



CH2

COUNCIL HOUSE 2

RIISING UP FROM THE SITE OF THE DEMOLISHED TIVOLI CAR PARK in the Melbourne CBD is a project that will establish a new benchmark for environmentally sustainable architecture in Australia. When completed, the Council House 2 (Ch2) project will be the first Australian building to achieve a Green 6 star rating under the Green Building Councils Green Star rating system. The City of Melbourne's vision for its new administration building is to create a real example of the benefits of sustainable design, both in terms of preserving the environment and in terms of

long-term cost savings. The CH² project has been called the most sustainable office development in Australia and will be recognized as a world leader in sustainable design.

For such an ambitious project, the City of Melbourne engaged Australia's fifth-largest construction company, Hansen Yuncken. Established in 1918, Hansen Yuncken is an Australian-owned company with an annual turnover in excess of \$520 million and employing approximately 400 staff. Hansen

Yuncken's motto is "Building Value" and over the years they have built a strong reputation based around quality and building integrity, with the aim of creating value for their customers.

Hansen Yuncken Project Manager for the CH² project Mr. Paul Bolton says, "Our aim is to build value for the client by working with them to achieve the best possible outcome we can".

Hansen Yuncken has a strong tradition of building environmentally sustainable projects

and has developed a reputation as a premier developer of "green" projects in the Melbourne area. The 60L project in the Melbourne CBD, built by Hansen Yuncken, was one of the first major "green" buildings in Melbourne. In addition, the K2 development for the Victorian Government on St. Kilda Road will achieve a Green Star 5 rating. The company's experience with environmentally sustainable projects made them the perfect candidate for the City of Melbourne's CH² project.

continued pg.44



Shading Systems of Australia

THE NEED TO DEVELOP NEVER BEFORE SEEN manual and automatic shading systems, some with full-loop motorised control, and provide an environmentally friendly product in the process, meant that Shading Systems of Australia was the perfect shading solution supplier for CH2.

The company, which has a strong and respected, component engineering and design background, was the first choice to provide the shading system requirements for the 6 green stars Melbourne project. Shading Systems' specialist expertise, and its particular experience in developing new products from architectural briefs, set it apart from its competitors. Having worked within the building, construction, architectural and interior design industries for many years, Shading Systems of Australia has vast experience in developing specific shading solutions for unique and difficult assignments including glazed areas in both vertical facades and horizontal roofs for the shading requirements of the new wave of environmentally conscious developments.



It was in fact Shading Systems' unique experience in working with environmentally sound materials and delivering environmentally friendly products that helped the company secure the coveted CH2 contract. Working closely in conjunction with French textile manufacturing company

"Ferrari", Shading Systems has employed an environmentally sound, specially coated and woven polyester radiation screen to be the first line barrier in controlling solar radiation.

WORLD FIRST – TIMES THREE

Peter Scrivenor, Technical director of Shading Systems of Australia, says "to satisfy all the criteria for the designers and client, we actually started from scratch to develop 3 "first of their kind" products especially for CH2.

The first of these is an external, permanently fixed, "light shelf in-fill". These are prefabricated aluminium frames designed to neatly insert into the steel framework to be installed above each North facing balcony. Comprised of a series of decreasing size, removable shading panels, Shading Systems will fill these frames with the special Ferrari environmentally friendly textile.

The second product Shading Systems has designed for CH2 is a moving "targeted shade panel system". Using a unique and exclusive system, this mechanism will operate a moving panel of shade fabric up and down a series of steel guides to provide adjustable "targeted" shade to the internal office areas concentrating on the specific layout of seating, desks, VDU's etc. within the office depending on the intensity of light and the time of day. In an exciting world first development, Shading Systems will supply this product into CH2 with a number of full loop controlled motorised versions to provide shade at the top, bottom and intermediate levels of the large, lower windows for CH2's North facade that are fully integrated into the BMS and for the very first time will provide complete positional feedback to the main computers (that are controlling lighting

and air conditioning) delivering the world's first genuinely fully integrated shading system.

The final product developed for CH2 by the Shading Systems team, is a unique internal roller shading system that operates from a hidden location in an upwards direction. Extending above the aforementioned targeted shade panel mechanism, this will provide the shade for the upper section of all the external windows on the North of the building.

The CH2 project, with its unique requirements, has provided many challenges for the Shading Systems of Australia design team. With its background in component engineering and design, as well as complete Shading System installations, the company has been able to meet these challenges and develop exciting new products for what is to be Australia's greenest building.

SHADING SYSTEMS OF AUSTRALIA
9/1-7 Canterbury Road
Braeside, VIC, 3195
PH: 03 9588 1200
FX: 03 9588 1233
www.shadingsystems.com
peter@shadingsystems.com



Professional risks. Professional protection.

Professional Indemnity insurance for Professionals including engineers, designers, surveyors, planners, project managers...

Planned Professional Risk Services (PPRS)

Services include:

- Professional Indemnity Insurance Advice
- Specialised Claims Advice
- Extensive Risk Management Material
- Client referral to 15 minute free Legal Consultation
- Client Contract Reviews in respect to Insurance Issues

For more information please contact PPRS on:

Freecall 1800 810 972 E-mail: prienquiries@raians.com.au

PLANNED
PROFESSIONAL RISKS UNDERWRITING AGENCY
A Trading Division of IBL Limited
ABN 65 005 754 718 - AFS Licensing Ref. 231203



Insurance underwritten by
Suncorp Metway Insurance Limited
ABN: 83 075 695 966
AFSL No: 229869



MIGLAS WINDOWS a clear environmental vision



MIGLAS WINDOWS WAS ESTABLISHED IN THE EARLY 1970'S BY WALLY MIGLAS as a family joinery business. The business evolved and developed and was continued on by his son Anatol Miglas.

Located in new premises in Montrose Victoria since 1985, Miglas specialises in window design and manufacture. The company boasts the latest, state-of-the-art machinery, guarantee a consistent product and continue to develop innovative, sustainable designs.

"All the products are designed in-house and we are continually improving the design and construction methods. The result is a product that we believe outperforms anything in the market under NATA approved laboratory tests. Recent tests on our Ali Clad window exceeded 2000 pa of water pressure" said Mr. Miglas.

As well as producing high quality products, environmental sustainability is an important part of the company philosophy.

Miglas manufactured and supplied the specialised windows for the CH2 project. Mr. Miglas said that no other window manufactures could meet the stringent requirements for timber windows in the 10 storey environmental, sustainable development.

One of these requirements was that the timber was sourced from re-growth forests.

"All timber, for every project, is sourced from sustainable re-growth forests. The native timber is private or state forests approved by the Victorian Department of Natural Resources and Environment for selective logging of re-growth timber." said Mr. Miglas.

Miglas are continually developing their products with the environment in mind. Recently the company was selected to manufacture and supply windows to two sustainable housing developments – K2 in Windsor, Melbourne and Walford Terraces in Hobart.

For more information, please telephone MIGLAS WINDOWS on (03) 9728 3999





Ronstan International



...oid design is an award winning specialist design team in the area of signage and wayfinding design, innovation and development.

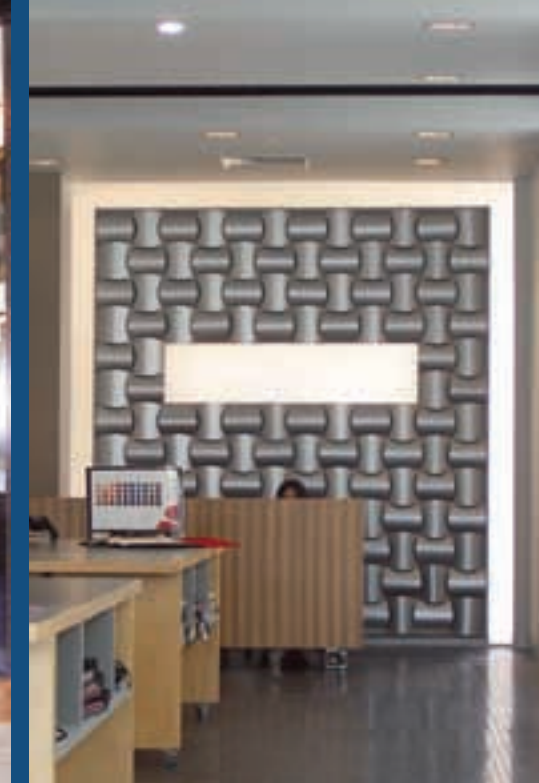
We have expertise in documenting, sampling, design and project management of entire signage programmes.

...oid has broken new ground in scale and use of materials to create new ways of communicating with a broad audience. We always maintain a commitment to designing signage that is functional, suitable to its surroundings, innovative and compliant with all DDA, BCA specifications.

Most recent projects include 606 St. Kilda Road, we were commissioned to come up with signage externally and internally that reflected the philosophy of the building which was cutting edge design meets technology.

We utilised materials that best reflected technology and design using substrates that have different luminosity qualities. ...oid maintained the building's identity through the signage rather than applying signage simply as





Scott Development Pty Ltd

SCOTT DEVELOPMENT

are involved refurbishing the new CH2 building which is part of the Melbourne City Council project. The refurbishment consists of the new 6 metre high Trespa panels available from Laminex Industries. The panels are 8mm and 13mm thick and will be installed in the foyer of the building and the exterior creating a new state of the art appearance. The Trespa panels will also form the vanity benches and wall paneling to the wet areas.

In addition to the CH2 building Scott Development are intensively involved in a number of projects throughout Australia specialising in retail and commercial fitouts from the various bars at the M.C.G. to extensive works at the new R.A.C.V. building in Melbourne. "We are proud to be associated with some of Australia's leading designers and architects" said Mr. Barry Scott.

In addition to these works Scott Development are committed to retail fitouts and building refurbishment, for example the new Instyle Head Office in Richmond, Victoria which was designed by Mr. Philip Adams from Design Empathy in Sydney.

Our retail expertise ranges from pharmacies, optical shops, clothing, hairdressing salons and bars from the Westfield Shopping Centres, the Gandel Group and various shopping strips.

Specialising in retail and commercial fitouts for over 30 years, committed to excellence, high quality finishes, schedules and customer service, Scott Development have the dedication, expertise and resources to successfully manage and complete projects Australia wide.

SCOTT DEVELOPMENT PTY. LTD.

64 Oakover Road
Preston Vic 3072

Phone: 03 94803122

Fax: 03 94800051

Email: admin@scottdevelopment.com.au

www.scottdevelopment.com.au



Boral Concrete

THE CITY OF MELBOURNE SET AN AMBITIOUS GOAL

of sustainable building with the design of Council House 2. This challenge was met by Boral with their leading-edge environmental concrete solution: Boral "green" concrete.

Boral "green" concrete features cradle-to-grave environmental sustainability including fly-ash, slag, recycled aggregate and crushed concrete with the pour flexibility and design capabilities that customers come to expect from Boral Concrete.

Boral "green" concrete was used for the concrete shell, as well as in the pre-fabricated concrete wave panels featured in the ceilings on each floor. In total, approx. 6,000m³ of concrete was used and the building was given a 6 Green Star rating, the highest achievable standard proving world-leader status.



As part of the Green Building Council of Australia's assessment of building materials used in CH2, "green" concrete was acknowledged to be exceptionally environmentally sound and credited as a contributor towards the Green Star rating system. Only Boral could undertake to provide environmentally sound concrete on such a large multi-storey project.

With recognition of the positive benefits of "green" concrete now emerging from environmental associations, Boral "green" concrete is well positioned to benefit both the community and construction industry. Suitable for most residential, commercial and government projects, "green" concrete is a product that delivers on performance and environmental sustainability.

Boral not only leads the concrete industry in

reducing the impact on the environment but also supplies a wide range of high performance and architectural concrete products such as Boralstone polished concrete, Exposé exposed aggregate and Colori coloured concrete.

Along with Melbourne's largest network of concrete plants and world-class research laboratories, Boral is your number one choice for concrete. For more information on "green" concrete and other Boral concrete product solutions, please contact Boral on 13 30 06.

BORAL CONCRETE VIC METRO

1 Glenferrie Road, Malvern 3144

Ph. 13 30 06

Fax. (03) 9508 7132

Email. concreteVIC@boral.com.au



Meinhardt Facade Technology

DESIGNINC

WHEN CH2 IS COMPLETED IN EARLY 2006,

the six green star Melbourne development will set a new standard in Ecologically Sustainable Design. The building, created through an intensive collaboration between the City of Melbourne and DesignInc, represents more than just the huge benefits of environmentally sound building practice.

In addition to being a stunning and environmentally sustainable multi-storey building, CH2 will be a tangible illustration of the benefits of an integrated design process. Stephen Webb, Design Director at DesignInc says that the multi-discipline firm, which has expertise in architecture, interior design and urban design, has a strong culture of collaboration. According to Webb, for DesignInc, a good idea is a good idea, no matter where it comes from. This, and the firm's strong focus on reconciling natural, social and economic building imperatives, made it the logical choice to collaborate on CH2.

And the collaborative approach involved a lot more than the traditional brief from the client. Working with the City of Melbourne in-house design team and Advanced Environmental Concept (AEC) Engineers, a fortnight-long workshop was staged to tease out and develop the core ideas of what CH2

should become. The experience was invaluable. According to Webb, working in the group saved significant time on the conceptual design of CH2. This enabled the whole team to trial prototype innovations and deliver the architectural plans for the project in a time frame that designers of a regular building would find challenging.

The collaborative approach had other benefits as well. Webb points out that working with such a mixed team encouraged a free flow of ideas and increased the chance of coming up with new innovations. This is especially important in the growing area of Ecologically Sustainable Design. As Webb points out, the workshops facilitated the creation of customised integrated solutions. Much was gained as participants, including architects, engineers, artists, environmental experts, future occupants, the CSIRO and the Sustainable Energy Authority, sparked new concepts off each other. Ideas for novel ways of doing things were forged, and with the help of DesignInc, will take form in early 2006. Webb says that the collaborative approach was interesting from a technical perspective, as it fostered the developments of key CH2 features such as ceiling panels that incorporate air-ducts, manage acoustics and regulate floor ventilation.

Giving life to the ideas of the workshop and regular follow-up design sessions needed a team that could manage such an influx of

ideas. It needed an architectural firm that could bring the complex goals together and set them to paper. DesignInc thrived on the challenge. Utilising its experience in ecologically sustainable design and interdisciplinary collaboration, the architectural firm was able to help create a building that harvested sunlight, night-air, water, wind and rain. Moreover, it helped create a refreshingly environmentally attuned building that will not only minimise environmental pollution both during and after construction, but will add new vibrancy and cultural life to Little Collins Street. CH2 will be a landmark for years to come.

Contact Details:

Melbourne

PH: +61396549654

FX: +61396544321

EM: melbourne@designinc.com.au

**Melbourne Central Tower
Level 51 360 Elizabeth Street
Melbourne, Victoria 3000
Australia**

**Sydney
PH: +61299575401
FX: +61299574259**

AS A COMPANY WHOSE VISION IS TO BE THE WORLD'S LEADING FAÇADE CONSULTANT,

Meinhardt Façade Technology (MFT) may be close to achieving its goal. The company represents the façade design and construction arm of the Meinhardt Group, a major engineering consultant with a staff of over 1000 in 12 countries and four continents. Utilising the latest technology, MFT's Managing Director Tony Alvaro says that the company's mission is to deliver a professional and a superior service to clients and always striving to be the leader in façade technology.

The company offers a number of services associated with façade consultancy and remedial engineering, including risk analysis and budget factoring. Specialising in the exterior envelope of commercial high-rise and low-rise buildings, MFT provides consultancy services for glass walls, windows and curtain walls of various shapes and materials, some stunning examples of which can be seen across Asia and the Pacific region.

One of MFT's current projects is the CH2 building in Melbourne, a project that demanded creative solutions in line with the ecologically sustainable design (ESD) imperatives outlined by the Client. MFT was called in by Builder- Hansen Yunken to be the consultant to design the exterior timber windows and glass walls. Mr Alvaro stressed the innovative nature of the task:

"For a multi storey building, the use of timber windows was totally unique. The use of glue-laminated (glulam) timber windows enhanced the integrity of the project's green-oriented initiative on manyfold." He said. In addition to the intrinsically rich aesthetic and the ecological benefits of re-using materials, the solid recycled timber presented several design challenges to the team at MFT. Unlike the metal-framed windows commonly used in commercial construction that sit hard against slab, the obvious problem with timber windows was to design an interface that allowed for the movement of the building. The solution involved developing a movement joints at the head to allow for flex of the building and adequately weather proof the interface".

"Commercial windows are a complex arrangement of components with contrasting requirements for strength, tolerance for building movements and as a barrier against weather. The normally, accurate performance predictions solely from design calculations are not sufficient in this case. Prototype samples were built and laboratory tested for structural engineering compliance and for water and wind ingress to ensure a durable and satisfactory outcome".

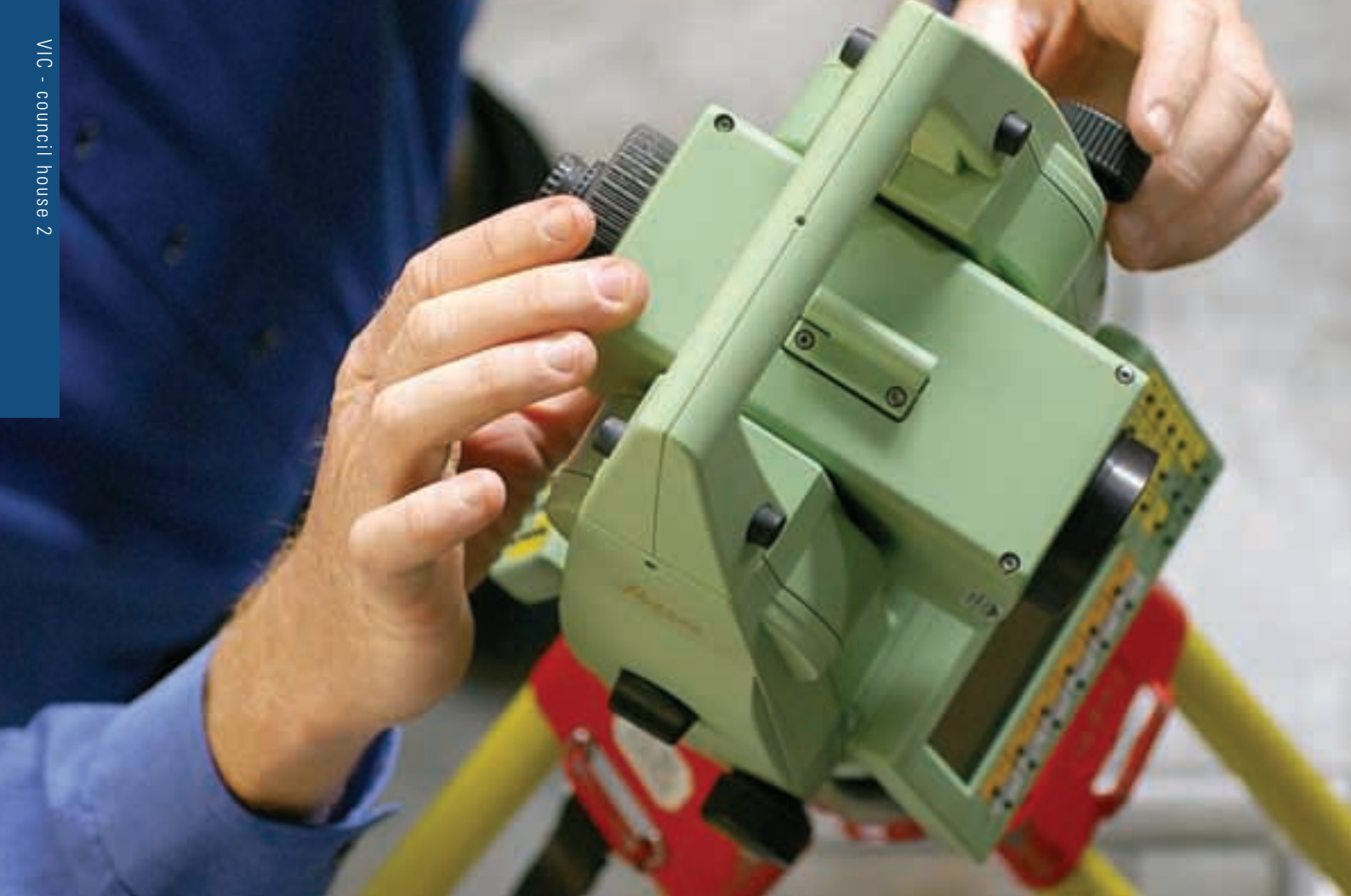
"The window frames were manufactured out Mountain Ash glue-laminated (glulam) timber sections. Sections had to be glue laminated so that off-cuts and smaller lengths of timber could be assembled to form the large frame. Whilst the properties of Mountain Ash are well documented, the structural properties of the glulam timber, in terms or strength and

stiffness cannot be assumed to be the same as the timber, hence there was the need for structural testing".

"The timber tests involved structural testing of glulam timber section to assess the structural properties of the timber and thereafter test wholly assembled prototypes. Based on the structural properties assessed from the tests on the timber sections, theoretical and finite element studies were carried out and the results of which then were compared with the behaviour of the prototype under the design wind actions. The water and wind ingress tests helped MFT to fine tune the flashings and sealing of the window and at the same time allowing the connections to accommodate the anticipated building movements. MFT in consultation with the timber suppliers, window manufacturers, testing laboratories developed appropriate specifications, procedures and managed whole the testing process and design".

At time of writing MFT is engaged in continuously monitoring the installation on site for compliance to the strict QA procedures as the project nears completions.

**MEINHARDT FAÇADE TECHNOLOGY
Level 12, 501 Swanston Street
Melbourne
Victoria 3000
Australia
Phone: (61-3) 8676 1200
Fax: (61-3) 8676 1201
www.mfacade.com**



Reeds Consulting Pty Ltd

WHEN CH2 IS COMPLETED IN EARLY 2006, the project being hailed as Australia's most sustainable office building will be remarkable for more than its much-vaunted 6 green star rating. CH2 will symbolise a huge feat of effective collaboration between a diverse green team including engineers, architects and builders. One of the main collaborators on the Little Collins Street development is Reeds Consulting Pty Ltd.

In business for over 45 years, Reeds Consulting employs a small team of only 42. It nonetheless packs a pretty mean punch. Specialising in land surveying, civil engineering and development consulting, Reeds involvement in CH2 came about when it was recruited by Melbourne City Council to create the site at 218-242 Little Collins Street.

Work on the CH2 project begun with Reeds re-aligning the property boundaries for council. Easements were established, boundaries for air space were created and underground boundaries were amended. Working with the builder, Hansen Yuncken, Reeds then supplied base information and control to ensure that the 10 storey CH2 was

built correctly on the site in accordance with the design.

Reeds expertise and experience in high-rise building subdivision and land development is well known. This, and Reeds reputation for high-quality customer service and efficiency, was one of the main factors that helped the consulting company secure the CH2 contract.

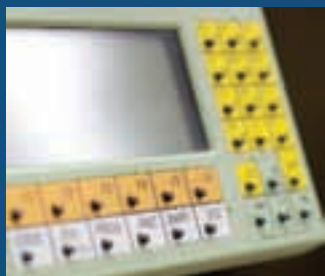
A spokesman for Reeds says, "our philosophy is that our interests are governed by our client's best interests". This means using sophisticated electronic measurement equipment and CAD programs, as well as methodically reviewing procedures to meet client's stated and implied aims. Reeds commitment to providing its clients with the best service possible extends beyond the usual customer service rhetoric. Reeds monitors changes in statutory acts and regulations whilst pursuing an innovative design policy. In fact, to maintain quality, Reeds constantly works to review and incorporate into its practice technological advances and new work practices.

Although Reeds typically bids on land development and high-rise sub-division, it

also provides particular expertise in other areas of land surveying and civil engineering. Reeds is an accredited service provider to water companies, municipal councils, VicRoads and an array of utility and infrastructure groups. Reeds provides particular expertise in engineering services in infrastructure and urban renewal projects. It also offers expertise in residential, commercial and industrial land subdivision and survey works. In addition to this Reeds offers project analysis, including feasibility studies and analysis of the financial management of projects. In land surveying Reeds offers expertise in title boundaries and due diligence as well as topographic, engineering and construction surveys.

Reeds involvement in the CH2 project is testimony to the company's focus on customer service and quality products. For Reeds, CH2 is another feather in a cap that is also decorated with projects such as the Eureka Tower, the Commonwealth Games Athletes Village, the TriBeCa East Melbourne re-development of the old Victoria brewery and the Concept Blue redevelopment of the former police headquarters on Russell Street.

REEDS CONSULTING PTY LTD
21 Bouverie Street
Carlton, VIC, 3053
Phone: 03 9349 4277
Fax: 03 9362 2766
Email: survey@reedscon.com.au
www.reedscon.com.au



Mr Roger Sykes - Project Engineer (left) and Mr Stephen Payne - Project Director (right)

THE BONACCI GROUP

AT THE HEART OF THE CH2 CONSTRUCTION WAS THE CUTTING-EDGE

work of the Bonacci Group, appointed to carry out the structural and civil engineering requirements. With a well-earned reputation as innovators in their field, Bonacci's 24 years of international achievement equipped them with the technical resources to really strut their stuff in a landmark project.

Mr. Roger Sykes, an associate of the group described how the design process evolved: "In the first two weeks, intensive workshops were held in which everyone involved contributed perspectives which were thrown into the mix. One of the outcomes was the actual changing of sites from CH1 to the carpark site next door, a more practical option." Mr Sykes went on to say "At the time of the design's inception, it was a leading edge situation for us in terms of requirements to meet green-star ratings. Factors that came into consideration included materials and a whole range of systems within the building. These effectively drove the shape of the structure," he said.

Bonacci was responsible for designing and commissioning the revolutionary wave-shaped ceilings, which are a crucial component of the green design's emphasis on the fusion of 'form and function'. The ceilings are 180 mm pre-cast concrete panels creating channels which provide 'passive' cooling when set against the flat slab above, and 'active' cooling from the chilled beams housed within. Into these panels is built the wall formwork, which in turn form up to the primary beam producing a stunning example of integrated design.

Another section of the project which benefitted from Bonacci's expertise was the constructed steelwork facade which supports the external balconies on all levels. One of the benefits of these 'aerial terraces' is the accessibility to fresh air - workers are spared the claustrophobic environment experienced in conventional office buildings. The steelwork also acts as a framework for the ingenious 'vertical garden' on the northern wall, which in itself is another link in the wholistic approach to controlling the air quality and temperature of the interior.

Meanwhile, Bonacci's continued presence in the inspection phase of the work successfully brings home the quality of service that has built their reputation as industry heavyweights. Their creative response to the shared vision of a greener future for the construction industry adequately justifies their corporate motto, 'The Art of Engineering'.

BONACCI GROUP PTY LTD
233 Punt Road
Richmond VIC 3121
PH: +61 3 9429 8300
FX: +61 3 9429 5825
EM: bonm@bonaccigroup.com
Contact Brendan Stapleton



In addition, Hansen Yuncken has been involved with many large-scale and iconic projects in Victoria and around Australia. Recent projects include the Royal Dental Hospital in Swanston Street and the redevelopment of parts of the State Library of Victoria. The company was also the head contractor for the new Adelaide Airport Terminal, the new Commonwealth Law Courts in Adelaide and the NSW Schools Project, encompassing seven new primary schools.

The CH² project is located on Little Collins St. in Melbourne and includes ten storeys above ground and three basement levels. The building was designed by the City of Melbourne in conjunction with leading Melbourne architectural firm DesignInc and has a cost of \$51 million. Hansen Yuncken was required to develop innovative solutions to build the ambitious project, which will include many unique features. The building will require 87 per cent less energy than the existing administration building and will produce only one-fifth of the greenhouse gas emissions. The contract time for the project is 23 months and completion is anticipated in June 2006, with Hansen Yuncken commencing work in January 2004. The building has already won a Green Building Award at the United Nations Association of Australia World Environment Day Awards 2005.

Hansen Yuncken had to develop totally new installation methods for the recycled timber shutters and Australian hardwood windows from sustainable forests that are used on the CH² project instead of the more common aluminium windows. The building is reliant on passive heating and the HVAC (heating, ventilation and cooling) systems have been

developed with energy conservation in mind. The building also features glazing positioned to control the building's internal temperature.

The new administration building will reduce the council's current consumption on mains water by up to 77 per cent. The project includes a blackwater treatment plant that will recycle sewage drawn from on site and from the main sewage system in the street and is capable of processing 100,000 litres a day: "The building will produce more water than it actually uses," said Mr. Bolton. This water will be used in the building for flushing toilets and watering gardens, and will also be used in council-owned fountains and for street cleaning.

In addition to this, the CH² project boasts chilled ceilings, PVC-free cabling, phase-change materials used for cooling and an automated façade system powered by photovoltaic cells to control light penetration, along with many other associated technologies that contribute to the overall efficiency of the building. Both new and established techniques have been comprehensively integrated and the intention is that during the building's lifespan, building systems can be replaced or upgraded with new Ecologically Sustainable Design (ESD) technology as they become obsolete.

The building's lifespan is indefinite- the intention is to construct a building that will not need to be demolished. Given that a reasonable estimate of the lifespan of an average commercial building of comparable size would be about 20-30 years, the cost savings from not having to replace the building every few decades more than offset the additional construction cost. In any case,

the additional costs building's innovative and often unique technologies are expected be paid off within ten years. The CH² Study and Outreach program aims to significantly influence the building and related industries and raise awareness of sustainable design opportunities through consolidated research and investigation.

The City of Melbourne has made a long term investment with the CH² project that is expected to pay off. "They're trying to show the commercial sector the advantages of building a project of this type, that it's worthwhile spending the extra money," said Mr. Bolton. "It's the way of the future- it's good for the environment and good for business."

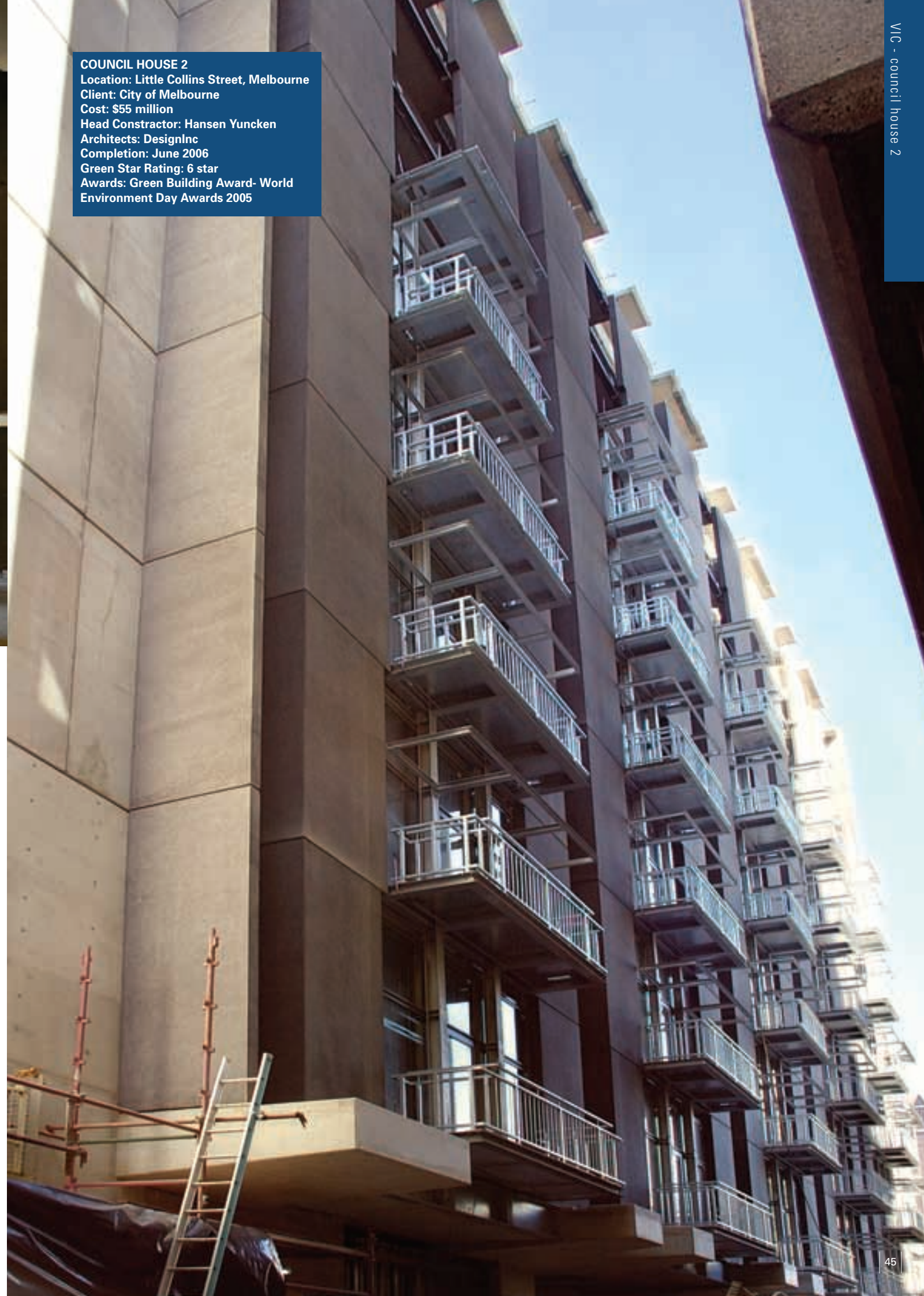
When completed, the Council House 2 project will stand as testament to Hansen Yuncken's ability to complete challenging and innovative projects, and will enhance their reputation as a world leader in the construction industry and in sustainable design. Hansen Yuncken has demonstrated their ability to provide appropriate and innovative solutions, maintaining their commitment to quality and cost-effectiveness while maintaining their client-friendly attitude. One of Hansen Yuncken's strengths is the enthusiasm of their work force. "In 25 years, this (the CH² project) is the biggest and most unusual challenge I have faced," said Mr. Bolton. "I can't wait to see it finished."

HANSEN YUNCKEN (VIC)
25 Huntingdale Road
Burwood VIC 3125
Phone: (03) 9831 6500
Fax: (03) 9831 6599

Web: <http://www.hansenyuncken.com.au>



COUNCIL HOUSE 2
Location: Little Collins Street, Melbourne
Client: City of Melbourne
Cost: \$55 million
Head Contractor: Hansen Yuncken
Architects: DesignInc
Completion: June 2006
Green Star Rating: 6 star
Awards: Green Building Award- World Environment Day Awards 2005





Arden Building Maintenance

CH2'S SPECIAL ENVIRONMENTAL REQUIREMENTS POSED AN UNUSUAL DILEMMA for the painting of the 300 window Melbourne development. These special requirements, however, posed no problem for Arden Building Maintenance.

Taking the unusual step of painting all of the timber window frames off-site, Arden was able to complete the mammoth task at its Melbourne factory base. Alan Maden, painting division director at Arden and formerly of Dulux, brought untold experience and expertise to the project. Liasing with the factory manager, building contractor Hansen and Yunken and others, Dan Saric supervised painters and lent valuable technical skill to the curious assignment.

Alan said the new way of working provided many benefits to both client and contractor. According to Alan, painting the window-frames off-site meant that Arden could set-up faster and be organised in a way not possible in on-site projects. Notably, painting at the factory meant that Arden did not have to worry about floor-to-floor access and working around other contractors. Similarly, as the windows were painted at the factory, both sides of the frames could be painted at once and Arden did not have to gain outside building access.

Arden's work on the CH2 project was not, however, confined to its factory activities. In addition to painting the 300 timber window frames with the environmentally friendly water based Wattyl Solagard, Arden also painted the outside of CH2. Using the new environmentally friendly Timbermate product, Graffiti Defence, Arden graffiti-proofed the soon to be complete 6 star landmark.

The project was unusual for Arden, who normally specialise in painting hospitals and schools. Arden's success in completing the six-month assignment on time and in atypical conditions is a credit to the company. It reflects the advantages Arden's skilled team of experienced painting professionals bring to top end projects.

ARDEN BUILDING MAINTENANCE
59 Chifley Drive Preston 3062
PH: 03 9484 8900
FX: 03 9484 8188
ardenbu@bigpond.net.au



TAC Pacific

MELBOURNE'S COUNCIL HOUSE 2 (CH2) PROJECT is fast taking shape and the developer, Hansen Yuncken, has contracted TAC Pacific to provide building management and security systems for the project. The aim of the Council House 2 project was to develop a building that was state of the art in terms of both environmental sustainability and technological innovation, and TAC Pacific provided a highly integrated management system that is integral in achieving these goals.

TAC Pacific was founded more than 30 years ago as a small Australian company and is now part of the Schneider group of companies, with more than 100,000 employees worldwide. They have branches in every state of Australia and specialize in providing building information technology and monitoring systems compatible with both major industry standards, Echelon's LonWorks and ASHRAE's BACnet.

TAC Pacific's Victorian branch is involved in many large scale and iconic projects- recently they have been involved in the RACV Club development and the QV project, both for Grocon in Melbourne. They have worked with Hansen Yuncken before, notably on the headquarters of the Australian Antarctic

Division in Kingston, Tasmania. Their involvement in the Council House 2 project commenced one and a half years ago and is due for completion in May.

The company's involvement in the Council House 2 project comprised building management and security. The security systems installed utilised closed circuit television (CCTV) technology. The building management systems included electrical load controls and controls for heating, ventilation and cooling (HVAC) systems. The company also installed an automated façade system with automatic blinds and shutters to control light penetration into the building. The project includes monitoring systems for electricity, water, sewage, gas consumption and other building systems.

The focus of the Council House 2 project is on environmental performance, and the building was designed with attention to environmental sustainability. "It's quite a special building," said Mr. Peter von Hofe, Project Manager at TAC Pacific. All the cabling used by TAC Pacific on the project was PVC free. The building is capable of preserving waste heat for use in the HVAC system, and the building is capable of monitoring and adjusting airflow to automatically maintain

acceptable CO2 levels. Data from TAC Pacific's monitoring systems is recorded for use in CSIRO research projects.

Building management systems are complex and this was no different. The unusual construction methods used for the CH2 project made installation especially difficult. TAC Pacific had to resolve the logistics of installation to provide an integrated control system and the result, as with the rest of the project, is of the highest quality. "This was very much a team effort", said Mr. von Hofe. "TAC worked with all parties to demonstrate a successful outcome at handover to the client, and to achieve the right balance of sophisticated energy management and ease of use for ongoing building operation"

For more information on TAC Pacific, call (03) 8892 3777.

TAC PACIFIC (VIC)
Level 2
818 Whitehorse Road
Box Hill VIC 3128
PH: (03) 8892 3777
FX: (03) 8892 3788