

Eastern Goldfields Regional Prison

Project: To manage FM for the Prison's redevelopment, using QFM software to maintain a highly functional environment.

Objectives: To effectively manage and maintain assets and services throughout the 25-year PPP contract term.

Results: Improved processes and procedures, easier to attend faults, and proactive prevention of problems to minimise financial deductions.

Improved FM in a Sensitive Environment

Eastern Goldfields Regional Prison (EGRP) is a new state-of-the-art prison in Kalgoorlie-Boulder, Western Australia, catering for both genders across all security ratings with a focus on delivering rehabilitative programs and meeting the needs of its primarily Aboriginal population. Replacing a smaller facility, the new 350-bed EGRP will allow more offenders from the local area to serve sentences close to their families and communities, with a view to improving prisoner wellbeing and behaviour.

The innovative design process of EGRP was based on people, landscape, activity, process and context, with extensive inclusion of technology to reinforce the safety, security and maintenance of the facility.

An open campus style reflective of Kalgoorlie's wide streets and a culturally sensitive secure perimeter was implemented, consisting of two advanced mesh barriers and technologies to allow for uninterrupted views to the country. These views reduce the sense of enclosure which is recognised as having an adverse impact on Aboriginal people in custodial environments. Furthermore, the landscape supports the maintenance of Aboriginal identity through the planting of local native vegetation and its design includes fire pits where bush tucker can be prepared, and ceremonies can be performed.

The prison replaces an overcrowded facility and has been developed under a public-private partnership (PPP) contract between the state's Department of Justice and



the Assure Partners Consortium, comprising of Capella Capital, John Holland, Pindan and Honeywell, with the latter proving facilities maintenance services over a 25year operating term.



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PPP Performance Management

Strict adherence to myriad PPP contractual terms can be easily overlooked without a comprehensive operational and maintenance management system in place. Honeywell has accumulated years of valuable experience in offering total asset management (TAM) under PPP projects, having established more than 50 contracts around the world. Recent projects such as AgriBio, a world-class facility for agricultural biosciences research and development, and Southern Cross Station, one of Australia's largest PPPs, were run by Honeywell using Service Works Global's QFM software and therefore the company had confidence in using the system at EGRP.

QFM is fully customisable operation and maintenance (O&M) software solution, allowing each specific detail and requirement of the PPP contracts to be added and subsequently managed and measured against each term in real time. Contracted performance standards span across all areas of the prison including cleaning services, faults, incidents, waste management and pest control, which can be monitored though QFM's online dashboard. Work is graded using a traffic light system to show urgency of jobs and potential service failures are forewarned to give Honeywell the opportunity for rectification before penalty deductions occur.

The Department of Justice Contract Manager, based at Eastern Goldfields Regional Prison, accesses QFM on a regular basis to review and track the status of all events and report on compliance.

"As a client, I can access QFM to monitor activity against the service level agreement. Reports are automatically generated each day through the system, and this allows me to audit how the prison is being affected by any faults that may have occurred. These software tools are invaluable and provide the potential to prevent problems escalating into a deduction scenario. I also have access to the custom reports developed by Honeywell which allow me to comply with my own reporting requirements."

The onsite FM team of eight people manage all works throughout the prison, but should a job require a specialist engineer, they are enlisted from the next closest city in Perth - a seven-hour drive away. In order to accommodate this, SWG worked with Honeywell to customise the software to allow an extension of time on the software, providing the ability to request an extension of the stated deadline for job completion. If the reason provided is deemed justifiable, the State can authorise this and an abatement can be avoided. As all stages of

the request take place within the system, an audit trail is created to ensure complete transparency between all stakeholders.

Reducing the Pressure on FM

Working in a facility designed to reduce stress and disruption, there is pressure on the FM team to maintain a highly functional environment. Prior to the newly expanded facility, EGRP relied on service from the Department of Housing and Works under a Whole of Government Facility Maintenance agreement. As a result of being based in a remote location, the facility struggled to achieve a timely response.

However, having an FM team on site with assets, works and services managed by QFM has resulted in a dramatic improvement to prison operations. "Things that took weeks now take minutes. This has had a significant impact on safety, security and employee engagement in an often-stressful working environment." In just over a year since opening the prison, in excess of 10,000 reactive and planned maintenance jobs have been generated, attended to and closed.

The team are all equipped with iPads which for security purposes only allow access to QFM, thereby preventing inmates from accessing the internet should the device be left unattended.

Once allocated a job by the help desk, operatives immediately receive a notification and can access and update information in real time. This improves communication across the team and reduces rectification times. Where internet signals are weak, the app's offline functionality ensures uninterrupted access to the system. Operatives also use self-service functionality to quickly and easily report jobs or request parts though a customised pictorial interface, driving operational efficiency and management of the prison environment.

In order to maintain the facility for the life of the contract and beyond, the Consortium and the Department of Justice adopted a partnership approach to the ongoing use of technology throughout EGRP. A number of initiatives were included in the facility design to increase effectiveness and functionality, such as energy efficient air conditioning with heat recovery, ventilation with CO₂ sensors, variable speed drives, water efficient fixtures and fittings and energy/water monitoring and regulating.

Future Focus

Honeywell's TAM strategy focuses on the whole of life asset life cycle, which is also a strong requirement of the PPP contract. In order to manage the numerous assets held across the 172,000m² establishment, Honeywell uses the Omniclass™ Construction Classification System. All assets are tagged with a code and this is held in QFM's asset register for easy access to information.

Due to the nature of the remote location and specialist engineers located in Perth, the accurate identification of an asset is essential. Honeywell plans to further improve reliability and information access by integrating their cloud-based building management system, Outcome Based Service, with QFM software.

The BMS was implemented to continuously monitor all building and security systems and provide site wide analytics to maximise system uptime, reduce utility costs and improve safety and security. Custom built rules trigger alarms and provide root cause and raise a request to fix the issue. The integration between the two systems will enable the instant and automated creation of jobs in QFM, removing the double entry process, and providing the option to automatically dispatch operatives with the requisite skills to attend the job.

This integration strategy not only improves job resolution, but also encourages preventative rather than reactive maintenance to improve asset performance. Problems are identified and rectified before they cause damage or degeneration, leading to reduced maintenance and energy costs across the whole asset lifetime.

Following the successful implementation of QFM at Eastern Goldfields, Honeywell plans to further expand their use of the software at new sites. Having a close working relationship with Service Works Global has created a strong mutual understanding of value and objectives, meaning contracts can be mobilised rapidly, leaving Honeywell more time to focus on delivering first class outcomes at the prison.





