



# **The 7 Most Endangered 2014**

Programme run by **Europa Nostra**,  
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## **Citadel of Alessandria, Italy**

### **Report**

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**Campbell Thomson**

Technical Consultant, EIB Institute

Luxembourg

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## 1. Summary

The aim of the project is to rehabilitate the 18th century Cittadella di Alessandria, located just outside the city of Alessandria, in Piedmont, Italy, and, where appropriate, convert its structures and buildings into spaces with a sustainable economic, social or cultural purpose. Most of the structures are heavily built, but some had already started to decay while under the control of the Italian army, a process which has become generalised, and which has accelerated significantly, since the army left the site in 2007. Although some control works have been carried out to allow the use of the site for: public access events, the creation of a military museum, and the development of some public offices, most of the structures are deteriorating through weathering and through the encroachment of vegetation. In particular, there is an encroachment problem from *Ailanthus Altissima*. This invasive, non-native species has characteristics which make it a serious threat to the site. It is well adapted to the climate, the roofs of the Cittadella form an ideal nursery, it can penetrate masonry, and it is very difficult to eradicate by either chemical or physical means.

The fortifications are substantial; covering more than 54 Hectares (Ha); with a built area of circa 121,000 square metres (sq.m.) spread across 42 buildings of varying sizes and ages. There are a few 20<sup>th</sup> century buildings, but most of the core buildings date from the 18<sup>th</sup> century, with some later additions. Access from the city and the national road network to the walls of the *Cittadella* is good, with additional infrastructure being constructed in the vicinity. However, the *Cittadella* is a defensive structure, designed keep out attackers - and modern visitors. There are only two access points through the fortifications, each of which is a single, narrow carriageway. Access to the site is therefore a major constraint when considering alternative uses. A second constraint is that the site currently has very limited physical infrastructure: power, water and waste-water treatment. Finally, while the city is responsible for the site, it holds it on a leasehold rather than freehold basis, and the city itself has a serious financial shortfall. It therefore cannot commit the significant financial resources needed to redevelop, or even stabilise, the site.

The city has made a first attempt to establish the redevelopment of the site as a Public-Private Partnership (PPP). However, despite there being some expressions of interest when the option of a concession was published in the National Journal, no bids were received. There are many historic structures within the *Cittadella* which could be put to alternative uses but, as the failed concession has shown, it is probably unrealistic, and possibly inappropriate, to expect a private developer or consortium to fund the redevelopment of the whole site. There are therefore two questions to be investigated. Firstly, what parts of the site could be put to revenue generating use and, secondly, what proportion of the site would need to be put to commercial use to allow the whole site to become self-sustaining. There is also a third, implicit, question which is how much would each individual component of the site cost to stabilise, restore and potentially convert to commercial use.

The main structures which have accessible built volumes include:

- ❖ *Fabricate Bonetti* Eight separate structures, all of a similar size, with a total area of circa 11,000 square metres (sq.m.).
- ❖ *Bastions (Bastione)* Six separate structures, ranging from 3760 – 6050 sq.m. with a total area of circa 29,000 sq.m.



- ❖ Barracks/Offices (*Caserne*) Seven separate structures ranging from 3,040 – 35,010 sq.m. with a total area of circa 60,000 sq.m.
- ❖ Sheds (*Capannone*) Three separate structures ranging from 680 - 1550 sq.m. with a total area of circa 3,000 sq.m.
- ❖ Mill and Bakery (*Molino/panificio*) outbuildings and main structure – circa 5,000 sq.m.
- ❖ Powder Magazines (*Polveriere*) – Two separate structures each approximately 1,000 sq.m.

Finally, there is a wide range of small, individual buildings and enclosed spaces. When considering the stated floor areas, there are two additional points to note. Firstly, although the *Fabricati* and Bastions are at ground level, they form part of the structure of the fortifications and as such have very little natural light and limited ventilation. The nominal ground (grade) level is also below the level of the nearby river and the site has flooded regularly in the past. Protection measures are in place and there is no record of recent flooding, but any potential concessionaire would need to take this risk into account when bidding. Secondly, the structures of the roof and upper floor of some of the barracks/office blocks have been designed to withstand bombardment. As well as reducing the available floor area, there are areas where deep internal window embrasures and limited headroom reduce the usable area.

Although Alessandria has a history of manufacturing, this has been declining and the focus of the city is on its role as an administrative centre, with a relatively high rate of unemployment compared to the rest of Northern Italy, and a high proportion of publicly funded employment.

Potential uses for the structures have been presented, but to stabilise them, put them into a condition where they could be redeveloped, and install the essential services and transport infrastructure would require EUR 10 - 20 million, depending on the scope of works. Thereafter, redevelopment costs would be in the range EUR 120 - 200 million depending on the options chosen.

There is a strong attachment between the people of the city and the *Cittadella*. Despite the parlous and potentially dangerous state of some areas of the site, it is a popular recreation space. It is also an historically important site, with connections to both Napoleon and Garibaldi. However, the city's economy is relatively weak and any significant commercial development on the site may have a negative impact on activities within the city. There is little doubt that the *Cittadella* is important and, in view of its physical closeness to the city and the wider built up area, it would be unrealistic just to abandon it. A balance needs to be found between public and private development, but in the short term, and under the present relatively depressed economic climate, it is unlikely that commercial developments would generate high returns, and the city may need to let the private sector have access to almost all of the site to cover the costs of the public infrastructure required, and the works required on the large open spaces which make up the site.

## 2. Purpose, location

The objective is to restore the *Cittadella* and the historic buildings contained within its perimeter, and turn them into economically useful, self-sustaining assets to the benefit of the city and to the wider region.

Alessandria was established in the 12<sup>th</sup> century as a defensive stronghold, lying between the Tanaro and Bormida rivers, close to their confluence, and sits on an alluvial plain, at the crossroads of major North-



South and East-West transport corridors. In the 18<sup>th</sup> century, following the transfer of the region from Spain to the House of Savoy, and probably driven by changes in military technology, the decision was made to build a citadel (*Cittadella*) to protect the city and its strategic location. The chosen design is a “six-star hexagon” and it was built on a subdivision of Alessandria, across the river from the city itself. The actual site was a village called Borgoglio which was razed to the ground and incorporated into the *Cittadella*’s foundations. Since that time, it has played an important role in The War of the Austrian Succession, Napoleon’s First Italian Campaign, the Risorgimento and World War II.

### 3. Context

The *Cittadella* remained a military establishment right up until 2007. However, it is clear that the Ministry of Defence had no interest in maintaining the whole site and only a limited number of key buildings benefited from a programme of maintenance and repair. The main fortifications were stabilised and structures maintained or supported only to avoid risk to military personnel, rather than to preserve them as part of the city and region’s heritage. The *Cittadella* is technically under the ownership of the State Property Agency which controls what activities may be undertaken within the *Cittadella*, while passing responsibility for maintenance and repair to the City of Alessandria under a type of lease. Within the city’s administrative structure, responsibility lies with the Department of Heritage, Cultural Policies and Youth Policy.

The city is being supported by the *Fondo per l'Ambiente Italiano* (FAI), a not-for-profit organisation, established in 1975 and now with over 60,000 members. The organisation aims to protect and enhance Italy’s cultural and natural heritage. FAI has established a presence in the *Cittadella* which has developed visitor programmes and created the core of a visitor centre through its local Delegation.

While there is a great deal of goodwill towards the *Cittadella* at local and national levels, none of the three organisations with a stake in this historic monument are in a position to fund the stabilisation, reconstruction and redevelopment of the site.

State Property Agency – is the owner, and lessor, but is effectively a holding company without the resources to make a significant financial contribution to the works.

The City of Alessandria – is the lessee but is still recovering from a period when the city was effectively bankrupt. The city remains heavily indebted and maintaining the core business of the city has to take priority over heritage. Even if the previous overspending had not taken place, it is perhaps unlikely that the city would have had the financial strength needed to take on the liabilities of the redevelopment. Although the region is wealthier than the Italian average, with lower unemployment, it has a lower GDP per capita than neighbouring cities such as Turin and Milan: Its economy is biased towards public administration, exacerbating the recent financial difficulties, with few private sector motors available to pull the city out of its economic depression. With the city’s finances finely balanced, any investment in the *Cittadella* would be at the expense of service provision for the rest of the city.

The FAI - manages the private funds it generates itself and some limited public resources. However, its entire annual budget would cover the redevelopment of only a small part of the site. Its contribution must come from its expertise and organisational support framework.



#### 4. Description

See Appendix I for a map of the *Cittadella* with principal structures marked. The same references have been used in the text, within square brackets: [ ].

The following structures are the most significant on the site, with a minimum footprint of 500 square metres, but there are others where the functionality is either already determined, e.g. gatehouse and purely defensive structures, or where there is a question as to whether the structure should be retained for safety or archaeological reasons.

There are five main component groups, as outlined in §1. Summary:

##### Fabricati Bonetti

- ❖ Eight structures [4 - 11] with a nominal total footprint of 11,000 sq.m.;
- ❖ Originally outlook or surveillance posts, they are located on the outside of the outer walls;
- ❖ The usable space at each post is less than 180 square metres;
- ❖ The structures appear to be in relatively poor condition, and they are not currently connected to any services;
- ❖ Access to the structures is difficult.
- ❖ Estimated cost to make secure and suitable for further development: no figures available but they should be treated as being part of the walls for stabilisation and redevelopment purposes.

##### Bastions

- ❖ Six structures with a nominal total footprint of 29,000 sq.m.;
- ❖ Defensive structures: located at the six points of the inner ramparts: the hexagon. They all have a pentagonal structure which offers sight and firing lines along the walls as well as to the outside ramparts.
- ❖ Two of the structures [45, 49] – located to the left of the access-ways when facing the *Cittadella* - are solid structures with only 76 square metres of enclosed space.
- ❖ Three of the other four structures [31, 33, 34] offer 3 920 sq.m. of gross covered area over two floors and three levels – approximately 3,500 sq.m. net. The fourth structure [32] is similarly arranged but with 3,760 sq.m. gross and approximately 3,300 sq.m. net.
- ❖ The interior structures are in relatively good structural condition, with cobbled floors and relatively dry. However, there are minimal services within the structures – low power electricity, no water or drains, and there is minimal ventilation and natural light;
- ❖ Headroom in the main areas is circa 5 metres.
- ❖ Estimated cost to make secure and suitable for further development: no figures available. However, subject to historic building consent and planning asset, the structures offer development opportunities for activities which do not require natural daylight.





## Barracks/Offices

- ❖ Seven separate structures ranging from 3,040 – 35,010 sq.m. with a total area of circa 60,000 sq.m.
- ❖ 1. – *Bainsizza* [61] – Approximately 3,000 sq.m. of usable space with full headroom and vaulted ceilings. Appears to be still structurally sound but requires maintenance and repair particularly to the roof and guttering. Minimal building services;
- ❖ 2. – *Montegrappa* [62] – Approximately 4,500 sq.m. of usable space over three floors with full headroom and vaulted ceilings. Also a basement with approximately 2,000 sq.m. usable space. Appears to be mostly structurally sound but requires maintenance and repair particularly to the roof and guttering. Minimal building services;
- ❖ 3. – *Gigersa* [65] – Approximately 1,350 sq.m. of usable space with full headroom. Built round a central courtyard, with some interesting architectural features. The building is structurally unsound and at risk of collapse. In its current state, it represents a risk to the overall development and a full structural and ground survey is needed to establish the building's viability;
- ❖ 4. – *Beleno* [66] – Approximately 8,500 sq.m. of usable space over three floors with full headroom and vaulted ceilings. Also a basement with approximately 2,500 sq.m. usable space. An impressive complex, facing the main parade square, with a number of architecturally interesting features. The building appears to be structurally sound and habitable apart from some problems with the roof. Minimal building services, but enough to allow it to host a military museum on the ground and first floors of the central section;
- ❖ 5. – *Giletti* [68] – Approximately 24,000 sq.m. of usable space over three floors with full headroom and vaulted ceilings. Also a basement with approximately 8,000 sq.m. usable space. An impressive building built round three courtyards, with a number of interesting architectural features, it appears to be structurally sound and mostly habitable apart from some problems with the roof and historic flood damage. No building services;
- ❖ 6. – *Montesanto* [75] – Approximately 6,000 sq.m. of usable space with full headroom and vaulted ceilings. All floors are large open areas, including the second floor which is a long, clear space with deep internal window embrasures. Appears to be still structurally sound but requires maintenance and repair particularly to the roof and guttering. Some building services and the building is occasionally used to host events and exhibitions;
- ❖ 7. – *Pasubio* [76] – Approximately 3,000 sq.m. of usable space with full headroom over three main floors plus usable attic and basement spaces, each of 8 - 900 sq.m. Partly restored and modernised the building has modern building services and is used as offices.
- ❖ There are no cost details for required works but, with the exception of the Gigersa building, renovation and modernisation of these structures would be mainly confined to roofing work and the installation of modern buildings services. Thereafter they would be suitable for a wide range of uses.



### Storage Sheds

- ❖ There are three structures of different ages and styles, with a total area of some 3,000 sq.m.
- ❖ *Doppio* [55] - A double apex (two-bay) shed of 1,500 sq.m., dating from the 1930s with no particular architectural merit. The building is basically sound, but unmodernised, with minimal building services currently installed.
- ❖ Shed 1 [59] – 680 sq.m. and Shed 2 [60] – 750 sq.m. No information available but located close to *Caserna Pasubio*.

### Flour Mill and Bakery [73] Ignoring outbuildings

- ❖ Single structure (plus outbuildings) with 4,500 sq.m. of usable space with full headroom and vaulted ceilings over three main floors;
- ❖ Simple, relatively well-lit brick-built building;
- ❖ The interior structures are in relatively good structural condition, with some services, e.g. power and lighting, within the building;
- ❖ The ground floor retains some of the original milling and baking equipment and is occasionally opened to the public as a museum space;
- ❖ Estimated cost to make secure and suitable for further development: no figures available. However, the building is fundamentally sound.

### Powder Magazines

- ❖ Two buildings, *Santa Barbara* [64] and *San Michele* [70] of 620 sq.m. containing a complex structure to minimise the risk of explosions;
- ❖ *Santa Barbara* is unsafe. *San Michele* is structurally sound except for an infestation in the roof members.
- ❖ These buildings are of a very specific design and are of historical importance.
- ❖ Estimated cost to make secure and suitable for museum status: no figures available.

## **5. Technical aspects**

With the possible exception of the *Giletti* building [68], none of the buildings pose any particular structural problems for the time being, and renovation works could be carried out by most competent contractors. However, the site as currently presented has a number of characteristics which make it unattractive to any potential investor, whether public, private, or not-for-profit. Any participation in the redevelopment of the site will involve the acceptance of a variety of risks. However, investors will not willingly accept risks which they cannot quantify, mitigate or manage. Unfortunately, the *Cittadella* presents five specific risks which will need to be addressed by either the Owner or the City before any of the three classes of investor identified above might reasonably asked to risk their money:



**Flood Risk:** The site has a long history of flooding, with structures still showing the effects of flood damage. Many of the buildings carry plaques identifying the height of the flood waters – more than three metres above the grade level. The grade level itself is lower than the normal level of the river. During the site visit, the city representatives assured the review team that measures had been put in place to prevent a recurrence. However, an investor would probably need to be assured that the existing defences will be adequate during the life of any concession, particularly under the expected changes in weather patterns, including the increasing frequency and severity of extreme weather events. A simple indicator would be the willingness of insurance companies to offer long term flood protection insurance to any investor. This may require the development of a flood risk study and recovery plan.

**Infrastructure:** At present the site has minimal physical infrastructure. If it is to be fully developed then it will require the full range of municipal and other infrastructure services to be delivered to the site: water, drinking water, management of black and grey waters from the structures, surface water management, and the provision of electrical power, gas and telecommunications. These will have to be installed taking full account of the historic nature of the site with all services below grade, and possibly also below the water table. Depending on the results of the flood risk study, these installations may have to be more protected than normal. Ideally, the investments in infrastructure would be made before the start of any redevelopment works. However, at the latest they should be carried out in parallel with the earliest works on the structures.

**Planning and Permitted Development:** The *Cittadella* is an historic structure which contains a set of historic structures within the walls. However, it also contains more modern structures. At an early stage, and before investors are invited to bid for any or all of the structures, the City and cultural heritage authorities will need to agree a development policy for the whole site. This would need to define:

- The buildings to be retained within the walls – not all of the structures are historic, some have no historic or architectural value. Will these be retained or demolished?
- What changes will be permitted to the exterior of historic structures, e.g. the installation of adequate rainwater guttering, new window openings, new door openings, etc.?
- What changes will be permitted to the interior of historic structures, e.g. creating ducts for services, changing floors to improve personal safety, introducing ventilation systems to enclosed spaces, etc.?
- What new structures may be created and under what conditions?
- Which structures will be retained for historic and cultural purposes and which may be developed for either commercial or not-for-profit purposes. This balance will need to take account of the premise that the non-public investors should be placed in a neutral position vis-à-vis the public investors. They should not be subsidised by the public sector – unless they have a specific social value - and they should not be expected to subsidise public works. The allocation of infrastructure costs between the public and non-public sectors should be fair and reasonable and be paid on the same basis as if the development were taking place within the city itself.

#### Access:

The *Cittadella* was designed as a defensive structure: to keep people out. As such, its entrances had to be defensible, i.e. protected from attack and as small as possible consistent with their need to allow passage of men and materiel. The entrances are therefore key historic and cultural components of the site. Any redevelopment has to accept this reality, even if it creates constraints on the types of activity which can be included in the redevelopment programme. For example, while the bastions could easily be used for logistical purposes, the difficulty of getting trucks into and out of the complex makes that option





unrealistic. However, if goods cannot be readily moved, then the alternative requires people to be moved, and they would require either public or private transport. Some initial planning has suggested that there should be a one-way system through the site, with the current main portal becoming the entrance, and the secondary portal the exit. This is entirely reasonable, but it would require the upgrading of all of the roads close to the site, and changes to the city's traffic management plan.

At present there is some parking within the *Cittadella*. However, if it is going to have a much higher level of activity, then the city will need to decide if a greater area should be set aside within the walls – to the detriment of the historical context, but the betterment of the visitors' convenience – or if remote parking areas should be established, in which case transport links into the heart of the *Cittadella* would need to be developed.

#### Site Preparation and Development:

There is one key risk to investors which they are not in a position to mitigate, unless they are to be given full control of the site. A fully funded, long-term programme of works is needed to eradicate *Ailanthus Altissima* from the site. It is a problem which needs to be addressed as a matter of urgency and unless the plant is eradicated, renovation and restoration of the buildings, and the roofs in particular will be pointless. In the past, this has been managed on an *ad-hoc* basis using volunteers. However, this has only addressed the most egregious infestations and has done nothing to solve the root problem. The nature of the plant is that cutting back simply leads to new shoots coming from the cut surface – or any other stem, branch or root of the plant. At the same time the roots will penetrate stone and brickwork, both hiding the plants' spread and damaging the integrity of the structures' foundations.

The infestation problem can be resolved, but only by establishing a multi-year, fully funded programme to clear the roofs, cut back the plants, many of which are now significant trees, and continue to tear up and poison the rootstocks for a number of years. It should also be noted that this problem has partly been encouraged to develop by the absence of control on the *Cittadella*'s horizontal surfaces. The wall cappings and much of the bastions' roofing is growing wild with the result that the appearance of the structure is being lost behind vegetation – which is also damaging the integrity of the defensive structures.

Consideration could be given to letting the ramparts and the open space between the ramparts as grazing land for goats and sheep respectively. It would not be the intention to establish agriculture *per se*, although some additional fencing would be required, but the combination of these two animals would allow the vegetation to be controlled at minimal cost and would start to address the infestation problem.

## 6. Implementation

As already noted, the redevelopment of the site should pose no particular technical difficulties. The principle risks associated with implementation will be the installation of the infrastructure within and around the site and then the scheduling of the works in all of the various buildings. In an ideal world, all of the works in all of the buildings should be completed at the same time, so that when the site becomes operational as a new district of the city, all facilities are in place and no-one will be expected to either live or operate in a continuing building site.



The implementation probably needs to have five distinct phases:

### 1. Infrastructure

- a) Defining the optimum mix of activities on the site, taking into account the town planning requirements of the city, the affordability of the public sector requirements, the availability of funding for these investments, and the demand for the foreseen facilities and services. See also §9.
  - b) Agreeing the planned infrastructure works with the relevant cultural heritage agency and obtaining all necessary environmental and social permits
  - c) Stabilisation of any structures which may be at risk from civil and construction works and protection of any natural or architectural features which might be at risk on a construction site.
  - d) Installation of the infrastructure and related services.
2. Final Negotiation of the terms of any individual or grouped concession structure. This phase may run in parallel with the first phase.
  3. Construction assent/listed building assent from the relevant cultural and building control authorities for the works proposed by each concessionaire, and by the city for its own works.
  4. Planning for the construction phase based on the agreed development proposals. This will need to take account of multiple contractors working in a limited site with limited access.
  5. Physical implementation and landscaping of the whole site.

The scale of the project being proposed is substantial, probably with a budget of EUR 100 - 200 million. There will be substantial costs for the local authorities, but potential revenues in the longer term. It would therefore be appropriate to establish a project implementation team within the city authorities, led by professionally qualified and experienced project managers, working on a term contract basis.

Any planning for physical works would need to take account of the availability of funding. Realistically, the structuring of funding and the establishment of relationship with developers for the individual structures is likely to be lengthy and time consuming for the parties concerned. It is unlikely that the project can be completed within five years, of which only two would be the physical redevelopment of the buildings.

## 7. Procurement

Unless there is actual transfer of ownership of the assets to the private sector – which is neither likely nor foreseen in the scenarios considered in §9., the award of concessions and the required infrastructure works will be subject to public procurement rules under the relevant EU Directives, and under Italian Law. Depending on the structure of concession(s) and the scale of the physical infrastructure works finally agreed, there may need to be publication in the EU and Italian Official Journals, but an accelerated programme of works would almost certainly require this administrative step. The time needed for this process would form a significant part of Project Management planning. Public procurement is a lengthy



process, and nine months would be a reasonable estimate for the time required, once the works are fully defined.

However, development works promoted and funded by the private sector could be procured much more quickly: possibly in as little as three months.

## 8. Environment, sustainability, social

Most of the structures contained by the site are listed by the relevant cultural authorities. It has also been suggested that the *Cittadella* should be proposed for nomination as a potential UNESCO world heritage site. If this listing is important then there will be constraints on the scope and type of development work to be undertaken. The permitted development on the site would be limited and it is likely that there would be cost penalties to convert these historic structures into revenue generating assets, e.g. the use of tunnels to link buildings rather than simple sheltered walkways. Achieving World Heritage status would be a long term affair, easily taking ten years.

Any significant development of the site is likely to have a strongly beneficial social impact, through the provision of employment in the region during the construction phase, and local direct and indirect employment during the operational phase. In particular, there should be boost to the local economy and wider development through the provision of goods and services to the redeveloped site and increasing visitors.

## 9. Use, market, demand

### Use

Before considering the market and demand for the various spaces, potential uses for the spaces have to be identified taking account of the specificities of each of the main structures – and ignoring what they may be getting used for at present. The suggestions presented below are a non-exclusive list and there will almost certainly be a much wider range of realistic potential uses.

#### Fabricati Bonetti

- ❖ Small covered spaces, with difficult access and in poor condition, on the exterior faces of the *Cittadella* ramparts;
- ❖ While there are a range of potential uses, e.g. retail, horeca<sup>1</sup> and leisure, the nature and location of the spaces are such that they do not need to form a significant part of the strategic planning of the site in the short term. Potential applications can be considered at a later stage, once the main structures are fully utilised.

#### Bastions

- ❖ The two solid structures can be ignored at this stage;

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<sup>1</sup> Horeca – Hotel, Restauration and Catering



- ❖ The other spaces are very attractive but with very limited natural light and ventilation. The actual levels of humidity are not known at this stage, but this may be regulated via environmental controls. Simple storage/logistics involving high stock rotations would not fit well with the difficulty of access.
- ❖ Potential applications include: secure storage for high value items, document archives, storage of personal goods, display/retail spaces on volumes opening onto the centre of the *Cittadella*, Museum display areas, particularly those which would benefit from low natural lighting and a controlled environment, maturation zones for artisanal food products, e.g. cheese and cured meat, etc.

#### Barracks/Offices

- ❖ 1-. – *Bainsizza* [61] – The internal structure probably makes it more appropriate for use in commercial real estate: offices or possibly retail.
- ❖ 2. – *Montegrappa* [62] – Retail, residential, specialist industrial in the food and beverage sector, offices.;
- ❖ 3. – *Gigersa* [65] – Provided the structure can be stabilised, appropriate uses would include: horeca, particularly functions and events, exhibitions, small scale concerts, etc.
- ❖ 4. – *Beleno* [66] – This is a large structure offering a wide range of potential real estate uses: residential accommodation/offices/student accommodation. It is probably not well suited to retail or industrial use;
- ❖ 5. – *Giletti* [68] – this is a very large structure and would be most appropriate for a mixed-use development residential real estate, commercial, retail and horeca;
- ❖ 6. – *Montesanto* [75] – With its large open areas over three floors, it could be a single large retail development, a commercial market, offering spaces for small traders and pop-up shops, or a major exhibition venue;
- ❖ 7. – *Pasubio* [76] - The internal layout would require substantial alterations to make it suitable for residential or horeca use, which may not be acceptable as it would change the essential nature of the building. However, it could be used for offices, a conference centre, artists' ateliers/studios, small business incubator, etc.

#### Storage Sheds [55, 59, 60]

- ❖ These are all industrial-type spaces and could be used for a range of commercial purposes, including workshops and service providers for the rest of the development. However, the more fundamental question is whether they are good fit with the rest of the development and, if they are not, then demolition should be considered.

#### Flour Mill and Bakery [73] Ignoring outbuildings

- ❖ This building was designed for a specific purpose, and while it is not overtly military – except for the attribution of the saying “an army marches on its stomach” to Napoleon who enhanced some of the *Cittadella*’s defences – it could be used as the *Cittadella*’s visitor centre. It is



located close to what should be the main entrance, and it would be difficult to redevelop the building without fundamentally changing its interior;

#### Powder Magazines [64, 70]

- ❖ While these structures could theoretically be used for another purpose, their real value is the nature of their specific design and construction as powder stores. These should probably remain as they are, to reinforce the historic and cultural context of the site.

### **Demand and Use**

From the documentation provided, it would appear that since the army gave up the site, the focus of thinking has been on preserving the *Cittadella* by finding alternative uses for the buildings. The difficulty with this approach is that it defines the issue as being the finding of new uses for the buildings, rather than how the site can be preserved within the wider context and fabric of the city and region. However, an historic monument which has been redeveloped to give new life to old buildings cannot be grafted onto a city without the risk of rejection by either or both parties. The real question which has to be asked is “what real estate needs does the city, and perhaps the wider region, have - and could the structures within the *Cittadella* be adapted to satisfy those needs without fundamentally changing its the nature?”

Alessandria contains a number of interesting and historic buildings, but it is not a major cultural and historical tourism destination. A reinvigorated *Cittadella* could help change that and attract tourists to the city, but that is a long-term strategy.

A key issue which needs to be addressed is an apparent lack of market data for public and private real estate activities in the city and region. Key questions which need to be answered are:

- What is the demand versus supply for residential real estate within the city, by size and type of property for purchase and for rent? Unless there is a buoyant real estate market in the city, creating substantial new residential real estate capacity in the *Cittadella* could have serious implications for the real estate market in the city, and the risk of either the *Cittadella* or the city centre being half empty.
- As a subset of residential demand, there is the proposal that some of the *Cittadella*’s buildings could be used as student accommodation/offices. This begs the question “How many students in the city would be prepared to travel from the *Cittadella* to the educational institutions, how many students have a problem finding accommodation, and how much would both classes be prepared to pay?”
- What is the demand and supply of retail spaces within the city? Is there an excess of demand over supply, or are there empty retail units readily available? What would be the impact on existing city-centre traders if new capacity were to be created on the outskirts?
- What is the demand and supply of office accommodation within the city? Is there an excess of demand over supply, or are there empty office units readily available? What would be the impact on the owners of existing city-centre commercial real estate if new capacity were to be created on the outskirts?





- How would a business incubator unit in the Cittadella fit with the city and regions existing business development policies?

If it can be established that there is enough additional demand to justify new capacity, then it should be possible to construct a masterplan for the site as an integral part of the city. That masterplan would balance the competing demands for accommodation/offices between the public, private and not-for-profit sectors, based on a clear definition of need.

Only at that point – when the City has a clearly defined product which it wants to sell - should the city start looking for investors. A “product” needs to be defined. This will be the whole site, minus the fortifications and minus the redevelopments that the city wants and can afford to redevelop. Only then can decisions be taken about how the product can be structured to make it attractive to potential investors. As with the project management of the infrastructure, this activity should be guided by experienced real estate advisers.

## 10. Investment cost

At present, there does not appear to have been any serious costings for the total project, including the infrastructure and essential cleansing of the landscape. However, the application of simplistic redevelopment costs would suggest a total public and private expenditure of the magnitude of EUR 150 million depending on the degree of redevelopment, with EUR 30 – 40 million expenditure needed to cover infrastructure and the retained public components before the concessionaires would be in a position to launch their own redevelopment programme. The funding for these investments needs to be established before any redevelopment can be considered, and can only be funded through public budgets and public subscription, i.e. charitable and altruistic donations by individuals, cultural organisations and private sector operators. It may be possible to borrow for a significant proportion of the redevelopment works, to be repaid out of rents or concessions from private and public operators concerned in the redevelopment process. However, neither commercial nor promotional banks would lend on a non-recourse basis and the structures themselves would probably not be available to the banks as security. Guarantees may therefore need to be offered by the public sector.

However, to put the project into perspective, redevelopment costs have been evaluated to be in the region of EUR 150 million for the types of development proposed above. However, with a real estate value of EUR 4 000 per sq.m.(net) for the accommodation/offices blocks and half that amount for the bastions, the total value of the site after redevelopment would be of the order of EUR 180 million. This suggests that, if properly managed and marketed, the project could be self-liquidating, provided the public authorities contribute at the same rate as the non-public concessionaires.

## 11. Financing Possibilities

It should be clear that there are two distinct types of funding required: “cultural” and “commercial”. The “cultural” funding is needed to make the total project financially viable and sustainable: many of the public redeveloped structures will not generate enough revenues to cover operating costs, quite apart from capital costs. It is also unrealistic to expect commercial activities to cross-subsidise public costs, other than through the normal tax regime. The cost to commercial operators of access (site rents, concessions, etc.) must be competitive with other sites they might choose. There can be no premium for



the location until private investors can be persuaded that a) the pre-development works can be funded and implemented, and b) that there will be a market for the products and services to be offered. Bearing in mind the fact there is no history of revenue generation on the site, and that the city is less well off than some major cities in neighbouring regions, there is the risk of a gap between visitor numbers during a start-up phase and the numbers needed to make these sites sustainable. It may also be very difficult to persuade private investors to risk their capital until the sites are ready for redevelopment and there is a marketing plan in operation which will draw large numbers of new visitors to the town and region.

However, provided potential commercial operators and developers have a sound track record, the funding of their investments should not be a significant problem and they would either organise it themselves or in conjunction with the City. This will be true whether the funding is sourced from commercial banks active in the region, or regional promotional banks, or the European Investment Bank. However, it may be either desirable or necessary to offer capital incentives to invest in what is a relatively weak local economy, with uncertain future demand. The possibility of capital or employment related grants should therefore be pursued if the overall project as presented here were to go ahead.

The critical factor is whether there is a realistic prospect of “cultural” funding being available. The costings so far are based on very approximate numbers. However, the order of magnitude is likely to be correct. The “cultural” funding will depend on the proportion of the site that the City wants to retain for public use, but could be in the region of EUR 25 million plus whatever the public infrastructure costs. There are a number of potential sources of funding:

- ❖ City budgets/borrowing – While the City may be able to devote some resources, it is not realistic to expect this to be more than nominal. As already noted, the City’s finances are heavily constrained.
- ❖ Department/Region – Budgets here are relatively larger, and the proposal would be in line with an orientation to develop the tourism industry. However, again, the funds may be limited due to existing and competing commitments. The parties involved will, of course, be fully aware of what funding might be available and on what terms.
- ❖ Regional Development funding: managed and allocated by the Italian government, based on EU resources. In theory, this could provide up to 50% of eligible costs. Again there will be competition for these resources, so any approach must be professionally managed with a well-argued economic and cultural case being made to the department responsible.
- ❖ Loan funding from promotional banks, as outlined for the private sector. Again a professional case needs to be made: this time one which presents suitable guarantees and repayment mechanisms.
- ❖ Private patronage: Internationally there are wealthy individuals, trusts and commercial companies with Corporate Social Responsibility objectives which can be approached for backing. Once again, the approach needs to be tailored to suit each potential donor, which requires financial resources and professional skills which are not currently available to the project.



- ❖ Public collections: Might form part of a wider fund raising programme, but may not be the most efficient or effective way of raising funds.

## 12. Conclusion: Proposed Action Programme and recommendations

The proposed stabilisation and redevelopment project is too large to be seen in isolation, and it should be recognised that Alessandria, while being the regional capital, has very little free capital available. The scale of the *Cittadella* when measured against the limited resources available within the local administration and the demands already being made by recurrent budgets, suggest that there has to be a major review of the City's development strategy. The representatives of the City and the owner and the FAI which assisted in the site visits were all committed, experienced and qualified for their responsibilities. However, they are too few to carry out all the necessary work and the teams need either to be reinforced or parallel teams established to take over some of the responsibilities.

It is therefore suggested that an action plan be developed which would incorporate, but possibly not be limited to, the following stages:

- ❖ A review of City's urban planning to incorporate the *Cittadella* into the fabric of the city.
- ❖ A series of real estate demand analyses, as outlined in §9 – Demand and Use
- ❖ Planning for the development and implementation phases by preparing terms of reference for professional advisers in infrastructure implementation and real estate strategic marketing

There is little doubt that the *Cittadella* is important, and it would be unrealistic just to abandon it, but there is a choice to be made by the interested parties. Either the *Cittadella* is simply stabilised and continues to exist outside the city, or it is fully integrated into the city.

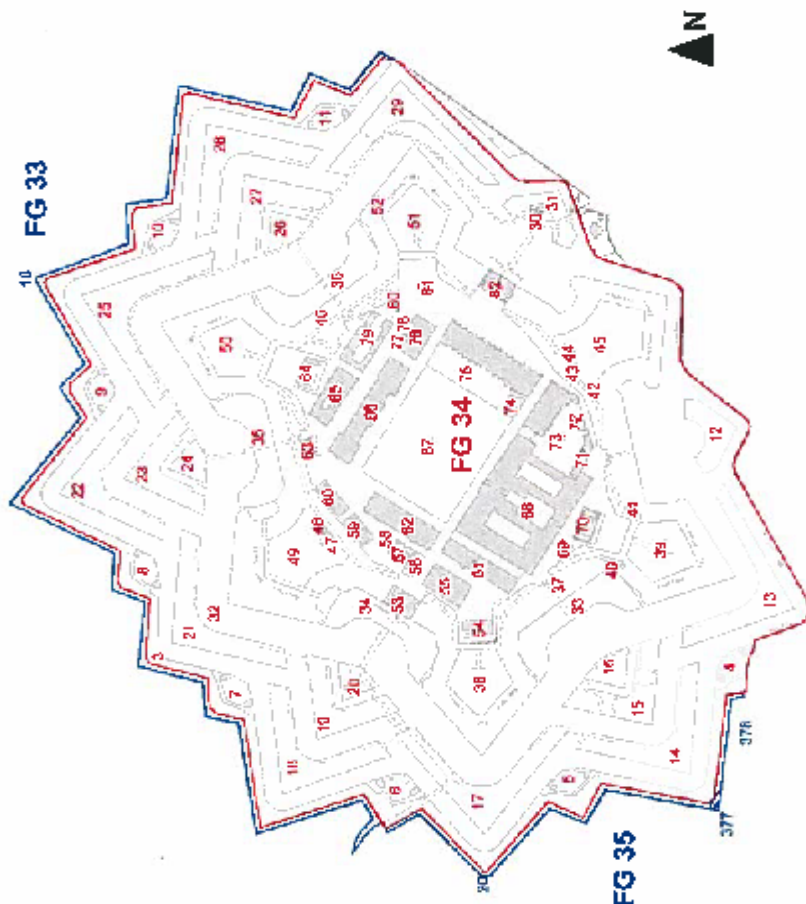
### Appendix I



### 3. Immobili

#### 3.1 Inquadramento catastale

<b>Riferimenti</b> Catasto Comune di Alessandria
<b>Opera Cittadella:</b> Catasto Terreni: foglio n.34, particelle: dal n.3 al n.82 comprese;
<b>Catasto Fabbricati:</b> foglio n.34, particelle: n.1, 4, 5, 6, 7, 8, 9, 10, 11, 30, 38, 39, 40, 41, 42, 43, 44, 47, 48, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81 e 82.
<b>Insediati al DEMANIO PUBBLICO DELLO STATO/IRAMO ARTISTICO STORICO ARCHEOLOGICO</b>
<b>Strada circoscranta l'Opera Cittadella:</b> Catasto Terreni: -Foglio n.33, particella n.18; -Foglio n.35, particelle n.1, 20, 377 e 378
<b>Catasto Fabbricati:</b> foglio n.35, particella n.377
<b>Insediati al DEMANIO DELLO STATO</b>



Individuazione dei beni su estratto di mappa catastale





### 3.2 Consistenze immobili

La superficie mappata corrisponde al catasto, la superficie fabbricata corrisponde al rilievo d'ufficio

Categoria	Tipologia	Qual	Quantità	Disposizione	Superficie fabbricata (mq)	Superficie mappata (mq)	Superficie fabbricata totale (mq)	Superficie mappata totale (mq)	Superficie fabbricata totale (mq)	Superficie mappata totale (mq)
34	3	0	Parcello	Terreno		23.000,00				
34	4	0	Parcello	Fabbricati in Terreno	1.700,00	1.700,00	1.700,00	1.700,00	1.700,00	1.700,00
34	5	0	Parcello	Fabbricati in Terreno	1.300,00	1.300,00	1.300,00	1.300,00	1.300,00	1.300,00
34	6	0	Parcello	Fabbricati in Terreno	1.400,00	1.400,00	1.400,00	1.400,00	1.400,00	1.400,00
34	7	0	Parcello	Fabbricati in Terreno	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00
34	8	0	Parcello	Fabbricati in Terreno	1.300,00	1.300,00	1.300,00	1.300,00	1.300,00	1.300,00
34	9	0	Parcello	Fabbricati in Terreno	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00
34	10	0	Parcello	Fabbricati in Terreno	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00
34	11	0	Parcello	Fabbricati in Terreno	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00
34	12	0	Parcello	Fabbricati in Terreno	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00
34	13	0	Parcello	Fabbricati in Terreno	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00
34	14	0	Parcello	Fabbricati in Terreno	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00
34	15	0	Parcello	Fabbricati in Terreno	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00
34	16	0	Parcello	Fabbricati in Terreno	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00
34	17	0	Parcello	Fabbricati in Terreno	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00
34	18	0	Parcello	Fabbricati in Terreno	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00
34	19	0	Parcello	Fabbricati in Terreno	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00
34	20	0	Parcello	Fabbricati in Terreno	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00
34	21	0	Parcello	Fabbricati in Terreno	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00
34	22	0	Parcello	Fabbricati in Terreno	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00
34	23	0	Parcello	Fabbricati in Terreno	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00
34	24	0	Parcello	Fabbricati in Terreno	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00
34	25	0	Parcello	Fabbricati in Terreno	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00
34	26	0	Parcello	Fabbricati in Terreno	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00
34	27	0	Parcello	Fabbricati in Terreno	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00
34	28	0	Parcello	Fabbricati in Terreno	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00
34	29	0	Parcello	Fabbricati in Terreno	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00
34	30	0	Parcello	Fabbricati in Terreno	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00
34	31	0	Parcello	Fabbricati in Terreno	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00
34	32	0	Parcello	Fabbricati in Terreno	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00
34	33	0	Parcello	Fabbricati in Terreno	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00
34	34	0	Parcello	Fabbricati in Terreno	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00
34	35	0	Parcello	Fabbricati in Terreno	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00
34	36	0	Parcello	Fabbricati in Terreno	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00
34	37	0	Parcello	Fabbricati in Terreno	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00
34	38	0	Parcello	Fabbricati in Terreno	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00
34	39	0	Parcello	Fabbricati in Terreno	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00
34	40	0	Parcello	Fabbricati in Terreno	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00
34	41	0	Parcello	Fabbricati in Terreno	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00
34	42	0	Parcello	Fabbricati in Terreno	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00
34	43	0	Parcello	Fabbricati in Terreno	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00
34	44	0	Parcello	Fabbricati in Terreno	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00
34	45	0	Parcello	Fabbricati in Terreno	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00
34	46	0	Parcello	Fabbricati in Terreno	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00
34	47	0	Parcello	Fabbricati in Terreno	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00
34	48	0	Parcello	Fabbricati in Terreno	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00
34	49	0	Parcello	Fabbricati in Terreno	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00
34	50	0	Parcello	Fabbricati in Terreno	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00
34	51	0	Parcello	Fabbricati in Terreno	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00
34	52	0	Parcello	Fabbricati in Terreno	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00
34	53	0	Parcello	Fabbricati in Terreno	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00
34	54	0	Parcello	Fabbricati in Terreno	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00	1.200,00





## Appendix II Cont'd.

## INFORMATION MEMORANDUM Compendio Citadella, Alessandra

Código		Título		Descripción		Superficie módulo (m²)	Superficie Edificio (m²)	Superficie Total (m²)
Id	Mapa Plano	Quil	Cog	Objeto	Objeto	Objeto	Objeto	Objeto
34	35	0	0	Edificio	Edificio	100,00	100,00	100,00
34	36	0	0	Edificio	Edificio	100,00	100,00	100,00
34	37	0	0	Edificio	Edificio	100,00	100,00	100,00
34	38	0	0	Edificio	Edificio	100,00	100,00	100,00
34	39	0	0	Edificio	Edificio	100,00	100,00	100,00
34	40	0	0	Edificio	Edificio	100,00	100,00	100,00
34	41	0	0	Edificio	Edificio	100,00	100,00	100,00
34	42	0	0	Edificio	Edificio	100,00	100,00	100,00
34	43	0	0	Edificio	Edificio	100,00	100,00	100,00
34	44	0	0	Edificio	Edificio	100,00	100,00	100,00
34	45	0	0	Edificio	Edificio	100,00	100,00	100,00
34	46	0	0	Edificio	Edificio	100,00	100,00	100,00
34	47	0	0	Edificio	Edificio	100,00	100,00	100,00
34	48	0	0	Edificio	Edificio	100,00	100,00	100,00
34	49	0	0	Edificio	Edificio	100,00	100,00	100,00
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34	54	0	0	Edificio	Edificio	100,00	100,00	100,00
34	55	0	0	Edificio	Edificio	100,00	100,00	100,00
34	56	0	0	Edificio	Edificio	100,00	100,00	100,00
34	57	0	0	Edificio	Edificio	100,00	100,00	100,00
34	58	0	0	Edificio	Edificio	100,00	100,00	100,00
34	59	0	0	Edificio	Edificio	100,00	100,00	100,00
34	60	0	0	Edificio	Edificio	100,00	100,00	100,00
34	61	0	0	Edificio	Edificio	100,00	100,00	100,00
34	62	0	0	Edificio	Edificio	100,00	100,00	100,00
34	63	0	0	Edificio	Edificio	100,00	100,00	100,00
34	64	0	0	Edificio	Edificio	100,00	100,00	100,00
34	65	0	0	Edificio	Edificio	100,00	100,00	100,00
34	66	0	0	Edificio	Edificio	100,00	100,00	100,00
34	67	0	0	Edificio	Edificio	100,00	100,00	100,00
34	68	0	0	Edificio	Edificio	100,00	100,00	100,00
34	69	0	0	Edificio	Edificio	100,00	100,00	100,00
34	70	0	0	Edificio	Edificio	100,00	100,00	100,00
34	71	0	0	Edificio	Edificio	100,00	100,00	100,00
34	72	0	0	Edificio	Edificio	100,00	100,00	100,00
34	73	0	0	Edificio	Edificio	100,00	100,00	100,00
34	74	0	0	Edificio	Edificio	100,00	100,00	100,00
34	75	0	0	Edificio	Edificio	100,00	100,00	100,00
34	76	0	0	Edificio	Edificio	100,00	100,00	100,00
34	77	0	0	Edificio	Edificio	100,00	100,00	100,00
34	78	0	0	Edificio	Edificio	100,00	100,00	100,00