em · bed

sarah pyne

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housing the homeless

sarah pyne

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

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Cruz Garcia
James Bassett
Nathalie Frankowski

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Abstract

While architecture, a physical built art form, markets itself as a public endeavor, access divides along societal and economical status. Urban planning of city layouts mimic and deep these divides, falling prey to the ideology that one must afford spaces, beauty, and comfort. Those who fall short of societal standards must be designed away as to not inconvenience the desired user. Washington DC does not even deem shelter a human right. The homeless, who population is higher there than anywhere else in the United States, are simply neglected. The Embed Projects aims to recognize their needs. Exploring the conditions and attributes that led them there, the every day struggles faced, the community centers focus on overall support through many facets.

Breaking down hostile architecture, the failures of homeless architecture solutions typically offered, and the systemic design to keep individuals from escaping homelessness, and exploring the lifestyle sustainability offered through permanent housing. This thesis offers a city wide, communal plan to provide flexible, permanent housing to individuals suffering from homelessness and a full network of support for every homeless individual. It aims to address not only the housing but the societal measures that led to it, and difficulties of within this community.

em bed : housing the homeless
           sarah pyne

General Audience Abstract

Historically architecture was designed to be for everyone but never has been. Money and class have always played too large of a role. Housing, design, and the over network of cities should never be restricted.

This thesis navigates the start of network throughout Washington DC that would help the overwhelming issue of homelessness there. Public housing would be offered in a variety of sizes and locations with the hope of a growth throughout the city.

Embed provides not only housing but also a network to support them. It looks into the reasoning for individuals to fall into homelessness and who is most vulnerable, the issues faced by those who are suffering from it, and the roadblocks society has set up against escaping it. The design of the two community centers dives into these issues and roadblocks, attempting to offer possible solutions.

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Every space we design, we must think about **who** will be using it. Whether we want to create a quiet space or activate the area, we design around our hopes knowing we will not actually control who inhabits it. Professors have constantly brought up that as much as you can design to pull your intended crowd in, you must also be careful to **keep out** those you do not want. Too often, the people they refer to as **undesirable** are those suffering from homelessness with the implied substance abuse, mental issues, and **distrustfulness** associated. This **fear** of their presence often was placed above the comfort of the 'preferred' inhabitant and the beauty of the design. I was told to be wary of more than dark alleys and corners, I had to be careful of benches and outdoor seating areas— anything that might constitute a bed.

Hostile architecture exists on wide scale and in many forms, ranging those tucked behind a **façade of functionality** to blatant statements of malice. Designers and urban planners join the government in deciding who they want where, resulting in **divided cities** and intensifying socioeconomic differences. When an architect is complicit in these choices and adapts their designs to governmental positions, they become culpable in the **worsening of the issue**. Architecture should never be just for those who can afford it. As James Furzer put it,

 "As architects, we have a duty of care to provide shelter for those who need it. I feel that architects can help by battling against the design guide and councils that want to design the undesirables out of their towns." Furzer also conceded that "There are many underlying political issues that need to be addressed before the issue of homelessness can seriously be addressed in the manner it requires."

My question was why is design being used to **make life worse** for the less fortunate when it had the **power to make life better**?

Growing up my family spent a lot of time volunteering at the local homeless shelter, especially cooking and serving meals. As I got older and a little less shy, I began talking to people I would routinely see coming in. It made me realize how **society simply failed** most of them. Sometimes simple bad luck was involved, an individual who has a job but is still not be able to afford rent because of an unexpected bill, or an injury that caused them to be out of work long enough to be evicted. But more often it was a **government or systemic issue** that lead to them being on the streets.

21%

8%

16%

32%

31%

41%

22%

87%
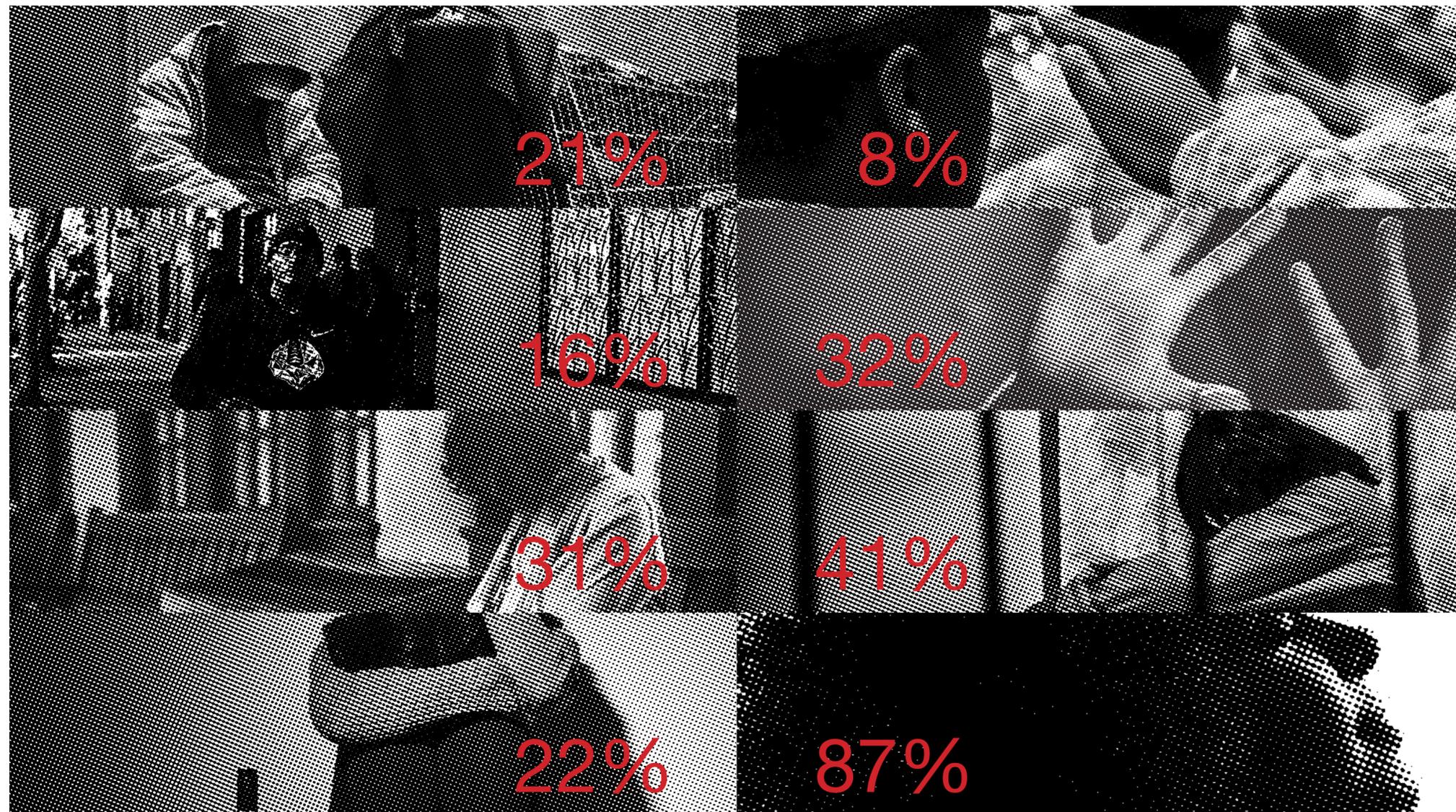
The healthcare system puts profit above health, especially mental health, constantly denying people access to care or robbing them when they need it. **21% are living with chronic health problems** and **16% have a physical disability**. Mental health is treated even more negelably. There is a history of **severe mental illness in 31%** of the individual adult homeless population for the US not only lacks access to mental care, it punishes any affects of it. **22% have dealt with chronic substance abuse**, where it is not recognized as an illness in need of treatment but is instead demonized and heavily criminalized.The prison system is designed to create repeat offenders, releasing people into a society that rejects them after stripping them of necessary skills and rights. Of the single adults who are homeless, **41% have formerly been institutionalized**. The government does nothing to rectify this, instead waiting for them to turn to something illegal and return to prison, where they have no freedom but at least access to consistent food and shelter. While women make up a smaller charge than men in the homeless population, the leading cause of their homelessness is due to domestic abuse, with 20% of single homeless adults and 32% of adults in families regardless of gender. In a country that holds systemic racisms deep into its roots, people of color are disproportionally affected. In DC, a city made up of 47% Black people, the homeless population is **87% Black**. Nothing about anyone being homeless is fair, but the largest injustice is in the government's handling of it.The government is not incapable of drastically helping its members. One of the systems the United States holds so highly, the US military, noticed only serves its current members. Veterans, too often suffering from PTSD, can end up homeless after being discharged with no method of sustaining a career outside the military and nothing but trauma remaining from their time in service. With the government actively working to help veterans, they are **dropped by over 50%** in the last ten years. Showing that is apathy that keeps the number of homeless from consequencial drops. Any of these compounding factors can make a difficult situation ever harder. And there is a lot of overlap.

WA : 29

OR : 38

CA : 38

NY : 47

MA : 27

Washington DC
93 homeless for every 10,000

National Average
17 homeless for every 10,000
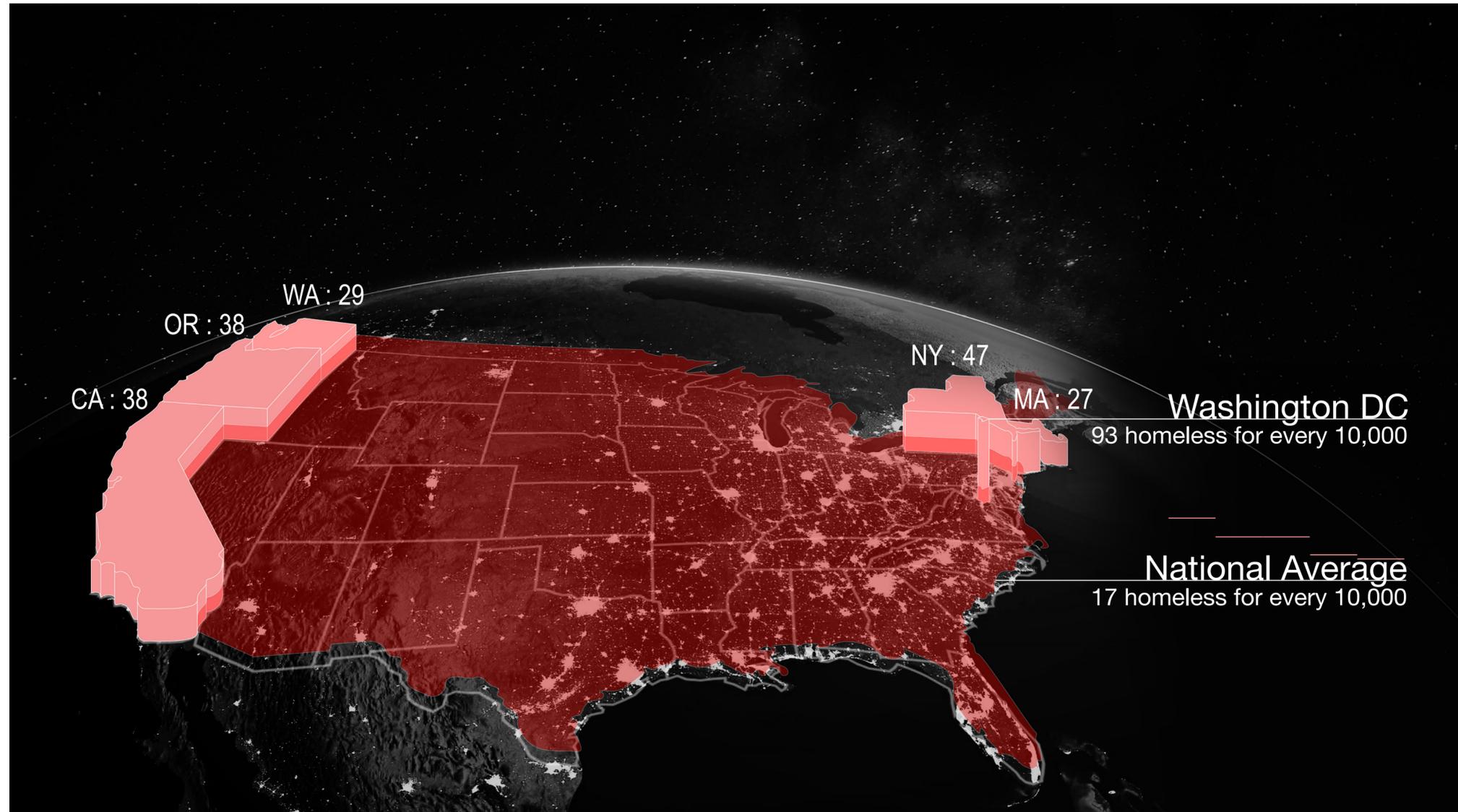
In a country designed to keep from helping its most needy citizens, it is hardly a shock that the capitol is the worse. The rate of home-lessness in DC is **93 homeless per 10,000 people**, over 5 times **the national average of 17**, and nearly twice the second highest, New York.

Rent prices in DC make it difficult to get stability. **55 % of the population doesn't make enough money for affordable rent** (the average household would have to earn $28.10 an hour for affordable housing). Rent prices vary drastically ward to ward with the cheapest prices being over in wards 7 and 8, the farthest from the city.

Affordable housing is limited within the city with wards such as ward 3 **offering as little 1%** of the housing. Their lack of affordable housing is carefully crafted to stay that way, as you could see on the last graph, they do not actually have the highest rent rates but instead their **urban planning** has worked very hard to **keep out** those they deem undesirable.

$1713

$2000

$1851

$1261

$1283

$1915

$1006

$1085

75%

25%

Affordable Housing Units

Total Housing Units

Affordable Housing Units

WARD 2 : 12.39%

Affordable Housing Units

WARD 5 : 15.15%

Affordable Housing Units

WARD 3 : 1.07%

Affordable Housing Units

WARD 1 : 12.59%

Affordable Housing Units

WARD 4 : 8.25%

Affordable Housing Units

WARD 7 : 25.56%

Affordable Housing Units

WARD 6 : 12.59%

Affordable Housing Units

WARD 8 : 51.27%

|RIGHT TO SHELTER|

over 95

under 32

2,831

890

985

322

46

815

667

SINGLE MEN   SINGLE WOMEN   GENDER NON-CON-
FORMING INDIVIDUALS

FAMILIES

Washington DC is also one of the few places that does not believe a human being has *a legal right to shelter*. Unless it is under 32 degrees or over 95 degrees, the city has no obligation to provide bed — not even proper housing, just a bed. Families fair best with **667 family units** available. The larger portion of the homeless population, the single adult is not as cared for. On average, the city offers **890 beds to individual men, and 322 to individual women**. Which is **barely enough for 30%**. They provide **zero beds to gender non-conforming individuals**, who like the trans community face serious discrimination from shelters and the government as a whole.

So what can we as architects do??

The first thing we must do is **stop building hostile architecture**. **Design must be for everyone**. No more spikes to keep people from laying or camping somewhere. Not even pretty or creative spikes. No individually seating to make laying down impossible.

Designing a better tent is also not good enough.

Most architectural solutions follow that path, designing countless collapsible sleeping pods and pop-up shelters—temporary responses to a persistent issue. Another common response is 'parasitic' housing, described as the idea of filling the gaps of cities, between and on the sides of buildings and above rooftops, with affordable housing. The name alone suggests an impression of the mere existence of the homeless leeching onto society, while tucking them into shadows of the cities perpetuates the sentiment of **hiding the homeless** from view. The structures tend to offer little more than an enhanced form of homelessness. The goal can not be to make the problem more palatable but instead to assist in permanent solutions.

Temporary housing, or temporary stays in permanent housings, has both advantages and draw-backs from the pop-up housing. It typically offers safer and more secure spaces for the individuals, but the impermanence of these set-ups only **solidifies the transitory lifestyle** that those using them are trying to escape, a fugacious hold on the stability such individuals deserve.

Data continues to show that **long term stability** in the form of permenant housing is the best basis to help to people suffering from homelessness recreate their lives.

Homeless

Shelter
☐ MEDICAL
☐ MENTAL
☐ BEHAVIORAL

Transitional
☐ INCOME
☐ LANDLORD RELATIONSHIP

Permanent
☐ MEDICAL
☐ MENTAL
☐ BEHAVIORAL
☐ INCOME
☐ LANDLORD RELATIONSHIP
Life Stability   Life Stability
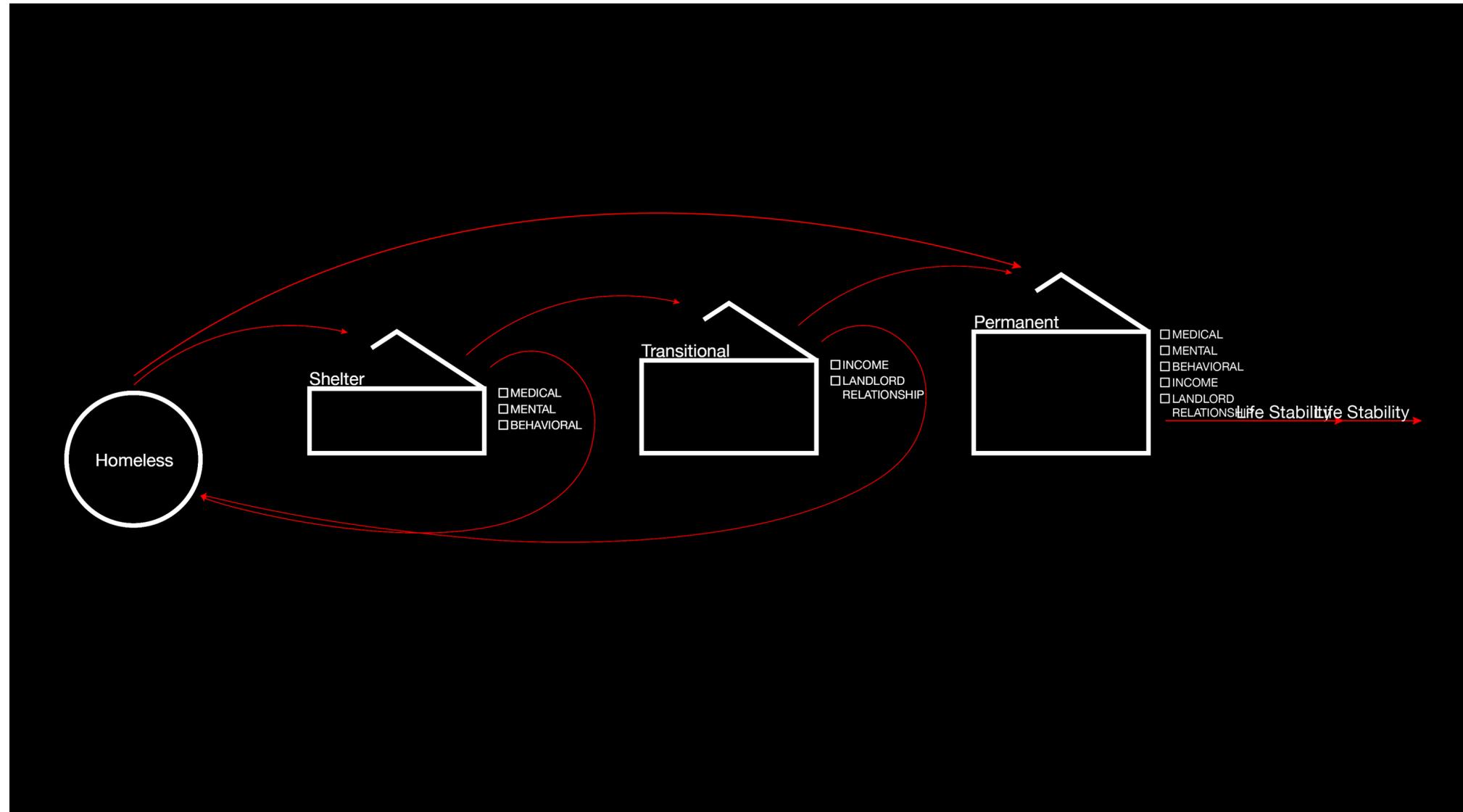
One approach oriented around helping individuals with one or more of these compounded issues is the **Housing First Approach**. The basic idea is as simple as the name, provide permanent housing first and then allow inhabitants to sort out their compounding factors and establish a job, stability and the likes.

Where the standard route is to try first for a shelter, but any medical, mental, or behavioral challenges can quickly have **the person back out on the streets**.

If you make it through the shelter, you are moved into transitional housing. Where you then attempt to establish a steady income and landlord relationship as you move into your new home.

Housing First skips this, **giving individuals a home first** to elimate as many factors than can catch them falling back into homelessness. This approach focuses on the needs and desires of an individual and caters to each in their recovery rather than offering a strict blanket route to 'success.' The backbone ideology is that individuals who are unwilling or unable to commit to sobriety or mental health care are still **deserving of shelter**. The HF approach allows them access to that while providing the support on whatever level of self improvement they are willing to reach for. Hopefully, with permanent housing and support, those goals will grow into a full commitment. Regardless, these individuals deserve **a safe space** to try.
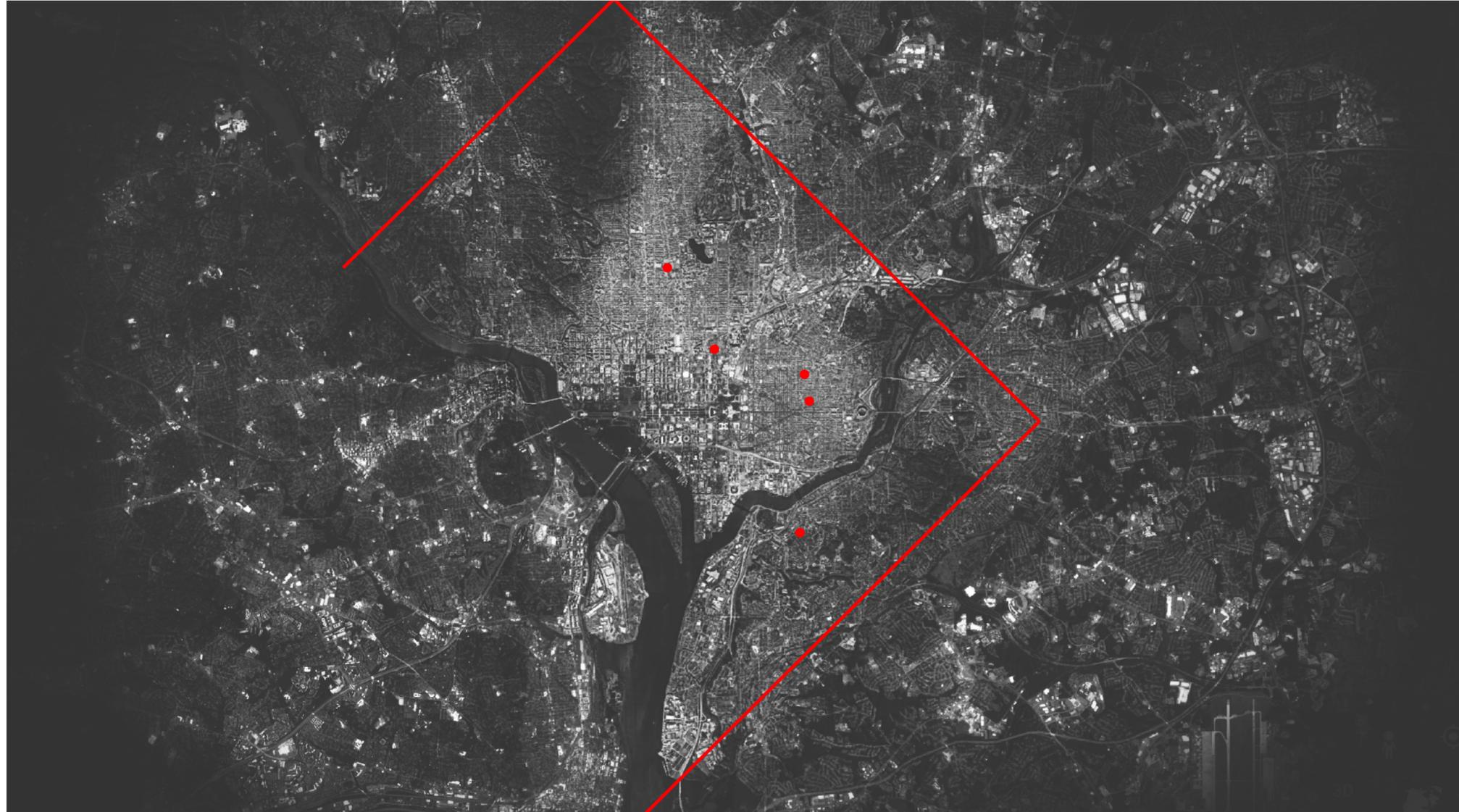
Appearance — Houses or construction should blend into the existing neighborhood, appearing rather average in design among its surroundings. Communal aspects of the design should be visible from the street and approachable. It is important for the design to enhance relations amongst neighbors rather than to seem closed off.

And most importantly… **Location** — Residences are best located with conventional residential neighborhoods that have lower levels of crime and little non-residential competing uses. Supplemental to available work, recreation, shopping, access to the key surroundings is paramount.

Groceries. Food scarcity is often stitched into the fabric of cities matching the economic patterns. HF developments should avoid such voids. However in the future developers need to make an effort to rectify such planning failures.

Social/health services. This is particularly important because of significant compound factors faced by are ideally with walking distance or at a minimum quickly available through easily accessible public transport.

With these factors in mind, I selected 5 sites of varying sizes. All are currently government owned vacant lots. 2 larger sites that have community centers in conjunction to housing units, and 3 smaller housing only units selected to be linked to the larger facilities for residents looking for a less communal approach.

VEHICLE TRANSPORTATION ROUTES

PUBLIC TRANSPORTATION - METRO

PUBLIC TRANSPORTATION - BUS

HEALTHCARE

GROCERY ACCESS
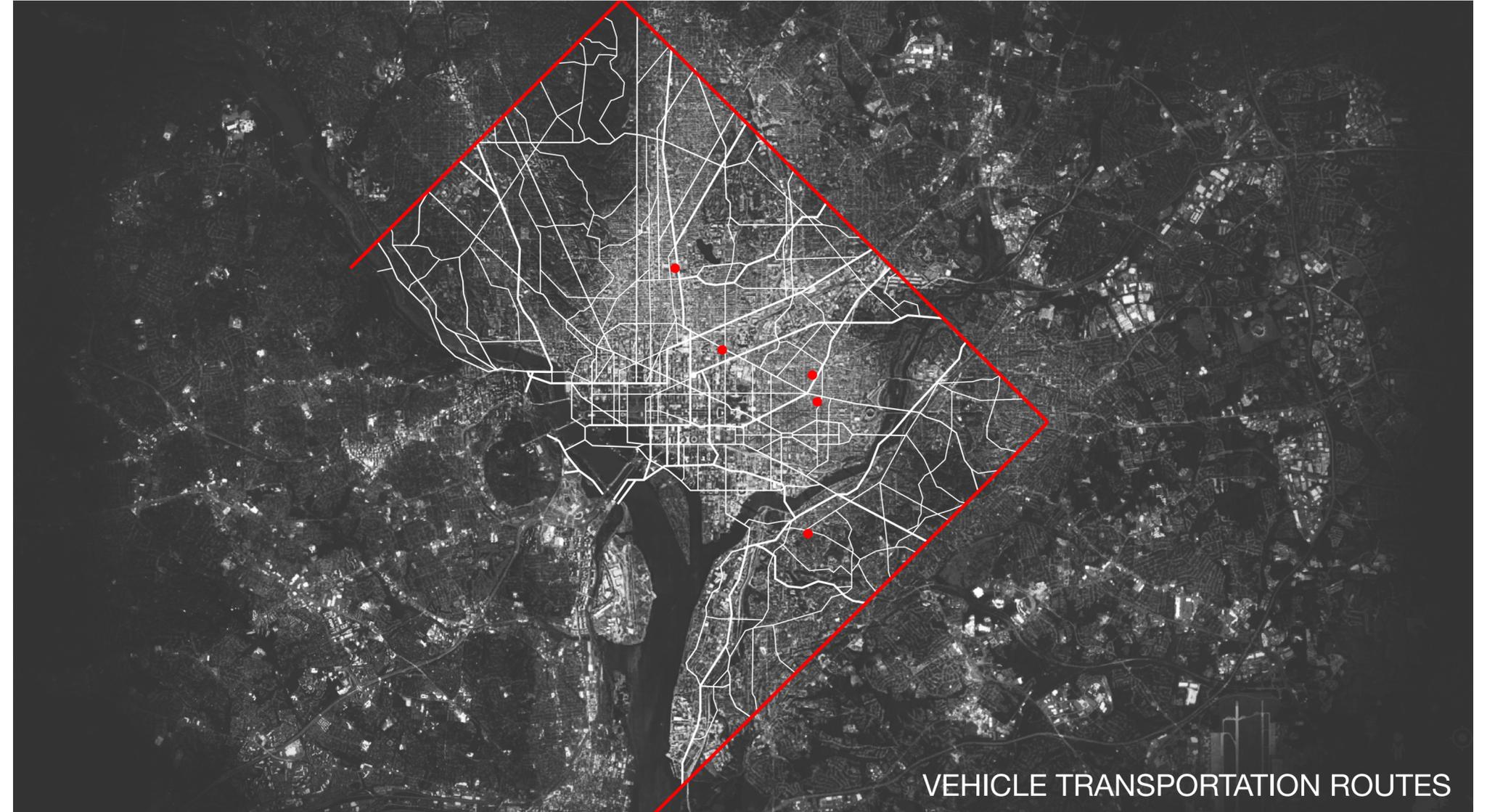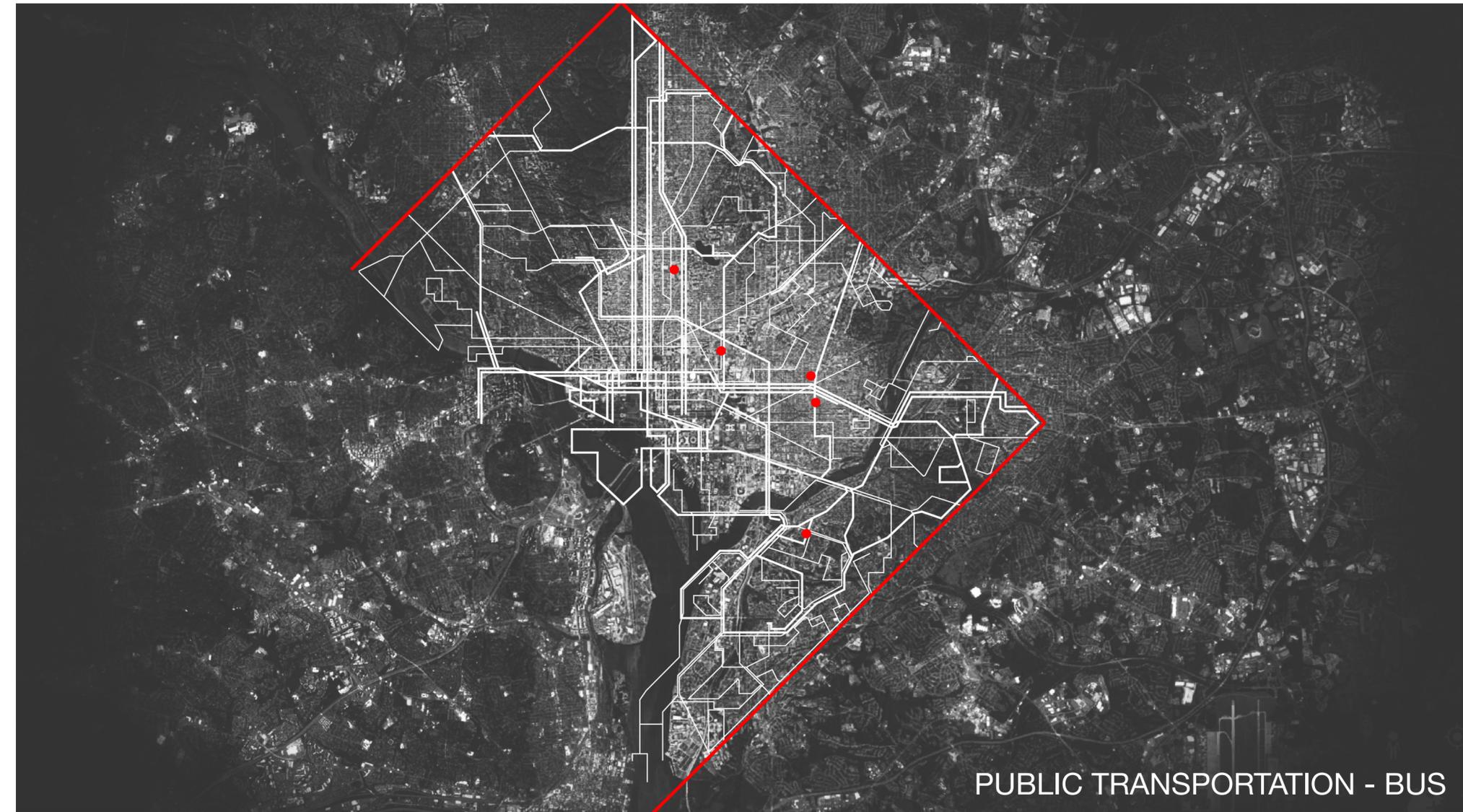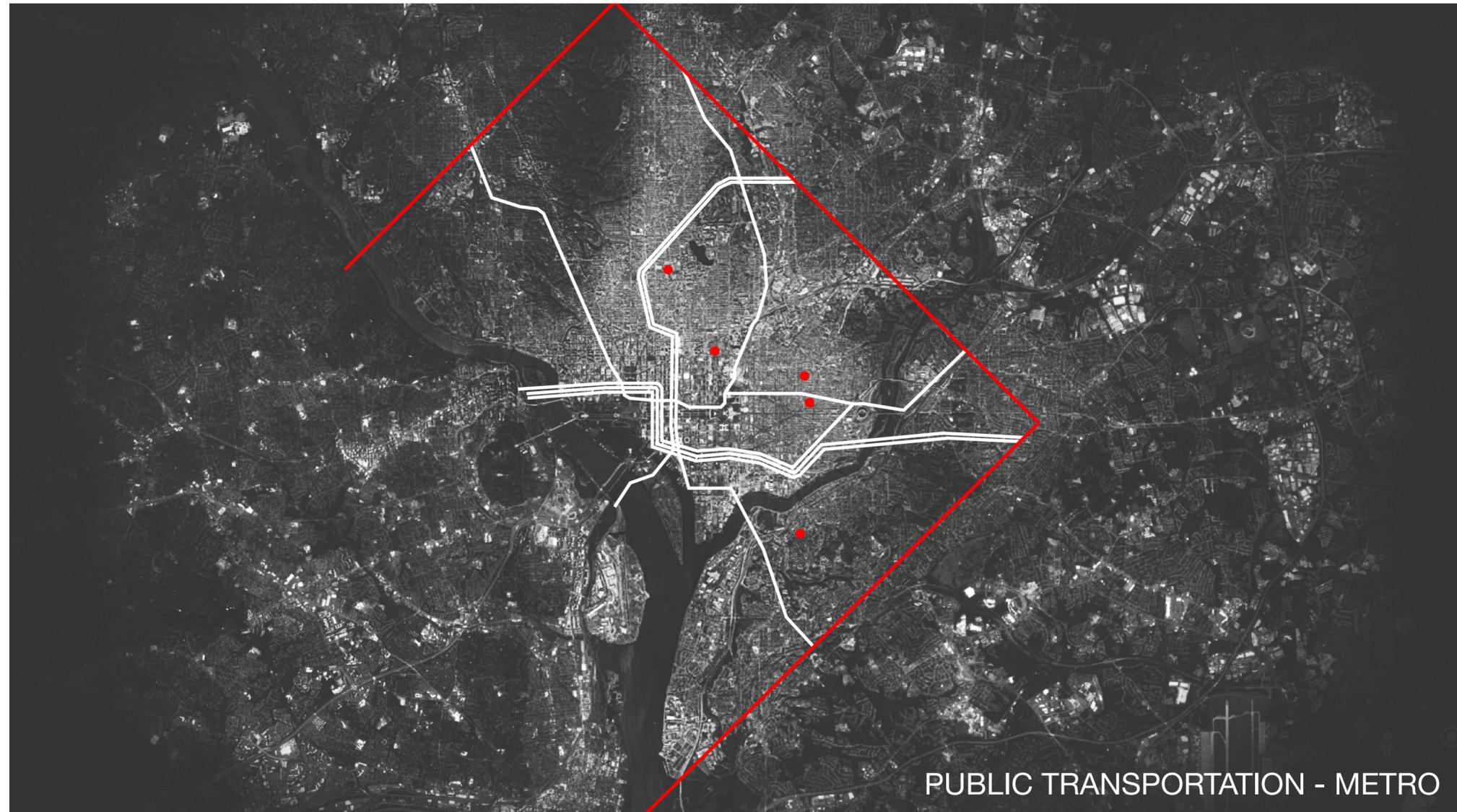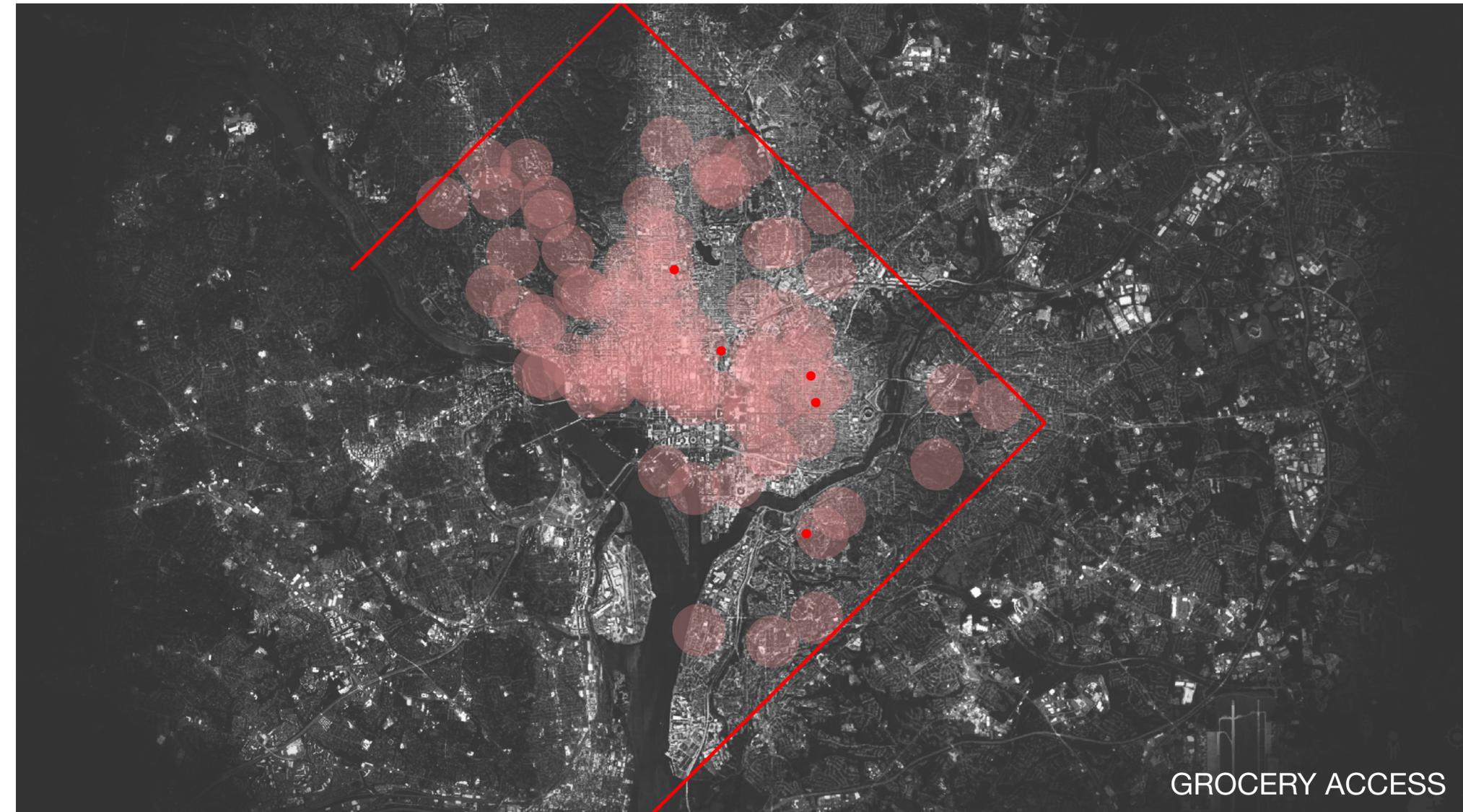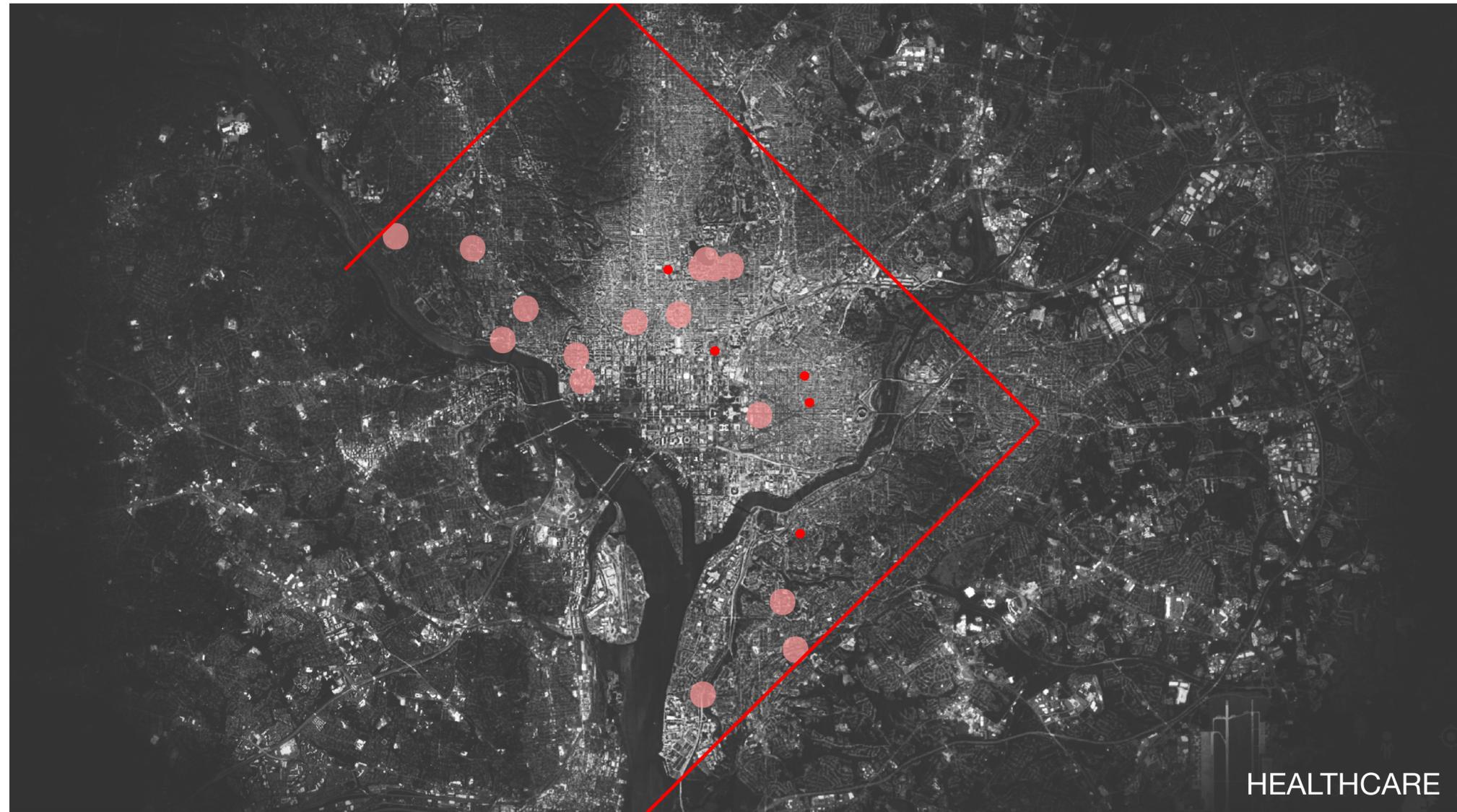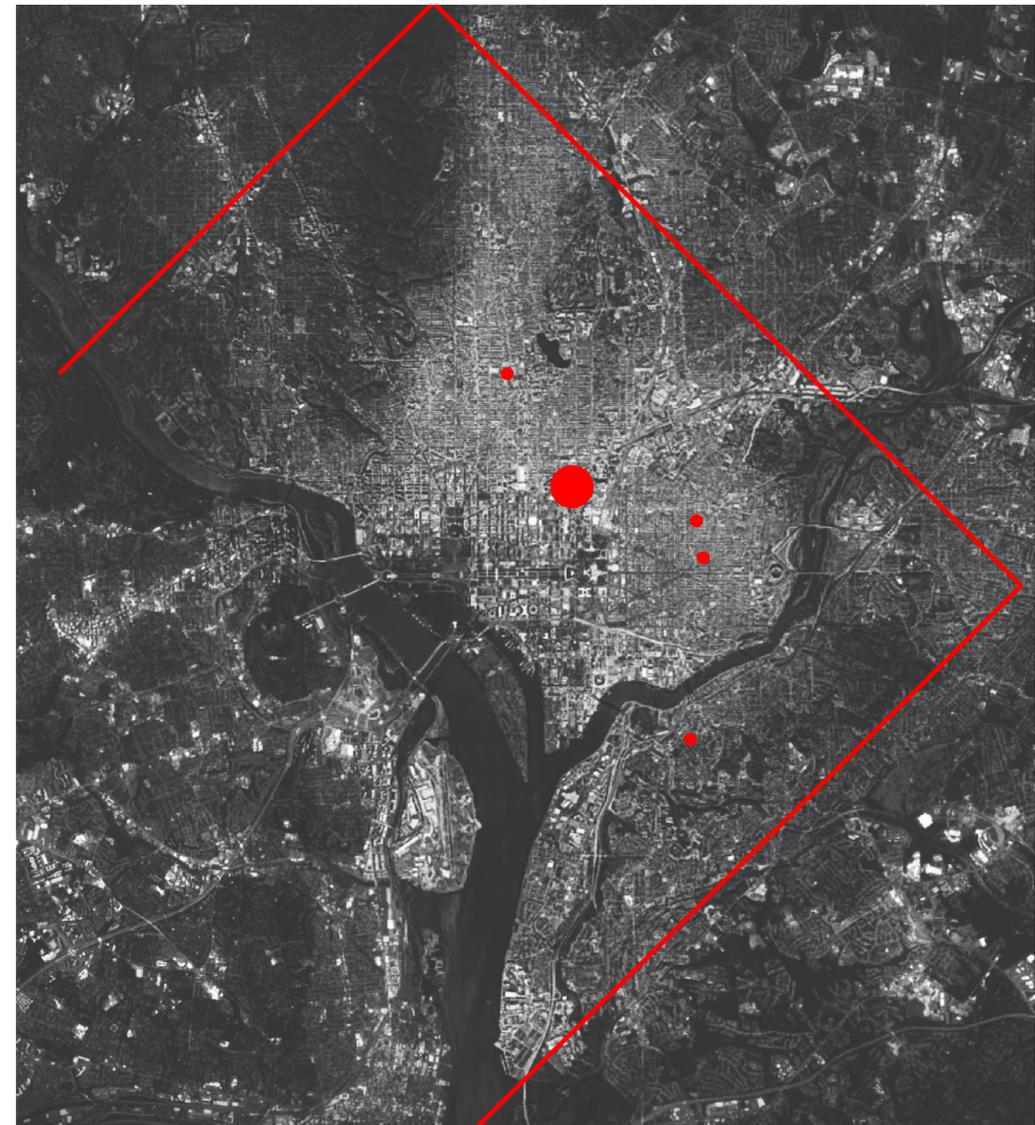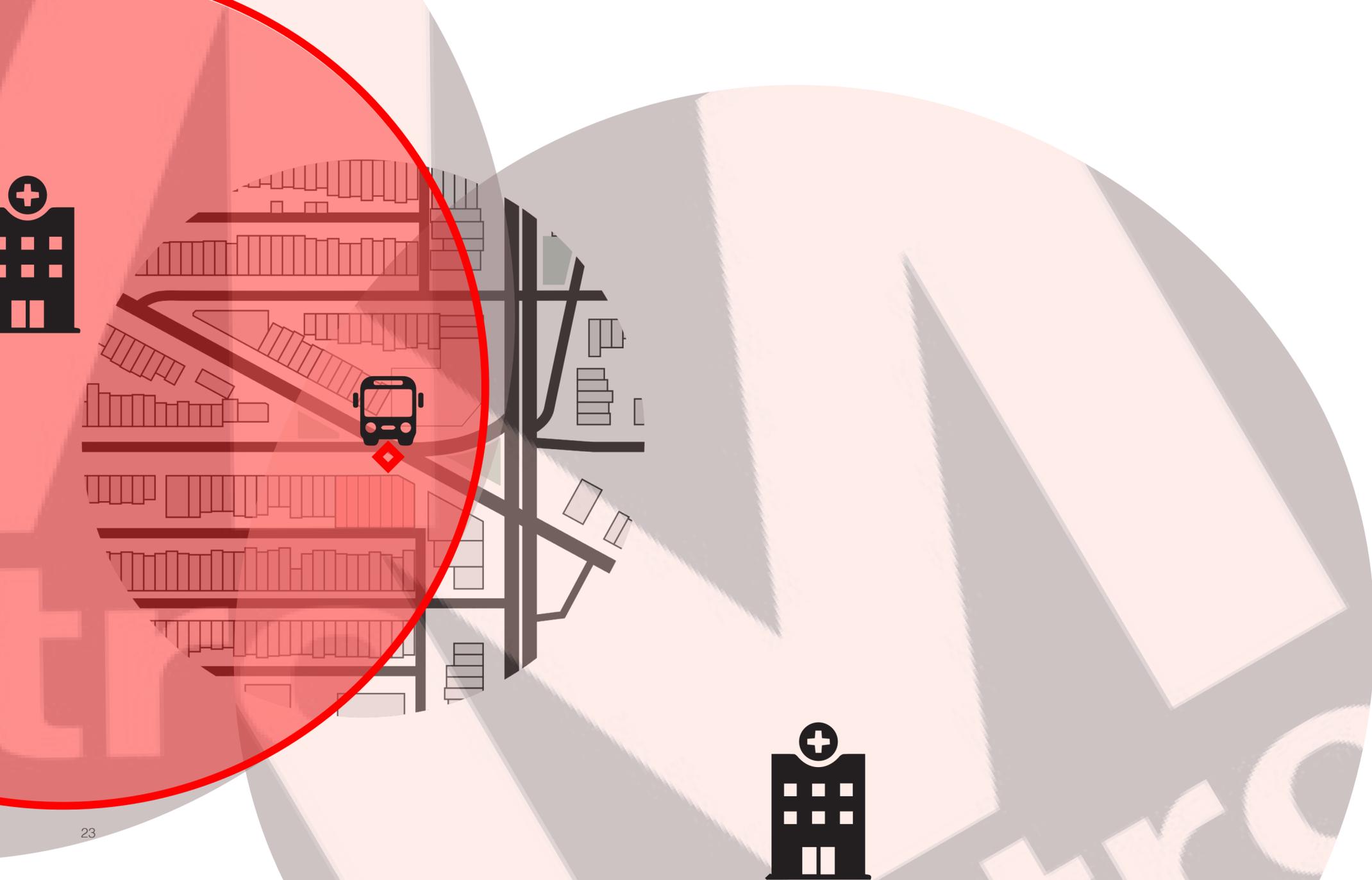
4-14 Q St &
14-16 Florida St
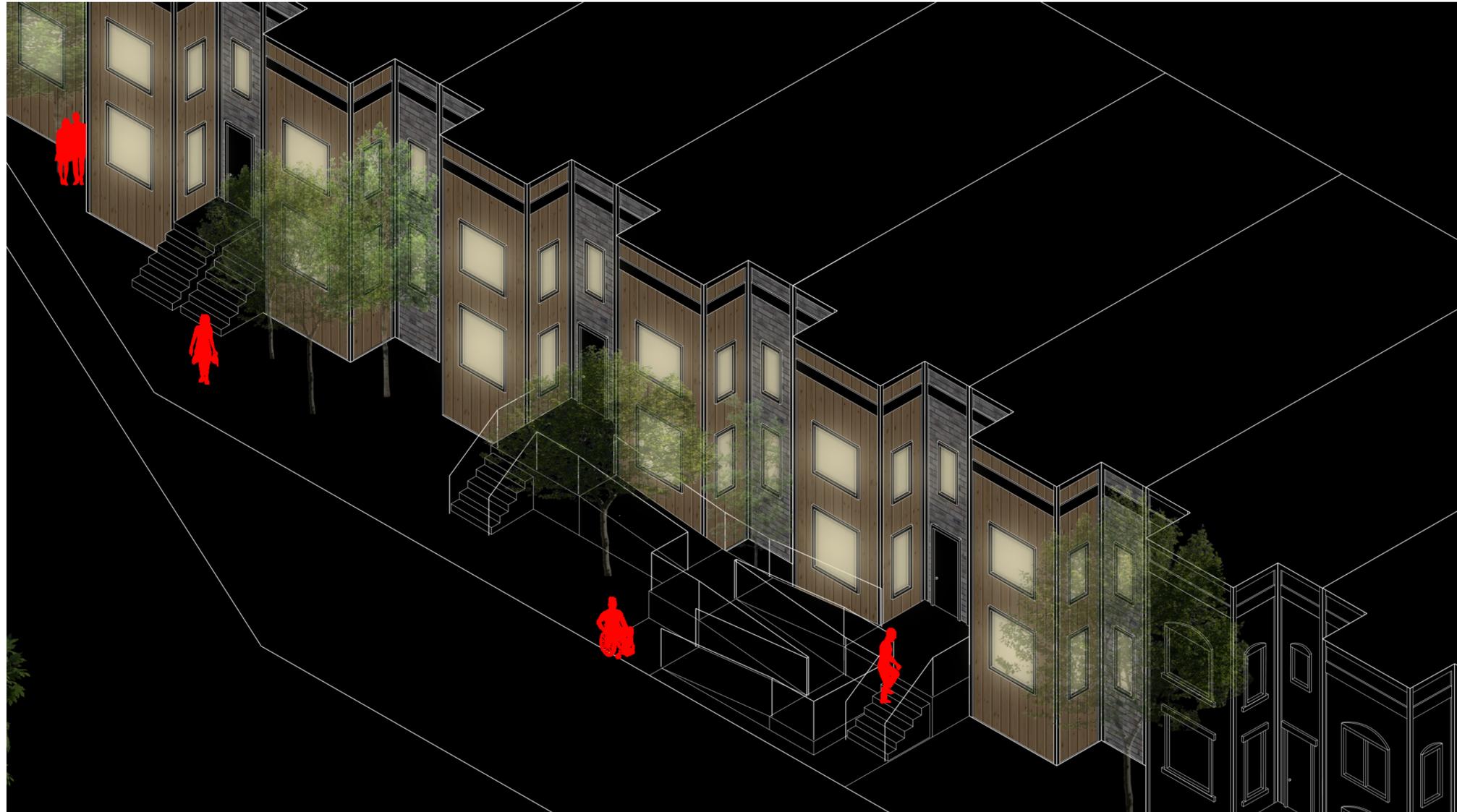
The Florida St Embed Center is located one 7 land parcels and like all the sites is currently a government owned vacant lot. It has two metro options, a bus stop directly out front, two nearby hospitals and very close food availability. It has **3 two bedroom**, fully accessible, family units. **3 one bedroom units. 10 studio units**. Most importantly, it has a **large community center** for both embed residents, and those not yet placed into permenant housing.

There are **public mailboxes** for those without a permanent address. Job applications, medical forms, bank account applications, personal identification — it is easy to forget how many forms require a mailing address and how much tougher life can be without one.
There is **access to computers and wifi**, for job hunts, education, research, or pleasure.As well as **work space** for individual or group studying or working.

There are both **individual and group therapy spaces**. Experiencing homeless alone put great emotional strain on a person, especially if they have any of the possible compounding factors. All residents would be greatly encourage to support their mental health.

The center provides **laundry access** to both its residents and homeless population. More importantly for those who are not yet within the program, it provides **access to bathrooms and showers**. Reestablishing personal hygiene can help give them back a sense of dignity as well as step them up for success in other endeavors.

A **sense of community** is a typical human desire, and those suffering from homeless can lose touch of that. The center provides several spaces to help them regain it. There is a **communal kitchen and dining** area, giving them the option of cooking and eating together on a large scale. There are raised garden beds for them to garden together and stock those meals. There is also a **community pantry**, for donated food to serve an informal soup kitchen.

ADAPTABLE WORKSHOP SPACE

LAUNDRY ACCESS

GROUP THERAPY SPACE

INDIVIDUAL THERAPY SPACES

COMMUNAL KITCHEN

COMMUNAL DINING

CUSTODIAN'S APARTMENT

CUSTODIAN'S OFFICE

RAISED GARDEN BEDS

MAILBOX ACCESS

COMMUNITY PANTRY

COMPUTER / WIFI ACCESS

GROUP STUDY / WORK SPACE

SHOWER & BATHROOM ACCESS

COMMON LOUNGE AREA

PRIVATE SHOWER & BATHROOM ACCESS
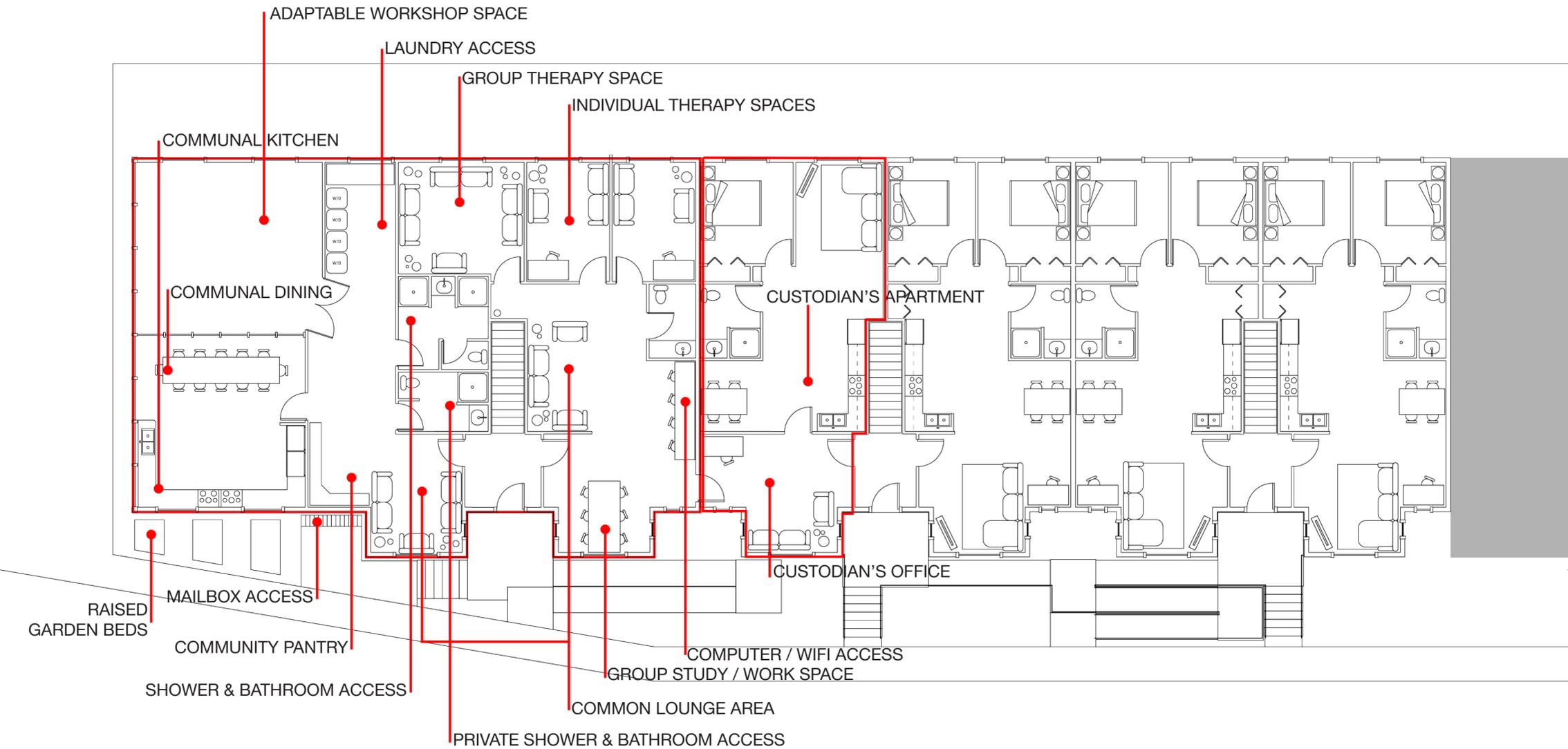
FLORIDA ST

FLOOR 01 : COMMUNITY CENTER

27
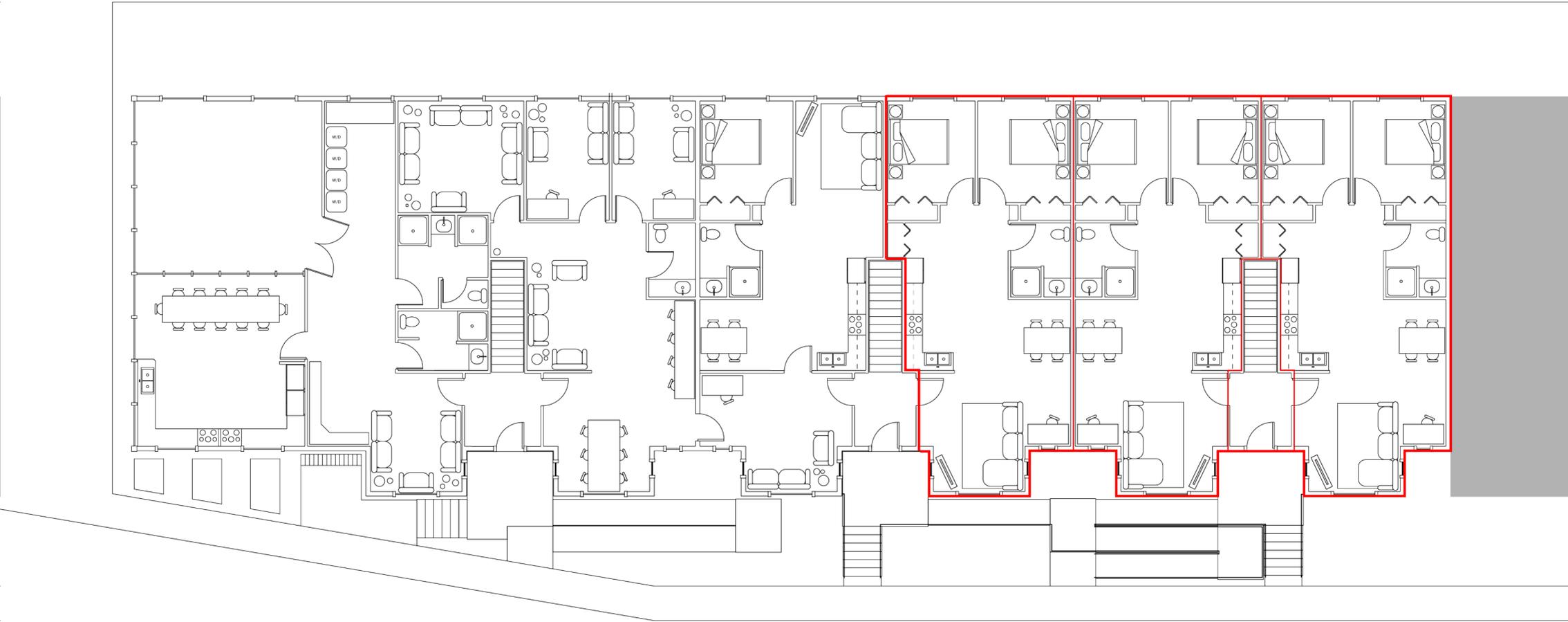
FLORIDA ST

FLOOR 01 : TWO BEDROOMS

28
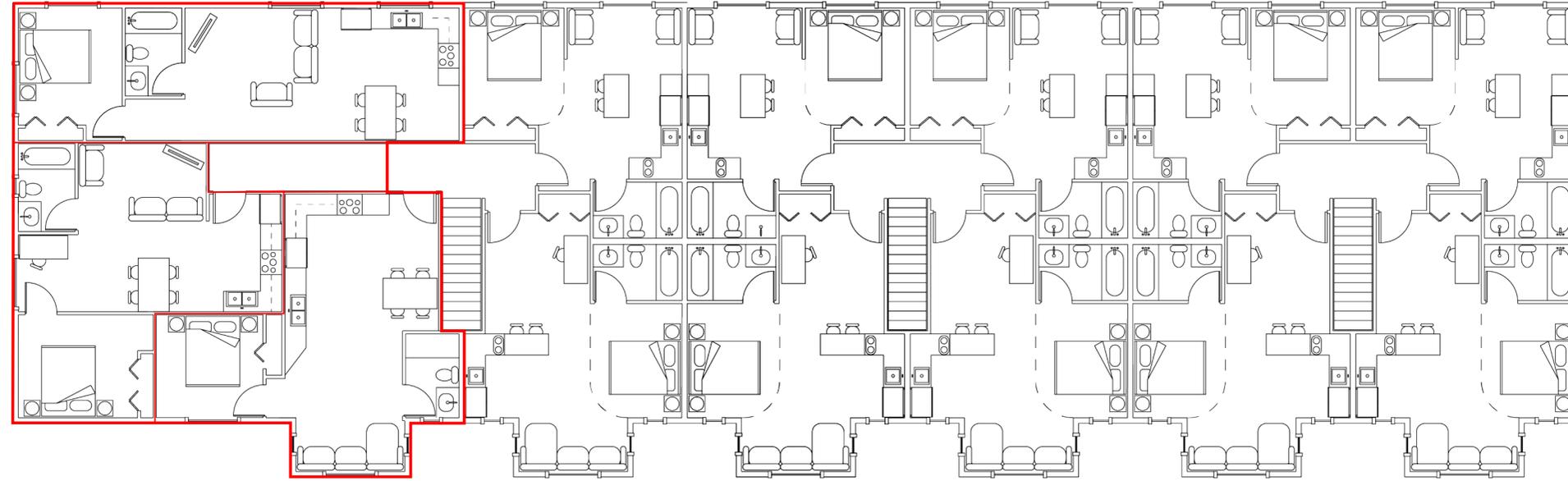
FLORIDA ST
FLOOR 02 : ONE BEDROOMS

29

FLOOR 02 : STUDIOS

30
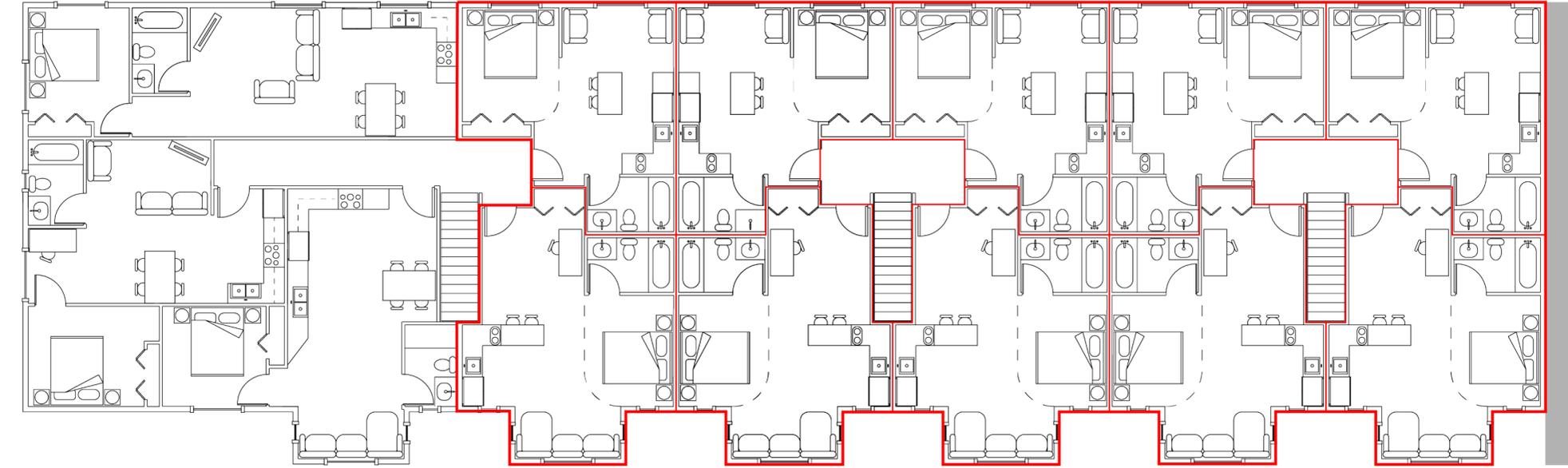
There is a **large flexible workshop** for a variety of uses. Outside providers visit the houses and **present workshops** presenting the community with options and access to education, substance abuse treatment, alternative therapies, linkages to medical and mental health services, and employment assistance. The house itself typically does not provide these services, only access, and coordination with the outside professionals who deliver them. A **custodian of the space** would manage the building and the programs brought in and be a resource to community in all its needs. They have a connected apartment and office space. Often longterm members of the program will be sought after to take on these roles. Unlike some approaches, this support is not conditional. Individuals are able to choose when and what support works for them. Helping target a broader spectrum of individuals. The space might offer **discussions and classes** on more niche topics, such as communication skills and parenting. Host exercise classes to help the community regain its physical health. Offer day care options when needed. And **adapt** to many more programatic needs.

33

34
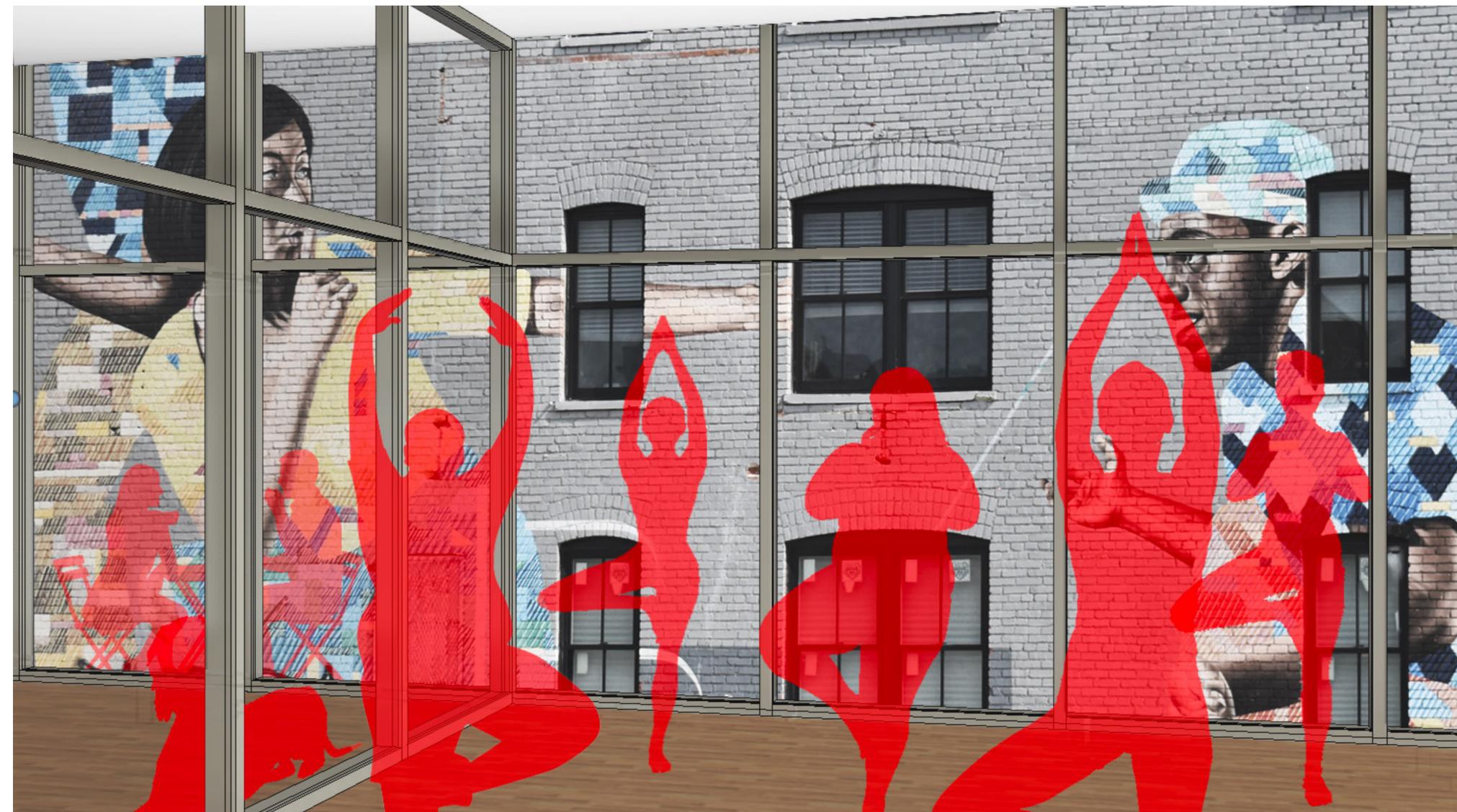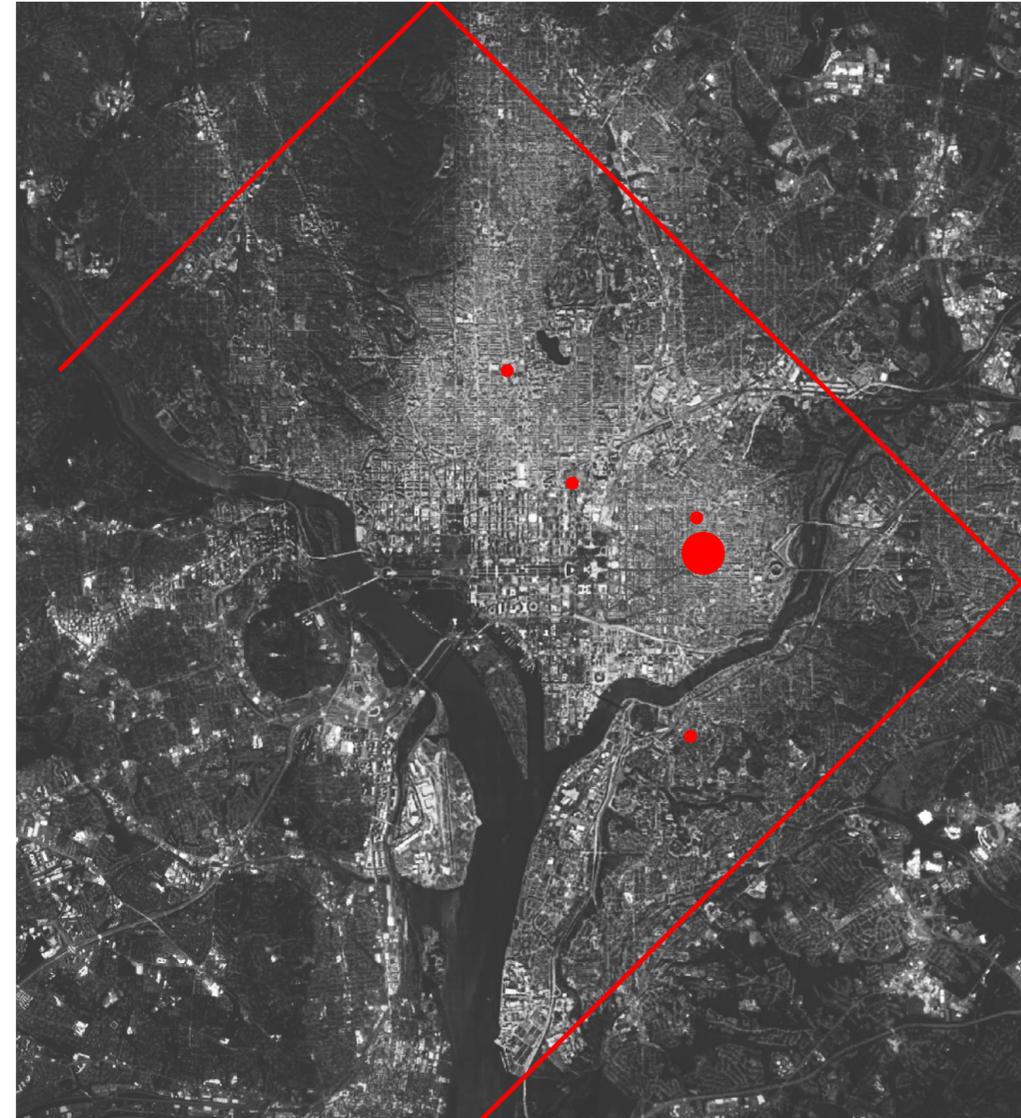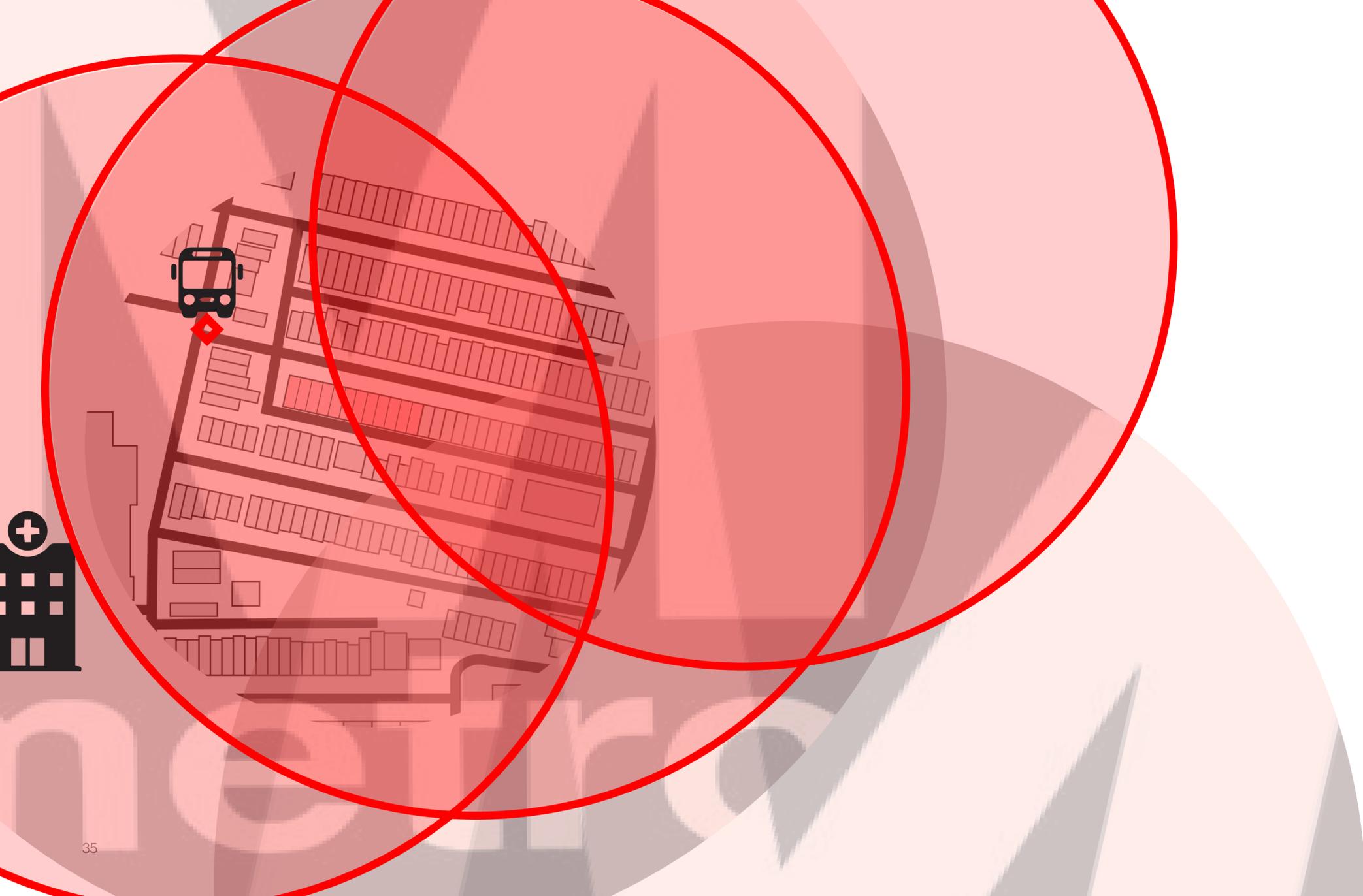
1613-1633
Kramer St

The Kramer St Embed center is located on a series of the smaller of DCs two typical lot sizes, offering 12 vacant lots. Unlike most shelters, there would be not discrimination against sexual orientation or gender presentation. Couple would be allowed to live together. And animals would be welcome, pushing back against reason people avoid shelters. It has two close metro stops, a bus stop, a nearby hospital and many food options.

There is a smaller **community center** on site. It has an **adaptable work space** which would be occupied similar to Florida St. **Therapy spaces** for those who are interested and a **communal gathering space**. **Bathroom, shower, and laundry access** would be available for the community. It has a c**ommunal kitchen, dining area, and pantry**. Continuing to provide community through food.

There are a total of **twenty-two one bedrooms,** ten on the first floor and twelve on the second floor. As these hope to be long term residents, the apartment are designed to grow with them.

ADAPTABLE WORKSHOP SPACE

INDIVIDUAL THERAPY SPACE

BATHROOM ACCESS

SHOWER ACCESS

LAUNDRY ACCESS

COMMUNAL GATHERING SPACE

COMMUNAL KITCHEN

COMMUNAL DINING

KRAMER ST
FLOOR 01 : COMMUNITY CENTER
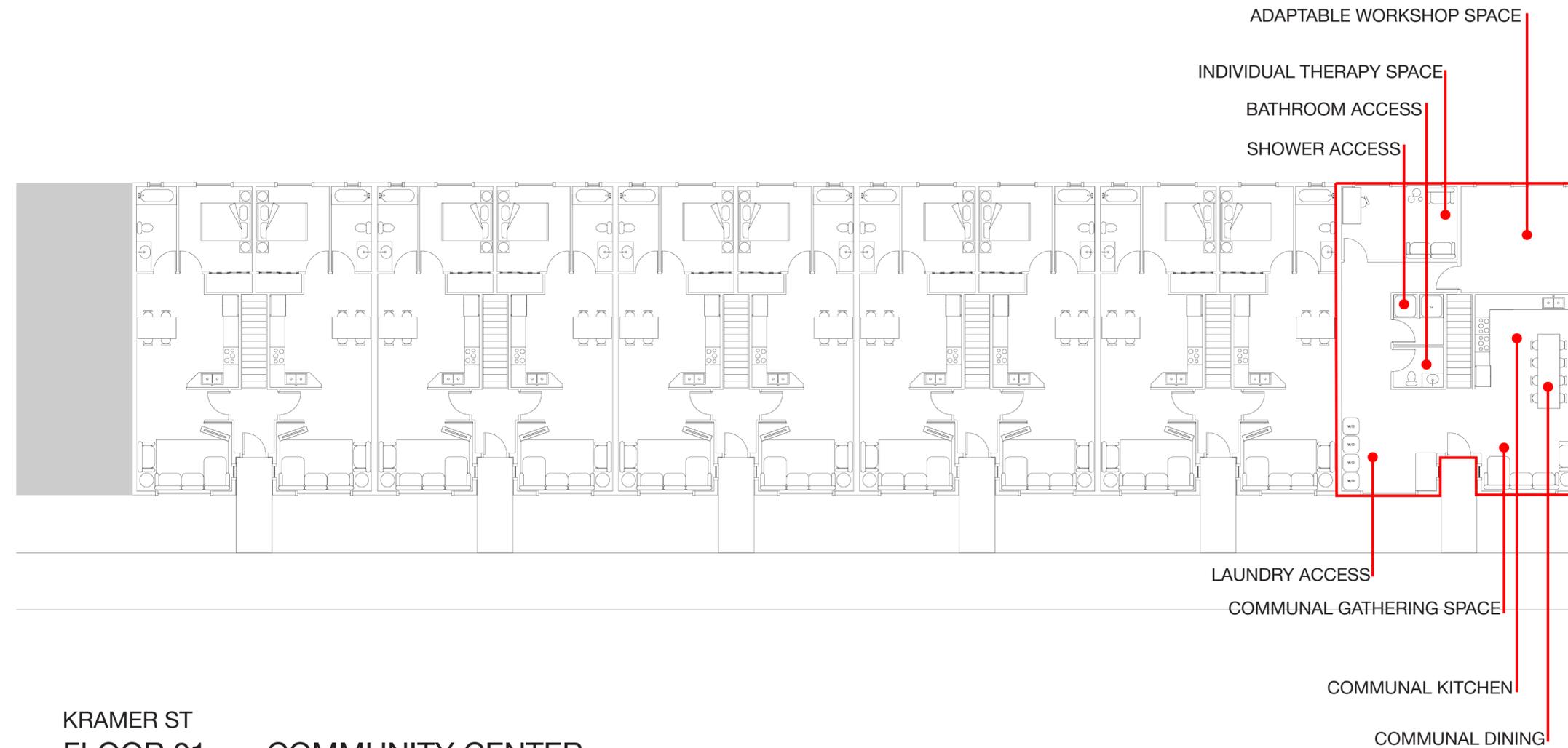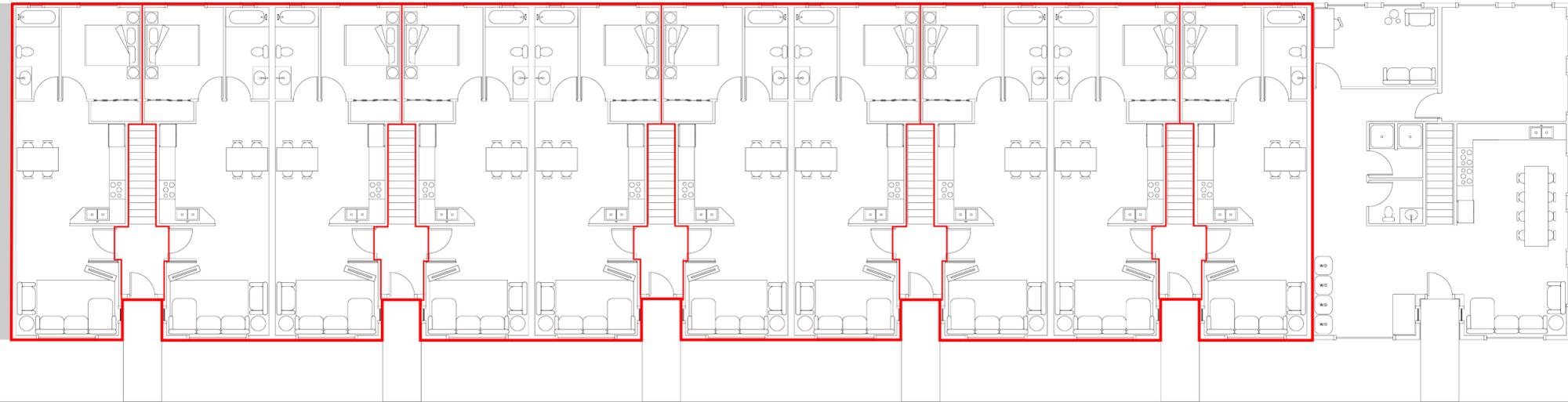
KRAMER ST
FLOOR 01 : ONE BEDROOMS

41
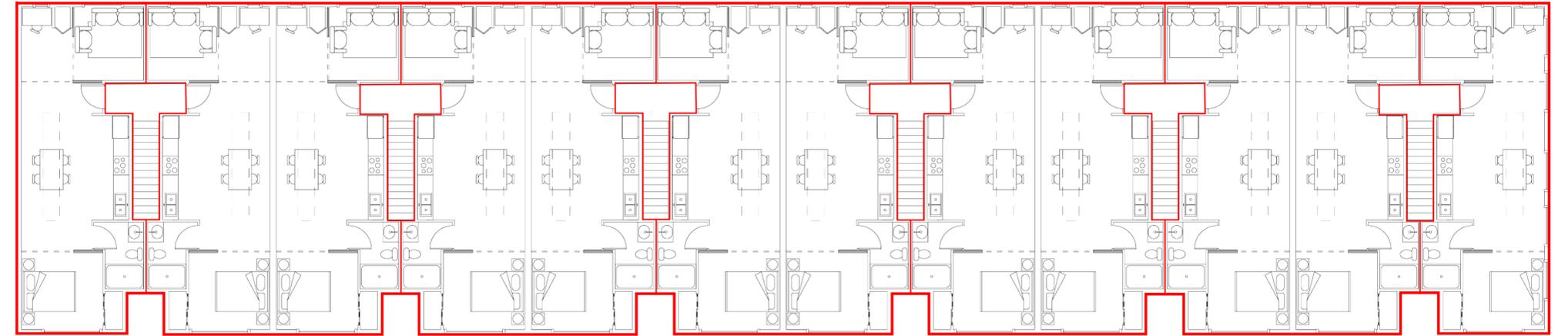
KRAMER ST
FLOOR 02 : ONE BEDROOMS

42
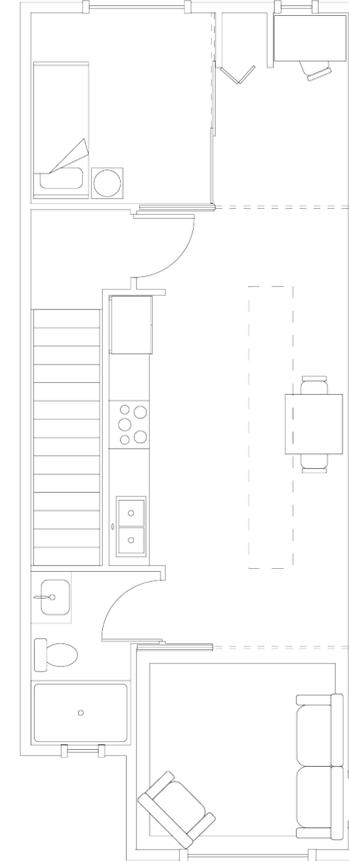
The apartment would start relatively bare and open. Basic furniture would be provided and greenery for its mental health benefits. The space would be split in three with sliding doors making it as open or not as they desired. The space would be minimalist to maximalize funding, but very flexible in adaptivity to the inhabitant or inhabitants.
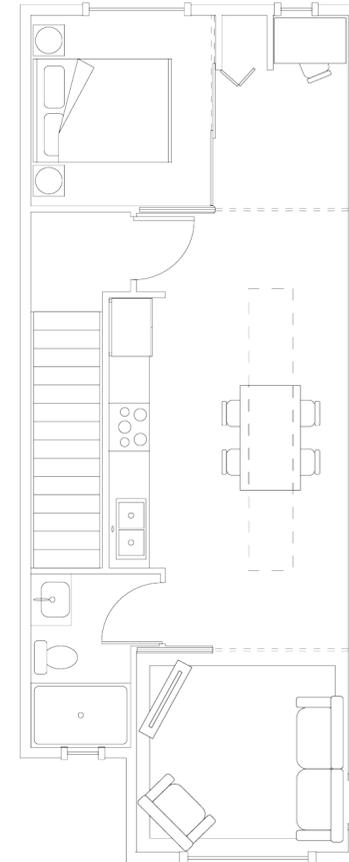
As they developed mental stability, they may add in more furniture and begin to make the space their own. As it is not a temporary space, their person style and design could be showcased and they will have the ability to truly lay down their roots.
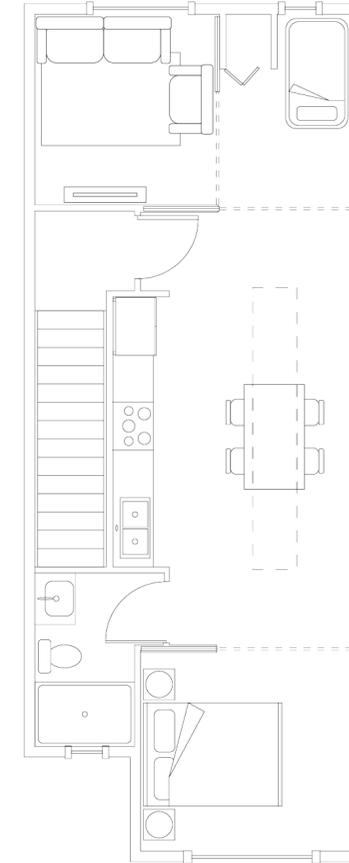
The flexibility of the space allows for many set up options, for example the living room and bedroom could switch locations. The residents might have decided to develop a family or bring a child into the home, the apartment would grow with them.
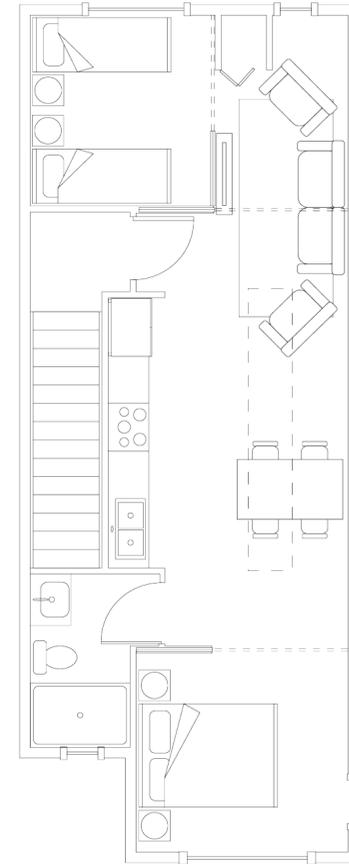
While the square footage is relatively small, both spaces could be converted into bedrooms as the family grew. Or an office or studio space. The rearranging and manipulation of the space allows for many options to fit the need of the inhabitant(s).
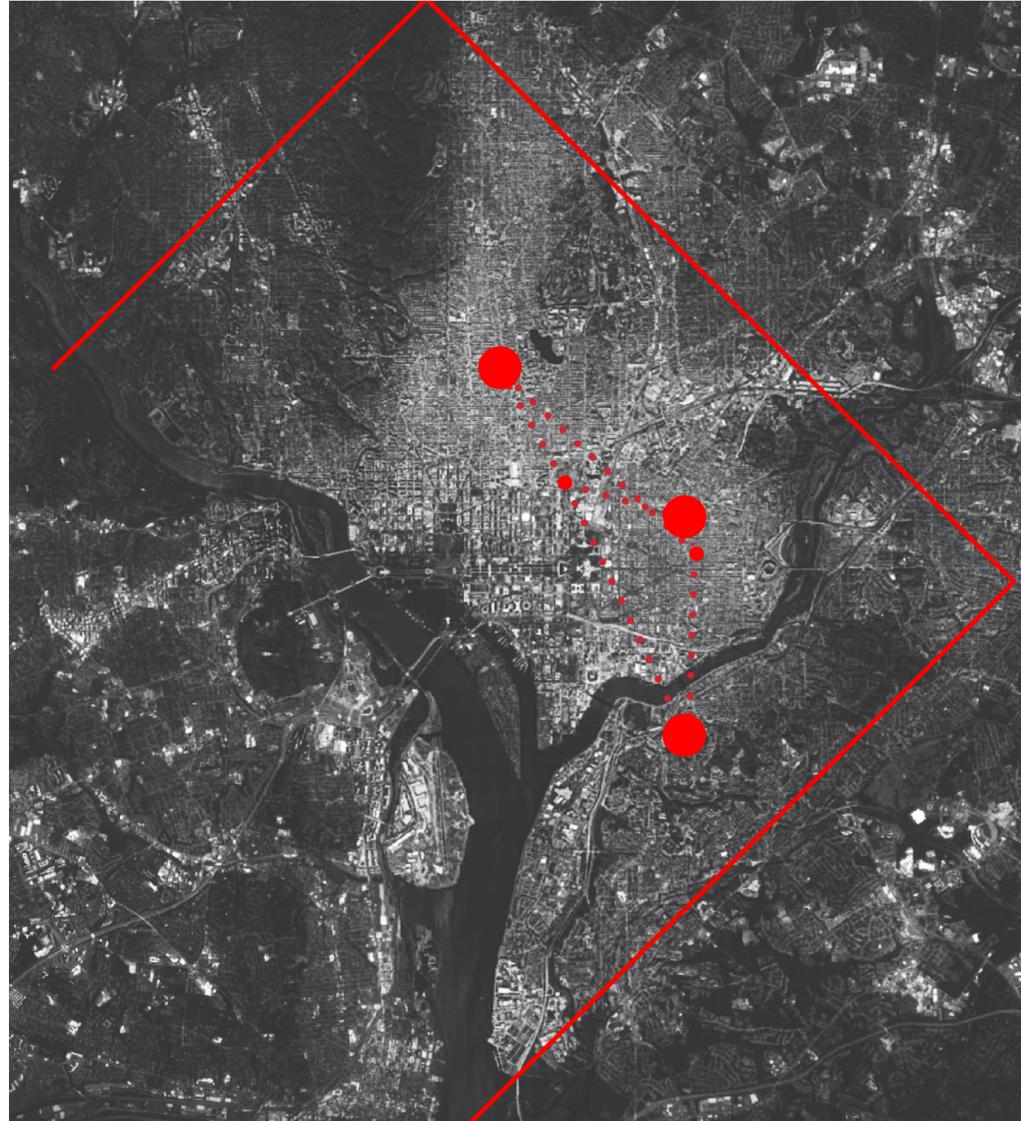
1928 15th St
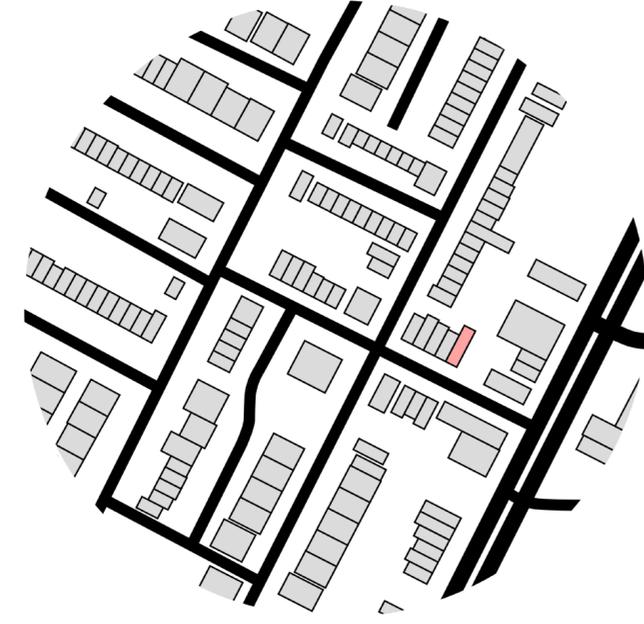
1612 Lewis St
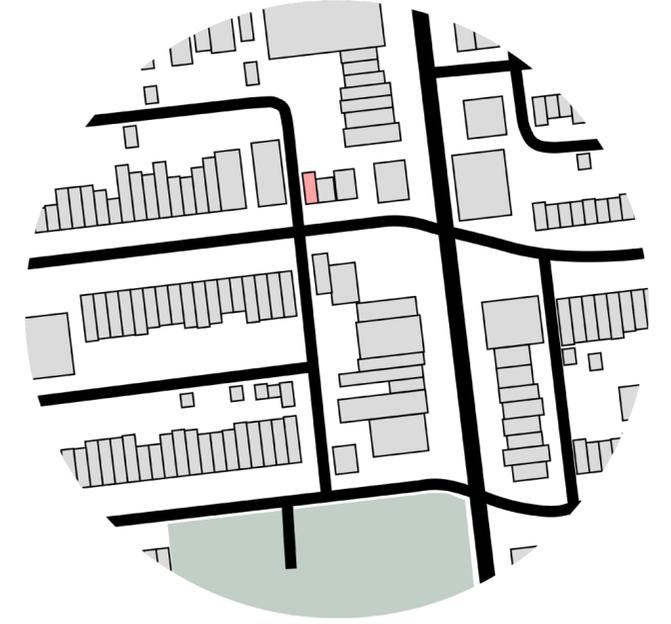
709 Kenyon St

Thoughout the entire program is linked. The smaller site on Kenyon street would have three more one bedroom units. Lewis street is only two streets over from the Kramer center and would offer two more two bedrooms. Across the river, on 15th another sited would be linked back to the others, offering four more two bedrooms. All would have access to both community centers and their services.

709 Kenyon St, NW

4-14 Q St & 14-16 Florida St, NW

1612 Levis St NE

1613-1633 Kramer St, NE

1928 15th Street SE
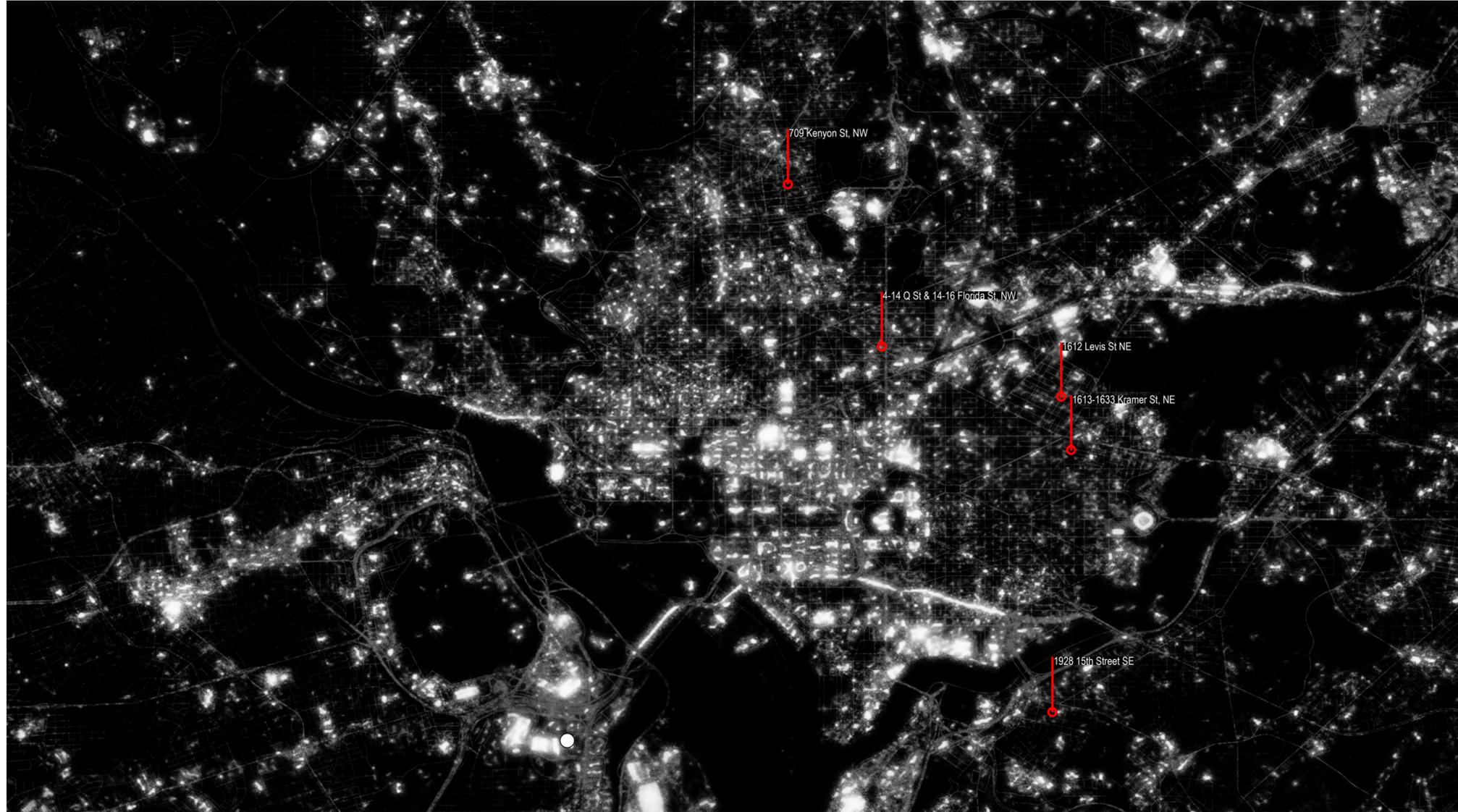
The goal would be expansion, **embed**ding sites into the city and making a network community with the hopes of easing the struggle of homelessness that too many experience.

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