

# A VITAL LINK

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PROJECT MANAGER JOHN POWELL, DAMPIER HIGHWAY DUPLICATION / HIGHWAY CONSTRUCTION



**Given that it is the only route providing access to some of the North West’s major projects on the Burrup Peninsula, the Dampier Highway Duplication Project is one of Western Australia’s most valuable projects currently under construction.**

The highway which runs between Karratha and Dampier services an incredible 10,000 vehicles a day, all of which will be able to enjoy the ease of travelling on the 12.3kms of highway once it is duplicated. Set for completion in December this year, the \$100 million contract for the project was awarded to Highway Works Albem which is a joint venture between Highway Construction, Downer EDI Works and Albem Operations.

Highway Construction is not new to a project of this magnitude as a privately owned specialist road contractor that has been contracted to Western Australia’s Main Road for more than 20 years.

This company can boast statewide project experience on over 30 major contracts including stage one of Tom Price – Karratha Road. It is well supported by Downer EDI Works, long term maintenance and road contractor to Western Australia’s Main Road and Albem Operations a privately owned specialist bridge contractor with the Department of Main Road Queensland for more than 20 years.

HWA Project Manager John Powell said the joint venture have faced a number of challenges throughout the project from building across salt flats to blasting within a National Heritage place.

“We recognise that this route is a vital link for residents and industry in this part of the Pilbara,” he said.

“The growth in population and the expansion of industrial activity in Karratha and Dampier requires good quality infrastructure that will provide a safe and efficient route for all road users. “Those using the highway and community groups have been made aware of all stages of work so far through use of local media and project newsletters because we understand their need to be informed.”

In all issues though, the Highway Works Albem have found a solution, further testament to the

experience and expert knowledge that each company brings to the project.

When rock blasting was required as part of the works involving temporarily closing the road to traffic, it was simply undertaken at the same time every day with closure times kept to a minimum.

“Work was undertaken over a course of 12 separate blasts to keep the maximum instantaneous charge down to a level that ensured all vibration restrictions on both heritage and infrastructure sites were met,” John said. “By having the project in two phases it also allowed for redesign of road alignment in the section of the route that covered significant heritage sites.

“This was followed by site inductions for all personnel to notify them of the location and cultural sensitivities of heritage sites followed by heritage monitors to identify and protect sites and supervise work in their vicinity.”

One of the biggest concerns on this project and inevitable considering its location was building across salt flats.

John said this saw the duplication of the causeway requiring a rock fill preload and an extensive monitoring program.

“The design engineers reviewed the settlement monitoring results and released the area for final road pavement building once settlement had consolidated.

“The 500mm salt crust had to be removed prior to the replacement of fill because its presence in the foundation did not meet strict durability criteria for the project.

“It was somewhat easier to cover the strengthening and refurbishment of the existing bridge because the new bridge 1669 was constructed and traffic shifted to the new northbound alignment to facilitate the closure of the existing bridge 1127 and allow its refurbishment.”

**For more information contact Highway Construction, 441 Stirling Highway Claremont WA 6010, phone 08 9384 7744, email: [admin@hicon.com.au](mailto:admin@hicon.com.au), website: [www.highwayconstruction.com.au](http://www.highwayconstruction.com.au)**







When you are working on 12.3km of heavily used road and under both strict deadlines and environment guidelines, having the right equipment and staff is vital. The question of who and how many was uppermost in the mind of contractors on the Highway Works Albem, a joint venture between Highway Construction, Downer EDi Works and Albem Operations who were awarded the contract to design and construct the first stage of the 12.3km Dampier Highway Duplication.

HWA Joint Venture, Dampier Highway Duplication Project project manager John Powell said with Main Roads Western Australia's research showing that the road routinely carries up to 10,000 vehicles a day this was a very necessary upgrade.

"The growth in traffic has led to a number of issues associated with the operation of the town's roads, particularly the Dampier Highway," he said. "The objective of the Dampier Highway Duplication Project is to ensure an efficient and safe level of service and prevent the road deteriorating as result of increasing traffic."

One of the companies that were able to offer that flexibility and support was Monty's Plant Hire, a major supplier of equipment and staff on this project.

Business manager Helen Newbey said as a locally owned and family run business in Karratha, the team at Monty's understood the complexities of the project combined with the real necessity to get the project completed as efficiently and quickly as possible to avoid too great a disturbance to those using the road.

"We pride ourselves on being a very versatile company specialising in wet and dry plant hire and civil earthworks and involved in bulk haulage, float work, earthworks, project management, construction and mining making us an ideal organisation for this style of project," she said. "Given the magnitude of this project there was much to be considered in its design and execution right down to protecting historical and cultural landmarks and keeping the surrounding environment safe."

Monty's Plant Hire had 10 employees involved in this project with stage one due for completion in August.

*For more information contact Monty's Plant Hire, Lot 1539 Pyramid Road Karratha WA 6714, Postal Address PO Box 1846 Karratha WA 6714, mobile 0438 984 686.*





Below Mobile Concreting Solutions supplying a variety of high performance engineered concrete mixes for the Dampier Highway Duplication project.



**Funded by the State and Federal Government, the Dampier Highway Duplication has been designed to improve the safety of the highway and to support the growing population and industry in this area of the Pilbara.**

Constructed in two stages the \$80 million highway duplication and improvement project involved construction of 12.3km of dual carriageway between Balmoral Road West and Burrup Peninsula Road.

Mobile Concreting Solutions Pty Ltd (MCS) is a ISO9001 Quality Accredited and NATA certified company that have showcased through the duplication the benefits of using concrete in road pavements.

Due to the high temperatures and high percentage of heavy vehicles in the Pilbara, MRWA opted for concrete as the most effective pavement material over a 'whole of life' study for the project. The concrete intersections at Madigan Road, Exploration Dive, Holcim Turn-off and Burrup Road are the first of their type in Western Australia and conform to strict Roads and Traffic Authority specifications.

MCS supplied a variety of high performance engineered concrete mixes for the intersections, culverts, footing beams, precast yard, bridge deck, stabilised fill around culverts and drainage, and supplementary services in the form of initial concrete mix design to suit the projects engineering specification and all onsite concrete testing.

The extensive project requirements, by way of, product range and supply conformance is a testament to MCS's ability to provide for large projects with complex concrete specifications and rigorous testing requirements.

This project wasn't the first of its size for MCS who also pride themselves on being Western Australia's premier mobile concreting business and specialists in high quality remote area concrete supply.

Currently mobilised at Fortescue Metal Group's Solomon Hub project, MCS is providing the same level of project commitment in customer service and product quality to supply an anticipated 80,000+m<sup>3</sup> of concrete and just recently completed two of the largest continual pours in the North West at 1900m<sup>3</sup> and 2200m<sup>3</sup>, over 15 and 13 hour periods respectively.

Other projects MCS have successfully been involved in include Citic Pacific Mining's \$6b Sino Iron Project where 120,000+m<sup>3</sup> of concrete were supplied throughout all aspects of the project over a three year period and the Collgar Windfarm, project where MCS successfully supplied 40,000+m<sup>3</sup> of concrete over eight months.

This project in particular was for a repeat client a testament to the company's commitment to meeting project deliverables.

Co-founder and Managing Director Richard Clarke who himself has worked in the construction industry for over 15 years considers that MCS's success has resulted from the ability to supply a quality product and service through their outstanding project commitment and "Can Do" company ethos.

MCS "We'll Be There".

*For more information contact MCS (Mobile Concreting Solutions), Lot 471 King Bay Road King Bay WA 6713, Office phone 08 9185 0400, Concrete Orders phone 08 9185 0405*