REF-A19	STEEL BASEPLATE CONNECTION TO CONCRETE

PROJECT	Reconstruction of the bridge edge curbs on the Quincinetto viaduct
LOCATION	Quincinetto, Italia
CLIENT	Gruppo sei s.r.l.
DESIGNER	XXXX
INSTALLATION	2024

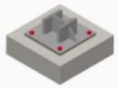
Application	**Anchoring of temporary supports**
Design std.	**EN 1992-4 (post-installed anchors)**
Hardware	**Hilti HUS4-H, TE 30, SIW 6AT-22**
Software	**PROFIS Engineering (anchor to concrete)**
Services	**Anchoring Specification, jobsite support**

CHALLENGES

- ➢ Anchor removal
- ➢ Reusability of anchors
- ➢ Limitation in edge distances
- ➢ Ease of installation

HILTI TOTAL SOLUTION

- ✓ Most optimized solution
- ✓ Post-installed concrete screw anchors
- ✓ Power tools with NURON platform
- ✓ Designed and approved product



LOAD/ CONDITIONS **Static**

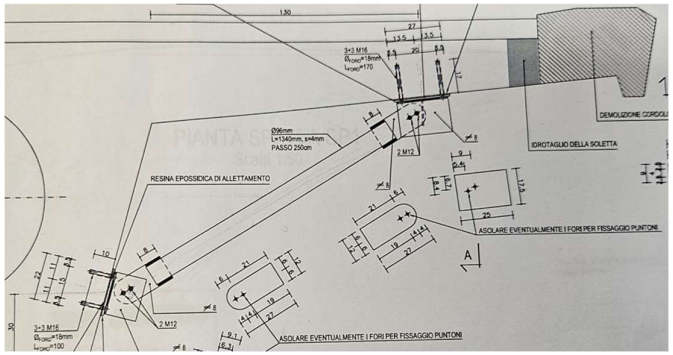
PROJECT HIGHLIGHT **Design optimization and collaboration**

APPLICATION AND REQUIREMENT

Application Details: Anchoring of temporary supports

Reinforce the cantilever structure using telescopic props prior to the planned demolition operations. The solution required anchors that ensure easy and secure installation, as well as straightforward removal, upon completion of the viaduct.

APPROACH TOWARDS SOLUTION

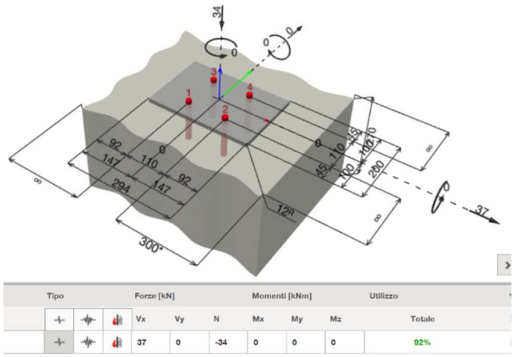


PROFIS Engineering – Anchoring specification

The anchoring details were not initially specified, so in collaboration with the customer, we identified the acting forces.

Considering the dismantling constraints, we performed a calculation using PROFIS Engineering and generate a related report, specifying the use of HUS-H M16x165 anchors.

THE FINAL OUTCOME



Finished job site

Collaborative Design Optimization

The main challenge in the design process was to find a verified solution that met the required loads while considering the associated boundary conditions. Through collaboration with the client, we were able to adjust certain parameters, such as the edge distance, ultimately identifying the optimal solution for both the anchoring and equipment aspects.

Post-installed anchors and other tools

- Post-installed mechanical anchors **Hilti HUS4-H M16x165** were used.
- Drilling was performed with **TE 30**
- Anchors were tightened using **SIW 6AT-22**