

POLITECNICO DI TORINO
SECOND SCHOOL OF ARCHITECTURE
Master of Science in Architecture
Honors theses

Landscape planning of new road system infrastructures in Biellese zone from recent past till nowadays. Analysis and observations of the road hypotheses. Study and evaluation of an eco-sustainable road system

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The thesis analyzes the today's Biellese road condition and studies a new street layout to be effected in the territory with the aim to connect usefully the province of Biella to the chief town of Piedmontese and Lombardic region.

The job introduces an alternative layout to that one proposed for the future realization of the Piedmontese Pedemontana. The plan of CAPSpA, currently presented to Region, foreseen the connection of Biella with the east and the south part of the province, the graft in the already existing A4 freeway and studies the perspective to diminish the traffic onto the A4 and A26 freeways by moving in specular way the users onto another freeway that could catches up the same zones easily, taking advantages from the works for Expo Milan 2015.



2010 – ULTIMA VARIANTE
per la realizzazione del
sistema autostradale da
parte del C.A.P.
(Concessioni Autostradali
piemontesi)
e
**PROPOSTA TRACCIATO
ALTERNATIVO**

The personal layout is innovative and has as main aim, that one to reduce the environmental impact, camouflaging themselves and overhanging, without to interfere, the cultivations, the breeding and the new plans for clean energy presents into the area; it aims to connect directly also the west and south Biellese zone, taking into consideration zones that now aren't served by fast roads. It foreseen the escapes in Cerrione and Verrone, connecting itself with the Maghettone zone, in order to link Biella to Ivrea and the province of TO and the Aosta Valley by using the road "Settimo Vittone", designed at the origin as the final west part of the Piemontese Pedemontana. By using n.2 galleries, one in Candelo zone and another in Salussola zone; n.1 bridge in the west part of Biella, for overhanging the torrents Elvo and Olobbia;



the important use of existing features of road and the passage of the new road in the western zone of the province, it shows the concrete possibility for connecting Biella to the others important cities, without ruining areas of great agricultural prestige (presence of the cultivation of biellese and vercellese rice D.O.P) and vineyards (wines D.O.C of the zone of Lessona and the hills of Gattinara) and safeguarding, at the same time, zones of great naturalistic importance, unique in Europe, for instance the zone of the Bessa and the Baragge.

While the CAPSpA layout passes in the zone of the field pools cutting the area of recharges of the stratum of rice fields, that one proposed does not interfere with that zone, in which it has been also approved a plan for a centre of photovoltaic production energy and a system for biogas production. The total length of the proposed layout is longer, but it uses features of roads already constructed (total use of the slip road Sandigliano Lancia-Fiat), or areas already occupied by other infrastructures (the final zone of the road flanks the area of the railroad) and it does not damage the zones occupied by agriculture.



The job is completed by 10 cartographic table in scale 1:50.000 and 1:25.000 that analyzes and puts in contrast the two layouts with the changing of the territory in the last few decades and identifies the zones that require fast and effective roads.

There is also the description of the financings for the public works that interests Public Administrations and the great contracting companies during the last few years. The Project Financing is introduced and it is explained how the Objective Law and the Cipe are relating with the plan for the realization of the Piedmontese Pedemontana of CAPSpA and how it is in contrast with the safeguard on environment. The thesis shows that the development can and must be also eco-sustainable, by using the Stepping Stones, studying the method for the reduction of the noise, for the safeguard of the biotypes and the improvement of the landscape. It studies also the method for the renewing of the ground, and introduces the plant of the Vetiver as an important and alternative instrument in order to contrast the erosion of grounds and the fall of the banks of the torrents. Attached: Press Review; The Rice, the rice field; The Vetiver; The Baraggia; Photographic Review.

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