

Raft slab failure in peatland in Co. Kildare

Background

The customer in this case contacted Geobear as they subsidence cracking showing on the right hand side elevation of the property.

The property was built on a raft slab and the structure had cracks showing internally and externally. Additionally the internal floors were uneven with cracked floor tiles.

A drainage ditch adjacent to the side of the property where the cracking appeared was identified as the cause. It was a long-standing issue and the customer was looking for a cost-effective, viable solution that could be completed relatively quickly and at the right cost



Customer alternatives

Concrete underpinning for which the customer had no appetite for due to the duration and the inconvenience.



Why Geobear

Concrete underpinning would have taken a minimum of 3 weeks with all the associated inconveniences, such as huge excavation of soil around the perimeter wall and concrete pouring.

Our solution was to use our minimally intrusive geopolymer injection method that we completed in one day with no excavation, spoil to remove from site or heavy plant on site (diggers, concrete trucks etc).

Geobear solution

We designed a treatment plan that had 11 injection points and treating to a depth of 2.1m below the base of the slab and into the fill.

A pre-design quantity of geopolymer was used per injection point and the ground improvement was verified by laser monitoring.

Customer testimonial

10 out of 10 NPS score