

Boffa Miskell

issue
number: 17

news:

Boffa Miskell^{NEWS}
spring²⁰⁰⁷



Method to landscape assessment

03

A comprehensive study of Banks Peninsula rural landscapes helps resolve controversy.
— SEE PAGE 3.



Farm Parks

04

Are 'farm parks' wolves in sheeps clothing or a sustainable rural land use?
— SEE PAGE 4.



Best practice urban design

06

Redevelopment of the former Hobsonville Airbase will be anything but a standard residential subdivision.
— SEE PAGE 6.



Editorial: Our 360 approach

It is tempting – but unwise – for a company like Boffa Miskell to rely on 35 years' past success to lead the way forward. We are determined to avoid that temptation.

Instead, we have set ourselves to keep critically appraising our work and pushing ourselves to be innovative through what we call our 360 approach. Symbolised in our company logo, this approach involves thinking laterally around questions and considering things from multiple perspectives.

Within the company, this approach means constantly reviewing the range of our services and the way we deliver them. Have we got the right people? Are we providing them with the training and technology they need to perform at their best? Does our company culture foster the team work and free exchange of ideas that is essential for rigorous and creative thinking? Above all, are we establishing and maintaining enduring client relationships?

Essential to the 360 approach is the need to work with you, our clients, to ensure we fully understand every project. We must communicate well and establish trust if we are to fully explore

your requirements, including the possibilities and constraints. This can mean asking wide-ranging and difficult questions because it is our responsibility – based on our company ethic of sustainability – to look at the big picture and see how your projects connect with wider environmental, economic, cultural and social contexts.

Our objective is, of course, to deliver complete and achievable solutions to you, our clients. However, the 360 approach has no real end. The completion of each project simply raises more questions. Was it a good outcome? Did it endure? Did we exceed expectations?

We welcome your feedback to help us see how we can do better.

Sarah Dawson, Director

Boffa Miskell NEWS

spring²⁰⁰⁷

This newsletter is published three times a year by Boffa Miskell Ltd.

DESIGNED AND PRODUCED BY: DNA

EDITED BY: Shona McCahon

COVER: Otanerua viaduct spans protected native forest, ALPURT B2 Northern Motorway extension, Auckland.

ILLUSTRATIONS: P2, bottom, by Wai-ora; P7, fish hooks, by Tauranga Project.

PRINTED IN WELLINGTON BY: Service Printers

Back issues of *Boffa Miskell NEWS* can be found at www.boffamiskell.co.nz

Pegasus begins to take shape

Earthworks have dominated the first six months of construction at Pegasus new town, north of Christchurch.

Contouring the wetlands and the first two stages of residential development is complete, and shaping of the golf course is well-advanced. Excavation of the 14-hectare centrepiece lake has also begun.

More than 100,000 wetland plants are scheduled to be planted in the 97-hectare conservation management area over the next three months, with a further 200,000 wetland plants to be installed over the following two years. Reinstatement planting on a former greenstone factory site has been approved by Te Ngai Tuahuriri Runanga.



▲ Despite the site constraints, children at Freeman's Bay Kindergarten now enjoy a variety of outdoor play opportunities.

Decontamination first – outdoor play second

Contaminated fill discovered at Freeman's Bay Kindergarten in 2005 presented extra challenges for Boffa Miskell landscape architects who had prepared an outdoor redevelopment plan the year before.

Boffa Miskell worked with decontamination engineers, Tonkin and Taylor, to review and amend the plan, modifying the proposed layout and construction detailing to avoid excavation into contaminated material. Site preparation for planting was complicated by the geotextile laid over much of the site to seal the contamination. Clean soil was brought in and laid over the geotextile but planting holes for large trees with deeper root systems had to be specially dug and the geotextile wrapped over the root ball.

Boffa Miskell supervised the site works, working to a tight timeframe to allow children safely back on site as soon as possible.

CONTACT: SARAH COLLINS sarah.collins@boffamiskell.co.nz

Five to six-metre residential street trees are soon to be planted into tree pits with specially prepared soil. The trees were tendered out by Boffa Miskell some years ago to ensure adequate supply at a competitive price.

CONTACT: DON MISKELL don.miskell@boffamiskell.co.nz



▲ Staff from planting contractors, Wai-ora Forest Landscapes Ltd, begin the wetland planting during the ceremonial first planting day.

Banks Peninsula Landscape Study

Boffa Miskell has completed a comprehensive study of Banks Peninsula's rural landscapes to help resolve years of controversy dating back a decade.

In 1997, the landscape provisions in the Proposed Banks Peninsula District Plan attracted considerable opposition, particularly in regard to the methodology used. A rural task force was set up to address the issue, culminating in a district plan variation notified in 2002. The variation attracted further opposition, which eventually reached the Environment Court. Following the merging of the Banks Peninsula and Christchurch City Councils, the Christchurch City Council considered that a comprehensive landscape study was needed. In conjunction with the appellants, the council mediated the terms of reference and asked for an adjournment of the appeal process until a study had been completed.

Boffa Miskell was commissioned to undertake the study using a methodology that would meet the requirements proposed by the Council and agreed to by the parties involved.

"Given the history of controversy and the likelihood of scrutiny in the Environment Court, we knew the study had to be very thorough and rigorous in its methodology but also easy for people to understand," says Boffa Miskell landscape architect, Yvonne Pfluger. "We conducted the work in three stages to demonstrate a logical progression."

Firstly, the project team identified and described all the distinct landscape character areas on the peninsula. Secondly, information was gathered from experts, stakeholders and the community on the values that people assign to the peninsula's landscapes, such as natural science, cultural and aesthetic values. This information was mapped and used to identify four categories of landscape value set by the Court: outstanding natural landscapes, coastal natural character landscapes, visual amenity landscapes and heritage landscapes.

Options, mechanisms and cost/benefit analyses for managing future landscape change were then considered, and recommendations made for achieving desired outcomes.

GIS to the fore

The project required a vast array of physical, biological, cultural and land use data to be assimilated from numerous existing sources as well as the project team's own field work.

This was where Boffa Miskell's GIS capabilities proved invaluable. Each set of data was saved as a mapping layer, which could then be overlaid to analyse spatial patterns and relationships. Mapping aided communication at open days and stakeholder workshops, as people could see the information used and relate it to the peninsula environments they knew.

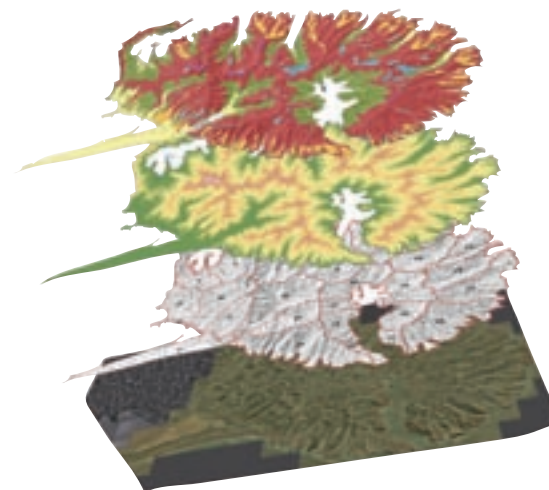
Yvonne says that 3D computer modelling was also a great aid. "Using the 3D model, we could 'travel' anywhere within a virtual Banks Peninsula but remain in the office. It's a useful analysis tool to complement actual field work."

The study was completed in May this year and mediation with the appellants is currently in progress.

CONTACT: YVONNE PFLUGER yvonne.pfluger@boffamiskell.co.nz

Ecology assessment too

Boffa Miskell is also working on a parallel Banks Peninsula ecological study and assisting in mediation with the appellants.



▲ Landscape analysis was greatly aided by overlaying spatial information using GIS. Illustrated top to bottom: land types, elevation, landscape character areas, aerial photo draped over K2VI 3D model of Banks Peninsula.

▼ Inner Akaroa Harbour.



▼ K2VI 3D model of Inner Akaroa Harbour showing the location of the assessed landscape value areas.

- | | |
|---------------------------------------|---|
| ■ outstanding natural landscape | ■ heritage landscapes |
| ■ coastal natural character landscape | ■ excluded from study area (urban area) |
| ■ visual amenity landscapes | ■ landscape category boundary |





◀ Tapuae Country Estate: the first dwellings will be constructed in 2008.

▼ Extensive revegetation has enhanced water quality and the rural coastal landscape.



It is also important to anticipate and provide for the kind of people that farm parks attract. Buyers often come from urban or suburban environments, perhaps attracted by romantic notions of living in the country. They may not realise the implications of being isolated from amenities they are accustomed to or of residing in a working farm environment with its associated noise, rural odours and rural work practices.

Boyden says potential owners need to understand what they are buying into and what they will be required to do if the entire farm park is to operate efficiently and sustainably. These requirements must be clearly spelled out in sale and purchase agreements. Robust ownership structures, such as body corporates or home owner associations, are also essential. Together with covenants registered on the land titles, such structures are designed to ensure current and future owners will implement agreed measures to create and enhance the farm park environment, and govern its overall operation and management.

Provided these first principles are adhered to, farm parks do offer opportunities to protect and enhance rural landscapes, including ecological and cultural features, and to demonstrate exemplary design in terms of siting and design of buildings, roading, earthworks, tree planting and conservation measures. Nevertheless, farm parks do not yet have a sufficient track record to conclusively show their viability. The real test lies in the years ahead.



▲ The rural character of this farm park is maintained by clustering houses within areas of increased tree planting, leaving the majority of the property in productive land.

‘Farm Parks’: wolves in sheep’s clothing?

‘Farm parks’ are a concept considered by some as a way to circumvent rural subdivision rules. Boffa Miskell has been involved in several ‘farm park’-type developments, some of which are now built and operating. We believe they can be a sustainable rural development and landscape protection option if certain principles are adhered to.

Most importantly, a farm park must retain genuine rural land use activities. Within the productive farm framework, some well sited and designed residential development, and possibly other land uses, can be incorporated. The income generated from allotment sales and from ongoing home owner levies can then be invested to enhance land use practices such as wetland

and waterway protection, reduced grazing pressure, tree and riparian planting, and protection of natural or cultural features.

“Unfortunately, some rural land development is carried out under the ‘farm park’ banner as a means to try and overcome minimum lot sizes and increase subdivision densities and yields,” says Boffa Miskell landscape architect Boyden Evans. “If the productive farm component of the total land holding is ignored, the outcomes will be unworkable from a rural land use perspective and often from the overall land management perspective too. Consequently, developers who are genuinely aiming for sustainable rural outcomes, prefer the terms ‘sustainable farm management plans’ or ‘conservation estates’”

Boffa Miskell always draws on a range of specialist advice, including a farm management consultant or farmer, to ensure efficiency of the farm operation is fully considered in the planning and design. Introducing a residential component may reduce ‘traditional’ farm productivity, but proper planning of fencing, water supply, stock movement and so on minimises loss of productivity. The land use activities are also planned and designed to integrate with the underlying landscape and ecological framework.

Tapuae Country Estate

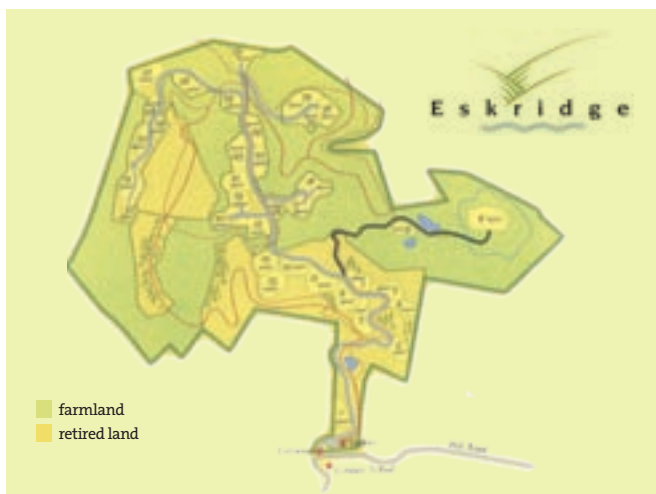
For farmers John and Mary Washer, their Tapuae Country Estate development on the outskirts of New Plymouth is a means to repay debt while also retaining 75% of the 80-hectare coastal property as a farming operation in perpetuity.

The Washers, who manage several farm operations in the King Country and Taranaki, say they appreciate the beauty of the region's rural landscapes and remnant native bush. At Tapuae, they are committed to extensive revegetation of the unproductive land, protection of archaeological sites and provision of public access to the coast.

Boffa Miskell has provided planning and landscape architecture services since 2001. Strict covenant conditions on lot titles govern the design and external appearance of the 30 dwellings which will be clustered around the property. A residents' association will lease the remaining productive land under rules and criteria to ensure it will continue to be 'professionally farmed'.

Eskridge

Boffa Miskell provided landscape and ecological services to Seafeld Farms Limited in planning the Eskridge 100-hectare farm park in Hawke's Bay. The site is visible from SH5, and has expansive coastal and farm environment views, which are being enhanced by retiring areas of regenerating native vegetation, revegetating extensive areas of marginal farmland and developing a network of walking and cycle tracks.



- ▲ The most productive land is retained for farming at Eskridge with the houses set amongst land retired for revegetation.

Eskridge was, in 2004, the first farm park to gain resource consent from Hastings District Council. A comprehensive body corporate document, including architectural and landscape guidelines, and explicit requirements in the sales and purchase contracts, ensure purchasers are committed to the concept.

Wainui Coastal Estates

Boffa Miskell assisted developer Titan 1 Limited with the concept for this 132-hectare farm park, recently consented by Gisborne District Council. The site forms part of the rural backdrop to Gisborne city. As parts of it lie within the council's 'urban ridgeline' district plan overlay, the landscape and visual effects were key considerations, necessitating sensitive siting and design of roading and dwellings.

The mainly pasture-covered site will be transformed by fencing remnant native vegetation and revegetating extensive areas. The planting will provide a suitable landscape setting for the new houses and enhance the city backdrop. The current lessee will continue to farm the property together with an adjacent farm, in accordance with a farm management plan.

CONTACT: BOYDEN EVANS boyden.evans@boffamiskell.co.nz



- ▼ Housing is clustered amongst trees planted for slope stability and visual integration with the surrounding farmland.



Whitford Forest

Boffa Miskell has been assisting with the management of 1700 hectares of strategically located land within Manukau City. The landholding is made up of two separate blocks, owned by the Whitford Forest Joint Venture Partners, in an area more popularly known as the Whitford Forest, south of Maraetai.

Approximately one third of the landholding falls within the area embraced by the Manukau City Council's Whitford Rural Plan Change. Whilst a number of appeals have yet to be resolved, the plan change is still likely to provide the framework for innovative forms of countryside living before long.

The joint venture land hosts a range of ecological and amenity features including significant stands of native vegetation. Boffa Miskell has utilised its range of ecological, landscape architectural, and planning skills to provide advice on various policy initiatives in the district and region, mindful of the important role the properties are likely to play in the future.

CONTACT: CAREY PEARCE carey.pearce@boffamiskell.co.nz



- ▲ The village of Maraetai (foreground) with a significant part of the Whitford Forest Joint Venture land visible to the south.



▲ The Hobsonville concept plan incorporates a mix of land uses, connected communities and open space in a location close to rapid transit options.

A collaborative design process was carefully structured to ensure that the master plan reflected 'best practice' sustainable development principles, as well as the unique values of the Hobsonville site itself. The first step in this process was to generate a 'Sustainable Development Framework' that specified environmental, economic, social and cultural targets and indicators. The framework was translated into design principles and only then was the urban design master plan developed.

The resulting design stands in positive contrast to conventional suburban development. Project team leader Doug Leighton says the proposed integrated community will use land and resources more efficiently, with more green space for recreation and conservation, and a better balance of residential, commercial, institutional and other land uses. "Hobsonville represents one of the most ambitious integrated community projects being undertaken in New Zealand, especially in terms of its systematic approach to sustainability and affordability."

The Hobsonville community will include up to 3,000 new homes, a marine industry cluster and other employment opportunities, two schools, and community facilities. A wide range of housing types and tenures is proposed, including some affordable and social housing, to accommodate households of diverse income levels and housing requirements. All residents will be within a ten minute walk of planned rapid bus and ferry transport services and parks.

Development progress has been dependent on a district plan change which was announced on 1 August. Subject to consent approvals, Hobsonville Land Company intends to start civil works in 2008 and housing construction in 2009.

CONTACT: DOUG LEIGHTON doug.leighton@boffamiskell.co.nz



▲ Proposed mixed-use waterfront areas will accommodate a ferry service and marine industry precinct - detailed design concepts are now being developed.

Hobsonville: Best Practice Urban Design

The former Hobsonville Airbase is set to become New Zealand's flagship of best practice urban design, affordability and sustainability.

In 2002 the Government identified the potential to create an integrated new community on the former Hobsonville Airbase in Waitakere City, Auckland. The new development would be based on sustainable development principles, meaning success in environmental, economic, social and cultural terms.

To achieve this objective, the Hobsonville Land Company was established (through Housing New Zealand Corporation) in 2005. The company's Board defined its vision as: *"to set new benchmarks for sustainable urban development within New Zealand and to build a community that is available to people from all sectors of society"*.

Boffa Miskell led the development of urban design concepts and an interim master plan for the Hobsonville site. The project team included experts from Architectus, Geoffrey Walker Urban Design, Landcare Research, Market Economics Ltd, Flow Transportation specialists, Salmond Reed Architects and Fraser Thomas Ltd.

Historic values given precedence

Preservation of archaeological, cultural and historic values is paramount in the Otumoetai Pa Historic Reserve Management Plan drafted by Boffa Miskell for the Tauranga City Council.

The Otumoetai Pa site is significant to the tangata whenua, Ngai Tamarawaho. Here, Otumoetai chiefs refused to sign the Treaty of Waitangi in 1840 and peace between warring tribes was agreed in 1845. Later, the Matheson family, who farmed the local area from the 1870s, built their homestead at the site.

According to Boffa Miskell cultural heritage advisor, Antoine Coffin, an earlier plan had given undue precedence to recreation values. "Cultural heritage values now come first in a hierarchy of management objectives. It's quite a pragmatic approach that has helped to resolve management issues, plan how and why the reserve is to be developed and has empowered stakeholders to participate."

Public submissions have been mainly favourable and the plan will be finalised in September 2007.

CONTACT: ANTOINE COFFIN antoine.coffin@boffamiskell.co.nz



▲ Fish hooks unearthed from Otumoetai Pa site, dating from c1600AD.



▲ Public access from the sea to the reserve will be improved to reflect the importance of former sea access and the connection to Mauao (far distance).

New website

Our new website is up and running. To visit, go to: www.boffamiskell.co.nz



In Brief

Best practice guide for open space

Boffa Miskell has recently completed a *Best Practice Guide for Open Space* for Tauranga City Council.

The guide is an illustrated 'how to' document aimed at assisting decision-makers involved in open space planning, design and management.

It provides practical advice on the appraisal of potential and existing open spaces and explains fourteen 'success factors' for achieving open spaces that will individually and collectively contribute to successful open space networks.



CONTACT: DAVID EUSTACE david.eustace@boffamiskell.co.nz

Predictions for traffic modeling

Earlier this year, Tauranga City Council asked Boffa Miskell to predict the likely distribution patterns of the city's workers between 2006 and 2031 – to assist in planning for future traffic demand.

Boffa Miskell used employment sector predictions from the New Zealand Institute of Economic Research together with 2006 population data from Statistics New Zealand to analyse existing distribution patterns and predict likely trends. Boffa Miskell's involvement and knowledge of SmartGrowth (the sub-region's 50 year growth management strategy) was a key factor in predicting the distribution.

The end result was a specially developed Excel database that allows for future updating as new information comes to hand together with a detailed report documenting the background and methodology.

CONTACT: GARRY CHRISTOFFERSEN garry.christoffersen@boffamiskell.co.nz

Cities on the Edge Conference, June 2007, North Shore City

Boffa Miskell urban designer, **Doug Leighton**, served on the advisory committee of the 2007 International Cities and Town Centres Society conference. The conference, called "Cities on the Edge", attracted more than 400 delegates involved in planning, town centre design, architecture, urban and built environment design from around the world, and included a number of Boffa Miskell staff.



▲ Craig Batchelar



▲ Doug Leighton

Doug presented a paper, entitled "Hobsonville: New Zealand's Sustainable Development Showcase" (see p.6). Boffa Miskell planner, **Craig Batchelar** and **Andy Ralph** of Tauranga City Council delivered a joint paper, "Turning Planning Strategy into Reality". The paper outlined the Western Bay of Plenty's sub-regional Smartgrowth Strategy and examined two case studies to illustrate how the strategy is being implemented.

Copies of the two papers are available on [www.boffamiskell.co.nz/news & publications](http://www.boffamiskell.co.nz/news&publications).

Cultural training

Increasing numbers of skilled professionals from overseas are joining Boffa Miskell. While their new ideas and international experience greatly benefit the company, it is also important to ensure they understand New Zealand's indigenous culture.

With that in mind, our Christchurch office recently arranged for a series of staff training sessions focussing on Maori values and cultural protocols. The training programme culminated in a visit to the Raupaki Marae on Banks Peninsula.

Similar training programmes are run regularly throughout the practice for both overseas and New Zealand-born staff.

Environmental awareness recognised

This year's supreme award for environmental achievement in New Zealand's construction industry has gone to the Northern Gateway Alliance. The Alliance, comprising Transit New Zealand, Fulton Hogan, Leighton Contractors, URS New Zealand, Tonkin Taylor and Boffa Miskell, is responsible for project management, design and construction of the ALPURT B2 Northern Motorway extension in Auckland.

Boffa Miskell ►
Environment Manager,
Michael Cassidy,
measures stream
data to monitor
potential effects of the
construction work.



The motorway project earned the award in the Shell Environmental Awards category for projects valued over \$10 million in the 2007 New Zealand Contractors Federation awards. The judges particularly acknowledged the culture of environmental awareness and performance that the Alliance has achieved.

Boffa Miskell is responsible for the environmental management services within the Alliance – a challenging job, considering that the route traverses ecologically significant and environmentally sensitive areas.

With 3.5 million cubic metres of earth to be moved, erosion and sedimentation management is a massive task, and numerous streams, wetlands and estuaries need protection from damage and pollution.

◀ The Otanerua viaduct during construction, designed to span native forest in the valley.

Measures to protect wildlife include relocation of lizards, the construction of specially designed culverts for fish passage, and the avoidance of bird nesting habitat. Then there's the revegetation required to rehabilitate highly modified and engineered soils.

"Good communication has been essential to maintaining rigorous standards," says Boffa Miskell Environment Manager, Michael Cassidy. "We work closely with the engineering and construction teams to alleviate possible adverse effects and minimise bush clearance and land disturbance. Everyone has to understand why the environmental standards are important.

"It's a matter of developing a culture of environmental awareness that extends from high level documentation and auditing procedures right through to the physical implementation of works in the field."

CONTACT: MICHAEL CASSIDY michael.cassidy@northerngateway.co.nz

Boffa Miskell



WEBSITE: www.boffamiskell.co.nz

EMAIL: info@boffamiskell.co.nz

AUCKLAND

Level 3, IBM Centre,
82 Wyndham Street,
PO Box 91 250, AUCKLAND
PH: 09-358-2526
FAX: 09-359-5300

TAURANGA

Level 2, 116 on Cameron,
cnr Cameron Road and
Wharf Street,
PO Box 13 373, TAURANGA
PH: 07-571-5511
FAX: 07-571-3333

WELLINGTON

Level 9, 190 Willis Street,
PO Box 11 340, WELLINGTON
PH: 04-385-9315
FAX: 04-384-3089

CHRISTCHURCH

7th Floor, 86 Gloucester Street,
PO Box 110, CHRISTCHURCH
PH: 03-366-8891
FAX: 03-365-7539