

ESSENCE OF LIFE

DEVELOPER : Sonic Healthcare

MAIN CONSTRUCTION COMPANY : Hutchinson Builders

ARCHITECTS : nettleontribe

The new headquarters and laboratories for Sullivan Nicolaides Pathology in Bowen Hills combines SNP's three major operations in Brisbane into one location, housing approximately 600 staff responsible for processing patient samples from Queensland, the Northern Territory and Northern NSW. The development comprises warehouse and administrative basement, three floors of laboratory space, and a third floor administrative level.

With a focus on design ensuring patients receive the highest quality healthcare, Sullivan Nicolaides Pathology's (SNP) state-of-the-art building signals a new era for the company.

Bringing together SNP's four existing sites under one roof, the Bowen Hills facility provides improved logistics and internal efficiencies as well as an enhanced environment for staff.

"The ability to install state-of-the-art technology, including vertical specimen transport systems produces patient results

in the fastest possible time, ensuring the best patient outcomes," SNP's Toby Barker explains. "The previous address was a repurposed government rehabilitation centre built in the seventies, so the new building has been a positive move for the staff, great for staff morale and has received many favourable comments."

Large floor plates provide an optimal workflow and equipment layout, including a static, modular track with a single tube transport and storage system. A large central staircase and atrium also interconnects the building's various levels. "This creates an environment where

staff can collaborate on an informal level," Toby adds. "It is interesting how many ideas can be conceived in this type of environment."

Low-energy LED lighting and motion sensors reduce energy use, while computer-modelled exterior sun shading reduces solar load on the air conditioning system and energy needed to cool the facility. Tinted double-glazed performance glazing also reduces this load while a building management system fine tunes energy use.

The building's landscaping will be irrigated from collected rainwater. Additionally, liquid waste will be collected in tanks for monitoring to ensure compliance with local council guidelines before being discharged into the sewer.

The new facility's location is also designed to encourage SNP staff to leave the car at home. This includes an end of trip facility holding up to 94 bicycles and incorporating change rooms. The uptake among staff has already been strong, with many SNP employees now

cycling or walking to work. Public transport is also within close proximity, with Bowen Hills Station just a five minute walk away and local buses available.

Among the construction material was 13,500m³ of concrete, 69,900m² of formwork and 2,278m² of precast walls. 42,000m³ of rock required 12 weeks to excavate with up to 10 machines working in tandem and 20 tip trucks. There was also 600 tonne of reo and 450 tonne of PT cable.

Among the work was a complete re-design of services on a Design and Construct basis. This included adjustment of floor heights to accommodate the extensive services in the ceiling space. Basements were also re-designed for improved efficiency and cost savings, as were retention systems to make use of the rock onsite and control costs.

The building's automated track system (one of only two in Australia) was integrated within the original contract period as was the inclusion of additional laboratory space. Double-height pre-cast walls and

columns during the construction not only provided a clean finish, but helped program time frames.

Toby explains that one of the biggest challenges faced on the project was the logistics of bringing together SNP's sites into one facility. "The relocation of the four sites into the one at Bowen Hills, without affecting the provision of quality healthcare to the community, rates as one of the largest and most complex relocations of an operational pathology lab/organisation," he says. "All of this relocation project was managed inhouse by SNP."

He also praises the work by Hutchinson Builders as the primary contractor as well as architects nettleontribe. "Both companies were interested in a collaborative approach to achieving a state-of-the-art medical testing facility and to solving the problems associated with the myriad of services required in this type of building."

For more information contact Sullivan Nicolaides Pathology, 24 Hurworth Street, Bowen Hills QLD 4006, phone 07 3377 8666, fax 07 3377 8722, website www.snp.com.au

Below Rowles Time Management provided construction program services, for tenders, contracts and target management.

Below **nettleontribe** used their experience from previous Sonic Health projects to design the custom facility.



Queensland-based **Rowles Time Management (RTM)** provide specialist project planning, construction programming and monitoring services to ensure the successful delivery of projects. Experienced across all sectors of the building industry, RTM recently supplied its experience and expertise to the construction of the Sullivan Nicolaides Pathology Central Laboratory.

“We were working for Hutchinson Builders and provided construction programming services for the duration of the project. This included the preparation of the tender program, some work in the tender negotiation process and the establishment of the contract construction program,” explains Richard Rowles, Managing Director, RTM. “We also developed the target construction program and provided input to the procurement of the trade packages.”

RTM also monitored the project’s progress throughout construction. “These independent status updates and reports monitor progress on and offsite, reflect if there’s a change in methodology and are usually included with the contractor’s monthly report to the client group.” Constructing the special purpose Sullivan Nicolaides Pathology Central Laboratory required RTM to draw upon the expert knowledge developed through years of experience, particularly with Health Care Facilities.

“The project’s complexity was similar to a hospital in that it had specific areas and specialist finishes – it wasn’t generic,” explains Richard. “It is also a complex building from a structural viewpoint. It has a large footprint and not many levels. A lot of the slabs overlap each other at different places on different levels. This creates challenging sequencing issues, difficulties for material handling and edge protection issues.”

Delivering specialist input regarding contractual issues, RTM also specialise in managing delay events and extension of time claims. Its program planning services encompass all time related phases of a project from concept design through to construction, commissioning and FF&E.

Established in 1985, RTM consistently delivers clients and contractors the best outcomes on their projects. “Time is Money; every day onsite is worth a lot of money,” Richard says. “Everyone needs to be in tune with each other; marching to the same drumbeat. Offsite and onsite activities are not mutually exclusive, they are all elements of the same process.”

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nettleontribe Architects resumed its working relationship with **Sonic Healthcare Group** to collaborate in the design and delivery of the **Sullivan Nicolaides Pathology (SNP) Central Laboratory**.

SNP utilised **nettleontribe**’s expertise right from the commencement of the project. Having previously designed the Sonic Healthcare facility in Sydney plus other key projects in the health and research sector, **nettleontribe** contributed to the evaluation and design of schemes for different site options.

“This assisted the client in the decision making process and helped find the optimal solution for their brief requirements,” explains Justin Morgan, Director of **nettleontribe**.

A highly collaborative architectural design process underpinned the success of the new SNP Laboratory. To facilitate collaboration, workshops and user group meetings were established with the facility manager, department managers, pathologists and a broad range of consultants. Here, as Justin describes, everyone “shared their knowledge.” 3D BIM modelling was used throughout the delivery process, resulting in improved collaboration, reduced re-work during construction and faster delivery.

The result is a user-friendly laboratory that defies the traditional ‘tight’ lab space. Instead, an emphasis on shared areas – flexible laboratories, lounge and meeting spaces – is integral to the facility’s collective design. A naturally lit atrium break-out area in the centre of the tower floor plate balances the intense and technical layout and provides some ‘loose’ space to facilitate meetings, relaxation and interaction.

Critical to the design of the floor plate was flexibility. With internal layout changes likely to arise from organisational shifts and as yet unknown technologies, **nettleontribe** future-proofed the SNP Laboratory design. This was achieved by the strategic placement of vertical and horizontal circulation elements as well as large column free spaces and post-tensioned slabs in the structure itself.

For over 40 years **nettleontribe** has specialised in the design and planning of buildings and estates across Australia. **nettleontribe**’s design experts deliver architectural, interior design, masterplanning and urban design services, consistently producing quality outcomes for clients.

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Sullivan Nicolaides Pathology
Central Laboratory, Bowen Hills

Below McKenzie Group provided integrated consultancy services for compliance with a variety of local, state and federal legislation.



National Building Surveying, Certification, Accessibility and Risk Management consultancy McKenzie Group Consulting, has ensured the new Sullivan Nicolaides Pathology (SNP) Central Laboratory complies with the complexity of legislation governing safety and accessibility.

“McKenzie Group provided integrated consultancy services for the Sullivan Nicolaides Pathology Central Laboratory including Building Certification, Accessibility and Dangerous Goods Consultancy,” explains Michael Leighton, Director of McKenzie Group.

A key challenge of the project was developing and implementing a compliance strategy specific to the requirements of the specialist facility. McKenzie Group successfully produced a strategy that complied with a variety of local, state and federal legislation including the Building Code of Australia, the Disability Discrimination Act and Access to Premises Standards for persons with disabilities, the Workplace Health and Safety Act and Dangerous Goods Standards.

“McKenzie Group’s ability to provide an integrated compliance management and certification service has ensured effective, functional and flexible design solutions that address the collective responsibilities

of all involved in the process,” Michael says. “Where the above legislation has competing objectives or conflicting requirements, we have developed innovative solutions through a combination of prescriptive and performance based solutions, whilst ensuring the legislative and community expectations are satisfied.”

Established in 1988, McKenzie Group has over 60 employees based in Sydney, Melbourne, Brisbane and Gold Coast offices. A pro-active, pragmatic and client-focused culture has earned the Group’s reputation as one of the best in Australia. “These attributes combined with cutting edge technical expertise allow us to consistently deliver quality outcomes for our clients whilst satisfying and exceeding community expectations of Safety, Health and Amenity,” explains Michael.

Servicing a diverse client base, McKenzie Group provides specialist consultancy for a significant number of Australia’s largest privately-held and publically-listed development entities and Government organisations.

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