


OUR REFERENCES IN CIVIL ENGINEERING

DOUBLE TRACKING OF AS25 BETWEEN CONTONE AND THE BRIDGE OVER THE TICINO RIVER

 Cadenazzo and Gambarogno





Client

Swiss Federal Railways SBB



Company

CSC 50% in consortium with MMC



Person in charge

Hodai Satar for SBB



Work duration

09.2024 - 06.2027



Designers

Civil engineering: Ingegneri SPP SA
(project manager Carlo Vanzetti)

Consolidation works: Studio Ingegneria
Andrea Pettinaroli S.r.l.B

ridges and ESSEN system: ESSEN ITALIA
S.r.l.



Type of contract

Construction contract



Contract amount

CHF 27.6 million (excluding VAT)

Description of works

Double tracking of the railway line between Contone and the bridge over the Ticino River, including: widening of the existing embankment, new LC foundations, new safety installations, various new crossings, new “Alla Monda” underpass replacing 2 level crossings, new inspection chamber, new wildlife underpass, relocation of the CDV collector with sheet pile installation, and extension of an existing crossing structure.

The works are located in the municipalities of Cadenazzo and Gambarogno. The double tracking will be carried out by building a new railway embankment alongside the existing one. The current line will remain in operation.

Section concerned: km 160.770 – 162.150. The construction of the new La Monda underpass, aimed at eliminating the conflict point between the road in the La Monda area and the Luino–Bellinzona and Locarno–Bellinzona railway lines, requires trench excavations up to about 6–7 m deep, from which two reinforced concrete box structures will be jacked under the two railway embankments. Essen-type track support is planned.

Consolidation works are also foreseen (jet grouting and low-pressure injections for the creation of a bottom seal).



Project features

Expansion of the railway embankment and new sewer collector:

Railway embankment

Concrete structures

Foundation layer in granular mix

Drainage / pipelines / sewer collector

Monda underpass – New inspection chamber – Wildlife crossing – Extension of crossing structure:

Load-bearing structures (final civil engineering works) Waterproofing of construction works

Finishing cover (bituminous surfacing)

Guardrails

Pumping station

Pumps

Foundations for LC and signalling piles:

Load-bearing structures (final civil engineering works)



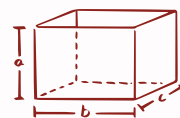
Main quantities



Excavation :
45,000 m³



Sheet piling:
25,000 m²



Jet-grouting columns
(mono- and bi-fluid):
35,500 m