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# NOVARA NEW TEACHING AND RESEARCH HOSPITAL

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Ospedaliero Universitaria «Maggiore della Carità»

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ORGANIZZATO DA



PROMOSSO DA



SI RINGRAZIA





# PIEMONTE A FUTURE-ORIENTED BUSINESS DESTINATION

You cannot think of an architecture  
without thinking of people  
(Richard Rogers)





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# PIEMONTE

## A FUTURE-ORIENTED BUSINESS DESTINATION

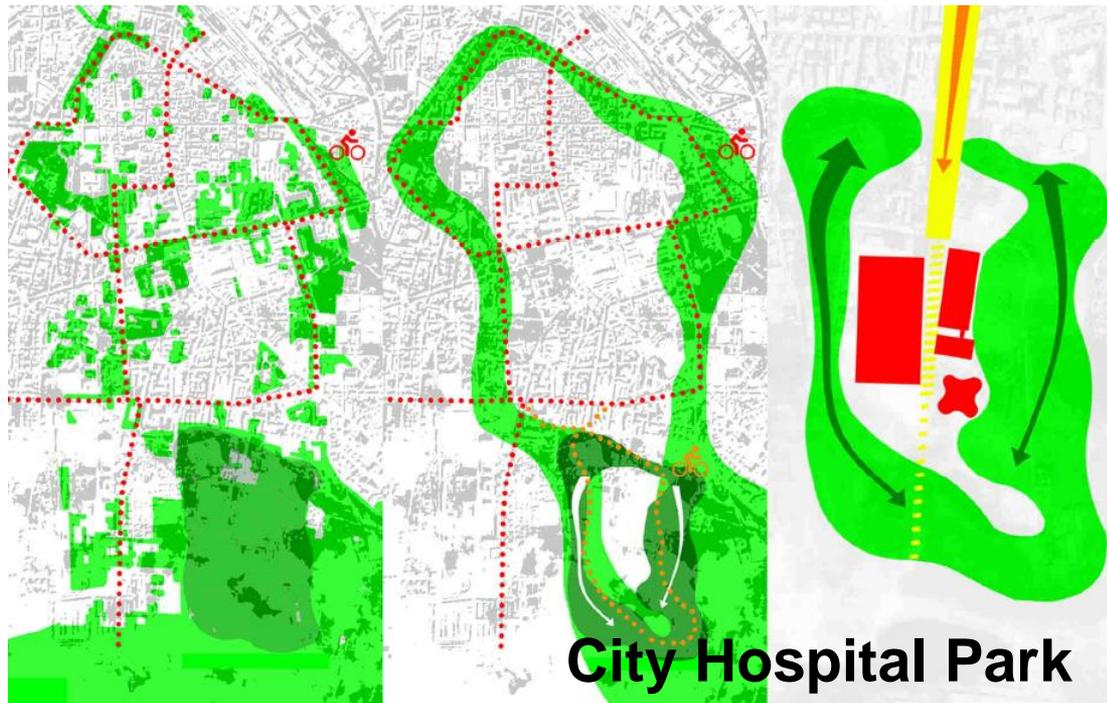
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### **Binding Assumptions**

- ✓ Integration between health activities and teaching and research activities
- ✓ Performance and functional requirements
- ✓ Smart Hospital & Green Architecture

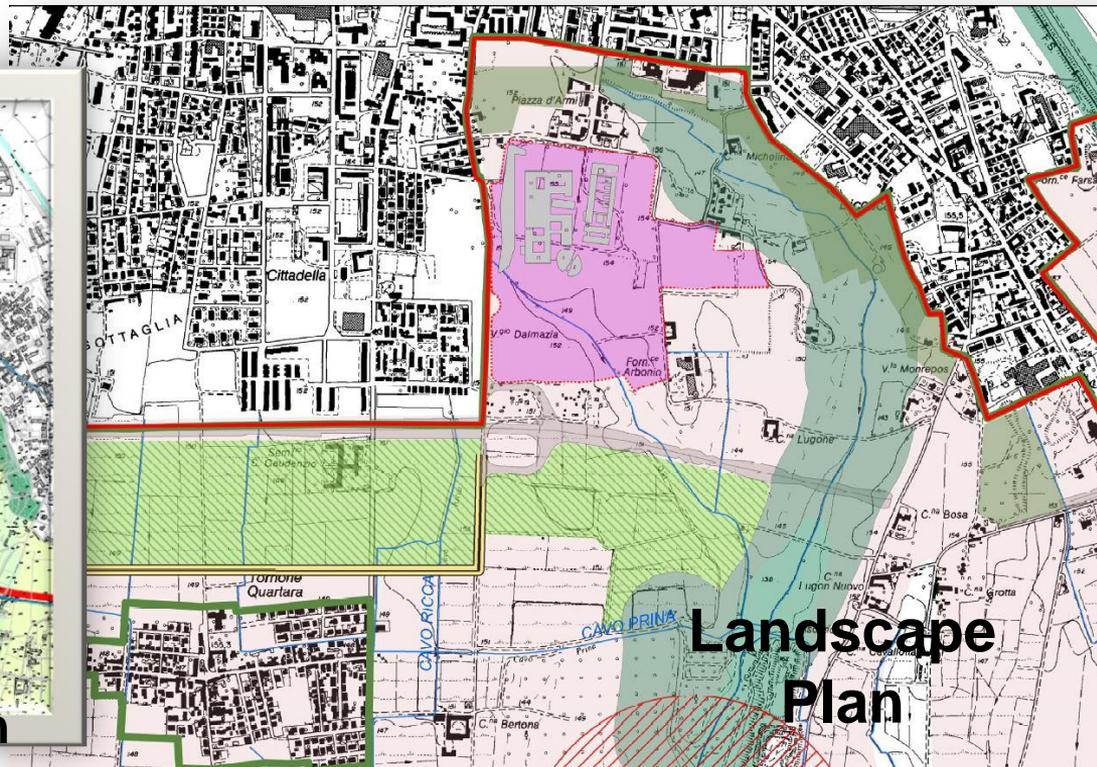
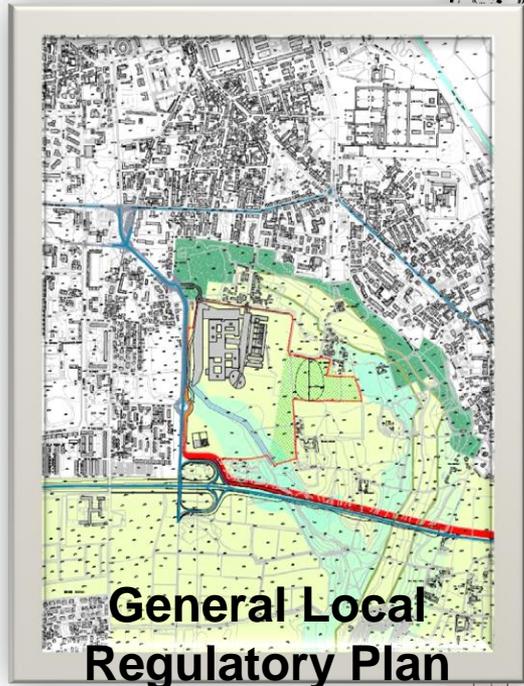


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### MAIN ASSETS OF THE PROJECT

- ✓ City-Hospital Relation
- ✓ External - Internal
- ✓ Rationalisation of flows
- ✓ Reception and accesses



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### STRUCTURE OF ACCESSES AND PATHWAYS

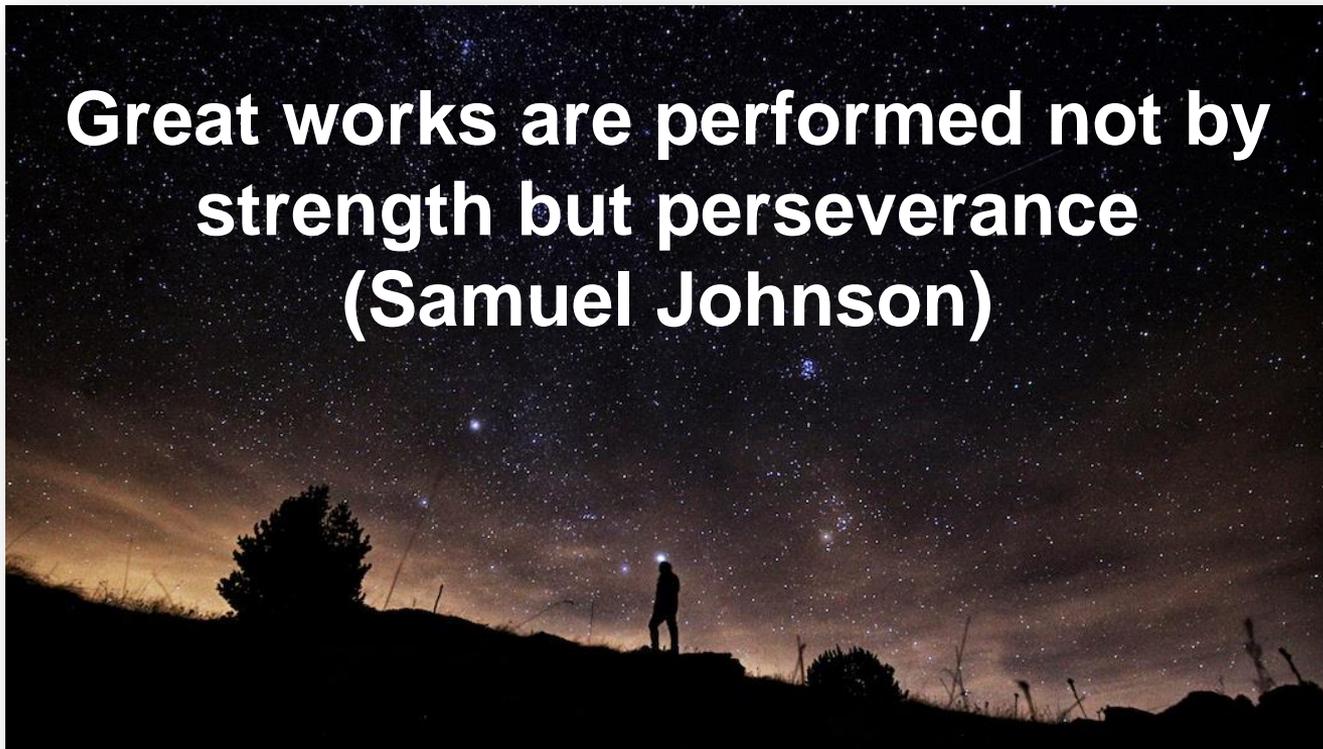
- ✓ Out-patients and visitors
- ✓ Emergency
- ✓ Goods and materials
- ✓ Staff
- ✓ Students
- ✓ Morgue



# PIEMONTE

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**Great works are performed not by  
strength but perseverance  
(Samuel Johnson)**





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# PIEMONTE

## A FUTURE-ORIENTED BUSINESS DESTINATION

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Good morning to all of you,

It is very hard to try to describe a complex and difficult project such as the Novara Teaching and Research Hospital in a few and exhaustive words. First of all I wouldn't like to give figures, surfaces, volumes, as well as general and specific data, but concepts and topics perceived as the project matrix and enabling the technical and economic feasibility study that I am going to show to all of you because "You cannot think of an architecture without thinking of people", as Richard Rogers explained.

### **SLIDE 1**

As you know, the area for the new hospital has been identified in the South of the city, between piazza "Piazza D'Armi" on the North and East side, the future extension of via Gorizia in the West, and the ring-road in the South – over 300 sqm-large total surface (324,300 sqm.)

The new via Gorizia shall become the main connecting road between the South ring-road and the city.

Via di Piazza d'Armi - as secondary road - represents the natural connecting axis between the city centre and the new hospital. It will be its main access for public transport, pathways, pedestrians, and private transports from the city to the new hospital.

The **main entrance of the new hospital** will be on this side. On the South-West corner there is the stream Arbogna – protected by an environmental buffer zone that shall be strictly complied with (art. 18 NTA of PTR Ovest Ticino).

The area is embedded in the North of the provincial "PARCO DELLA BATTAGLIA", hence the new urban settlement shall not be an impenetrable division barrier, but basically an access gate to the park.

### **SLIDE 2**

**The project is based on the binding assumptions that envisage:**

- A close integration between the health activities and the teaching and research activities in order to implement a homogeneous and synergetic system
- Performance and functional requirements (SMART HOSPITAL and GREEN ARCHITECTURE) that are obviously the principles the project is based on.

**The key-elements are closely connected to the above-mentioned requirements and lead to the preliminary project that was then redesigned in the Technical and Economic Feasibility Study, according to the Code of Contracts.**

**Such principles are:**

- **The relation between hospital and city**
- **The Internal and External relation and rationalisation of flows and routes**
- **Reception and access areas**

### **SLIDE 3**

#### **1) The relation between hospital and city**

The first consideration for a real environmental excellence is giving the hospital an urban value as a city-open and not inaccessible location that is closely integrated with the surrounding landscape. Such goal implies two different but intertwined levels – city-planning / environment and architecture. As for the city-planning aspects – position, localisation, environmental value, accessibility – the hospital is conceived as a city-open facility able to enhance its surrounding.

The following items do also play a role of paramount importance: equipped and non-equipped green areas, internal and external spaces designed as rest and recreational areas but also a city-open and disease-free space.

### **SLIDE 4**

The landscape project is designed as integration into the architecture. The City Administration's decision to locate the Novara Teaching and Research Hospital in a large green area gives the Hospital and University spaces a potential as environmental quality, but at the same time it fosters the development of a green architecture project – as much as possible.

The strategic element is therefore the so-called “Urban Promenade” that extends the city within the hospital area – it is covered and stretches also into the Parco della Battaglia as a continuous link between city and park through a citizen-friendly facility.

#### **2) The Internal and External relation and the rationalisation of flows and routes**

The attempt to obtain a high humanisation degree of the system goes hand in hand with the goal of highest patients' security. The first project area that has delivered this goal is related to the adequate definition of routes and internal flows.

In this regard the following items are particular important: identification of an easy and quick access from outside, as well as identification of vehicle flows in order to avoid long journeys causing problems and disservices.

The solution in the Technical and Economic Feasibility Project envisages the implementation of an underground parking in close proximity to the hospital-university system in order to optimise the flow-based access as well as following vertical and horizontal connections as adequate answer to the users' needs.

## **SLIDE 5**

### **3) Reception and access areas**

The first interface between internal and external hospital and hence between home and urban experience and hospital context are the two access points: emergency and the access hall. The project is particularly focused on these two areas since the use and perception of such spaces may impact on the experiences within the hospital system.

Orientation plays an important role. Space is designed in a way to unconsciously “guide” the user with colours, targeted graphics, objects and pieces of furniture that become reference points, as well as the use of natural and artificial light. In particular the “hospital covered pathway” plays this role as guiding space.

During the Hospital stay the patient is very often alone in an alien context compared to his/her life style.

**The in-patient area** ensures the respect of the patient's privacy and an adequate hotel-like comfort but simplifies the patient's access and the medical and paramedical staff's supervision.

The staff's **working areas** ensure the availability of services as support for the hospital activities in a context in which works shall be performed without an increase of the stress level.

The project is also focusing on the **visitors and out-patients' rest areas** that are mainly located in spaces connected with the outside world in order to emphasise once more this constant dialogue between artificial and natural as a particular focus of the project.

## **SLIDE 7**

**Therefore, as a result of the project binding requirements the Economic and Technical Feasibility Project has been chosen as reference model.**

The main project starting point originates – as mentioned – in the analysis of the location and its potential. The new-generation hospital facilities shall be also considered from the perspective of their integration into the landscape and its territorial context.

The general project was guided, designed, and conceived in order to find a strong link between the closest and the historical urban fabric. The system consists hence of several buildings - functionally integrated and with a formal and structural autonomy.

The architectural project develops mainly horizontally in order to promote the design of courtyards and gardens. Even the functional layout of the out-patient areas and health services aims at combining the health care efficiency with the constant research for highest quality for different target user groups.

## **SLIDE 8**

The model consists of four “L-shaped” buildings connected via a central axis as link for the whole system that includes the vertical communication nodes among several levels.

This element is connected with other two buildings: the former is located in the West of the central axis and hosts high-tech activities such as operating block, intensive therapy, and imaging. The latter is located on the first and second floor and is home for management and teaching areas. It represents also the connection with the University in front. Four perpendicular elements originate from the central axis, are connected with the “L-shaped” buildings and define spaces devoted to large internal gardens overlooked by the out-patients areas on the upper floors.

The final element of the hospital large communication axis is the connection with the “Mother and Children Medical Centre” that represents a different volumetric buildings within the project.

The hospital envisages an underground and four above-ground floors, of which the first one – at **150.5 level** – is for internal flows, Emergency, access to the in-patient system.

The upper floor – **at 155 level** – ideally connected with the city and completely devoted to visitors’ flows and out-patients. The further two levels are for in-patient areas and health activities such as Operating Block and high-intensity care areas. Level 155 is also the access floor for the University.

The University plan has the same hospital structure and is connected with it functionally and formally. It also consists of an underground and four above-ground floors.

The large covered “Urban Promenade” connects the Hospital and the University. It represents the connection with the city and ends with the “Mother and Children Medical Centre”. The Service Building is the last part of this complex and acts as a protection for the Hospital on the western side – an artificial hill as Land Art.

## **SLIDE 8**

### **Structure of accesses and pathways**

The project is equipped with access points for different users’ flows in order to avoid route overlapping of non homogeneous users, as follows:

- Visitors and out-patients
- Emergencies
- Goods and materials
- Staff
- Students
- Morgue

A short detailed description:

#### ***Visitors and out-patients***

The visitors’ access to the Hospital is located in the North, where there are a visitors-dedicated parking and two access points at 150.5 and 155 level.

Walking down the long Promenade from Via Piazza d’Armi to the Park there is the access to the Hospital on the right – recognisable through the jutting out volume focused on management and teaching activities – and then the University access.

#### ***Emergency***

The staff-supervised Hospital access is located in proximity to the second round-about in Via Gorizia in the West. This access is related to emergency, materials, staff flows and morgue.

The heliport in the South-West of the main building is located on the landing and take-off area, pursuant to regulations.

### ***Goods and materials***

The building where support activities such as kitchen, workshops, administrative areas, and Technological Centre are located is also related to in-coming and out-going goods and materials.

The goods handling shall take place from this building based on automated transport on dedicated routes.

### ***Staff***

Staff may access their own parking located next to but separated from the visitors' parking. Staff will access their own changing rooms through the vertical connecting nodes.

### ***Students***

Students may access the University areas from the underground parking located underneath and from the public transport access area.

### ***Morgue***

The access to the morgue and for the funeral procession is totally separated.

This layout ensures the separation of such a sensitive area from the in-patients' view.

### ***Internal pathways***

Pathways for in-patients, visitors, staff and goods are well-marked in order to guarantee an efficient flow separation with higher security.

Staff may easily access diagnosis, healthcare, in-patient upper floors through internal pathways.

The connecting axis acts as an urban element including rest spaces, small commercial and recreational areas, too.

In addition, this public vocation is enhanced by the restaurant (one floor down) and the large bar-cafeteria that can be used both by in and out-patients as well as visitors.

As a recap, the project cornerstones are

- Integration between healthcare and teaching activities
- performances and functions (SMART HOSPITAL and GREEN ARCHITECTURE)

I'd like to thank you for your attention and hope that this project may be finally implemented as soon as possible.

because

**SLIDE 9**

Great works are performed not by strength but perseverance.

(Samuel Johnson)

Have a nice day!