





## Client

Repubblica Cantone Ticino, FFS, Citta Lugano



# Project Manager

Collenghi Claudio



# Responsible person for the client

Citino Nicola



## Contractor

CSC Costruzioni, Muttoni, Implenia



## Duration of work

09.01.2022-12.12.2025



## Type of contract

General Enterprise



#### Work amount

CHF 24 '0 00 '0 00 .- (VAT excluded)

#### Description of work

#### ✓ GOAL

The goal of the project is to create a "work of art" of livable pedestrian connection between east and west Lugano station, with the inclusion of commercial premises and a restaurant. The underpass will be intended to become a new public transportation hub for the region by connecting the SBB station and the future tram-train.

#### ✓ SEVERAL STEPS

The Besso Underpass is a complex construction site in terms of logistics and scheduling of both personnel and material supply. The construction site is operational for most of the year on 2 shifts and for certain periods H24-7/7. To complete this project, we have carried out a number of delicate operations over the months. In August 2022 we assisted the specialist company in carrying out the first relocation of the historic building, we then carried out Berliners, excavations and all the C.A. works to then allow at the end of August 2023 to move the same building back to its final position with an additional relocation of about 30 meters. During the fall, all the rough structure under the railroad bed of the new underpass was completed, and as anticipated, between late December 2023 and early February 2024 we will go on to remove the temporary bridges and pedestrian walkways in the track area to rebuild everything according to plan and restore the full efficiency of the tracks and platforms of Lugano station to customers.

In the year 2024 we will focus mainly on the end of the underpass i.e. in the area of Via Maraini -Bertaccio Park, and Via Basilea. In the first phase we will move the present underground utilities to allow in spring 2024 the construction of the Berliners, foundations and subsequent laying of the temporary bridges over Via Maraini, scheduled for May 19, 2024. The bridges will be laid to ensure the viability of the cantonal road "Via Maraini" being it one of the crucial and busiest roads in the City of Lugano during all the time necessary to allow the excavation and construction of the reinforced concrete works of the final section of the Besso Underpass.

Once the reinforced concrete works are therefore finished between 2024 and 2025, we will provide for the removal of the same temporaries and the placement of the cantonal road in its final configuration.



#### Highlights

4 temporary railway bridges

3 temporary pedestrian footbridges

1 Bailey bus bridge

1 pedestrian footbridge

6,500 m<sup>3</sup> of concrete

1,500 t of reinforcing steel

 $18,000 \text{ m}^2 \text{ of formwork}$ 

15,000 m of micropiles

6,000 m of anchors

400 t of steelwork

30,000 m<sup>3</sup> of excavation (loose)

7,000 m of PE-HD/LD liner pipes

2,500 t of bituminous pavement

20,000 t of mixed demolition material (loose)