

Client: Maersk Supply Services

Project: WHPS Recovery



Background

Elgenio delivered onshore and offshore engineering support for the decommissioning of 3 x 100Te Well Head Protection Structures from the seabed to the deck of the CSV Maersk Installer.

Challenges

It was essential to maximise the deck space utilisation, ensuring all three structures could be safely recovered and seafastened onto the CSV deck.

The structures had been piled down to 6m depth. For recovery, the piles would be cut 3m below the mudline. This resulted in a 3m pile stick out below the structures which added complexity to the seafastening design.

Due to the age of the structures, very little design details were provided to base the lift analysis on.

Geotechnical assessments had to be provided to estimate the breakout loads when recovering the structures from the seabed due to the cut pile sections.

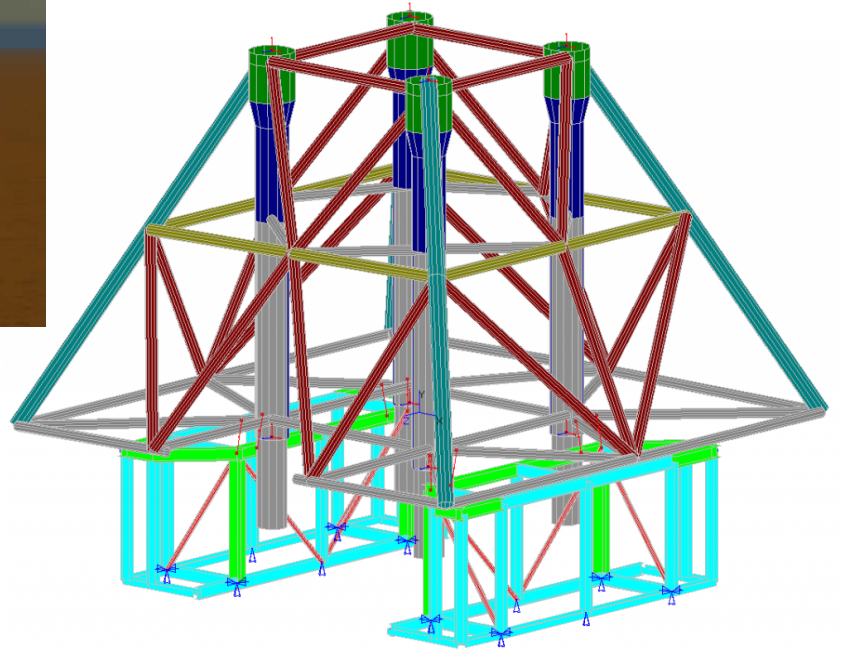
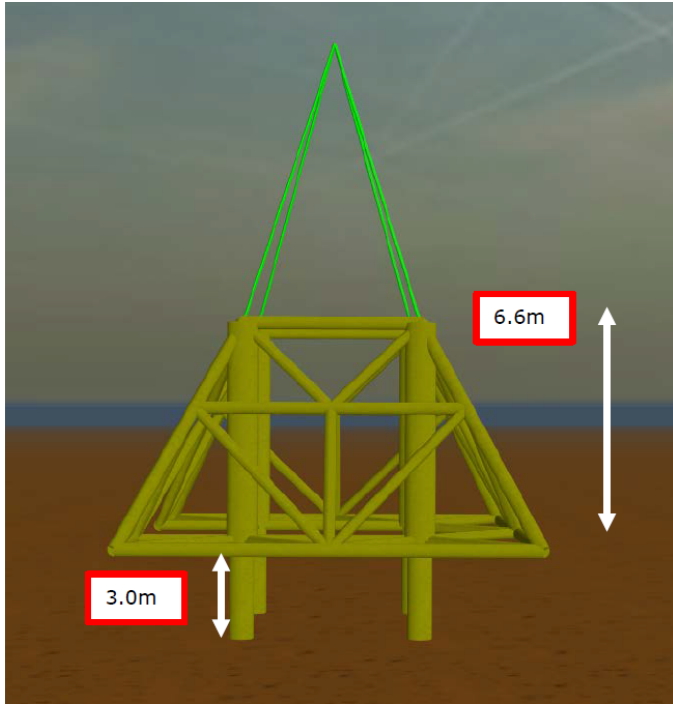
Task

Elgenio provided the structural design and analysis engineering required for the recovery of the three Well Head Protection Structures.

Offshore project engineering support was also provided as part of this scope.

The Solution

Working closely with the Maersk Supply Services project engineering team, Elgenio provided a full detailed design and analysis solution that was simple to mobilise, came in significantly under budget in terms of steel costs and allowed for all three structures to be recovered in a single trip.



Results

The simple, robust design of the seafastenings allowed the project to achieve its objectives.

The lifting analysis and assumptions made during the design phase provided accurate crane loads that were within 5% of the actual loads.