

POLITECNICO DI TORINO  
SECOND SCHOOL OF ARCHITECTURE  
Master of Science in Architecture Heritage Preservation and Enhancement  
***Honors theses***

**Preservation and Enhancement of the Archaeological site of Fordongianus**

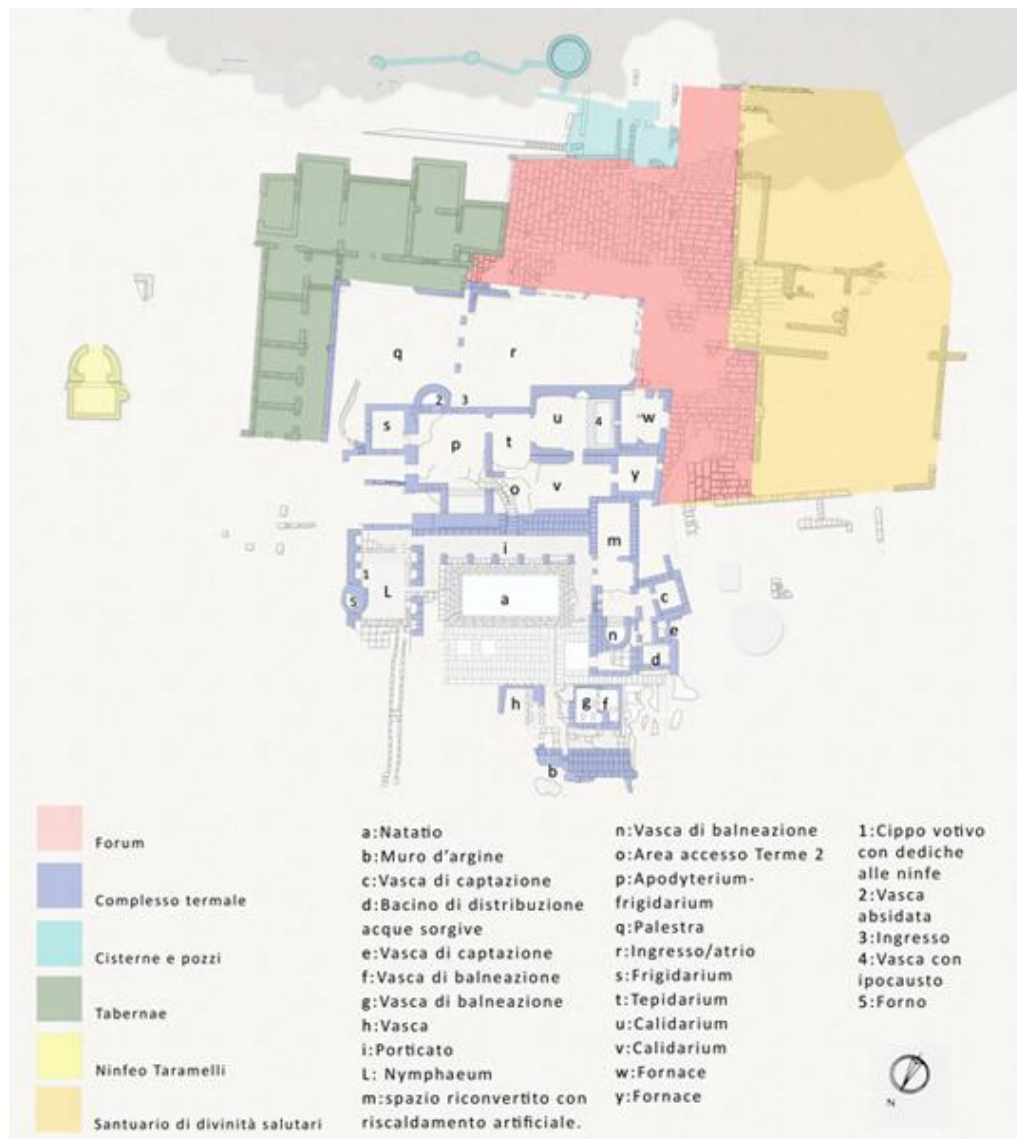
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The subject of this graduation thesis is the archaeological area of the Roman City Fordongianus in the upper city of Oristano in Sardegna.

The archaeological site includes the thermae, the forum, the tabernae, the Taramelli ninfeo and in the end a Sanctuary dedicated to salutary divinities.

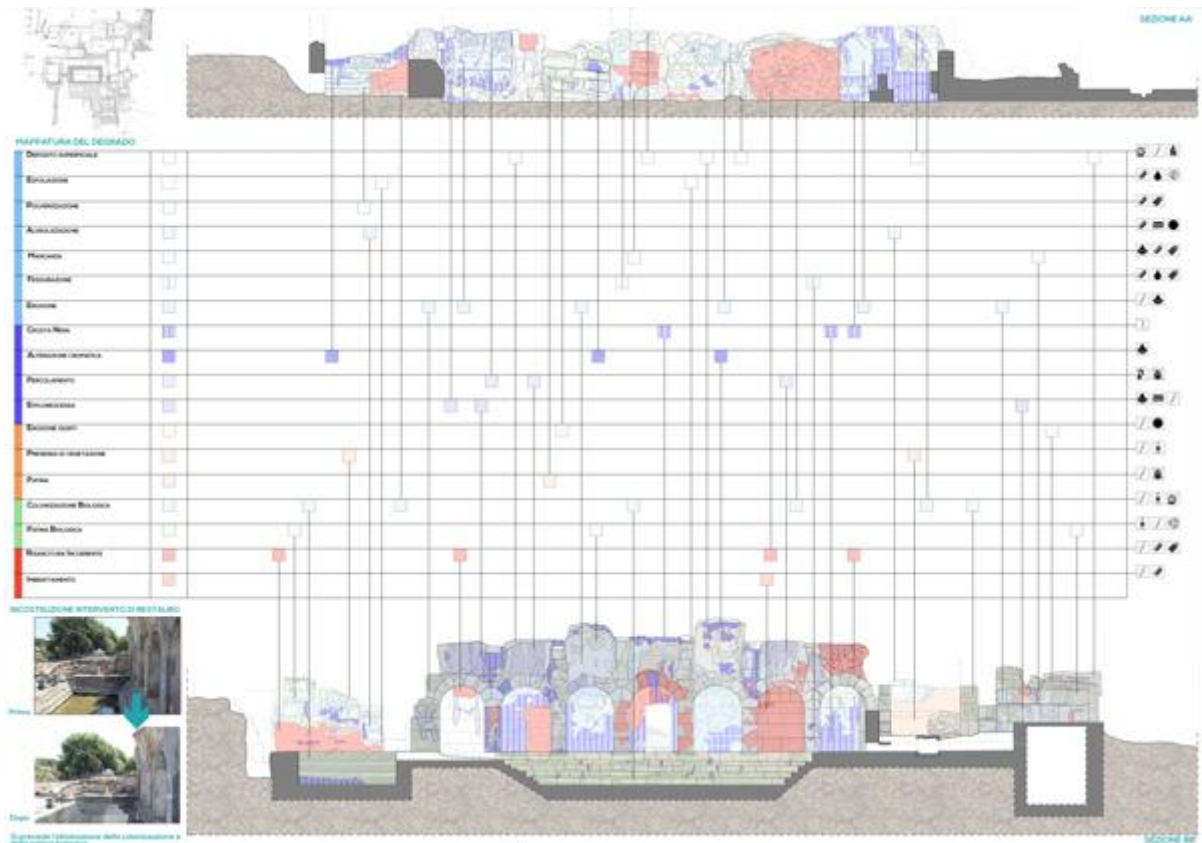


Archaeological Site of Fordongianus

The choice of the site for the Romans isn't casual, in fact the complex takes advantage of the below volcanic tour, which even being dormant for centuries, permits heating water tables, which reach a temperature of 54 degrees. The Roman thermae consist of 2 thermals: the first one was erected by Emperor Traiano and is the original thermae, based on natatio, which takes advantage of the sources of warm water; the second one, instead, is an artificial heating. On the basis of the architectural techniques used, one believes that the first one is from the 1<sup>st</sup> Century a.c. and the second one beside it, from the 3<sup>rd</sup> Century a.c. Based on historical analysis, we come to the definition of the restoration project and functional adaptation.

The project has as its objective the restoration and enhancement of the archaeological site, using a non-invasive system, which aims at "minimal intervention", focusing on the conservation, but ensuring its enhancement through the use.

You analyze the status of the instabilities and you present a proposal of a conservating intervention, formulated on the basis of a visual examination of the artifacts and the realization of a mapping of the decay found.



Mapping of the decay

The exposure to the atmospheric agents is one of the major causes of deterioration of the complex, to limit the effects you insert "sacrifice surface" with a of mortar layer favoring its protection.

The integration must result in each part easily recognizable and distinguishable from the pre-existence so as not to obstruct and confuse the legibility of the complex.

The completed restoration process is accompanied by a project of revaluation and adjustment which allows its utility.

The project aims to integrate a totally removable, allowing easy reading of the archaeological complex. It involves the insertion of a ticket office/ bookshop, a catwalk at the service of the tour and the area of coverage of the tabernae with frescoes, exposed to the elements.

The walkway allows to overcome the difference in levels of the terrain and allows the connection and access on almost all of the areas archaeological site, without architectural barriers, allowing for the widest visitability for every type of user. The walkway is made from a base composed of a curb placed on the ground, which follows the course of the archaeological finds, an upright and a crossbar made entirely of laminated wood.

The concept of "minimal intervention" and the reversibility also develops in the lighting design, providing a itinerary visit night, encouraging the visitability and enhancement, with installing a implant non-invasive.

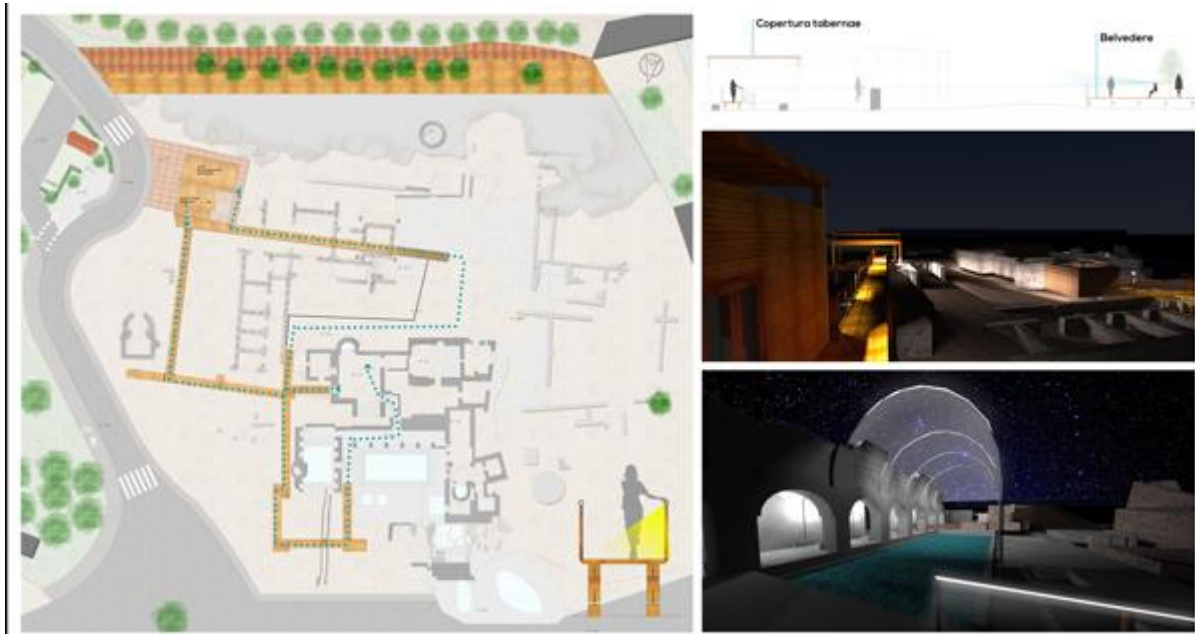
The project therefore provides functional lighting in the walkway so as to allow the fruition and the scenographic lighting of the complex.

The distinction between guided tour, with functional lighting and the archaeological site emphasized with scenographic lighting, you make using a different color temperature; providing 3000K (warm) for paths and 4000K (neutral) to the site visitable. Doing so to permit the perceptible visual difference of installation and creating an atmosphere that enhances the the cultural heritage.

The functional lighting of the path is done with led strip placed inside the handrail of the walkway.

The scenographic lighting, it focuses on the facade to the north, heart of the Roman baths, which reproduces an vault that is not present currently. Doing so allows the visitor to perceive the reposition.

The integration allows you to use light as a means of knowledge and also is not "invasive" in the diurnal path, but rather. Also allows the perception of vault, that in the nocturnal visit create the most emotional impact.



### Project of revaluation and adjustment - Route Visit Night

In conclusion, the restoration project and functional adaptation allows the usability of the well and at the same time its enhancement, which means the additions made will help to facilitate the historic reading and at the same time create the charm on the visitor.

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