

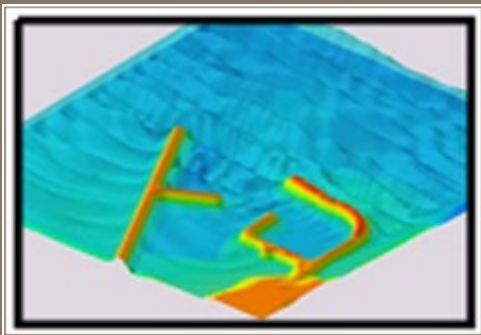
“Where will our knowledge take you?”

## Cape Lambert 320MTPA Upgrade

Hamersley Iron



“ The scope of works that BMT JFA was engaged for was extensive, including breakwater and berth design, dredging planning and assessment, and both numerical and physical modelling. ”



SKM – RTIOEP Expansion Projects (SKM-RTIOEP) considered expansion options for the further development and expansion of facilities at Cape Lambert, in order to increase the iron ore output capacity at the port.

The proposed development included construction of a new iron ore loading wharf, with associated dredging for berth pockets and an access channel.

This development included a new service wharf and tug harbour adjacent to the existing tug facility to service the proposed expansion and accommodate the additional tugs required.

The scope of works that BMT JFA was engaged for was extensive, including breakwater and seawall design, dredging planning and assessment, and both numerical and physical modelling.

Following the study and planning stage of the project, BMT JFA were further engaged to provide on site management of the dredging operations.

### BMT JFA Role

- Numerical modelling for design conditions
- Preliminary and detailed design of the tug harbour expansion
- Breakwater design for the causeway associated with the wharf structure
- Investigation of wave impact forces on the new service wharf and main wharf structure
- Dredging investigations, including dredge log production for plume modelling
- Coastal geomorphologic assessments of the impact on the coastline due to the proposed developments
- Management and supervision of all 2D and 3D physical modelling for the proposed breakwater structures.

### Services & Expertise Provided

- Design of tug harbour expansion
- Breakwater design
- Mooring and berth operability studies
- Port planning and development
- Physical modelling
- Wave transformation modelling
- Wave attenuation modelling
- Wave force study
- Dredging study and assessment.



### Location

Cape Lambert, Western Australia

### Date

2007 – 2009