

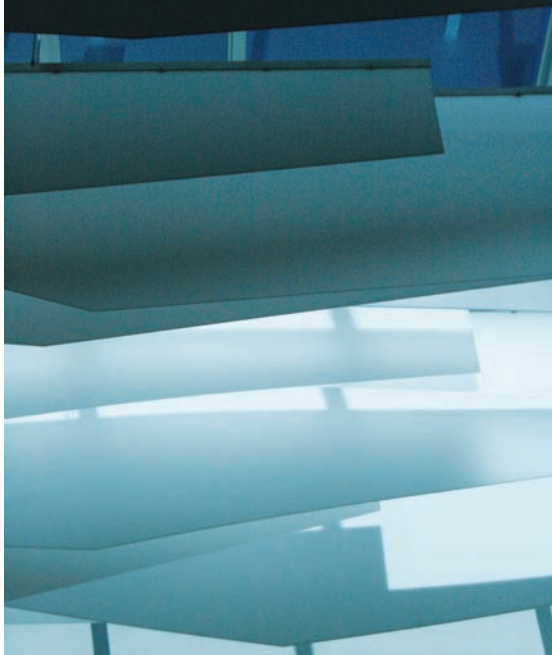
S
&T

OUTLINES

SUMMER 2009

STEPHENSON
&TURNERARC
HITECTSENGI
NEERSCREATI
NGINSPIRATI
ONALENVIRO
NMENTS

Auckland Airport Skylights



Stephenson&Turner's latest project with Auckland International Airport will soon transform the boundary between 'airside' and 'landside', with a new development designed to enrich the traveller's experience.

More than 200 square metres of glass, skylights and acrylic fins will allow natural light to flood into the farewellers' hall, providing a distinctively Kiwi interpretation of the 'long white cloud'.

Adding a new and exciting dimension to the airport's interior, the skylights will also have a practical purpose – they'll help to reduce the building's reliance on powered lighting during daylight hours. With the project well underway, this inspirational environment will be complete in time for peak travelling at Christmas.

*Client: Auckland Airport Limited
Architecture: Stephenson&Turner
Interior Design: Stephenson&Turner and AND*

Stephenson&Turner on TV

Readers with eagle eyes may have noticed **Stephenson&Turner's** new Auckland office appearing as an 'extra' on the nation's television screens. Following two separate and unrelated approaches, the office's design and flexibility have been put to a whole new use!

An advertisement for a new brand of beer that aired in July featured a series of fast-action shots filmed over one and half days of intense activity. The **S&T** team gained new insights into how many people, how much equipment and how much time it takes to create 30 seconds 'on air'.

The second performance is due to air in the new year via an intriguing new drama series on TV2 called 'This is not my life'. Seeking the 'office of the future', the writers and directors concluded that our office's style and make-up more than fitted the bill.

To make recording possible, a small crew arrived each Friday night to prepare the space for filming, then returned on Sunday night to enable **S&T** 'business as usual' on Monday. Our thanks go to Benny Tatton, Locations Manager at GRST Limited for TV2, for his extraordinary organisational skills!



Awards for S&T

2009 Property Awards

Stephenson&Turner was delighted to receive three awards at the 2009 Property Council New Zealand Property Awards:

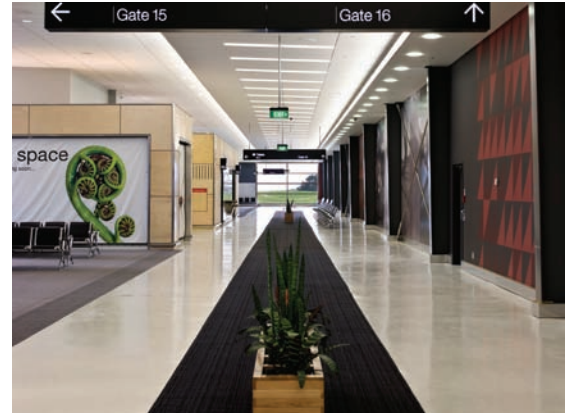
- An Excellence Award in the Tourism & Leisure category for the recently completed Te Rauparaha Arena project in Porirua
- Two awards for our 'Pier B' project at Auckland International Airport – an Excellence Award in the 'Special Purpose' category and a Green Building Merit Award, which recognised the way the project has enhanced the environmental quality of this large-scale infrastructural building.



Te Rauparaha Arena

The Arena opened in November 2008 to widespread community acclaim, providing a popular and flexible recreation centre for Porirua and the wider community.

Te Rauparaha Arena is linked to the Porirua Trust Aquatic Leisure Centre (which was completed by **S&T** in 1997), adding two large sports halls, a fitness gym, theatre, café and meeting spaces. This co-location makes it the perfect training facility for elite and local sports groups, including the All Blacks, Silver Ferns and Tall Ferns – and it's also proving an ideal venue for entertainment, trade shows, expos, weddings and funerals.



Auckland International Airport

Pier B (a new pier designed to accommodate the A380 aircraft) is part of the first stage of an extensive expansion programme at the Airport. A vital part of the plan for future growth, it's designed to enable the addition of two new gates every two to four years, depending on the Airport's requirements. It complements existing piers and provides large, open departure lounges in a format flexible for future change.

The Pier design recognises its intended use, employing materials that are versatile, robust and fit appropriately with the existing terminal materials and finishes.

It uses natural timber panelling in the ceilings and walls, large murals and artworks to depict New Zealand's 'story', and sustainable, environmentally friendly materials rated internationally by LEED (the United States' Green Building Council rating system). In addition, passengers using this arrivals space can enjoy expansive views over the airfield to the Manukau Heads.

Engineering awards

S&T's contribution to the environment and sustainability was recognised through awards to two organisations at the recent IPENZ (Institution of Professional Engineers New Zealand) and ACENZ (Association of Consulting Engineers New Zealand) Awards.

S&T designed and provided building services engineering for Auckland City Council's 'material recovery facility', built by Visy Recycling. The facility handles recyclable waste from Auckland and Manukau households, converting more than 95% into reusable product.

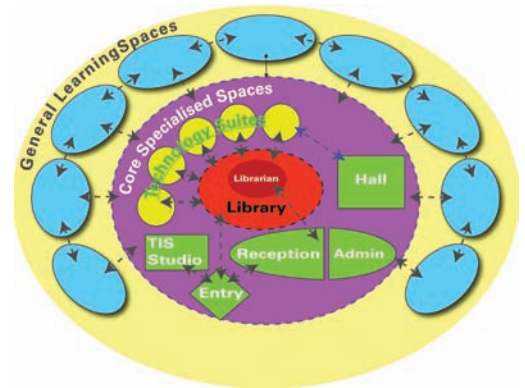
This remarkable achievement earned Auckland City Council the IPENZ Arthur Mead Award for the Environment and Sustainability, and Visy Recycling the ACENZ Award of Merit, 'in recognition of an outstanding project'. Our congratulations go to both organisations.

Pedagogically challenged!

There's a new 'pedagogy' sweeping through the education sector, and enabling it to happen requires a new way of thinking when planning and designing the schools involved.

To save you reaching for your dictionary, pedagogy is simply the art of teaching – and **Stephenson&Turner** has been engaged by two of Wellington's established schools, Tawa Intermediate and Upper Hutt College, to design facilities that integrate this new approach.

"Like many building types, gone are the overly purpose-built spaces – and in the world of education, gone are the days of students sitting in rows facing the blackboard," says **S&T** Associate Director Murray Robertson. "Instead, new schools are being developed to encourage learning through flexible teaching practices, which means they have to have the flexibility to provide a greater range of learning settings."



S&T is applying extensive research in the field to these new facilities – embracing the challenge of creating new buildings to the tight budgets inherent in education projects. We relish the opportunity to push some serious design boundaries and will bring you the results in future editions of *Outlines*.

IESANZ Lighting Awards 2009

Stephenson&Turner's expertise in lighting design has been recognised with three awards at this year's IESANZ (Illuminating Engineering Society of Australia and New Zealand) National Lighting Awards.

Lighting designer Mona Aziz received an Award of Commendation for her lighting design for a biology lecture theatre at the University of Auckland. Considered part of an 'historic/heritage' building, the theatre required lighting that accentuated its historic elements while also meeting its functional demands, including sophisticated audiovisual facilities.

The other two awards recognised **S&T's** work at Porirua City Council's new sport and recreation venue, Te Rauparaha Arena. An Award of Commendation went to lighting designer Glen Wright for lighting the Arena's three-court main stadium, and the design also received the solitary Award of Commendation for Energy Efficiency.

The 2500-square-metre stadium is the heart of the Arena, a multi-purpose space that can be adapted for many events and activities. The lighting design and controls provide an energy-conscious and flexible solution that also adds a unique visual signature to the space.

More details on both of these projects will feature in the next issue of *Outlines*!



A building transformed

If you read the last issue of *Outlines*, you'll be aware that **Stephenson&Turner** are involved in an exciting new design project centred on a former Auckland Education Board (AEB) building in the city fringe area of Grafton.

The existing six-storey structure, built in the 1970s, is being refurbished as apartments with convenience retail, while the outer edges of the courtyard in which it sits have been enhanced with new office/showroom buildings to the north and east.



The commercial space in the complex is now ready for leasing, while the AEB building has been transformed with an eye-catching façade of cedar cladding panels and screens, and spacious balconies. Office occupiers and apartment residents alike will be able to enjoy sweeping 360-degree views of the Auckland Isthmus, from the Waitemata Harbour and Hauraki to the north to the Waitakere Ranges and Manukau Heads to the south-west.



At street level, a new 'Plaza' provides a social space for the complex, with retail and food outlets and carefully planned landscaping. It reflects the principles of 'shared space' advocated by Auckland City. Instead of kerbs and painted markings, textured paving and colour delineate the vehicle and pedestrian areas, enabling both to co-exist in a common space. Meanwhile, parking for more than 600 cars is provided beneath one office building and in a dedicated car park building in the southern corner.

We are pleased to announce that the new Building B of the complex, which houses offices and ground floor retail outlets, has officially been awarded a 4-star rating by the New Zealand Green Building Council (NZGBC).



*Client: Neil Properties Limited
Urban Design, Architecture & Building Services:
Stephenson&Turner*

5 stars for 'green' building



Extract air through skylight

The recently completed NZI Centre in central Auckland has earned a prestigious 5-Star Green Star rating for office design and is the first commercial building in New Zealand to receive a 5 Green Star Office Interior Pilot rating from the New Zealand Green Building Council (NZGBC). The fitout rating achieved the highest score of any project going through the NZ Green Star system – a resounding endorsement of its adoption and use of green building practices and systems.

Mechanical Services planned and designed by **Stephenson&Turner** include an environmentally efficient air-conditioning system, which uses conditioned air supplied into a void space under a raised floor. 'Diffuser' technology enables occupants to control their thermal environment by adjusting air flow rate and direction, while the system itself operates more efficiently than conventional systems, greatly reducing energy use.

Key features:

The façade

The twin-skinned façade of the building features high-performing double glazing to the south and east and triple glazing to the north. It also includes external shading devices to the west.

Fully sensor-controlled solar blinds feature on the northern façade, while fully motorised roller blinds have been installed on the south. The walls and the green roof are highly insulated.



Automated blinds in twin cavity

The mechanical system

Features of the mechanical system include:

- an air-conditioning-free full-height atrium, where there is a naturally displaced, non-ducted return air path
- return air ventilation through the atrium and skylights
- an under-floor displacement distribution air-conditioning system that uses a raised access floor
- night purge cooling when necessary
- exposed concrete structure being used as heat sinks
- air supply control enabled through individual outlets.

In addition, conditions are maintained and verified in the office spaces (which are open to the atrium) by rigorous analysis that includes Energy and Thermal Modelling as well as CFD (computational fluid dynamics). The air supply temperature is set at 18°C to enhance free cooling.

Acoustic design

The NZI Centre includes acoustic features that required computer modelling. Its five facades have undergone rigorous analysis to optimise their thermal and acoustic performance.

The selection of double glazing was based on traffic noise monitoring, which enabled the glazing configuration to be tailored in response to internal building design elements and surveyed environmental noise conditions.

The heart of the building is the atrium, with the office floor opening directly onto it, the cafe at the entrance and 'flying' meeting rooms. All surfaces finishes optimise the acoustic ambience in the atrium while allowing quiet noise levels in the offices.

The acoustic treatment of the building services systems included a specialised design for vibration isolation of the 'load lopping' generator located directly above the offices next to the skylights.

With an underfloor air distribution system, the walls and ceilings of the meeting rooms were built as boxes, with the walls extending beneath the raised floor.

Client: M Six Investments Limited

Tenant: NZI

Energy and Thermal Modelling, Mechanical Services and Acoustics: Stephenson&Turner

Renovation, restoration, modernisation

For the past four years, **Stephenson&Turner** has been proud to work on one of Wellington's most significant heritage buildings – 86 Customhouse Quay originally known as the AMP Society Building.

Designed by renowned architects Clere & Clere and built in the late 1920s, the stone-clad building dominates an important intersection in the central city. Many of its original features remain and today it's listed as a Category 1 building with the New Zealand Historic Places Trust.

Having designed an award-winning entrance to the building and refurbished the upper floors, terrazzo stairwells and lifts, we've recently developed an innovative solution to a 'problem' space – a ground floor dominated by a double-height former reception area, which was too imposing to be used as office space and too vast to be effectively air-conditioned.

S&T's solution is a new mezzanine level, a light and elegant glass and steel structure that provides a contemporary contrast to the solid robustness of the marble, stone and bronze of the surrounding space – highlighting, rather than blending with, its heritage values. Suspended from the ceiling, it has no impact on the floor space below, and it's set back from the external windows to maintain the integrity of the view from outside.

Creating additional and highly tenantable floor space, the mezzanine also provides lighting and air supply to the area beneath. Integrated chilled beams and direct/indirect light fittings ensure a comfortable working environment, provide more fresh air and use energy more efficiently than standard systems.

The mezzanine project completes this extensive internal refurbishment project. Combining style and practicality to enhance one of the city's most distinctive historic buildings, it's taking last century's design well into the future.

*Client: AMP Capital Investors
Architecture & Building Services:
Stephenson&Turner*



Housing for the future



In a major new redevelopment project starting construction soon, **Stephenson&Turner** will be working with Housing New Zealand Corporation to redevelop an outdated state housing area in Ernie Pinches Street, Mt Roskill.

Established around 50 years ago, Housing New Zealand wants to improve the area as well as making better use of the land to provide more housing for people in need.



Forty-five new houses will be built, the new housing including semi detached and stand alone homes all ranging in size from one bedroom to five bedrooms.

Some of the existing houses will be removed altogether while some will be refurbished and relocated to new sites within the project area. There will also be major improvements to infrastructure and landscaping.

Construction is scheduled to begin towards the end of this year with the entire project due for completion in February 2011.

*Client: Housing New Zealand Corporation
Architecture & Building Services: Stephenson&Turner*

SERVICES PROVIDED

Architecture

Interior design

Urban design and infrastructure planning

Engineering

Heating, ventilation and air conditioning

Electrical systems

Plumbing and drainage

Fire engineering

Acoustic engineering

Communications and information technology

Lift and escalator systems

Security systems

Facility planning

Facilities management

Feasibility and space utilisation studies

Building surveys and due diligence reports

Plant and energy audits

Sustainable Design

Green Star applications

Systems Modelling

STEPHENSON & TURNER ARCHITECTS ENGINEERS

WWW.STEPHENSONTURNER.COM

AUCKLAND OFFICE:

152 FANSHAWE
STREET LEVEL 2
PO BOX 1830
AUCKLAND 1140
NEW ZEALAND
T: 649 3031249
F: 649 3032554
E: AUCKLAND@
STEPHENSON
TURNER.COM

WELLINGTON OFFICE:

RADIONZ HOUSE
155 THE TERRACE
LEVEL 1
PO BOX 10145
WELLINGTON 6143
NEW ZEALAND
T: 644 4727899
F: 644 4731111
E: WELLINGTON@
STEPHENSON
TURNER.COM

ARGEST TECHNICAL SERVICES LIMITED

AUCKLAND OFFICE:

PO BOX 1830
AUCKLAND 1140
T: 649 3099419
F: 349 3032554
E: AK@ARGEST.
CO.NZ

FREEPHONE: 0800 274 378

WWW.ARGEST.COM

WELLINGTON OFFICE:

PO BOX 10145
WELLINGTON 6143
T: 644 4727905
F: 644 4731111
E: WN@ARGEST.
CO.NZ

CHRISTCHURCH OFFICE:

315 MANCHESTER
STREET LEVEL 4
PO BOX 13324
CHRISTCHURCH 8141
T: 643 3773757
F: 643 3663769
E: CH@ARGEST.
CO.NZ

SAFETYFIRST NZ LIMITED

AUCKLAND OFFICE:

PO BOX 1830
AUCKLAND 1140
T: 649 3776500
F: 649 3776501
E: INFO@SAFETY
FIRST.CO.NZ

WELLINGTON OFFICE:

PO BOX 5666
WELLINGTON 6145
T: 644 3846890
F: 644 3849608
E: RECEPTION@
SAFETYFIRST.CO.NZ

ASSOCIATED OFFICES, AUSTRALIA:

STEPHENSON
& TURNER ARCHITECTS
66 DUDLEY STREET
WEST MELBOURNE
VIC 3003

STEPHENSON
& TURNER
INTERNATIONAL
80 ARTHUR STREET
LEVEL 7
NORTH SYDNEY
NSW 2060

31 ROWE STREET
SHEPPARTON
VIC 3630