Hinkley Point C - Earthworks Unit 1 Heatsink

The Heatsink, completed in 2018, consists of the fore bay intake tunnel, the pump house and the outfall shaft. The Heatsink construction involved the removal of 250,00m^3 of material for the 90m x 90m x 33m deep excavation, 15,500m^2 of sprayed concrete and 18,800 linear m of ground nail slope support and 15,500m^3 of concrete blinding.

The nature of the top down excavation and slope support process presented complex logistical challenges, combined with the constraints realized the project became very challenging and required expert project management and collaboration between contractors to ensure the project milestones were met.

SHEQ (Safety, Health, Environment and Quality) was at the core of the delivery team's values with an industry leading health and safety performance with an AFR of just 0.07, excellent environmental performance and 97% right first time for quality inspections.

The project also utilized some innovative solutions for water management, nail installation including grouting and sprayed concrete application.

The Heatsink is an essential part of Hinkley point C which is positively impacting the local community by, securing the next generation of power for the region, developing local infrastructure, putting £4 billion back into the local economy and providing at least 25,000 job opportunities.

As a project Hinkley Point C's positive impact to the region is vast. It is providing 7% of the UK's electricity and it will avoid the emission of 9 million tonnes of CO2 a year. Other positive impacts include updates to the local infrastructure such as building a bypass around Cannington village, road improvements at M5 junction 23 and 24 amongst other locations and the construction of a new hotel campus in Bridgwater.

The Heatsink element is key to the successful completion and operation of the plant. For HPC to meet the terms of its design consent order (DCO) HPC was required to consult with the local community and local authorities to agree delivery controls and delivery access routes in order to minimise the impact on local villages and the surrounding area. All deliveries are booked into the delivery management system and the number of deliveries per day by road is restricted. The jetty forms a key part of the delivery strategy keeping numerous movements off the local roads.