



neolAGOS
Urenna Evuleocha

“This thesis book is dedicated to all those who have ever been forgotten by society. Everyone who has been marginalized and disenfranchised by the oppressive, discriminatory and corrupt.

Know that it may not seem like it, but we see you, we will support you and we will uplift your voices.”

- Urenna



Architecture. Art. Culture. Equity.

Currently minoring in Ethnic Studies, I am from Lagos, Nigeria in West Africa.

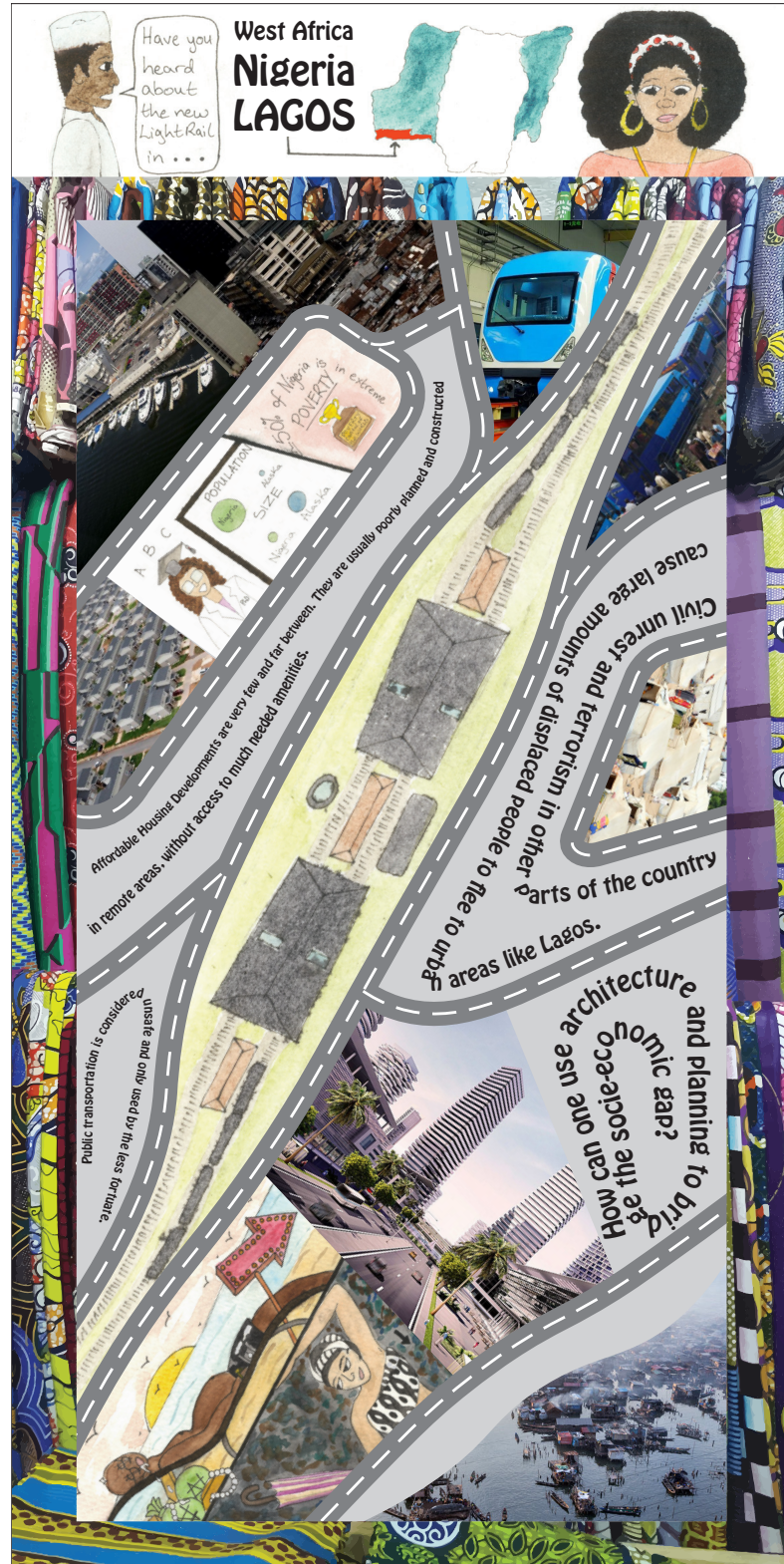
I have always believed in equal access to basic necessities of life and the dignity of all people. With my academic pursuits, I hope to learn how to plan and design for various people of varying identities, providing shelter and necessary infrastructure geared towards the betterment of all. From urban planning and design to architecture and furniture, I wish to always hold the end user and social context in mind, so as to ensure that my work would strengthen society, rather than derail or interrupt it. For this reason I try to be conscious of and willing to learn as much as possible about everyone I work with or come in contact with. By learning about the lived and historical experiences of different people, I can design to cater to these diverse people.

My goal for the future is to design and construct housing and community infrastructure building communities, helping to bridge societal gaps. Aside from housing, I am also interested in the design of public schools, community centers, recreational spaces and health care facilities.

I am interested in social justice advocacy, photography, animation and art, and also enjoy reading fantasy novels, comics, manga and mythology.

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Thesis Abstract

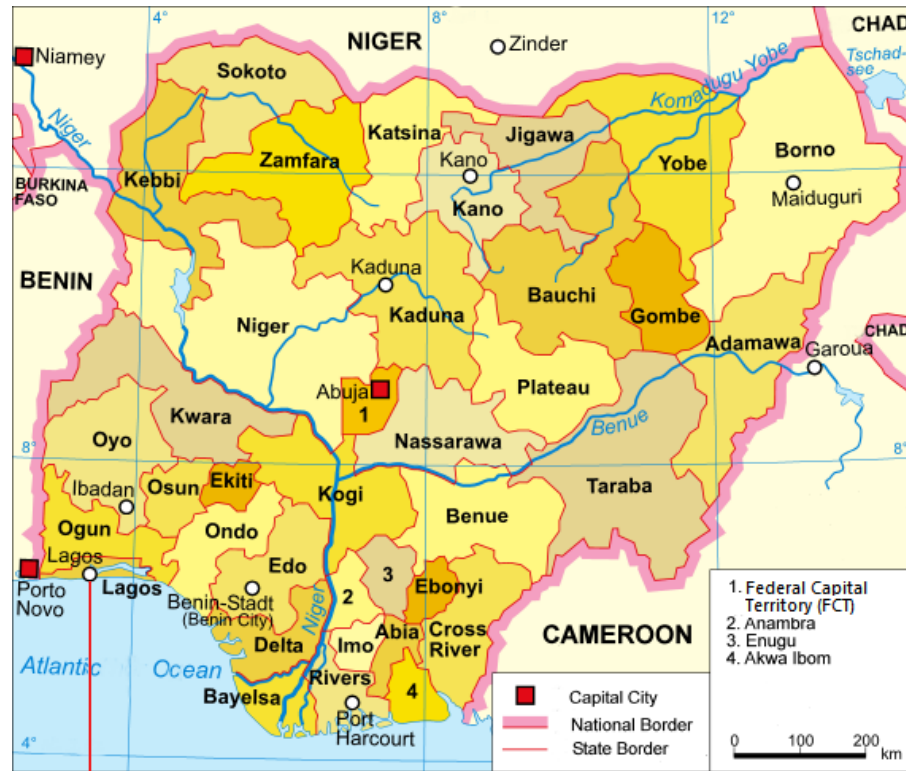
I believe place-making and redevelopment with new transit infrastructure are catalysts for social change and collective progress. Construction and infrastructural costs can be reduced by exploring the use of contextual materials and found objects for construction and adaptive re-use in design. This thesis investigates the manipulation of these objects to be utilized at various scales, from small furniture to large building structures.

Context

Using Design and Infrastructure to Bridge the Socio-Economic Gap

I am from Nigeria, in Western Africa, with a land area of 356,667 mi² and a population of an estimated 200 million. We are currently the 65th densest country in the world with a density of 563/mi², for context, Alaska is 663,300 mi² with a population of 737,438. So Alaska has almost 2 times the landmass of Nigeria, our population is 270 times that of Alaska. In 2018, Nigeria was declared the poverty capital of the world, with 86.9 million people living in extreme poverty, almost 50% of its estimated 180 million population. Nigerian statistics report that 8.5 percent of the near 21 million people living in Lagos, Nigeria live in poverty — about 1.7 million people. Of this number, an estimated 300,000+ are homeless in the growing city, mostly due to state-ordered demolition and lack of space for construction and development. The country and city are plagued by rampant corruption and poor planning, which are the roots of a lot of our systemic issues. With civil unrest in various parts of the country, there are waves of internally displaced people migrating to urban areas like Lagos, in search of better lives.

For my thesis, I would like to explore planning for diverse communities, from various cultures and socio-economic backgrounds. Using architecture and planning to bridge the gap between various groups that make-up the Lagos society. Proper planning and infrastructure can control pollution by noise, burning of hydrocarbons by vehicles and poor waste disposal in underprivileged communities. The introduction of large scale public transportation also reduces congestion on roads, which is a huge problem in the city with an average of 220 vehicles per half a mile, while the national average is 11 vehicles per half a mile. Good train and bus infrastructure would get people out of their cars, and their cars off the street. This would also allow for urban areas to expand better to more of a sprawl rather than a singular congested hub.



Maps highlighting location of Nigeria and Lagos



Overview of Lagos



Solar Panel Installation on Homes

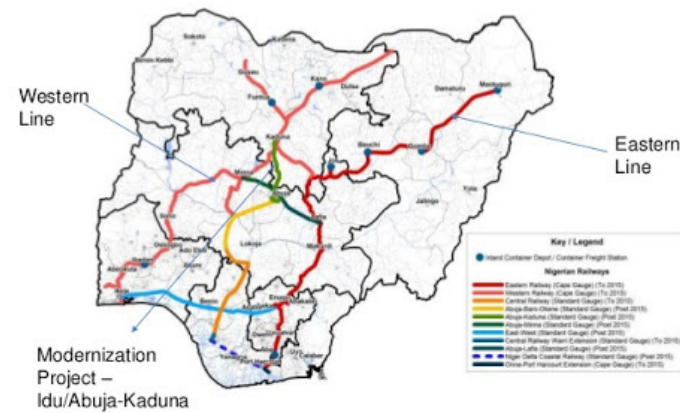
The first urban rail development in the nation opened on July 12, 2019, in Abuja, the capital of the country. With an estimated population of almost 3 million, its new rail system currently has two completed lines. This phase has a total of 12 stations across 45.3km (28.1mi). These lines connect the city center of Abuja to the international and local airports.

With this project I would like to create a planning typology for transportation hubs in the city, like those created by the light-rail stops, to provide much-needed amenities like affordable housing, more micro-mobility friendly street networks, proper transit infrastructure, community support services, and public spaces. The status quo is to design highly organized development for the rich and toss the poor into low quality “cookie-cutter” estates. All those who can afford it have private cars, while the poor are relegated to infrequent poor quality buses, and taxis. This causes urban areas to be cesspools of pollution, which can be transformed over time to a thriving multi-modal hub. The pedestrian and person with disabilities are often neglected in our society, with inadequate provisions being made to make their experience as easy as possible, with these new developments, I also seek to address that.

Lagos as a city is highly dense but is very poorly planned. With the already existing density, if proper infrastructure is provided multi-modal transit hubs would be easily self-sustaining, there is no lack of demand, all that is needed is the foundation to be put in place for better growth and set a precedent for forward-thinking urbanism. With extremely poor National electrical provision, the average well-off Nigerian household, even those in struggling socio-economic conditions, find other ways to power their businesses and homes. With constant noise and air pollution from the use of diesel and petroleum burning generators, Nigerians are always looking for a more efficient means of power generation. Some, like my home, have bought solar panels to be used in coordination with electrical inverters and batteries. This has increasingly become popular over the years, leading to the employment of solar power generation for charging stations in highly low-income and destitute communities like Makoko the floating slum of Lagos, where these pods are used by community members to charge lamps, phones and other equipment for private use.



The Hive, Lagos



Nigerian Rail Network



Abuja Light Rail

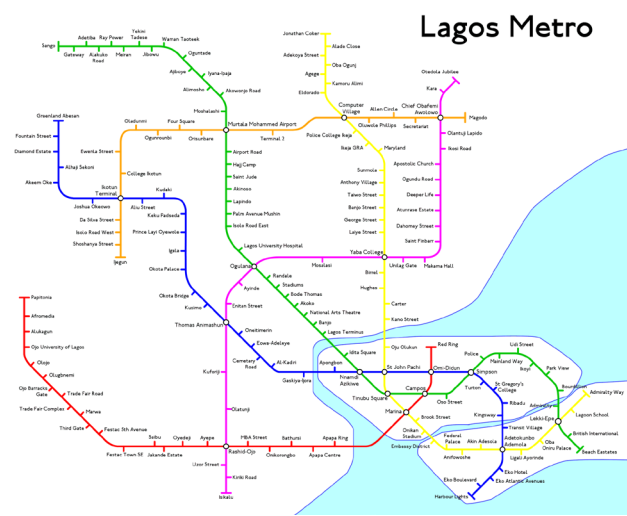
There has been a recent push over the years for the recycling of shipping containers for building construction, this has been highly applauded as Lagos is a port city and extremely high trading society has an abundance of these containers that would otherwise be left to rot or repurposed by squatters and the homeless. Even before this new hype over shipping containers, I remember that street vendors would often use them to set up their shops, so there has always been a market for repurposing these materials, but they are often torn apart by governments in the push to widen roads or clamp down on non-permitted construction. Fast forward to 2018 and the Lagos government is setting up pop-up showcases of remodeled shipping containers into office spaces and homes in an effort to push this new form of construction, which in actuality is not new, but made more palatable to the middle and upper-class tastes.

Lagosians are constantly finding ways to innovate and change to make their navigation of society easier. With already poor existing traditional infrastructure, it would be very easy to migrate to more efficient and environmentally friendly options as long as they clearly work. Large scale private developments offer constant power supply and piped metered water to their housing units, these are very abundant, especially on the islands of Lagos where the more prolific live, so why can't this be expanded to more regional state and national scale you may ask? The issue at the heart of it is poor planning and constant frustration in the abundantly red-taped system. With Lagos ranked as the 10th most vulnerable coastal city to climate change and Nigeria the 4th most vulnerable country, you would think there would be a push on a national level to help stem adverse climatic impacts?

There is also a national rail line in the works to connect major cities across the country, like Lagos and Abuja through Ibadan the third-largest metropolitan area in the country, to reduce air and road transportation. This has set a precedent for urban rail transportation in the country, and with continued use can be expanded up linking other areas in the state.



Proposed Trains



Lagos Metro Plan

There is an ongoing urban rail construction project in Lagos right now. Proposed in 2011, the initial completion date for its phase I (27.5km the blue line from Marina to Mile 2) was 2011, but due to lack of funding, it is now estimated to be in 2022. This section would be 27.5km with 13 stations. Travel time from end to end is estimated to be 35 minutes. The entire Blue Line will operate over a secure and exclusive right-of-way, with no level crossings and no uncontrolled access by pedestrians or vehicles. The route will run on the surface in the central reservation of the Lagos-Badagry Expressway between Igbo-Elerin Road (Okokomaiko) and Iganmu. The line will then be elevated from Iganmu along the south side of the expressway passing the junction with Eric Moore Road, crossing just south of the National Theatre to Iddo, then south to Lagos Island with a terminal at Marina. A Maintenance and Storage Facility (MSF) will be constructed at Okokomaiko, with a track connection from the Blue Line to the depot.

With Lagos' new urban rail system being constructed, I see a need for creating an infrastructure that is both served by this new transportation system but also validates and supports its implementation. As history has shown, politicians make grand plans and projects, then either fail to follow through, or they are completely abandoned for new ones when the people in power change. With proper planning and development, a community, especially one that is low-income serving will be able to not only amass financial support but give incentives for the continuation and upkeep of large-scale projects like this.



LAGOS CITY

LEGEND

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COMPREHENSIVE INFRASTRUCTURE MASTER PLAN FOR LAKKI SUB-REGION, LAGOS - NIGERIA

FIGURE 2-9: LAKKI MASTER PLAN - LANDUSE PLAN

Lagos State Government
Ministry of Physical Planning & Urban Development

Lekki Masterplan

The government of Lagos is currently working on their plans for a model city, with construction spanning over the last 10 years for a number of areas including, Badagry, Apapa, Lekki, Agege/Ifako-Ijaiye amongst others, it seeks to transform the entire state to a sprawling garden city metropolis. Since these plans were put into motion, they have made very little headway to accommodate the large demand for housing in the state. They are more focused on addressing the increasing volume of rainwater brought by intensive storms across the state, but fail to take into account the other impacts of climate change, such as tidal surges, waterlogging of soil, rising sea levels, subsidence (the gradual caving in or sinking of an area of land), erosion, salinity of the water table, and diseases that would spread in a saturated environment. Like many other developed and developing cities/countries, Lagos has high amounts of pollution from the construction industry. With "development" many traditional construction practices have been totally abandoned, forgoing abundant raw materials like stone and clay for hollow cement blocks produced with the preferred imported cement. Even with mass amounts of timber available for construction, that is sidelined for cement and concrete as this form of construction is believed to be better and more effective. Cement is preferred as it is believed to last longer, when we should really be asking ourselves if building for longevity is really the best? Even these perceived long lasting buildings quickly become outdated, neglected and fall into severe disrepair, so should we even be building to "last"?



Compressed Stabilized Earth Blocks (CEBs)



Uneven Growth, NLE + Zoohaus/Inteligencias Colectivas

In order to push towards a more sustainable future, it would be highly beneficial for more traditional practices and local materials to be merged with more modern ones, to create better hybrid culturally and environmentally responsive practices. Compressed earth blocks (CEB) are a good example, as an alternative to adobe blocks and wattle (rods or stakes interlaced with twigs or branches) and daub construction (laster, clay, or another substance used for coating a surface mixed with straw). CEB are made with small amounts (usually less than 10%) of cement or lime components in its mixing process. This varies from native adobe blocks which are made with soil, water and cultural additives, moulded into shape by hand. CEBs can be used to build up to 5 floors, and can be used as a great local and cheaper alternative to cement blocks. They can also be used for adornment and veneers, bringing more traditional elements to modern buildings.

Lagos is an extremely unorthodox resilient city, even with the seemingly extreme conditions that lower income people face here, they love the city. It offers them the capacity to innovate, and adapt in new and creative ways, that they would not be able to in more rural areas. With huge economic disparity, and dwindling middle class, a drive for survival is born, giving birth the well known term, "Lagos Hustle". Within the constant chaos and cacophony of crazy, there are well designed and planned out standing out against the Lagos backdrop. In their discussion on the past, present and future of Lagos, Rem Koolhaas and Kunlé Adeyemi talk about the amalgamation of existing conditions with the global contemporary. Hybridizing the traditional outdoor market an the western ideas of malls, to create a "market-mall". We often draw to binaries on western influence, seeing "colonial" influence as taboo, but this is not the case at all. Sometimes these influences can be positive especially when mixed mindfully with existing conditions, which was the case of Lagos of the past. For the city to flourish, it would need to take basic principles and mix them with various other design factors to come up with what I believe to be the needed step in steering Lagos away from it destructive and self-endangering path.



Nigerian Affordable Housing

With an estimated 3 million housing deficit, Lagos is in dire need of housing, and a wide majority of the demand is for low-cost subsidized housing. Sadly the Lagos government, currently still does not have provision for such housing, choosing instead to fund and develop “affordable housing” that is well above the capabilities of those without homes. And even these homes are often stand-alone buildings, which demands more space for construction, leading them to be pushed to unwanted outskirts of communities, with poor planning and leading to high congestion and cost. In order to help break this cycle of poor construction and planning, there would need to be a push for more mixed-income multi-story housing, shifting from a homeowner system to an apartment system. Not only would investment in transit open up new areas for development, but it would also help provide possible employment opportunities for individuals, not only in transportation, but in businesses that spring up around these hubs. For my thesis, I plan on looking at ways to revamp the Lagos Planning codes in these areas that could become multi-modal hubs due to the introduction of the metro, allowing for better-planned communities, that could have a positive impact on the Lagos society, and serve as precedents for statewide redevelopment.



Dilapidated Public School, Nigeria

In Lagos, as well as in the rest of Nigeria, there is very little if any focus on community development establishments. There are little to no community centers, most communal gathering spaces are privatized and only cater to their paying membership, leading to a financial block in access to community spaces. Public schools are severely underfunded and left to dilapidation, same with other publicly funded institutions like hospitals. Sadly, this is not due to lack of knowledge on how to create better communities, but rather rampant corruption and embezzlement of public funds, leading to cutbacks on budgeting and settling for poor designs and construction. Often times when new “communities” are being developed, they are either inaccessible to lower-income individuals, poorly planned, lacking in community necessities and failing to provide much-needed infrastructure to foster a good community.



Alaba International Market, Lagos



Makoko Slums, Lagos

Majority of public social spaces are in markets, which are often created by individuals and vendors creating spaces to sell their wares and render services in areas that are often neglected or under utilized. A good example of this is the Maeklong Market, that is set up on the Lagos-Ibadan Railway line, with the train running right through the market, with the tracks often covered up by vendors and traversed by market goers. Markets have remained as lasting organized communities, built up with very little governmental influence. The Alaba International Market, as highlighted by Rem Koolhaas in his 2002 film on Lagos, is a great example of a bottom up strategy of development, set up by individuals to sell electronic wares was able to climb to global renown as one of the largest technological trading hubs in the world with imports from China, Spain, Japan, Korea and many other tech power houses at the time.

These markets often come coupled with transportation hubs with wide expanses of parking, bus and taxi stops, in order to maximize traffic to these vendors. Governments have started seeing the importance of these spaces in the Lagos community especially, developing slightly more organized and better planned spaces, to promote safety and provide better control. Although these measures are in place, there is still no plan in place to best optimize the proposed city metro, in order to make these new hubs not only market centers but social havens. Provision of social amenities such as public parks, plazas, small shops, housing and mixed use buildings, would help elevate these spots to be well on their way to being economic incubators, while still being accessible to various levels of society.

The better the standard of living of a place, the lower the crime rate as there is less of a gap between the privileged and less privileged. When people are content, they are less likely to commit crimes, thus improving the safety and wellbeing of others in the community. Another angle of approach would be to look at the innovations and lifestyles of the less privileged people, in order to find the best way to design in order to accommodate them. A good case study would be the floating slums of Makoko located off the Lagos Island banks in the Lagos lagoon, that is being continuously attacked by governmental authorities to combat illegal settlements. From how they tackle food security, waste management, construction practices, to abstract things like how they organize communities, create abstract social hierarchies and economize space. All these various topics all lie in urbanism and how it can help shape our social landscape. From building fundamentals for shaping and formulation of public policies, to prioritizing development and societal needs in order to allow communal growth and development.



Made up of the mainland and series of islands and peninsulas, Lagos has been slowly sinking due to its proximity to the Atlantic Ocean. This port city has an estimated 22 million people, a majority of which are living below the poverty line, settled in floating shanty slums over the city's lagoons and water bodies. This city that is currently undergoing the adverse effects of climate change and sea-level rise is poised to be catastrophically affected in the coming years if mitigation methods are not taken.

In the rise of job and housing shortages in 2008, a new ambitious development was introduced, to build a brand new city on land "reclaimed" from the ocean. This new development, named Eko Atlantic, is poised to be the new economic capital of Africa, right next to the current capital, Lagos. Proposed to have luxury apartments, a new financial district, private power grid, and shopping district, this new development has everything it needs to thrive, and help Lagos recover from its 30-year recession. Providing 250,000 jobs and culling housing shortages from Lagos' booming population, this project is backed by private investors as well as state and federal government.

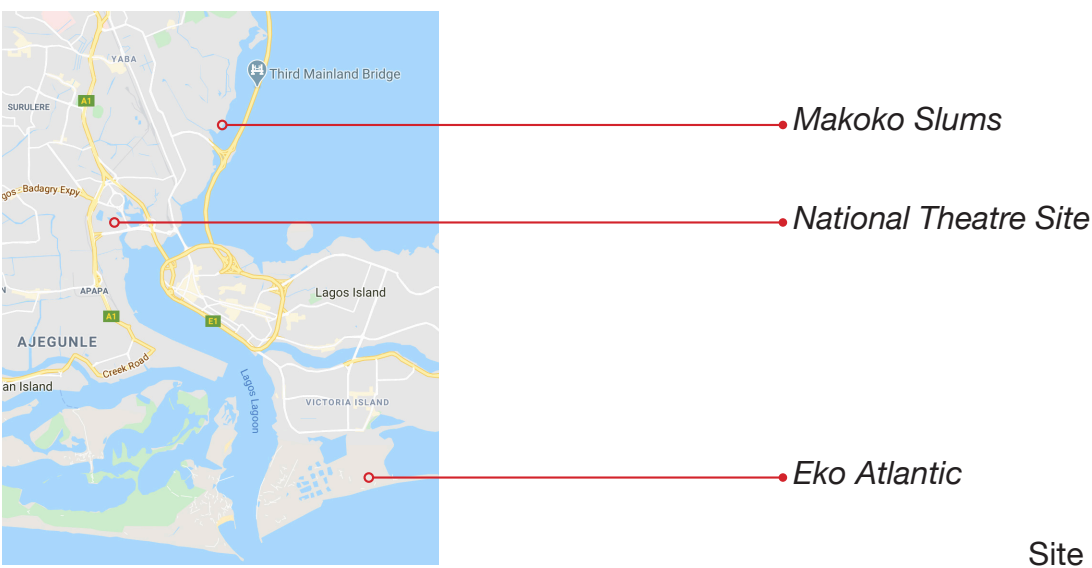


This new project is being built by infilling 6.2 miles worth of Land of the coast of Lagos. To address the dangers of coastal erosion, reduce storm damage and mitigate sea-level rise, the "Great Wall of Lagos", a sea wall the wraps around the city was devised, to protect it from the surrounding Atlantic. This strategy, however, has come with adverse effects as the wall will protect Eko Atlantic, but will lead to flooding in surrounding impoverished areas, which are low-lying. These areas will be left highly vulnerable to sea-level rise, and this issue is not being addressed.

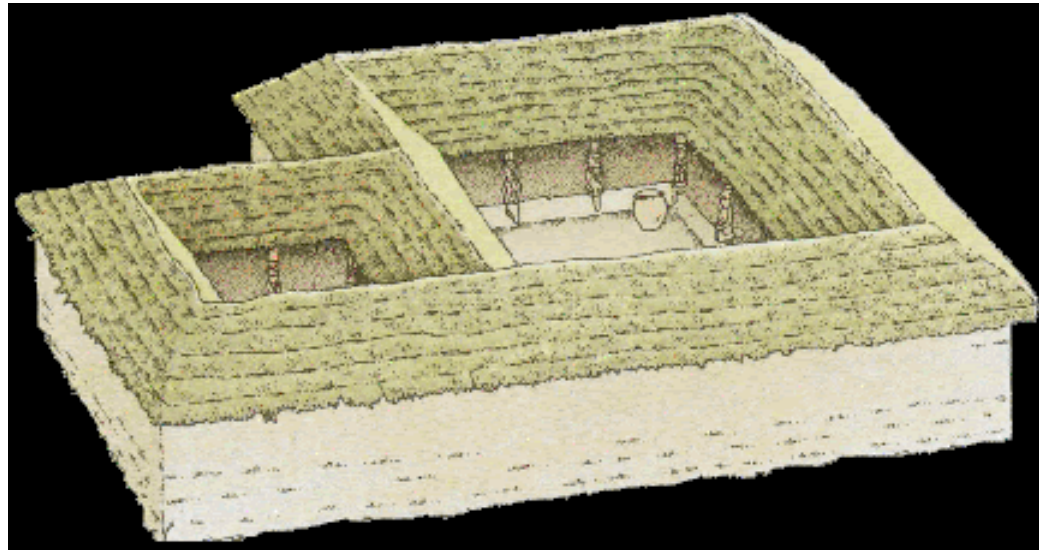
Although infrastructurally very different and much better planned than majority of surrounding Lagos, Eko Atlantic serves as a beacon of the extents, power-hungry capitalists can go to better themselves. One of the buzz topics around the project is the creation of jobs and new housing, but the real question, is who are these designed for? One of the towers that have currently finished construction on the island, contains apartments listed at \$11,000 a month, how can this be utilized by people living in the poverty capital of the world? This project appears to be a haven created by, and for the uber-rich and foreign class, protecting them from the effects of climate change, and providing them ease of access to all needed amenities in a well-planned environment, away from the everyday struggles of Lagos.

Thesis Statement

Lagos, Nigeria has approximately 1.7 million people living below the poverty line, 300,000 of whom are homeless in the growing city. I have chosen the National theatre light rail stop in Lagos Island as the site for my thesis. This is an underdeveloped area in close proximity to a cultural landmark that, with a new stop, is a viable location for redevelopment. Being a highly active port city, there is an overabundance of shipping containers abandoned on the streets as it is cheaper to keep them than to ship them back. Starting with a community center in the first phase of redevelopment, I have chosen to re-adapt these shipping containers for use in new construction.



Site Context



Traditional Yoruba Central Courtyard Building



Lumen Building at Wageningen University & Research, The Netherlands



Veranda in Traditional Yoruba Architecture



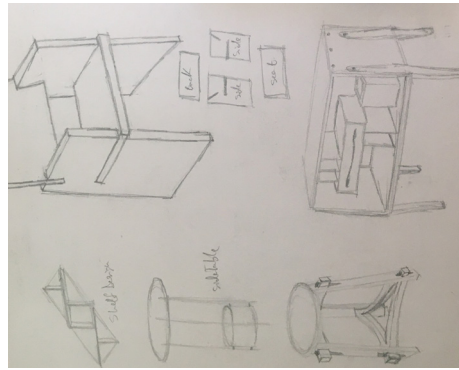
Dallas High Speed Rail Master Plan



Shipping Containers Congesting Lagos Streets



Granja de Alimentos Orgánicos, Shanghai



TEBUL OMENKÀ

- Igbo (Eastern Nigerian Language) for "Artist's Table" -

For my Vellum project I set out with the goal of re-using as much old material I can find as possible. This was in order to be both sustainable in my design and construction, but also keep my costs relatively low. Going into this project, to get some inspiration on what to make, I decided to sketch random furniture I found online to get my creative juices flowing. I did this in bed, as the desk in my bedroom currently very uncomfortable and discouraging to work on. This is to be expected, as its made quite poorly and I got it off of Craig's list. This is how I got the idea to make a desk, at first I wanted it to be an Artist's desk, hence the name "Tebul Omenkà" which is its translation, in Igbo, my native language.

After hearing about the Deadwood Revival Design essay competition for a free slab of urban wood, I jumped at the opportunity. I was able to get first place with my essay talking about incentivising corporation to use urban wood, as well as raising awareness and thus market for urban wood and providing everyday items at comparable prices for the average consumer rather than relegating these sustainable practices to the elite who can afford them. I was able to gain a Coastal Live Oak slab that I found very interesting with its Y-shape and various cracks and voids in its grain. I used my six and a half foot slab for my desktop and waterfall support leg.



Slab from Coastal Live Oak cut down for construction



Drawer Chest from desk from Goodwill Warehouse



Pipes from Dumpster



I wanted to make a form of a full functioning everyday desk and made a trip to Goodwill Warehouse to see what furniture I could buy and take apart for my needs. I ended up finding a pretty decent desk with inlaid drawers for \$5 made from dense particle board and lined with walnut veneer. I took out the old drawers and drawer tracks refinished them and kept them to be used in my Vellum piece. The rest of the desk was completely taken apart. The particle board was mulled down and reused for the casing for my drawer set and all the fasteners from the old desk were saved and re-used in my desk and drawer set. The walnut that was used on the border of the drawer set was a cut off I found in the scrap pile at Deadwood Revival.

For the structural elements for both my table and drawer set, I was able to find electrical conduit and plumbing pipes in the dumpsters by the engineering workshops. When I first heard about the junkyard by the engineering workshop, I was quite skeptical on what I would find, but it ended up being a treasure trove of awesome materials. The pipes were a bit rusty, but I was able to clean them up by soaking in coca-cola. While working on a sign for one of my clubs in third year, we had to buy some paints and wood finishes, which had a lot left over that I had saved ever since. I used those roughly two year old paints and varnishes on my piece as well.



I went into this project with a lot of personal goals and stakes set for myself, that I am happy I was able to stick to and achieve. For my wood pieces rather than hide their imperfections, I chose to highlight them in ways they can be appreciated. Filling up the scars of the slab to pronounce its wonderful texture, and removing the veneer on the desk pieces to show that particle board underneath, that does not need to be hidden as there is honesty in materiality. This was an amazing experience for me with a lot of firsts and lessons learned. Often you find good design and construction, but at high costs, making sustainable and local products inaccessible to the low-income to average consumer, I hope with this project I have taken a step towards marrying sustainability, durability, and affordability.

Water Color Exploration



For this exploration I chose to give an abstract depiction of my Vellum piece. I made the voids in here much larger than that of my slap in order to make them more like windows. The bottom right depicts a cube section of a beach, in order to call back to my thesis site in Lagos which is a coastal city. The split river has its roots in River Niger and Benue that flow from the North of Nigeria and converge to create a fork in the national landscape.

Form Exploration



I chose to explore ways in which mundane or familiar items can be reused or reimagined in different ways. I discovered that I could dye rockite with the same dye I used for my resin in my Vellum piece. I was also able to use some of my original Vellum text pieces in various ways other than what they were intended, the stand was a joint text piece, and the rock fragments in the planter bottom were from a shattered rockite piece I initially intended to use on my table as well. For this, I chose to continue on the path of re-using objects to create mundane objects.

Collage Exploration



For this piece I chose to depict continuity in location and materiality with the images I chose. Words and phrases that also have a connection to my thesis were also included as visual cues and links to my topic. The pen elements are to represent the delicate connections that may connect harsh or more pronounced elements in society to create a full network. With the drop watercolor technique I chose to test how the pigments would naturally disperse through a controlled environment; the water spot, allowing for limited chaos in an orderly and controlled space.

Site Exploration

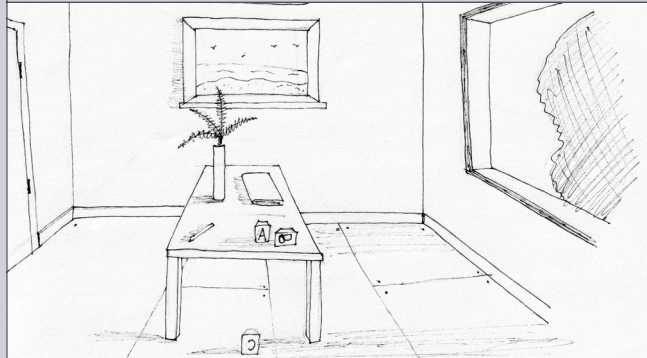


Focusing on the exploration of creating with found objects, I chose to create an everyday object that can be put together by anyone with very little technical know-how. I tried to merge practicality, re-use and adjustability. With simple knots and looping, I was able to achieve delicate connections between different objects to create something completely new and far removed from what they originally were.

Poetry Exploration

It's hard to breathe, I am choking
 I start awake drenched in sweat
 An orange glow creeps through the rice bag curtains
 Everything is on fire, the smoke is thick
 We escape with only our lives
 The police burned our house down

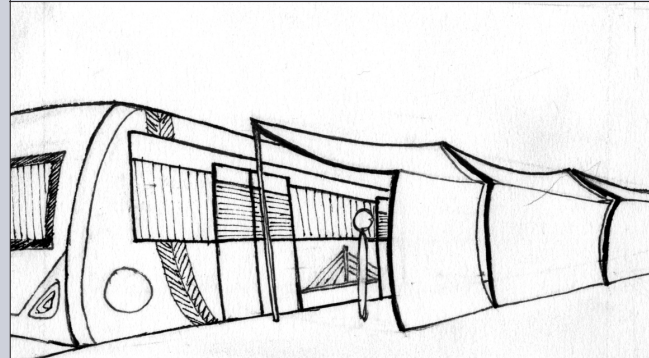
We finally have a roof over our heads
 A place to call our new home
 Some day we will recover
 But for now we pick up the pieces
 And rely on each other.



People dot the lawn engaged in their little worlds
 All drawn together for one reason or the other
 Children play with their parents ever vigilant
 Some enjoy meals or are engrossed in conversation

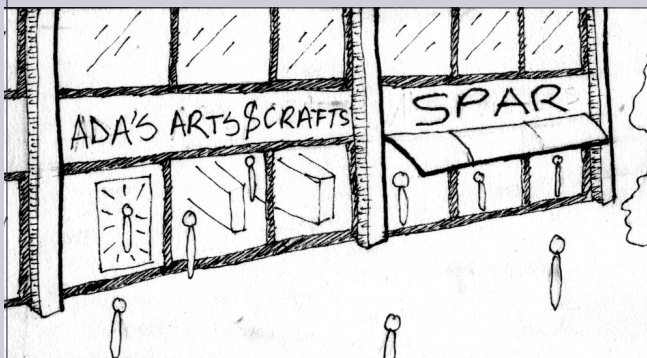
In the distance, there is a silent hum
 The bloodline of our city continues to pump on
 Bringing in a new wave of people to offload
 And carrying waiting passengers off on their journey

New arrivals spill out into the plaza heading in every direction
 Friends greet one another, strangers pass on by
 Like a beating heart, swelling and deflating
 The hub brings life to the community.

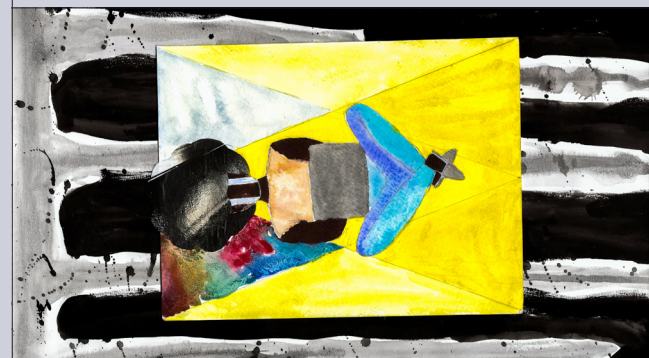


The bus come down the street with tired people
 "Now approaching National Theatre Station!"
 There's a hushed vibrancy in the air
 Passengers file out in every direction
 Some on their way home, or to stores
 Others to catch the approaching train
 Restaurants beckon with amazing scents
 Street displays offer art and various wares
 The market is having its night sale
 Art students are setting up an exhibit

Walking to my building, I spot my poster
 I go to bed smiling, I have a play tomorrow.



A world filled with color and vibrancy
 Their love lies with dedication and creativity
 Why remain awake when one can dream?
 Why suffer when one can flourish?
 They are not weak and will not break
 But overflow with the strife and love of others
 Often instructed on how to live, act, exist
 Are they but a character in another's narrative?



The street hawkers draw you in with there delicious aromas
 Conductors howl at the top of their lungs
 Shouts and honks can be heard from all directions
 Endless crows jostling you every which way
 Belongings held continuously in a death grip
 Hyper aware of every shove, bump, and noise
 Thrown into the deep end and fighting to resurface
 That's just every day on a Lagos Street

"Get the car ready, I'm late for school!"
 The gateman greets you as you're driven out
 The air conditioner turns to just the right temperature
 You queue up your favorite playlist
 "Take the toll road, it's quicker" "Yes ma'am"
 You text dad: Took the Range Rover for the day
 Getting comfortable, you doze off in the leather seats
 That's just every day on a Lagos Street

The sky starts to darken and everything becomes drenched
 You run to the nearest stall in search of shelter

Awoken to the thundering of the rain
 You turn up your music to drown it out

Rolling up your pants to save from the splashing cars
 You journey on as it's a race against the overflowing gutters

I hate the rain, it always brings traffic
 The street quickly floods scaring the smaller cars

I am soaked by a huge car trying to make headway

We lurch forward into a pothole sending out a huge splash

The drive off, I continue on, this is nothing new

This is just every day on a Lagos Street



Land Intervention

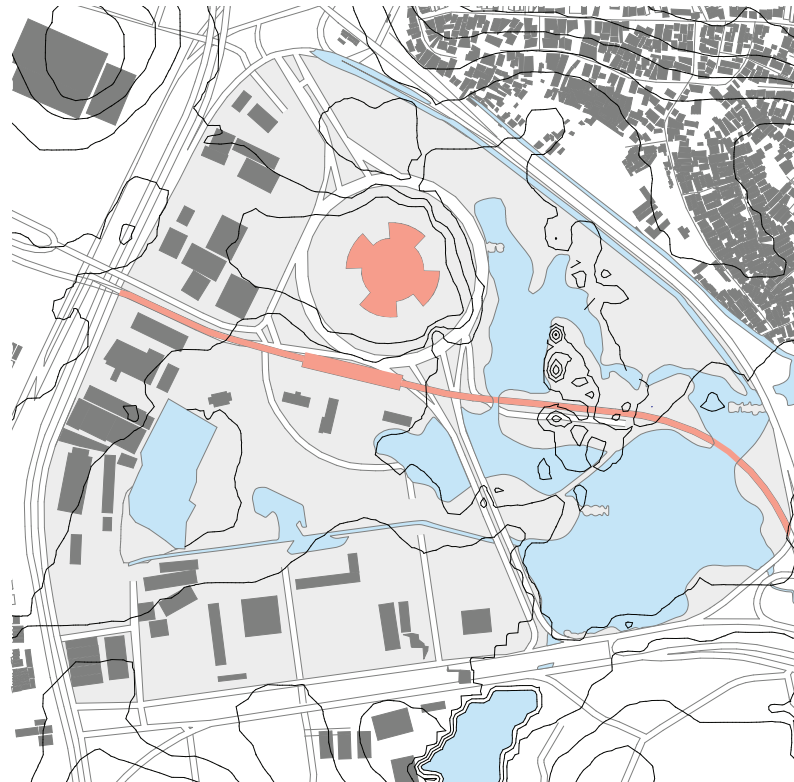
Looking at our chosen site as a canvas, our team sought to not only highlight an existing condition like the crack on the rock formation. Since it is at the point where a small creek meets the ocean, we represented how we believe the rock will eventually break apart from weathering. We used rocks found around the area as well as some from higher ground, with dark rocks to contrast against the light background, white rocks against the moss and created a channel that led to the creek that was eventually washed away. Although we did not carry on with our idea of creating a shape like a square, we still held on to the idea of creating some form a framing element.



Montana de Oro, with Henry Hawks and Maddie Feron

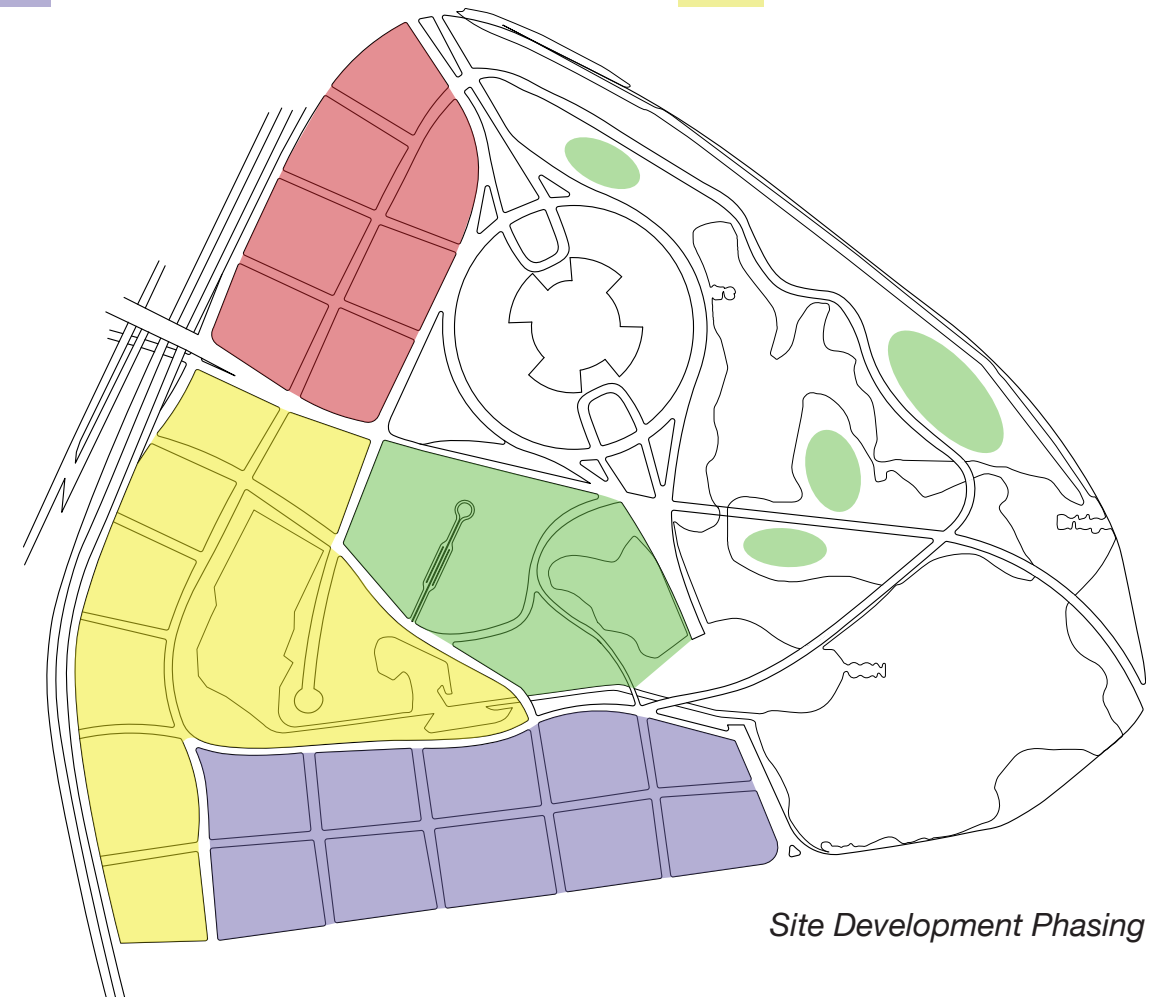
Masterplanning

The site originally consisted of the National theatre, industrial manufacturing buildings, some small stores and businesses, a church and the metro station currently under construction. The remainder of the site largely unused and left to be overgrown by vegetation. The goal of the masterplan was to map out an effective development schedule for the area. This was achieved by grouping certain community amenities with more market rate or more revenue accruing construction ventures, so as to offset costs.

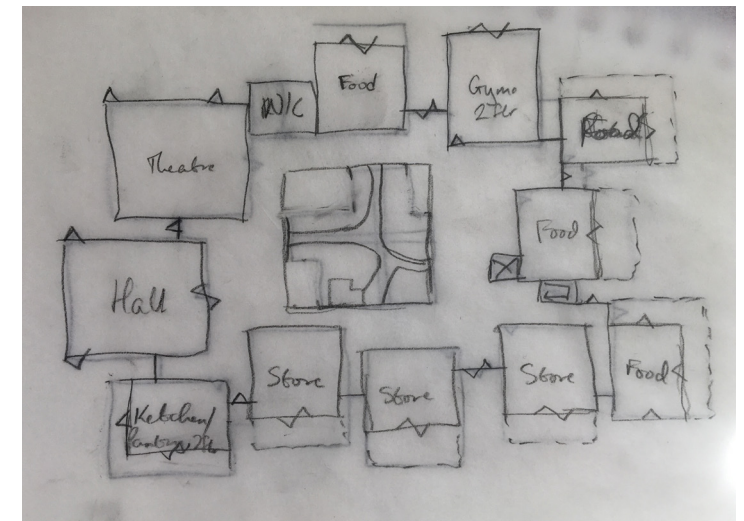
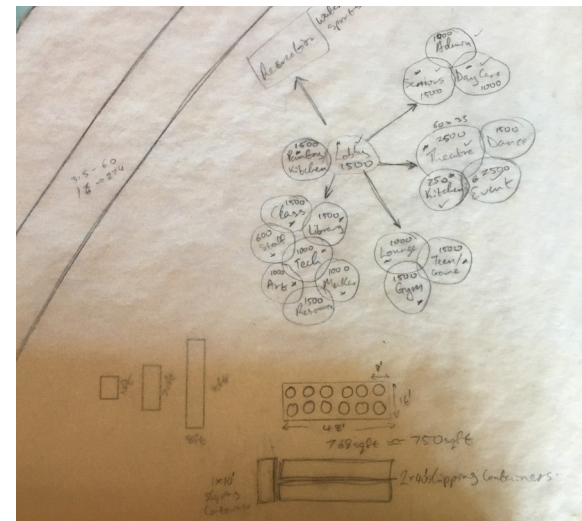
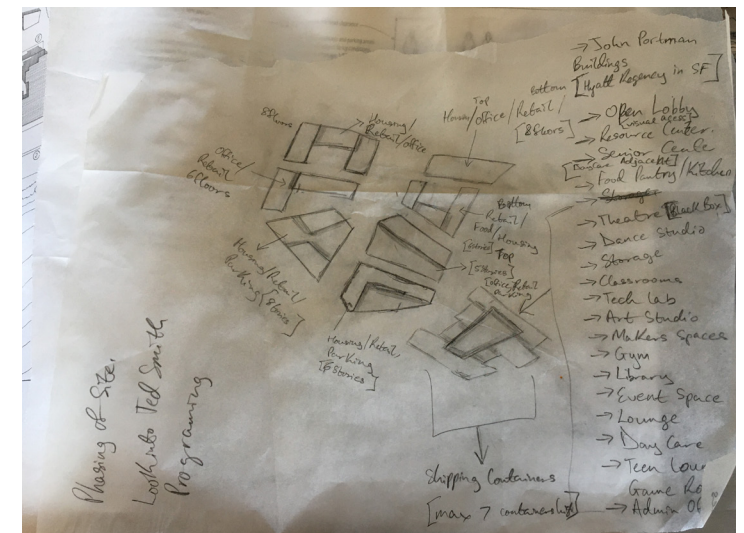
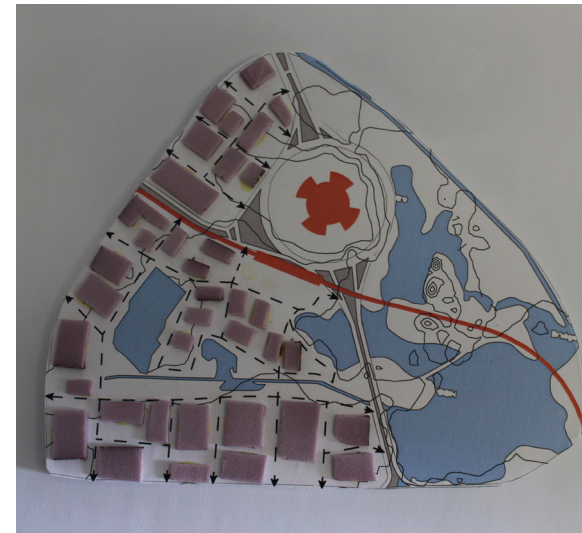
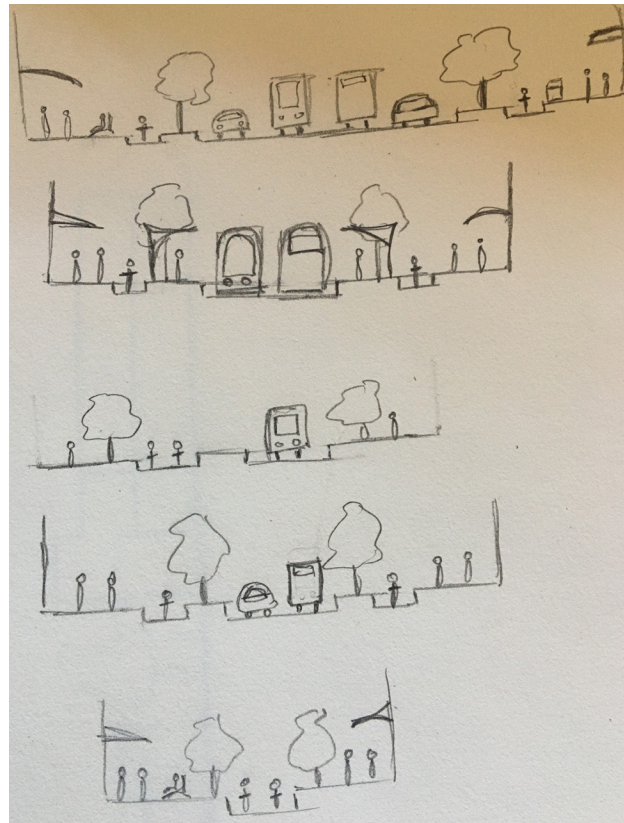
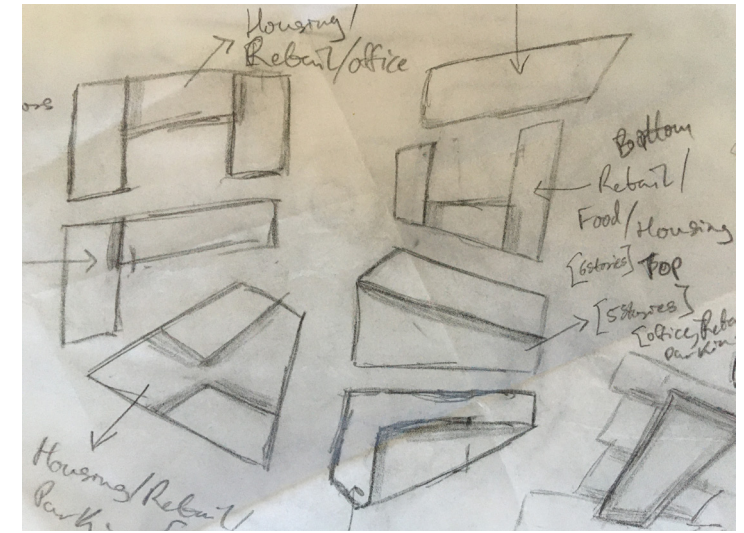
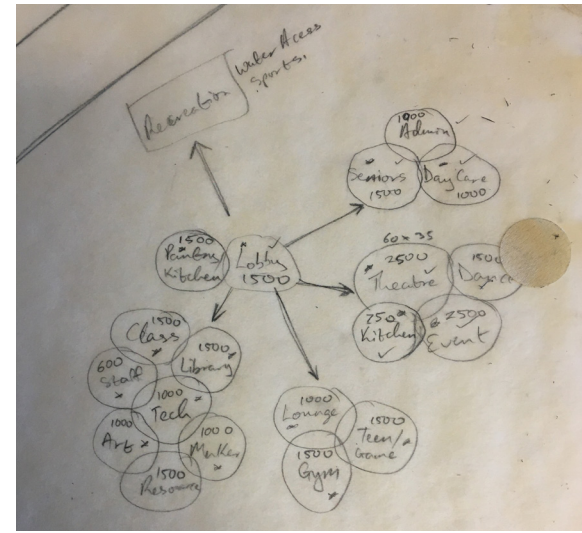
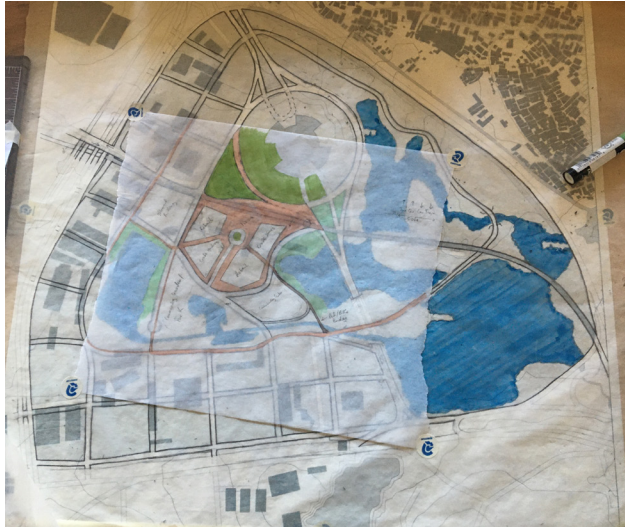
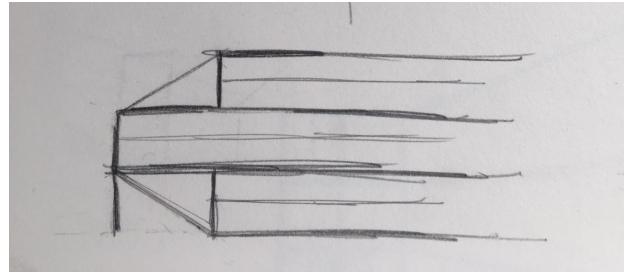
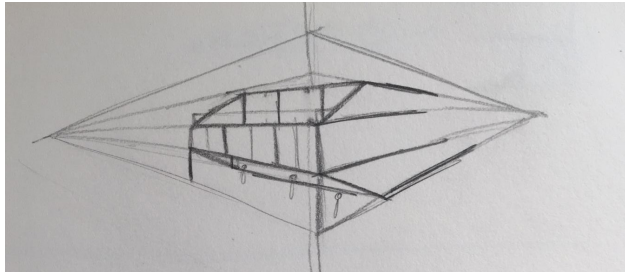


Original Site

- Phase 1-** Community Center, Mixed Use, Affordable Housing, Local Craft Stores, Food, Recreation
- Phase 2-** Mixed Use, Low density, Light-Industrial, Recreation, Education
- Phase 3-** Art/Craft School, Artisan Market, Mixed Use
- Phase 4-** Mixed Use, Light-Industrial



Site Development Phasing

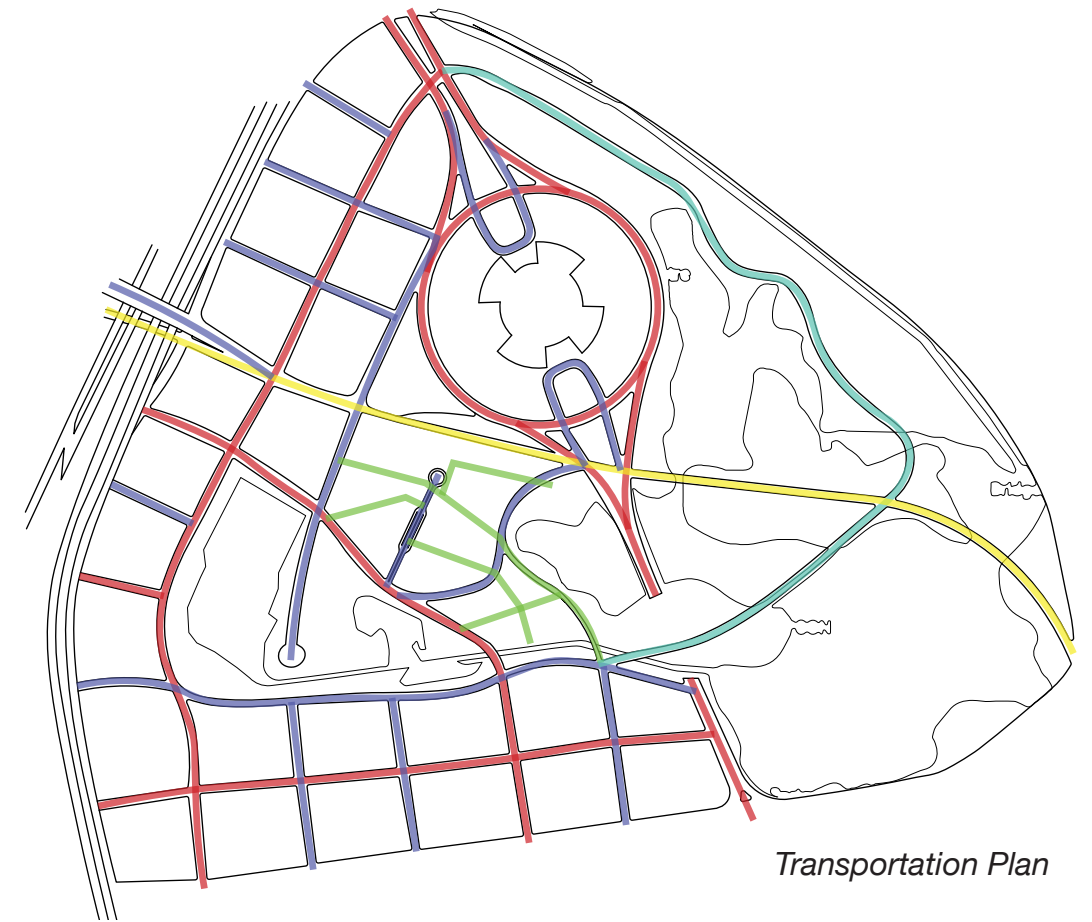


The master plan serves to highlight a scheme of building placement on the masterplan, centering the use of mid-block passages, and green spaces on grade and on roofs, in developed areas, serving as a break from the building fabrics, allowing for outdoor uses and occupation through out the area. The plan creates a developed urban fabric integrated with a park and lagoon system, allowing for constant interaction with the natural environment which is not common in the city.

In order to mitigate traffic congestion which is one of the calling cards of Lagos, a transportation plan was developed to break down accessibility throughout the site, centering pedestrian and public transportation, rather than individual vehicular travel like that of the wider city. Wide sidewalks and bike lanes are provided to foster use of multimodal transportation and welcoming street scape.



Final Masterplan



Transportation Plan



Low Capacity



High Capacity



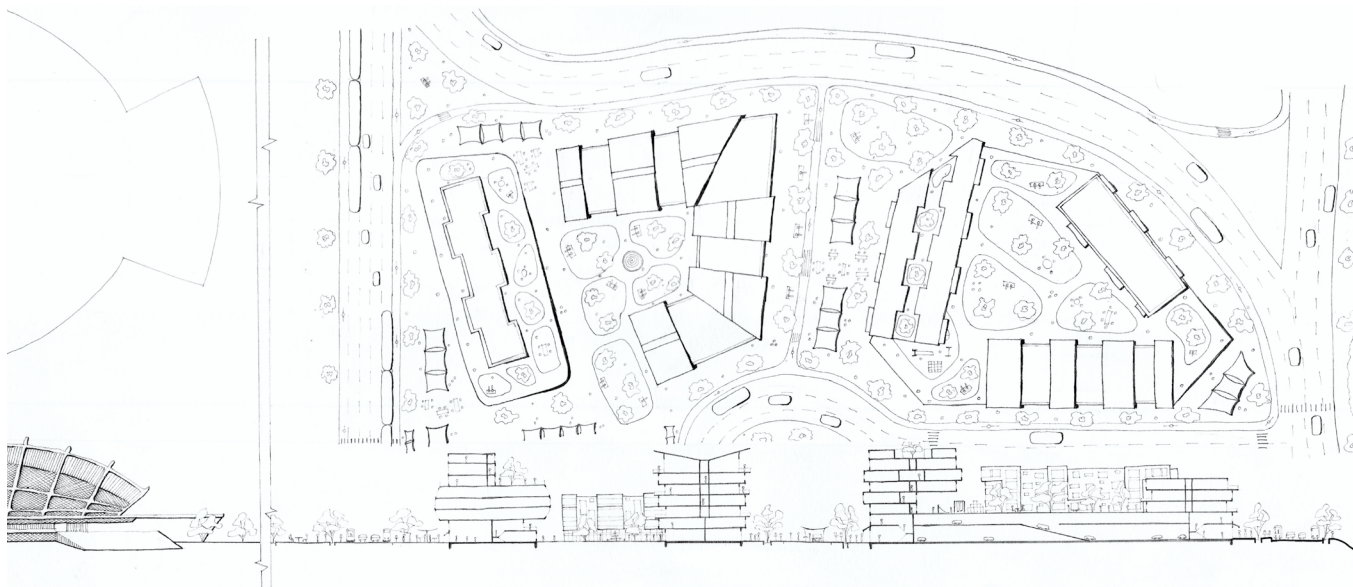
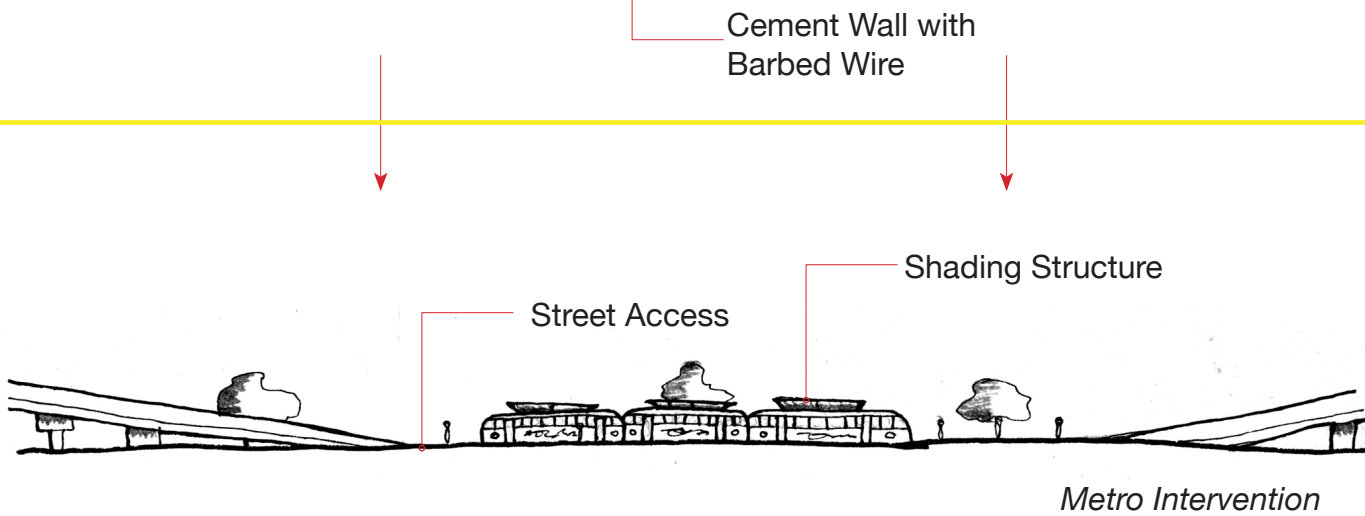
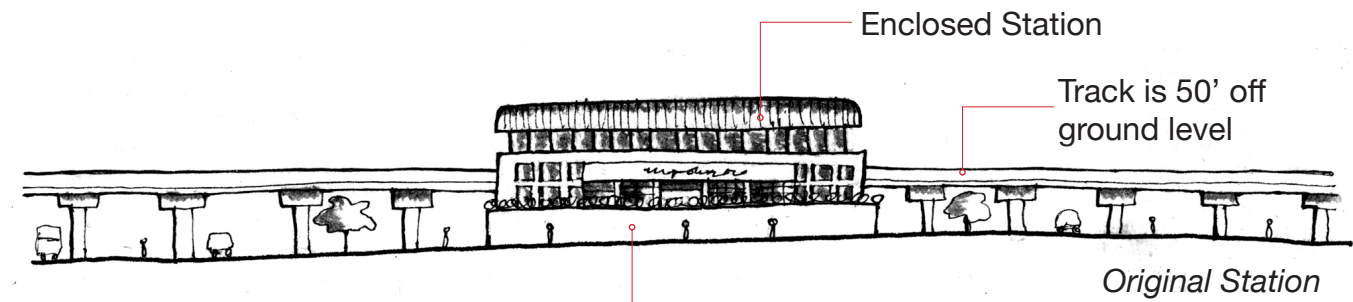
Bike/Pedestrian



Light Rail



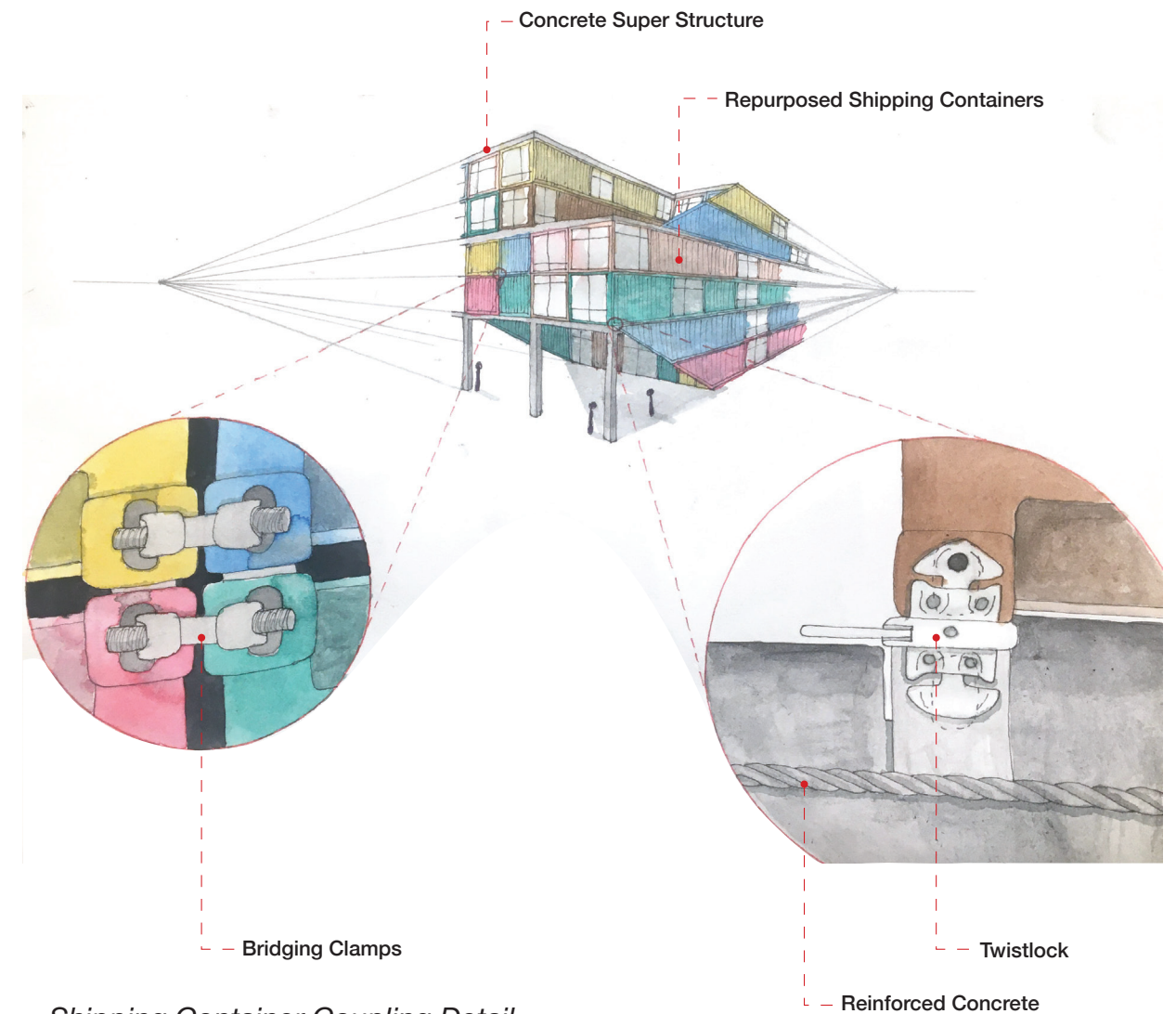
Trail/Pedestrian



Urban Street Section and Plan

Majority of the station for the Lagos metro under construction is highly removed from the public realm, with the stop on the site elevated 50' off the ground and housed in a building. In order to allow for easier accessibility, I have proposed the Track be lower to ground level at this stop. This opens up public space and mitigates the need for added man-power, construction and control. The plan and section showcase the new urban hub fed by the adjacent station.

Using a concrete super-structure, which is commonly used by local builder and contractors, the community center would be built up with the use of shipping containers. The containers would be connected by Bridging Clamps (horizontal) and Twistlocks (vertical), which are readily available as they are used for bracing the shipping containers for transportation. Using these tools, these connectors, the containers would be able to be braced effectively at their most stable points. The Building utilizes 10', 20' and 40' long shipping containers interchangeably depending on program.

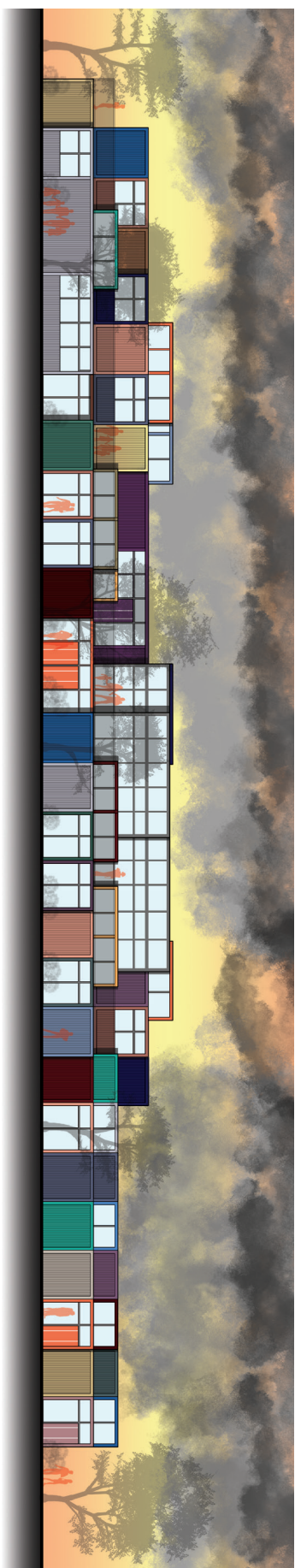


Shipping Container Coupling Detail

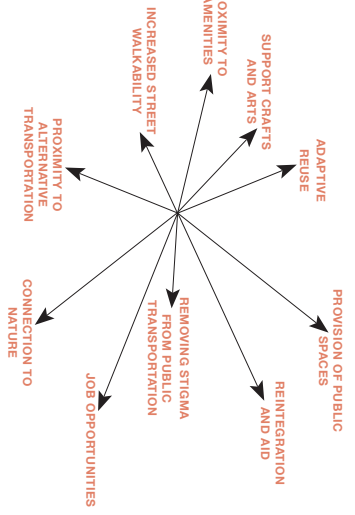
Building Design



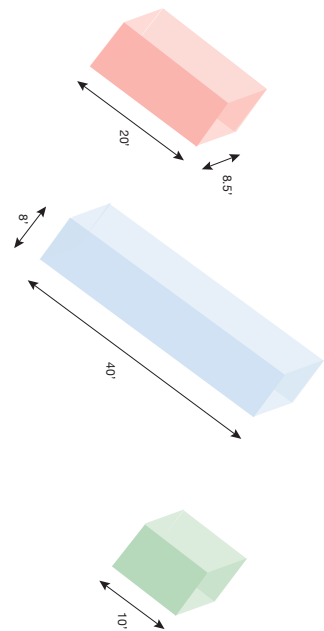
North Elevation



South Elevation



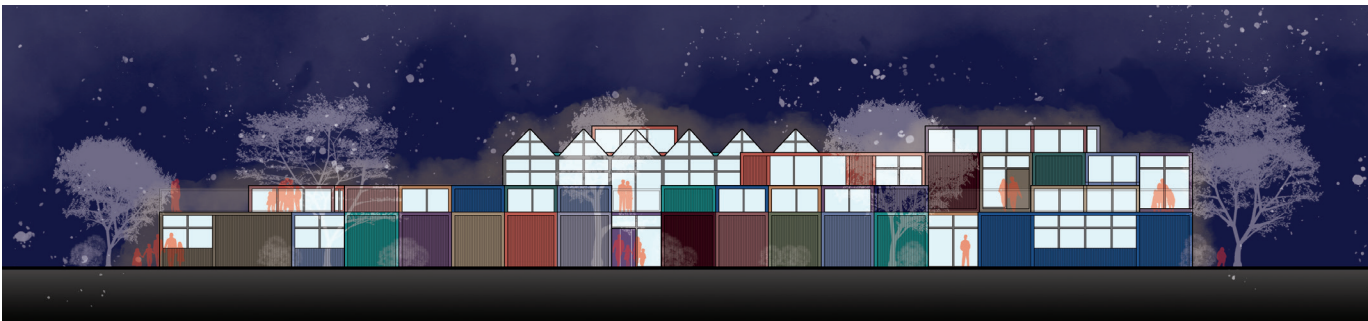
Programmatic Goals



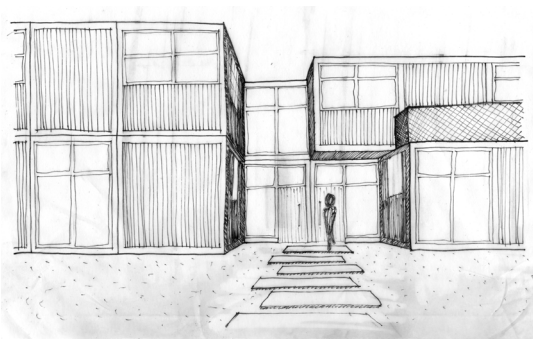
Shipping Container Forms



West Elevation



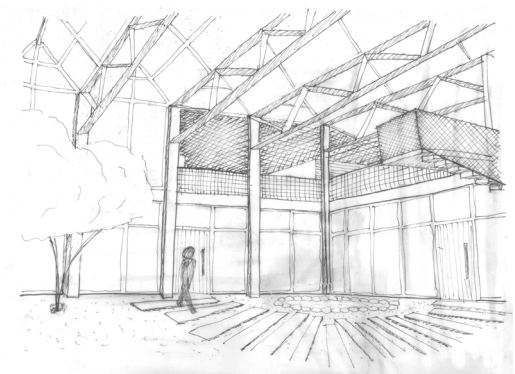
East Elevation



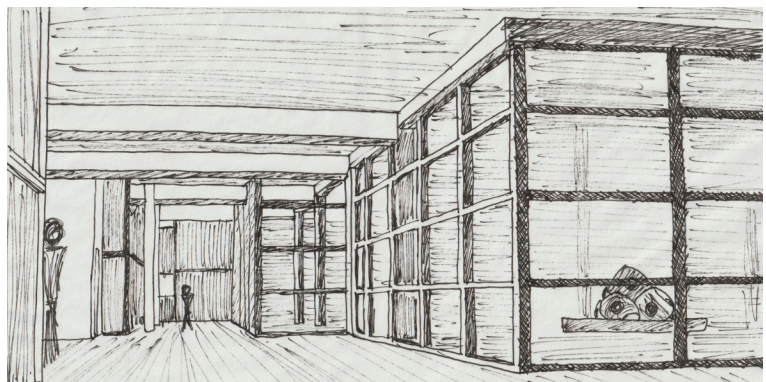
Entrance



Hallways



Courtyard

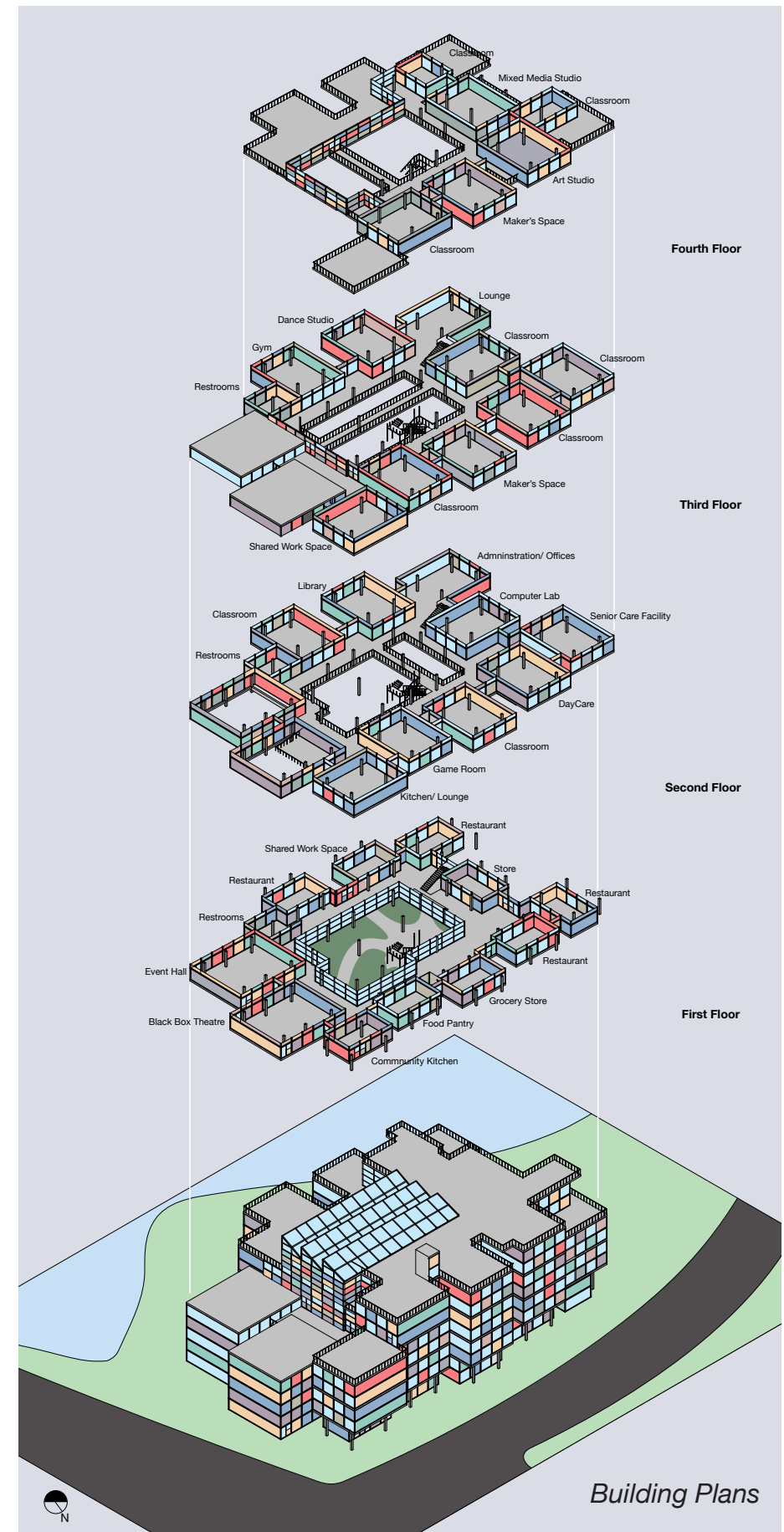




- Solar Water Heaters
- Outdoor Classroom
- Roof Access Elevator
- Solar Panels

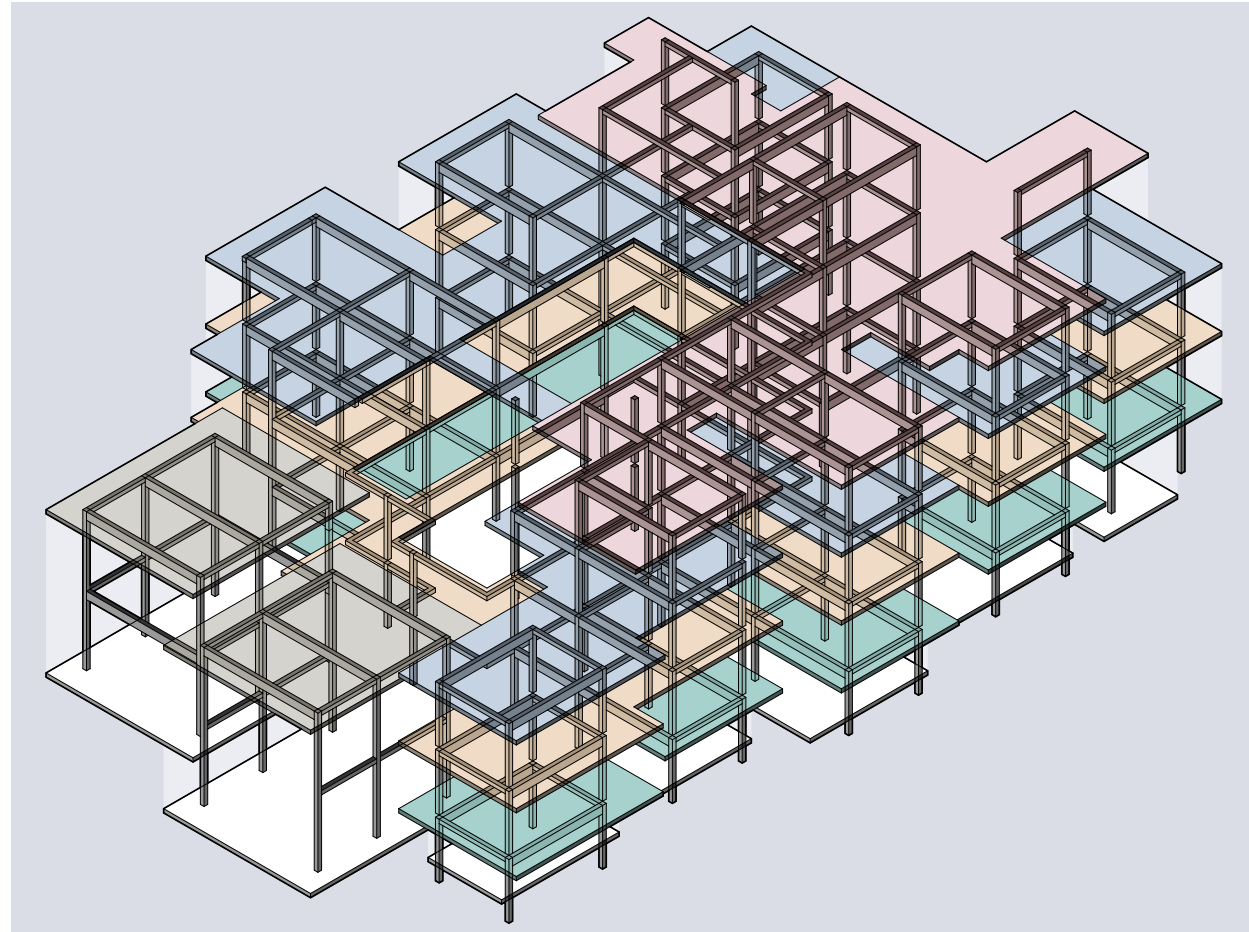
Site Plan

- Community Garden
- Gathering Spots
- Outdoor Lounge
- Sculpture Garden
- Outdoor Market

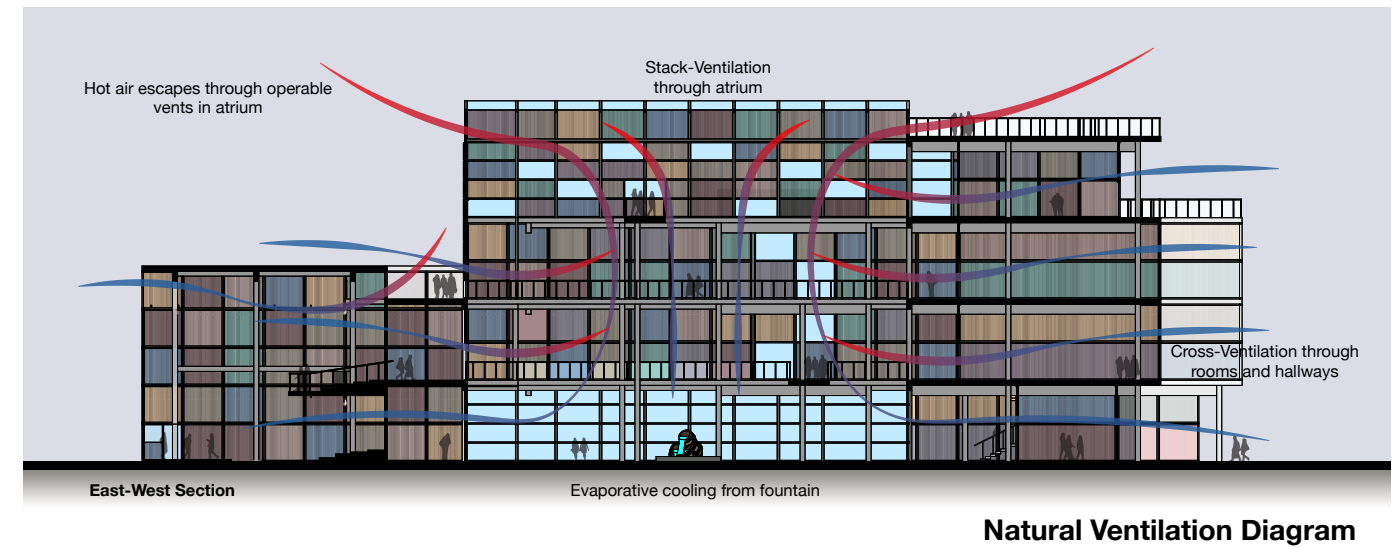
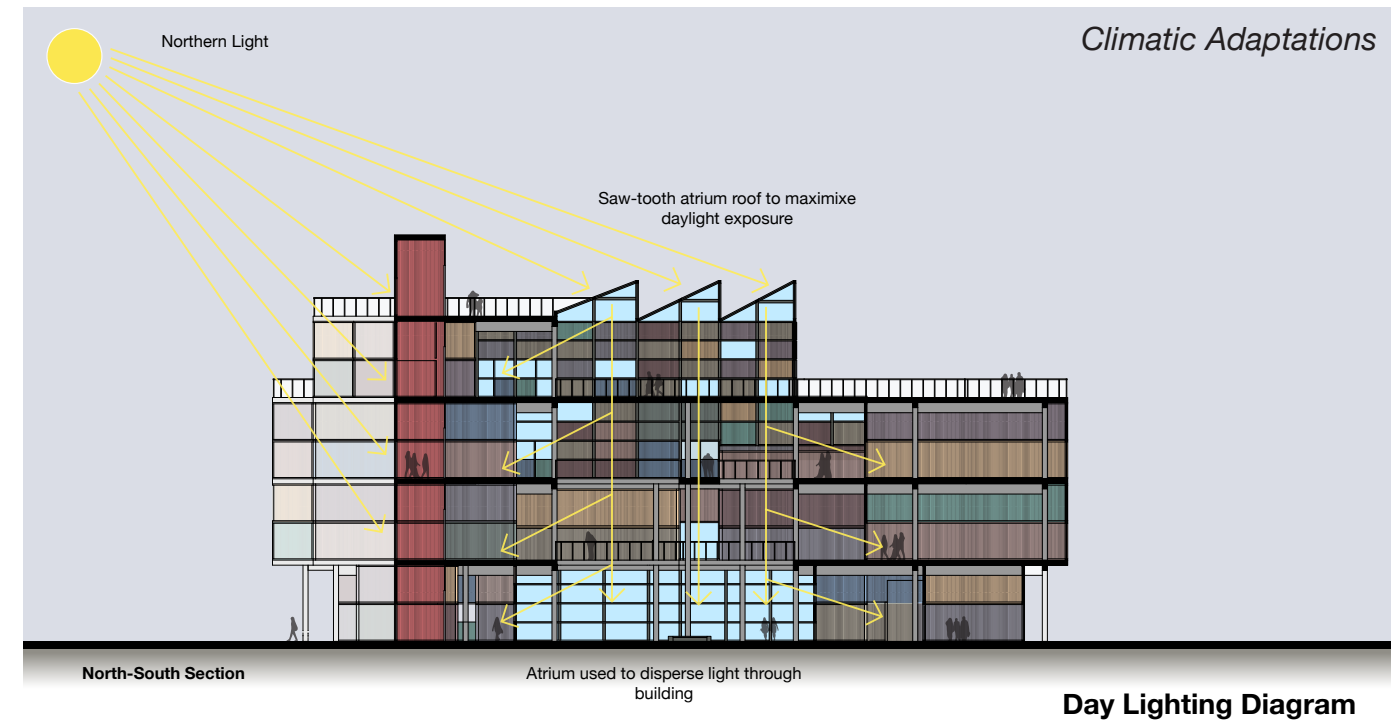


- Classroom
- Mixed Media Studio
- Classroom
- Art Studio
- Maker's Space
- Classroom
- Classroom
- Lounge
- Dance Studio
- Gym
- Restrooms
- Classroom
- Classroom
- Classroom
- Maker's Space
- Classroom
- Classroom
- Shared Work Space
- Administration/ Offices
- Library
- Classroom
- Restrooms
- Senior Care Facility
- Day Care
- Classroom
- Game Room
- Kitchen/ Lounge
- Restaurant
- Shared Work Space
- Restaurant
- Store
- Restaurant
- Event Hall
- Restrooms
- Restaurant
- Restaurant
- Restaurant
- Grocery Store
- Food Pantry
- Community Kitchen
- Black Box Theatre

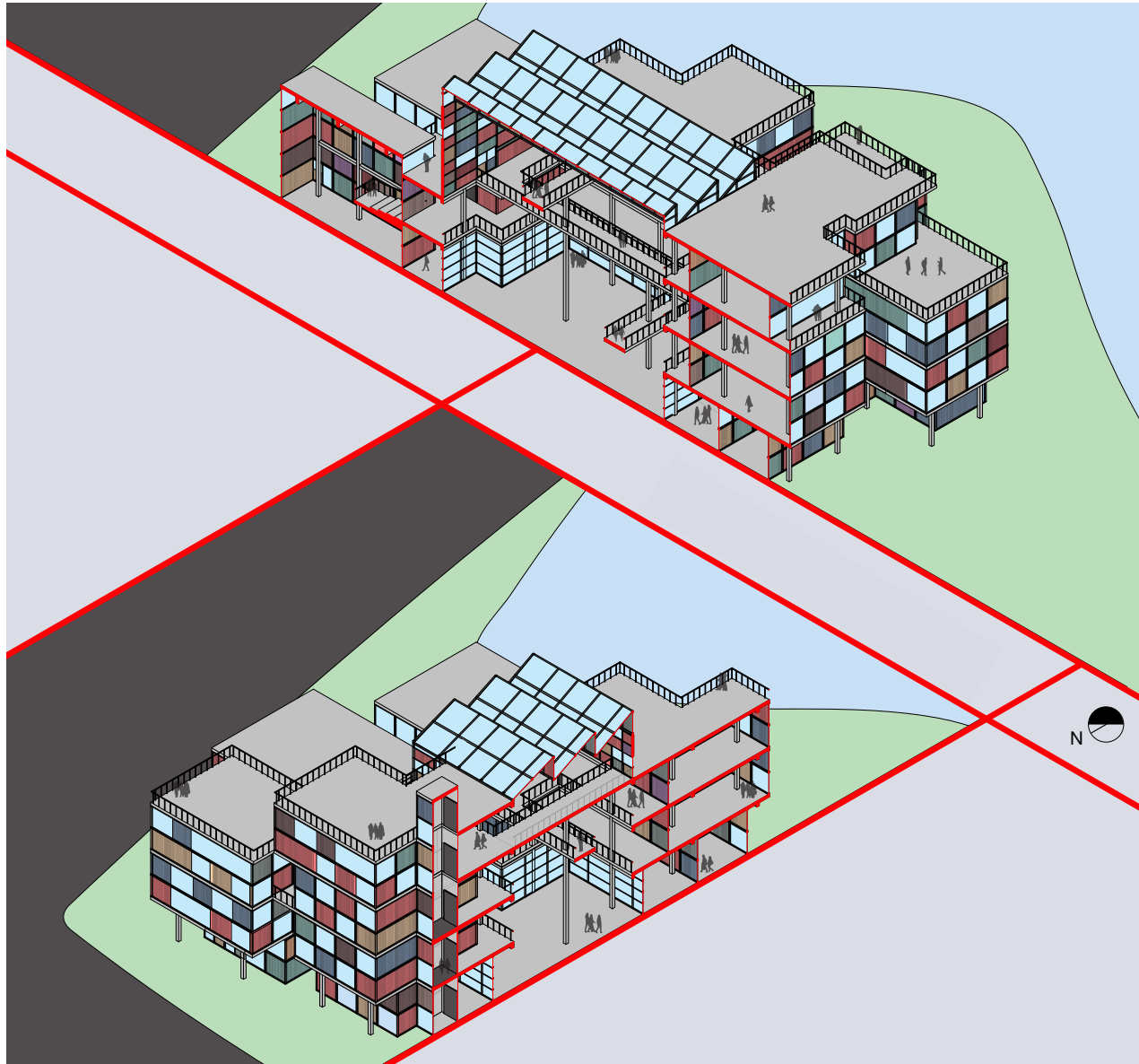
Building Plans



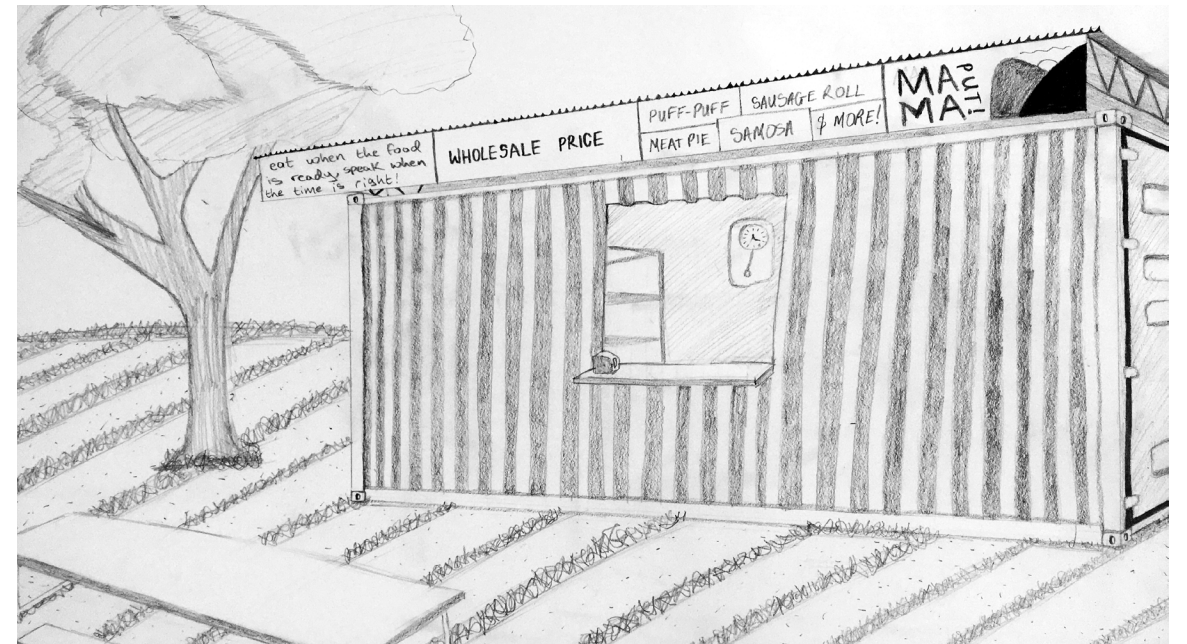
Building Structural Axo



Average power supply from the on-grid electrical supply in Lagos is 9.2 hours per day, majority being sporadic and tended to provide maximum of 4 hours electricity at a time. Due to these conditions, as well as the average temperatures between 75-95F all year round, the building is designed to utilize daylighting and evaporative cooling techniques throughout the building, in order to reduce the need for artificial lighting and mechanical cooling equipment. The building is also equipped with solar water heaters to supply the building and photovoltaic panel arrays to mitigate the inconsistent electricity, on the roof.



Axonometric Sections



Outdoor Market



Roof Catwalk



Hallway



Dance Studio




Classroom

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***“You stay stuck in you own little bubble
Claiming to care and speak on change
Do you silence the oppressed and flee from trouble?
Well I fight for progress and for a harm free new age”***