

Frankfield Loch, Stepps

Civil Development

Case Study

Project Overview

Client: Taylor Wimpey West

Scotland

Engineer: Waterman

Sector: Civil Value: £115k

Description of works: Design, supply & install

precast concrete piles

to form foundations.

TECHNICAL DETAILS

Pile Type: Precast Concrete

Pile Length: 9m - 13m

Pile Testing: 18no.Dynamic Tests

No. of piles: 174no.

Pile Size: 350mm sq

Working Load: up to 1385kN



NPL were subcontracted to design, supply and install structural precast piles for the new residential road along Frankfield Loch, Stepps, Glasgow. The new road will replace the old Loch rd, which previously collapsed, providing further access to the new build estate just off the main road, Stepps.

Due to the location of the site, space was very limited and presented a big challenge for the piling rig. Structural 350mm sq piles where used to accommodate the high live compressive loads caused by the constant movement of motor traffic on the road.

There was also a sewer line running through the site, so works had to be undertaken cautiously in order to avoid damaging existing infrastructure or breaking the driven piles. The piling operations were monitored to ensure that the surrounding buildings and structured were not compromised during the installation process.

The project was completed in 2 phases and took a total of 2 weeks to complete, 1 week ahead of program. Both the 2no. static tests and 6no. dynamic tests were carried out during this time.







