

CASE STUDY
Residential Development,
Plot Q Western Harbour
Edinburgh



Greenpiling

PROJECT OVERVIEW:

Client: Barratt Homes
Sub-contracted to: Pennant Civil Engineering
Engineer WSP Group
Sector: Residential
Value: £220k
Description of Works: Installation of piles to form part of the foundations for a high rise residential development

TECHNICAL DETAILS:

Type of Piling System: Steel Tubular
Soil Conditions: Made Ground (in filled dock containing cobbles and boulders)/Glacial Till/ Mudstone/Siltstone
Max Load kN: Up to 1100kN
Length of piles: Up to 25m
Type of testing: Dynamic
No of piles installed: 390 No.
Diameter of piles: 177, 244 and 340mm.

Green Piling installed reclaimed steel tubular piles to form part of the foundations for a high rise residential development as part of the Edinburgh Waterfront Regeneration, the scheme comprising of apartment blocks with underground basement car parking together with town houses and affordable homes.

Steel tubular piles were chosen as the most suitable piling system that could overcome obstructions present within the back filled dock and yet adequately cope with a variable and unknown depth to rock head.

Green Piling proposed an alternative foundation layout, based on experience and results achieved on nearby sites.

Working closely with the Engineers throughout the project, the scheme was value engineered reducing the number of piles and generating cost and programme savings.

