

COMUNE DI FERRARA

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Development Fund

Schede progetti

Ufficio Beni Monumentali - Comune di Ferrara



INTRODUCTION

The town of Ferrara hosts an artistic, architectural and historical heritage of great importance from the national and European point of view. It is also among the areas of the earthquake that hit the region Emilia Romagna in 2012 that caused serious damages to the cultural, artistic and historical buildings, whose valorization represents an opportunity for the development of our community.

The use of the **2014-2020 POR FESR FUNDS** constitutes the instrument for this valorization of the artistic, cultural and environmental resources and consequently the economical growth carried out to promote development processes.

The attractor is represented by the **SOUTHERN PORTION OF THE ANCIENT WALLS OF FERRARA** in particular the restoration of:

- the medieval Bulwerk of **SAN LORENZO**, a defensive curtain, today used as a parking area
- the Bulwerk of **AMORE**, a construction site, not completed due to archaeological findings
- The Gate of **PORTA PAOLA**, monumental entrance to the town, currently site of the earthquake of 2012, to be used as a Documentation Center of the Walls
- the nearby building of **EX TEATRO VERDI** to be used as an Open lab for the development of sustainable mobility

This will allow:

1. the opening of new tourist itineraries, museums and cycle-pedestrian routes,
2. The use of spaces located in the southern area of Ferrara, through the "rehabilitation" of the Ancient Walls to enhance its shape, and urban identity,
3. the development of cultural, tourist, sustainable and recreational mobility functions.
4. the reconnection of the Renaissance area to the medieval one, with cycle paths.
5. The revitalization of the commercial sectors, favoring the young cultural and creative start-ups.



BALUARDO SAN LORENZO

The project for the restoration of the walls (financed with funds FIO '86 and '91) did not include the excavation of the embankment filling of the bulwark of San Lorenzo until the discovery of the "Piazza Bassa" (on the inner city side of the walls) that was used to refuel the munitions of the "low gunners" to fire in the direction of Porta Paola and the bulwark of San Pietro .

In fact the destination of the embankment on the top of the Bulwark of San Lorenzo was historically used for the Beasts Market since the last century and nowadays the weekly open market and the car parking is still maintained.

The intervention of restoration concerns the wall and the closure of the openings called "camattoni" that allowed to use the caves obtained in the embankment between the walls.

The project follows the work already carried out to avoid the risk of collapse of the masonry, through shoring the wall and lightening of the pressure caused by the ground in the upper part of the bulwark.

After that consecutive phases of cognitive excavation of the supporting structures were activated, to verify the causes of structural collapse of the internal buttresses, and at the same time avoid the collapse of the entire south-eastern portion of the Bulwark.

The excavation phase, made it possible to verify that:

- all the buttresses were damaged near the base
- the supporting structure of the external wall was composed by a series of walls supported by masonry arches forming a sort of porches with continuous chambers some of which supported the heavy guns placed at the top of the wall.



The aim of the project is the complete recovery of the monumental property, restoring the external wall face and create a new load-bearing structure of the wall, disconnected and independent from the compromised structure, through the creation of new concrete partitions laid on foundation piling.

These works will secure the masonry wall of the Bulwark and allow the restoration to ensure the functions of parking and of the weekly market.

It will however be necessary to carry out further excavations of the embankment in order to reach the original foundations and to realize important temporary works and shoring of the wall of masonry wall that allow the execution of the workings in complete safety.

Finally, the internal excavation work will also be an opportunity to deepen the knowledge of transformations of the Bulwark to the current conformation following the building of Porta Paola.

The design choice includes the architectural restoration of the wall side, while inside it will be built a concrete structure to anchor to the surface of the wall. Once the structure has been secured, the progressive excavation will be carried out through overlapping layers of about 50 cm, stabilized with lime to minimize the phenomenon of soil compaction over time.

These works of structural restoration and restoration of the Bulwark of San Lorenzo, are the occasion for a radical functional rethinking of the spaces on the embankment.

In fact, parking spaces will be reorganized and suitable night lighting will be created. Finally, the current access ramp will be extended, creating a protected pedestrian path and a new staircase to the embankment from the Via dei Baluardi.



BALUARDO DELL'AMORE

The rampart of "Amore" is integrated into the southern section of walls of Ferrara that was the most equipped military curtain for defense;

It is located about halfway along the Via dei Baluardi and represents the perspective focus for those walking along Via Porta d'Amore towards the walls.

On this bastion stood a building used as a kindergarten (Scuola Bianca Merletti) since 1936. The school occupied a floor area of about mq.500 and overlooked two floors above ground on Via dei Baluardi.

The demolition of the building, as foreseen by the Functional Lot of the project "Demolition of the Bianca Merletti School and Re-qualification of the Bulwark of Love" and the archaeological excavation campaign carried out between 2013 and 2014, within the second Functional Lot, has highlighted the remains of the ancient Town Gate Amore of 1451 and, in the central part of the rampart, the remains of a small bastion in masonry, called "rivellino", built in 1557 and never completed completely; these finds cover an area of about mq.650.

As a result of the planned redevelopment, the walls were completely consolidated and restored, the floors protected and covered with sheets; in fact, it is an archaeological area, waiting for the completion of landscaping and architectural redevelopment aimed to the construction of the Baluardo dell'Angelo Archaeological Park.



The architectural surveys of the entire area, allowed to reconstruct the history of the place from the 15th century to nowadays. On the basis of this knowledge, the project for the construction of the Archaeological Park of the Baluardo of Amore took shape, respecting the conservation of the finds, proposes the enhancement of the building in order to "tell" the visitors a part of the history of ancient Ferrara. The Access to the Park will be set up in via Baluardi via through an iron gate placed between the two enclosure curtains of the area.

The visitor, on entry, will be faced with a curtain wall, consisting of the remains of the belt of the Borso Age and the Gate of Amore (15th century), with the use of a metal structure, will raise again the original volumes, it will be a composition of aluminum foils, installed orthogonally to represent the horizontality of the wall texture.

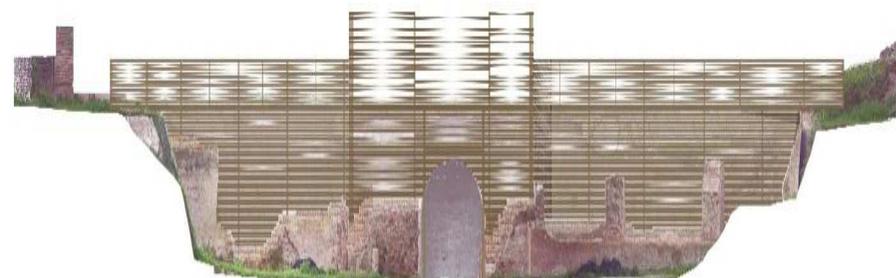
The foils will be arranged in a "flat" way with respect to the structural uprights, to underline the dimensional "uncertainties" in the architectural composition.

Above this curtain, the walkway of the path of the walls will be set up, at the center of which the upper level of the Gate of Amore will be found.

The continuity of the city promenade, will allow you to observe the Archaeological Park from above, at 360 °, as well as to enter inside the upper level of the ancient tower. The visitors will be able to enter the Park, passing under the Gate thanks to the "reconstructed" arch and after observing the internal finds inside the tower, like a terracotta stairway connected to the upper level, and artifacts from the sixteenth century.

Inside the "arrow-shaped defence tower" of 1557, restored and consolidated, you can visit two small rooms with vaulted ceilings, one used originally to store weapons, and the other, used as a small oratory. On the walls are clearly visible signs and keys of vaults that recall the system of coverage of the "gallery" interposed between the walls of Borso and the defence tower; on the opposite ends, to the north-west and south-east, there are openings that allow the exit to the under located valley, open, consolidated and restored during the previous works. The entire walking surface of the area inside the Park will consist of a new cement flooring that recalls the original flooring now protected as required by the Authority.

In order to allow the use of the structure during any visits or nocturnal events and in order to enhance the site, redeveloping the historical and landscape context, a public lighting system conceived as a setting of soft and diffused lights, produced by lighting as "invisible" as possible.



PORTA PAOLA

The configuration of Porta Paola is the result of many functional changes since the early 1600s.

1608 - Porta Paola replaces the two "Entrances to the town" of San Paolo and San Romano for the renovation of the southern part of the walls;

1612 - Giovanni Battista Aleotti designs the south façade in the Wall, as an entrance into the town;

end of 1700 - a building destined to customs officers and guardians incorporates the facade of G.B. Aleotti;

1817/1842 – the Porta assumes the function of a tax barrier;

1888 – it becomes part of the patrimony of the Municipality with a duty function and public weighing;

1898 - works are carried out to transform the Porta into a barrier-control door isolated from the boundary walls (two large lateral passages are opened), a new Istrian marble façade is built towards Piazza Travaglio, on the northern front (inside the town);

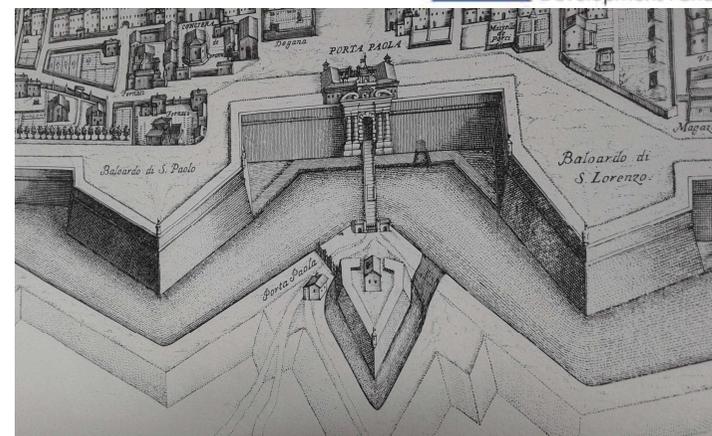
1947 - transformation works to modify the spaces into municipal offices and offices of the Bank "Cassa di Risparmio di Ferrara", destination retained until the earthquake of 2012.

The building from the typological point of view is configured as a singular element that was originally inserted in the continuous line of the walls, with a function of controlled passage, from the direction of Bologna to the interior of the town, or outwards from Piazza Travaglio .

The character of the building was also enhanced when the walls were "broken" to create the two lanes of entry and exit of the road. At this point the ancient door became a seat for public offices with the construction of internal partitions and with the construction of the east and west side facades, modifying the original type.

At the end of the 80s, to redevelop Via Bologna, it was found the original threshold level of the Istrian stone door, designed and built by the Aleotti, which stood at about 1.50 meters below the current level of Piazza Travaglio.

The stratigraphic surveys carried out have shown that all the modifications carried out over the years have not left original walls inside and that the last heavy modifications the walls have no traces of original plasters. In fact the side walls are those built after the operation of isolation of the door from the walls.



The 2012 earthquake has deeply affected the already fragile elements of the Porta caused by the isolation of the door from the wall that gave it continuity.

This is evident both from the lesions on the walls and from those on the intersections between the internal and external walls, and from those in the new stairwell.

The intervention that the building assigns to the Documentation Center of the Walls is mainly aimed to strength the building from an architectural point against the earthquake and it focuses on some main choices oriented to the revival of the original type of functional "Door" entrance to the town.

The main elements of this choice are:

access only from the two main entrances: front on Via Bologna and on Piazza Travaglio. This choice re-proposes the old route of entry and crossing of the Porta;

the reopening of this path is highlighted by the the flooring materials and is further highlighted by the opening of the first floor slab from which the light descend from the skylight onto the roof. The correctness of this opening on the roof is supported by the historical position of the ancient central staircase placed there;

the ground floor and the first floor are destined as center of documentation of the walls while the attic is for technological systems,

There will be 2 new toilets, one of which for disabled people. A small lift is placed for the users themselves

The stair case is confirmed in the current position starting from the central path of the ground floor;

The walls of the building are insulated from the inside, with insulation made of rock wool, in order to improve the thermal performance of the building, both from the point of view of heat and cold;

The thermal power plant is placed in the attic, which is accessed by a service staircase that starts from the first floor;

The works on the façades consist essentially in the recovery of the injuries with injections based on hydraulic lime without cement. The facades are cleaned with two-color bleaching, one for the backgrounds and one for the frames.

THE POR FESR MUSEAL INSTALLATION

To complete the works of post-earthquake repair of the building, in order to guarantee its opening to the public with a destination of Documentation Center of the ancient Walls, a museum set-up is proposed thanks to the POR FESR funding.

Following the inventory of all the documentation held by the Municipality, it will be necessary to proceed with a computerized archiving on digital support of all papers, photographic material, films, drawings and models.

This documentation, related to the "total project for the recovery and enhancement of the entire town walls" will be visible and available to everyone interested.



TEATRO VERDI

By location, size, characteristics of the spaces and historical identity, the “Teatro Verdi” constitutes a potential centrality for the future of Ferrara, a connecting element between the wall circuit and the pedestrian area of the downtown. The declination of an “Open Laboratory” aimed to promote knowledge of the cultural heritage through the themes of cycling and, more generally, sustainable mobility.

The “Teatro Verdi” will be a complex organism with a high permeability of internal circulation, in direct continuity with the external public spaces (first of all the area of Piazza Verdi) and will guarantee the greatest degree of accessibility to users.

In the rooms on the ground floor there will be a bike café overlooking the Piazza Verdi, where users can rest, have a coffee, eat a small meal, rent, repair and collect bicycles. A UNESCO Visitor Center will be built next to the bike café; in the main entrance, an area dedicated to the reception that can act as a Foyer of the City in which to expose and see exhibited other documents dedicated to the culture and identity of the territory between land and water. Another space will be dedicated to the Center for Sustainable Mobility intended as a meeting place where to develop research, work, study, observe and design everything around the issue of light mobility with low environmental and social impact.



COMUNE DI FERRARA
Città Patrimonio dell'Umanità
SETTORE OPERE PUBBLICHE E MOBILITÀ
Servizio Beni Monumentali

Lavori per la realizzazione di un "laboratorio aperto nell'ex Teatro Verdi di Ferrara, nell'ambito della programmazione Asse 6 Por Ferr...
Città Attrattive e Partecipate in attuazione dell'Agenda Urbana"

MoVe.rdi - riding, development, innovation

Proprietà
Soggetto attuatore
Assessore Settore Opere Pubbliche e Mobilità
Responsabile Unico del Procedimento in fase di progettazione
Responsabile Unico del Procedimento in fase di esecuzione

Progetto architettonico
CITTÀ DELLA CULTURA
CULTURA DELLA CITTÀ
Arch. Elisa Uccellatori
Arch. Massimo Davi
Arch. Sergio Fortini
Arch. Federica Poggi

Progetto strutture
Ing. Denis Zanetti

Progetto impianti
Ing. Paolo Magri

Coord. sicurezza progettazione
Geom. Antonio Casazza

Determina di aggiudicazione
Costo totale intervento
Importo dei lavori con oneri per la sicurezza
Inizio lavori 03/07/2017 Ultimazione lavori 02/01/2019

Comune di Ferr...
Comune di Ferr...
Dott. Aldo Modor...
Ing. Luca Capri...
Arch. Natascia Fras...
Impresa esecutrice
Ing. Giada Guzzinati
Direttore operativo
Geom. Riccardo Malagutti
Dir. operativo architettonico
Arch. Elisa Uccellatori
Arch. Massimo Davi
Dir. operativo strutture
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Ing. Paolo Magri
Coord. sicurezza esecuzione
Arch. Antonella Zeni
DIRETTORE TECNICO
Arch. Manuela Menegatti
Tecnico di cantiere
Arch. Paolo Benetti
Assistente tecnico di cantiere
Geom. Giacomo Reccazzi
Geom. Gianni Capatti
Subappalti

Logo: POR FERR... EMILIA-ROMAGNA, European Union, Regione Emilia Romagna

On the first floor are inserted two of the specific functions: the area dedicated to Lab Space (a dozen of flexible spaces) and the area dedicated to the "bicycle museum". The second floor will be organized to host workstations and guarantee co-working areas, as well as to offer visitors a privileged panoramic view from the gallery to the interiors of the theater. During the summer period it will be possible to access, from the second level, to the terraces on the flat roof of the entrance to the Teatro Verdi and via Camaleonte. The scenic tower is an absolutely unique and spectacular environment. A direct and potentially drivable access allows you to enter a space of two hundred and fifty square meters where you can install, build, exhibit modern large-format works of art: sculptures, special structures, exceptional performances or productions of contemporary theater. The stalls area offers another 250 square meters of free and flexible space for artistic, scientific, cultural and experimental activities related to various genres, but also social space (covered square) during the summer season. In the stalls you can enter through stairs and ramps created from the entrance of via Camaleonte (the one closest to the Estense Walls) and from the main entrance of via Castelnuovo. A new environment will be added between the stage tower and stages of the theater, to be used as a multi-purpose hall for about fifty users, called a black box. Accessibility and internal mobility of the new building, in all its environments and spaces, are guaranteed by a system of stairs, ramps and two elevators that allow everyone to move freely within the horizontal and vertical space, as well as to reach the escape routes in the event of an emergency. From a functional point of view, the intervention will guarantee the start of the activities concerning the center for sustainable mobility, the UNESCO visitor center, the laboratories and the bike-cafe, a place of social life in direct continuity with Piazza Verdi.

