

Urban Design Case Studies







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Auckland **Regional** Council <u>TE RAUHITANG</u>A TAIAO



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Sustainable Development New Zealand Programme of Action

SOCIAL | ECONOMIC | ENVIRONMENTAL | CULTURA

Contents

Introduction	
Urban Design Case Studies: Locations and Land Uses	
Summary of Urban Design Case Studies	
Auckland University of Technology	
Beaumont Quarter - Auckland	
Botany Downs - Manukau City	
Britomart - Auckland	
Chancery - Auckland	
Character Appraisal in Inner-city Wellington	
Christchurch Bus Exchange	
Harbour View - Waitakere City	
Lancewood Courts - Christchurch	
New Brighton Library - Christchurch	
New Lynn Town Centre - Waitakere City	
New Plymouth Foreshore	
Northwood Residential Area - Christchurch	
Terraced Housing in Takapuna - North Shore City	
Vero Building - Auckland	
West Quay - Napier	



Page #

Int

Introduction

The *New Zealand Urban Design Protocol* provides a platform to make New Zealand towns and cities more successful through quality urban design.

It is a voluntary commitment by central and local government, property developers and investors, design professionals, educational institutes and other groups to create quality urban design and to undertake specific urban design initiatives. These case studies support the Urban Design Protocol.

The projects documented in these 16 case studies demonstrate the urban design qualities outlined in the Urban Design Protocol. The diversity of project types is intentional, covering a range of activities, scales and locations across New Zealand to ensure wide appeal and to illustrate as many lessons as possible.

There are many other examples around the country of quality urban design and more case studies will be added over time, including projects that signatories to the Protocol develop as part of their action plans.

The projects demonstrate the practical application of urban design principles, the benefits that come from good practice, and they identify areas where further improvements could be made. Each case study includes basic summary facts and project statistics, a description of the design process, the urban design issues, an evaluation of the project's success and limitations, lessons learnt and the value gained, and selected comments by clients, users and community groups. The evaluation of each case study is based around the seven Cs in the Urban Design Protocol: context, character, choice, connections, creativity, custodianship, and collaboration. The case studies were initiated as a joint project by the Ministry for the Environment, Auckland Regional Council and Waitakere City Council, as part of a cross-government commitment to improve the quality of urban design in our urban areas. The case studies have been written by authors who were in most cases involved in the project development process. Therefore, the views they express are their own and do not necessarily represent the views of the Ministry or other sponsoring organisations.

URBAN DESIGN CASE STUDIES: LOCATIONS AND LAND USES

Name	Location	Land uses
Auckland University of Technology	City centre, Auckland	Education facilities, commercial, public buildings
Beaumont Quarter	Freemans Bay, Auckland	Medium-density residential
Botany Downs	Botany, Manukau City	Town centre, residential
Britomart	City centre, Auckland	Public transport interchange
Chancery	City centre, Auckland	Mixed use retail, commercial
Character Appraisal in Inner-city Wellington	Mt Cook, Wellington	Heritage precinct
Christchurch Bus Exchange	City centre, Christchurch	Public transport, commercial
Harbour View	Te Atatu Peninsula, Waitakere City	Residential, public open space, mixed use, wetland restoration
Lancewood Courts	Beckenham, Christchurch	Residential
New Brighton Library	New Brighton, Christchurch	Public building
New Lynn Town Centre	New Lynn, Waitakere City	Mixed use, retail, commercial
New Plymouth Foreshore	New Plymouth	Foreshore development
Northwood Residential Area	Styx Mill, Christchurch	Greenfield residential
Terraced Housing in Takapuna	Takapuna, North Shore City	Medium-density residential
Vero Building	City centre, Auckland	Commercial high-rise
West Quay	Ahuriri, Napier	Mixed use, industrial, commercial, residential

Summary of Urban Design Case Studies

AUCKLAND UNIVERSITY OF TECHNOLOGY

This case study illustrates the importance of an integrated approach to urban design, using the technique of master planning. The project aims to enhance campus life, culture and education outcomes through an improved learning, social and working environment. Physically, this involves consolidating the facilities into one campus to create efficient access and better connections between buildings, and creating public plazas and meeting areas for improved social interaction.

BEAUMONT QUARTER, AUCKLAND

The design of Beaumont Quarter is based on a modernist reinterpretation of a traditional terrace house. It is a successful medium-density development offering alternative housing forms that combine to create a unique place to live and work close to the city. It avoids domination by private vehicles by creating narrow streets and semi-public squares that give priority to pedestrian movement. Restoration of the historic Enerco buildings along the street frontage and retention of a number of mature trees adds to the character and identity of the development.

BOTANY DOWNS, MANUKAU CITY

This case study focuses on Sacramento and Eastpark, two of the more established mediumdensity developments in this rapidly expanding area, and their relationship with Botany Town Centre. These developments demonstrate how a liveable community with a distinctive and safe environment can be created. The case study highlights the important role of town planning in taking a visionary approach through the adoption of urban design principles and through active involvement in the development process.

BRITOMART, AUCKLAND

The first phase of the Britomart project, the central Auckland rail terminal, is complete. This project will eventually include a comprehensive public transport interchange for bus, rail and ferry passengers and result in the revitalisation of an entire city precinct. This project represents the largest construction project ever undertaken by a local government in New Zealand and demonstrates what can be achieved by local government taking an active approach and calculated risks. The project illustrates the importance of good consultation techniques, and the benefits of retaining and restoring heritage buildings as an integral part of a major development project.

CHANCERY, AUCKLAND

This case study describes a successful inner-city development driven by design principles rather than maximising floor space potential. The creation of a new public space is an integral part of the development, which links successfully with the existing urban fabric by maintaining an appropriate scale and responding to the topography of the site. It demonstrates the importance of creating an environment that is at a scale that feels comfortable for people, and of actively designing a place that is memorable and attractive to people.

CHARACTER APPRAISAL IN INNER-CITY Wellington

This case study does not analyse a development project, but demonstrates a methodology for character appraisal in an existing inner-city area, and highlights useful research methods to provide objective and effective character evaluation. It also illustrates techniques to rate the value and relative significance of existing residential areas and their constituent elements, as a contribution to setting development control policies.

CHRISTCHURCH BUS EXCHANGE

The Bus Exchange, an off-street and purpose-built public transport facility in the city centre, has helped to revitalise this part of the city and provide sustainable transport options. The development has also resulted in a significant increase in bus patronage, which now means expansion is needed. This case study illustrates how a substantial new activity can be successfully incorporated into the streetscape of an existing commercial and retail area, and the benefits of local government working collaboratively with the private sector in the development process.

HARBOUR VIEW, WAITAKERE CITY

Harbour View is a demonstration project which shows how the natural environment can be successfully incorporated and reinstated as an integral part of a development scheme. The development builds a distinctive identity, through connections to the adjacent wetland conservation area, which plays a vital role in the stormwater system. This case study also demonstrates the successful integration of a mix of housing densities and types, using varied lot sizes and provision for a range of lifestyles. A network of streets and pedestrian pathways provide a permeable and well connected local movement system.

LANCEWOOD COURTS, CHRISTCHURCH

Lancewood Courts, developed by Christchurch City Council, demonstrates how social housing can be designed and built to a very high standard on a restricted budget. The vision for the housing complex was to provide a healing environment through architecture, design, landscaping, and a sense of community. A strong community consultation process was an integral part of the project, and the development is successfully integrated into the local community, meeting both its social and environmental objectives.

New Brighton Library, Christchurch

This case study of the New Brighton Library demonstrates a design-led approach to revitalise and bring new life to run-down suburbs. The Library is a terminus building adjacent to the New Brighton Pier and containing a 'new generation' Library, café, retail area and public space. It provides a range of activities including spaces for study, socialising and relaxing. 'Living rooms' provide books, television, PlayStations and music listening posts. The Library has achieved unprecedented success as a library, tourist destination and community focal point.

New Lynn Town Centre, Waitakere City

New Lynn town centre demonstrates the successful use of a comprehensive urban design process that began with a community charette. The design process addressed social, economic and environmental elements of revitalisation, including improving community facilities, developing business and retail opportunities and restoring elements of the natural environment. Inspired by the shared vision that emerged, both Council and private developers have invested more than \$200 million into numerous projects to support the revitalisation of the town centre.

New Plymouth Foreshore

"Mountain to the Sea", a design-led master plan for the central city's redevelopment, provided the impetus to create a unique walkway along the foreshore linking into the upgrade of New Plymouth's city centre. This has not only revitalised the foreshore but contributed to a distinctive new identity for New Plymouth itself. The master plan addressed the city's lack of identity with its natural environment, the poor integration of open spaces, and the physical separation of the commercial area of the city from the sea.

D Northwood Residential Area, Christchurch

This case study illustrates the challenge of developing a greenfield area in accordance with a master plan with strongly articulated urban design principles. The area was developed over a period of five years, and the end result shows significant differences from what was originally envisaged, as a result of commercial pressures and changing requirements. The project illustrates the successful modification of some urban design principles in response to changing demands.

TERRACED HOUSING IN TAKAPUNA, NORTH SHORE

This terrace housing project in Takapuna demonstrates how intensive development can be successfully integrated into a town centre, and how it can provide an attractive and liveable neighbourhood. The development responds to its corner site, and deals successfully with difficult issues of car parking and private open space.

VERO BUILDING, AUCKLAND

The Vero Building is New Zealand's tallest and most technologically advanced office tower. It demonstrates how a commercial building can successfully incorporate public art, through its large collection of contemporary New Zealand art in the lobby area. The office tower also achieves high standards of energy efficiency for a building of its type, and has received recognition for its energy efficient design.

WEST QUAY, NAPIER

This case study demonstrates how a heritage precinct can be successfully redeveloped without losing its significant character and mix of activities. West Quay is an excellent example of a local government taking a proactive approach to the future of an area, through a design-led policy framework, extensive public consultation and an integrated approach to resource consents. The focus of the process has been on managing and guiding change so as not to destroy the important character of the area, including the working wharf.







Auckland University of Technology

FAST FACTS

Location: Wellesley Street, Mayoral Drive, St. Paul Street, Lorne Street, Auckland City Construction: 2004 - 2006 Owner: Auckland University of Technology Architecture and Design: Jasmax Planning: Opus International Consultants Case study researcher: Sam Coles, Opus

KEY STATISTICS

Land area: 8,441 m² Buildings: Three main buildings, plus plaza and streetscape

Total floor area: 27,540 m² (Arts: 8,640 m², Studio: 8,300 m², Business: 10,600 m²) Project cost: \$100 million

- 1 Location plan.
- 2 Studio Building Plaza concept.
- 3 Arts Building Plaza concept.
- 4 Business Building construction site, Lorne Street.

Building AUT is a three-stage development of the Auckland University of Technology's CBD Campus. Jasmax, in partnership with AUT, have designed the project to accommodate over 8,000 students and staff in three main buildings - the Studio Building, the Business Building, and the Arts Building.

Together with improved streetscape and new plaza areas, Building AUT consolidates university functions into a strong and successful education precinct at the heart of Auckland City.

The aim is to enhance campus life, culture and education outcomes by improving the learning, social and working environments.

This case study demonstrates a co-ordinated approach to urban design between AUT, Jasmax and Opus, working with Auckland City Council's Urban Design Panel.

DESIGN PROCESS

The design was commissioned by AUT in 2002. From the earliest stages, the architecture and design team at Jasmax and the planning team at Opus were focussed on providing a comprehensive design that would meet planning and environmental standards and guidelines.

The timeline for Building AUT began with a year of design and planning. Once initial designs were prepared, Auckland City Council's Urban Design Panel was consulted. This voluntary exercise provided valuable constructive suggestions that resulted in improvements to the design.

Building AUT has three stages:

- Stage one: The St. Paul Street Studio Building began construction in 2003, and has been in use since February 2004.
- Stage two: The Business Building was begun in 2004 and will be completed in the second quarter of 2005.
- Stage three: Construction began in May 2004 on the Arts building, and is expected to be completed in early 2006.

URBAN DESIGN PRINCIPLES

Consultative and open

From the earliest stages of the project, the designers paid careful attention to the requirements and vision of AUT's faculties using consultation and discussion groups. AUT's intranet was used to inform staff, students and the public of all proposed developments.

Viable and deliverable

AUT brought Jasmax and Opus a clear vision for their future campus. The combined experience and expertise of closely co-ordinated planning, design and engineering teams ensured that the project satisfied district plan and Resource Management Act controls from the outset. This meant the transition from design to construction was smooth, and the design remained true to its initial concepts while accommodating changes and responding to constraints in a positive way. The three-stage design allowed a generous development timetable.

Integrated and comprehensive

A university campus is an exciting environment that accommodates a diverse range of people and activities. The buildings create a positive interface between the external public spaces and the interior facilities that enhances both.

A strong partnership between the landowner, and the design, planning and engineering teams meant communication was clear and feedback flowed easily between all parties.

URBAN DESIGN ISSUES

In addition to function, site and cost restraints, meetings and discussions with user groups generated additional design requirements. Urban design issues and principles arising out of these requirements were organised into categories of 'Footprint', 'Form', 'Planning' and 'Function'. The requirements included:

- an efficient and flexible design to provide for changing academic needs
- enhancing a sense of community with social interaction, particularly at entrances
- providing a simple but strong form for maximum legibility
- addressing the whole AUT campus and greater urban context
- connecting new buildings with the existing framework, physically and visually
- creating a safe, healthy environment within and around buildings
- making an attractive, vibrant and distinct landscape that draws on New Zealand's pacific heritage.

EVALUATION - URBAN DESIGN PRINCIPLES

Context	Building AUT consolidates AUT faculties into one efficient, supportive campus community. The concept of community has been emphasised in every aspect of the design, but particularly in the wider streetscape elements, where the majority of social activity occurs. The campus fronts Wakefield Street, Lorne Street and Mayoral Drive. It responds outwardly to the street pattern and the public environment. Plazas have been integrated into several key areas of the development, supported by building forms that encourage social interaction.
	The AUT campus has established a modern, dynamic environment oriented to pedestrians. This landscape offers a distinct combination of practical social space and visual interest by creating an exciting, cohesive urban streetscape.
Character	Maori and pacific identity is represented in the building form as well as in detailing. The Business Building is styled after an international corporate centre, while the Arts Building has dramatic visual appeal through the use of decorative panels. The Studio Building offers artistic users clean, functional spaces and highlights an exhibition area on the ground floor.

Сноісе	Flexibility has been built into the design at a primary level, allowing the buildings to adapt to suit changing education styles and techniques. Spaces offer interior freedom while maintaining a functional and efficient style. With an emphasis on simple, robust forms, the buildings have a wide range of possible future roles.
Connections	Connections occur on a number of different levels. The campus is well connected to the CBD and student accommodation and within walking distance of public transport along Queen Street. Connections with the wider area have been maintained, but the pedestrian-oriented streetscape design is able to control traffic, allowing cycle and public transport use to flourish.
	Internally, the buildings comprising Building AUT are designed to re-establish the academic heart of the AUT campus around a framework of connected faculties. Relocating over 3,000 students to the precinct enhances both the academic and social aspects of the University.
Creativity	The three buildings display contemporary design that is both attractive and user-friendly (see also character above). Strong colour and form are used to draw attention to entry points and attract people toward the campus.
Custodianship	In addition to enhancing the sense of community, the new facilities have greatly improved efficiency in terms of land use, transportation and energy. The master plan process has allowed design of buildings and activities to address and enhance environmental characteristics in the wider urban environment. The careful use of light-enhancing materials, vertical voids and building orientation has ensured natural light and airflow permeate the new spaces. The new development will generate 24 hour activity and 'eyes on the street',
	improving safety and security in the area.
Collaboration	The master plan for AUT is a collaboration between the project partners AUT, Jasmax, Opus and the Auckland City Council. This project was developed through an iterative process that engaged stakeholders at all levels. The openness of the project was emphasised through the continued involvement and assistance of Auckland City Council, particularly the Urban Design Panel who provided on-going feedback that was useful in adapting the design to achieve the best outcome for all parties.

Lessons Learnt

The design issues faced by AUT, Opus and Jasmax illustrate the importance of an integrated approach to urban design, made possible through comprehensive master planning. The outcome of Building AUT demonstrates the success of this process in an urban setting by creating a development true to the vision of a dynamic, social, healthy and efficient environment for students, staff and visitors to AUT. In addition, Building AUT enhances the nationally important academic and cultural precinct housing AUT, Senior College, University of Auckland, art galleries, public library, student halls of residence, and other facilities.

To manage the complex organisational requirements of the various departments of AUT affected by the project, the three-stage process was carefully co-ordinated with the academic year. This presented construction and environmental challenges to site management that were met by an emphasis on comprehensive project management and anticipation of effects.

VALUE GAINED

The recently completed Studio Building is a great improvement to the previous facilities. When completed, the combination of the three main buildings, plus exterior streetscaping will provide a range of benefits to staff, students and the wider community including:

- centralising activities to enhance campus communities
- ensuring efficient access and connectivity within and around the campus
- providing attractive, purpose-built permanent facilities that promote learning
- creating more outdoors space and improved integration with covered areas
- improving the campus designs so they are more consistent, attractive and user-friendly
- providing flexible space for AUT to expand its facilities and services.

In addition to tangible benefits, the project is valuable for the experience it offers in the master planning process. The partnership between Opus, Jasmax, AUT and Auckland City Council has been instrumental in the overall success of the Building AUT project. This case study will serve as an example of successful development through collaborative planning and design.

COMMENTS

Client: Building AUT is a long term commitment to upgrading all of the University's facilities and creating Wellesley and Akoranga campuses whose vibrant and attractive designs are an asset to students and staff alike. Importantly, these campus developments will also further Auckland University of Technology's contribution to Auckland's vitality and economy.

Users: The new Arts Studio Building's internal space is light and airy, and is like a blank canvas that offers the opportunity for students to create a vibrant atmosphere. Improved workshop space, separation of work and other areas and better interaction between staff and students provides a highly creative learning environment.

Architect/Design: JASMAX (and previously JASMAD) have provided a master planning design service for the ATI and the AUT for the Wellesley Campus since the early 1990s. JASMAX believe that the success of each of the individual building designs is a direct result of embracing a master planning approach during the inception of concept design for each building project.

> **Planning:** The regulatory planning context was a significant factor in the design of each of the three projects, providing both opportunities and constraints. Opus provided Jasmax with planning constraints / opportunity reports before beginning the preliminary design on each of the buildings.

Auckland City Council Urban Design Panel: "The panel commends the applicant on the presentation to the panel, the urban design approach and the quality of the overall design."





- 1 Business Building concept: Mayoral Drive looking towards Lorne Street.
- 2 Arts and Business Building concepts: Mayoral Drive.







Beaumont Quarter -Auckland

FAST FACTS

Location: Beaumont Street, Freemans Bay, Auckland

Construction: 2001 - on-going

Owner: Melview Developments

Design: Dominic Papa, Nicholas Barratt-Boyes, Studio of Pacific Architecture; Boffa Miskell

Case study researcher: Shyrel Burt, Auckland City Council

KEY STATISTICS

Dwellings: 240 (terraced and apartment) Retail: 3,100 m² of office space Site size: 2.4 ha Gross density: 1:100 m²

- 1 Central pedestrian pathway.
- 2 Terraced houses and historic gaswork buildings.
- 3 Terraced houses with apartment building in background.

At the foot of an escarpment overlooking the Waitemata Harbour, the Beaumont Quarter sits across from Victoria Park on a site previously used for a gasworks. The site is close to central Auckland, and the motorway passes nearby.

The architecture of its residential units suggests a modernist reinterpretation of the traditional terraced house. The narrow streets emphasise that pedestrians have priority in the neighbourhood.

DESIGN PROCESS

The 2.4 ha site is large for an inner-city site, so the development of a master plan was necessary to organise major structure elements such as pedestrian and motor vehicle connections, and the location and massing of residential buildings. An overall landscape concept was developed to better define the outdoor amenity areas.

Beaumont Quarter has been developed in three stages. The first stage of the master plan provides 12 different housing types, four new apartment buildings, fitness amenities (swimming pool and gym), commercial space, and car parking.

In May 2004, 72 houses in the central area of Stage 1 and 13 houses of Stage 2 were complete and occupied. The terraced houses on the escarpment will be completed in 2005.

URBAN DESIGN ISSUES

Because it is close to the central city and has good connections to public transport on both Beaumont and Victoria Streets, the Beaumont Quarter is designed for inhabitants who do not want to rely on their car.

Inspired by similar European projects, Beaumont Quarter has been designed with narrow streets giving priority to pedestrians and providing a dense network of pedestrian pathways and small squares.

The master plan aimed to address several principles:

- integrate and acknowledge the site's unique history in the new development
- create a distinctive place to both live and work, close to the city and Victoria Park
- provide a range of innovative housing types
- allow easy pedestrian access through and around the site.

Creating appropriate density was a priority for planners and architects. Natural light and privacy for the houses was a priority for the designers. Special attention was paid to balancing open and built space and a series of semi-public squares provide a spacious feeling to the site.

Because inner-city land is so expensive, it is rare to get the opportunity to develop such a large site. By offering houses on a leasehold basis, the developers were able to keep the prices down to levels similar to those in the suburbs.

The property is managed by a residents' society made up of the owners. The society manages the body corporates, of which there are currently six, and ultimately approximately 10.

While the buildings on the western slope of the Quarter have extraordinary views of the harbour, they are designed so that the occupants don't feel they are on public show. This concept works for the whole Quarter, creating a dense cluster of buildings that have neighbourhood qualities without sacrificing privacy.

EVALUATION - URBAN DESIGN PRINCIPLES

Context	Beaumont Quarter is a classic example of an adaptive re-use of a brownfield site. The site was a former gasworks and incorporates a number of heritage buildings. One main aim for the redevelopment of the site was the restoration of the historic buildings located along the Beaumont Street frontage and the integration of these with newer, more intensive development.
	It is a medium-density mixed use development within walking distance of public transport, the CBD, and the inner-city suburb of Ponsonby. The site was large for an inner-city site, and presented a rare opportunity to create a quality urban environment with good connections to the CBD and city fringe.
Character	The Beaumont Quarter is contemporary in its architecture, with a wide variety of house types that are all constructed using high quality materials and finishes.
	The retention of a number of mature trees and the refurbishment of some of the gasworks buildings adds a sense of heritage, character and identity to the development.
Сноісе	This mixed use development offers a great deal of choice in terms of housing types, mode of transportation and lifestyle, although these are all aimed at the high end of the market. Prices have, however, been kept to a reasonable level by the use of leasehold title.
	In addition to the residential development, the existing industrial building on the site frontage has been retained and refurbished for offices, and includes a small café. Several houses are designed for home-business with optional offices, and some units could be used for businesses only.
	Proximity to the CBD and Victoria Park offers a whole range of 'live-work-play' opportunities. Residents' facilities, including a 16 metre indoor heated swimming pool, gymnasium, sauna and spa, help to provide a sense of community. The small café provides another meeting place for residents.
Connections	The development has excellent pedestrian connections within the site, and is well connected to the CBD and Ponsonby. It is also very close to the Northern Motorway, and to bus routes.

	The public spaces within the development are open to the public during daylight hours. The development has two vehicular entrances, but because of its difficult topography the site lacks connections other than on the Beaumont frontage.
Creativity	The developer has used three different architects to design the buildings. This has resulted in a variety of house designs (12 in total). The designs include one bedroom studios, work-from-home terraced houses, and double maisonette houses, plus landscaped squares, pedestrian walkways and communal facilities. The elements are related through the use of unified landscape materials, including lighting and lime chip paths.
	The steep eastern side is occupied by the "Cliff Hanger House", a design that deals directly with the special topography to maximise of the view towards the city. The Beaumont Quarter brings to central Auckland a European design philosophy that emphasises pedestrians over vehicles. The environment retains public/private definition while providing high development densities close to the city centre.
Custodianship	In addition to preserving topographic and historic features and mature trees, the removal of contaminated soil on the property is expected to have a beneficial effect on the quality of the groundwater. The conversion of this site from a noxious industrial use to residential is beneficial to residents and the wider city.
Collaboration	The project was a result of a collaborative design approach that included a number of architectural and landscape architectural practices.

LESSONS LEARNT

The open space in the development challenges the public's perception of public open space. The open spaces are grass contained by bunds, challenging the assumption that public open space has to be a place where you can kick a ball around.

The developer and Auckland City Council received some criticism from neighbours and the press regarding the reserve contribution, partly due to the limited access to the public open spaces. The reserve contribution consists of public open space within the development and \$1 million payment to the City.

A development of this size and scale has the potential to be quite repetitive and bland, but considerable variety and interest has been achieved by having three different architects working together, to create a variety of building forms.

The challenges of the site, including steep topography, noise, and high land value, have been met creatively without compromising urban design principles.

■ □ Value Gained

The project has been a market success. Full occupancy has been reached in the office and retail units, and the prices for the residential units have gone up dramatically from initial sales - up to \$200,000 more in some instances.

Although the gasworks buildings are not scheduled in the Auckland City District Plan, the developer has placed a covenant on the buildings to ensure their retention.

The first stage of Beaumont Quarter received an architecture award from the New Zealand Institute of Architects in 2003.

COMMENTS

"Feedback from clients is usually very good. They find it a very good community to live in, with lots of lovely outdoor areas to live within. Great for children of all ages, particularly with the open spaces and the pool and gym amenities. They find the houses to be of a very good standard of finish and very good sizes, with great indoor and outdoor living spaces."

- Melview Developments.





- 1 Small gardens of the terraced houses, low-rise apartment building in background.
- 2 View along one of the smaller pathways.







Botany Downs -Manukau City

FAST FACTS

Location: Eastpark, Sacramento, Botany Town Centre, Manukau City Construction: 1998 - 2004 BOTANY TOWN CENTRE Architect: Altoon & Porter Architects, LA, USA Local consultants: Hames Sharley Bentley and Co. Owner: AMP Asset Management EASTPARK Design team: Richard Priest Architects, Sinclair Knight Mertz, and Boffa Miskell

Developer: Hopper Developments and Southside Properties

SACRAMENTO Architect: Stan Powley Architects

Developer: Taradale Properties

Case study researchers: Michelle Thompson-Fawcett and Sophie Bond, Planning Programme, University of Otago

KEY STATISTICS

BOTANY TOWN CENTRE Area: 17.6 ha Retail area: 56,500 m² EASTPARK Dwellings: 147 Gross density: 25 units/ha SACRAMENTO Dwellings: 211 Gross density: 34 units/ha

- 1 Sacramento Spanish adobe theme.
- 2 Eastpark variation within a common theme.
- 3 Botany Town Centre focus on open public space and street furniture.

Botany Downs, in Manukau City in the southeast of the Auckland metropolitan region, was identified as an intensive node in the Auckland Regional Growth Strategy. The Manukau City Council has adopted an integrated approach to planning and growth management in the area, which forms part of the intensification of the East Tamaki Corridor. Botany Downs was part of the Te U Kaipo structure plan, which established the development pattern before land was released for urban development.

Botany Downs consists of a main street style town centre surrounded by a large area of commercially zoned land and low and medium-density housing. This case study focuses on Botany Town Centre and two of the older, more established medium-density developments in the area - Sacramento and Eastpark.

Together, the three developments demonstrate how varying degrees of collaboration and strong leadership from the local authority can ensure a high quality built environment that focuses on community needs and can offer design features that create a distinctive, safe, neighbourly environment.

DESIGN PROCESS

The development of the Botany Town Centre and the intensification of the surrounding area complement other intensive nodes in the region. Botany Downs is strategically located at the intersection of two major arterial roads (Te Irirangi Drive and Ti Rakau Drive) that link central Auckland with Manukau City.

The three projects, Eastpark, Sacramento and the Botany Town Centre, were each designed under their own master plan within the ambit of the Te U Kaipo structure plan.

The Eastpark site was originally owned by Manukau City Council, who called for tenders to create an exemplar in medium-density housing. The successful tenderer worked in close collaboration with the Council, and treated the development as a long term project, meeting demand as the market dictated.

Sacramento was developed solely by the private sector. The site was bought from a previous developer by Taradale Properties and came complete with titles and cul-de-sacs. On their own initiative, the new developers doubled the density and worked out a system of lanes to enhance connections within the existing street pattern. The project was completed within three years, and was almost all sold off the plans.

Although both Eastpark and Sacramento consist of two-storey terraced dwellings, varying in size and layout, the two developments are visually quite distinct. Sacramento has a Spanish adobe theme, and has on-site managers, careful landscaping and provides its own recreation facilities. Eastpark has a contemporary New Zealand flavour, and is characterised by visual variety within a coherent overall design.

Both developments followed a fairly typical non-notified resource consent process. During that process there was a degree of on-going interaction between parties especially with regard to Eastpark. Ultimately, however, the role of the Design Code for Intensive Housing within the Manukau District Plan and each developer's commitment to urban design principles ensured the overall design was consistent with the Council's emphasis on a particular set of urban design features.

The Botany Town Centre site was bought by AMP Asset Management from the parent company of a supermarket chain. AMP was seeking a long term investment that would meet the needs of local communities.

In collaboration with the Council they embarked on a six month consultation process, using focus groups with local residents and businesses to identify the needs of local communities. While the consultative process could have been more extensive, the process revealed that the needs included a community oriented town centre, with high amenity values and community facilities that would meet the future needs of local people and allow long term financial return for the property owner.

URBAN DESIGN ISSUES

All three projects demonstrate successful urban design elements. It is not possible to determine whether this is the result of developer initiative or Council involvement either directly or through the Design Code for Intensive Housing, but it is likely to be a combination of both. The urban design issues that have been addressed in both residential developments and the Town Centre are listed below.

Sacramento and Eastpark

- Landscape design enhances amenity and provides opportunities for public social interaction.
- Good pedestrian and cycle access.
- Opportunities for a high degree of surveillance of public open space to increase security.
- Small front yards and good visual communication between dwelling and street.
- Backyards are well screened, private and secure.
- Garages at rear or set back from front door.

Botany Town Centre

- High quality long term investment.
- High quality public open space that is covered, open or partially covered to suit varying weather conditions.
- Human-scale main street with appropriate traffic calming.
- Vital, vibrant, safe public space.
- Community amenities and convenient facilities.
- Variety of cafés and speciality shops.
- Variety in size and style of retail spaces.
- Fine architectural detailing with overall coherence of built form.
- Buildings oriented to maximise natural daylight.

There is clearly a strong emphasis on urban design in all three developments. Although there is little coherence between the three developments, within each development the emphasis on urban design has provided a sense of vibrancy, safety, and a strong and well utilised public realm.

VALUATION - URBAN DESIGN PRINCIPLES

Context	Botany Downs was identified as an intensification node within the Auckland Regional Growth Strategy and was subsequently the subject of a structure planning exercise. Botany Downs is strategically located at the intersection of two major arterial roads (Te Irirangi Drive and Ti Rakau Drive) that connect central Auckland with Manukau City. As an intensification node, it established commendable development patterns that integrate land use and transport and complement the regional layout of nodes and corridors.
Character	Botany Town Centre is visually distinct, centred on a main street style development that offers a variety of retail, office space, mixed use buildings and ample public space. Public spaces are carefully designed, diverse and flexible, displaying variations according to theme, scale and degree of openness, which contributes to a secure, comfortable and legible public realm.
	Similarly, Sacramento and Eastpark both have a distinct character. Sacramento has a conspicuous 'identity' with its Southern Californian / Spanish theme, with careful landscaping, on-site facilities and management. Whether or not Sacramento's adobe theme is relevant to New Zealand's own history or the local context is open to question. Eastpark has a contemporary New Zealand feel, characterised by visual variety within a coherent overall design.
Сноісе	The Town Centre offers a variety of retail and business services. A public library is also part of the complex. In terms of future land use opportunities, the original design provides potential to extend the main street to provide further choices and flexibility in the future.
	Eastpark and Sacramento provide choice in lot and house size, and offer medium- density housing as an alternative to the conventional single dwelling on a section typical of this area before intensification.
	Choice in residential developments is limited by the district plan, which generally does not encourage mixed uses. However, home enterprises, small-scale facilities in childcare, aged care, and healthcare are permitted subject to conditions.
Connections	Connections are good between individual developments. Developers have created permeable, walkable, safe, well connected layouts in both residential areas. Streets within the developments provide opportunities for interaction and multiple uses. The developments would however benefit from better interconnections between pedestrian and cycle network.

Creativity	In both their structure planning process and the development of the Design Code for Intensive Housing, the Manukau City Council has offered creative solutions to growth issues facing the region.
	At the level of individual developments, creativity is expressed through the use of strong architectural design and flair. In particular, the Town Centre now presents an attractive vibrant space offering diverse services. Moreover, the way in which the developers of Sacramento successfully retro-fitted the existing cul-de-sac subdivision was a creative solution to enhance connectivity.
Custodianship	The three developments demonstrate careful landscaping and sympathetic public plantings which add to both the public realm and the quality of the environment. Each development is designed to enhance safety within the public realm by encouraging natural surveillance between dwellings and the street.
	Public spaces in the town centre are environmentally responsive to varying weather conditions. Similarly, aspect has strongly influenced layout so that natural light and solar radiation are used. Aspect has also been considered in the layout of the two residential developments.
Collaboration	Manukau City Council took on a co-ordinating role in developing and promoting a broad vision for the Botany area with the development of the Te U Kaipo Structure Plan. In the design of the Botany Town Centre, local community groups and stakeholders took part in a six month consultation process. Extensive collaboration ensued between the developer and Manukau City Council. Similarly, the design of Eastpark involved direct input from Manukau City Council.
	There was little community input in the design of both Eastpark and Sacramento, as both developments followed a typical non-notified resource consent process. However, in complying with the Council's Design Code for Intensive Housing, the developments support a vision for medium-density housing.

LESSONS LEARNT

The primary lesson that can be drawn from this case study is that intensification and medium-density housing can work. There are, however, several issues that detract from the developments' successes and from which lessons can be drawn.

First, while the Council should be commended for its commitment to urban design principles and zoning for medium-densities, a less tentative approach may have resulted in the development of an intensive node at Botany Downs that was more integrated and comprehensive.

Rather than an intensive node where densities decrease towards the edges of the node, the area displays an incoherent mixture of conventional and medium-density housing. Arguably this is the result in part of the role of the market and perceived market demand for conventional housing.

A second issue lies with the location of Eastpark. Both Ti Rakau and Te Irirangi Drives form a significant barrier between Eastpark and the Town Centre, affecting the walkability of the whole area. A senior planner from Manukau City Council has retrospectively questioned the appropriateness of Eastpark's location as a medium-density development, given that the *'road-dominated environment to get to the nearby Botany Town Centre is not pedestrian friendly'* (interview, 2004). Perhaps a more integrated approach between traffic planning and land use planning would have addressed this issue.

The third issue concerns the quality of building construction, particularly for Sacramento. Post-occupancy research¹ undertaken in late 2002, showed that leaky building syndrome did affect some buildings in Sacramento, although at the time the research was being undertaken this was being addressed by the body corporate.

Arguably, leaky building syndrome has generally tarnished the image of medium-density housing. For example, some residents, commented '*leaky building syndrome affects house prices*', and '*leaky building gives negative publicity even though they're not leaking*' (residents surveyed, 2002).

Overall, a more integrated, holistic approach and emphasis on quality construction are factors that could be improved upon. That said, the values achieved in this case study show just how planning can be visionary through urban design principles, council commitment and innovative developers.

VALUE GAINED

The three developments show a significant improvement in urban form compared to conventional suburban development and earlier examples of medium-density housing. The elements contributing to this success are the focus on an enhanced public realm, creating safe, user-friendly areas and environments responsive to the needs of local people and communities.

The successful sales in the two residential developments and the level of vitality in the Town Centre indicate the value in economic terms. Around 70% of Sacramento was sold off the plans (interview with developer, 2000), following a comprehensive marketing strategy.

Eastpark was a little slower, but was planned as a longer term development where construction 'plugged away as demand dictated' (interview with developer, 2000). 'Initial stages were released during a market downturn, however later stages sold very well' (interview with senior planner, MCC, 2004).

Hames Sharley Consultants, who were involved with the market research for the development of the Town Centre, indicated that the feedback from other professionals, shop owners, tenants and shoppers has been good: *'they're absolutely rapt'* (interview, 2002).

Post-occupancy research, undertaken in late 2002, reveals the social and environmental gains in the two residential developments. Residents were asked what they considered to be the positive aspects of living in the Botany Downs neighbourhood. Typical responses include its proximity to shopping centres, safety for children, design of houses, well thought out use of space, inclusion of on-site facilities, and the quiet, private, low maintenance nature of the neighbourhoods. In the same research respondents were asked to indicate how well they thought the Botany Downs neighbourhood had delivered certain features, including some related to urban design.

1 For more information on post-occupancy research contact Michelle Thompson-Fawcett, University of Otago.

The table below shows the percentage of respondents who agreed or strongly agreed that Botany Downs had provided these features.

QUALITY PROVIDED	Respondents that agreed or strongly agreed
High quality public space	80%
Safety and security	82%
High quality urban design and architecture	58%
Inviting environment in which to walk and cycle	82%
Good links with adjoining areas of Auckland	65%

Respondents were also asked to identify negative aspects of living in Botany Downs. Examples of comments most frequently stated include: crowded, lack of open space, traffic and traffic noise, lack of local parks, no privacy, and poor building quality. Poor building quality was often associated with leaky building syndrome. So while key strengths lie in quality public space, safety and security, and the inviting areas in which to walk and cycle; building construction and region-wide issues such as provision of parks and roading networks are weaknesses.

Further indications of the values gained are evident from comments made by those involved in project development and residents of Sacramento and Eastpark (see below).

COMMENTS

	Соммент
Resident - survey 2002	Initially I was apprehensive about moving to medium-density but it has been good - has worked out well. Small street, know everyone. Just enough companionship.
Resident - survey 2002	Concept is brilliant but shame about construction.
Resident - survey 2002	I like it, I'm happy here it's got a nice feel.
Hames Sharley - interview 2002	The community feedback has been great, and professional feedback in terms of what we've developed out there has been really positive as well.
Hopper Developments - interview 2000	It will be I think probably one of the best models of high-density housing in New Zealand. The quality of the housing is impeccable.
Taradale Properties - interview 2000	It's probably turned out as good, if not better than what we visualised. Pretty pleased with it.



Sacrament

200 m

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- Botany Downs intensification node in the context of the Auckland Regional Growth Strategy (adapted from RGF, 1999; and Thompson-Fawcett and Carter, 2003).
- 2 Case study location plan.







Britomart - Auckland

Fast Facts

Location: Quay Street, Auckland City

Construction: 2003

Owner: Auckland City Council

Design: Mario Madayag Architects, JASMAX Architects

Case study researcher: Shyrel Burt, Auckland City Council

KEY STATISTICS

Site area: 5.2 ha

Retail: 236 m²

- 1 Aerial view of the site.
- 2 Interior of restored Chief Post Office.
- 3 Britomart main entrance.

Britomart is major transport, heritage and urban renewal project by the Auckland City Council. The \$204 million project brings trains back into downtown Auckland City for the first time in over 70 years, and creates a public transport interchange for trains, buses and ferries. Development included the transport centre, restoration of the historic Chief Post Office, and improved streetscapes and planting.

The Britomart site occupies 5.2 ha of land and buildings in the city's downtown. The site is bounded by Britomart Place, Quay and Customs Streets and Queen Elizabeth Square. The Britomart project is the largest construction project to date for a local government in New Zealand.

This case study demonstrates the application of urban design principles and extensive public consultation. It also demonstrates the difficulties for a local government of translating a major project into reality. The case study touches on the difficulties of providing integrated transport solutions when operators, policy-makers and funders are diverse and fragmented. The controversy surrounding the project's history is also discussed.

DESIGN PROCESS

Three mayors have so far presided over the Britomart project, and it has also been subject to review by the Audit Office and the Environment Court.

In 1995 Mayor Les Mills proposed a Britomart scheme that included:

- a five story underground transport interchange
- a train station with four rail lines and the provision for light rail
- an underground bus terminal
- major high-rise development
- 2900 car parking spaces
- putting Quay St underground
- new public spaces.

This ambitious project generated strong opposition. Major concerns about the project included a lack of public consultation, the bus operators' reluctance to operate in an underground terminal, the large financial risk, and the lack of success obtaining a resource consent for the de-watering of the site.

Auckland City Council committed \$125 million to the transport centre, but developer Jihong Lu missed contractual deadlines and the project was cancelled.

A new Council was elected in October 1998 who resolved to rethink the project. The new Mayor, Christine Fletcher, promised to 'open the books' on Britomart. In 1999 there was a recommendation to proceed with a revised version of the project following public consultation.

In 1999 Auckland City Council adopted the principle that the future of the site be determined with the help of its owners, the Auckland public.

URBAN DESIGN ISSUES

Several consultation exercises were held to seek people's views on features that they would like to see in the waterfront area. Results from the consultation were used to create a set of principles that guided the Britomart development:

- a transport interchange for Auckland including bus, ferry and rail services
- a gateway to the CBD and the waterfront
- people coming and going 24 hours a day
- a safe, welcoming place for people
- exciting and vibrant public spaces
- enhancement of the downtown waterfront to open up the city to the sea
- extending the Viaduct Harbour success story.

Using these principles, Auckland City Council embarked on a two-stage design competition to make the best use of the Britomart site, and including the Chief Post Office as a major part of the development.

Mario Madayag Architect and JASMAX Architects won the design competition.

In 1997 Auckland City Council established a centre with displays and models on the floors of the old Chief Post Office. The display centre became the central point where the public could provide input to the design as well as find transport information.

Evaluation - Urban Design Principles

Character	Providing a sense of place is an essential element of the design. "The design needed to celebrate rail travel, and it also needed to capture the spirit of Auckland," says Mario Madayag (Britomart Architect).
	The city's volcanic origins and local Maori culture provided the key. A series of skylights running the length of the station represent the city's volcanic cones. Local basalt rock also features in the station, in the polished aggregate on the platforms and cladding on a water wall.
	Stainless steel mesh lines the station's walls and ceiling, and is reminiscent of Maori woven flax patterns or tukutuku.
	The external form and features of the original historic buildings are retained.
Сноісе	The fundamental purpose of the Britomart is to offer people modal choice by enabling an easy interchange between rail, road and sea (proximity to ferry terminal).
	The design of the station allows easy modification of the platform and track configuration to accommodate any mode of public transport.

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Connections	The significance of Britomart is its proximity to the CBD, downtown area and the ferry terminals. The transport station integrates and connects public transport services for the Auckland Region in one downtown location. Passengers can easily change between bus, rail and ferry transport. It also serves as the inter-city rail station. A number of inter-city buses also use the precinct as their terminal. However, changes to the original design eliminated the underground bus terminal and as a result there is less clear and effective integration of bus and rail transport.
	Internal connections are well designed and incorporate tactile dots for the visually impaired, safety help points, a public address system, and real-time train information. There is good signage to direct people both to the station platform and to the buses, ferries and visitor attractions.
Creativity	The Britomart design was advanced through a two-stage design competition. The design combines re-using existing heritage buildings (including the Chief Post Office) with strong contemporary design for the station concourse. Britomart has also restored the street connections at the lower end of Queen Street that was at one time occupied by the poorly used QEII Square.
Custodianship	Britomart has conserved the important historic buildings and features within the precinct. The Chief Post Office has been refurbished and now serves as the pedestrian entry to the station. The Britomart Above Ground project will also include the restoration for mixed uses of a number of heritage buildings within the surrounding area.
	The glass box, at the rear of the Chief Post Office and the 'volcano' skylights allow natural light to the rail platform. The station toilets and passenger facilities also operate with water and energy saving technologies.
Collaboration	The Britomart project was fraught with controversy and evolved over a period of several years. It was finally designed by two major architectural firms with strong direction from Auckland City Council.
	The design process included several rounds of consultation with transport operators, local authorities and the public before reaching consensus on the urban design approach. It was public consultation that generated the set of urban design principles that ultimately guided the development.

Lessons Learnt

As with any new project of this scale and complexity there have been teething problems. In the period between the opening of the station and the completion of the Chief Post Office restoration, public access to the station was restricted. When the Chief Post Office restoration and the landscaping were completed most concerns were alleviated.

Bus stops have been rearranged to better accommodate users and operators, in response to public feedback.

VALUE GAINED

The opening of the Britomart transport interchange has stimulated patronage on the rail network across the region. Rail patronage has risen about 30% across the region since the station opened. A June 2004 Britomart patronage survey recorded 6,864 rail passengers per day with a steady increase since the station opened. The Beach Road Station before its closure had about 3,500 passengers per day.

The Chief Post Office contains 236 m² of retail space (excluding the ticket counter, information counter and an ATM). The eight retail spaces were readily leased and are occupied by a variety of businesses including a convenience store, florist and café.

More recently, the completion of the terminal has expedited the development of a major mixed use development above it.

COMMENTS

"Britomart is more than just a railway station - it's a transport, heritage and urban renewal project all rolled into one. Bringing trains back into the city centre after more than 70 years will provide Aucklanders with greater mobility and a much needed link with bus and ferry services."

- Auckland City Councillor Greg McKeown

"While the architecture has been well executed, the jury is still out as to whether Britomart is a successful urban intervention. A good urban intervention has complexity that provides for good linkages to the balance of the city, a diversity of experiences, a range of uses and a variety of characters."

- Gerald Blunt, Urban Designer.







- 1 Surface bus interchange.
- 2 Entrance plaza.
- 3 Rail Station interior.



Chancery - Auckland

Fast Facts

Location: Chancery Street, Auckland Construction: 1999 - 2000 Owner: Chancery Ltd Design: Grant Harris, Ricky Do, Jeremy Whelan, IGNITE Ltd

Case study researcher: Grant Harris, IGNITE Ltd

KEY STATISTICS

Site area: 3,949 m² Retail area: 4,600 m² Commercial area: 4,800 m² Parking spaces: 228 Gross floor area: 18,535 m² Site coverage: Carpark = 100% Plaza Level = 80% Maximum height: Ranges from 10 m - 26 m Number of shops: 41 Office floors: 9 floors spread over

three buildings

- Site context
- 2 Glass umbrella and outdoor café space.
- 3 Entrance from Freyberg Square.

Chancery is a \$40 million mixed retail and commercial development on the edge of the 'High Street' fashion district. The site is bounded by Chancery Street, Courthouse Lane and Kitchener Street, and extends to Bankside Street.

In the late 1980s the site was targeted for re-development, and the existing buildings were demolished. Excavation work began to construct three new commercial buildings to cover the entire site. Due to financial pressures, this development did not proceed beyond the construction of the car park on the site now adjacent to "Chancery", and the excavation of the land to the east of Bacons Lane.

The entire site was purchased by Chancery Ltd, who saw the opportunity to reinvigorate this portion of the city.

This case study illustrates how urban spaces can be created that link with the existing urban fabric, maintain a scale appropriate to their surroundings, and respond to topography and geography.

DESIGN PROCESS

IGNITE designed a streetscape, which could be considered popular in its approach, in an effort to create a modern interpretation of the past. A crucial aspect was to ensure the new buildings complimented the existing High Street district, so design cues were taken from the surrounding streets and buildings to present Chancery as an extension of them.

Every effort was made to maintain connections with the area's pedestrian and traffic flow. The buildings follow the existing contour of the surrounding streets with an easy walking gradient to the central plaza, despite 47 different levels in its construction. Convenient parking was essential, and an additional two levels of parking were created directly under the new complex. Easy access is provided to the centre of the Chancery retail area, with a short stroll to High Street and Queen Street beyond.

The variation of style for each tenancy reflects the evolution of the district, providing new occupants with the opportunity to establish their own identity. Three distinct buildings create the overall harmony, with more than 40 different façade treatments and a multitude of finishes providing variety. Colours were chosen from those used in older urban districts: white, brick-red, beige and grey. Awnings and street furniture reinforce the human-scale at ground level. The stone walkway uses granite porphyry, distinguishing it from neighbouring streets and reinforcing the idea of something special.

The design for Chancery focused on providing a memorable experience for visitors. This begins with the curving streets that progressively reveal more as one moves through the complex. The environment encourages people to stay by providing trees, seating, shade umbrellas, a glazed central canopy, shelter without enclosure, orientation to the sun, and views to spaces beyond (including Albert Park and High Street). It is very much a place for people.

URBAN DESIGN ISSUES

The design brief provided by Chancery Ltd was developed after investigation of retail areas in the USA and Europe. While the project had to be commercially viable, neither budget nor maximum potential floor area drove the design.

Chancery was required to:

- connect to the retail precinct of High Street
- enhance the atmosphere of the district
- retain a connection to the adjacent historic buildings
- maintain the openness of adjacent Freyberg Place, and connections to Albert Park
- provide an urban space which would enhance the notion of place.

Commercial viability required:

- a mix of retail and commercial space
- flexibility to allow for change of use (commercial to residential)
- maximising retail frontages
- individual identities for retailers at street level
- commercial space that allowed for a wide range of possible tenants, from larger corporate business to boutique professional offices
- clear-span spaces with services efficiently located
- minimal depth in office spaces to maximise natural lighting and outlook.

EVALUATION - URBAN DESIGN PRINCIPLES

Context	The Chancery site had lain vacant for over a decade. The site is a prime location off High Street within an existing mixed use district on the edge of the CBD retail area. An important factor in developing Chancery was its connection to the High Street fashion district. Adding a diverse range of fashion retailers to Chancery's street and plaza area strengthens and effectively extends this retail node and brings the High Street district into the Chancery site.
Character	Entries into Chancery are defined by strong architectural elements as well as by the secure entry gates. The domes and turrets are recognised as symbols of Chancery and provide a strong link to the adjoining historic buildings. The central café under the glass umbrella is a focal point for gathering and meeting, and is also clearly identified with Chancery.
	The axis of the Chancery path is carefully orientated towards Freyberg Place and Albert Park to connect with the existing plaza and park pedestrian network. The openness of Freyberg Square and the height of the surrounding buildings, in particular Chancery Chambers and the Pioneer Woman's Memorial Hall, determined the scale of the new Chancery buildings. Low-rise, medium-density buildings establish a connection with the historic buildings of the area, and the mix of activities complements others in the district. As a result, Chancery is seamlessly integrated into the CBD.
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Сноісе	The open floor areas subdivided by lightweight fire-rated walls permit a diverse range of floor area mixes and uses on retail levels, including cafés, restaurants, fashion boutiques, and gift shops. The commercial floors above can also be used as residential or hotel accommodation.
	Because each tenancy has its own façade there is great diversity, but the opportunity remains to create consistency without enforcing a uniform identity.
Connections	Chancery is on the eastern side of the CBD and has good regional and local connections to the road network, Albert Park and other pedestrian areas. There is an existing network of pedestrian and vehicle spaces through the CBD but cars tend to dominate and pedestrians are forced to make do in an inhospitable and often dangerous environment. Chancery, however, offers a pedestrian street, like Vulcan Lane, where the pace of movement is walking speed and pedestrians dominate. Chancery creates an alternative way to move between High Street and Albert Park , avoiding the traffic, and simultaneously improves the connectivity and permeability of the area.
Creativity	The previous development proposed for the site that created high-rise office towers to maximise floor area was rejected in favour of a human-scale development, a mix of uses, and interesting architecture. Chancery illustrates the creation of a pedestrian street as an alternative to an enclosed shopping mall.
Custodianship	The Chancery development enhances the built environment by seamlessly integrating with the existing patterns. The addition of planters, trees and outdoor seats enhances the area. By restricting the height of the building along Chancery Street on the north of the plaza to two levels, sunlight fills the square throughout the year, particularly during the lunch time, when it is heavily used and enjoyed by workers and residents.
Collaboration	The design process was a close collaboration between Chancery Ltd and the design team at IGNITE. The project was fuelled by a desire to regenerate the High Street - Chancery Street - Albert Park axis.

Lessons Learnt

Chancery shows that it is possible to create a development that is financially viable without using maximum floor area as the driver.

Timing is all important. For the project to be successful the client, architect, consultants and contractors must work closely to meet deadlines and budgets. In this case, the deadline was dictated by the Christmas shopping period. However, before budgets can be established the design and scope of work needs to be clearly defined. To do this effectively, the complete design team needs to be assembled as early as possible in the process.

Establishing a common understanding of quality for a project can be difficult, but it is essential to do this early on as quality affects time and budget. All participants need to understand this and work within clearly-defined parameters.

Overall harmony can be created despite diversity of styles if this is anticipated and neighbouring tenants' choices are considered.

Although the retail area is principally fashion, for this to be successful an anchor tenant related to food is essential.

This project has been financially successful for the developer, but the rent for tenants may have been set too high, leading to a high tenant turnover and some vacancies.

VALUE GAINED

In 2002 Chancery won the Supreme Award, from the Property Council of NZ, which recognises excellence in property investment and development. Judging criteria are weighted towards user satisfaction, but architecture and efficiency are also considered.

Chancery has become a destination in its own right, due to the quality and strength of the development and the presence of draw-card tenants. It is seen as an extension of the boutique High Street retail precinct, and this has contributed to the revitalisation of this part of the CBD.

In 2002, the developers had sold 18 shops with a yield of around 8.5%. Since this time the occupancy levels have remained high, and all areas, especially the plaza, continue to be well patronised.

These figures demonstrate the value good design added to the project:

Project construction cost - \$23,500,000

Total development cost - \$40,300,000

Value upon completion - \$54,000,000.

In 2002 Chancery received a Certificate of Merit from the International Council of Shopping Centers (New York) for its *"innovative design and construction."*

"Chancery was a clever development that created a new heart in the city and had achieved greater than expected returns for its developers."

- Graham Horsley, Chief Judge, Property Council Awards, (NZ Herald, April 2002).

"Chancery is the best answer yet to the dominance of the suburban mall. It has a certain charm, it acknowledges human-scale and is perhaps the best apology so far for the disappearance of the legendary Melba."

- Douglas Lloyd-Jenkins, (NZ Herald, April 2002).

"This development, by virtue of its thematic qualities, accessible imagery and human-scale, is likely to be appreciated by the general public."

- Errol Haarhoff, Professor of Architecture, University of Auckland.



Character Appraisal in Inner-city Wellington

FAST FACTS

Location: Mount Cook, Newtown, Berhampore, Wellington

Study undertaken: March 1999

Prepared for: Wellington City Council

Case study researchers: Graeme McIndoe, Architect and Urban Designer and Deyana Popova, Urban Perspectives Ltd

Images from top to bottom

- 1 Study area.
- 2 Streetscape analysis summary diagram identifying groups of buildings and neighbourhoods of significance.

This case study, unlike the others in this series, does not analyse a development project. Instead it illustrates the application of character analysis techniques to establish urban neighbourhoods.

The study was initiated to assess the form and character of Wellington's southern inner-city residential areas. The study area covers three distinctive and long established neighbourhoods that contain about 5,000 dwellings spread over 170 ha. The results of the study were used to inform recommendations for characterrelated development provisions.

The identity of towns and cities is often associated with older neighbourhoods that have retained a high degree of authenticity of form and character.

Local authorities need to be able to identify that character and assess its significance to determine if and when to apply character management techniques and what those techniques might be.

This case study demonstrates a methodology for character appraisal. It highlights useful research techniques to assist an objective and effective character evaluation. It also illustrates ways of measuring the value and relative significance of existing residential areas, and/or any of their elements. This can assist recommendations on appropriate types of development controls.

DESIGN PROCESS

Research methodology

The character appraisal identifies typical development patterns relating to building age, type, and scale, building height, site coverage, lot size, frontage setbacks, and side yards. It also identifies the location of new development within the study area.

The character appraisal summarises the results of a systematic urban design evaluation of the study area. Evaluation is based on a combination of the following three research techniques:

1 Streetscape analysis

This is an expert field analysis of the study area to identify important visual characteristics of the street and the buildings at its edges, and to verify the location of multi-unit development. Streetscape analysis involved viewing all streets and every building on each street to give a character overview of the area as a whole, as well as of the specific features and patterns of its various parts. A checklist was developed and used to assist completeness and consistency in recording key characteristics. Photographs were taken to record the defining patterns of each of the hundred or so streets in the study area, but not to record the street as a whole.

2 Use of the Valuation NZ database

Patterns of building height and age were determined by linking property records from the Wellington City Council's LANDS system to address points in the GIS. Site coverage was determined by intersection of building polygons and Digital Cadastral Database (DCDB) parcel polygons. A series of maps, all to a single scale, were produced to show the distribution of buildings with certain consistent characteristics. Maps produced related to:

- building age ('Age Profile')
 - building site coverage
 - building height
 - location of multi-unit development.

3 Measurement

A range of typical lot sizes, frontage setbacks and separation distances within selected blocks were measured from 1:500 scale cadastral maps and aerial photographs. Results were tabulated to indicate typical patterns. Figure-ground plans were electronically produced from GIS sources to graphically illustrate typical patterns of building size, intensity of development and the urban grain in the selected blocks.

4 'Character Significance' criteria

A crucial aspect of the study was to develop criteria to assess the character significance of the study area and elements within it, to recommend appropriate levels of development control.

The assessment criteria were used to determine:

- the importance of the study area to the character of the city as a whole
- any elements within the study area (precincts or groups of houses) of special character or amenity value
- the relative significance of the identified elements.

The criteria included:

Primary criteria (in descending order of importance):

- (i) rarity of type, design or configuration
- (ii) visual prominence
- (iii) ability to demonstrate historical or otherwise valued development pattern.

Secondary criteria

- intactness of original building fabric
- visual unity or consistency
- aesthetic coherence
- expression of identity or contribution to 'sense of place'.

The combination of field study, mapping and measurement had identified important components. These were assessed against the significance criteria and rated using a three-level scale of significance:

- 1 exceptional significance
- 2 considerable significance
- 3 some significance.

Each level of significance was correlated to an appropriate control or management regime.

Lessons Learnt

Use of existing city-wide databases is a highly efficient and effective means of determining city-wide patterns, without the need to undertake site analysis and measurement of every dwelling.

The Valuation NZ database allowed neighbourhood-wide patterns of age, site coverage and height for every building in the study area to be determined and mapped electronically.

A characteristic of this technique is that its accuracy is limited by the accuracy of the database used. Feedback from the community following the study indicated that a small number of dwellings were older than the age indicated in the 'Age Profile'. A detailed check on these dwellings confirmed the inaccuracy of the database. However, the identified errors constituted a very low percentage of the total number of dwellings investigated (around 10 out of 5,000 dwellings).

A research approach investigating and measuring every dwelling in a study area will provide accuracy of detail. However, for large study areas, this is neither practicable nor necessary as the database information was sufficiently accurate to show the general patterns necessary to guide character control recommendations. In addition, the electronic mapping was complemented by other investigations that provided a check on database inaccuracy. While the accuracy of the base data was not absolute, it was sufficiently accurate to identify important character patterns with confidence.

Electronic data processing was also able to generate histograms to show the range and distribution of coverage and building height, without the need for a manual count of these attributes. Aerial photographs and GIS data can be readily measured to indicate general patterns of development in an area. This data is readily accessible and allows quantitative analysis. A sample of typical blocks was measured. For robust results it is important to carefully select a sample of blocks that best represent the common and underlying patterns.

Multi-tool character assessment gives certainty. A combination of mapping, field study and measurement from aerial photographs overlaid with cadastral maps allowed cross-checking of analysis. Quantitative and 'objective' data was used to both inform and verify findings of the qualitative expert field study.

Graphic presentation highlights patterns of character. Graphic presentation of information and analysis was useful in making intangible aspects of character visible. Various maps including those for site coverage, building height, age profile and accompanying summary histograms were highly effective. Figure-ground drawings are readily produced and effective in indicating patterns of building footprint size, distribution and urban grain. They provided tangible evidence to support analysis and assisted agreement on defining character. This graphic evidence was relatively inarguable. Community acceptance of the evidence allowed well informed discussion in the consultation and focus on the need for character control and the means by which it could be achieved.

Comparative age profile histograms were highly effective in allowing the character of the study area to be compared with other areas in the city. A close correlation between building age, style and character was observed.

Character significance criteria are essential to appropriate management within existing residential areas. They:

- assist an objective interpretation of character analysis findings
- support their translation into appropriate provisions for managing on-going changes.

Comprehensive character appraisal can effectively inform character control provisions and improve community understanding of local character and identity.

The Mt Cook, Newtown, Berhampore Urban Design Evaluation is one of a series of similar studies undertaken by Wellington City Council for the wider Wellington inner-residential areas.

VALUE GAINED

The recommendations of this study, while reviewed and discussed with the community, have not yet been adopted. However, studies completed before this one, as well as one undertaken within the same period, have been used to inform character control provisions including changes to district plan rules and design guidelines for multi-unit and/or high-density development.

Three separate sets of design guidelines have been implemented in the Wellington District Plan following a character evaluation similar to that described in this case study. These are for multi-unit developments in Mt Victoria, Thorndon and Aro Valley. Another set of guidelines for high-density development in the Oriental Bay Height Area is currently subject to a plan change.

These have been successfully operating for several years now. Systematic monitoring of results on the ground shows that character-related provisions, when based on a comprehensive analysis, can protect important character patterns while allowing an appropriate level of change. At the same time, feedback from residents and developers suggests that identifying, describing and promoting the character of local residential areas with character evaluation and design guides can improve public understanding and appreciation of this character.





Images from top to bottom

- 1 Part of an 'age profile' map which locates buildings built within a defined decade.
- 2 Electronically produced map of site coverage.









Christchurch Bus Exchange

FAST FACTS

Location: Cnr Colombo and Lichfield Streets, Christchurch

Construction: 2000

- Owner: Christchurch City Council
- Developer: The Carter Group

Design: The Buchan Group, Christchurch City Council

Contractor: Mainzeal

Case study researchers: Josie Schroder and Paul Roberts, Christchurch City Council

Key Statistics

Site area: 3,000 m² approx Floor area: 9,500 m² Building height: 15 m (with variations) Cost: Total development: \$20 million (Bus Exchange \$10 million) Users: Approximately 8.6 million bus passengers/year. 1,850 buses/day (1,050 off-street)

Images from top to bottom

- 1 Christchurch Bus Exchange location.
- 2 Location of the Exchange within the block.
- 3 Colombo Street on-street bus stops.
- 4 Lichfield Street pedestrian environment.

The Bus Exchange is an off-street, purpose-built public transport facility located close to the core of Christchurch's central business district. The Council wanted a first class facility that would assist inner-city revitalisation and promote public transport as an attractive option.

Rather than building a huge central city terminal where buses would park and passengers would wait, the buses briefly stop to set down and collect passengers and then continue moving. Such an interchange requires fewer stops than a bus terminus or station.

The Exchange operates in two parts, on-street and off-street. In all, there are eight pedestrian entry and exit points to the Exchange from surrounding streets, adjacent stores and the car park.

DESIGN PROCESS

When a substantial portion of a central city block was being redesigned for a retail development, Christchurch City Council and Environment Canterbury saw an opportunity to work in partnership with the developer, the Carter Group to create a Bus Exchange.

The design process was relatively rapid as the retail spaces were already under construction when the site became available for the Exchange.

However, consultation with a wide range of external stakeholders and advocacy groups had already begun as the Council had already decided to remove buses from Cathedral Square.

The internal stakeholder group included, the construction company, Mainzeal; architects the Buchan Group and Carter Group; and City and Regional Council officers. This group held a series of mini-charettes to conceptualise how the Exchange might work within the parameters of the project.

Wider public consultation took the form of information dissemination rather than discussion, principally because of the very short time available for design.

URBAN DESIGN ISSUES

The aims of the project centred on inserting the new infrastructure into the existing block, building structure and street pattern, so it would work well and would:

- keep within the footprint and scale of the existing structure
- connect well to the surrounding streets, with the emphasis on the existing pedestrian connection to Colombo Street
- retain the heritage facades and ensure the remainder of the façade related well to the scale, detail and form of the historic grand warehouse facades on the southern side of Lichfield Street
- tie the modern interior to the historic exterior.

The Exchange was deliberately designed to invoke the feel of the quality of an airport lounge to:

- improve the quality and image of public transport
- provide a safe, secure, sheltered comfortable place from which to catch a bus
- separate buses and pedestrian traffic
- provide ample visual and audible information to minimise uncertainty and waiting time for passengers.

EVALUATION - U	RBAN DESIGN PRINCIPLES
Context	The Bus Exchange is close to the heart of Christchurch. It is part of a mixed use block containing a school, food court and retail facilities. As well as providing transport, the design of the Exchange aimed at helping revitalise the central city by building on existing retail, services and facilities, supporting the consolidation of the central city and increasing its attractiveness as a destination, while providing access to a sustainable form of transport. The multiple objectives have been achieved.
	The Bus Exchange has proved very popular. It provides a comfortable transition and waiting space, and bus patronage has increased substantially since it opened. In fact, its popularity has become an issue with unprecedented increases in patronage. Future expansion of the Exchange will be required and it is difficult to see how this will be accomplished within the constraints of the present site. The Council is now looking at options to expand capacity onto an adjacent site, as the existing site will reach passenger carrying capacity by about 2008.
Character	The Exchange has illustrated how a substantial new use can be successfully incorporated into an existing block pattern. The block is of such a size that it is adaptable to a wide range of uses.
	The heritage façades on Lichfield Street have been sensitively incorporated into the development of the exchange, providing a street facade that reflects the scale, detail and form of the buildings to the south and east of the site and creating a strong sense of identity. The ground floor frontage onto Lichfield Street is fully glazed and provides good visual interaction between the waiting areas and the street.
	The Colombo Street connection to the Exchange is not as successful. Its presence is less evident on the street, and apart from limited signage the primary indications of the location of the Exchange are the bus shelters that line the pavement.
Сноісе	The mix of smaller retail outlets and larger department stores, the food court and various other activities wrapped around the Exchange are compatible and generate plenty of activity during the day. When the retailers close, however, there are few night time activities in the immediate area.

	The Exchange incorporates car parks and cycle cages. In recognition of the role of the Bus Exchange, the number of car parks was reduced to 200 from the original 300-400 proposed, to serve the needs of the property owner. The car park has proved very popular because of its central location, access to the one-way system, and one hour free parking during shopping hours.	
	The cycle cages are visible to a limited degree inside the Exchange, but their access is tucked down an alleyway with very poor passive surveillance, particularly at night when the alley is not well used.	
Connections	Developed in an existing city block, the Exchange has two street frontages and privately managed pedestrian links to City Mall and to the food court. The least successful connection is with the food court, where steps restrict access for some users, although there is a lift adjacent to the stairs.	
	The Lichfield Street entrances have been far more popular than originally anticipated, increasing the amount of pedestrian traffic to the east towards the various education facilities. Initially it was not anticipated that the Lichfield Street pedestrian entrances would be so well used, and they were intended as secondary entrances to those on Colombo Street, to the food court and north to City Mall.	
	This has exacerbated the problem of the co-location of the Exchange and car parking, both of which have wide access and egress points, giving pedestrians conflicting visual clues. The number of vehicles entering and exiting interrupt pedestrian movement through the block. Changes in the paving treatment denote vehicle access and egress, giving the impression that vehicles have right of way, and poor driver behaviour reinforces this impression.	
Creativity	The Bus Exchange met the Council's objective of providing a major public transport facility within an existing block and building structure on multiple levels, rather than at street level. A creative solution to working within an existing city block was found through a collaborative partnership between the Council and developers.	
Custodianship	The creation of the Exchange reflects Christchurch's intention to promote more sustainable forms of transport. Bus patronage has increased as a result of a high quality facility offering a safe, comfortable and accessible environment. Within the Exchange, the cycle cages are visible, to a limited degree. However, their access is tucked down an alleyway with very poor passive surveillance, particularly at night when the alley is not well used.	
	Two unanticipated benefits of the location of the Exchange are passive surveillance in less busy streets at a distance from the Exchange where drivers sit in their buses during layovers; and greater coverage of the city resulting from	

	changes in bus routes. However, concerns have been raised about visual pollution associated with buses and bus stops in some residential areas. This is being addressed by reassessing through-routes as contracts come up for renewal.
Collaboration	A wide range of stakeholders and advocacy groups had already been consulted as a result of the Council's decision to remove buses from Cathedral Square.
	For this project an internal group of stakeholders, including Mainzeal, the Buchan Group, Carter Group and City and Regional Council officers , held a series of mini- charettes to conceptualise how the Exchange could work, and they disseminated project information to keep the public updated on progress.

LESSONS LEARNT

The project demonstrates the need to make the most of opportunities as they arise, and to be flexible about desired outcomes so they can be adapted relatively easily where improvements are required. The Exchange has almost become a victim of its own success and is expected to reach passenger carrying capacity in 2008.

Colombo Street is an important pedestrian route and vehicular route. At peak time the number of buses increases noise and pollution levels to a degree where Colombo Street becomes a very unpleasant pedestrian environment. At these times there is also a high degree of congestion and conflict between pedestrians and people waiting to catch buses on Colombo Street.

Cyclists also have difficulties in negotiating Lichfield Street as a result of the number of access and egress points and as a result of the poor visibility when buses are waiting to enter the facility. Particularly during rush hour, there is conflict between buses and cars pulling out of the Exchange, and cars using the adjacent carpark.

Street furniture, signs and other paraphernalia related to the bus system exacerbates of these problems. A better design or greater footpath width is needed on Colombo Street for waiting passengers. Since the purpose of the Exchange is to provide transport to pedestrians, the pedestrian environment needs greater emphasis both inside and outside the Exchange. Any system for pedestrians should be intuitive and provide clear visual clues if it is to work successfully and not produce avoidable conflict. From the start of the project development, there was difficulty in designing a bus routing system that would work within the existing one-way system. A contra-flow lane was the result for northbound buses, and this system is confusing, particularly for pedestrians.

The project highlights how difficult it is to satisfy all urban design and traffic management objectives in densely developed locations.

■ □ Value Gained

Bus patronage figures have risen and the Exchange is now working at its capacity for the number of buses using the facility. The location of the Exchange close to the centre of Christchurch has been integral to the success of the Exchange.

Christchurch residents identify well with the Bus Exchange and appear to value the benefits that it has provided, citing the level of comfort, provision of information and sense of security within the waiting areas.

The south-central area of the city has become more active and vibrant during the day, and its building heritage has been retained.

The Association of Blind Citizens of New Zealand awarded the Christchurch City Council the Extra Touch Award for its consultative approach and for ensuring the accessibility of the Exchange for the blind and visually impaired.

COMMENTS

"This complex moves public transport onto the centre stage, both for the inner-city area and for all of Christchurch."

- Mayor of Christchurch, Garry Moore.

"Encouraging public transport is important to the city. More and more people every year are deciding to take the bus and you can see that with the numbers passing through the Exchange every day... look at how the average person views it - and that it's a safe and convenient place to use."

- Yvonne Palmer, Safer Christchurch.

"It might be nice inside but outside the Exchange waiting on Colombo Street is unpleasant. You get shoved around on the footpath and the noise and fumes are horrible."

- Pam, a bus user.







Harbour View -Waitakere City

FAST FACTS

Location: Te Atatu Peninsula, Waitakere City, Auckland Construction: 1996 - present Owner: Waitakere City Council Design: Waitakere Properties Ltd, Hopper Developments Ltd and Kingston Morrison Ltd Case study researchers: Andrea E. Nelson,

University of Auckland and Phil Rhodes, Hopper Developments Ltd

KEY STATISTICS

Total area: 41.5 ha Dwellings: 370 residential units Net density: 1 unit/ 648 m² Average lot size: 450 m² Range of lot size: 150 - 3,392 m² Type of dwellings: Medium-density attached, single-level attached, small and large single sections

Images from top to bottom

- 1 Location map.
- 2 Development plan.
- 3 Medium-density residential.

Harbour View is on the Te Atatu Peninsula in Waitakere City, 8 kilometres west of Auckland's central city. The Te Atatu Peninsula stretches into the Waitemata Harbour and is surrounded by coastal wetlands and mudflats.

Waitakere City Council owned land on the underdeveloped Te Atatu Peninsula that had formerly been used as a theme park and as pastureland. The site adjoins Te Atatu Town Centre and a number of conventional suburban developments that make up the Te Atatu community.

The Council created Waitakere Properties Ltd to carry out strategic development that the private market was not prepared to do at the time. Its mandate for this site was to create a sustainable community including adoption of urban design principles.

Harbour View was developed as a demonstration project to guide and encourage private development in the region. At the time Harbour View was developed, this development concept was risky but Harbour View has subsequently proven to be highly successful.

DESIGN PROCESS

Waitakere City Council's Strategic Development Department acted as the key stakeholder with Waitakere Properties Ltd. In the mid-1990s, the Strategic Development Department invited prominent new urbanism designers from Australia to provide urban design advice to the Council. The Council emphasised the importance of achieving adaptability and connectivity in the urban form and were looking for new opportunities to implement the eco-city framework outlined in its Greenprint strategy.

In 1994 the Council hired an architect and urban designer to redesign Harbour View. Waitakere Properties Ltd and Hopper Developments Ltd then developed Harbour View as joint venture partners.

From the beginning, the design team embraced the principles of sustainable development. The joint venture partners and Council sought to balance the need for an economically viable development with the design principles. Waitakere City Council used a variety of techniques including district plan controls, design guidelines, pre-consent negotiations and demonstration projects to help reconcile these goals.

Waitakere Properties Ltd undertook extensive consultation with the Te Atatu community, as well as stakeholders within Council such as the Strategic Development team, Parks and Recreation Department, and EcoWater.

In the initial stage of development and design, the design team boldly decided to establish high quality parks before they developed the surrounding environment. Landscape development and artwork was budgeted at \$50,000 per lot and \$600,000 for the public green spaces, proportionally a very large amount for a development.

All section owners are required to comply with design covenants that are aimed at maintaining consistency in the area's colour scheme and guiding any future additions to properties. A Homeowner's Association is intended to ensure standards are upheld in the future.

The development assumed that changes will occur in lifestyles and demographics, and was designed to provide flexibility.

URBAN DESIGN ISSUES

In line with the principles of sustainable development, the following principles are integral to the design of Harbour View:

- use an ecologically responsive approach by using resources efficiently
- establish a sense of community within the new development and promote strong links with the existing community
- create a socially equitable environment
- contribute to the regeneration of Te Atatu's town centre and commercial area
- balance pedestrian safety, environmental quality, and convenience for motorists
- promote safety, security and privacy
- respect heritage attributes
- offer a wide range of housing choice and diversity to attract a demographically mixed population
- support an energy conscious approach
- increase residential density near the town centre
- create extensive reserves and open space linkages beyond the development.

EVALUATION - URBAN DESIGN PRINCIPLES

Context	The site borders the town centre and existing suburban residential development and was prime greenfields development land. Harbour View's mixed use and commercial space, in combination with the nearby Te Atatu town centre, provides a diversity of retail and commercial opportunities. Most Harbour View residents can walk to shops supplying basic needs. However, the suburban nature of this part of west Auckland means that the residential development is not well connected to employment areas, so residents are required to travel some distance to work.
CHARACTER	Harbour View uses its natural environment to create a unique identity. The adjacent wetland conservation area, and the architectural and design details underscore its affinity with the coast. Art, sculpture, and native landscaping work together to generate a special sense of place within the development. Harbour View is compact, with medium and high-density housing grouped in clusters. Many residential units front onto the central public spaces. A wetland conservation area borders the development on the harbour edge.
Сноісе	The diversity and choice of housing and its equitable distribution across the development is one of Harbour View's greatest assets. The mixture of housing

	density and types, as well as lot sizes and number of bedrooms encourages a mix of residents with different lifestyles and in different life stages, although most properties are of relatively high value. Harbour View includes a diverse mix of land uses and compatible activities including public open space, conservation areas, heritage sites, and amenities for residents and commercial centres.
	The highly connected street network supports a variety of activities and land uses that may change over time.
Connections	The street network and pedestrian pathways provide a permeable and well connected local movement system. Small street blocks, fine-grain development, and the availability of public space in the neighbourhood creates a pedestrian friendly environment and gives the residents a sense of security. Local trip distances are short and residents are encouraged to walk to the neighbourhood's shops and amenities. Reserves are within 3-5 minutes walk from each house. The paths and conservation area was designed for use by the neighbouring community.
	A landscaped vegetation barrier borders the surrounding region. The development is well connected to the surrounding region by streets that connect to adjoining roads and to public transportation along the adjoining arterial road, Te Atatu Road, that connects to the North-Western motorway (SH2O).
Creativity	Harbour View was an experimental, design-led subdivision that had clear objectives for the preservation and enhancement of the natural environment, including a major wetland conservation area. The Council in collaboration with a developer successfully used its land ownership to demonstrate its vision.
Custodianship	The preservation of the coastal wetland and the attention to the existing topography was essential to Harbour View's development. The wetland and topography play a vital role in the stormwater management strategy, which involves the use of permeable surfaces, green corridors, swales, and the wetland conservation area.
	Residential units are positioned to take full advantage of harbour and reserve views, and sunlight.
	Harbour View promotes energy conservation through the design of 'smart houses'.
Collaboration	Waitakere City Council took the lead on this project and engaged architects and urban designers to develop clear design principles, and created a company, Waitakere Properties Ltd, to carry out the development. In designing and delivering this project, Waitakere Properties Ltd undertook extensive consultation with the Te Atatu community, as well as with stakeholders within the Council.

Lessons Learnt

Waitakere City Council's lead in developing Harbour View meant the project was driven by a clear set of ideals that created a profitable, attractive and distinctive place.

The project invested heavily in creating the landscape setting, including planting mature trees and establishing reserves in the early stages of the development, which immediately attracted people and helped develop a sense of community from the beginning.

It proved difficult to require people to carry out sustainable principles through all aspects of construction due to significant differences in cost and a lack of knowledge. At the time, the market was not prepared to absorb the cost of sustainable approaches.

Design covenants might have been more effective if they had been more stringent and comprehensive and included elements such as building materials.

VALUE GAINED

Economic and financial values

- Properties in Harbour View sold faster and were of higher value than those in adjoining Waimanu Bay, a conventional development built and marketed at the same time.
- Land sales by value Harbour View: \$37,058,510; Waimanu Bay: \$17,297,500
- Section sales by value Harbour View: \$27,306,110; Waimanu Bay: \$17,297,500
- Speed of sales at first, sales in Harbour View reflected New Zealand's overall housing market, but
 accelerated as time passed. In contrast Waimanu Bay is home to a more limited demographic population,
 and is struggling financially.

Social and cultural statistics

- Single women, pre-retirement families, and mature couples purchased property in Harbour View.
- Many residents were prepared to trade down in size but up in price to live in Harbour View.

Quality of place

- Large proportion of houses overlook reserves and open space.
- Variety and quality of architecture.
- Heavily planted in reserves and along streets.
- Overall, an aesthetically appealing development.

Harbour View is "an experimental 'new urbanist' subdivision in Te Atatu [and] ... the first of its kind in New Zealand," notes Stephen Knight, an Auckland environmental journalist.

Harbour View has a philosophy "for ensuring quality through good design and a recognition that people make communities," writes Rachel Hargreaves from BRANZ.

Bob Harvey, Mayor of Waitakere City Council, states that developments like Harbour View are "the face of the future".

Forest and Bird celebrates the wetland conservation area, which acts as a "sanctuary for some of the less common wetland species lost from other areas".









Images from top to bottom

1-4 Views of Harbour View showing residential and open space areas.









Lancewood Courts -Christchurch

FAST FACTS

Location: Percival Street, Beckenham, Christchurch Completed: 2000 CLIENT: Beckenham Community Housing Trust and Christchurch City Council Design: Common Ground Urban Design & Architecture Communications: Sustainable Cities Trust Engineers: City Design, Christchurch Construction: Armitage Williams

Case study researcher: Mark Tollemache

KEY STATISTICS

Site: 1,865 m². Living 2 Zone Christchurch City Council District Plan

Dwellings: 11 one bedroom units of approximately 50 m² each

Density: One unit per 169 m² of the site

Budget: \$1.4 million including GST, landscaping and consultant fees

Images from top to bottom

- 1 Entrance to Lancewood Courts.
- 2 Common open space.
- 3 Plan view.
- 4 Public/private interface.
- 5 Designed for walking.

Lancewood Courts is a community partnership between the Beckenham Community Housing Trust and Christchurch City Council to cater for the needs of some marginalised people in the community. It houses people with a mix of disabilities, both emotional and physical, in individual single-person units supported by a part-time supervisor.

The vision for the housing complex was clear: "providing a healing environment through architecture, design, landscaping, and a sense of community".

The project represents a revolution in the provision of social housing. Dubbed "palaces for the poor" by the local media, the design provides high quality housing at the same cost as the Council's conventional concreteblock pensioner flats.

DESIGN PROCESS

The Trust undertook an assessment of housing needs and the assessment identified a lack of affordable purpose-built housing available for those with emotional and physical disabilities. The Trust decided to establish an affordable housing complex on two vacant sites at the rear of the Baptist Church land in Beckenham.

Responding to a brief set by the Trust, Common Ground organised a series of community design charettes to integrate social concerns with urban design and environmental imperatives. The first charette was held in July 1998 with an open invitation to members of the parish, community, Council, welfare organisations and local elected representatives.

The outcome of the charettes was a scheme for 11 one-bedroom units, constructed in two buildings with a total footprint of 387 m^2 (about 21% of the site).

Each 50 m² unit is self-contained with a bedroom, kitchen, bathroom and living room. Each ground floor unit is provided with private outdoor living courtyard, upper floor units with a 7 m² deck and a 7 m² landing.

A common open space of 619 m² at the rear of the site faces north and provides privacy for the residents. Decks, kitchens, indoor and outdoor living areas are oriented to the north. Units with street frontage have bay windows off the living rooms to provide additional surveillance.

URBAN DESIGN ISSUES

The goals of the project were to:

- avoid the stigma associated with social housing as low quality, lacking amenities, and isolated from the community
- ensure an open consultation process with stakeholders, particularly the surrounding community
- establish a Trust to champion the project and to support and care for the residents
- provide affordable, purpose-built housing for those with emotional and physical disabilities. Units had to
 be disabled-friendly and built for a wheelchair bound person. Residents are low income, single, generally
 with no access to a car and therefore reliant on public transport

- integrate the design with the local community and street. The units shouldn't be identified as 'social' housing and should have the same or better characteristics as the surrounding housing stock
 - respond to ecological imperatives

- provide residents with safety, security and privacy without isolating them from their community.
 Open space is to be maximised for the enjoyment of residents
- design the units so they have low operating costs for residents.

Evaluation - Urban Design Principles	
Context	The site is in the heart of the Beckenham community in Christchurch, one street from the arterial route of Colombo Street. The development provides higher density housing that helps support the vitality of the main street retailers and services, and the frequency and service of public transport.
Character	The architecture was informed by the local building style, a nearby Art Deco Church and arts and crafts bungalows. The new buildings are modern in style but acknowledge the character of the adjacent buildings by using deep overhangs that provide shade in summer and weather protection for courtyards and decks in winter. Verandas and bay windows add relief to the façades and provide surveillance of the street from the living rooms. The large buildings are kept to domestic scale by the use of varied roof forms, materials such as locally sourced Darfield brick, plaster relief and locally designed artworks.
	The buildings are arranged in a U-shape that creates a front towards Percival Street, overlooking the access lane to the north that leads to the courtyard. This forms a sunny, enclosed court and garden. Parking is at the rear of the site. Limiting access to one vehicle crossing into the site maintains the street edge, and avoids the dominating visual impact of multiple driveways and garages.
	Public and private space is clearly defined by the buildings and entry gate that ensures the residents' privacy, while maintaining a strong relationship between the units and the street. Of the total open space, 40% is private and 60% is shared. The shared open space facilitates socialising to encourage mutual support. The oversized stair access becomes a shared meeting space, and the letterbox is a deliberately accented meeting spot, not just an afterthought.
Сноісе	While the nature of the development provides a single housing type, the project increases the diversity of housing options within the wider community. It provides purpose-built, affordable housing that meets the needs of those with disabilities. The quality of the design, well above the usual social housing standard, ensures the housing remains adaptable and able to respond to the need of a wide range of potential tenants.
	Open spaces encourage flexible use for recreation, gardening and conversation.

58

Connections	Both physically and socially there are good connections to the local area. The site is integrated into the local community through the Church, the proximity to local retail and services and public transport (approx. 200 m).
Creativity	This scheme shows how high quality, well-designed public housing can be created at a cost similar to standard developments. This development is the result of a collaborative effort between the Beckenham Community Housing Trust, Christchurch City Council and the local community and successfully integrates social and urban design issues into an innovative housing development.
Custodianship	A small building footprint allowed large areas of private and communal open space to be made available for the residents, resulting in 56% of the site remaining in permeable surfaces. Parking bays are formed in a semi-pervious grass cell, allowing stormwater infiltration and softening the visual appearance of car parking. Living areas and kitchens face north to allow passive solar gain. Each unit has a private north facing courtyard or deck as well as access to the communal garden space.
	BRANZ provided advice on materials, which were locally sourced where possible, to ensure environmentally sound manufacture, thermal efficiency and low toxicity. All windows are double glazed, and walls are insulated to standards higher than the building code requires. An EECA grant allowed the project to install solar hot water heating. As a result, the units are cost effective for low- income residents. All units are fitted with low-flush toilets and efficient taps and showerheads. Recycling facilities and clotheslines are provided for all units.
	The landscape design incorporates a diversity of native plants that reflect the Canterbury plains. Residents were involved in planting the site to personalise their open spaces.
Collaboration	Stakeholders and interested parties formed a committee that became the project champion, formulating the design brief for the consultants, establishing the partnership with the City Council, raising necessary funds, liaising with members of the community including immediate residents, and managing the project's successful implementation. A series of community design charettes were held to integrate social concerns with urban design and environmental imperatives.

Lessons Learnt

Good urban design goes beyond the physical components of the built environment to encompass the detailed aspects of how that environment will be used. With informed design it is possible to deliver good quality housing within a limited budget, to eliminate the stigma associated with social housing and provide healing environments for integrated care in the community.

Inclusive and open consultation with stakeholders and interested parties allowed the project to bring together wide community support and a joint venture partner. Design workshops with stakeholders explored the opportunities to create a design that met a wide range of needs, and greatly contributed to the design outcome.

By involving the specialist expertise of BRANZ and ECCA, the project was able to integrate cost-effective sustainable building technologies such as solar hot water heating, increased insulation, double glazing and water efficient taps. Unfortunately, technologies that could radically reduce the adverse effects of water and energy consumption were too expensive and outside the project's budget.

District plans can make it difficult to provide diverse housing stock. In this case the district plan didn't recognise social housing other than for pensioners. District plans need to respond to diverse communities or they will exclude and marginalise many.

VALUE GAINED

- Providing a practical response to an identified need, the project was completed within the Council's budget for affordable housing.
- It delivers a high quality living environment for those who most need support within the community.
 The design sets a new standard for all social housing, earning the description "palaces for the poor".
- The quality of the project, the year-long community consultation during the design phase, and the care taken in providing a safe and healing environment shows that social housing can be integrated successfully into the community without the stigma of poor quality design and reduced amenity.
- Rentals are set less than market rates (approximately 80%) in accordance with the Council's housing policy. Rental income is used to maintain the properties and fund additional housing stock.
- BRANZ awarded the housing complex a Green Home Award in 2000 for efficiency in design and running costs with energy savings of about 25% over similar conventionally designed units.

COMMENTS

"The Lancewood Courts complex is very well appointed. The design and décor are wonderful, and you only need to talk to tenants who have moved in to know how successful it has been. They never thought they would be living somewhere they would consider luxurious. The Council, through partnerships, is filling a gap in the rental housing market. Christchurch can be proud that there are no homeless people in the City." - *Councillor Carole Anderton, Chair Housing Working Party, Christchurch City Council. Christchurch Press, 2000.*

An independent Tenant Satisfaction Survey commissioned by Christchurch City Council in 2002 concluded that 100% of the Lancewood Courts tenants found that their housing arrangements were either very satisfactory or excellent; this compared favourably with the 94% response from Council tenants.









New Brighton Library - Christchurch

FAST FACTS

Location: Marine Parade, Christchurch Construction: 1998 - 1999 Owner: Christchurch City Council Design: Architecture Warren and Mahoney Associates Contractor: Mainzeal Case study researcher: Hannah Lewthwaite, Christchurch City Council

KEY STATISTICS

Site area: 2 ha (approx) Building area: 1,422 m² (approx) Commercial: 430 m² (approx) Library: 992 m² (approx) Foot traffic: 30,000 visits per month Project value: \$4 million Parking: 90 parking spaces

Images from top to bottom

- 1 Location map.
- 2 View of Pier Terminus and Clock Tower from New Brighton Mall.
- 3 The northern end of the Library.
- 4 Plan View of Library context.

The New Brighton Library is a \$4 million urban renewal project for New Brighton, on the east coast of Christchurch City. The Library site occupies two hectares of land and buildings adjacent to Marine Parade, between the Pier and New Brighton Mall.

The building was commissioned by the Christchurch City Council and designed by Barclay Architects who have since merged with Architecture Warren and Mahoney.

It is a highly successful project enjoyed by both the community and tourists. However, the project also highlights some of the problems that can occur through the lack of a multi-disciplinary approach.

DESIGN PROCESS

The Christchurch City Council decided to redevelop the New Brighton beach area in 1994 following lobbying by an action group, and in 1997 completed the construction of a new 300 m pier. The pier took the City Council 18 months to complete at a cost of about \$4 million. A terminus building was then proposed to complete the development, and in early 1998 Barclay Architects designed a building that included:

- a 'new generational' Library, designed for informality and to be used by all ages
- a café
- a retail area
- new public space.

While the Council had not initially envisaged a Library in this location, the Library staff from the former New Brighton Library were highly in favour of the unique waterfront site.

The design process was relatively short as the pier could not be properly used until the terminus was complete. Consultation was brief and primarily undertaken with the Library staff, who in turn consulted with Library customers.

The Library building was completed in eight months and opened on 24 July 1999. The Library occupies most of the ground floor and part of the first floor of the building. A café adjoins the Library on the ground floor, and there is a restaurant on the first floor.

The Library provides a range of facilities including: 'living rooms' of books arranged under topics, TV, PlayStation, computer games and music listening posts. A 'play and display' area caters for small community meetings and exhibitions. The music listening stations are positioned so people can sit and listen to music while looking out over the Pacific Ocean.

URBAN DESIGN ISSUES

The brief for this project was to develop an iconic building for the lower income suburb of New Brighton and its under-used foreshore.

As part of the vision for the revitalisation of the area the Council required that the development incorporate the following design features:

space for retail

- space for cafés
- exciting and vibrant public spaces
- access to the pier
- seating areas to enjoy the views
- a building that would create a focal point for the New Brighton community.

The architects saw the Library as a "new generation highly-interactive, highly-accessible and sociallyappropriate structure which would act as a centre for the community".²

The architects used contemporary library design and maritime architecture to inspire the building's form. The resulting form incorporates an elliptical plan with a slightly inclined curved roof which "…implies motion towards the bow of a modern ship," say the architects.

Evaluation - Urban Design Principles	
Context	The Library building is situated on the foreshore at the edge of the existing New Brighton Mall and is separated from the Mall by Marine Parade. It was intended to revitalise and bring new life to the run-down suburb of New Brighton. The Library is very successful as a library, but, it has not acted as the catalyst for the wider commercial revitalisation of the Mall that was initially envisioned, partly due to its physical separation by Marine Parade.
Character	The unique form of the Library building is highly visible along the shoreline. It has been successful in providing an iconic building for the New Brighton suburb and contributes significantly to the sense of place.
	However, there are aspects of the design which could have been improved. The building fails to create a good connection between the road, Mall, foreshore and the pier, as it does not read easily to pedestrians. For example, the main pedestrian entrance to the Library is directly behind the existing heritage clock tower and is obscured from Marine Parade and the Mall. The building also obscures the view of the pier from the Mall and Marine Parade. These design aspects have contributed to the building being perceived by some as having a barrier effect to pedestrians wanting to get access to the pier and the beach from Marine Parade and the Mall.
Сноісе	Besides a Library, the building contains a café and a restaurant. The Library and dining uses are compatible and have the potential to complement each other. They help to attract a range of people to the building and offer a variety of activities which keep the building in use for longer hours each day.

	The Library provides a range of uses including spaces for study, socialising or relaxing. Facilities include living rooms of books, television, PlayStations and music listening posts. A 'play and display' area caters for small community meetings and exhibitions. The retail area (which currently contains the restaurant) is intended to be available for other retail uses in the future if necessary.
Connections	On a regional level, connections are good. Public transport is well provided for on this section of Marine Parade, as it is served by five existing bus routes that cover a large part of Christchurch .
	On the local level, the Library fails to provide good visual and physical connections to the adjacent New Brighton Mall, the pier and the foreshore. Marine Parade is still a barrier to connection between the Library and the Mall. Similarly the Library building fails to offer good connections to the foreshore, because the main access point to the pier and the foreshore is from the first floor.
Creativity	The library is a bold architectural design that provides an iconic building for a run- down suburb. Within the library there is a range of 'new generation' library facilities that encourage active participation, linked with other retail uses.
Custodianship	The Library building is an impressive landmark on the New Brighton landscape. It is positioned to use natural light, with the building's long axis oriented north- south and the café placed at the northern end of the building. However, there have been problems with the Library's internal temperature becoming uncomfortably hot with little way of moderating it.
	There is a large Monteray Cyprus at the north end of the Library building, which has been a prominent feature on the New Brighton foreshore for many years, and the Library was built to accommodate this historic tree. The foundations of the building and surrounding paving area designed to minimise any adverse effects on the tree's root system.
Collaboration	Christchurch City Council led the project. Consultation was brief and primarily undertaken with the Library staff, who in turn consulted with their customers.
	Surveys show that the Library successfully attracts local New Brighton residents, but it has not necessarily drawn people from the wider Christchurch area into New Brighton as originally intended. ³

3 (2002) New Brighton Library Residents Survey, Christchurch City Council.

Lessons Learnt

The New Brighton Library project was to provide an icon and a focal point to draw people back into the run-down suburb of New Brighton to aid in its revitalisation. However, design issues such as the poor connection between the Mall, Marine Parade, and the foreshore have not allowed the building to function to its full potential.

Shortly after the completion of the Pier Terminus building, it was requested that the heritage clock tower doors be kept open to reveal the Library entrance.

These problems could have perhaps been avoided if:

- a more multi-disciplinary approach had been taken
- sound urban design principles had been incorporated in the early planning stages.

VALUE GAINED

Since it was first opened the project has enjoyed success as a Library, tourist destination, and community focal point.

Foot traffic at the New Brighton Library has been very high with 380,000 visitors per annum, equating to 30,000 visits per month or 1,000 per day. These figures are by far the highest foot count of any community library in Christchurch. The Library is very popular in the weekends, especially with tourists.

COMMENTS

"New Brighton (Library) has an outstanding and stunning location which has allowed us to do something special."

- Canterbury Public Library Manager, Sue Sutherland.

"This is a beautiful outlook onto the beach - it will be a really exiting place to shop."

- City Council Property Projects Manager, Angus Smith.

"It is a thrill to know I have only a 10 minute walk to get to a superb library, with what must be the best view in town."

- New Brighton Resident, Helen Campbell.









New Lynn Town Centre - Waitakere City

FAST FACTS

Location: New Lynn, Waitakere City, Auckland

Commenced: 1996, build-out on-going

Organiser: Waitakere City Council

Participants: Community, AMP (LynnMall City), other developers and property owners, RSA, Auckland City Council, public sector agencies, public transport providers

Case study researcher: Megan Howell, Waitakere City Council

KEY STATISTICS

- 314 ha in a 1 km radius from the New Lynn Railway Station
- Includes 23 hectares of retail land area, 483 retail and service businesses, and 1,179 households
- Worker/resident ratio of 29 people per ha
- Residential density has increased from 3.9 occupied dwellings per ha in 1996 to 5.2 dwellings per ha in 2001

Images from top to bottom

- ¹ Concept plan integrating mixed use, residential, retail, parks, stormwater, public transport and pedestrian connections as part of an Eco-City vision.
- 2 New Lynn Community Centre. Local activities within a funky modernist building that integrates art and stormwater design.
- 3 Medium density housing sited around Ambrico Reserve.
- 4 Beauty and function combined to cut the walk time for residents - (Creative NZ Creative Places Award).

New Lynn is one of Waitakere City's three urban centres - a vibrant commercial area that attracts people from throughout the region. It is a gateway and a hub for transport activities since pre-European times. More recently, it is one of the busiest stations on Tranzmetro's western rail line and a major interchange for bus services. Several road links make New Lynn a hub for traffic from the south, west and central parts of Auckland.

Traditional clay and brickworks were clustered south of the railway line, but most of the sites have been abandoned and manufacturing has ceased. The town centre, to the north of the rail line, has spread out along Great North Road, and is notable mainly for LynnMall, New Zealand's first enclosed shopping mall.

Waitakere City Council recognised New Lynn's potential for innovative development as part of the City's commitment to sustainable development and quality urban design. Since initiating the town centre's revitalisation in 1995, more than \$200 million of private and public capital has been invested in New Lynn.

DESIGN PROCESS

The design process for New Lynn began in 1996 with a community charette. Over 700 residents contributed to the five-day design workshop, sharing their ideas and priorities with a team that included urban designers, traffic engineers, planners and ecologists. The design process addressed social, economic and environmental elements of revitalisation, for example improving community facilities, developing business and retail opportunities and restoring the ecology of the area.

The charette produced comprehensive drawings which detailed a structure for the New Lynn centre and surrounding neighbourhoods, looking at both public and private land and their interfaces. Inspired by the shared vision that emerged, both the Council and private developers have contributed to the revitalisation of New Lynn's town centre, undertaking numerous projects including:

- reflecting the charette outcomes in the District Plan
- construction of a new community centre
- refurbishment of Gardiner Reserve and Ambrico Kiln and Reserve
- creation of Memorial Drive and the new war memorial
- LynnMall City expansion and opening to face Memorial Drive (value \$64 million)
- relocation of the RSA to larger and improved premises
- construction of the Rewarewa Footbridge
- medium-density housing developments in Caspian Close, Ambrico Place and the Crown Lynn Condominiums, building over 400 new housing units at a value of over \$87 million
- stream restoration and creation of Manawa wetland.

Projects still to be realised include:

- new rail/bus interchange to co-ordinate with the rail double-tracking project
- extension of Memorial Drive across the rail line to Clark Street
- proposed new library and Memorial Square.

URBAN DESIGN ISSUES

The key urban design issues included:

- realising Council's Urban Villages Strategy by encouraging people to live, work and have recreational opportunities within walking distance of town centres
- creating a vibrant, safe and accessible town centre with community facilities complementing the business sector
- connecting a fragmented community, physically divided by rail, roads and streams
- developing transport strategies for the area, including provision for interchange between bus, train, car and walking
- providing a diverse range of housing
- renewing community facilities, particularly a new library and community centre, and re-creating Memorial Square as a focal point of activity
- protecting ecological habitats and heritage buildings
- maintaining industrial strength and improving New Lynn's attractiveness as a place to work and do business
- addressing physical constraints such as flood plains.

EVALUATION - URBAN DESIGN PRINCIPLES

Context	The design vision for New Lynn sought to reinforce its role as one of Waitakere's three urban centres, both as a gateway and as a major transport hub in the west of Auckland, one of the busiest stations on Tranzmetro's western rail line.
	An area defined by an 800 m radius from the town centre was identified for revitalisation. Developers have responded positively to the design vision by the creation of medium-intensity housing within this area. However, less has been achieved in terms of retail intensification and this is a focus of future work.
Character	A straightforward and legible street connection to the rail and bus interchange (replacing a maze of one-way lanes) was created with the mall complex facing out into it. There is a continuing challenge with the Clark Street / Totara Avenue roundabout and integrating the two sides of the railway line.
	New Lynn's past as the centre of the brick and ceramic industry in Auckland has been celebrated through art, building design and community projects.
Сноісе	The revitalisation of New Lynn focuses on a mix of uses and users. Both civic and commercial properties have been upgraded. The Post Office, LynnMall, and McDonalds have all worked with the Council and re-developed to fit with and take advantage of the overall concept.

	It is still difficult to achieve mixed use on a single development site, but possible changes to the District Plan (including the removal of car parking requirements for apartments) may make this easier.
Connections	Good local connectivity is a key component lacking in New Lynn. Better connections have been made with the Rewarewa footbridge (northwest part of New Lynn to the town centre), the Veronica / Ward Street rail crossing and Memorial Drive (connecting Great North Road and Totara Avenue). Further projects to improve the connections across the rail line await the double-tracking project.
Creativity	The overall design seeks to retro-fit an existing centre and turn the existing shopping mall 'inside-out' to engage the street. The vision for medium-density housing preceded market perceptions, but the strength of the overall design vision coupled with the active involvement of the Council resulted in a change for the suburb.
Custodianship	Revitalisation was required to conform to the City's commitment to sustainable development. There are a number of features that promote the Eco-City vision. Manawa Wetland has been developed as a stormwater quality treatment facility, flood mitigation area and park with high amenity and ecological values. Local community groups and businesses have been involved in restoration of parts of the Rewarewa Creek. The New Lynn Community Centre has been developed as a model sustainable building. The New Lynn Library (due to start construction) has been designed following principles of sustainable development.
Collaboration	The design process began with a community charette in 1996. This attracted a lot of attention, with over 700 residents contributing to a five-day design workshop. As a direct consequence of the charette, a detailed structure emerged for the New Lynn centre and surrounding neighbourhoods. The charette considered an area within an 800 m radius of the New Lynn Railway Station, to encourage development of medium-density housing within reasonable walking distance of public transport.

LESSONS LEARNT

The initial charette in 1996 was a highly successful catalyst to development. It clearly defined the community's vision for New Lynn and communicated the range of possibilities to developers who had previously been sceptical of the potential for intensification in Waitakere, and uncertain of the future for the old brickworks areas.

The scale of the project and the number of parties involved has made for a long and often complex design process. Working with an existing fragmented urban fabric has generated challenges from the shape and location of available (rather than ideal) sites. Not wanting to discourage redevelopment, the Council has issued consents (particularly in the first years) for the redevelopment of sites that should probably have been amalgamated or re-oriented.

Charettes, design workshops, annual plan submissions and community consultation drop-ins have all received wide input from different parts of the public sector: Waitakere City Council staff from across the organisation including planners, engineers, economists, ecologists, community advisors; Auckland Regional Council and Auckland City Council staff; and bus and rail representatives. Organised community groups such as the RSA, local business people and major landowners such as AMP have all been closely involved. However, there is no formal process to ensure that all parties are kept up-to-date with the evolution of the vision over time.

A further challenge has been bringing the community along at every stage of the project. The designs offered immediately obvious benefits, but some aspects of intensification were less comfortable for the existing community. This points to a need to ensure that the positively perceived developments such as street improvements and community facilities keep pace with the more radical changes to the urban character, such as the development of medium-density housing. There is also a need to monitor and communicate the changes to the community. Studies show for instance that the profile of the new residents does not fit the 'ghetto/slum' stereotype that some of the older residents were assuming.

Experience has highlighted the need for better sequencing of projects and more direction in the District Plan to ensure comprehensive integration.

VALUE GAINED

The value gained from the redevelopment of New Lynn includes:

- defined and communicated an exciting, comprehensive vision for revitalising New Lynn
- catalysed public and private development consistent with that vision
- reawakened the community identity of New Lynn
- diversified the housing stock, with a 50:50 split of traditional households and medium-density housing
- intensified residential densities from 3.9 occupied dwellings per ha within a 1 km radius of the centre in 1996 to 5.2 dwellings per ha in 2001
- encouraged better quality built development, with LynnMall opening out and relating better to the rest of the town centre
- private investment of new development (excluding refurbishment) following the New Lynn charette -\$49.15 million from 1997 - 2001.

COMMENTS

Despite community uncertainty about the impact of intensification, a study of Ambrico Place has found the majority of residents are satisfied with their home, neighbourhood and the surrounding town centre. Residents possess higher than average levels of tertiary qualifications and personal income levels. They chose to live in medium-density housing for its safety and security, low maintenance sections and proximity to shops and transport, and they have comparatively lower rates of car ownership.

Individual elements of the town centre revitalisation have been recognised with national design, architecture and sustainability awards, including an Auckland Regional Council Environment Gold Award for the Manawa Wetland, a Creative New Zealand Creative Places award for the Rewarewa Footbridge, and a New Zealand Institute of Architects Community and Cultural Award for the New Lynn Community Centre.




New Premintly, CDD Straingle Action

New Plymouth Foreshore

FAST FACTS

Location: New Plymouth central city and foreshore

Construction: 1995 - 2003

Owner: New Plymouth District Council

Design: Isthmus Group Ltd, Richard Bain

Coastal Engineering: Tonkin & Taylor Structural and Civil

Engineering: Apex Consultants

Case study researchers: Guy Protheroe, David Irwin and Jo Soanes, Isthmus Group Limited

KEY STATISTICS

Area of open space: Foreshore development extends 6 km

Project cost: Works to date on the CBD total \$8 million; Foreshore development \$9 million

Images from top to bottom

- 1 Len Lye 'Wind Wand'.
- 2 Mountain to Sea master plan (not to scale).

New Plymouth is a provincial city servicing the rural and oil industry sector. Its urban form and evolution reflect the development of its port, rail and road infrastructure. The central city area has developed in a somewhat ad-hoc and fragmented manner, aggravated by creating a pedestrian mall in the 1980s in part of Devon Street, the main commercial street.

Recognising the complexity of the issues, the District Council engaged Isthmus Group in 1995 to develop a master plan for the redevelopment of the central city. Entitled "Mountain to the Sea" it proposed a physical and visual link between Devon Street and the city's isolated amenities and facilities including the museum, Huatoki Stream and the waterfront. The intention underpinning the plan was to turn the city towards the sea.

The master plan has since stimulated the development of several other major projects.

DESIGN PROCESS

The Mountain to Sea master plan provided a strategy for the overall development of the central city. The whole master plan development process was design-led. It ensured that every asset manager in the Council was thinking of the wider context, and it created a common focus throughout the different departments.

A list of projects developed out of the master plan. Although the foreshore was ranked as the highest priority project, the redevelopment of the Devon Street CBD area was first to occur. The CBD area project centred around a concept booklet that provided the basis for consultation with Council, iwi and identified project groups.

The development of the foreshore began with the Council preparing three concepts, which ranged from a heavily developed scheme with a strong commercial emphasis, to a very natural approach. The concepts were tested through extensive public consultation that contributed to the final concept. There was no direct economic objective underlying the proposal.

The community saw the foreshore as a space that they could use recreationally, and that should have a strong environmental flavour and connection back to the city. They wanted a design that picked up on the rugged nature of the west coast.

URBAN DESIGN ISSUES

The Mountain to Sea master plan highlighted the following design issues:

- the physical separation of the commercial area of the city from the sea by a main arterial route and active railway line
- the poor integration of open space areas including the unused and hidden Huatoki Stream
- the unfulfilled potential of the foreshore reserve, which was essentially an abandoned area with a
 deteriorating seawall. It did, however, have a series of popular but unconnected beaches
- the need for a street upgrade in the CBD, beginning with Devon Street
- the City's lack of association with its natural setting
- the need for strong robust elements and materials to withstand the forces of the west coast.

Some issues were relevant to many other New Zealand contexts:

- providing strong linkages between existing amenities
- overcoming the constraints of existing infrastructure and development
- providing strong connections between urban and natural environments
- maximising recreation opportunities within urban development
- responding to natural conditions and using appropriate materials and design sources.

Evaluation - Urban Design Principles		
Context	The Mountain to the Sea project had the overall objectives of creating a physical and visual link from Devon Street to other amenities within the city and in particular the waterfront. The upgrade of Devon Street included the removal of the existing pedestrian mall, which improved vehicle and pedestrian flows. It allowed for a stronger link and higher profile to be given to the cultural centre and waterfront, and provided greater focus and concentration of activities in the central area. The extended museum and foreshore development have also been important catalysts with flow on effects for adjoining commercial activities.	
Character	The CBD development featured high quality, long lasting street furniture in a restrained classical design. Simple robust materials were used, such as bluestone paving that complemented the maturity and solid character of the existing buildings. These materials also recognised the volcanic history of the district at the base of Mt Taranaki.	
	The foreshore project has become New Plymouth's most popular project, and ranks first in preference for public spending. It is seen as a celebration of the coast's wild nature. Considerable thought has gone into the use of materials that reflect this. The Len Lye 'Wind Wand' sculpture has been incorporated and has become a significant landmark. The popularity of the Wind Wand has created opportunities for further sculptures.	
Сноісе	The development has opened up more of the city for retail and other uses and created a park outside Puke Ariki (the museum). The park area is multi-use and the promenade allows for both passive and active recreation.	
	The only remaining issue with the foreshore is its popularity. It has increased pressure from competing activities including biking, roller-blading, jogging and walking, and it was this pressure that initially motivated the project's completion earlier than originally planned.	

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Connections	The design strengthens the links across the city and extends the existing city grid across the arterial road and railway line over to the foreshore. Finger piers carry the grid right to the sea edge, while the main pier forms the heart of the foreshore project.
	The design reconnects Puke Ariki with the foreshore by an extra-wide pedestrian crossing, an upgraded pedestrian underpass and two overbridges, thus ensuring the existing road and railway do not divide the city from the sea.
Creativity	The scheme incorporates strong design features and landmark sculptural elements into the foreshore area. The design has been a catalyst for regeneration of the area.
Custodianship	The previously hidden Huatoki Stream is now a vital connection between the city and the sea. The development now extends from the CBD, follows a paved walkway that drops below the level of the road, and connects to the main pier that extends out into the Tasman Sea.
	The promenade recognises the environmental conditions that are characteristic of the west coast. Design features like the main pier cantilevered over sea, and the promenade without an edge accentuate a sense of being on-the-edge and connect people in a very immediate way with their environment.
Collaboration	The master plan process was very much design-led, and involved extensive consultation with iwi, identified project groups and the wider community.
	Through this process the importance of the connection between the city and the foreshore was stressed, as was the recreational use of the foreshore. The public favoured a design that would acknowledge and celebrate the rugged nature of the west coast.

LESSONS LEARNT

One of the key points to take from the development process is that it takes time to develop a robust plan that is able to persist and work as Council political agendas change.

Research shows that recreation is often underestimated as a catalyst for successful urban development. We also know from research that the heart of a city does not have to be a traditional main street or square. It can also be a foreshore, and it can be recreation-led.

The project has also highlighted a number of important issues about managing infrastructure. These include:

- the need for the co-ordinated integration of open space areas
- the need to maintain transportation corridors while providing good pedestrian access to the waterfront
- the retention of the functions of streams as part of stormwater provision
- the long term strengthening of foreshore protection while providing for recreation.

VALUE GAINED

The city redevelopment and in particular the foreshore now form a central part of the city's marketing strategy, helping to reposition New Plymouth as a fashionable place to visit and live. Anecdotal evidence indicates numerous economic, social and environmental benefits although no formal study has yet been completed. The following changes have been noted.

Economic benefits

- Houses are marketed by their proximity to the walkway, and residential property prices have increased significantly.
- Accommodation operators have indicated visitors are extending their stay to enjoy the foreshore / coastal walkway.
- There are new major apartment block developments in the vicinity of the foreshore.
- A new hotel has been constructed on a central site opposite the foreshore.

Social benefits

- Identity and pride of place.
- Recreation opportunities particularly walking and cycling.
- Enhancement and better integration of the open space network.

Environmental benefits

- Retention of foreshore embankment.
- Improvement of stream path.

This project illustrates what can be achieved with an enthusiastic client, and a design-led team on site, in a project that could easily have been dominated by its engineering requirements. Instead, urban design, park design, recreation and engineering requirements have been considered together to provide a design-led response.

The success of the foreshore project has been recognised with the following awards:

- Gold design award, 2002, NZ Institute of Landscape Architects National Awards
- outstanding project award, 2003 NZ Recreation Association.

"What we have got is a really good solution although there are still a few of the pieces of the jigsaw to put in place. The public continues to push the Council to do so."

- Grant Porteus, New Plymouth District Council.

Community Comments

Comments published in magazine articles, newspapers and letters of endorsement since the project was built:

"All along the walkway, one thing becomes obvious. People enjoy just being there. The view, the sounds and smell of the sea."

"The walkway flouts all the normal conventions of something designed by a committee."

"From the vision that was articulated by the Urban Design Group the implementation has exceeded our highest expectations in terms of design integrity. In particular the integration of a major public artwork, Wind Wand, into an urban upgrade is as good as, if not better than, anything I have seen around the world."









Images from top to bottom

- 1 Abandoned foreshore before development.
- 2 Foreshore walkway.
- 3 Pier on the foreshore.
- 3 Sketch of foreshore development illustrating finger piers extending from city grid to the sea.





Northwood Residential Area -Christchurch

FAST FACTS

Location: Main North Road, Christchurch

Construction: 1999 - 2004

Developer: RD Hughes Developments Ltd

Urban design / landscape concepts: Harrison Grierson Consultants Ltd

Planning / engineering / surveying: Davis Ogilvie and Partners Ltd

Landscape architecture: John Marsh Landscape Architect

Styx Mill master plan and rezoning: Baxter Brown Ltd and Davie Lovell-Smith Ltd

Case study researchers: Ian Craig and Abu Hoque, Harrison Grierson Consultants Ltd

Key Statistics

Northwood area: 77 ha

Approximate dwellings numbers: 630 houses (285 m² - 1,500 m² lots); 64-unit retirement village; 40 terraced houses

Gross residential density: 1 dwelling per 1,050 m² (9.5 dwellings per ha)

Net residential density: 1 dwelling per 625 m² (16 dwellings per ha)

Images from top to bottom

- 1 Location of Styx Block.
- 2 Medium-density terraced housing.

The Northwood Residential Area was developed over five years based on a master plan with strongly articulated new urbanism design principles. It has proved a commercial success. This case study considers the extent to which this success is due to adherence to (and departure from) the initial master plan principles. The project's history illustrates how some urban design 'rules' were appropriately 'bent' to meet changing market demand and conflicting agency objectives.

The Proposed Christchurch City Plan 1995 attracted many submissions requesting the rezoning of rural blocks, including the Styx Block, a 97 ha "Applefields" orchard south of Belfast, Christchurch. The site is a flat river terrace, abutted on the south by Styx Mill Reserve, a major wetland reserve, and fronts onto two state highways.

At hearings the evidence presented in support of rezoning included the new urbanist Styx Mill master plan, which succeeded in the area being rezoned to various 'living' zones and an area of 'Business 1'. The boundaries were drawn directly from the master plan.

DESIGN PROCESS

The five year design process for Northwood included extensive pre-application discussions between the land developer, consultants, and local authority staff. There was no consultation with the public.

RD Hughes Developments Ltd acquired the rezoned land in 1999. The District Plan's zoning pattern and associated development plan did not match their aspirations, so they engaged Harrison Grierson to 'reorganise' the main elements of the Styx Mill master plan, while still meeting its key design intentions. They were also asked to identify and design a 'big impact' first stage with maximum amenities, for construction in 1999 - 2000.

The north-eastern quadrant of the block was selected for Stage 1, with a new signal-controlled access from Main North Road. One block in, a roundabout with a fountain was created to provide a sense of entry. This road leads directly on to Northwood Boulevard, which includes grassed swales and has a consistent edge treatment.

The original positions for the lake and residential node were moved closer to Northwood Boulevard, and the District Park was also relocated to a Boulevard location at the edge of the first stage area.

City traffic engineers required that the grid pattern be modified to reduce the number of four-way intersections. To provide variety for the five house builders operating at Northwood, and to improve yield, some cul-de-sacs and blocks with rear lots were introduced. Cul-de-sacs were typically linked by short pedestrian walkways to nearby roads.

Stage 1 included the first stages of a medium-density terraced housing development next to the central lake.

In the light of the popularity of this component, during Stage 2 in 2001 the developers elected to re-subdivide a block initially sized for conventional lots into a rear-lot-based layout for medium-density sites (typically 300-350 m²). These were all constructed by one house builder, and successfully introduced a more affordable product into the housing mix.

By 2002 a bulk retail development had been completed outside the main entrance to Northwood. In due course, a complementary small supermarket was developed on the lot at the Main North Road entrance

(identified in the initial master plan as a possible alternative business site), with a pre-school opposite.
 However, to date there has been no progress on the development of a business/retail site within Stage 1
 that was proposed adjacent to the lake.

In April 2002 the master plan was revised to incorporate a retirement village on land next to the Main North Road which had proved difficult to sell as rear lots. A new 'lakeside precinct' was also proposed for a later stage. Council gave consent to a redistribution of the medium-density development to make the retirement village possible.

Stage 3 was developed in 2002 and included the retirement village.

Stage 4, developed during 2002 - 2003, highlighted an issue along the Styx Mill Reserve edge. The Styx Mill master plan had envisaged a single-loaded road along this edge, which was supported by some Council staff but opposed by others who wished to establish a predator fence and have the development back onto the Reserve (as did the developer, initially). The road along the edge won out, and the developer later acknowledged this as worth incorporating and included it in Stage 5.

In 2003 the 'lakeside precinct' design was developed to the stage required for consents. However, the maintenance conditions were too onerous, and in 2004 Stage 5 was redesigned as larger conventional lots (800 - 1,500 m²).

In 2003 the developer elected to sell the balance of the original Northwood master plan area to Styx Mill Estates Limited, which is now pursuing a country club estate concept with gated cul-de-sac roads and predominantly rear-lot development. A large stormwater detention basin was required in Stage 5 to cater for the block sold, and this introduced a new large open space into Northwood.

The completed layout as at May 2004 is shown in image 4 on page 83.

URBAN DESIGN ISSUES

The key features and design principles of the Styx Mill master plan and associated evidence were:

- a 'boulevard'-style road linking between the two state highways
- a centrally-located lake
- a 'node' of medium-density housing and residential/retail use around the lake
- a possible additional business location on Main North Road (State Highway 1)
- a 'District Park' recreation reserve
- pockets of medium-density housing opposite regularly shaped neighbourhood reserves
- a highly connected grid road layout, with block depths sized for front lot development, and single loaded roads along reserve edges, including the edge of the Styx Mill Reserve
- a stormwater management system that included swales along the boulevard.

The project is of national interest as one of the first significant greenfield blocks to be designed based on a master plan that demonstrated new urbanist design principles.

aluation - Urban Design Principle

Context	Northwood is a coherent development of places, spaces, streets and activities conceived to relate well to each other within the development, and also to recognise its place within the city, in particular the adjacent state highway, bulk retail area and the Styx Mill Reserve. It has a degree of diversity and integration of uses appropriate to its outer suburbs location.
	It has a recognisable medium-density node focused on the lake. This includes two terraced developments and a site for business/retail use, and is adjacent to Northwood Boulevard with the District Park just beyond. A second node is beginning to get established, based around the activities at the Northwood entrance - the pre-school, supermarket and bulk retail development.
Character	As a greenfields development, Northwood did not have to fit in with an existing urban character. It creates its own locally-appropriate and distinctive character through the use of landmarks such as the sculptural roundabout features at either end of Northwood Boulevard and through detailing such as colouring of concrete paths. Hard landscape features such as arches and other structures at key pedestrian routes and at the entrances to reserves are effective in way-finding, to frame views, and to further establish character. It also incorporates the natural environment through swales and stormwater ponds, and responds to its historical identity as an orchard, adjacent to a major wetland, through its soft landscaping and some retention of existing peripheral planting.
Сноісе	Northwood's housing exhibits a marked diversity of type, site size, and cost and includes terraced housing, retirement villas, low-cost detached medium-density housing, suburban detached housing on 550 - 650 m ² lots, and larger lots (800 - 1,500 m ²) for higher priced housing. There is good access to open spaces for all . The initial retail node is likely to have competition from a second retail node based around the activities at the Northwood entrance, i.e. the pre-school, supermarket and bulk retail development. This has not yet been developed.
Connections	Vehicle connections into Northwood are not extensive, owing to its long boundaries with the Styx Mill Reserve, unzoned rural land, and the two state highways, where Transit New Zealand opposed more than one access to each. Pedestrians have more options, and can use the long road frontage to the Styx Mill Reserve, the Kaputone Reserve to the north, and a stormwater reserve at the southeast corner

	Within Northwood, the original grid road concept was modified to meet traffic engineering requirements and market (builder) desire for cul-de-sacs. Even so, in comparison with most suburban developments, the roads are well connected, and there are few examples of long cul-de-sacs.	
	Pedestrian and cyclist connections within Northwood are excellent, through reserves, roads and pathways. The latter are typically short and straight, and celebrated with distinctive archway features.	
Creativity	Sculptural features have been incorporated into the overall design.	
Custodianship	The development exhibits some elements of environmentally responsive design, particularly as a consequence of protecting and enhancing the adjacent wetland reserve. Northwood's stormwater management includes swale-based treatment and a major detention basin.	
Collaboration	Wider public consultation was not undertaken as this is essentially a private development, although there were extensive discussions between the land developer, their consultants and the local authority.	

LESSONS LEARNT

The lessons learnt include:

- single ownership or control of a substantial landholding is required for a successful master planned greenfield development
- all urban design principles can rarely be incorporated into one concept. Many are in conflict with current convention, particularly in road design
- large scale developments happen in stages and can rarely be designed in total from the outset. Flexibility
 in planning documents and master plans is required to adapt to changes in market conditions and
 ownership over time
- a fully connected grid road system will typically need to be modified to provide layout variety and to meet the concerns of traffic engineers over four-way intersection design
- cul-de-sacs offer a housing choice which is perceived by some sectors of the community to be advantageous
- nodes do not usually develop until there is a residential catchment to support them, and by that time, the nature and location of the node may need to change from that which was initially envisaged.

■ □ Value Gained

Northwood, as built, deviates in a number of ways from, and generally improves upon, the vision for Northwood proposed in the original rezoning hearings.

The success factors for Northwood have probably been its ability to move with market aspiration and opportunity over time, to provide a diversity of housing and subdivision layout, to use hard and soft landscape features to reinforce its legible identity, and all the while to hold true to the core principles and design features upon which the rezoning of the land was based.

Rising section prices and its completion several years ahead of the original schedule underscores Northwood's commercial success and popularity. The diversity of housing is understood to be one of the factors in its ongoing commercial success.

COMMENTS

Janet Reeves, Christchurch City Council.

Because this site was zoned as a result of a submission to the Proposed City (District) Plan, the Council was not in a position to incorporate appropriate mechanisms in the Plan to ensure that the type of development promised at the hearing would eventuate. Luckily, even though there was a change of developer at the outset, the original objectives have generally been met.

The use of the master plan to define both the zoning and the development plan framework incorporated in the City Plan, made it difficult for both parties to make changes as development progressed. This was overcome through negotiation but in some cases necessitated additional resource consent applications. Before and during the development of the site the developers and their designers met with Council officers to discuss their preliminary proposals to reach agreement before submitting subdivision applications.

That the central retail/business site has not yet developed is not surprising and points to the need to carefully consider the feasibility of such uses at the outset, if they are intended to be the focus of a community node.

The Northwood Area has been broadly successful from the City Council's perspective.



- 1 Medium-density semi-detached housing.
- 2 Retirement village.
- 3 Grassed swales.
- 4 Completed layout of Styx Block development.

















Terraced Housing in Takapuna - North Shore City

FAST FACTS

Location: Takapuna, North Shore City, Auckland Construction: 2002 - 2003 Owner: Manson Developments Design: Jensen Chambers Young Ltd Case study researcher: Sarah Lindsay, North Shore City Council

KEY STATISTICS

Site Area: 3,218 m² Density: 1 unit per 178.8 m² of land No. of units: 18 terraced units Average size of units: 184 - 292 m² inclusive of garages and decks Project Cost: \$7,200,000 approx

Images from top to bottom

- 1 View from corner of Hurstmere Road and The Promenade.
- 2 Hurstmere Road elevation.
- 3 View of communal open space at rear.
- 4 Elevations.

This development is on the fringe of the commercial centre of Takapuna, on Auckland's North Shore.

Regional policy initiatives to deal with population growth encourage intensification close to new or existing town centres. High quality, more intensive forms of housing located in and around such urban areas is an essential ingredient of this policy. This development provides a good example of how these initiatives can be implemented.

The surrounding area includes a mix of commercial development and standard residential properties.

With the zoning of the site allowing for intensive residential housing, the form of the chosen development acts as a buffer between the CBD to the south and the more traditional detached suburban housing to the north.

As a result of good design and a high quality of construction, the development makes a successful contribution to its immediate environment.

DESIGN PROCESS

The site is an amalgamation of five smaller sites that previously contained a car park and standard residential dwellings, which were in a poor condition. The developers decided to re-develop the site with a mediumdensity residential development. They were keen to use a terraced house typology. Several protected trees and a five metre front yard requirement were factors which helped determine the building envelope.

The architects invested time and care into developing an appropriate terraced house form. Based on an Australian model, the architects pared back and refined the design to suit both the specifics of this site, which is located close to the beach, and the New Zealand lifestyle.

As a result, the units have been designed to be more open than traditional terraced houses. Each unit has a double aspect, facing both the street and the inner communal courtyard. The arrangement of the units around the site perimeter provides a good relationship to the street while also allowing for generous communal open space within the site.

Each unit has private open spaces along the street frontage. Car parking for the units was designed to fit with the existing site contours, so garages are at the lower ground level and accessed from the interior/courtyard of the development.

Although the main ridgeline of the proposed development did not exceed the 10 metre limited discretionary height limit, the original proposal, as lodged with the Council and notified, included a turret to mark the corner of the development (and the street corner). The turret extended the building height to approximately 12.2 metres above existing ground level.

Because a number of submitters raised concerns about the height of the proposal, the developer and architect addressed these by modifying the design of the corners to fall within the 10 metre height limit.

URBAN DESIGN ISSUES

The design issues addressed in this development include:

- providing high quality, medium-density housing close to a town centre
- adapting the Paddington-style terraced house type to a sloping corner site that faces both the street and the beach
- designing contemporary urban accommodation suited to its location at the edge of the CBD and adjacent to existing low-density residential development
- retaining three large, existing trees
- successfully addressing two principal street frontages
- providing the required two car parks per unit without interfering with the built form and street relationship.

As the population of New Zealand's cities continues to grow it is essential that intensification is concentrated in and around town centres.

Ensuring there is well-designed, more intensive housing close to town centres contributes to sustainable and successful urban development by:

- decreasing the need to travel long distances to employment, or to purchase essential goods and services
- reducing sprawl, and congestion
- allowing people living in such locations to use realistic alternatives to a car to travel to their destinations.
 Instead they can walk, cycle or take public transport.

Providing a variety of high quality, intensive housing choices which are well suited to our lifestyle and climate is one of the current challenges facing urban designers, architects and planners working in New Zealand.

EVALUATION - URBAN DESIGN PRINCIPLE

Context	The site is located just on the fringe of Takapuna CBD. This development offers medium-density housing close to the largest town centre in North Shore City, reinforcing regional policy initiatives to address population growth and intensification close to town centres. Additionally, the development complements the style of the commercial/café environment across the street.
Character	The units have been designed as four-level terraced houses that positively address the street. The design typology allows for higher density residential accommodation in a sensitive transitional location.
	The development as a whole is designed to a high standard. It creates a landmark on the street and responds well to the sloping site and adjacent developments. The units are well articulated and detailed with terrace and balcony features along the full frontage and dormer windows in the roof space. The building is well made, is of solid construction and has used local materials. The building displays a strong local identity in its character. It has a good relationship with the street, responds well to the unique site and to the wider local environment.
	Particular elements of architectural design and detailing include:
	 well proportioned street elevations that express individual units
	 decorative wrought iron detailing including balcony balustrades, verandah fretwork, and balusters to the upper part of the front wall
	 copper flashings, rainwater heads, spouting and downpipes.
	Front yard requirements necessitated a building setback of five metres, therefore the outdoor living courts as required by the North Shore District Plan are provided along the street frontage of the units.
Сноісе	The development provides 18 terraced housing units on a corner site. While this is a specific built form, it provides a transitional buffer between the urban centre immediately to the south and the suburban residential zone to the north. Importantly, it offers an alternative to a standard residential dwelling for people looking for a low maintenance lifestyle close to shops and the beach.
Connections	The development has been designed to relate to and connect with its immediate environment. The units are terraced and the development as a whole has been designed to respond to the corner site. The development forms a perimeter block with the units facing out to the two streets and the right-of-way that surround the site on three sides.

	Takapuna town centre is within easy walking distance. Regional connections are good as the development is well connected to the road network and a good bus service is available in close proximity.
Creativity	This development adapts a terraced housing typology from Australia to meet the New Zealand way of life and the particular site context. The perimeter block with car parking and communal open space within a courtyard is not a form of development commonly seen in New Zealand.
Custodianship	The site contained a number of protected trees including a very large Silky Oak; this became one of the determining factors of the building form. By massing the buildings around the site perimeter, a sheltered communal open space which included the oak tree was created towards the centre of the site and away from the street.
	The natural contours of the site, which were higher around the perimeter, allowed for the car parking under the units. This meant that they are neither visible from, nor interfere with, the development's relationship with the street.
Collaboration	The developer employed quality architects Jensen Chambers Young. They worked closely with the Council to produce this typology that complemented the site and the local environment. The project did not involve public consultation in the design process other than that which is required by the Resource Management Act.

LESSONS LEARNT

By employing a skilled designer, the developer has produced an outcome that has been profitable and that also makes a positive contribution to the urban environment.

North Shore City's District Plan provides for medium-density housing in this location on the fringe of town. Apparently there have been some complaints from residents in this area about the noise from neighbouring bars and restaurants. This highlights the need for a high standard of acoustic privacy within developments of this nature.

Potential reverse sensitivity - that is, businesses being inhibited as a result of residents living close by - is an issue that must be carefully considered and addressed at the outset of any residential project within or close to a mixed use area or town centre.

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■□ VALUE GAINED

Economic benefits

Marketing went exceptionally well and all units were sold over a period of two months, about eight months before the project was completed. Subsequent to the completion of the development the re-sale value of the apartments increased significantly. While this has been driven in part by demand, the developer's investment in the design and construction quality has been a major contributing factor.

Social benefits

For the residents:

high quality housing close to necessary and desired town centre facilities.

For the community:

- increased residential population means greater support for local businesses and services
- greater housing choice to suit differing lifestyles
- brings vitality to Hurstmere Road precinct.

Environmental benefits

The development achieves a balance between successful built/urban form and preservation of existing natural features (contours, trees). It also contributes to town centre intensification, thereby potentially helping to reduce sprawl.

For local businesses and employees, housing close to their place of work reduces travel time and road congestion.

COMMENTS

The developer is very happy with the outcome of this project, in terms of both the built form and fiscal return.

The development is generally well regarded by a number of groups and individuals in the community for its contribution to the Takapuna town centre.







Vero Building -Auckland

FAST FACTS

Location: Shortland Street, Auckland City Construction: 2000 Owner: Kiwi Income Property Trust Design: Peddle Thorp Architects Case study researcher: Shyrel Burt, Auckland City Council

Key Statistics

Offices: 39,450 m² (Net Rentable Area) Car parks: 386 Height: 167.5 m / 38 stories Gross floor area: 68,900 m²

Images from top to bottom

- 1 Vero Building.
- 2 Podium with parking decks at street frontage.
- 3 Lobby containing café and public art.

The Vero Building was constructed in 1998 and completed in 2000 as the Royal & SunAlliance Centre. According to the Property Council of New Zealand, this is New Zealand's tallest "and most technologically advanced" landmark office tower. The site comprised 4,250 m² lying between Shortland Street and Fort Street east of downtown Auckland. The building is 38 stories high with a five-storey podium facing Fort Street. The podium is detailed carefully and articulated on both street frontages at a human-scale.

The completion of the building reinforced Shortland Street as a premier office address. The site is also strategically located between the revitalised High Street and the future Britomart Precinct. While the main entrance faces Shortland Street the design of the building also had to address the less desirable (but changing) Fort Street in the north.

DESIGN PROCESS

The site was previously vacant land, industrial warehouses, student rental accommodation and massage parlours.

The developer (Kiwi Income Property Trust) identified this site as being appropriate for a premier office building and assembled a strong design team including architects, landscape architects and artists. An important part of the design process was driven by the 'bonus' provisions of the District Plan for public open space and public art. The Auckland City District Plan - Central Area section provides a bonus system whereby developments may exceed the basic floor area ratio (FAR) in exchange for public amenity. The Vero Building contains a number of bonus elements including a public plaza and works of art.

The vehicle entry and courier drop on Shortland Street is located at the side of the building. This forms an elegant courtyard organised around a monumental column and is screened from the street by wire mesh and glass.

URBAN DESIGN ISSUES

Urban design issues included:

- reinforcing Shortland Street as a premier office location
- improving the two street frontages (Fort Street and Shortland Street)
- creating the most technologically-advanced landmark office tower in New Zealand
- creating public space at ground level to showcase contemporary New Zealand art
- minimising use of energy, natural resources and materials
- creating large column-free floor plates for high efficiencies without compromising the quality of the
 office environment.

The Shortland Street frontage was designed as the main visitor and pedestrian entrance to the building. Shortland Street rises across the front of the building, necessitating a stepped lobby. This elevation was carefully detailed to create a human-scale and to avoid blank walls.

EVALUATION - URBAN DESIGN PRINCIPLES

The lobby consists of an indoor and an outdoor plaza. The plazas are open to the public during daylight hours and contain two cafés. The outdoor plaza is landscaped with native plants and provides views down to Gore Street and the Hauraki Gulf.

CONTEXT The Vero Building is New Zealand's tallest landmark office tower. This building is strategically located between the CBD and upper Shortland Street. As a high-rise design it successfully extends the Queen Street premium commercial area into Shortland Street. The height and density bonuses granted to this building do make it significantly larger than its immediate context, however the building has aided the regeneration of this eastern part of the CBD. The building is successful as a CBD landmark and relates well to Shortland Street at street level. It is less successful, however, in connecting Shortland Street with Fort Street and effectively 'turns its back' to the latter. The character established by the design responds to the surrounding area. CHARACTER The building exterior is very well detailed and uses highly durable, permanent materials such as stone panels and granite paving that reflect historic buildings in the area. The plaza has been landscaped with native plants and the lobby contains a large collection of contemporary New Zealand art. Both these elements are high quality and successful. The 'halo' is a distinctive feature that not only creates a distinctive roof line but also successfully covers up the lift over-runs, aerials and antennas. Сноісе The large open floor plates in the Vero Building provide for adaptability of future use. The building's proximity to the Britomart transport centre and CBD shops and amenities is a positive attribute. However, the extent of parking provided suggests a strong car orientation. CONNECTIONS On Shortland Street the landscaped plaza and a lobby with a café serves as a showcase of contemporary New Zealand art. The café acts not only as an important meeting area for tenants and their visitors, but also as a public space. The building faces two streets, but a link through the building is only possible for the tenants through the underground garage. There is no public link. This building demonstrates creative, high quality architecture with many positive CREATIVITY features. The relationship with the street and the detailing of the building's podium have been designed at a human-scale.

	Incorporation of public art in a publicly accessible plaza represents a creative shift from conventional office tower design. The investment made in the artworks is well over \$1 million, commissioned with the assistance of the Auckland City Art Gallery. The art gives the lobby a very strong New Zealand sense of place and identity, and responses from tenants, their visitors and the art and architectural community are very positive.
Custodianship	The developer was keen to create the most technologically-advanced office tower in New Zealand. The building won the EnergyWise Award 2004, showcasing innovation in energy efficiency or renewable energy projects. Kiwi Income Property Trust also received the RICS International Award for Building Efficiency and Regeneration in 2001 for innovative environmental and energy efficiency design.
	On-going attentive tuning and analysis resulted in the building's energy use falling by 7% in two years while the number of tenants has risen by 10%. The building's operating costs have been measured against industry standards and the Vero Building costs approximately 10.3% less to operate than the Property Council of New Zealand's average building.
	The building is continuously monitored for energy flow and air quality. Ventilation in the car parks is monitored and has to work properly at peak times.
	Analysis of the façade design and engineering optimised the contributions of natural light while controlling the effects of solar gain by the use of double-glazed low-E vision panels, and thermal insulation within the façade non-vision panels.
	The 12 high-speed lifts, two dedicated car park lifts and escalators are designed to reduce energy consumption.
Collaboration	Kiwi Income Property Trust assembled a high profile design team for this project that included Peddle Thorp Architects. The civil and structural engineering consultants were a vital part of this design process, with the client and future tenants closely involved throughout. As noted earlier, a number of New Zealand artists were involved in the design of the public spaces, courtyard and lobby. Public consultation in the design process was limited to that required under the Resource Management Act.

LESSONS LEARNT

The major urban design lessons learnt include the following:

- strategic sites deserve unique and excellent design solutions
- large showcase buildings can have a strong ripple effect in revitalising the surrounding area
- taller buildings can be scaled to relate to lower adjoining buildings and streetscape by careful street level design

- vehicle entrances in a pedestrian area can work if carefully located and designed
- high quality projects require a motivated client and a strong design team working in unison
- public art can add value and vitality to a project, particularly if artists are involved in the design process.

This building demonstrates excellence in architecture and energy efficiency in a CBD environment. However, the lack of connections between Shortland Street and Fort Street and treatment of the Fort Street façade are particular shortcomings. In addition there is the question of whether the 'public' open space and art provided is really publicly available - and whether these really provide sufficient justification for the bonus density granted to this development.

VALUE GAINED

Ten months after practical completion the Royal & SunAlliance Centre was 89% tenanted. The building is "able to command the highest rental rates of any office building in the country" (Kiwi Income Property Trust, 2001).

In 2004 the property was 100% leased.

"Our latest measurement taken in October 1998 shows a tenant efficiency of 86%. This places the Royal & SunAlliance Centre (Vero Building) as one of the most highly efficient floorplates in the Asia-Pacific Region." DEGW's Independent Assessment (DEGW, London).

COMMENTS

"Law firms are undergoing significant changes in terms of operational structures and information flow. The Royal & SunAlliance Centre design and technology features facilitate a very high level of efficiency and productivity and gives us maximum flexibility for the future. [That way] our organisation will be able to deal with change with relative ease."

- Greg Thompson - Partner, Russell McVeagh.

The chief executive of Kiwi Income Property Trust, Angus McNaughton, commented on the public areas in the Vero Building, in response to research undertaken on the effectiveness of the city's bonus system:

"I think everyone is entitled to have their own opinion, but ours is a public plaza area with a hotel lobby feel to it and we welcome anyone wandering through. It's like a little oasis," McNaughton said. "We get lots of people coming through to look at the art and enjoying the feel of it."

McNaughton said the success of plaza areas in office towers depended on consultation and having the right people involved in planning and design.

(New Zealand Herald, 17 March 2004.)







West Quay - Napier

Fast Facts

Location: West Quay, Ahuriri, Napier

Construction: 2000 - on-going

Owner: Napier City Council

Design: West Quay Design Team, Napier City Council Design Unit, Traffic Design Group, and Salmond Architects

Case study researcher: Alan Titchener, West Quay Design Team

Key Statistics

Area: 4 ha (approx) Number of units: 172 Commercial floor area: 3,000 m² Gross floor area: 6,666 m² Net floor area used: 3,000 m²

Images from top to bottom

1 Location map.

2-3 Views along the main road showing enhancements to streetscape.

West Quay is a unique historic precinct in the suburb of Ahuriri, Napier.

In pre-European times the area was an important pa site. European settlers developed the area into the port for Napier, with a mix of primarily industrial and commercial uses.

The 1931 Hawkes Bay earthquake forced changes to the port facilities. Although the harbour still operates as a working fishing wharf, changes in commercial activity and pressure on waterfront areas for residential and recreational purposes have led to significant changes in land use in the area.

After the completion of two heritage studies and a public consultation process, the Napier City Council appointed a Design Team to co-ordinate the development of the West Quay area.

The key to the development has been the retention of the industrial/marine character of the area, while catering for its gradual transformation into more commercial residential and recreational use, particularly restaurants, cafés and bars.

DESIGN PROCESS

Initially, two heritage studies were commissioned, one identifying sites of significance to Maori in the Ahuriri Estuary area, and the other focusing on heritage issues within the suburb of Ahuriri, including West Quay.

Both studies helped establish the importance of the area and gave strength to the Council's intention to preserve the remaining features of the area from inappropriate or destructive development.

In essence, what gives West Quay its unique character is its strong built form with industrial scale buildings, the number and style of windows and doorways, the relatively uncluttered streetscape with its sharp interface between horizontal and vertical planes, and the juxtaposition of the streetscape, and the working wharf.

Public consultation further reinforced the need for controls on future development and helped identify the features and elements that needed to be retained.

In 1995 the threat to the unique character of West Quay became even more real when a wool store was demolished to make way for a motel and apartment development, which was out of character with the buildings in the area. A special character protection order was placed on the remainder of the historic precinct and any future development within the prescribed zone needs to comply with specific resource consent procedures.

A local poet was commissioned to put into words the issues that had been identified in the heritage studies and the public consultation process and his 'thought pictures' were captured on video. This video has proved to be an invaluable tool in introducing people new to the area to the underlying context and issues facing West Quay.

A Design Team was established, co-ordinated by a planner from the Napier City Council and including an architect, a landscape architect and an artist/designer. It was given two primary roles to perform.

The first was to design the streetscape for West Quay. This was done with input, where required, from the Napier City Council Design Unit and Traffic Design Group.

The design deliberately maintained elements of the existing streetscape, retaining an uncluttered industrial and marine 'feel'.

Traffic slowing chicanes and wharf-style bollards were installed to discourage use of the precinct as a thoroughfare for heavy traffic.

Parking between the street and the wharf was restricted to reduce visual clutter, maintain access to the wharf and enhance views to the water.

A small area of soft landscaping was undertaken to reduce the impact of the traffic-slowing devices. A staged development plan was designed to allow for the phased removal of heavy traffic that used West Quay for access to the port.

The second role of the Design Team has been to positively influence development proposals that have an impact on the physical environment of West Quay.

Through this input, the design of structures and landscape elements within the streetscape and the treatment of building facades have been kept appropriate to the character of the precinct.

The services of a heritage architect are employed as required in the role of peer review and for final checks, particularly for developments involving modifications to buildings.

Developers employ their own designers to work through their particular design processes, using the Design Team to provide guidance for outcomes that will comply with resource consent requirements.

URBAN DESIGN ISSUES

The urban design issues dealt with in the course of the project have been:

- management of the process of change of use while protecting the unique character and heritage of the area
- facilitating changes in traffic patterns while maintaining access to the working wharf
- influencing the style and extent of re-development of buildings in the area
- creating an appropriate streetscape for the area.

Evaluation - U	rban Design Principles
Context	West Quay is an historic waterfront precinct that continues to be used as a port. As the area was being subjected to development pressure and threats to its unique heritage, Napier City Council sought to take a lead and instigated a design process to co-ordinate re-development of the West Quay area.
Character	The retention of the existing buildings and the dominant streetscape elements has ensured the retention of the area's character. Careful adherence to these elements in new developments has been essential.

	References to the area's pre-European history have been incorporated, including the construction of a 'waka wharf' and a carefully positioned carved pou. These help to acknowledge the area's cultural and historical significance.
Сноісе	West Quay is an excellent example of the active provision of a mix of uses - in this case adapting buildings to suit evolving functions and needs. The focus of the design process has been on managing and guiding this process so as not to destroy the characteristics of the area that make it attractive to potential users and developers.
	New apartment developments in the area will complement the existing restaurant, café and bar facilities.
	Retaining the area's function as a working wharf has also been vital to the success of the project.
Connections	The development is well integrated into the traffic plan for the suburb and the port facilities. Traffic control measures such as carefully designed slow points, combined with the co-operation of trucking firms, have been successful in removing around 95% of the heavy traffic from West Quay, creating a better environment for pedestrians and cyclists. Recreational needs (walking, cycling, jogging and sightseeing) are well catered for.
	The popularity of the area has put pressure on existing parking, and providing more parking is part of the long term strategy.
Creativity	The outcome has been positive as a result of the Council taking a strong design- led approach and being active in the re-development of this historic precinct. The development has successfully managed to integrate developing new uses and enhancing the streetscape with retention of an original working wharf and associated historic buildings.
Custodianship	The relationship of West Quay to the wharf and harbour and the views to the boats has been a feature of its development.
	The existing built environment has been the primary determinant of the style of streetscape elements used.
	Honest, robust, industrial marine materials have been used with a minimum of clutter. Simplicity and understatement have been pursued rather than importing design influences from other urban spaces.
	Some compromise has been accommodated in the interests of comfort, such as allowing sun umbrellas, but permanent enclosure of the public open spaces has been discouraged.
	Existing trees (coastal native species) have been retained and some limited additional planting has been done to soften street treatments.

COLLABORATIONResolving design issues at the 'front end' rather than in hearings and Court is
beneficial for all parties. Regular consultation with tangata whenua and
stakeholder groups has been a feature of the design process.Regular consultation and openness about what is planned for the area and why,
has been essential to retaining both public and stakeholder support for the
development of the area.

LESSONS LEARNT

Consistency of approach and continuity of personnel have been significant factors in the success of the Design Team approach. Resolving design issues at the 'front end' rather than in hearings and Courts has been beneficial to all parties.

Some developers have found the process frustrating and some have walked away from involvement because of the perceived inflexibility of the consent requirements. Those who have seen the process through, however, have eventually realised that the outcome has been worth the perseverance.

What has been good for West Quay in terms of the retention of urban character and heritage, has also been good for business. The fact that more developers are lining up to become involved in the area, particularly for residential and commercial use, would appear to be a vote of confidence in the approach used. Indeed, the biggest issue confronting the area in the future is its popularity and with that, the need to cater satisfactorily for people wishing to live in and use the area.

The 'proactive' approach to meeting resource consent requirements has been very successful in avoiding time-consuming and costly hearings and litigation.

A few concerns have been expressed by recently arrived residents relating to some of the streetscape elements such as the traffic slowing devices and the carved pou, but most users consider these positive elements.

Not all the built elements have been built to the highest quality of workmanship and there has been some frustration at the lack of satisfactory supervision of construction (which is outside the Design Team's brief).

VALUE GAINED

Values in the area have risen significantly over the period of development. Some of this rise in value can clearly be attributed to the worldwide phenomenon of increases in the value of waterfront land.

However, the extent of increase in value, and the perception that West Quay is a desirable area in which to invest can in part be attributed to the success of the West Quay project.

The development of new apartment complexes and high occupancy rates of motels in the area are further evidence of the success of the urban design processes and results.

Stakeholder Jarrod Lowe, Proprietor of The Gin Trap, a restaurant and bar developed and operated under the terms of the process described above says, "The results of the Design Team's efforts have been beneficial to my business".

Napier Mayor, Barbara Arnott, says, "Good planning has maximised the potential of West Quay. The retention of historic industries with the integration of waterfront living and recreational activities make for a dynamic environment".







Images from top to bottom

- 1 Aerial view of West Quay.
- 2 West Quay market.
- 3 West Quay proposals.





URBAN DESIGN PROTOCOL



