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South Christchurch Library, Service Centre and Community Learning Centre

Functional Design Brief and Budget

Prepared for
The Christchurch City Council
Project Control Group

by

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CHRISTCHURCH CITY LIBRARIES
BECKENHAM SERVICE CENTRE
COMMUNITY LEARNING CENTRE

Version 3, 29 November 2001

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1. INTRODUCTION

A report recommending that a new combined Library/Service Centre/Community Learning facility be constructed on the site of the existing Beckenham Service Centre was endorsed by the Council in November 2000, subject to consultation. Consultation was subsequently carried out and the proposal adopted by the Council at its meeting on 22 February 2001.

Following adoption of the proposal, the project's pre-development phase was commenced, culminating in development of the concept design, functional design brief, and a budget report for presentation to Strategy and Resources Committee in December 2001.

On approval of this brief and associated budget the development phase will commence, leading to building construction and commissioning.

2. PHILOSOPHY BEHIND THE NEW FACILITY

2.1 Background

Expansion of Spreydon Library was first identified in 1993 as part of a development and enhancement plan for suburban libraries. Budget provision was made in 1996 and planning was initiated to get the project underway.

In 1999/2000 funding was available for the purchase of land to allow for the building of a new library at St Martins in the following financial year. The Council was unsuccessful, however, in its bid to purchase the only suitable piece of land in the area (the site of the former St Martins Catholic Church).

At the Council meeting on 25 November 1999 the recommendation in the Strategy and Resources Report of 15 November, regarding Spreydon Library accommodation options, was replaced with the following resolution:

"*It was resolved that a report be sought on the provision of a combined service centre/library for the South Christchurch area, which would obviate the need for major upgrading of the St Martins and Spreydon Libraries.*"

An officer project group was set up in February 2000 to investigate the strategy for the delivery of library services in the south of the city in conjunction with the future of the Beckenham Service Centre. At this time, following closure of the Sydenham Primary School, the Ministry of Education and local schools were considering how best to provide enhanced facilities in South Christchurch for schools information technology education. The project group, through liaison with the education sector, developed the concept of a combined facility, incorporating a technology based learning centre for schools as well as wider community use.

The resulting report recommended that a new combined Library/Service Centre/Community Learning facility be constructed on the site of the existing Beckenham Service Centre.

This recommendation was endorsed by the Council in November 2000 subject to consultation. Consultation was subsequently carried out and the proposal adopted by the Council at its meeting on 22 February 2001.

2.2 Project Phasing

The project has been divided into two distinct phases; Pre-development and Development phases.

The Pre-development phase constitutes the following deliverables:

- Project Terms of Reference Document
- Functional Design Brief and Budget Report
- Project Delivery Methodology Report for future stages

This document is the Functional Design Brief and Budget Report for the project. It provides a brief for the Architectural and technical design requirements for the future Development Phase of the project and a budget estimate.

The Development phase constitutes these deliverables:

- Detailed design and documentation
- Resource Consent
- Tender
- Tender evaluation and recommendation
- Construction
- Commissioning and Opening

2.3 Aims and Objectives

Aim: To enhance customer service delivery and obtain maximum efficiency gains through the cost-effective co-location of Library, Service Centre and Community Learning facilities.

Objectives:
To provide a building which meets the following Objectives:

1. Co-located / integrated Library / Community Teams facility in line with the Suburban Service delivery strategy document

2. "Healthy", safe, "friendly" building in terms of all users - customers and staff delivery function with flair

3. Completed within the Council approved budget

4. Completed within the Council approved programme

5. Complying with all the requirements of the agreed Brief including quality

6. Designed to give a good balance between capital costs and operating costs - lifecycle costs

7. Meeting the requirements of Council policies eg Energy Strategy and Children's Policy

8. Meeting requirements of Council criteria for waste minimisation and sustainable design

9. Social focal point for the local community

10. Library and advocacy functions preferred location is the ground floor. However the Project Control Group remains open to creative architectural design.

11. Inclusion of a fire sprinkler system

12. Continuity of existing Service Centre activities on or near the site after demolition of the Service Centre (To be pursued with the Community Board).

13. Flexibility for future users/adaptability to technology changes

14. Space provision for a Community Learning Centre

15. In sympathy with surrounding residential area

16. Natural light for workspaces

17. Inclusion of a Cafe

3. SITE DESCRIPTION

The site for the new Library/Service Centre is the site situated on the corner of Colombo St and Hunter Terrace currently occupied by the Beckenham Service Centre, plus adjacent land also owned by the City Council largely comprising water supply facilities.

Council Land comprises:

- The corner site covering 2,529 square metres on Certificate of Title 7B/666.

- 1.747ha of land immediately adjacent to the corner site and stretching along Hunter terrace fronting the Heathcote River, on CT 7B/589

- The existing Water Supply and storage area comprising 1.3152ha on CT 241/117.

3.1. Summary of Provisions of the Proposed City Plan applying to site

General

The site is zoned Living Zone 1 in the Proposed Plan and part of the site is designated for the Scheduled Activity of Service centre and community services.

In a Scheduled Activity Zone any activity other than that for which the site is specifically scheduled shall be subject to the normal standards of the zone. The proposal includes library and educational facilities as well as the scheduled service centre usage. It is therefore assumed that the building will be subject to the Living Zone 1 rules.

Under the Proposed City Plan a resource consent application will be required for the proposal.

A PIM application has not yet been made for the project. The details listed below will require to be confirmed by means of a PIM application.

Site Density

Open Space – residential and other activities; the maximum percentage of the net area of any site covered by buildings shall be 35% less 18m^2 for activities other than residential in the development standards. And 40% in the critical standards.

Scale of Activity

Scale of activities – the maximum gross floor area of buildings used for activities other than residential activities shall be 40m2 or 30% of the GFA of all the buildings on the site, whichever is the larger.

Site Size

Site Size- the maximum net area of any site for activities other than residential activities shall be 1100m2.

Hours of Operation

Hours of operation – maximum total number of hours that the site shall be open to visitors, clients or deliveries for any activity other than residential activity shall be 50 hours. Hours of operation shall be limited to 7.00 – 2300 Monday- Friday and 0800 – 2300 Saturdays/ Sundays and Public Holidays.

Building Setback

Street Scene – residential and other activities

(a) The minimum building setback from road boundaries shall be 4.5m
(b) Parking and outdoor storage areas shall be screened from adjoining roads by landscaping, walls, fences, or a combination. The minimum height of screening shall be 1.8m for activities other than residential

Separation from neighbours – residential and other activities; the minimum building setback from internal boundaries shall be 1.8m except that;

(a) Accessory buildings may be located within the 1.8m where the total length of walls does not exceed 9m.
(b) Where an internal boundary of a site adjoins an access, the minimum building setback (except accessory buildings) shall be 1m.

Building Height

Building Height – residential and other activities; the maximum height of any building shall be 8m under the Development standards and 9m under the Critical standards. Both to be within the designated recession planes

Continuous Building Length

The maximum length of a building shall be 20m except that this length may be exceeded where there is a minimum step in plan of 2.4m for each 20m length of a building and each step in plan extends for a minimum length of 6m.

Building Size

The maximum gross floor area of any single building shall be 550m2.

Landscaping

Screening from neighbours – other activities; parking and outdoor storage areas shall be screened from adjoining site(s) by wall of 1.8m in height or landscaping 1.5m in height.
Minimum depth of landscaping along road frontages 1.5m.

The site has on it a number of Notable and Protected trees. These were the subjects of a separate report. A number of these in particular those located in the centre of the site will require removal or relocation to accommodate the proposed building.

Traffic Generation

The maximum number of vehicle trips per site shall be 2 Heavy vehicle per site and 50 other vehicles per day.

Facility Access

The vehicle entry to the site shall be from Colombo Street. A point of vehicle entry may also be required from Hunter Terrace. Under the Proposed plan Colombo Street is designated as a minor arterial road. Hunter terrace is designated as a local road;

Parking area and access design - minimum requirements for private ways and vehicular access;
Legal width 6m (reducible to a minimum of 3m for one way access where no more than 30 vehicle movements occur in any hour.)
Formed width 4.5m

On-site manoeuvring –

(a) on site manoeuvring shall be provided to ensure that no vehicle is required to reverse either onto or off the site.
(b) Parking spaces shall be located so as to ensure that no vehicle is required to carry out any reverse manoeuvring from any vehicle access to any required parking spaces.

(c) Vehicles shall not be required to undertake more than one reverse manoeuvre when manoeuvring out of any required parking or loading space.

Queuing spaces - shall be provided on site for all vehicles entering or exiting a parking or loading area. Queuing space length shall be measured from the road boundary to the nearest vehicle control point or point where conflict with vehicles already on the site may arise. For 50 – 100 parking spaces the minimum queuing space length is 15.5m.

For a frontage length of 16-60m on a minor arterial road (Colombo Street) the maximum number of vehicle crossings is 1.

Distances of vehicle crossings from intersections - Vehicle crossings to be located no closer to intersection than 25m (intersection type frontage road minor arterial to local and service road).

Access for high traffic generators - Any activity on a site, which is not in the Central City Zone providing more than 25 parking spaces shall be a discretionary activity with the council's discretion limited to vehicular access. This proposal would be deemed a high traffic generator.

Car Parking

Parking space numbers - for any activity the owner shall provide parking spaces at the following rates. Or a cash payment of 90% of land value ($25m^2$ per car park) may be made in lieu of part or all of the parking requirement.

Activity	Libraries
Residents/Visitors	1 space/$50m^2$ PFA
Staff	1 space/$200m^2$ PFA
Cycle	1 space/$100m^2$ PFA
Loading/unloading	as per general requirement

Activity	Learning Centre (done at Primary School rates)
Residents/Visitors	1 spaces/ 10 students set down
Staff	1 space/ 25 students
Cycle	1 space/ 5 students
Loading/unloading	1 99% car bay for less than 100 students

Activity	Offices
Residents/Visitors	5% of staff requirement (1 space minimum)
Staff	2.5 spaces/100m2 GFA
Cycle	1 space/200m2 GFA
Loading/unloading	1 99% car bay/800m2 GFA or part thereof + 1 HGV bay/8000m2 GFA (up to 16000m2 GFA)

PFA = Public Floor Area
FTE = Full Time Equivalent
GFA = Gross Floor Area

Parking spaces for people with disabilities: shall be provided at a rate of 1 for up to 10 spaces, provide 2 for up to 100 spaces provided.

The requirement for vehicle parking for this proposal is estimated as follows:-

LIBRARY (including library office space of 266m2)
Area 1695 m2
Total car parks required 43 +1 loading
Visitors 34, Staff 9, Cycle 17
Loading/unloading I 99% car bay

OFFICE SPACE
Area 280 m2
Total car parks required 9 + 1 loading + 1 HGV
Visitors 1, Staff 8, Cycle 2
Loading/unloading I 99% car bay + I HGV bay

LEARNING CENTRE
Area 295 m^2
Total car parks required 8 +1 loading
students: 60 , Visitors 6 (set down only)
Staff 2, Cycle 12
Disabled parking 1

TOTAL PARKING REQUIREMENT: 60 normal + 3 loading spaces , 1 disabled and 1 HGV bay
(This figure will require confirmation by way of a PIM application)

3.2 Summary of Provisions for the Heathcote District Plan applying to the site

General

The site is zoned Residential 1in the District Plan and part of the site is a designated area for a Christchurch City Council Waterworks Yard and Pumping Station.

Residential Zone Analysis – both the library and the educational facility are classed as conditional uses.

Requirements for conditional uses shall be set by the council having regard to the circumstances of any application, but shall generally be the same as those for predominant uses.

Under the Transitional Plan a resource consent application will be required for the proposal.

A PIM application has not yet been made for the project. The details listed below will require to be confirmed by means of a PIM application.

Site Density

Maximum site coverage for all buildings is 45%.

Building Setback

Minimum yard requirements for corner sites are as follows
Road boundary 4.5m
Road boundary 3.0m
Side boundary 1.8m
Side boundary 2.7m
*The determination of which measurement relates to which road/side boundary to be decided by the designer.

Landscaping

Shall be provided over 20% of the site and where vegetation is involved a maintenance period of one year is required.

Car Parking

The requirements for off-street parking spaces shall be as follows:

Libraries, offices (other than professional offices)2 spaces/100 m^2 PFA

Education and research institutions 1 space/2 staff and 1 space/10 students over age 15

The requirement for vehicle parking for this proposal is estimated as follows:-

LIBRARY (including office space of 266 m^2)
Area 1748 m^2 **Total car parks required 35**

OFFICE SPACE (non-professional offices)
Area 280 m^2 **Total car parks required 6**

LEARNING CENTRE
Area 322 m^2
60 Students (under age 15)
5 Staff **Total car parks required 3**

*Toilets facilities area included in total area – this varies from the Proposed City Plan.

TOTAL PARKING REQUIREMENT: 44 standard car parks

Facility Access

Access to major developments where the use of the site is likely to generate more than 50 vehicle movements on 35m of frontage in any one typical hour during the first five years of its use, or where potential conflict between vehicles and pedestrian traffic dictates, the developer may be required to provide a drive-in access.

A crossing constructed to commercial standards is required here. A crossing continuous with a side boundary must not exceed 4.5m.

The minimum length of crossing for Colombo Street being an arterial road is 4.25m this may be increased by 1m at the Councils discretion.

Where a property fronts onto more than one street and subject to satisfying all other requirements, a developer may amalgamate all or part of his crossing entitlement for each frontage. The disposition of the access so created shall be at the discretion of the council.

Distance of Access from an Intersection – Access to be sited no closer than 30m where the frontage road being an arterial road intersects a local road. Distances measured to the curb line.

Vehicle entry to parking other than by access ways must be prevented. Also prevent the approach and damage of boundary fences.

Reservoir space to be provided to prevent vehicles queuing on the street.

4. GENERAL REQUIREMENTS

4.1 Introduction

The South Christchurch library, Service Centre and Community Learning centre will provide a co-located public facility for Library and Service Centre users plus Learning centre. The needs of all the users must be considered and the final design shall provide for a fully integrated facility.

The facility also provides a place of work for City Council staff and elected member facilities. The design must balance the requirements of staff working conditions, elected member and community user expectations and requirements.

4.2 Function and Service Requirements

In particular the building will provide for:

- A community library
- Boardroom facilities for the Spreydon/Heathcote Community Board, Resource Management Panel hearings and wider community use.
- Walk-in customer service facilities for receipting, handling action requests for Council and general Council/community information.
- Administration servicing of the Spreydon/Heathcote Community Boards.
- Delivery of community activities, technical and general support for the Spreydon/Heathcote communities.
- A community constable.
- Community Learning Centre principally delivering education in computer technology for primary school children

4.3 Concept design

The proposed building is single level, approximately 2400m2 in area. The Northern aspect incorporates substantial area of glazing to provide visual link with the river environment and visibility from Colombo St and Hunter Tce. Car parking is on the south side of the building so that vehicles do not screen the northern aspect and also to provide for possible future alterations to Hunter Terrace and to enable easy access to the building entrances.

Concept Design only has been carried out, detailed design shall be part of the Development Phase.

4.4 Learning Centre

The Council has the opportunity to be a partner in an innovative Learning Centre integrated with the library within this facility. Whilst the partnership with the education sector has yet to be finalised, the parties involved (Ministry of Education and local schools) have indicated their real interest in such a venture. It is understood that the recent closure of Sydenham School will realise sufficient capital from education vote to fund the operational costs of the Learning Centre for a 3 – 5 year period. It is hoped that partnerships with local and national technology business interests can also be fostered to support this venture.

The proposed Information and Communications Technologies Learning Centre is intended to serve a number of functions, as follows:

4.4.1. On site learning opportunities

A space equipped with a suite of networked, internet connected computers (and other peripheral ICTs scanner, digital camera, data/video projector, etc) to be used for:

- Primary school student lessons (which may be in conjunction with using the library) during the school day
- Teacher professional development at various times
- Secondary/tertiary students after school / evenings
- Community groups/members of the public at various times, eg adult education classes, senior citizens groups

4.4.2. Resource Centre for ICT equipment & resources

It is envisaged that the Learning Centre would serve as a resource centre to house loan equipment for local primary schools, eg;

- data/video LCD projectors for multimedia presentations
- polycoms for audio link ups and conferencing
- scanners
- digital cameras
- video cameras
- set of laptops and/or notebooks

The centre could also have a high specification equipment that would be too expensive for any one school to purchase for on site use eg; a digital colour printer for schools to do colour print runs.

It is envisaged that the centre would enable teachers to trial software and applications prior to purchase and offer technical advice to schools.

4.4.3. Global Net & Waterlink

With the incorporation of the Learning Centre within the New Beckenham Community Library and Service Centre, it has been proposed that Global Net,

one of the Council's most successful millennium projects, would make its future home in the Centre.

4.4.4 Planning Considerations:

Sufficient floor area and appropriate division of space to accommodate the various intended functions.

These include:

- Computer suite/classroom space
- ICT resource storage area to house loan equipment, specialist high specification equipment, area for teachers to trial equipment and software
- Technical support office/administration space
- Toilet – cloak space for school groups
- Easy access by school groups and teachers picking up/dropping off equipment that doesn't interfere with the other functions of the building.
- Child designated toilet and cloak facilities for school groups, that could be public facilities at other times.
- Visual and physical access to library at least from the computer suite (not necessary for other functions – loan equipment storage, technical support space).
- With the close proximity of the upgraded Beckenham exchange, there is an opportunity to seek a partnership with Telecom to ensure that high speed digital facilities are supported. Obviously any 'wiring' of the building for internet and network facilities should be designed in conjunction with the best technical advice and assistance available to ensure reasonable 'future proofing'. Telecom could be approached to support an 'experimental/demonstration' digital linkup among the schools in the South Christchurch area

There are opportunities for this to be an innovative Ministry of Education – Christchurch City Council – local IT industry initiative which could be used as a 'test bed' for developing practices designed to close the information literacy gap and as such offer a blue print to other communities. It is therefore vital that the design of the spaces and the technical infrastructure support this exciting initiative and future developments.

4.5 Community Views

A commitment to public consultation, and to keeping the community informed throughout the project, resulted in the development of a communications plan

which identified project milestones, key stakeholders, both internal and external, and appropriate means of consultation. These include press releases, internal newsletters, public meetings, charettes or roadshows and a website http://library.christchurch.org.nz/south
Important customer groups to be consulted have been identified as:

- The general public
- Senior citizens
- Youth and children
- Local schools
- Councillors and Community Board members
- The Beckenham and Cashmere Junior Voluntary Library Committees
- Maori
- The Pacific Island Community

Ideas and issues gathered have been used to inform the architects concept plan. Information gathered throughout the consultation process has been collated and is available on the website.

The Library and Service Centre Briefs and views sought from the community formed the basis for the work carried out during the Pre-development phase, and are included in subsequent sections of this document.

4.6 Children and Families

Christchurch City Council is committed to Christchurch developing as a 'child-friendly city'. Whilst many of the specific requirements relating to people with special needs are covered and satisfied by the New Zealand 4121 Code of Practice for 'Design for Access and Use of Buildings and Facilities by Disabled Persons' and the NZ Building Code section S1/AS1, there is also a need to identify the needs of children and their families. For this reason all aspects of the design will, with sensitivity, acknowledge the smallness of children, their height, sight lines and physical limits.

The Architect is referred to the publication 'Designing for Parent and Child' available from the Christchurch City Council Children's Advocate.

4.7 Passive Design and Energy Efficiency

The internal environment is dependant upon the local climate, external building envelope, its thermal mass and the arrangement of the major spaces, in addition to the natural and mechanical environmental control systems provided in the building. The building's form and structure will be designed to assist with the control of the environmental conditions in a passive manner. This will minimise the requirement for active systems and therefore optimise energy consumption. Mechanical systems which are provided will be cognizant of energy efficiency and sustainable design issues. The internal temperatures anticipated with the passive and semi passive systems will generally fall within the range of 20oC to 24oC, higher temperatures will however be experienced on very hot days.

The design should be carried out in accordance with the requirements of the Christchurch City Council Energy Strategy 2020. An Energy Efficiency and Sustainability Assessment should be carried out.

4.8 Future Proofing and Flexibility

Future changes of use, growth and new technology require that provision for flexibility is made by planning structure and services to allow for such possibilities to occur at least cost in the future.

Examples of provision for the future include, but are not limited to:

- Adoption of common design floor-loads throughout to permit future relocation of uses within the building without restriction, eg expansion of library into service centre space.
- Avoiding using solid internal load-bearing walls which may be a future barrier to changed building usage.
- Consideration of 'open-planned' office functions flexible to change.
- Common ceiling heights within zones permitting partition relocation.
- Provision of accessibility to services to allow the installation of new cabling for new functions.
- Accessibility to wall, ceiling and floor cavities, or provision of access ducting.
- Provision of multiple service point locations within spaces.
- Integrated cable routes for electric power, security, fire data, data, telephone, audio and video networks with suitable segregation.

4.9 Sustainable Design /Durability

Sustainable Design

It is stated elsewhere in this brief that the design shall take into account the councils criteria for waste minimisation and sustainable design and meet the Councils Energy Strategy.

The complex will have to be designed and constructed in accordance with specific energy standards set by Christchurch City Council. These standards surpass the requirements of the building regulations and the targets envisaged in the Energy Efficiency and Conservation Strategy as released by the Energy minister in September 2001. The issue of passive design and energy efficiency has already been addressed in more detail in section 4.5 of this document.

The following issues have been taken into account in the preparation of the Concept Design. Most of the items listed have been included the Functional Design Budget. Those issues not included in the Functional Design Budget have been highlighted and have been added to the Functional Design Budget as options for approval by the Council.

Material selection

1. The contract documents should specify the use sustainably sourced timber only.
2. The project should specify the use of the lowest possible wood hazard class for timber treatment allowed by the building code for any given situation.
3. The project should aim to avoid the use of CCA & LOSP timber treatments and promote the use of more environmentally benign alternatives. This issue has been highlighted for specific Council approval.
4. Where possible the scheme should support and give preference to materials endorsed by the Ministry of Environment sponsored Environmental Choice Labelling Scheme.
5. Where applicable the material selection should give preference to manufacturers who are actively engaged in improving the environmental impact of their manufacturing processes and can demonstrate this fact.
6. Where possible preference should be given to the use of materials with a recycled content. An allowance has been made for the use of cements with a percentage of industrial waste, acoustic insulation manufactured from wool and recycled polyester, glass wool with recycled content. The use of recycled tarmac has been highlighted for specific Council approval. There are many other materials that have a recycled content these will have to be analysed on a case by case basis.
7. The specification of materials will aim to minimise the use of materials, which are polluting in their manufacture or life. This will include minimising the use of PVC's, certain paints, polyurethane's, refrigerants, insulating materials and floor vinyls. Allowance has been made for the use of low VOC paints and polyurethane's, PVC alternatives to plumbing and drainage pipe work and alternatives to vinyl flooring in toilet areas. Other materials will be analysed as the project progresses. Each issue will have to be analysed on a case by case basis.
8. Construction materials which are known to off-gas potentially dangerous chemicals should be avoided or minimised where possible. Allowance has been made for the use of low emission phenol formaldehyde bonded plywood and water-based paints among other things. The use of low formaldehyde MDF will be analysed availability and budget constraints.
9. Where relevant consideration should be given to the embodied energy content of the material selected.

Durability

1. The National Building Code will apply to the construction of the new Library / Service Centre with performance standards requiring that the building shall have minimum design life of 50 years. The building code and life cycle design accept that components both internal and external will be renewed within this period.
2. The design should aim to, where reasonable, incorporate durable materials to minimise the use of applied surface finishes. Allowances have been made for the use of stone cladding, glass, anodised aluminium, and ceramic tile floors.
3. The selection durable materials over less durable alternatives may be investigated and proposed to the council for approval on a life cycle costing basis.

Waste

1. During the construction programme construction waste should be minimised. The contract documents shall include a requirement on the contractor to have a site specific waste management plan. This will be based on the standard plan currently being developed by the Target Zero team.
2. The design shall allow for the provision of space for the collection and storage of recyclable material.
3. Consideration should be given to the use of an on site wormery or other composting facilities for vegetable scraps.
4. The building should incorporate 2 composting toilets for educational / demonstration purposes. This issue has been highlighted for specific Council approval.

Water Use

1. Provision shall be allowed for the collection and storage or rainwater to reduce overall water use and to reduce stormwater run off. This water shall be used for irrigation and use within the moat.
2. Grey water storage and recycling may be adopted to further reduce water use. This issue has been highlighted for specific Council approval.
3. Throughout the project low water use plumbing fittings shall be specified. An allowance has been made for the use of time-controlled taps, dual flush toilet cisterns, low flow showerheads and waterless urinals.
4. Due to the small demand for hot water in the building it is likely that solar water heating will have a long payback periods. However as solar water heating is a simple concept easily understood and copied by the public we believe it is important educationally to promote solar water heating. This issue has been highlighted for specific Council approval.

Landscaping

1. The existing deciduous trees along Hunter Terrace will be retained where possible and used for seasonal solar shading.
2. The landscaping included in the proposal is limited to the to the car park and associated pedestrian areas and a small amount of planting adjacent to the car parking. Within this limited scope preference will be given to the use of indigenous plant species.
3. Permeable surfaces should be used in car parking areas to reduce storm water run off and help to filter oil residues and other pollutants. This issue has significant costs attached and has been highlighted for specific Council approval.
4. During the construction process ditches and silt filters should be used to reduce silt run off into the Heathcote River should the site contours make this necessary.

5. ARCHITECTURAL DESIGN REQUIREMENTS

The design requirements comprise the Library and Service Centre briefs and summary of views expressed and noted at the various public meetings and stakeholder workshops. The Main Themes from Public Consultation are noted below and the design briefs are appended.

Main Themes from Public Consultation

Access/Mobility

Awareness of accessibility for people with limited mobility

- Doors not too heavy – automatic doors – may need to be wider for people with disabilities
- Space for mobility scooters and wheelchairs to manoeuvre
- Unisex toilets for the disabled
- Parking close to the entrance for the disabled
- Ramps not too steep for hand propelled wheelchairs and walking frames – need good handrails – shallow step risers, wide treads, well defined edges
- Some seating should not be too low and should have good arms – small tools near shelves
- Small trolleys for carrying books
- Shelving with pull out tables, Not too low or high in the Large Print area

General Access Issues

- Safe pedestrian access
- Re-route the Orbiter
- Plenty of parking – landscaped – behind the building – bus parking for schools – safe egress – on site parking for staff
- Dual entrances from Colombo Street and Hunter Terrace
- Plenty of cycle stands
- Free Library service
- After hours returns slot – drive by
- Good security system
- Good, easy to read signage - Library branding and standards will dictate this – good advance external signage from Colombo Street
- Collection well identified
- Direction map
- Know where we need to go – clear distinction between the Library and the Service Centre
- If 2 storeys have as lift – no escalator – keep upstairs for mostly non-public functions
- Visible Service Centre contact

Environment/Ambience

- A mix of vitality and tranquillity – acoustics important
- Pleasant welcoming pleasurable environment
- Reading area with comfortable seating – river views, access to the river from the building – some outside reading areas – quiet study areas

- Retain as many trees as possible – make the most of the river – no flaxy grasses – fit with residential area – take a 'global' look at surrounding land – interface between Hunter Terrace and Colombo Street
- Long low building, but not too low ceilings – use 'Cashmere' materials, stone and scoria – not too much concrete and glass – vibrant colour - set back from corner – split roof line – doors opening to favourable weather conditions – courtyard effects – tie in with the Malt House across the road
- Avoid steps in unexpected places or unexpected changes in floor levels
- Café with reasonable prices
- Good lighting – natural light as much as possible
- Avoid security lighting which impacts on surrounding residential area
- Safe children's play area outside
- Child friendly – crèche - children's area away from the entrance – away from quiet areas – room for class visits, story reading sessions etc.- safe toilets
- Parenting room
- Young people's area – comfortable seating – music – place to hang out
- Study areas with tables, comfortable seating
- Fish tanks
- Meeting rooms – available after hours

Sustainability

- No artificial air conditioning – use of passive solar energy – cool in summer, warm in winter
- Use of non-toxic materials
- Natural cladding – no need for painting

Services

- Free Library Service
- 7 day service until 9.00pm
- Varied resources – books, lots of new books, videos, CDs, DVD, Large Print, talking books, car and bike manuals, wide range of magazines and newspapers (Akaroa Mail and Ashburton papers etc.), business services, information, Council information, telephone directories etc.
- Free Internet, email – downloading from Internet to disc
- Facility to preview CDs
- Help with computer catalogues - community IT classes, sessions for Seniors – Seniornet
- Plenty of computers
- Printing, copying, binding services
- Word processing facilities
- Public Sky, Newsroom, CNN etc.
- Community notice boards – display areas – window display facilities – facilities to display local art etc.
- Citizens' Advice – counselling services for youth
- Toy Library
- Public telephone
- Story telling sessions for pre-schoolers – music sessions

- Supervised homework programmes
- Place for Local History
- Place to make Council payments – buy bus tickets, rubbish bags etc. – get Council information and advice
- Bank ATM in the foyer (none available in the area) – Post box

Other

- Acknowledgement of the contributions of volunteers at The Beckenham and Cashmere Junior Libraries over the years
- Personal service – people know you and what you like
- Library is still a place to borrow books
- Shift the Beckenham Library books
- Retain the Community Constable
- Keep the things available at the Library and Service Centre now
- Knowledgeable, qualified, friendly helpful staff
- Parents should control children
- No canned music
- Seating outside while waiting for buses or taxis
- Reuse existing building in some way

6. STRUCTURAL REQUIREMENTS

6.1 Preamble

This section of the Functional Design Brief covers the structural and geotechnical design criteria for project.

Care is needed with the structural design to incorporate future flexibility and security of the building structure.

6.2 Design Standards

All structural design and construction shall comply with the latest version of the New Zealand Building Code, Handbook, Section B1, Structure and B2, Durability. Unless noted otherwise, comply with all relevant Verification Methods and all relevant Acceptable Solutions. Alternative solutions may be permitted, but only with the express approval of the Territorial Authority.

6.3 Floor Design Loadings

Design floor-loadings shall be in accordance with NZS 4203:1992 Table 3.4.1 Basic Live Loads for Floors and Stairs. Where floor-loadings are not specified in the above Standard, they shall be calculated by the engineer for the specific situation.

6.4 Durability of the Building Structure

The specified intended life of this building shall be 50 years. The quality of the design and construction of the building structure and its associated components shall meet the requirements of the New Zealand Building Code, Clause B2, Durability.

6.5 Future Proofing the Building Structure

The building design shall allow for a high degree of flexibility of the use of Library, Service Centre and Community Learning spaces. For example, during the life of the building it may be that service centre spaces are converted to library spaces and vice versa.

Internal columns should be minimised to give clear spaces. Special consideration shall be given to the library display areas.

Structural walls should be carefully located to allow for a good degree of future flexibility of usage.

6.6 Seismic Design Criteria

In general, the building structure shall be designed for a seismic risk factor of R=1.1 commensurate with the minimum seismic load requirements of NZS 4203:1992.

6.7 Structural Form/Type

Designers shall select the structural form/type that best suits the geometry of the building. The full range of structural types and materials as set out in Table 4.2.1 and their corresponding ductility factors, μ are considered suitable for this project.

6.8 Seismic Restraint of Building Services

It is particularly important that all building services are adequately restrained against seismic movement and rupture for this building project. The contents of the library are particularly vulnerable to ruptured pipes or tanks.

Designers shall adhere to the requirements of NZS 4219:1983 'Specification for Seismic Resistance of Engineering Systems in Buildings' except that Appendix A, covering loads from NZS 4203:1976 shall be replaced by the equivalent sections from NZS 4203:1992.

The Risk Factor in NZS 4203:1992 shall be taken as:

R = 1.1 for all general building services.
R = 1.3 for waterpipes, drainpipes, water-storage tanks, fuel tanks and items of plant containing water or fluids etc.

NZS 4219:1983 shall be modified to include the current appropriate materials, codes and design guides.

The design and construction of all seismic restraints for plant, equipment and pipework shall be accompanied by Producer Statements for Design and Construction Review from a New Zealand Registered Engineer competent in that work.

6.9 Geotechnical

Geotechnical information is set out in the attached Appendix.
The Engineer shall arrange for any further, necessary site investigations to determine the specific soil conditions at the site. Borehole records adjacent to the site are included in the Appendix.

6.10 Building Vibration

Special care is needed with the design of the building structure to ensure that building vibrations are kept within acceptable limits. Designers shall mitigate the effects of vibration by adopting proven methods of isolation, damping, stiffness control etc.

All sources of vibration from mechanical plant and the like shall be adequately isolated using rubber mounts, concrete plant decks and the like.

Suspended floor design shall comply with the NZS 4203:1992 Commentary recommendations that deflections shall be less than 1 mm under a 1.0 kN point load at all positions on the slab so as to limit transient vibrations from footfall effects.

6.11 Removal of Existing Foundations and Slabs

The building contract shall allow to demolish and remove the existing Service Centre building and any concrete foundations and floor slabs remaining on or under the site.

7. MECHANICAL SERVICES REQUIREMENTS (incl Fire)

7.1 Introduction

The Mechanical, Hydraulic and Fire Services shall comprise the following systems:

(a) Mechanical:

- Environmental control by passive, semi-passive or mechanical means, as appropriate throughout all normally occupied and habitable areas.
- Mechanical ventilation to service areas, including Toilets, Printing/ Photocopying areas, Kitchen, Showers and Cleaners.
- Electrical for Mechanical including electronic controls.

(b) Hydraulics:

- Sanitary sewer drainage.
- Domestic hot and cold water supply and reticulation to Toilets, Cleaner, Shower, Kitchens, Tea Making and Activities spaces, supplementary solar water heating within budget constraints.
- Roof water drainage, including water storage, for re-use where appropriate and within budget constraints.
- Soil, waste and vent plumbing.
- Water supply to landscape irrigation.

(c) Fire:

- Manual and automatic fire alarm systems.
- Fire hose reels and / or portable extinguishers.
- Automatic fire sprinkler system.

7.2 Regulations / Standards

The Mechanical, Hydraulic and Fire systems shall be designed and installed to comply with the New Zealand Building Code, Regulations and Bylaws of the appropriate Authorities having jurisdiction over the installation.

The systems shall be designed and installed to comply with at least the minimum requirements of the relevant New Zealand Standards. In the event that there is no applicable New Zealand Standard, then the relevant Australian Standard shall be used.

7.3 General Design Considerations

The Mechanical, Hydraulic and Fire systems shall take into consideration the following fundamental design requirements.

7.3.1 General

Sustainable and energy efficient practices shall be taken into account where practical and consistent with budget constraints.

7.3.2 Mechanical

- The systems shall be capable of providing satisfactory environmental control with optimal energy input.
- The systems shall be zoned and controlled according to the level of environmental control required in the specific areas.
- The facility and systems shall incorporate operational flexibility.
- The systems must be energy efficient.
- The systems shall include a high level of maintainability.
- Protection of books and records from risk of rupture, flooding, etc. of services shall be considered.

7.3.3 Hydraulics

- The systems shall have a high level of accessibility.
- Domestic water systems shall be energy efficient.

7.3.4 Fire

The fire protection design must comply with the fire safety objectives of the New Zealand Building Code, and seek as a minimum standard, equivalency with the New Zealand Building Code Acceptable Solutions. This is in particular reference to New Zealand Building Code Clauses C1-C4 and F6-F8.

7.3.5 Risk Mitigation

The mitigation of risk to people, books, and other building contents shall be considered and incorporated in all design and technical solutions.

7.4 Design Criteria – Environmental Control

The design criteria stated herein shall be used to meet the design and operational objectives.

- External Design Conditions:

The external design conditions are:
Summer 28°C DB, 19°C WB
Winter 1°C
which are the 2.5% design conditions for Christchurch City as advised by the NZ Meteorological Service.

- Internal Design Conditions (Dry Resultant Temperature):

(i) Internal temperatures will generally be controlled in the range 20ºC to 24ºC. Higher temperatures in the 26 – 27ºC range will be experienced during peak times (approximately 5% of the summer period). Specific spaces justifying air conditioning (e.g. computer suites, boardroom) will be designed for conditions of 22.5ºC ± 1.5ºC.

(ii) Toilet ventilation - 10 L/s per sq. metre floor area or 25 L/s per soil fixture whichever is greater.

(iii) Kitchen ventilation - to Code.

(iv) Outdoor air - minimum 10 L/s per person.

Zoning

The building environmental control systems shall be arranged to provide independent zones of control and operation as is necessary to suit the required environmental control. Zones of like requirements should be considered to be grouped or consolidated into common areas.

7.5 Plant and Equipment

7.5.1 Physical Requirements

Plant and equipment shall be located to provide a high level of accessibility, but shall be adequately protected against seismic loads, hail damage, wind loads and sabotage. Lightning protection shall also be provided.

Plant areas shall be fully bunded and sealed against water migration.

7.5.2 Vibration

Plant and equipment having the potential to introduce forced vibrations into the building structure shall be isolated to eliminate the transfer of vibration to the building structure.

7.5.3 Noise

Plant and equipment having the potential to generate noise shall be isolated acoustically from all zones of use and occupation.

7.5.4 Redundancy

No redundancy in plant systems is required.

7.6 Electronic Controls

Electronic controls shall form an integral part of the building management system (BMS) and shall have both control and monitoring capability.

The system shall be capable of fulfilling the following objectives:

- To maximise the mechanical services reliability.
- To maintain satisfactory conditions for staff.
- To optimise energy efficiency, and to minimise operational and maintenance costs.
- Consideration should be given to monitoring/interfacing with other building systems, within budget constraints, e.g. Security, lighting control, etc. Decisions will be based on a cost / benefit analysis.

The BMS front end shall provide visual and audible alarm of plant malfunctions. The BMS shall be serviced by a UPS.

The BMS shall be interfaced with the Christchurch City Council Civic Offices BMS.

7.7 Hydraulics

7.7.1 Domestic Water Services

Domestic water shall be provided to the building from a single metered water supply from the CCC street main.

7.7.2 Roof Water

Roof water systems shall be designed for precipitation of a 100-year return period.

7.7.3 Sanitary Sewer

Gravity drainage shall be provided.

7.8 System Maintenance

The Mechanical, Hydraulic and Fire Services shall be designed and installed to minimise future maintenance costs. This includes cost effective access.

Consideration shall be given to system designs that reduce the downtime or the period of system disruption for maintenance wherever possible.

7.9 Energy Efficiency

The building is to be designed to be as energy efficient as the budget constraints will allow.

The life cycle costs of systems shall be addressed and where significant operating cost savings are evident these shall be the subject of further investigation.

It is a specific requirement that an Energy Efficiency and Sustainability Assessment be carried out with the objective of the design of the energy consumption of the Library / Service Centre building to meet the Best Practice Benchmark set by the Christchurch City Council. This performance target includes lighting, air conditioning, heating, ventilation and miscellaneous energy uses.

In order for these Benchmarks to be achieved a fully integrated approach will be required with commitment from the entire project team and in particular the Architect that to some degree the building form will need to follow function, e.g. Building orientation, external shades, exposed structure, glazing restriction etc.

7.10 Fire Services

7.10.1 Protection Systems

The fire protection systems provided need to not only meet New Zealand Building Code objectives, but also the requirements of the Fire Safety and Evacuation of Buildings Regulations 1991.

Fire alarm and sprinkler systems are to be installed to reduce the impact of other fire protection features.

Due regard is required for support systems such as hand held fire fighting equipment, emergency lighting and security interfaces.

7.10.2 Egress Design

The following factors need to be considered:

- Travel distance and way finding
- Exit design

- After hours access and egress
- Smoke and fire separations.

7.10.3 Spread of Fire

Consideration is required for spread of fire risk to neighbouring property, and limiting contents damage within the new building. Advice needs to be provided to the Architect on any passive fire protection features.

8. ELECTRICAL SERVICES REQUIREMENTS (incl Communications and Data)

8.1 Electrical Services

8.1.1 Scope

The scope of the electrical services associated with the South Christchurch Library/Service Centre redevelopment will consider the following in terms of the relevancy to this project and design will be undertaken as necessary to provide an energy efficient and economic solution in line the 'eco friendly 'design of the building:

- Power Supply- mains survey and upgrade
- Main Switchboard
- Earthing
- Submains
- Distribution Boards
- Subcircuit Cabling
- Lighting Systems
  - External (incl carpark)
  - Internal General
  - Internal Feature Lighting
  - Emergency Lighting
- General Purpose Power Outlets
- Future Proofing
- Energy Conservation Target
- Lightning Protection on key sub-boards

8.1.2 Power Supply

The power supply will be obtained from an existing boundary box. A 400V supply will be taken from this box to the building main switchboard. The ICP No for the existing connection is 6805302. The capacity of this supply may enable it to be reused . Check with Orion.

Main Switchboard(MSB)

The main building switchboard will be designed in accordance with the following criteria:

- Metal clad switchboard in accordance with AS 3439.1
- All switchgear, busbars, terminations and distribution equipment designed to withstand the maximum prospective fault current for a period of one second assuming 250MVA at the 11kV terminals of the supply transformer
- Designed and installed in accordance with the seismic requirements of the building
- Compliant with all relevant New Zealand, Australian and International standards
- Allowance for metering

8.1.4 Earthing

Earthing of all electrical switchboards and equipment shall be included. A separate earth shall be used for the lightning protection . The earthing on computer and computer services should also be segregated from the main and lightning earthing systems.

8.1.5 Submains

Submains will be provided throughout the building to supply sub-distribution boards and items of significant equipment. The selection and routing of cables shall take into account the following:

- Minimal impact of electromagnetic interference, careful design of mains cable routes and cable configurations shall be considered.
- Fire resistance for essential services
- Ease of access for future flexibility
- Particular attention will be paid to segregation of services, residual current devices shall be utilized for all power outlets.

8.1.6 Distribution Boards

Distribution boards will be provided as necessary throughout the building and will be of the same metal clad commercial pattern as the MSB with MCB chassis mounted MCB's.

They will be positioned to allow for future flexibility of installing additional subcircuits during the life of the building. The boards will provide for a minimum of 25% of spare ways for future flexibility.

8.1.7 Lighting

The lighting can be split into two distinct areas. These are the external lighting and the internal lighting .

External Lighting
Lighting for the carpark will be considered during the initial design phase and included as necessary. The lighting levels will be to current standards for carparks. Some decorative waterway lighting will be allowed for fed from an RCD circuit.

Internal Lighting
The following standard shall be taken into account in the design for lighting for the Library/Service Centre, as minimum requirements.

- NZS 6703 1984 'Code of Practice for Interior Lighting Design'

except where superseded by AS/NZS 1680 'Interior Lighting' standards.

Lighting for the building will need to take into account the three different functions of the building and various time of after hours operation.

Some feature lighting will be provided at the main public entranceway to the building as well as around the public service counter of the Library/Service Centre. Use of daylight sensors for the lighting circuit nearest external windows and aisle access sensors for lighting between significant aisles in the library will be considered during the preliminary design phase of the project.

Emergency Lighting
The design will allow for emergency lighting throughout all areas of the building in accordance with the requirements of AS/NZS 2293:1995 "Emergency Evacuation Lighting for Buildings".

The minimum period of the availability of the emergency lighting will be in accordance with the requirements of the New Zealand Building Code.

8.1.8 Future Proofing

For this project the design of electrical services will incorporate flexibility and vision to effectively allow for changes and additions to services, without the major costs of alterations to the infrastructure of the building or fitout.

8.1.9 Luminaries and Services Equipment

Careful consideration should be given to the selection of luminaries and services equipment to ensure that they enhance the sprit of the building and are as unobtrusive as practicable. An intelligent lighting system will be considered to maintain recommended lighting levels throughout the building during times of variable ambient lighting levels.

8.1.10 Energy Conservation Target

An Energy Efficiency and Sustainability Assessment will be carried out during the preliminary design phase of the project. An energy analysis of the proposed design will be submitted to the Christchurch City Council Energy Manager. The placement or inclusion of lighting and heating units shall be designed in close association with the Building Management System.(BMS) and mechanical services equipment.

8.1.11 Lightning Protection

The design will consider lightning protection for the building. If it is considered necessary the building structure will have protection that complies with the requirements of AS/NZS 1768: 1991 "Lightning Protection". Primary and secondary protection shall be considered.

Special consideration will be given to the following equipment/systems in terms of tertiary lightning protection:
PABX and associated equipment
Building Management System
Security system
Subcircuit supplies to main computing equipment

8.2 Data and Communications Requirements

The data and communication services will encompass all information technology systems to be provided throughout the building. These are generally outlined as follows:

- Telephone services
- Intercommunication System
- Network cable reticulation
- Public address (emergency warning system)

The network philosophy and operating parameters will be determined by the Council's Management Information Systems (MIS) Unit. Additionally, the interconnection of the Library/Service Centre to the existing Council system will be determined by the MIS Unit. The data network and telephone system will be shared between the Library/Service Centre and the Main Pumping Station.

Aspects such as the ability to upgrade will be considered during the initial design phase.

Basic requirements include;
A PABX room to house telephone system, data network equipment, and alarm systems,
A structured cabling system for telephone and data communications,
A duct and lead-in cable for connection to the Telecom network,
A duct and lead-in cable for connection to the TelstraSaturn network,
A duct and tie cables to the Pumping Station control building.

9. SECURITY REQUIREMENTS

Electronic security in the form of access control, alarm systems and intercommunications will be provided. The security system will be suitable for at least 3 separate zones

9.1 Access Control

- Card (or similar) access control to essential doors in the building including electric mortise locking, and full door status monitoring. The system used will be capable of readily interfacing with the existing Council systems.

- The security system computer will be independent from the BMS computer. There will be some level of data transfer. The actual requirements for this will be established during the initial design phase.

9.2 Alarm Systems

The following items will be considered during the preliminary design phase

- Door status monitoring via the access computer
- Space detection will be provided.
- A duress alarm at the cash counting point will be considered during the concept design stage. This alarm could be a hard-wired alarm or a personal pendant type.

10. FURNITURE, FITTINGS AND EQUIPMENT

Furniture, fixtures and equipment will include such items as:

- Loose furniture (including seating, office furniture, work-stations and screens)
- Appliances
- Drapes and blinds
- Staffroom/kitchenette equipment
- Rubbish collection and handling
- Library collection shelving
- Lockers
- First Aid equipment
- Public area furniture (including lounge seating and study spaces, computers,
- printers, a photocopier, self issue units and security gates)

Exact details of the furniture, fittings and equipment shall be decided upon and agreed with both Library and Service Centre staff during the design phase.

11. CONTRACT STRATEGY AND PROGRAMME

The usual Council procedure for a project of this nature will be followed whereby approved contractors will be invited to submit tenders based upon full contract documentation. Thus the contract price will be known to the Council before the building works are committed.

Subject to Council approval it is intended to re-engage for the development phase of the project the consultants used for the pre-development phase, subject to project control group reaching agreement with them on an acceptable fee for their work.

A preliminary programme for the Development Phase is attached.
The programme is to be verified by the Design Team at the start of the Development Phase.

12. PROJECT BUDGET

The Current Cost Estimate carried out by Cost Consultants Shipston Davies Ltd in November 2001 based on the concept design and since subjected to value management workshop and assessment against The Natural Step principles indicates the budget required for the project to be $5,650,000.

This is broken down as follows:

Building Construction	$4,050,000
Carparking and Landscaping	$300,000
Professional fees	$550,000
Library fitout	$350,000
Service Centre fitout	$100,000
Communications/advertising	$5,000
Miscellaneous expenses	$10,000
Notified resource consent and building consent fees	$35,000
Project contingency	$250,000
Total Required	**$5,650,000**

Excluded from these costs are:

- Library Stock
- Computers
- Community Learning Centre fitout
- Temporary accommodation and relocation costs
- Surveying and rearrangement of property titles
- Financing and legal costs
- GST

The following list of energy saving and sustainability options could be incorporated into the project with the provision of specific funding or through cost savings identified further on in the project development phase. These items are identified for information only and are not incorporated in the budget identified above.

Inert gas to double glazed windows	$3,000
Motorised roller blinds for north windows	$79,000
Composting tank for two toilets	$4,000
Grey water recycling	$10,000
Solar panels for boosting water heating	$10,000
Copper and arsenic free deck treatment	$14,000
Permeable pacing adjacent to building	$32,000
Permeable pacing for rest of drive and carpark	$48,000

APPENDICES

APPENDIX 1

LIBRARY AND SERVICE CENTRE BRIEFS

(Available in hard copy only)

APPENDIX 2

PROJECT TERMS OF REFERENCE

SOUTH CHRISTCHURCH LIBRARY AND SERVICE CENTRE

TERMS OF REFERENCE

CHRISTCHURCH

CITY COUNCIL · YOUR PEOPLE · YOUR CITY

July 2001

SOUTH CHRISTCHURCH LIBRARY AND SERVICE CENTRE

TERMS OF REFERENCE

1.0 **PROJECT NAME:** South Library, Service Centre and Community Learning Centre

2.0 **PROJECT DESCRIPTION:**

Replacement of the existing Beckenham Service Centre to provide an integrated/co-located Library, Service Centre and Community Learning Centre

3.0 **BACKGROUND:**

The report entitled "Library and Council Services in South Christchurch – Report of the Project Team November 2000" included in part the following:

Expansion of Spreydon Library was first identified in 1993 as part of a development and enhancement plan for suburban libraries. Budget provision was made in 1996 and planning was initiated to get the project underway.

In 1999/2000 funding was available for the purchase of land to allow for the building of a new library at St Martins in the following financial year. The Council was unsuccessful, however, in its bid to purchase the only suitable piece of land in the area (the site of the former St Martins Catholic Church).

At the Council meeting on 25 November 1999 the recommendation in the Strategy and Resources Report of 15 November, regarding Spreydon Library accommodation options, was replaced with the following resolution:

"It was resolved that a report be sought on the provision of a combined service centre/library for the South Christchurch area, which would obviate the need for major upgrading of the St Martins and Spreydon Libraries."

An officer project group was set up in February 2000 to investigate the current strategy for the delivery of library service in the South of the city, to consider if this was still relevant and to investigate subsequent solutions.

The resulting report recommended that a new combined Library/Service Centre/Community Learning facility be constructed on the site of the existing Beckenham Service Centre.

This recommendation was endorsed by the Council in November 2000 subject to consultation. Consultation was subsequently carried out and the proposal adopted by the Council at its meeting on 22 February 2001.

NEW FACILITY – SIZE, ROLE AND FUNCTION

Size specifications for library

Size specifications for a new library in the south have been based on New Zealand public library standards published by the Library and Information Association of New Zealand Aotearoa (LIANZA) in 1995. Following on from a meeting with Councillors in June 2000 the requirements for a new library have been based on the assumption that whilst the new library would be the major facility, the existing Spreydon library would remain. The existing St Martins Adult volunteer library would also remain whilst the volunteers wished to continue their service to the community in that location, the St Martins Children's Library would be relocated to the new facility. The population to be served by the new facility is estimated to be 45,000. The size and population served for the new Fendalton Library is given by way of comparison.

New Facility	Serving a population of 45,000	2100 sq m
Fendalton Library	Serving a population of 32,500	1500 sq m

Note: The New Zealand public standards recommended size for a stand-alone public library serving a population of 40,000 is 2390 and for 50,000 is 2930. We have discounted these sizes to take account of the fact that this is a branch library and does not need to house the administrative services associated with a main library.

Community board and advocacy

For some years now the Council has been working towards the co-location and integration of Service Centres with Libraries where possible. This strategy was outlined in the Suburban Services Report in 1997 and Fendalton Library and Service Centre is the most recent example. It has therefore been an assumption of the Project Team that if a new library is to be built in the South then provision should be made in the planning to locate the Community Board and Advocacy in the same building. This will require a total building of 2504 square meters.

Property issues

The Property Unit has investigated a number of possible locations for a library and service centre of the required size. If the facility is to be single storey then a site size of 3,500 square meters is required to accommodate parking and landscaping. Sites investigated include both land owned by the Council and sites which would require purchase. The only site available in the area which Council owns and which is big enough to accommodate the facility with parking is the land on which the Beckenham Service Centre currently sits (2529m^2) if the building is to be single storey.

Suitability of the Beckenham site

This location meets two of the criteria for siting a community library. It has a catchment population of greater than 10,000 and it is on a main traffic route with public transport provision. Cross traffic could be catered for by enhancement of

connections with the Orbiter bus route, and preliminary discussions with the Environment Canterbury would indicate a willingness to consider this.

The site is not immediately adjacent to a significant shopping complex. However, there is strip shopping north in Colombo Street (about 0.5km) and resource consent is being processed for a new supermarket in this area. Given that this library will serve a greater catchment population than a traditional 800 square meter library such as Linwood, the requirement to ensure that it is within walking distance of most of its customers in not a reasonable expectation. Therefore, good parking and easy access for cars will be essential. The location is in the middle of the Board area (when considered East/West) but well towards the South of the area. East/West traffic flow is not straightforward south of Milton Street but it is the view of the Project Team that if the Library is a significant community facility it will be a destination in its own right.

Learning centre

The Council has the opportunity to be a partner in an innovative Learning Centre integrated with the library in this facility. The Centre will provide learning opportunities in technology and information skills for school children, teachers and the community. It is proposed that Global Net 2000, which has been one of the Council's most successful millennium projects, would make its future home in the Centre. Whilst the partnership with the education sector has not yet been finalised, the parties have indicated their real interest in such a venture, which would see the operational costs of the Centre being funded for a 3 – 5 year period. A Learning Centre of this nature would be a first of its kind in New Zealand and a likely model for others to follow.

Village concept

The facility would build on a "village concept" with spaces for small scale entertainment, learning, meeting and browsing, taking coffee, information and collections, library studying and sitting, listening to music and liaising with the community. A "drive by" drop off and pick up service would be a new feature of the proposed library. It would build on the best features of the New Brighton and Fendalton Libraries and create a new concept for learning in partnership with the education sector, which would be a first in New Zealand and a model for others to follow. The Council has the opportunity to again be at the forefront in delivering innovative information, recreation and learning facilities which support the Councils social, economic and community objectives.

Sustainable building

The Council has committed itself to improving sustainability through 3 recent resolutions:

1. Adopting the “Natural Step”
2. Recognising “the opportunity for the city to become an international leader in sustainability and become a showcase example of a good place to live with clear business, social and community benefits”
3. Leading a process to build a sustainable Christchurch

In developing the new building, international concepts for minimisation of energy use and atmospheric emissions are to be considered in selection of construction materials, techniques and building operation. Methods of waste minimisation are to be incorporated into demolition and construction contracts.

4.0 AIMS AND OBJECTIVES:

4.1 Aim:

To enhance customer service delivery and obtain maximum efficiency gains through the cost-effective co-location of Library, Service Centre and Community Learning facilities.

4.2 Objectives:

To provide a building which meets the following Objectives:

1. Co-located / integrated Library / Community Teams facility in line with the Suburban Service delivery strategy document
2. "Healthy", safe, "friendly" building in terms of all users - customers and staff delivery function with flair
3. Completed within the Council approved budget
4. Completed within the Council approved programme
5. Complying with all the requirements of the agreed Brief including quality
6. Designed to give a good balance between capital costs and operating costs - lifecycle costs
7. Meeting the requirements of Council policies eg Energy Strategy and Children's Policy
8. Meeting requirements of Council criteria for waste minimisation and sustainable design
9. Social focal point for the local community
10. Library and advocacy functions preferred location is the ground floor. However the Project Control Group remains open to creative architectural design.
11. Inclusion of a fire sprinkler system
12. Continuity of existing Service Centre activities on or near the site after demolition of the Service Centre (To be pursued with the Community Board).
13. Flexibility for future users/adaptability to technology changes
14. Space provision for a Community Learning Centre
15. In sympathy with surrounding residential area
16. Natural light for workspaces
17. Inclusion of a Cafe

5.0 NEEDS ANALYSIS:

The Council at its October 1997 meeting adopted the strategy for the delivery of Council services in the suburbs as recommended in the report entitled "Suburban Service Delivery Beyond 1996" and dated December 1996. This strategy included the co-location of Library and Service Centres.

The report entitled "Library and Council Services in South Christchurch – Report of the Project Team November 2000", accepted by the council in February 2001 provides a summary of the justification for the new facility.

6.0 SITE DESCRIPTION:

The site for the new Library/Service Centre is the site situated on the corner of Colombo St and Hunter Terrace currently occupied by the Beckenham Service Centre, plus adjacent land also owned by the City Council.

Council Land comprises:

- The corner site covering 2,529 square metres on Certificate of Title 7B/666.
- 1.747ha of land immediately adjacent to the corner site and stretching along Hunter terrace fronting the Heathcote River, on CT 7B/589
- The existing Water Supply and storage area comprising 1.3152ha on CT 241/117.

7.0 PRELIMINARY FUNDING PROVISIONS:

7.1 Library/Service Centre:

The allowance made in the draft Christchurch City Council 2002 Financial Plan and Programme is as follows:

Available Finance	**2000/01**	**2001/02**	**2002/03**	**Total**
Property	$344,433	$2,500,000	$1,315,042	$4,159,475
Libraries – ex Spreydon	∗$182,729	3,655		186,384
Libraries – ex St Martins			158,100	158,100
Libraries - ex St M stock			81,600	81,600
Libs – stock ex 6 month review	∗350,000			350,000
Total	$877,162	$2,503,655	$1,554,742	**$4,935,559**

∗To be carried forward

Required budget for the project		
Building – 2504m^2 @ $1650/m^2	$4,131,600	(Construction component approximately $3,300,000)
Library fit out	$350,000	
Community Board fit out	$100,000	
Total required	**$4,581,600**	
Available	**$4,503,959**	(not including stock from table above)
Shortfall	**$77,641**	(Comprising expenditure from Spreydon budget on prefeb, investigation and estimate fees for other options)

7.2 Fitout:

The allowance made in the draft Christchurch City Council 2002 Annual Plan for library fit out is $350,000 and for Community Board fit out is $100,000. Fit out of the Learning Centre is not included in the project budget and is to be separately funded by the Learning Centre Trust.

7.3 Stock:

Library stock is excluded from the project budget and is to be administered by the Libraries and Information Unit.

7.4 General:

These figures exclude land, GST and financing costs.
These figures are to be revalidated during the Pre-Development phase.

8.0 TIME FRAME:

The current programme for the Pre-Development Phase is included as Attachment 1.

It shows completion of the Pre-Development Phase and presentation of the Functional Design Brief to a meeting of the Strategy and Resources Committee in December 2001.

9.0 PROJECT CONSTRAINTS:

The project shall comply with Council requirements including the "Energy Strategy 2020", "Designing for Parent and Child - Guidelines for Projects, Policies and Planning", waste minimisation and sustainability criteria currently being developed, "Resource Handbook for Barrier Free Environments" by the Barrier Free NZ Trust and "Policy on Equity and Access for People with Disabilities".

10.0 DELIVERABLES AND APPROVALS

Refer Attachment 2 - Project Delivery Process

PRE-DEVELOPMENT PHASE

(a) **Functional Design Brief and Budget report**

Approved by the Strategy and Resources Committee
Adopted by Council.

DEVELOPMENT PHASE

(b) **Tender Evaluation and Recommendation Report**

Approved by the Projects and Property Committee
Adopted by Council

(c) **Construction**

Regular reports to the Projects and Property Committee

(d) **Completed Library/Service Centre**

Accepted by the Libraries Manager/Community Relations Manager/ Property Asset Manager.

11.0 PROJECT ORGANISATION:

Refer Attachment 3 - Organisation Structure

Project Control Group
This group comprises the major project stakeholders and will be the primary staff decision making body guiding the Project Manager.

Project Manager:
Ian McKenzie

Libraries Unit Representatives:
Sue Sutherland, Hilary Renfree

Community Relations Representatives:
Stephen Phillips, Nick Chapman

Property Unit Representative:
Peter Wills

Learning Centre Trust Representative:
To be determined

PRE-DEVELOPMENT PHASE CONSULTANTS

Project Manager:
City Solutions

To be appointed:
Architect
Cost Management Consultant/Quantity Surveyor
Mechanical Engineer
Fire Engineer
Electrical Engineer
Structural Engineer
Civil Engineer

DEVELOPMENT PHASE CONSULTANTS

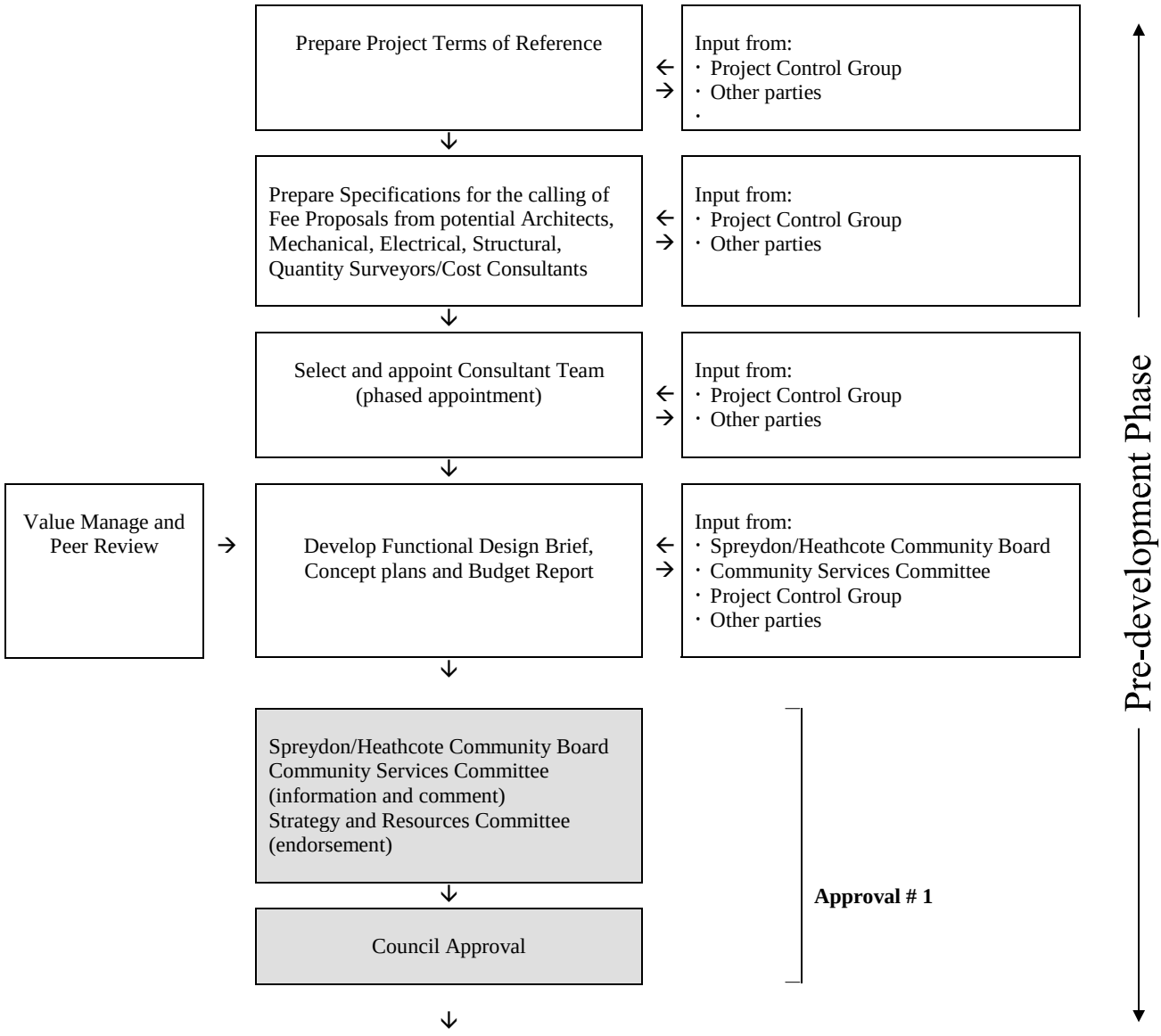
To be confirmed following Pre-Development Phase

Attachments:

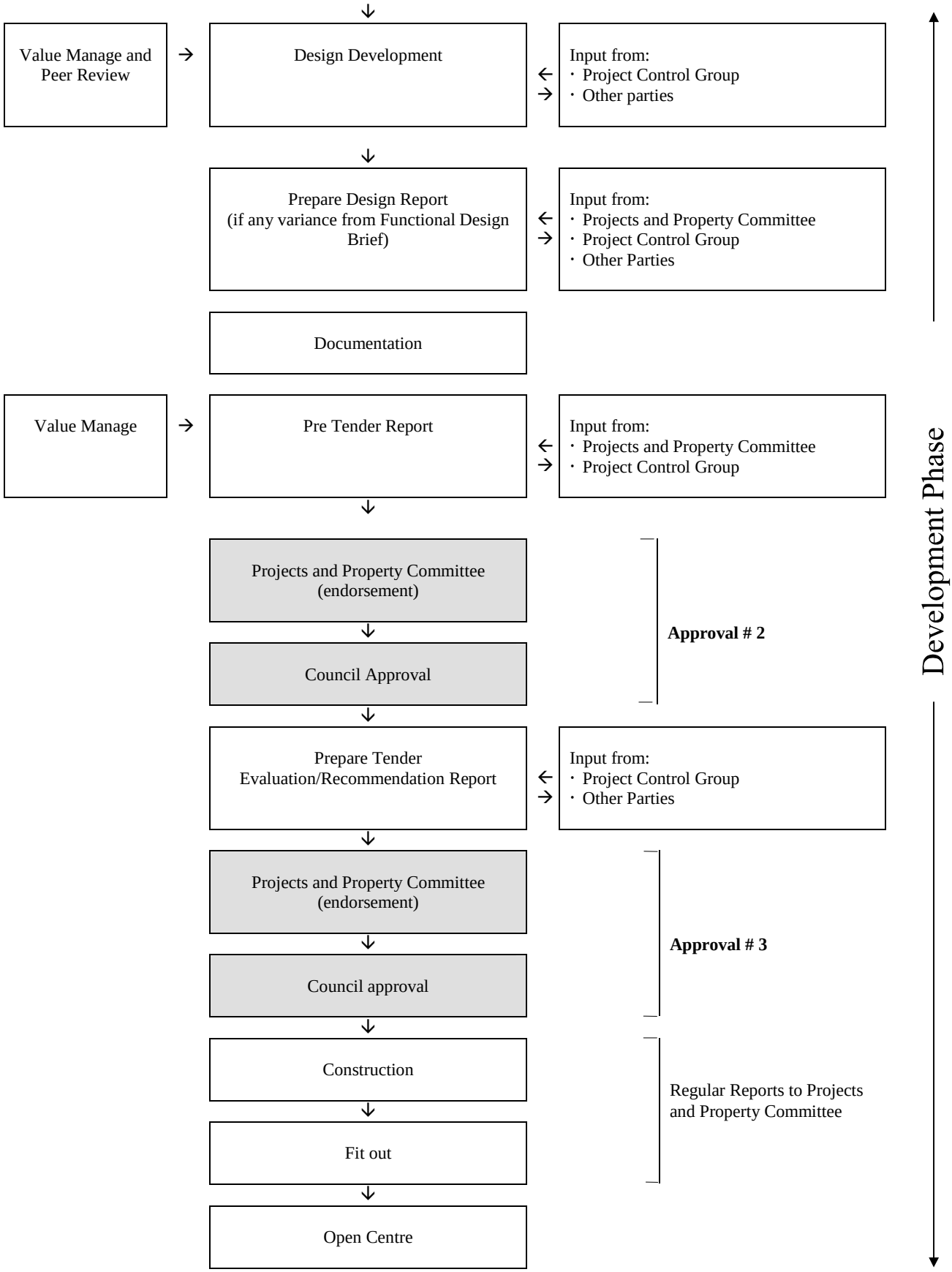
1. Programme for the Pre-Development/Brief Definition Phase
2. Project Delivery Process
3. Organisation Structure
4. Site description
5. Breakdown of space requirements

SOUTH LIBRARY/SERVICE CENTRE
DRAFT PROJECT DELIVERY PROCESS

254/23601
May 2001

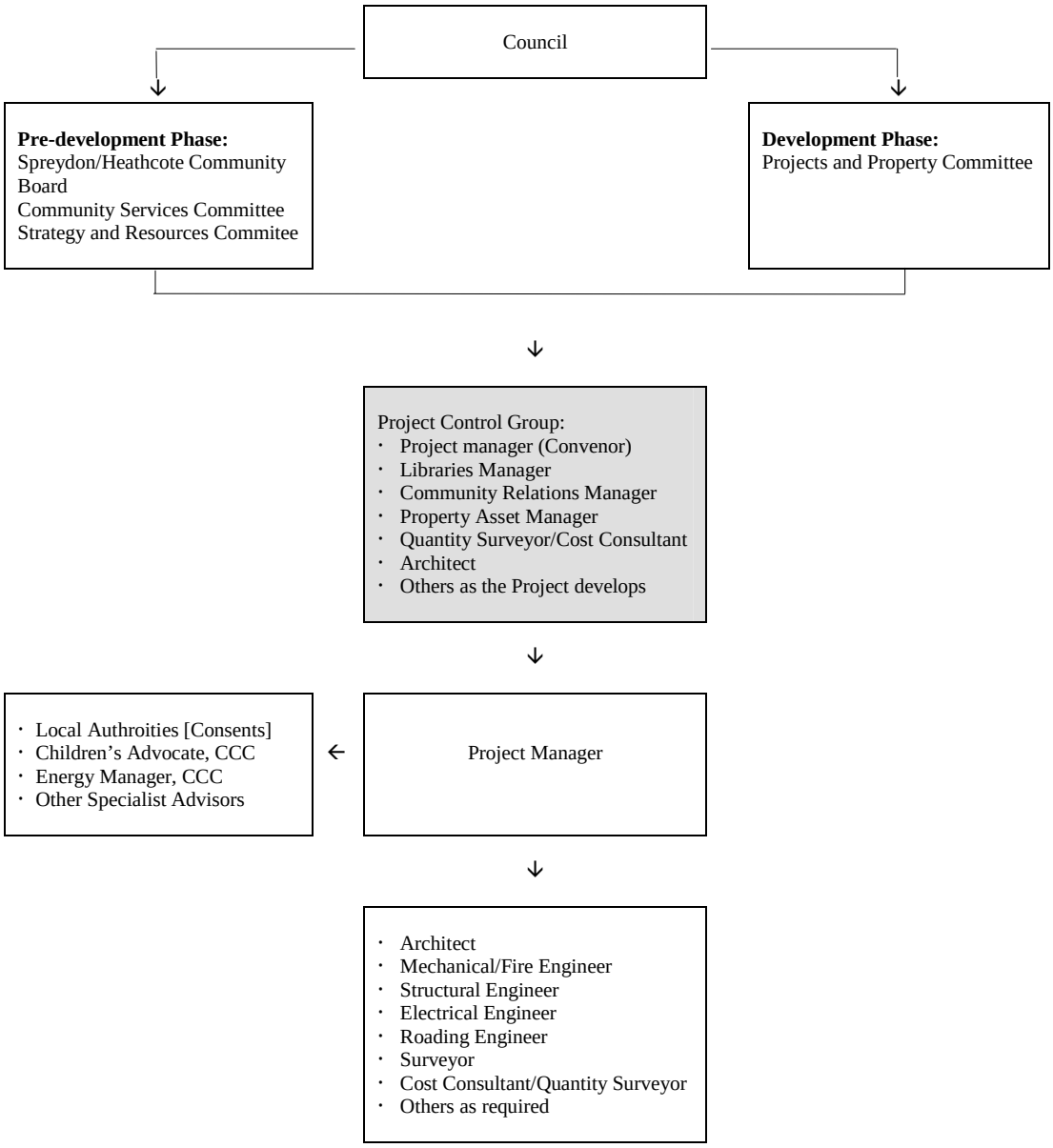


SOUTH LIBRARY/SERVICE CENTRE 254/23601
DRAFT PROJECT DELIVERY PROCESS cont... May 2001



SOUTH LIBRARY/SERVICE CENTRE ORGANISATION STRUCTURE

254/23601
May 2001



South Christchurch Library and Service Centre – Component Areas

Population served:	45,000	
Collection size	70000	
LIBRARY		
Collections	700	
Seating	150	
Armchair seating	50	
Service desks (Issues, returns & info)	50	
Gallery	20	
Café & market square	100	
PAD	50	
Other - 20%	#	
Study/seminar rooms	#	
Foyer etc	#	
Public toilets	#	
Staff work area	230	
Staffroom & toilets	#	
Library store	30	
Loading dock	15	
Other	200	
Total		**1595**
COUNCIL/COUNTER SERVICES	**70**	**70**
LEARNING CENTRE		
Training rooms	140	
Office x 2	30	
Storage & other	30	
Total		**200**
ADVOCACY		
Board room	90	
Double meeting room	42	
Community Advocates Office	20	
Commuunity Secretay	12	
Work Stations (9)	108	
File Room	5	
Photocopy/Fax Room	7	
Utility Cupboards	18	
Community Constable	12	
Reception - incoporated in Council/ Counter Services	*	
Total		**314**
SHARED FACILITIES / SPACE		
Study/Seminar Room	33	
Staff Toilets	27	)
Staff Room	80	)
Public Toilets	65	
Foyer	20	
Access areas / passageways / contingency	100	
Total		**325**
TOTAL FOR THE FACILITY	**2504**	**2504**
LIBRARY (incl Learning Centre)	**2063**	
COUNCIL/COUNTER SERVICES	**80**	
ADVOCACY	**361**	

APPENDIX 3

GEOTECHNICAL REPORT

(Available in hard copy only)

APPENDIX 4

EXISTING SITE SERVICES

(Available in hard copy only)

APPENDIX 5

CONCEPT PLANS

(Available in hard copy only)