

Underpass and Car Park in Corazón de María St.

The Corazón de María Underpass is located at the junction of López de Hoyos St. with Corazón de María St. and Alfonso XIII St. The layout of the underpass coincides with the stretches of Corazón de María and Alfonso XIII streets. Its total length is 310.2m of which 112.5 m and 85.5m correspond to the two access ramps. Both the tunnel and ramps were designed with continuous foundation diaphragm walls. The concrete slab itself was first cast on grade and afterwards, the tunnel was excavated.

In addition to the tunnel, a 6,065m², four-storey underground car park with a capacity for 1,077 vehicles was constructed. The adopted solution consisted in the placing of perimeter foundation walls, over which a hollow concrete slab, 15m in span, was cast. This solution allowed easy diversion of the traffic in an area which suffers a high volume of circulation. Once the excavation was completed, the three intermediate floors were built employing a column modulation of 7.0m using waffle slabs.



Spain /1993 Project data

Structural type:
Underground structure
Location:
Corazón de María St. Madrid
Opening Date:
December 1993
Proprietor:
Ayuntamiento de Madrid
Concessionaire:
OCISA and SAE
Main Consultant:
PROINTEC
Construction:
OCISA
Scope of Works:
Structure Construction Project