



## TUBULARS CASE STUDY

## BAYTREE

# DRIVEN STEEL TUBULAR PILING HELPS COMBAT CHALLENGING SUBSURFACE STRUCTURE AT NEW DISTRIBUTION CENTRE FACILITY

Using John Lawrie Tubulars' repurposed tubular products and bespoke procedures saved this project **1,168 CO<sub>2</sub>e**. That's a **97.21% saving** over the production of new prime steel products.

### Highlights

Client:	Balfour Beatty Ground Engineering
Location:	Nuneaton, Warwickshire, UK
Project:	Supply of steel tubulars for use as piling
Casing Pipe:	7200m x 244mm

### Project Summary

Balfour Beatty Ground Engineering was contracted by Glencar Construction Ltd for the piling work at their Baytree Nuneaton project site in Warwickshire. Due to a challenging subsurface structure – the site was originally a quarry that was later backfilled with general landfill, before being covered to be used as agricultural land - steel tubes were proven to be vital in achieving the required depth to bedrock in certain areas of the site, where conventional precast piles had become obstructed and therefore ineffective.

Using three Junttan PM20/22 driven piling rigs, Balfour Beatty Ground Engineering installed roughly 7200m of John Lawrie Tubulars' repurposed steel pipes between April and June 2022, along with 30,000m of precast concrete to support the structure. The steel tubes used were 244mm od and take working loads up to 600kN.

Multiple working pile load tests were carried out to verify tube and pile performance, assess the settlement characteristics and structural capacity, including compression tests. For the project, a reduction of 1,168 CO<sub>2</sub>e was achieved.

