

CULVERT REPAIR PREVENTS POTENTIAL ROAD COLLAPSE

BARCELONA, SPAIN

A segmented concrete pipe culvert beneath a busy street in Barcelona, Spain, had settled over time, leading to leaking joints and erosion. The damage was beginning to buckle the roadway—posing a serious risk of collapse or sinkhole formation.

Complicating matters, the site was located near a school and along a heavily trafficked area, making access and repair scheduling extremely challenging.

To solve the problem efficiently and safely, the project team turned to LOCTITE GeoSpray HCE which was capable of providing a fully structural repair. The material could be pumped up to 150 meters and hand-sprayed inside the two-meter-diameter culvert, allowing crews to restore the pipe from within. Over ten days, a 73-millimeter-thick layer was applied along the full length of the culvert, reinforcing it to meet modern structural standards.

SUMMARY:

- **Application:** segmented concrete pipe culvert
- **Location:** Barcelona, Spain
- **Solution:** LOCTITE GeoSpray HCE



Timing was critical, and logistics were perfectly orchestrated. The LOCTITE GeoSpray HCE was produced regionally and delivered to Barcelona in five truckloads, arriving precisely when the team needed it. This just-in-time delivery ensured steady progress and kept the project on schedule.



In the end, the culvert was fully rehabilitated and now boasts a 50-year design life and renewed structural integrity.