

SURGICAL PRECISION

CLIENT : Health Infrastructure
MAIN CONSTRUCTION COMPANY : Hansen Yuncken Pty Ltd
ARCHITECT : MBMO Architects
SURVEYOR : KFW Infrastructure
PROJECT VALUE : \$65 million



The \$72M Wollongong Hospital Redevelopment aims to improve the capabilities and capacity of the Hospital and includes a new Emergency Department and Ambulatory Care Unit.

Hansen Yuncken's reputation for health construction projects stretches across Australia with awards for cancer centres in South Australia and New South Wales, surgery centres in Victoria and the School of Biomedical Sciences in Far North Queensland. Hansen Yuncken are highly experienced with contract and construction management for health projects.

Nearing their centenary celebrations, Hansen Yuncken are delivering hospital developments in Echuca, Wagga Wagga, at the new Royal Adelaide Hospital, Lyell McEwin Hospital Redevelopment and Royal Victorian Eye & Ear Hospital Redevelopment. They have recently completed the new \$72 million Wollongong Hospital Redevelopment for Health Infrastructure in New South Wales.

The redevelopment comprises a number of elements that significantly expand the capabilities and capacity of Wollongong Hospital. This included building a new 6-storey building on Loftus Street to house seven new surgical theatres and a short stay service area catering for a high number of patients undergoing surgery.

Supporting the increased numbers of patients is a new intensive care/high dependency unit with 24 beds, and an outpatient department. The building also includes 3 new wards: one close observation ward with 10 beds and two surgical wards each with 25 beds. In addition, Hansen Yuncken have managed the development of a Central Sterilizing Services Department (CSSD) as part of the new build. The sixth floor houses a plant room.

As well as the new build, Wollongong's Emergency Department has undergone refurbishment and expansion under Hansen Yuncken's direction and some of the previous clinical areas of the Department have been transformed into offices.

The expansion work has fitted in neatly behind the new 6-storey Wollongong Hospital Redevelopment, making a compact addition contained within the original hospital footprint. The contract included construction of additional capacity to the existing hospital

support services such as loading dock, linen and food services.

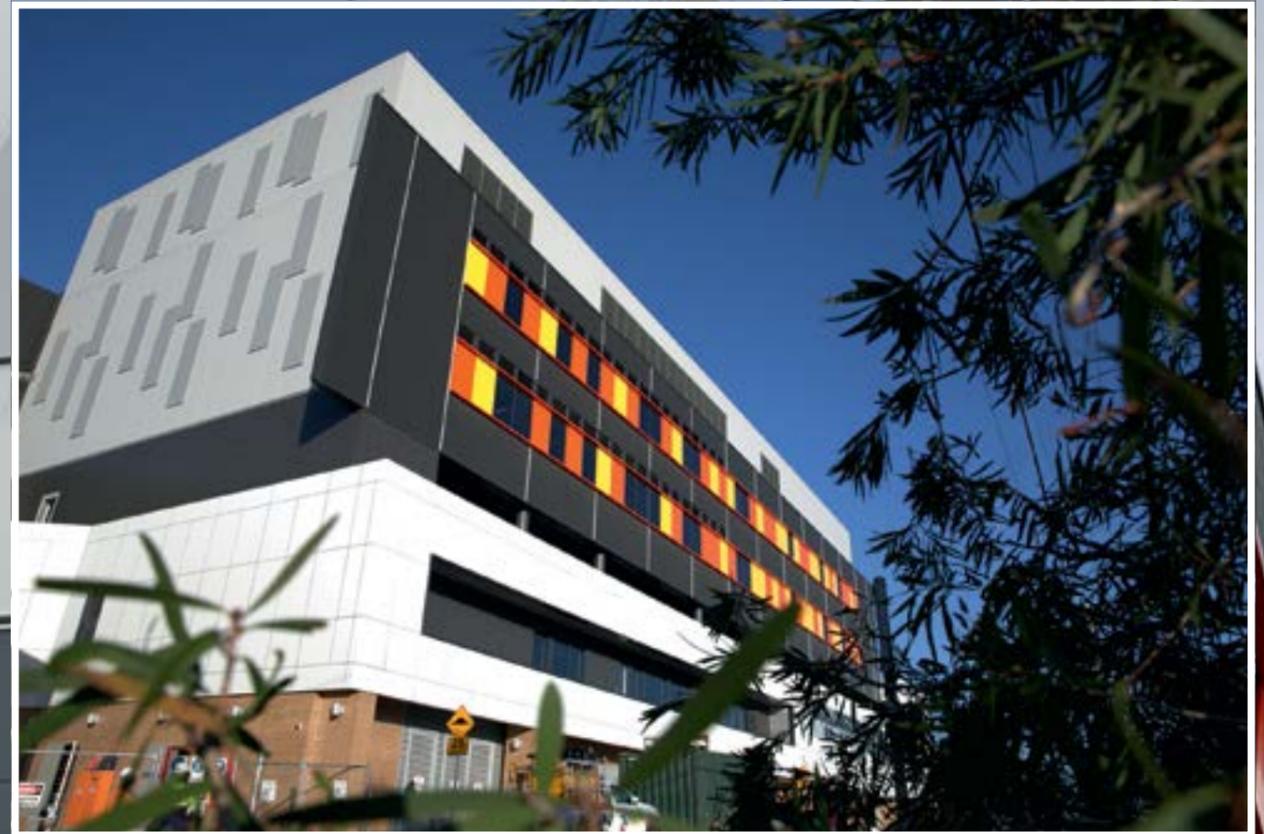
Hansen Yuncken were awarded the project in May 2013 as a design finalisation and construction contract and began onsite in August 2013. An early revision of the façade needed new approval, with MBMO Architects presenting an entirely new design to the Department of Planning. The amended design led to significant cost savings for NSW Health Infrastructure.

Hansen Yuncken's Tim Cadden identified the new façade as one of three challenges in completing the build. The others were managing the build in stages with minimal interruption to hospital operations, and successfully managing infection control. "The infection control processes were implemented to such a level that we essentially created new guidelines for the hospital around building and infection control," says Cadden. The project has provided a management plan for future infection control within a hospital environment that can be utilised elsewhere.

Working on a live site, Hansen Yuncken became a key partner in a working group to keep operations running smoothly. "We were completing demolition works above and adjacent to operating theatres, so we needed to work closely and cooperatively."

Over 400 contractors worked on the site during its construction. At peak, around 200 personnel were employed onsite with 24 Hansen Yuncken project management staff. This also included a lot of interaction with local Warrigal leaders and direct training, development and employment of indigenous workers on the project. The project also involved significant community consultation, befitting of a new facility that will serve so many people in the Illawarra region.

For more information contact Hansen Yuncken Pty Ltd, Level 6, 15 Bourke Road, Mascot NSW 2020, phone 02 9770 7600, fax 02 9770 7601, email sydney@hansenyuncken.com.au, website www.hansenyuncken.com.au



Mechanical services at the Wollongong Hospital Redevelopment were designed and installed by Allstaff Airconditioning. Their work includes provision of air conditioning, heating and ventilation to the new wards, theatres, outpatient clinics, intensive care unit, Central Sterilizing Services Department (CSSD) and associated buildings.

Owing to specialised procedures and sterile requirements, the filtration of certain areas such as the new operating theatres was critical. In these areas, Allstaff have installed High Efficiency Particulate Air (HEPA) filters to protect against transfer of airborne pathogens from outside the clean zone. The system also functions to distribute clean air to rooms in a flow that distributes contaminants away from the operating tables.

“We’ve used Focus 1,000 UCV systems from Airpure,” says Simon Spiteri of Allstaff. “The advantages of this product is its modular arrangement that enables easy installation to theatres and seamless coordination with other fixtures, such as lights and pendants.”

Allstaff sites one of the challenges of this installation as the management of contamination from micro-organisms arising from the building activities. The installation has involved integration of new with existing facilities. Allstaff have worked closely with their client Hansen Yuncken and the

hospital’s Infections Control Committee to eliminate contamination of existing areas from the processes of the new build.

Allstaff have specialist expertise and abundant experience in delivering mechanical systems for health, research and educational facilities, as well as retail and commercial developments. They are currently working on other hospitals at Dubbo and Wagga Wagga.

Allstaff’s and their associated companies, Triple M and BSA are based in offices in VIC, NSW, ACT, QLD SA and NT as well as undertaking installations across the Eastern states. Their strength lies in their capability to provide innovative mechanical services solutions for complex and sizeable projects. Allstaff’s expertise covers all elements of project delivery from design and installation to engineering and servicing.

For more information contact Allstaff Airconditioning, Quad 2, Level 3, 8 Parkview Drive, Sydney Olympic Park NSW 2127, phone 02 9879 3377, email syd@allstaffnsw.com.au, website www.allstaffnsw.com.au

Healthcare design in Australia is changing — and for the better — due to award-winning Morris Bray Martin Ollmann Architects (MBMO). Since 1974 MBMO Architects have been perfecting ways to design and construct buildings with speed and efficiency. With the introduction of creative partners Cameron Martin and Sven Ollmann in 2011, MBMO has now evolved into an exciting and agile design practice marrying deep construction and commercial know how with visionary creativity.

MBMO has the ambition, capability and collaborative energy to deliver both the visionary and the reality. Our team is a mix of design talent and technical experience. We bring together carefully considered design solutions with economic outcomes and outstanding detail resolution for an all-round performance on projects. We are large enough to take on the biggest projects, and small enough not to lose the personal relationships we build or the attention to detail that we desire.

Cameron Martin is the driving force behind the \$65 million NSW Health Priority Project upgrade of the Wollongong Hospital. Including a new 6-storey structure, significant expansion to the existing Emergency Department and Ambulatory Care, major increase in the surgical and critical care capacity and a façade upgrade, this is the most sizable redevelopment of the hospital in decades.

Traditional hospitals are rigid in design, but MBMO designs are providing a welcoming ‘non-clinical’ atmosphere with natural light atriums that provide secure patient rest and rehabilitation areas. “Whilst healthcare is clearly driven by the need for rigorous controls, we as designers are challenged to provide spaces that are modern, efficient and cohesive healing environments — places that serve to support health professionals in improving both healing and patient experience that greatly assists recovery rates,” said Cameron Martin.

Cameron also says that hospitals of the future will be focused on therapeutic options for patients and hospital time will be minimised. “When it comes to technology, the key to our continued success has been the use of ArchiCAD and dRofus in our projects,” he said. “They have helped us deliver consistently high standard projects while communicating our designs clearly and delivering them more efficiently to exceed our client’s expectations, which in turn ensures us repeat business.” MBMO’s collaborative philosophy, superior design abilities combined with their use of advanced technology assist in producing their many successful projects.

For more information contact MBMO Architects, 186-188 Willoughby Road, Crows Nest NSW 2065, phone 02 9439 6622, email cmartin@mbmo.com.au, website www.mbmo.com.au



Since 2000 Gridline Commercial Constructions Pty Ltd have been building quality expertise, experience and reputation into handling any specialist cladding solution no matter what the size. Their understanding and appreciation for a customer's needs for aesthetics, cost efficiency and durable cladding solutions delivered on time and budget made their company a perfect choice for the Wollongong Hospital Redevelopment.

Employing over 45 people in their Sydney office, factory, building sites and specialist subcontractors, Gridline Commercial Constructions have successfully provided quality architectural cladding solutions for major industrial and commercial building projects. Having undertaken over 100 projects of various sizes, locations, materials and types, they are not limited by the size and volume of the project.

"We're equally able to provide smaller face and shop front solutions as well as major industrial cladding solutions in an efficient and high quality manner," informed Managing Director and Project Manager David Sretenovic. "We're doing our utmost to be on the forefront of the industry when it comes to new design, new materials and new production and installation methods. Our team is always looking for interesting and challenging projects to best utilise these elements."

Gridline's typical project comprises creative and technical discussions with architects, designers and engineers, then interpretation of drawings or 'from design idea to practical implementation.' Next develop solutions, then the cladding is manufactured—cutting, grooving, curving and assembling the panels. Finally on-site installation. "On the project, Alpolic, Kingspan and Custom Orb façade cladding elements were installed, plus sunshade devices," said David. Completely flat Alpolic has high rigidity, is weather-resistant, lightweight, has a fire-retardant core, is easy to process and recyclable and accommodating it to nature. Kingspan panels present a superior system compared to conventional multi-part site assembled systems and meet Section J compliance. While Custom Orb is famous for its versatility, long, wide, strong, lightweight corrugated profile.

Add up all these features of experienced, skilled staff who pay attention to quality and detail, plus a choice of the best roof or wall cladding products available in today's market and all Gridline customers benefit from outstanding value and know how.

For more information contact Gridline Commercial Constructions Pty Ltd, Unit 2/3 Pullman Place, Emu Plains NSW 2750, phone 02 4735 6217, fax 02 4735 8178 email admin@glcc.com.au, website www.glcc.com.au

Today new automated technology and advanced ceiling lifts are saving our governments, councils and medical facilities millions of dollars annually. Not to mention the benefits to the health and wellbeing of nursing staff and patients.

Established in 1999, Healthcare Lifting Specialists (HLS) are the exclusive Australian distributor of the Guldman ceiling hoist system, ROPOX height adjustable kitchen frames and bathroom products and the Vendlet patient positioning system.

"The Guldman ceiling hoist system is a superior way of lifting, handling and transferring patients," said Nick Stehr, Project Manager for HLS Healthcare on the Wollongong Hospital Redevelopment. "Guldman represents best in class products offering market leading quality and reliability. This coupled with our extensive experience and expertise we're now known as Australia's leading provider of ceiling hoist solutions."

HLS Healthcare supply a range of lifting and transfer products that assist people who have permanent or temporary disabilities. Their products are being used in hospitals, nursing homes, aged care homes, schools, special accommodation and residential homes Australia-wide.

"The initial investment in this technology pays for itself in just a few years. Our lifting technology makes it possible for a single nurse or caregiver to move a patient from their bed to a wheelchair or bathroom, where previously two or more people were needed," informed Nick.

"In the IESS Centre at Wollongong Hospital we've incorporated 24 'H track systems' to ICU and a further 14 to wards on levels 4 and 5. Several have multiple curves, enabling patients to be easily transferred from bed to ensuite. A combination of fixed and portable hoist motors have been fitted to the tracks."

Self-installing portable hoist motors are a unique feature of the Guldman system. They simply self-install to and from the track meaning staff don't have to lift or reach up to attach the motor onto the track and the hoist motor is kept safely away from a patient's head. It's no wonder hospitals, nursing homes, aged care homes, schools, special accommodation and residential homes across Australia choose to partner with HLS Healthcare for their patient handling requirements.

For more information contact HLS Healthcare, 3/56 Norcal Road, Nunawading VIC 3131, phone 03 9878 4448, email admin@hlshealthcare.com.au, website www.hlshealthcare.com.au

Wollongong Hospital Redevelopment, NSW



Below Intrec undertook the fitout and refurbishment for the Emergency and Psychiatric Department for the Redevelopment.

Below Resolution Rigging provided Tower Crane services for the Wollongong Hospital Redevelopment.



Commercial fitout and building refurbishment company Intrec have been undertaking refurbishment of Wollongong Hospital's Emergency Department and Psychiatric Emergency Care Centre (PECC) since July 2014. The project involves complete internal demolition, refurbishing and fitting out over four staged periods.

Intrec's refurbishing requires close and continual communication with Hansen Yuncken and hospital management to ensure there was minimal disruption to ongoing services. Quite simply, it has not been possible to shut down the Emergency Department of a major regional hospital. Working on a live site, cooperation between contractors and principal was critical. Existing systems are required to remain operational and work health and safety is particularly important involving not only contractors but patients and staff.

"Wollongong Hospital is patient centric, all design elements of the building are driven to support a healing environment for the patient," explains Intrec's Brendan Forde. He continues that "challenges during the build include a focus on infection control, contamination control, patient care and a high standard of professional delivery of health services demanded by this facility"

Intrec's internal refurbishment work required specialist approaches and materials to meet the particular needs of the health facility. Construction of the emergency X-ray area required Intrec to install lead lined walls, doors, windows and frames compliant with radiation zones.

Specialist fixtures and fittings were installed by Intrec in the PECC to minimise the risk of patient injury and self-harm, as well as providing safety for staff. Intrec used impact resistant walls, glass and doors in the PECC fitout and specialist tamper-proof fixings that reduced risk of ligature.

Founded in 1996, Intrec currently has 60 staff in offices in NSW, QLD, ACT and VIC. Other current projects include Waratah Private Hospital, Oracle, Comcare, NSW State Library, St Vincents Hospital Melbourne, Henkel, The University of Sydney and Multiple DHS sites.

For more information contact Intrec Pty Ltd, 9 Cleg Street, Artarmon NSW 2064, phone 1300 791 632, email nsw@intrec.com.au, website www.intrec.com.au

Resolution Rigging Services Pty Ltd (RRS) is a local company in the Illawarra employing local personnel and are proud and honoured to be associated with the redevelopment of the Wollongong Public Hospital.

RRS was awarded the contract by Hansen Yuncken to supply the tower crane and operations to meet with the materials handling at the hospital. They supplied a Liebherr 290HC tower crane free standing at 49m height under hook and with a 70m jib radius, lifting 12 tonne maximum capacity and 3 tonne at 70m radius. The tower crane was strategically placed in a location that it would cover the entire project and have no impact on the completion of the structure.

RRS specialises in the Tower Crane Hire, Crane Crews and Rigging industry. All services supplied by RRS are undertaken in prompt and professional manner. Erection and Dismantle of Tower Cranes Completed in minimal time safely in accordance with WH&S legislation and requirements.

The company have fully qualified riggers on the erection team that have undertaken all relevant training to perform their duties efficiently and safely under the WH&S Regulation.

All permanent crane operators and dogman have been specifically trained in all aspects of operating all types of tower cranes such as Liebherr, Favco Favelle to name a few. RRS also offer Crane Crews for hire to operate tower cranes.

RRS has been registered since November 2000 and is privately owned and operated by Tony Noronha, with the intention of providing hands-on, face-to-face quality service and has personally been in the tower crane industry for over 21 years.

RRS are also involved in the tower crane operations for the materials handling at the current development of the Wollongong Private Hospital on Crown Street, Wollongong.

With also numerous other tower cranes in Wollongong and also in Sydney for the construction of residential buildings, shopping centres, hospitals and commercial buildings.

For more information contact Resolution Rigging Services Pty Ltd, 8 Resolution Drive, Unanderra NSW 2526, phone 02 4271 4343, fax 02 4271 4746 email info@resolutionrigging.com.au, website www.resolutionrigging.com.au



When it comes to waste, Bin Master have the scoop on any job no matter how big or small. They're the Illawarra waste logistics, waste management and skip bin hire specialists. Locally owned and operated since October 2006 their services are renowned throughout the Illawarra region covering Kiama, Wollongong to Shellharbour City and surrounds.

"Whether it's a one off mini skip bin for rubbish removal around the house or yard, or site skip bins serviced daily for waste disposal from a major construction site, we have a whole range of skip bins suitable for the project," said Jennifer Julian from Bin Master.

Bin Master friendly staff are qualified and experienced to sort out all rubbish removal and waste management requirements. Types of material accepted in skip bins include:

- Construction and Demolition Waste
- Garden Green Waste
- Pavers, Bricks, Tiles and Concrete
- Metal, Rocks, Timber and Plastics
- Household Goods, Furniture, Appliances and Whitegoods
- Cardboard and Paper
- Dedicated bins for bonded asbestos only
- Along with many more

The dedicated team at Bin Master work hard to maintain high percentage diversion of material from landfill to recycling/reuse. These operations not only ensure a project's waste management obligations are being met, but also demonstrate commitment to the "Waste Less, Recycle More" initiatives, on which Bin Master's own environmental policies are based. Waste Management Reporting is available on all projects.

Bin Master provided waste management services on the Wollongong Hospital Redevelopment construction site. At least one truck was dedicated to service the site each day for the duration of the project, servicing up to 12 bins a day during the busiest periods.

"We have provided services to many large projects throughout the Illawarra region over the years," says Jennifer. "The challenge is to be able to prioritise dedicated service to a large project whilst keeping other customers happy. Fortunately it's something we do very well." The site foreman had nothing but praise for the Bin Master crews.

For more information contact Bin Master Pty Ltd, PO Box 446, Albion Park NSW 2527, phone 02 4256 2008, fax 02 4256 8376, email info@binmaster.com.au, website www.binmaster.com.au

Just like the relationship between a surgeon and patient, expertise, perfection and commitment are key factors for successful outcomes. At Scarelli Joinery, Michael and his talented, collaborative team continually exceed their client's expectations. Their attention to detail is matched with passion for precision.

Founded in March 1999 by Michael Scarfo, Scarelli Joinery has gained a well-deserved reputation for flawless craftsmanship, reliability and on-time delivery. Michael personally assures all works delivered by his skilled and resourceful team is of the highest quality and standard. His 25 full-time staff members are qualified in all areas of joinery and carpentry, including project managers, designers, draftsmen, purchasing officers and estimators.

Today Scarelli Joinery has become a contractor of choice for joinery solutions within Australia's leading construction and architectural firms. Over the years, they've partnered with big-league construction players including Boulderstone Hornibrook, Bovis Lend Lease, Novati Constructions, Renascent Sydney, St Hilliers Contracting, AWD and LHD Defence (Randwick ship facility), HCF and more recently with Hansen Yuncken on the Wollongong Hospital Redevelopment.

The interior fit-out of the reception, consultation rooms, utilities, patient bays, bedrooms, staff stations, triage cubicles, storerooms, wall paneling, toilet and shower partitions at Wollongong Hospital was a huge undertaking.

"Our dedicated team leaves nothing to chance," Michael enthuses. "We have a simple philosophy. Do the job right, from start to finish. Our carpentry service is expertly project-managed from start to finish, in close collaboration with contractors and client-side team members alike."

"From planning to manufacturing, installation and delivery, customers count on us to deliver zero-fault custom joinery on any scale project. And I can proudly count on my professional team to deliver too."

Scarelli Joinery successfully works across a variety of sectors including retail, corporate, education, hospitality and health, bringing lasting results to the big end of carpentry.

For more information contact Scarelli Joinery Pty Ltd, 7 Arkley Street, Bankstown NSW 2200, phone 02 9791 6922, email info@scarellijoinery.com.au, website www.scarellijoinery.com.au