PORTFOLIO

Tamar Cherkezishvili

Selected Work

2020 - 2024



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	Group members: tamar Cherkezishvili, Cyphanah Arshad Khan	
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RECLAIM 65 Blurring The Borders

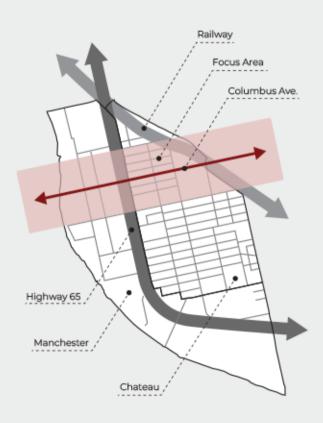
Highway 65 in Pittsburgh, also known as the Ohio River Boulevard, is a relic of an era when infrastructure projects prioritized vehicle traffic over community cohesion. Once a major route along the Ohio River, its relevance has diminished over time. Today, it is no longer heavily traveled, and its function could easily be replaced by a regular road.

The highway's construction carved through neighborhoods like **Manchester** and **Chateau**, displacing many residents and demolishing countless homes. This divisive project left Manchester as a residential area, while Chateau transformed into an industrial zone filled with warehouses and factories, severing their physical and social connections.

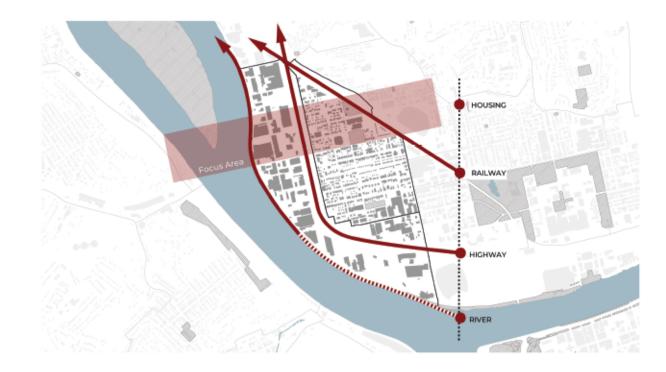
Projects like **RECLAIM 65** aim to address these past mistakes and breathe new life into these neighborhoods. By reconnecting them physically and socially, the initiative seeks to not only restore what was lost but also to create a new identity for Manchester and Chateau - bridging their histories and fostering a vibrant, unified community.

The primary objective of the project was to identify a focal area within the neighborhood and develop a solution to bridge the gap between Manchester and Chateau.



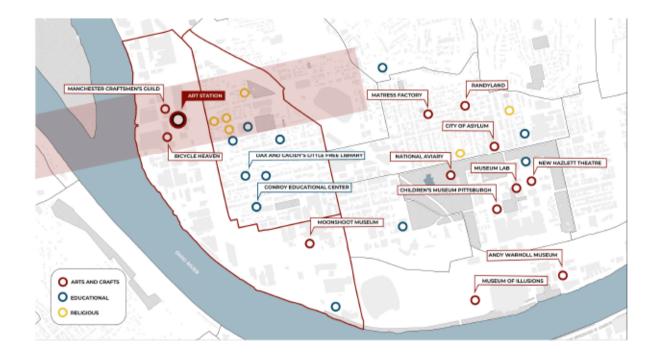


Colombus Avenue and its adjacent blocks was selected as the focus area. Stretching across Manchester and Chateau, Colombus Avenue connects the railway to the waterfront, offering a natural axis for reconnection and revitalization.

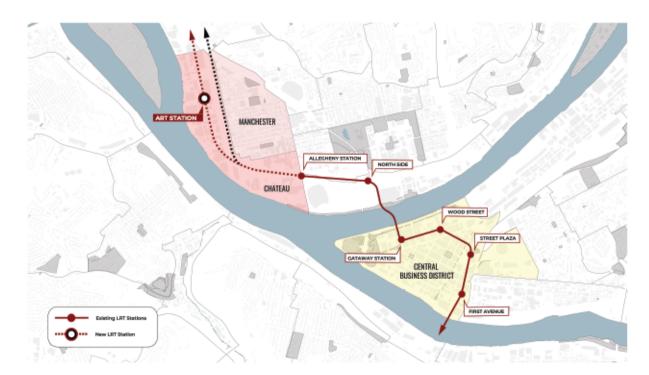


Jane Jacobs's concept of border vacuums, from The Death and Life of Great American Cities, high-lights how physical barriers like highways and railroads create dead zones by discouraging pedestrian activity and isolating neighborhoods. In Manchester and Chateau, residents initially moved toward the center to avoid the dividing borders of the railway and waterfront. However, the construction of Highway 65 in the heart of the area further fragmented the neighborhood, making it nearly unlivable.

In our project area, three physical borders define the landscape: the highway, the river, and the railway. Additionally, a potential social border could emerge with new development, particularly in housing, risking segregation between high- and low-income families. To address this, the neighborhood must be thoughtfully planned to foster inclusivity and cohesion. The project's goal is to blur these dividing lines—both physical and social—and restore livability to Manchester and Chateau.



Manchester and Chateau sit on the edge of Pittsburgh's cultural district, a vibrant area rich in artistic character and creative spaces. The project aims to transform the neighborhood into an extension of the adjacent cultural district, seamlessly connecting its artistic vibrancy with Manchester and Chateau.

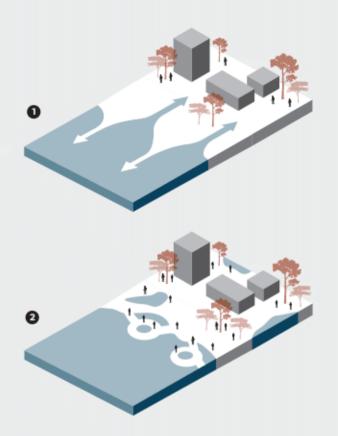


What If The LRT Station Becomes The ART Station?

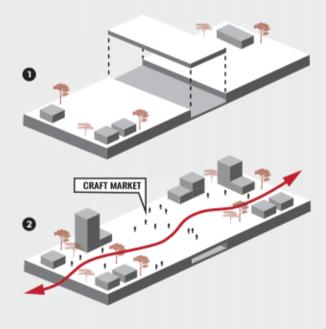
The project envisions replacing the former Highway 65 with a regular street, making it significantly easier for people to cross. Meanwhile, public transport in the form of a Light Rail system will be introduced on a parallel street, enhancing connectivity.

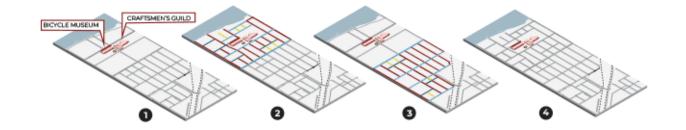
To blur the borders surrounding the neighborhoods, the project outlines a series of strategic operations aimed at fostering connection and integration.

The project aims to blur the boundary between the neighborhood and riverfront by bringing water into the neighborhood and extending the land into the river, softening the divide.

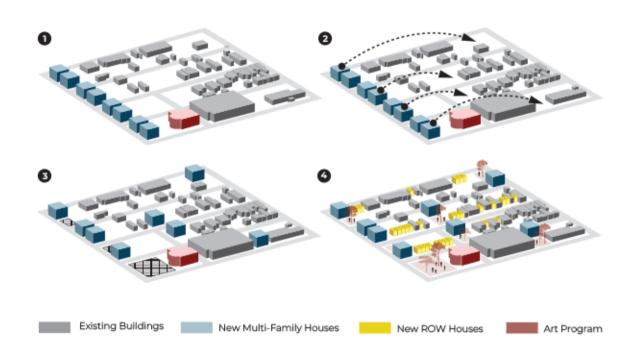


Capping a small section of the railway creates space for public use, boosting activity and encouraging future development along the corridor.





Manchester and Chateau have distinct grid structures. To guide future development in Chateau, we analyzed Manchester's lot specifics and incorporated them into Chateau's layout to establish a strong foundation. The existing buildings, such as the *Craftsmen's Guild* and *Bicycle Heaven*, served as reference points in organizing and structuring the grid layout.

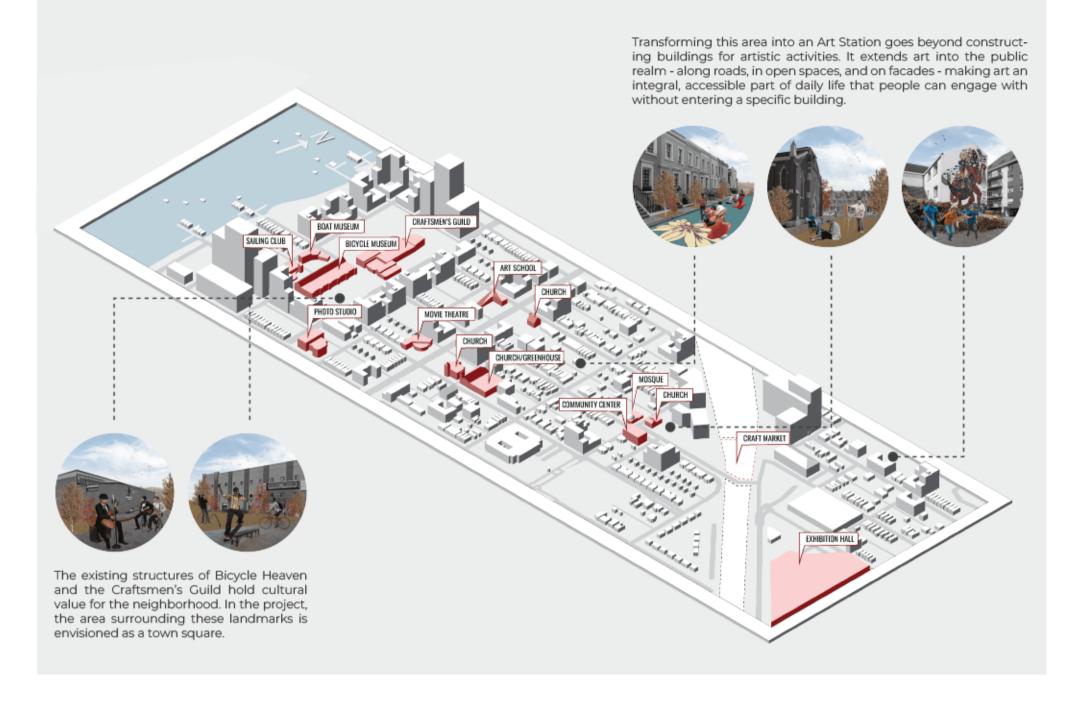


After the highway demolition, instead of filling the newly created empty area, we used existing significant buildings as guides to design new public spaces alongside the new housing. Empty lots in the neighborhood were filled with row houses, reflecting Manchester's typical architectural style.



Pittsburgh mandates that 10% of all new housing be affordable, but this project aims to raise that to 20%. Additionally, commercial areas will include artistic features and spaces to enhance community engagement and cultural vibrancy.





We developed a diverse range of infill building types, each thoughtfully designed with unique configurations and varying numbers of stories. The design of each building is carefully adapted to its specific location, taking into account its interaction with and impact on the surrounding environment.

Total Number of Units: 2,700

Residential
Commercial



Art Program



Row House



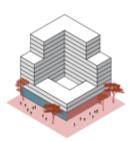
Single Family



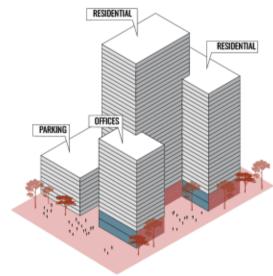
Multi Family (Low Rise)



Multi Family (Low Rise)

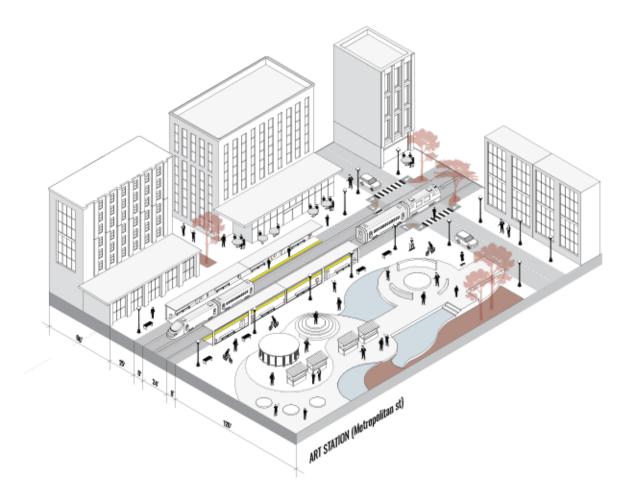


Multi Family (Mid-Rise)

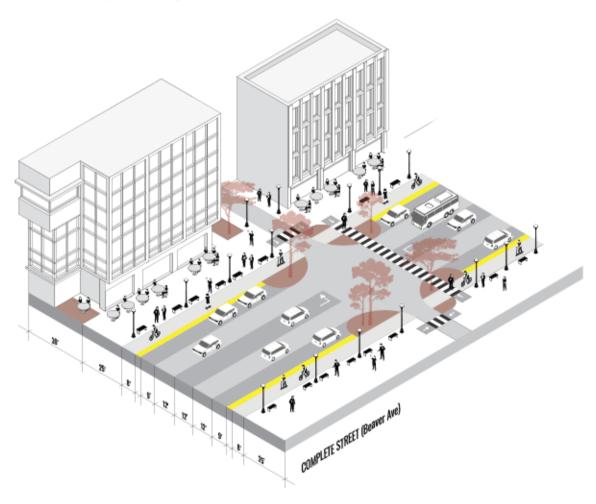


Mixed Use (High Rise)



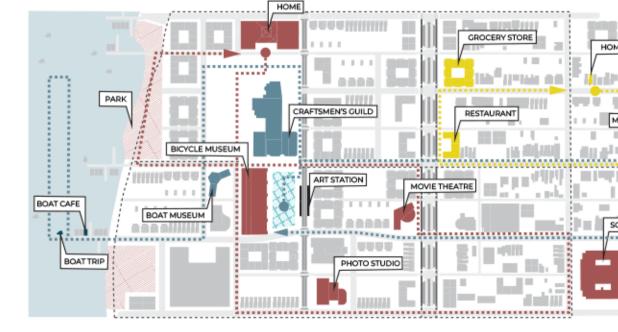


The new art station is envisioned as a primary public space within the neighborhood, designed to host a variety of activities aimed at fostering communication and engagement between locals and visitors. The art station, alongside a revitalized Beaver Avenue, will create opportunities for commercial activities. These areas will support local businesses and vendors, contributing to the economic vitality of the neighborhood.





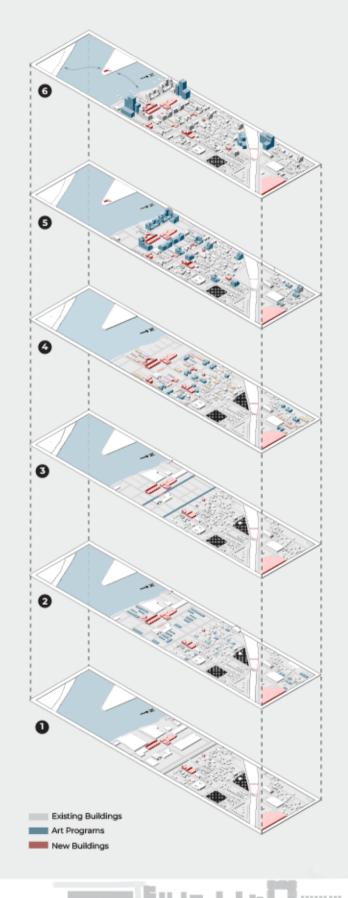
There is a place for everyone in the neighborhood. It doesn't matter who you are, you can always find your path in Manchester-Chateau...

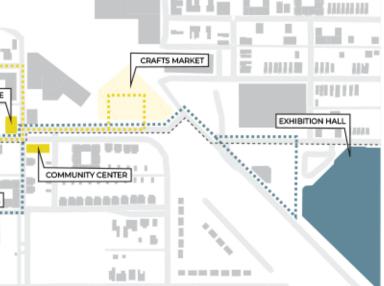


Building Through Time

The development of a large portion of a neighborhood cannot happen overnight. It must be carefully planned over time, aligning with the establishment of necessary institutions and considering the financial investments and resources flowing into the area.

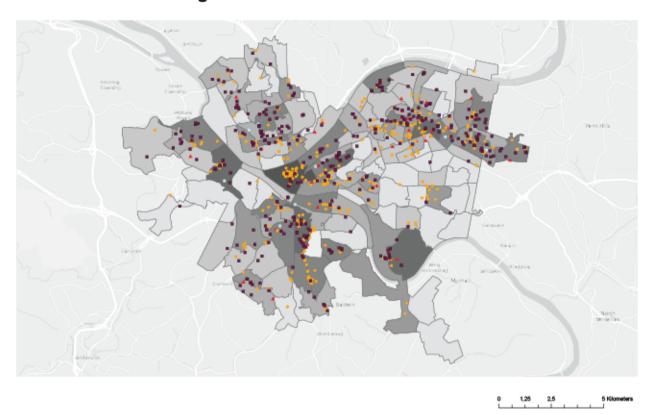
After constructing the LRT and reestablishing connections between the neighborhood and other parts of the city, development will begin by utilizing existing empty lots. This initial phase will focus on low-rise developments that introduce essential facilities. As interest in the neighborhood grows, new businesses will emerge, gradually paving the way for larger-scale developments to take shape over time.





GEOSPATIAL ANALYSIS AND VISUALIZATION USING ARCGIS

Crime Rates in Pittsburgh in 2015

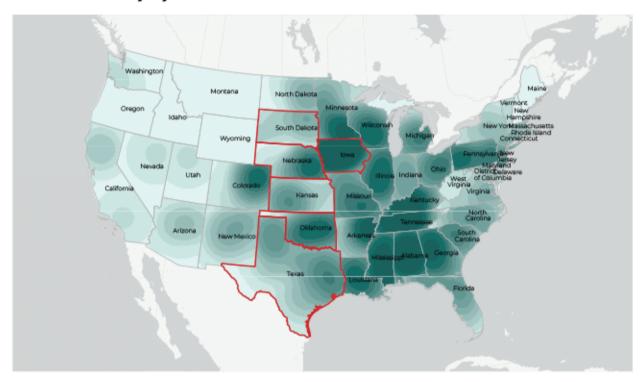


This map depicts Crime Rates in Pittsburgh in 2015 by neighborhood, showing the spatial distribution of various types of crimes and their intensity in different areas

Using the map, we can assume that the crime rate in 2015 was the highest in downtown Pittsburgh and the most common crime categories in the whole city were Aggravated Assault and Robbery.

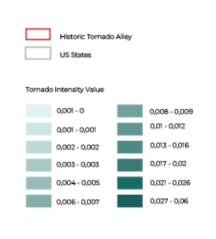


Tornado Intensity By State In The USA In 2021

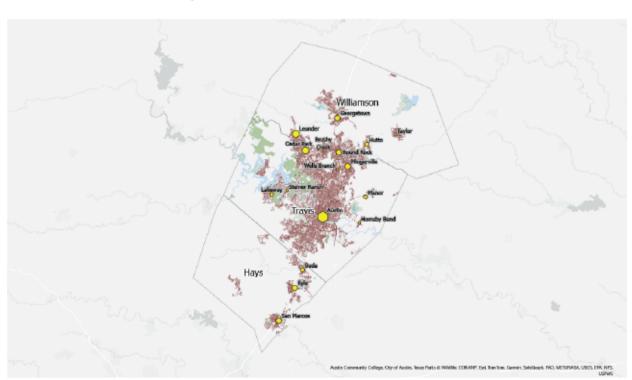


The map examines how the historical Tornado Alley, originally encompassing six central U.S. states, has shifted eastward over time.

However, Iowa still remains as a state with one of the highest intensity values.



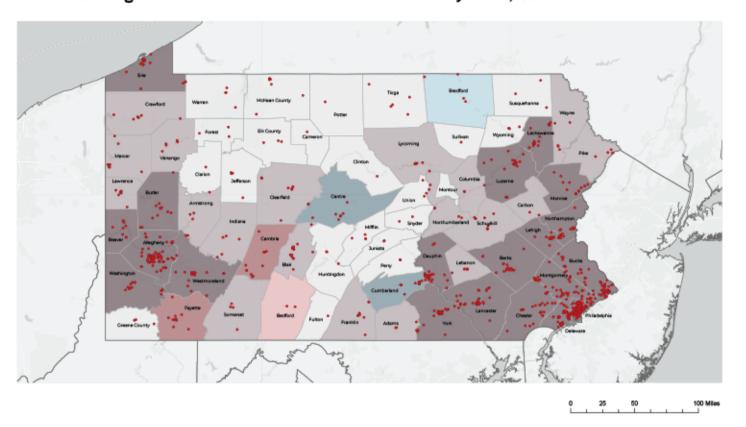
Austin Metro Area Study



The map was used to analyze key metrics within the urban study area, including population changes in Austin and all study cities (381,007 total). It also measured the total park area, water area, and road infrastructure, identifying 29,104 road segments.

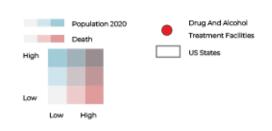


Access to Drug and Alcohol Treatment Facilities In Pennsylvania, USA

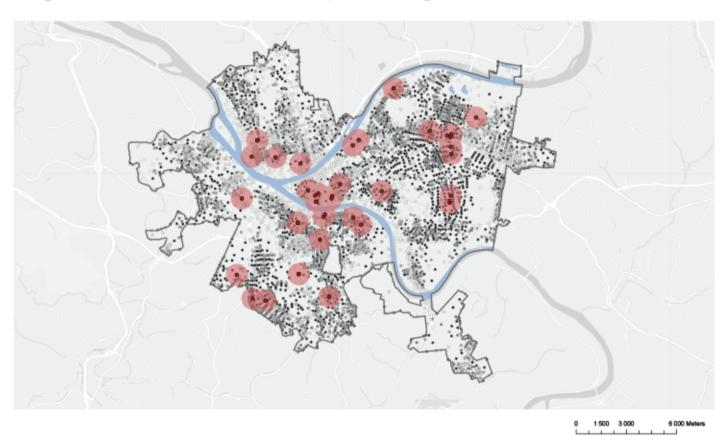


The map shows the distribution of drug and alcohol treatment facilities in Pennsylvania, overlaid with data on population and drug overdose death rates for each county.

In most cases, population size, death rates and the distribution of the treatment facilities are directly proportional. However, in some counties, such as *Cambria County* and *Fayette County*, the death rates are disproportionately high despite their relatively small populations. These areas might need more Treatment Facilities or a better access to them.



Drug And Alcohol Treatment Accessibility In Pittsburgh, PA

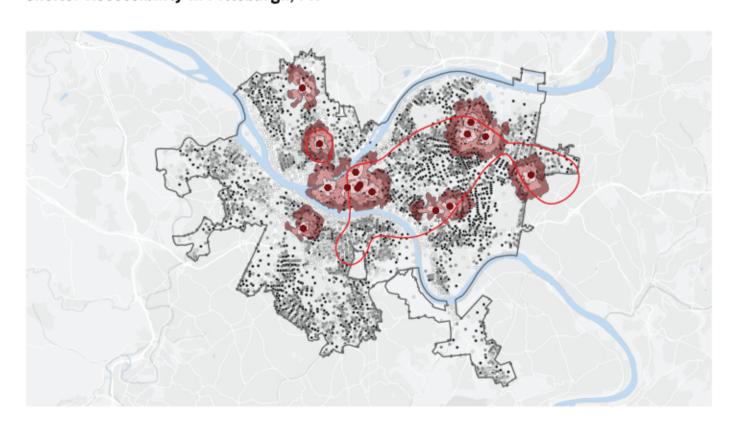


The main goal of creating this map is to analyze and visualize the accessibility of drug and alcohol treatment facilities within Pittsburgh, focusing on the population's proximity to these facilities.

It appears that total 67 479 individuals have access to the drug and alcohol treatment facilities within the 500-meter radius in Pittsburgh.



Shelter Accessibility In Pittsburgh, PA



The map was used to calculate the number of population in a shelter walking servis area considering the different kind of physical barriers:

Pittsburgh Population - 323 190 Poverty area population - 109 075

0-5 minute - 12 243 5-10 minute - 21 468 10-15 minute - 31 999



HOMETOWN BASED RESEARCH - TBILISI, GEORGIA

MAY 2024

"Georgian Dream" Introduces "Foreign Agents Law"

OCTOBER 2024

Georgian ruling party Rigges elections

OCTOBER 2024

Civilians start selforganizing fundings for continious demonstrations

NOVEMBER 2024

"Georgian Dream" decides to halt EU Membership bid unti 2030

arrested during the protests.

NOVEMBER 202

Government starts violently beating and arresting peaceful protesters every night

The graphic work depicts the ongoing massive demonstrations across Geor-

gia, but most importantly in the capital city - Tbilisi, where people are

demanding fair elections, government change, and the release of those

DECEMBER 2024

Ruling Party massively atart firing everyone who express a contrary opinion

Graphic work was created for the *Urban Design Media* course at CMU, focusing on exploring and visually representing a significant past or current event of choice from the student's hometown.



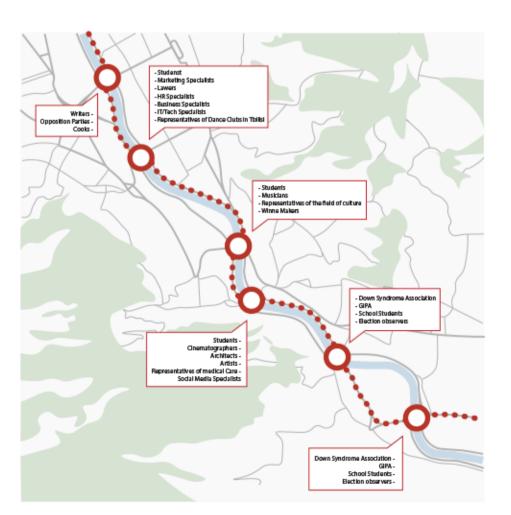
The collage portrays daily life in Georgia, where protesting in front of the Parliament has become routine. People work, study, and then gather to defend their rights, enduring tear gas and pepper spray.

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AMN RAB MAR AFR MAY JUN AJL RUS SEP OCT NOV DEC

When peaceful protests in front of the Parliament fail to draw government attention, people escalate by paralyzing the city, gathering in different locations, and marching together along the river - the city's main traffic corridor.

Dressed in colorful raincoats to shield against police water cannons, people from across the country, not just Tbilisi, stand united and self-organized in front of the Parliament day and night, united under one goal - change.



Protesters form a continuous human chain along the river, using the main vehicular bridges to halt the city for a day, symbolizing their unity and determination to steer the country back toward the European Union.

REIMAGINE DIDUBE

In Tbilisi, the imperative task of addressing urban challenges necessitates a focus on decentralization, aiming to relieve strain on the city. Didube, a district with historical significance from Georgia's industrial period, currently faces disorder and lack of organization.

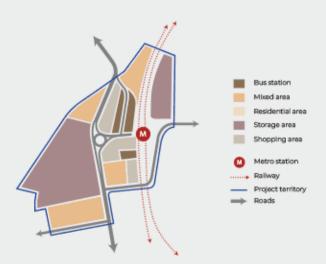
Despite its central location, Didube has been overlooked by the capital's residents. Our project aims to identify and rectify obstacles impeding the area's development, revitalizing it into a vibrant segment of the city. The objective is to transform Didube, integrating diverse functions for all demographics and breathing new life into this central locale.



The project site, spanning 446,000 square meters, is situated on the left bank of the river Mtkvari. What adds to its intrigue is its unique position at the confluence of five districts.



According to the Georgian regulations, the site analysis encompasses a radius of 300 meters from the project territory, containing all cadastral units within this range. Notably, the research was conducted within the extended distance of 300-1050 meters.

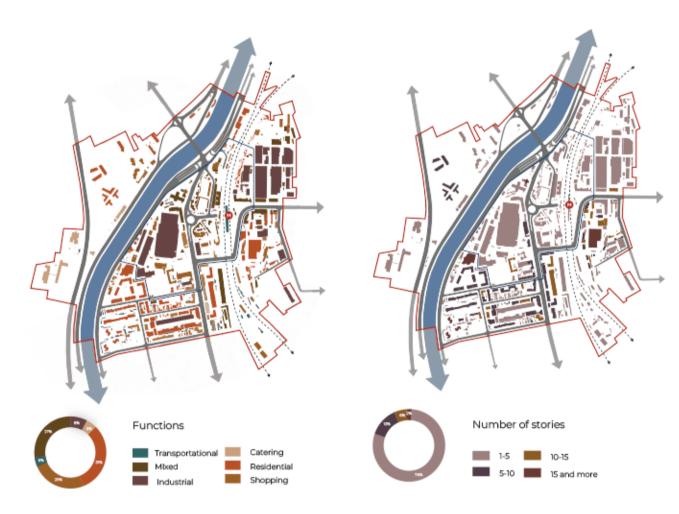


Various functional units are dispersed rather than onsolidated in a specific area, leading to an intricate and confusing layout within the project territory. The unorganized placement of these elements results in interconnected and perplexing spaces, contributing to a lack of coherence in the overall design and functionality of the site.



Nowadays, only 13% of the entire territory is landscaped, leading to a negative effects on the ecological condition and harmony of the place.

Most of the buildings studied in the area are inferior today, unsuitable for the current lifestyle and appearance of the city.

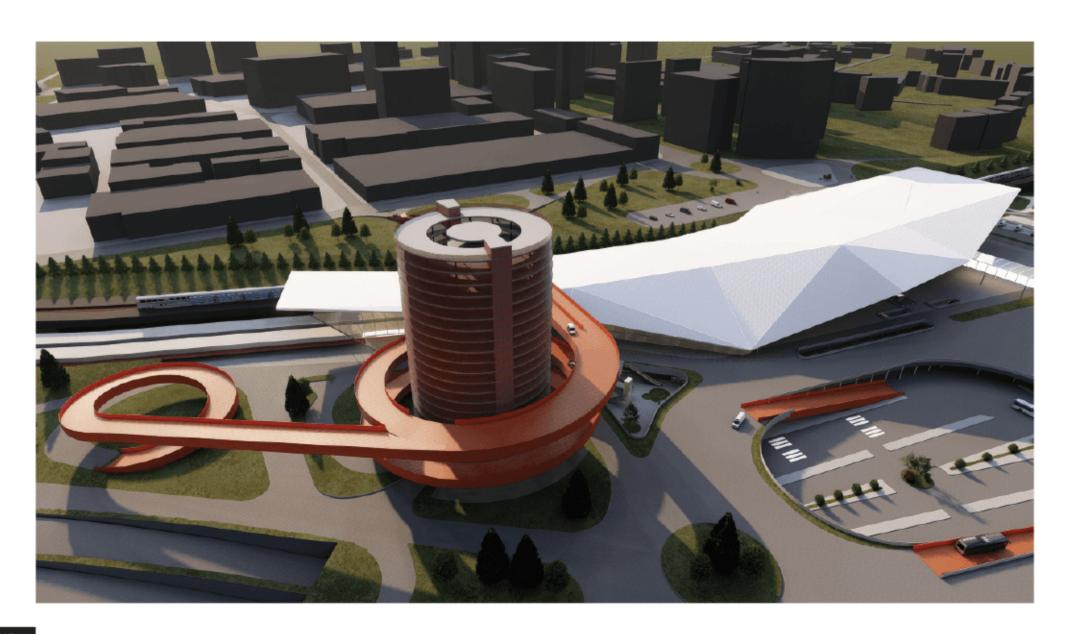


Uncontrollably scattered shopping and catering facilities complicates the orientation and hinders the traffic capacity of the passengers.

The area is characterized by an excess of low-rise development. Relatively high-rise buildings are hard to find.







Numerous seperators in the area prevent the unity of the space.



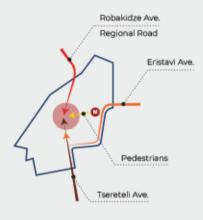
Tsereteli Avenue, characterized by constant heavy traffic throughout the day, seperates the project area in the middle.



The railway of 'Didube' metro station, passing through the area, splits it into two more parts.

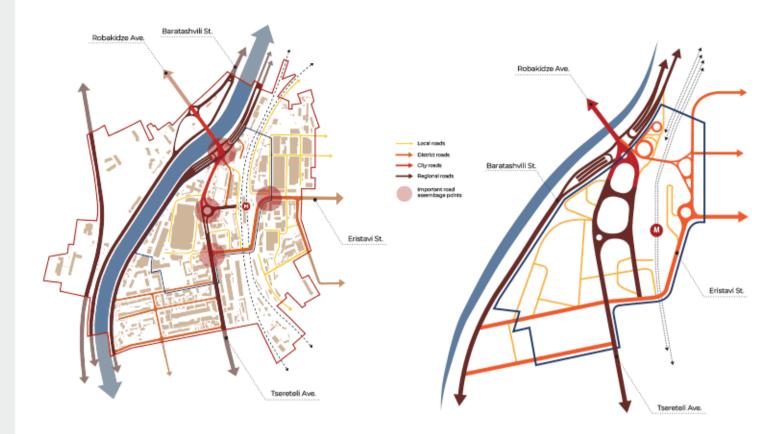


From the West the project area is bordered by the Mtkvari River with two main roads of the city running along its both banks.



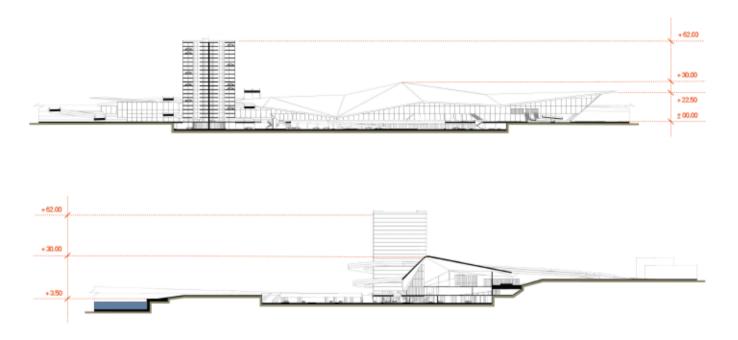
Intersections where regional, city, municipal, and local roads converge, giving rise to intricate traffic nodes.





The entry of primary regional and municipal routes into the area results in the concentration of heavy traffic flows in this segment of Didube. The movement of minibuses and taxis amid the congestion around the station contributes to chaotic traffic patterns. The current dynamics not only generate discomfort but also pose hazards for both pedestrians and motorists

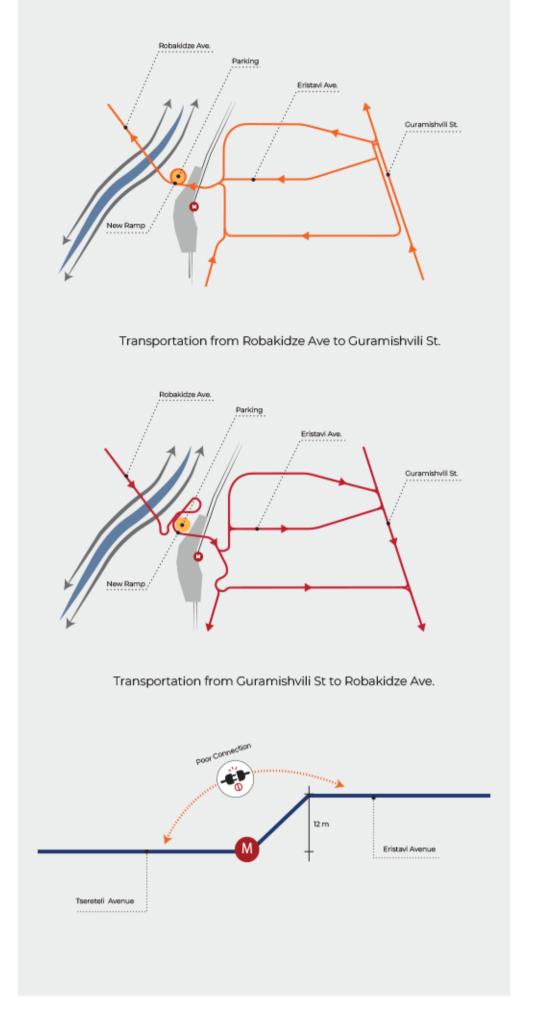
In order to reduce the flow of vehicles, we separated the traffic coming from the development near Tornike Eristavi St: part of it was directed towards Tsereteli Ave and part of it was diverted directly to Robakidze Ave. with the help of a ramp circling around the parking building. Additionally, Tsereteli Ave underwent a division into two flows to reduce overall traffic intensity.

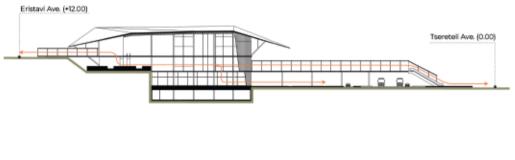


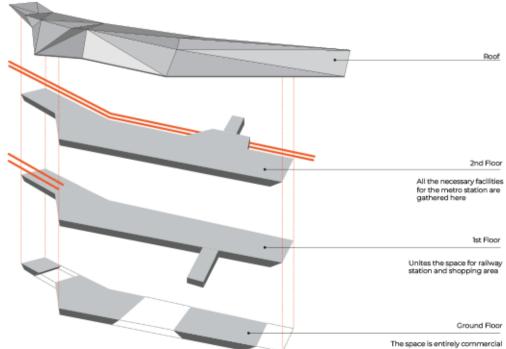
The absence of structured parking facilities poses a significant challenge in the area, with both surface and underground options being scarce.

The unregulated parking of vehicles hampers the movement of both pedestrians and commuters. To address this issue, we proposed the construction of a 19-floor parking building capable of accommodating vehicles that would otherwise congest the streets, ensuring a more organized parking solution.



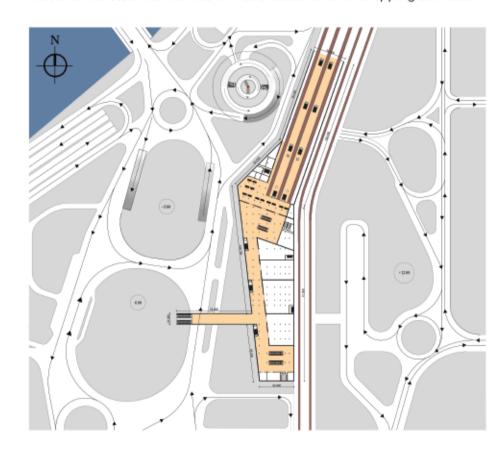








Adjacent to the main metro entrance, a wide square facilitates pedestrian orientation and offers easy access for public and private transport. The building's first floor, partially open and partially closed, seamlessly integrates with the subway square, promoting free movement. The enclosed space is designated for the essential facilities of metro station and for shopping activities.



The third floor functions as a hub for passenger flow, catering to visitors arriving from the lower level and Tornike Eristavi street. The central area is dedicated to diverse dining options serving both metro travelers and intercity commuters. This floor also features recreational and shopping spaces, providing a convenient environment for locals and employees to unwind and relax.



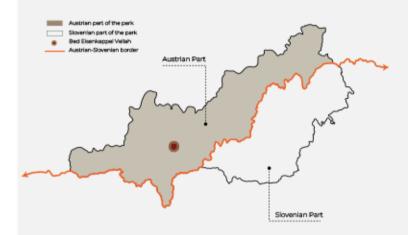
RECONSTRUCTION OF HOTEL 'OBIR'

An old structure of hotel OBIR is located in Bad Eisenkappel-Vellah on the South part of Austria, near Slovenian border.

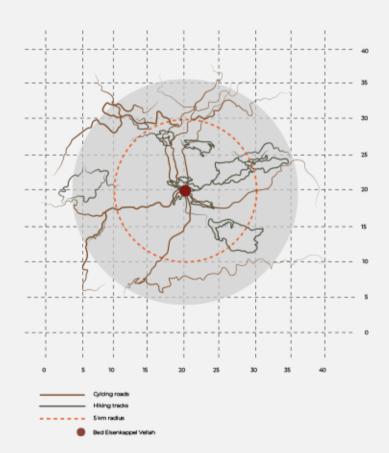
OBIR was travellers' favourite meeting place since 1970's, but lost its functune in 2003. Today the building is abandoned and requires renovation to regain the status.

Most of the travellers and tourists, who visit Bad Eisenkappel these days, usually spend their time in Karawaken geo-park and embrace the outdoors.

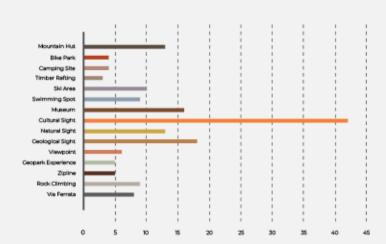
Therefore, the proposed revitalization aims transforming the structure into a new gathering place for adventorous people.

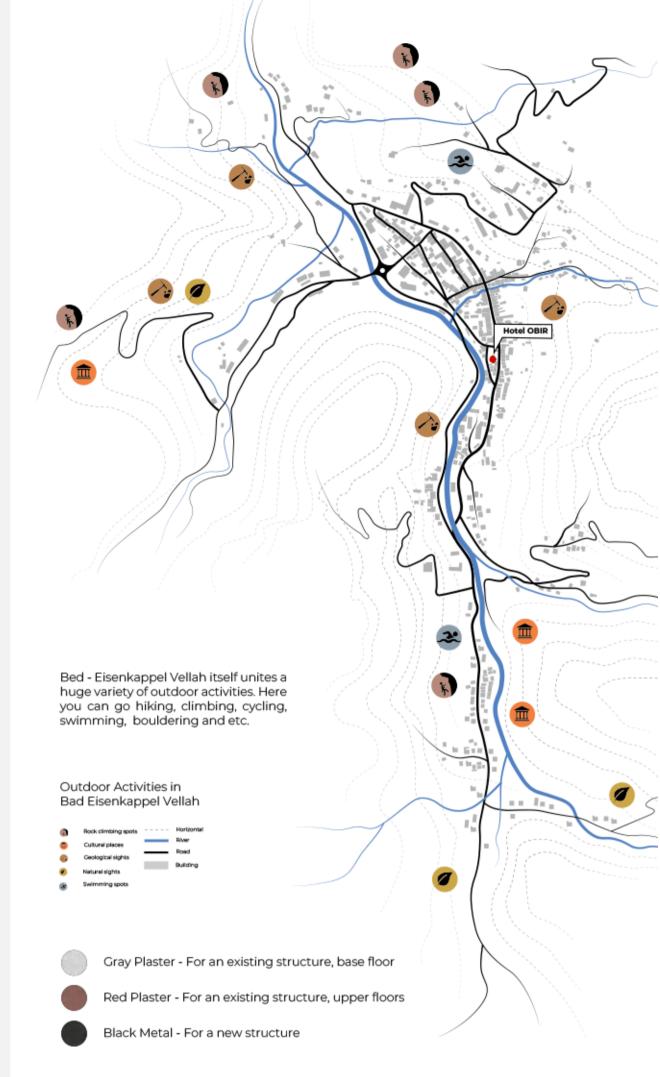


OBIR is a part of the cross-border KARAWAKEN Global Geo-Park, which has been protected by UNESCO since 2015. The area is known for its variety of outdoor activities and attracts people in all seasons from all around Austria and Slovenia.



There is a huge network of bike lines and hiking tracks in KARAWAKEN Geo-Park, connecting different kinds of natural and recreational sights.

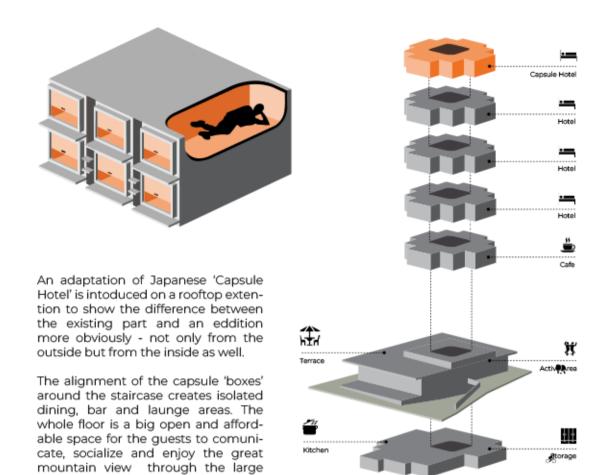




In order to maintain the character of the existing structure as much as possible, because of the historical and cultural context, old colors were returned to the existing part of the facade and new material was used for the new structure. This way, the difference between the existing and the edditional parts was displayed.





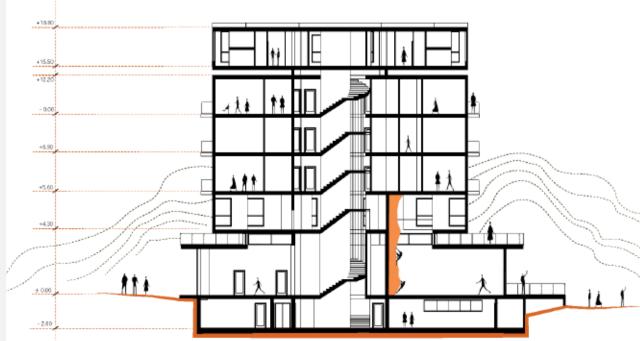




glass windows.



According to the concept, the existing roof was removed and replaced with a new extention, balconies were added to the hotel rooms for increasing quality and the ground floor was extended to get more space.



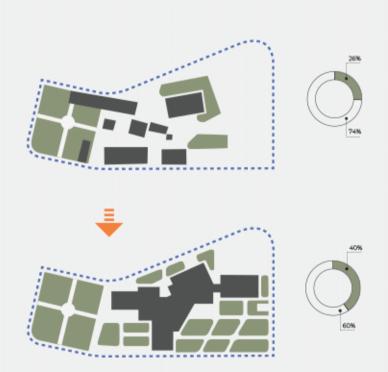
CULTURAL-RECREATIONAL CENTER

The cultural and recreational center is located in one of the central districts of Tbilisi - Vera. This area is distinguished by the greatest activity and vitality in any part of the day. This whole neighbourhood is loaded with public facilities and therefore huge crowd of people come here every day. Our project area is located in the center of this active area and is somehow cut off from this livelihood.

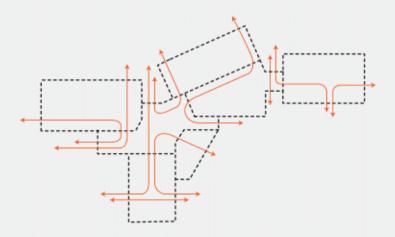


In order to revitalize this space, a conceptual design of a building was created that would contribute to the cultural development of the place.

Due to the fact that students and pupils are the people who walk closest and most often in this area the function of the building was primarily adapted to their needs

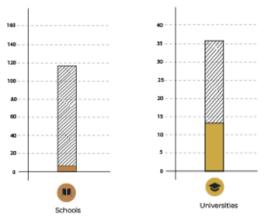


The location not only dictated the building's function, but also influenced the building's design concept. There is a small square here, which is practically non-functional, the plants are in a state of decay, and the park itself has no visitors ever. It iwas decided to expand the park territory asmuch as possible.



The building and it's function would bring the park back to life and would become a part of the park itself. That's why the design is maximally open, it has several entrances and exits that makes it possible to move in the park throughout the recreational center.

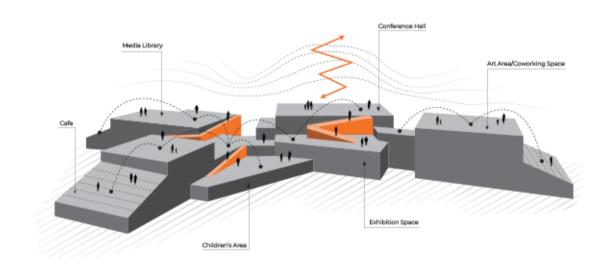




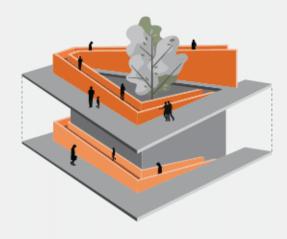
While analysing the area in within the distance of 1.5 km radius from the project territory, it was revealed that a huge cluster of educational institutions gather here. You can find that 13 of the total 36 universities and 7 of 119 schools described in Tbilisi are located there.

Cultural-Recreational Center unites three most important qualities for the students to spend their free time fruitfully.









The main qualitie that the building has is that its is equipped with the ramps that allow the visitors to move through the inside and outside parts of the structure unstoppably.

One of those ramps start from the central part of the building, circles around the tree and leads you to the rooftop creating a temporaryexhibition space inside.



Some parts of the roof are terraced into the large 'steps', creating the seatings like an amphitheatre. That enables the visitors to sit in the sun, look at the great views of the river and the city.

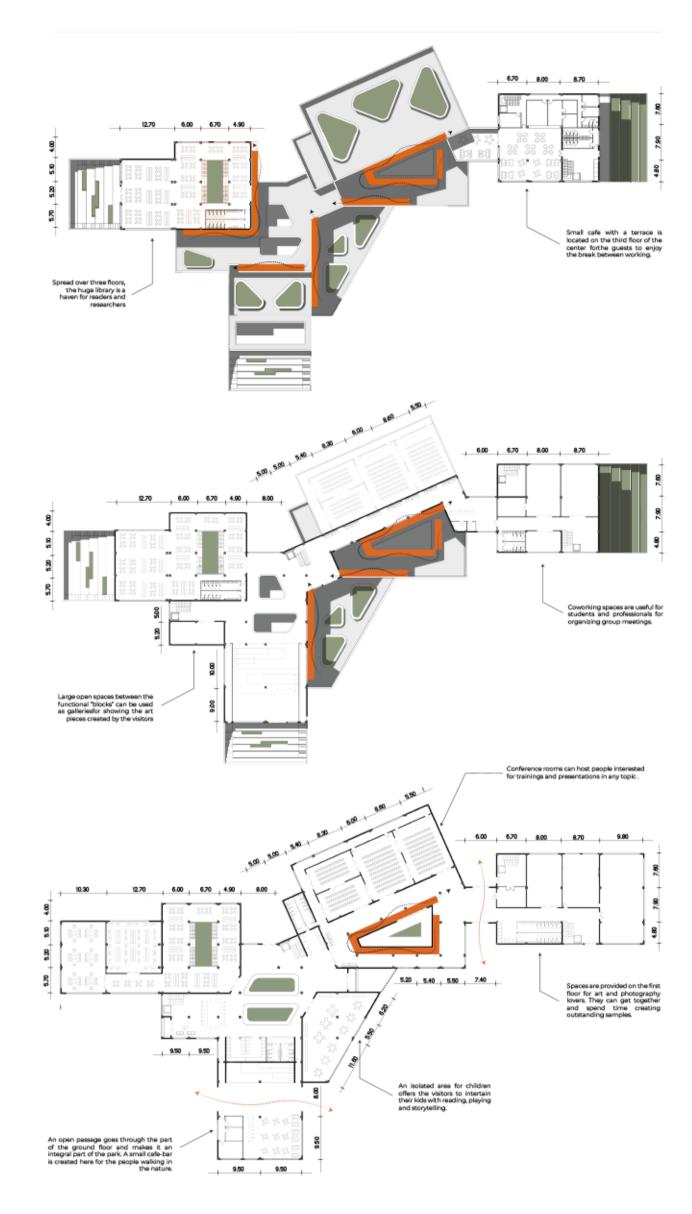


A new design element was introduced on the rooftop to turn it into a garden. The 'Green Islands' create a great gathering place, where you can sit among the bushes and the flowers and socialise with the peopleof all ages.





The project area is located on the crossroad, that makes it isolated from the other parts of the district. In order to easily connect the residents of upper streets to the center, a new pedestrian ramp was places on the hill behind the new structure.





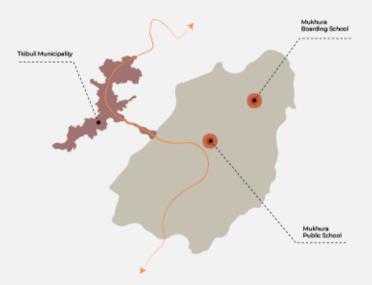
BOARDING SCHOOL IN VILLAGE 'MUKHURA'

The conceptual design is prepared for a public school building in a village Mukhura, on the West side of Georgia.

In Georgia, educational institutions equipped with sophisticated and modern technologies are concentrated in the capital city, while the other regions experience difficulty in accessing education. Most of the students in the highland villages do not even have access to the Internet or computers at school. This public school is located in one of such regions - Imereti.



Village Mukhura is part of Tkibuli municipality and is famous for its beautiful nature, mineral waters and clean, healty environment. The village today has two public schools but none of them meets the required standarts. Students do not have comfortable classrooms, playgrounds and necessary equipment to get proper education.



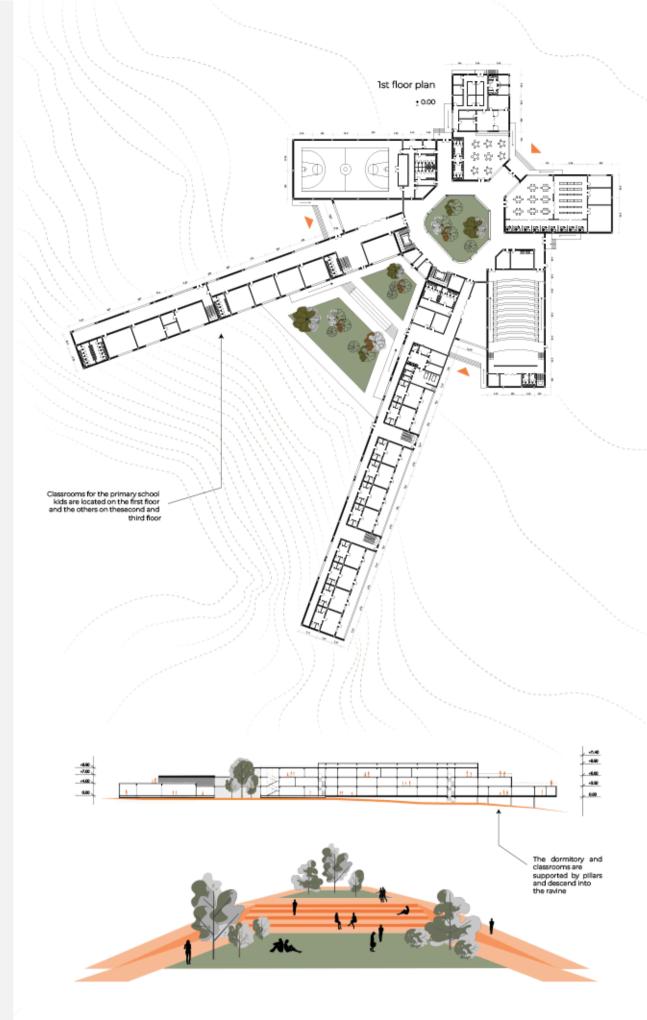
providing children in rural areas with access to modern schools ensures that they are not left behind. It's important to provide better educational resources, updated curriculum materials, and access to the information to enhance the overall quality of education, helping children develop a broader range of skills and knowledge.

DATA	AMOUNT
People living in 'Imereti'	486,986
People living in village 'Mukhura'	1412
Students in 'Imereti'	9112
Students in 'Mukhura'	155
Schools in 'Imereti'	168
Schools in 'Mukhura'	3

The eim was to create a desine, that would fit all the necessary spaces and equipment for the children to get proper education.

The concept envisages a transformative school which suits the needs of students in rural areas of the region. Here children from across the whole region can receive quality education, and engage in extracurricular and physical activities for healthy development.

The plot that's allocated for placing the building is characterized by a difficult terrain and is close to the forest, which in turn determined the shape and volume of the building.



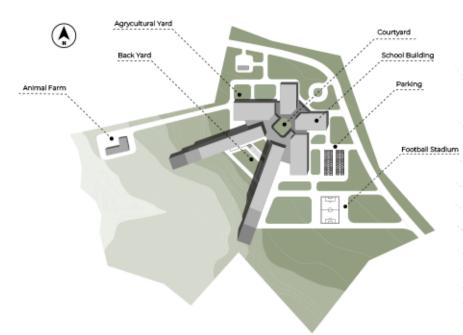
Four main volumes of the school building are placed on a more or less flat surface on the ground, but the dorm and the classrooms descend into the ravine, so they lean on the pillars.

This space between them is used as a large back yeard, where students can do their leisure activities. It's accessable through the dorm and classrooms as well as from the main hall.

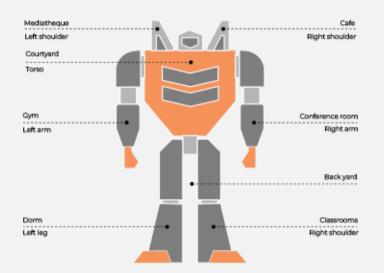


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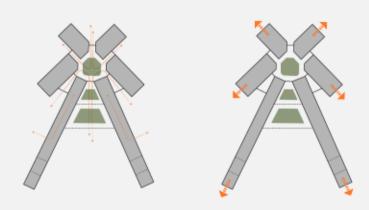


The shape, structure and mechanism of the school building are identical to "Transformer". Character is an integral part of every student's childhood. The building is transformable and easily adaptable to the current needs.



The building has several entrances and exits along with the courtyard and back yard, making it absolutely transparent.

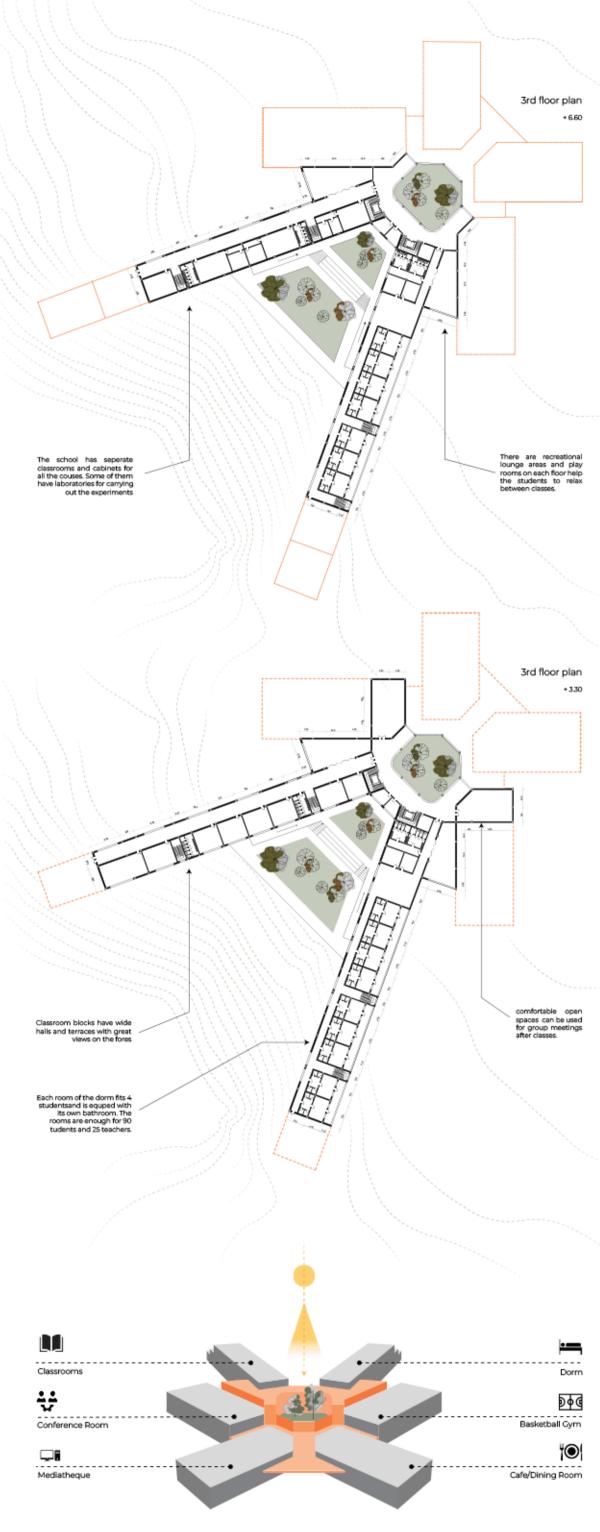
Each functional volume corresponds to a separate part of the 'transformer body' and works independently.



The idea was to create a symmetrical form consisting of several separate volumes revolving around the main design element - central courtyard.

Each volume has it's own function and is connected to the others with a wide glass corridor. Such design easily separates different functions from each other, but also simplifies the access of these spaces to each other.

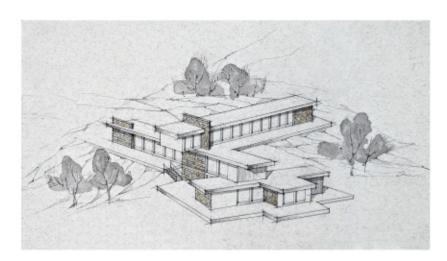


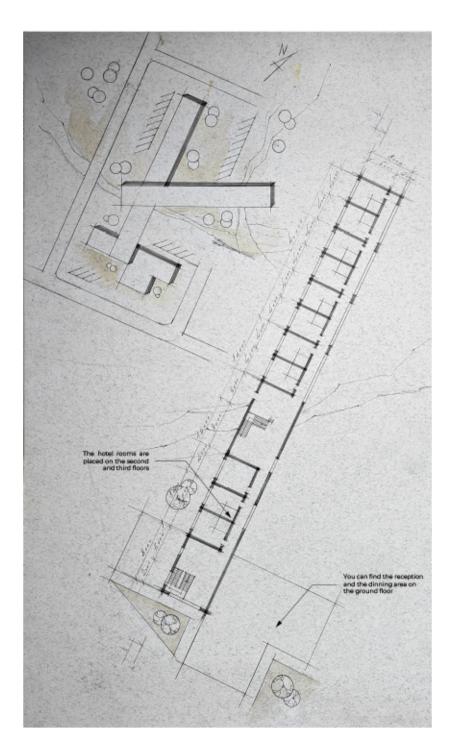


MOTEL NEAR SVANETI

Svaneti stands as the highest mountainous historical-geographical region in Georgia, characterized by majestic peaks, rolling hills, castle towers, and ancient villages, emblematic of the area. This pictur-

esque landscape continually captivates the interest of travelers, vacationers, and mountain sports enthusiasts.

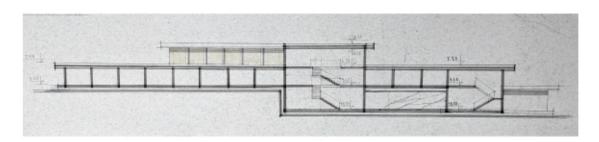




Given its considerable distance from the capital city, Tbilisi—a journey requiring over 8 hours without stops, which can be notably exhausting—the proposed design aims to be strategically positioned along the road to Svaneti.

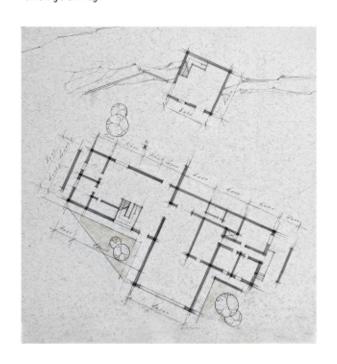
The natural contours of the terrain played a pivotal role in shaping the design.



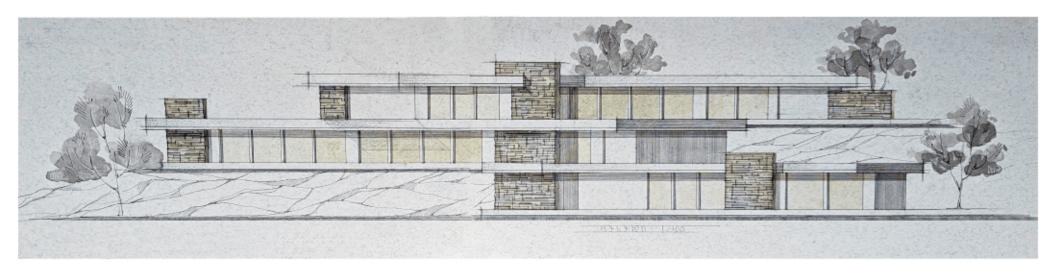


With three floors strategically placed on varying ground levels, the second and third floors house a total of 20 rooms capable of accommodating 40 people. The ground floor is dedicated to reception and a café.

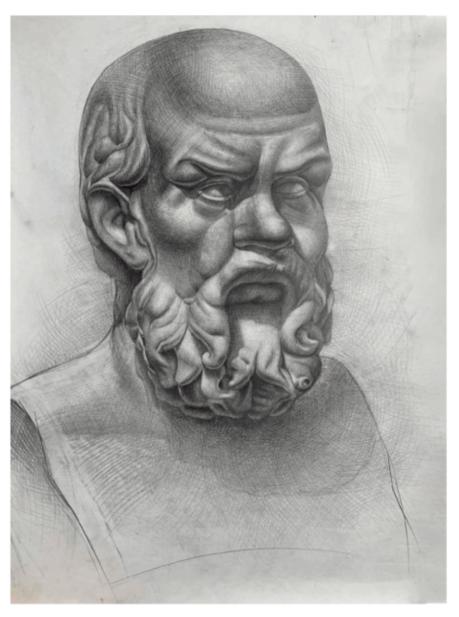
Designed to provide respite to weary travelers, the motel offers comfortable accommodation for a night or two, allowing them to recharge amidst breathtaking views before continuing their journey.







SKETCHES AND DRAWINGS



Pencil on paper, A3



Pencil on paper, A3



Watercolor and Ink on paper, A3



Pencil on paper, A3



Watercolor and Ink on paper, A3





THANK YOU