

## Honors thesis

## COURSE OF ARCHITECTURE FOR THE SUSTAINABILITY DESIGN

## **Abstract**

## Proposal for the recovery of "Fausto Coppi" Motovelodrome in Turin

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Proposal for the recovery of "Fausto Coppi" Motovelodrome in Turin answers the historical critical issues of this area in Turin. The publication of an Explorative Notice (April 2018) by the Municipality re-opened the debate about the management and the requalify of this sports facility, that is part of the architectural assets of the City and of the cycling culture of this territory.

The Thesis introduces the re-design of the area and a study related to it, of an economic nature, that has as its goal the certification of the profitability of the design. This issue is solved thanks to a proposal of the functional organization of the whole sports complex and a critical comparison with similar realities.

The first part is divided into five chapters. The first one regards the permanent relationship between the urban space and the sport, by introducing some case studies in which the planning of the events has had a successful (or less successful) impact on the governance of the territory.

The second chapter, whose main target is to summarise the history of the track cycling, proves how important have been the velodromes (and their genesis) in the development of the sport.

The third chapter introduces the case study of the Vigorelli Velodrome in Milan, which is properly considered as the world temple of the track cycling: its requalify, which has been at the center of an architectural contest, attracted many designers. The result and the structure of this contest have been examined in a detailed way, in order to evaluate different approaches to the case study in Turin, taking into account that the requalify of the "Vigo" constitutes nowadays the only case of a redesign of a historical velodrome.

The fourth and the fifth chapters introduce the area of "Fausto Coppi" Motovelodrome and its redesign. It is structured in two parts: the recovery of the existent buildings, whose main goal is to requalify the area as requested by the Explorative Notice; an "addiction" component in order to solve the main critical issues of the area through the insertion of a new sports building. This addiction aims at the implementation of the sports supply in Turin and at the urban "stitching" of two "suspended" areas of the City through the redesign of the public space.

The last part analyses the cost of construction and the cost of realization of the design thanks to a parametric compute. Then the cash flow has been calculated. The incomes have been estimated after the definition of a possible schedule of the whole complex, whose main goal is to profile the average users in a typical year and to calculate the possible incomes deriving from the practice of sport in the new centre.

It has been more difficult to calculate the outflow at this point of the design. They have been estimated according to a sector study regarding the average management and maintenance costs in Turin of the public sport facilities (from 2011 to 2015).

This design for the recovery of the Motovelodrome is barely profitable in the intended use. In order to achieve the economic sustainability of the whole intervention, three design alternatives have been evaluated: these introduce the different ways through which economic viability could be granted to a possible private investor.