

# Contesto

esteso



- Il sistema dei Corridoi Multimodali Europei e in particolare il corridoio V Est-Ovest nel suo tratto pedemontano e la sua interferenza con il sistema Nord-Sud.
- Il processo oggi in corso di riconfigurazione della geografia europea delle **centralità**.
- Il fenomeno della **dispersione insediativa** che affligge ampie parti dell'Europa.
- L'ormai prossima **congestione** del sistema della mobilità europea.

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## Issues

The growing conflict facing transport:

- Increasing demand for mobility
- Worsening congestion
- Poor quality services
- Damage to the environment
- Safety being challenged
- Isolation of some regions

Economic importance of the sector:

- Total expenditure around €1000 billion in the Union
- Generates over 10% of Union GDP
- Employs over 10 million people

## Congestion

Apoplexy at the centre, paralysis at the extremities

Congestion affects:

- urban areas
- the trans-European network, including:
  - 10% of the road network: 7 500 km
  - 20% of the rail network: 18 000 km
  - 30% of flights at major airports are more than 15 minutes late

Consequences

- risk of losing competitiveness
- costs (road): 0.5% GDP, 1% by 2010

The effect of imbalance between modes

Goods	Road 44%	Sea 41%	Rail 8%, Inland waterways 4%
Passengers	Road 78%	Rail 8%	Air 5%

## Roads

The explosion in road traffic

The roads carry 44% of freight and 79% of passenger transport. Each day 10 hectares are covered over by road infrastructure. The car fleet is expanding by 3 million vehicles a year in the Union.

Consequences

- Saturation of industrialised urban regions (Ruhr, Randstad, northern Italy, southern England). One tenth of the trans-European network is congested.
- Pollution: road transport accounts for 84% of all CO<sub>2</sub> emissions from transport.
- Unsafe roads

## Integrating transport into sustainable development

Why?

- Air quality and climate change
- Transport consumes energy, 28% of emissions of CO<sub>2</sub>, the main greenhouse gas.  
If nothing is done: CO<sub>2</sub> emissions up 50% between 1990 and 2010  
84% of transport emissions generated by road transport.
- Security of supply
- Tackling noise pollution

How?

The Gothenburg European Council placed *breaking the link between economic growth and transport growth* at the heart of the sustainable development strategy.

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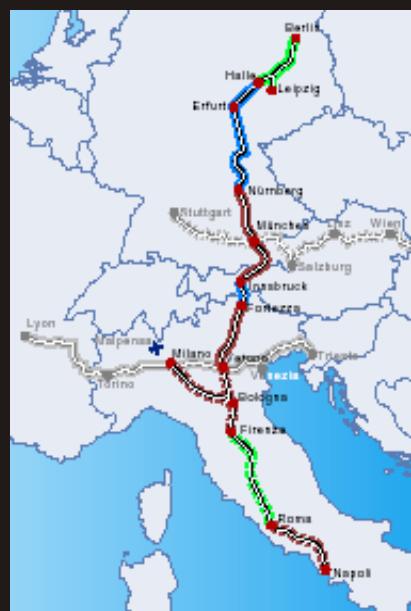


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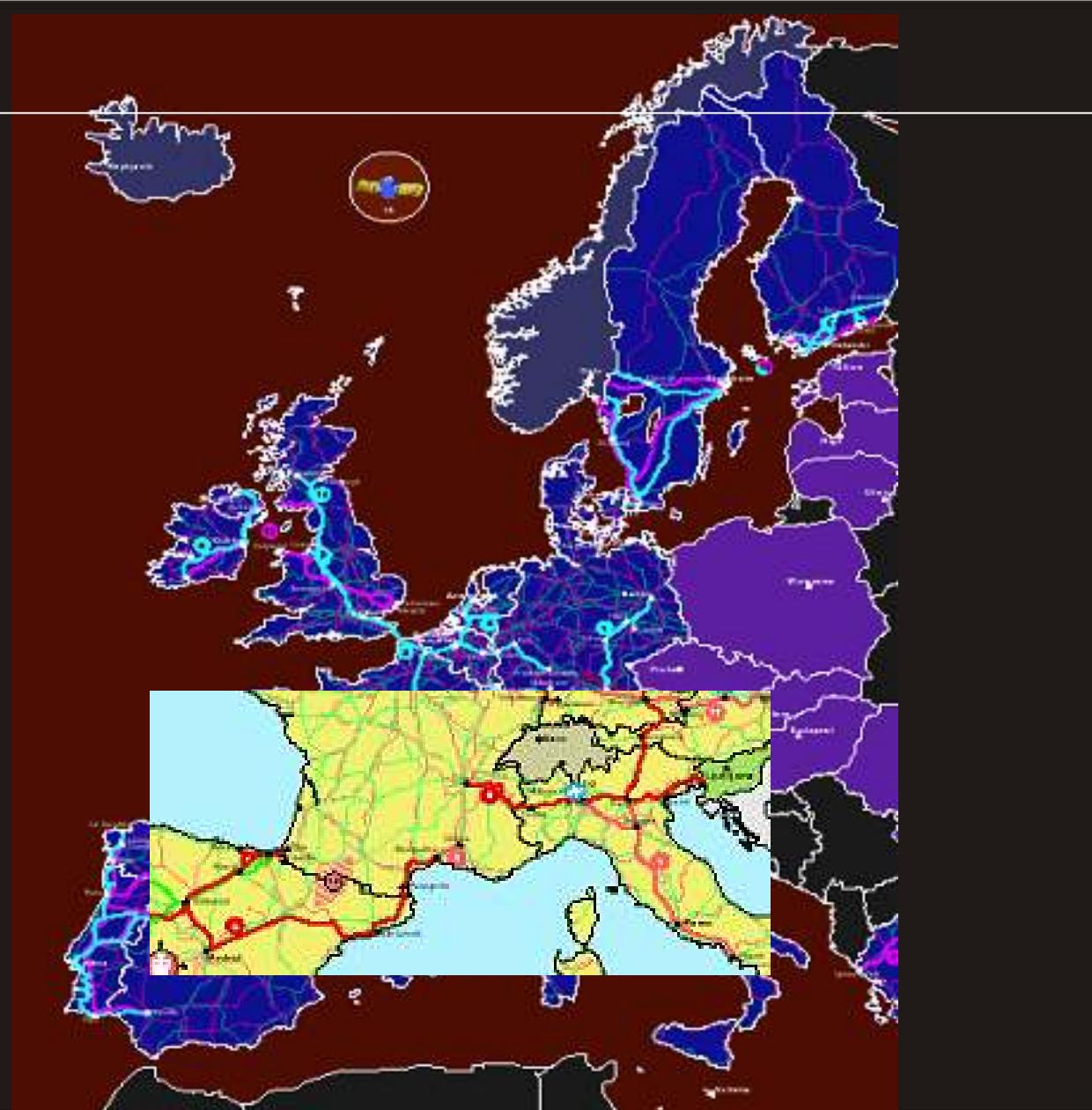
Quadro intermedio



EST-WEST V EUROPEAN CORRIDOR

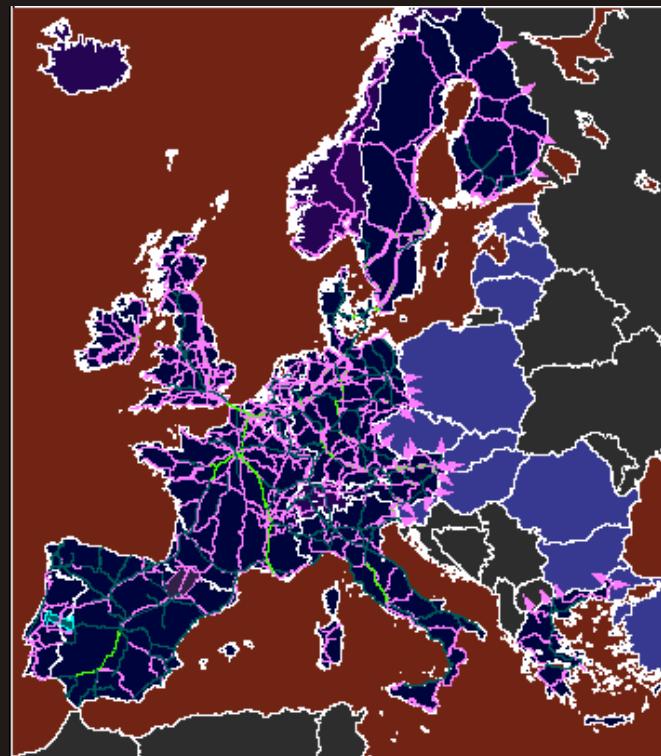


NORTH-SUD EUROPEAN CORRIDOR

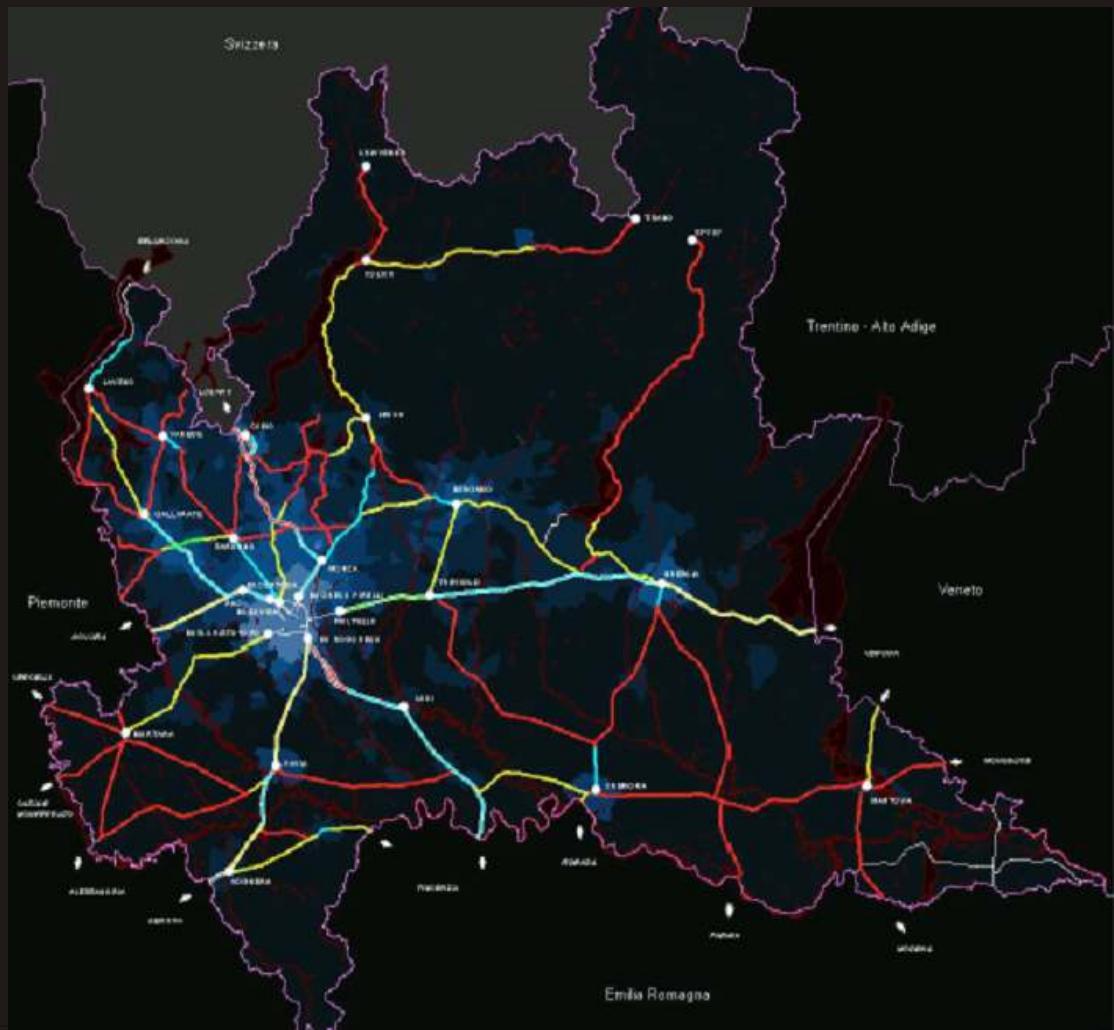


# Contesto della ricerca

Quadro intermedio



IL SISTEMA FERROVIARIO LOMBARDO  
NELLA RETE EUROPEA

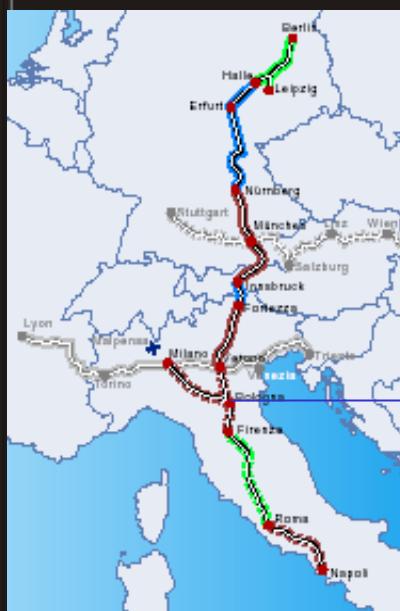


# Contesto della ricerca

Quadro intermedio



CORRIDOIO EST-OVEST



CORRIDOIO NORD-SUD

POLITECNICO DI MILANO

Lecco, 15 settembre 2004.



Strategie globali e trasformazioni locali; Nuove scale di relazione nella rete Trans-europea

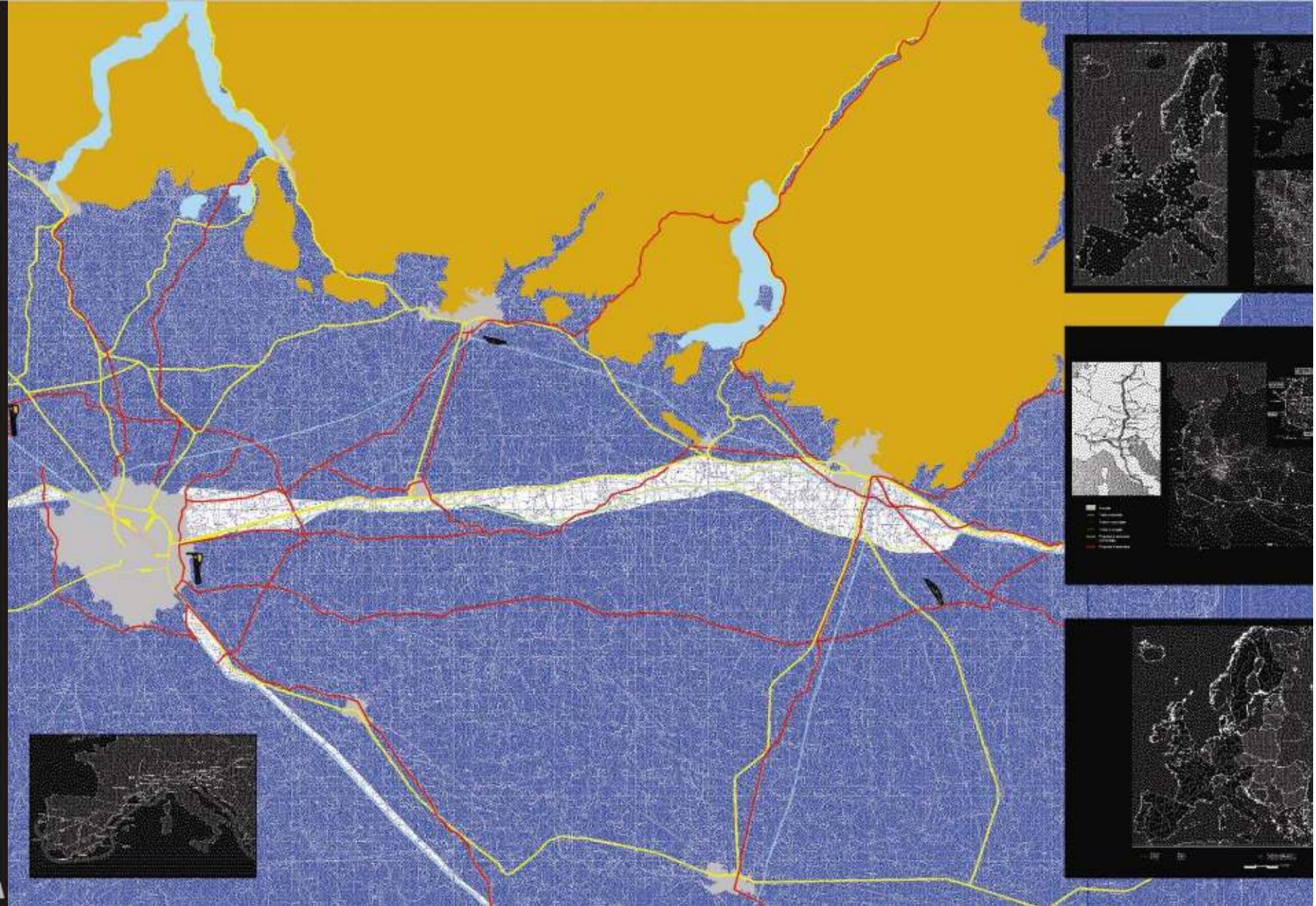


# NODI INFRASTRUTTURALI LUNGO IL TRACCIATO PEDEMONTANO

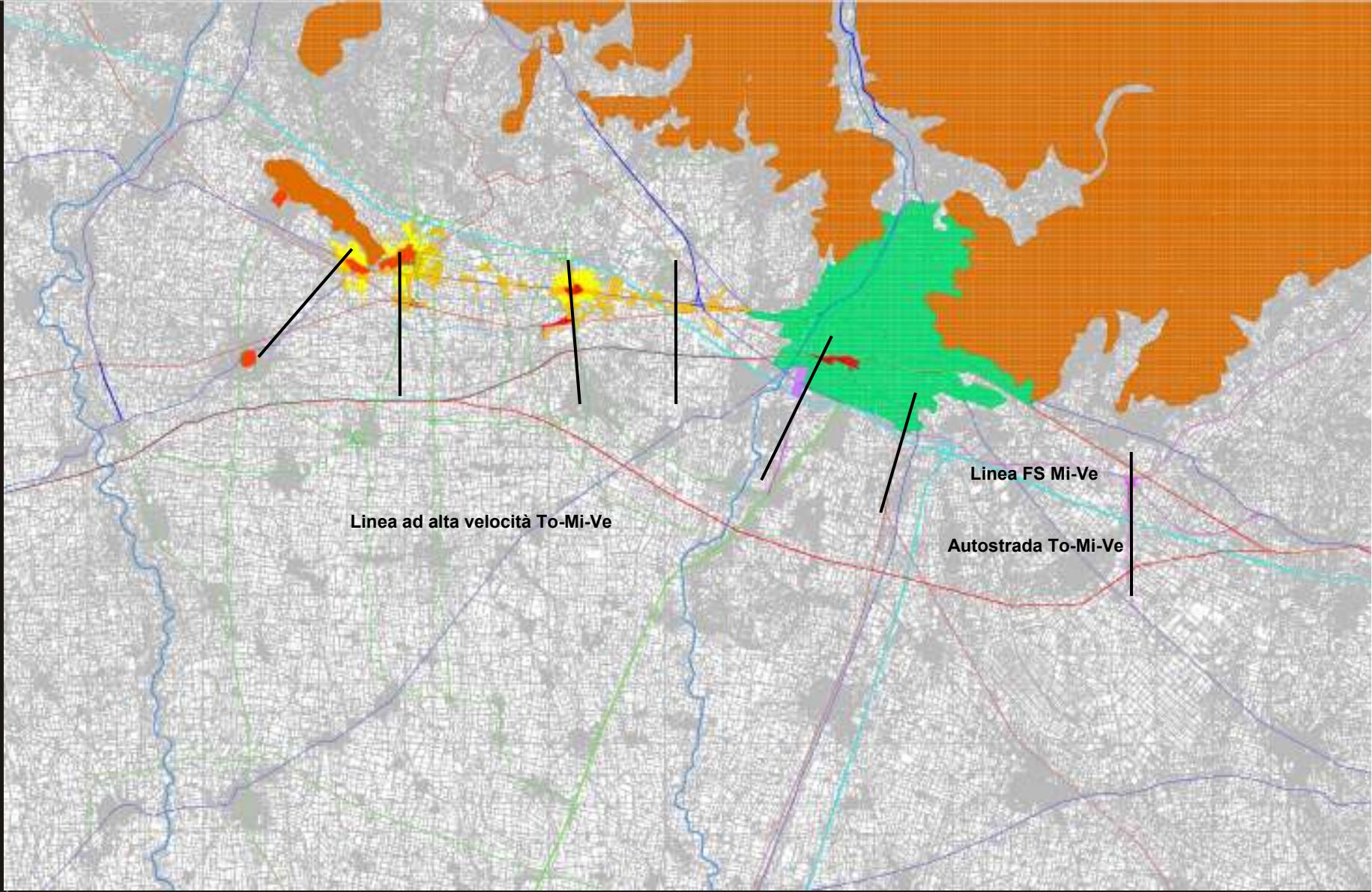
*Architettura delle connessioni nella rete Trans-europea: progetti applicati a nodi di interferenza locale*

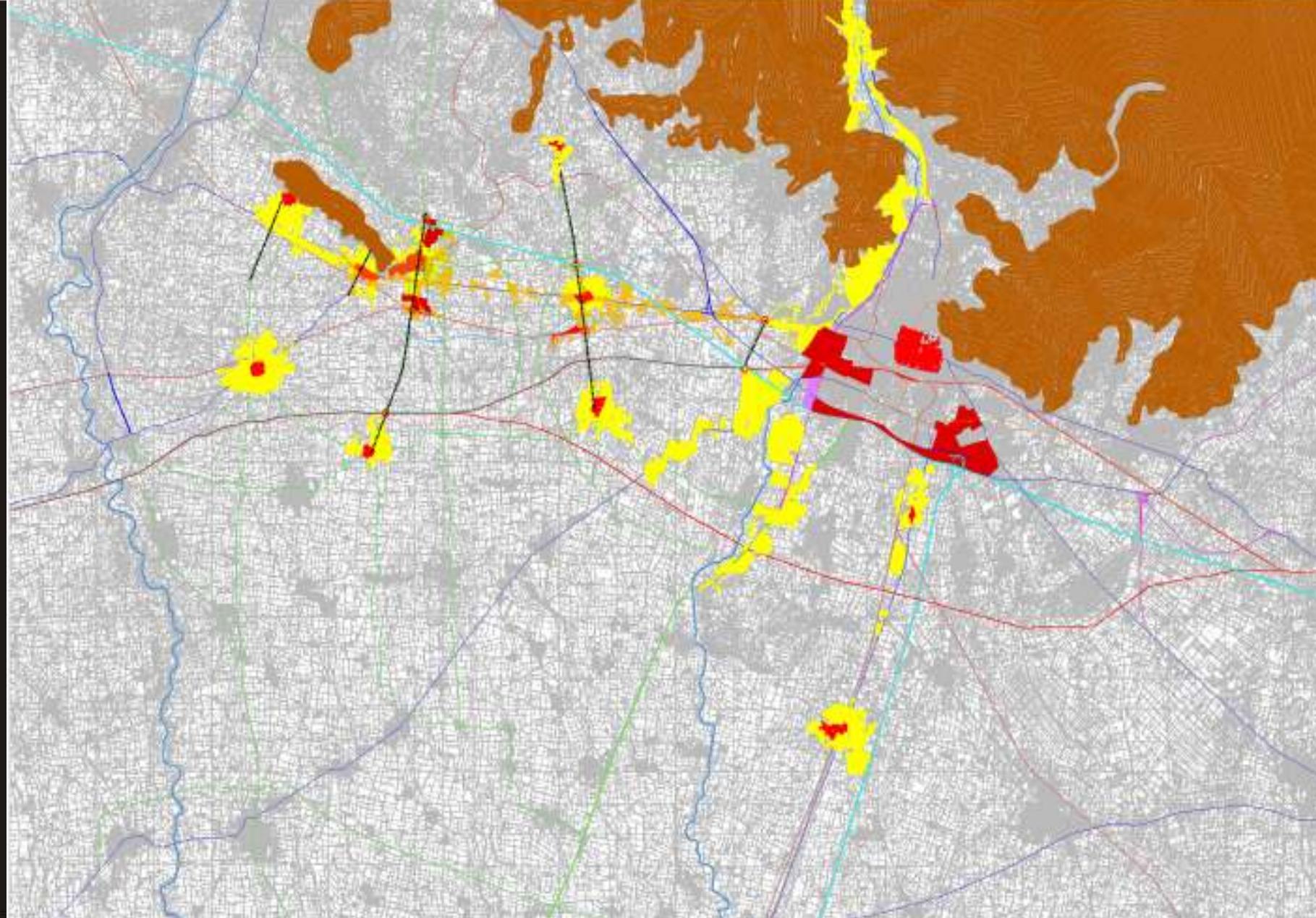
*Nodo di Brescia*

*Strategie globali e trasformazioni locali; Nuove scale di relazione nella rete Trans-europea*

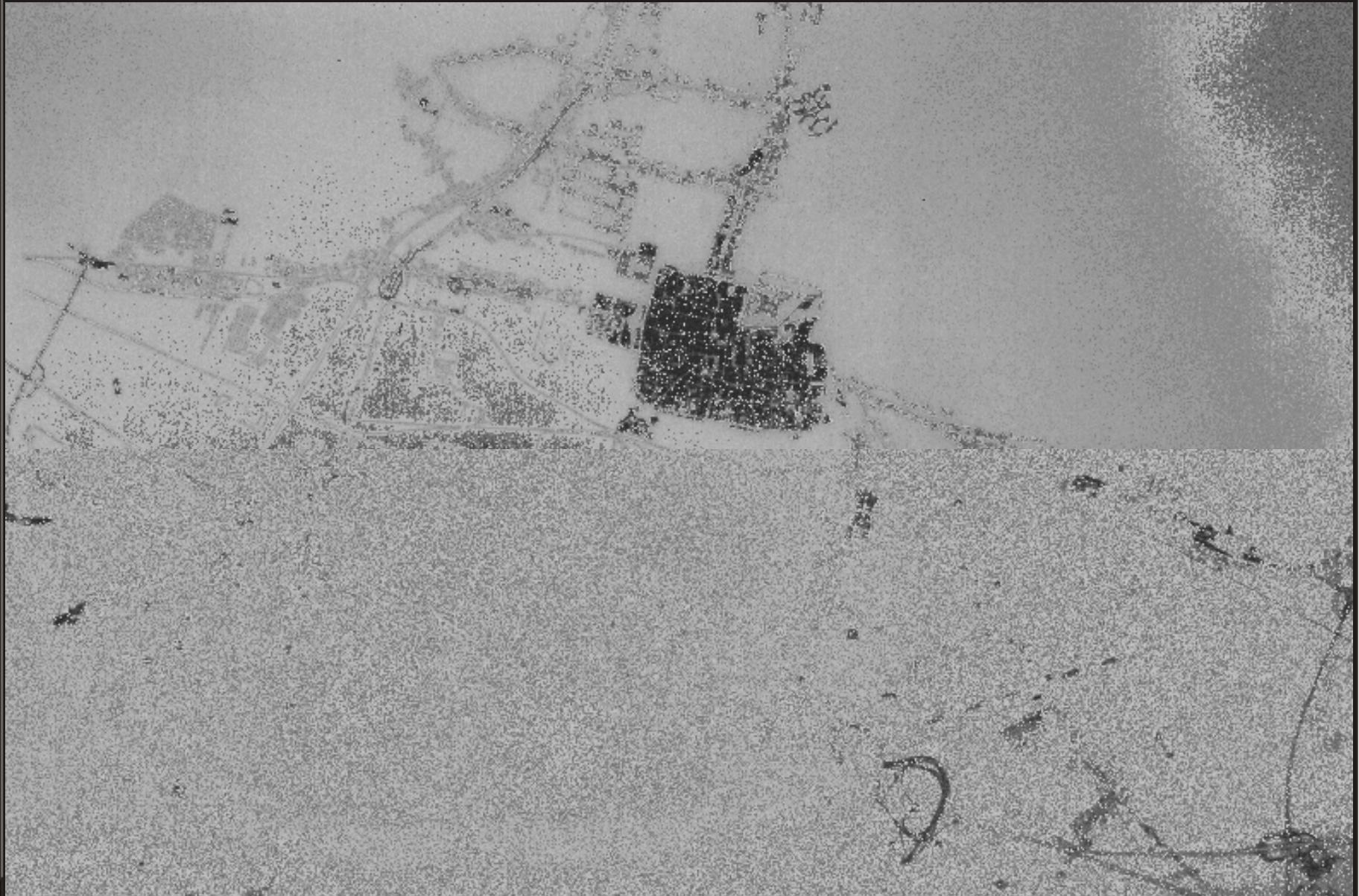


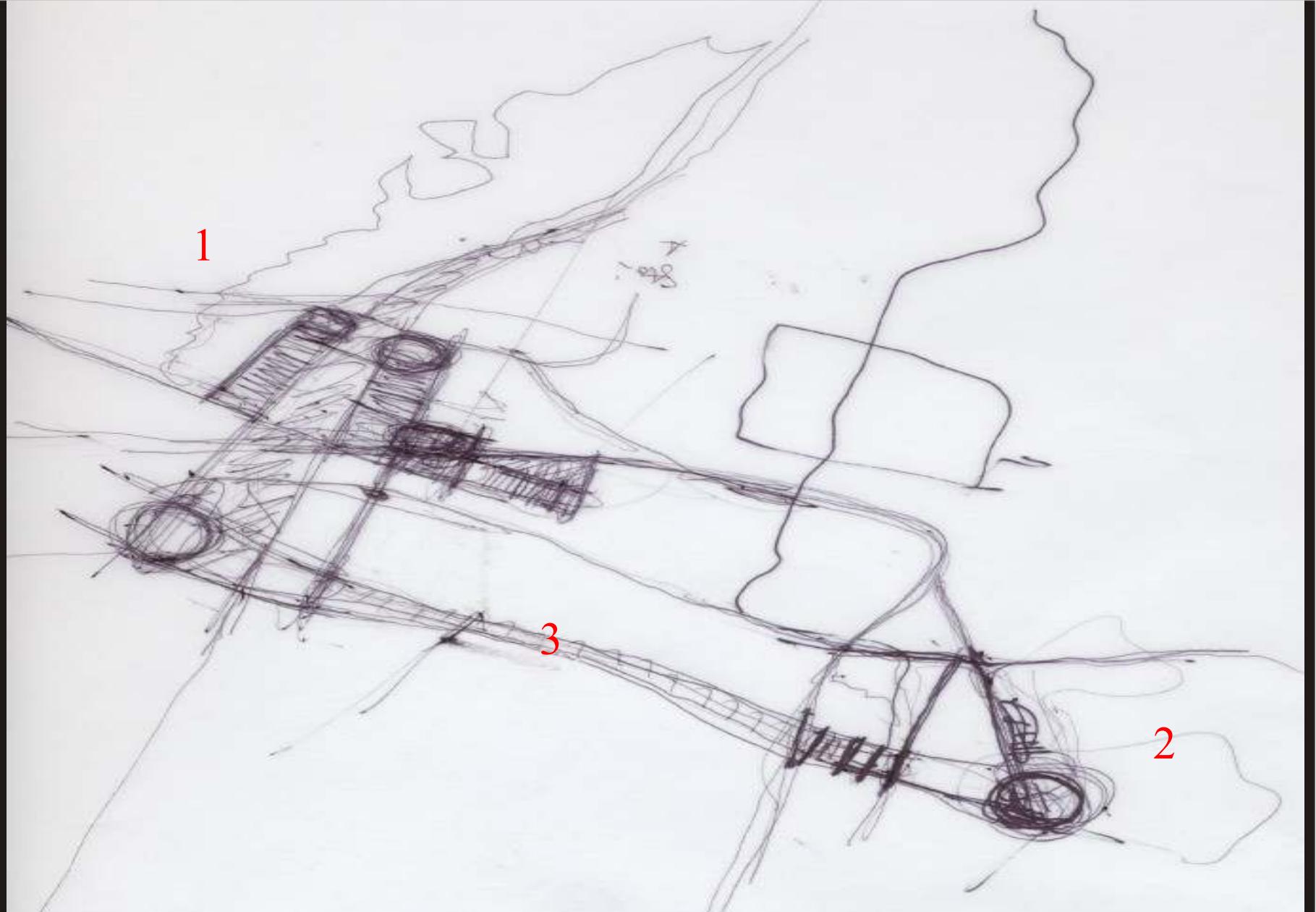
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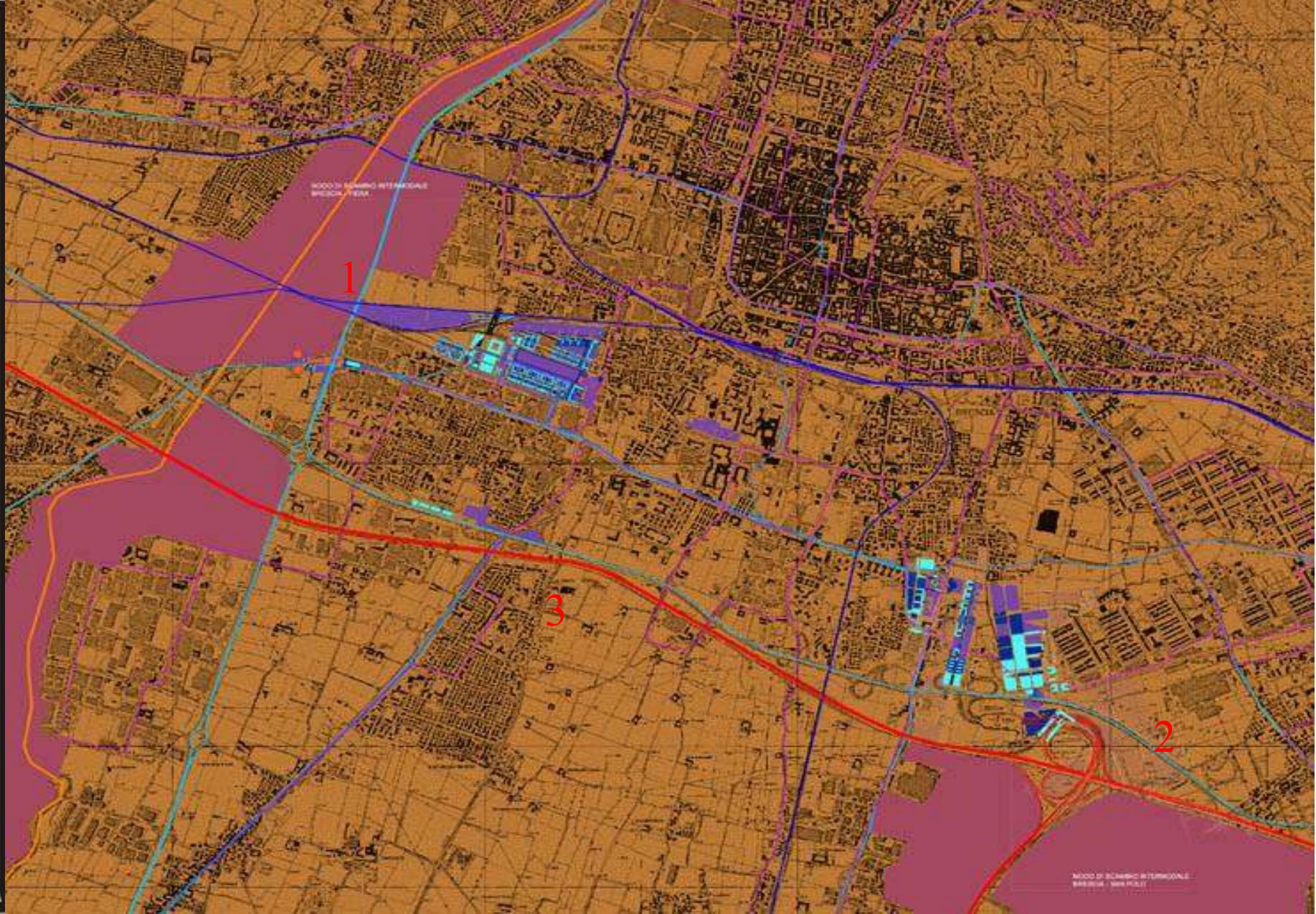




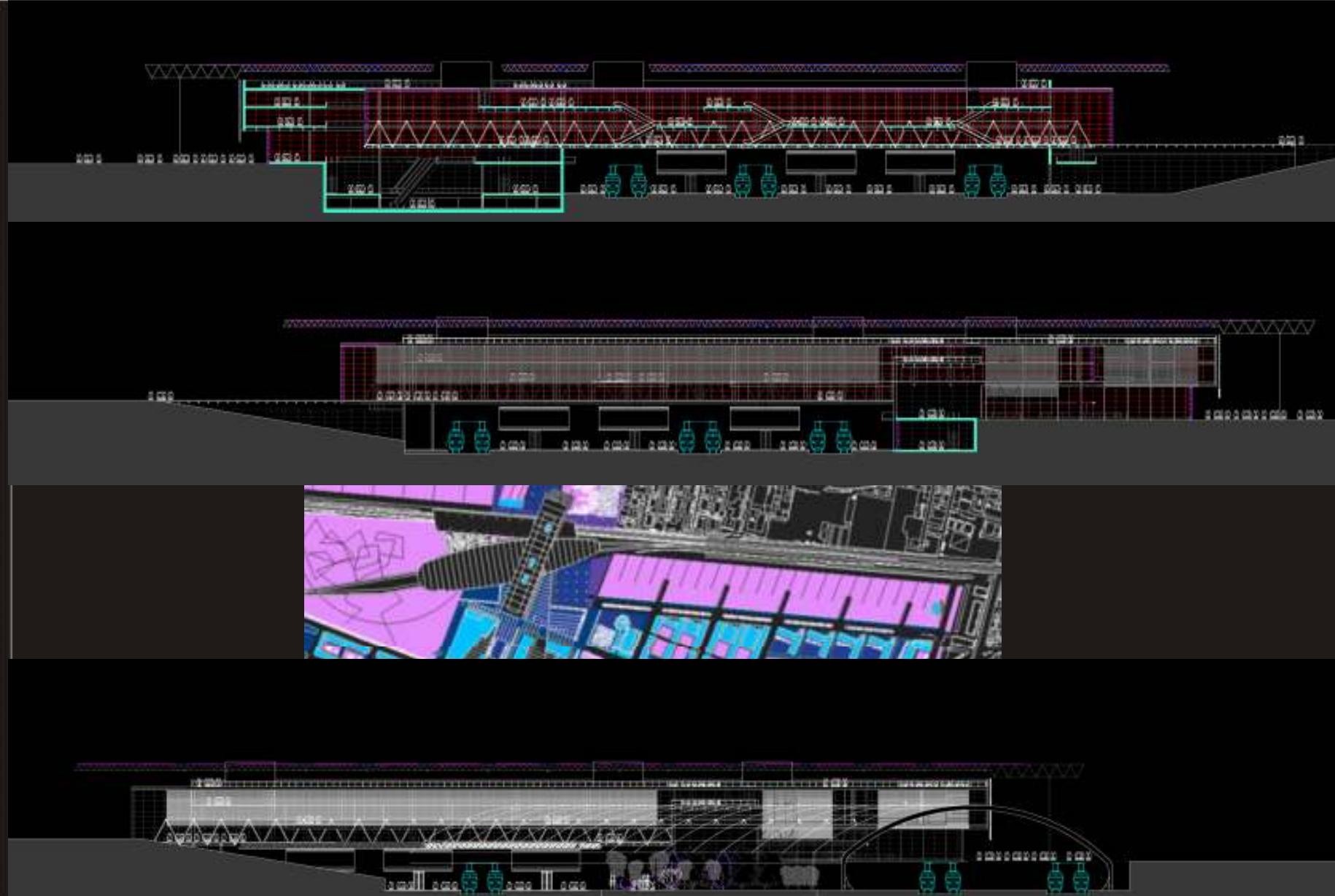




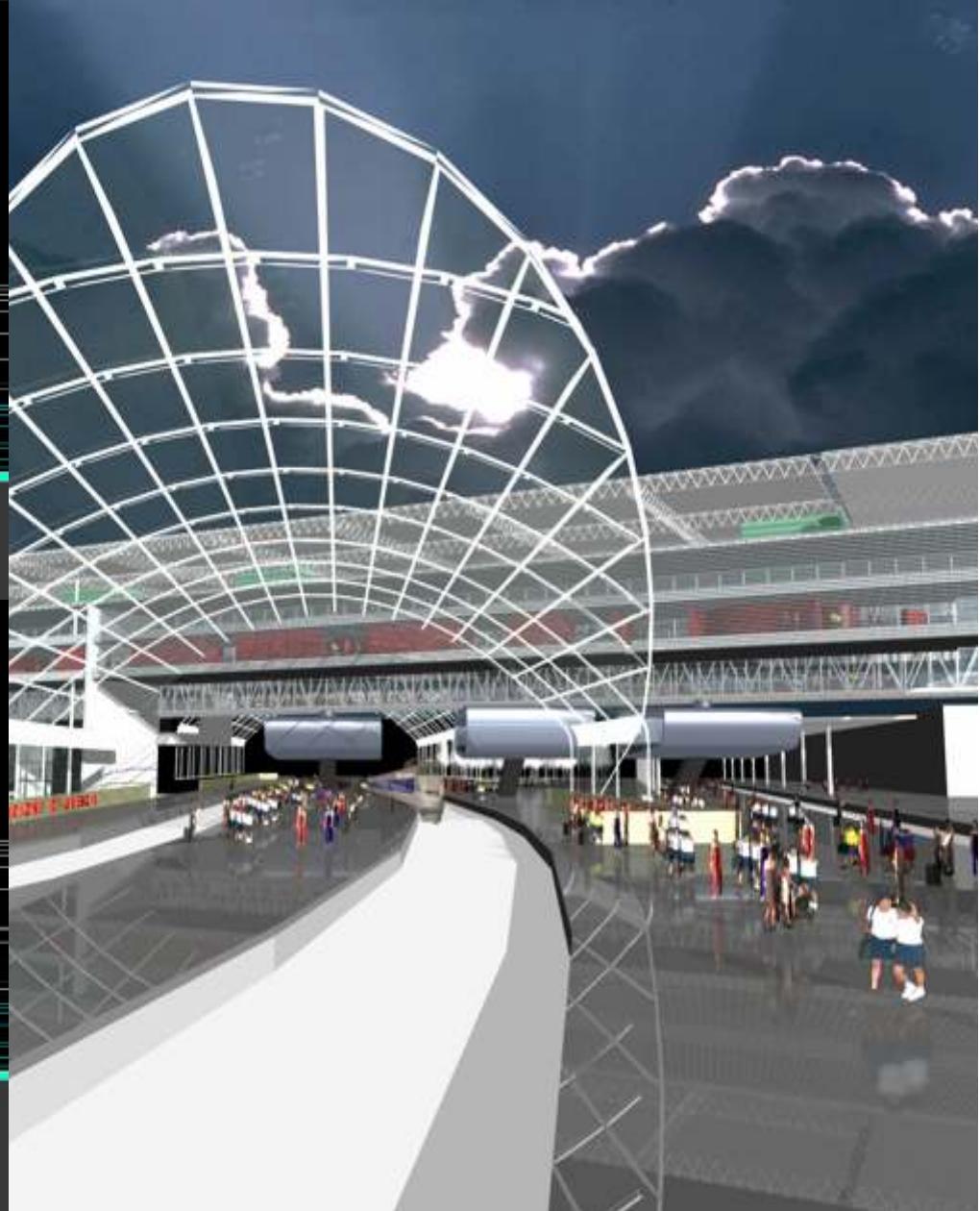
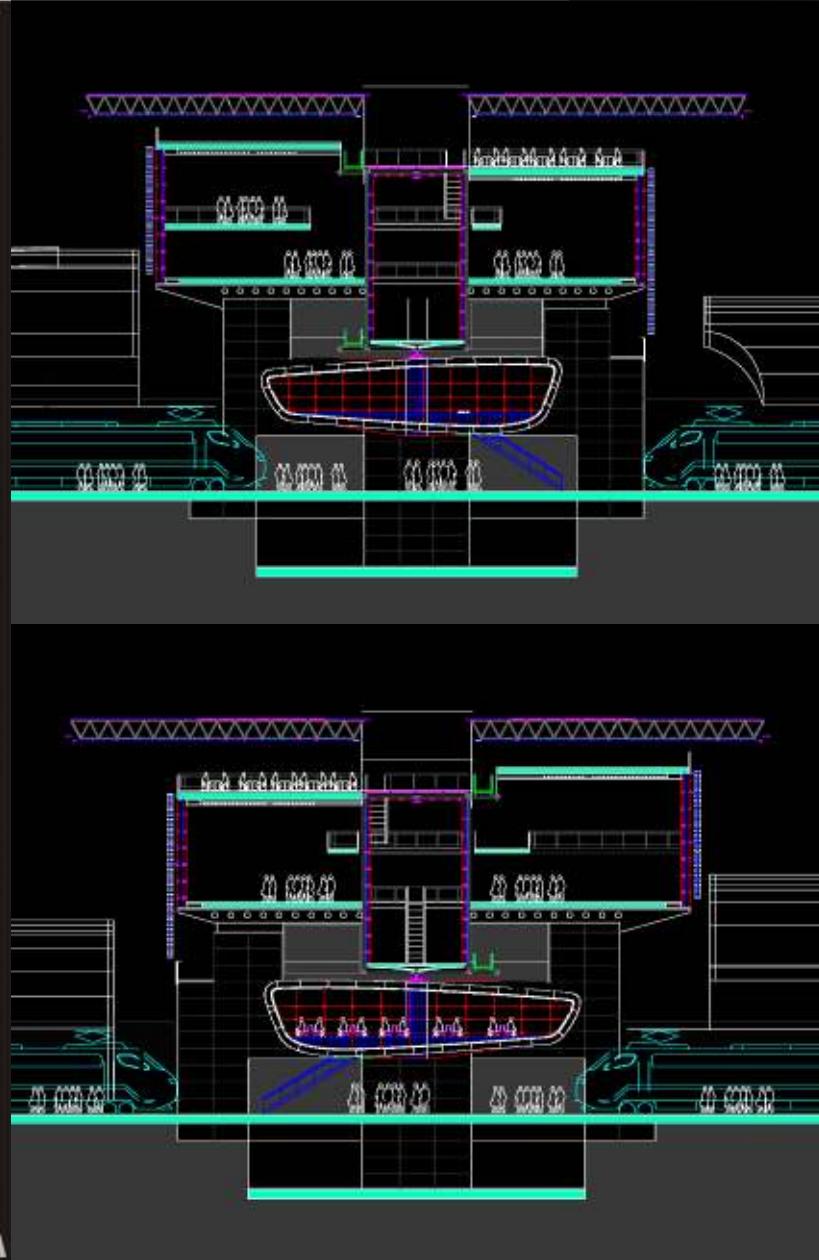


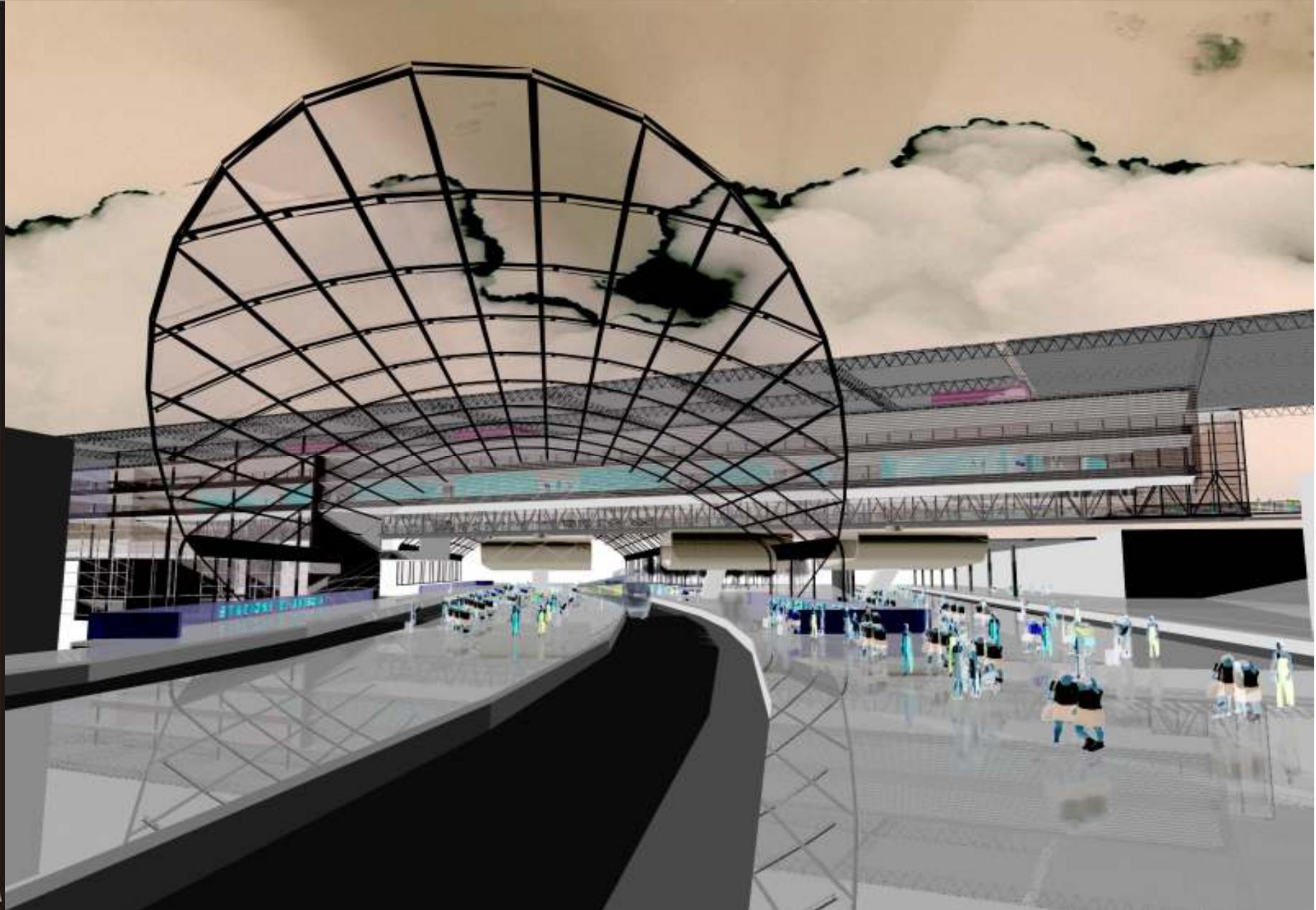






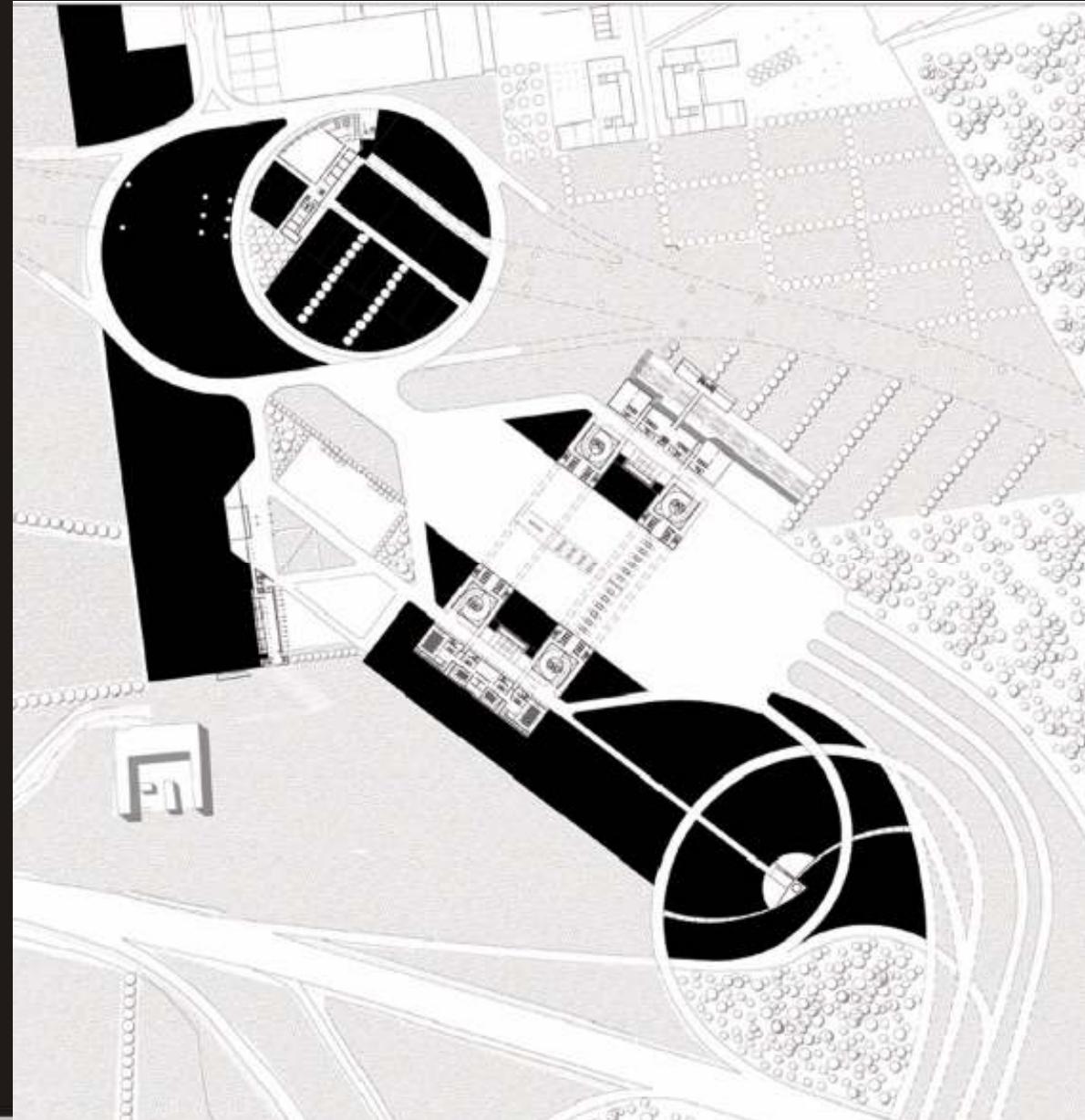
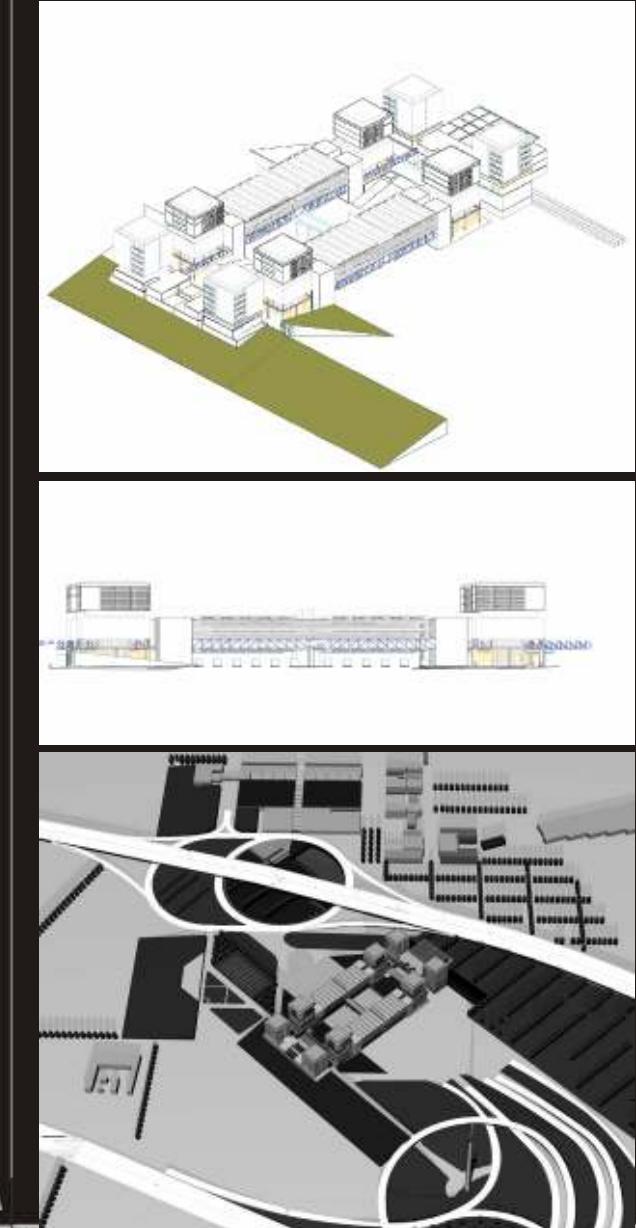
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**ARCHITETTURA E INFRASTRUTTURE PER LA CITTÀ CONTEMPORANEA**





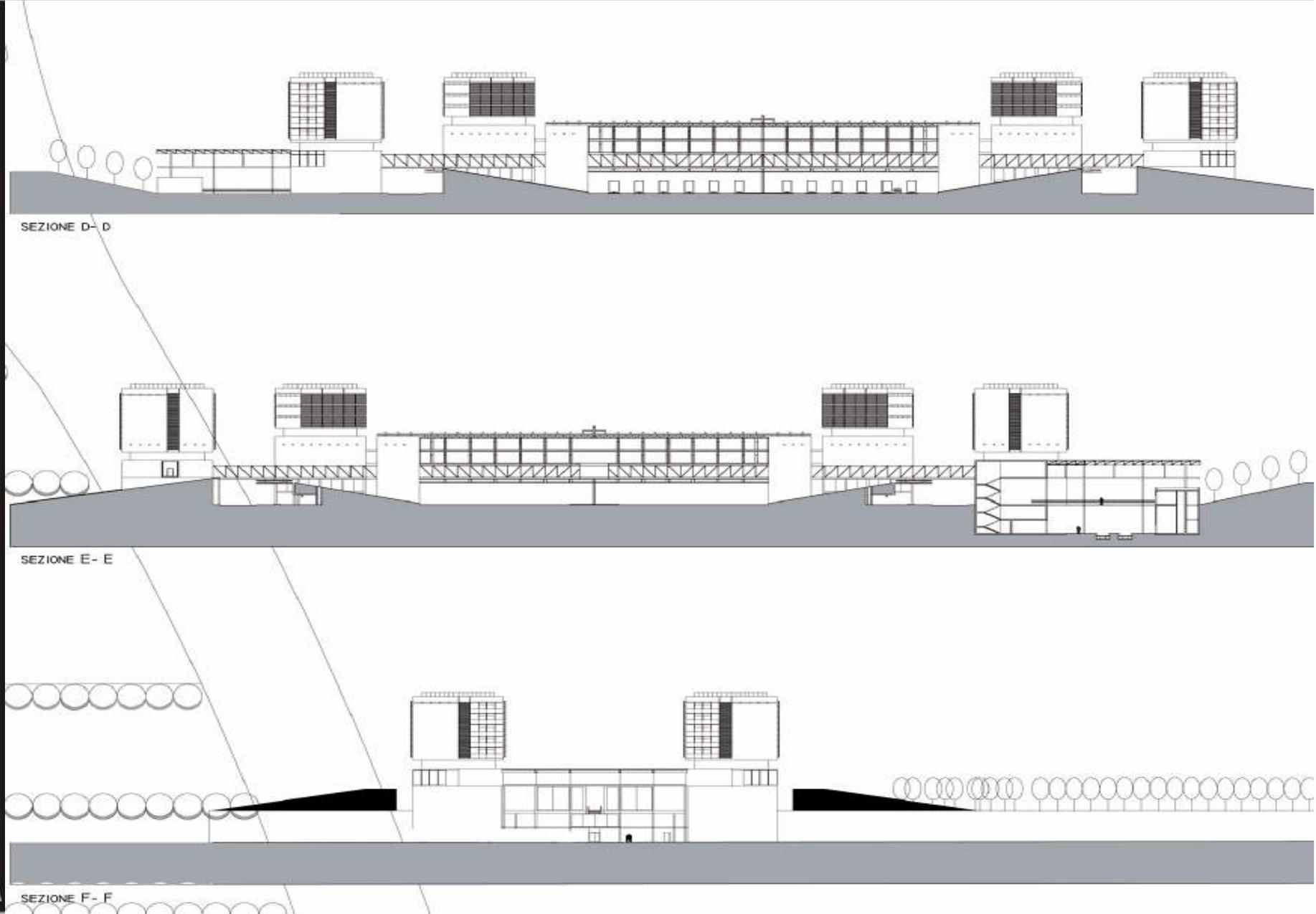
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