

# CASE STUDY: Coal Mine Project, Infrastructure, Prep and Handling Plant Electrical Support Services



**GDW ENGINEERING**  
E.P.C.M. DELIVERY SPECIALISTS



⚙️ Engineering

🏠 Procurement

🏗️ Project & Construction Management

♻️ Renewables

Gateshead NSW 2290

ABN 39 623 486 117 ACN 623 486 117

GDW Engineering Pty Ltd  
2/4 Metro Court Gateshead  
NSW 2290

ABN: 39 623 486 117  
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M: 0467 720 343

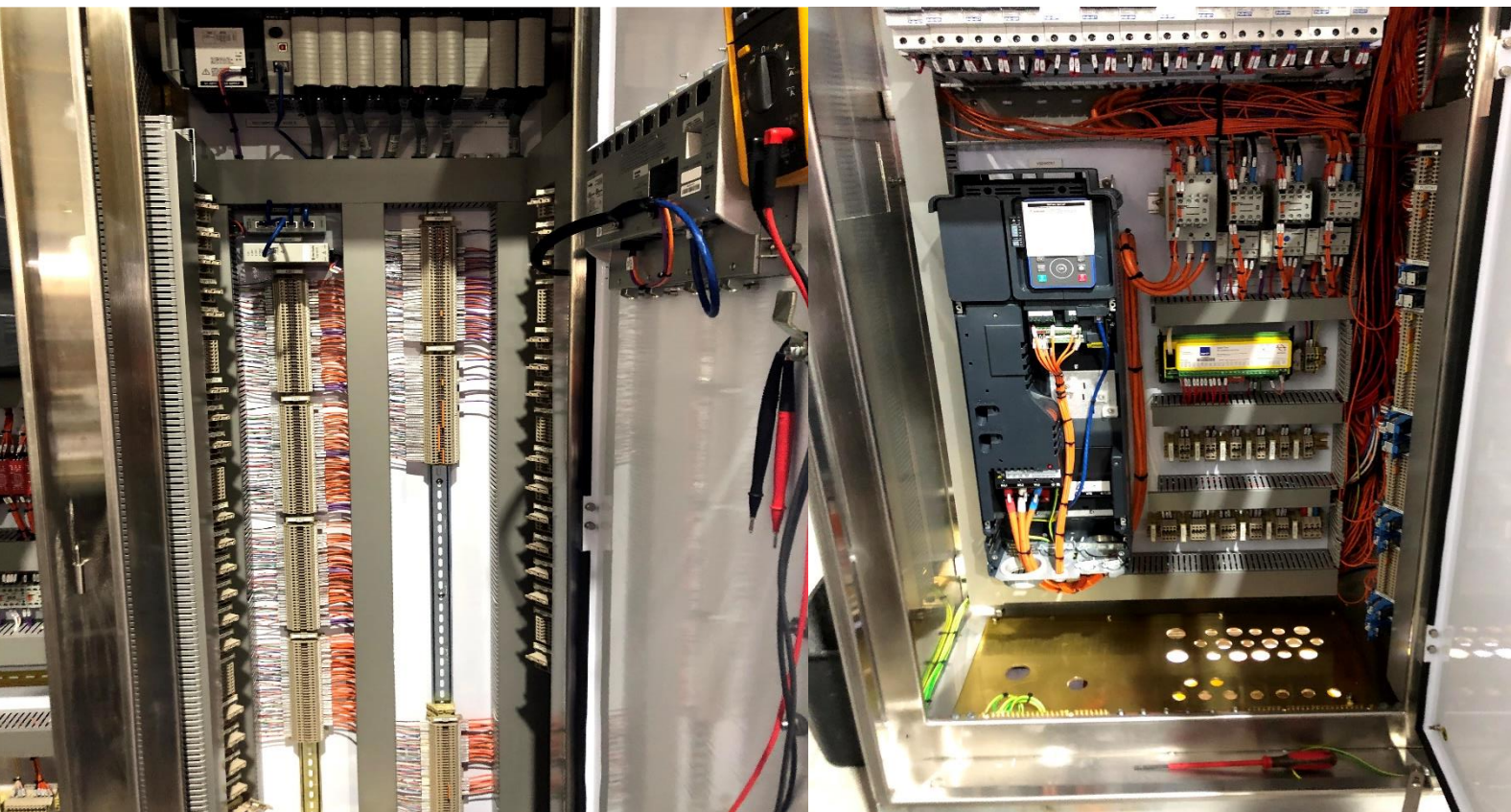


**Introduction:**

GDW Engineering offers our clients comfort knowing that at all times we strive to deliver our services on time, to the highest quality, at great value for money whilst complying to all site and regulatory body safety regulations.

We have extensive experience in coal infrastructure, handling and preparation plants from both a project and maintenance support perspective.

With a can do and client first attitude we have various client letters of recommendation that truly show our capability as a leading electrical industrial contractor in the region.



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### GDW Project Capability:

Having completed projects ranging from \$5k in value right through to \$5M there is no job to big or small that we can execute. Using our ISO triple certified management system we ensure that quality, safety and environment are front and centre of any project we deliver whilst ensuring that they are on time, without incident and within budget.

Our Electrical construction projects to mention a few include:

- Design and construction of 3 LTE 50 metre radio towers for Yancoal MTW and Moolarben sites as well as Wilpinjong
- Water treatment plants both temporary and permanent at Moolarben and Malabar Coal
- HV and LV Infrastructure for new dam infrastructures at Moolarben Coal
- New fuel farms at Moolarben Coal
- E&I installation at Bayswater Power Station
- Mach Energy high wall dam water pumping station
- Mach Energy MIA Infrastructure switchboards and LV mains cabling
- MTW KIOSK upgrade: 400 metres of HDG 450mm cable ladder and 800 metres of parallel 240MM mains PH/N/E
- IGLOO Infrastructure installations around MTW open cut area's
- Supply and Installation of a new MSB including consumer mains at MTW
- Design and Installation of new 2500A MSB at MTW
- Construction of LOM Bore Hole Pump installations

### Facets of the Projects included:

- Large EMC/VSD cabling install and terminations
- All types of LV, control and instrumentation supply and installation
- Supply and installation of instrumentation
- Design, supply and installation of cable ladder systems
- Underground conduit and trenching
- Large cable winch pulls
- Switchroom and MCC supply and installation
- VFD, UPS, Change Over Switches, Network Cabinet supply and installation
- LCS, J Boxes and Field Equipment supply and installation
- Magnet, Strain Gauge, Limit Switch, Transmitters, Belt rips, Lanyard and Pull Keys, Block Chute, Crushers, Belt Weighers etc electrical installations
- Hazardous Area Installations and Sign Off
- LED Lighting
- IP66 rated 3 phase and sing phase GPO's
- Remote I/O panels
- RMU installations
- Working in and around live plant
- Both brown and green fields installations
- Working in with civil and mechanical contractors

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## **GDW Maintenance and Operational Support Capability:**

GDW have proven capability working in and around CHPP handling plants.

We focus on being responsive to requests sometimes at very late notice and always strive to meet the client's operational requirements.

Proven services include:

- Infrastructure support services around administration buildings
- Infrastructure support services throughout the open cut area's including driving/operating a vehicle on haul roads interacting with the mining fleet as per the site procedures.
- Category 1 support electricians
- Working in established client operational teams in the open cut and CHPP area's
- Routine shutdown support
- Minor work projects in the CHPP and open cut
- Planned preventative maintenance work orders
- Breakdown support
- Testing of LV Motors
- Commissioning support
- Instrumentation installation and maintenance
- Trained authorised isolators and permit receivers
- Local familiar faced teams supporting client requirements
- Working under client safe systems of work
- Apprentice to tradesman ration of 1:5

GDW also has an embedded apprentice supervision procedure within our IMS in line with the new supervision guidelines that came into force September 2024.

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6<sup>th</sup> February 2024

To whom it may concern,

RE: Letter of Recommendation GDW

In my position of Reliability Engineer (Electrical Infrastructure) at Yancoal Australia's MTW Coal Mine, I have had the pleasure of working with GDW Engineering on a number of projects over the past two years.

GDW's approach to their work is always professional and of a high standard. The products that they deliver are always of exceptional quality and for this reason they are now our preferred Electrical Contractor here in the Maintenance Department at MTW. Their technical capabilities are second to none and they are always working in the best interest of their customers.

They have delivered multiple successful projects across all areas of the mine, all of which were on time, within budget and without incident or injury. I have no hesitation in recommending GDW for any electrical works, as I believe that they are well deserving of the recognition.

Yancoal look forward to continuing working with GDW in the future and could not recommend Gavin and his team enough.

Sincerely,

**Geordie Allen**  
**Reliability Engineer (Electrical Infrastructure)**

13/10/2022

To whom it may Concern,

**Re: Statement of Recommendation for GDW Engineering.**

In my position as a Project Manager for Yancoal Pty Ltd (Group Support Projects), one of my roles is to manage infrastructure construction works and participate in the evaluation and selection of multiple contract awards for the major infrastructure works to be executed at one of our Yancoal mine sites.

For one of the individual separable portion of works packages, GDW were selected as the winning tenderer for the works out of a competitive field of three top tier electrical firms. This being the first time for GDW to participate in the tender process at this site, gave rise to the evaluation team having the opportunity to review new competitors within the industry market.

Post evaluation, GDW were selected due to the incredibly high standard and professionalism of their tender submission, as well as the additional support and services they offered regarding safety, sustainability, QA and asset management which was of a high standard. Additionally, site stakeholders have now been able to re consider being more vigilant towards seeking additional cost evaluations from GDW for other required site works whether large or small including complexity.

Throughout the 2022 works, GDW have conducted themselves in a highly professional manner at all times and are delivering a product of exceptional quality. To eliminate and reduce cumbersome procurement timing processes, the project team have proceeded with sole source justification approvals with GDW to maintain program timing execution sustainability due to their ongoing commitment towards favourable and successful outcomes.

To date, GDW have delivered and executed successful job tasks across the site, all of which were on time, on budget and without incident or injury. Personally, I have no hesitation in recommending GDW for other works within our group and other companies on request as I believe that they are well deserving of the recognition as a leading electrical contractor of our region.

Please do not hesitate to contact me at any time for the purpose of additional information.

Sincerely,

*Gary Brooks*

30<sup>th</sup> May 2023

To whom it may concern,

RE: Recommendation for GDW Engineering.

In my position as Operational Technology lead for Yancoal Australia, I was tasked with the implementation of a state-of-the-art LTE network for the MTW Coal Mine in NSW in 2022/2023.

GDW Were selected as the partner to project manage, design, and implement the Charlton Ridge communications tower along with the upgrade of the existing tower infrastructure on site to support the network.

Yancoal and GDW have formed a close working partnership over the years and have worked on other similar projects in the past. GDW is always first preference as a partner for these types of projects due to the incredibly high standard of diligence, technical skill, safety, professionalism, and the ability to offer a complete turnkey solution without the need of Yancoal to manage multiple contractors.

This project was quite complex with many variables. Throughout the process highly technical designs were changed to accommodate the technology that was installed. Each time these changes were presented to GDW, there were no issues at all and GDW quickly adapted to accommodate the needs of Yancoal and the project as a whole.

The implementation of the communications tower and underlying infrastructure provided by GDW have enabled MTW Coal mine to now boast the latest LTE network in Australian mining and has completely changed the way the mine operates with the use of intelligent mining.

Multiple requests were made by Yancoal for GDW to assist on weekends to limit downtime to the mining operation and each time these requests were fulfilled.

Without the support of GDW I don't believe Yancoal would have had the infrastructure in place in a timely manner to launch this incredibly complex and critical network.

Yancoal look forward to working on multiple projects in the future with GDW and could not recommended Gavin and crew enough.

Sincerely,

**Brett Tristram**  
**Operational Technology Lead – Yancoal Australia**

