



▲ No 18 wall general view with three tiers

In accordance with the Client's design made by COBA, VSL Sistemas Portugal developed VSoL® wall solutions for this road realignment project which comprised 6 different superimposed walls, wall No.'s 2, 12, 14A, 17, 18 and 19 respectively, with two or three tiers to each wall.

The design of the walls was complicated by the issues due to the geotechnical and geological conditions, the geometry of the site and the required road alignment.

The simplicity of the VSoL® system allowed construction to proceed easily and rapidly, despite the foundation problems and site conditions.

Scope of works performed

- Structural steel erection
- Excavating and grading
- Power washing of precast panels
- Slab waterproofing
- Masonry and brick erection
- Concrete repair
- Surveillance of problems



▲ One of the superimpose walls constituting 5,000m2 total

To ensure wall alignment on this restricted site it proved necessary to place the selected backfill in an extremely well controlled manner.

The total VSoL® wall area installed on the project amounted to 5,000 m².

In addition to design and technical support, VSL Portugal was

responsible for panel and reinforcement installation plus site co-ordination with backfill team.

The installation of the walls was finished on July 2004 and instrumentation installed during construction will be monitored for five years to confirm the performance of the structures is as expected.

OWNER
E.P. Estradas de Portugal

DESIGNER
COBA

MAIN CONTRACTOR
TECNOVIA

RETAINED EARTH
VSL Sistemas Portugal



▲ No 12 wall general view with three tiers



▲ Erection details with various levels of walls



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