

Green Port Hull, Associated British Ports

Engineering Hull's 'Carbon to Clean' vision

£114m

/ Project value

November 2014

/ The build commenced

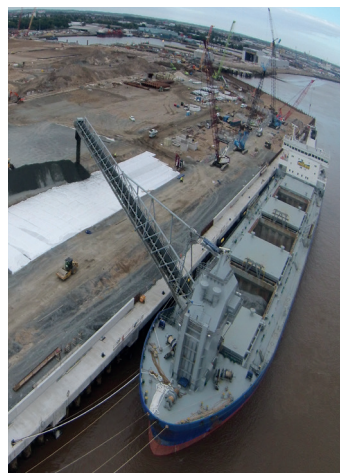
January 2017

/ The build was completed

Featuring the maiden project of the world's largest dredger (Manu Pekka), one million tonnes of imported Norwegian Stone and one million cubic metres of sand, this major £114m redevelopment of Alexandra Dock has revolutionised the Green Port Hull's functionality. Part of a Joint Venture with Lagan Construction, our team creatively designed, and constructed, the Port to accommodate three offshore wind installation vessels on behalf of Associated British Ports' (ABP) end user Siemens.

The Brief

This ambitious collaborative project was conceived to provide the platform for Siemens to begin construction of its own off-shore wind turbine manufacturing facilities. Sub-divided into three separate Lots, the complex scope of works incorporated a new berth facility, infilling of the existing Alexandra Dock and supplemented by comprehensive auxiliary works.



"We're delighted to see this investment become operational, giving life to a project that is already creating jobs and that will make a significant contribution to the regional and national economy,"

Simon Brett
ABP Head of Projects Humber

“The investment will benefit the UK economy by creating green jobs and growth as well as providing secure, sustainable and low-carbon energy. The development will also help to drive down the costs of offshore wind. It marks the beginning of a new industry based here and exporting worldwide,”

Right Honourable Ed Davey

The Challenges

Realising the long-term “carbon to clean” vision of the project’s partner organisations, the enabling works’ expansive footprint, complex civils infrastructure and the manipulation of a massive volume of materials/natural resources presented unique challenges. Efficiency in operational delivery was also a fundamental requirement in the face of the end user’s (Siemens) stringent deadlines and constraints stipulated in stakeholder licenses (e.g. Environment Authority, Natural England). Our team showcased its problem solving capability, and adaptability, exemplified when restrictions were placed on the demolition of old timber piers and housing to allow for the installation of the pontoon.

GRAHAM’s added value solution

This award winning project, handed over on budget and ahead of programme in January 2017, has laid the foundations for the Port of Hull’s future position as a world-class centre for renewable energy. Pivotal to its success was a robust collaborative approach established with the array of skilled subcontractors who combined to deliver 60% of the entire workflow. Complex works included infilling one third of Alexandra Dock with 780,000m³ of material while reclaiming 7.5 ha of the Humber River to create a new 650m quay wall. Construction also incorporated the dredging of a new pocket berth, the completion of earthworks and surfacing and the building of internal access roads/ service networks. The composition of a new roll on/roll off ramp, the demolition of existing buildings and the reengineering of Ro-Ro deck design, providing a five-week improvement on the original programme duration, encompass core elements of this innovative project.

Outputs & Benefits

- / **Award Winning:** Silver Awards 2016 and 2017 (Considerate Constructors Scheme Awards), Contract of the Year ‘Highly Commended’ 2016 (CECA York and Humber Awards)
- / **Technological Innovation:** Utilisation of the largest dredger in the world (Manu Pekka) on site for its maiden project
- / **Safety First:** 1.5 million RIDDOR free ‘man-hours’, reduction of the ‘working at height’ risk through the creation of ‘delivery pits’ in our on-site precast yard
- / **Sustainability:** Reuse of demolition material and lime treatment of other site won material for infill works
- / **Compliance:** No non-conformance of Marine License conditions
- / **Corporate Social Responsibility:** Raising £15,000 for local man Carl Giblin who was diagnosed with Motor Neurone Disease



For more information on how we’re delivering lasting impact:

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