

ARMOURSTONE



MINEHEAD EMERGENCY SEA DEFENCE PROJECT

CASE STUDY

A MEMBER OF
 **HOLCIM**



AGGREGATE
INDUSTRIES

MINEHEAD EMERGENCY SEA DEFENCE PROJECT

EMERGENCY SUPPLY OF 14,500 TONNES OF ARMOURSTONE TO HELP BOOST SEA DEFENCES

THE BRIEF

Aggregate Industries returned to one of Somerset's beaches to provide an emergency supply of 14,500 tonnes of armourstone to help boost its sea defences ahead of winter in a record six-week turnaround.

THE CHALLENGE

Led by the Environment Agency, the emergency project, set three miles from Blue Anchor beach, was focused on ensuring the continued standard of the existing sea wall by making vital repairs to areas which had been damaged as a result of sea erosion ahead of winter. Furthermore, with time of the essence, the risk was that just a further one or two storms, without remedial action taken, could put up to 800 nearby properties at serious risk of flooding.

THE SOLUTION

This project follows the completion of a £3.8 million scheme completed in September 2023 which, contracted by Somerset Council and headed up by Kier, saw Aggregate Industries supply 13,500 tonnes of armourstone to protect a section of the B3191 road along the same beach.

Indicative of the success of the project, the more recent emergency repair works project saw the Environment Agency appoint Kier as the main contractor who once again called on Aggregate Industries for materials supply and delivery.

To meet the brief in the most efficient and sustainable means possible, Aggregate Industries took to the water and supplied and transported the armourstone, also known as Rock Armour, directly from its Scottish super quarry, Glensanda to a specified offshore anchorage position.

From there it was transferred to Aggregate Industries' very own SeaRock1 barge, as a tug and barge combination to access the allocated landing area on the beach to complete the final stage of the shipment. This innovative approach helped keep the meticulously tight programme on schedule while also preventing thousands of lorry movements rurally.



John Buttivant, Coastal Engineer
at Environment Agency commented:

"As we all know too well, Britain's weather is becoming more extreme than ever so time really was of the essence for us to be able to address the emergency repair requirements before winter hit.

"We chose to use Aggregate Industries because of their experience with the nearby scheme that they just completed at Blue Anchor. This allowed us to benefit from the same innovative approach, materials, equipment and even the same team, once again combined with Kier at the helm to deliver the project. As with the previous scheme, it worked incredibly well, helping us to not only keep to an incredibly tight delivery framework but benefit from economies of scale and an overall reduced carbon footprint too."



Matt Phillips, Senior Project Manager
at Kier commented:

"The project was hugely challenging, given the pace and scale of the scheme. This is not usually the type of project you can get off the ground in a few weeks given the complexity associated with coordinating everything from the shipping, tugs, rocks and barges through to the ground teams to deliver it all. Moreso, some suppliers simply wouldn't have the capabilities to provide the vast quantity of materials required at such short notice. Fortunately, having previously worked on the Blue Anchor scheme we have already established a good working relationship with Aggregates Industries and were able to deliver a highly coordinated effort in a very short space of time."

Nick Gilbert, Business Development Manager
at Aggregate Industries commented:

"This really was no mean feat, requiring us to effectively deliver on a job that would usually take a six months lead time in just six weeks. However, through our dynamic experience in this area, along with our unique capabilities, such as having our own sea barge and a vast amount of 'rock on stock', we were able to pull it off. We couldn't be prouder of our team for their sheer hard work and grit without which it wouldn't have been possible."



