



POLITECNICO  
DI TORINO

# Honors thesis

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Master of Science in Architecture (Environment and Land)

*Abstract*

## **Joint Studio 2016: Project of renewal of the Olympic Bobsleigh Track of Cesana Pariol**

*Tutor*

Gustavo Ambrosini  
Mauro Berta  
Michele Bonino

*by*

Sofia Carpinteri

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The bobsled track in Cesana is undoubtedly a very complex and unusual structure, it is not a structure with which we often have to do with or which it is easy to be familiar. This venue was one of the most critical legacies of Torino 2006, also because by nature, it is very sensitive in terms of economic and ecological feasibility.

The aim of this research thesis was to offer a response to the problem of the post-Olympic use of the bobsleigh track which has been shut down after the World Luge Championships in 2011.

The site where the track has been built is now compromised from the environmental point of view, and a total removal of the track would have a very large impact if one considers the amount of material to be removed and the energy to carry out the disposal. The track is an object with a very extended length, approximately 1.750 m, although it is not particularly impressive in terms of size. It occupies an area which is about one kilometer long and 300 meters wide.

As a first step, we have studied all the Olympic tracks made before and after Torino 2006, in order to better understand the functioning of a bobsleigh track and to understand all the elements that should be considered when dealing with a sports facility of this type. This study proved to be very interesting because the elements to be considered when building a bobsleigh run, from the first runs of the twenties to the present day are not so different. Just to name a few, it is essential to study thoroughly the topography, the shading and exposure of the site in order to carry out few excavation works and be able to keep the ice in good condition. As a matter of fact, the use in the post-Olympic stage is not secondary, in fact, since the first editions it has been paid attention also to this aspect.

The first chapter analyzes all sports facilities of Turin 2006 and the Olympic system which includes the cluster of the venues in the city and the cluster of venues in the mountains.

The second chapter goes through all the stages of the 22 editions of the Winter Olympic Games. The data and facts highlight the trends that characterize the editions of recent years and forecast what may affect the future editions such as the predictions regarding the global warming that could jeopardize the sporting event.

The third chapter deals with all the bobsleigh runs made in occasion of the Winter Games, both the Olympic and the post-Olympic stage, when the track continued to function, have been analyzed.

The fourth chapter deals with the renewal project of the run, in a scenario where the track continues to operate as an international sport infrastructure. Some solutions are proposed to solve the most critical problems that result from a lack of attention to the most important aspects to consider when building a bobsleigh track such as shading and tourist attractiveness.

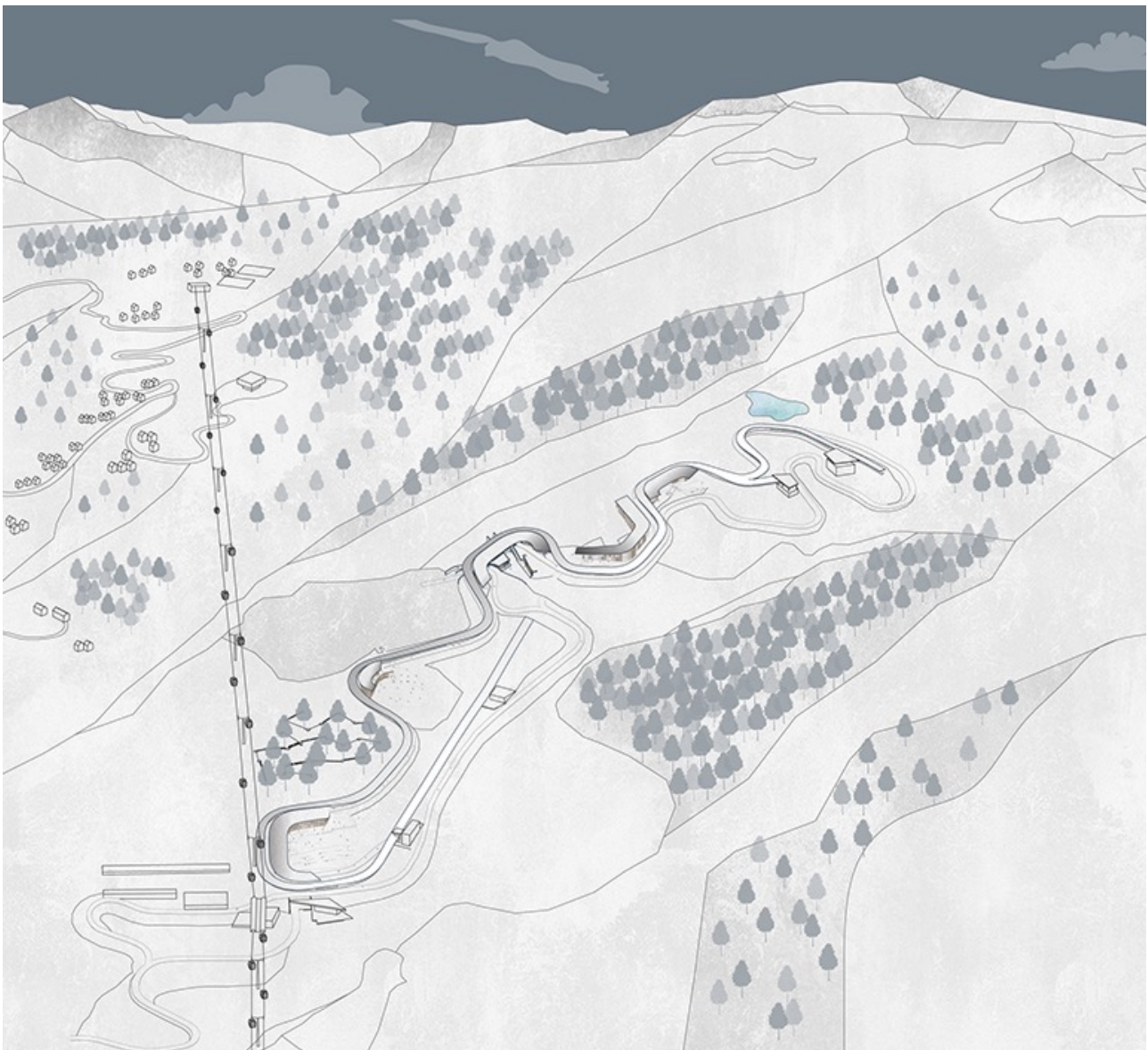


Fig 1: axonometric view of the project



Fig 2: evocative view of the Tourist Start Building

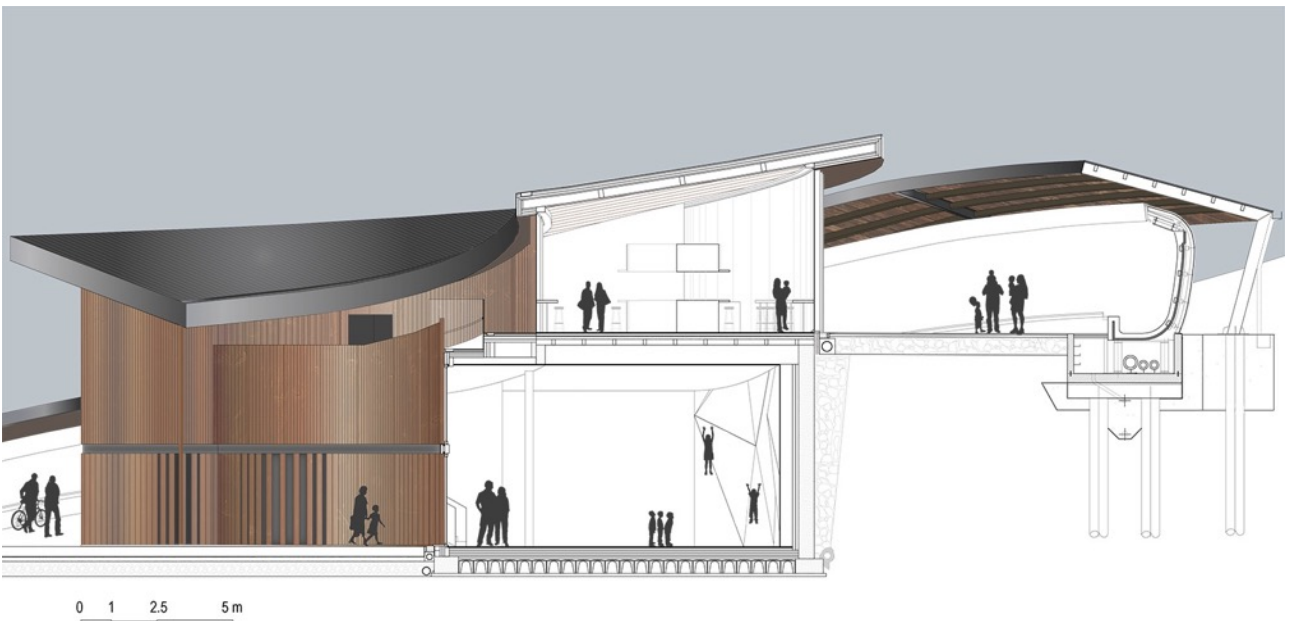


Fig 3: Cross section of the Kids Start building

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For further information please contact:  
Sofia Carpinteri, [sofiacarpinteri4@gmail.com](mailto:sofiacarpinteri4@gmail.com)