



One of the country's most impressive office buildings, Sovereign House features a striking five-storey atrium, cutting-edge facilities and new age eco-friendly design.

## Sovereign House

Client: ASB Bank, Building Owner: Smale Family

Project Manager: Octa Associates

Contractor: Mainzeal Property & Construction

Architect: Bligh Voller Nield, Jasmax (Interiors)

Publication Date: November 2009

Region: Auckland

Sector: Commercial Office, New Building

Construction Value: \$40m

Project Timescale: Construction – Oct 2005 to Aug 2007

Form of Contract: NZ 3901 Stage 1 P&G +Margin, Stage 2 Tender

## A Healthy Building Creates A Healthy Culture Which, in turn, Creates A Healthy Organisation

This award winning Sovereign House in Auckland is a Pathfinder Project that fits the culture of its tenant and is the result of teamwork at all levels.

### Background

Sovereign Insurance's rapid growth over 20 years resulted in their 750+ staff being located in 5 separate sites in Takapuna CPD. Sovereign realised they needed to amalgamate and work together under one roof to be able to move to their next phase of development. Building new from scratch provided the opportunity to express their key values into architectural reality.

Now, in its second year of occupancy, it is clear when visiting the premises that the building has achieved what it was set out to do. The numerous awards received from all sectors in the construction industry further verify this. This pathfinder project will explore how this was realised and how others can emulate this achievement.

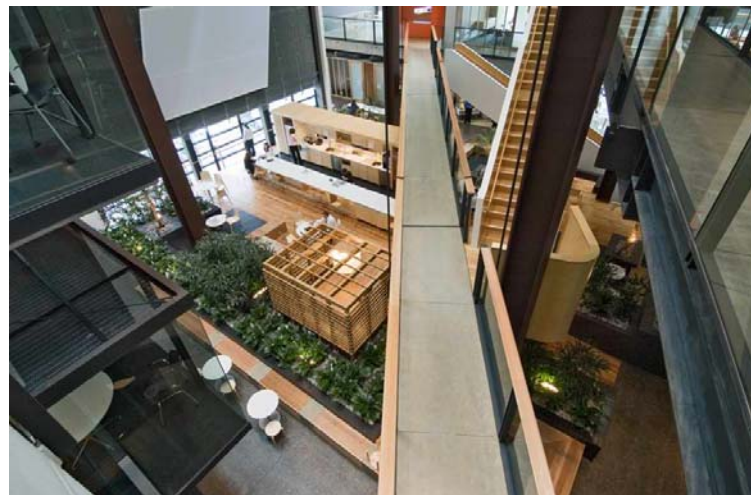
### Successful Process

**Building on the tenant's core beliefs** From macro to micro the project team have embedded Sovereign's founding belief that *'transparent and collaborative behaviour creates the best outcome'*. This not only happened in the design and throughout the finished product, but also during the construction process.

Spaces maximise face-to-face interaction – from the placement of the kitchens and café, to the interconnecting bridges and 'village square' – known as 'bump' areas. At the heart of the internal park-like atrium, the village square acts as a gathering space for meetings, lunches and organised social events.

The design made use of 'multi-chilled beams', carefully laid out exposed services, glass lifts and senior management in transparent boxes overhanging the atrium space. This level of transparency in the design demanded the construction process to become like a finely tuned orchestra.

Collaboration between the consultants, the contractor and trades was paramount as every structure, surface and service had to be planned and coordinated as everything was expressed and celebrated.



*The interior of the building showing the 'Village Square'*

**Look beyond today and anticipate meeting the needs of the future**

Another core belief of Sovereign's, is 'to look beyond today and anticipate meeting the needs of the future' and this was assimilated into the building.

Recognising people as the organisation's future, Sovereign provides a healthy workplace to acknowledge their commitment to their people. Not only is this done through conscious choice of materials and paints, but by purposefully creating a 'home-like feel' and visual interest in space through the use of atrium, light, volume and materials.

In addition, integral to the building is the incorporation of environmental features that minimise energy use, water use and non-toxic materials as their way of contributing to addressing issues of responsible use of resources.

Sustainability is considered in its broadest sense. The payback in both the operating costs and the retention of staff far outweigh the initial higher costs sometimes required in making these decisions.

**Establishing measureable benchmarks for environmental features**

Part of the brief included measurable benchmarks in energy and water use. To support this, the team designed bespoke 'multi-service chilled beams' – at the forefront in mechanical systems technology and a first in New Zealand.

As well as massive reductions in energy consumption and savings in operating costs, this technology provides a healthier environment with improved airflow, cooling, heating, lighting, data, power, communication and other services to the spaces, thus improving overall thermal comfort. With no mechanical plant within the space the noise is also significantly reduced .

**Client briefed contractor on key objectives**

The client clearly set out their objectives and expectations to the contractor at several meetings prior to the acceptance of the first part of the tender. This provided an opportunity for open discussions on when, what and how these expectations could be met. Cost constraints as well as value management were part of these meetings.



*Sovereign House in its beautifully landscaped setting*

**Client and Project Manager change procurement method**

To meet the tight timeframe exacerbated by external factors beyond their control, the Client and the Project manager decided to procure the building in two stages. The first stage, which included the foundations and ground floor structure, allowed the design team to continue the design and detailing of the remainder of the building and the internal fit-out. This meant that design and construction were running almost parallel with each other. An added advantage of this was the contractor's ability to become involved in the buildability issues during the documentation.

**Successful Outcomes**

**Exceptional results delivered under usual circumstances**

The usual demanding time frames, financial constraints and high quality expectations were very much a reality for this project. And yet the project team still managed to innovate, challenge typical social constructs in office design and build on time, to budget and to a quality that exceeded everyone's expectations.

*Sovereign's Corporate Values underpinning the Project Process*

<p><b>Unity</b></p> <ul style="list-style-type: none"> <li>• one team one goal</li> <li>• an inspiring team valuing diversity</li> <li>• listen, encourage, support</li> <li>• contribute to our community</li> </ul>	<p><b>Achievement</b></p> <ul style="list-style-type: none"> <li>• push the boundaries</li> <li>• develop and stretch</li> <li>• share knowledge and experience</li> <li>• embrace the future</li> <li>• delivering to and exceeding expectations</li> </ul>
<p><b>Integrity</b></p> <ul style="list-style-type: none"> <li>• be true to yourself and your word</li> <li>• honour our promises</li> <li>• open our hearts</li> <li>• take responsibility and ownership</li> </ul>	<p><b>Fun</b></p> <ul style="list-style-type: none"> <li>• choose your attitude</li> <li>• participate and get involved</li> <li>• take time to celebrate success</li> <li>• smile</li> </ul>

## Experienced client leads the process

The client's depth of knowledge and internal expertise in the design, construction process and in building maintenance shaped the briefing, programming and careful planning.

Objectives and deliverables were clearly expressed. Accountable for all facets of the building performance, the client was able to make innovative decisions in process and design because of their extensive experience.

One example of this was the relationship established with Smales Farm, ASB Property and Sovereign. Everyone benefited from the arrangement and was able to meet their objectives without compromising quality or cost.

Sovereign gained a building purpose designed for them at below market rental cost and Smales Farm will have a freehold building within 18 years – the life of the Sovereign's agreed tenancy.

One of the key benefits is that Sovereign as tenant was able to drive the internal fit-out which shaped the building to fit their culture. Derek Shortt saw one of his key roles as General Manager of ASB Property was to ensure that Sovereign's relocation objectives and vision were realised.

## Sovereign staff involved in briefing stage

As part of realising the tenant's vision, Sovereign's different departments led by ASB Property team, were involved in determining their space requirements and key objectives.

This ensured that their needs were heard and met by the project team during the design phase. The fit-out was the driver of the building form, it is often quoted that the building was designed from the inside out.

## Transparency and collaboration at work

The Property Administrator for the building, Cindy Wendt commented that the layout of the spaces and the 'bump' areas successfully work and create a sense of familiarity and community.

In previous office layouts rarely did other departments see or communicate with each other. *"Working here is fantastic, the openness and warmth creates a homelike feeling and inspires informal meetings, you get a sense of seeing people and being amongst everybody instead of separate"*.

'Bumping' into people has reduced the email traffic and has helped communication between the various departments. The environment was purposefully created to be relaxed and 'homelike' as evidence has been shown that the more relaxed a space is the more engaged the staff become.

The kitchens and communal areas further reinforce the importance of people in the workplace and are located to capture the best views, thus they are shared by many rather than reserved for senior management.

## Risk management

The risk management plan was addressed at each site meeting. This was adhered to at all times and included in the site minutes. Separate meetings were arranged to address issues that did not meet a milestone to ensure improvements were made and minimise future occurrences.



*The ground floor of Sovereign House accommodates a 600 sqm Gymnasium and a 900 sqm Child Pre-School Education*

## Pebble effect

A positive spin-off effect is the potential exponential impact the sustainable features have on staff. *"This building prompted me into looking at how I could make my own home more sustainable.*

*When I saw how it could service a lot of people without compromising on quality or services I became interested. It also took away the stigma I had of sustainability being outside of the norm.*

*It has set me down the track personally to being eco-friendly with the benefit of saving the planet and saving money"* Cindy Wendt.

## Building relationships

The Property Team instigated a collective approach at the commencement of the project. They invited the Project team to a two-day forum to help people get to know each other beyond their official roles.

This helped to break down barriers and also created an opportunity to brainstorm and form an informal partnering agreement with agreed KPI's.

In addition it created the forum to collectively identify the risks together. The agreement and risk register was kept alive through the construction process by reviewing them at the monthly PCG meetings.

As well as the forum set up by the Property Team, the Construction Project Manager also initiated a few bonding sessions. These were well received and everyone was happy to be a part of it. This helped build up a congenial relationship amongst the team members.

## Summary of Benefits

- A proactive and involved client helped to speed decision making, essential in a fast track process.
- Last Planner™ smoothed the planning process and formed a collaborative team based on trust.
- Upfront workshops involving the whole team including the client enabled everyone to understand how their part fitted within the process, gave ownership and built trust
- Partnering with the council early on enabled the complex resource consent process to go smoothly.
- The fast track process enabled integrated design and construction

## Relationship building to sustain the vision

Holding a vision for 4 years is a long time and this greatly relied on the Project Manager whose key role was to manage people and relationships.

Project Manager, Ray Bryant attributes the project's success to *"treating people honestly and helping people to be open and rely on each other"*. He further comments in his 40 years in construction he has never been on a job where people trusted each other so much and were able to rely on that trust - a further confirmation towards transparency and collaboration not just being espoused but actual values embedded into the process.

The trust gained by the Project Manager meant that people were willing to overcome any hurdles that inevitably appear.

When asked what the contractor learnt from this project, Murray Svendsen replied *"I'd like to see the honesty and transparency, the openness of working with the client and the trust the client had in us – I'd like to see that done all the time"* Murray Svendsen.

This project required dedication and commitment from the whole team – where they lived and breathed it for 3-4 years; yet to all those I spoke to, this has been one of their most rewarding of their career.



## Teamwork

Simple decisions amongst the key project team made the project move forward with greater ease. *"It was a team effort – a team built it – probably one of the best team efforts I've ever worked under – we were all working as one, everyone knew the end result – it was not one person but the whole team that made it happen"* Murray Svendsen.

There was a positive attitude towards the integration of the design and construction. The Contractor felt able to contribute towards the buildability of the documentation which benefited the final result.

## Health and Safety

The contractor practiced excellent Health and Safety procedures and operated under a Site Safe site. It is Mainzeal's number one priority and on this particular project they received a certificate for achievement from OSH for managing health and safety on the project.

## Key principles for repetition

- A clear brief, where vision and values drove decisions
- Measureable benchmarks set to realise sustainable outcomes
- Use of multi-service chilled beam technology rather than conventional air-conditioning
- Commitment to ongoing relationship building
- Strong open communication during design and construction
- Collaboration and teamwork during the design and construction process from the top down
- Trust and transparency brings out the best in people
- Project team solution focussed, rather than problem focussed
- Contractor clearly understood client objectives and expectations prior to commencement of the construction
- Innovative design and service solutions were adopted rather than status quo decision-making.
- Prototypes and sample-making to raise level of quality and reduce costs
- Sun control to minimise large temperature fluctuations
- Health and safety of key importance

## Communication

Clear communication between the whole project team was key to the projects success. *"It is only successful when key managers are talking to each other and the client is talking to us as well. Everyone has to work as one"* Murray Svendsen. Coordination between the major trades was crucial. Everyone was proactive in working together to achieve the level of quality and transparency the project demanded. This was in all areas of the project, from the exposed concrete, multi-serviced chilled beams, and glass lifts that lined up with the exposed structural steel. Monthly Project Control Group meetings, fortnightly design and site meetings helped ensure open communication and answered any outstanding queries. A common website – maintrac was adopted to help with the flow of communication.

## Key Client Actions

This project demonstrates a number of areas where the client directly and positively affected the outcome of the project **for all**, by adopting specific Collaborative Working practices, including:

- **Experience Client on board:** A well informed, experienced client. The client was central and involved in all key decisions.
- **Decision making Framework:** A decision-making framework was put into place and a senior client made the majority of decisions in a timely and clear manner.
- **Control:** Careful control of budget, time and quality.
- **Strategic Plan:** A well considered strategic plan enabled the tenant to drive the fit-out to reflect their needs.
- **Relationships:** Initiating a forum to help build relationships between the project team, plus agreeing to an informal charter and combined risk register all contributed to the success of this building.

## Transparency during construction

The team operated under a very good honesty policy. If the contractor was behind in a particular area they informed the group, or if a problem was identified they informed them.

The Architect, James Grose commented that *“he found the project team was solution focussed rather than problem focussed”*. Everybody worked together to manage their way out of an issue. Transparency was a high priority amongst the team.

## Cost

The client was very clear in the importance of completing the building within the budget constraints. The costs were carefully managed and well communicated between the project team.

## Time

The Project Manager, carefully programmed the process over the whole period, from strategy, design through to construction and internal fit-out.

Understanding the sequence of events ensured key disciplines delivered on time and were able to achieve the complexity, transparency and innovative aspects of the building.

Sovereign's leases terminating on the five other premises meant that there was a very real time pressure placed on realising the deadline.

The construction of the project commenced on time. Even when delays occurred, the team worked together to ensure that they achieved the deadline. In fact, the construction finished one day later than initially anticipated.

## Quality

*“The quality of the workmanship was exceptional”* Derek Shortt.  
*“Absolutely stunning and way above what everyone expected”* Ray Bryant. One example of the high level of quality was the contractor on his own volition, twice re-poured a concrete column as he was not happy with it.

Samples and prototypes were made to ensure the quality benchmark was maintained. If a problem arose during the sample-making a different approach was taken until a successful result was obtained.

Sub-contractors were also proactive in making samples. A complete office was built on site on the lower floor, including the carpet and paint whilst still constructing the 3<sup>rd</sup> floor to showcase quality finish and integrate the innovative features and iron out issues between the programming of various trades.

The contractor affirms that prototypes and samples are a responsible way of doing work and actually saves money and time overall. Any defects that have been identified have been quickly and efficiently resolved.

## Lessons learned

Key lessons to take forward from this project are:

- **Building Maintenance:** For buildings that are designed to perform with minimal resources it is important that the bedding down period and the learning that it takes to drive the building takes two years rather than one as is currently standard practice for sustainable buildings.

The reason for a longer period is that it takes at least one cycle of the four seasons to understand the dynamics and than it takes time to teach the maintenance team to run it efficiently.

The benefits in demanding a two year period are great as the operating costs are being driven lower all the time as the team understands the automative systems and learns to optimise them.

## Possible improvements

- **Liquidated Damages** Including Liquidated Damages into the contract is still part of the old construction paradigm. Over the last 20 years there has been a significant change in the way contractors are engaging in the process rather than being confrontational. In the past LD have been used to focus the team on achieving, now other motivating factors beyond punishment are driving contractors to deliver.
- **Building maintenance** Establish a two year period rather than one
- **Double Glazing** Install double rather than single glazing window systems to help thermal control Client to be more informed around programming

## Conclusion

Creating a healthy workplace serves many purposes. Not only does it provide a great place to work, but it also provides financial benefit as well. By creating a place that focuses on the people, shows that people underpin a culture and that the culture underpins an organisation. A healthy culture equals a healthy organisation.

Every decision made to create this building reinforced the simple principles of transparency, collaboration and meeting the needs of the future; which in turn helps to strengthen the human aspect of Sovereign's business.

This could not have been achieved without having an experienced client like Derek Shortt of ASB Property, who was willing to act as leader and challenge conventional thinking in all areas of the construction process from strategic planning right through to making this building into a reality.

