

LISBON, PORTUGAL

WALK TO PLAN + PLAN TO WALK

INTERNATIONAL SUMMER
WORKSHOP IN
URBAN DESIGN



TABLE OF CONTENTS

- Task 1.....4
 - Complexity + Surprise.....6
 - Vitality + Robustness.....8
 - Enclosure + Linkages.....10
 - Transparency + Vistas.....12
 - Legibility + Coherence.....14
 - Architectural Richness.....16
 - Personalization + Community Values.....18

- Task 2.....20
 - Vehicular and Pedestrian Circulation.....22
 - Public Transportation.....24
 - Accessibility and Linkages.....26
 - Land-Uses.....28
 - Physical and Architectural Context.....30
 - View Out and Into the Area.....32
 - Climate, Sun Exposure, Winds, Noise.....34

- Task 3.....36
 - Vision Statement.....37
 - Goal 1.....38
 - Goal 2.....39
 - Goal 3.....40
 - Inspirational Images and Materials.....42
 - Concept Diagram.....43
 - Site Plan Narrative44
 - Site Plan Diagram.....45
 - Section Cuts.....46
 - Rotunda Diagrams.....48
 - Sketch-Up Model.....49

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TASK 1



WALK TO PLAN

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INTRODUCTION

On the first day of class students reported to Universidade Lusófona to get acquainted with their new professors, learning facilities, and classmates. Professors Vicente del Rio and Diogo Mateus introduced the students to the City of Lisbon, sharing about the city's rich history of struggle and redevelopment, as well as introducing us to the project site for the class. We took our first visit to the site, an approximately 10 acre vacant lot in the Entrecampos area, to gather our first thoughts and impressions.

On the second day of class, our walking tour of the city began. Students were guided through Lisbon's most attractive districts like Alfama and Barrio Alto, as well as through some of the less touristy areas like Oriente and Alvalade. Students were challenged to look at the city through the eyes of *the Flaneur*, a French concept for "the person who walks and immerses oneself in the urban space," and "views the city as the spectacle." With this attitude, students were tasked to observe and take notes on Lisbon's unique neighborhoods with a set of urban characteristics in mind. What follows is our report on these characteristics.

COMPLEXITY + SURPRISE

Complexity and surprise is best displayed in the Alfama neighborhood, which is one of the oldest parts of Lisbon. As a neighborhood stretching back a thousand years, it lacks much centralized planning, and largely flows out in an organic fashion following the local topography, with narrow streets and alleys, and a design that does not take private cars into account. As a result of the harsh topography, many unusual building shapes have had to be used, and narrow winding streets often lead to unexpected places. You can see things like people using a cycling machine to sharpen cooking knives and small shops offering all sorts of colorful things to tourists and buildings that are centuries old, and the skyline is not uniform at all, between the ever varying topography and the varying height of buildings on each block.

Another good example is in Bairro Alto, where there are often public plazas built going down streets that are only visible upon passing by the ends of the plaza. This neighborhood is known as a Bohemian Quarter, notable for its highly active streetlife, and in the evening one constantly runs into sights such as street performers, dancers, and people DJing from open shop windows. The topography, while not as drastic as that of Alfama, is still rugged enough to necessitate small, interestingly shaped buildings. There are many interesting statues to see, and at the moment, a summer fair with stalls selling all sorts of classic fair refreshments, as well as night time music performances.

Conversely, the part of Alvalade closest to the university is a particularly bad example. There are portions where large apartment buildings have a tremendous amount of green space between them, which makes the buildings have a large amount of dead space between them, yet residents do not actually use this public space, leaving the neighborhood feeling deserted and lifeless. There is no complexity, as everything largely looks the same, and there is no public energy or activity with which to be surprised. In many ways, the neighborhood feels like the type of apartment or office buildings commonly built in suburban America, where a tower is surrounded by open space that physically segregates it from the community, but likewise is not very attractive to people to visit or linger in.

Bairro Oriente lacks this quality for similar reasons. The waterfront has a very long walking trail and a promenade, but the trail isn't paved, and neither the trail nor the promenade really have shops. There are a few restaurants close to the promenade, but little activity between them, leaving a lifeless waterfront. Here, the buildings are very expensive, but are often walled off. This creates the ultimate form of segregation from the community at large. There are also very poorly designed pedestrian arcades that are either elevated and not visible from street level, or are located inside arches that obscure the view of the shops. The public spaces are incredibly large, but they are mostly devoid of seating or interesting architectural features or anything else attractive, and the sheer size separates the shops beyond the public spaces from the street. These spaces are not utilized, and only serve to make the visitor walk long, uncomfortable, boring distances, or choose to drive, something this neighborhood has an ample supply of parking for.

COMPLEXITY + SURPRISE EXAMPLES

POSITIVE



This part of Bairro Alto has a public plaza created at the bottom of a small valley, and the hidden nature of this valley is such that one wouldn't know the plaza exists until they walk by it.

NEGATIVE



Here, every public space is placed in a predictable place with the exact same layout, and the visitor always knows what each row of buildings will look and feel like before going there.

VITALITY + ROBUSTNESS

Owing in part to its rich history, which has largely been preserved over the passage of time, Lisbon's urban spaces exude an effortless sense of exuberance and spirit, with vibrant public spaces that invite. With sizable but dense pracas peppered throughout the city, most notably in central/historical neighborhoods such as Bairro Alto, Rossio, and Afama, Lisbon provides those lucky enough to find themselves in its midst with robust public spaces carrying a diverse array of urban activities, propelled forward yet not completely defined by historical circumstance. These spaces and their balance of aesthetics and practicality grant Lisbon a strong sense of liveliness and community, attracting curious tourists and long-time residents alike to engage in a wide array of social activities, a central function of the urban ecosystem.

While serving the practical function of travel and interconnectivity, streets should be, in the words of Jane Jacobs, the primary space for daily social activity in the urban ecosystem. A city with hundreds of years of architectural heritage portrayed through its varied urban design, Lisbon's beauty lies in not only its imageability but its attention and care to the human dimension. Lisbon's historic core is littered with beautiful and robust urban spaces, pracas that serve to facilitate a wide array of social activity and behavior. These spaces are both practical and beautiful, reflecting the ever changing and dynamic nature of the human condition while retaining the beauty of its architectural heritage. One great example of this dynamism can be found in Praca da Camoes in the historic neighborhood of Bairro Alto.

This centrally located historic center is filled with numerous points of connection and social activity, with everything from relaxing benches upon which to rest and take in the beauty of Lisbon's imageability, kiosks selling the city's famous 'bica', small shops in the direct periphery which attract tourists and residents alike, attractive landmarks such as statues, which reveal Lisbon's rich history, and open areas that facilitate the creation of small, temporary festivals and events. Through its diversity of potential usage and seamless integration with its existing architecture, neighborhoods in Lisbon's historic core are able to effortlessly retain their historic character while simultaneously facilitating the vast changes in population density and composition the city has experienced over time, resulting in a charming and attractive metropolis with inimitable character and a vibrant outdoor social life.

While a great deal of Lisbon's character is a reflection of its historical heritage, much of the city's later urban development came about in a historic period which prioritized function and legibility over aesthetics and imageability, resulting in a number of urban spaces that lack the same "feast of the eyes" evoked by the aforementioned neighborhoods. What's more, many of these highly functional modern neighborhoods experienced a discrepancy between design and practice, leaving behind large and conventionally unattractive yet dense, mixed-use development without much of the rich urban life it was meant to facilitate.

One example of this is found in the later development of the centrally planned community of Alvalade. Designed in the 1940's and later with the intention of solving issues stemming from population growth while injecting ideas from new urban forms, Alvalade was designed to house a growing Lisbon. While strategically designed with numerous but small open public spaces, the lack of diversity of usage in the surrounding area coupled with unimaginative design resulted in bland spaces that neither attract the residents they were intended to nor facilitate social interaction in the same rich way the historic pracas of Lisbon's iconic communities do.

VITALITY + ROBUSTNESS

EXAMPLES

POSITIVE



A small festival setting located in Jardim de São Pedro de Alcântara in the neighborhood of Rossio. The small park is well utilized to facilitate a small, temporary street festival, attracting a wide array of social activity and a diverse population of students, tourists, and locals while conforming and adapting to the Jardim's intrinsic design. Well-placed trees provide natural shade to both the walkway and benches, while the limited openness of the jardim creates a tightly enclosed, defined space that promotes social interaction.

NEGATIVE

A flat and open impermeable concrete space in the planned community of Alvalade, tucked between two high rises. Lacking seating, shading, green space, historical identity well-defined edges or enclosures, and a diversity of potential usages, the space, while designed with the best of intentions, remains largely unused, contributing to an air of lifelessness felt while in the area.



ENCLOSURE + LINKAGES

Inner courtyards, tight alleyways, and central plazas are enclosures that encourage people to stay in a space. While arcades connected to central streets, pedestrian walkways, and promenades are linkages that invite people to flourish into a space. The historic district of Lisbon that includes the moorish and medieval tightly neet streets of Alfama and the baroque squares of Baixa Pombalina with punctuating markers are great examples of the liveliness and navigability enclosure and linkages draw to a city. While the residential area near the 1998 World Expo (Principe real/ Oriente) and the project site (Alvalade/ Areeiro) are poor examples of the inactivity brought to a city by badly linked arcades, wacky-out of proportion buildings, and the blurring never ending open space.

Enclosures are mainly created to fabricate the feeling of safety, comfort, and intimacy that make it impossible for the user to leave. This is executed by designing clear, visible edges from the surrounding human scale buildings or public streetscape. For instance, many of the tight alleyways in Baixa Chiado and Barrio Alto, that follow the contours of the hills, are great examples of enclosures. The well constructed buildings provide the visible edges needed for the user to feel comfortable in the inner space.

This was also mainly emphasized and targeted in the area because of the old moorish community values of family/ intimacy/ closeness. What I found surprising as I was roaming the pink street in Baixa, is many of the structures of this district are very old and worn down yet are as lively and bustling as ever. In the pink street's case, it has to do with feasibility of replacing different land uses while still preserving the character and richness of the place. This is able to happen mainly by the enclosures and linkages of the area that pull users in even in a stinky street with graffiti and crumbled buildings.

This element of urban design and this feeling of place is widely seen in the other historic district as well and contributes the walkability of a city. However, one wrong move and it drastically affects the vitality of the space. For instance, even though the whole industrial area in Oriente was redeveloped during and after the expo, many of the residential areas near the expo were horribly designed with the utmost disregard for enclosures and linkability. This was mainly due to the concept of divide in Lisbon of public and private space. The public space is very open and green but does not have a clear close edge to a residential complex because of the streetscape or walls acting as barriers. Furthermore, the huge, highly dense buildings with small arcades leading to no exit points, with high windows, and overall no connection points, makes people scatter and hurry off.

Linkages are mainly created to produce the feeling of connectivity, sense of orientation, order, and organization. This is excellently done by designing streets and main walkways leading up to the public spaces while also taking into consideration the overall public transportation and infrastructure. Because of the 1755 Lisbon earthquake that destroyed almost half the city and the new plan proposed by Carlos Mardel and Cusemo Dos Santos along with the writing Manoel Da Maya proposed in his dissertation, Alfama and Baiza are exemplary examples of linkability between the public places.

The only exception would be the connection between the churches but that was critically done to deemphasize the power of the church during the time period. For instance, getting to the castle is very feasible as any turning point going up allows you to reach the destination. However, the connection in Alvalade and Areeiro in many courtyards does not connect to any other central courtyard, there are even a retention walls separating different areas.

ENCLOSURE + LINKAGES

EXAMPLES

POSITIVE



This commercial mixed use alleyway is clearly a good example of an enclosure in Baixa. The close neet inner walkways with proportionally scaled surrounding buildings produce a welcoming, intermediate, and comfortable sense of place. Enclosures like this, developed in the rich, historic district of Lisboa, might have you freely wandering around for days, by the flourishing virality of these inner, well lit, lively streets.

NEGATIVE

This residential complex and public park are clearly a poor example of an enclosure in Oriente. The huge open space along with the highly dense residential buildings makes way for a very intimidating, unwelcoming environment. Enclosures like this, developed near the great Oceanario de Lisboa Expo and Parque Das Nacoes Metro, might have easy access to infrastructure but will unfortunately go underused if people feel uncomfortable, exposed, and weak.



TRANSPARENCY + VISTAS

One of Lisbon's most famous qualities is what Jane Jacobs would call "eyes on the street." The avenues of Lisbon's rich neighborhoods are lined with people (stereotypically old ladies), keeping watch over life passing by below, giving off a feeling of safety and familiarity. Several neighborhoods in Lisbon share this quality, most notably Alfama, Baixa, and Barrio Alto. These older neighborhoods have a certain charm that modern cities often neglect, and that is the presence of people, the inviting feeling of closeness with other people.

Buildings being set closer together before strict regulation promote this quality and allow for this closeness. Most, if not all, of these buildings are mixed-use, with shops of all kinds on the ground level. These shops all keep their doors wide open, inviting people in for a look inside, offering an enticing glimpse from the street. Windows also provide pedestrians a look inside the shops, making the streetscape feel almost completely transparent. While you cannot necessarily see all the way through the building, the windows and doors on the ground and above creating a welcoming space.

In Contrast, other neighborhoods of Lisbon do a poor job of capturing this quality. Most of these neighborhoods are more modern, less organically planned areas that fall victim to over-regulation and poor connectivity. In areas like Oriente and parts of Alvalade, residential buildings are closed off to busier streets and are left windowless, providing almost no transparency and feelings of connectedness. The more planned residential areas surrounding the Expo '98 do a poor job of providing vibrant commercial activities, forcing these spaces to be used in less interesting, office-type ways that do little to provide transparent facades and safety.

Due in part to Lisbon's hill and valley geography, there are several opportunities for pedestrians to come across a beautiful vista overlooking the city and adjacent features. Perhaps the most famous vista in the city is atop Castelo de S. Jorge, the ancient castle overlooking the city from Alfama. The site offers almost 360 degree views, perhaps a tourist's best opportunity to get acquainted with the city. Alfama offers more vistas, like the public plaza in front of Igreja de Santa Luzia that has views of the River Tajo and the coastline.

Barrio Alto has vistas as well, like from atop the Santa Justa lift that connects the district to Baixa, providing access to the Convento do Carmo. Streets along the hilltops also give beautiful urban vistas down streets full of life and vibrant architecture that should not go unmentioned as well. We came across many vistas on our walking tour, too many to mention here. Examples of poor vistas would be in the same areas that had poor transparency, where turns lead to views of similar buildings and dead landscaping.

TRANSPARENCY + VISTAS EXAMPLES

POSITIVE



This vista overlooking Alfama and the River Tajo is one of the most stunning examples in Lisbon. The viewer can see all the way to the distant horizon, over the tile rooftops of Alfama and to Ponte 25 de Abril, the bridge stretching across the river. Vistas like this capture the attention of pedestrians, and enhance their experiences.

NEGATIVE



This is an example of a poor vista in Oriente. The view offers no interesting attraction, only of distant, out of scale buildings and underused public spaces. The attention is drawn primarily to the poorly maintained water feature, which connects to a polluted part of the River Tejo.

LEGIBILITY + COHERENCE

The streets of Lisbon, however beautiful they are, sometimes struggle with legibility by way of signage. Street signs are most often placed high up on the sides of buildings that fall on the corners of streets, which sometimes puts them out of sight and difficult to find. In this way, wayfinding through some parts of the city can be difficult for tourists who are unfamiliar with the city and its districts, like Alfama, Baixa, and Barrio Alto. Other signs, however, are prevalent throughout the city, like traffic and public transportation signs. While lacking in other dynamic urban qualities, newer neighborhoods like Oriente have made improvements to their street signage, as these neighborhoods are more vehicle oriented.

Although the older districts of Lisbon (Alfama, Baixa, Barrio Alto) have distinct architectural flares and styles, they all blend together and create a coherent atmosphere in the city. This is aided by the extreme proximity of buildings in Alfama, where shared walls are necessary to support neighboring structures and styles seamlessly glide across buildings. The streets of Lisbon are all lined with sidewalks studded with stone patterns that are consistent throughout the differing neighborhoods, uniting communities through common characteristics. Building colors are bright, vivid, and unique, but all compliment each other to create vibrant urban spaces. In the outer, more modern areas of Lisbon, attempts have been made to update the classic architectural style to fit today's standards. The effect has minimal success in some neighborhoods, and less in others. Alvalade is perhaps the best example of planned urbanism and coherence in Lisbon, while Oriente fails in bringing interesting coherence to its streets. In Oriente, coherence can be found in the sense that every building looks the same, making things unpersonalized save for drying laundry hanging out of windows. The streetscape still maintains the stone patterns found throughout the city, but the sidewalks lead to uninteresting areas devoid of community activity.

LEGIBILITY + COHERENCE EXAMPLES

POSITIVE



Although the buildings of this Rossio street are different heights and colors, the colors compliment each other and create a vibrant neighborhood. The styles of the facades also work with each other, while maintaining distinct characteristics.

NEGATIVE

The end of these blocks in Alvalade were meant to have buildings similar to the one on the right side of the street, but somewhere along the way the masterplan was ignored. This breaks up the coherence of the street, making the building on the left seem out of place, and out of time. The architects of the project disregarded the context of the surrounding area.



ARCHITECTURAL RICHNESS

The most architecturally rich neighborhood in Lisbon is definitely Alfama, which is a thousand years old, and was originally the Moorish city, before being the Moorish neighborhood of a Catholic city. The architecture varies all the way from the Moorish castle at the top of the hill, which still bears parts of the old Ancient Roman wall near its gates, to 16th Century Catholic Churches, to 18th and 19th Century apartment buildings, to a handful of more modern houses.

The use of colorful tiles to decorate buildings further adds to the architectural richness, creating a very bright and vibrant environment, which blends well with the inconsistent building sizes. The harsh topography means a lot of unusual building shapes are necessary to compensate, and most buildings are rather small, which means more buildings on every block, and more variety for the visitor to take in.

Principe Real is much more upscale, with smoother topography, wider streets, and larger, more uniform buildings, but in its way also exhibits architectural richness well. The paint colors used are varied, which looks interesting from the street level, and amazing when seeing a vista of the area from high up, and the area offers many spots from which to see such vistas. The buildings are far better maintained than those in Alfama, and there is a lot of skilled decorative carving. The apartment buildings are filled with windows overlooking the street, without dead corners, and with a great many balconies. There is an attractive amount of variety in the heights of the buildings, but not as much as in hillier areas of the city.

The part of Alvalade closest to the university, in comparison, does not have any sort of architectural richness at all. There is a very long block where the same yellow apartment building is just repeated several times, with the same single story building for shops or restaurants in between each apartment building. This is exceedingly boring, with nothing to distinguish one part of the building from the next. There is another part of Alvalade where several apartment towers are built with gigantic green spaces between them, and both the apartment towers and the green spaces just look like the same ones repeated over and over again. Many parts of Alvalade have corners of buildings where there are no windows, which creates an extremely boring facade to look at, and makes the street corners feel devoid of life.

Parts of Bairro Oriente can also be devoid of architectural richness. This is an odd neighborhood in this respect, as, while it is a very poorly designed neighborhood in regards to having any sort of community life, there are many architecturally interesting apartment buildings. They just aren't connected to the rest of the community, which detracts from their beauty, especially where they are walled off from the outside world. However, there are some examples of poor architectural design. The design of the pedestrian arcades hides the businesses from view of the street, and the area where the arcades are has bland, white, uniform architectural design that is instantly forgettable. Combined with very large but unutilized public plazas, the whole area is just huge, white, and empty, and it is difficult to even remember anything specific about it after leaving.

ARCHITECTURAL RICHNESS EXAMPLES

POSITIVE



This part of Bairro Alto shows a good variety of different architectural styles, as well as different building heights and a varied topography. The overall visual effect is very inviting and attractive.

NEGATIVE



These three buildings are all identical, and the spaces between them are likewise identical. There is nothing interesting or thought provoking, or even memorable.

PERSONALIZATION + COMMUNITY VALUES

It is important for people to have an opportunity to express themselves and to find their own identity with the place. Some people feel more need for this, some less. You never know for sure what kind of story is behind the particular expression. It could be a sad story about loneliness or it could be a happy story about gathering together with aim to celebrate. It allows you to think about the story behind, find the identity of place and to connect yourselves with the people who were here before.

It is important for planners to provide a design which allows people to take over the place and give their imagination to create. When they can share their feelings, dreams and believes. Let's hope for their imagination to do the best and to express themselves in a 'good' way! Old city districts provide more possibilities for people to personalize due to the small human scale of landscape around: narrow streets, dead ends, small corners between the houses, small plazas, etc. So it can be a good example of the personal expression. Alfama as an old district is full of places where people can dry their colorful clothes outside the window so everyone can see. They place decorations over the streets from window to window to celebrate, place pots with plants outside the door, and if they have more space the bench can appear. They are not afraid that something would be stolen. They even bring tables and chairs to sit together and socialize. They even do barbecue in the heart of Lisbon or place the dog/cat shelter and feed them. They feel free to take over the place, but at the same time they keep it secure and identify themselves with the place as their own. In opposite more or less new district of Expo area provides less possibilities to personalized. Everything is already designed for you. You have an opportunity to do some things only in your property: windows and balconies. Other public places are meant to be used in a specific way: recreation, sport activities, children playground, walkways, etc. It seems that the younger generation want to share less (do not bring their own clothes to public displays at least). Some people want to express themselves incognito. Graffiti appears as a result. Artists instead do write their names on the graffiti because they seem to be proud of the work and they do have, because some of the works are the art pieces.

Districts which were design in 40th-70th provide some of the value, but it depends on the place. Some provide more (yards, balconies, windows, space attached to the buildings), some less (the same as in Expo area). Although there was a good example of public market. It was built not so long time ago. Designers created a light metal-glass pavilion structure colored in bright yellow so it can be used as a food market or a flea market or probably something else. So people can gather together, buy some food, drink coffee, talk to each other and socialize.

It seems that people always can find a way to personalize the space around. They can do it either a 'good' or a 'bad' way. So it is important for planners to provide various mixed use places for people to express themselves in a 'good' way and to have an opportunity to socialize. It has a particular importance in XXI century due to the internet era when people less and less talk to each other.

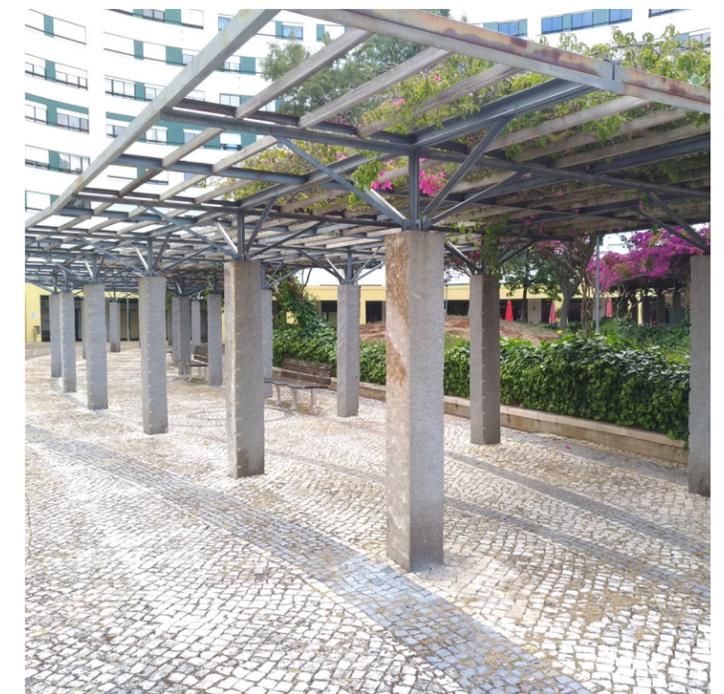
PERSONALIZATION + COMMUNITY VALUES EXAMPLES

POSITIVE



Well design Graffiti in the covers brandmauer wall with the recognizable signature to create a view through the window for people on the other side of the road.

NEGATIVE



Not so well designed space in Expo area where everything is designed for you with the certain type of activities, but poorly used by locals.

TASK 2



SITE ANALYSIS

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INTRODUCTION

After walking all over Lisbon, students revisited the project site with a new perspective and insight into the city's urban fabric. We were tasked to think critically about the site, taking notes on crucial elements that have an impact on its opportunities and constraints, benefiting or limiting possible developments. This chapter annotates Group 2's findings.

VEHICULAR + PEDESTRIAN CIRCULATION

OPPORTUNITIES

- The project site is surrounded by important access roads and pathways on all sides. These can be seen as opportunities, because they can draw people into the site in a nice and orderly fashion, with as little traffic as possible. The road on the east side of the site, Avenida de Republica, has several lanes going north and south, as well as a center lane for cars to travel through the roundabout unimpeded. That street also contains all of the public transportation around the site.
- It features four underground Metro entrances and two bus stops going south. Pedestrian traffic is pretty moderate all around the site, with heavier patterns around the public transportation nodes. On the south end of the site, pedestrians gather in a closed off walkway that has connections to the light rail station above.
- Young adults seem to gather here to talk, smoke, and drink beer. The center of the site has an east-west informal pedestrian route, marked only by beaten dirt sticking out as a break from the tall grass. All of these factors can be seen as opportunities. Public transportation near the site is essential to draw people in, and connect residents of the area to other parts of the city.
- The pedestrian hub on the south end of the site shows that people want to hang out in the area, even in an informal setting, showing that the site is attractive to people. The informal walkway can be used as a place marker for a more permanent street or pathway later on in the site's development. Street parking is also prevalent on all sides of the project except for the pedestrian south end.

CONSTRAINTS

- The heavily trafficked walkways on all sides have very little, if any shade. This makes the walk unpleasant during daytime hours, and will make people want to spend less time at the site. More shade will need to be added.
- In addition, the street parking may be at risk during and after development, making a need for new parking solutions in the site's design. However, there may be less of a need here than in other sites because of the proximity to so many public transit options.
- In addition, the pedestrian hang out area at the south end of the site should be preserved or enhanced, because it is so busy as it is. The development should not displace any current functions of the area, and that spot seems to be the only place with heavy activity.
- In addition, the large roundabout on the northeast end of the site may present some complicated traffic situations, especially with more people coming to the site when the project is completed. More signage or perhaps a new street pattern should be considered.
- The east side of the site also had very narrow sidewalks that should be widened for safety and an enhanced pedestrian experience.

VEHICULAR + PEDESTRIAN CIRCULATION MAP



PUBLIC TRANSPORTATION

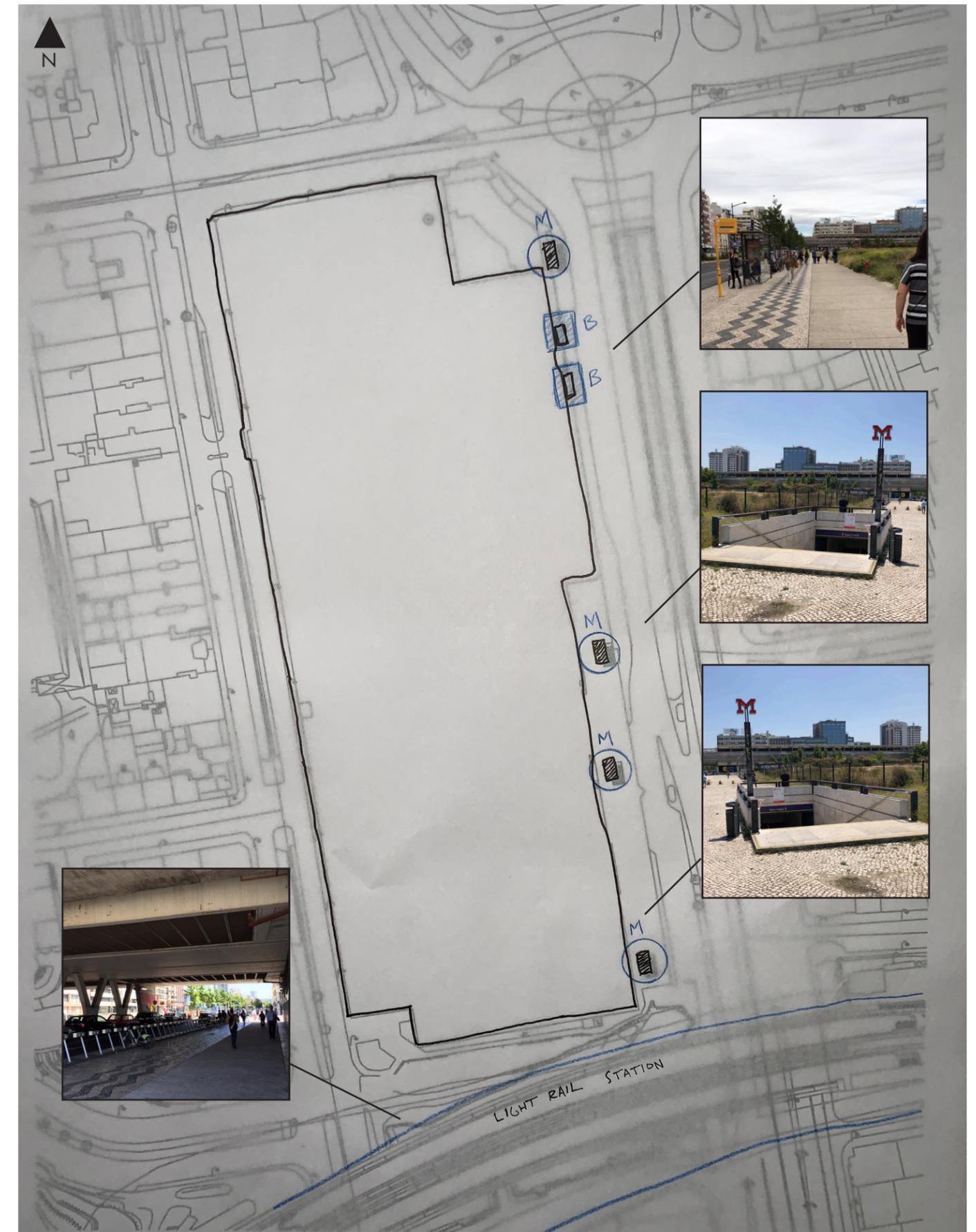
OPPORTUNITIES

- The project site features five nodes of public transportation, all along Avenida de Republica on the east side of the lot. This consists of three Metro entrances and two bus stops.
- In addition, the site is bordered by a commuter rail station to the south, providing another link to the city and surrounding neighborhoods.
- The four Metro entrances adequately provide access to Lisbon's subway system, and the two bus stops serves the area's current need fairly well.

CONSTRAINTS

- While three Metro entrances should be fine, additional bus capacity should be considered in the area. The bus stops on the east side are already operating at capacity, with lines queuing during peak hours that sometimes forces people to wait for the next bus. With even more residents being added to this site, the problem will only intensify, and Carris needs to either run buses more frequently or switch from standard to articulated buses.
- The site also had very few bike lanes, and should consider implementing some to promote other forms of safe transit.

PUBLIC TRANSPORTATION MAP



ACCESSIBILITY + LINKAGES

OPPORTUNITIES

- The current plan for the site proposes extending the Rue de Cruz Vermelha through the project site, and a walking path following what will eventually be this extension already exists. This provides for a logical main link for the site to be built around, and an easy way to cross from one side of the site to the other from the middle.

CONSTRAINTS

- The streets surrounding the site are very wide, with the east and west streets having landscaping in the middle, and in the case of the west street, a tunnel. This means that someone at the site can only see across the street to the north. They cannot be attracted by any of the storefronts or restaurants west or east, and even to the south, the Entrecampos train station blocks the entire view, with the supermarket only being obvious do to advertising.
- Crossing the street is also rather unpleasant, as the streets are very wide, and the street to the west, which contains the subway entrances and is the main arterial street, has few crossings. There is no real feasible way to fix this problem, either, as one cannot propose ripping out the medians or the train station, or narrow these streets.

ACCESSIBILITY + LINKAGES MAP



LAND USES

OPPORTUNITIES

- Currently, the site itself is empty, but at the immediate end of the lot, at the northern corner, is a building containing a supermarket and 9 stories of housing units. This creates an opportunity to build the rest of the development high, as the site already has the precedent of a 10 story building, and the rest of the site can be matched to this.
- The supermarket also means there is an easy source of groceries and toiletries on the same block as any residential units constructed. Furthermore, there is also a second supermarket past the southern end of the site, next to the Entrecampos train station. This ensures that the site will not become a food desert.
- Across the street to the north is a medical center, and there is a hospital across the street to the east, so basic health services are within an easy walking distance.
- The streets north and west have a large number of hotels, as does the area south of Entrecampos train station, which shows a high demand for visitor lodging that could potentially be built on the site.

CONSTRAINTS

- While the northern half of the street west of the site, as well as the north of the site, have hotels and restaurants, the rest of the streets surrounding the site are devoid of activities for pedestrians.
- The condemned hotel owned by the Universidade Lusofona contributes to an overall deserted feeling to the area unless one is to the north of the site.
- Overall, most land use is various types of things that are closed to pedestrians, such as office buildings and headquarters, car garages, and residential buildings without ground floor commercial uses.
- By and large, the main issue is just this lack of commercial space overall, which means that, aside from supermarkets, everything residents of the site would want needs to be provided by the site itself.

LAND USES MAP



PHYSICAL + ARCHITECTURAL CONTEXT

OPPORTUNITIES

- The proposed project site is currently a wide, vacant, and open plot of land enclosed by a very densely built environment. The high density can be seen as an opportunity since it surrounds our site with an abundance of people, vibrancy, and liveliness. This is mainly amplified towards the southside of the site, near the Entre Campos train station (a two to three story structure).
- Our site is also enclosed by structures varying in height. The altering heights can be seen as an opportunity as well since it does not constrain us to follow a specific unified point. For instance, Av. Republica, on the west side of site, has buildings reaching 120' (around 12 stories) and 40' (around 4 stories) while Avenida 5 de Outubro, on the east side of the site, has structures reaching 100' (around 10 stories) and 50' (around 5 stories). Furthermore, Campo Grande has the highest buildings going up to 140' (around 14 stories) and going as low as 40' (around 4 stories).
- What is also pretty interesting about our site, is that towards the northside, near the tall structures, there is an open, green park called Jardim Mario Soares. This park can be seen as an opportunity to give our site air and breath from the heavy surrounding development. The park has a unique modern structure as well that gives a refreshing contrast to the Peninsular War monument in the middle of the roundabout.
- This is reflected in many of the surrounding buildings, with the play of modern mixed in with a Portuguese style of blue tiles, decorative details, and beautiful porches. The architectural context can be seen as an opportunity since we can choose to go with different styles that follow the spectrum of modern to medieval and potentially even morrish.
- What is even more exciting is that we also have the opportunity to integrate the graffiti art into our design and the ancient brick columns. This will bring richness, personality, and character to our site allowing the locals to feel a tighter connection and bond with our proposed designed.

CONSTRAINTS

- Although the brick columns can be seen as an opportunity with the historical element it presents, this structure can also be seen as a challenge. This has to do mainly with linkability and coherence since our design will need to keep in mind the brick material and the entrance/ gateway the columns create.
- Furthermore, the proposed project site also currently has an existing structure towards the northside. This can be seen as a challenge since our design has to keep in mind the overall coherence and linkability of this structure's modern design and main entry point.
- Then the floor pavement can also be seen as a challenge since the combination of the grass, concrete, and elegant stone paving do not compliment each other very well. And although the density and public transportation networks work well in bringing people into our site, the tall highrises can provide an intimidating environment to our users, making it difficult for them to stay in our site.

PHYSICAL + ARCHITECTURAL CONTEXT MAP



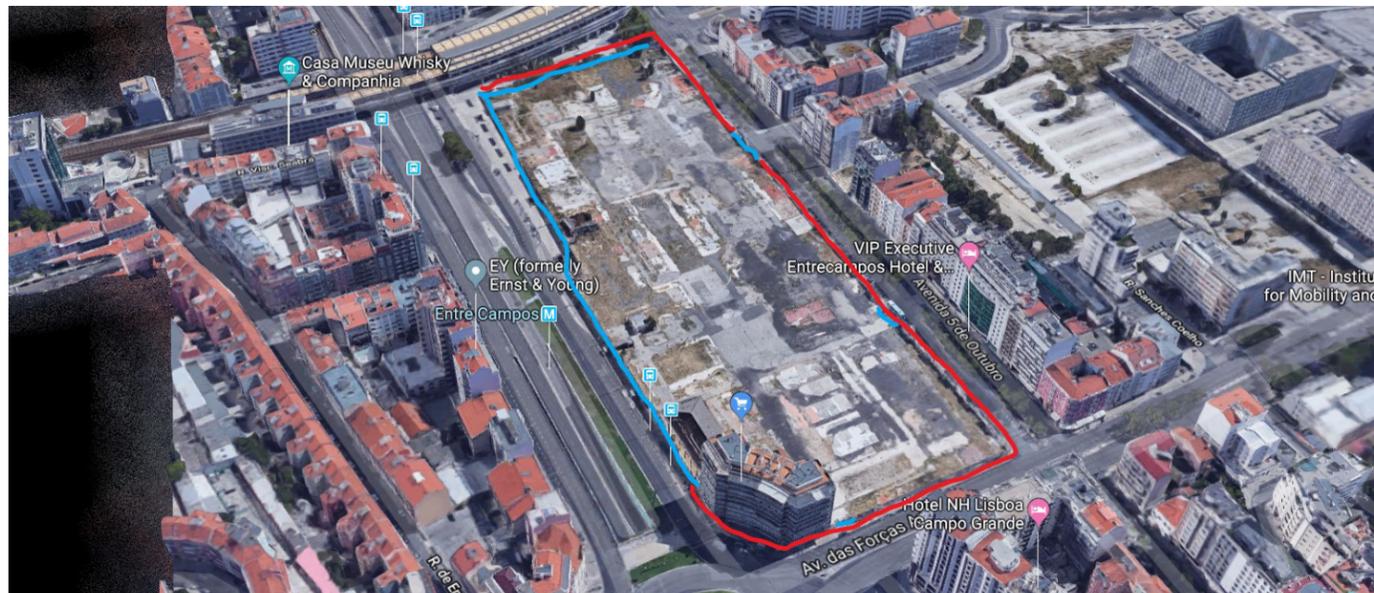
VIEW OUT AND INTO THE AREA

OPPORTUNITIES

- The project site is open from western part along the Avenida da República. The site is more or less clear visible towards the other side - Avenida 5 de Outubro regardless of the fact that the area is partly closed off with wire-mesh fence (all private areas meant to be built are fenced).
- It is possible to see the project site as well from the Rua José Carlos dos Santos which is situated up the hill and opens the view over the old remnant of the gates to Cattle Market.
- From the corner of Avenida das Forças Armadas and Avenida da República the area is closed from the view by the private building.
- The project site is clearly visible from the train station upper floor through the decorations.

CONSTRAINTS

- Although the view is closed by a metal fence in the ground floor.
- The project area is closed for a view from north and west side by concrete wall and banners. It is only possible to see via the fences. There is an opening in the concrete wall and it opens the view from Rua Cruz Vermelha towards the project site as well as from the site toward the street up the hill.
- From the project site is possibility to see all the areas around if the concrete and metal fences would be demolished except from the view towards the roundabout of Avenida das Forças Armadas and Avenida da República due to the house there.



Blue: open and visible | Red: closed by fences, not visible | Blue/Red: Can be seen from the upper floor of the train station or via gates or holes in the fences

VIEW OUT AND INTO THE AREA MAP



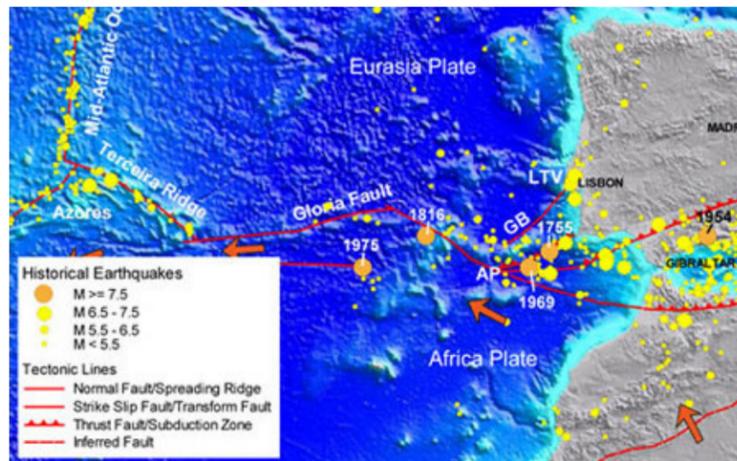
CLIMATE, SUN EXPOSURE, WINDS, NOISE

OPPORTUNITIES

- Lisbon’s highly desirable average daily hours of sunlight offer an array of invaluable opportunities for energy conservation, thermal retention, and reduced heating and cooling costs for a potential new structure. Indeed, Portugal and Lisbon itself boasts some of the highest annual solar radiation in the world.
- Taking full advantage of this rich solar resource through the construction of roof-integrated solar photovoltaic panels would provide a consistent, renewable source of clean energy for the project site, and help Lisbon meet its own climate goals by offsetting any harmful GHGs released through use of traditional energy sources.
- Furthermore, a structure which utilizes passive solar design could help the building retain heat and save energy, significantly reducing heating and cooling loads, while also saving on lighting costs through utilization of natural sunlight.

CONSTRAINTS

- While its central location grants it an unparalleled degree of interconnection with the surrounding city, the site unfortunately suffers from a high degree of noise and air pollution from these points, most especially from the automobile traffic which goes in both directions on either side of the project site.
- Further noise pollution (quite significant) comes from incoming airplanes landing at Lisbon Portela Airport, which is located just 4.1 km north of the project site.
- Further environmental issues can be found in the large quantity of trash littered throughout the project site, a direct product of the site’s current vacant status within the midst of a dense urban area lacking sufficient trash receptacles.



A map of seismological activity along the surrounding fault lines in the 1755 Lisbon earthquake.

CLIMATE, SUN EXPOSURE, WINDS, NOISE MAP



TASK 3



DESIGNING FOR ENTRECAMPOS

VISION STATEMENT

The Amanhã Aldeia de Entrecampos will inject new housing opportunities to a highly desirable area of Lisbon, encouraging diverse community life, sustainability, and healthy public spaces, while paying homage to the site's historic integrity.

INTRODUCTION

After our walking tours of Lisbon and site analysis work, it was time for students to put their new perspectives into practice and design a new space for Entrecampos. Students were encouraged to be as creative as possible, developing solutions to the constraints discussed in Task 2. The design process began with the drafting of a shared vision statement, which was expressed in detail in three goals. Each goal has two ideas that further expand on the point. After coming up with three goals, teams developed a concept diagram, which was refined into a specific site proposal.

GOAL 1

Encourage mixed-use housing development, ensuring commercial opportunities on the ground floors, promoting public spaces.

Idea 1

Incorporate a variety of building heights to compliment the surrounding context, providing unique housing opportunities and creating attractive living spaces, similar to those of Alfama and Barrio Alto.



A modern take on dense residential living in Lisbon.



A streetscape showing varying building heights and street activity.

Idea 2

Landscape architecture (extensive and intensive green roofs on the buildings mixed with public spaces; small plazas and pocket parks with green and water features; green buffer along the Avenida de Republica to reduce the noise; permeable surfaces; green as possible; native species and diverse vegetation).



A modern take on dense residential gardens in London by Gillespies.



A modern water feature and desirable shady passage along the water, Oriente, Lisbon.

GOAL 2

Build a sustainable, equitable space that is net zero energy, incorporates environmentally conscious design and promotes healthy communities.

Idea 1

Net zero energy and energy harvest via roof-integrated and canopy on-site generation (solar PV), EV charging stations, passive solar design, with use of sustainable building materials.



An ideal green roof, providing both on-site rooftop solar photovoltaics balanced with rooftop agriculture.



A solar carport with integrated EV charging stations and shaded parking.

Idea 2

Provide dynamic multi-use permeable green space (green roofs, courtyards) with public agriculture, composting and rainwater harvesting systems.



Permeable green rooftop that serves as both a healthy public space and provides shading.



Use of available roof space to grow fresh produce on-site.

GOAL 3

Highlight the linkage and connection between the surrounding public transit to our proposed development entry points and pathways.

Idea 1

Shaded pathways into metro stations, and parking limited to 1 spot for 4 housing units, with parking spaces unbundled from units.



Man-built shaded pathway leading to the metro station.



Man-built lit meandering pathway leading to our development from the metro.

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Idea 2

Provide transparency through the use of arcades and inner enclosure tunnels leading from main pedestrian walkway/ promenade to the public transit entrances.



Inner transparent pathway showing the entryway to the plaza in Baixa.



The central plaza area leading from the tunnel pathway in.

INSPIRATIONAL IMAGES + MATERIALS

Features and streetscape our proposed development will incorporate to make the pedestrian experience, enjoyable, pleasant, and comfortable.

Furniture and Nodes/ Green Roofing

In our proposal we will incorporate various seating arrangements and provide naturally shaded pathways with landscape all around.



Benches will be placed near the main pedestrian walkways. These will be brown concrete.



Green roofs will be opened up for pedestrian access to promote a healthy urban environment.

Plant trees, shrubery, grasses, perennials and bulbs/ Playgrounds

Different layers of vegetation will enrich the biodiversity in the area. We will include a variety of recreational activities such as playgrounds and resting areas and lounges.

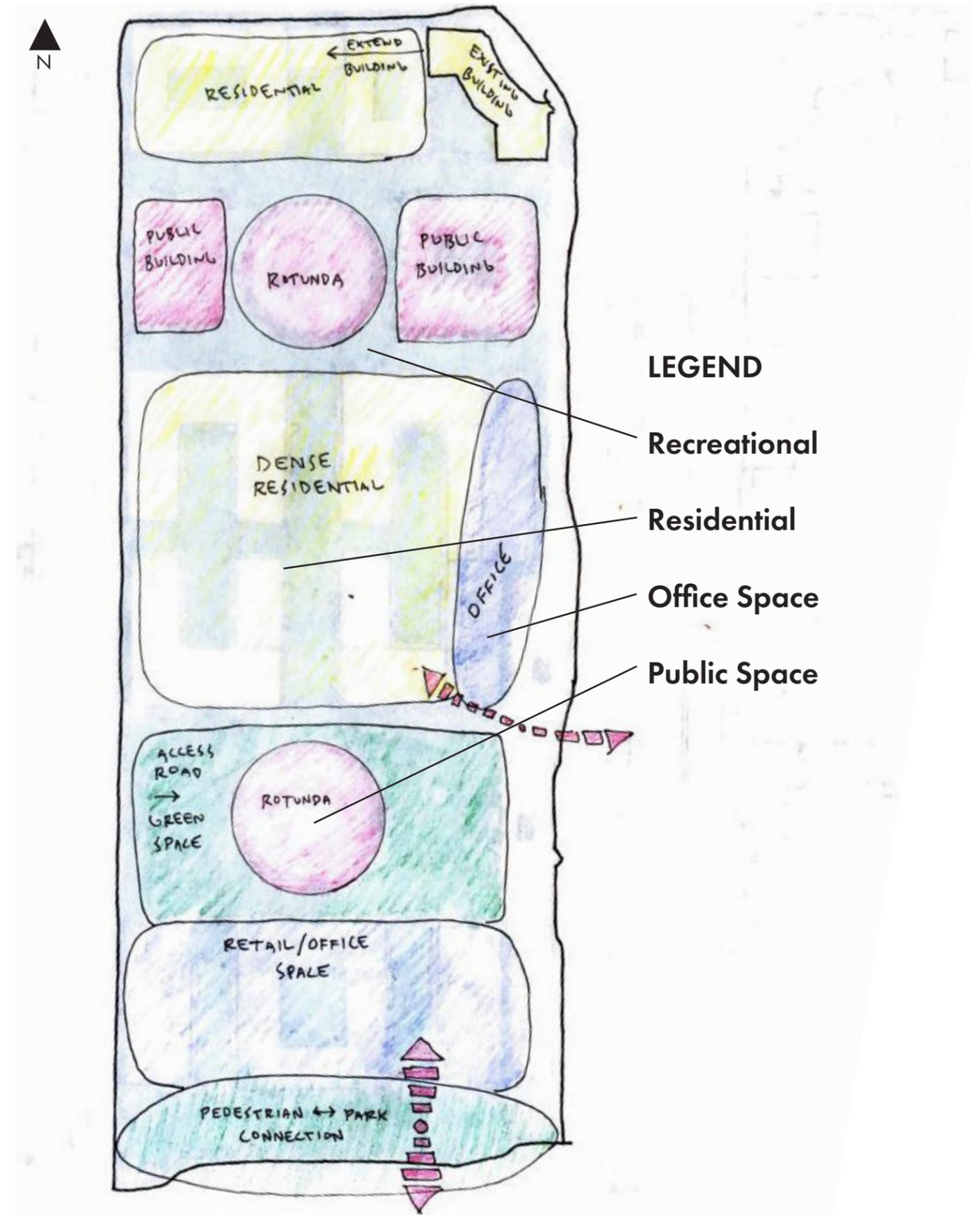


Bench with natural landscape that include native plant species found in Portugal such as Narcissus jonquilla, Narcissus bulbocodium, Narcissus calcicola, Quercus suber (Cork Oak), etc.



Children recreational playground to stimulate creativity and a healthy mindset.

CONCEPT DIAGRAM



LEGEND

Recreational

Residential

Office Space

Public Space

SITE PLAN NARATIVE

The main focus of our proposal is dense housing and mixed use spaces, creating vibrant centers for urban life and community. The bottom floor of every building in the site is dedicated to retail opportunities, with either residential or office use on the upper floors. This mixed-use layout will go a long way to create active centers of activity, just like some of Lisbon's more popular areas like Barrio Alto and Alfama. Office space will provide more jobs in the area, bringing new opportunities to residents of the site and in the surrounding areas.

The buildings on the perimeter of the site will be taller than the ones placed in the middle, so as to enclose the area and give the residential buildings a sense of privacy from the street. Some of these outside buildings will be solely for office use, with retail on the bottom, and others will have residential uses as well. The site is anchored by two rotundas that call on the site's history as a former cattle market, when one rotunda served as the center of operations. These new rotundas will be the center of community life, one being focused primarily on food with a farmer's market, restaurants, and other food sources, and the other being a community center with commercial opportunities and space to gather.

The rotunda on the south side of the site will be open space that connects to a new park created to serve the pedestrians that like to gather near the train station. The park connection will draw people into the community space from the train and Metro entrance, creating linkages in the community's infrastructure. The rotunda at the north end of the site will be dedicated to food and produce, providing residents of the area a place to buy healthy groceries and a variety of other food options. This rotunda will be surrounded by other public space buildings, we would like to encourage a daycare or perhaps a kindergarten in the space.

The existing building on the northeast corner of the site will remain there, and we propose extending it to the west to create more residential and bottom floor retail opportunities, as well as further enclosing the site. In some instances in the buildings surrounding the rotundas, the bottom floor will open up to create an arch-like walkway through the building, leading pedestrians into the center of each rotunda.

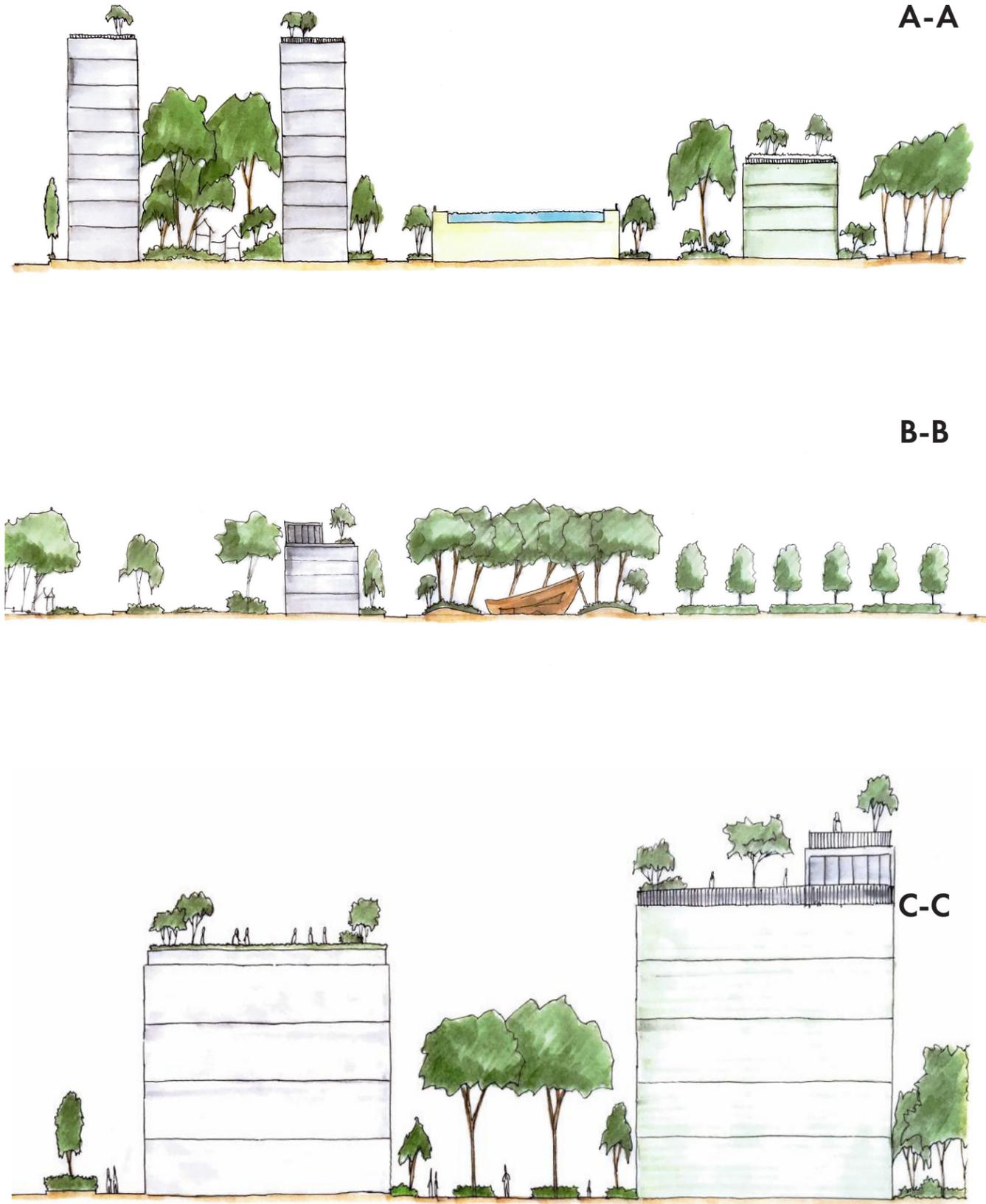
The bottom floor of every mixed-use building will be 5 meters tall, giving occupants room to operate in the space and creating an open atmosphere. The roofs will also be utilized resourcefully by integrating solar panels and landscaping to reduce the urban heat island effect. The rest of the stories on each building should be approximately 3.5 meters, the standard for most residential and office floors. The sidewalks between buildings within the site should be a minimum of 3.5 meters in width, so as to easily allow two people to walk side by side and be comfortably passed by a bicyclist. This large amount of space also accommodates the ground level stores, bars, and restaurants, providing a space that is open, but not so large as to be intimidating. The traditional Portuguese style sidewalk is not appropriate, due to the high cost of installation and maintenance, the slipperiness during rain, and the obstacle it creates for those with mobility challenges. Concrete should consequently be used, though it should be colored, perhaps in light brown so as to better reflect light. Native plants like *Pyrus calleryana* (Chanticleer) and *Narcissus calcicola* should be used throughout the site.

Additionally, perhaps in another phase of the project, the eastern side of the development next to the tunnel between Entrecampos metro and train stations could be opened up to create a small underground shopping mall, providing a comfortable public space in between the two transit stations. A staircase, escalators, and elevator into this mall would be built directly in front of the market rotunda, providing another link from the trains into our development.

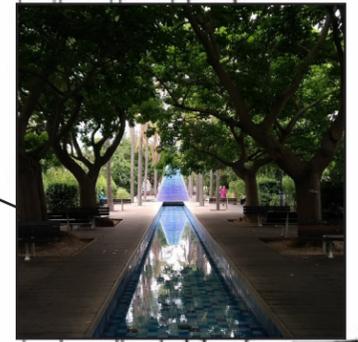
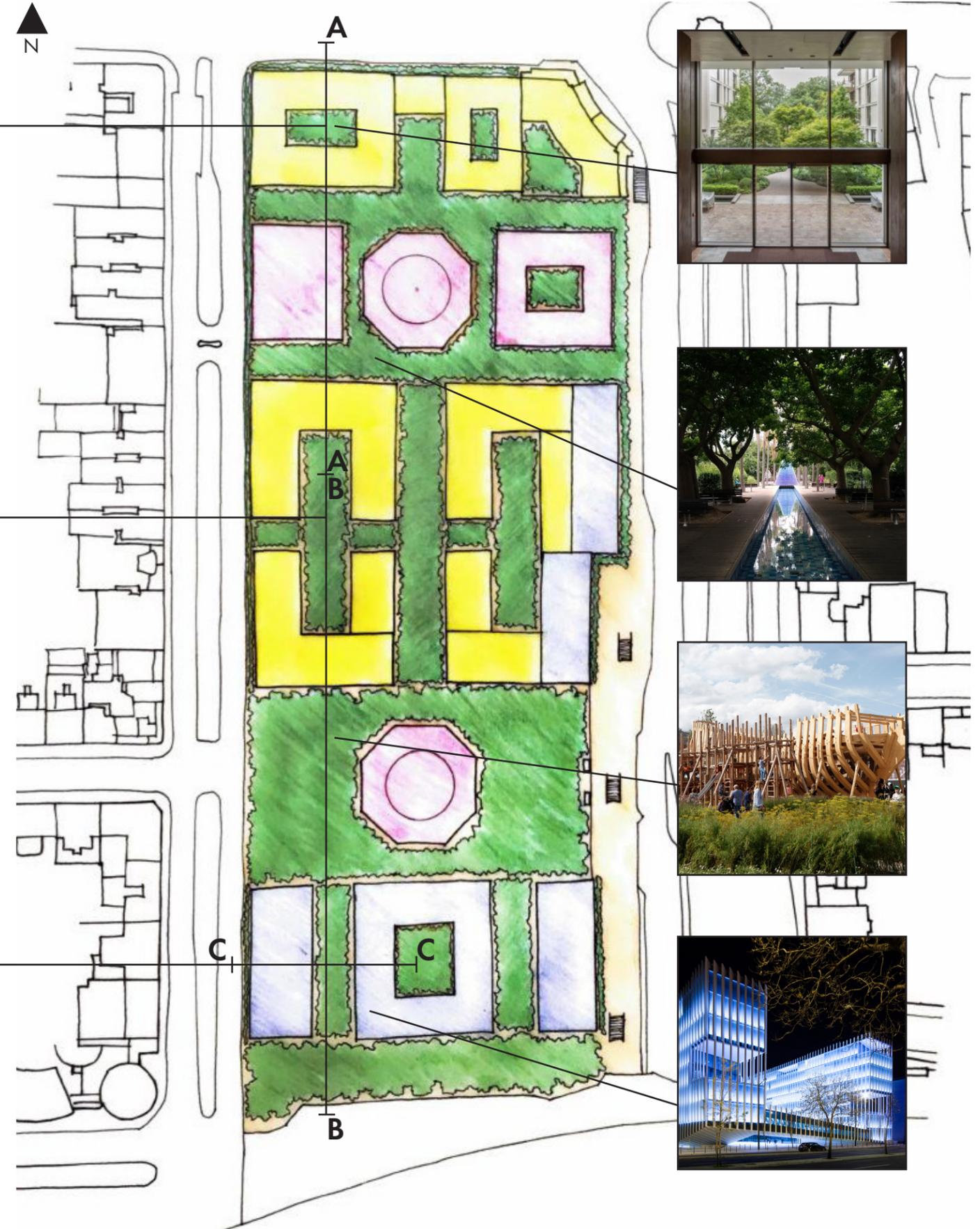
SITE PLAN DIAGRAM



SECTION CUTS



SITE PLAN DIAGRAM



ROTUNDA DIAGRAMS

Zoning Plan

This plan shows three different alternatives for how the second and third floor could be lay out in the market rotunda.

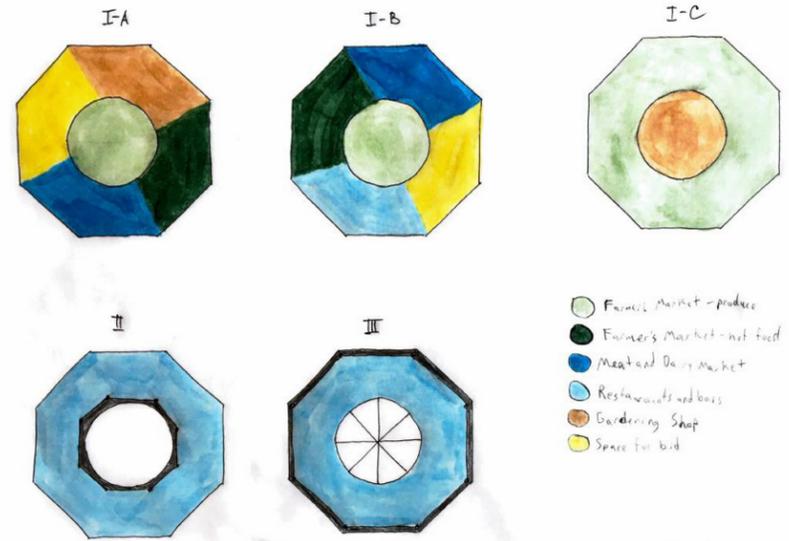
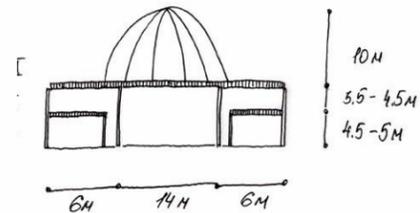
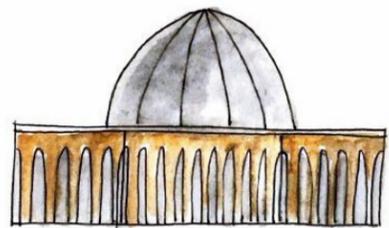
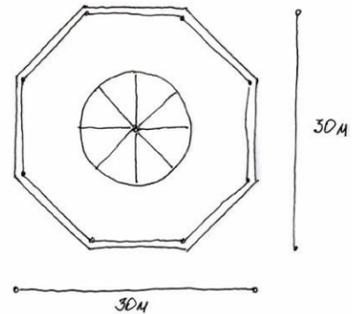
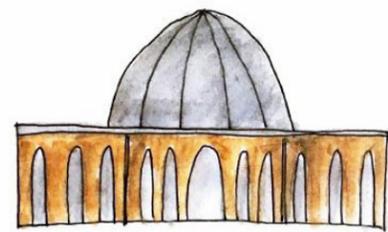


Diagram of the Exterior of the Rotunda

Design is modeled after the original cattle market using similar materials. The dimensions also mimic the original length, width, and height.



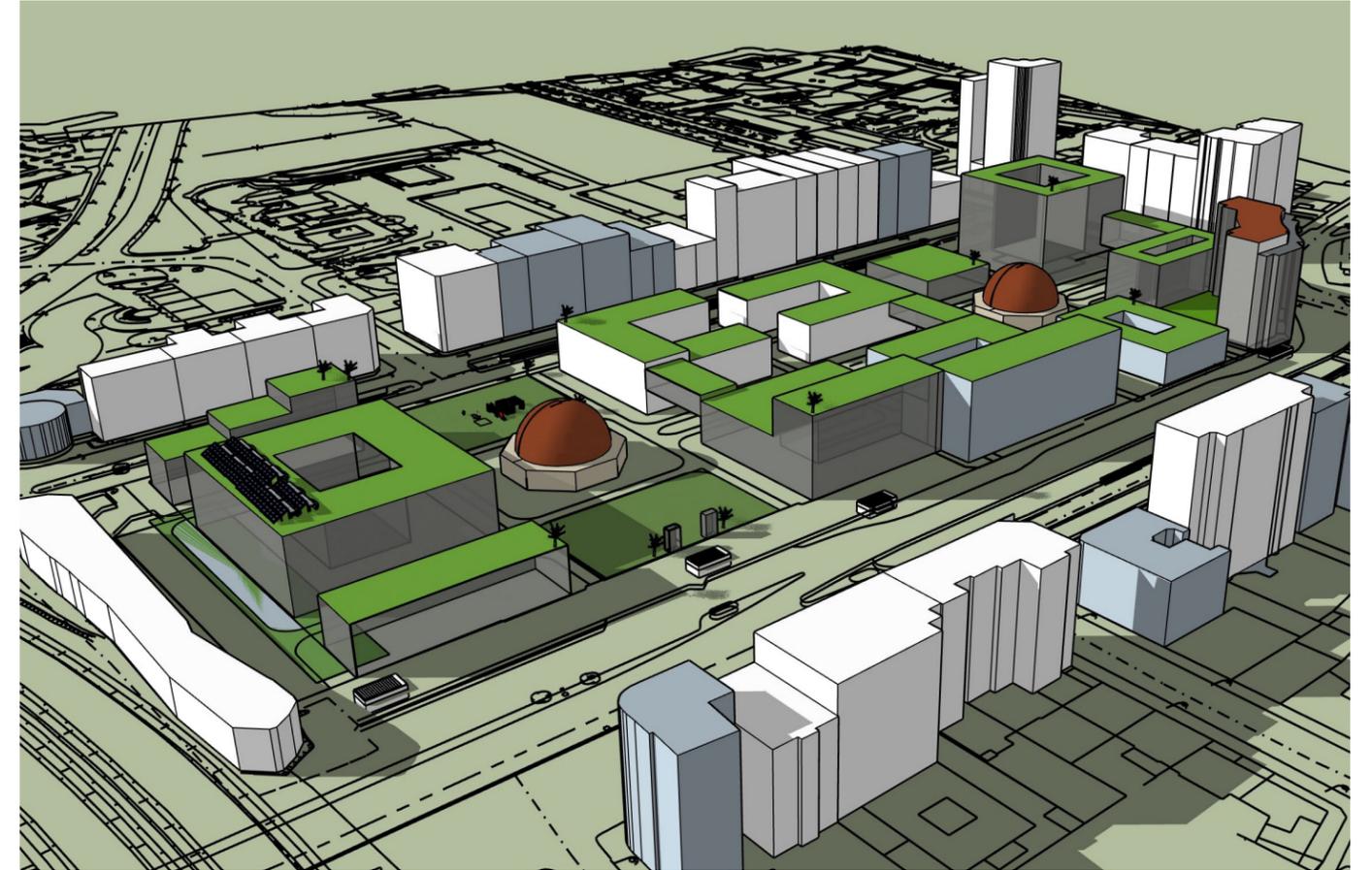
Exterior Design options

Dimensions

SKETCH UP 3D MODEL

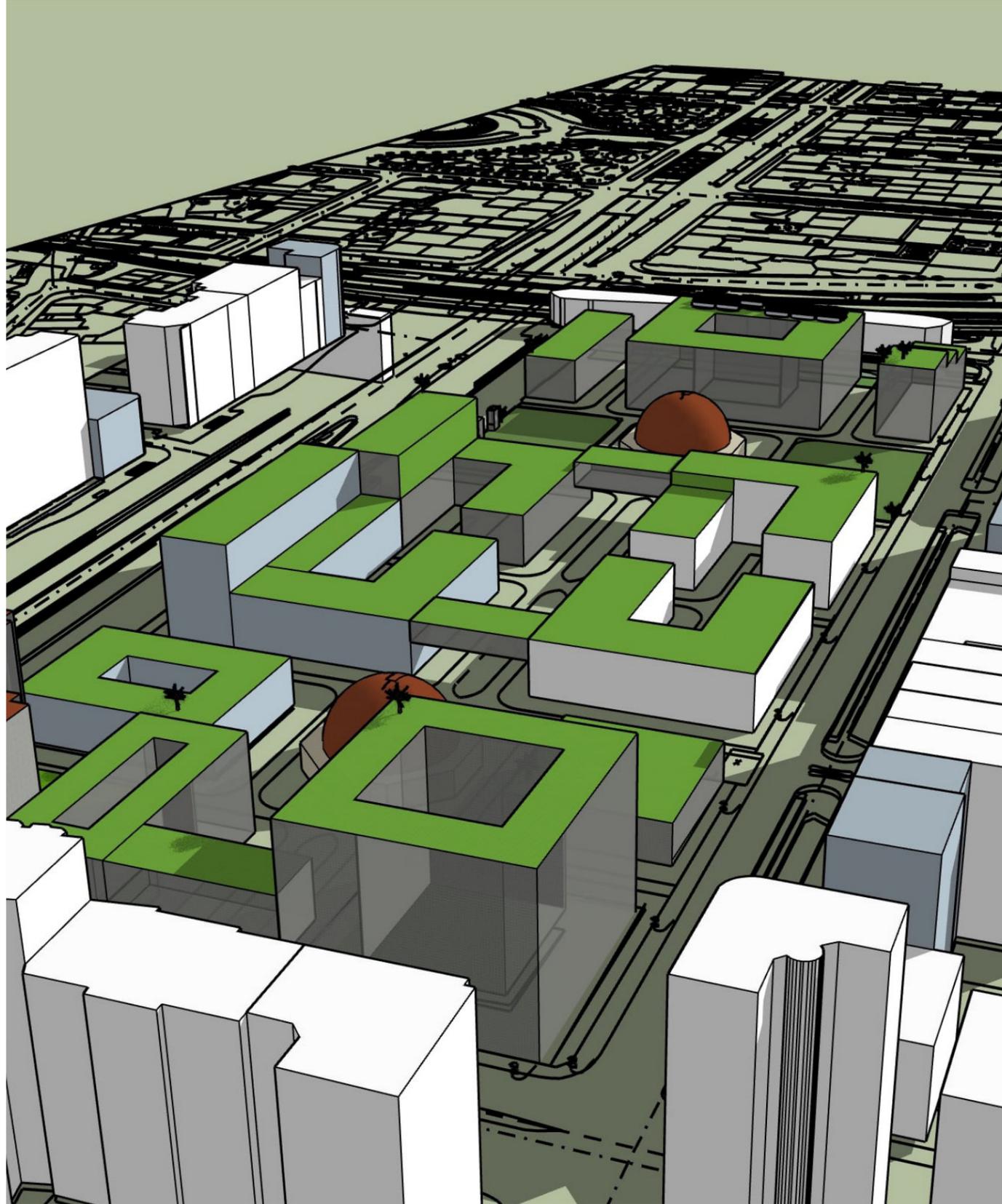
Birds eye north-west view

The 3D birds eye view includes our proposed development structures. The elevations of our structures are cohesive to the surrounding building elevations and architectural style. A main priority of our design was to vary the building heights amongst one another and emphasize both of our market roundadas.



SKETCH UP 3D MODEL

Birds eye south-east view



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