designated public areas. Even then, they would be constantly supervised and escorted by staff members at all times for the safety of the residents.



NTS

Right: Example of visitors' daily movement

SECURITY ELEMENTS

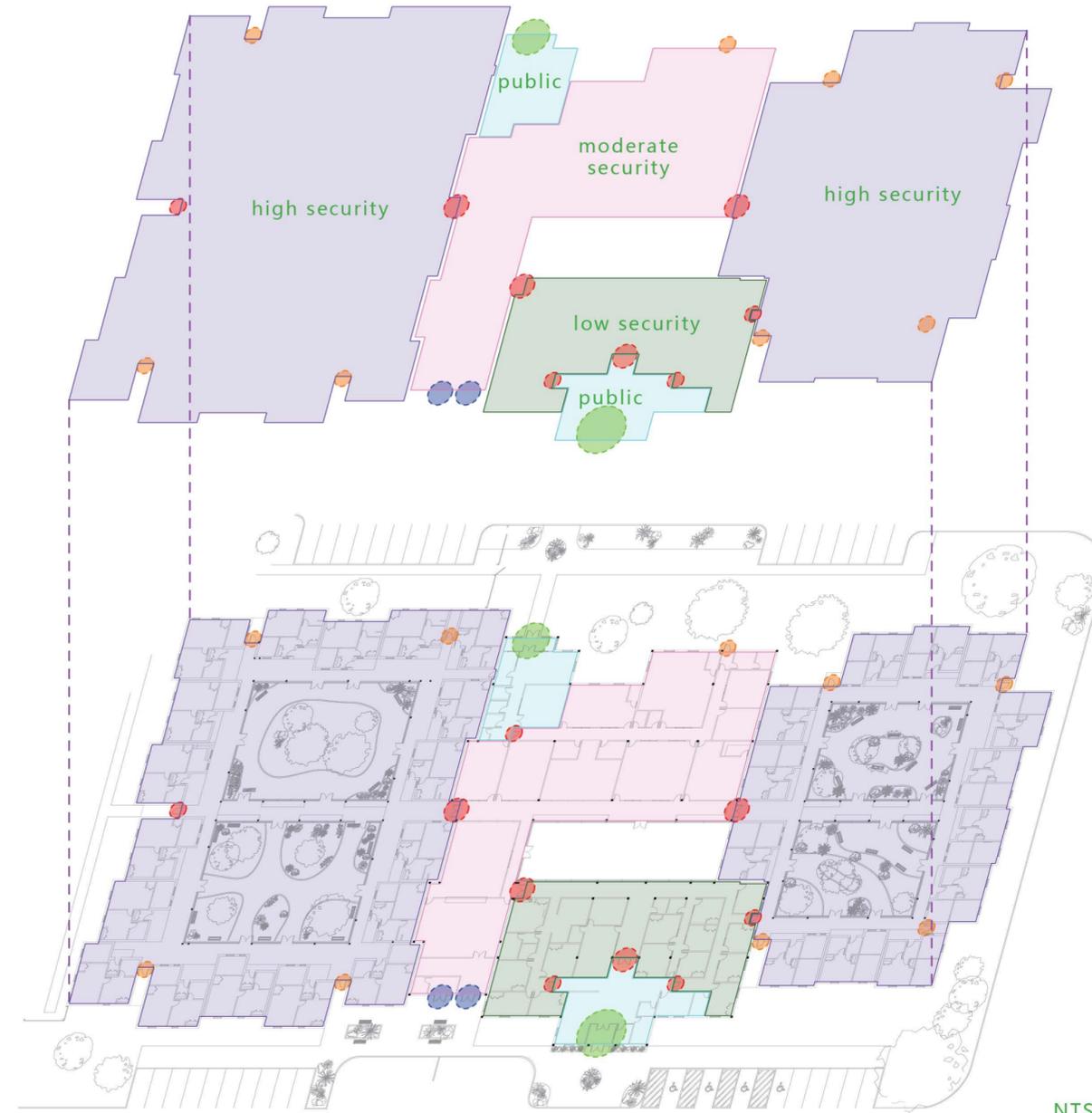
Security cameras are a must to ensure that there are no blind spots anywhere on the premises. Private zones - such as residential - are not required to have as many cameras, but in areas such as public and admin these security measures are particularly essential.



Right Top: Security cameras + programmatic elements

Right Below: Security cameras + programmatic elements with plan overlay

NTS



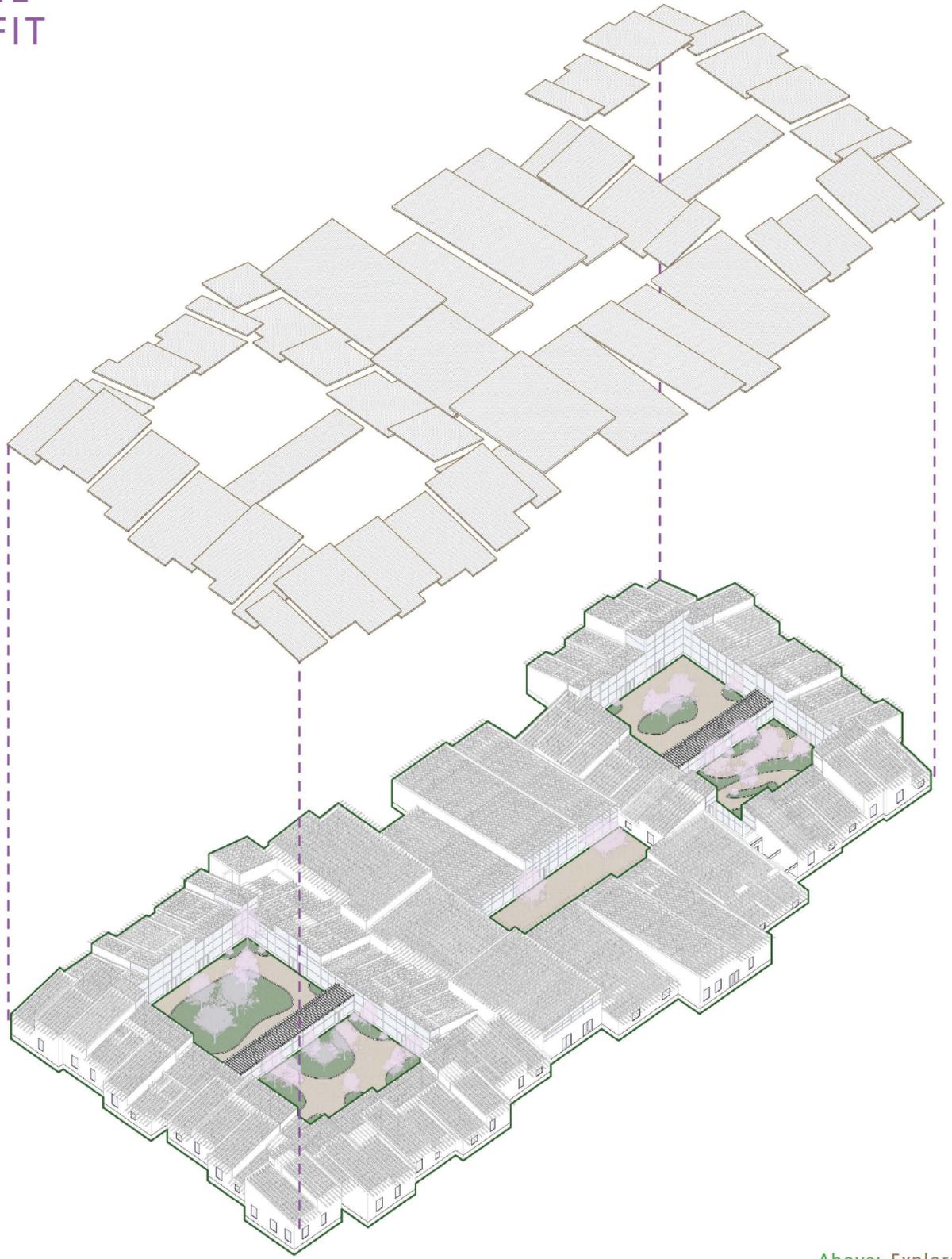
As with security cameras, different programmatic parts of the building will need unique security standards. Residential will be considered a high security zone and use heavier duty doors in order to enter that area and will be monitored closely. Key cards and special requirements will be necessary to pass through into a moderate or high security area, whereas public areas will be an easy access zone with low security.

Left Top: Security doors + zones

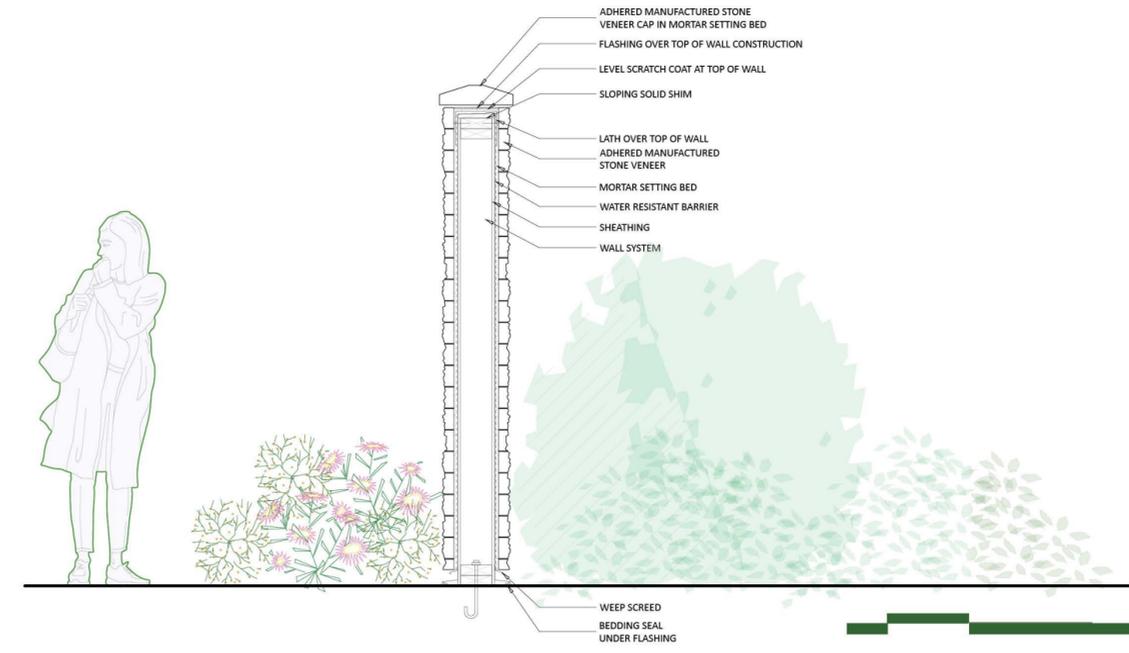
Left Below: Security doors + zones with plan overlay

NTS

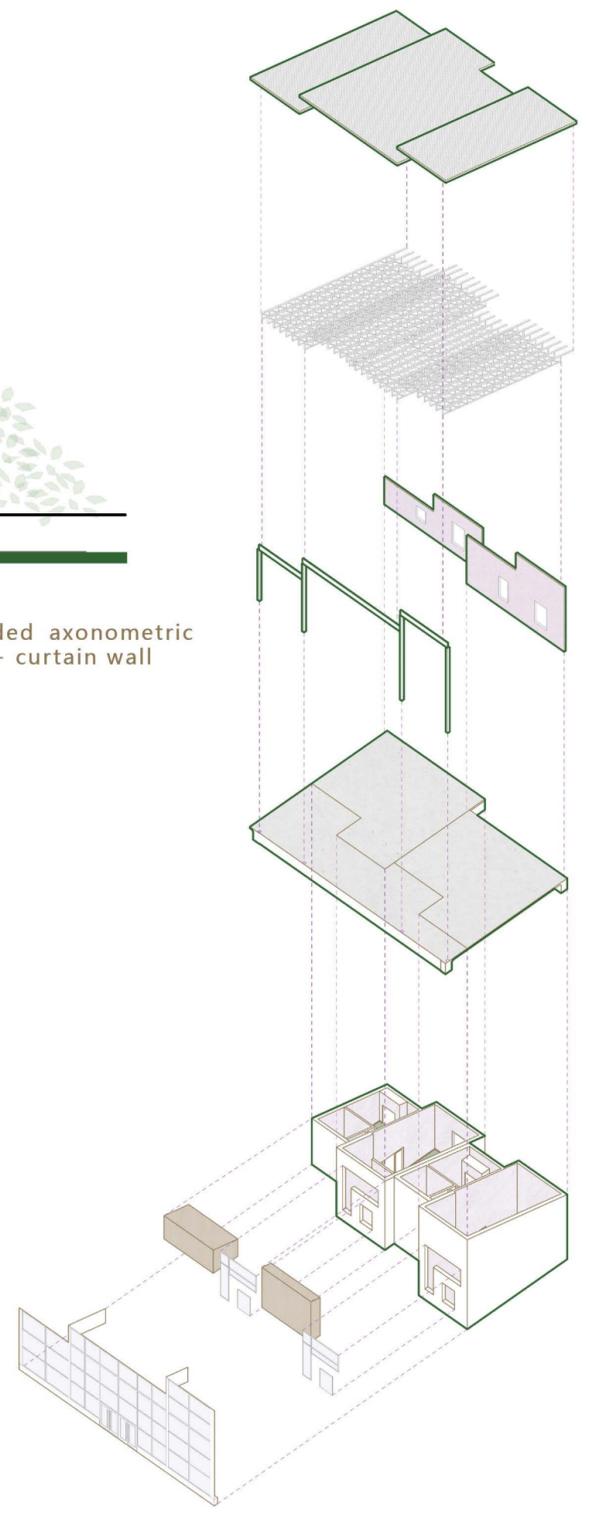
HOW THE PIECES FIT



Above: Exploration of roof + trusses

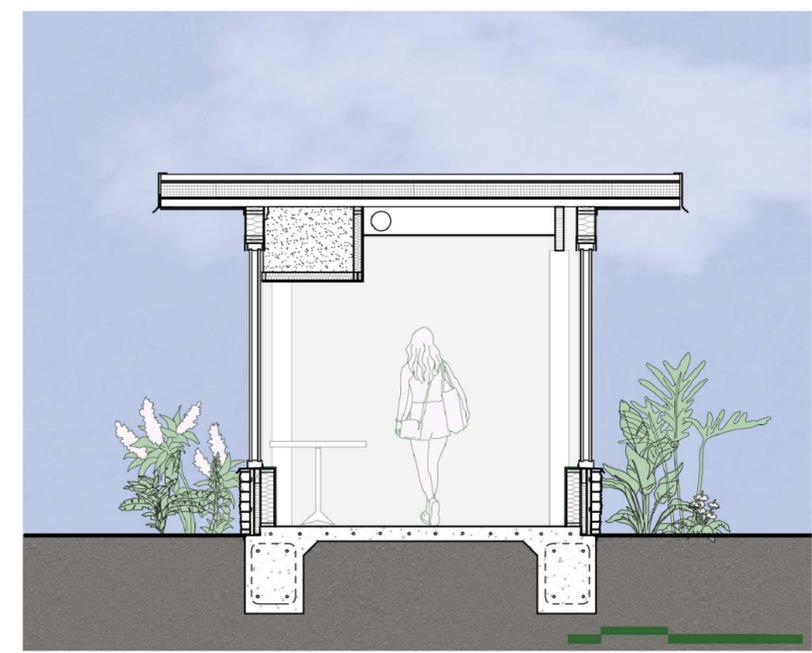


Above: Detail of protective perimeter site wall



Right: Exploded axonometric of structure + curtain wall

Below: Detailed section through courtyard walkway

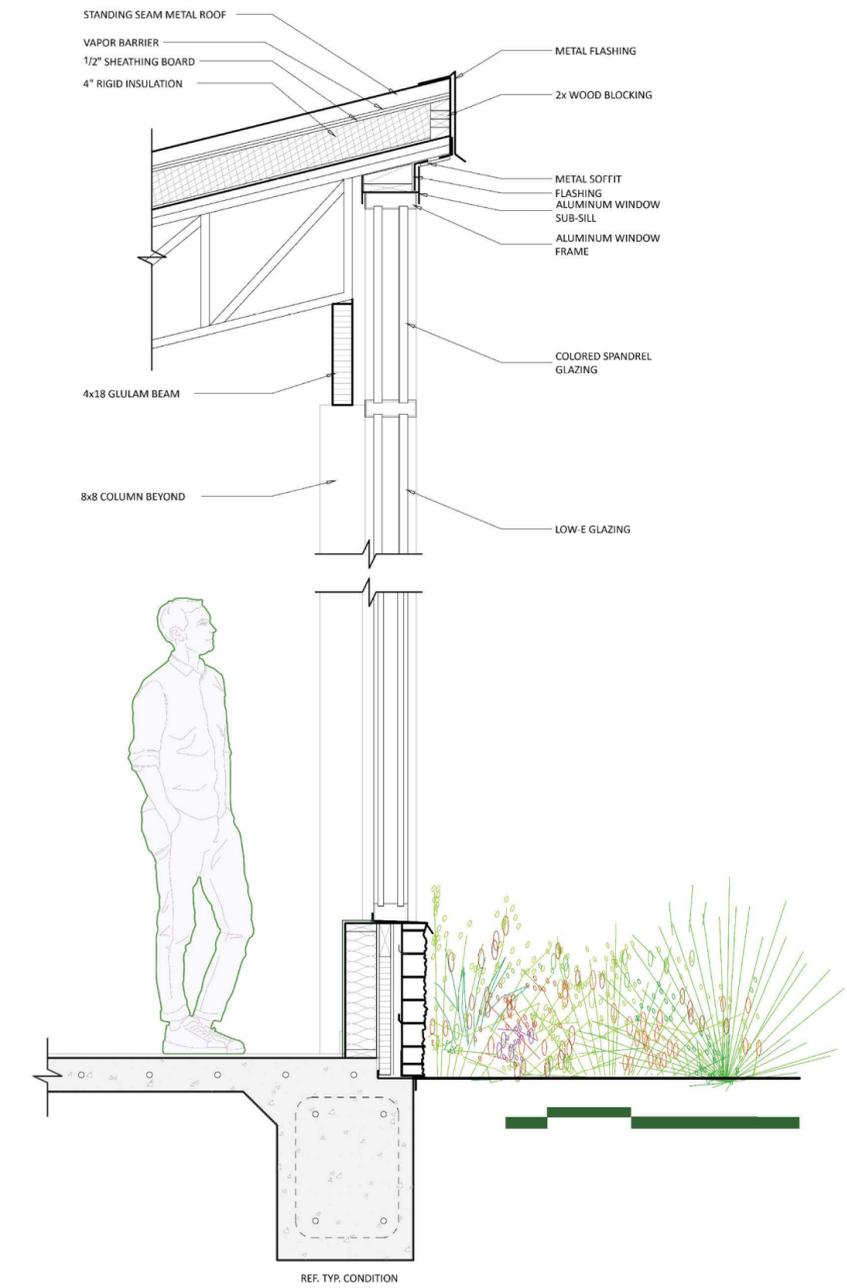
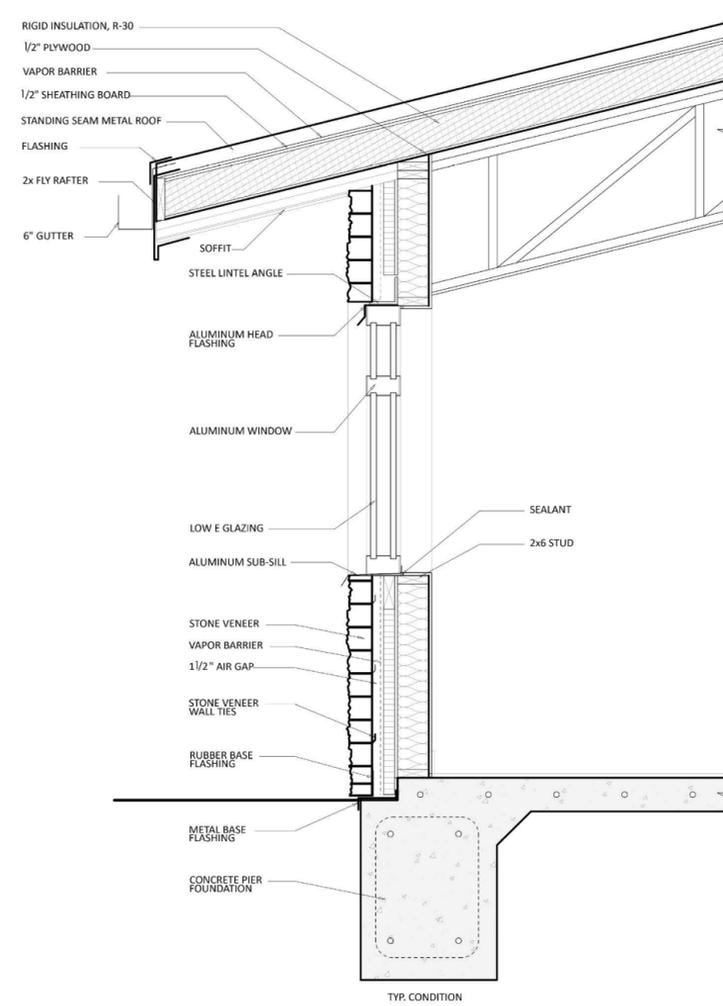


UNDERSTANDING THE PROCESS

Behind Closed Doors is about creating an environment where all inhabitants can heal, thrive, and be set up for future success. This environment was brought about through rigorous research that included

investigation into domestic violence and trauma, architectural case studies, and interviews. Through this process I was able to obtain new knowledge and integrate trauma-informed design into my project.

Right + Below: Typical wall sections of interior to exterior of residential units



Below: Longitudinal section "A" through interior road, public, courtyard, + residential unit.

Following Top: Longitudinal section "B" through residential units, courtyards, public, + admin.

Following Middle: Transverse section "C" through public, outdoor playground, + admin.

Following Below: Detailed section through residential units + courtyard walkway connection.







4

C O N C L U S I O N

CONCLUSION:
final thoughts

FINAL THOUGHTS

I discovered that the best way to ensure that a victim will not return to their abuser is to help them regain their self-confidence, independence, and ability to find the resources to meet their and their families' needs. **To do this, they need a secure environment in which to heal and process the trauma they have experienced.** This can only be done if their surroundings successfully balance the fine lines of comfort and safety, privacy

and community, provision and encouragement. Only then can they sever the ties and dependence they associate with their abuser. Through my project, I hoped to use architecture to facilitate healing from the most intimate of traumas in an attempt to assist individuals as they navigate through the stages of healing with the intent of renewing their inner strength and confidence in order to move forward in society.

NATIONAL DOMESTIC VIOLENCE HOTLINE

800-799-7233

TEXT

"START" TO 88788

DOD ALL SAFE HELPLINE

877-995-5247

SUICIDE PREVENTION HOTLINE

800-273-8255

**"We shape our buildings,
thereafter they shape us."
- Winston Churchill**

Although trauma-informed design is not the solution to healing or preventing trauma in general, it is a crucial stepping stone to providing a safe and protective environment to survivors where they can begin their new lives. I set out to solve a problem through architecture, and instead learned that solutions are not through design alone but must be supported by

the people who reside there. The built environment is not only for people, but through people as the building and residents work in tandem to influence each other; giving and taking, teaching and learning, healing and supporting. Materials and plans can only do so much, **but the heart of the human is what gives architecture its power.**



5

ANNEX

ANNEX:
bibliography

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