



The project presented the team with a number of challenges to overcome – from Covid-related restrictions at the start of the work, to the complexity of navigating a live substation environment and existing infrastructure.

## Background

To support a growing community in Guildford, Clancy has been working with UK Power Networks to uplift the capacity of the electricity network with a new switch house and two replacement transformers at a live substation.

## Solution

From the outset, Clancy was influential in driving efficiency throughout the programme, suggesting alterations to the cabling route design to minimise disruption to the local community and meet strict project timelines.

As the project developed, we had to tackle emerging obstacles while staying on track. As we delivered the excavation and installation of 33kV cabling, we strengthened some existing cables before we continued our programme of works.

Similarly, in the installation of the new oil-filled transformers and transformer bunds, we were able to upgrade the foundation for the transformer bund. We set about removing and replacing the plinths to support the new transformer requirements.

## Benefit

Throughout this project, our extensive expertise in the energy sector and our long-standing work with UK Power Networks in the ED1SON Alliance meant we were able to overcome the various challenges and deliver the project.

The substation's new transformers benefit from double the capacity, at 20kVa compared with the 10kVa of the old equipment.

We were also able to deal with a number of environmental and ecological issues sensitively. The site is home to nesting foxes and birds, which required us to liaise with specialist animal safety groups to understand how and where we could work while ensuring their protection. Careful reassessment of the order of work and identifying programme efficiencies elsewhere ensured these unexpected issues did not impact the project schedule.

