

# Case Studies Series

## Sallybrook

<b>Project Type:</b>	Underpinning Project
<b>Client:</b>	David Flynn Building Contractors
<b>Location:</b>	Watersedge, Sallybrook, Dungarvan, Co
<b>Project Duration:</b>	Waterford



Twenty separate private dwellings in Sallybrook, Dungarvan required structural underpinning as a result of the failure of poorly designed and badly installed bored pile foundations.

In the first instance Bullivant Taranto Ltd were asked by engineering consultants Thomas Garland Partnership to provide a design scheme foundation package for the structural underpinning and stabilisation of each property. We worked closely with Thomas Garland Partnership throughout the consultation period and were asked to speak directly with the local residents group to answer their questions on underpinning theory and design, works guarantees, liability insurance cover and the construction process involved in underpinning a property.

Bullivant Taranto Ltd subsequently were employed by main contractor, David Flynn Ltd to design & supply a piled underpinning scheme to the twenty properties. This contracted represented the largest single domestic dwelling underpinning contract ever awarded in Ireland.

### Solutions

The underpinning scheme comprised a mini piled RC raft installed internally to each property. Due to the nature of the fill material used during the original construction works, each pile location required pre-drilling to depths up to 3.0m. Bullivant Taranto Ltd carried out these works using their lower head room mini-drilling equipment, before installing 220mm dia mini piles at each location. The mini piles were again installed using low head room equipment and were installed to depths up to 10.0m. The underpinning scheme was detailed not to clash with the existing bored pile foundations. On

completion of the piled raft, the full load from the property would be exerted on to the underpinning works, thereafter making the faulty bored pile foundations redundant.

## **Experience**

Bullivant Taranto Ltd called on their 30 years of underpinning experience plus their membership of ASUC (Association of Specialist Underpinning Contractors) to provide and manage a viable, cost effective engineering solution to the structural problems encountered on site.

The bespoke design scheme provided ensured that all underpinning works were carried out internally thereby reducing the effect to external finished such as gardens, paths and driveways.

On completion of the works we provided a 12 year insurance backed guarantee to each individual home owner. This guarantee provided easily understood traceability and accountability for the benefit of the current and any future owners of the properties.



**Bullivant Taranto Ltd.**  
**Old Scarva Road Tandragee**  
**Co. Armagh**  
**Northern Ireland**  
**BT62 2ED**  
**T: +44 (0)28 3884 1765**  
**F: +44 (0)28 3884 1815**  
**E: [info@bullivanttaranto.com](mailto:info@bullivanttaranto.com)**  
**<http://www.bullivanttaranto.com/>**