



**TÉCNICO LISBOA**

## **URBAN PROJECT CARNIDE | AV. LUSÍADA | BENFICA**

Infrastructure, Public Space, Urban Continuity

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Extended Abstract

**ARQUITECTURE**

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## 01 | INTRODUCTION

### 01.01 | Aims and Area of Investigation

The main purposes of this work are the presentation and analysis of project-based strategies developed for the Final Project subject, part of the fifth and last year of Masters in Architecture, throughout the academic year 2011/2012.

While operating in an area with heterogeneous, fragmented and dispersed urban tissues, this paper intends to elaborate an urban intervention strategy capable of empowering the territory, offering efficient alternatives to the problems here observed.

A strong aspect was taken under consideration when choosing the area of *Benfica/Carnide* – its great accessibility. This is seen as an asset towards accomplishing the finality of developing an urban structure able to integrate and articulate all different zones of Lisbon's North-West ring.

Seeking to find an answer to the urban problematic inherent to the project's area of intervention – the urban discontinuity, the impact of the already existing infra-structures and the lack of identity – a proposal will be exposed based on the following premises: restructuration of the road network and building organization, as well as the continuous ecological organization complemented by a structured pedestrian and cycling route.

In this document, a greater focus is given to the second phase of the work done along the academic year, as this is its main goals, not forgetting the contribution of the analysis and strategies developed in the initial phase, which will opportunistically be presented further along the paper.

In order to frame and introduce the options taken in this urban project, a study of the importance of infrastructure, public spaces and urban continuities in the city's context is undertaken. Besides this theoretical investigation, a series of case studies were analyzed, with the intention of reflecting about similar realities and gathering support in common articulation points.

### 01.02 | Reasons for the Choice of Project and Author's Motivations

It becomes clear that a city like Lisbon, with so many centuries and having suffered various occupations throughout time, carries a wide range of problems relating pre-existence. Whatever may be the dimension in the urban intervention, this one will have to face not only the problems of the zone in which it is entering but must also adapt to a context under construction and transformation, and which must be respected.

During the process, the urban project faces a wide range of obstacles, most of them unexpected at first, this being a constant challenge.

Despite focusing in an area of Lisbon which combines an enormous housing, cultural and economic potential, it is understood that nowadays, this is a fragmented area, badly articulated with the evolving urban tissue. The lack of urban organization does not allow the city to take maximum profit of its assets.

The relevance of intervening in this area holds on to the idea of finding a solution to a territory, not limiting itself to the intervention area but going further, creating impact in the evolving urban organization. This way, it becomes a crucial element in the integration and articulation of Lisbon's North-West ring.

Thus, the interest and pertinence of this paper relies mainly in the demand of searching for efficient strategies towards the future development of this territory and surroundings.

In this project's report lays also a personal interest as a meeting point is established between the theoretical thoughts and practical intentions of the author under study all year round.

## **02 | DEVELOPMENT**

### **02.01 | Conceptual Framework**

In the first chapter, brief thinking is given to two themes regarding the city, part of the investigation undertaken during this project. This investigation considers the drawing of the Infrastructure in the City and its important role in the definition of New Public Spaces | Urban Continuities.

### **02.02 | Case Studies**

The second chapter presents four case studies which frame and introduce the proposed Urban Project. This selection was mainly based in the will to reflect on similar realities to the one of this project, sustained in common articulation points.

This being, the following four case studies will be shown: The Passeio Atlântico and Plano de Pormenor das Antas, in Oporto and the Parque en El Nudo Viario de Trinitat and Plaça de les Glòries Catalanes in Barcelona. The first two projects were studied at the same time the project was being done and this helped defining its principle premises. The others are now being used a posteriori for a deeper critical analysis about the respective intervention project.

### **02.01 | The Project: Analyzing the Area**

The third chapter presents a detailed analysis of the project's zone, deepening information of the area under investigation, allowing a more conscious intervention. The analysis begins with identifying the project's intervention area and the scope under investigation, followed by Lisbon's historical and urban contextualization. Here, aspects which have generated greatest impact in the urban development of the North-West ring will be analyzed. Additionally, this chapter will include a physical characterization of the

Road Network, Public Transports Network, Cycling and Pedestrian Network, Building Organization, Physical Features, Green Spaces Organization and Obstacles.

## **02.04 | The Project: Presenting the Proposal**

The Project presented in this chapter was created for the Final Project subject with a one-year course and was developed in two main stages. The exercise meant elaborating a project which would present the urban reorganization of Lisbon's North-West ring, a territory designated by heterogeneous, fragmented and dispersed urban tissues.

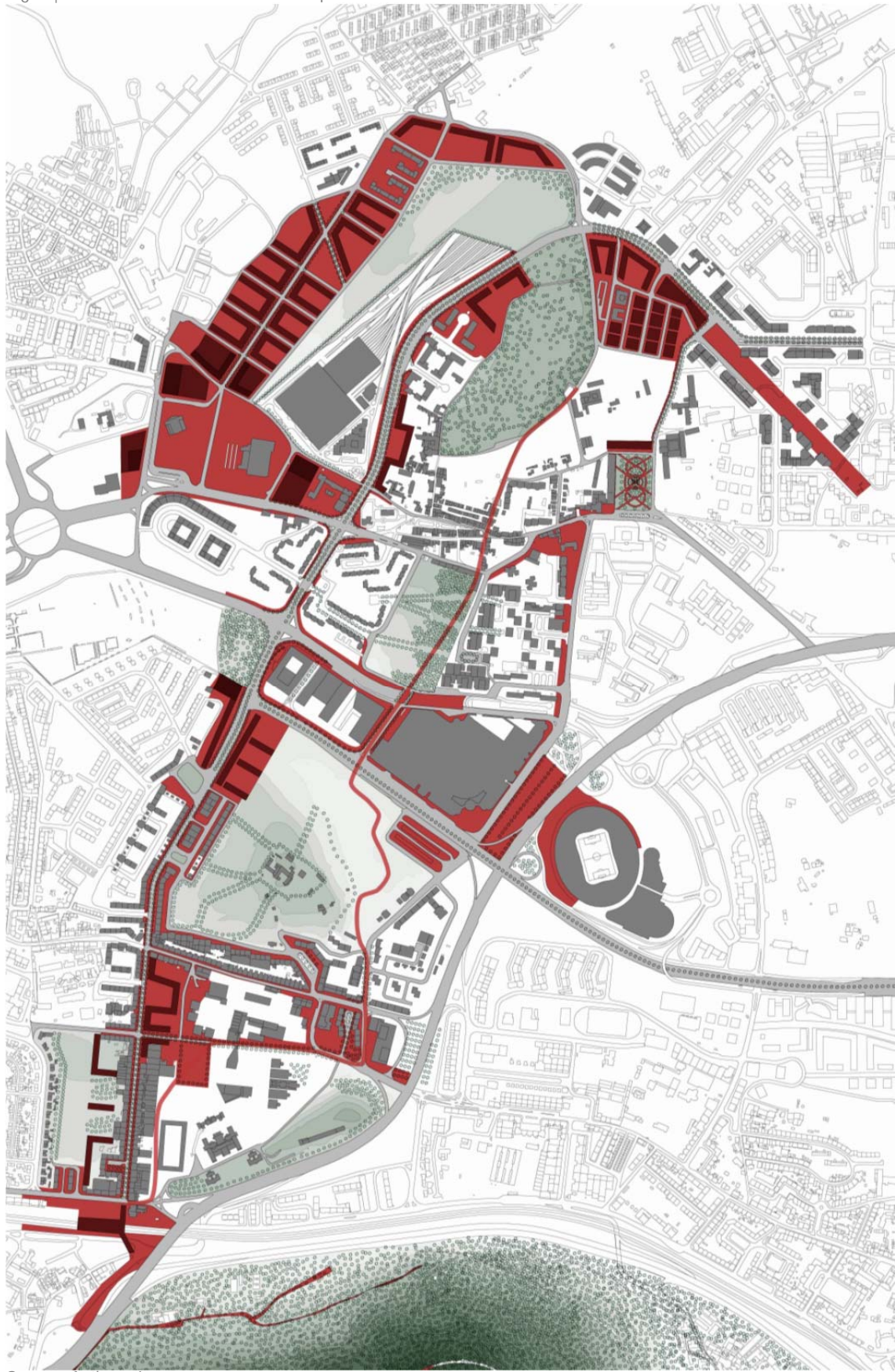
### **Phase 1 – Reorganization and Revitalization – North-West Ring**

The first phase occurred during the first semester, beginning with a group assignment. During this time, information on the project's field of study was collected, including the North-West ring and part of Odivelas county and Amadora county. This information permitted to evaluate blockages, disjunctions and potentialities within the zone and consequently, reformulating the proposal. In this stage, the broad intentions of the project were offered, towards the road structure reorganization, green structure, building structure, as well as the entire public spaces network.

#### **Synthesis – Phase 1**

- Creation of a structuring axis which guarantees a connection between the entire North-West ring. By being linked to the other axis connected to the city center and local network, it assures continuity amongst the different grids of the territory;
- The green structure represents an important element in the field study, vital in the creation of an ecological aisle which assures permeability between surrounding neighborhoods;
- The building structure is drawn with the intention to close off the existing grids or to create new ones, articulated with the pre-existing one. Linked to the territory's structuring axis, this configuration may contribute to a combined panorama of the entire urban structure;
- The public spaces network is one of the highlights in the revitalization of this territory. Along the proposal, public spaces come articulated with the mobility system, green zones and buildings, creating conditions for unexpected spaces to raise, ones of differentiated nature which covers the entire territory.

Fig. 1 | Phase 1 . General Plan of the Proposal

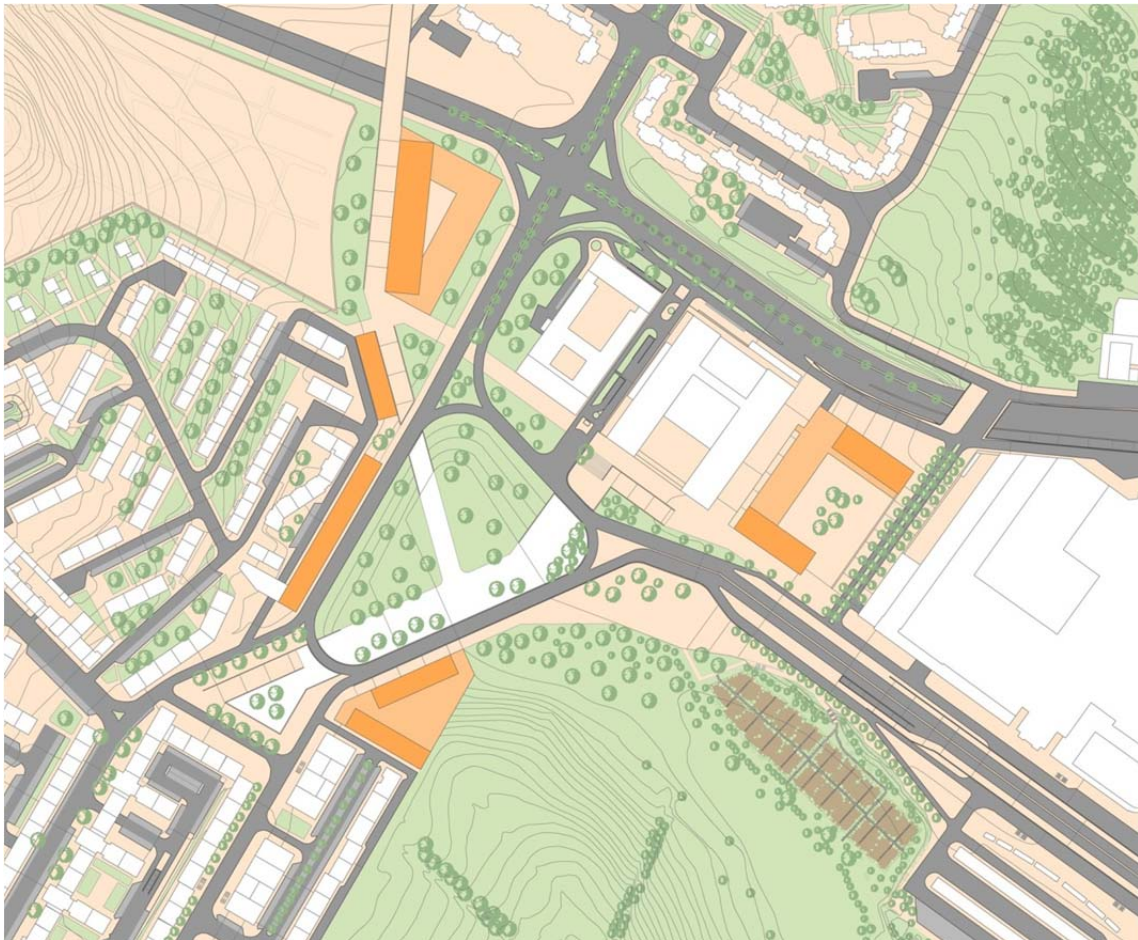


Source: Author's Image

## Phase 2 – Urban Project – *Benfica/Carnide*

The second phase gave start to the individual work entitled as “The drawing of public space and its evolving elements”. In this sense, a new area was delimited, the project’s intervention area, which will be the focal point of this urban project. The chosen area has great access passages and is considered to be a place of opportunity for the development of an urban structure capable of integrating and articulating the different zones of Lisbon’s North-West ring. The individual plan holds the support of fundamental intervention principles suggested by the group and added thoughts on other urban issues.

Fig. 2 | Phase 2 . General Plan of the Proposal



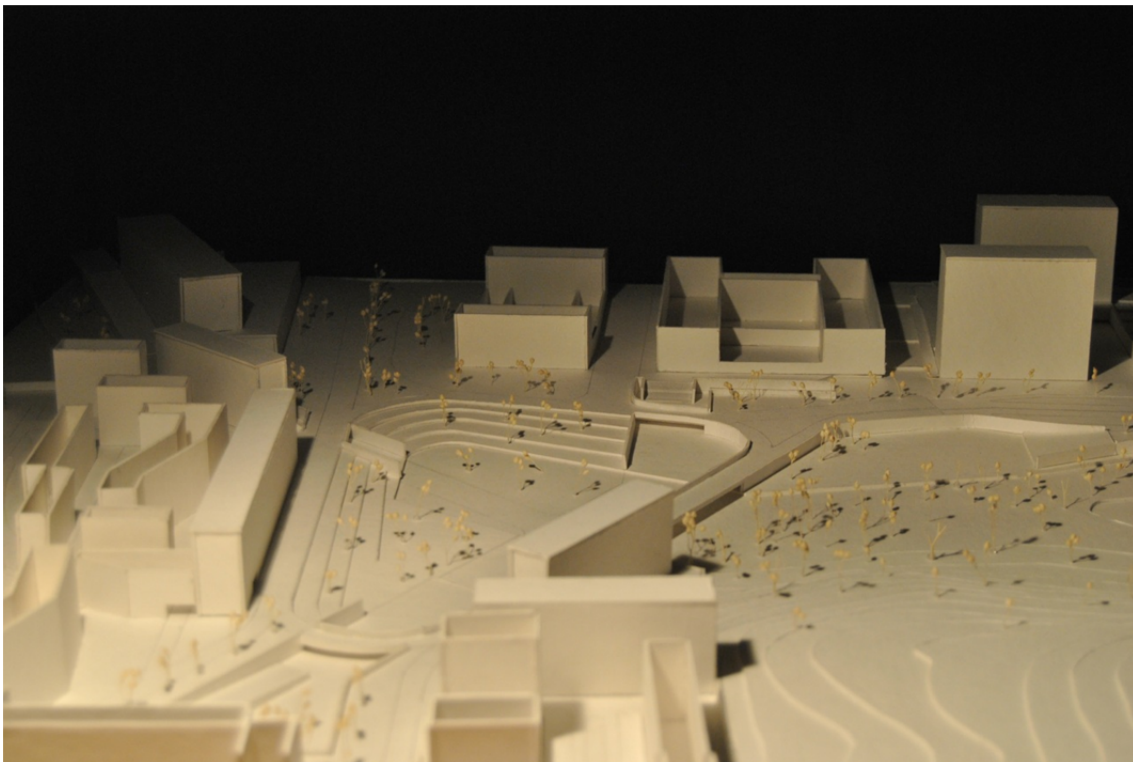
Source: Author's Image

## Synthesis – Phase 2

- The reorganization of the road infrastructure, by drawing a distributed road system at the core of the intervention area and reshaping the axis;
- Creating a system of continuous public spaces which articulate the ecological organization and establish new urban continuities joining the whole territory;

- Drawing of a new subway station, part of a predicted extension of the Blue Line and its accessibilities, as well as a new square full of commerce/ eating points;
- Creating a continuous ecologic structure by implementing news parks and green zones and through the forestation of the road network;
- Implantation of a new building structure in various points of the intervention area which would act as complementary to the drawing of the proposed urban project.

Fig. 3 | Photograph of the Maquette



Source: Author's Image

### Critical Reflection

The project's intervention plan is based from the start on issues related to infrastructure, public space and urban continuities. It aims to solve the latter problems of the area under study, which resemble to these issues set above. This project seeks a global coverage of the intervention area, guaranteeing continuity in the different systems and in the quality of public space. It was thanks to the road infrastructure reorganization, in particular through the creation of a distributed road system as the core of the intervention area, which enabled the project to happen and confront the place. This distribution road system was seen as a moment of opportunity, engaging into new relations with the evolving city and a catalyst of urban life. "The acupuncture metaphor may be used for the city's policies as its efficiency depends on the knowledge gathered by the organism's neuralgic interactions. In this sense, it is possible

to say that what matters most in a project's intervention is what cannot be seen – but which after all, decisively influences the general state of urban life" (*Portas, 1998*).

The cases studies examined have contributed to forming a reflection which resulted from decisions taken within the project. The selection of the case studies was mainly based on the intention of questioning parallel realities with common articulations. The drawing of the infrastructure and the creation of qualified public spaces are fundamental points in all projects under examination. It was the drawing of infrastructure which allowed an urban organization capable of taking to the limit potentialities of the place where it is intervening. Except for the Plaça de les Glòries Catalanes, all projects offer proposals which have efficient and effective interventions. This is gained by revitalizing the intervention areas, significantly improving public space, contaminating qualified public spots and establishing a variety of urban continuities. The project for Plaça de les Glòries Catalanes showed very interesting premises of the project. However, as time went by, it faced different troubles related to traffic jams, especially in the Gran Via. It is relevant to mention that this axis sets up important road connections and that it is one of the main exits from Barcelona, becoming a highway with elevated automobile flux.

Comparing with the case studies, a more conscious and grounded urban project proposal could be done. The fact that these relied on intervention principles very much the same as the project highly contributed for this. This reflection facilitated the comparison between the urban project and real situations, trying to understand the viability or lack of it, of the intentions presented, dependent on the success or not of the case studies. The analysis of concrete cases also permitted a better understanding of the characteristics and means a project of this nature implies.

Hence, conclusion is that the proposal here presented successfully corresponds, in general, to the goals it set up to at the beginning of the exercise and solves the main problems and gaps identified in the intervention territory. Even so, some details of the project could be improved, such as the dimension of some of the buildings suggested.

## 05 | CONCLUSION

This report focuses on presenting, analyzing and reflecting about a project to an urban scale, for the Final Project subject, during the academic year 2011/2012. It is important to enhance the relevance of the theme as well as the interest of the intervention area proposed by the professors. Through an academic project, the assignment given offers the possibility to take part of a reflection about a current architectonic and urban problem concerning the city of Lisbon. This project focuses on a wide urban space where



interference is intended and where this transformation causes significant implications to the evolving communities, socially, economically and politically.

As an Urban Project report which was developed during the course of one year, this paper became an essential part of the project's presentation. It has reinforced the main premises through theoretical arguments, as well as raised theoretic issues regarding the pertinence of some of the project-based options which have been taken. This way, the abstract investigation done about the role played by infrastructure in the city and the importance of public spaces and urban continuities could have had a different impact on the project. This could have occurred if it had been done during the exercise, and therefore contributing for a mutual support between both theoretical and practical sides.

Yet, the present report enabled a more conscious and grounded critical reflection of the project proposed. It may be concluded that the proposal here shown successfully answers to the aims it set itself to, outdoing and solving the main problems and gaps in the territory it acted upon. This project, by causing modifications in a neuralgic point in the observed territory, aspires to influence and generate impact on the entire surroundings.

The thoughts given to the case studies in analysis allowed a comparison between the suggested urban project and real situations. It also contributed for a better evaluation and understanding of the viability offered by the proposed project-based intentions, according to the level of success observed in the projects studied. Thus, the achievement of an urban intervention is only tested when this one takes action in a city's territory and after its execution. This being, this approach may be too narrow and not completely conclusive. Additionally, the critical reflection has permitted to understand the specific aspects and means related to a project of this nature. In this way, it is eligible to state that the success of an urban intervention plan depends not only on the architectural quality of the urban project but also the viability of the actions needed for its implementation. Due to being an academic project, some of these matters were not sufficiently taken into account throughout the assignment.