



THE GERALDTON PORT AUTHORITY

OAKAJEE PORT MASTER PLAN

JUNE 2011





PURPOSE OF THE OAKAJEE PORT MASTER PLAN

The Oakajee Port Master Plan (OPMP) has been developed by the Geraldton Port Authority (GPA) as a working document to guide the development of the Oakajee Port over the next 30 years. It provides context and a vision for how the port will be developed in stages and describes how Oakajee Port is connected to the overall development of the Mid West.

The OPMP will be regularly reviewed and updated to ensure it reflects the evolving infrastructure needs of industry and constantly changing trade and market conditions.

BACKGROUND TO THE DEVELOPMENT OF OAKAJEE PORT

The Western Australian and Commonwealth Governments support development of the Oakajee Port to provide world class infrastructure that will underpin the future development of the Mid West.

The Mid West of Western Australia has the potential to emerge as a significant iron ore province in the next few years. A marked increase in iron ore prices in recent years has led to iron ore tenements in the Mid West becoming economically viable.

While capacity at the Port of Geraldton has been significantly increased, there is insufficient space to cater for the anticipated needs of the iron ore industry. Consequently, a deep water port is required in the Mid West to realise the iron ore industry's potential.

Very few locations on the Mid West coastline are suitable for the construction of a deep water port. A number of studies conducted over time have identified Oakajee as the most suitable site for a future port.

Oakajee has the potential to cater for large (Cape-sized) vessels because it is suitable for the creation of a channel and sheltered harbour deep enough for these ships. There is also ample available land for stockpiles and storage areas.

The Government, through a Request for Proposal process, selected Oakajee Port and Rail Pty Ltd (OPR) to design

and develop initial port facilities at Oakajee capable of handling and exporting iron ore. OPR's development will be consistent with the Government's long-term port development concept. The OPMP sketches out this long-term port development concept.

The Oakajee Port will be situated adjacent to the Oakajee Industrial Estate and will provide a world class industrial precinct and gateway to overseas markets. Along with the Port of the Geraldton, the Oakajee Port and Oakajee Industrial Estate have the potential to create jobs and opportunities in the Mid West and around Western Australia for generations to come.

TWO PORTS, OPERATING UNDER ONE MASTER

Both the Geraldton Port and the Oakajee Port will be managed by the Geraldton Port Authority (GPA). As is the case at Geraldton Port, the GPA will plan for the future growth and development of Oakajee Port and manage common use infrastructure such as the breakwaters and channels.

A single Harbour Master will be responsible for maritime safety across both port sites, controlling the movement of vessels, and managing both pilots & other port marine services.

These arrangements will enable both port sites to be developed in a complementary manner, and promote accountability, safety, and the efficient provision of port marine services.

OAKAJEE VISION

To create a long term economic growth opportunity for Western Australia by planning and delivering sustainable infrastructure at Oakajee that seamlessly integrates the port and the industrial estate with the Mid West's hinterland and beyond.

OAKAJEE MID WEST DEVELOPMENT PROJECT- WHERE THE PORT PROJECT FITS IN

The proposed Oakajee Mid West Development Project consists of four pieces of strategic infrastructure, namely: Oakajee Port; Oakajee Industrial Estate; Oakajee-Narngulu Infrastructure Corridor; and Oakajee Rail Infrastructure.

Oakajee Port

Oakajee was first identified as a potential site for a port in 1972 and was incorporated into the Geraldton Regional Plan as a strategic use industrial estate in 1976.

Comprehensive environmental investigations of the Oakajee site were carried out between 1994 and 1996 and the port marine area received environmental approval in 1998, subject to a number of conditions and management obligations. Studies have confirmed that Oakajee is the best site for a deep water port in the Mid West and successive governments have endorsed Oakajee as the location for a new port with planning efforts being focused accordingly.

The demands of the iron ore industry are driving the first stage development of Oakajee Port. Building a new port is expensive and the investment can only be justified if there are foundation customers with sufficient demand to underpin or pay for investment that needs to be made. The iron ore industry currently is the only prospective industry in the Mid West large enough to initiate the development of Oakajee Port.

Once a port has been developed at Oakajee it will provide opportunities for other industries and make the adjoining Oakajee Industrial Estate more attractive by widening its appeal to potential customers. It will also pave the way for future incremental development of the port.

Oakajee Industrial Estate

Land adjoining the proposed Oakajee Port has been progressively purchased since 1997 and has been zoned for industrial use in the Shire of Chapman Valley Town Planning Scheme since 2004. The Oakajee Industrial Estate will be a large scale development, incorporating land designated for strategic industries, support industries, port related usage and a significant buffer zone.

LandCorp is undertaking structure planning to guide the long-term development of the industrial estate. The

structure plan and the OPMP have been prepared in parallel to ensure the integration of the port, industrial estate, rail and wider transport network over the long-term.

With its close proximity to Oakajee Port and the nearby Dampier to Bunbury Natural Gas Pipeline, the Oakajee Industrial Estate is expected to be an attractive investment destination for industry and create jobs and opportunities in the Mid West and throughout the State.

Oakajee-Narngulu Infrastructure Corridor

The Geraldton Region Plan includes a structure plan for Greater Geraldton which shows the alignment of a services corridor between the proposed Oakajee Industrial Estate and Oakajee Port site and the Narngulu Industrial Estate, a distance of 35 kilometres. More detailed planning is now underway by the Department of Planning.

As well as catering for rail development, the corridor will have capacity to include a road, which could serve as an outer bypass of Geraldton and as a heavy road haulage connection between Geraldton, the Narngulu Industrial Estate, the Oakajee Industrial Estate and Oakajee Port. The corridor will also provide a possible route for major trunk services to be connected into the Oakajee Industrial Estate and Oakajee Port.

Oakajee Rail Infrastructure

A standard gauge line will transport iron ore from Jack Hills to the Oakajee Port, with a spur linked to Weld Range. Mines south of Mullewa will be served by a spur line connecting near Mullewa to the existing narrow gauge line, which will be upgraded to a dual gauge line.

While these rail lines will mainly serve the iron ore trade, there will be the opportunity for other products destined for the Oakajee Port or the Oakajee Industrial Estate to be transported along the rail infrastructure. The Master Plan also envisages other rail lines being built to connect Oakajee Port and the Oakajee Industrial Estate with the Narngulu Industrial Estate and the narrow gauge network. These rail lines are expected to carry a variety of non iron ore products.



OAKAJEE PORT AND RAIL PTY LTD

In March 2009, the Western Australian State Government and OPR signed a State Development Agreement to develop the Oakajee port and Oakajee rail infrastructure for foundation iron ore customers.

The OPR project underpins its infrastructure development by aggregating production from the region's planned iron ore projects. OPR is responsible for entering into contracts with foundation customers who will form a key element of the bankable feasibility for the rail and first stage port development.

OPR is responsible for preparing the port and rail designs, undertaking the construction and financing (most of) the project with the State and Commonwealth Governments contributing towards the common-use port infrastructure. OPR will operate private use infrastructure at the port such as the train unloader, stackers, reclaimers, conveyors and shiploader. It will develop the necessary rail infrastructure such as the formation, track, signals, maintenance workshops, marshalling yards and weighing stations.

A successfully developed OPR project is a critical first step in implementing the OPMP and will provide a foundation for further development.

A MULTI-USE PORT AND OPEN ACCESS TO INFRASTRUCTURE

Both Oakajee port and Oakajee rail infrastructure will be subject to open access regimes. The long-term vision for Oakajee is a port that handles multiple products with multiple users. A key consideration for port spatial planning is ensuring development is based on a long-term port development concept that provides for the future development and efficient operation of the port.

GPA is tasked with facilitating trade within and through the port, planning for the future development of the port and controlling business and other port activities. This includes

leasing areas of the port to third parties that operate their own private infrastructure.

Access to port and rail private use infrastructure will usually occur on a commercially negotiated basis between the infrastructure provider and the customer. However, given the strategic importance of the Oakajee port and rail infrastructure and the absence of port services competitors, Government is requiring that prospective customers that have not been able to negotiate access to the infrastructure have recourse to an effective open access regime.

Accordingly, an access regime will apply in relation to OPR's port iron ore services.

A STRATEGIC DEVELOPMENT

The Oakajee Port and Industrial Estate are visionary developments that have the potential to create jobs and opportunities in the Mid West and around the State for generations.

Value Adding Industrial Opportunities

Oakajee Port will be a major multi-user open access deep water port servicing mines in the Mid West. Alongside the port will be the world class Oakajee Industrial Estate, ready to accommodate sophisticated downstream minerals processing and manufacturing facilities.

International Market Opportunities

The strategic location and integration of the Oakajee Industrial Estate provides an opportunity for raw materials to be processed and manufactured in close proximity to a port and within an appropriately buffered industrial area. It also provides close access to the Dampier to Bunbury Natural Gas Pipeline.

While some bulk cargos and project cargos may be shipped in containers, it is unlikely that general domestic container trade will be undertaken at Oakajee Port.

Room to Grow

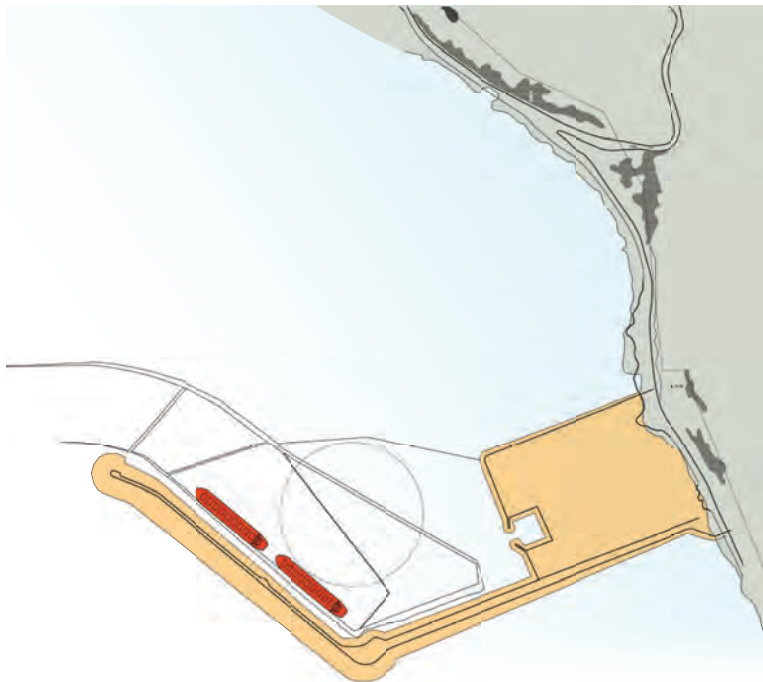
The Oakajee Port has been planned to be developed in stages. The first stage is the construction of the southern breakwater and associated iron ore facilities. Beyond that, planning processes have identified the potential to construct a northern breakwater that could make Oakajee the largest capacity port in Western Australia outside of the Pilbara.

Employment Opportunities

The initial OPR project is projected to directly generate approximately 2,600 full time jobs at peak during the construction and development phase, and around 250 direct jobs when completed. The project will generate many more jobs indirectly by facilitating the growth of the iron ore industry and unlocking the mineral resource wealth of the region. Further jobs and opportunities will be created as additional projects take advantage of the multi-user open access Oakajee infrastructure.

World Class Port Facility

Oakajee will be the only port in the region capable of accommodating the larger Cape-size vessels required by major iron ore exporters, facilitating trade and driving development in the region's resources industry.



OPR Stage 1 Development

A DEMAND DRIVEN DEVELOPMENT

The development of Oakajee will occur in demand driven stages.

OPR Stage 1 Development

OPR is planning to develop two Cape-size berths to support the export of iron ore. The Cape-size berths will have a start-up capacity of 45 million tonnes per annum (mtpa), with the capacity to increase to 70 mtpa. The layout will also accommodate tug pens and a small craft harbour.

A southern breakwater development and reclaim area will also support future port operations.

Future and Long-Term Development

The southern breakwater will provide space where a third Cape-size berth can be located. In the future, a northern breakwater will be needed to create the sheltered water required for the safe operation of additional berths. The port may begin to evolve into two distinct precincts: the original bulk materials precinct to the south and a northern precinct which could provide a further 1.5km of berth face for servicing the industrial estate and subsequent other bulk products.

If three berths are utilised for iron ore the target iron ore capacity is likely to be 105 mtpa.

SUSTAINABILITY & ENVIRONMENT

Considerable environmental investigations have been undertaken for the first stage port development and the rail development.

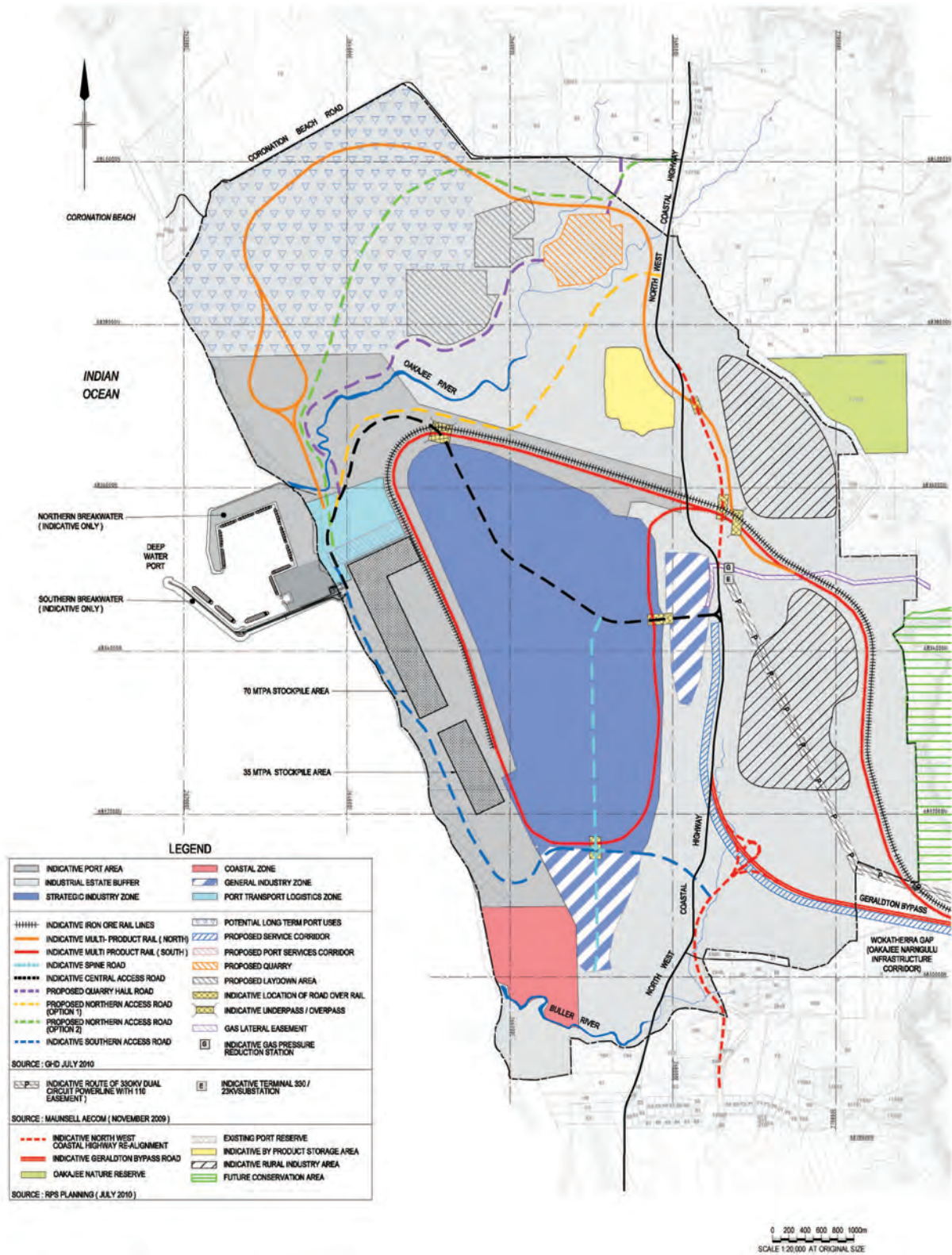
Environmental approval for port marine area was received in 1998 via Ministerial Statement 469 and Public Environmental Review environmental assessments were carried out in 2010 and 2011 for the Oakajee Port Terrestrial Development and the Oakajee Rail Development.

The development of stage 1 of the port will comply with conditions to be set by the Minister for the Environment.

Further environmental investigations will need to be carried out before further stages of Oakajee Port are developed and in order for the port to reach its ultimate development potential. Environmental investigations relating to future developments may be subject to environmental assessment under the Environmental Protection Act 1986.

This Master Plan acknowledges the principles of sustainability and these principles will be embedded in all future work.

LONG-TERM OAKAJEE PORT DEVELOPMENT CONCEPT



LONG-TERM VISION

The staged long-term development of Oakajee Port will be accompanied by the staged development of land and transport infrastructure.

Long-Term Land Use

As Oakajee Port develops, land usage around the port will include:

- A port reclaim area to support:
 - cargo, office and workshop accommodation;
 - material handling; and
 - port marine operations (tugs and workboats).
- A port bulk stockpile zone along the coastal plain.
- A port industrial zone to the north for cargo consolidation, storage, administration and loading support operations.
- A coastal zone and buffer along the southern extent of the Oakajee port area extending south to Buller River, providing a buffer between urban development and port operations.
- The development of the Oakajee Industrial Estate to value-add regional resources and support port developments.
- A quarry site to provide large rocks necessary to construct and maintain the southern and northern breakwaters.

Long-Term Transport Infrastructure

As Oakajee Port develops, transport infrastructure could potentially grow to include:

- A transport logistic zone that provides:
 - a collection and distribution area for road based transport accessing the port from the southern, central and northern corridors;
 - a service corridor allowing movement of utilities (including water, electricity and gas) from the Oakajee Industrial Estate to the port; and
 - a transport corridor for pipeline and conveyor connections between the port and the Oakajee Industrial Estate.
- A modified North West Coastal Highway, incorporating the proposed Geraldton bypass and a deviation for the rail crossing.
- A quarry road running north of and adjacent to the Oakajee River, connecting the quarry to the port to supply the rock for construction and maintenance of the southern and northern breakwaters.

- A central port road corridor to support the development of the Oakajee Industrial Estate and to be the main artery connecting the Estate and Oakajee Port for the movement of export and import cargoes.
- A northern port road corridor to support the separation of light and heavy vehicle traffic accessing the port, and the construction and maintenance of the northern breakwater.
- A southern port road corridor that will support the development of the port with its primary functions to separate heavy and light vehicle traffic, to assist with high wide loads and to support stockpile access and operations and ultimate connection to the Oakajee Narngulu Infrastructure Corridor.
- The Oakajee Industrial Estate rail access corridor that facilitates the development of multi-product rail and associated infrastructure.
- A northern multi-product rail corridor set aside for potential delivery to the northern precinct.

OPMP CONSULTATION

The development of the Oakajee Port Master Plan involved extensive consultation with government and industry stakeholders, including:

- Department of Transport
- Department of State Development
- LandCorp
- Public Transport Authority
- Main Roads Western Australia
- Department of Planning
- Shire of Chapman Valley
- Oakajee Port and Rail Pty Ltd
- City of Geraldton-Greenough
- Geraldton Iron Ore Alliance
- Mid West Development Commission

Consultation with these and other emerging stakeholders will continue as the OPMP is reviewed and updated over time.

GPA welcomes comments from interested parties and has established the following email address for that purpose oakajee.consultation@gpa.wa.gov.au



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