



MAIN CONSTRUCTION COMPANY : Hansen Yuncken
CONSTRUCTION VALUE : \$25.5 million
COMPLETION DATE : November 2014
ENGINEER : Northrop
ARCHITECT : Nettleton Tribe



MEETING TIGHT DEADLINES

The \$25.5M DB Schenker Project is the initial stage of the new Goodman Redbank Motorway Industrial Estate, which consists of the design and construction of a 44,400m² warehouse split into two tenancies.

Hansen Yuncken recently completed the design and construct industrial project for DB Schenker in Redbank, west of Brisbane.

The facility has approximately 45,000m² of warehousing space on a site spanning 84,000m². There are 2 tenancies each with their own 2 storey office building.

The design and construct contract commenced in September 2013 with handover to DB Schenker achieved on 30 June 2014 (original handover date). This was a period of just 9.5 months, which required the full design, authority approvals, and construction of the DB Schenker project in a tight timeframe. Despite incurring 6 weeks of weather delays, careful project planning,

early procurement of leadtime critical elements such as structural steel, precast concrete, metal cladding, lift, fire, electrical and mechanical services and including shop detailers on the design team, all led to the successful completion of this contract.

Despite the relatively short timeframe of the project, which required up to 120 workers on site daily, the project was completed safely and without any lost time injury incurred.

The DB Schenker building was the first to be constructed in the new Redbank Motorway Estate. A civil works contractor operating directly for the developer was constructing the Estate concurrently and as such, estate works (roads & services infrastructure) were

being undertaken on all sides of the DB Schenker site. This required close coordination with the estate civil contractor and communication with our subcontractors as access to the site was regularly changing to allow the estate roads and services infrastructure to be built.

Due to this project being on a new estate under construction, Hansen Yuncken was on temporary services throughout the course of construction and hence had to be self sufficient. As a result the team implemented the following:

- Generator power
- Wireless IT
- Tank water
- Sewer holding tanks.

With availability of permanent estate services obtained just 4 weeks prior to DB Schenker handover, Hansen Yuncken had a compressed timeframe for testing and commissioning of all services to achieve project handover on time, which required careful planning with our respective subcontractors.

Given how critical it was for DB Schenker to be operational on Day 1 following handover, special efforts were made to ensure their communications services were up and running prior to handover. This involved the early construction and completion of the Communications Room whilst the remainder of the office fitout was at wall framing/services rough in stage.

As permanent power wasn't available, temporary generator power was commissioned to the Communications Room to allow data fibre cable installation. This required close communication between all stakeholders (ie. Hansen Yuncken, Developer, DB Schenker, Telstra), which allowed a seamless transition for commissioned communications services to be operational the day after handover for DB Schenker.

DB Schenker, chose to proceed with a LED lighting option throughout the warehouse in lieu of conventional warehouse highbay lighting. Whilst this had a higher initial capital cost, it was calculated this was repaid in a relative short timeframe and in hand with the lighting control system continued to indicate lower power consumption costs of approximately 20%.

Careful structural steel design in coordination with racking layouts were able to accommodate more internal columns in certain areas of the building whilst keeping other critical areas column free (ie. staging areas). This careful review of steel framing and racking allowed a more lightweight steel portal frame design to be utilized within the building which assisted in quicker fabrication and erection on site.

Warehouse footing structural design did not require conventional reinforcement as a fibre concrete design solution was adopted. This reduced program impacts from typical reinforcement scheduling and bending allowing up to 20 pad footings to be excavated and poured daily, thus increasing productivity.

Hansen Yuncken used an alternate metal roof and wall cladding methodology with regard to the roof perimeter handrail on the project, which allowed the walls to be sheeted initially, and then the roof. The team found this alternate methodology saved approximately 1 week program duration by allowing the pouring of internal slabs to commence earlier.

Hansen Yuncken has achieved a renowned reputation for the successful delivery of industrial projects in Queensland, and throughout the Country.

For more information contact Hansen Yuncken, Level 1, 120 Wickham Street, Fortitude Valley QLD 4006, phone 07 3872 4000, website www.hansenyuncken.com.au



EXCELLENT PARTNERS

STRONG SUPPORT

AG Rigging & Steel supplied and erected all structural steel, purlins and bondek for the main warehouse and office buildings on the recently completed \$25.5M DB Schenker project.

The construction program was very tight which meant the steel delivery sequence was critical in ensuring the material being delivered could be erected as efficiently as possible so other trades could follow seamlessly.

All of the steelwork supplied for this project was drafted, fabricated and painted in-house at the AG Rigging & Steel Toowoomba facility. With a commitment to helping the local economy, all materials used for the DB Schenker project are Australian made and procured through local suppliers in Brisbane.

AG Rigging and Steel has proudly supported the delivery of many significant construction projects which include shopping centres, industrial warehouses, high rise apartments, commercial buildings and manufacturing plants.

For more information contact AG Rigging & Steel, 207-217 McDougall Street, Toowoomba QLD 4350, phone 07 4633 0244



Douglas Partners provided supervision and testing of the bulk earthworks for the entire Redbank Motorway Estate along with the geotechnical inspection and advice during the building works for the DB Schenker project.

With around 1,000,000m³ of earth moved in just a few months, the team of Douglas Partners technicians and engineers provided timely and crucial advice to the contractor and their client.

Douglas Partners is an Australian consulting services firm, wholly owned by employees and specialising in the fields of Geotechnics, Environment, Groundwater & Laboratory Testing.

Their experienced staff includes Geotechnical, Environmental and Groundwater engineers plus scientists and Earthworks Testing Technicians throughout Australia. Douglas Partners features regional offices in Sydney, Brisbane, Canberra, Newcastle, Melbourne, Darwin and Perth and branch offices in Geelong, Cairns, Macarthur, Gold Coast, Sunshine Coast, Townsville, Wollongong and Central Coast.

Just recently, Douglas Partners received numerous awards in the prestigious BRW 2014 Awards one of which was Best Supplier to the Construction Industry.

For more information contact Douglas Partners, 439 Montague Road, West End QLD 4101, phone 07 3237 8900, email brisbane@douglaspartners.com.au, website www.douglaspartners.com.au

