FEATURE OF TECHNICAL SERVICE

Subject	Maxilotto 1 Highway A3 «Salerno-Reggio Calabria» - Adjustment and modernization work on the type 1A section of the CNR/80 on SA-RC motorway between km 53+800 (interchange of Sicignano included) and km 82+330 (interchange of Athena Lucana excluded), section Sicignano, Petina, Auletta, Pertosa, Polla and d Atena Lucana.
Carried out by	SGAI srl of E. Forlani & C.
Client	Cooperativa Muratori & Cementisti - CMC of Ravenna soc.coop
Service length	2003 - 2013
Value of works	€ 529'009'393,97
Categories value	V.03: € 216'883'927,37 S.03: € 62'108'209,99 S.04: € 48'957'588,99 S.05: € 166'090'875,64 IA.03: € 14'897'815,42 IA.04: € 6'384'778,04 IB.08: € 11'046'585,52 D.02: € 867'441,60 D.04: € 867'441,60 P.01: € 904'729,80

INTERCHANGES AND TUNNELS	
-	N. 3 Highway interchanges: Sicignano, Petina e Polla
-	N. 2 Tunnels of new construction twin tube: "Tanagro" e "Costa Incoronata"
-	N. 3 Tunnels enlargement: "Castelluccio", "Baldassarre" e "Intagliata"
-	N. 1 Galleria artificiale: "Lontrano"

VIADUCTS, BRIDGES AND BYPASS	
-	N. 2 Bridges of span 114m and orthotropic slab: "Tanagro" e "Petroso"
-	N. 1 Viaducts of span 115m steel/concrete: "Costa Incoronata"
-	N. 4 Viaducts of span 94.5m and piers 100m hight: "S.Onofrio 1", "Lontrano", "Murusella" e "Tanagro"
-	Numerous boxes, sustain walls/bulkheads and minor works

Figure 1 -Imb. North Tanagro tunnel and portal on Tanagro bridge

Figure 2 -Imb. South enlargement of Castelluccio tunnel

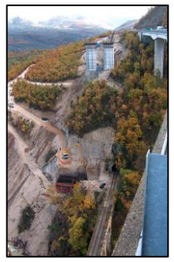


Figure 5 -Imb. Tanagro tunnel and portal on Tanagro bridge

Figure 4 – Castelluccio Tunnel – Petroso arch-bridge and V. Costa Incoronata

Figure 3 - Imb. South Castelluccio Tunnel carr. North and South

Figure 6 – Curcio bridge

Figure 7 –View from Tunnel Castelluccio of Costa Incoronata viaduct

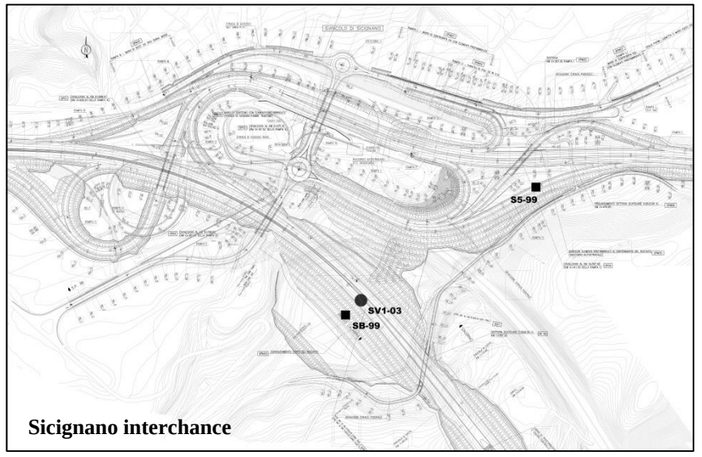
Figure 8 – Lontrano viaduct

ROAD ALIGNEMENTS and INTERCHANGES - Design issues and their resolution

The Highway route of about 28.5 km in length develops mainly along the course of the Tanagro stream in the province of Salerno; The track is divided into four parcels and three sections with different characterisation.

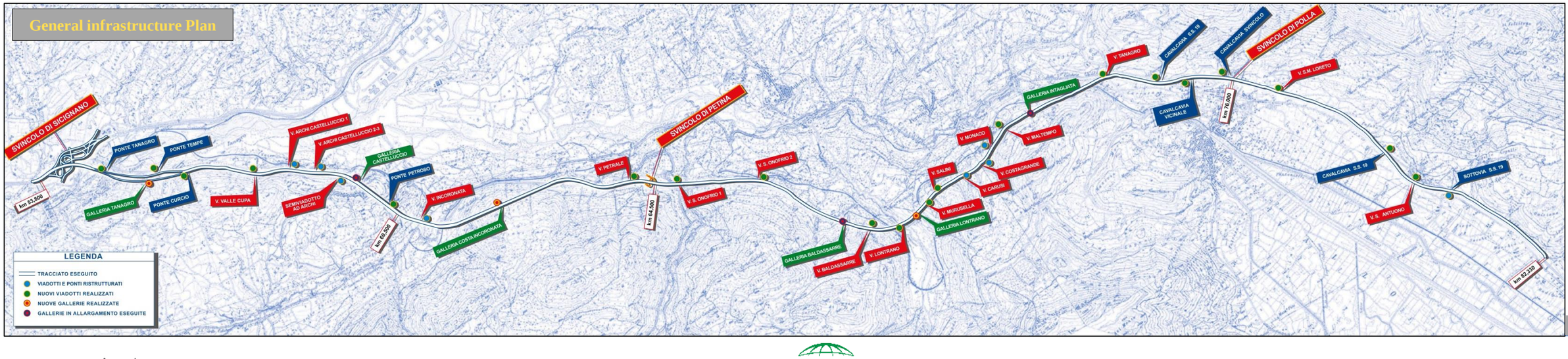
The first stretch between the interchange of Sicignano and the Castelluccio Tunnel is a half-coast section characterised by staggered levels between the two roadway; in this section is included a Tunnel, Tanagro of about 1200mt and 2 viaducts with a single span of about 100mt (Tanagro and Ponte Petroso). The second stretch always half-way between the Castelluccio Tunnel and the Tanagro viaduct is characterised by many and several important works both as length and impact: Costa Incoronata viaducts, S. Onofrio 1, Lontrano and Tanagro with varying lengths between 800 and 400mt mixed-structure concrete steel and Costa Incoronata and Baldassarre tunnel with varying lengths between 700 and 1900mt. The third and last stretch of the viaduct at the junction of Athena Lucana (not included) is instead located in a flat area near Polla, characterized by a strong urbanization and countless constraints, such as roads, ditches, finds Archaeological and pre-existing situations near the project patch.

Along the track there are three interchanges, Sicignano, Petina and Polla. The first is particularly complex given the presence of the motorway interchange for power and all connections with the local road. The entire track has been verified following the CNR/80 rules (except for the Petina junction, which for relevance and quantity of traffic is verified by the rules CNR 73). The major design problems arose during the adaptation of the junction Sicignano, which presents a complex geometry of the ramps and grafts, to which are added the obvious orographic and normative constraints that distinguish the area. As a result of the adaptation, the road structure of the junction remained unchanged, although the radii of curvature were considerably increased, in order to satisfy the most restrictive normative standards. The connection of the ramps to the local road traffic has been reinforced by the provision of new roundabouts, thus ensuring that all the exchanges between the currents are efficiently carried out.



Sicignano interchance

General infrastructure Plan



ROADS AND RAILWAYS