

Projecting Shkodra / Operative fragments between lake, river and sea

report edited by Enrico Porfido / PhD researcher POLIS University

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Introduction

The international PhD POLIS/Ferrara in Architecture and Urban Planning, organize for the 32nd cycle a new Workshop trying to explore deeper, some of the recent research fields already active in the previous years within the Department of Applied Research (OMB) Observatory of the Mediterranean Basin FKHZ Faculty at POLIS University. Base of the discussion for this year it will be the idea to develop a critical and analytical capacity of each PhD student to find, within a given planning project, tools able to generate new architecture design processes for the future development of Shkodër city in Albania.

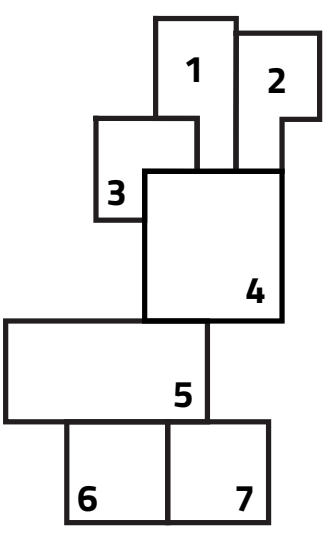
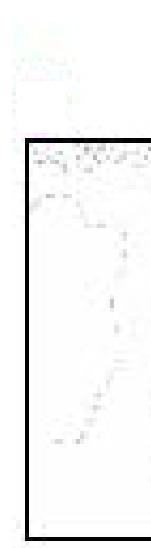
Following the previous experiences, elaborated during the past International joint PhD POLIS/Ferrara – e.g. Albania 2030 (2014), Durana project (2014), Albania Riviera (2015) and When the River Flows (2016) - it is now the moment to deeply investigate, the city of Shkodër, one of the most important city of north Albania, which in the last year it has been studied by POLIS University to develop the new Regulatory Plan (see attached pdf). Despite been an important historical centre, the entire municipality of Shkodër is located in a specific geographic spot where the main morphologic characterized is defined by an urban development in between river, lake and sea.

In order to continue the planning project proposal by POLIS University, the next step is to shrink, select and projecting in the future hidden relevance already present in the Shkodër Urban and Landscape patters. At PhD student will be ask to elaborate a critical though on a specific quadrant belong of the Municipality of Shkodër trying to generate consistent architectural design concept in a way to open new theoretical debates and to elaborate proposal for the future development of Shkodër.

In this framework the workshop intends to address the topic of Shkodër urban development with a strong accent on working in fragments as a method to observe and intervene in a closer scale on certain specificities belonging to the Albanian Landscape. The idea is to focalize the attention in three different parts of the site project: The historical city center, the lake waterfront + river and the sea waterfront. Instead of concentrating on a global vision of the territorial area (as above mentioned already deeper studied in the project plan proposal) this workshop considers the entire area from Scutari until the sea, in terms of smart fragments in order to easily achieve the architecture scale. According to the main topic drawn by the planning proposal, the entire site will be divided in 7 quadrants each of them will be object of study of the workshop.



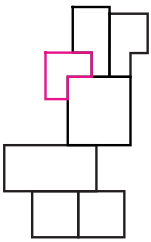
Fig1 / Exhibition "Projecting Shkoder"
source / PhD students



Fragments Legend

- 1 / (Un)margin**
Sara Codarin and Saimir Shtylla
- 2 / Sewing Identities**
Valentina Frighi and Kejt Dhrami
- 3 / LOW COAST**
Gian Andrea Giacobone
- 4 / Hydro Response**
Eranda Janku
- 5 / Commerce + Comfort**
James Stevens
- 6 / Amphibious Devices**
Gerdi Papa
- 7 / Envisioning Nature**
Giuseppe Resta





1 / (Un)margin

Sara Codarin and Saimir Shtylla

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The project proposal deals with two critical issues: the necessity to protect (margin) and the necessity to preserve (un-margin) the relation between Shkodra and the lake. A city which is strongly related and constantly threatened by its homonym lake, as well the main factor of the past and probably future floods that run over during Autumn and Winter months. The western part of the city is a protected area but its lower slope that facilitates the flooding action of the lake, somehow needs interventions to provide protection from floods.

The Dike is a friendly margin because of being respectful to the regular natural grid made by the draining channels that were built years ago, preserving the natural protected areas the best way possible because of being positioned to the limit of the city. Unlike the linear dikes, its fragmentation made by the mirroring of its building section, facing the lake and the urban, suburban and rural territories of Shkodër in other tracks, is an attempt to avoid the sensation of boring and never-ending linearity common for the "basic" dikes.

The building section of each track is different from the basic well-known solutions, too. Despite of making a gradual-stepped or a variable slope section dike, its height is divided into three parts where in between there are two "natural" pools that may retain the sediments to facilitate the grow of green plants and trees when water retires, as well reducing the visual

impact of dike by distributing the five-meter height in proportion with the slope of the area.

The connection between city and the lake is not only preserved but is enforced even more along and across the dike. In the ending points of the dike there are the new port (South) beyond the Rozafa's castle and the natural pool near Vraka's channel where dike assumes the role of an "blue" axis connecting. The transversal paths are provided not only with the purpose to strengthen the relationship between the lake and the urban, suburban and rural parts of territories of Shkodër but they establish in the same time a relation with the dike as well. Precisely in the intersection between the dike and these paths there are public spaces that fragment further this blue axis.

*Fig2 / Masterplan of the fragment n°1
source / Sara Codarin and Saimir Shtylla*



Margin remodeling scheme
Scale 1:2,000

Project section AA | territorial safety

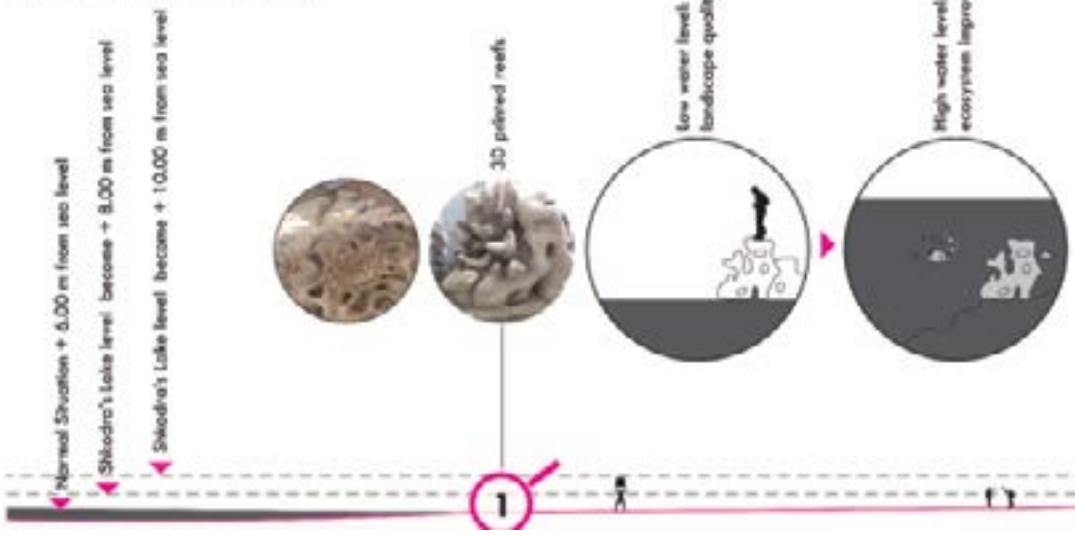
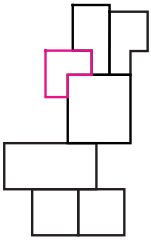




Fig3 / Zoom on the project area
 source / Sara Codarin and Saimir Shtylla



Fig4 / Project area profile
 source / Sara Codarin and Saimir Shtylla



2 / Sewing Identities

Valentina Frighi and Kejt Dhrami

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The fragment under investigation focuses on the main city of Shkoder and on the relationships between its surroundings and the river Kir. The plot, located in the north-east of the general area, comprises the main access-roads to the inner city as well as the biggest industrial site of the whole municipality.

As starting points of the work has been taken in consideration the provisions of the existing plan for the municipality of Shkoder, in order to understand what could be the main criticalities on which reasoning on. The proposals concerned the realization of an infrastructural bypass - in order to pass the east of Kiri river and unload the traffic through the historical city center -, the improvement of the connections between the train station, the rest of the area and the waterfront and the regeneration of the riparian areas. Downstream of these considerations, the project proposals concentrate mostly on the inner city, on its northern part and on the riparian areas of Kir river.

Regarding the first, the work started with an analysis of the squares system (already identified by the local general Plan) and of the existing pedestrian paths within the city center, trying to understand how to replicate their features in other parts of the city. Furthermore, a recognition of the main points of interest and historical sites of the inner city has been made in order to provide new pedestrian connections between them.

Thanks to these analyses the main critical issues was figured out, leading to the definition of a two-scales intervention

strategy both at the urban and at the building scale. Regarding this last, the problems identified were connected with road systems and with the need to guarantee access, light and visibility to all of those dwellings hidden by enclosure or other buildings. Other questions identified concerned maintenance and re-functional issues of communist blocks.

On the other hands, regarding urban and functional issues, the decision made was to work on the empty spaces, often present along central roads, intervening on them through informal activities or functions able to give them back to Shkoder inhabitants.

Finally, several classes of actions have been developed in order to respond to the issue stated above. The first deals with building identities and provide interventions in order to refurbish communist blocks and to develop new connection solutions through the urban fabric. The second class of actions deals with the empty rooms at the floor level and provide suggestions in order of take advantages of them through their re-use for commercial or leisure activities, also informal. Last actions, at a more urban scale, were the ones concerning the in-between spaces, that propose to use abandoned buildings or empty spaces to establish inside them cultural or leisure time activities, such as informal libraries and small thematic gardens. Also suggestions of introducing new functions within the city center and re-distributing the already existing ones in order to enhance pedestrian routes has been provided.

04_the analysis / scale 1:500

- 1. existing system
- 2. existing system
- 3. the proposals / scale 1:500
- 4. proposed system
- 5. proposed system
- 6. existing system



05_multidistribution of function / scale 1:500

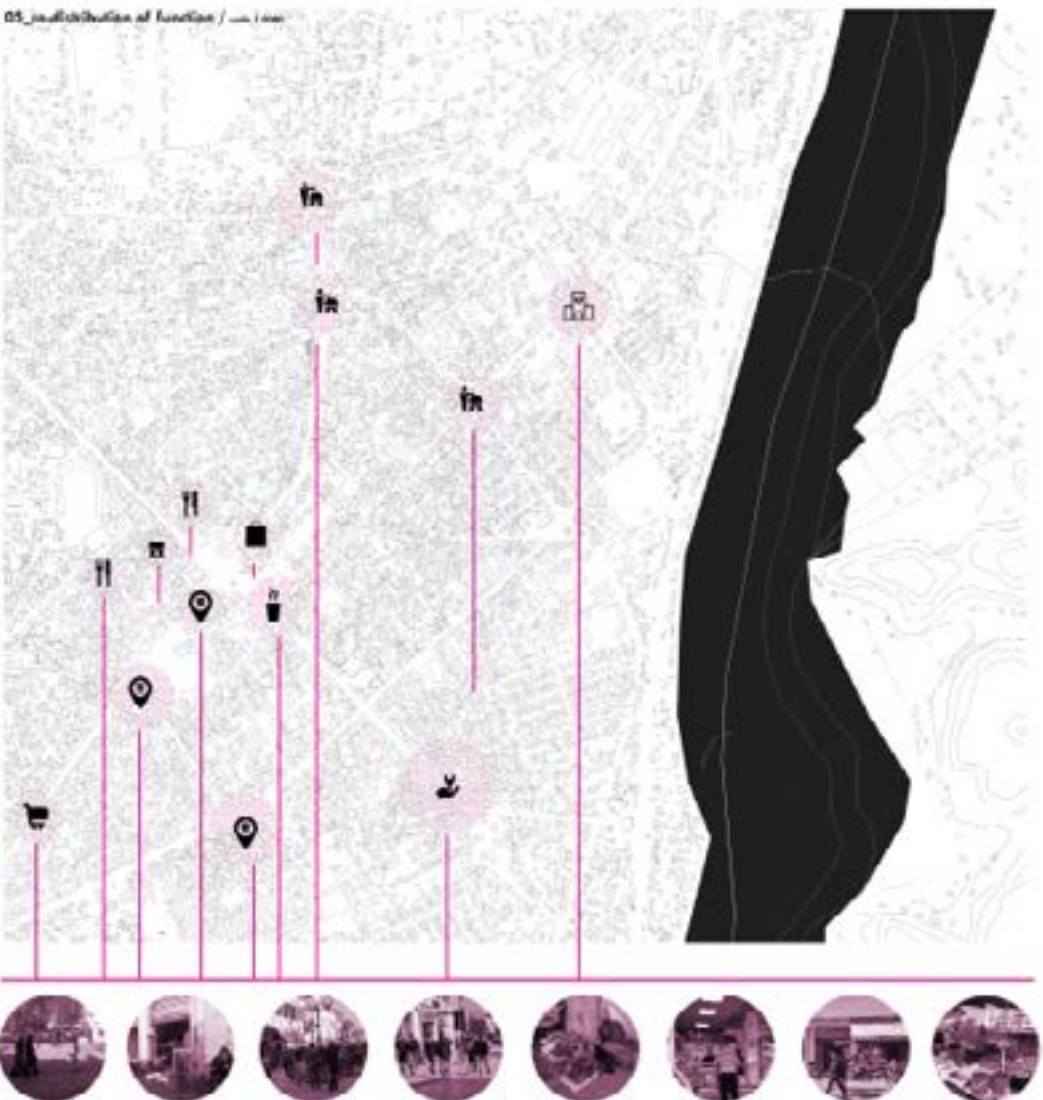


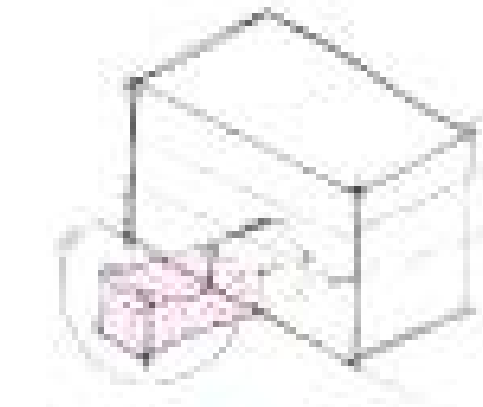
Fig5 / Masterplan of the fragment n°2
source / Valentina Frighi and Rejt Dhrami

/ classes of action for the inner city /

01_building identity

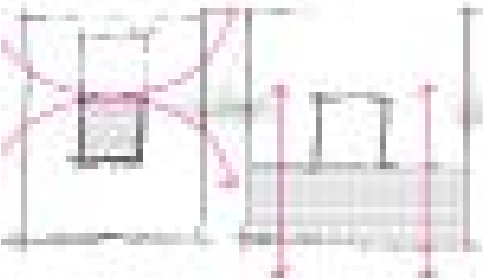
rehabilitation of concrete blocks

improving the access to those ancient buildings now hidden



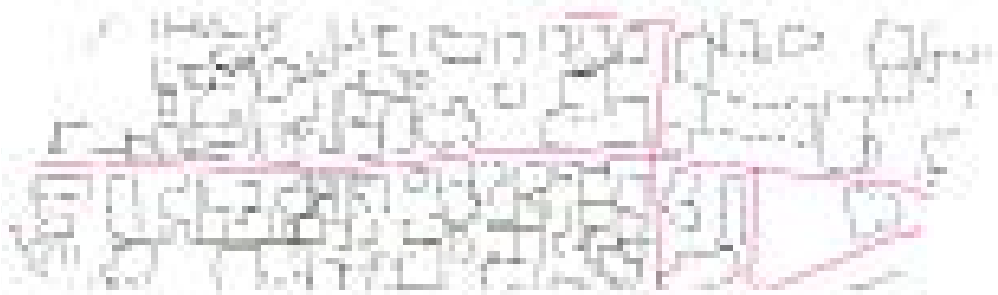
▷ Low intervention of energy efficiency and facade painting

▷ Introduction of new light-ventilable elements acting as curtain-walls in order to respond to some of needs.



▷ Provide connection solution for hidden ancient houses

02_old roads system

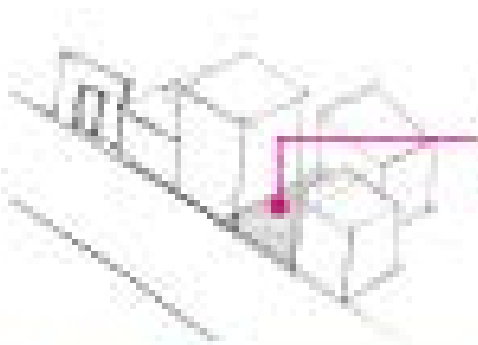


▷ Consolidation of ancient roads and streets system.

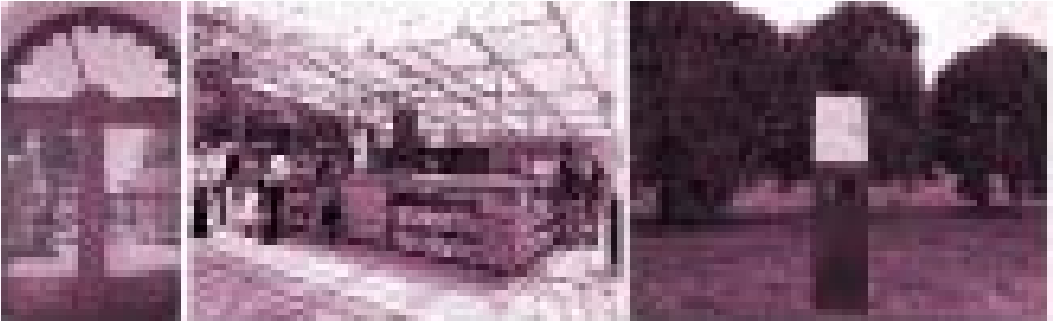
▷ Improvement of the pedestrian area using traditional and local permeable materials, paving, seating and green areas.



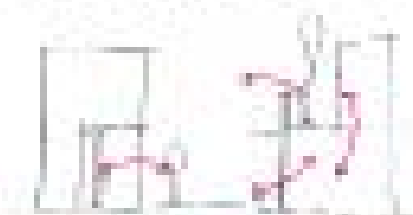
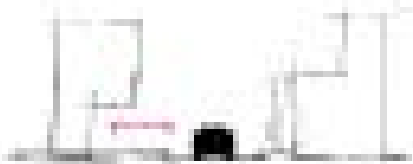
03_working on the in-between spaces



= Using abandoned buildings or empty spaces to establish informal-cultural or domestic activities such as libraries, social thematic gardens.



04_two levels of interaction / upper floor vs. street level



= Improving connection between the two side of pre-determined roads by leveling out the street level.

= Take advantage of empty spaces of two building levels with the insertion of social recreation and culture (street row and social local activities).



Fig6 / Project actions
source / Valentina Frighi and Kejt Dhrami

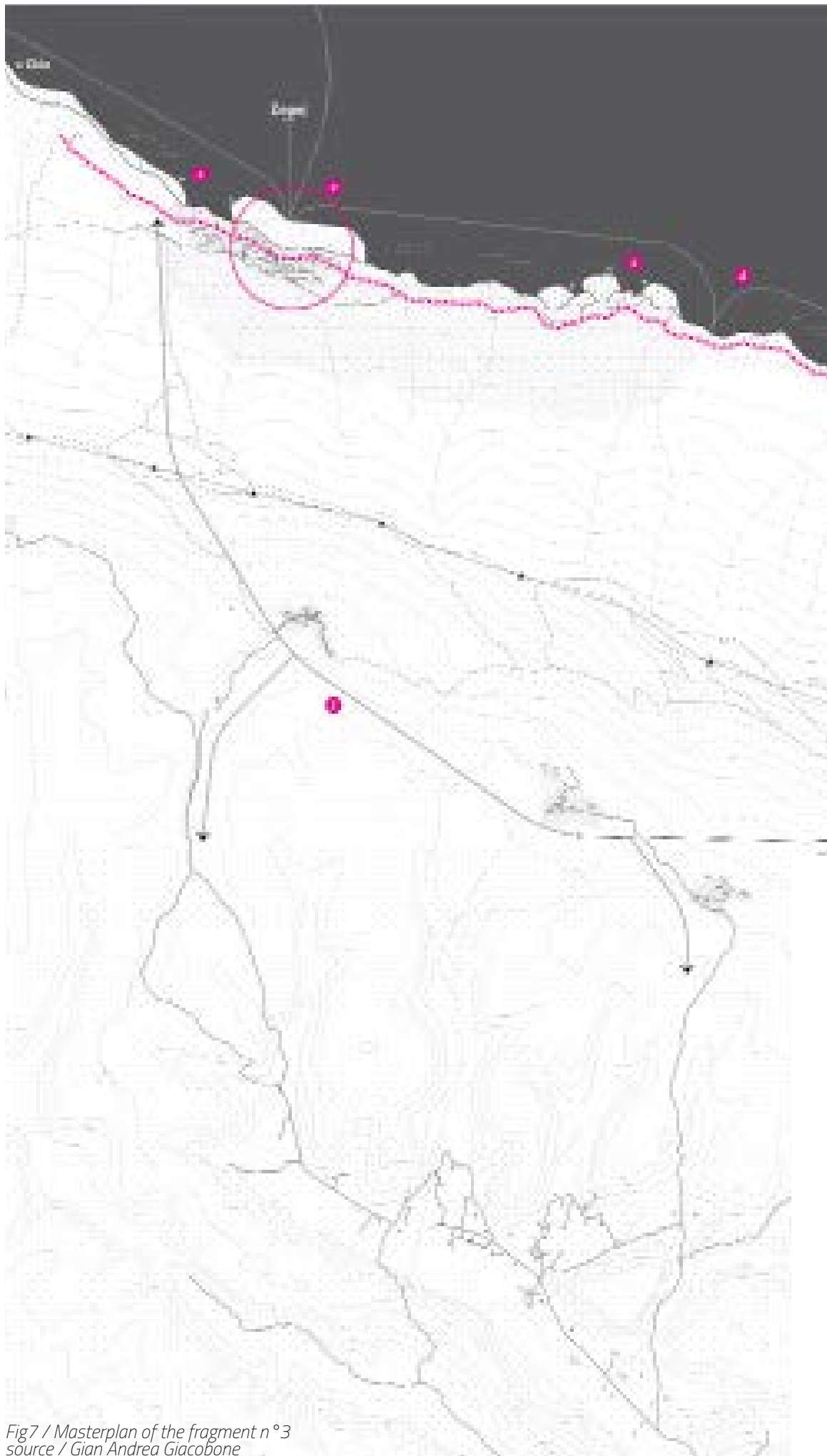
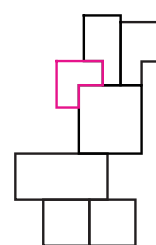
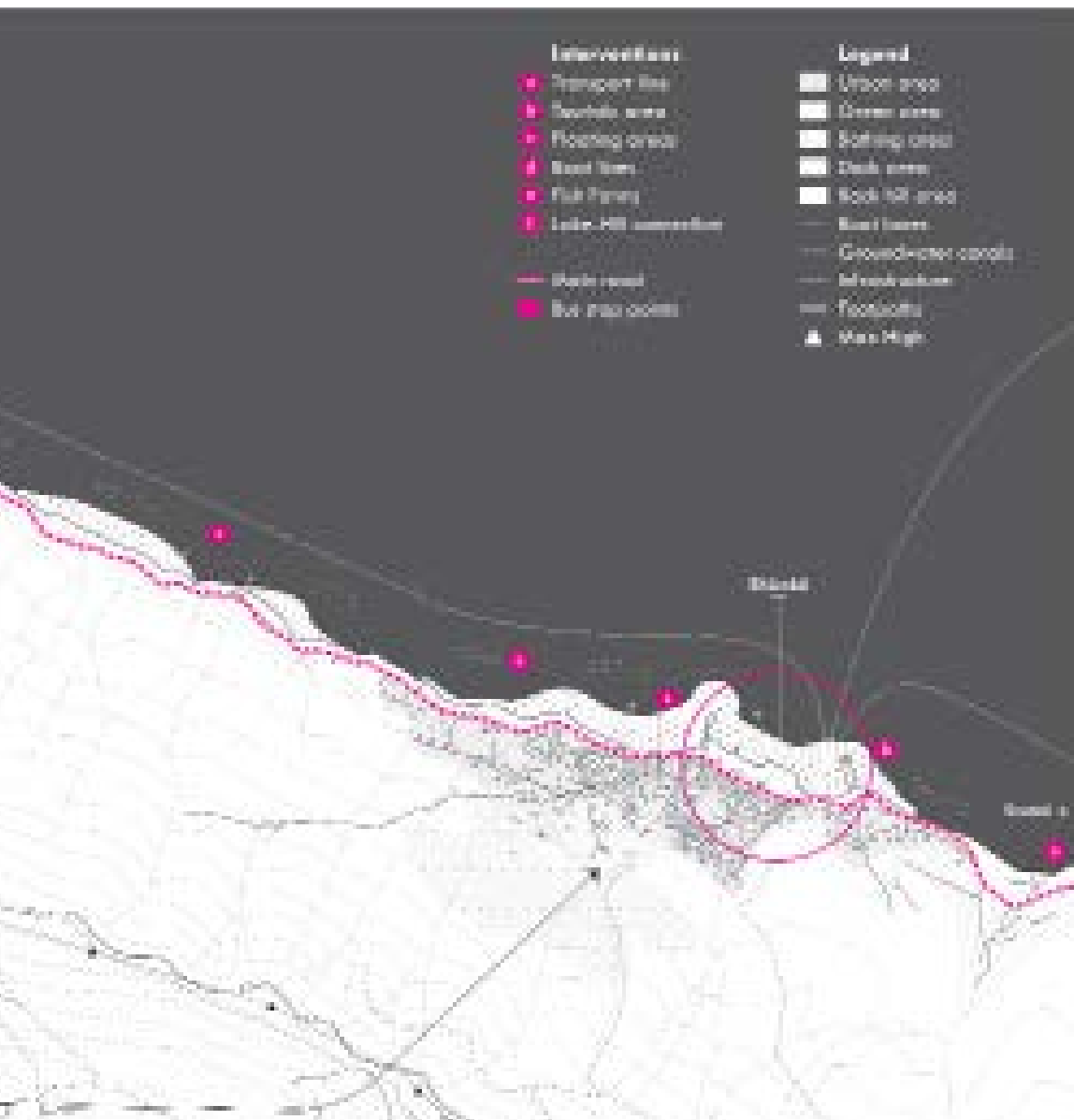


Fig7 / Masterplan of the fragment n°3
source / Gian Andrea Giacobone



3 / LOW COAST

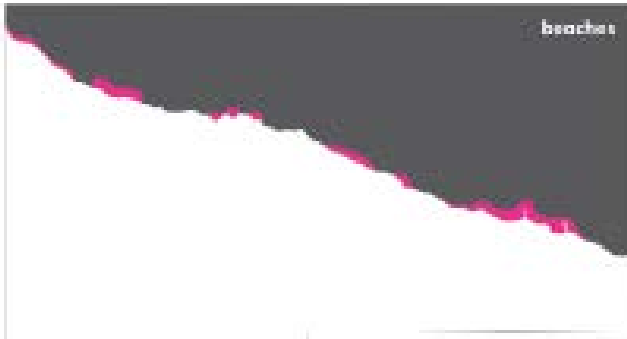
Gian Andrea Giacobone

The project proposes the urban redevelopment of the southwest part of the town of Shkodrë on the border with Montenegro, which is located along both the lower shore of the homonym lake and the final portion of the Tarabosh mountain range. The interest is focused mainly on the enhancement of the two cities Zogaj and Shirokë that arise within the area examined.

The great value is certainly the huge touristic and landscaping potential that the area offers through the conformation

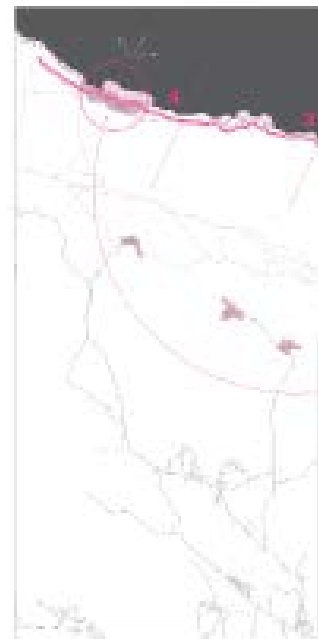
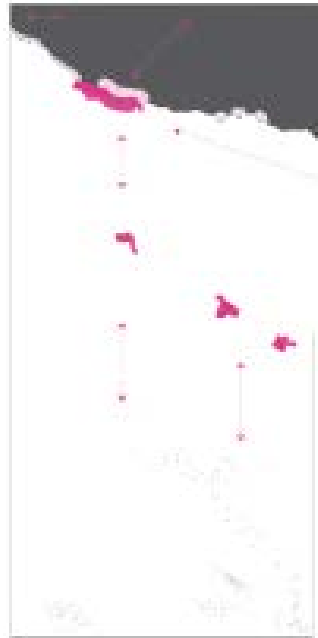
of its territory. Most of the lake coast can be used as a seaside stretch, while the topography of the landscape allows you to develop, on the hillside, several activities in contact with nature as the practice of hiking or mountain biking. However, the main issue that has been analyzed is the lack of a proper and connected infrastructure between the area (and its related cities) and the main center of Shkodrë, which prevents the segment to be reached or left accessibly by all. There is not even a direct and reciprocal relationship

Process



Potential

The area offers a great potential due to the presence of some bathing area along the coast of lake.



between the valley overlooking on the lake and its related hinterland belonging to the municipality of Ana e Malit.

The proposal wants to give an answer to these problems by creating slight changes such as the creation of a network of connections that they can exploit and foster the slow mobility and do not disrupt the natural landscape. The entire project area is under protection by general local plan because thanks to the peculiar environmental characteristics of the territory, it has been possible to grow a precious and vast biodiversity that needs to be preserved.

The project adopts the main street that runs along the coast as a communication route both for the cycle lane and the public transport line.

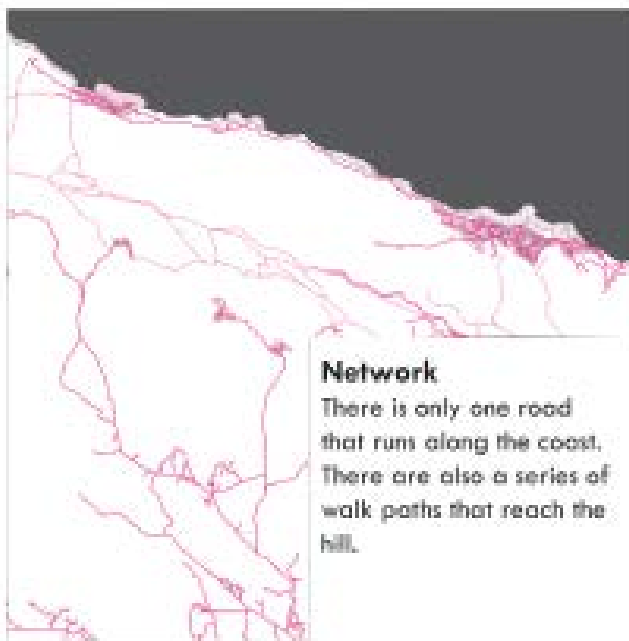
Along the way they have been identified four strategic points as possible stops that make the bathing areas and the cities of Zogaj and Shirokë more affordable to reach.

For the internal area it's provided a reunification between the two sides of the hill through the extension of pedestrian and bicycle trails with panoramic or refreshment points, to keep the experience in contact with the autochthonous nature of the territory.



Problem

The two villages are disconnected from Scutari and Montenegro. There isn't also the relation between the lake and the hill.



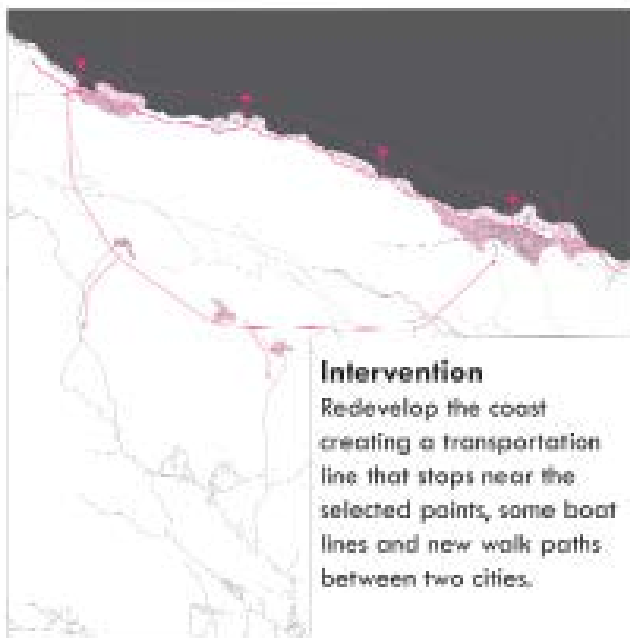
Network

There is only one road that runs along the coast. There are also a series of walk paths that reach the hill.



Solution

The idea is to use the main road along the coast creating some points to reach the beaches and use the two villages as stops for boats.



Intervention

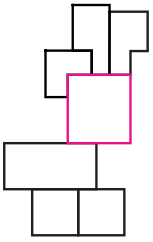
Redevelop the coast creating a transportation line that stops near the selected points, some boat lines and new walk paths between two cities.

Fig8 / Project process
source / Gian Andrea Giacobone

It's also provided an intervention within the two cities through a hypothesis of regulation of building area to do not allow informal urbanization, based on a circular grid of terraces longer correspond to the real shape of the land. Some paths at the end of the hypothetical area of urbanization delimit the boundaries of its expansion. A series of squares have been provided as focal points to rethink the viability within the city centers, enhancing some streets already existing.

In both cities have been thought two small harbors to reconnect the observed area to the other places passing along the lake

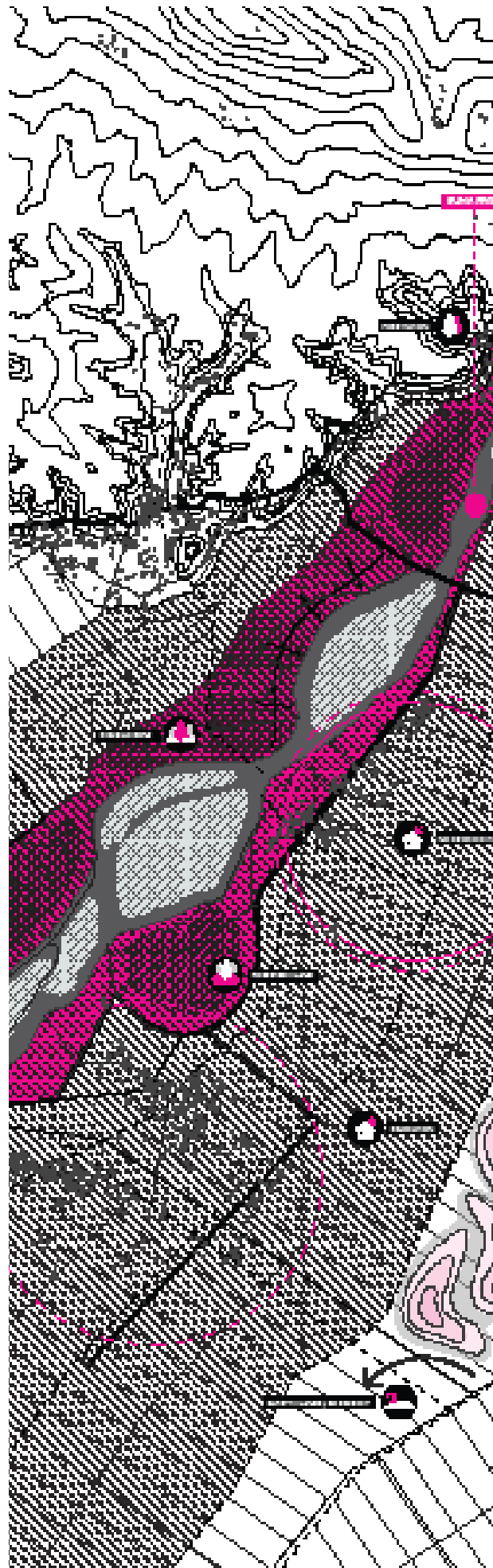
as well. Being the city of Shirokë a place closer to the center it is more accessible to visitors, so it has been designed a touristic harbor including a protected bay created through some natural floating shelter, in order to take advantage to the resort area longer. While for Zogaj (where there is already a small fishing community) has been designed an expansion of the harbor and the creation of a section dedicated to fish farms in order to boost the local economy through the creation of small fish markets, or gastronomic activities related to the ichthyic husbandry of the place.



4 / Hydro response

Eranda Janku

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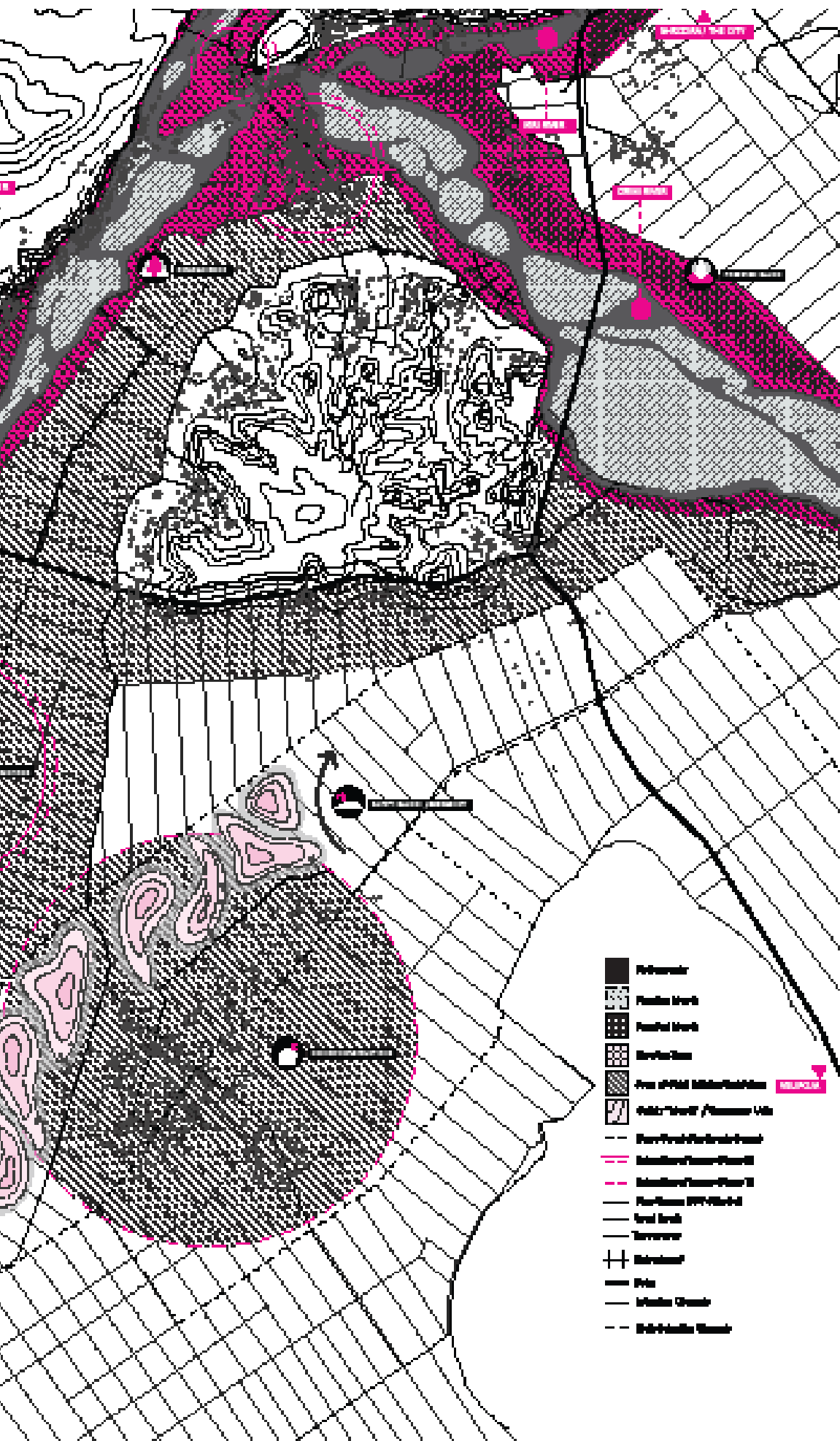
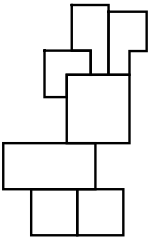


Fig9 / Masterplan of the fragment n°4
source / Eranda Janku



5 / Commerce + Comfort

James Stevens

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The unique conditions warrant an agricultural proposition of balance between polyculture farming and consolidated farming. This balance will provide both the volume necessary for Albania's farmers to be regionally competitive by maintaining a volume-to-yield ratio that is sustainable, and provide possible export surplus. The profits of this industrialized product should be used to subsidize polyculture farms dispersed in the same landscape. This will not only sustain the fertility of the land, but also preserve the epistemological knowledge of farming so that it remains in the domain of the people - not the government or corporations. This balance can and should be achieved through land division that not only maintains the percentage balance, but ensures proximity and intermixing of polyculture and industrialized farms.

The industrialized and polyculture farming balance suggested can be debated in their proportions, but the potential outcomes are clear: local produce continues to prosper and the peasantry's purpose remains. A designer's contribution is one that embraces the slow in Slow Valley and encourages visitors to shift their speed to accommodate that of the context. The design proposal for Slow Valley is not heavy-handed infrastructure, but a simple and slow trail. The trail meanders through the valley, and the features along the way serve to tease out the beauty and assets of this unique place while supporting both polyculture agriculture and the new tourism industry. The proposal is

described through a series of vignettes consisting of trail and landscape condition, each facilitating a strength of the land's time and place by addressing the needs of the peasantry and the visitor equally.

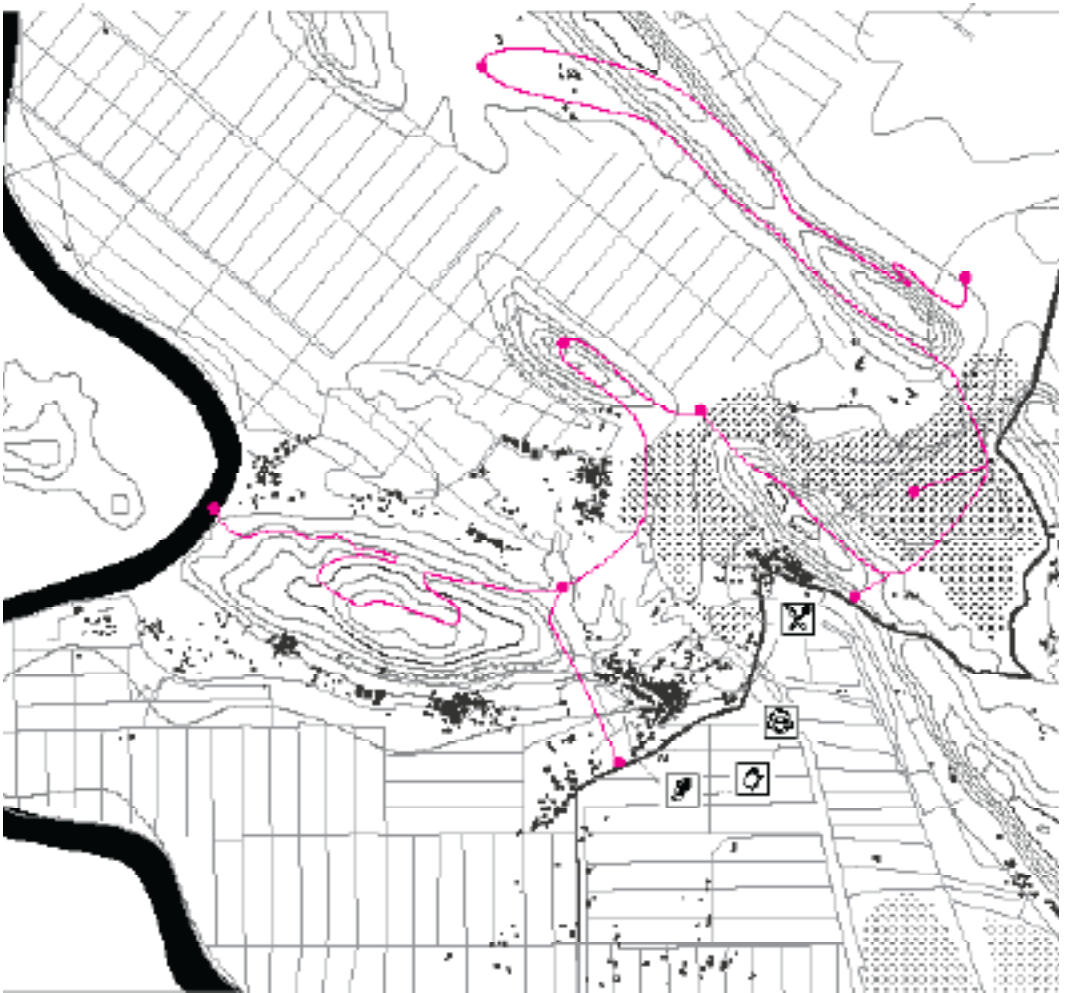
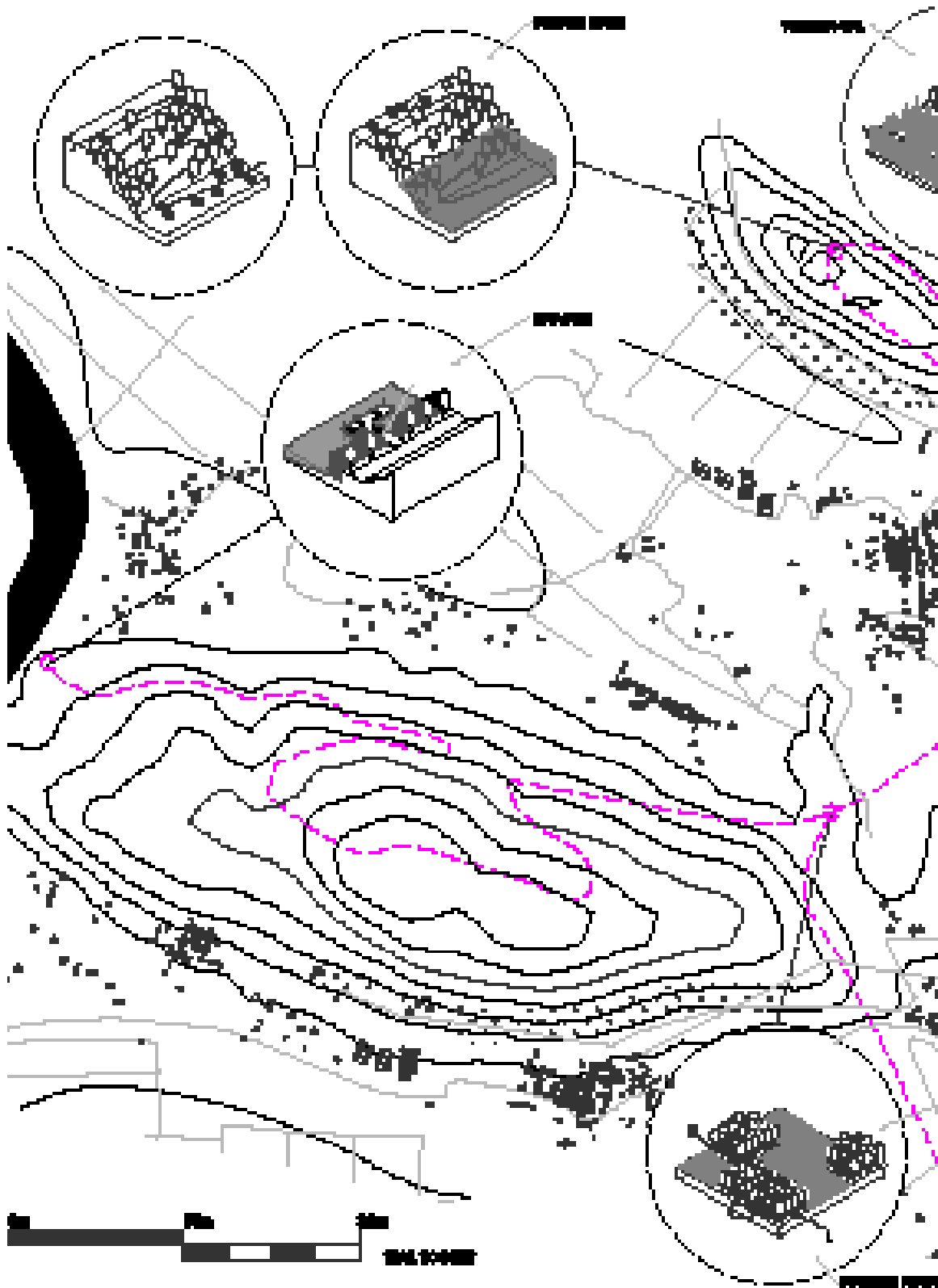


Fig10 / Masterplan of the fragment n°5
source / James Stevens



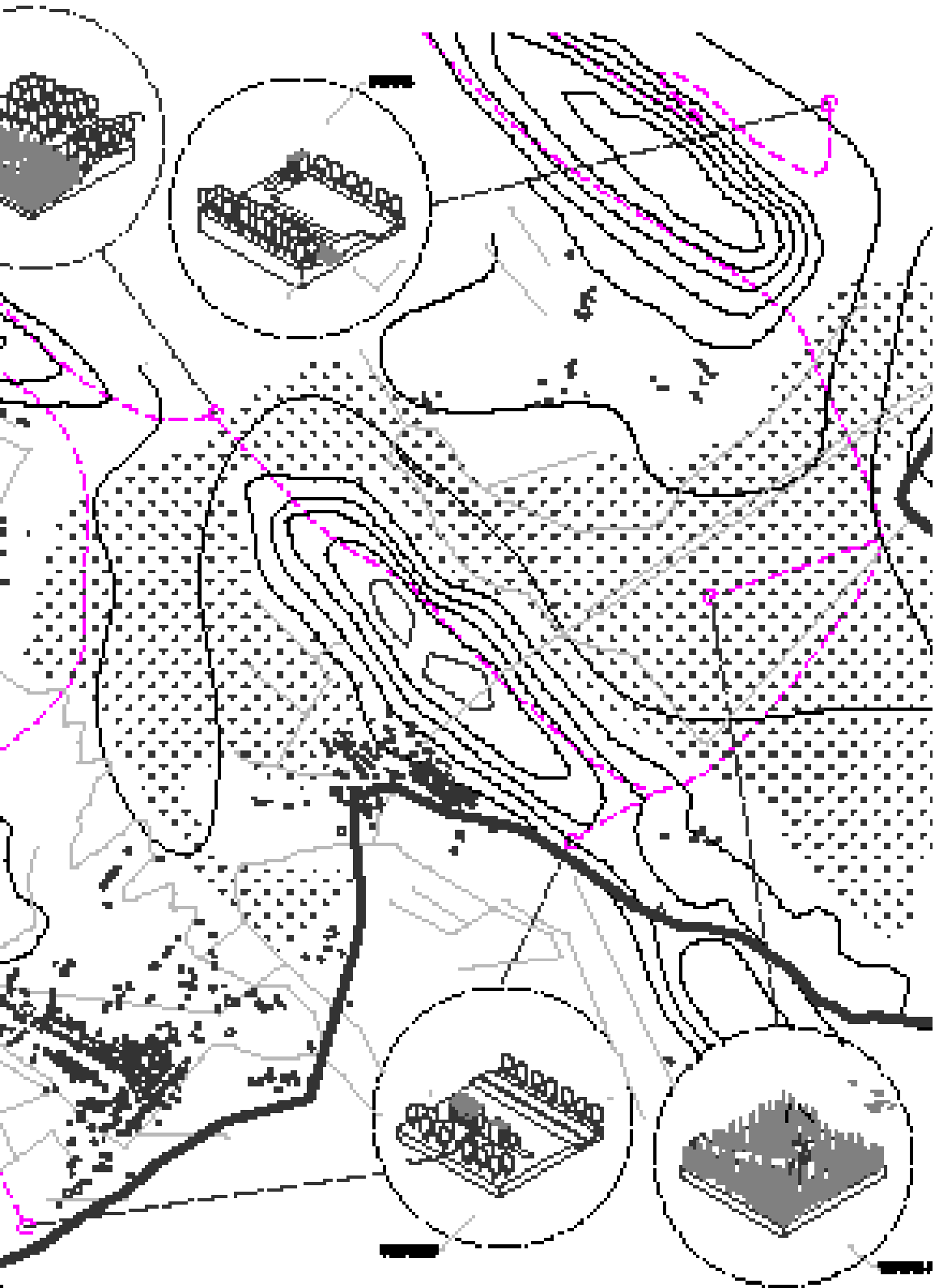
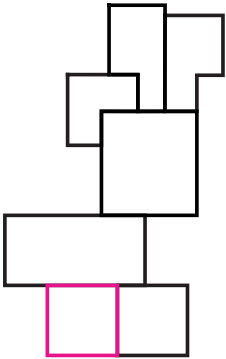


Fig11 / Zoom on the project area
source / James Stevens



6 / Amphibious Devices

Gerdi Papa

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The intervention aims to address some of the main issues that the Shkodra sea shore is facing. One side the informal Velipoja is pressuring the still not urbanized part of the sea line. On the other side the area is constantly with floods, destroying the few homes of the locals and also erosion from the sea and land has been a factor to the constant decline of the sea line. Pollution as well as the fact that the area has been declared a protected landscape and is home to rare birds asks for a particular approach.

Amphibious Devices aims to create tools to co-exist operations to preserve the coast through artificial and improve the current conditions. It offers a set of sand dunes and a barrier of reef balls and also the mountain using local vegetation. The wetlands present in the area have been the home of rare species of birds and amphibious devices aims to reinforce the current landscape to create better conditions for the local species to breed and live in the wetlands that can also be nicknamed as "Bird Airport", which in turn can also create a touristic attraction for people who love bird watching.

The last amphibious operation proposed comes in the form of Amphibious Housing. As flooding is well known and common problem in Shkodra, and something that doesn't seem that will be fixed anytime soon, necessity requires for new housing solutions. The proposal presents a tried prototype of a floating house that rises with the water level. The house itself

remains undamaged while the platform floats on the rising levels of the waters, being kept balanced by the vertically moving columns. As the Amphibious House is designed to last in emergency situations, where stranded habitants can wait for days for rescue, the house is equipped with solar panels, food storage and a small lifeboat.

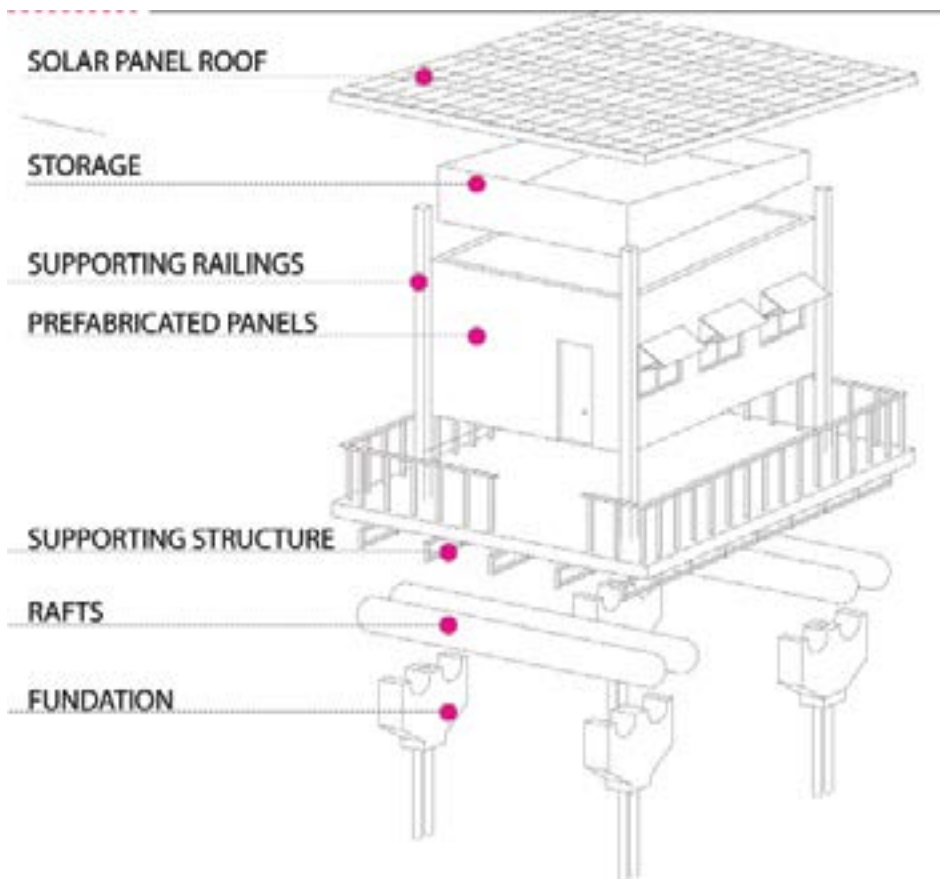


Fig12 / 3D representation of the device designed source / Gerdi Papa

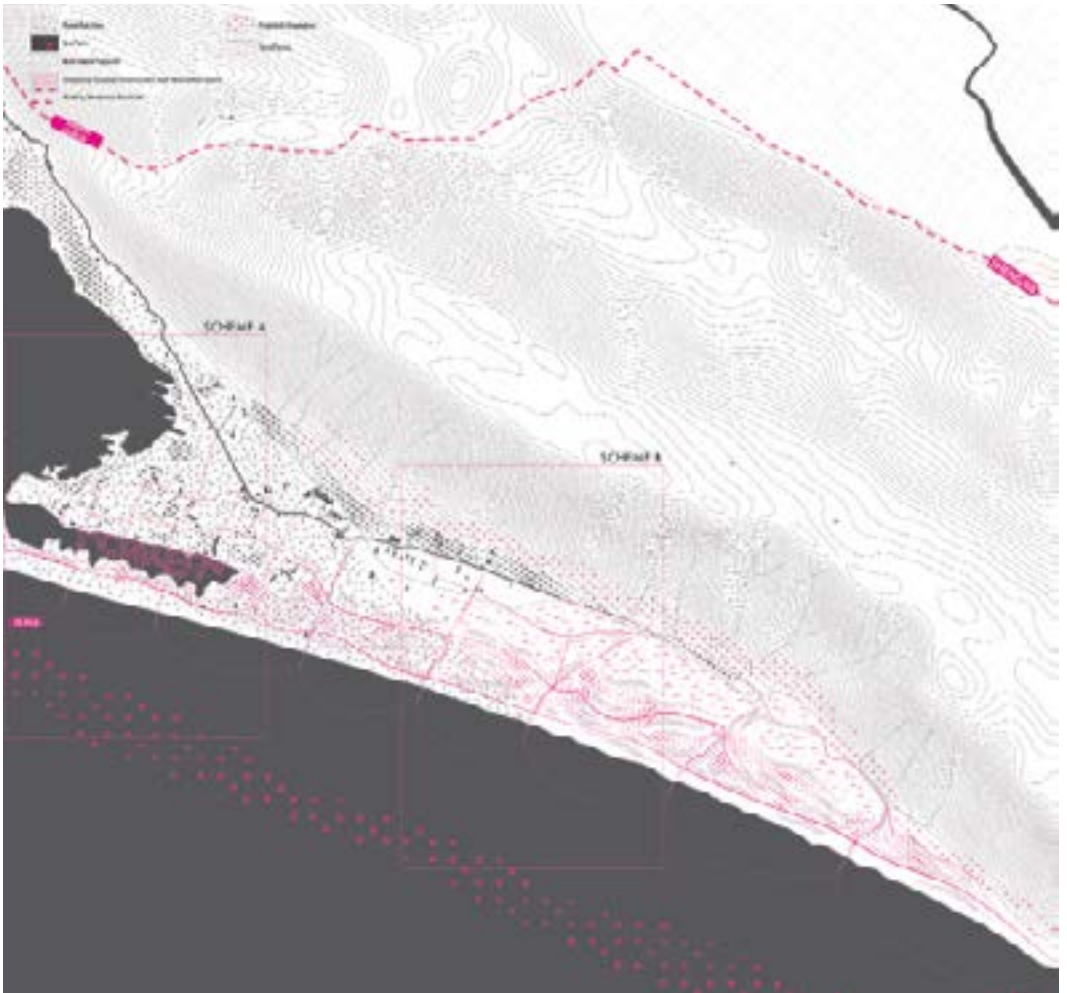
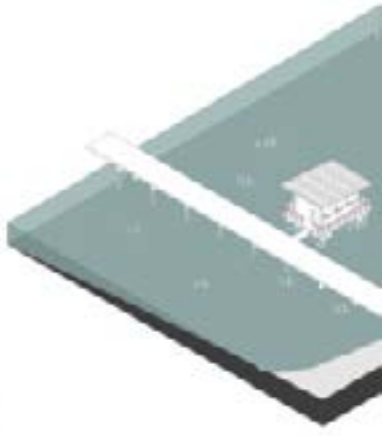
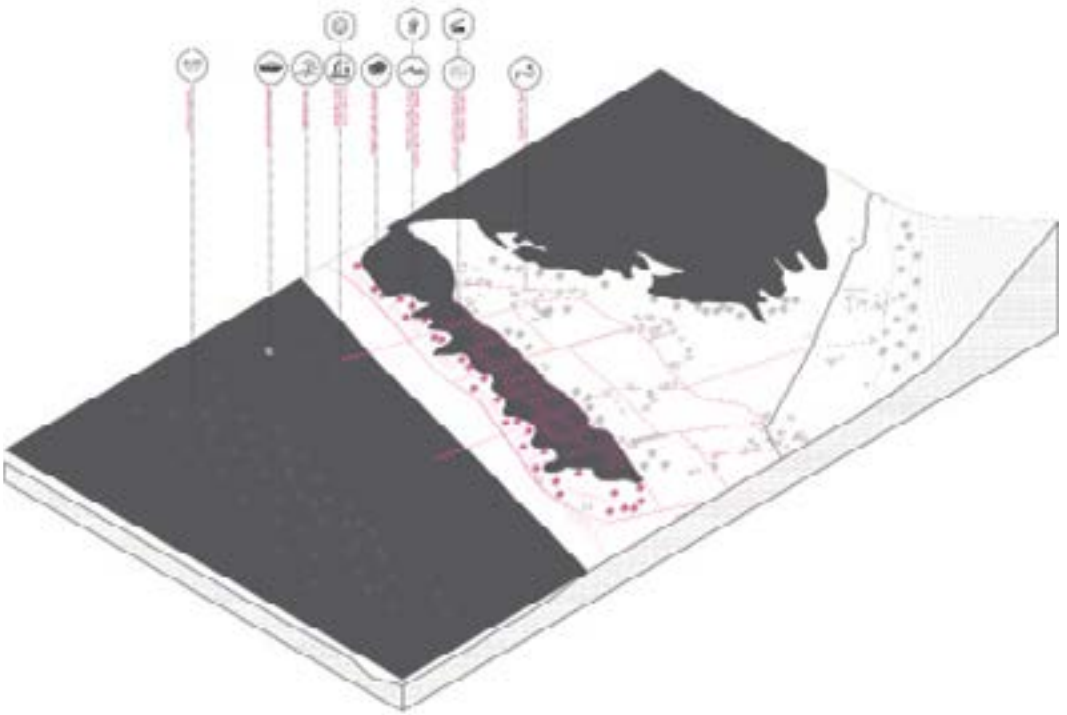


Fig13 / Masterplan of the fragment n°6 source / Gerdi Papa



NORMAL WATER LEVEL
 THROUGH NORMAL WATER LEVELS THE
 RAFTS SIT ON THE BUILDING FOUNDATIONS

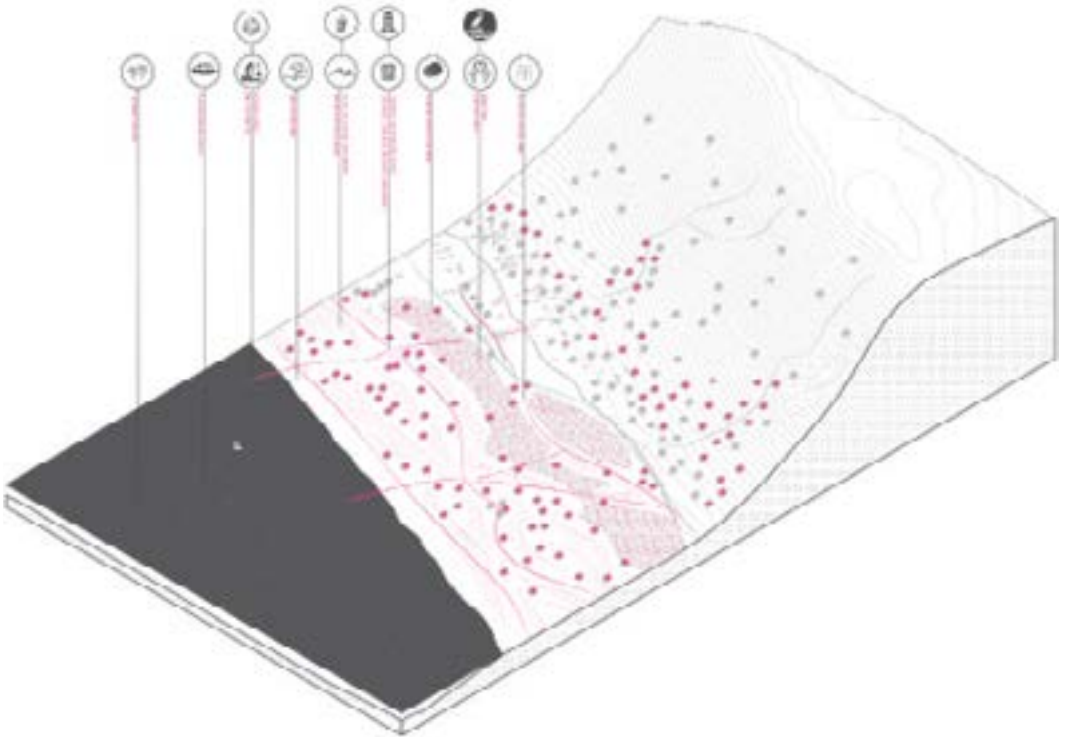


Fig14a / 3D sections of the project area
source / Gerdi Papa

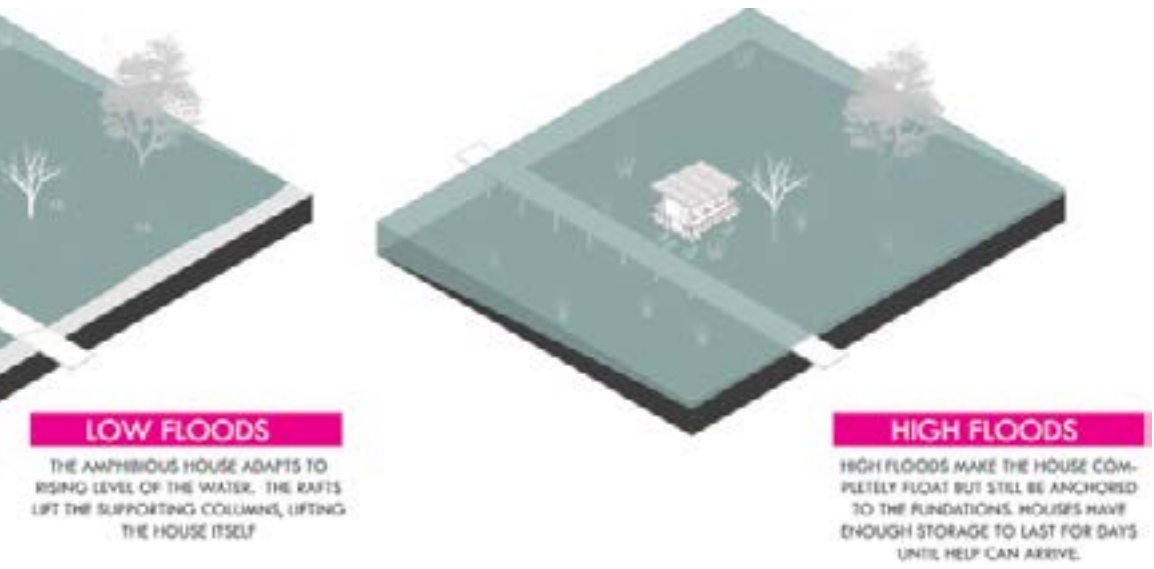
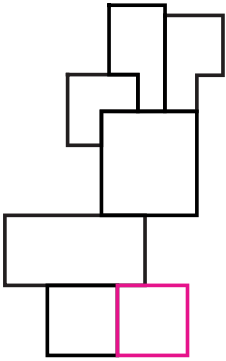


Fig14b / Project scenarios
source / Gerdi Papa



7 / Envisioning Nature

Giuseppe Resta

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The seventh fragment frames the mouth of the Buna River, ranging from the Albanian part of the delta to the western side of the marsh. The project called "Envisioning Nature" is a soft landscape infrastructure that enhances the natural diversity of the area (wetland, meadow, rural area, coast, urbanization), though addressing natural and human threats.

Since flooding phenomena and informal constructions are strongly interwoven, an integrated plan of action should be implemented. It is based on a multiscale toolkit, which combines water and air quality assessment, emergency structures, and watchtowers. The proposal about Velipoje area follows the "satellite concentration" strategy in relation to Shkoder: given the predominance of residential informality, urban area requires clear limits, amenities and strict measures to regain the balance with the natural environment. A Pedestrian promenade would reduce coastal erosion and the designed paths would retrace the existing rural network to limit further agricultural fragmentation. Agricultural land is meant to be consolidated, while a riparian corridor establishes a better protection of the land from flooding risk. This action would include a pattern of woods to establish a strip connecting the two main ecosystems: the delta of the river and the marsh, nonetheless defining a green belt to confine urbanization. Such landscape-scale toolkit would enhance pavement permeability and the regeneration of the irrigation channel network.

In the rural area, a large logistic structure

is provided for collecting agricultural goods and storing agricultural machinery. In the residential area, informality is addressed with the consolidation of the urban form, introducing compulsive services and green areas connected to the elevated pathway of the project. In the center, a bazaar would define a flexible space for periodic markets, fairs, exhibition and large-scale events.

The architectural-scale toolkit provides a series of landmarks, each one focusing on a different landscape typology. Such network of environmental observatories recalls the forms and the functions of the ancient Albanian watchtower system to supervise the territory. In this case, watchtowers are meant to be used for bird watching and landscape photography, even relating to the historical tradition of Shkoder and that of the Marubi museum. At the same time, these structures would monitor water pollution, measure flooding risk, and check wild life related practices. In case of natural threats, the tower shelters animals and food stocks.

In the frame of the possibility to make Buna River navigable again, one of the architectures is placed on the bank, functioning as river dock; while another landmark, a circular platform by the sea, can be used during the summer. Envisioning Nature is structured on a suspended pathway over the ground, whose structure functions as a pier, in order to be still operative in case of flooding.

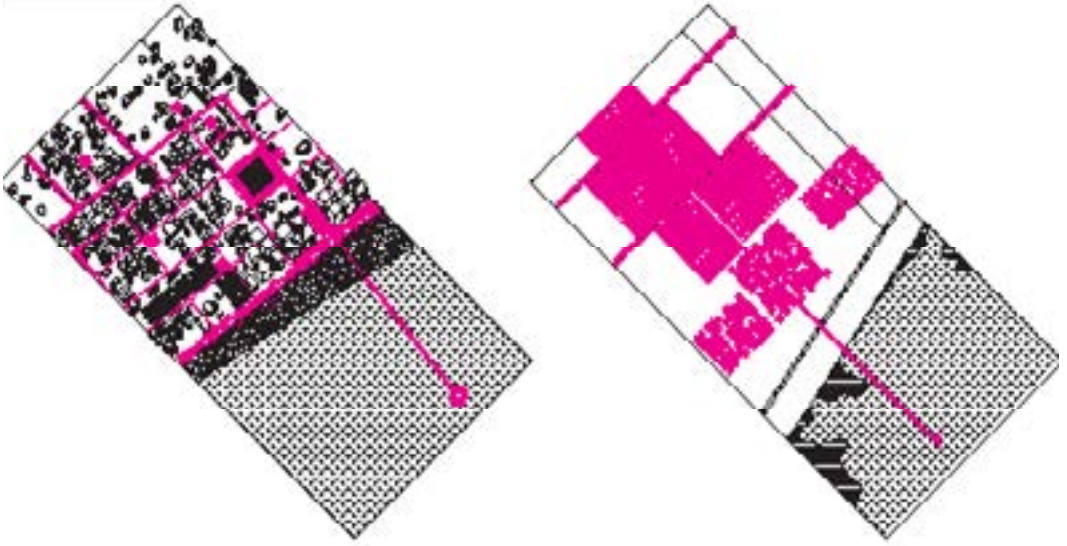


Fig15 / Zooms of the project area
source / Giuseppe Resta



Fig16 / Masterplan of the fragment n°7
source / Giuseppe Resta