



# Robert Street Royal Borough of Greenwich

## EQUANS undertakes new build modular construction of homes for Greenwich

In October 2019, as part of the Royal Borough of Greenwich's (RBG) 15 year initiative to increase their housing stock by 2028, making use of existing spaces, EQUANS began works at Robert Street on behalf of the council.

The project had been tendered as an advanced pilot to the proposed Off Site Manufacturing (OSM) programme. Robert Street is one of 108 sites that had been identified by RBG as suitable for redevelopment using an OSM or modular housing solution.

The properties at Robert Street achieve 100% of the requirements of regulated carbon dioxide emissions.

EQUANS secured the Robert Street scheme following a competitive tender in August 2018. The project was originally intended to be completed at Flintmill Crescent, however, this location became financially unviable due to costs associated with diverting media cables running across the site and, as such, Robert Street was identified for the pilot.

As part of the close working relationship with ILKE Homes and the subsequent agreement of a Memorandum of Understanding between our two companies, our bid for Flintmill Crescent/Robert Street was submitted to RBG in partnership. EQUANS and ILKE have since submitted several partnership bids for other schemes to clients such as Bexley,

Clarnon, Redbridge and Hounslow. ILKE has also been working with EQUANS to deliver modular homes in Braintree and Aylesbury Vale.

### The Challenges and Solutions

The project is receiving funding through the London Plan. This means the project has to be completed within set timescales and has to achieve at least a 35% reduction in regulated carbon dioxide emissions.

To achieve the carbon reductions, the choice was made to switch the properties from gas heating to Air Source Heat Pumps (ASHP).

This means the properties at Robert Street achieve 100% of the requirements of regulated carbon dioxide emissions as set out in L1A 2013.

The use of modular construction significantly reduces the build time onsite as the process allows for both the site foundations and manufacture of the modules to be completed simultaneously. The benefits of being able to prepare the site and construct the homes concurrently not only reduces the environmental aspects but lessens impact on residents' daily lives.

Due to the nature of modular build, liaising and maintaining communication with neighbours of the site is essential to ensure delivery of the modules is completed smoothly. At Robert Street, the delivery of the modules requires road closures, an extension of the site hoarding/compound to facilitate the crane and a temporary parking suspension. Despite the programme being a pilot of only four homes, EQUANS ensured an RLO was assigned



to the contract in the weeks prior to delivery to ensure that neighbouring residents were fully informed of the proposed works and had a point of contact for any questions or concerns.

Furthermore, to prevent potential delays, meet the stringent timescales and start work on site sooner, the site team increased the size of the piles to facilitate a more flexible design, should RBG/ planning have decided that the homes required more floors.

## The Outcome

The demolition and piling works were completed on budget and on time for the modules to be delivered late February 2020.

Additionally, in harmony with EQUANS drive to be the world leader in the Transition to Zero Carbon, the new build properties are expected to produce an average of -0.38 tonnes of CO<sub>2</sub>e/ annum. This project is anticipated to be net zero carbon, with the potential to export energy to the Grid and support RBG's progress towards achieving ambitious government targets to reduce carbon missions by 57% by 2030.

## Responsible Business

The site generously allowed a resident of a neighbouring property to use their skip to dispose of some items and have offered to give them the excess ply wood from the site hoarding after the project is complete. The site team have identified a few potential opportunities and are in discussion with RBG on whether these are feasible.

## Mural

The team are in discussion with RBG for potentially using the newly constructed car park wall to provide a space for artwork or a mural.

## Work Experience

A local resident, with construction experience, has expressed interest in potentially shadowing the site manager on this flagship pilot project.

## Key features

- ☒ Demolition of garages
- ☒ Modular Construction of four ILKE style homes featuring:
  - ☒ Landscaping works
  - ☒ Car park construction
  - ☒ Solar Panel Installation
  - ☒ Air source heat pump installations
  - ☒ Two EV charging points
  - ☒ Cycle Storage

## Duration

Start date October 2019

Completion date March 2020

## Location:

65 Robert Street, Greenwich,  
London, SE18 7NB

**"The new council houses at Robert Street are eco friendly, they're energy efficient and they've got solar panels and air source heat pumps. They are exactly the homes we need to tackle the housing crisis."**

## Chris Kirby

Cabinet member for Housing  
Royal Borough of Greenwich

