



ISTANBUL

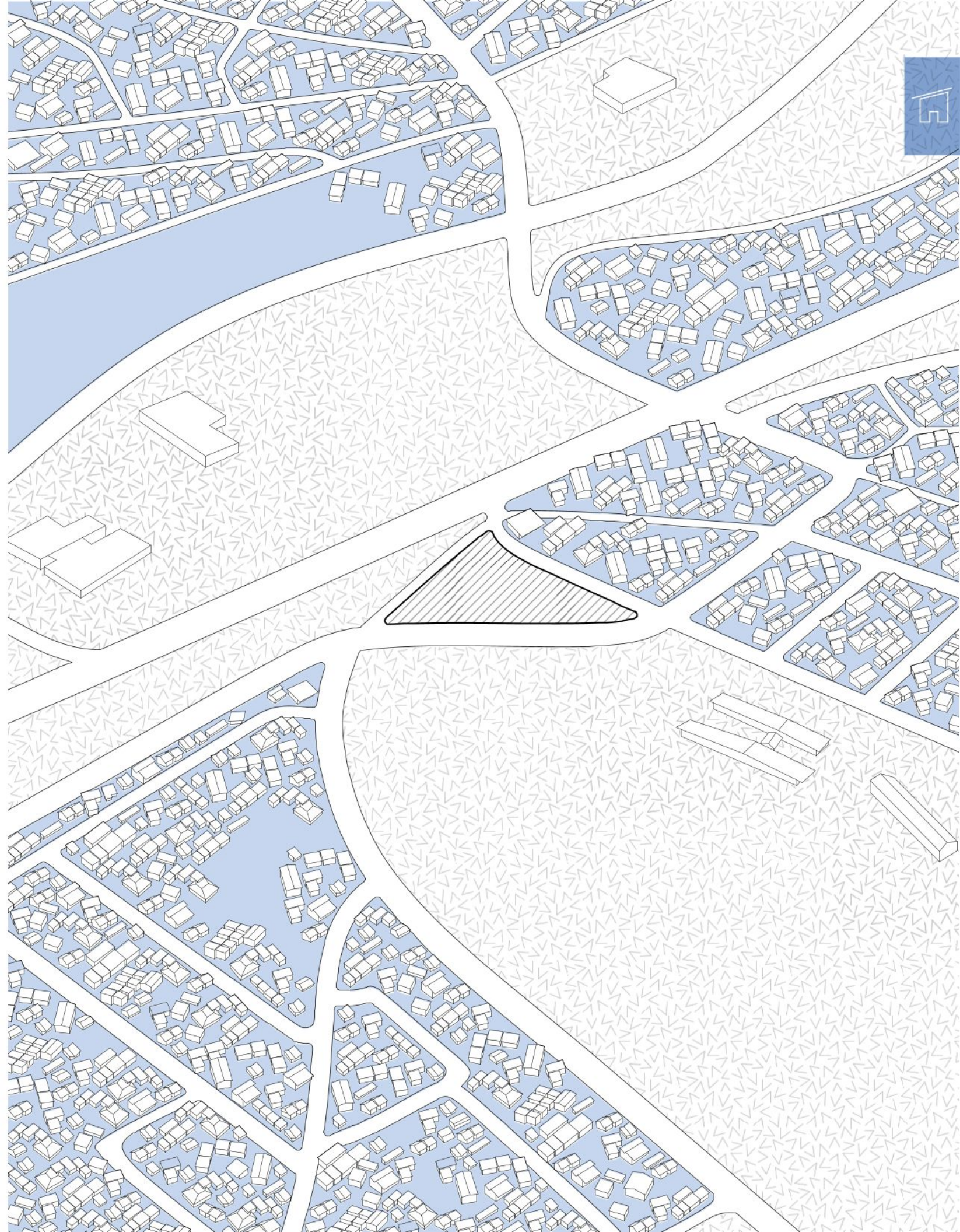
Istanbul is one of the most rich cities in the world, both culturally and historically. The city is split by the Bosphorus Sea, connecting Europe to Asia. This connection of two continents creates an expression of many traditions, customs, and beliefs. Various networks make up the city on all scales, from city organization to endless walkways through the bazaars. This city is personally significant, as I lived there for many years roaming the city with locals as my tour guides. I was able to experience the culture first hand and be exposed to not only the beautiful parts, but also the imperfections. Understanding where the built environment needs improving, as well as how social and political issues influence a city, became crucial to my design philosophy. For this reason, I strive for my designs to constantly address the needs of local communities through equitable design and universal based solutions.

Deforestation Hunger Land Degradation
Labor Strikes Information Security Tourism
Renewable Energy Public Safety Wages Working
Conditions Power Shortage Health Hazards
Overcrowding Overpopulation Unemployment
Housing Problems Development of Slums
WATER AS A MEDIATOR Sanitation Problems
Health Hazards Degraded Environmental Quality
Disposal of Trash Transportation Problems
Urban Crime Increased Rates of Poverty Poor
Air Quality Poor Water Quality High Energy
Consumption Mental Health Racial Segregation
Food Security Waste-Disposal Problems Mental
Health **HEALING THROUGH DESIGN** Natural
Disasters Inadequate Housing Household Pay
Segregated Neighborhoods Racial and Ethical
Inequality Homeless Children Lack of Education
Homelessness Air Pollution Traffic Congestion
Increasing Crime Rates Gender Pay Gap Increased
Carbon Emissions Climate Change **IMPACT**
Urbanization Congestion Discrimination Fiscal
Difficulties Communicable Disease Inadequate
Infrastructure Flooding Nature Conservation
COASTAL RESILIENCE Noise Pollution Civil
Depersonalization Water Drainage Substance
Abuse Leveraging Technology Lack of Inclusiveness
Oppression Economic **TOWNSHIP TENSIONS**
Development Urban Governance Emergency
Preparedness Storm-water Waste Unequal Access
to Resources Migration Patterns Refuge
Response **RADICAL DIVERSITIES** Psychological
Impact of Human Behavior Poor Nutrition Social
Inequality Loss of Biodiversity Immigration
Stresses Health Care Availability Childhood
Obesity **ACTIVISM** Bullying Sexual Crimes
Drug Abuse Depersonalization Lack of Space

WATER AS A MEDIATOR

Johannesburg + Fire Station + 4th year undergraduate studio

Water as a Mediator focused on developing a community fire station which centers on revealing the tensions between authoritative figures and the community. This project uses water to find a middle ground between all actors and center water as a connector, resource and symbol.





LIVING CONDITIONS

These settlements adjacent to the site frequently lack sanitation, electricity, plumbing, water and other basic necessities. Due to urbanization, the amount of people moving into similar conditions in South Africa continues to increase.



Image by Steven DosRemedios

UNEQUAL SCENES

One of the biggest issues in South Africa is social inequality. The disparity between socioeconomic classes has been amplified and widened by generations of social and economic immobility. This gap has a tremendous impact on the difference in quality of life between the socioeconomic classes.



Image by Kaya Sands

COMMUNITY GAP

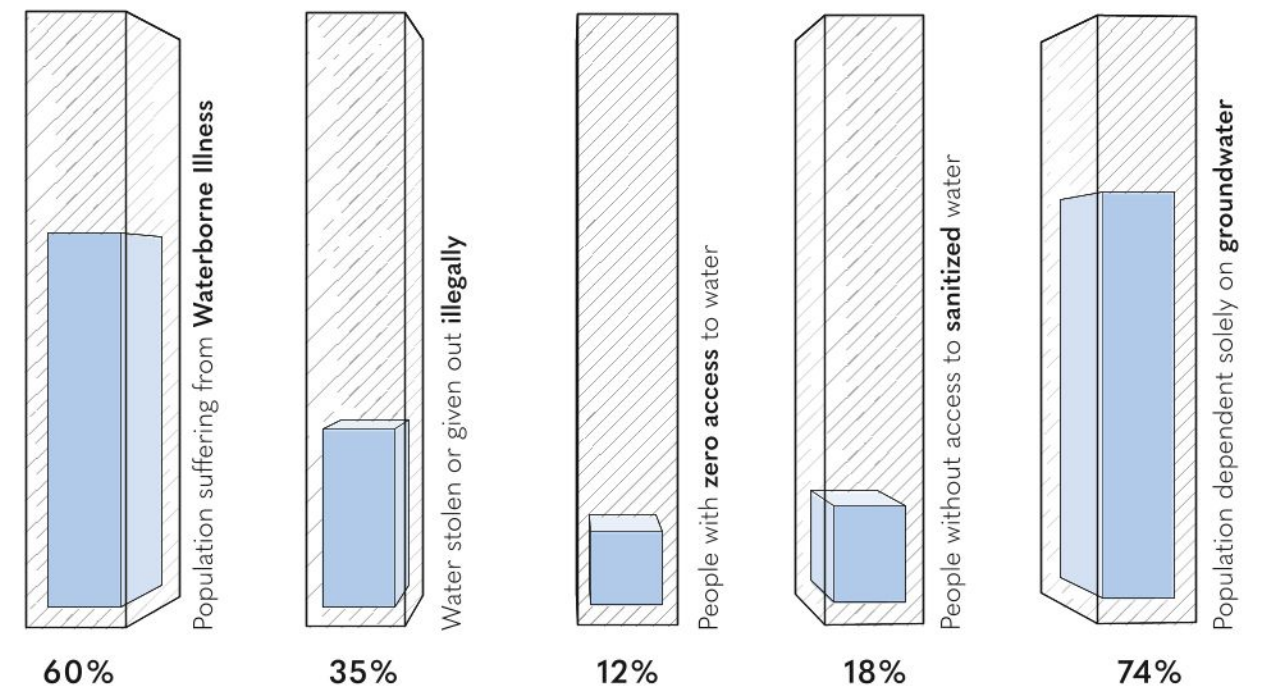
Through interviews with firefighters in Johannesburg we were able to directly connect with the user. The firefighters explain the complex relationship between them and the community. The biggest issue is that people of the community associate firefighters with government agencies and often forget that they are there to help and rather become afraid of them.



Image by EWN

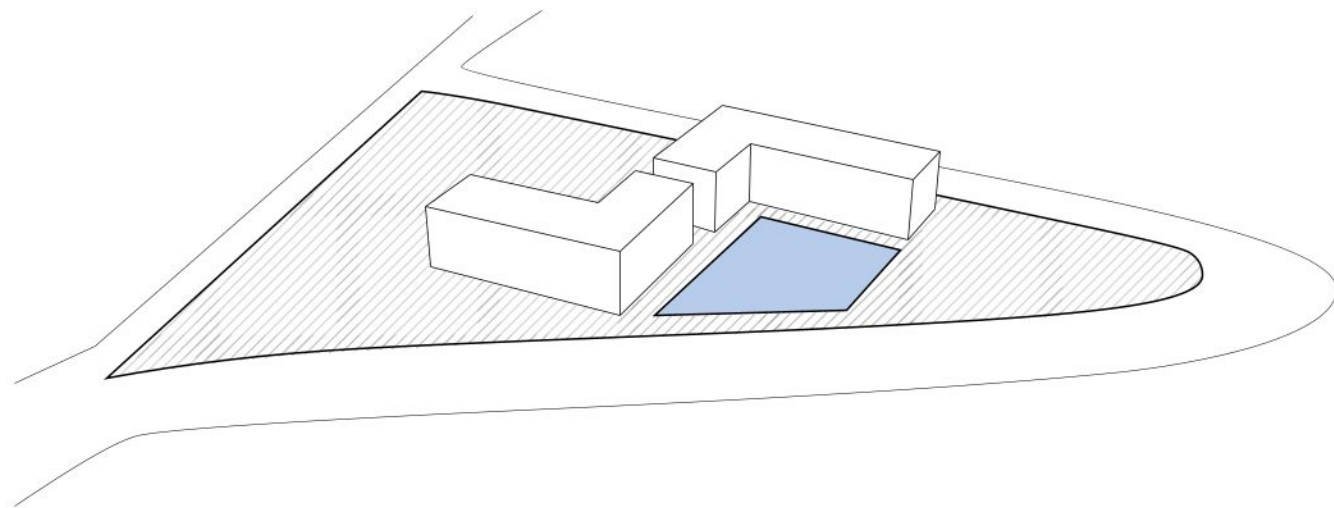
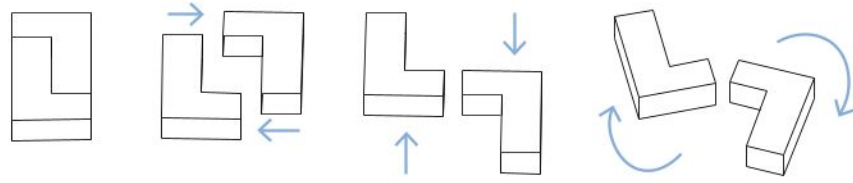
WATER DEFICIENCY

The water deficiency in Johannesburg continues to increase and affect people in many ways. The lack of access to clean water often causes illnesses, which can even be fatal. The people in poverty are who become most affected, as they have the biggest water scarcity due to lack of resources.



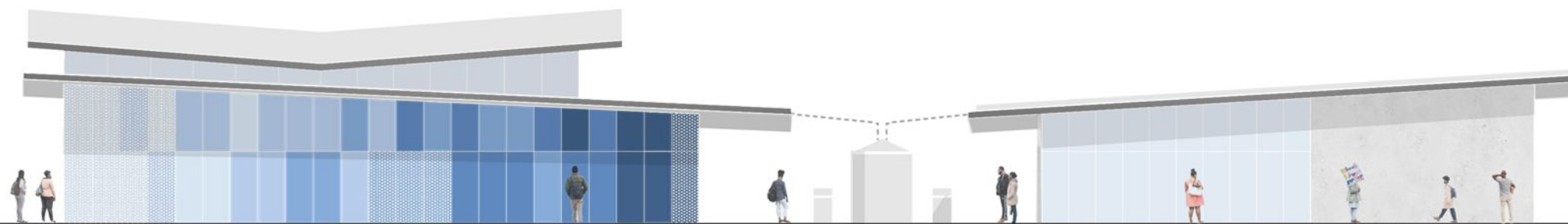
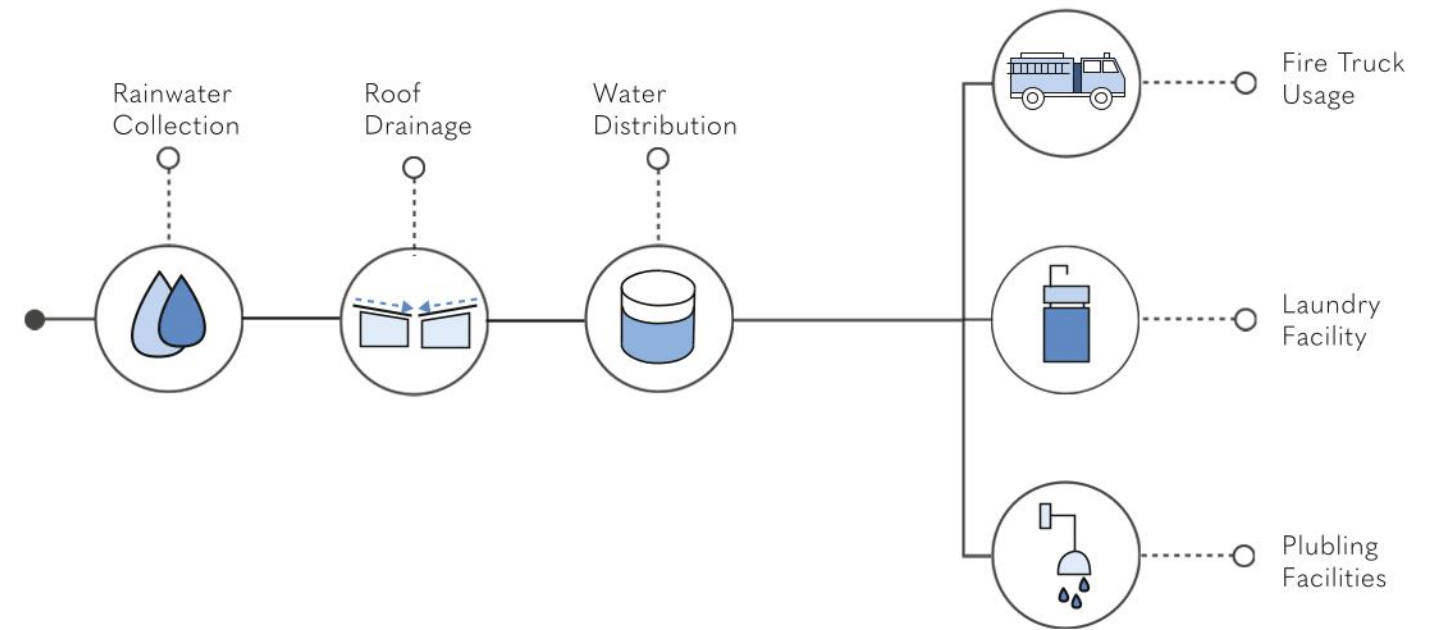
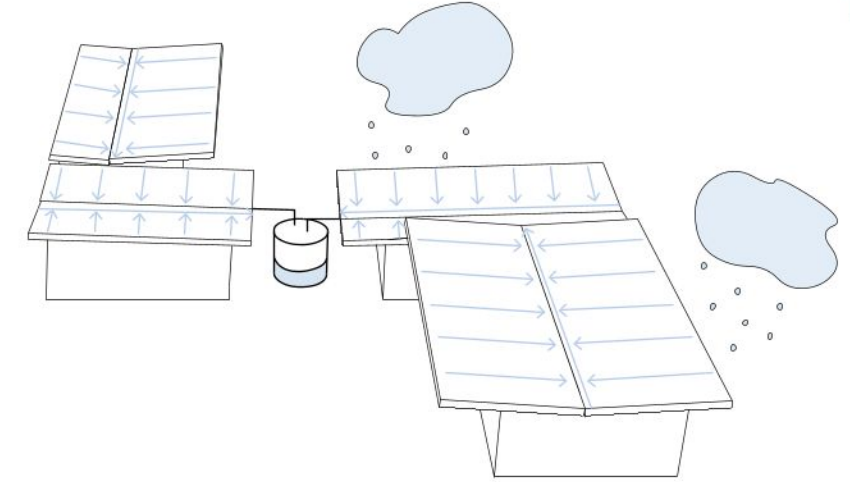
WATER AS A CONNECTOR

Water serves as a connector, and has the potential to mend the gap caused by the unequal distribution of resources. This proposal promotes closing the gap within the community by creating a central gathering space, where space is not discerned by socioeconomic class, but rather helping the community becomes the central goal. The location of is designed to be convenient and central in order to provide people from all communities accessibility.



WATER AS A RESOURCE

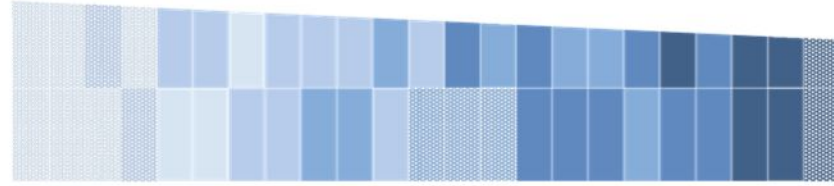
As this fire station aims to serve the community, it became a key goal that the building also produce a resource responding to the needs of the community. For this reason, a rainwater collection system has been incorporated into the fire station in order to provide water back to the community. After the water is collected, it is filtered and used in various ways, including a communal washing facility.





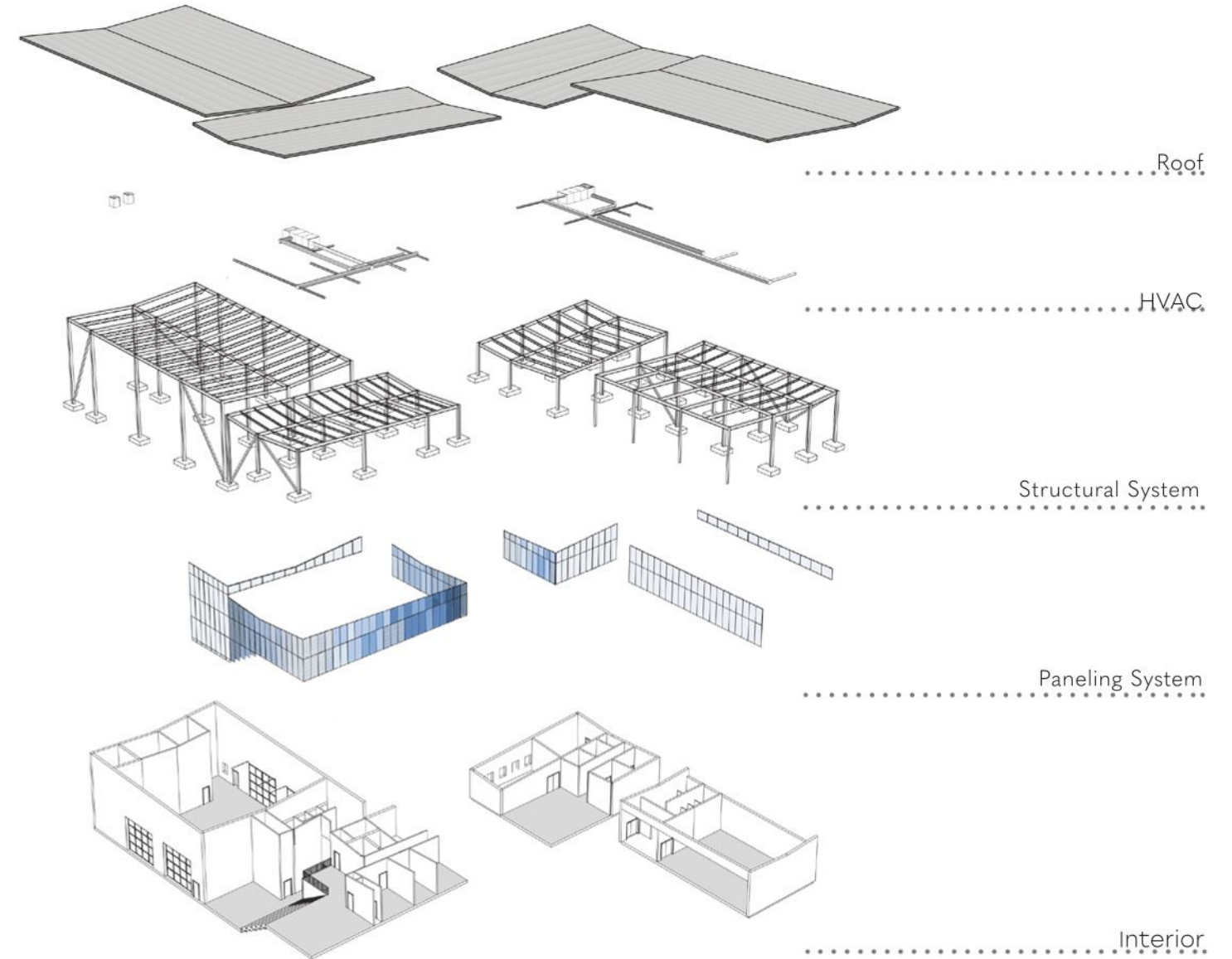
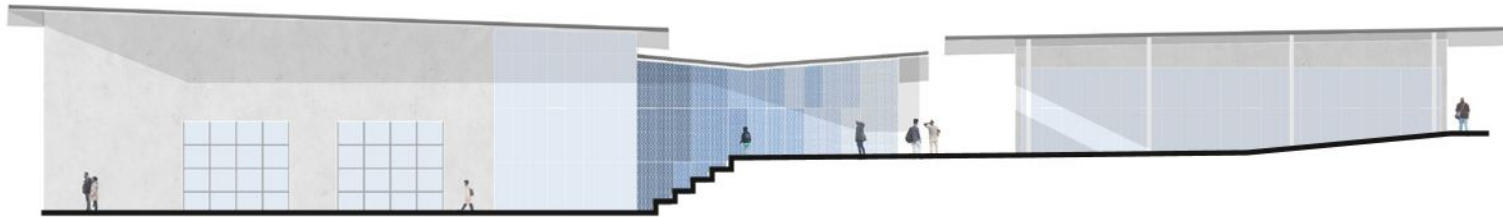
WATER AS A SYMBOL

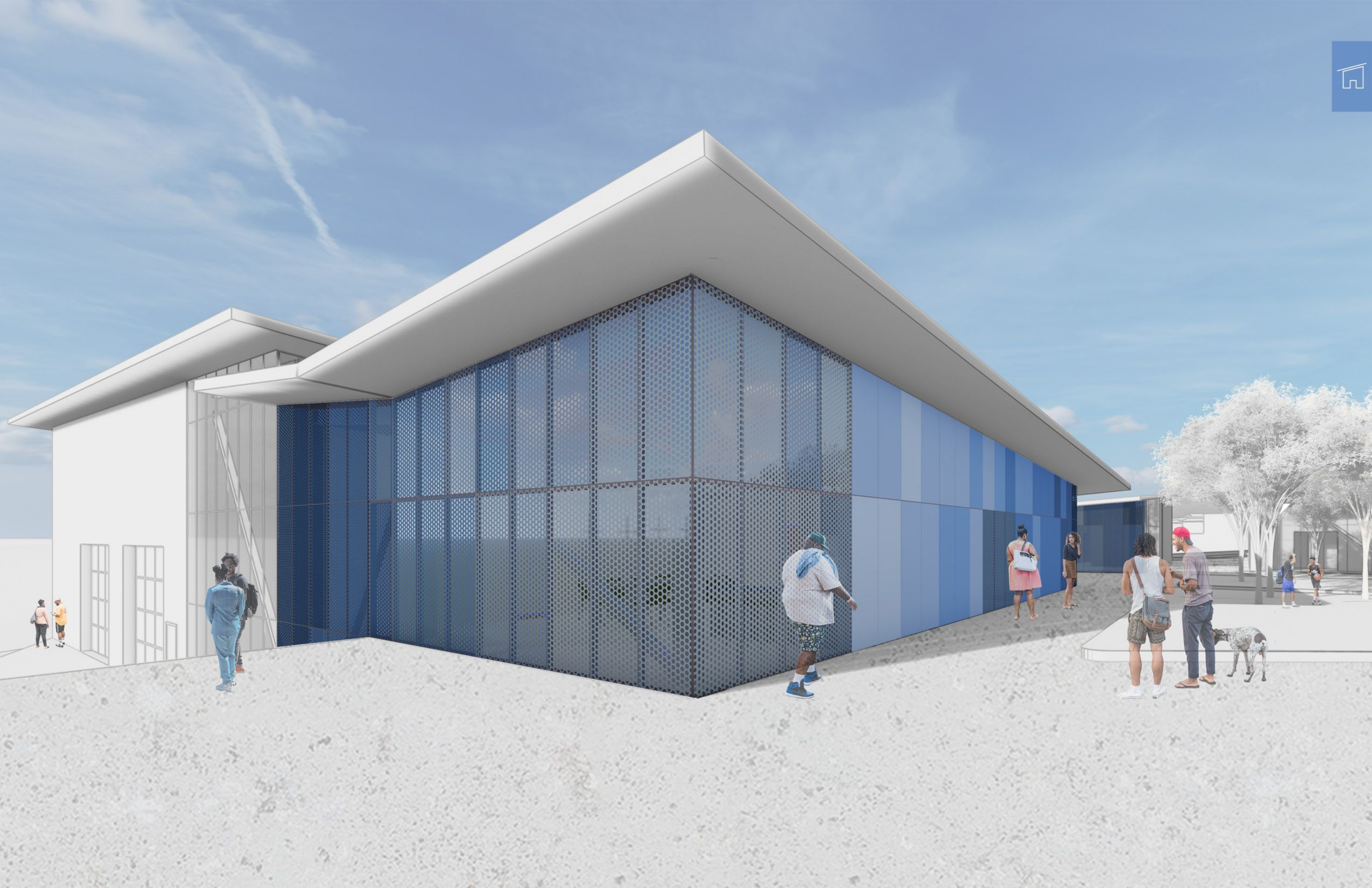
Throughout the design, a radiating gradient of blue can be seen on the main paneling system of the building's facade. The use of a blue gradient serves to symbolize the celebration of water. The radiating blue ultimately leads the user to the exposed water cistern and highlights the process of water collection.



SYSTEM INTEGRATION

Placing community engagement and water scarcity at the center of design, required careful coordination of all the building systems cohesively. The necessary alignment and calculation of the slopes on the multiple roofs was critical in achieving a successful water reuse system. Interior and exterior coordination of the facade design was essential in highlighting the importance of water through function and as a symbol.







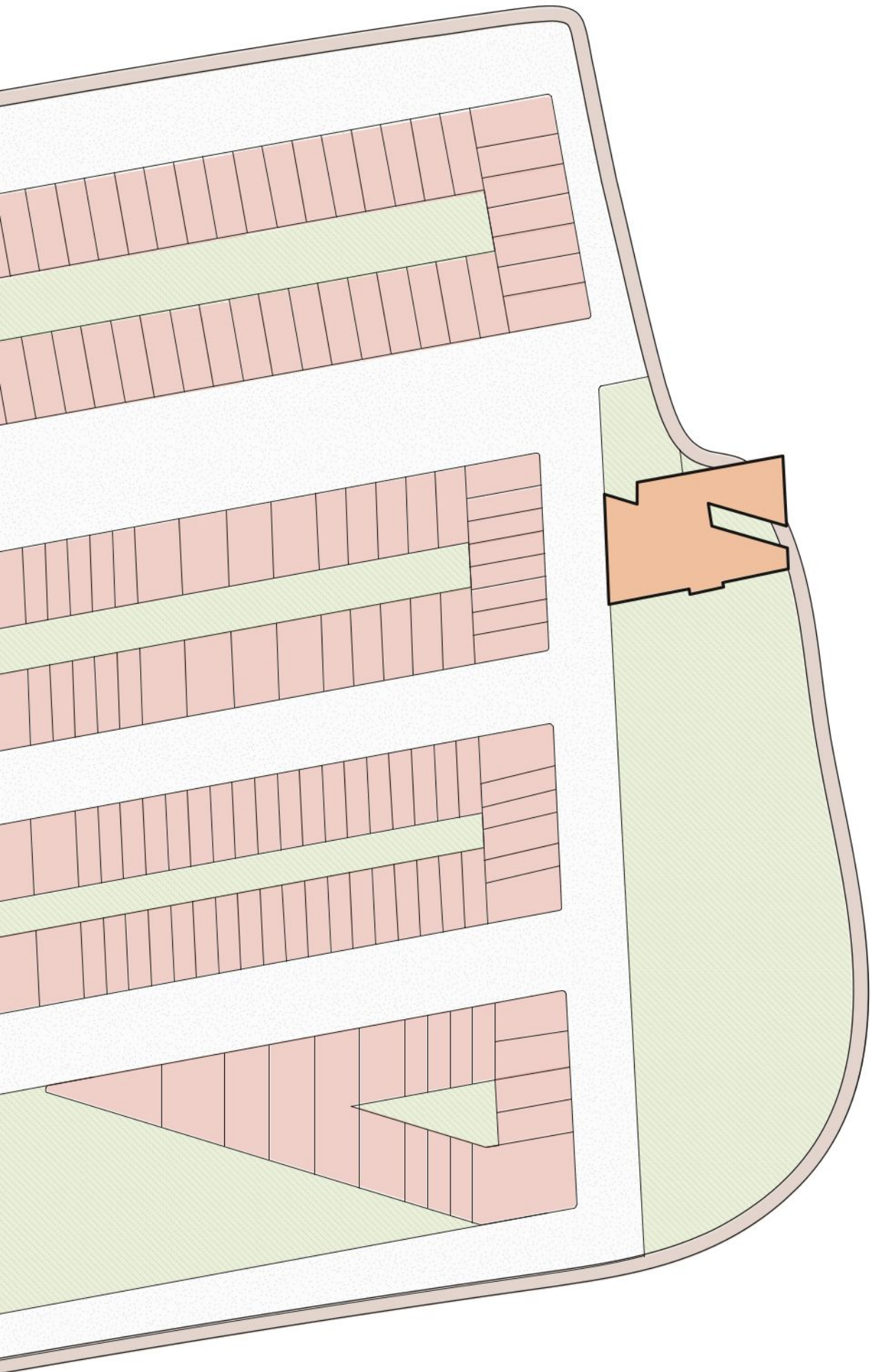
HEALING THROUGH DESIGN



Amsterdam + Cancer Center + 3rd year undergraduate studio

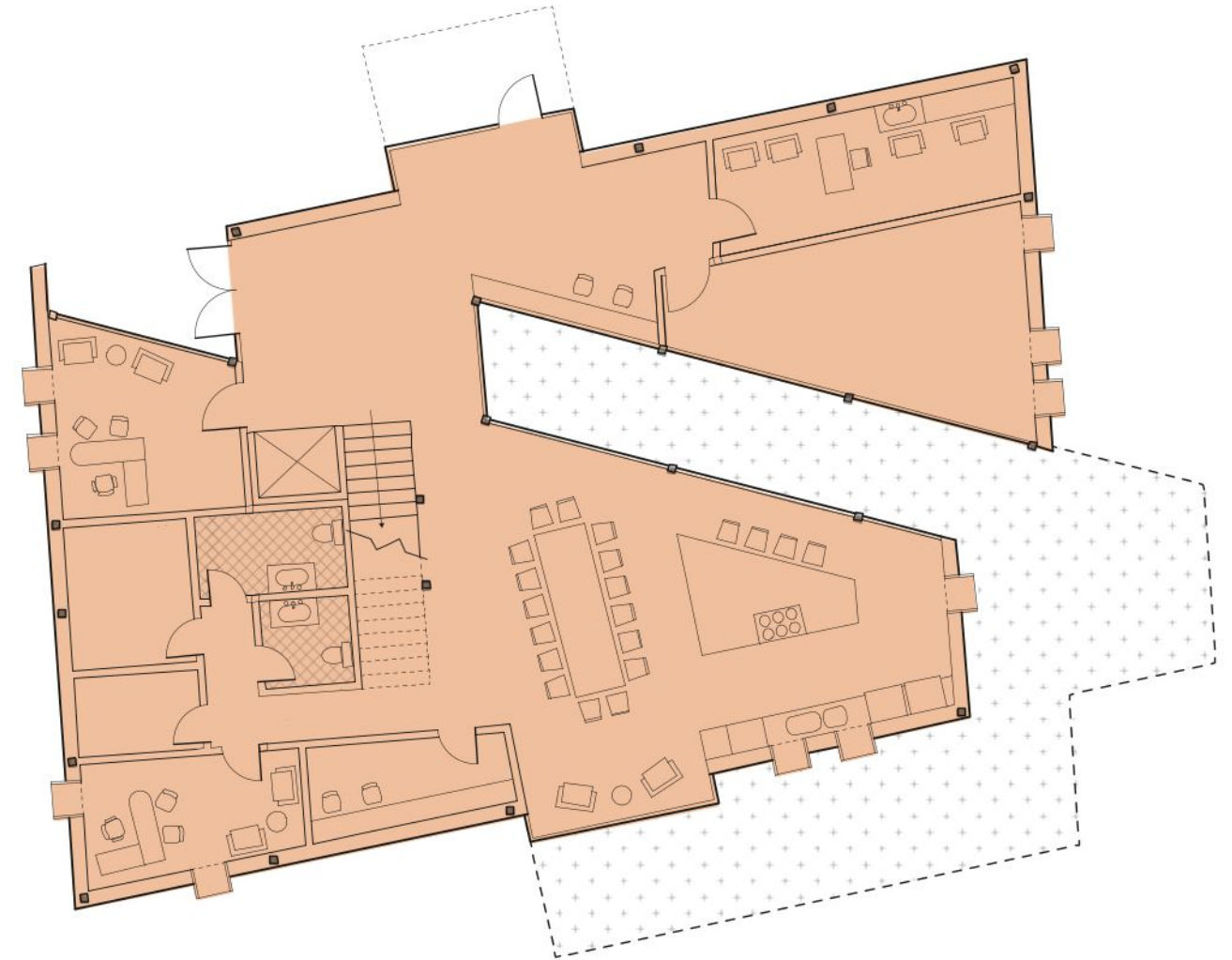
This project focused on providing both practical resources as well as a place of support and comfort for cancer patients and their loved ones to spend their time while receiving medical treatment.





VOIDS & EXTRUSIONS

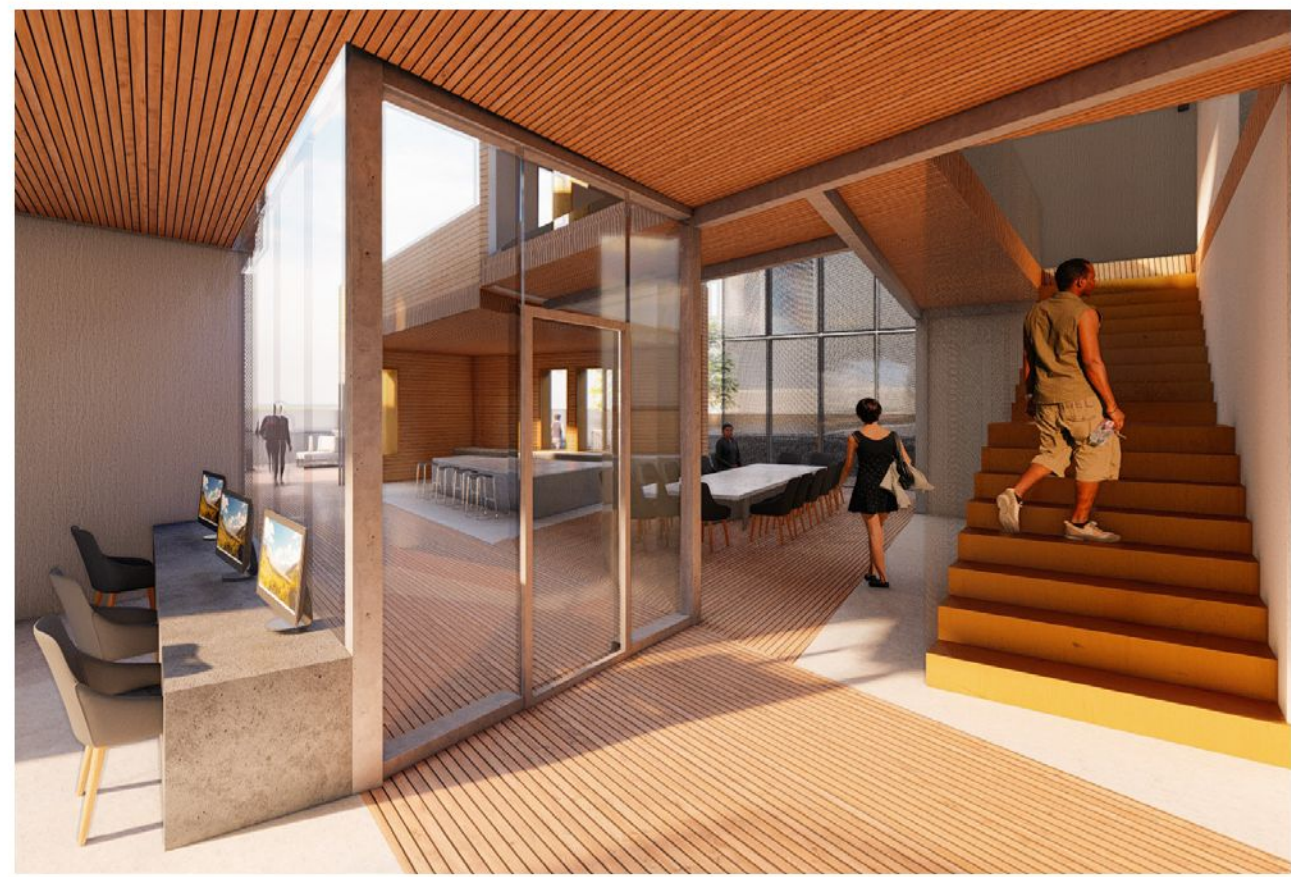
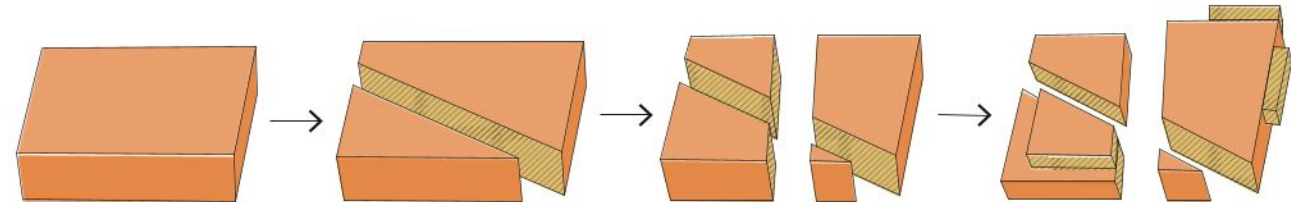
Due to urbanization and the way cities are designed, in Amsterdam, many buildings are designed vertically. This is often due to the small lots within immediate adjacency. For this reason, many designs are based on voids and extrusions coming from the base of the site's footprint. The development of the cancer center is composed of a combination of voids and extrusions.





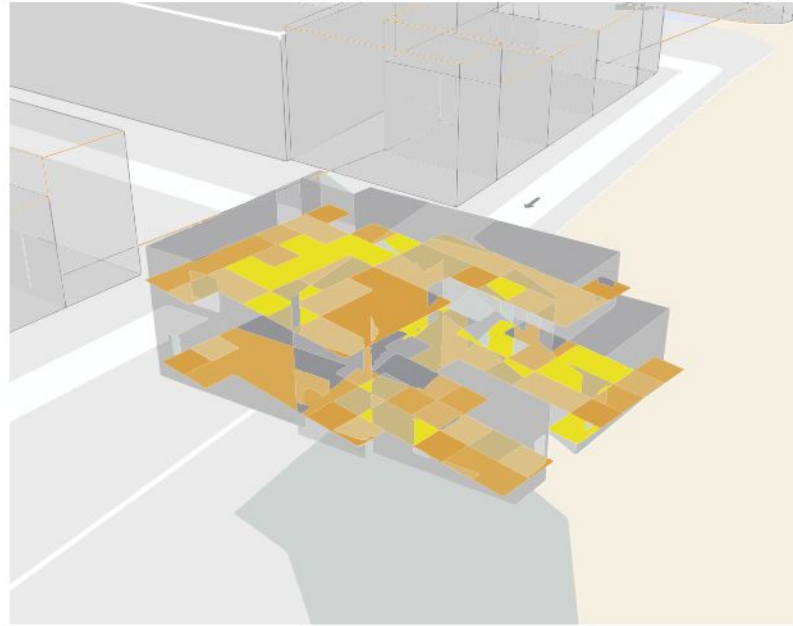
CONNECTION

The form of the building was created using the site lines as a guide to create voids and extrusions. The voids helped connect the users to nature. Being seaside, it was important to create a strong direct relationship to the surrounding context.

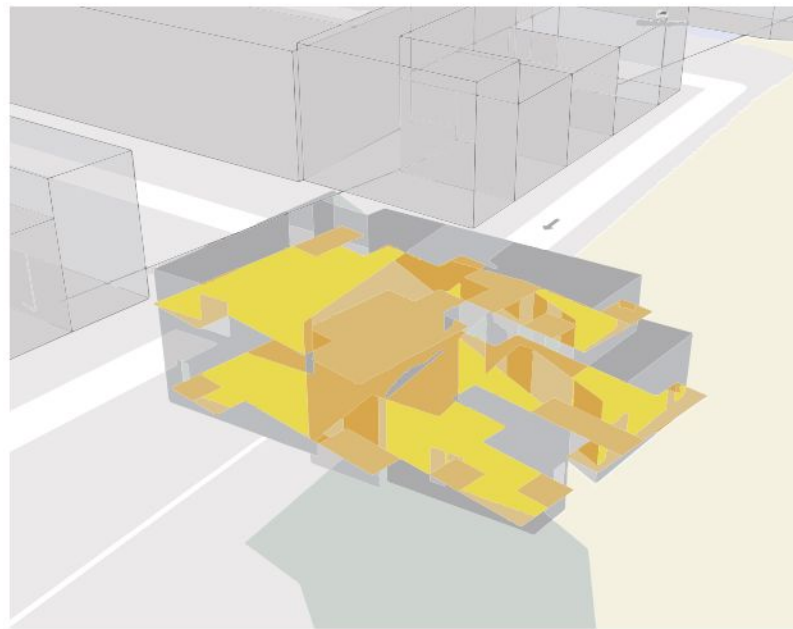


SOLAR ANALYSIS

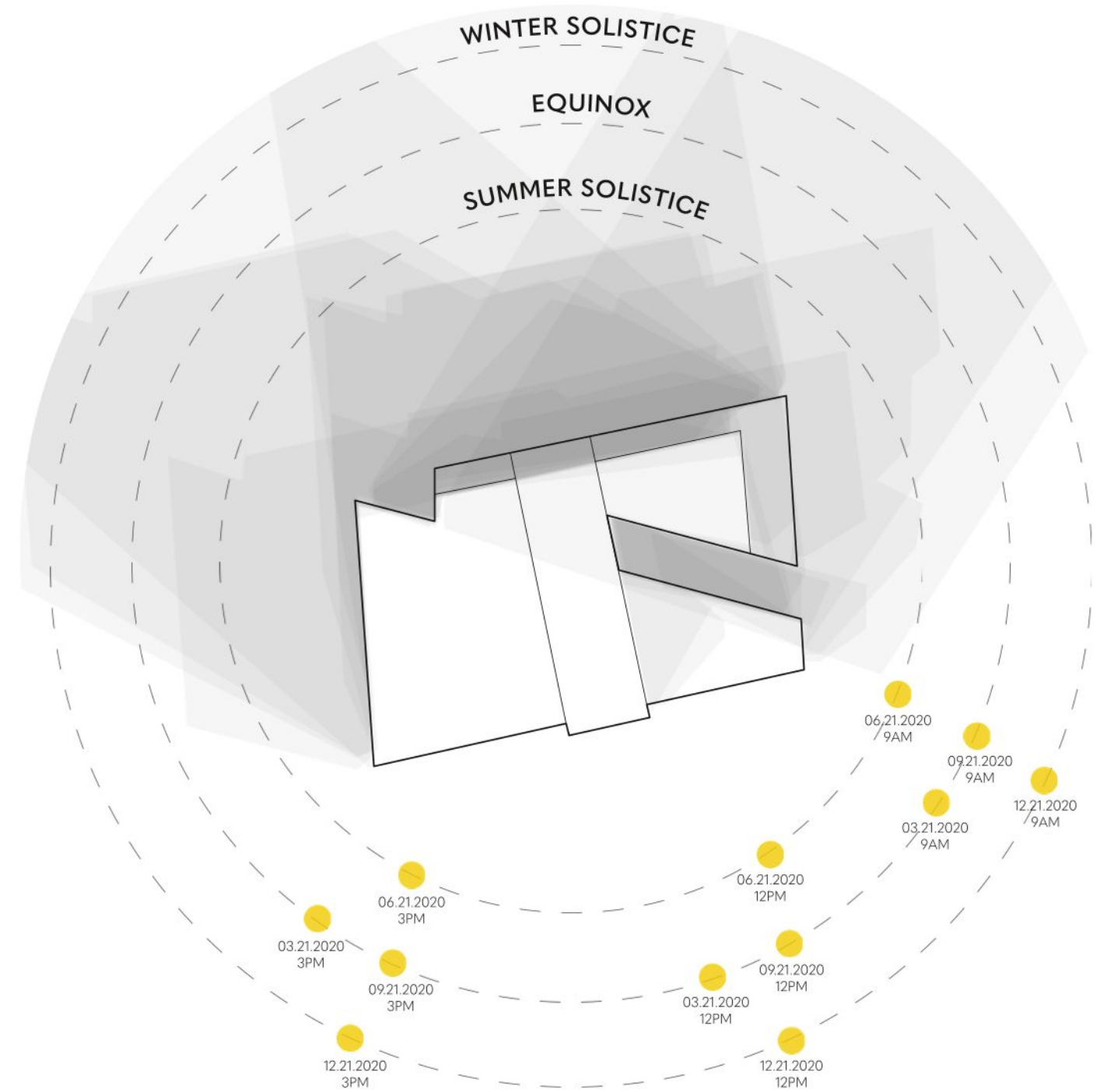
In order to achieve healthy and ideal levels of daylighting and glare multiple studies were conducted. This was done through the use of Cove Tool, an application developed to measure appropriate lighting levels. The main axis of the building was addressed with a combination of shading panels as well glazing, both used for privacy and light filtering. There are openings throughout the different spaces depending on the function of each room. These openings help to provide natural daylight into the spaces.



DAYLIGHTING (SDA): 51%
RECOMMENDED: 50%



GLARE LEVELS (ASE): 22%
RECOMMENDED: 20%



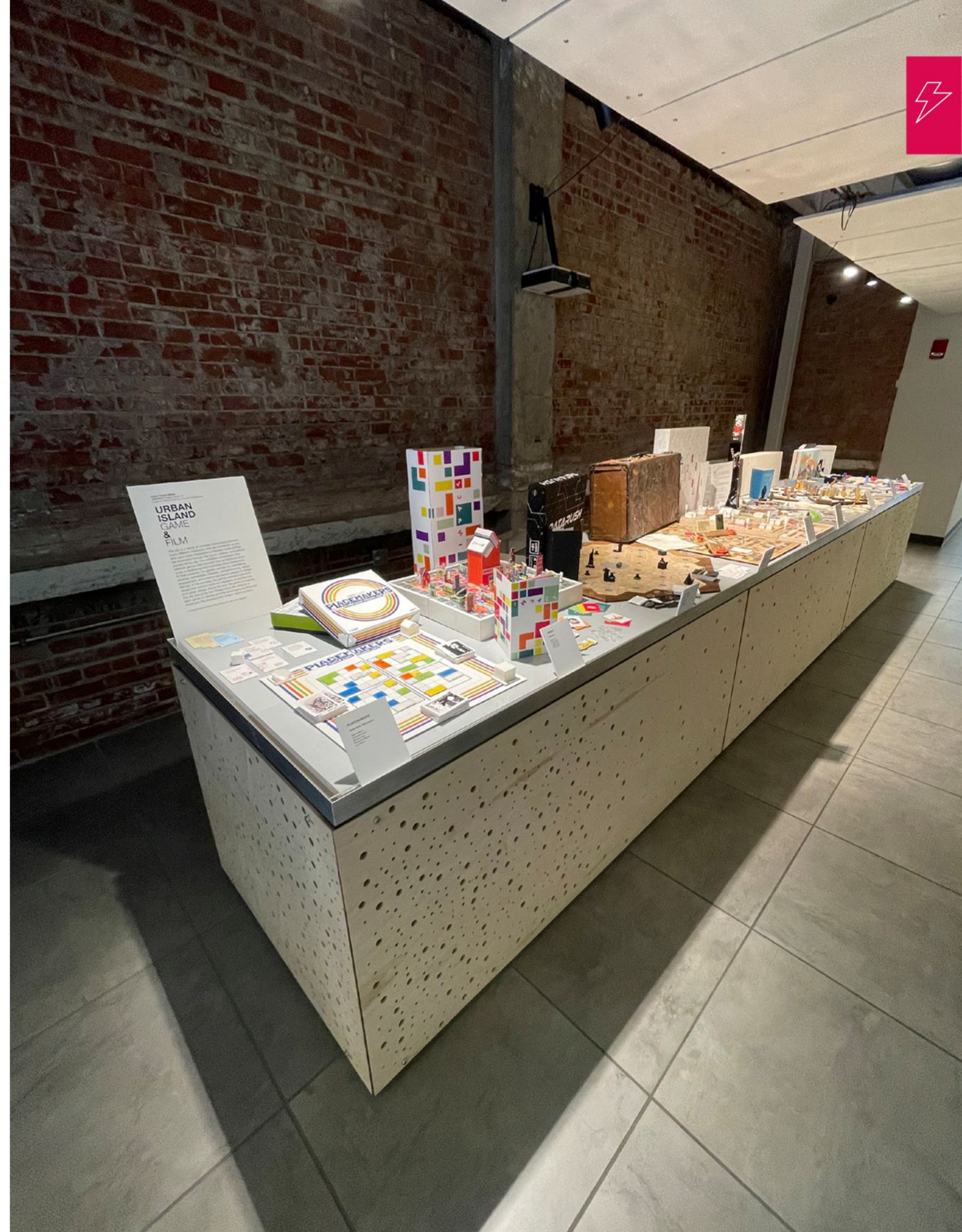


IMPACT

Board Game Design + 5th year undergraduate studio

Impact, designed and constructed by Re.dot.Act was created as part of an exhibition to challenge urban issues in New York City. The game was focused on the rapid rate of urbanization splitting the players into two teams, economists and environmentalists.

This project was completed by a team of five named Re.dot.Act. Members of Re.dot.act: Anatalia Lopez, Andrew Quinn, Grace Rykard, Wesley Kinsey and myself.





CONSTRUCTION PROCESS

The construction of the board game was created in a way that the box for the game would also serve as the playing board. The board functions similar to a chess box where it folds down the center and the pieces are stored within the box. This facilitates transportation making the game easier to store and carry. The board itself has a wooden base with a graphic on top. The graphic then has an acrylic top with crosses in order for the pieces to stand on the board.

ECONOMIST VS ENVIRONMENTALIST

Identity cards give a player their character to play as. This determines Each character has an affiliation and occupation, which determines what their goals are and what bonus resources they begin the game with.



RESOURCES

There are four resources necessary to build different properties, which include: concrete, vegetation, water, and electricity. The required resources to build a property are located on the building pieces.



GRAY VS GREEN

3-dimensional pieces represent buildings and parks. Each piece is sized according to property spaces on the board in increments of 1, 2, 3 and 4 tiles. The resources required to build directly relate to the size of the building.



CONTRACTOR CARDS

Contractor Request cards give rewards and sabotages to the player when drawn. Some give additional resources, while others inhibit opposing players. Some cards are used immediately or saved for use at decisive moments to maximize the benefit.



COASTAL RESILIENCE

Governors Island + Climate School + 5th year undergraduate studio

The Governors Island project encapsulates a single motive: to be a center for climate solutions. A variety of concepts inspire the design of the island's character: public realm, context, biodiversity, and infrastructure.

This project was completed by a team of five named Re.dot.Act. Members of Re.dot.act: Anatalia Lopez, Andrew Quinn, Grace Rykard, Wesley Kinsey and myself.



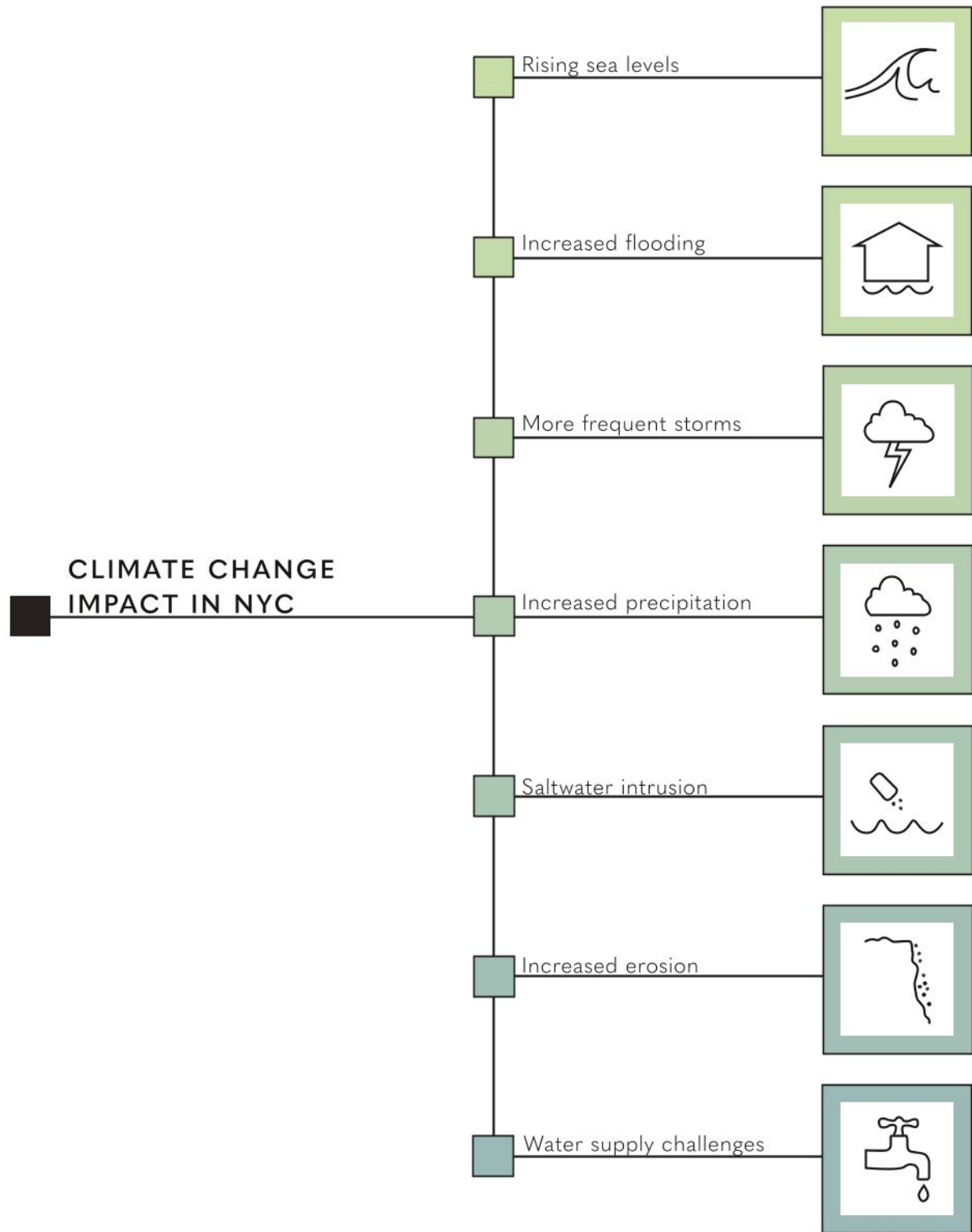


Image by Frank Becerra Jr.

INCREASE IN STORMS

Due to the fact that the ocean water is warming, there is an increase in evaporation; this leads to an increase in storm frequency. As sea levels rise, cities become more vulnerable to flooding when storms occur. In the last decade, there have been more storms than ever before affecting New York City.



Image by FEMA National Flood Hazard

RISING SEA LEVELS

There are two main causes identified for rising sea levels: arctic ice caps melting and oceans warming. Over the past hundred years, there has been an increase in the average global temperature due to an increase in concentrations of greenhouse gases. This causes oceans to warm, and, therefore expand in volume.



Image by EWN

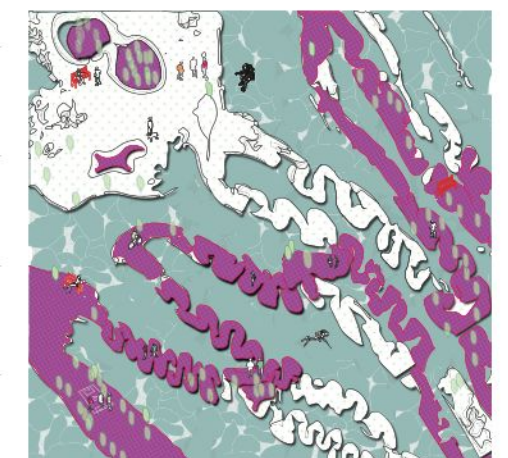
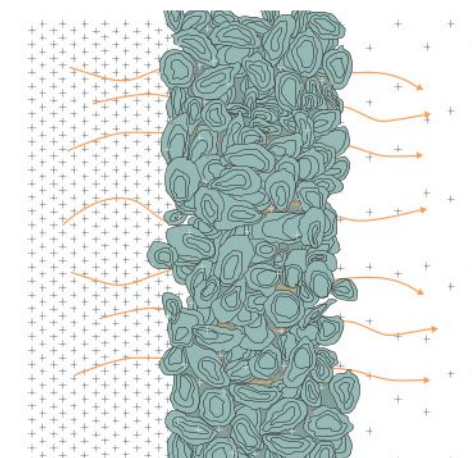
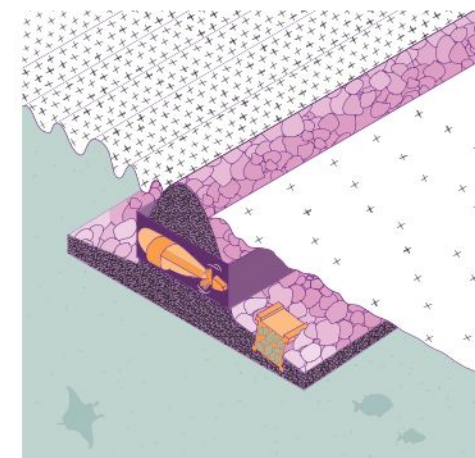
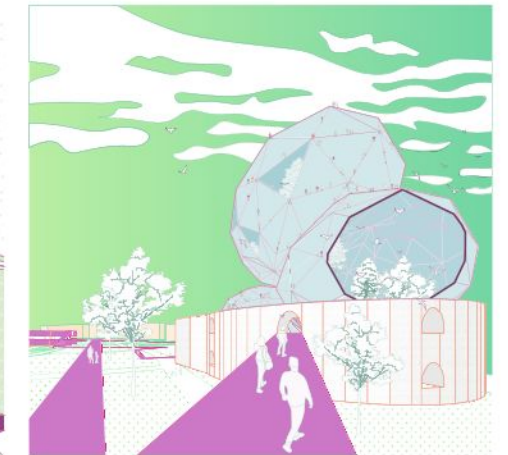
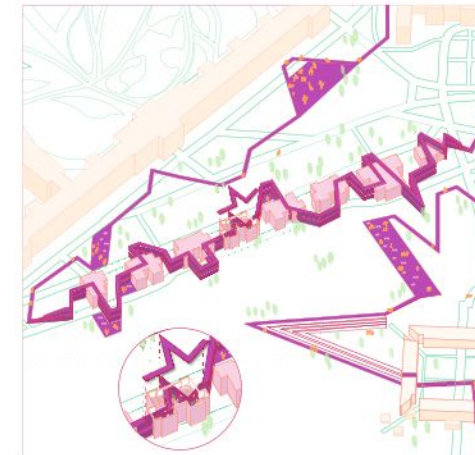
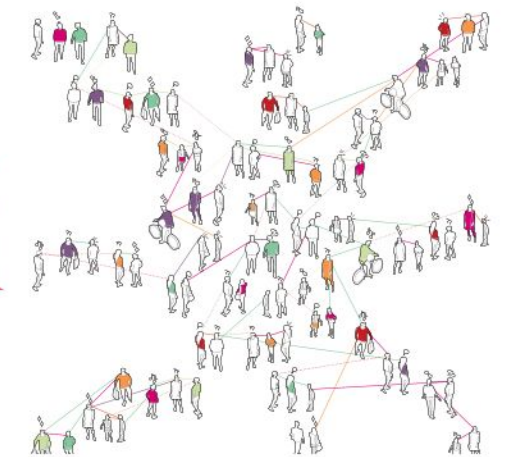
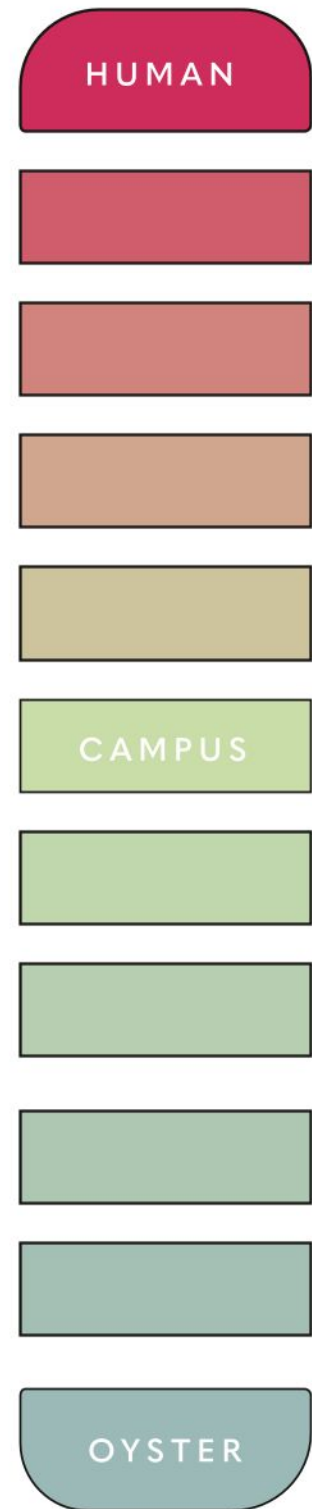
VULNERABILITY

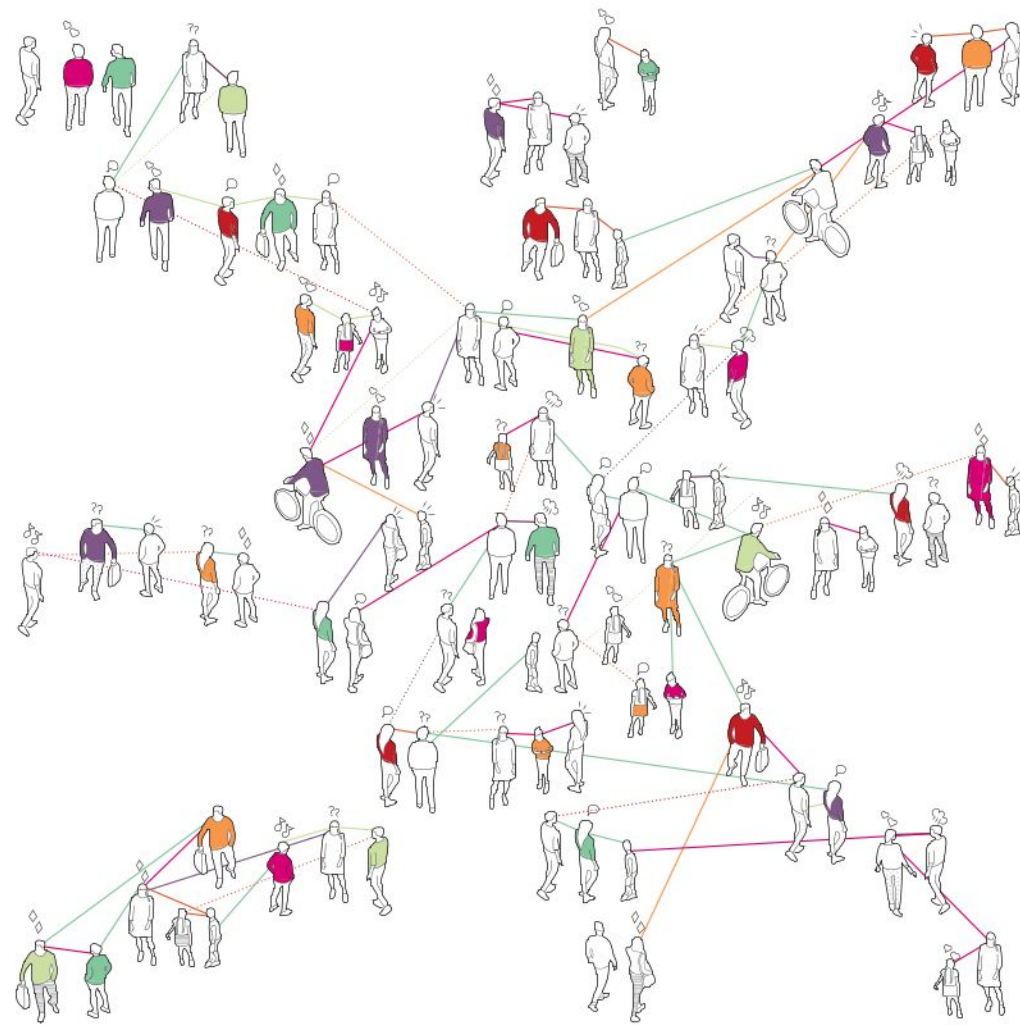
The New York City water system supplies more than half of the state's population with water. The distributed water comes from the surrounding rivers, with the main ones being the Hudson River and the Delaware River. When flooding occurs, these rivers become overfilled with ocean water; therefore, requiring more regulation and filtration to combat the water's salt levels and keep them within the appropriate concentration.



POWERS OF 10

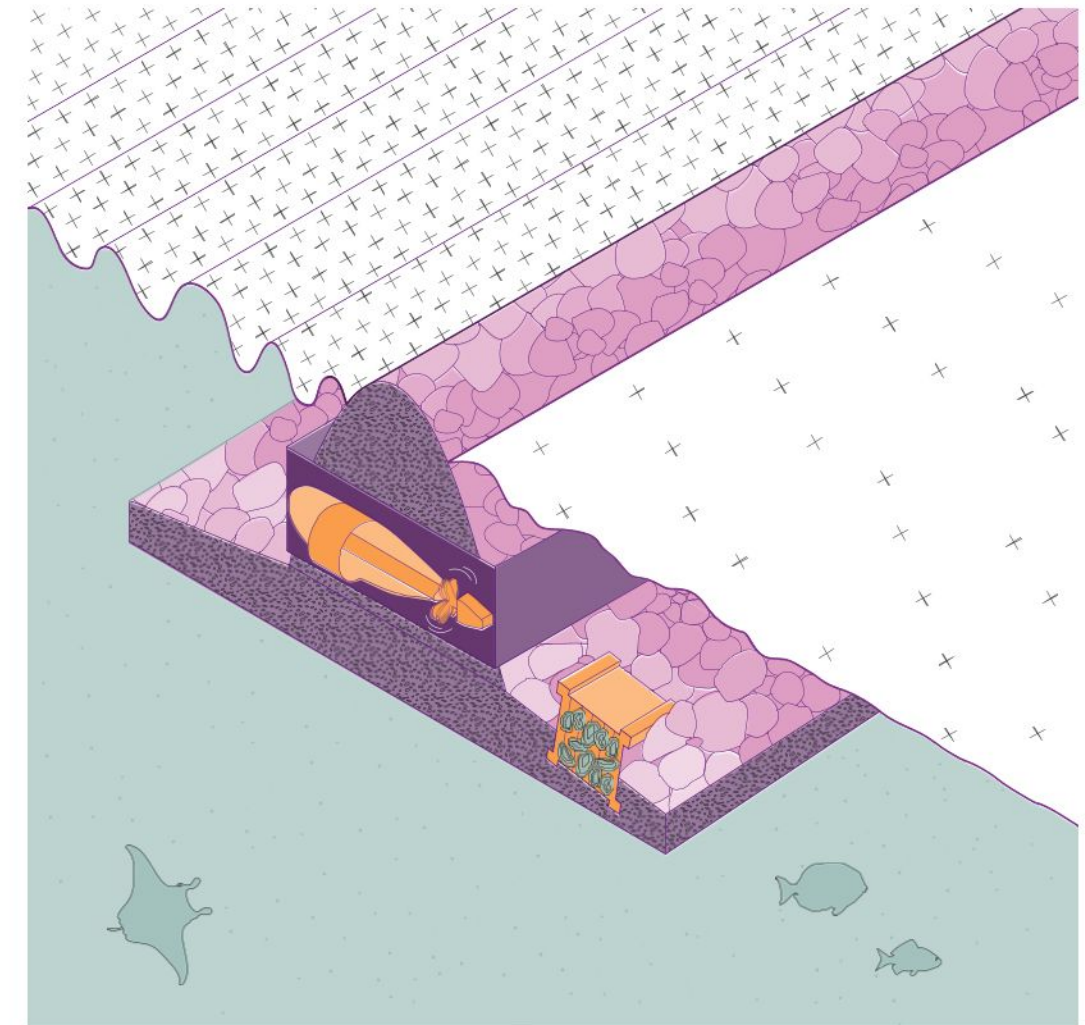
At the intersection of human ecology and marine biodiversity, Columbia University's Climate School on Governors Island researches: coastal resilience, de-carbonization, disaster resilience, and sustainable food systems. The intention is to study the city at a range of scales with the Climate Center at its heart. The extensive walking paths lead you to and from the new and historic parts of the Island. The Island's historical Colonel's Row has now adapted to be experiential artist habitats. The paths around the island turn into gallery walls and allow visitors to directly interact with the history of the island. Another landmark, Castle Williams, once used for coastal fortification is now used as an aviary containing plants and animals to simulate and rehabilitate the natural environment.





HUMAN INTERACTION

A human's genetic makeup, diffusion tensor brain pathways, and personal interactions are all studied in order to understand the site at the human scale. Human interaction served to inspire a series of experiential walkways throughout Governors Island's landmarks. Studies of different scales revealed all humans have a unique genetic profile; however, our genomes are more than 99% the same. Traveling to the island will give visitors a break from the high speed pace of New York City and instead provide an opportunity for visitors to learn about climate change solutions.



RESILIENCE

Oyster cells, reefs, and living breakwaters inspired research beyond the Island's shoreline. New York Harbor, formally known as "The Big Oyster", was once rich with marine diversity. By pairing with the Billion Oyster Project we plan to create a hub to promote research and training to further enhance efforts to rehabilitate the oyster population along the harbor. When repopulated, oysters will begin to filter the murky river water. Living breakwaters are a solution to rehabilitating the oyster population. Oysters form into a mass stronger than concrete and will be used to build a breakwater in order to harness energy and utilize the strong Hudson River currents.





EXHIBITION PROCESS

The display of this exhibition portrays the networking and paths behind the design's intent. The existing artists' habitat homes are connected through a path to serve as an art gallery, taking visitors through the different art installations. Taking the idea of displaying art in the galleries, we have applied this to displaying our drawings as the exhibition. The construction is made of 4' by 8', 1" panels of insulation. They were then hung using fishing line, hanging the walls as one system and the roofs as another; this was done in order for the drawings to be able to receive light through the gap. The final step was to curate the drawings according to the story we were intending to tell.

TOWNSHIP TENSIONS

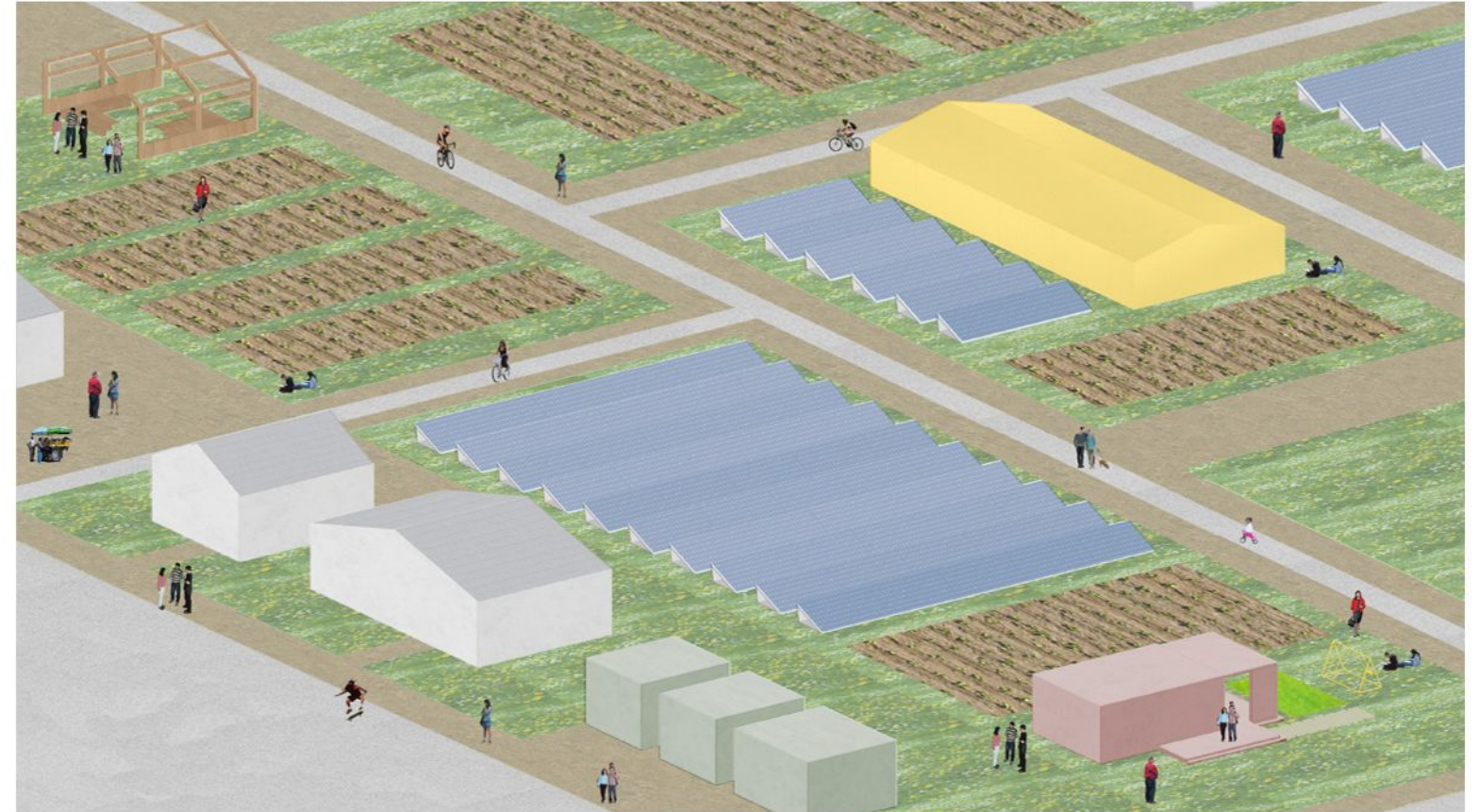
Michigan + Monroe County + 1st year graduate studio



Scan here for video

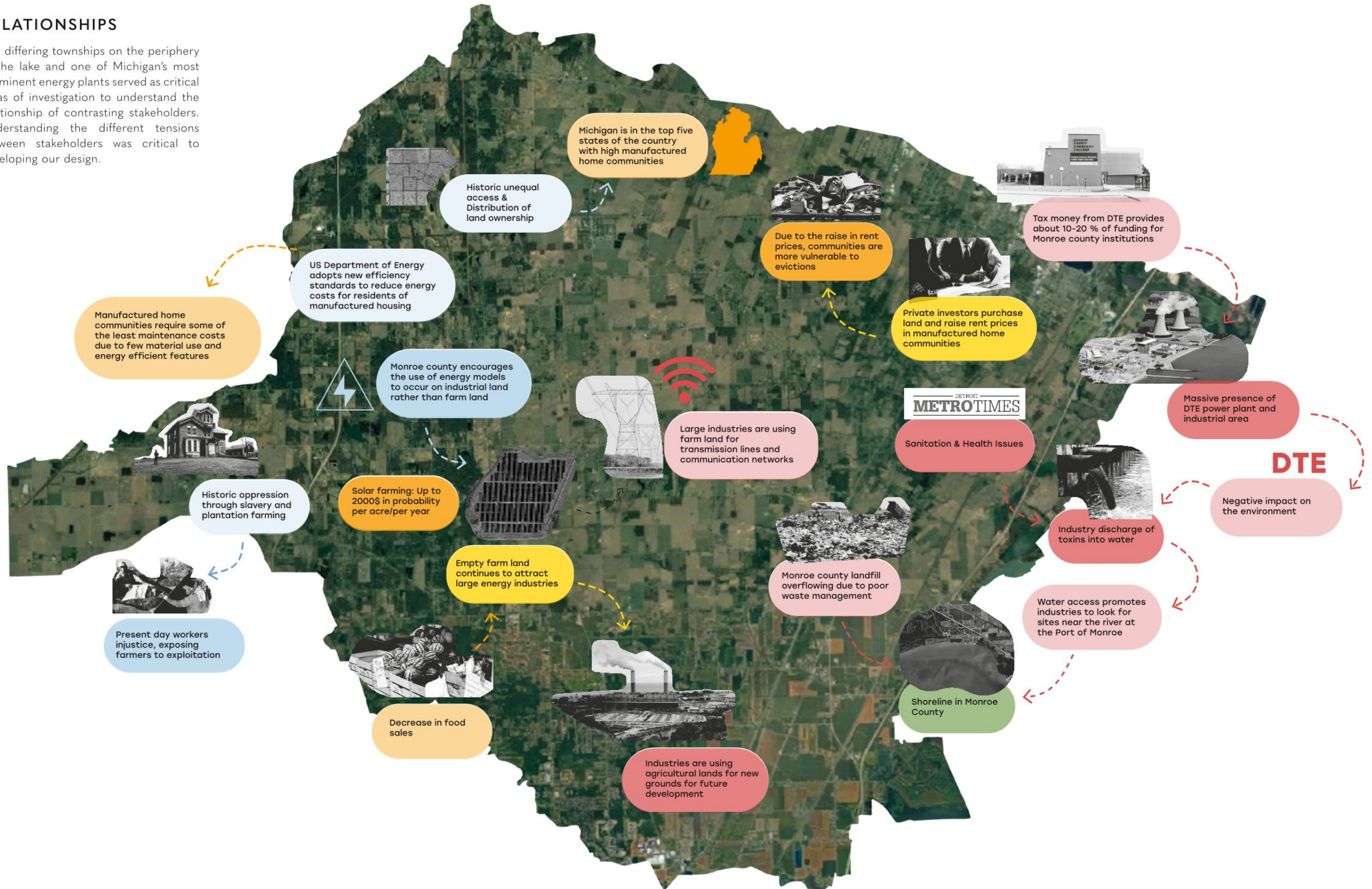
Township Tensions focused on the question: how can solar farming create an equitable transition for agricultural lands? From the perspective of urban designers, these interventions involved spatial decisions, incentives, as well as policies. This allowed our design to focus on the process and negotiations rather than the end product.

This project was completed in a group of two: Sanjana Jismon and myself.



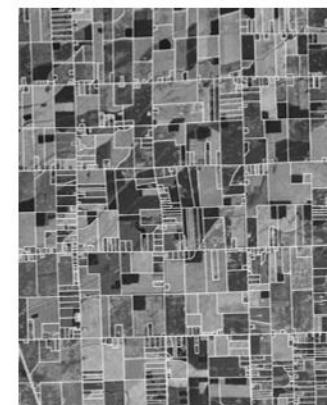
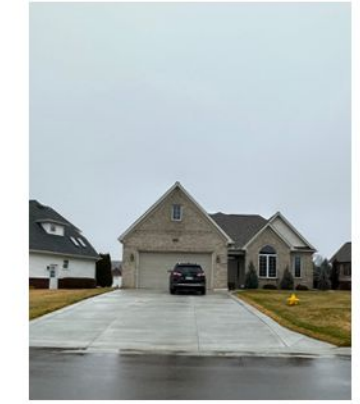
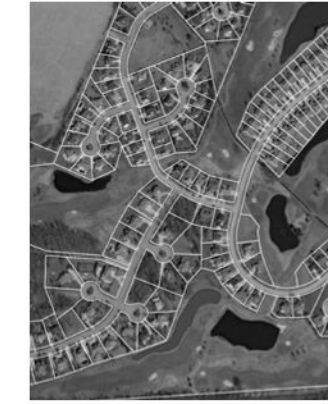
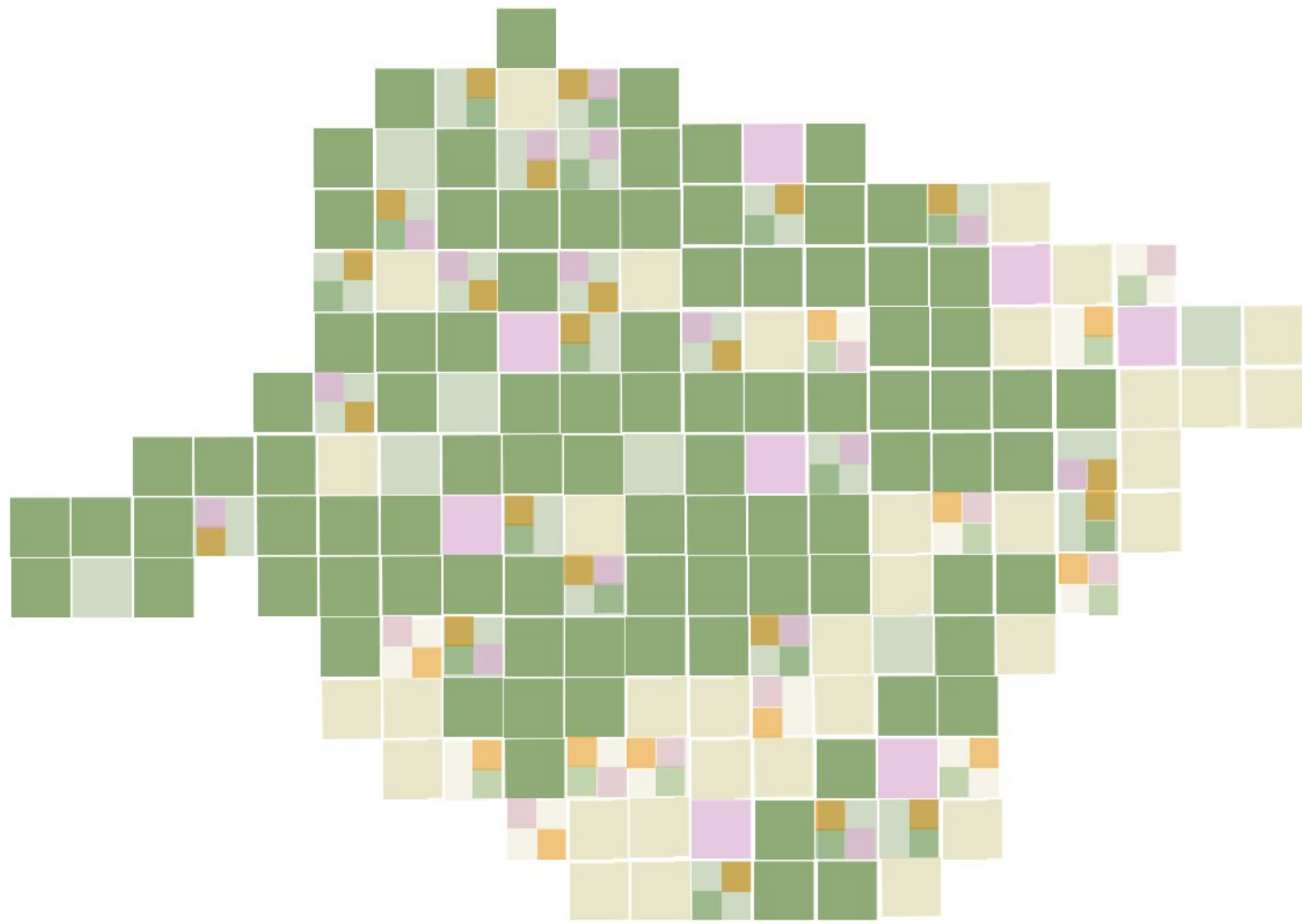
RELATIONSHIPS

The differing townships on the periphery of the lake and one of Michigan's most prominent energy plants served as critical areas of investigation to understand the relationship of contrasting stakeholders. Understanding the different tensions between stakeholders was critical to developing our design.



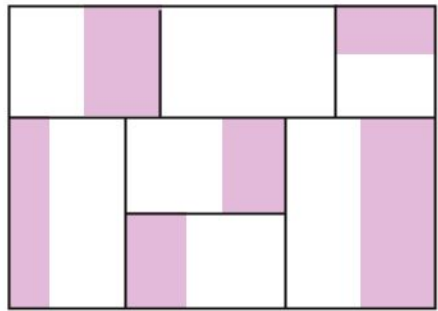
LAND TYPOLOGIES

Our watershed comprised eleven different townships, each with different populations and typologies. Monroe County is home to different types of land, each with changing needs. To understand the spatial implications of the extensive site, we started by documenting and analyzing the various land typologies.

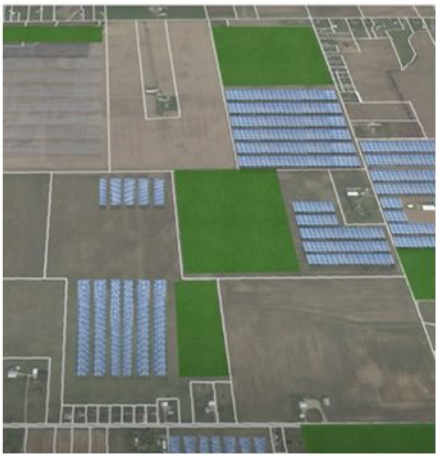
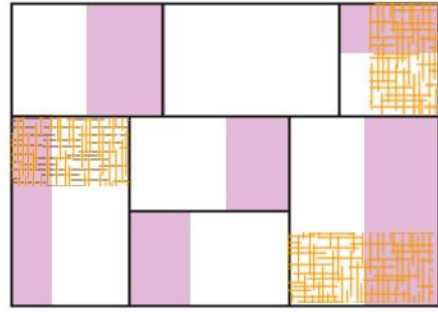




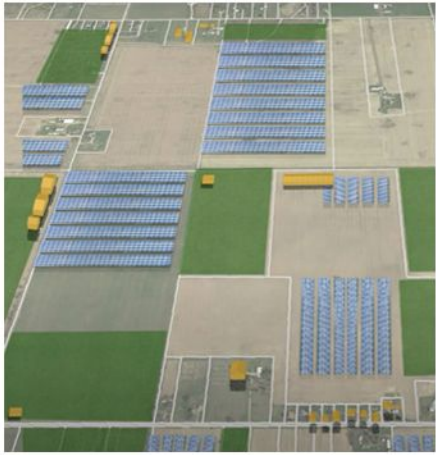
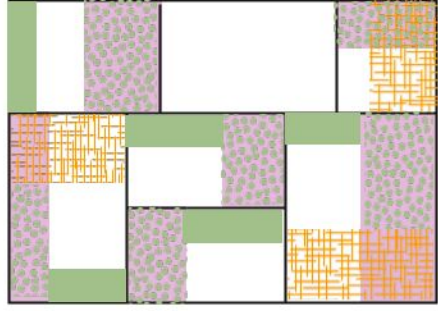
Decentralize
 Shift the focus from few main sources of funding, energy and resources to many smaller sources.



Localize
 Shift the focus from outsourced entities and exterior focus to local owned and community objectives.



Integrate
 Create connections and relationships through amenities between communities and between ecologies.



RADICAL DIVERSITIES

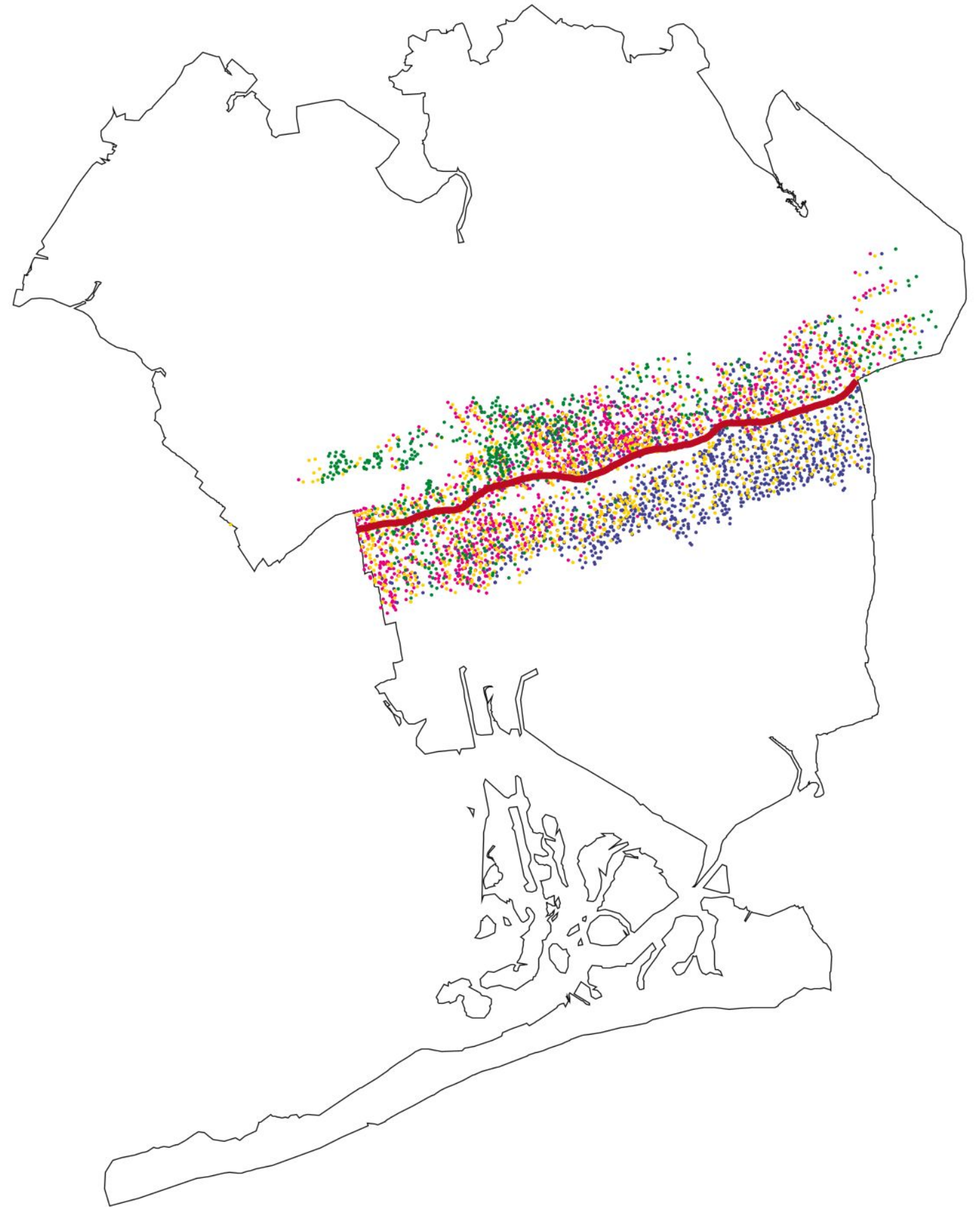
Queens + Willets Point + 1st year graduate studio



Scan here for video

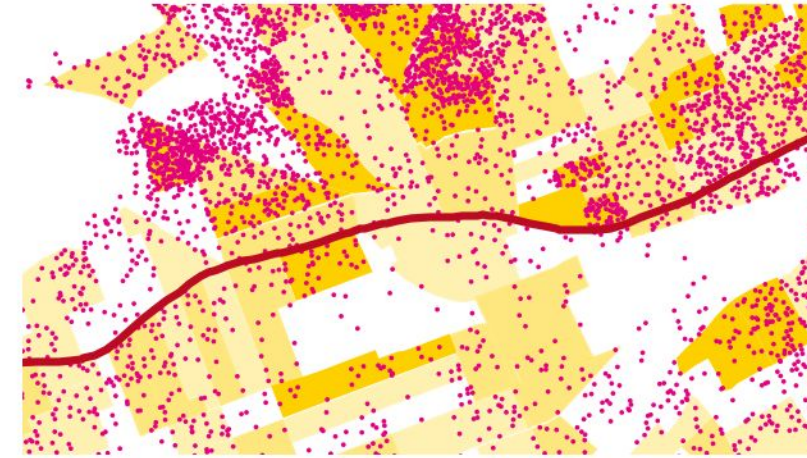
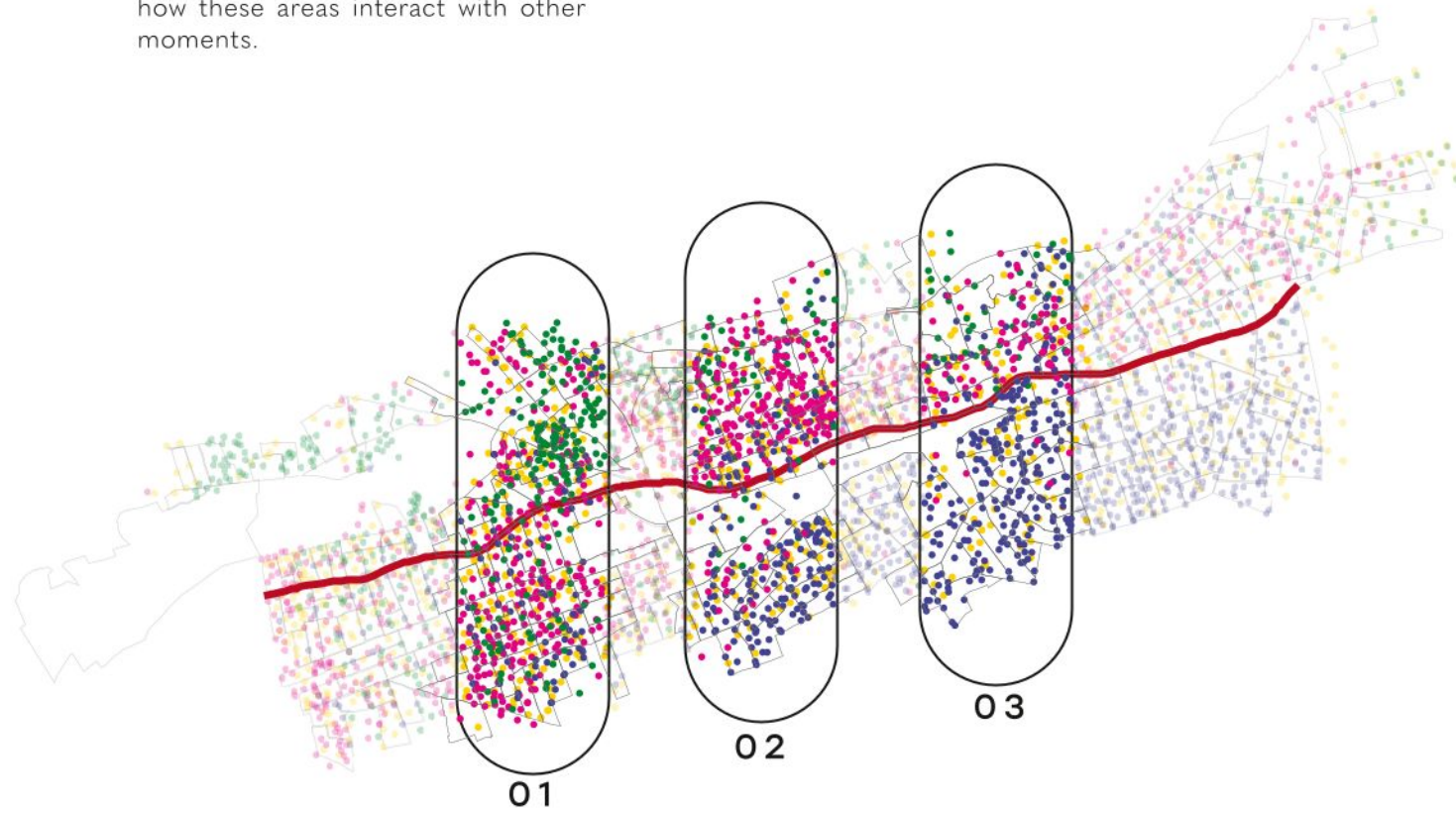
Radical Diversities focuses on one of the most diverse areas in the world, Queens. This imagined Willets Point aims to create a microcosm of Queens at Willets Point.

This project was completed in a group of three: Sai Pradhan, Pratibha Dabas and myself.



BLURRED MOMENTS

Our investigation focuses on the conditions that negotiate where connections and divisions occur: the blurred moments. These blurred moments help us define Willets Point as a Microcosm of Queens. Through our analysis in mapping, we found that there were three major areas where the in-between moments occur: household typology, transportation and education. Along the main commercial avenue, we see how these areas interact with other moments.



01. Household Typologies

- Individual households
- Increasing family households
- Jamaica Avenue



02. Transportation access

- Walked area
- Increasing use of subways
- Increasing use of buses
- Jamaica Avenue
- Subway routes



03. Educational distribution

- Private schools
- Public Schools
- Increasing per capita income
- Jamaica Avenue





WILLETS POINT AS A MICROCOSM OF QUEENS

Queens is one of the most diverse places in the world. Through mapping, these spaces became highlighted and the investigation focused on how blurred moments were generated. Through the development of a catalog, representing the typical built forms found in Queens, the idea was to randomly generate combinations.

LIVE

ENJOY

GROW



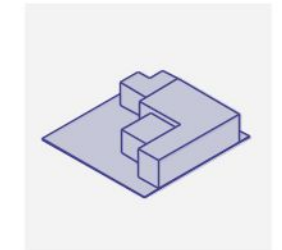
Detached Home



Stand Alone Store



City Hall



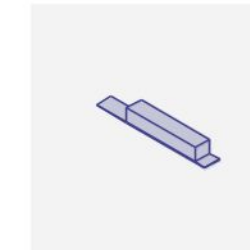
Hospital



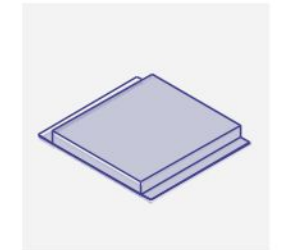
Attached Home



Ground Level Stores



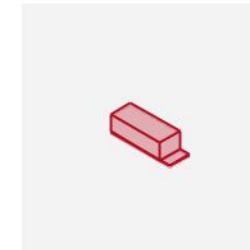
Collaboration Space



Office Space



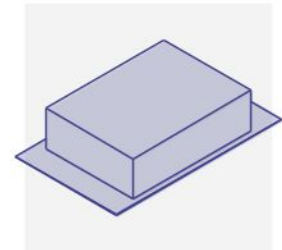
Work - Live



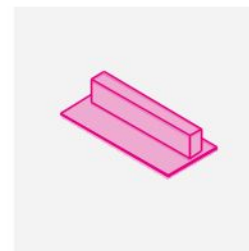
Department Store



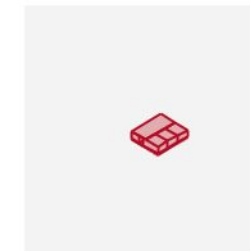
Recreational Center



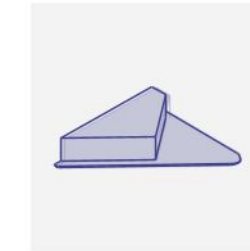
Library



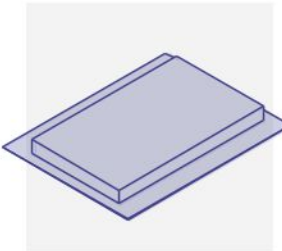
Apartment



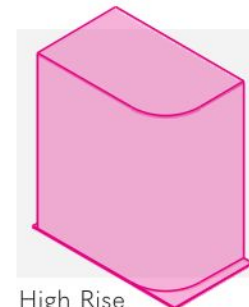
Restaurants



Transit Center



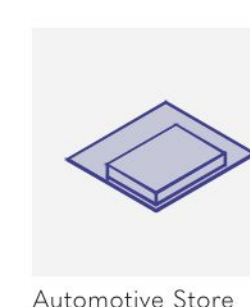
Research Lab



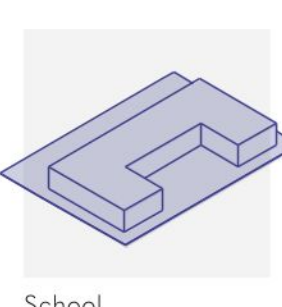
High Rise



Community Center



Automotive Store

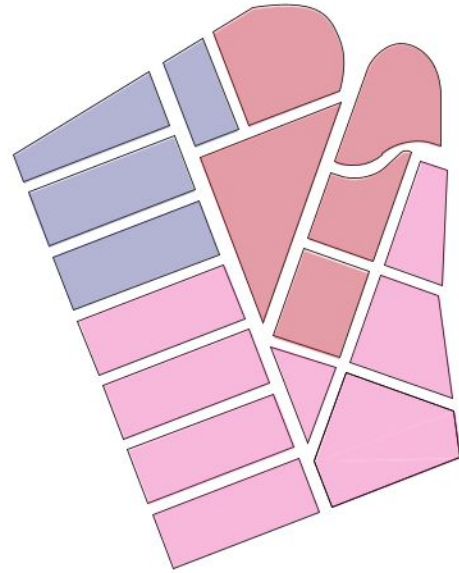


School



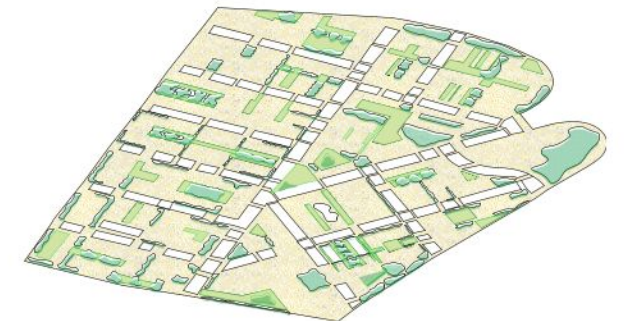
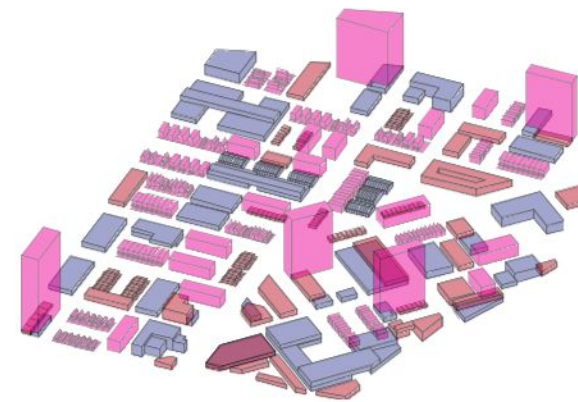
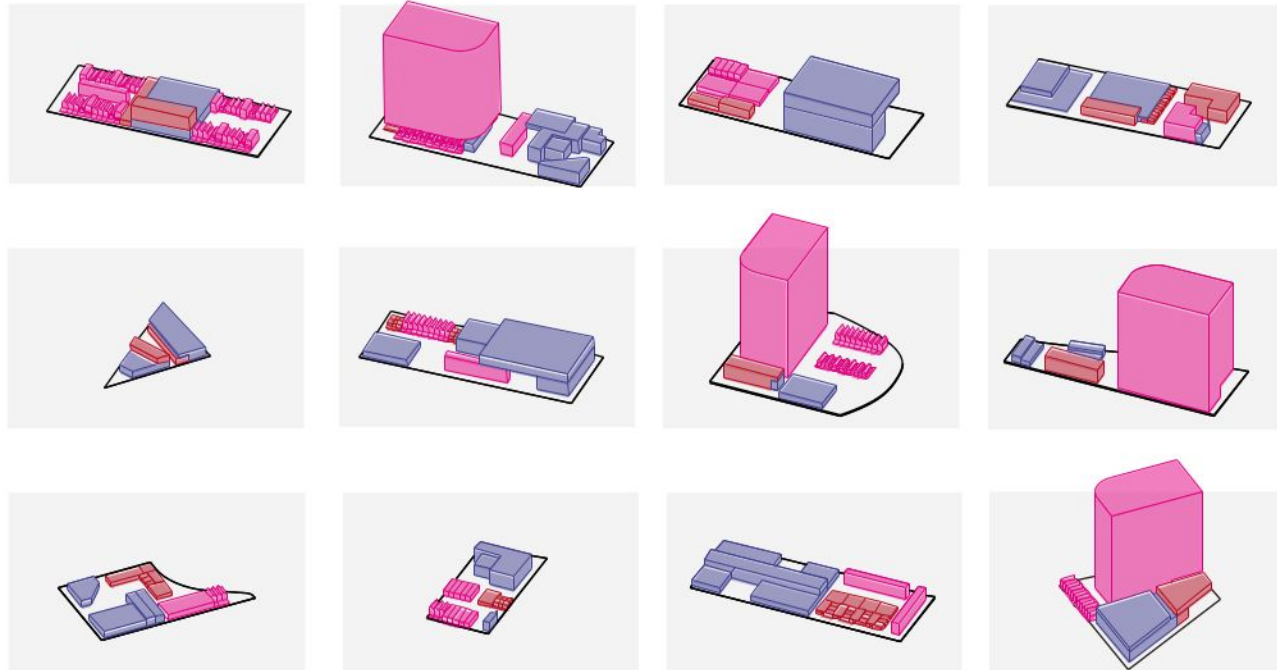
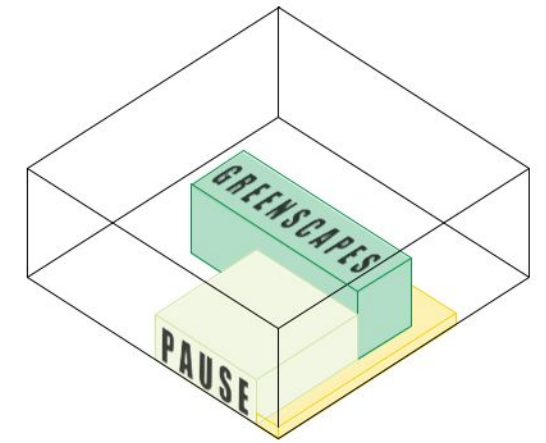
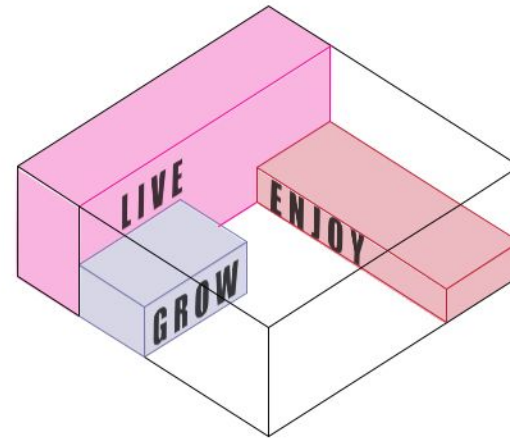
RANDOMIZATION

From the typologies identified in Queens, a catalog was developed from the spaces which most promote a variety of activities. This catalog represents the existing massing and volumes which are most commonly seen at Queens. These programs were used with the imagined block proposal in order to generate random combinations of spaces that typically would not be adjacent to each other. This experimental method allowed us to envision connections and new ways of bringing different user groups together.



THE IN-BETWEEN

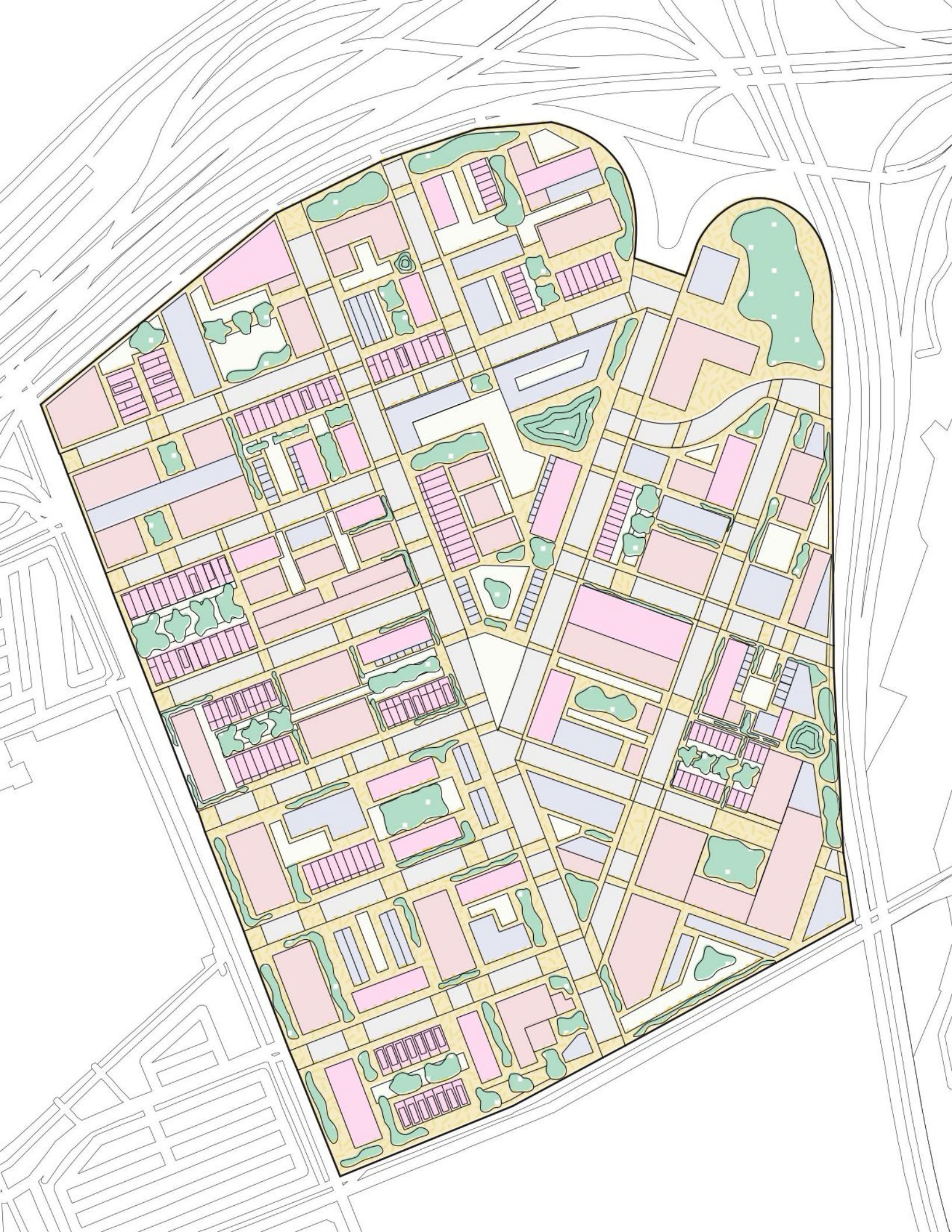
Bringing all three components together, the built fabric began to form. The voids created between the built form were further developed to form our social fabric. The social fabric consists of: movement, pause and greenscapes.



BUILT FABRIC

SOCIAL FABRIC





ACTIVATION

Phase one begins with activating the site, with the ownership primarily publicly owned. The goal of this phase is to re-activate Willets Point. In order to activate the site, the public spaces in between focus on responding to all diverse building typologies which have been designed through the process of randomization.



CUSTOMIZATION

Phase two focuses on customizing the site, to ensure individual user expressions are included. The ownership of this phase is distributed with a combination of public and private ownership. This phase provides users the ability to customize the given land parcels, for living, according to their individual needs.



INTEGRATION

Phase three integrates activation and customization to create a community that reflects the needs of diverse users. The ownership of this phase is distributed equally between publicly and co-owned to ensure equal representation. The design of this phase differs, in that the components were chosen as a response to the other phases, rather than by randomization.







ACTIVISM

Volunteer involvement with local communities

As urban designers our role serves to represent the communities we aim to design with. In order to represent our communities, we must first understand them. Advocacy is one of the strongest tools we have as urban designers. Supporting local organizations and being involved in different projects and initiatives has consistently been a priority of mine, in the hopes of contributing to improving our communities.

DEI ADVOCACY



Serving on the diversity, equity and inclusion (DEI) committee my role focuses on organizing events which bring visibility to the issues at Taubman college. I have worked creating a digital gallery exhibition of global artists, helping to develop the new college DEI goals as well as working as a student researcher investigating DEI initiatives across other educational institutions.

MENTAL HEALTH



During Covid-19, our chapter of the National Organization of Minority Architect Students wanted to provide resources to aid students' mental health. As the social media director, I worked alongside the exhibition coordinator to create an exhibition with resources. This exhibition was displayed at the School of Architecture throughout the Spring of 2021.

PHYSICAL HEALTH



When quarantine became the new normal at OSU, our school began limiting social interaction for organizations on campus. For this reason, we spearheaded, and led, outdoor activities throughout the semester to encourage people to continue staying active and promote social interaction in a safe environment.

GENDER EQUALITY



The Almighty S is an organization created for women in all design fields and careers. This organization was founded by myself and a group of three other women to raise visibility and promote the advancement of women in all design fields and careers.