

PORT OF BRISBANE - PORT DRIVE UPGRADE

Port of Brisbane Pty Ltd (PBPL) is delivering a \$110 million upgrade to Port Drive and the local road network, delivering safer and more efficient port roads.

Design and innovation

The upgrade of Port Drive provides a significant opportunity to create a lasting piece of infrastructure that contributes to the national economy by improving the capacity of the road to meet the future needs of the port.

The upgrade will also incorporate innovative design and working methods that will improve efficiency of the road network within the port precinct.

Key project design benefits and highlights:

- improved safety and access to the port for all road users
- reduced traffic congestion and increased road capacity to accommodate future traffic volumes
- the creation of a four-lane overpass at Kite Street to improve transport efficiency
- widening of Port Drive to accommodate two lanes each way, including a separation barrier and/or median for the full length of the road as an additional safety enhancement

- key intersection upgrades at Tanker Street and Osprey Drive
- improvements to the Tanker Street intersection which include a connection to Osprey Drive to facilitate traffic exiting Tanker Street
- the use of innovative Super I bridge girders to improve work efficiency, and provide opportunities for potential rail expansion
- retaining existing public areas within the port precinct such as the lake and Whyte Island boat ramp
- a separated shared path from Pritchard Street to Port Gate
- urban design for Lucinda Drive Bridge is sympathetic with the adjacent existing bridge
- new twin Kite Street bridges include an urban design scheme to improve the local amenity
- access improvements to the Whyte Island boat ramp from the Kite Street intersection
- new EME2 (Enrobés à Module Élevé Class 2) technology will be used to create a high fatique resistance road pavement.



Concept design: Lucinda Drive bridge over Port Drive looking south.



Concept design: Lucinda Drive bridge over Port Drive looking north.

Innovation

Lucinda Drive Bridge

At Lucinda Drive, an innovative Super I girder will be used to build the new bridge over Port Drive and the railway line.

The original design required a 5-span bridge to be built. The innovation in the new design allows a 3-span bridge to be built using special Super I girders.

The design allows bigger spans, and eliminates the need to have a pier positioned within the railway line corridor.

This innovation will:

- help improve capacity and reliability of the road into the port
- provide significant future opportunities for rail use without any physical constraints within the rail corridor
- eliminate the need to work in the rail corridor therefore minimising potential disruption of services
- minimise the risk of locating, working around and/or relocating public utility services
- provides sufficient clearance for double stacked container rail freight, if required.

Kite Street overpass

The Kite Street overpass will allow through-traffic to seamlessly travel to Fisherman Islands without having to travel through the existing roundabout / intersection therefore improving safety and transport efficiency.

Road surfacing

EME2 sustainably-sourced asphalt offers the prospect of reduced asphalt thicknesses for heavy duty pavements, and lower construction and maintenance costs.

The Port Drive upgrade will be one of the first major projects to use this technology in Queensland.

Sustainability

The project is seeking to achieve an ISCA (Infrastructure Sustainability Council of Australia) rating of 'Excellent' for the project's design and construction. PBPL has recognised an opportunity for the project to implement excellent sustainable initiatives on this project.

Offsite stormwater treatment pilot

PBPL has elected to utilise the offsite stormwater treatment initiative as part of the project's stormwater management requirements. Offsite stormwater treatment complements the onsite treatments planned for the project such as grass swales, trash racks and good site management.

The pilot is repairing nearly 1km of Laidley Creek's eroding banks with a view to reduce future sediment pollution from bank erosion and improve the quality of the Brisbane River at the Port.

When combined with effective onsite treatments, this approach will deliver the best stormwater management outcomes for the project.



Concept design: Lucinda Drive bridge over Port Drive looking west.



Concept design: Lucinda Drive bridge over Port Drive looking north.



Concept design: Kite Street overpass.

More information

For information regarding construction activities, please visit our website www.portbris.com.au or contact us on 1800 895 929 or email us at community@seymourwhyte.com.au

