THE PLACE OF PSYCHIATRIC REHABILITATION IN NEW ZEALAND COMMUNITIES

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I_____**ABSTRACT**

Supported Residential Care Facilities (SRCF's) play a distinctive role in the integration of mental health consumers within host communities. Despite the vast quantity of research on the sociological impacts of discrimination against mental health consumers, such as societal and self stigmatisation, little to no research is conducted on the effects that the built environment have upon mental health consumers in SRCF's in New Zealand post deinstitutionalisation.

This study examines the 23 existing SRCF's within the Wellington region, examining their socioeconomic context, city planning context, physical environment context and the built typology of these facilities. Each of these research subjects are examined to identify and understand the implications they have on the integration of mental health consumers within their host communities at three scales; host community, location and facility design. The findings and insight drawn from sociological literature and empirical research are summarised within the design guideline and tested through a design based case study.

The conclusions of this research can be summarised as follows:
 1. It is desirable for host communities to be socioeconomically diverse with an appropriate level of public and mental health amenities

2. It is advantageous for SRCF's to be located within the 'inner edge context,' promoting a diverse urban context, socioeconomic context, diverse planning context and safe pedestrian access to public amenities.

3.The facility design of SRCF's should promote a 'recovery oriented practice,' achieved partially through context specific 'integration programs'.

The majority of SRCF's within the research sample are located within residential suburbs. This research identifies that SRCF's and facilities alike must be located within the 'inner edge context'. The findings are of particular usefulness to Wellington's SRCF's yet are also helpful in understanding and improving the built environment of SRCF's within New Zealand communities.

Firstly, I am deeply thankful to my supervisor, Chris McDonald, whose encouragement and support from the initial to the final level enabled me to develop and understand the topic of research, and whose guidance enabled me to complete this thesis.

It is also my pleasure to thank the following who have helped make this thesis possible:

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Last but definitely not least, is my partner Nicola Verbokkem who has tirelessly supported me throughout this journey.

III_____DEFINITIONS

Community Mental Health Teams: Ministry of Health provision of dedicated psychiatrists and case workers providing regular support to MH consumers.

Crisis and Assessment Treatment Team (CATT) and **the Service Co-ordination Team** (SCT): Minister of Health based assessment and service coordination team.

Host Communities: Urban/suburban communities not defined geographically but rather based on two social qualities:

1. The members of common society and public amenities attributed to a common New Zealand community

2. The members and amenities of the MH network within a common New Zealand community.

Integration: "*Bring or come into equal participation in an institution or social group.*" (Oxford University, 2004)

Mental Health Consumer : A person(s), with mental illness who is cared for by the Mental Health System of New Zealand.

Non Government Organisations: Organisations that provide community psychiatry through both secondary and tertiary community care.

Physical Integration: The level of integration of an examined physical or spatial quality of SRCF's and PARF's within its urban context and neighbourhood.

Psychiatric Accommodation and Recovery Facility: The Psychiatric Accommodation and Recovery Facility is the proposed intervention, within the SRCF, of this thesis to combat societal and self stigmatisation through a recovery oriented short term accommodation facility that focuses on the integration of MH consumers within their Host Communities

Residential Housing: detached, single-family dwellings for the purpose of this thesis.

Self Stigmatisation: A symptom generally believed to arise amongst mentally ill persons internalising the negative messages and behaviour that they experience from others, typically society. Self stigma can also be caused by the internalisation of perceived stigma that involves the belief that others hold stigmatising attitudes.

Social integration: The ability for MH Consumers, within the context of this research, to socially integrate with equal opportunity as mainstream members of society.

Societal Stigmatisation: Corrigan and colleagues describe 'stigma' under three components: *"Stereotypes, or negative beliefs held by most members of a social group about a minority group; prejudice, or agreement with such stereotypes, usually incorporating a negative emotional reaction to the stereo type; the discrimination, or behaviour motivated by that prejudice"* (Corrigan & Rusch, 2002, p. 317). In New Zealand we tend to use the term 'discrimination' instead of the term 'stigma;' throughout this research the word stigma or societal stigma alike will be used.

Supported Residential Care Facilities: What society commonly considers a 'Halfway House' is known within the mental health sector as Supported Residential Care Facilities. The term 'halfway house' is no longer used in modern psychiatry. SRCF's are typically operated by NGO's and audited and partially funded by the Ministry of Health

ABBREVIATIONS

Crisis and Assessment Treatment Team (**CATT**)

Crime prevention through environmental design (**CPTED**)

Community Mental Health Team (**CMHT**)

District Health Board (**DHB**)

General Practitioner (**GP**)

Mental Health Consumer (**MH Consumer**)

Mental Health Foundation of New Zealand (**MHFNZ**)

Ministry of Health (**MoH**)

Non Government Organisations (**NGO's**)

Not in my backyard syndrome (**NIMBY**)

Psychiatric Accommodation and Recovery Facility (**PARF**)

Service Co-ordination Team (**SCT**)

Wellington City Council (**WCC**)

FIGURES_____v

FIGURES

1.INTRODUCTION

The research examines the relationship between Supported Residential Care Facilities (SRCF's) or "half-way houses" and their host communities. The Introduction describes the context of New Zealand's Mental Health System, narrowing the scope of research to the issue stigmatisation of Mental Health consumers. Specifically, the research asks whether stigmatisation can be reduced by the optimising the location and design of SRCFs thereby increasing physical and social integration between the facility and its host community.

This chapter sets the methods of enquiry present within the subsequent chapters of this thesis; Literature Review, Empirical Research, Design Guideline and Design Case Study whilst also setting the parameters for the Conclusions chapter.

1.1 Research Proposal

"The research examines the relationship between Supported Residential Care Facilities (SRCF's) or "half-way houses" and their host communities. The research asks whether stigmatisation of Mental Heath consumers can be reduced by the optimising the location of the SRCF and by increasing physical integration between the facility and its host community."

1.2 Context of Research

1.2.1 Institutionalisation to Deinstitutionalisation

Institutionalised Psychiatric Hospitals were often large and isolated self sufficient mental hospitals that provided care for mental health patients. Institutionalisation of the mentally ill was the only treatment option from the early 1800's up until the 1990's, with the last operating institution in New Zealand, the Kimberly Hospital closing in 2005.

'Cure, care and custody' were the key social functions of Institutionalised Psychiatric Hospitals. Mass care took precedence over the significant values of patient dignity, individuality and privacy; values now recognised as vital attributes to good mental health accommodation. Institutionalised mental health care led to the eradication of fundamental idea's such as safety, order and cleanliness resulting in the undesirable psychosocial effect of long-term residential care. Patients within institutions became reliant upon the comfort of institutionalised safety and provision of care resulting in a growing mental health population with few patients returning back to their own communities.

The 'deinstitutionalisation' of Mental Health Care has sought to achieve the outcome of deinstitutionalisation through two related objectives:

> I.   'Mainstreaming or normalizing: the aim to provide services for the mentally ill (inpatients) in general hospitals as part of general health services, bringing psychiatric services out of the isolation institutionalisation creates and thereby reducing the stigmatisation against the mentally ill person.

ii.   'community care' or 'community psychiatry:' which centres around a caring community, supporting people with mental illness (outpatients).

TERTIARY CARE

SECONDARY CARE

PRIMARY CARE

DIAGNOSIS & ASSESSMENT

Community Mental Health Team
Supporting MH consumers within their own homes and other MH recovery programmes

Community Mental Health Team
Supporting MH consumers within SRCF and other MH recovery programmes

GP
Assessment and administering medication

GP
Assessment and administering medication

GP
Assessment and administering medication

GP
GP Diagnoses symptoms of Mental Illness and Addiction

Presenting
CONSUMERS
of Mental Illness and Addiction

Acute Services

Acute Services
Psychiatric Hospital or Ward

NGO's
Advise, Help Line

SCT & CATT
Crisis and Assessment Treatment Team & Service Co-ordination Team

Social Housing
Provided social housing for MH consumers

NGO's (SRCF)
Supported Residential Care Facility

(Reserach Context of this Thesis)

NGO's
Residential support for MH consumers within their own homes.

Community
Public and MH programs available to MH consumers

Community
available to MH consumers

Figure 1: Diagram of New Zealand Mental Health System

CURRENT MENTAL HEALTH ACCOMODATION SYSTEM: "mini institution effect"
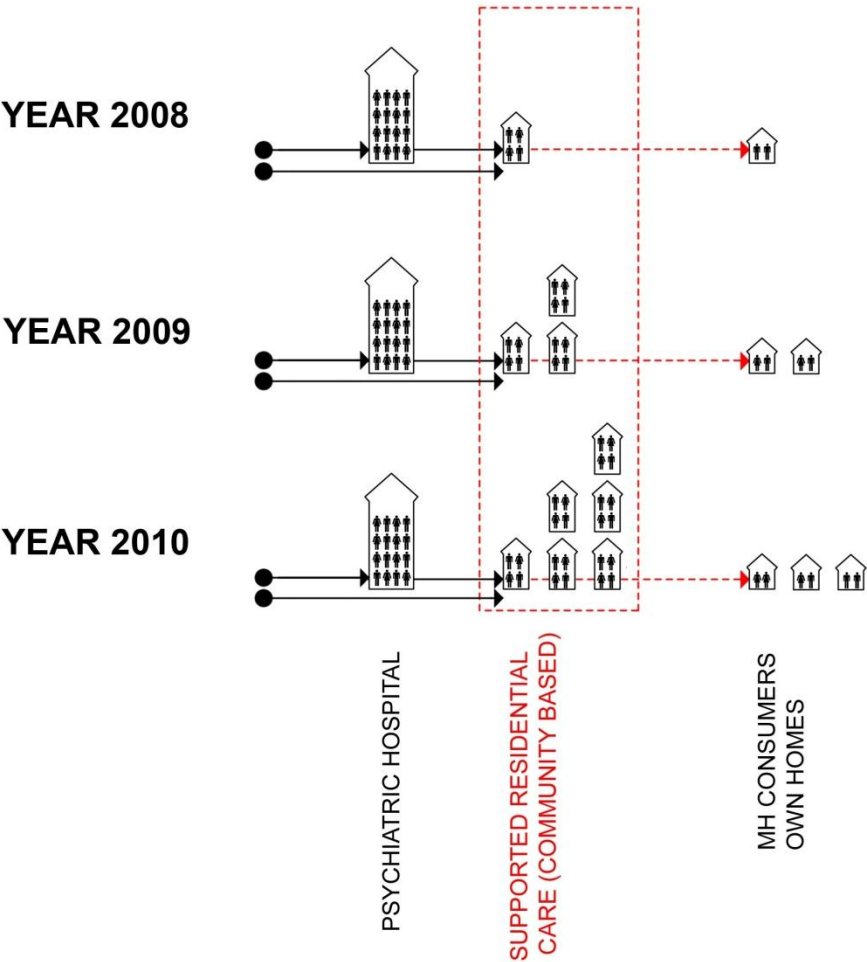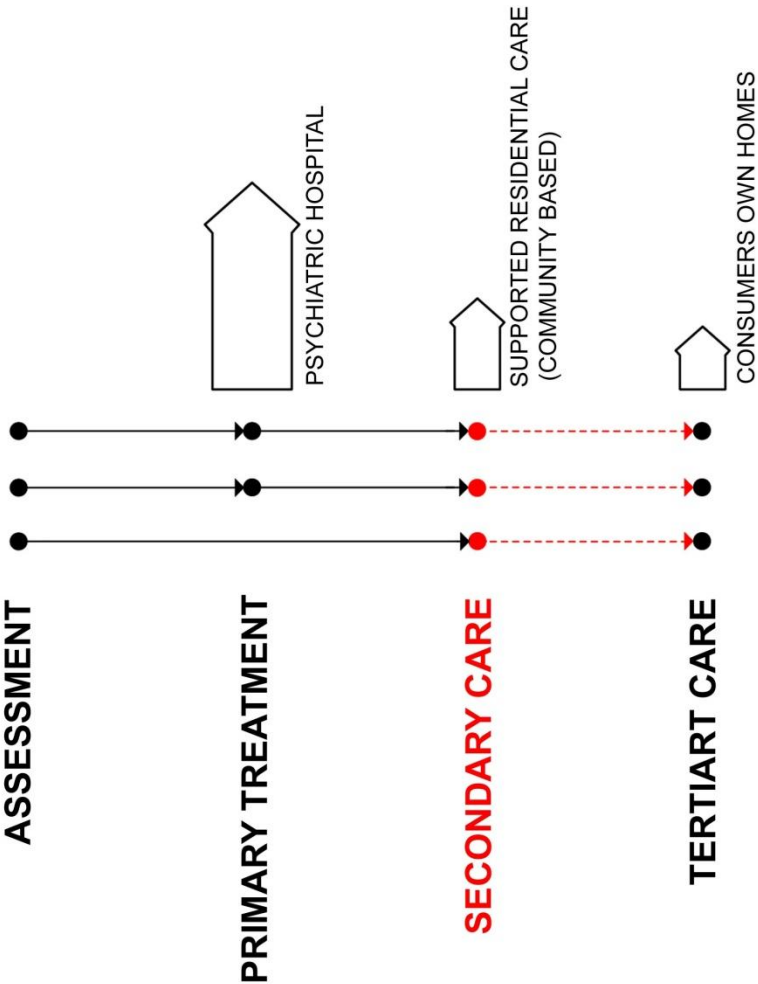
Figure 2:LEFT Current New Zealand mental health accommodation system demonstrating primary, secondary and tertiary MH treatment.

Figure 3: RIGHT New Zealand mental health accommodation system demonstrating the trend over that past three years.

MHCP
Community Alcohol & Drug Service
Opioid Treatment Service

MHCP
Wellington Community
Mental Health Team

Karori

Aro Valley

WELLINGTON CITY

Western Mt Victoria

Mt Cook

Ngaio

MHCP
Specialist Maternal MHS
Child & Adolescent MHS
Acute Inpatient Unit, (Wd 27
 Acute Day Services
Consultation Liaison Service

Kilbinie

Mirimar

Seatoun

MHCP
South Community Mental
Health Team
Team for Assertive Community
Treatment (TACT)

Figure 4: Regional Map of Wellington presenting the 3 x Community Mental Health Teams, 1 x Inpatient Acute Psychiatric Hospital and 12 x Supported Residential Care Facilities making up the Wellington Mental Health Network .

1.2.2 The New Zealand Mental Health System

The New Zealand mental health system is made up of a multitude of government and non government organisations (NGO's) all serving the presenting mental health consumer (MH consumer) in different avenues as demonstrated in **Figure 1**. This diagram demonstrates the many differing paths a presenting MH consumer may follow from diagnosis to recovery.

Diagnosis and Assessment of Mental Health

Presenting MH consumers are directly diagnosed by their personal General Practitioner (GP). Depending the severity of the presenting mental illness the GP will either refer the presenting MH consumer to a Crisis and Assessment Treatment Team (CATT) or the Service Co-ordination Team (SCT) for primary care and assessment of needs. The CATT provides for people experiencing a serious mental health crisis where there are urgent safety issues.

The SCT provides assessment for consumers who may require additional environmental or social independent living support in the community to facilitate recovery. Both the CATT and the SCT are Ministry of Health (MoH) funded organisations typically located within regional hospitals. In some case presenting MH consumers may approach NGO's, NGO's are also likely to refer presenting consumers back to CATT or SCT for appropriate assessment.

The Community Mental Health Team (CMHT) are MoH funded organisations. They provide secondary mental health assessments and treatment options for mental illness to MH consumers. These MH consumers have typically been discharged from acute inpatient care yet require secondary mental health care.

CMHT's are community based teams of psychiatrists and clinicians responsible for the assigning treatment of MH consumers within their regional catchment. For example there are three CMHT's in Wellington City that are operated and funded by the MoH's District Health Board's (DHB), refer to **Figure 4**. CMHT's do not provide accommodation or daily care, rather, they assign and maintain care of each MH consumer within their catchment area. If accommodation for MH consumers is needed the assigned case worker will then make arrangements for a MH consumer to enter a

appropriate rehabilitation programme either within secondary or tertiary care, such as a local Supported Residential Care Facility (SRCF) appropriate for the MH consumers needs.

Treatment of Mental Health

The Mental Health sector classifies the treatment of MH consumers under two categories:

1. Inpatient Treatment: This category is explained below as primary treatment and it typically provided within hospitals

2. Community Care (Outpatient): This category is explained below and throughout this thesis under two sub categories; secondary care and tertiary care - both of which are provided within a community context.

Primary Treatment (In Patient)

Primary treatment of MH consumers (as demonstrated in **Figure 1**) is acute inpatient care provided within psychiatric hospitals or psychiatric wards within regional hospitals.

Secondary Care (Community)

Secondary care for MH consumers is shared amongst several parties and in many cases the parties simultaneously work together throughout the MH consumers recovery. Secondary care, as illustrated, (**Figure 2**) generally serves MH consumers who leave primary inpatient treatment, aiding the recovery and rehabilitation of MH consumers back into their own homes. Secondary care is predominantly provided by GPs, CMHT's and NGO's.

Today the majority of MH consumers within community care recover within their own community either living at home (tertiary care) whilst being supported by their CMHT or spending periods of time in supported residential care. SRCF's, more commonly known as 'Halfway Houses,' are the focus of this Thesis and play a vital role within the secondary care sector. SRCF's grasp the theories of *'community psychiatry'* as a product of deinstitutionalisation, and strive to provide a recovery oriented environment. This care is typically provided within domestic contexts and most commonly within residential homes in New Zealand communities. SRCF's vary in capacity, rehabilitation methods and the level of care provided. They can range in sizes, holding from as few as three beds to as many as forty beds.

MH consumers within secondary and tertiary care are typically characterised by their stability in response to the amount of care they require rather than the type of condition or mental illness. In some particular cases, NGO's do provide SRCF's which specifically provide for MH consumers with schizophrenia or bi- polar disease. However, these are uncommon and in many cases provide only long term care rather a recovery focused environment. Supported accommodation is ranked according to its service specification from level 4-1; 4 being the highest level of supported accommodation and 1 the lowest.

Supported residential care is typically provided by NGO's. NGO's are primarily funded by the New Zealand MoH yet they also rely upon charity contributions. NGO's usually lease property from the private sector to house SRCF's, however it is clear under public ownership records that there are examples of NGO's owning some properties.

Tertiary Care (Community)

Tertiary care is also shared amongst several parties. Tertiary care is typically provided for MH consumers returning to their own homes or seeking a new home. Social Housing, NGO's and CMHT's all provide this support, which ranges from providing homes, providing advice on lease agreements, helping to organise bill payments and further education and support for MH consumers within their own homes.

Social housing is also identified as a component within **Figure 1** of the New Zealand mental health system. Housing provided by regional or city councils are vital components of the mental health system. Typically MH consumers post recovery in a SRCF will continue to have support from NGO's and CMHT alike, aiding the MH consumer and their family in re-inhabiting their own homes. In many cases these homes are provided by community housing groups.

Long term mental health care is also considered to be tertiary care. These consumers are a minority and an aging group. Commonly this group has originated from an institutionalised treatment facility prior to deinstitutionalisation. This minority group today are often treated medically and are reliant on basic care and accommodation.

1.2.3 Societal Stigma and Self Stigma
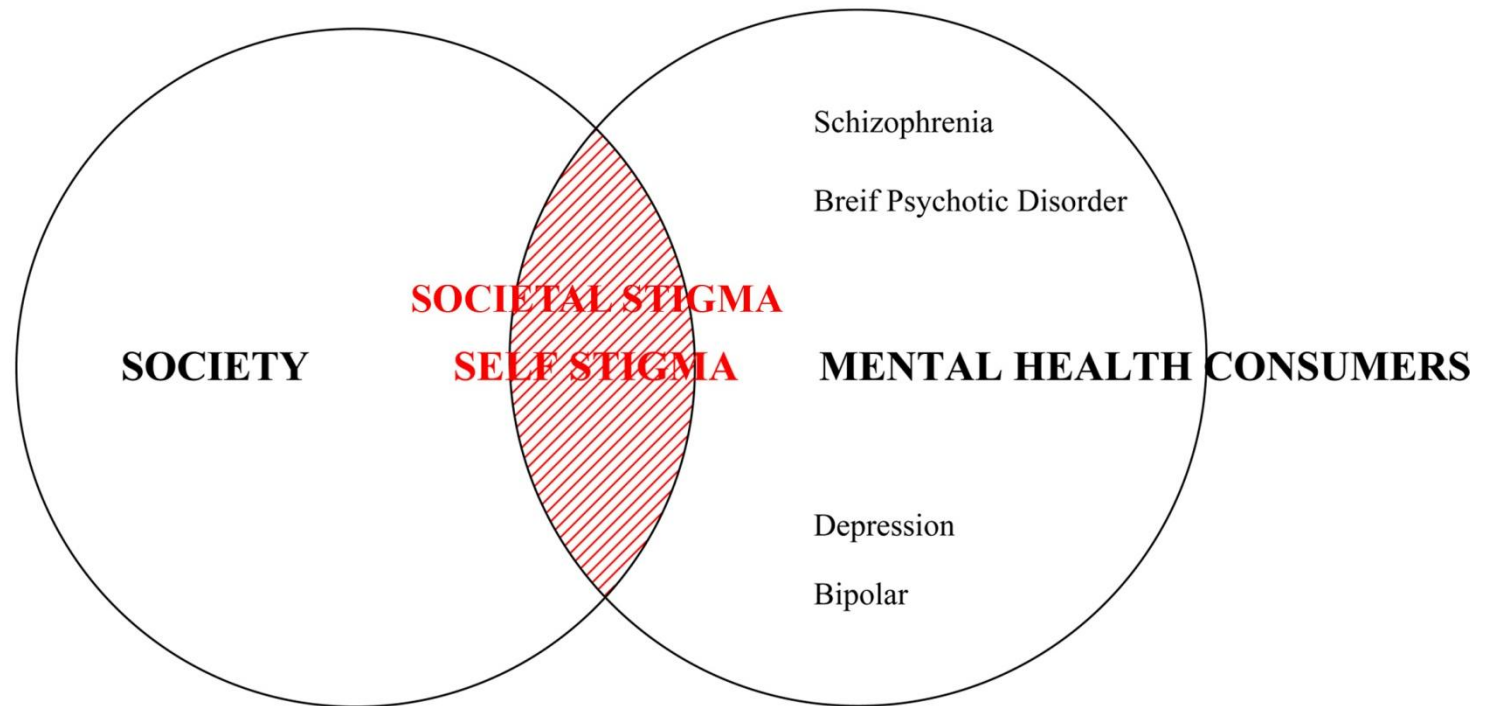
Figure 5: Societal and Self stigmatisation illustrated as the product all MH
consumers suffer from poor integration of society with the MH community

Self Stigmatisation: A symptom generally believed to arise amongst mentally ill
persons internalising the negative messages and behaviour that they experience
from others, typically society. Self stigma can also be caused by the
internalisation of perceived stigma that involves the belief that others hold
stigmatising attitudes.

Societal Stigmatisation: Corrigan and colleagues describe 'stigma' under three
components: *"Stereotypes, or negative beliefs held by most members of a
social group about a minority group; prejudice, or agreement with such
stereotypes, usually incorporating a negative emotional reaction to the stereo
type; the discrimination, or behaviour motivated by that prejudice"* (Corrigan
& Rusch, 2002, p. 317). In New Zealand we tend to use the term

'discrimination' instead of the term 'stigma;' throughout this research the word stigma or societal stigma alike will be used.

Public awareness of mental health has grown through the introduction of community psychiatry. Media campaigns such as *'Like Minds Like Mine'* by the Mental Health Foundation of New Zealand (MHFNZ) are publicly funded programmes aimed at reducing the societal stigmatisation and resultant self stigmatisation associated with mental illness. It is the MoH's objective for New Zealand to be 'A nation that values and includes all people with experience of mental illness (Ministry of Health New Zealand, 2007, p. 5).

'Societal stigmatisation' and 'self stigmatisation' are conditions and symptoms which best illustrate the effects the built environment socially and physically have upon MH consumers. Due to the nature of the New Zealand mental health system, MH consumers of mental health accommodation represent a broad spectrum of mental illnesses, ranging from Schizophrenia, Brief Psychotic Disorder, Depression, drug and alcohol addiction to Bipolar. Examining the social and accommodation quality's of SRCF's for each type of mental illness would be conflicting when considering SRCF's typically have a range of MH consumers diagnosed with different illnesses. This research attempts to examine the link between societal and self stigmatisation and the physical/built environment, illustrated in the vend diagram, **Figure 5**.

1.3   Scope of Research

Supported residential care, whilst only one component amongst New Zealand's diverse mental health system, plays a large role in providing opportunities for integration and reducing societal and self stigmatisation. SRCF's define the built environment as well as consequentially contributing to the social environment of MH consumers. MH consumers are stigmatised against by neighbours, the local community and abroad. Paine refers to this community response as the NIMBY (Not In My Back Yard) syndrome (Paine, 1998), a common discriminatory feature of New Zealand Society (Pere, Gilbert, & Peterson, 2001, p. 5).

1.4   Research Aim

This Research aims to investigate how the physical environment can improve the effectiveness of SRCF's to integrating MH consumers within their surrounding neighbourhood and community. SRCF's are understood according to three scales; Host community, location and facility design. Each scale contributes to defining the appropriate level of integration that mental health accommodation and its MH consumers should have with their community. In particular, this research aims to provide a workable framework for the; host community context, location and facility design. To date there is little to no comprehensive design led evaluation of community based MH accommodation post-deinstitutionalisation of New Zealand's central psychiatric institutions.

1.5   Research Approach

This research is split into three broad methods of enquiry; Literature review, Empirical Research and the Design Case Study. Each broadly contributes to the understanding and investigation of the impacts of host community, location and facility design of MH facilities.

Literature Review

The Literature Review attempts to survey and understand literature associated with the built environment and integration of MH consumers. This includes both historic and contemporary theory, knowledge and precedents associated with community psychiatry, especially those based within secondary care. The Literature Review provides a summary of contemporary knowledge that will be used to evaluate and understand the study of existing SRCF's within the New Zealand context and later design case study.

Empirical Research

The Empirical research aims to identify the implications of the quality of the host community, location and facility design of existing SRCF's upon their MH consumers.

Particular attention when analysing and investigating existing SRCF's is to be placed upon the degree of integration of MH consumers within the community understood through societal and self stigmatisation. This research is primarily based on precedent urban design and building evaluation methods.

Design Guideline

The Design Guideline is a concise summary of the findings of the Literature Review and Empirical Research. The Design Guideline provides both the prerequisite and evaluation context for the proposed Design Case Study

Design Case Study

The role of the Design Case Study is to test potential finding's summarised within the Design Guideline by applying the results of initial research to a contextual design within the same realms of reality that are investigated within the earlier research phases. The proposed contextual design within the Design Case Study whilst an SRCF, it is renamed as an Psychiatric Accommodation and Recovery Facility or PARF for the purpose of clarity within this thesis and specific role the proposed PARF plays within the wider secondary care sector. This method (Design Case Study) aims to provide further evaluation of the appropriateness of earlier findings whilst also realising the opportunity and consequence of these research findings upon MH accommodation within an New Zealand context.

Conclusion

The Conclusions Chapter combines the overall conclusions the each phase of research identifies to fully address the research proposal. The Conclusion Chapter in addition to this provides an evaluation of the overall conceptual framework of this Thesis and concludes with further possibilities for research raised within this Thesis.

2.LITERATURE REVIEW

The Literature Review examines current understanding of the effects the built environment has upon the stigmatisation of Mental Health consumers.

The Review finds that little or no research has been conducted on the physical setting and condition of New Zealand's SRCF's. Furthermore, little is known about the effects the built environment has on the welfare and recovery of Mental Health consumers. The Literature Review surveys key publications on the subject of stigmatisation. Particular attention is given to 'Fighting Shadows', a paper produced by the Mental Health Foundation of New Zealand as part of an initiative to combat societal and self stigmatisation within New Zealand (Peterson, Barnes, & Duncan, 2008).

The Literature Review provides the concepts and methods necessary for original Empirical Research presented in Chapter . The Review also informs the Design Guideline for SRCFs presented in Chapter.

LITERATURE REVIEW

This chapter reviews the literature associated with the integration of MH consumers within host communities, paying particular attention to literature providing insight into the built environment, and societal and self stigmatisation. The Literature Review is split into the following sections below; firstly identifying the extent of knowledge within this field of research then later expanding upon the specific contributions relevant literature provides according to the following sections;

2.1   Overview of Literature and the Consequences of its Gaps

2.2   Discrimination against Mental Health Housing

2.3   The Architectural Image of the Mental Health Facility

2.4   New Zealand's initiative to combating Societal and Self Stigmatisation

2.5   New Zealand Criteria for Design of Psychiatric Acute and Intensive Care Facilities.

2.1   Overview of Literature and the Consequences of its Gaps

There is a distinct lack of robust research conducted on the effects that the built and urban environment have on mental health care in New Zealand. The Journal of Public Health, published by Oxford Journals, printed a paper titled: *A systematic review of the evidence on the effect of the built and physical environment on mental health* (Clark, Myron, Stansfeld, & Candy, 2007). The review was conducted in 2007, reviewing publications from all industrially established, English speaking countries. Results conclude there was weak evidence under the subcategories of: house hold spatial density, housing tenure, and access to residential green or open spaces (Clark, et al., 2007, pp. 7,8). This paper detailed six research domain categories: remoteness, community amenities, pollution, road improvements, urban hassles and territorial spaces in the home which were only addressed in one paper (Clark, et al., 2007, p. 8). Clarks paper suggests future studies which would benefit by better assessment of confounding factors, such as social disadvantage and specific features of the physical environment (Clark, et al., 2007, p. 10). The Australian and New Zealand Journal of Psychiatry acknowledged through the paper 'Research on mental health literacy: what we know and what we need to know' that: "Despite stigma being one of the major concerns of patients, we know very little about how to reduce it" (Jorm, et al., 2006, p.

4)*. It is evident that the topics mentioned are implicit attributes that affect both the social and accommodation implications of SRCF's in integrating MH consumers into their host communities. The evidential lack of research is not an indication of the degree of influence the built environment has upon the recovery of MH consumers but rather identifies the extent of existing knowledge and the need, and context for new empirical research to provide insight into SRCF's with in New Zealand.

In contrast to the lack of research conducted on the effects of the built environment upon integration, extensive research both globally and nationally has been conducted under 'societal' and 'self stigmatisation'. The Mental Health Foundation of New Zealand (MHFNZ) and the MoH have conducted in depth research, looking at the past and present elements of discrimination and in particular societal and self stigma. In 2008 the MHFNZ published "Fighting Shadows: Self-Stigma and Mental Illness". Gordon of Case Consulting Ltd (NZ service co-ordination) claims this research report is an international first, suggesting this publication goes further than others by confirming the significant role that recovery-oriented services can play in combating self stigma (Gordon, 2008, p. 7). This publication is founded on the MHFNZ's first research report: "respect cost nothing"(Peterson, 2003) revealing that discrimination on the basis of mental illness permeates all aspects of the lives of those who experience mental illness (Peterson, 2003, p. 4).

2.2   Discrimination against Mental Health Housing

The MHFNZ identifies the extent of discrimination mental health consumers suffer trying to find suitable independent housing after recovering in a SRCF. This discrimination can "*lead many consumers to accept unsuitable housing in caravan parks, boarding houses and 'poor' neighbourhoods where housing may be substandard and unsafe*" (Pere, et al., 2001, p. 3)*. A Christchurch Mental Health Service provider (NGO) reports "that there is discrimination...especially if there is disclosure of mental illness" - if the NGO provides letters of references with their official letterhead, landlords are hesitant to accept them as tenants, showing the immediate discrimination that affects mental health consumers. (Ministry of Social

Development, 2002, p. 16). The symptom of "not in my backyard," otherwise known as NIMBY, is a prevalent example of societal stigmatisation that is defining quality of SRCF facilities. The response and effect of NIMBY raised by this literature is later examined within the empirical studies of Wellington's contemporary SRCF's providing significant insight into SRCF's qualities of the location and building typology. This discrimination by social housing groups is one factor to why NGO's typically lease or own private property.

2.3   The Architectural Image of the Mental Health Facility

 Historically architects have been preoccupied with the 'image' of historic lunatic asylums, mental asylums and institutionalised mental hospitals as a vital tool for convincing the public that asylums were not places of secrecy, cruelty and injustice (Topp, Moran, & Andrews, 2007, p. 244). L Topp states that at the end of the nineteenth century architects strove most passionately to finally banish those harmful prejudices; prejudices which have continued to evolve now in the twenty first century and persist in promoting the public's deep-seated emotional reactions to mental disorders. L Topp identifies that, in the context of the early twentieth century, the architectural image was undermined by the press attributing and elaborating on negative stories connected to the asylums of the day. Today this picture still remains; while community psychiatry has evolved from institutionalisation and is spread throughout the contemporary urban fabric of New Zealand, the physical image of any facility today remains a receptor of societal stigmatisation. The attractive architectural proposition to again create a new image for SRCF's, waving previous stigmatisation against SRCF's, is short sighted and historically proven to fail, given that stigmatisation will simply be attributed to a new architectural image. L Topp goes further to describe institutions which attempted to develop an image of a village with a suburban neighbourhood - such theoretical ideas are present in the retired Kimberley Centre, located south of Levin, operating during the period of 1977 to 2005. The general design guides for 'village asylums' was to avoid everything that resembled the

old asylums. Instead, it was to be a loose arrangement of free standing homes with gardens that represented what a private citizen's property would enclose.

The repetitious stigmatisation of the architectural image of mental health facilities identifies the challenging nature of this thesis. The conceptual realms of symbolism alone are negated identifying the need for SRCF's to combat stigmatisation through the physical environment in potentially a more socially inclusive and active manner.

2.4   New Zealand's initiative to combating Societal and Self Stigmatisation

Fighting Shadows, is New Zealand's most substantial recent research work, tackling both societal and self stigmatisation. Fighting shadows is published and produced by the MHFNZ. Fighting Shadows firstly; explores the issue of self-stigma from the perspective of people with experience of mental illness. Secondly investigates the causes and effects of self-stigma. And thirdly discuss ways to combat self-stigma amongst people with experience of mental illness.(Peterson, Barnes, & Duncan, 2008, p. 71)

In the course of their research a model to combat self-stigma was produced, **Figure 6**. MHFNZ states, in reflection, that this is the first time the role of recovery-orientated practices in combating self-stigma was evident. MHFNZ recognises the importance that anti discrimination campaigns play in combating societal and self stigma while describing a recovery oriented practice, yet the paper makes no direct application to the quality of built environment conducive to a recovery orientated practice.

While non specific to the built context, this paper describes the key recommendations of MHFNZ's model to combating stigma. These sociological recommendations provide the appropriate insight to investigate the effects of built environment of existing and proposed SRCF's upon the relationship and degree of integration MH consumers have with their host communities.

While this body of external work could be appendicized, due to its significance and prevalent use within this Thesis it has been published within the main body of this Literature Review.

1.   Recognise the contribution of mental illness and foster leadership among people with experience of mental illness

> *"We need to continue to publicly recognise the contributions of people with experience of mental illness. They are capable of working, being in relationships, having families, and participating fully in society. Encouraging visible consumer leaders is vital as they offer innovative ways of developing relevant services, being positive role-models and mentors, and advocating for and with people with experience of mental illness. If people compare themselves with successful people with experience of mental illness then self-stigma will be reduced."(Peterson, et al., 2008, p. 73)*

2.   Celebrate and accept difference

> *"As a society we need to celebrate and accept difference, rather than reject it. We will know we have reached this point when people with experience of mental illness feel 'normal' and included, and are actively involved in decision-making regarding issues that affect their lives." (Peterson, et al., 2008, p. 73)*

3.   Affirm human rights

> *"Treating people with experience of mental illness as full members of society, with the same rights, responsibilities, and privileges as others is the only way to overcome the discrimination associated with mental illness. It will also help to combat self-stigma, particularly by advocating for access to high-quality mental health services, rights to freedom from discrimination and access to justice, and promoting economic, social and cultural rights of people with experience of mental illness".*

4.   Encourage disclosure

"Disclosure helps normalise mental illness. Talking to others about an experience of mental illness can help place things into context and create opportunities for peer support. Therefore, it is also necessary to enable people to gain support from others, seek treatment for their symptoms, and challenge others' attitudes and behaviour. Addressing self-stigma through resource development, education, and training initiatives at national and grass-roots levels will contribute to an environment where disclosure is encouraged and safe." (Peterson, et al., 2008, p. 73)

5.   **Encourage recovery-oriented practices**

"Recovery-oriented practices that inspire hope, give service users personal power and a valued place in their communities, family, and whānau, while also supporting them to lead their own recovery, is essential. If mental health services instilled hope and if people with experience of mental illness knew they could recover, then self-stigma would be reduced. Utilising a holistic approach to recovery, whereby medication is balanced alongside eating and exercising regularly, keeping to routines, and connecting with others is one way that self stigma can be challenged." (Peterson, et al., 2008, p. 73)

6.   **Encourage empowerment**

"Encouraging people with experience of mental illness to empower themselves will increase self-efficacy and self-esteem thus combating self-stigma. All services should be successful in supporting people if they offer spaces of connection and security through appropriate cultural practices, responsiveness, and understanding. Evidence from this research suggests that specific mental health services such as kaupapa Māori, Pasifika, Chinese, and refugee oriented programmes are some of the most effective ways of helping people to deal with the stigma and discrimination associated with mental illness and ethnicity. Therefore, services that work in partnership with people with experience of mental illness will help to overcome self-stigma." (Peterson, et al., 2008, p. 74)

7.   **Support peer support services**

"Encouraging and developing peer support services in the community will help to combat self-stigma. Peer services play a crucial role in building people's resilience by helping people to understand and learn from each other. Creating peer environments where common experience and mutual respect are built, enables people to feel a sense of belonging and connection, which undermines social isolation and feelings of inadequacy and self-doubt." (Peterson, et al., 2008, p. 73)

8.   **Challenge attitudes and behaviour**

"Encouraging people to complain when they are discriminated against, progressing anti-stigma and discrimination campaigns, as well as challenging some of the attitudes and behaviours of people with experience of mental illness will all contribute to reducing self-stigma. However, emphasis must continue to be on eliminating the societal and public discrimination associated with mental illness, as this is a main trigger of self-stigma." (Peterson, et al., 2008, p. 73)
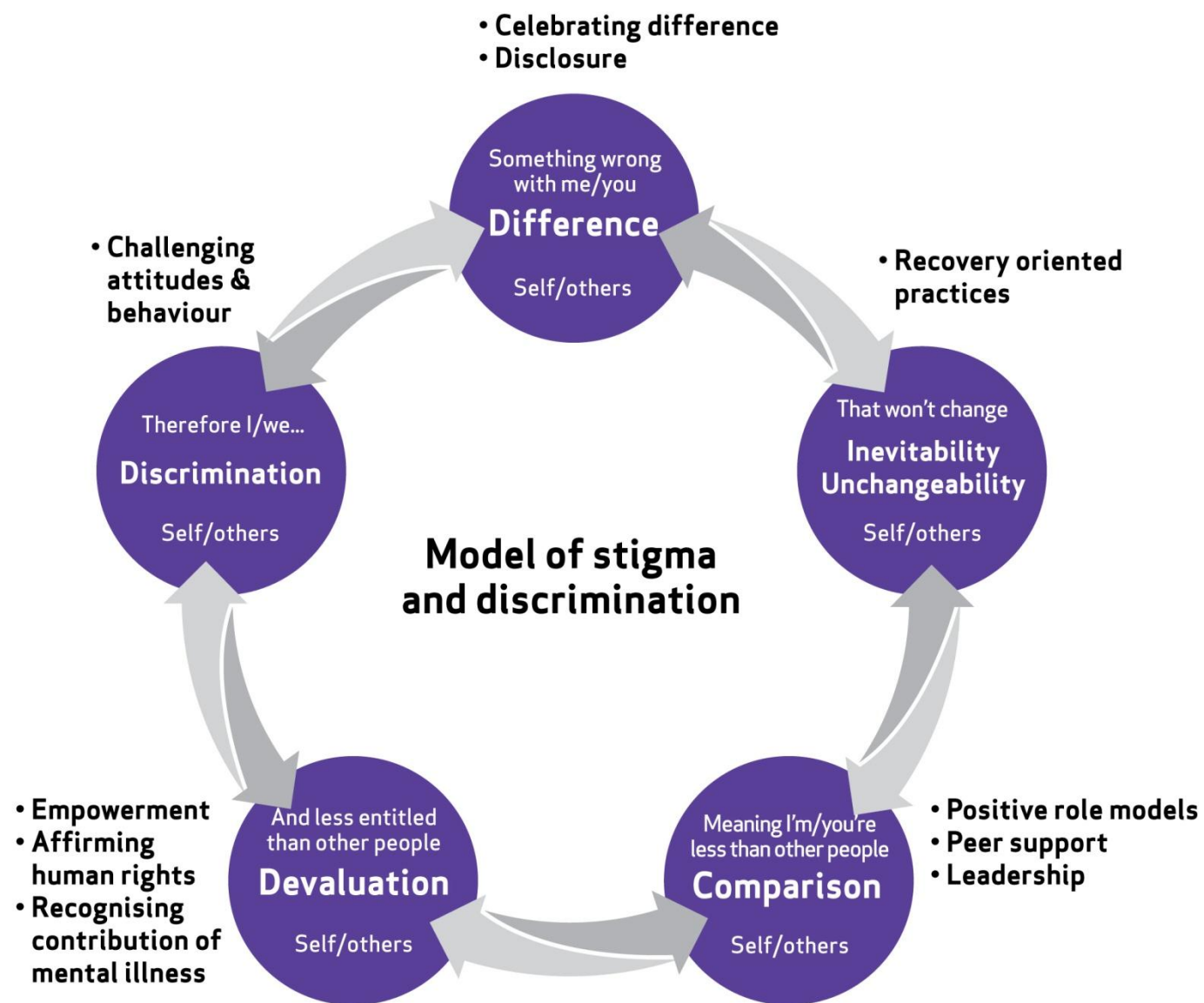
Figure 6: 'Like Minds like Mine' model to combat Societal and Self Stigmatisation by the Mental Health Foundation of New Zealand (Gordon, 2008)

These eight recommendations do not define the role of built environment within mental health services in their own right, rather they define and describe the sociological objectives of integration that the built environment must participate in hosting in order to reduce societal and self stigmatisation. Good design alone cannot instigate the elimination of societal and self stigma, yet the provision of appropriate facilities and insight into the role the built environment plays, empowers the service provider (NGO) to use facilities to best combat societal and self stigma. Below eight recommendations are summarised under two categories: The general role of the built environment and their specific role in fostering relationships between mental health consumers and society.

General role of the built environment

The built environment indefinitely fosters interaction and relationships with different groups of people within society. Recommendation 4 illustrates that disclosure of mental illness must be fostered at "*grass-roots level*"(Peterson, et al., 2008, p. 73Rec 4). SRCF's and our urban environment are the backbone of MH consumers relationship society. The built environment can be "*an environment where disclosure is encouraged and safe,*" (Peterson, et al., 2008, p. 73Rec 4) Furthermore, SRCF's can be "*Recovery-oriented practices that inspire hope, and give service users personal power and a valued place in their communities*."(Peterson, et al., 2008, p. 73Rec 5) Recommendation 6, identifies if mental health services "*offer spaces of connection and security through appropriate cultural practices, responsiveness, and understanding,*" SRCF's will be effective in supporting the mentally ill and empowering them. Empowerment is one of the most effective ways of overcoming self-stigma through increasing self-efficacy and self-esteem, (Peterson, et al., 2008, p. 74Rec 6).

Specific role of the built environment

Recommendation 5 identifies that "connecting with others is one way that self stigma can be challenged"(Peterson, et al., 2008, p. 74Rec 5), This is more specifically addressed under recommendation 7 which introduces the concept of "peer support". Peer support environments are "environments where common experience and mutual

respect are built, which enables people to feel a sense of belonging and connection". The MHFNZ state that a peer support environment undermines social isolation and feelings of inadequacy and self-doubt.

While 'recovery oriented practice' is still a broad phenomenon the general and specific roles outline that each of the eight recommendations are significant and are each called upon both individually and collectively under the description of a 'recovery oriented environment' to evaluate existing SRCF's, inform the design guideline and the Design Case Study.

2.5   New Zealand Criteria for Design of Psychiatric Acute and Intensive Care Facilities.

In 2002 the Ministry of Health of New Zealand published their "Criteria for Design and Refurbishment of Psychiatric Acute and Intensive Care Facilities"(Ministry of Health, 2002). This is the only relevant design criteria or guide published in New Zealand for psychiatric care facilities. It was published to advise District Health Boards on the design or redesign of such facilities, providing a checking mechanism, rather than set requirements, to ensure that proposed designs are safe and functional. Much of the content of this criteria is based on lessons learnt from the successes and failures of past New Zealand precedents.

This criteria is for acute and intensive care facilities; SRCF's are not categorised as intensive nor acute limiting the usefulness of this document. This criteria is useful in understanding the Ministry of Health's policy, as well as more general criteria for psychiatric recovery space. The criteria provides and describes spatial quality's such as: "space for inclusive interactions", "welcoming public spaces", "sense of belonging", "flexible space"(Ministry of Health, 2002, p. 3), see **Appendix 1**. As the only New Zealand specific design criteria, these qualities are useful the criteria lacks definition useful in understanding wider host communities and the influence the location of SRCF's have upon the integration of MH consumers.

Conclusion of Literature Review

The Literature Review reveals that firstly little to no investigation has been published tackling the effect the built environment has upon on the integration of MH consumers understood through societal and self stigmatisation. The literature review identifies instead the societal and self stigmatisation alone are well understood within New Zealand, yet this research does not consider the built environment. Alternatively knowledge surrounding the design of MH facilities and specifically secondary care; SRCF's is scarce within New Zealand and borrowed from primary inpatient hospitalised care design literature. This significant gap in knowledge within the New

Zealand mental health sector provides and justifies the need for significant empirical research into the degree of integration of the existing stock of SRCF's.

3. EMPIRICAL RESEARCH

Prompted by the lack of existing research into built environments of New Zealand's SRCF's, the Empirical Research investigates all 23 existing SRCF's within the Wellington Region. This phase of the research aims to identify the formal and spatial implications of the objectives and recommendations identified within 'Fighting Shadows'.

Wellington's stock of SRCF's are investigated at three scales; host community, location and the facility design. Methods of analysis vary according to these scales, ranging from socioeconomic mapping of entire neighbourhoods to the internal layout of existing facilities. This analysis reveals that SRCF's are best located within socioeconomically diverse host communities. Further analysis of the location of amenities reveals the 'inner edge" (the periphery of a suburban commercial centre) is the most appropriate location for a SRCF. At the facility-design scale, SRCFs were found to be located within retrofitted houses rather than purpose- built facilities. It is argued that the typically residential character and setting of this accommodation contributes to stigmatisation. While the SRCF is a product of deinstitutionalisation, these SRCF facilities prescribe a domestic normality which nevertheless defines the Mental Health consumers as atypical. This difference contributes to both societal and self stigmatisation.

The findings of this chapter are summarised according to their three respective scales within the following Design Guideline and subsequently informing the broad objectives set by 'Fighting Shadows' initiative.

In order to examine the spatial/accommodation implications of Supported Residential Care Facilities (SRCF's), a series of empirical analyses of the existing stock of SRCF's located in New Zealand's Wellington District have been carried out to investigate:

3.1   The socioeconomic context of existing SRCF's neighbourhoods and host communities;

3.2   The planning context of existing SRCF's neighbourhoods and host communities;

3.3   The physical context of existing SRCF's neighbourhoods; and

3.4   The facility design of existing SRCF's.

These four series of empirical research methods each relate to the three components and scales identified within the problem statement; the host community, location and facility design of the SRCF's. Each analysis identifies its aim, research methodology and findings along with expanding on the implications of the findings and the laminations of the research. The conclusions of the research findings are summarised within the Design Guideline chapter according to their implication upon the three scales analysed.

All the empirical research is conducted within New Zealand's Capital, Wellington City and associated regions. The Wellington region has been chosen as representative of New Zealand's context because it is readily accessible to the principal researcher; it encompasses Porirua City, Upper Hutt City, Lower Hutt City and Wellington City each with different populations, demographics and geographical contexts. The Wellington region has a total of 23 SRCF's providing a large sample within two MoH funded DHB's; Capital and Coast DHB and Hutt valley DHB.

3.1 The socioeconomic context of existing SRCF's neighbourhoods and host communities.

3.1.1 Aim

The purpose of mapping the NZDep2006 is to reveal an 'objective' picture of the socioeconomic landscape of host communities and the neighbouring context of SRCF's. The analysis was instigated to test the underlying assumption that SRCF's in New Zealand are typically located within deprived socioeconomic areas of cities and neighbourhoods, drawn on the observation of Geoffrey Cramp, medical officer of health in Tairawhiti District Health, that psychiatric accommodation facilities in the United Kingdom are located in deprived neighbourhoods (Cramp, 2010).

3.1.2 Method

This analysis presents information relating to the measure of deprivation; an indicator of the socioeconomic position of a person relative to the local community and or wider society or nation (Townsend, 1987). This analysis uses the NZDep2006 deprivation deciles as a measure of socioeconomic position, these deciles are based on the 2006 New Zealand Census meshblocks from Statistics NZ. It combines nine variables from the 2006 census into deprivation deciles for each meshblock, reflecting both social and material deprivation. Deprivation is categorized into deprivation deciles ranging from 1 -10, with 10% of New Zealand's population fitting into each deprivation bracket (White, Gunston, Salmond, Atkinson, & Crampton, 2008), see **Appendix 2**. Listed below are the nine variables, in decreasing importance, used to construct the New Zealand Index of Deprivation 2006 (White, et al., 2008).

Nine Variables of NZDep2006 Score:

1.   Means tested benefit status

2.   Household incomes

3.   Dwellings not owner occupied

4.   Single parent families

5.   Unemployed

6. No Qualifications

7. Occupancy- crowding etc

8. Access to telephone

9. Access to car

This mapping technique uses a monochromatic shading scheme where dark red represents areas mapped as most deprived, (NZDep2006 Deprivation deciles 10) and white represents areas least deprived (NZDep2006 Deprivation deciles 1), with shades in-between indicating the varying deprivation deciles.

The mapping of the levels of deprivation of the New Zealand cities of Wellington, Porirua, Lower Hutt and Upper Hutt City, in correlation with the location of all 23 SRCF's accommodating 5 or more beds has been presented at two different scales. Firstly, at a city wide scale, **Figure 7** where the location of SRCF's can be analysed in relation to their placement within the greater socioeconomic landscape of the cities studied. Secondly, the immediate socioeconomic landscape within 500m of the existing 23 SRCF's presented on **Figure 11**.

These studies are understood both through numerical and graphical interpretation. The numeral interpretation is a measure of the average socioeconomic levels of deprivation within the neighbourhood surrounding a selected SRCF. The graphical interpretation is where the socioeconomic mapping is examined according to its pattern. These patterns are defined under three types:

i. Socioeconomic Edges: the instances of clear distinctions between socio economic groups within one area. This is exemplified in patterns where there is a clear dissimilarity of edge in the distribution of colour.

ii. Socioeconomic Uniformity: this relates to areas populated by people of a uniform socioeconomic position which is seen in patterns that have an even colour masking of a set area.

iii.   Socioeconomic Scatter: this refers to areas where there is a great diversity in the socioeconomic position of people inhabiting an area. This is most evident in a mosaic type of socioeconomic distribution or pattern.

3.1.3   Findings

Socioeconomic Levels of Deprivation

SRCF within the four cities studied share common trends apparent in the Wellington District and City scale. Primarily SRCF's are situated within areas of average to upper quartile deprivation deciles, indicating that most SRCF's are in average to moderately deprived areas. The average deprivation of Wellington City (**Figure 8**) is 6, Porirua City (**Figure 9**) is 8, Lower Hutt City (**Error! Reference source not found.**) is 6 and Upper Hutt City (F**igure 10**) is 4.

Within the separate SRCF case study level (500m radius mapping), the average deprivation deciles of the neighbourhoods of the 23 SRCF's studied is 6. This indicates clearly that SRCF's are not located within the most deprived areas of our cities and neighbourhoods, see **Figure 11**. Research reveals that there are no SRCF's located within areas of no deprivation, for example, deprivation deciles of 1 or least deprived. Such areas can be considered to be affluent. Notably, only two of the 23 SRCF's are located within highly deprived neighbourhoods; SRCF's 4 and 6, **Figure 11**. These examples are situated within the cities most deprived suburbs: Cannons Creek of Porirua City and Naenae of Lower Hutt City, with respective deprivation deciles of 9 and 10. The SRCF's 13, 20 and 21, with deprivation levels of 7-8, may also be deemed to be in areas of relative socioeconomic deprivation, yet they are not considered to be at the polar extremes of deprivation within the larger socioeconomic landscape of the city.

Socioeconomic Patterns.

The three different deprivation patterns categorized - edge, uniformity and scatter - begin to indicate the types and distribution of differentiated populous within cities.

SRCF's 4,10, 13, 20 and 21 (as noted above) are located within highly deprived neighbourhoods. Polar extremes in socioeconomic deprivation of the surveyed areas (census 2006 meshblocks) show either most or least deprived areas are located in places of relative socioeconomic uniformity. The correlation between polar deprivation and socioeconomic uniformity is strongly demonstrated in the neighbourhoods of SRCF's 4 and 10 (**Figure 11**) where the immediate surroundings of the two SRCF's studied are inhabited by one socioeconomic group. Such areas of polar deprivation are conducive of poverty traps consisting of the most deprived people, and in the other extreme, the least deprived areas are exclusive or sequestered communities for the affluent or least deprived populous. The MHFNZ's 'Fight Shadows' paper presents the second of its eight key recommendations to combating self stigma as "*Celebrate and accept difference: society needs to celebrate and accept difference, rather than reject it" (Peterson, et al., 2008).* Building upon the 'Fighting Shadows' recommendation, the urban areas of socioeconomic uniformity have less social diversity. Contrasting the socioeconomic uniform context the socioeconomic scatter context has a higher degree of social diversity. This higher degree of social diversity represents a context with a vast differentiation in lifestyles, these occupants are likely to be more accepting of this difference and consequentially potentially more accepting of mental illness.

Socioeconomic scatter is the prevalent characteristic of eighteen of the twenty-three existing SRCF's socioeconomic neighbourhoods. The degree of socioeconomic variation or scatter appears to be most dispersed (on the district plan scale) at the edges of the four cities studied, see **Figure 7**. When observing Wellington City on the City Plan scale at **Figure 8** it becomes evident that socioeconomic scatter is most defined and diverse at the edges of the city centre and suburban centres alike. Suburbs such as Karori, Aro Valley, Kilbirnie and Miramar all appear to have the greatest degree of scatter about their suburban centre and become more uniform as they expand outwards. The reason socioeconomic scatter is at its most diverse at the edges of the suburban centres can be attributed to the variety of facilities and services, i.e. mixed-use context.

In summary there are instances where SRCF's are located in the most deprived area within its neighbourhood; such as seen in case studies of SRCF's 3 and 12, yet this is by no means a conclusive pattern, with many more examples of the opposite phenomenon occurring to that assumed. The MHFNZ's 'Fighting Shadows' recognises the diverse socioeconomic context as most useful in combating societal and self stigmatisation correlating to the inner edges of suburban and city centres and their surrounding residential context within mapping studies

3.1.4   Limitations

Imposing landscape and rigid boundaries, defined by waterways, railway and motorways, industrial zones and even suburban centres, are examples of factors that must be considered when examining socioeconomic deprivation distribution patterns. Such characteristics of our cities are very significant factors in the distribution of deprivation: for example, the housing along the edges of railway lines are typically inhabited by those most deprived within a community

The density or size of Meshblocks must also be considered when querying socioeconomic patterns. For example, very large meshblocks are typically in rural areas due to their size yet whilst only representing approximately 100 people, it can create misleading visual hierarchy.

The deprivation score varies from 838 to 1619 according to deprivation mechanism. NZDep2006 deciles versus NZDep2006 reveal that the inherent difference in social economic deprivation between groups 2-3 is much smaller than the difference between groups 8-9, demonstrated diagrammatically in **Appendix 2**.

PORIRUA CITY

LOWER HUTT CITY

1:5000 CORRELATION

WELLINGTON CITY

UPPER HUTT CITY

Figure 7
1:150000
WELLINGTON REGION

10
MOST DEPRIVED   NZDep2006   LEAST DEPRIVED   1

MHCP

Community Alcohol & Drug Service
Opioid Treatment Service

MHCP

Wellington Community
Mental Health Team

MHCP

Specialist Maternal MHS
Child & Adolescent MHS
Acute Inpatient Unit, (Wd 27
Acute Day Services
Consultation Liaison Service

MHCP

South Community Mental
Health Team
Team for Assertive Community
Treatment (TACT)

Ngaio

Karori

Aro Valley

Western Mt Victoria

Mt Cook

Newtown

Kilbirnie

Mirimar

Seatoun

Figure 8

1:7500
WELLINGTON CITY

Average Dep: 6

MHCP

Porirua Community Mental Health Team
Porirua Child & Adolescent Service

MHCP

Maori Mental Health Service
Health Pasifika Montrose
Crisis Assessment & Treatment Team (CATT)
Rangatuhi Acute Day Hospital
Service Coordination
Psychogeriatric Inpatient
Psychogeriatric Community

Titahi Bay

Golden Gates

Cannon Creek

Figure 9

1:7500
PORIUA CITY   Average Dep: 8

Figure 10
1:7500
UPPER HUTT CITY   Average Dep: 4

SRCF

PYSCHIATRIC ACCOMDATION
(5 BED MIN)
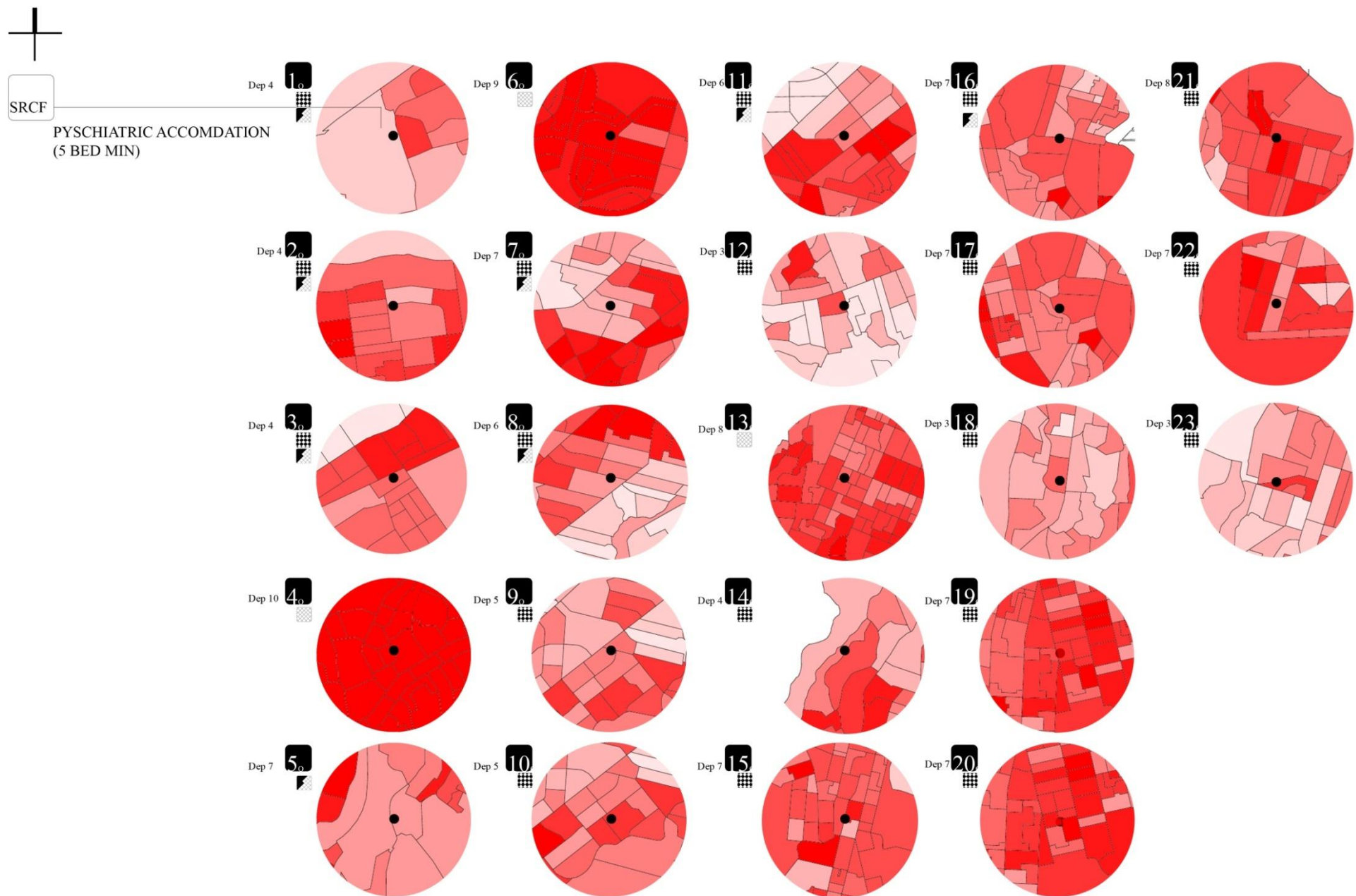
Figure 11

1:5000

SRCF DEPRIVATION CORRELATION

UNIFORMITY

SCATTER

EDGES

Average Dep: 6

3.2 The planning context of existing SRCF's neighbourhoods and host communities.

3.2.1 Aim

To investigate the effect of city planning conditions upon the location of SRCF's.

3.2.2 Method

The Wellington District Plan, prepared under the Resource Management Act 1991, dictates what land use activities are and are not permitted within the Wellington City District. This analysis (by example of the above socioeconomic study) has plotted all twelve existing SRCF's on a Wellington District Plan. This identifies the area or zone in which a particular SRCF's are located within, presenting a picture of their planning context.

3.2.3 Findings; *refer to Figure 12 & Figure 13*

Specific plan searches of the 12 SRCF's studied reveal that all existing SRCF's within the Wellington City Plan are permitted activities.

The District Plan analysis confirms the general observation that SRCF's are typically located in residential areas. The Wellington City District Plan, **Figure 12**, reveals all 12 SRCF's are located in the 'Inner Residential Zone' and 'Outer Residential Zones'. Of the twelve SRCF's, four of the SRCF's plotted (13, 15, 19 & 20, **Figure 13**) are located within the Inner Residential Zone, with the remaining eight located in the Outer Residential Zone.

The nature of the distribution of Wellingtons stock of SRCF's within its planning context must be understood by examining the particular conditions that exempt a SRCF with 5 beds or more from being defined as a discretionary activity under District Plan Rules for Inner and Outer Residential areas. R Vorstermans, an Architect active in the retrofitting of existing residential dwellings within the Wellington district during the deinstitutionalisation of the Kimberley Centre, provides light on the effect of planning conditions upon the development of SRCF's. Vorstermans alludes to the specific implication of 'limited notifications' upon the selection of sites and building

typologies appropriate for SRCF's (Vorstermans, 2010). Clause 95B of the Limited notification of consent application under the Resource Management Act 1991 states:

"The consent authority must give limited notification of the application to any affected person unless a rule or national environmental standard precludes limited notification of the application".(New Zealand Parliament, 2009)

This clause is of particular importance in understanding the rights neighbours have to object to any resource consent applications where they are affected. If all affected parties (neighbours) of a resource consent application give their formal consent, the application will be consented to by the Regional Territorial Authority. Vorstermans mentioned a case where resource consent was required, under limited notification, from the neighbours to conduct appropriate building works that were going to affect the neighbours' property. The neighbour refused consent under what was considered a minor breach of the sun light recession planes (a local government planning control). Vorstermans believes that the reason this consent was refused was not because of the minor breach of the sunlight recession plane, but rather because of the neighbours knowledge that the building was going to be used as a 'half way house' (Vorstermans, 2010). He reinforces the above observation by noting that sites and existing dwellings requiring resource consent for appropriate retro-fitting were avoided by those procuring sites for SRCF's, especially during the deinstitutionalisation period. This example of the NIMBY symptom and evident instance of societal stigmatisation can be attributed to the later conclusion that SRCF's are camouflaged rather than disclosed to the public.

Appropriate to this scale of analysis is that large sites were and are favoured over small sites. This is because large sites are more flexible in land use under the Local Territorial Authorities rules. SRCF facilities often have two residential units on one site; under the inner residential District Plan Rules this is considered to be a 'controlled activity,' whereas under the outer residential rules this is listed as a 'permitted activity.' This rule is seemingly the reason that 8 of the 12 SRCF's studied are located in the Outer Residential Zone. With large sites scarce amongst our built suburbs and small sites creating more difficulties, there is a definitive correlation that

suggests the 7 of 17 SRCF's studied more broadly within the wellington region are located on the edges of low density suburban sprawl. This is evident in SRCF's 1,3,5,14,17,18 and 23 within figure ground studies collated in **Appendix 3.**

SRCF

(5 BED MIN)

MHCP

MENTAL HEALTH CARE
PROVIDER
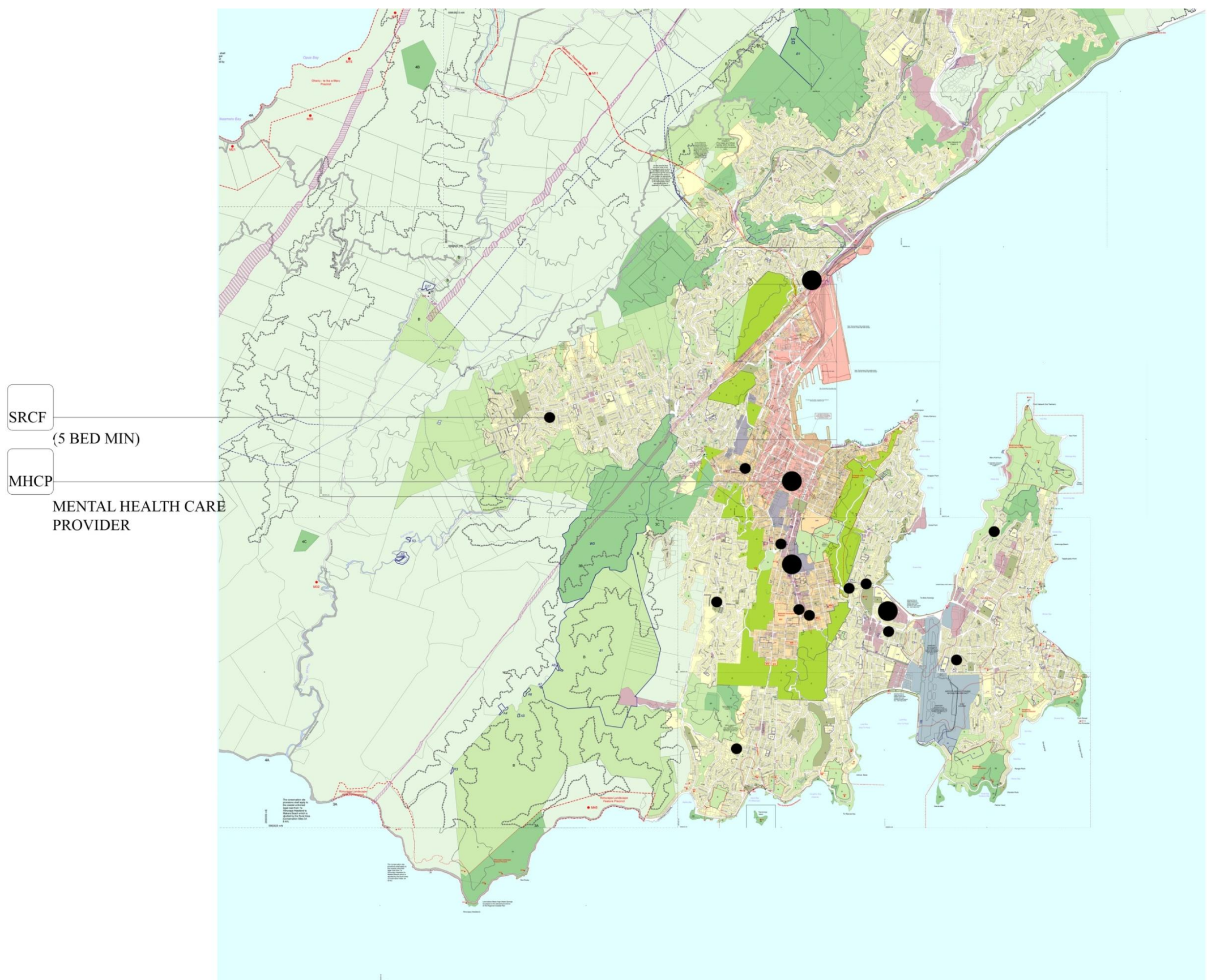
Figure 12

1:7500
DISTRICT PLAN WELLINGTON CITY

OUTER RESIDENTIAL ZONE   INNER RESIDENTIAL ZONE   SUBURBAN CENTRE ZONE   CENTRAL ZONE   INSTITUTIONAL PRECINCT

.

1.

6.

11.

16.

21.

2.

7.

12.

17.

22.

3.

8.

13.

18.

23.

4.

9.

14.

19.

5.

10.

15.

20.
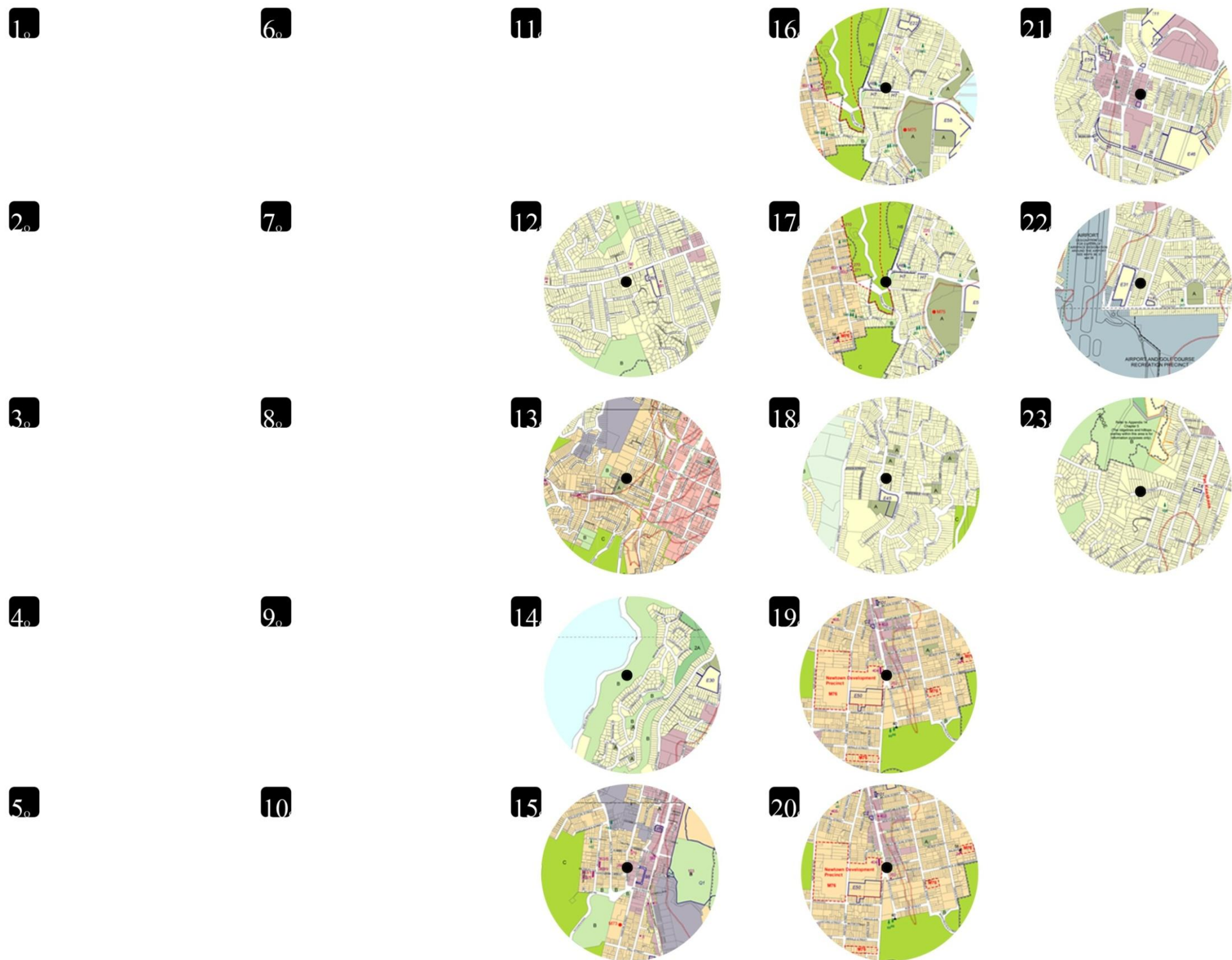
Figure 13

1:5000

DISTRICT PLAN CORRELATION

OUTER RESIDENTIAL ZONE   INNER RESIDENTIAL ZONE   SUBURBAN CENTRE ZONE   CENTRAL ZONE   INSTITUTIONAL PRECINCT

3.3   The physical context of existing SRCF's neighbourhoods.

3.3.1   Aim

To examine the physical context of existing SRCF's neighbourhoods in order to determine the level and context of integration these facilities and their MH consumers have with the host community.

3.3.2   Method

The analysis of the physical/spatial qualities of neighbourhood contexts of SRCF's have been conducted through two methodologies that each typically work in unison to provide a conclusive picture of the physical context at an neighbourhood scale:

> i. Figure Ground Plan studies

> ii. Amenities Plan studies

i. **Figure Ground Plan studies**

Figure ground analysis is a planning technique which distinguishes the main figure on a plan from the background information (Borden, 1972). Each figure ground plan studies the surrounding neighbourhood of a SRCF at a scale of 1:5000 within a 500m radius of the SRCF. This area is suggestive of the distance presumed for a five to ten minute walk. It assumes 5 minutes of walking if the most direct route is taken to the perimeter of the research zone, while allowing 10 minutes for less direct pathways through the streets. (Ministery of Transport, 2009)

The main figure analysed in these figure ground study's is the built fabric, (solid mass) marked black, with the background information being the surrounding open space (open voids) in white. This study begins to illustrate some of the typical physical and spatial qualities of the urban fabric that MH consumers inhabit surrounding the SRCF they live in.

ii. **Amenities Plan studies**

The Amenities analysis takes its basis from the figure ground studies but, instead of depicting spatial qualities of the urban context, the amenities plan provides an objective understanding of the diverse use of the physical built environment. The

studies focus on locating, in particular, the non residential activities in each area with a colour assigned to each activity:

> Community **(yellow)**: Libraries, schools, Health care, Community Halls
>
> Retail **(Red)**: Publically accessible retail, Shops, Supermarket
>
> Commercial **(Green)**: Warehousing, Office space
>
> Industrial **(Blue)**: Factories, Workshops,
>
> Residential **(White)**: Homes, Wellington City Council Community Housing
>
> Mental Health Facilities **(Pink)**: Hospitals, CMHT, CATT and SRCF

The amenities analyses also allude to the road hierarchy of the urban areas studied. Hierarchy of road size and use is indicated according to the density of lines indicating the passage of a road. Roads or streets indicated with one line are likely to be suburban streets leading to a cul-de-sac or dead end. Roads indicated with two to four lines are connecting routes or roads indicated with more than four lines are representative of urban by-passes, highways and motorways.

3.3.3   Findings

This section summarises the significant findings resulting from the investigation into the physical context of SRCF's immediate neighbouring context and wider host community. These topic based findings are summarised to one of three 'location type' sub headings.

17 of the 23 SRCF's were studied in their immediate urban context through the Figure Ground and Amenities Plan Studies. The remaining six were not completed due to lack of aerial photographs and are unlikely to affect this research. This analysis follows on from the findings of the planning context analysis (**Section 3.2)** which indicated SRCF's are typically located in residential areas. The 17 case studies can be categorised according to three location type conditions:

> a . Outer Edge Context: this refers to the remoteness of an area from a
> suburban centre. Typically, it is the outer boundary of residential

development - the edge of suburban sprawl neighbouring on rural land, bush, coastline or even industrial development. A typical example of this is SRCF18.

b. Homogonous Residential Context: This refers to areas of an urban environment with a uniformity of land use; in this case this is usually residential areas occupied by households. The homogonous context is generally located between the inner edge condition and outer edge condition. An example of this is SRCF5.

c. Inner Edge Context: This refers to the close proximity of an area to a suburban or city central (urban centre). Generally this is both within and at the inner edge of residential areas bordering on a suburban centre. An example of this is SRCF's 19&20.

a. Outer Edge Context, *Appendix 3* *(SRCF1,3,5&23)*

Four of the 17 SRCF's studied are located within this outer edge context. The implications of contextual locations are diverse yet can be exemplified through isolation. A clear example of this is SRCF 1, **Figure 14**.

C Nolan idenitfies that while intergartaion of MH consumers within the community is often the key or core outcome sought by NGO's and architects, *"you cant divorce the person from the community of supports nessessary to keep them stable in a wider community setting" (Nolan, 2010)*. Here, Nolan outlays the importance of 'community support' or community based mental health amenities for better integration of MH consumers within their community.

3.3.3.1 Isolation of MH consumers within the Host Community

MH consumers rely heavily upon pedestrian access for their own participation within the host community. MH consumers under the Compulsory Treatment Order Act 1992 cannot legally enter into a contract. This prevents mental health consumers from owning their own form of personal private transport, i.e. Car or Motor Bike. Community care providers (NGO's) supporting SRCF's will usually provide allotted vehicles that care workers will use to transport MH consumers. Reasons for transportations are likely to vary from trips to the CMHT, the supermarket or daily outings. The National Health and Nutrition Examination Survey found that people with severe mental illness are over all less physically active than the general population (Daumit, et al., 2005) presenting a further limitation to their ability to travel.

SRCF's located within the 'outer edge context' stigmatise their MH consumers through their remoteness. MH consumers without access to private or public transport rely upon pedestrian access to participate in urban and suburban centres. Of existing SRCF's 1, 3,5 and 23 (**Appendix 3**) located within the outer edge context only SRCF23 is within a 500 meter proximity of a public transport link. The inaccessibility of public transport can be considered typical of the outer boundaries of suburban areas, especially recent low density suburbs such as those that SRCF's 1,3,& 5 are located within. SRCF 1 is located 2.6km (walking distance) from its nearest suburban centre, SRCF 3 has a walking distance of 2.5km but does not have a continuous footpath, requiring the pedestrian to walk on the grassed edge of Eastern Hill Road, Silverstream, Upper Hutt city (a four lane 70km/h road). SRCF 5 has a 3.2km walking distance to a suburban centre and SRCF 23 is 760m from its nearest urban or suburban centre.

 In order to understand the level of disadvantage generated through lack of pedestrian access one must understand that main stream society living within the outer edge context relies heavily upon private transport. While pedestrian access is, in most cases provided, private transport allows the majority of the populace to travel easily in a timely manner, with minimal physical exertion, travelling comfortably during bad weather and safely at night.

b. **Homogonous Context** , *Appendix 3* (SRCF2,12,14,18 & 22)

Five of the 17 SRCF's studied are located within the homogonous context. The homogeneity of this context is evident within the figure ground plan and amenities plan in the relatively similar scale of development, single activity context and consistent spatial density. This is seen most clearly in SRCF 2, and also in SRCF's 12,14,18 and 22. The implications of locating SRCF's within homogenous contexts results in lack of provision for an integrative residential environment for MH consumers living in SRCF's, an observation expanded on below. A clear example of this is SRCF 17, **Figure 15**.

3.3.3.2 SRCF's are Atypical in the Normalised Suburban Environment.

The routine of living in a residential building located within either a homogonous context and/or outer edge context for 24 house per day is an atypical activity, contrasting the normal routines of work, school and weekend recreational activities observed in the suburbs. While there are other activities located within the suburb, activities such as working from home, stay at home parents and the pastimes of the elderly (that do not prescribe to the typical suburban routine), each of these activities are well understood and linked with a clearly identifiable purpose.

Unintentionally and largely unavoidably within this context, the regular routine and normality of suburban living contrasted with the lifestyles mental health consumers observe with SRCF's frame the MH consumer as different and atypical. Irrespective of the lack of direct stigmatisation by society and its unintentional nature the Mental Health Foundation of New Zealand argues "*that self stigma becomes so ingrained that it would persist even in the absence of societal stigma.*" (Peterson, et al., 2008)

Subtle tension exists within the finding that the atypical life style of MH consumers is a compromising stigmatisation within the homogonous context. As identified within section **3.1 Empirical Research** 'difference' with a context of difference encourages disclosure and provides an environment where difference can be celebrated. Yet the difference identified within this finding is stigmatising because the MH consumers,

who are inherently different, are placed within a blanket of normality, being the residential suburban home and its neighbouring suburban context.

With the suburban centre recognized as providing the diversity and amenities which common society participates within, the homogonous and outer edge suburban environment (as in the case of SRCF 18) do not provide sufficient diversity in use within the 500m radius of the amenities plan study to provide an integrative environment where difference is both accepted and celebrated (Peterson, et al., 2008). Like the outer edge context, the homogonous context further contributes to the conclusion that remoteness to suburban centres stigmatises mental health consumers.

c. **Inner Edge Context,** *Appendix 3* *(SRCF4, 13, 15, 16, 17, 19, 20 & 21)*

Eight of the 17 SRCF's studied are located within the inner edge context. The implication of SRCF's located within the inner edge context are largely defined by the inner edges inherent capacity to provide the qualities of urban context, which is found to be deficient in the outer edge context and homogonous context. A clear example of this is SRCF 19 and 20,**Figure 16**.

3.3.3.3 The Suburban or City Centre

The contemporary suburban centre has typically originated from significant retail and industrial centres located within suburban areas. In recent times the distinction between industrial centres and retail centres has diminished markedly (Wellington City Council, 2010). In particular, the market has changed the focus of most industrial areas from purely industrial to mixed-use retail, public amenities, built up residential (apartments), service and industrial centres. For MH consumers the suburban centre and city centre alike provide basic public and MH provisions; CMHT's, CATT, medical centres (GP's), libraries, community halls, sports centres and events centres, along with public amenities, retail and commercial employment. The ability and desire to access community facilities and services by MH consumers is stated by Guite as being important for building 'mental capital' (Guite & Clark, 2006). "*Learning through life has been associated with positive regard, life's satisfaction, optimism, efficacy, resiliency, encouraging social interaction and a more active life*" (Aked, Marks et al. 2008; Kirkwood, Bond et al. 2008).

SRCF's 19 & 20 located in Newtown, both on Honner Street, are examples of SRCF's located on the edge of a suburban centre and the residential suburb, **Figure 16**. When examining the amenities plan study for SRCF's 19 & 20 it can be seen that each facility has access to readily available public transport. In contrast, SRCF's located in a homogonous or outer edge context (**Figure 14**) (**Figure 15**) have a notable decrease in accessibility of public transport.

The amenities plan study demonstrates that there is a wide variety of amenities typical of a suburban centre (indicated by the range of colours) and notably there is a high amount of community amenities, highly constructive contexts for integration of MH consumers with the community. Locating SRCF's within the 'inner edge context' provides MH consumer**s** with pedestrian friendly access to the amenities used by the entire community.

3.3.3.4 Diversity at the Inner Edge Context

In complete contrast to the homogonous context, the inner edge context reflects diversity both in the physical quality's and the social quality's. The figure ground plans present a large diversity in scale of the built form within SRCF's 4, 13, 15, 16, 17, 19, 20 & 21, **Appendix 3**. The suburban centres have a much larger building scale, yet what is notable is the rapid decrease in scale at the edges of the suburban centre bordering upon residential areas. This can largely be attributed in the prescribed rules of the Wellington City's District Plan in regards to the interface between residential zones and suburban centres zones. The amenities plan study reinforces the observation that a large range in socioeconomic diversity **(Section 3.1)** is evident in this context through the variation of building use described in length above (SRCF's 19&20). Residents and users living within the greater diversity of the inner edge context are intrinsically more accepting to both physical and social difference. The homogonous and outer edge context case studies all have provided consistencies in building scales, built densities and types of amenities use. This reflects what we understand to be normalised residential environment for the typical New Zealand working class.
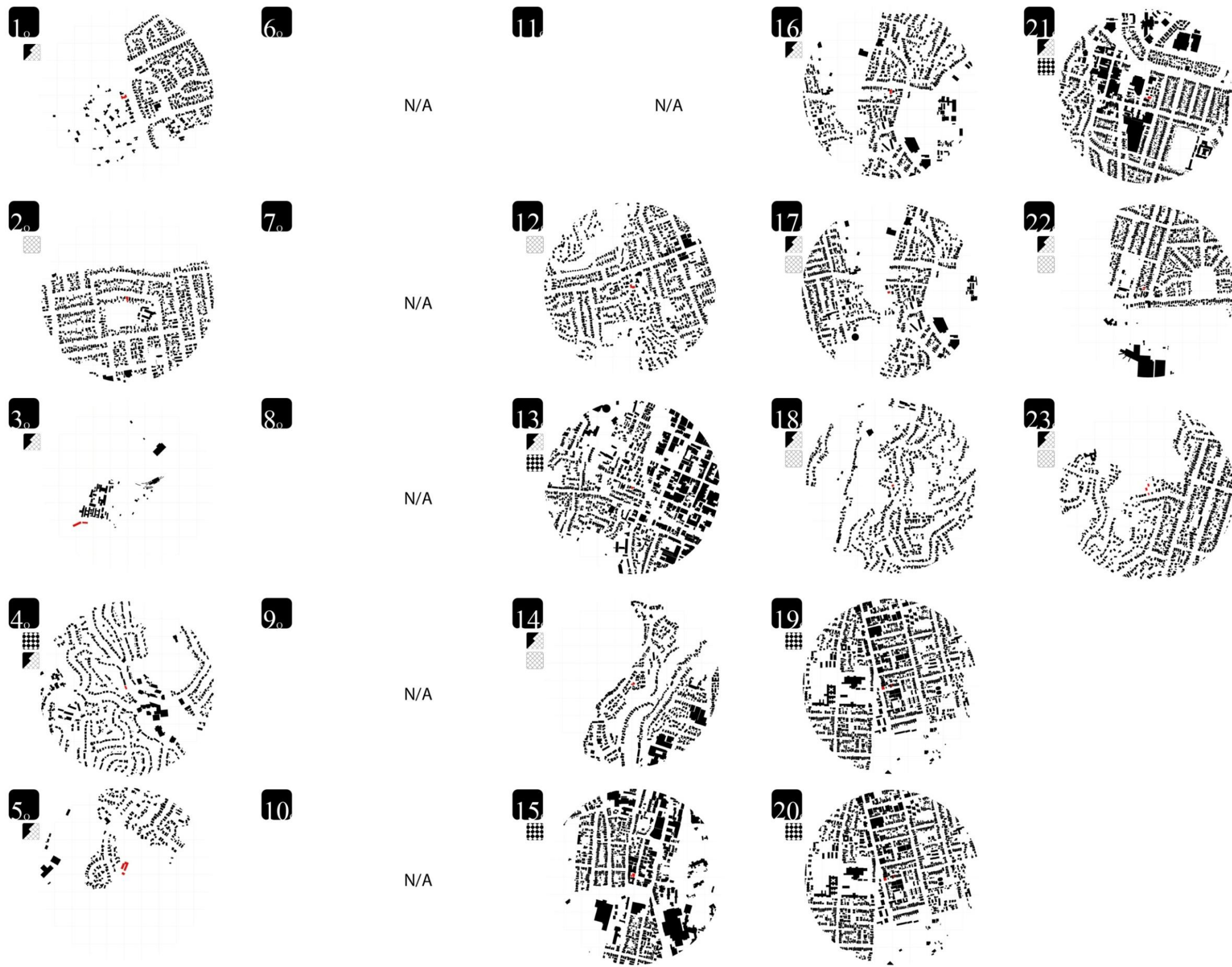
3.3.3.5 Host communities: Suburban Centres versus City Centres

SRCF 13, unlike the remaining examples of inner edge context, is located on the edge of Wellington city within the Aro Valley residential suburb. As expected, the amenities plan study illustrates that cities, like suburban centres, offer a diverse range of amenities to its users. New Zealand is traditionally a country of suburban dwellers (Statistics New Zealand, 2005), 1.5 per cent, a clear minority of Wellington's population, live within the inner city; undoubtedly the greater percentage borders the

city within the inner edge context but the majority of Wellington Cities population live within the outer suburbs. Without exempting the city centre as an appropriate environment for MH consumers to access amenities, the suburban/town centre is the most normalized environment for the majority of New Zealander's.

3.3.4   Limitations

Through using previously tried unban analysis techniques, limitations of this research are few in number. Firstly, recreational green space is not include within the realms of the amenities plans due to the 'built' limitations of the figure ground plan study they are based upon. The analysis of recreational green space will strengthen findings under this study. Secondly, care must be taken when comparing this research with other regional studies as the findings are of specific nature to Wellington.
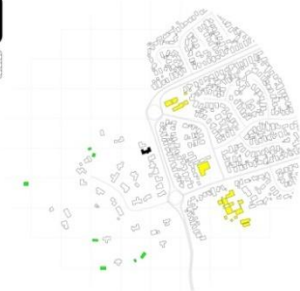
I

1.

2.

3.

Railway Museum
Conference Centre
Christian Centre

4.

5.

6.

N/A

7.

N/A

8.

N/A

9.

N/A

10.

N/A

11.

N/A

12.

13.

14.

15.

16.

17.

18.

19.

20.

21.

22.

23.

1:15000
AMMENITIES CORRELATION

UNIFORMITY

SCATTER

EDGES

PA

PYSCHIATRIC ACCOMDATION
(5 BED MIN)

SRCF 1₀   1:5000
FIGURE GROUND PALN

PA

PYSCHIATRIC ACCOMDATION
(5 BED MIN)

SRCF 1₀   1:5000
AMENITY PLAN

COMMUNITY RETAIL COMERCIAL INDUSTRIAL RESIDENTIAL MH FACILITY
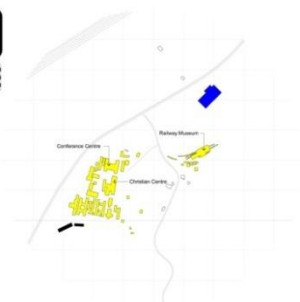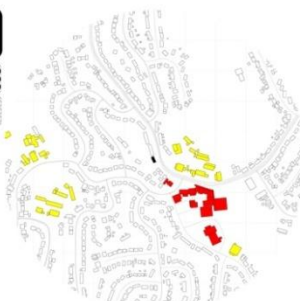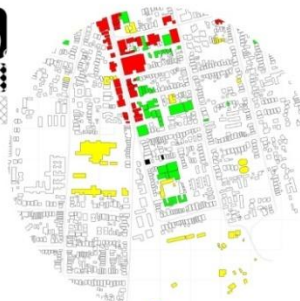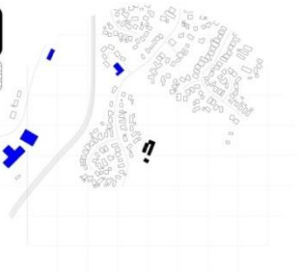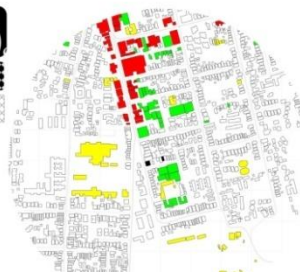
Figure 14: SRCF 1, example of 'outer edge context'

SRCF 2₀
1:5000
FIGURE GROUND PALN

SRCF 2₀
1:5000
AMENITY PLAN

Figure 15: SRCF 2,example of 'homogonous context'

Figure 16: SRCF 19 and 20, example of 'inner edge context'.

Note see **Appendix 3** for full stock of case studies

3.4 The facility design of existing SRCF's.

3.4.1 Aim

To examine and summarise the existing facility design of built typology of SRCF's.

3.4.2 Method

To examine and summarise the existing building typology of SRCF's within Wellington City this portion of the chapter covers the two research methods below:

    i.   Historic building works timeline

    ii.   SRCF Building Typologies Case Studies:

            SRCF 18 (Retro fit residential house: 7 Bedroom)

            SRCF 19 (Retro fit hotel: 20 Bedroom)

            SRCF 21 (Retro fit boarding house:10 Bedroom)

Records of all building works were sourced from Wellington City archives. A succinct description of all building works and amendments made to each of the selected existing PARF's were provided, along with the corresponding documentation of each amendment. Eleven of the twelve facilities within Wellington City have been analysed;. SRCF 15, the 12th facility, has not been analysed as building records were not available.

    i.   Historic building works timeline: a series of comparative timelines objectively compare the historic building works and amendments made to each existing SRCF - **Figure 17** & **Figure 18**. Each record of the original building works and subsequent additions and alterations, has been plotted against time and described in order to compare and analyse the time of changes, purpose of the changes, date of initial construction and purpose of initial construction.

    ii.   SRCF Building Typology Case Studies: The chosen three SRCF's, 18,19 and 20, represent the three different building types evident in the research sample. As stated above, the research sample found that there were no purpose built SRCF's within Wellington City. This study analyses the

implications of retrofitting each of these building types - the residential home, boarding house and the hotel.

3.4.3   Findings

Historic Building Works Timeline, *Figure 17 & Figure 18*

The most significant findings, established through analysis of the stock of existing SRCF's within Wellington City, found that there were no purpose built SRCF's. Rather, the analysis highlights that 9 of the 12 SRCF's are retrofit residential dwellings, with the remaining SRCF's (15, 19 and 21) housed in retrofit commercial based buildings. Of the three commercial examples; SRCF's 15 and 21 have been retrofitted into residential boarding houses while SRCF 19 was originally designed and occupied prior to becoming a SRCF as the Temperance Hotel (Wellington City Archives, 2010). The implications of each of these typologies and the nature of this retrofit process is examined through three case studies below
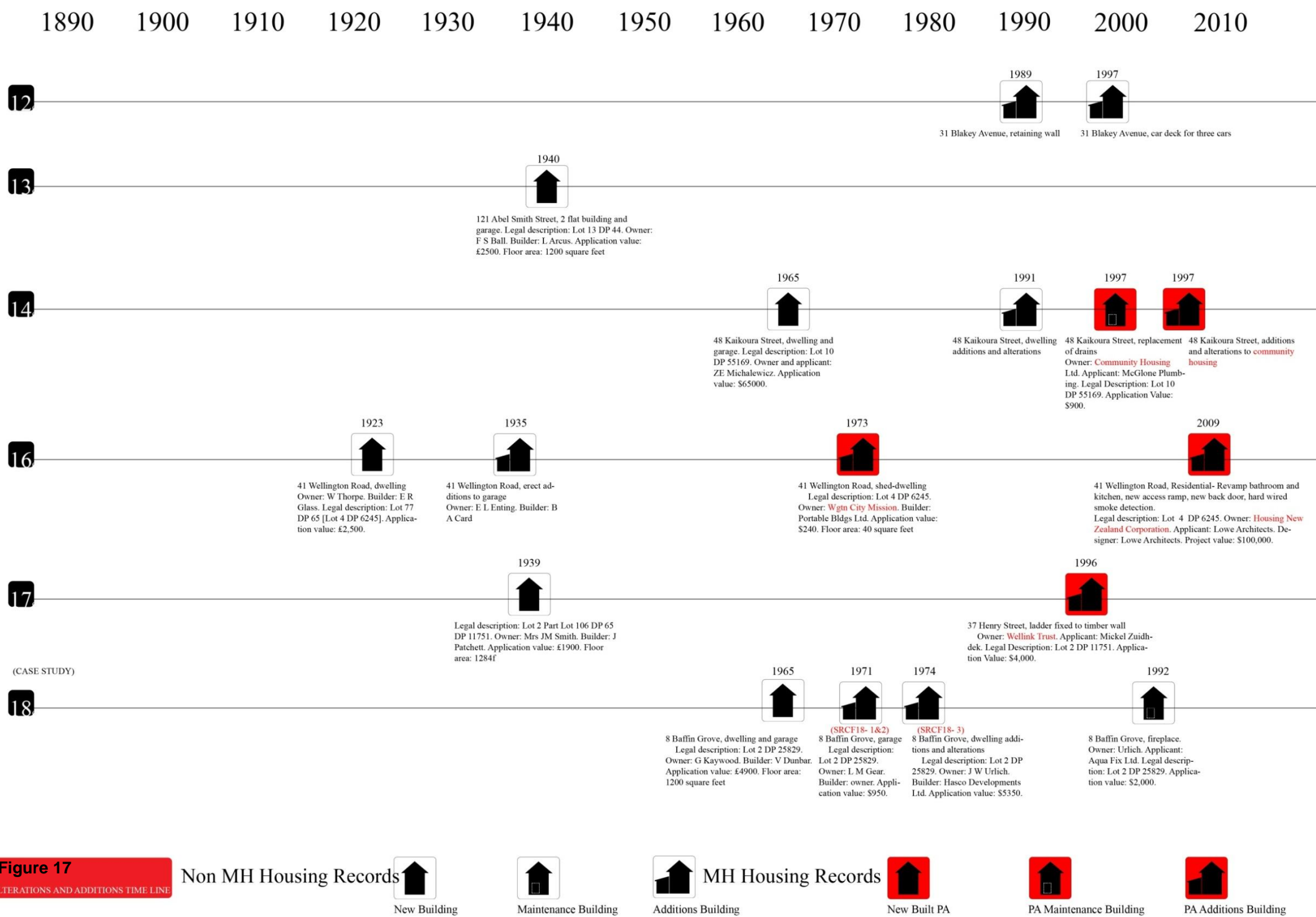
R Vorstermans recalls, that following the deinstitutionalisation of the Kimberley Centre, purpose built residential units were built in the Nelson, Kapiti Coast and Palmerston North regions.(Vorstermans, 2010). Wellington City is a dense and historically developed area and the regions noted above are all less geographically challenged than Wellington City. While the findings of Wellingtons SRCF's show no purpose built facilities, this must not be used as a trend of New Zealand City's. Rather it presents Wellington City as an unreceptive urban host of psychiatric care in the form of community based SRCF's.

None of the building works identified with the corresponding use of the building as a SRCF were registered as being in breach of the Wellington District Plan or having to gain resource consent under the Resource Management Act 1991.

This observation, and that of Wellington City being an unreceptive urban host, is confirmed by the findings in section **3.2 (Planning context**) - that the misuse of the 'limited notification' clause (Resource Management Act 1991) by neighbours resulted in alterations or new purpose built SRCF's being unduly controlled and restricted.

This evidential societal stigmatisation against the development of purpose built or effective retrofitting of SRCF's has driven the retrofitting trend presented in this study.

Of the twelve SRCF's studied, 6 SRCF's (numbers 12, 13, 18, 20, 22 and 23) have no record of building works or corresponding documentation that give clue to any specific alterations, additions or maintenance that was required for the use of the properties as SRCF's (Wellington City Archives, 2010). Of the remaining SRCF's (which do have recorded building alterations) the majority are alterations within the existing building envelope, such as the reconfiguration of bedrooms, excavation of a basement to provide for additional bedrooms, external fire escape stairs, new bathrooms or the expansion of hallways. Among the research sample there is only one instance of major external building works: SRCF 21, Mahora House. This was owned and managed by Mahora House Incorporated who built a new ancillary building, office and veranda in 2000, seen in the building consent drawings **Figure 18**, **Figure 19** and **Figure 30** to **Figure 31**. The addition of the ancillary building is significant in revealing that the existing retrofit boarding house does not provide an effective space for SRCF management yet in confirms that SRCF's avoid additions and alteration that require Resource Consent. The addition of an ancillary building upon an inner residential zoned site is a permitted activity under the Wellington District Plan.

1890 1900 1910 1920 1930 1940 1950 1960 1970 1980 1990 2000 2010

12

1989
31 Blakey Avenue, retaining wall

1997
31 Blakey Avenue, car deck for three cars

13

1940
121 Abel Smith Street, 2 flat building and garage. Legal description: Lot 13 DP 44. Owner: F S Ball. Builder: L Arcus. Application value: £2500. Floor area: 1200 square feet

14

1965
48 Kaikoura Street, dwelling and garage. Legal description: Lot 10 DP 55169. Owner and applicant: ZE Michalewicz. Application value: $65000.

1991
48 Kaikoura Street, dwelling additions and alterations

1997
48 Kaikoura Street, replacement of drains Owner: Community Housing Ltd. Applicant: McGlone Plumbing. Legal Description: Lot 10 DP 55169. Application Value: $900.

1997
48 Kaikoura Street, additions and alterations to community housing

16

1923
41 Wellington Road, dwelling Owner: W Thorpe. Builder: E R Glass. Legal description: Lot 77 DP 65 [Lot 4 DP 6245]. Application value: £2,500.

1935
41 Wellington Road, erect additions to garage Owner: E L Enting. Builder: B A Card

1973
41 Wellington Road, shed-dwelling Legal description: Lot 4 DP 6245. Owner: Wgtn City Mission. Builder: Portable Bldgs Ltd. Application value: $240. Floor area: 40 square feet

2009
41 Wellington Road, Residential- Revamp bathroom and kitchen, new access ramp, new back door, hard wired smoke detection. Legal description: Lot 4 DP 6245. Owner: Housing New Zealand Corporation. Applicant: Lowe Architects. Designer: Lowe Architects. Project value: $100,000.

17

1939
Legal description: Lot 2 Part Lot 106 DP 65 DP 11751. Owner: Mrs JM Smith. Builder: J Patchett. Application value: £1900. Floor area: 1284f

1996
37 Henry Street, ladder fixed to timber wall Owner: Wellink Trust. Applicant: Mickel Zuidhdek. Legal Description: Lot 2 DP 11751. Application Value: $4,000.

(CASE STUDY)

18

1965
8 Baffin Grove, dwelling and garage Legal description: Lot 2 DP 25829. Owner: G Kaywood. Builder: V Dunbar. Application value: £4900. Floor area: 1200 square feet

1971
(SRCF18- 1&2)
8 Baffin Grove, garage Legal description: Lot 2 DP 25829. Owner: L M Gear. Builder: owner. Application value: $950.

1974
(SRCF18- 3)
8 Baffin Grove, dwelling additions and alterations Legal description: Lot 2 DP 25829. Owner: J W Urlich. Builder: Hasco Developments Ltd. Application value: $5350.

1992
8 Baffin Grove, fireplace. Owner: Urlich. Applicant: Aqua Fix Ltd. Legal description: Lot 2 DP 25829. Application value: $2,000.

Figure 17
ALTERATIONS AND ADDITIONS TIME LINE

Non MH Housing Records   MH Housing Records

New Building   Maintenance Building   Additions Building   New Built PA   PA Maintenance Building   PA Additions Building

1890   1900   1910   1920   1930   1940   1950   1960   1970   1980   1990   2000   2010

(CASE STUDY)
19

1905
(SRCF19- 1&2)
Corner Horner Street and Mansfield Street [277 Mansfield Street], Temperance Hotel
   Applicant: W G Emeny. Owner: J Fanning and Co. Note: Mansfield Court Hotel.

1966
277 Mansfield Street, out building alterations - hostel. Legal description: Sec 1249, Part Town Acre 877 (Town Of Wellington SO 26016). Owner: Wellington City Mission. Builder: LT McGuinness. Ap-

1973
277 Mansfield Street, upgrade hoste. Legal description: Sec 1249, Part Town Acre 877 (Town Of Wellington SO 26016). Owner: Wellington City Mission. Builder: ER Glass Construction LTd. Application value: $692

1978
(SRCF19- 3)
277 Mansfield Street, upgrade residential building. Legal description: Sec 1249, Part Town Acre 877 (Town Of Wellington SO 26016). Owner: Mansfield Court. Builder: B Francis. Application value: $3544. Floor area: 214.4 square metres

1989
277 Mansfield Street, garage

20

1900
7 Horner Street, dwelling. Legal description: Part of Town Acre 877 [Lot 2 DP 6603]. Applicant and owner: G and W Richardson. Note: envelope also contains plans for proposed dwelling at 9 Horner Street, also for G and W Richardson. Plan does not match footprint of existing dwelling.

31 Mahora Street, new bathroom and kitchen alterations. Owner: Mahora House Incorporated. Applicant: CR Ltd Construction. Legal Description: Sec 16 Evans Bay District. Application Value: $18,500.

(CASE STUDY)
21

1910
Courtenay Road [31 Mahora Street], dwelling. Applicant: Easson Bros, Owner: selves, Legal description: Section 27

1970
(SRCF21- 4)
31 Mahora Street, convert dwelling to boarding house. Legal description: Lot 28 DP 1932 (Sec 16 Evans Bay District SO 23598). Owner: Mrs A Temple. Builder: owner. Application value: $1500. Note: completion certificate 11452

1971
31 Mahora Street, building additions and alterations - boardinghouse. Legal description: Lot 28 DP 1932 (Sec 16 Evans Bay District SO 23598). Owner: Mrs A Temple. Builder: DJ Services. Application value: $1000. Floor area: 15 square

(SRCF21- 1,2&3)

1975
31 Mahora Street, building alterations - upgrade boarding house. Legal description: Lot 28 DP 1932 (Sec 16 Evans Bay District SO 23598). Owner: P Board. Builder: D Bridge. Application value: $300

1976
31 Mahora Street, boarding house alterations. Legal description: Lot 28 DP 1932 (Sec 16 Evans Bay District SO 23598). Owner: P Board. Builder: owner. Application value: $400

1989

1994
31 Mahora Street, repile. Owner: Mahora House Incorporated. Applicant: Harris and Greer. Legal description: Section 16

31 Mahora Street, kitchen window

2000
FIG # (PARF21- 4&5)
31 Mahora Street, new ancillary building - office and verandah

2004

22

1998
7 Hobart Street [5, 5a and 7 Hobart Street]. Three new dwellings

23

1926
36 Ribble Street, dwelling. Owner: J H Flocton. Builder: H B Retter. Legal description: Part Lots 19, 20 DP 1815 [Lot 2 DP 7403]

1963
36 Ribble Street, repile dwelling. Legal description: Lot 3 DP 7403, PartLots 19 and 20. Owner: EM Rice. Builder: Young Bros Builders LTd. Application value: £140

1974
36 Ribble Street, crib wall. Legal description: Lot 3 DP 7403, PartLots 19 and 20. Owner: DD Bennett. Builder: Owner. Application value: $800

1986
36 Ribble Street, repile

1986
36 Ribble Street, fireplace. Owner: D Bennett. Applicant: Solid Fuel Heating Ltd. Legal description: Lot 2 DP 7403. Application value: $1,600.

2002
36 Ribble Street, relaying of section of foul water drainage - removal of buchan trap - place

2006
36 Ribble Street, fireplace

Figure 18
ALTERATIONS AND ADDITIONS TIME LINE

Non MH Housing Records

New Building

Maintenance Building

Additions Building

MHHousing Records

New Built PA

PA Maintenance Building

PA Additions Building

3.4.4 SRCF Building Typology Case Studies

SRCF 18 (Retro fit residential house: 7 Bedroom), **Figure 21** - **Figure 23**

SRCF 18, built in 1965, was first built as a 3 bedroom residential dwelling with a double garage in the basement. On change of ownership in 1974, the new owner, J W Urlich, instigated the addition and alterations to the existing family home. As drawn in the building consent drawings, **Figure 23** & **Figure 24** J W Urlich built 4 additional bedrooms that are fitted in the existing garage, **Figure 24**. The existing concrete basement structure was retained with the interior bedrooms framed out. While a timber floor structure was built over the original concrete garage floor, no insulation was added when changing the basements use from a non inhabited garage to inhabited bedrooms. The garage door openings were replaced with oddly sized domestic windows ,with the remaining bedrooms relying upon the original openings that provided light to the garage, **Figure 23**. A additional bathroom and separate toilet was also installed. While today the alterations appear conspicuous with a change in driveway configuration and planting, it remains a surprise that this medium size family home has 7 bedrooms. This addition has endured 36 years without any further alterations with the exception of a new fireplace in 1992, **Figure 18**.

SRCF 19 (Retro fit hotel: 20 Bedroom), **Figure 25** - **Figure 28**

The Temperance Hotel built in 1905 in Newtown , Wellington still portrays its original use. The existing Temperance Hotel was bought by the Wellington City Mission in 1966 and upgraded to function as a hostel. While the extent of changes is unknown, the value of the works, $692 conducted by ER Glass Construction, suggests that this was for glazing alterations, **Figure 18**. Changing hands again, building owner Mansfield Court spent $3544 in 1978 on residential upgrades. The 1978 plans reveal alterations to the existing large dining room and kitchen to accommodate what was then the keeper of the house, now known as a care provider (social worker), **Figure 26**. The care providers accommodation is separate from the function of the SRCF. While true scale is impaired on these drawings, each of the bedrooms measure a mere 2.6m by 2.3m equating to 6m^2 of bedroom space. To gain a perspective of the size of

these bedrooms with the care providers bedroom, **Figure 26**, these rooms equate to the size of the providers bathroom. WCC has indicated that there have been no further records of significant building works being conducted on the historic suburban Hotel. The twenty bedroom facility has three shared bathrooms, 1 shared laundry in a shed at the back of the section, and what appears to be 3 social lounges and 1 dining room.

SRCF 21 (Retro fit boarding house:10 Bedroom), **Figure 29** - **Figure 35**

 The large residential dwelling was build on Mahora street of Kilbirnie, Wellington in 1910. 1970 saw the building change hands, after 60 years as a residential dwelling the new owner, Mrs A Temple, converted the dwelling into a boarding house. This entailed the addition of fitting fire escapes and landings as shown in **Figure 33**. Its history as a boarding house was short lived when in 1976 the boarding house again changing hands and underwent further upgrades; the repiling of the single story kitchen and the addition of two sets of separate showers and toilets as seen on **Figure 32**. Four further alterations and additions have been recorded since, each indentifying Mahora House Incorporated as the owner. Of the four recorded building applications, made over a period of 25 years, three are very minor additions .As already discussed above, in 2000 Mahora House Incorporated also built a new ancillary building in the front yard space to serve as their office. While alterations have occurred over the past 100 years, the Mahora House building continues to reflect the generous proportions of its existing use as a large residential dwelling. The bedrooms, by comparison of earlier case studies, are large, yet they are served by two shared bathrooms amongst its ten residents. The facility also boasts a large amount of communal space including a sitting room, large lounge and front entry lobby that also serves as a sun porch.

Residential Building typology appropriate for MH accommodation.

Building records demonstrate that SRCF's will typically inhabit residential property for extended periods of time; in many cases SRCF's have existed within the same building for 35 years or since post deinstitutionalisation (1975). Furthermore, the prevalence of SRCF's located in existing residential houses indicate that the existing building typologies are such that they provide the necessity's for housing MH

consumers. While minor interior changes occur this does not void the residential built typology(i.e. the suburban house) from providing adequate accommodation. Photo's have been taken of all twenty-three SRCF's within the larger Wellington region research sample, **Figure 19**. The larger sample of SRCF's shows again that the vast majority of SRCF's are located in residential homes.

The remainder of this chapter discusses the implications of the residential building typology through the notion of 'recovery oriented practice', the MHFNZ's model to combating societal and self stigmatisation (Peterson, et al., 2008). When considering the appropriateness of the building typologies presented in the research sample it must be understood that these existing buildings and their sites were chosen to be inhabited for a variety of reasons. Each SRCF has unique quality's understood to be a product of their distinctive environment, as shown in the case studies above. Significant to this research are the commonalities in building typology perceived in the larger building stock of Wellington Districts SRCF's.

The MHFNZ recommends combating self stigma "*by advocating for access to high-quality mental health services, rights to freedom from discrimination...*" and also encourages "*Recovery oriented practices that inspire hope, give service users personal power and a valued place in their communities*." (Peterson, et al., 2008). The case studies, SRCF's 18 and 19, do not reflect the notion that mental health consumers are given and deserve a valued place in their community. In SRCF 18 a mental health consumer inhabits a basement bedroom of a residential house with four others, while three others have bedrooms in the typical residential portion of the house and other mental health consumers occupy bedrooms equal in size to the care providers bathroom as shown in SRCF 19. These conditions are in stark contrast with the encouragement given to them by their social worker, family, friends and peers to affirm their own personal power and drive their own recovery. The built environment, if poorly considered, can reflect a lack of perceived value through situations arising from the practice of retro fitting existing residential buildings. Firstly, through lack of maintenance and secondly, through the quality of the building and, in particular, the quality of retrofitting works that relate directly to the individual consumers space. Examples of ill-considered retrofitting is can be seen situations such as oddly exposed

plumbing in an interior room, internal partition walls that split a window at a transom which clearly demonstrate that a room has been reduced in size or split in two to accommodate more people.

Topp identifies that public prejudice existing historically against asylums and mental health care is attributed largely to the popular press (Topp, et al., 2007). By this he means that the press have always attributed negative behaviour to the facility of whom an reported consumer may belong to. Topp also identifies that the imagery of the asylum, later halfway houses and today community psychiatry (SRCF's), independent of changes in architectural image, continue to be receptors of stigmatisation. An example of this is evident in SRCF 19; In 2009 the assault and consequential death of a halfway house resident assaulted by a fellow resident of SRCF 19 now results in violence and danger being attributed to this facility in particular, and like facilities in the region (New Zealand Herald, 2009). Fear and suspicion in such a case divorce society from the SRCF's. In order for SRCF's to be integrated socially, society needs to understand the running of such a facility and be comfortable in its presence, or to actively participate in assisting in the recovery of mental illness. SRCF's today are run exclusively by non government organisations (NGO's) and the running of the facility from the street edge is barely noticeable. The only social interaction the community does have with those inhabiting SRCF's is in the public domain. There is no evidence of initiatives run by the NGO's to have members of the host community participate in the recovery of mental health consumers within SRCF's.

SRCF's photographed through examination typically appear to be residential houses blending in with the building typology of the greater street context of their surrounding neighbourhood. i.e. single or double story residential houses. The variety of plans and photo's demonstrate several further examples of SRCF's in the Wellington District that are withdrawn from the street edge. Examples of these include SRCF's 3,4, 7,10,11,14,22 and most notably withdrawn, SRCF 23. SRCF 23 is set in Island Bay, Wellington, elevated approximately fifteen meters above the street. The large site contains two separate residential houses yet all that greets the visitor is the street number, a winding path and a typical stand alone residential garage. While it is not serving as a SRCF currently, less than 12 months ago the facility was occupied

as a SRCF, justifying it as a valuable case study amongst the larger research sample. While not disclosing the reason for its vacation, it is clear that this facility clearly did not integrate well into society both physically and socially. SRCF's 5, 13, 15, 17, 19 and 20 border the street edge, but are also perceived as withdrawn. Curtains are closed, decks or front gardens are uninhabited and unmaintained, veranda's are screened off and mirrored glass used to obscure view (such as in the case of SRCF 5), **Figure 19**.

The private suburban residence is the typical SRCF building type. The privatised suburban residence does not encourage social integration necessary for a SRCF. Rather, the SRCF within the private suburban residence is separated from the public realms of the street, often enclosed by fences from public view, separated by an under used front garden and a highly funnelled front path entrance. The implication of SRCF's camouflaged within a suburban residential home amongst a neighbourhood of suburban residential homes expresses a perceived degree of physical integration through its normalized appearance. Yet socially, the SRCF located in a private suburban residence is divorced from the community through the barriers created by expressing itself as a typical domestic home. The domestic scale of the suburban residence further limits the integration of visitors through the limited size of hallways, living spaces and lounges shared by all inhabitants creating a barrier to social integration which is uncomfortable and inappropriate for members of the public to visit and participate within.

As described, the private suburban residential model clearly does not facilitate the levels of social dialogue that is suggested in MHFNZ's '*Fighting Shadows'* as a 'recovery oriented practice'. Rather, the privatised model, as explained above, is restricting the mental health system from socially integrating with its host community.

3.4.5   Limitations

Building alterations prior to the 1970s often did not require WCC building consent. This must be considered when interpreting plans. It is assumed that the most recent architectural drawing obtained from Wellington City Archives checked against contemporary aerial satellite imaginary (TerraMetrics NASA, 2010) is a reliable

description of the facilities used in today's SRCF's. Furthermore, examples such as SRCF's 13, 18 and 23 show no sign of specific building works that can be attributed to being used as a SRCF. SRCF 23 in particular has numerous registered building alterations and additions which attribute to it being used as a residential dwelling. In this case the building is likely to have been leased and all building works registered under the building owners personal name rather than the NGO, Wellink, providing the psychiatric accommodation at this address.

	DEPRIVATION	FIGURE GROUND	ZONE	DISTRICT PLAN	PLAN SEARCH	ADDRESS	PROVIDER	CITY
1.	■	■	■	☐	N/A	87 Totara Park Road	M.A.S.H. Trust Board	Upper Hutt
2.	■	■	■	☐	N/A	25 Oxford Crescent	Q-nique Limited	Upper Hutt
3.	■	■	■	☐	N/A	3 Reynolds Bach Road	Silverstream Park Christian Centre	Upper Hutt
4.	■	■	■	☐	N/A	1 Ribbonwood Terrace	Porch Limited	Porirua
5.	■	■	■	☐	N/A	200 Champion Street	Porch Limited	Porirua
6.	■	N/A	N/A	☐	N/A	106 Rata Street	Q-nique Limited	Lower Hutt
7.	■	N/A	N/A	☐	N/A	5 Beecham Grove	Q-nique Limited	Lower Hutt
8.	■	N/A	N/A	☐	N/A	35 Bauchop Road	Q-nique Limited	Lower Hutt
9.	■	N/A	N/A	☐	N/A	20 Avon Street	Q-nique Limited	Lower Hutt
10.	■	N/A	N/A	☐	N/A	54 Waiwhetu Street	Richmond Fellowship New Zealand	Lower Hutt
11.	■	N/A	N/A	☐	N/A	136 Waiwhetu Road	Q-nique Limited	Lower Hutt
12.	■	■	■	☐	■	31 Blakely Avenue	M.A.S.H. Trust Board	Wellington
13.	■	■	■	☐	■	121 Able Smith Street	Schizophrenia Fellowship	Wellington
14.	■	■	■	☐	■	48 Kaikoura Street	M.A.S.H. Trust Board	Wellington
15.	■	■	■	☐	N/A	26 Hanson Street	Pathways Health Limited	Wellington
16.	■	■	■	☐	■	41 Wellington Road	M.A.S.H. Trust Board	Wellington
17.	■	■	■	☐	■	37 Henry Street	The Wellink Trust	Wellington
18.	■	■	■	☐	■	8 Baffin Grove	M.A.S.H. Trust Board	Wellington
19.	■	■	■	☐	■	277 Mansfield Street	Te Menenga Pai Charitable Trust	Wellington
20.	■	■	■	☐	■	7 Horner Street	Te Menenga Pai Charitable Trust	Wellington
21.	■	■	■	☐	■	31 Mahora Street	Mahora Trust	Wellington
22.	■	■	■	☐	■	5a Hobart Street	M.A.S.H. Trust Board	Wellington
23.	■	■	■	☐	■	34-36 Ribble Street,	The Wellink Trust	Wellington

Figure 20

1:15000

CASE STUDY INDEX
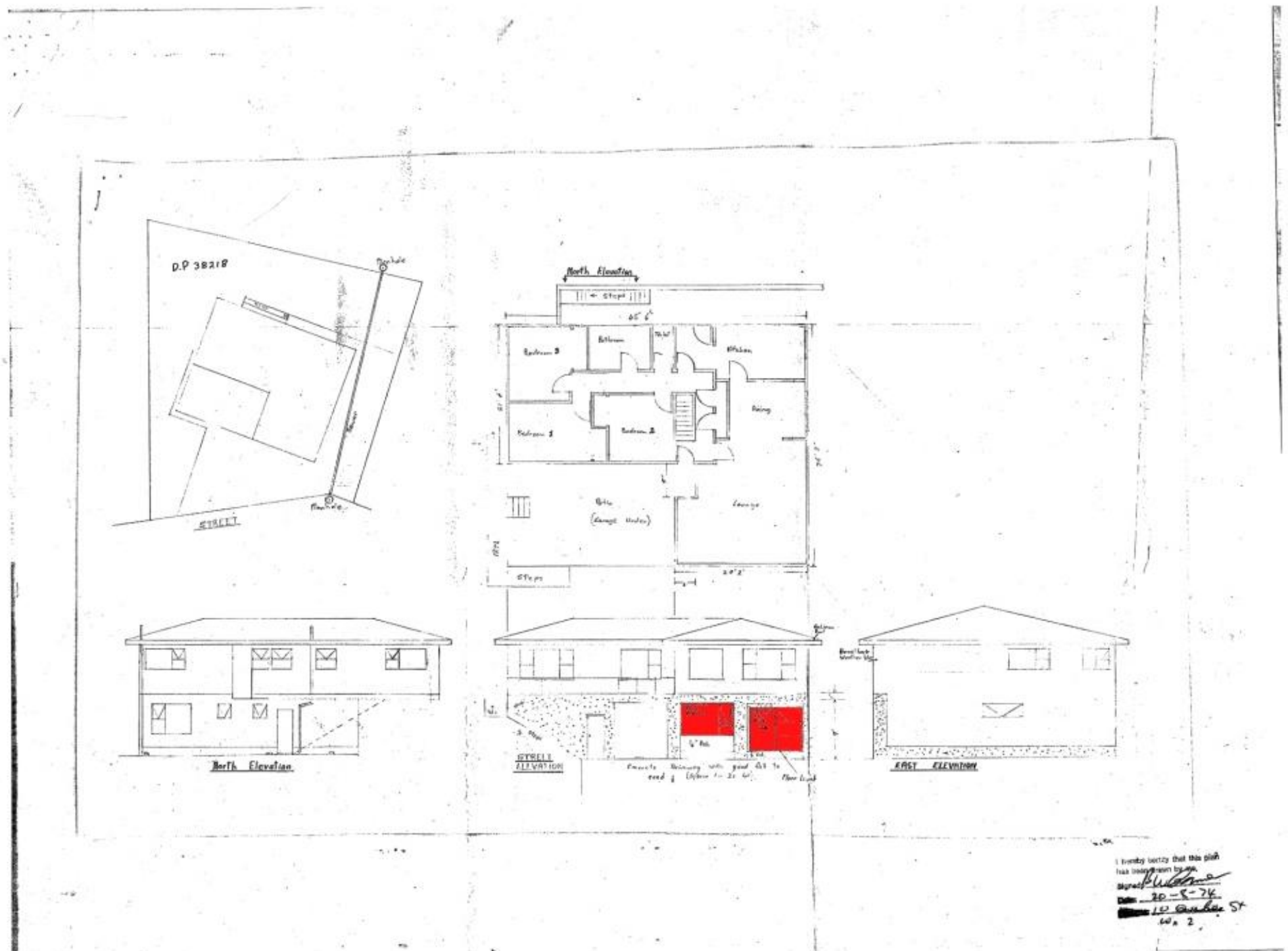
Figure 21

Figure 22   Page 1 of 3
Building Consent Drawings SRCF 18   NOTE: DRAWINGS NOT TO SCLAE

SRCF retrofitting building works indicated in Red

Figure 24   Page 3 of 3
Building Consent Drawings SRCF 18   NOTE: DRAWINGS NOT TO SCLAE

Figure 25
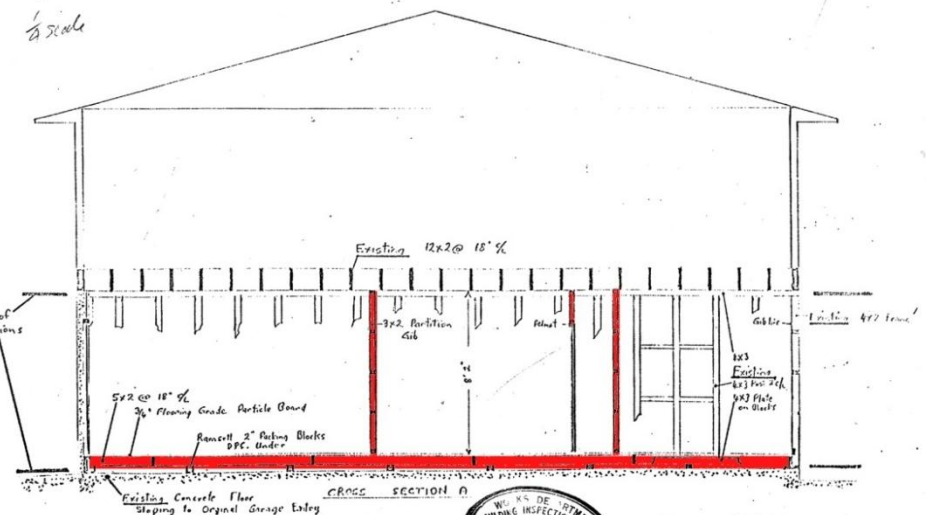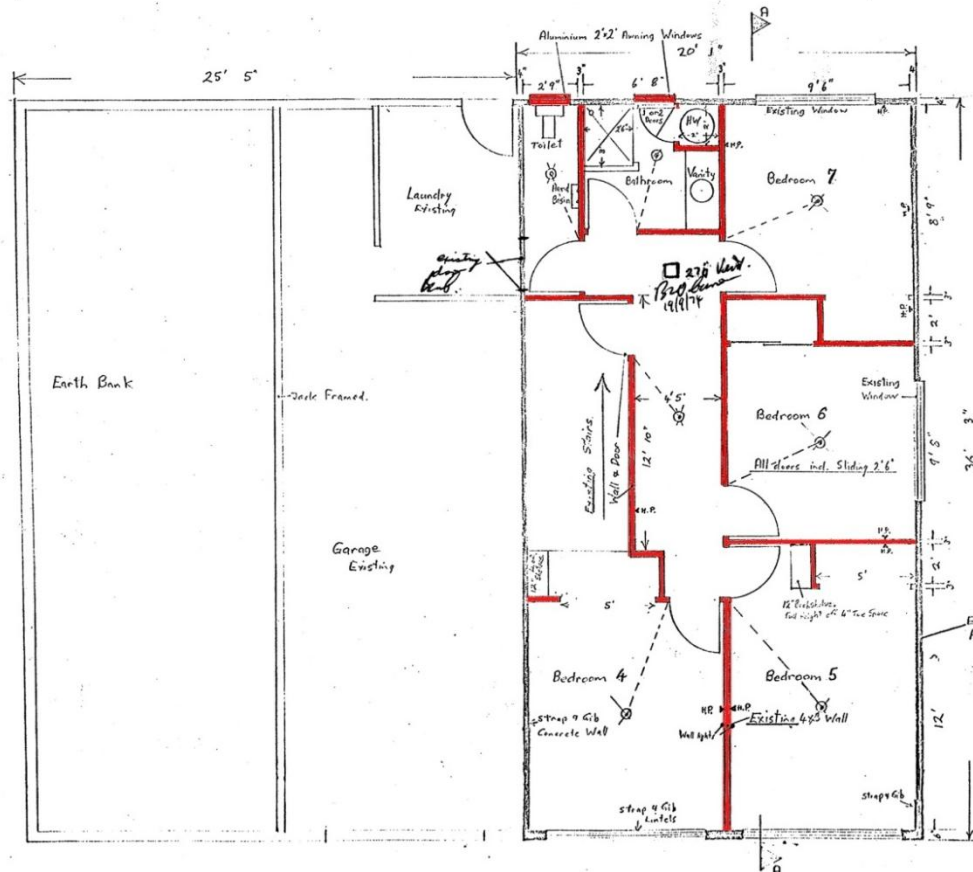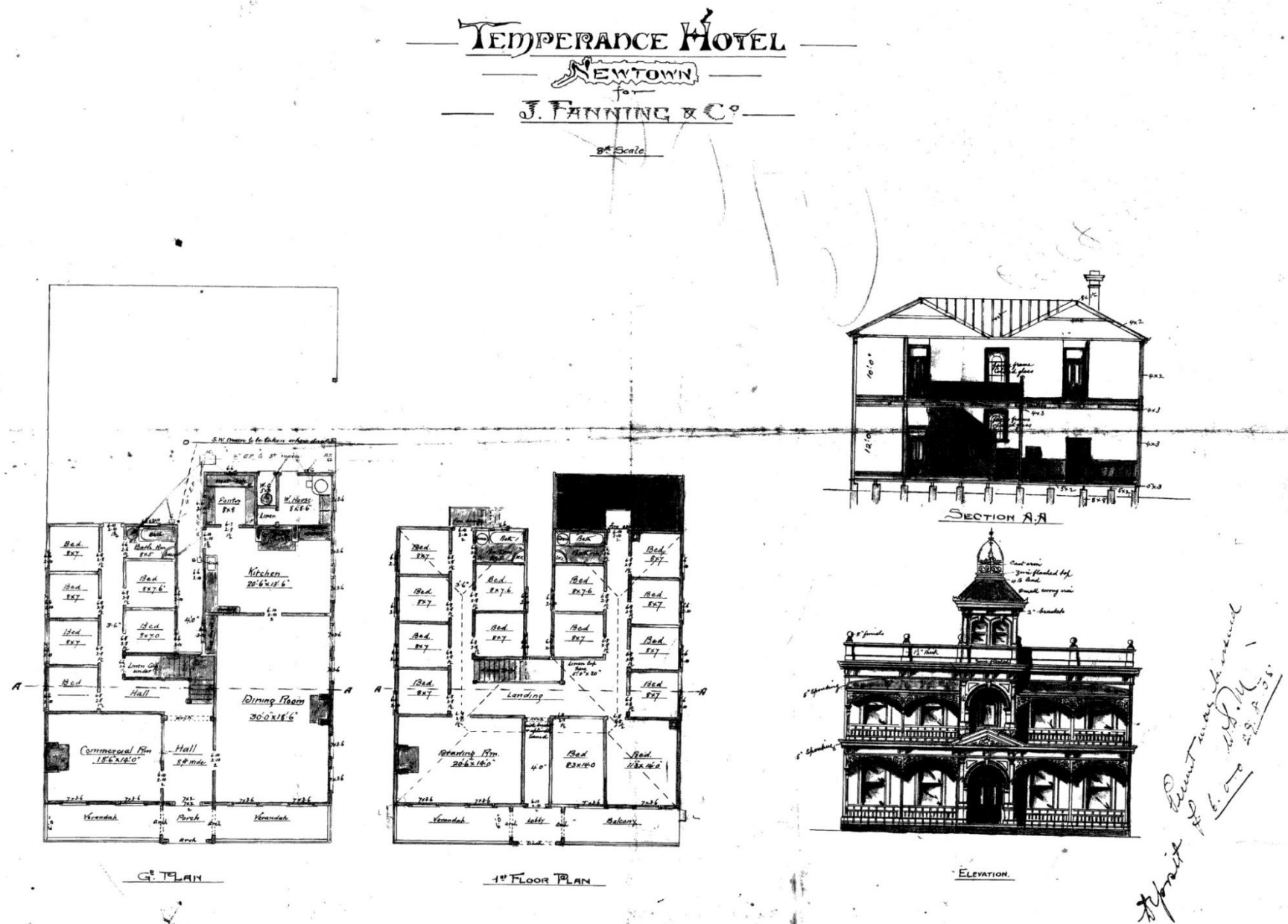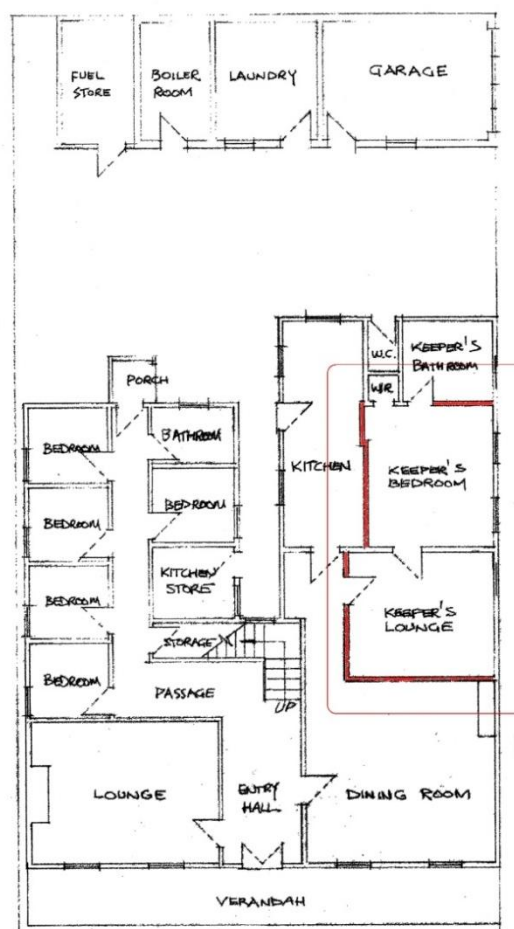
GROUND FLOOR PLAN ~ 1.100

FIRST FLOOR PLAN ~ 1.100
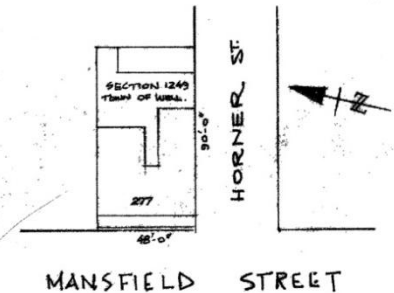
EXISTING FLOOR PLANS: 277 MANSFIELD ST. WGTN 2

SCALE 1.100

GROUND FLOOR PLAN
Scale: ⅛"-1'-0"

FIRST FLOOR PLAN
Scale: ⅛"-1'-0"

ATTIC PLAN

Figure 29

Site PLAN FOR PROPOSED OFFICE FOR
MAHORA HOUSE INC.
31 MAHORA ST.

1:200

Figure 30   Page 1 of 6

Building Consent Drawings PARF 21   NOTE: DRAWINGS NOT TO SCLAE

GROUND FLOOR PLAN

FIRST FLOOR PLAN

NEW WORK =

SITE PLAN

SPECIFICATIONS

UPGRADE BOARDING HOUSE
FOR MRS. A. TEMPLE
AT 31 MAHORA STREET, KILBIRNIE.

AMENDED PLAN
APPROVED BY   DATE

Proposed Floor Plan for Office at 31 Mahora St. Kilbirnie

JOB ADDRESS—

1:400

PO Box 13-103
Wellington
New Zealand
39 Raiha St
Porirua
Ph 04 237-8686

Grove Cottages
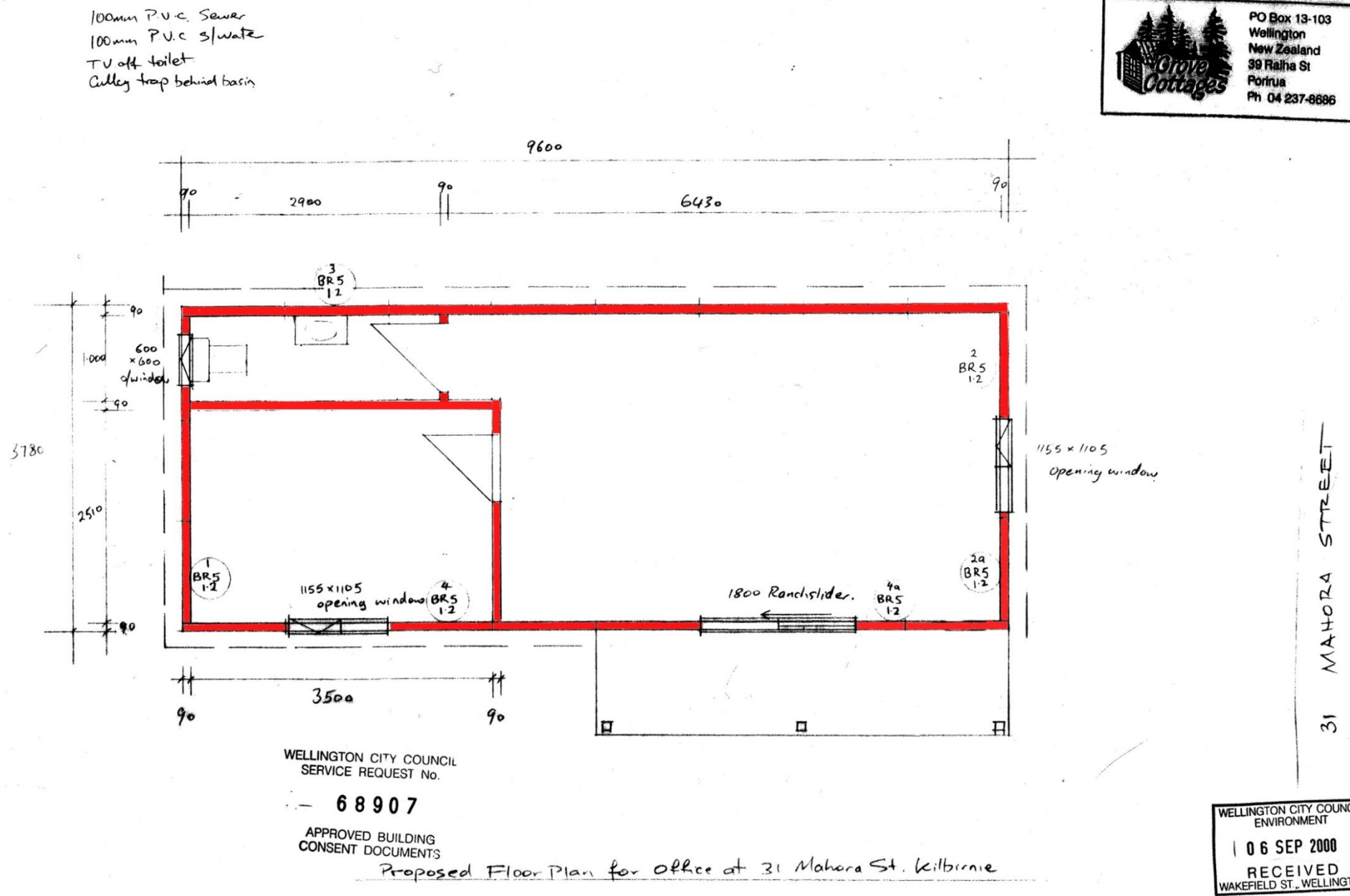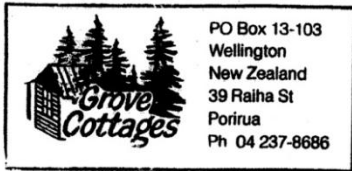
* Specifications.
All work to comply with
NZS 3604 1999

22mm

25mm

w/board profile
L.O.S.P. treated
to H3

115mm

90×45 KD
framing

6 kn strap to
floor joists

150×25
H3 Sawn fascia

1200 ⌀ Strap bracing each side

150×100 lintel

3800

WELLINGTON CITY COUNCIL
SERVICE REQUEST No.
— 68907
APPROVED BUILDING
CONSENT DOCUMENTS

Anchor piles   double sided perforated
foil between joists

SIDE ELEVATION (FRAMING)

100×50 purlins
cut between
trusses

Standard truss
design

G2Z colorsteel corrugate
roofing over building paper

20°

H3 ply soffit
over

trusses wired down
to studs
H3 ply over
verandah

150×50
H3 lintel

½ round
profile
w/boards

Standard 9.5 Gib

R2.2 Batts

R1.8 Batts

2400

particle board

520
min.

D.P.C with
6mm overlap

125×125 H5
piles

425×425 conc footings
to solid.

H5 100×100
Post

1:40   END CROSS SECTION.

WEST

NORTH ELEVATION

SOUTH ELEVATION

EAST

WELLINGTON CITY COUNCIL
ENVIRONMENT.
1 0 6 SEP 2000
RECEIVED
WAKEFIELD ST. WELLINGTON

Conclusion of Empirical Research

The four methods of observation based empirical research conducted above provide a comprehensive picture of the state of SRCF's within the Wellington. The studies identify and extrapolate key qualities of the host community, location and facility design of SRCF's that contribute to the degree of integration of MH consumers within their communities. Attempts were made to gain more user-based knowledge through questionnaires and interviews of NGO's representatives located within Wellington City (**Appendix 4**), however no response was received from the six NGO's asked. To further validate the research beyond the present limitations of observation based empirical research a more thorough enquiry of the user group of SRCF's could be undertaken.

The findings within this chapter are summarised within the Design Guideline according to their application within the three scales of investigation of SRCF's.

4.DESIGN GUIDELINE

The Design Guideline is a combination of the broad objectives set by 'Fighting Shadows' identified and the more specific findings from Empirical Research on the location and physical condition of existing SRCF's within he Wellington Region.

The Design Guideline is subdivided into three sections corresponding to distinctive scales; host community, location and facility design. Key physical and sociological objectives are identified under each scale. These specific physical qualities are based upon the findings of the Empirical Research. Due to the greater rigour of the research on host communities and locations, these two sections are addressed with greater precision. Conversely, the section on facility design describes possibilities rather than definite objectives or recommendations.

The Design Guideline was initially created as a summary of findings to be tested by the Design Case Study. Whilst relying primarily upon 'Fighting Shadows' and the Empirical Research findings, the Design Guideline is further informed by the Design Case Study's findings in retrospect.

Introduction of Design Guideline chapter

This Design Guideline chapter encompasses the findings extracted from the Literature Review and Empirical Research.

The Design Guide is not specific to site or region; whilst referencing the requirements of the MoH the design guideline is not a complete prescription of these requirements. Rather, it is a reference of the objectives set for the Design Case Study and a condense publication of the objectives identified to encourage integration and combat societal and self stigmatisation of mental health consumers within their host communities.

The Design Guideline is structured to test and address the three main components of research findings:

4.1   Host Community - Design Guideline

4.2   Site/Location - Design Guideline

4.3   Facility Design - Design Guideline

The Design Guideline builds its objectives for each of the three sections above by employing the MHFNZ's; '*Fighting Shadow'\s'* (Gordon, 2008), see **Section 2.4** Literature Review and **Figure 6**. The majority of the three sectioned objectives below are headed by the '*Fighting Shadows'* recommendations. The sociologically headed objectives are expanded upon through findings from empirical research of the existing SRCF's within the Wellington region. The resolution of these objectives differ, typically those associated with the first two scales - host communities and location - are most resolved, with clear findings proposed for testing. The objectives associated with facility design are less resolved. The role of the Design Case Study respectively tests the first two components and their findings while it explores the possibilities and opportunities of the third scale, facility design. There are cases within this Design Guideline where lessons learn in retrospect of the Design Case Study are inserted back into the design guideline. In such cases these are clearly noted under the objectives title.

There is an degree of repetition within the three scales of the Design Guidelines objective titles. This is caused by using the 'Fighting Shadows' recommendations.

These recommendations often apply to two if not all three scales yet the bullet points which follow applicable to their selected scale.

4.1   Design Guideline - Host Community Criteria

1.   **SRCF's are to be located in socioeconomically diverse host communities, 'celebrate and accept difference'** *Refer* **to 3.1 Empirical Research** *for further background.*

- The 'inner edge context' is identified to be the most socioeconomically diverse sub region within the residential context of Wellingtons urban landscape.
- Socioeconomically deprived community contexts within the Wellington region typically have higher levels of public amenities suitable for MH consumers. See section **5.2 Design Case Study** for evidence of this counter intuitive finding discovered as a result of cross examining the amenities plan with socioeconomic mapping studies.
- Socioeconomically deprived community contexts often have public amenities such as social housing. Occupants of social housing often are often from diverse cultural backgrounds, are unemployed or employed part-time with a variable personal situations. These occupants do not comply with the typical suburban model of home ownership, providing diversity in life styles within the community which is helpful in creating a context celebrating and accepting difference.

2.   **SRCF's are to be located in host communities with sufficient community/public amenities, affirming human rights** *Refer to* **3.3 Empirical Research** *for further background.*

- Host communities with a substantial suburban centre or city centre provide the best opportunities for access to a wide range of public amenities.
- The suburban centre is recognized as the most normalized environment for the majority of New Zealanders and those living in Wellington alike to access

public amenities. Suburban centres public amenities are, in many cases, smaller than city centre amenities. This can be seen as advantageous as these environments are less socially intimidating.

- Amenities are diverse and often unique to different communities; SRCF's should be well linked with Public Library's, Public Recreation Centres including pools and gyms, Community Halls/centres, Theatres, Polytechnics or other tertiary education facilities, retail outlets, post office, banks, supermarkets, Community support organisations such as Work and Income, and other Non Government Organisations and amenities.

- When considering an appropriate Host Community a survey of the public amenities available within the community should be undertaken and compared with other communities.

- The Suburban centres provide access to arterial public transport routes linking suburban centres together and providing public transport to major city centres.

3. **SRCF's are to be located in host communities with an appropriate level of mental health network, 'peer support environment'** *Refer to **3.3 Empirical Research** for further background.*

- CMHT's, general hospitals, GP's and SRCF's are scattered throughout New Zealand's urban fabric. When considering the appropriateness of a Host Community, the availability of MH amenities must be surveyed.

- SRCF's and their MH consumers rely primarily upon CMHT's and Neighbouring SRCF's. These are most important when considering the quality of the MH network within host communities.

- SRCF's rely on GP's and general hospitals for secondary external support of MH consumers.

4. **Host communities must provide a safe pedestrian environment** *Refer to **3.3 Empirical Research** for further background.*

- Pedestrian access is the primary means of allowing individuals or small groups of MH consumers to access the wider community. Pedestrian access is preferred over supported residential care provided transport. Walking provides MH consumers with freedom, avoiding the societal stigmatisation of the 'mental health van' and encourages MH consumers to more actively participate within the community at an individual level.

- It is desirable for the majority of public/ MH amenities to be within a 500m radius of the proposed or existing SRCF. This area is suggestive of the distance presumed for a five to ten minute walk. It assumes 5 minutes of walking, if the most direct route, while allowing 10 minutes for less direct pathways through the streets. (Ministery of Transport, 2009)

- The quality of a pedestrian environment can be assessed and achieved by using recognised CPTED principals:

    1. Informal and formal surveillance
    2. Safe movements and connections
    3. Clear and logical layout
    4. Physical protection
    5. Sense of ownership
    6. Quality environments
    7. Activity mix, 'eyes on the street'

(Wellington City Council, 2009, p. 3),(Ministry of Justice, 2008)

5. **SRCF's must be located within a appropriate zoning context** *Refer to 3.2 Empirical Research for further background.*

- New Zealand urban planning rules are dependent on the selected region. Ensuring that SRCF's are permitted within the selected zone is critical to creating a recognised recovery oriented facility that is suitable for its location and clinical programme. Host communities with more diverse planning zones create flexibility in the site location or the clinical program of the building (building size).

4.2 Design Guideline - Site Criteria

6. **The site location must affirm the human rights of MH consumers** *Refer to 3.3 Empirical Research for further background.*

- The 'inner edge context' of the suburban and city centres provides an appropriate context for a safe pedestrian environment. Because the 'inner edge context' lies on the edge of the suburban centre and the residential suburb that surrounds it, this context generally provides good pedestrian access to amenities.

- It is desirable for the majority of public/ MH amenities to be within a 500m radius of the proposed or existing SRCF.

- By providing a safe pedestrian environment with good access to the host communities amenities, MH consumers are empowered with the same opportunity as members of the wider host community in regards to the use of amenities.

7. **The SRCF's site and its location must celebrate and accept difference, rather than reject it, and promote the disclosure of mental illness** *Refer to 5.3 Design Case Study for further background.*

- The location of SRCF's should be easily accessible for visitors and wider members of society. The SRCF site or immediate context is to provide sufficient visitor car parking.

- Pedestrian obstacles such as steep hills, large roads or facilities such as schools and kindergartens should be avoided. Amenities such as schools and kindergartens often instigate conflict with host communities, to encourage a positive relationship with the host community such potential conflicts should be avoided rather than challenged.

- The SRCF site must be well defined and clearly identifiable by the public and MH consumers alike.

- SRCF's must not be camouflaged within the homogonous urban context, rather, its presence within the community must be clear and valued. SRCF's must have an

identifiable presence within the community in order to facilitate the opportunity for social interaction.

8.   **The SRCF site context must encourage recovery-oriented practices** *Refer to **3.3 Empirical Research** for further background.*

- Providing references to normalized residential living is constitutive. This provides MH consumers with an objective understanding that defines the SRCF as a dedicated recovery oriented facility rather than only a home or accommodation facility

- References to residential living emphasise the goal of 'recovery' to reintegrate MH consumers in to their own homes.

- The location of the site can achieve recovery oriented practices by siting SRCF's near the edge of residential homes or other typical residential within the community, the 'inner edge context'.

- This objective as per 3.3.3 Empirical research must be accompanied and understood with objectives relating to **Objective 7** the celebration of difference.

9.   **The SRCF's site should foster a 'peer support environment'** *Refer to* 5.4 ***Design Case Study*** *for further background.*

- SRCF sites should have a high level of natural surveillance - the perceived safety of the site and facility design directly influence the level of participation that the community has with SRCF's. This can be achieved through the CPTED principals and, more practically, through a positively elevated sloping site, neighbouring public space, street edge, mixed use environment. Typically the 'inner edge residential context' is a diverse environment with ranging uses throughout the day and night supporting this type of environment.

10.   **Recognise the contribution of mental illness and foster leadership among people with experience of mental illness** *Refer to* 5.4 ***Design Case Study*** *for further background.*

- SRCF's have the potential to provide further public amenities to the community. Opportunities for peer support environments should be investigated through

analysis of the needs, demographic and unique characteristics of the host community.

4. 3   Design Guideline - Facility Design Criteria

11.   **The facility design is to 'affirm human rights'** *Refer to 3.4 Empirical Research for further background.*

- Purpose build facilities and well retrofitted facilities demonstrate to the host community that MH consumers are valued within their community.

- High quality mental health facilities demonstrate to MH consumers both within and connected to such a facility that MH and those with mental illness are valued by their host community.

12.   **The facility design should celebrate and accept difference** *Refer to 5.4 Design Case Study for further background.*

- Difference can be expressed and celebrated through facility design, this relates primarily to the aesthetic interpretation of the built facility.

- The facility design must celebrate difference through recognizing and providing for the expression of culture and individuality. This can be created through the provision of spaces and environments where activities and programs foster the celebration of differences of both MH consumers and the public alike.

13.   **The facility design is to foster a 'peer support environment'** *Refer to 2.4 Literature Review for further background.*

- The facility design must create a peer support environment where common experience and mutual respect is built between MH consumers, both current MH consumers, those recovered and members of the host community.

- Providing MH consumers with the ability to contribute to and within the host community allows the community to recognises MH consumers talents and ability. This can be achieved through the individual SRCF's providing and contributing to public amenities within the host community.

- Empirical research identifies that existing SRCF's are a highly domestic environment informed by the retrofitting of existing residential homes. SRCF's and their spatial environment must distinguish the SRCF as a recovery oriented facility from the domestic home.

15. **Encourage empowerment**

- Encouraging people with experiences of mental illness to empower themselves will increase self-efficacy and self-esteem thus combating self-stigma. All services should be successful in supporting people if they offer spaces of connection and security through appropriate cultural practices, responsiveness, and understanding.

5.DESIGN CASE STUDY

The Design Case Study entails the testing of the Design Guideline within the realms of an hypothetical yet realistic case study.

The Design Case Study identifies a clinical service gap within the 'entry point' of the SRCF sector. Addressing this, the Design Case Study proposes a facility described (for the sake of this research) as a Psychiatric Recovery and Accommodation Facility (PARF). The PARF is a specialised version of the SRCF. Specifically, the PARF is designed to reintegrate Mental Health consumers within a short term, intensive recovery oriented clinical program. The Design Case Study sites the PARF within Kilbirnie, a socioeconomically diverse host community with a broad range of public and mental health amenities. The site is located within the 'inner edge" context of a future growth centre. The site layout and architectural design demonstrate the potential benefits of this location. The 'inner edge' permits a high degree of physical and social integration between the PARF and the host neighbourhood. In turn, this provides improved access to public amenities and mental health services. Furthermore, Kilbirnie's physical and social diversity encourages disclosure and celebrates difference, outcomes which help to reduce stigmatisation. The 'inner edge' also presents the PARF with more flexible planning controls than would be found in an exclusively residential area. This flexibility also encourages the PARF to become a distinctive architectural entity. Significantly, the 'inner edge' location also supports the development of an integrative activity programme, in this case a community garden.

The role of the Design Case Study is to test the possibilities of initial research summarised in the Design Guideline while exploring further possibility through design. The Design Case Study in particular 'tests' the first two components of the Design Guideline; host communities criteria and site criteria of the design guideline. While testing the third component, facility design criteria, the Design Case Study primarily explores the possibilities and opportunities the objectives this component sets.

The Design Case Study chapter has five sections:

> 5.1   The Design brief - Case Study
>
> 5.2   Host Community - Case Study
>
> 5.3   Site/Location - Case Study
>
> 5.4   Facility Design - Case Study
>
> 5.5   Design Evaluation - Case Study

5.1   Design Brief

The Wellington region has been chosen as the setting for this Design Case Study. Initial research findings summarised above within the Design Guideline identify that the normal residential home does not provide a 'recovery oriented' environment. The Design Guideline describes objectives that are most appropriately tackled through purpose built design.

This Design Case Study proposes to design a Psychiatric Accommodation and Recovery Facility (PARF). The title PARF has been created within the realms of this thesis rather than as an industry recognised title. The PARF must be understood as a SRCF yet the PARF is separately defined because it specifically tackles the 'community care entry point' of the SRCF sector, **Figure 37**. The PARF proposes to bridge the particular service gap between primary and secondary care as the first means of community psychiatry. The PARF is intended for MH consumers who have recently been discharged from in-patient primary care and are at the beginning of community psychiatry*;* see **Figure 37** and **Figure 36**. In some cases MH consumers

may return to the PARF from less intensive SRCF's to avoid readmission into inpatient primary care. MH consumers are likely to stay within this facility for up to 18 months and, in more difficult circumstances, slightly longer. Research identifies that the initial reintegration of MH consumers into the community context is poorly served by the existing MH accommodation studied.

The PARF is to provide for 12 MH consumers at a Level 4 capacity. Level 4 is the highest level of secondary outpatient care typical of short term community care. Level 4 care will usually provide 24 hour care and supervision by care providers on site. 12 bed accommodation is recognised as the lowest critical mass to make such a facility financially viable within the current realms of MH funding in New Zealand (Nolan, 2010). The design case study is intended to be financially feasible; whilst this type of facility is somewhat unique to New Zealand MH, MH facilities of a similar size will be used to compare development costs, seen within **Appendix 11.** The proposed PARF (in contrast to current SRCF's) attempts to provide a more effective recovery context, shortening the recovery period and reducing the barriers to recovery that MH consumers experience when entering their own homes following care in an SRCF, as demonstrated in **Figure 37**.

The recognised service gap for short term recovery focused psychiatric accommodation provides the functional program for the PARF described below through the Design Brief and is designed within the Design Case Study.

Space requirement:

- 12 Bedrooms with ensuites
- 2 Intensive care units (bedrooms)
- Bedrooms must be separated by gender
- Communal laundry facilities
- Communal Kitchen
- Communal Dining

- Communal and individual lounge/living spaces
- Communal computing and utility space
- Entrance, reception
- Family/Whanau space
- Meeting space
- Nurses Store
- File Store

PROPOSED MENTAL HEALTH ACCOMODATION SYSTEM: "recovery focused accommodation"
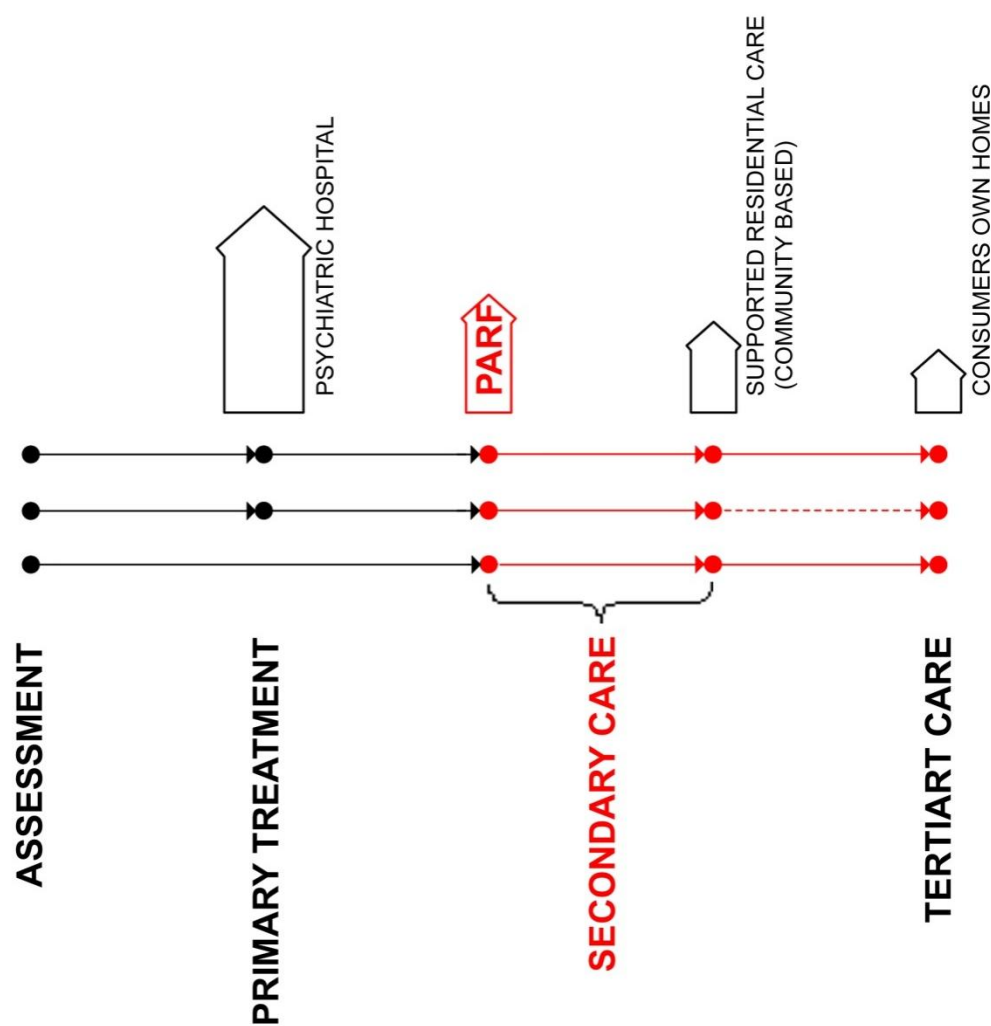
Figure 37: LEFT BELOW Current and Proposed New Zealand mental health accommodation. Illustrating consumers at present become dependent upon supported residential care creating mini institutions.
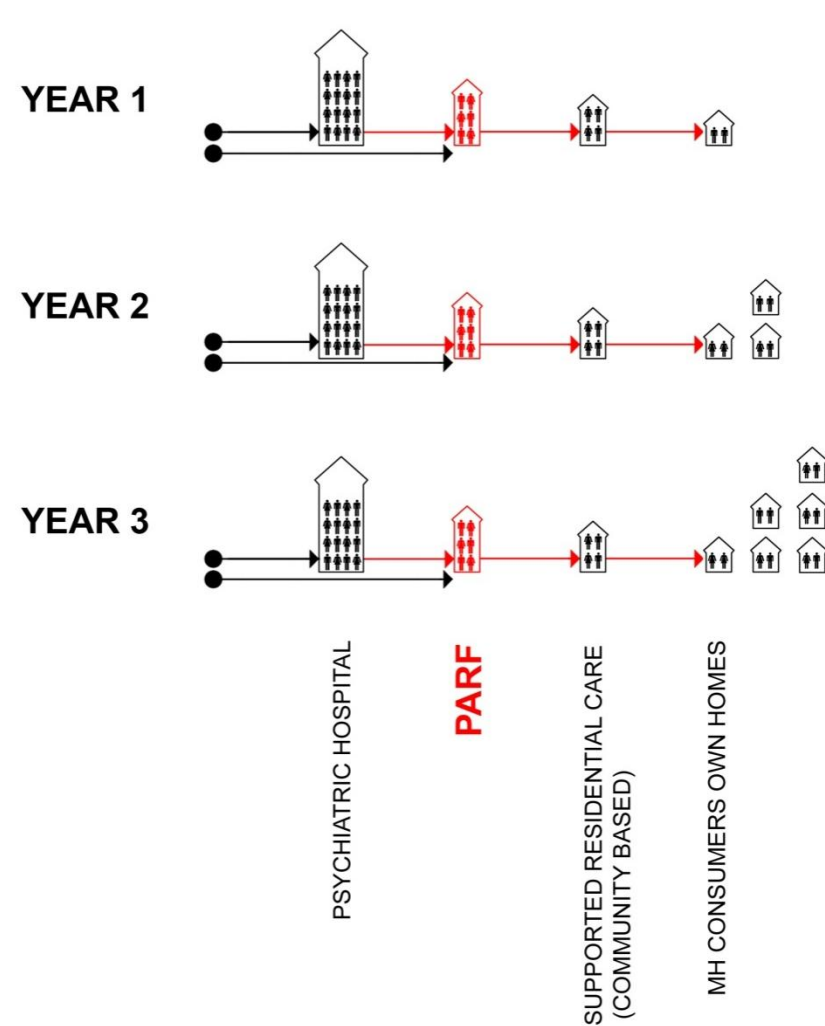
Figure 36: RIGHT BELOW New Zealand mental health accommodation problem and proposed solution reducing the demand for supported residential care through proposed recovery focused accommodation PARF.
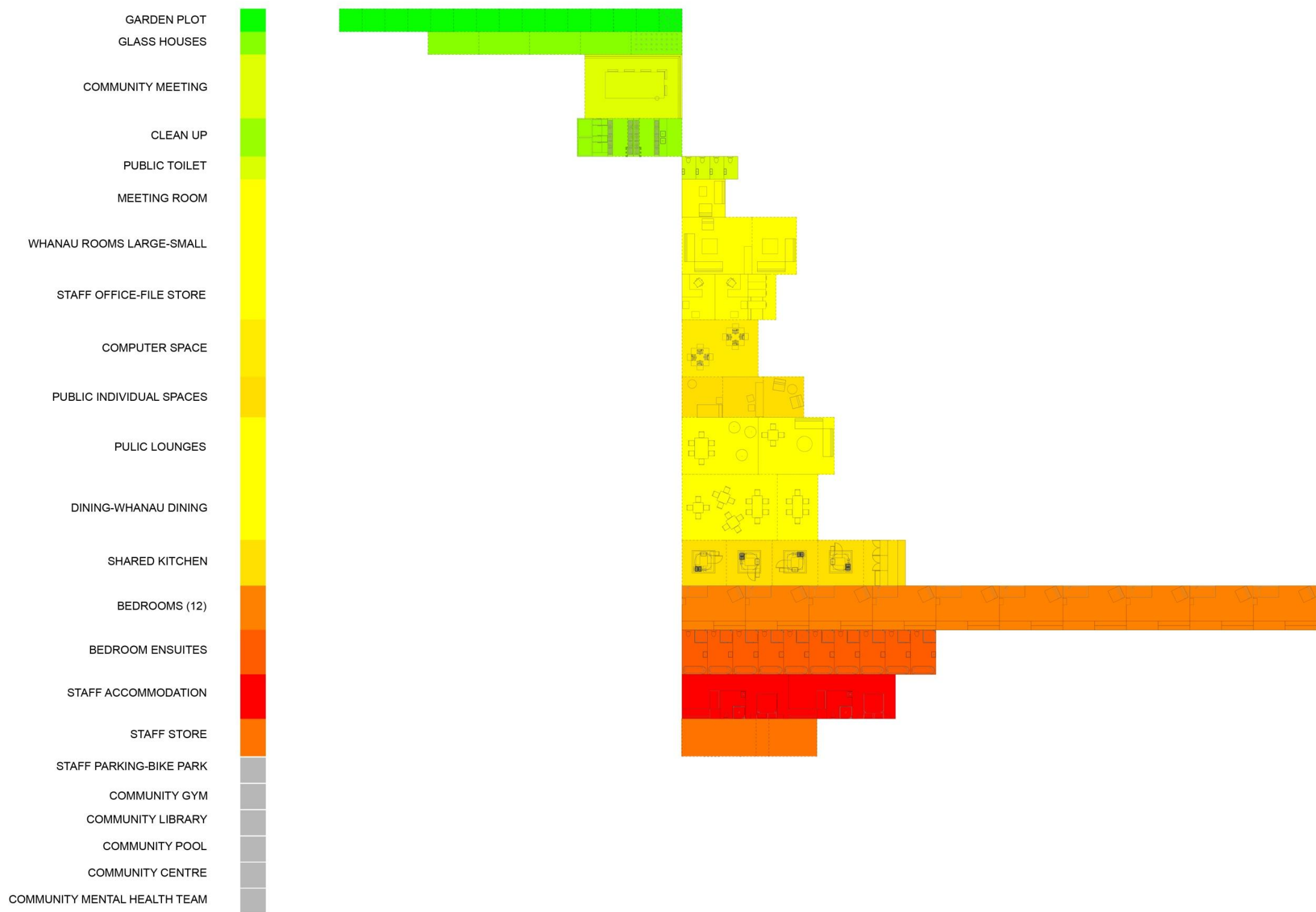
GARDEN PLOT

GLASS HOUSES

COMMUNITY MEETING

CLEAN UP

PUBLIC TOILET

MEETING ROOM

WHANAU ROOMS LARGE-SMALL

STAFF OFFICE-FILE STORE

COMPUTER SPACE

PUBLIC INDIVIDUAL SPACES

PULIC LOUNGES

DINING-WHANAU DINING

SHARED KITCHEN

BEDROOMS (12)

BEDROOM ENSUITES

STAFF ACCOMMODATION

STAFF STORE

STAFF PARKING-BIKE PARK

COMMUNITY GYM

COMMUNITY LIBRARY

COMMUNITY POOL

COMMUNITY CENTRE

COMMUNITY MENTAL HEALTH TEAM

Figure 38: Design brief area/use diagram

5.2   Host Community Selection

Wellingtons suburbs - Kilbirnie, Newtown and Karori - have been chosen as candidates for appropriate host communities (**Figure 39**). Each of these host communities are of a sufficient scale to have a broad range of public amenities, mental health amenities with a large spectrum of socioeconomic diversity and pedestrian friendly suburban centres. The three host community candidates are evaluated below according to the objectives of the Design Guidelines.

Socioeconomic mapping of the three chosen suburban centres (**Figure 41**) reveal that Karori is the least deprived, with very distinct boundaries of socioeconomic deprivation. Newtown appears to be most deprived, whilst appearing largely homogonous diversity exists within this deprived context, evident in slight colour tone differences. As concluded, the empirical research reveals that deprived contexts such as Newtown and Kilbirnie typically have higher levels of community amenities useful to MH consumers. This is evident in Karori, with the lowest level of amenities useful to MH consumers whilst having an equally high population catchment as Newtown and Kilbirnie. The majority of public amenities are useful independent of the deprivation of its users yet highly deprived regions appear to have high amounts of community based support groups and income support services, for example Work and Income New Zealand, Mary Potter hospice, Salvation Army etc. When examining Kilbirnie in greater detail, Kilbirnie presents a gradient change in the socioeconomic landscape from east to west rather than the defined boundaries of deprivation in Karori, indicating that socioeconomic diversity is well dispersed rather than in pockets which can be attributed to exclusive communities (affluent) or inversely poor residential development attracting poverty.

All three suburban centres have SRCF's within their neighbouring suburb, only Kilbirnie has a CMHT. Karori relies upon the Wellington Central CMHT, and Newtown relies upon both Wellington Central or Kilbirnie CMHT's, both of which are beyond reasonable walking distances, see **Figure 39**. The PARF initiative must be accompanied by a supportive MH community. Circumstances and suburbs such as Karori with its lone SRCF, (**SRCF12)** are not appropriate host suburbs for the

proposed PARF. The isolation in SRCF's such as SRCF12 (**SRCF 12 :Appendix 3)** should be addressed, through relocation to a more supportive host community, or the provision of a CMHT. However, due to demand within the area the later suggestion seems unfeasible.
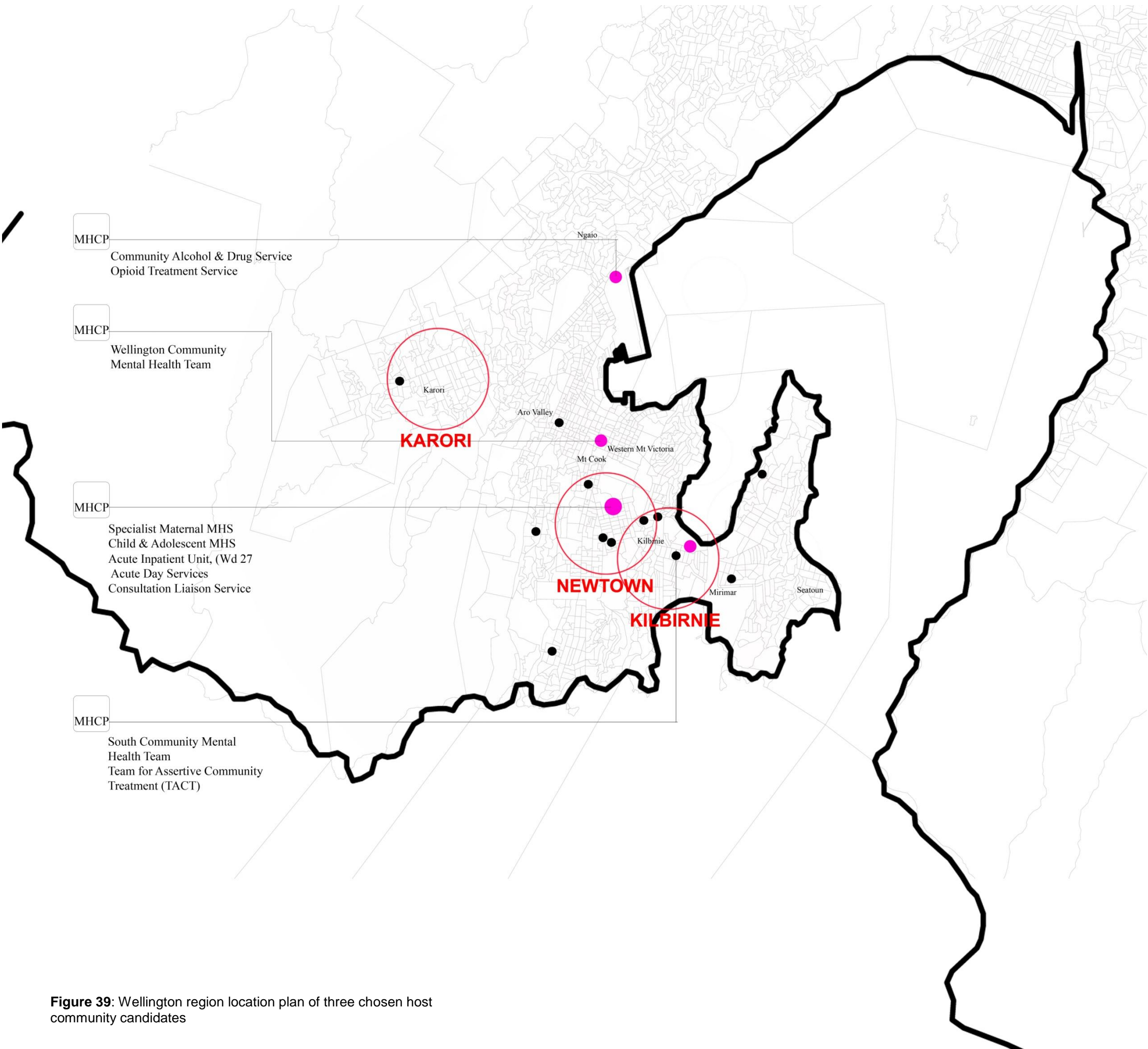
Kilbirnie is a recognised hub for public amenities within Wellington South, with a high level of social housing contributing to a high quantity and quality of basic public amenities as evident in **Figure 44**. Newtown and Karori also provide high levels of public amenities. All three suburban centres have good public transport linking the suburban centres to the CBD of Wellington City, good access to the Wellington City Hospital, and a large number of SRCF's within its catchment, as shown in **Appendix 7**

Karori and Newtown are typical main street oriented suburban centres. It is clear from the amenities plan of both these suburban centres (**Figure 42** & **Figure 43**) that retail, commercial and community buildings are predominantly located on and create the edge of this main arterial route, with residential homes behind the edge. Kilbirnie is somewhat different, with several arterial routes through the suburban centre creating defined inner suburban blocks. The more defined and developed street blocks of Kilbirnie result in the surrounding residential area being more prominent and visible from the suburban centre. This is visible around the entire boundary of the Kilbirnie suburban centre (**Figure 44**). The urban centre street blocks of Kilbirnie are predominantly developed in non residential development with their neighbouring residential street blocks developed solely in residential buildings. When searching for an appropriate site within the 'inner edge context' of suburban centres, suburbs such as Kilbirnie offer more prominent residential sites than arterial route based suburban centres.

The Design Guideline recognizes the importance of SRCF's and PARF's alike being located in the appropriate zoning to avoid resource consent conflicts. The Wellington District Plan, **Figure 41** reveals that all three suburban centres have 'suburban centre zoning,' permitting the development of multi unit dwellings. The design brief defines a building capacity and size beyond what is permitted within the residential zones of the Wellington District Plan. The Suburban centre rules permit buildings to be a

maximum of 12m high, whilst also allowing buildings to be built within the perimeter of the site boundary with no maximum coverage requirements. The introduction of the Kilbirnie Town Centre Plan and rezoning of inner Kilbirnie as a Suburban centre zone provides new context for development of multi unit dwellings (12bed facility).

Newtown and Kilbirnie are both appropriate host communities with good public and MH amenities. Each has socioeconomic diversity yet relatively deprived contexts. Within this Design Case Study, Kilbirnie is chosen to be the most appropriate host community as Kilbirnie has a CMHT providing better community support for MH consumers, which is vital in the early stages of community psychiatry.

MHCP

Community Alcohol & Drug Service
Opioid Treatment Service

MHCP

Wellington Community
Mental Health Team

KARORI

Ngaio

Karori

Aro Valley

Western Mt Victoria

Mt Cook

MHCP

Specialist Maternal MHS
Child & Adolescent MHS
Acute Inpatient Unit, (Wd 27
 Acute Day Services
Consultation Liaison Service

Kilbirnie

NEWTOWN

Mirimar

Seatoun

KILBIRNIE

MHCP

South Community Mental
Health Team
Team for Assertive Community
Treatment (TACT)

Figure 39: Wellington region location plan of three chosen host
community candidates

KARORI

NEWTOWN

KILBIRNIE

COMMUNITY   RETAIL   COMERCIAL   INDUSTRIAL   RESIDENTIAL   MENTAL HEALTH
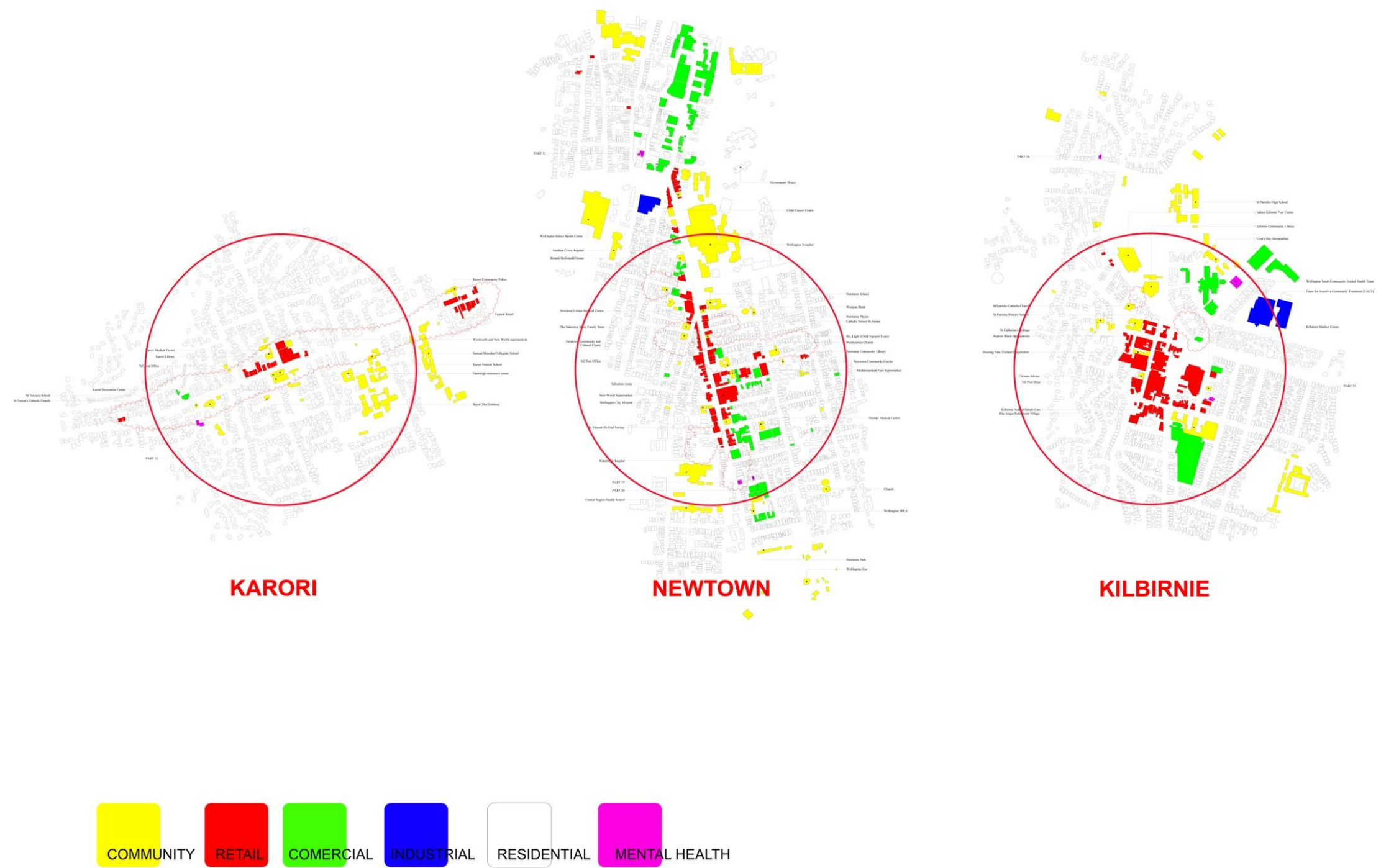
Figure 40: The three chosen host communities
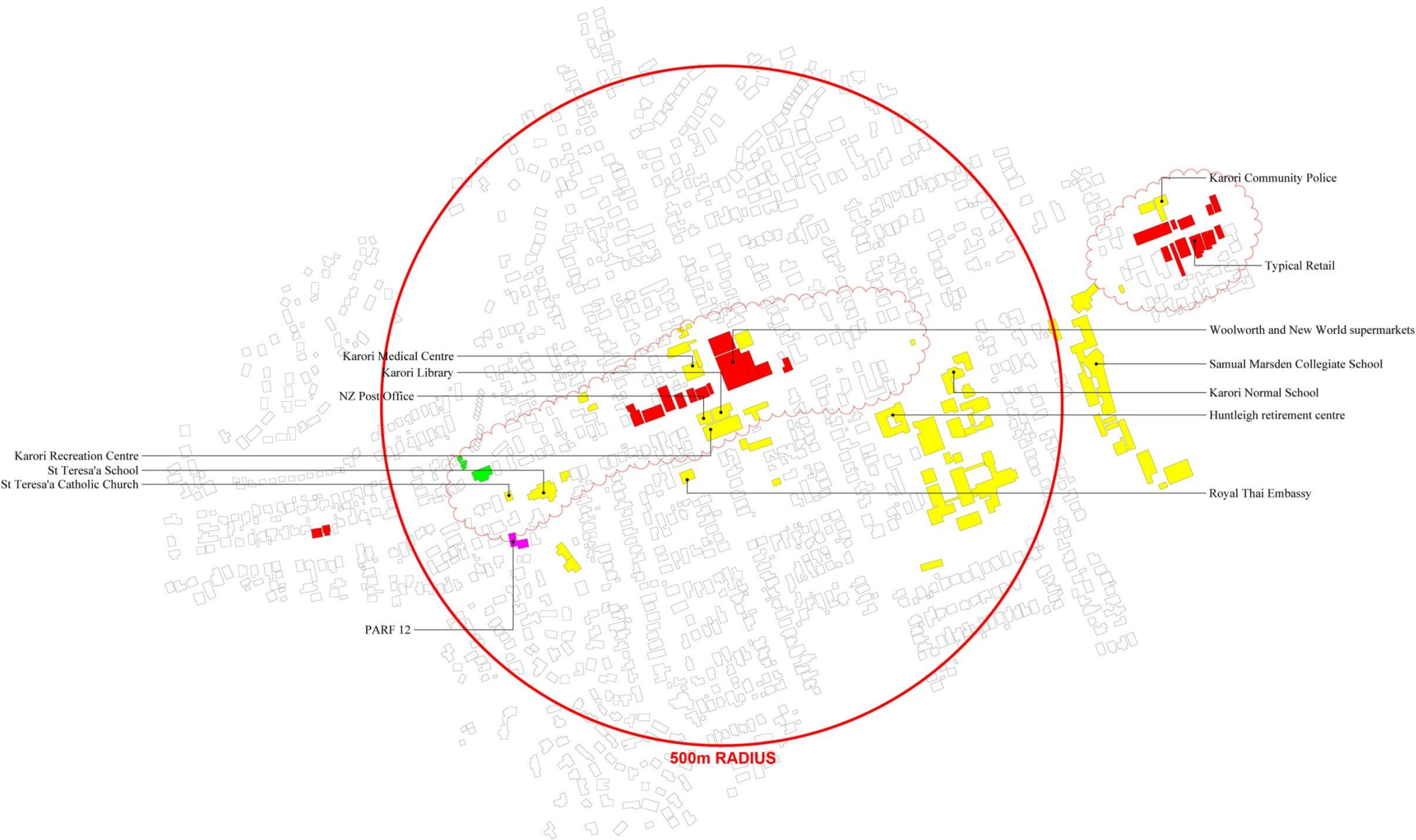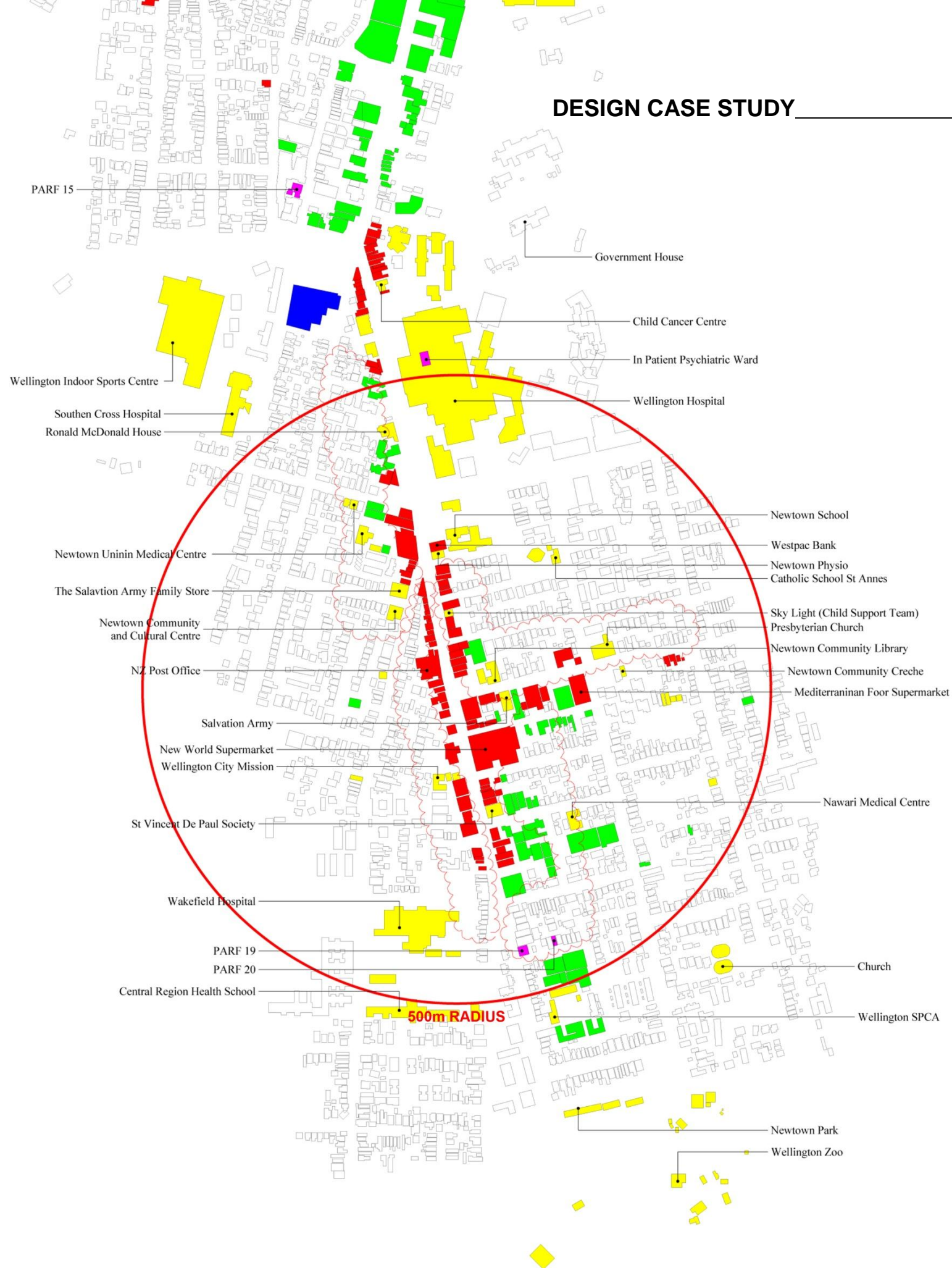
FIGURE GROUND PLAN

SOCIOECONOMIC MAPPING

10 ▪▪▪▪▪▪▪▪▪ 1
MOST DEPRIVED   LEAST DEPRIVED

WCC DISTRIC PLANNING

KARORI   **NEWTOWN**   **KILBIRNIE**

☐ OUTER RESIDENTIAL ZONE   ☐ INNER RESIDENTIAL ZONE   ☐ SUBURBAN CENTRE ZONE
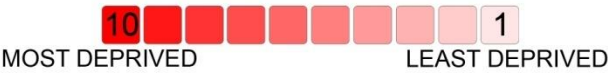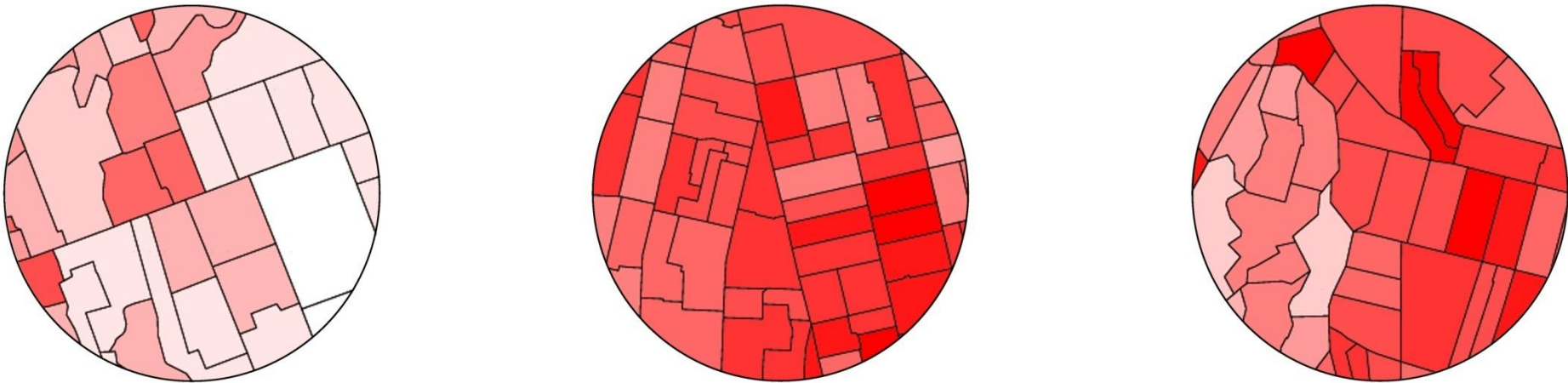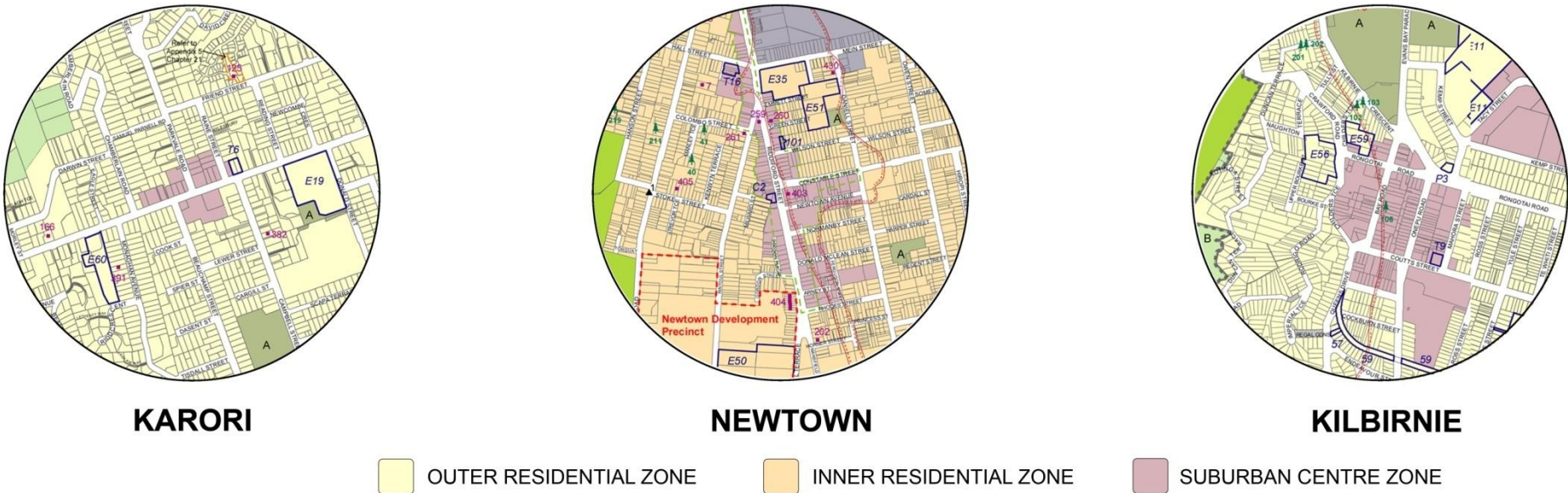
Figure 41: Comparison of three host communities using empirical research methods

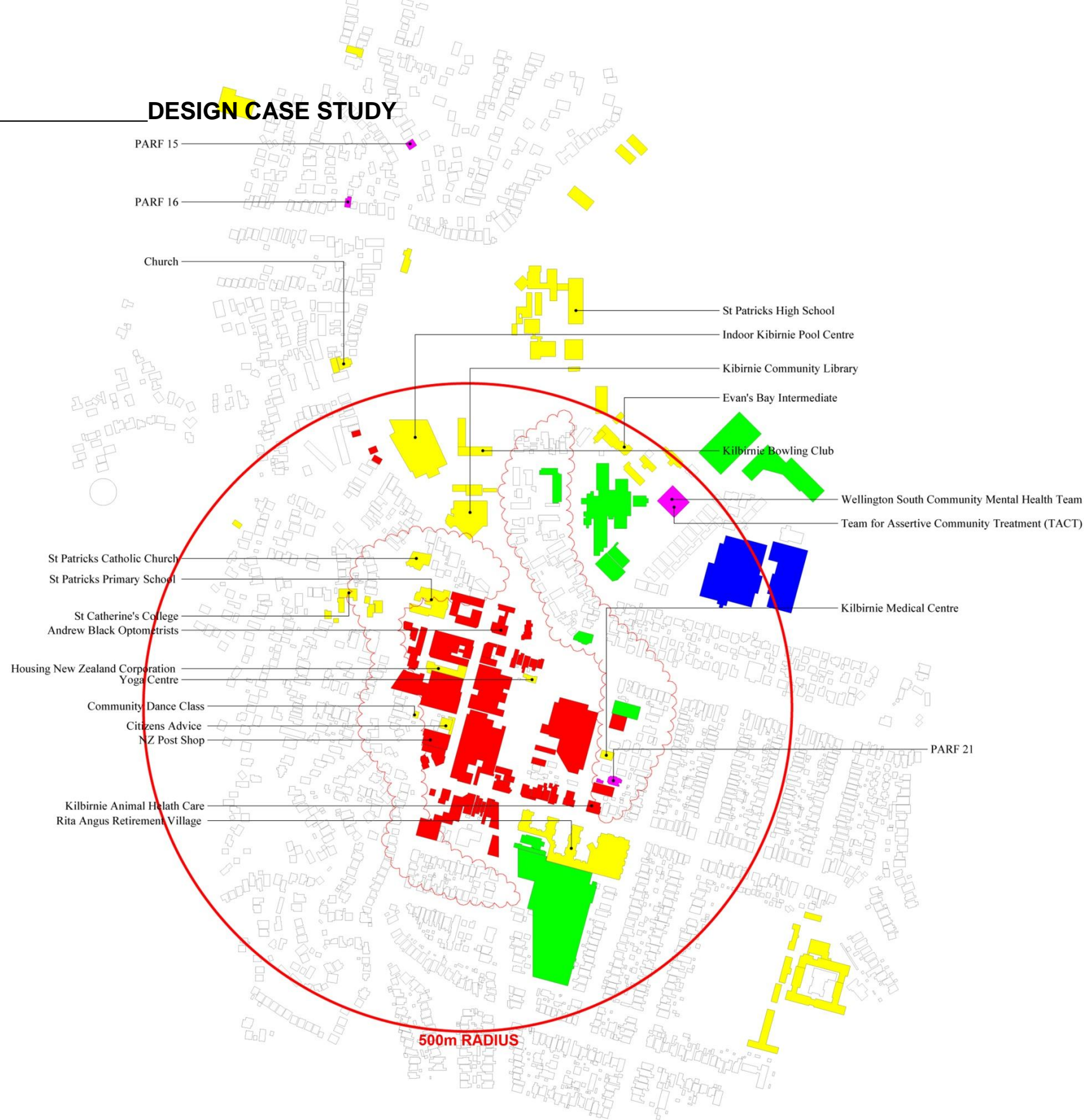**Figure 42**: Karori suburban centre amenities plan.

(red bubble line refers to the 'inner edge context')

PARF 15

Government House

Child Cancer Centre

In Patient Psychiatric Ward

Wellington Hospital

Wellington Indoor Sports Centre

Southen Cross Hospital

Ronald McDonald House

Newtown School

Westpac Bank

Newtown Physio

Catholic School St Annes

Newtown Uninin Medical Centre

The Salavtion Army Family Store

Sky Light (Child Support Team)

Presbyterian Church

Newtown Community
and Cultural Centre

Newtown Community Library

NZ Post Office

Newtown Community Creche

Mediterraninan Foor Supermarket

Salvation Army

New World Supermarket

Wellington City Mission

Nawari Medical Centre

St Vincent De Paul Society

Wakefield Hospital

PARF 19

PARF 20

Church

Central Region Health School

500m RADIUS

Wellington SPCA

Newtown Park

Wellington Zoo

Figure 43: Newtown suburban centre amenities plan

(red bubble line refers to the 'inner edge context')

PARF 15

PARF 16

Church

St Patricks High School

Indoor Kibirnie Pool Centre

Kibirnie Community Library

Evan's Bay Intermediate

Kilbirnie Bowling Club

Wellington South Community Mental Health Team

Team for Assertive Community Treatment (TACT)

St Patricks Catholic Church

St Patricks Primary School

St Catherine's College

Andrew Black Optometrists

Kilbirnie Medical Centre

Housing New Zealand Corporation

Yoga Centre

Community Dance Class

Citizens Advice

NZ Post Shop

PARF 21

Kilbirnie Animal Helath Care

Rita Angus Retirement Village

500m RADIUS

Figure 44: Kilbirnie suburban centre amenities plan

(red bubble line refers to the 'inner edge context')

5.3   Site Selection for proposed PARF

The 'inner edge context' is identified within the Design Guide to be the most appropriate context for MH recovery oriented care. **Figure 44** highlights the location of the 'inner edge context' within Kilbirnie. The Design Brief defines the built facility to be a minimum of 12 bedrooms. This scale of built facility is neither appropriate nor compliant with the outer residential zone of the Wellington City District Plan that surrounds the suburban centre, evident in **Figure 45**. Consequentially, the site selection was narrowed down to land within the suburban centre zone. The site indicated and selected for the proposed PARF was based on the objectives set by the Design Guideline. This is expanded upon below in reference to appropriate analysis.

- The site is located within the boundary of the suburban centre and surrounding residential context - this context provides the potential for the PARF to make reference to residential living as the future outcome of the recovery process whilst defining the facility itself as 'recovery oriented' i.e. visually and functionally distinct from conventional and neighbouring housing. The boundary of these conditions is physically formed by Childers Terrace which follows the contours of the base of the surrounding residential hill side; **Figure 45** and **Figure 48**. While the planning context largely controls urban development, the hillside geography limits the feasibility of the residential context being developed commercially, providing long term security that this facility will remain within the appropriate inner edge context.

- The site is located on a positively sloping site with two of the sites three boundary edges being defined by street edge, providing potential for good surveillance and a clear and pronounced presence perceived by the surrounding community. This location encourages appropriate disclosure of mental illness. The prominent locality allows the wider community to easily and safely visit the proposed PARF. Good accessibility and legibility will encourage members of the Kilbirnie community to spend their lunch break or visit MH consumers whilst doing other activities within the town centre.

- The chosen site is presently under developed, with 8 poorly maintained homes bordering on the southern face of the neighbouring apartment building and the community centre car park with poor vehicular access. The selected site remains the last portion within the suburban centre plan to be developed. This is evident again in the figure ground plan, **Figure 45** where the scale of buildings on the identified site are small and dispersed in contrast to the typical compactness of the town centre.

- WCC, in its study of the Kilbirnie Town Centre based on crime prevention through environmental design (CPTED) principals, identified the chosen site as both unsafe and dangerous (McIndoe Urban, Athfield Architects Ltd, & Wraight + Associates Ltd, 2009a). Potentially dangerous and under developed, this site provides an opportunity for the development of a PARF to contribute to the redevelopment of the Kilbirnie town centre and improve its quality of urban space.

- The Kilbirnie Town Centre Plan also recognises the selected site for redevelopment. The Kilbirnie Town Centre Plan (McIndoe Urban, Athfield Architects Ltd, & Wraight + Associates Ltd, 2009b), a 2009 initiative by the WCC, proposes that the Bay Road precinct be developed as a mixed-use zone including retail, public car parking and apartment type living above street level (3-4 levels), see **Figure 46**. The building scale of the proposed PARF is similar apartment type living. Whilst the intention is to disclose MH and have a perceived and clear identity, designing the PARF facility within a built up mixed use context is sufficiently diverse.

- Tim Heath identifies (**Appendix 9)** future growth trends within Kilbirnie, identifying its prominence in serving the greater Wellington south region, and predicting the future demand for more intensive housing and economic growth of Kilbirnie (Heath, 2009).

- The selected site is located within 500m of the majority of community amenities, **Figure 49**. Because of the condense nature of the Kilbirnie town centre the highlighted community amenities, which are of particular significance, are all within close proximity of the site and town centre.

Mental health amenities, in contrast to community amenities, are more dispersed within the urban context. The PARF must be located within a close proximity to, yet independent of, the CMHT and local GPs. The selected site is within a 10 minute walking distance in a safe pedestrian environment from both these facilities. SRCF's 14,15,16 ,21& 22 are located within Kilbirnie and its neighbouring suburbs. The proximity of existing SRCF's is unavoidable. The proposed site is within reasonable walking distance of the three Kilbirnie based SRCF's, with a reasonable walking distance ranging from 300 to 900 metres. While the remaining two SRCF's are relatively isolated, their presence must be considered when recognising that the proposed PARF is a stepping stone to these broader SRCF's and an additional amenity to the greater Wellington South MH network.

This site provides the level of access to amenities that common members of society have access to through private transport, thereby affirming the rights of MH consumers as full members of society.

- Public transport is well provided within Kilbirnie as illustrated within **Figure 49**, providing good transport possibilities for MH consumers, their family and friends.

PARF SITE
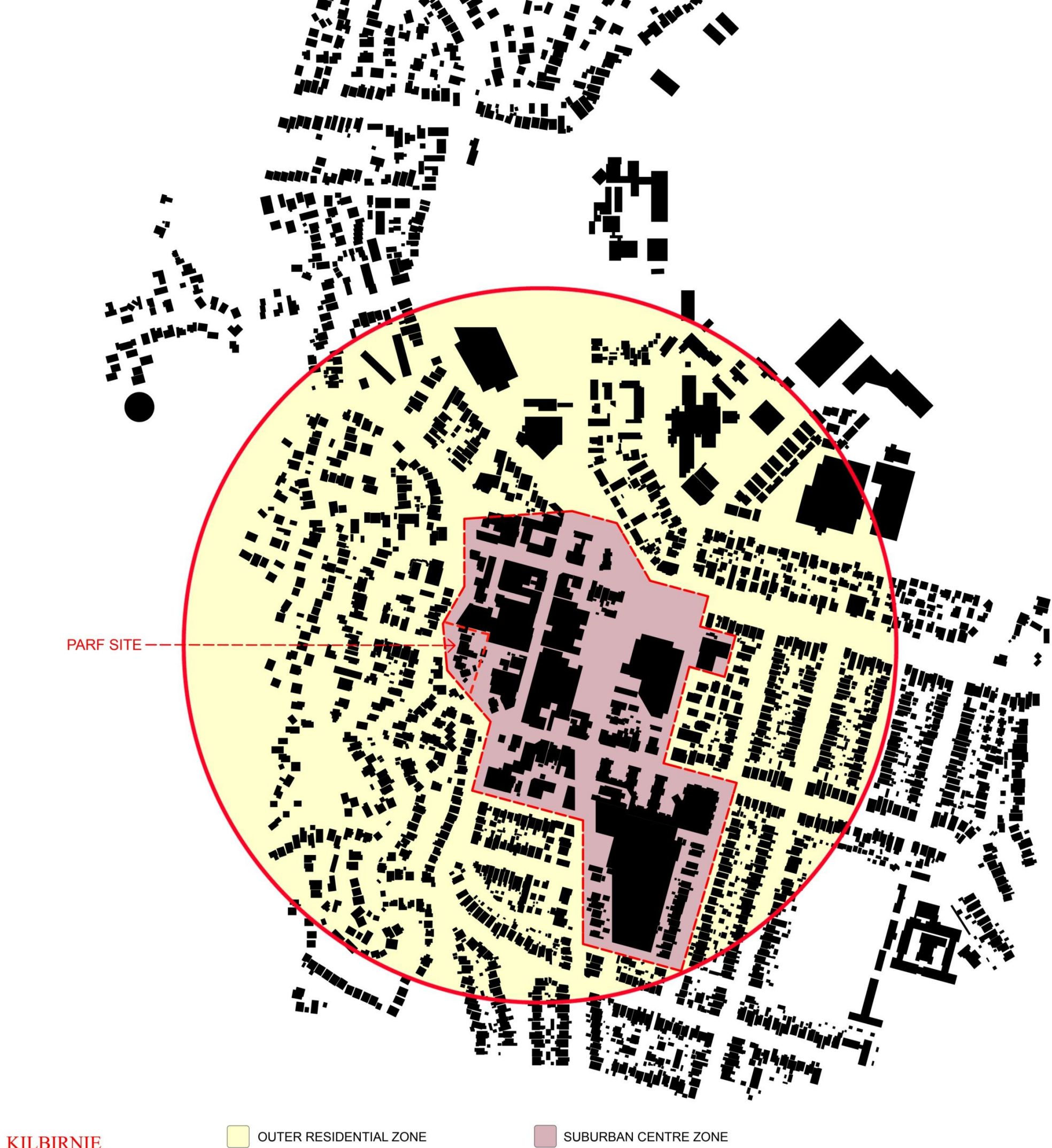
KILBIRNIE

OUTER RESIDENTIAL ZONE

SUBURBAN CENTRE ZONE

Figure 45: Figure Ground Plan of Kilbirnie identifying the chosen site for development within the suburban centre zone
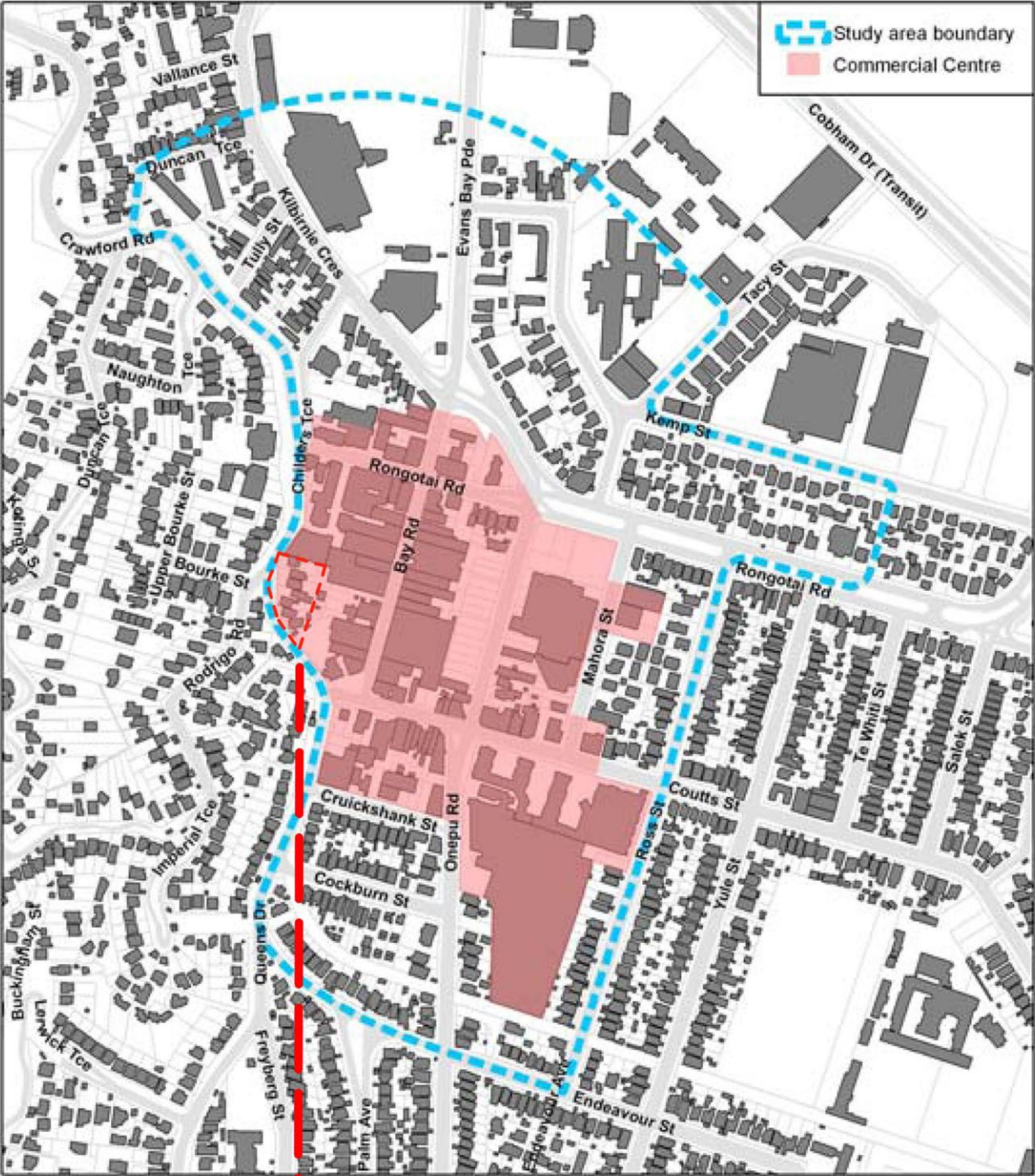
Figure 47: Kilbirnie Town Centre Plan Study Area

Legend:
- retail anchor (3 storeys)
- general retail
- ground floor retail entry
- new residential above (3-4 storeys)
- existing residential
- new planting
- concealed carparking
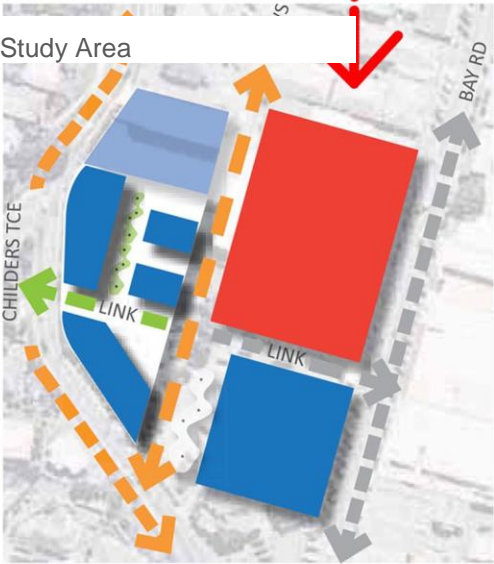
Upper Levels

Street Level

Figure 46: Proposed new street layout for Bay Road precinct (Kilbirnie Town Centre Plan)

Figure 48: Photos of existing site condition

Church

Indoor Kibirnie Pool Centre

Kibirnie Community Library

Proposed Location of Kibirnie Community Centre

Kilbirnie Bowling Club

Public Housing

Public Housing

St Patricks Catholic Church

Kilbirnie Medical Centre

Housing New Zealand Corporation
Yoga Centre

Community Dance Class

Citizens Advice
NZ Post Shop

Rita Angus Retirement Village

KILBIRNIE PUBLIC AMENITIES

Figure 49: Kilbirnie public/community amenities network,

SRCF 15

SRCF 16

Wellington Regional Hospital

1.7 KM

Wellington South Community Mental Health Team

Team for Assertive Community Treatment (TACT)

Kilbirnie Medical Centre

2.1KM

1.6 KM

SRCF 14

SRCF 22

SRCF 21

Rita Angus Retirement Village
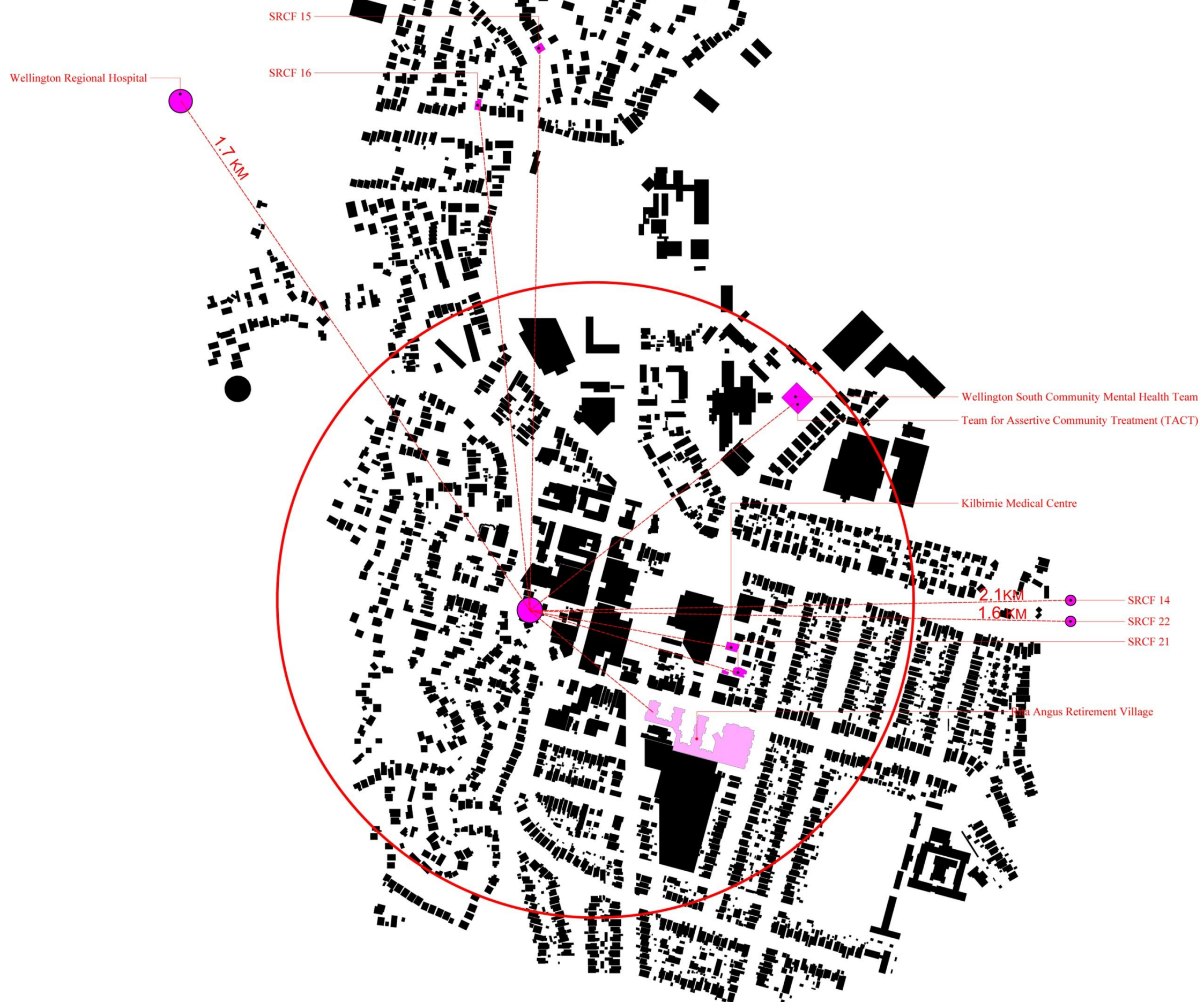
KILBIRNIE MENTAL HEALTH AMENITIES

Figure 50: Kilbirnie mental health amenities network

5.4   Facility Design of PARF

The following section of the Design Case Study describes the proposed PARF design based on the objectives of the design guideline. This section breaks the design down into three subsections:

> 5.3.1   Site Design
>
> 5.3.3   Landscape Design
>
> 5.3.2   Facility Design

5.5.1   Site Design

The context of the proposed PARF assumes that the recommended street construction of Mews Walk and the Bay Road Link way as indicated within the Kilbirnie Town Centre Plan (**Figure 46**) are built. **Figure 52** demonstrates the existing context of the site with the proposed street additions. It must be noted that the proposed street additions must be complete in order for the propose PARF and its wider context to be successful. The additions of the proposed streets address the safety issues identified by the WCC whilst also making feasible the intended mixed-use urban precinct. The development of the site does not reuse any of the existing buildings; they are to be demolished or removed as appropriate, see **Appendix 11**.

CAR PARK

The future development of Kilbirnie town centre forecasts demand for public car parking to increase. The Kilbirnie town centre plan (McIndoe Urban, et al., 2009b) suggests an additional 160 car parks are required within the Bay Road precinct, see **Figure 46**. These are suggested to be primarily located on the selected site for development either at ground or below ground level, ensuring a good quality street edge. The proposed link way within this design case study is renamed as the Garden Lane. It provides shared vehicular access to the proposed car parking for both the PARF and Apartment site through the elevation difference between Mews Walk and

Childers Terrace. Building a car parking basement at Mews Walk street level creates both a concealed underground car park and road retention structure on the PARF site, see **Figure 51**. Parking for the proposed PARF is relatively low volume, demonstrated in the small car park design, **Error! Reference source not found.** To avoid low light levels the case study proposes that this site be developed with Mews Walk street level commercial car parking on the Garden Lane apartments. This car park will service both apartment dwellers and commercial businesses within Kilbirnie, **Figure 51**. Narrow strip retail surrounds the Garden Lane commercial car park creating a safe and attractive street edge that draws the public into Garden Lane.

PROPOSED GARDEN LANE APARTMENTS

The proposed built form for the 3 story apartments sited on the northern site is illustrated in **Figure 54**, named the Garden Lane Apartments. These apartments are oriented on the edge of the Garden Lane to primarily provide 'eyes upon the street,' a CPTED principal that improves the natural surveillance for the mixed-use environment. It provides the additional surveillance necessary to instil a sense of safety for some members of the community to feel comfortable in a semi MH care oriented environment. The perceived and actual level of safety of this facility is crucial to encouraging members of the community to participate in the recovery oriented facility. While the design of this site and its apartments is crucial it remains peripheral to providing the design resolution necessary to inform the PARF design (focus of case study) and its immediate urban environment.

PROPOSED PARF

The Childers Terrace site boundary has the highest vehicle traffic of the three street boundaries on the proposed site. Due to the geography of the site, Childers Terrace is disconnected from the site below. This is best understood because the majority of the site falls below the sight line of vehicles, neighbours and pedestrians using Childers terrace. It is proposed that the Childers Terrace boundary be a solid built edge defining the suburban centre zone whilst also continuing the existing built edge both north and south of the proposed site, (**Figure 54**). The three story proposed PARF will act as the built threshold between the residential context and inner urban context. The

degree in which the proposed design does this is explored within the later Facility Design subsection, yet the appropriateness of the PARF defines this transition as useful in providing MH consumers with perspective of the overall role of the PARF which functions between hospitalised care and that of SRCF. The location of the proposed PARF provides potential for good surveillance from neighbouring buildings both upon Childers Terrace but more importantly upon the semi pedestrian focused Mews Walk and Garden Lane. The remainder of the PARF site has been allocated as public green space both for MH consumer and the general public. Developing the remainder of the PARF site as green space provides good quality light and view for the proposed PARF and neighbouring apartments.

PROPOSED GREEN SPACE

Analysis of Kilbirnie town centre and surrounding suburban context reveals that Kilbirnie has very little public green space that is appropriate for MH consumers. (**Figure 87**) This context is neither appropriate nor conducive to a positive relationship between MH consumers and the general public. The chosen site, whilst being split with the Garden Lane, remains too large for the proposed PARF. Due to the prominence of the site and its connection to the street level retail, the enclosed green space will both encourage the public to use and inhabit the Bay Road precinct, yet will also provide a good quality green space to the surrounding apartment dwellers and inhabitants of the PARF. The allocated green space can be understood as a shared public community garden designed primarily as a mechanism for fostering integration and creating interaction at 'grass roots level' between MH consumers and their host community, in an attempt to combat societal and self stigmatisation. The 'community garden' is explored in greater detail in section **5.5.3 Design Case Study** and **Appendix 10 (**a review of literature on gardening within the realms of mental health)

5.5.2   Facility Design

The Facility Design subsection of this chapter focuses on the design of the built form on the PARF site.

BUILDING VOLUME

The combination of the 12bed PARF capacity, inner edge context, the suburban centre zone planning regulations and the quality of the mixed-use apartment context presents multi storey construction as the most appropriate and financially feasible building option. Multi-storey construction provides a helpful spatial and scale differentiation from both the hospital and the typical residential home. Ore usefully, the scale asserts the facility as a recovery oriented facility rather the less recovery focused SRCF's.

CO-LOCATION OF PROGRAMS

Due to the value of the proposed PARF building, the two ends of the proposed building are allotted as commercially let apartments with the ground floor/street level of the corresponding apartments serving as cafe space and a community utility room - see **Figure 57**. Whilst co-location of the above programs creates a more complex business development case, as later evaluated within **Appendix 11**, the PARF becomes much more financially feasible for an NGO both purchase or rent the facility long term. Privately let high quality apartments and commercial cafe spaces ensure that the most valuable real estate returns are developed appropriately. As real estate, the space allocated for the PARF has less value then the high quality apartments and commercial café spaces surrounding the area; however, the PARF does not require the level of prominence the end spaces hold, but is instead well suited to the internal portion of the development, see **Figure 57**. In many cases staff live on site for consecutive days whilst working in SRCF's. This PARF does not provide for such accommodation due to the inflexibility and inefficiency of such accommodation as a consequence of differing policies of care providers (NGO's). The additional commercial leased apartments allow for NGO staff to rent their own apartment – separate to the PARF yet conveniently close to the facility.

The community utility room is also a leasable space that can be run and owned by the WCC. This provides additional utility space for the PARF but, more importantly, a leasable space for community groups and wider MH health groups.

Because of the co-location of mixed-use building - PARF, apartments, cafe and community utility room, it is important to define the extent of each of the services.

This is primarily achieved through separating the function vertically by placing two circulation cores between the PARF and corresponding commercial apartments. Whilst subtle, yet defined from the exterior, the expressed atriums and circulation cores internally allow the user to clearly recognise the presence of the each program yet understand their appropriate separation. See **Figure 63** and **Figure 64** for an illustration of this vertical separation.

PARF SPACE LAYOUT

The WCC suburban centre zone rules prohibit sleeping spaces at ground level. This is addressed within the PARF by developing the ground level as common living space and having bedrooms located on the first and second floor. As defined by the MoH, sleeping spaces are to be gender separated. This is achieved by vertically splitting the two storey volume as indicated in **Figure 55**. This split occurs at the intersection of the two Childers Terrace boundary lines that create the cranked plan. The two storey volume of bedrooms provides different settings and corresponding levels of care. The first floor provides two dedicated intensive care unisex units with a separate lounge for family and friends. The remainder of the bedrooms, both male and female on the first floor, provide a more dedicated level of surveillance and care. These units are typically designed for more complex, aged or physically disable consumers, see first floor plan **Figure 68**. Access to both floors is separated by a male and female vertical circulation core, each with a disabled lift and a staircase. As **Figure 73** and **Figure 74** illustrate, the full height staircase balustrades are glazed, allowing for appropriate supervision. The defined form of the overall building envelope and location of the circulation cores define the separation of gender well, providing and encouraging interaction within the well supervised ground floor common space.

PARF BUILDING FORM

The building form was derived by attempting to diminish the rectilinear volume typically constructed to gain maximum built space below the 12m maximum height plane. As illustrated in **Figure 61** the rectilinear building volume was cut away primarily to increase the volume of hill side visible from Mews Walk and Garden

Lane, while increasing the amount of sky visible and access to winter sunlight for the users of Childers Terrace.

The Proposed PARF is identified earlier as a medium of threshold between small scale residential and the mixed-use urban context. This design plays upon the qualities of roof and wall which define the typical archetype of the domestic home. The shape resulting from the sight-line cut away design experimentation (**Figure 61**) left a design which is experienced from both ends as a mono pitched roof form, yet is seen as a gable form when examined through section and elevation. This shape both emphasizes the importance of the garden to the facility and creates the best garden environment possible. The design emphasises the enclosed nature of the inner concave face by building up the ends whilst reducing the building scale within the inner portion of the crescent to avoid the bulk and scale of the building dominating the garden entrance to the PARF at ground level. By making the ends of the building more dominant from the inner green space it increases the wind shelter effect of the building whilst also creating better built definition at the end street edge conditions, **Figure 77.**

The building while making clear links to domestic architecture strives to be differentiated from the normal suburban residential residence. Presenting itself as a different in a bid to disclose the 'recovery oriented' facility.

PARF BEDROOM DESIGN

As recognised within the overall planning of the PARF building volume, the PARF mediates the boundary between small scale residential and a mixed-use urban precinct, **Figure 62**. While yet to be fully explored within this chapter, the garden is a public and PARF amenity where MH consumers can garden and interact with each other, their friends and family and the wider public and MH community. The bedrooms are located to face out to the residential context of hillside housing above Childers Terrace with the horizontal circulation forming the communal gallery spaces open to the garden and inner urban mixed-use context, see section **Figure 71** and interior view **Figure 75**. This orientation encourages MH consumers to relate to the domestic context individually within their bedrooms.

The bedrooms and bedroom windows are detailed to express and celebrate the difference and individuality of each MH consumer. The bedroom window opening sizes are defined according to the 1.2m x1.8m module within the entire facade and garden bed design, a modular set out which is typical of multi storey construction, **Figure 85**. Within the modular window openings the individual design and size of the glazed window strives to present the unique qualities of each MH consumer and the domestic nature of the bedrooms through each bedroom windows unique colour and size. This provides the MH consumer with a cognitive understanding of where their bedroom is within the Childers Terrace facade and also a sense of identity and acknowledgement of the purposed provision of this high quality environment for the recovery of themselves as MH consumers.

The gallery spaces contrast the domesticity of the bedrooms, drawing MH consumers attention to the mixed-use urban environment through large portion of full height glazing. This allows consumers to observe the multitude of different activities that exist within the 'inner edge context', see **Figure 71** and **Figure 75**. The galleries are not designed primarily as social spaces, hence remaining relatively general with no particular individual spaces. The gallery spaces are there to provide a sufficiently large space to avoid altercation and claustrophobia in contrast to the bedroom environment. This again demonstrates that MH consumers are in a recovery oriented environment, encouraging them to spend the majority of their time in common ground floor. The common ground floor provides both individual annexes and group spaces appropriate for occupation throughout the day.

PARF COMMON AREA DESIGN

The use of the two identified contexts - residential and mixed-use - are also vital contributors to the quality of the common ground floor. The orientation of spaces within the common ground floor area can best be understood to relate either to the Childers Terrace context or the community garden. The spaces are separated by a central hall way, defined by the direction of the roofs ridge line and partition walls that correspond to window openings which are informed by the garden grid; this is best illustrated within diagram **Figure 62**, floor plan **Figure 67** and illustration **Figure**

77. This results in a hall that is defined by the combination of spaces on each side of the hall. This hall arrangement provides privacy from one space to another across the PARF in the transverse direction yet provides good sight lines for supervision by staff in the longitudinal direction. The concept and reality of this planning relates to the domestic principals well known within New Zealand houses of separate rooms opening off a central hallway.

The central hall splits the floor plan into two types of zones; firstly the inner crest living area and secondly the two separate utility spaces, see **Figure 67** for location of these two space types. The inner crest living space relates directly to the corresponding outdoor courtyard whilst the separate utility spaces relate to the residential Childers Terrace context. The inner crest living space must be understood to be dedicated living space for the PARF's MH consumers, this space includes lounge, dinning, PC stations and small pockets of individual space, see **Figure 67** and **Figure 74**.

The inner crest living space is serviced by the two relatively separate utility spaces. Both these utility spaces as illustrated by **Figure 62** are partially street oriented spaces in reflection to the inner crest garden/mixed-use context oriented space. The first of the two utility spaces include the PARF reception, reception desk, file store and general meeting area, **Figure 72**. This separate meeting space and reception area can be joined and defined to function as a family room in cases when privacy is needed. The second separate utility space contains the communal kitchen with a small individual seating space, see **Figure 72**. The separate utility spaces can be understood to be spaces less crucial to the integration process. For this reason staff oriented spaces and the public reception are located in this position. The Childers Terrace context that neighbours the reception space is useful as it connects the space with the main public entrance defining these spaces as more general public spaces rather than more privately PARF oriented living spaces. The public entrance to the PARF is located on Childers Terrace, **Figure 63**. Locating the public entrance on the most public boundary; Childers Terrace facade sets the gentle progression of public to private space through the PARF from the main entrance 'front door' to the inmost crest

space and corresponding entrance to the outdoor courtyard. The courtyard must also be understood as defined semi private PARF space and the 'back door' setting.

The basement provides a shared and flexible storage unit that can serve partially as a possessions store while also being an available store for the commercially let apartments or community utility room. The two lifts serving the PARF each service the basement level, providing an appropriately concealed environment for the removal of complex MH consumers that require an ambulance or need to be restrained. The eastern vertical circulation core is more suitable for an ambulance or support staff to park with little potential interference.

LEASABLE APARTMENT DESIGN

Like that of the Garden Lane Apartments, the end commercially let apartments must be understood as ancillary to the design case study of the PARF. There are two double level apartments located at each end of the proposed building. These two sets of apartments each have a separate Childers Terrace street entrance. Each set of apartments share a communal lobby space at first floor level which is accessed either through their dedicated staircase of the shared PARF lift.

5.5.3 Landscape Design

As described above the allotted green space has been identified as the primary mechanism within this PARF to combat societal and self stigmatisation. The identified green space is to be developed as a community garden that provides a context for interaction between MH consumers and their host community. The garden does not propose to provide a sustainable quantity of fresh produce to provide for the PARF or public alike but rather a context where individuals have a common setting, allowing for the sharing of knowledge and consequential break down of societal and self stigmatisation.

GARDEN FUNCTION

Garden or park space is a relatively low cost 'recovery oriented' environment and is also more flexible in contrast to the built PARF described above. Gardening is identified to be one of the key successes of historic institutions (mental asylums); they

provide occupation and constructive manipulation of nature, identified as 'therapeutic horticulture'. The proposed garden is designed primarily to serve the adjoining PARF and the mixed-use Kilbirnie town centre context that surrounds it. However, it is encouraged that wider members of the MH community and host community also participate in this peer support environment. Further insight into the capabilities for gardening to foster social integration is summarised within **Appendix 10.**

The development of this garden initiative can be understood as the first step to integration, provided it is successful in breaking down societal and self stigmatisation and receives positive support from the wider MH and host community of the Kilbirnie community. The second step will see this garden act as the central hub garden for a wider urban renewal program of Kilbirnie underused empty urban lots. These lots consist of a variety of council reserves yet of particular interest is the Kilbirnie storm water/sewer reserve, **Figure 86**.

GARDEN DESIGN

The public east-west pedestrian link between Childers Terrace cafe platform and the Garden Lane street context was the first objective tackled within the garden design. Childers Terrace is a key meeting point and entrance space that connects the apartment precincts entrance level green roof, the wider Childers Terrace street context, entrance to the community garden and access route to the wider Bay Road precinct, see **Error! Reference source not found.**. The garden draws the pedestrian route partially into the PARF, locating it upon the axis of the vertical circulation cores within the PARF. This creates an integrative link between the circulation function of the internal space and the garden path. The garden is also set to provide secondary pedestrian access to the PARF and shared apartment car park **Figure 51**. This is provided with a north-south pedestrian path also located on the PARF set circulation axis, see **Figure 56** and **Figure 58**. Together these major pedestrian paths define 3 types of garden space that each serve in a different manner in defining public to private threshold between the street edge and inner PARF courtyard (**Figure 58**). The street side gardens are the most public garden spaces, serving as porous garden beds for both the public and MH consumers, providing access to the main pedestrian

pathways whilst also offering variety seating and lawn contexts. The gardens beds and paths are defined by the 1.2 x 1.8 meter module. This module was set as the most appropriate proportion for garden beds and path widths providing wheel chair access, with sufficient space for two gardeners to work back to back and also pass each other without contact. The grid module allows for a variety of pathways ensuring that any one person has multiple choices of direction preventing people from feeling trapped or forced to confront someone. The use of a garden set module for the planning of architecture is certainly atypical, yet this relationship helps define the hierarchical importance of garden to the success of the PARF.

The corner street garden serves primarily as a vegetable garden for the PARF. Its elevation, while only 0.8 metres, avoids potential damage by pedestrians at this highly trafficable public edge, **Figure 77**. This cornerstone draws and directs the public further into the garden beyond the most public corner of the site and through the main pedestrian routes and street side gardens. The unique roof form is translated into the angular garden walls demonstrating a recognisable unity between the dedicated portions of the garden and the PARF itself.

The street edge, two outer types of gardens, and the inner pedestrian paths create a series of thresholds toward the inner sanctuary of the garden; the PARF courtyard. The covered outdoor courtyard is level with the common ground floor of the PARF, **Figure 82**. By elevating the courtyard above the remainder of the garden it ensures that the inner courtyard space remains primarily PARF orientated, **Figure 78**. This clear transition will be a hurdle for some MH consumers when they attempt to enter the garden; by entering the garden from the inner courtyard they are presenting themselves as MH consumers to the public.

The built branch like steel tube structures are designed to provide a degree of shelter to the car park entrance, inner PARF courtyard and staircase transition between the Childers Terrace cafe platform and the garden. These structures take their form from the qualities of horticulture; the ability for gardeners to find a sense of satisfaction in their ability to grow produce. These structures have a branch like structural rigour yet are prescribed within the constraints of the garden orthogonal grid. These structures

will identify the role of the park at night to enhance safe pedestrian access to the car park and Childers Terrace cafe deck.

Typical of landscape design theory, the edges of spaces and gardens are locations of diversity and rigour both in ecology and social interaction. Garden beds have been used to identify the garden edges, as they provide a defined edge yet provide structure. The sloping nature of the site provides gardens at variable working levels ensuring those in wheel chairs or with physical disabilities can garden comfortably. 70 percent of the garden is 'accessible' under the New Zealand building code; while a small minority of bed gardens at the street edges are not accessible by wheel chair, these boundaries are clearly shown by raised step of Oamaru stone within the gravel/lime chip, **Figure 80**.

Figure 52: Selected site with existing houses and neighbouring context, proposed Mews Walk and Garden Lane is also illustrated as context for the proposal .

Figure 53: Proposed LINKWAY to continue Garden Lane providing pedestrian access and sight lines to upper Childers Tce and residential slopes above. Splits selected site in two.
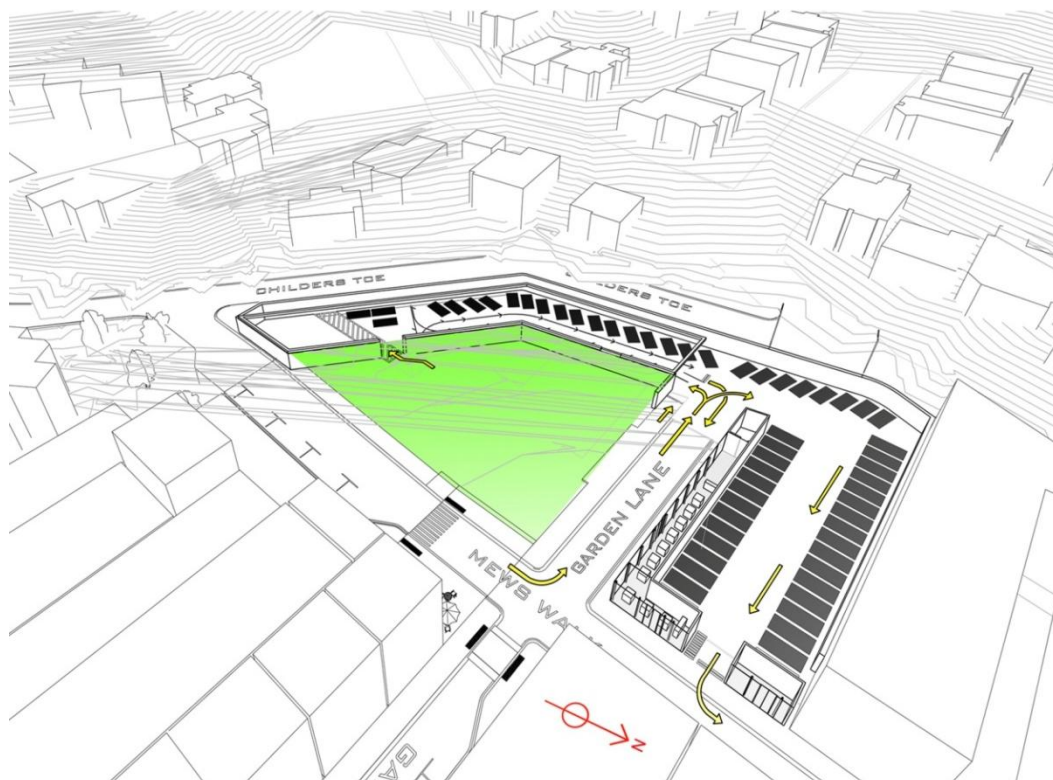
Figure 51: Proposed extension of garden lane provides shared entrance to ground level car parking, whilst creating street retail.

Figure 54: Proposed building volumes on selected site. Red dashed line indicates proposed PARF whilst black dash line indicates private residential apartments.
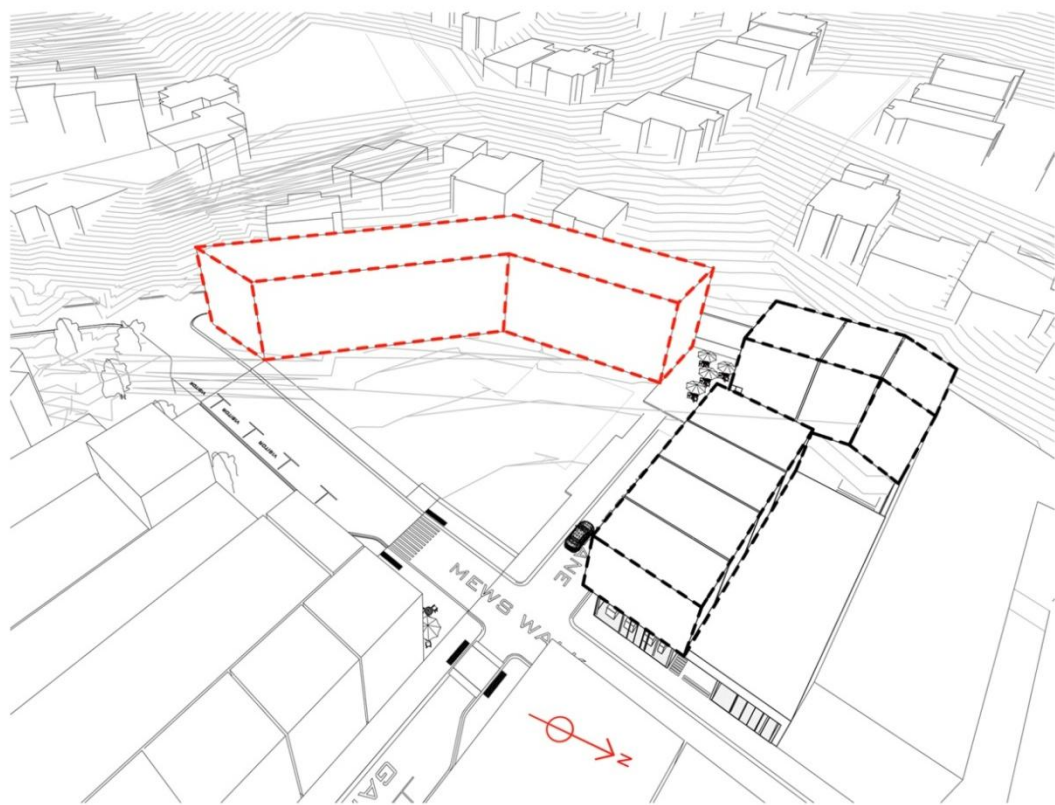
Figure 54: Proposed building volumes on selected site. Red dashed line indicates proposed PARF whilst black dash line indicates private residential
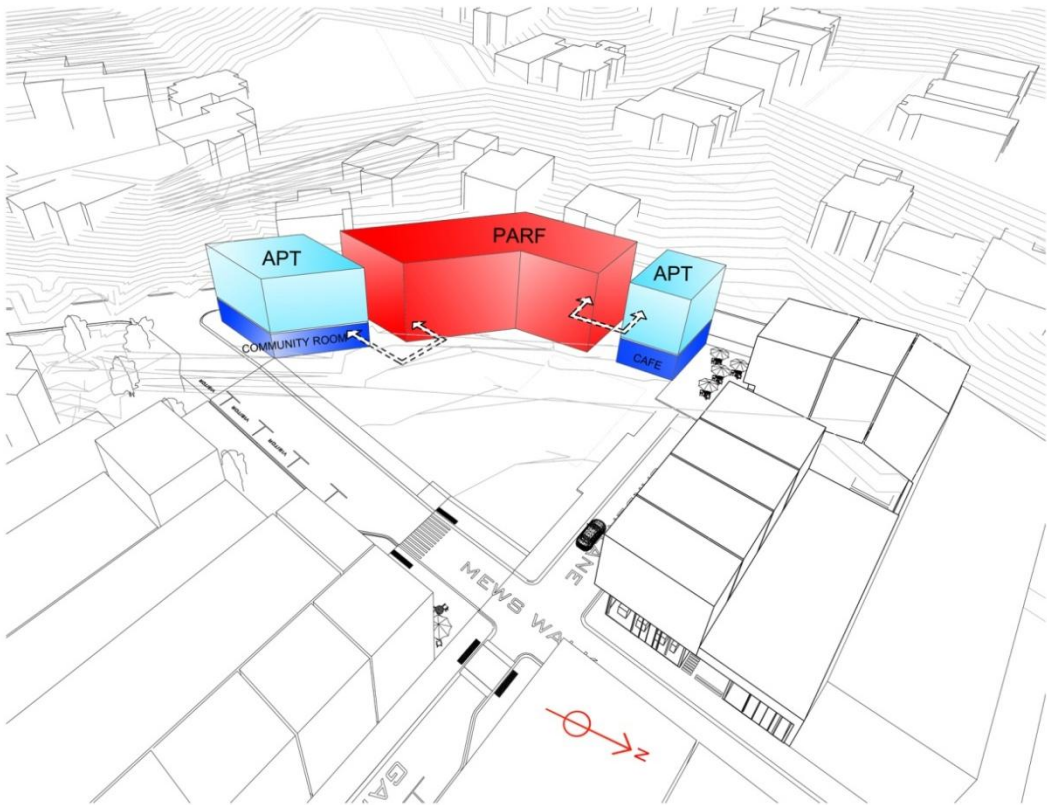
Figure 57: Segregation of proposed building volume into mixed-use with PARF defined within the proposed commercial building ends.
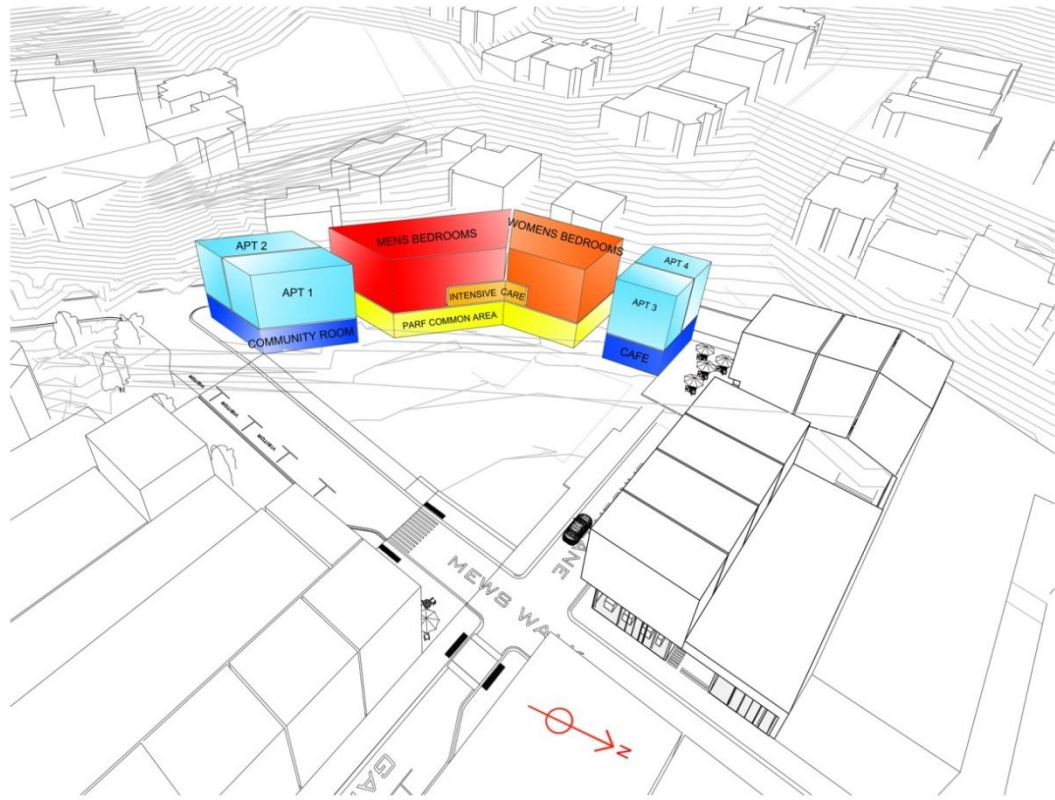
Figure 55: Program layout of entire building
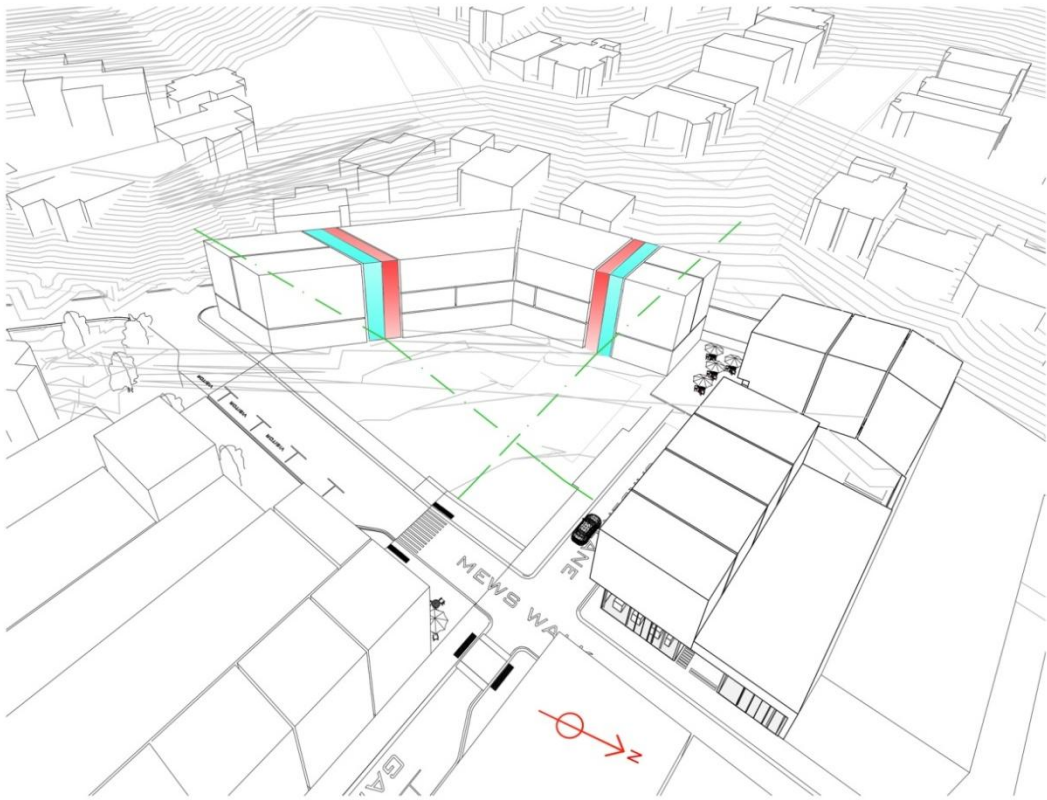
Figure 56: Location of two vertical circulation cores shared respectively by both the PARF and private let able apartments.
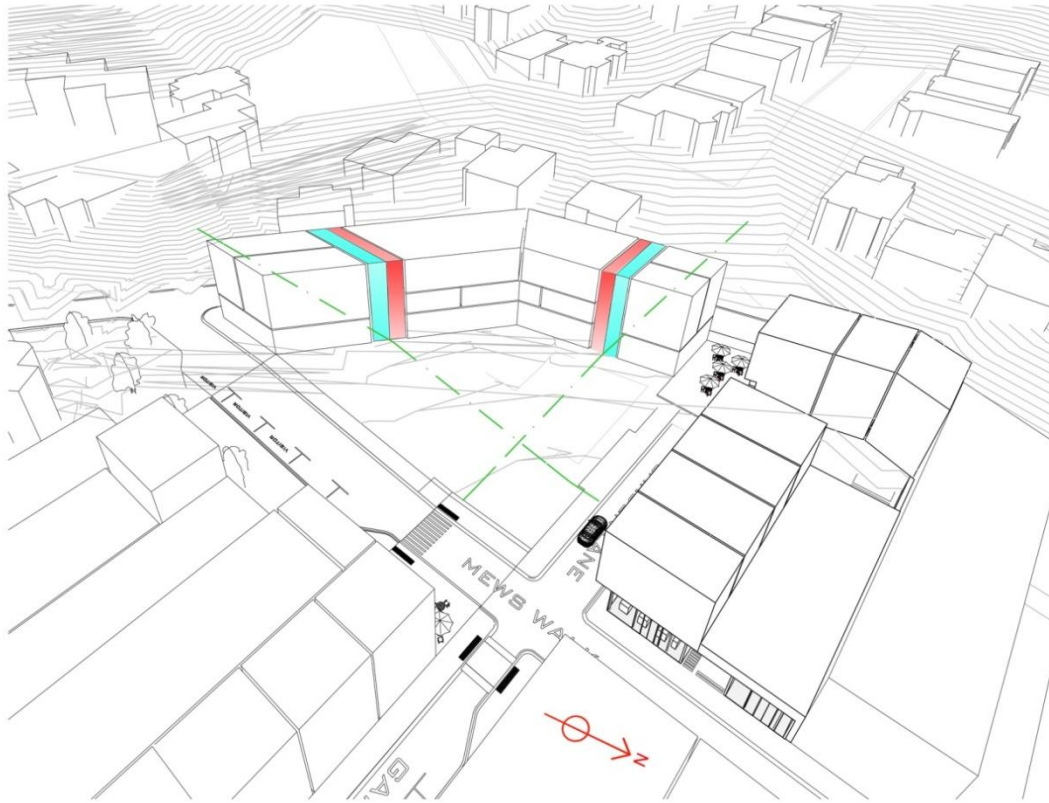
Figure56: Location of two vertical circulation cores shared respectively by both the PARF and private let able apartments.
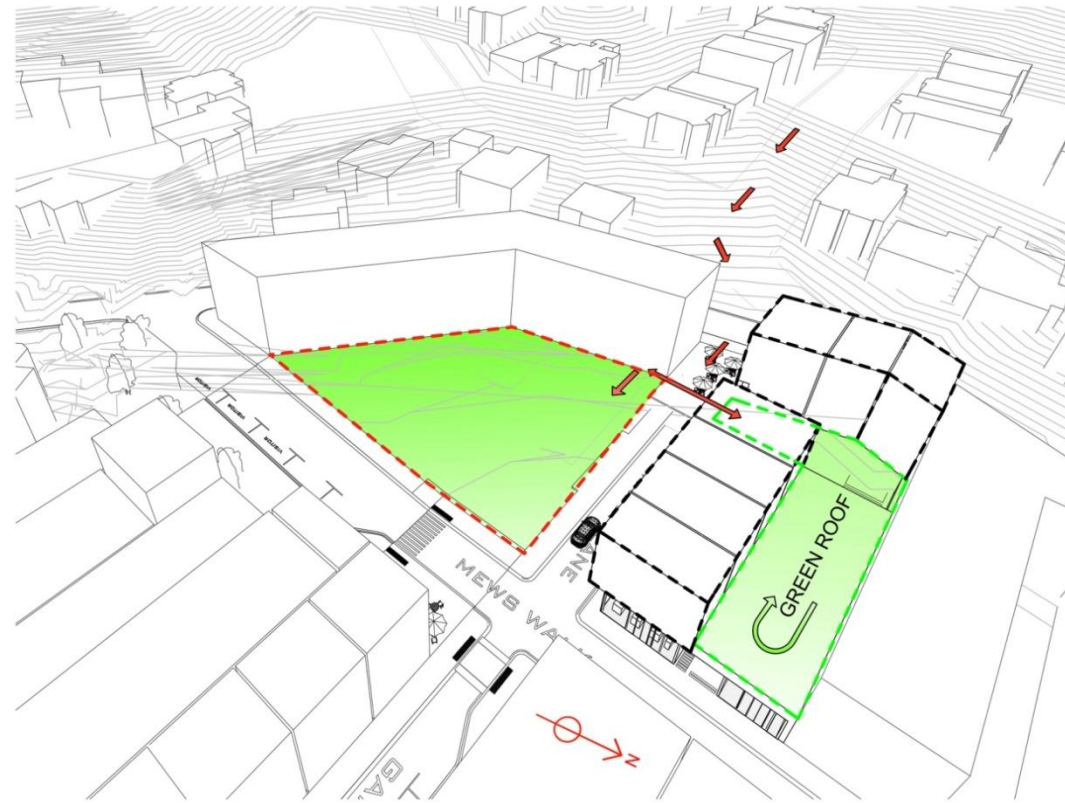
Figure 60: Context of the proposed community garden and primary pedestrian route

MOST PUBLIC
1 STREETSIDE PUBLIC GARDEN
2 ELEVATED CORNER STREET PARF GARDEN
3 INNER PARF GARDEN/COURTYARD
LEAST PUBLIC
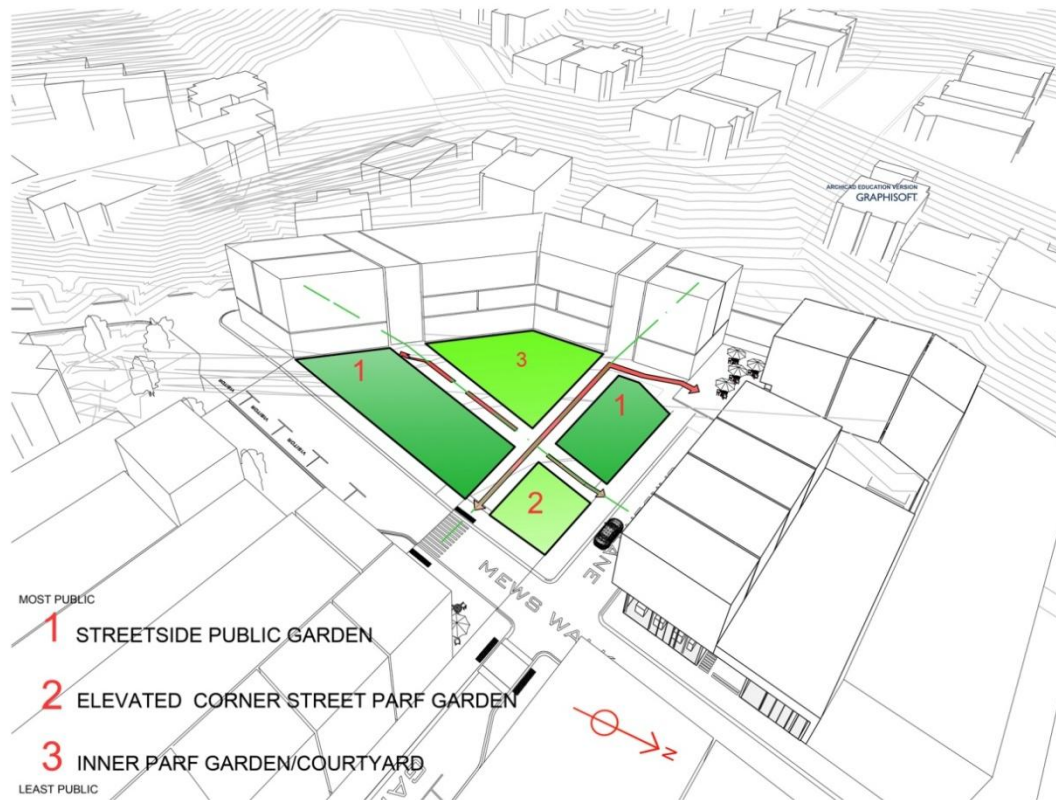
Figure 58: Two major pedestrian pathways with 3 defined types of garden

MOST PUBLIC
1 STREETSIDE PUBLIC GARDEN
2 ELEVATED CORNER STREET PARF GARDEN
3 INNER PARF GARDEN/COURTYARD
LEAST PUBLIC
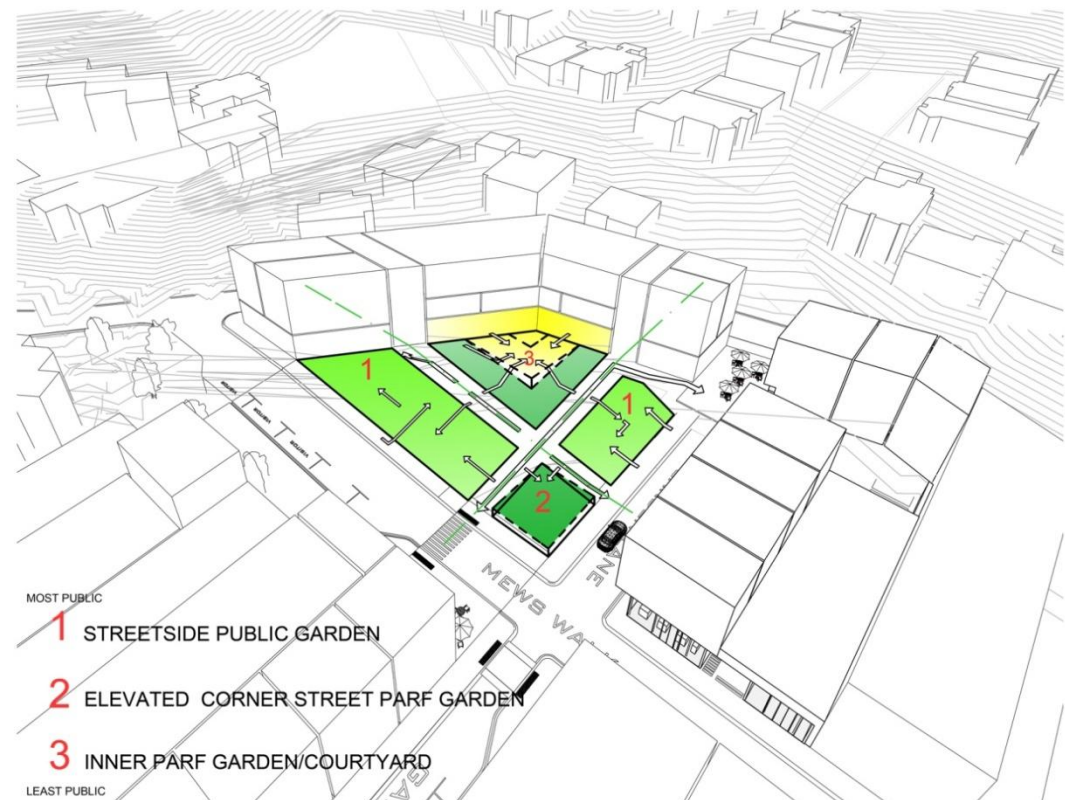
Figure 59: Intended paths of people within garden
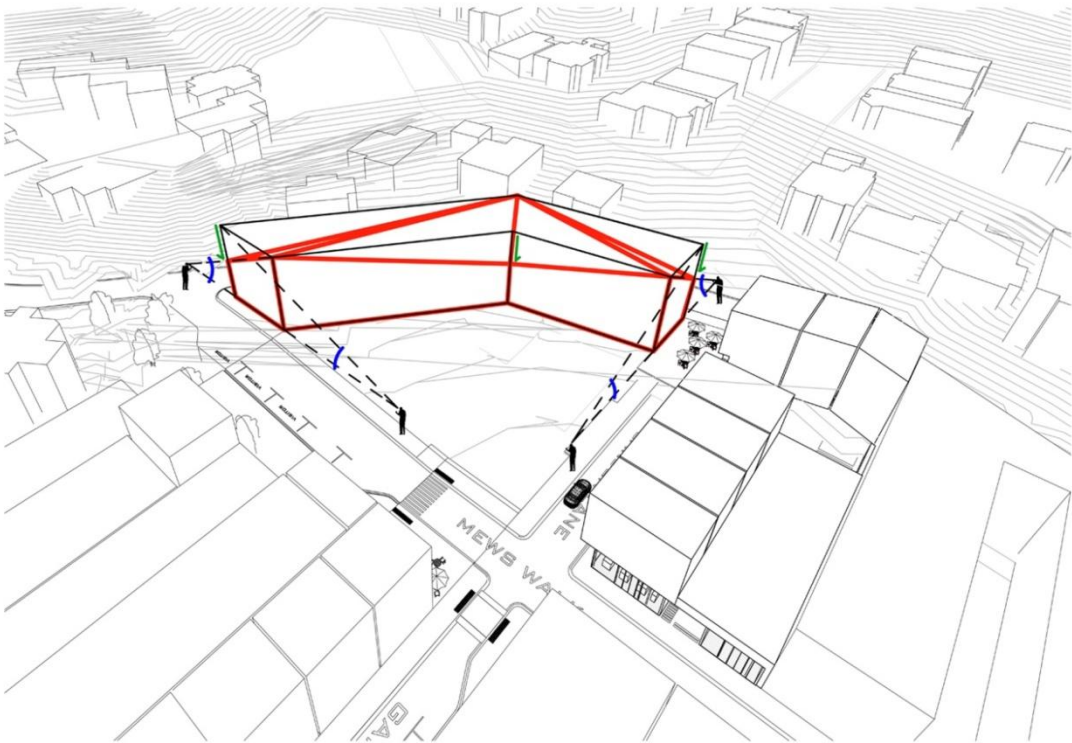
Figure 61: Sight line cutaway form generator

GARDEN ORIENTATED SPACES

HALL

STREET ORIENTATED SPACES

HALL

BEDROOM   HALL

DOMESTIC CONTEXT →   BEDROOM   URBAN COTEXT

STREET/ RESIDENTIAL   GARDEN/ APPARTMENTS
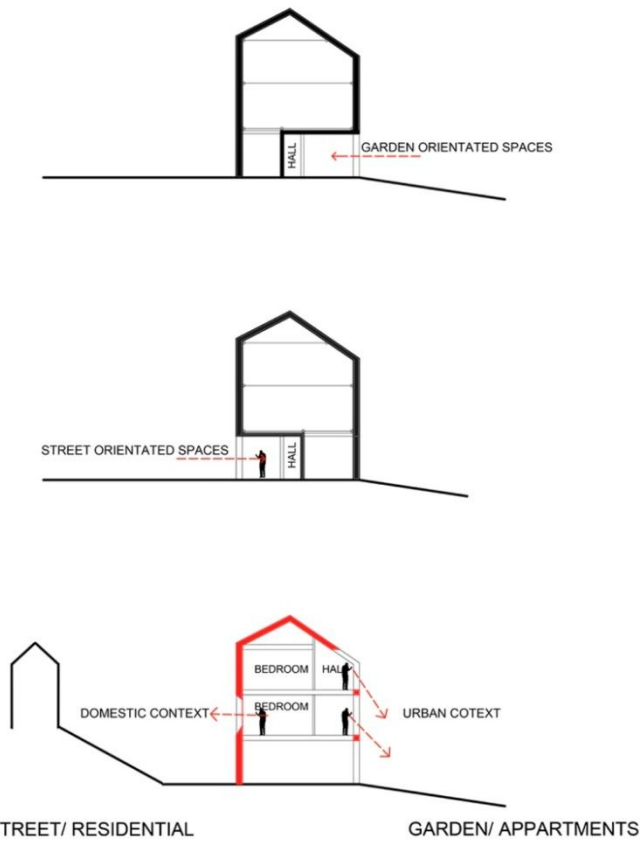
Figure 62: Illustration demonstrating space relating to corresponding contexts

CHILDERS TCE PLATFORM Figure 63

CHILDERS TCE - MEWS WALK CORNER **Figure 64**

1 PARF VEGETABLE GARDEN
2 LAWN PLATFORM
3 FRUIT GARDEN
4 INNER PATH-COURTYARD TERRACE
5 PUBLIC HERB & VEGETABLE GARDEN
6 PUBLIC GARDEN -INNER PATH SEATING
7 STREET EDGE- PUBLIC GARDEN SEATING
8 LAWN SPACE
9 PARF COURTYARD
10 CARPARK ENTRY
11 CHILDERS TCE- GARDEN STAIRCASE
12 CAFE SPACE- CHILDERS TCE PLATFORM
13 FLOWER GARDEN

ROOF GARDEN

GARDEN LANE APARTMENT PRECINCT

APARTMENT ENTRANCE

GARDEN LANE

MEWS WALK

CHILDERS TCE

APARTMENT ENTRANCE

PARF STREET ENTRANCE

PRIMARY LINK PATH

SECONDARY LINK PATH

STAIRS

RAMP

VISITOR

VISITOR

VISITOR

CHILDERS TCE

APARTMENT ENTRANCE

N

SITE PLAN

0   250   500   1250   2500

Figure 65

1 GARDEN LANE APT CARPARK
2 GROUND FLOOR RETAIL/GALLERY
3 MINOR ACCESS TO GARDEN LANE APT ENTRY
4 SHARED CARPARK ENTRY
5 PARF PRECINCT CARPARK
6 PEDESTRIAN CARPARK - PARK ENTRY
7 SHARED PARF/APT LIFT
8 COMMUNITY ROOM STORAGE
9 APT STORAGE
10 PARF PERSONAL POSSESSION STORE

MEWS WALK LEVEL | CARPARK PLAN

0   500 1000   2500   5000

Figure 66

CHILDERS TCE PLATFORM

CAFE

APARTMENT ENTRANCE

LIFT
UP

PARF STREET ENTRANCE

HALL

PARF COURTYARD

HALL

COMMUNITY ROOM

APARTMENT ENTRANCE

1 CHILDERS TCE - GARDEN STAIRCASE

2 CAFE TOILET

3 APARTMENT ENTRANCE LOBBY

4 WOMENS VERTICAL CIRCULATION

5 MEETING ROOM

6 RECEPTION WAITING ROOM

7 WHANAU/FAMILY ROOM (COMBINATION OF 5+6)

8 PC SPACE

9 GARDEN TOOLD STORE AND GARDEN CLEAN UP ZONE

10 RECEPTION

11 LOUNGE SPACES

12 REFLECTION SPACE (STREET VIEW)

13 DINING

14 KITCHEN

15 TOILETS

16 MENS BEDROOM VERTICAL CIRCULATION

CHILDERS TCE LEVEL/ GROUND FLOOR PLAN

Figure 67

0   250   500   1250   2500

INNER CREST LIVING   SEPERATE UTILITY SPACES

1 MARKET LEASE APARTMENTS
      (CARE PROVERS HOME)
2 APARTMENT COMMON AREA

3 WOMENS VERTICAL CIRCULATION

4 WOMENS UTILITY SPACE (LINEN + CLEANING STORE)

5 WOMENS BEDROOMS

6 INTENSIVE CARE STORE

7 INTENSIVE CARE LOUNGE

8 INTENSIVE CARE BEDROOMS

9 MENS BEDROOMS

10 MENS UTILITY SPACE (LINEN + CLEANING STORE)

11 MENS VERTICAL CIRCULATION

FIRST FLOOR PLAN

Figure 68

0   250 500   1250   2500

1 MARKET LEASE APARTMENTS

2 VOID

3 WOMES VERTICAL CIRCUALTION

4 WOMENS COMMUNAL SPACE/ HALL

5 WOMENS BEDROOMS

6 MENS BEDROOMS

7 MENS COMMUNAL SPACE

8 STORAGE

9 MENS VERTICAL CIRCULATION

SECOND FLOOR PLAN

Figure 69

0   250 500   1250   2500

D1   C1

11000

7500
SECOND FLOOR

APT 1   APT 2

4000
FIRST FLOOR

CHILDERS TCE

COMMUNITY ROOM

GROUND FLOOR   0

STORAGE   STORAGE

SECTION A-A

0 100 200   500   1000

Figure 70

D1

C1

11000

MENS BEDROOM   HALL

7500
SECOND FLOOR

MENS BEDROOM   HALL

4000
FIRST FLOOR

CHILDERS TCE

PARF COMMON SPACE

GROUND FLOOR   0

CARPARK

SECTION B-B

0 100 200   500   1000

Figure 71

PARF ENTRANCE RECEPTION **Figure 72**

PARF KITCHEN Figure 73

PARF GROUND FLOOR HALL SPINCE & LOUNGE Figure 74

PARF - MENS BEDROOM HALL **Figure 75**

Figure 76

VEGETABLE

CARROT
CABBAGE
SILVERBEET
TOMATO
CHILLI
CAPSICUM
SWEET PEA
BROAD BEAN
POTATOE
PARSNIP
BEETROOT

FRUIT

RUHBARB
CRANBERRY
FIG
GOOSEBERRY
BLUE BERRY
PLUM
APPLE
GRAPE
FEIJOA
PASSIONFRUIT
LEMON
STRAWBERRY
APRICOT

HERBS

BAY
ROSEMARY
MINT
OREGANO
PARSLEY
LEMON GRASS
CHIVES
SUNFLOWER
EDIBLE FLOWERS
BASIL
LAVENDER

ROOF GARDEN

DESIGN CASE STUDY _____

GARDEN LANE

MEWS WALK

CHILDERS TCE

WALNUT TREE
PLUM
FRUIT GARDEN
CHESTNUT
NUT ORCHARD
PARF GARDEN
HERB GARDEN
FLOWER GARDEN
PUBLIC VEGETABLE GARDEN
LAWN
APPLE

VISITOR
VISITOR
VISITOR

N

PLANTING PLAN

0   250   500   1250   2500

MAJOR LINK WAY PATH - CHILDERS TCE Figure 77

MINOR LINK WAY PATH - CARPARK   **Figure 78**

MEWS WALK GARDEN EDGE **Figure 79**

PUBLIC VEGETABLE GARDEN Figure 80

CHILDERS TCE - GARDEN STAIRCASE Figure 81

PARF COURTYARD Figure 82

GARDEN LANE / NORTH ELEVATION

Figure 83

12M MAX HIEGHT PLANE

MID SUMMER SUN

MID WINTER SUN

48°

26°

10 METERS

0   250   500   1250   2500
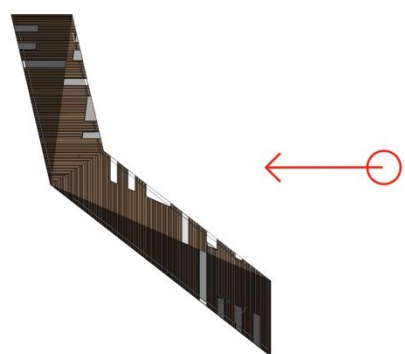
MEWS WALK/ EAST ELEVATION

Figure 84

12M MAX HIEGHT PLANE

10 METERS

2500

0   250   500   1250

CHILDERS TCE/ WEST ELEVATION

Figure 85

ROAD RESERVE

ROAD RESERVE

ROAD RESERVE

ROAD RESERVE

PARF (CENTRAL GARDEN PROJECT)

STORM WATER RESERVE

STORM WATER RESERVE

Figure 86: PARF central garden project with potential empty urban lots available for gardening

Figure 87: Empty storm water reserve

5.5   Evaluation of Case Study

This design case study can be summarised as an exploration of the possibilities of the 'inner edge context'. As evident within the design guideline, the concepts which define the 'inner edge context' as the most appropriate urban context also inform the design guideline and case study throughout its various scales.

Within this evaluation section of the Design Case Study chapter the proposed Kilbirnie PARF is evaluated against the design brief, the critical reflections made on the case study when presented to an Victoria University of Wellington panel of reviewers and critics, and the critical evaluation of C Nolan, an expert in facility design and forensic psychiatry. The design case study above has produced conclusions to the empirical and literature research whilst also providing insight, offering new options on how to best integrate MH consumers with their host communities in a bid to reduce societal and self stigmatisation. Evaluation of the case study summarises the conclusions and new insights within the three separate subsections. Each subsection summarises its evaluation in terms of the scale range starting with host communities through to functional design.

The specific and intensive nature of the PARF's clinical program has provided a good vehicle for a large degree of design lead enquiry of the possibilities of the Design Guideline objectives. It can be assumed that the product of a less intensive SRCF model would be much more subtle and would potentially touch on a number of appropriate objectives for its clinical program.

HOST COMMUNITY

Kilbirnie is an appropriate host community context; the current and future demographic of apartment dwellers, infill housing, residential housing and social housing provides socioeconomic diversity, allowing MH consumers to relate to others within the community through culture, age, gender and personal life styles whilst also generating acceptance, being different in a context that openly recognises difference.

As demonstrated, Kilbirnie has a large cluster of appropriate community amenities for MH consumers. Additionally, it also has the best MH amenities network, one that is

well linked through a safe pedestrian environment. The Kilbirnie context confirms earlier observations that a relatively diverse socioeconomic context has high levels of public amenities useful to consumers, **Figure 8**.

The co-location of services is successful within this Design Case Study yet, on reflection, the articulation of the PARF within the overall development is too subtle. This could be corrected by changing the cladding of the greater cedar clad volume. Whilst the glazed atriums are a clear expression of separation of services, the articulation in the quality of cladding should be better defined to improve the distinction of the PARF from other services. A means of disclosing the realms of the facility to the public.

This case study exemplifies the implication of city planning upon the location and the possibilities for the PARF. PARF's and SRCF's are not specifically considered within New Zealand cities planning conditions. The Kilbirnie planning context has two planning zones as described above, **Figure 45**. Because of the proposed size of the facility the PARF is not a 'permitted activity' within the residential zone meaning it must be located within the suburban centre zone. The empirical research defined the 'inner edge context' to be the edge of the suburban centre and the residential context. It was the research's assumption that this context was within the residential context of this edge. When translated to city planning zones the selected site for the proposed PARF is developed within the suburban centre zone. This highly prominent mixed-use setting, while contrary to earlier assumptions, remains within the 'inner edge context.' The selected site context both was and is a successful location for a PARF, however the consequence of this location is a high land value, totalling approximately 2.7 million dollars, due to the development possibilities of the suburban centre zone, see **Appendix 11**

 Newtown, in reflection, is differently zoned to that of Kilbirnie, with the inner residential zone being a planning threshold between outer residential and the suburban centre zone, see **Figure 41**. Because of this Newtown, as a host suburb, provides a greater variation of context for PARF's to be developed within, ranging from the suburban centre zone (Design Case Study) to the inner residential zone. The inner

residential zone remains within the proven 'inner edge context' in contrast to the high value of the suburban centre zone in Kilbirnie; development within the inner residential zone provides opportunity for more spatially defined cluster facility designs, accommodation built at ground level and less demand for multi storey construction. The diversity of planning context within Newtown does not prescribe Kilbirnie as a poor host community, rather its brings to attention the degree of planning, and site selection freedom gained by having a diverse planning context.

SITE

Kilbirnie's town centre plan has provided an opportune window for development of the proposed PARF. The empirical research identifies the difficulties of acquiring sites for development due to existing neighbours refusing consents (NIMBY) and scarcity of large parcels of land. Locating the PARF within a larger development context allowed the articulation of this mixed-use location to avoid the unnecessary conflict that the development of a PARF or SRCF can have upon existing neighbours.

Locating the PARF within a mixed-use environment encapsulates the rigour of the 'inner edge context'. The 'inner edge context' founded site successfully provides the threshold context useful in designing a PARF or SRCF. The threshold context is sufficiently diverse to affirm the PARF as a recovery oriented facility, yet makes clear reference to the residential context linking to the overall goal of the community based mental health system - returning MH consumers to their own homes.

All of Kilbirnie's public and MH amenities are located within the favourable 500 meters of the PARF development. Kilbirnie has a defined public amenities cluster 300 meters north of the selected site. By locating the PARF somewhat remotely (200-400 meters) from MH and community amenities this draws the MH consumers through the pedestrian friendly Kilbirnie town centre.

C Nolan recognises in a critique of the this design that: "*locations with key functions established within facilities in community settings have an 'automatic' hub function with tentacles that extend beyond the doors of the perimeter" (Nolan, 2010)* The

PARF, in combination with the community garden, extended urban renewal scheme and community utility room provides this level of 'automatic' hub function. The prominent location of the PARF allows the wider town centre to be conveniently used as a context of integration.

Whilst the PARF successfully acts as an automatic hub, the PARF must also be recognised as only a small element within the greater MH system. As the community care entry point the PARF is a significant milestone for MH consumers and those recovered from mental illness. SRCF's, because of their existing nature and location, often do not have the possibility of creating a MH or community amenity. C Nolan identifies that "*a single programme, even an attractive one which enhances urban environments, like a garden, is not sufficient to embrace the range of needs/wishes that would form part of the profile for the small consumer community that would exist (and change over time) there*" (Nolan, 2010). This PARF has offered the community garden as its PARF's mechanism for integration. This PARF alone does not provide the diversity of integrative programmes required for a community such as Kilbirnie, however the combination of MH facilities dispersed throughout the community creates a network of amenities, encouraging MH consumers to integrate throughout the wider community. The success of the 'inner edge context' is proven within the design but is equally applicable to the location of SRCF's. SRCF's are typically less intensive than the proposed PARF and are unlikely to be able to fund intensive integration programs such as community gardens. Regardless, locating SRCF's within the 'inner edge context' remains valid positioning, with MH consumers being in a location conducive to the integration of MH consumers within the host community.

FACILITY DESIGN

The proposed development of a mixed-use environment is recognised above for its potential to develop an appropriate surrounding context for the PARF but, more specifically, it provides the opportunity for a purpose built facility. Empirical research reveals purpose built SRCF's facilities are scarce in New Zealand's broader context and nonexistent within Wellington City. The ability to purpose build within Wellington must be recognised as a unique opportunity produced by locating the

proposed PARF within the 'inner edge context'. The 'inner edge context' typically provides more flexibility in building volume size and use. Locating the proposed PARF within an empty lot proposed for development provided this design case study with the appropriate flexibility, addressing the research findings on the most appropriate integration of MH consumers within their host community.

Retrofitting existing buildings is the common reality of MH facilities due to the high capital investment involved in purpose built design. Retrofitting can be effective, yet purpose built design has allowed this design case study more flexibility. In order to understand the financial implication of purpose built design and to evaluate whether this facility is realistically possible within the realms of MH sector the project development cost of the design has been estimated. This estimation is based on Rawlinson's Construction Handbook, (Rawlinsons, 2009) attached as per **Appendix 11.** The overall development cost of the proposed PARF site, including apartments and associated cafe and community utility room and the purchase of land, is 14.4 million dollars, including Goods and Services Tax. Of this, the PARF and garden make up 48 and 22 percent respectively, meaning a total of 70 percent, or 10.1 million dollars, of the total development cost. The remaining 30% - 4.3 million dollars - of the total development costs are attributed to the 4 apartments, cafe and community utility room. Creating a mixed use built context within the PARF site results in the development costs of the purpose built PARF being 6.9 million, equating to 820,000 dollars per bed. The clinical program function of the 'community entry point' is relatively unique, making cost comparison difficult with other MH facilities. The most recent purpose built facility in New Zealand was completed in 2001; the Tauranga Acute Mental Health Facility, with 26 beds, equated to a present day development value of 370,000 dollars per bed, an estimate which excluded land costs (Department of Building and Housing, 2007) (King, 2001). Whilst it is difficult to predict the operating costs of this PARF it is evident that the cost consequence of an intensive short term recovery orientated facility, low bed capacity (12beds), prominent 'inner edge context' site, private and commercially zoned site and associated community garden instigates a proportionately higher cost per bed than that of a acute facility. Due to the short term clinical programme of the PARF it is intended that MH

consumers recover quickly meaning a reduction in recovery time and resultant reduction in cost of community secondary and tertiary based care. Providing a purpose built and high quality care is important in affirming that MH consumers are valued and deserve high quality care in society.

'Cluster' versus 'facility' designs are the two recognized planning types, each with their advantages and disadvantages. Facility design lends itself to an inpatient setting, while the cluster design provides a more diverse and flexible provision of care typical of outpatient care. The proposed PARF design was recognised by C Nolan to have both types of design. Because of the relatively small size of the PARF and identified clinical program function of the 'community entry point', the PARF only provides two levels of care; typical and intensive care units. With 12 bedrooms in total the design is separated into 3 clusters of consumer types; 5 female bedrooms, 5 male bedrooms and 2 unisex intensive care bedrooms. Clusters are linked with the communal space demonstrated in the PARF design. In an attempt to provide green space on the site the building itself strives to be spatially efficient, acting as a 10m wide band that traces the Childers Terrace boundary within the inner green space. Whilst these clusters are present internally within the PARF, externally the PARF reads as a 'facility,' lending itself to the unhelpful description of an 'institution'.

The qualities of this mixed-use environment combined with the suburban centre zoning defined multi-storey construction as the most commercially sensible option. Separate spatially defined clusters were considered yet were found to be an inefficient building form in this context. This design externally defines the entire PARF as a 'facility' providing the community with a clear understanding of the whole facility. The critique provided acknowledged that the PARF's 'facility' perception provides the potential for the PARF to be a receptor of stigmatisation, with more spatial defined clusters being potentially more helpful in defining the level of care to its MH consumers. While valid, the program and fulfilled service gap of the PARF is to provide short term recovery oriented care, and must be recognised as one dedicated cluster amongst the greater mental health care system. The design does not provide support for the full duration of recovery, rather only a portion of the recovery striving to foster integration. There is potential for the clusters to be expressed further within

the facade design, yet this does not resolve the potential for the proposed PARF to be read and compared to historic institutions. This stigmatisation is a product of the lack of existing disclosure of the mental health system. This facility strives to disclose a portion of the mental health system, yet it must be appreciated that its limitation to do so depends on the wider understanding of the mental health system by the public.

The PARF's common ground floor does not sufficiently acknowledge the diversity and difference amongst MH consumers. The format of the space is short of individual annexes with the majority of the inner crest being group space. At present the separate utility spaces offer the context for individual spaces, but the one space provided is insufficient (**Figure 67**). The partition walls that define the hall and associated spaces within ground level present a relatively austere space that was criticised for its commercial and hotel like appearance. While not fully realised, these walls can potentially be decorated canvases, showing the diversity of cultures and other personal expressions drawn from within the community of MH consumers.

The community garden is a significant and successful interface (both spatial and behavioural) between the host community and mental health consumers. Gardening and horticulture has been employed historically within psychiatric institutions and today NGO's run gardening programmes overseas to provide therapy and foster interaction between individuals. Gardening as an interface continues to be successful in today's context because of its links to domestic living, its multi cultural significance, its beauty and the ability for the garden to provide a context for varied and diverse level of involvement. These qualities give each occupant within the garden a common interest, initiating the potential of discussion and the exchange of skills and knowledge, bases to build genuine relationships between individuals. This idea is summarised by Milligan, who sees contemporary British community garden allotments as "relational spaces in which gardening, as a social activity, acts as a mechanism for overcoming exclusion" (Milligan, Gatrell, & Bingley, 2004, p. 1783). A more thorough examination of gardening as therapy and a peer support environment is explored within **Appendix 11** including two contemporary case studies.

Gardening beyond the parameters of therapy is a useful programme to initiate potential joint funding by the NGO funding the PARF and the WCC. Typically the lease of MH facilities is long term, presenting a degree of security to potential private or public funded developers.

With Kilbirnie's forecasted increase in population and present shortage of urban green space the proposed community garden is an appropriate amenity for this context and community. Gardening must not be recognized as the only programme for integration, but is suited to the Kilbirnie town centre, with the physical and social qualities of its surrounding suburbs. Programmes for integration must be sculpted around the deficiencies and opportunities provided by MH consumers and their host community. This PARF, due to its intensive nature, has the ability to provide a relatively capital intensive interface or programme. SRCF's within their existing contexts cannot provide this level of dedicated programme and neither is it appropriate for SRCF's to act as 'hubs'. SRCF's should encourage integration through less capital intensive programs that may operate on a semi regular basis. Drawing upon the potential for the PARF to provide the centralised community garden is successful for the wider development of the urban renewal scheme.

6.CONCLUSION

Both the location and the physical design of SRCFs can increase integration with the host community and reduce the stigmatisation of Mental Health consumers. At the same time, an 'inner edge' location can result in higher capital and operating costs, and may lead to a larger more centralised facility than would be the case with conventional SRCFs.

This chapter is a summary and discussion of the overall findings and methods used within this thesis, separated into the following sections:

7.1   Research Statement

7.2   Final conclusions of research findings

7.3   Evaluation of research framework

7.4   Opportunities for further research

6.1   Research Statement

"The research examines the relationship between Supported Residential Care Facilities (SRCF's) or "half-way houses" and their host community. The research asks whether stigmatisation of Mental Heath consumers can be reduced by the optimising the location of the SRCF and by increasing physical integration between the facility and its host community."

6.2   Final Conclusions of Research Finding

This section of the conclusions chapter presents the culmination of research findings to address and improve the degree of integration of Supported Residential Care Facilities within New Zealand host communities.

The poor integration of MH consumers stems from the discrimination received from society, internally defined as 'societal stigmatisation' and consequential 'self stigmatisation'. The literature review revealed that there is significant research into the sociological background of stigmatisation; however there is a distinct lack of robust research conducted on the effects that the built environment has upon societal and self stigmatisation globally, with no scholarly research undertaken within New Zealand post deinstitutionalisation.

Due to the lack of precedent this thesis builds upon the sociological objectives set by the MHFNZ's recent research and public campaign, " *Fighting Shadows,"* addressing methods of combating societal and self stigmatisation within New Zealand, but not limited to its sociological parameters (Peterson, et al., 2008).

The empirical research examines the existing stock of SRCF's within the Wellington region informed by the sociological understanding of societal and self stigmatisation of 'Fighting Shadows' within the literature review. The Empirical research explores the three scales within the thesis; host community, location and facility design, by methodically analysing the socio-economic context of host communities, the physical context of SRCF's surrounding locations and the built typology of existing SRCF's.

Findings are summarised as a design guideline. The guideline is a summary of the empirical and literature research findings and a prerequisite used by the design case study to identify possibilities and make informed conclusions. The proposed contextual design within the Design Case Study whilst an SRCF, is renamed as an Psychiatric Accommodation and Recovery Facility or PARF for the purpose of clarity within this thesis. Due to the intensive nature of the PARF clinical program, this specific SRCF (PARF) within the realms of a realistic brief was able to test the majority of objectives set by the Design Guideline. Whilst the specific clinical programme of the PARF diverts the attention of the thesis to a small sector of the community care sector, the conclusions as well as the Design Guideline described below are relevant for both the design and location of PARF's and SRCF's, and must be understood taking into account both the possibilities and limitations of the context of the relevant facility.

On conclusion of both the Design Guide and Design Case Study it was found that overall findings were and are most specific to Host communities and Site selection scales whilst findings associated with the Facility Design recognised opportunity within objectives set yet were less definite.

Host communities must provide a level of public and MH amenities that are comparable with the standards of other amenities within the wider region. In this thesis a suburban/town centre was tested for it appropriateness and it was proven to potentially be a successful host suburb. Before choosing a site it is important that amenities are identified as being well linked through a pedestrian friendly environment. The socioeconomic context of a host community should ideally be

diverse, providing a context where MH consumers from all walks of life are accepted in an centre that celebrates difference. Both Empirical Research and the Design Case Study confirm that host communities that are relatively deprived provide a greater provision of amenities useful to MH consumers. The Design Case Study identified the implications of the planning context of host communities on location, size and scale of the proposed PARF or SRCF.

The location of SRCF's and in PARF's should be located within the 'inner edge context'. The inner edge context describes the urban edge condition between a suburban/urban centre and the immediate residential context that surrounds it. The empirical research conclusively identifies that the inner edge context provides both the best location for accessing amenities, the most socioeconomically diverse area, the most opportunity for planning flexibility and is a mixed-use context providing a safe pedestrian environment. The strength of this empirical research conclusion is confirmed within the Design Case Study as it explores the potential of integrative programmes. Locating the PARF within the 'inner edge context' provides a location that enables the wider host community to easily access the proposed facility. The site should be located within 500m of the majority of public and MH amenities yet not adjacent to the amenities, encouraging MH consumers to use and interact with the urban/suburban centre and its wider dwellers.

Mixed-use environments are both typical of the 'inner edge context' identified yet also provide the level of surveillance necessary to create a safe pedestrian environment needed for a intensive clinical programme such as the PARF. Whilst SRCF's do not need the degree of surveillance necessary for a community garden, providing a high level of public surveillance and clearly defining the limits of the facilities site provides a greater degree of disclosure and perceived safety, which encourages the host community to feel safe in community psychiatry environments.

The design case study acknowledges the benefits of a purpose built facility, but also broadly demonstrates the benefits of locating a proposed facility amongst a wider development such as the Bay Road precinct of the Kilbirnie Town Centre Rejuvenation Plan (McIndoe Urban, et al., 2009b). Locating a proposed facility within

a development context provides the opportunity for the surrounding areas to support its presence, avoiding the NIMBY syndrome. The design case study further identifies that locating a MH facility within an under-developed site or building and improving the quality of urban space through its development provides a good context for the contribution of MH consumers and their facility to be recognised within the host community. This is particularly significant during initial stages of development and initial occupation of the facility as this period typically creates highest levels of societal stigmatisation (NIMBY).

It must be understood that as a consequence of locating the PARF or respective SRCF's within the 'inner edge context' land value is higher, the intensive nature of development results in larger scale buildings and consequential centralisation of services which is not consistent with the understood cluster model.

The Facility design of the PARF is vital in realising the Design Case Study yet it must be understood that only select components of the design contribute to the integration of MH consumers within their host communities. These includes the co-location of services, shared common ground floor, the public perception of the built facility and the community garden.

The co-location of services was primarily introduced to reduce the development cost of the PARF facility, recognising that the site selected not only provided an appropriate context for the PARF but, by developing the most valuable portions of real-estate commercially, would improve the business case for such a PARF located within the inner edge context. The co-location of services, while making the PARF a more financially feasible option, also provides an intermediate scale of physical integration for MH consumers closer than the extended integration of the PARF with the Garden lane Apartments or residential housing on the Childers Terrace hillside.

Empirical research identifies the privatised model of the residential home which existing SRCF's typically occupy as an inappropriate recovery oriented environment. Both SRCF's and PARF's alike must provide a degree of dedicated space for family, friends and the wider host community to visit. Beyond this MH facilities should

encourage visitors to participate within the wider living space of the PARF whilst both MH consumers and visitors feeling safe. This is partially achieved within the Design Case Study through the provision of diversity of spaces, from communal to individual annexed spaces to suit varied levels of interaction between consumers. These spaces, while not conducive to integration specifically, are further advanced through the respect and fostering of different cultures and those with varied forms of mental illness.

The public perception of the built facility as expanded upon within the Design Case Study is open at a multi level debate regarding notions of institutionalisation, identity, and domesticity. It must be concluded that the most significant functions of the building facade are to disclose the location of the PARF or SRCF, its identity, its purpose as an MH facility and to reveal the facility to the public as MH consumers rely upon the peer support of the wider host community to aid their recovery.

Community gardening must be understood as only one of many possibilities in generating an integration programme. The community garden is a significant and successful interface for integration and defines what is identified as the 'integration program'. Integration programmes must not be prescribed but, rather, sculpted from the possibility and quality of the facilities host community and the community of MH consumers occupying proposed or existing facility.

The clinical program of the PARF as the 'entry point' to community psychiatry justifies its function as a major MH amenity or MH community hub. It is important to realise that this PARF alone, with its associated community garden, will be limited in its effectiveness to disclose and normalise mental illness by how overt the wider mental health secondary and tertiary community care sector is to the public. SRCF's do not have the financial capability to support such extensive integration programmes such as the community garden possible under the PARF. SRCF's as MH amenities set within the community more appropriately may provide integration programmes within their capability e.g. programmes on dedicated occasions rather than every day. Disclosure of mental illness must be present within the whole community rather than at a sole entity (PARF). By locating amenities both big and small, dispersed yet linked

within the host community, societal and self stigmatisation is hoped to be reduced through the integration fostered.

6.3   Evaluation of Research Framework

Understanding the implication of the built environment upon differing symptoms of mental illness is unrealistic within the context of New Zealand's MH system. Societal and self stigmatisation has defined a constructive scope for this research that builds on the sociological research summarised within the literature review.

It is important to recognise that this research, while relatively unprecedented, relies heavily upon the MHFNZ's research paper; *Fighting Shadows,* and its eight recommendations to combating societal and self stigmatisation through recovery oriented practice (Peterson, et al., 2008).

This thesis is most appropriate to the Wellington Region; while attempting to explore the wider context of community psychiatry amongst New Zealand communities, there is a degree of bias toward Wellington. Wellington's wider demographic is representative of New Zealand's population, however, C Nolan suggests that Wellington is in a unique situation due to its *"inner-city pressure"* (Nolan, 2010) referenced to its geography and the scarcity of appropriate SRCF sites.

The majority of empirical research conducted within this thesis has been conducted via observation. Attempts were made through a questionnaires and interview requests of NGO's located within Wellington City for user feedback (**Appendix 4**), however no response was received from the six NGO's asked. To further validate the research, beyond the present limitations of the existing literature and empirical research, a more thorough enquiry of the user group of SRCF's must be undertaken. C Nolan notes that consumer input, along with clinical and family input, is essential to the design process (Nolan, 2010). The specific qualifications of the researcher, Stephen Geuze, limit the degree of trust and understanding appropriate to interpreting feedback from user groups within the realms of psychiatry. Research of this nature is best undertaken

alongside a skilled psychiatrist enabling the responses of MH consumers to be fully understood.

The empirical research can be understood as a relatively conclusive volume of research in its own entirety. The conclusive nature of this research can be attributed to the use of precedent research methods and a relatively large research sample. The urban analysis was the most conclusive, with methods such as socioeconomic mapping, figure ground analysis and amenity analysis used. The result from the relatively convincing conclusion was a guideline that presented clear objectives enabling an appropriate host community and location to be selected within the Design Case Study. The architectural analysis was less conclusive and fielded a large degree of insight into the failings of the existing stock of SRCF's. This is attributed to the relatively similar nature of the research sample and the lack of insight into user group based research and less precedent research methods - plan search and photo comparison. The result of this is evident within the Design Guideline and Design Case Study as the results are less conclusive and provide less insight into possibilities of design.

6.4   Opportunities for Further Research

Opportunities for further research are present both within and outside the scope of this thesis. Within the scope of this research further empirical research of the MH consumers interpretation of the existing built stock of PARF's is necessary. This includes an enquiry both of the built facility, wider location and host communities. This may take the form of interviews, cognitive mapping, and behavioural studies. The integration programme is only partially explored within this thesis and the proposed PARF. The possibilities for smaller scale SRCF's should also be explored. This may be done through further literature reviews and analysis of existing SRCF's, their consumer community and their host communities.

The garden provides light on horticulture and the connection with 'work 'as therapy. The proposed design case study indicates its provision as the hub for an urban renewal scheme through gardening, encouraging MH consumers to 'work'. Beyond the realms

of SRCF's it presents an effective tool to further community psychiatry worthy of further investigation.

7.REFERENCES

Borden, D. (1972). Visual organization and thematic map design (1 ed. Vol. 1): Georgia State University Press.

Clark, C., Myron, R., Stansfeld, S. A., & Candy, B. (2007). A systematic review of the evidence on the effect of the built and physical environment on mental health. Journal of Public Mental Health, 6(2), 14.

Corrigan, P., & Rusch, N. (2002). Mental illness stereotypes and clinical care: Do people avoid treatment because of stigma. Psychiatric Rehabilitation Skills, 6(3), 312-314.

Cramp, G. (2010). NZ Mental Health Services. In S. Geuze (Ed.) (pp. 1). Gisborne: Stephen Geuze.

Daumit, Gail, L., MD, Goldberg, M., Ph, W. R., Anthony, et al. (2005). Physical Activity Patterns in Adults With Severe Mental Illness. The Journal of Nervous and Mental Disease, 193(10), 641-646.

Department of Building and Housing. (2007). Identification and analysis of building consent, inspection and approval costs: Economic environment.   Retrieved 27,11,2010, 2010, from http://www.dbh.govt.nz/bc-approval-costs-2

Foucault, M. (1967). Madness and Civilisation: The History of Madness and an Age of Reason. London: Tavistock.

Gordon, S. (2008). Fighting Shadows: Self Stigma and Mental Illness. In D. Peterson, A. Barnes & C. Duncan (Eds.), Forward Note (Vol. 1). Wellington: Mental Health Foundation of New Zealand.

Guite, F. H., & Clark, C. (2006). The impact of the physical and urban enviroment on mental well-being. Public Health, 120(12), 1117.

Harnik, P. (2010). Urban Green: innovativeparks for resurgent cities (Vol. 1). Washington: Island Press.

Heath, T. (2009). KILBIRNIE TOWN CENTRE ASSESSMENT-Property Economics.

Ireland, M., & Simmons, K. (2008). The Gathering Tree Community Garden, Inclusive development-working with the marginalised and disadvataged (pp. 7). South Australia: Adelaide Central Community Health Service, Prospect East, SOuth Australia, Australia

Eatsern Community Mental Health Service, Enfield, South Australia.

Jorm, A. F., Barney, L. J., Christeansen, H., Highet, N. J., Kelly, C. M., & Kitchener, B. A. (2006). Research on mental helath literacy: what wek know and what we still need to know. Australian and Newzealand Journal of Psychiatry, 40(1), 3-5.

King, A. (2001). New acute mental health unit at Tauranga Hospital.   Retrieved 3,09,2010, 2010, from http://www.scoop.co.nz/stories/PA0108/S00220/new-acute-mental-health-unit-at-tauranga-hospital.htm

McIndoe Urban, Athfield Architects Ltd, & Wraight + Associates Ltd. (2009a). Crime Prevention Through Environmental Design (CPTED) Considerations: KILBIRNIE TOWN CENTRE.

McIndoe Urban, Athfield Architects Ltd, & Wraight + Associates Ltd. (2009b). Kilbirnie Town Centre Plan.

Milligan, C., Gatrell, A., & Bingley, A. (2004). Cultivating Health. Social Science and Medicine, 58, 1781-1793.

Ministery of Transport. (2009). Walking for transport: Ongoing New Zealand Household Travel Survey 2006 – 2009.

Ministry of Health. (2002). Criteria for the Design and Refurbishment of Psychiatric Acute and Intensive Care Facilites.

Ministry of Health New Zealand. (2007). Like Minds, Line Mine: National Plan 2007-2013.

Ministry of Justice. (2008). Crime Prevention Through Environmental Design – Draft New Zealand Guidelines.

Ministry of Social Development. (2002). Mental Health and Independant Housing Needs: Part 4 (Vol. Part 4 pp. 16): Ministry of Social Development.

New Zealand Herald. (2009). Man arrested after death at halfway house. The New Zealand Herald.

Resource Managment Act(2009).

Nolan, C. (2010). Study of Psychiatric Accomodation. In S. Geuze (Ed.). Wellington: Stephen Geuze.

Nottingham Borough Asylum. (1881). Nottingham Borough Asylum Annual Report. Held at Medical Library, Duncan MacMillan House, Nottinghamshire Healthcare NHS Trust, Nottingham: Nottingham Borough Asylum.

Oxford University. (Ed.) (2004) Concise Oxford English Dictionary (11 ed., Vols. 1). New York: Oxford University Press.

Paine, T. (1998). Housing and Housing Support in New Zealand for people with Mental Illness: paper prepared for the Mental health Commission: Mental health Commision.

Parr, H. (2007). Mental helath, nature work, and socila inclusion. Enviroemnt and Planning D: Society and Space, 25, 537-561.

Pere, L., Gilbert, H., & Peterson, D. (2001). Government Policy project: Issues Paper 2: Discrimination in Housing.

Peterson, D. (2003). Respect Cost Nothing: Discrimination against Mental illness in realtion to community (pp. 80). Wellington: Mental Health Foundation of New Zealand.

Peterson, D., Barnes, A., & Duncan, C. (2008). Fighting Shadows: Self-Stigma and Mental Illness.

Rawlinsons. (2009). Rawlinsons 2009 New Zealand Construction Handbook (Vol. 2009): Rawlinsons Media Limited.

Salmond, C., Crampton, P., & Atkinson, J. (2007). NZDep2006 Index of Deprivation (pp. 1-61). Wellington: Department of Public Health University of Otago, Wellington.

Statistics New Zealand. (2005). Downtown Dwellers New Zealand's CBD Residents. Statistics New Zealand, 1(1), 46.

TerraMetrics NASA (Cartographer). (2010). Google Earth.

Topp, L., Moran, J. E., & Andrews, J. (Eds.). (2007). Madness, Architecture and teh Built Enviroment: Psychiatric Spaces in Historic Context (1 ed. Vol. 1). New York: Routledge.

Townsend, P. (1987). Deprivation. Journal of Social Policy, 16(2), 125-146.

Vorstermans, R. (2010). Kimberley Hospital Deinstitutionalisation and Housing Retro Fit. In S. Geuze (Ed.) (pp. 1). Wellington: Stephen Geuze.

Wellington City Archives. (2010). Property Search Requested Plans for Several Propertys.

Wellington City Council. (2006). Wellington District Plan.

Wellington City Council. (2009). Guidelines for Design Against Crime.

Wellington City Council. (2010). Wellington City District Plan: Suburban Centres.

White, P., Gunston, J., Salmond, C., Atkinson, J., & Crampton, P. (2008). Atlas of Socioeconomic Deprivation in New Zealand NZDep2006.

APPENDIX INDEX

8.APPENDIX

13. The facility design needs to accommodate:

Privacy for patients	Support for clinical functions and observation
Safety and security for patients	Safety and security for staff
Domestic scale (homeliness)	Welcoming public spaces
Domestic feel	Durable materials
Least restrictive environment	Secure space for detainment
Gender safe, age safe, culture safe places	Space for inclusive social interactions
Retreat/ sanctuary	Choice of spaces for different activities
Autonomy	Sense of belonging
Specifically designed intensive care facilities	Flexible spaces

Be clear about both current and future requirements
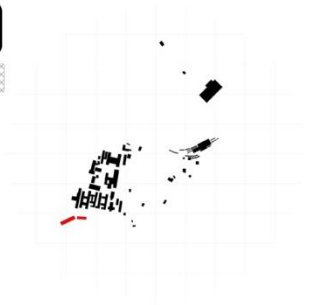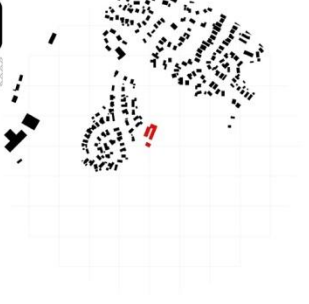
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AMMENITIES CORRELATION

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(5 BED MIN)

SRCF 1. 1:5000
FIGURE GROUND PALN

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PYSCHIATRIC ACCOMDATION
(5 BED MIN)

SRCF 1. 1:5000
AMENITY PLAN
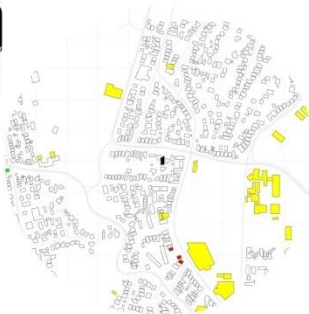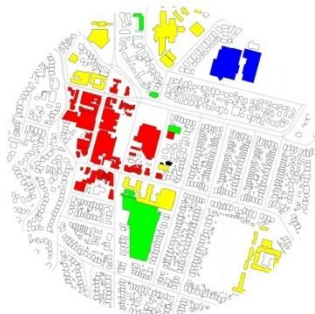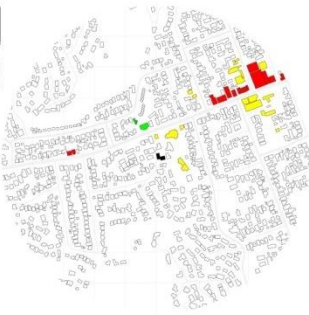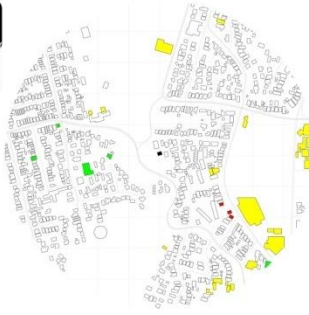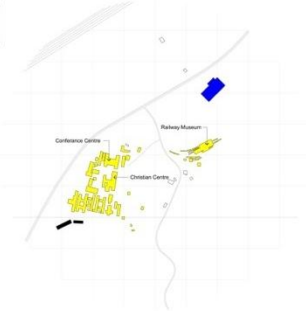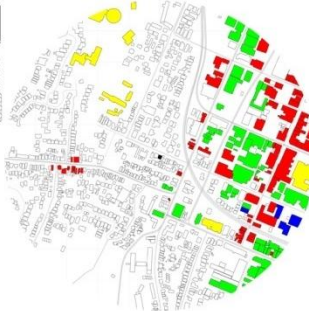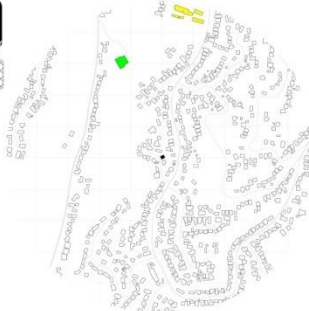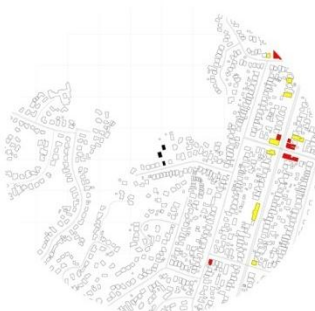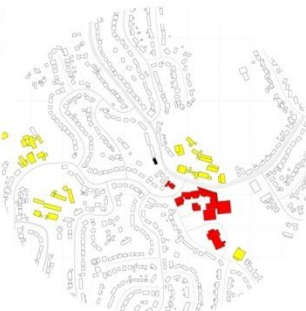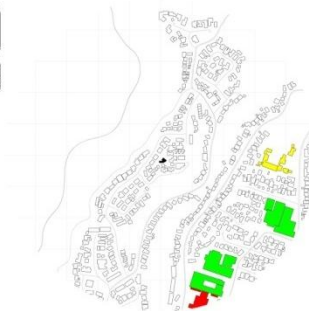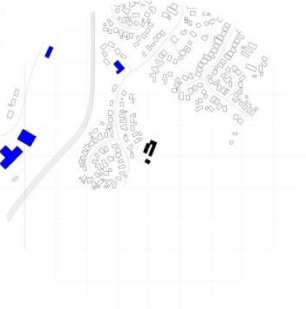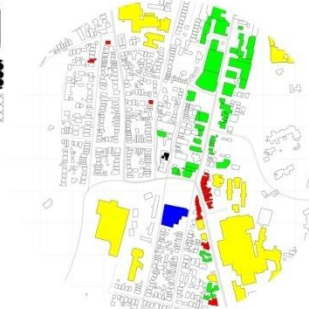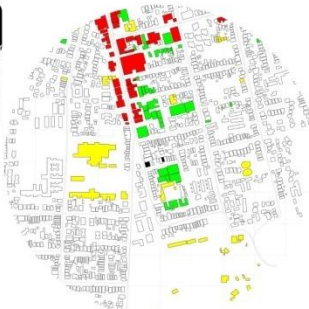
COMMUNITY   RETAIL   COMERCIAL   INDUSTRIAL   RESIDENTIAL   MH FACILITY
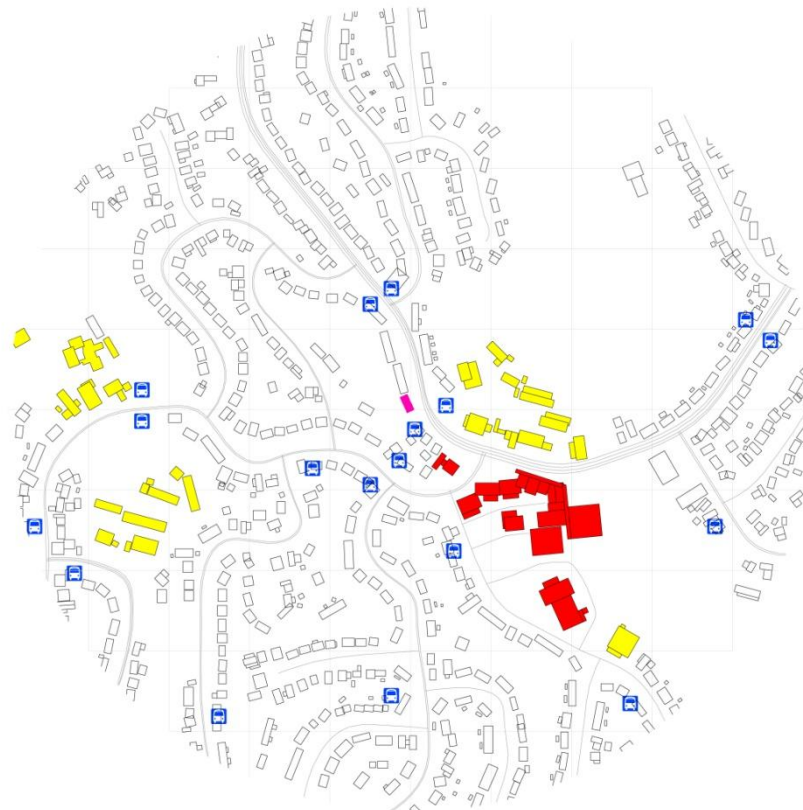
SRCF 2o
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AMENITY PLAN

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FIGURE GROUND PALN

Railway Museum

Conferance Centre

Christian Centre
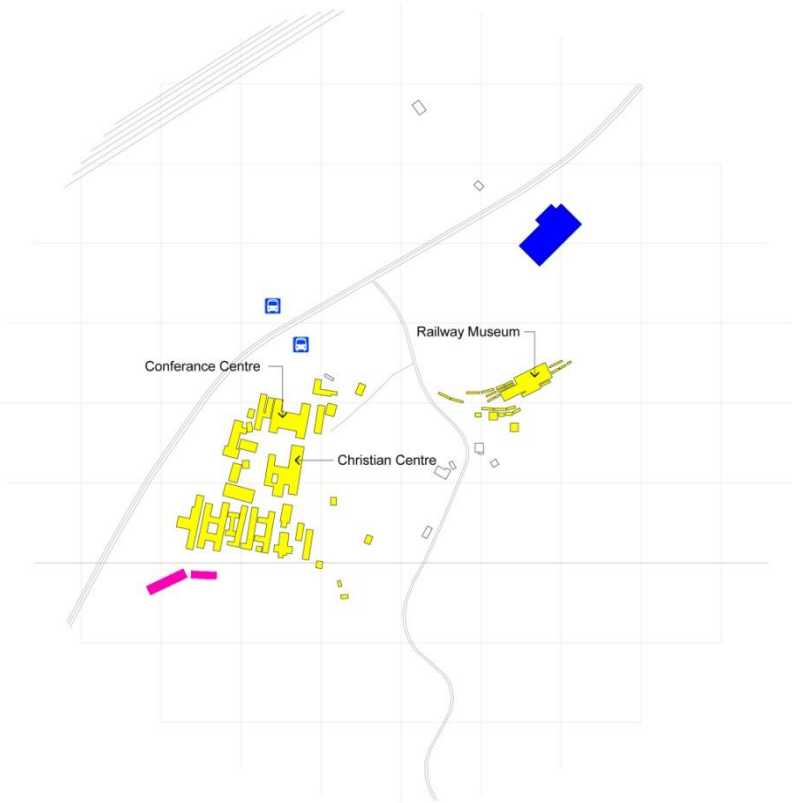
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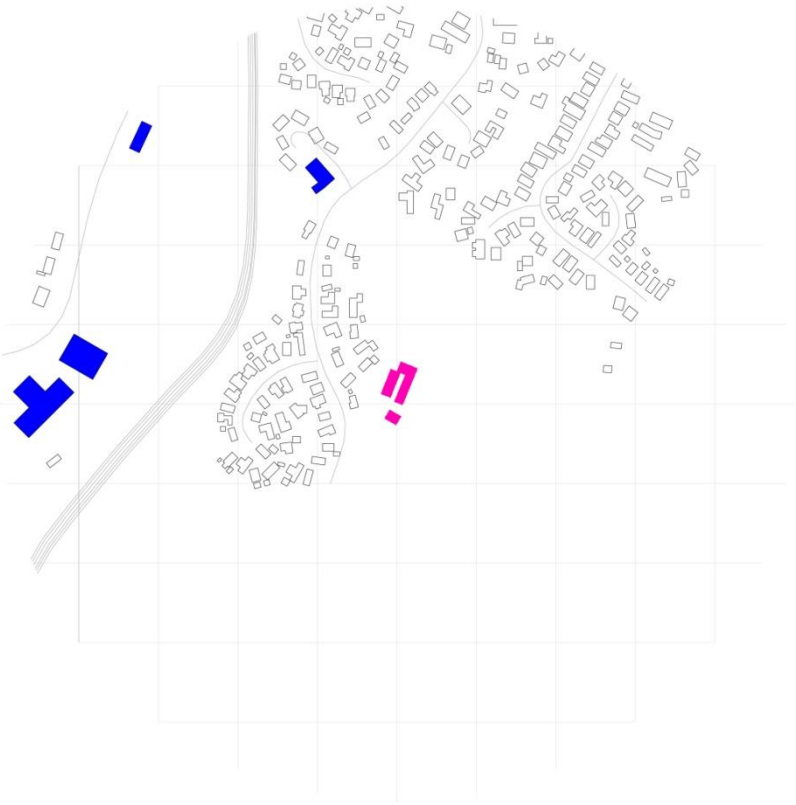1:5000

AMENITY PLAN

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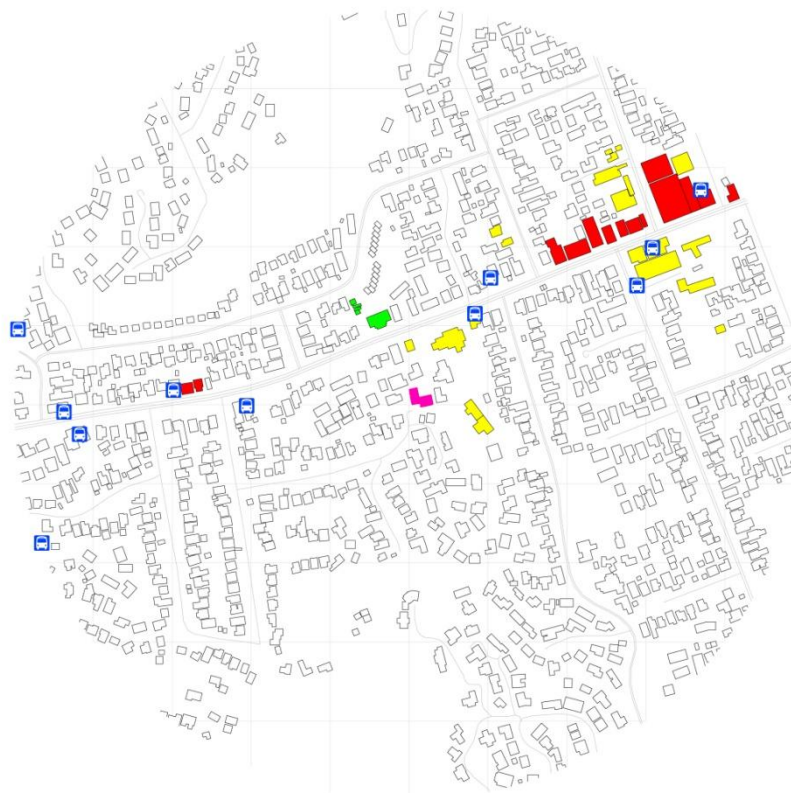
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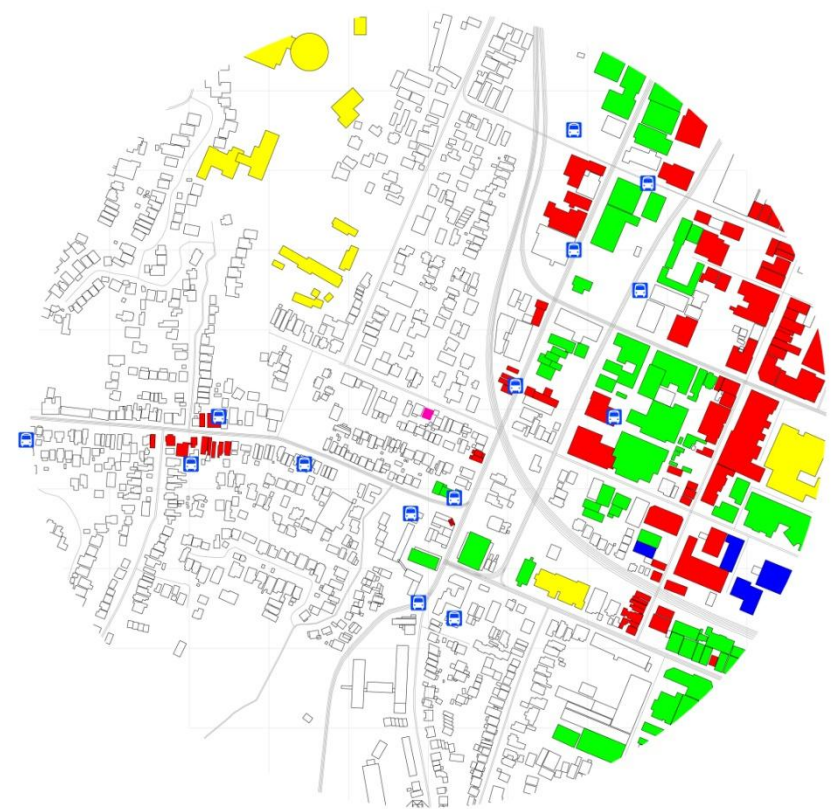SRCF 12°
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SRCF 12°
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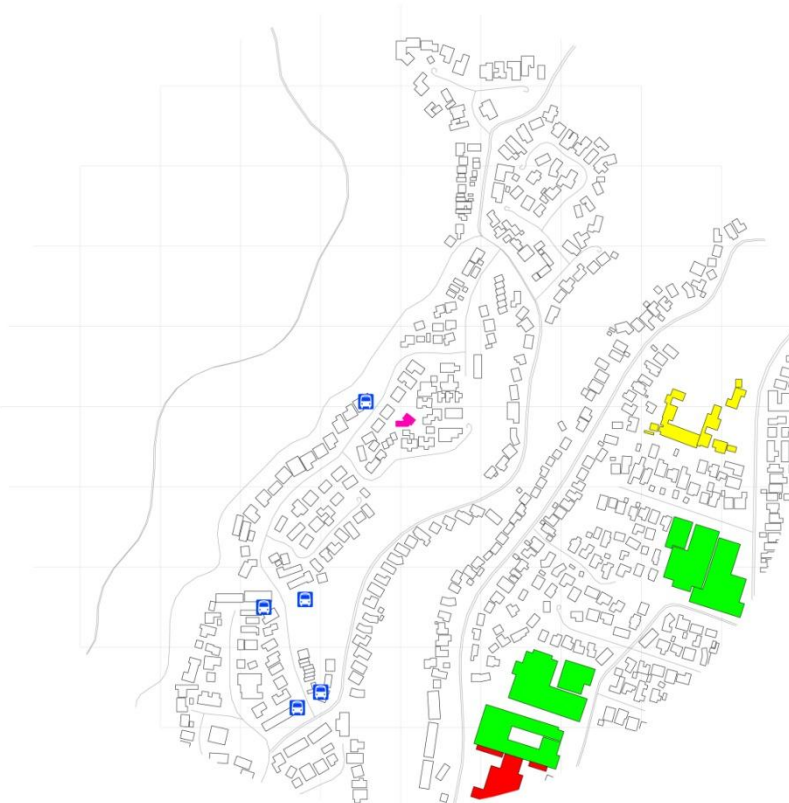
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AMENITY PLAN

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SRCF 14.
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AMENITY PLAN

SRCF 15₀
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AMENITY PLAN

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AMENITY PLAN

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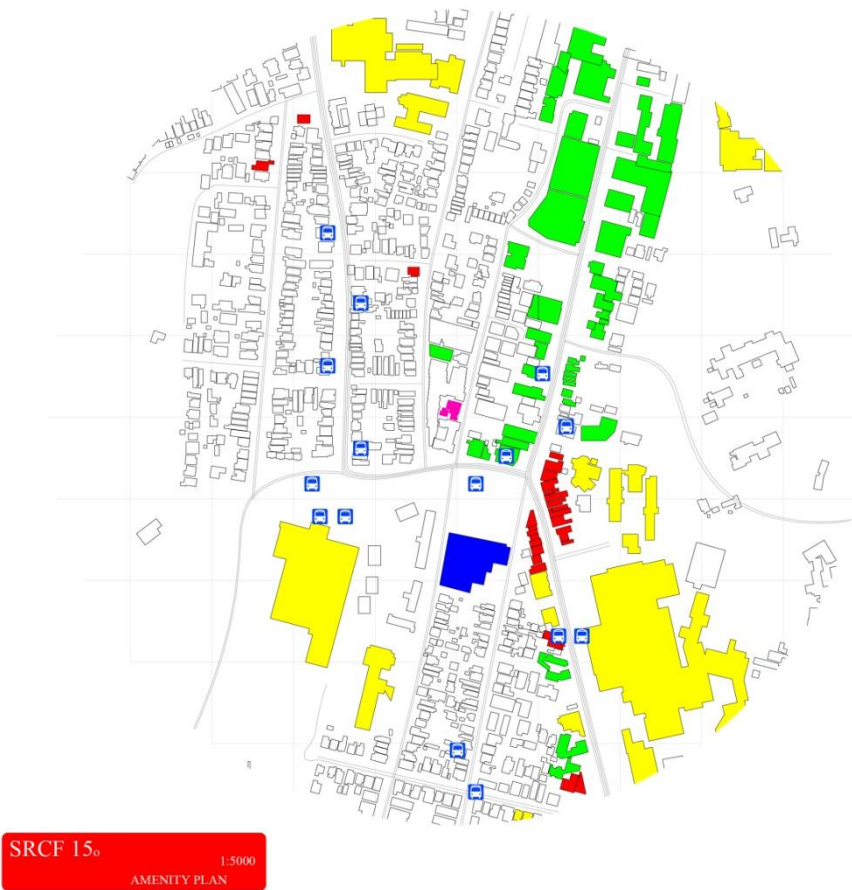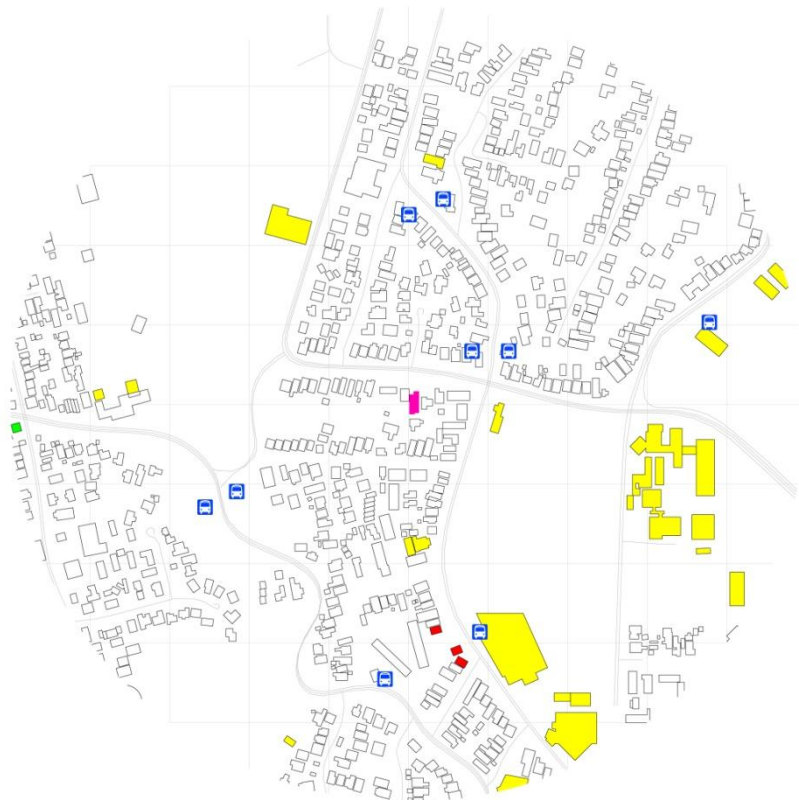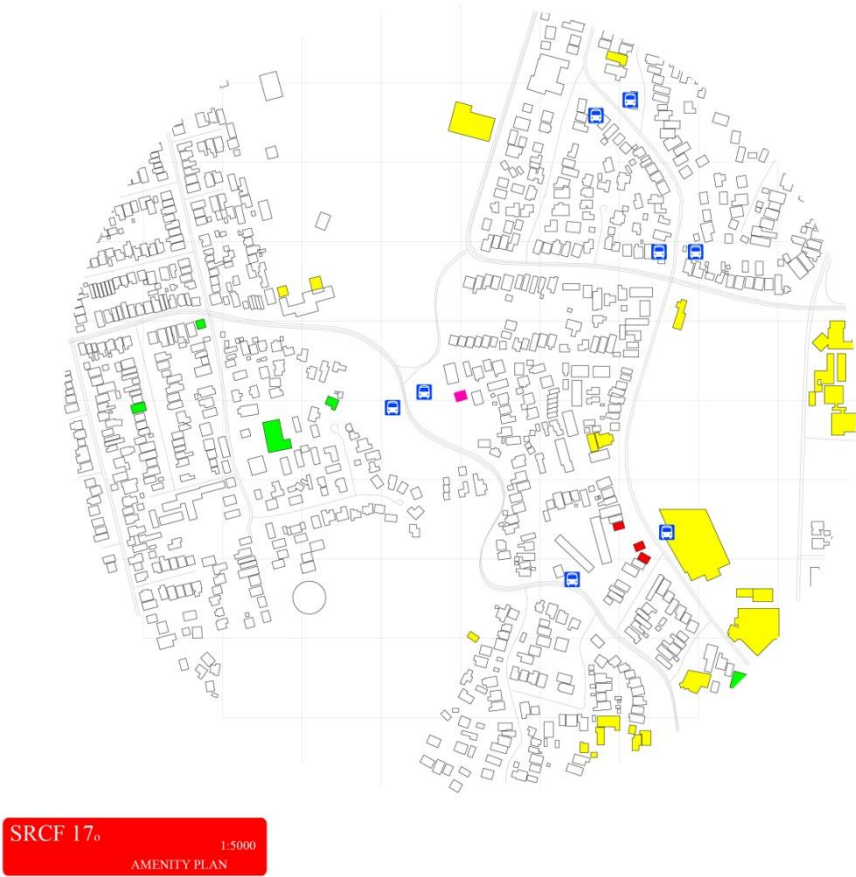FIGURE GROUND PALN

SRCF 17₀
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AMENITY PLAN

SRCF 18₀

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FIGURE GROUND PALN

SRCF 18₀

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AMENITY PLAN

SRCF 19&20

1:5000

FIGURE GROUND PALN

Newtown Public
Library

Baobab Cafe

NZ Post Office

Salvation Army
Hair Studio

NewWorld
Supermarket

St Vincent De
Paul Society

Church

Wakefield
Medical Centre

Wakefield
Hospital

Central Region
Health School

Presbyterian
Church

Mediterranean
Food Warehouse

Wellington Region
Free Kindergarten
Association

KidZone Childcare
Centre

Church

Fire Station

Wellington
SPCA

Wellington Zoo

Baptist Church

SRCF 19&20

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AMENITY PLAN

Amenities are labelled in this case to provide context to the types of different amenities that fall under the five categories of building
use. This does not inclued all amenities, rather this is indicative illustration of a portion of the drawn amenities

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FIGURE GROUND PALN

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AMENITY PLAN

SRCF 22₀
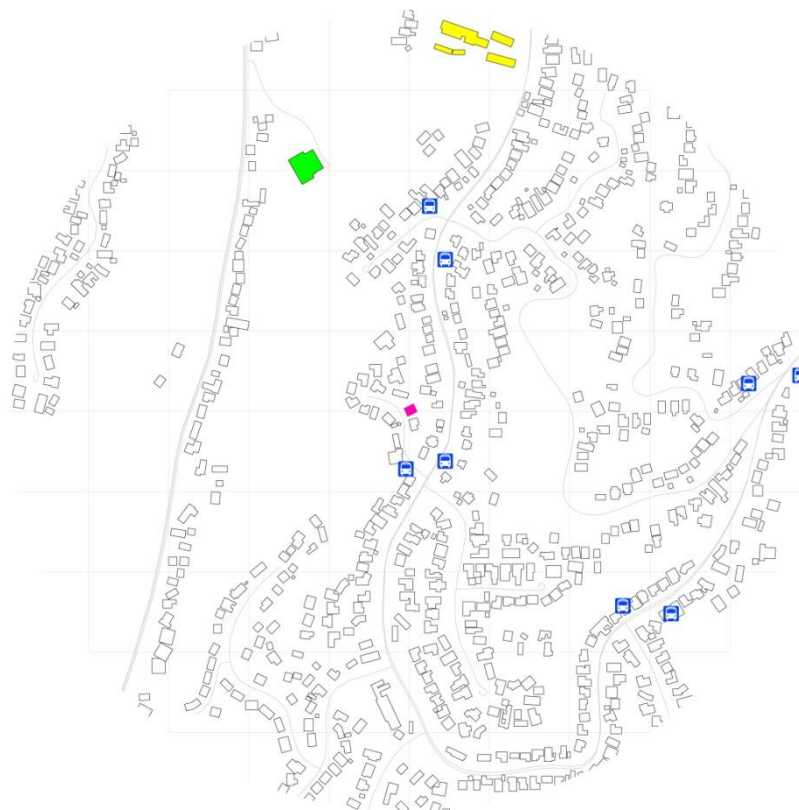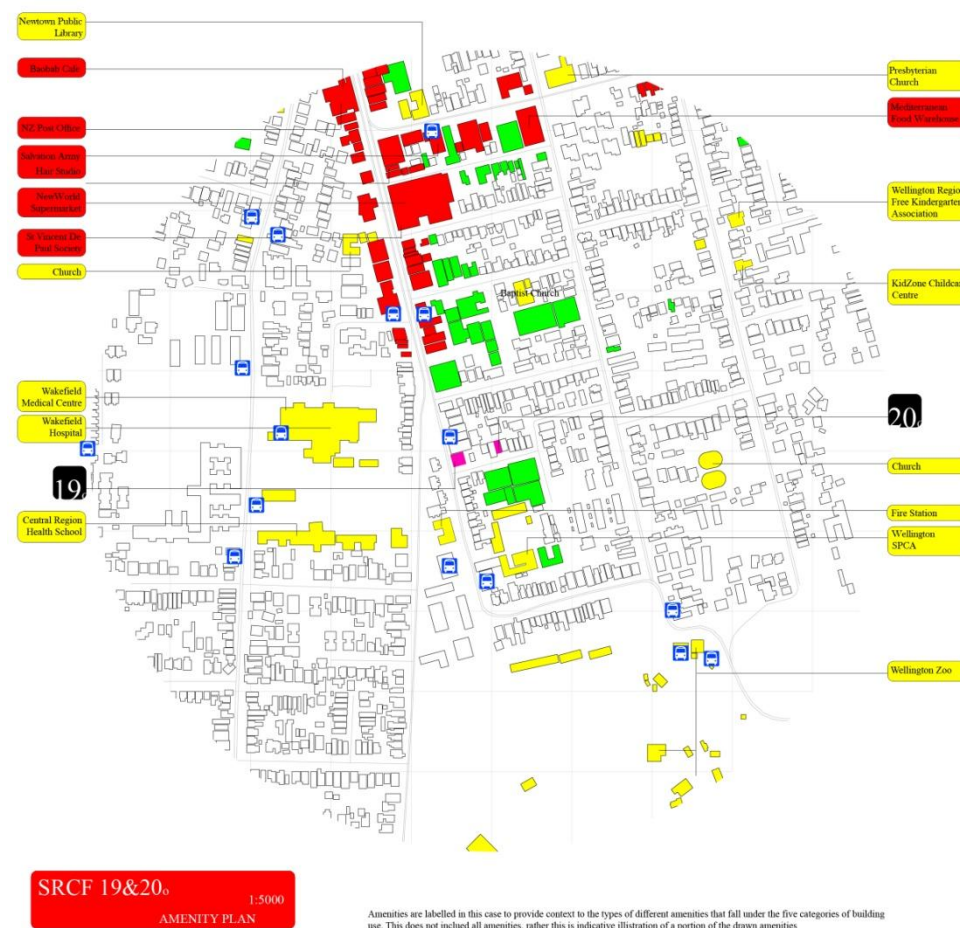1:5000
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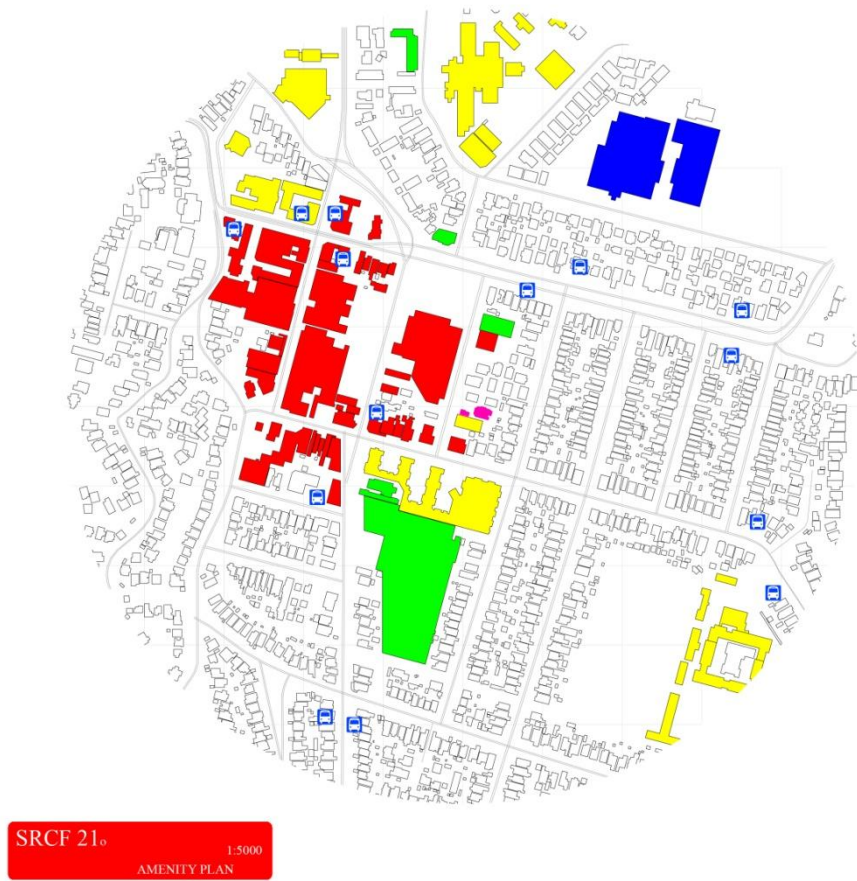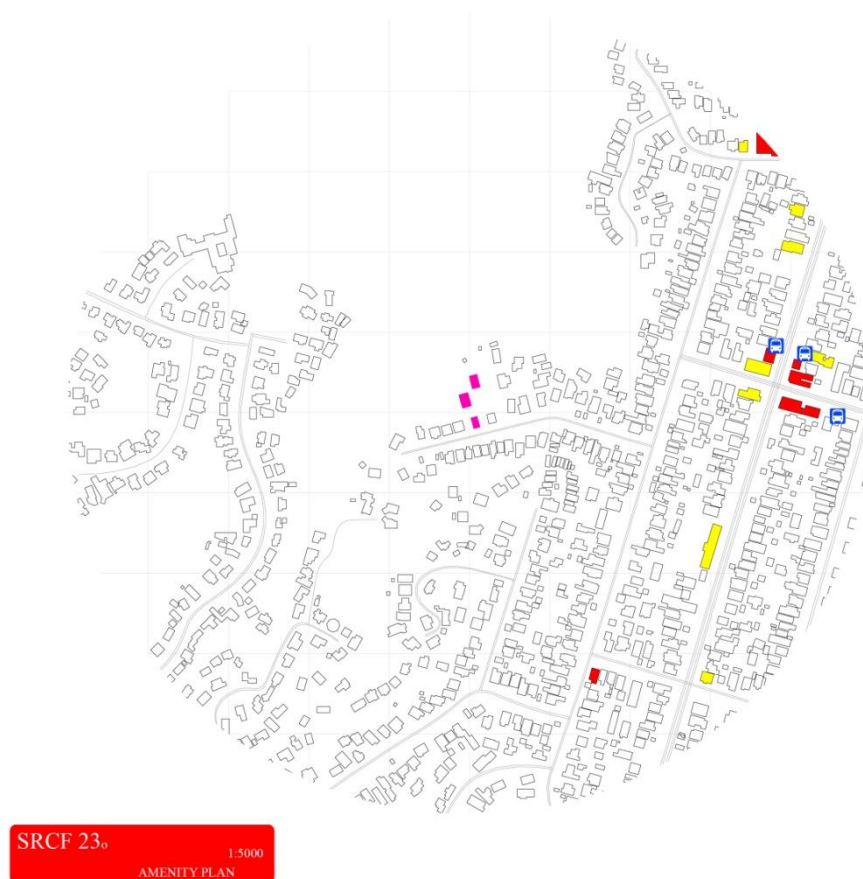
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AMENITY PLAN

VICTORIA UNIVERSITY OF WELLINGTON
Te Whare Wananga o te Upoko o te Ika a Maui

INFORMATION SHEET

Participant Information Sheet - Study of Psychiatric Accommodation

Researcher: Stephen Geuze: School of Architecture and Design, Victoria University of Wellington.

I am a Masters student in Architecture at Victoria University of Wellington. As part of this degree I am undertaking a research project for my thesis. The project I am undertaking is <u>examining the level of integration that psychiatric accommodation and recovery facilities have with society</u>. The Victoria University of Wellington has granted ethics approval for this research.

The majority of my research is field work, however, gaining opinions and general information on mental health accommodation is essential to validating this thesis. For this reason I have approached you because of your knowledge or particular understanding of this topic.

Enclosed is a questioner, and respective consent forms. Should you choose to participate in the research there are two steps detailed below. You are not obligated to do both steps. The second step is a follow up of the first.

Step 1 **Questionnaire** - Complete the attached questioner either responding in hard copy or electronically via email.

> The questions enclosed in the questionnaire relate to the location of psychiatric accommodation and recovery facilities within the community. The questionnaire further queries how different locations may affect the user in regards to their access to amenities, their receptiveness to societal stigma and the qualities of appropriate neighbourhoods for psychiatric accommodation and recovery facilities.

> The Questionnaire is confidential, the information you provide (with your consent) will be used and potentially published in my thesis. Your identity will remain confidential to the researcher.

> If you wish to have your name acknowledged in the research and thesis, please indicate this on the attached **Questionnaire Consent Form**.

Step 2 **Interview** - On completing the questionnaire, should you be willing to provide further insight into the topic that you feel the questionnaire did not allow you to do, this can be completed through a follow up interview.

This option is also confidential. Information received in a follow up interview will be summarised into a set of minutes and will only be used only after you have acknowledged that the information in the minutes is both correct and that you consent to me using and publishing this. The summarised minutes will be returned to you with the **Interview Consent Form** to acknowledge that you have checked the minutes and they are correct.

If you, as the participant, choose to respond in writing rather than through a face to face interview, your written response is considered to be your summarised minutes and you must include your completed **Interview Consent Form**

If you wish to have your name acknowledged in the research and thesis please indicate this on the attached **Interview Consent Form**

Should any participants feel the need to withdraw information given after providing signed consent to publish the information they have provided, they may do so within a the two week period after providing signed consent. Any information withdrawn by research participants will remain confidential and if requested it will be destroyed.

The thesis will be submitted for marking to the School of Architecture and Design and following this it will be stored in the University Library. Submission date is forecast for the 3rd Dec 2010

If you have any questions, or would like to receive further information about the project, please contact either myself or my supervisor, Chris McDonald, through the following contact details:

Stephen Geuze (principal researcher)

Email: stephengeuze@hotmail.com

Phone: 027 6358587

Address: 28a Ohiro Rd, Aro Valley, Wellington

Chris McDonald (supervisor)

Address: 139 Vivian St, Te Aro, Wellington

Stephen Geuze Signed:

VICTORIA UNIVERSITY OF WELLINGTON
Te Whare Wananga o te Upoko o te Ika a Maui

Written below is the content of the interviews to be conducted in relation to research into Psychiatric Accommodation. The following format will be provided to the targeted source of information i.e. A Mental Health Accommodation Provider.

Dear Research Participant

Outlined below is the content is a series of questions relating to Psychiatric Accommodation and Recovery Facilities; the topic of my research.

I have provided you with the following questionnaire to allow you to review the topic of research. Provided you are willing to participate in this research, please fill out your response to the questions provided either electronically via expanding the word document or hand writing your response. Please ensure you also fill out the **Questionnaire Consent Form** acknowledging that you consent the researcher (Stephen Geuze) to use this information under the confidential criteria explained on the Information Sheet.

Questionnaire:

1. My research indicates that psychiatric accommodation and recovery facilities are typically located in residential areas, often being located large distances away from suburban centres or in remote locations i.e. the end of a suburban street, or on the fringes of development.

   a.)   Can you provide any insight into the implications you may have observed of psychiatric accommodation and recovery facility's being in remote locations *and* its effects upon mental health consumers.

   A:

b.)   Following on this idea, do you know of any location where a
psychiatric accommodation and recovery facility is located close to a suburban
centre *and* have you observed any implications of this, both positive and/or
negative?

A:

2. My research also indicates that if psychiatric accommodation and recovery facility
is located closer to suburban centres that this gives mental health consumers the
opportunity to access (walking) public amenities such as libraries, indoor sports,
parks, gardens and places which the majority of New Zealanders access by vehicle.

a.)   To what extent do mental health consumers use public transport, walk
or rely upon provided transport by an non-government organisation (NGO)?

A:

b.)   In your opinion, taking into account a person's individual nature and
the variations that arise between each and every person, what public amenities
aid the recovery of mental health consumers?

A:

c.)   Are there public amenities or interventions that may not be used today
by mental health consumers yet you consider that they could be influential in
their integration into the community?

A:

d.)   Community gardening is used in Australia and Scotland to provide
mental health consumers with therapy through gardening, yet it also provided a

very positive relationship between mental health consumers and the general public.

In the cases studied, the gardeners (mental health consumers) were seen by the community to 'contribute to the improvement of community life'; a positive aid to breaking down the stigma associated with mental health consumers.

It is my intention to explore how community gardening can be coupled with Psychiatric accommodation and recovery facilities to combat societal-stigma and resultant self-stigma.

Do you have any insight or thoughts on this type of intervention in particular?

A:

3. Placing psychiatric accommodation and recovery facilities in residential neighbourhoods is typical in New Zealand. Residential neighbourhoods vary greatly within the Wellington region, from affluent neighbourhoods to deprived neighbourhoods. Some areas have large proportions of social or council housing whilst others areas are all privately owned properties.

a.)   In your opinion, what type of neighbourhood or what quality's in a neighbourhood are appropriate to host mental health consumers.

A:

4. Psychiatric accommodation and recovery facilities are typically located within residential houses, with the exception of 3 located in boarding houses and a historic hotel.

a.)   Do you feel that a residential house provides the appropriate <u>accommodation</u> environment for mental health consumers?

A:

b.)   Do you believe that a residential house provides the appropriate <u>recovery</u> or rehabilitation environment for mental health consumers *and* in

particular, does this environment encourage visits by family and friends, public interaction, disclosure or a peer support environment?

A:

On completion of this questionnaire please see the **Questionnaire Consent Form** attached. This form acknowledges that you give consent for the principal researcher, Stephen Geuze to use this information and provides the opportunity for you to define whether you wish for your identity to remain confidential of be acknowledged in this research.

VICTORIA UNIVERSITY OF WELLINGTON
Te Whare Wananga o te Upoko o te Ika a Maui

Questionnaire Consent Form

This Consent Form is to be completed by the research participant. The completed consent form provides yourself (the research participant) with the opportunity to disclose whether you wish to have your identity remain confidential or not. Information provided by research participant will not be used until this Consent Form had been completed and indicates that permission has been granted by yourself the research participant for me to use this in my research.

Please refer to the attached Information Sheet which outlines the participants rights to withdraw information provided and their rights to remain confidential. This consent form should only be completed if the participant has read and understands the intended use of data collected.

Please highlight, circle or write your answer respectively.

1.   Do you consent to the information you have provided via hard copy or your email response being used in this research.

Y/N

2.   By default your identity is confidential when participating in this research, if you wish for your identity to be made known (non confidentail) within this research please indicate this.

Y/N

2.   If you answered "Y" above, please provide your name and, if you choose, your credentials and/or professional details.

Name:

Date:

Credentials or Professional details:

Note: If organisations are to be named, research participants need to be in a position to have the authority to do this

VICTORIA UNIVERSITY OF WELLINGTON
Te Whare Wananga o te Upoko o te Ika a Maui

Step 2 Follow-Up Interview Consent Form

This Consent Form is to be completed by the research participant. The completed consent form provides yourself (the research participant) with the opportunity to disclose whether you wish to have your identity remain confidential or not. Information provided by the research participant will not be used until this Consent Form had been completed and indicates that permission has been granted by yourself the researcher to use this information in my research.

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Attached is either an electronic copy or hard copy of the summarise interview minutes taken by myself or provided by you (your written response). Please check these summarised minutes of our interview, if there is any inaccuracies or you wish for portions of the data to be withdrawn please indicate this and I will amend the minutes. Any data provided through the interview process will not be used and will remain confidential until you have provided consent via this form below.

Please contact me via the contact details attached to the Information Sheet if you have any query's in regards to this process.

If you agree to the attached summarised interview minutes being correct please fill out the consent form below indicating that you give consent for the principal researcher to use the information you have provided in our interview to be used and published in my research in the formulation of my thesis.

Please highlight, circle or write your answer respectively.

1.   Do you consent to the information you have provided via hard copy or your email response being used in this research.

Y/N

2.   By default your identity is confidential when participating in this research, if you wish for your identity to be made known (non confidentail) within this research please indicate this.

Y/N

2.   If you answered "Y" above, please provide your name and, if you choose, your credentials and/or professional details.

Name:

Date:

Credentials or Professional details:

Note: If organisations are to be named, research participants need to be in a position to have the authority to do this

TE WHARE WĀNANGA O TE ŪPOKO O TE IKA A MĀUI

VICTORIA
UNIVERSITY OF WELLINGTON

MEMORANDUM

Phone   0-4-463 5676

Fax   0-4-463 5209

TO	Stephen Geuze
COPY TO	Chris McDonald
FROM	Dr Allison Kirkman, Convener, Human Ethics Committee
DATE	06 October 2010
PAGES	1
SUBJECT	**Ethics Approval: No 17991 Research Design Project**

Thank you for your applications for ethical approval, which have now been considered by the Standing Committee of the Human Ethics Committee.

Your applications have been approved from the above date and this approval continues until 1 December 2010.   If your data collection is not completed by this date you should apply to the Human Ethics Committee for an extension to this approval.

Best wishes with the research.

Allison Kirkman

Convener

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Please highlight, circle or write your answer respectively.

1.   Do you consent to the information you have provided via hard copy or your email response being used in this research.

Ⓨ/N

2.   If you wish for your identity to be confidential within this research please indicate this.

        Note: Provided you agree below, the disclosure of your name within the thesis is most useful to validating this research

Ⓨ/N

2.   Please provide your name and, if you do not wish to remain confidential, your credentials and/or professional details.

Name: MR ROBERT LODEWYK VORSTERMANS

Date: 1/12/10

Credentials or Professional details: ANZIA, EBSc, BArch.
                                        DIRECTOR VORSTERMANS ARCHITECTS LTD

Note: If organisations are to be named, research participants need to be in a position to have the authority to do this

VICTORIA UNIVERSITY OF WELLINGTON
Te Whare Wananga o te Upoko o te Ika a Maui

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Please highlight, circle or write your answer respectively.

1.   Do you consent to the information you have provided via hard copy or your email response being used in this research.

(Y)/N

2.   By default your identity is confidential when participating in this research, if you wish for your identity to be made known (non confidential) within this research please indicate this.

Y/(N)   OK TO USE NAME

2.   If you answered "Y" above, please provide your name and, if you choose, your credentials and/or professional details.

Name: *Geoffrey J. Cramp*

Date: 24/10/10

Credentials or Professional details: *MB ChB FNZCPHM*

Note: If organisations are to be named, research participants need to be in a position to have the authority to do this

VICTORIA UNIVERSITY OF WELLINGTON
Te Whare Wananga o te Upoko o te Ika a Maui

Step 2 Follow-Up Interview Consent Form

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Please highlight, circle or write your answer respectively.

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Y/N

2.	If you wish for your identity to be confidential within this research please indicate this.

	Note: Provided you agree below, the disclosure of your name within the thesis is most useful
to	validating this research

Y/N

2.	Please provide your name and, if you do not wish to remain confidential, your credentials and/or professional details.

Name: Christopher Nolan. Registered Psychiatric Nurse, working towards a commerce degree.

Date:1/12/2010

Credentials or Professional details: Note: If organisations are to be named, research participants need to be in a position to have the authority to do this

[signature]

Interview 1 Summarised Minutes

Information provided:

Because we have had continual email correspondence i have simply attached all you r emails. I have in some case directly quoted statements made by yourself. In other cases adopted your idea's with the greater critique of my design.

Provided you agree that i can use the emails you have sent, please sign below.

Research Participant Signature

[signature]

ABSTRACT 7
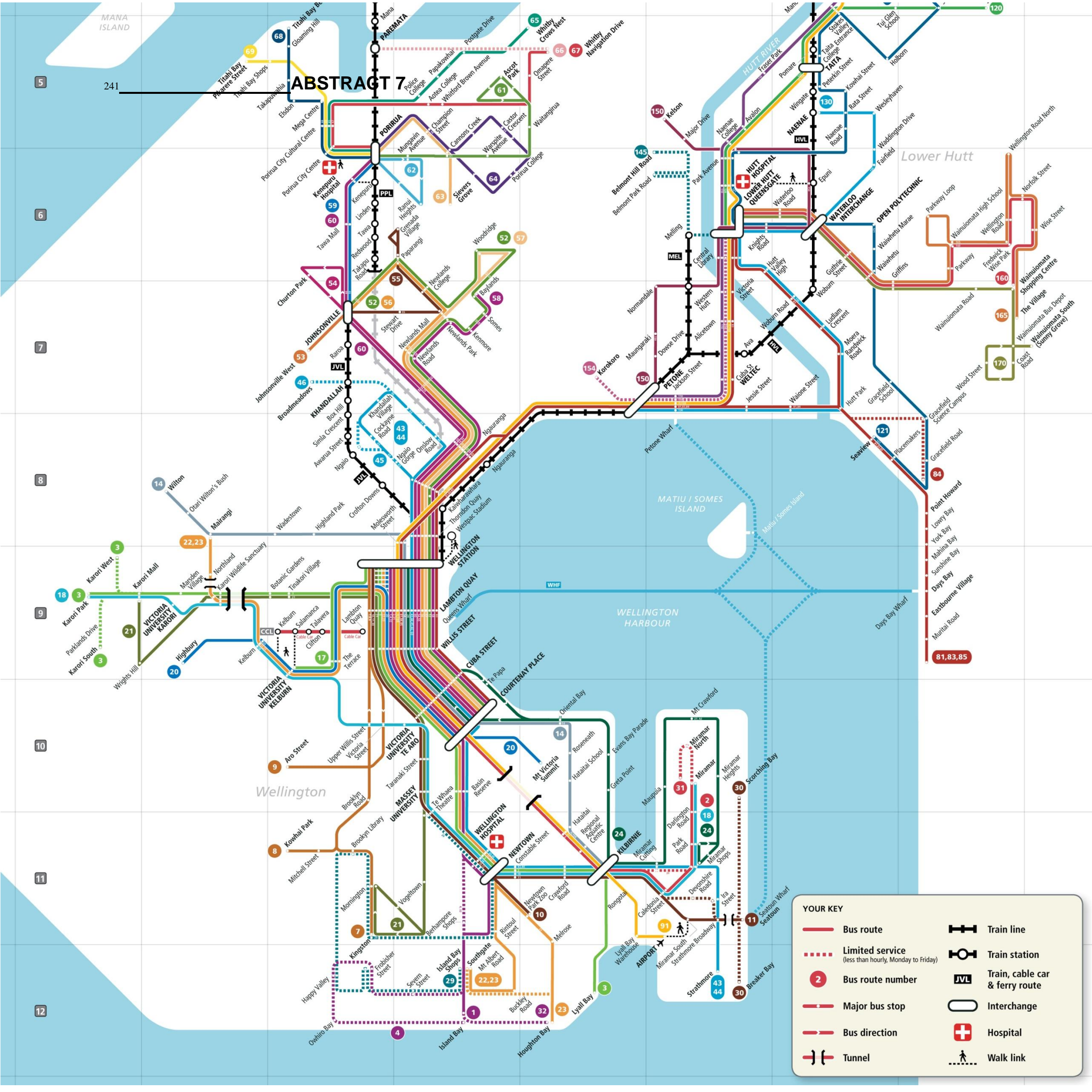
CPTED Considerations

CPTED Assessment (continued)

CPTED Assessment presented in the form of a SAFETY MAP

| High Risk | red shaded areas considered to be very risky |

| Marginal | orange shaded areas where people are likely to feel unsafe especially at night |

| Low Risk | unshaded areas considered to be low risk |

⭐ places which contribute positively to crime prevention e.g. provide 'eyes on the street'
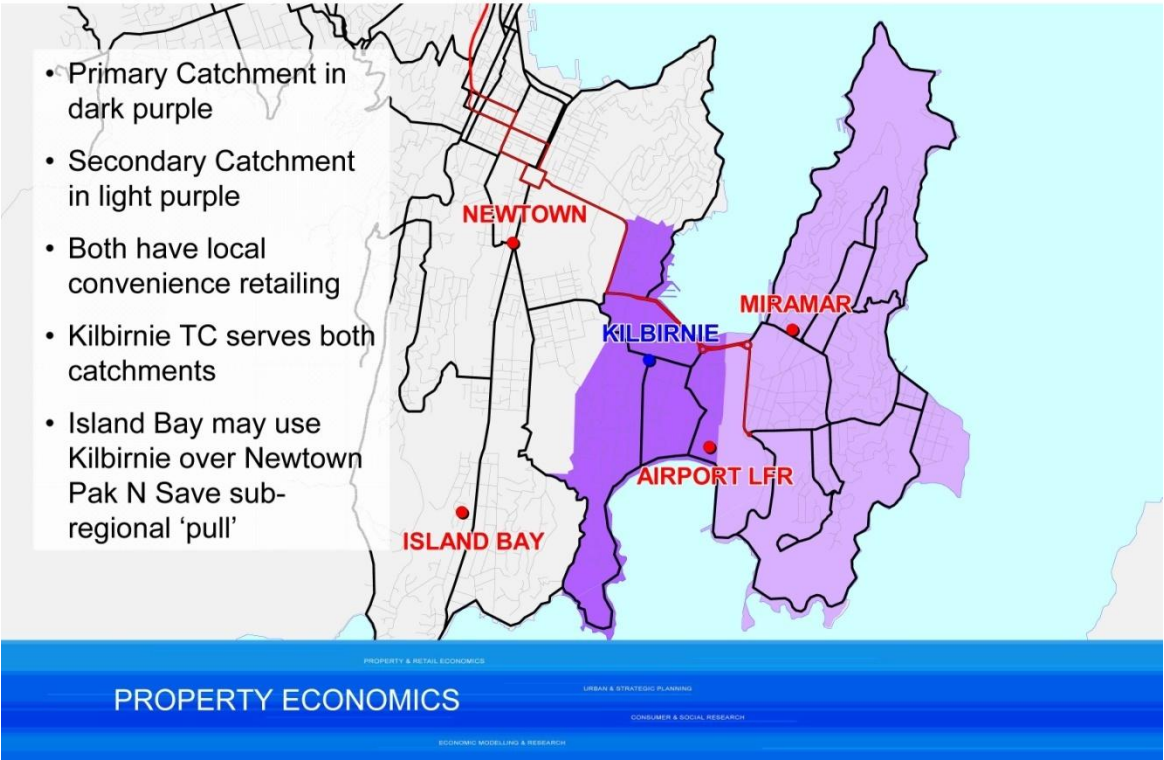
STOKS
LIMITED
7

CPTED Assessment

✓ Predominantly low risk

⭐ Several activity generators 'eyes-on-street'

● Risky (convoluted) cross-block walkways

● Poorly lit areas

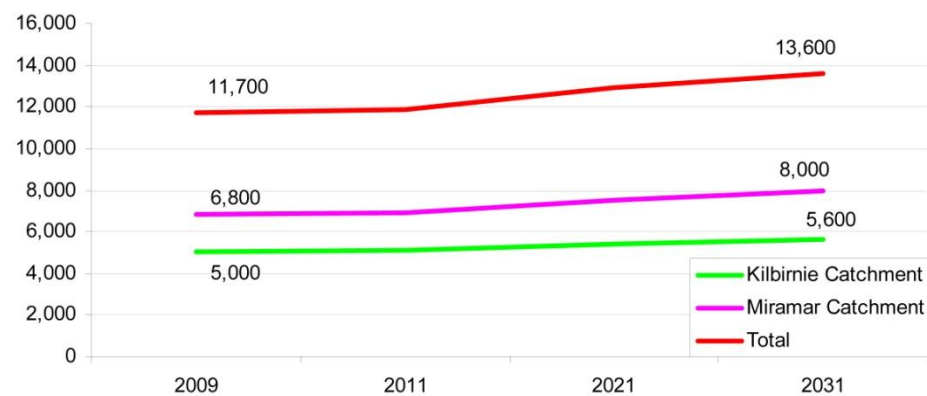● Secluded unlit private year yards off public space

● Two entrapment spaces

STOKS
LIMITED
8

CPTED Assessment

Core Catchments

- Primary Catchment in dark purple
- Secondary Catchment in light purple
- Both have local convenience retailing
- Kilbirnie TC serves both catchments
- Island Bay may use Kilbirnie over Newtown Pak N Save sub-regional 'pull'

NEWTOWN

MIRAMAR

KILBIRNIE

AIRPORT LFR

ISLAND BAY

PROPERTY ECONOMICS

Household Growth

- Moderate nominal growth – around 100 new households annually
- Ongoing performance of KTC is about capturing more of existing market rather than relying on market growth
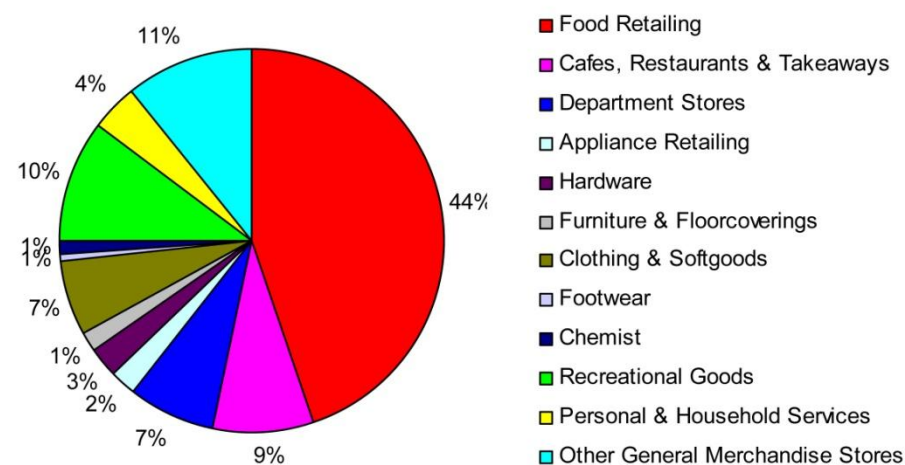
PROPERTY ECONOMICS

Retail Floorspace Kilbirnie 15,000 sqms

- Food Retailing
- Cafes, Restaurants & Takeaways
- Department Stores
- Appliance Retailing
- Hardware
- Furniture & Floorcoverings
- Clothing & Softgoods
- Footwear
- Chemist
- Recreational Goods
- Personal & Household Services
- Other General Merchandise Stores

PROPERTY ECONOMICS

Community Gardening Literature Review

This Appendix, titled 'Community Gardens,' explores the powerful relationship between mental health and nature, with reference to past asylum horticultural practices and two contemporary case studies of mental health gardening schemes as initiatives to providing effective 'peer support environments'.

18th Century and 19th Century thinkers advocated that the it was the unnatural 'absenting' from nature itself, arising from the urban industrialisation of western cities that was the cause of both individual and collective mental health problems (Parr, 2007, p. 540). This drove asylums to be located in 'removed' and often 'rural' and domesticated nature spaces such as farmland and parkland, where nature is mediated by human intervention through horticulture or landscaping providing a nature that could be passively absorbed as healthy space. 'Nature' was thought of as being beyond simply healthy. Foucault comments that to be a labourer amongst nature was to be (potentially) freed from the 'artificial clutter' of society and to be subjected only to the "the gentle constraints of nature" - where living by seasons and by the demands of the land was to submit oneself to powers of 'natural obligation' that might help to counter the confusion of the insane mind (Foucault, 1967, p. 194). The annual reports of the Borough Lunatic Asylum (Mapperly Hospital) in England find that "the patients derive more benefit from employment in the garden than anything else, and this is natural, because they have the advantage of fresh air as well as occupation"(Nottingham Borough Asylum, 1881).

Milligan describes the contemporary British community garden allotments as "relational spaces in which gardening, as a social activity, acts as a mechanism for overcoming exclusion" (Milligan, et al., 2004, p. 1783). The two contemporary case studies described below each combine the historic asylum's 'therapeutic horticulture' with the contemporary concept of 'urban renewal'.

Case Study 1: The Couch House Trust

> The Coach House Trust in Glasgow is a voluntary-sector project that draws about 50-60 people with mental health problems. 98% of the volunteers referred to as 'workers' or 'staff' are men, a feature recognised across many

gardening schemes, due in this case to the semi private environment the Coach House Trust works within. The project comprises the landscaping of gap sites around the neighbourhood of Glasgow's 'West End,' a neighbourhood described as being socially inclusive, working-class and ethnically mixed. The project also includes an allotment typology market garden in which it produces organic produce for use within the project and for sale to local residents. Mobile teams of garden workers also landscape local private residential gardens.

Case Study 2: The Gathering Tree Community Garden

The Gathering Tree Community Garden is a joint initiative between Adelaide Central Community Health Service, South Australian Housing Trust and Eastern Community Mental Health Services. This project is based in the backyard of a south Australian housing trust home located in Kilburn, with the house located on the site used as a community meeting and information space. The extensive back yard has been developed into a large community garden. 1/3 of the Kilburn Suburb is supported by public housing. Much of this housing is allocated to housing priority clients, creating a high dependency on support services. The project members, in contrast to The Coach House Trust, meet weekly rather than daily in line with a community group rather than as an employment strategy the Coach House Trust adopts.

Contemporary community gardening is not strictly a clinically oriented environment; rather the community gardening provides therapy in a more generalised environment. The Case studies above encapsulate the successes of its historic precedent, rural asylum 'therapeutic horticulture' demonstrated by a volunteer-worker of The Coast House Trust:"the therapy, yes it's the therapy" (Gavin, Volunteer-worker, April 2008). Gavin elaborates to define therapy as a physical activity that promotes bodily tiredness and psychological contentment, and which is tied to senses of achievement -"if you're active enough [in the garden] during the week you know you've done something-you feel more secure you know.... you're not stuck at home and not feeling the same thing day in day out... you know, you can plan the rest of the week, you feel secure that you

have that thing to do in the week."(Parr, 2007, p. 251) Gavin identifies the significant difference in activity between passively oriented Day-Care facilities for people with mental health problems and the Coach House Trust, which actively pushes the concept of 'work' as an effective therapy.

Locating the host gardens and adopting gap sites set within the community defines the success of these community gardening initiatives. This initiative goes beyond the degree of therapy that 'workers' gained from gardening within the contemporary and historic precedents alike. The urban context of each of the case studies facilitates a socially inclusive environment that begins to entail what is described by the Mental Health Foundation of New Zealand as a 'peer support environment'. By adopting gap sites (neglected sites) and locating community gardens or market gardens used as the community group head quarters within the community, this fosters genuine integration. Both the Couch House Trust project and the Gathering Tree Community Garden project provide an environment for social interaction and also demonstrate the positive contribution this minority group makes to its community. The rejuvenation of gap sites within the community is a powerful symbol of the purpose and capacity of people with mental-health problems. In addition to this, contributing to the improvement of community through regenerating unsightly neglected sites and producing fruit and vegetables for sale provides mental health consumers with a useful sense and recognition of citizenship. Parr reflects that locating the Coach House Trust project in populated residential spaces is central to the perceived success of the rejuvenation project (Parr, 2007, p. 552). Parr goes further to identify a second case study in her paper, the Ecoworks allotments set in Nottingham, situated in a more isolated and secluded setting. Whilst identified as powerful domesticated nature space providing 'therapeutic horticulture,' it is noted that there was a distinct lack of social activity between 'workers' and fellow members of society (Parr, 2007, p. 546). Clearly a lesson reflected in observation of isolated PARF location within the empirical research chapter of this thesis. (page#.)

In both case studies, ethnical diversity proves to contribute to the use of the community gardens. This is observed clearly in the Kilburn, Adelaide (the Gathering

Tree Community) with high populations of Vietnamese, Chinese and South Eastern Europeans immigrants who live in the built up area, many of whom live in public housing, yet still have a deep cultural attachment to horticulture, and have participated in the shared community garden (Harnik, 2010, p. 83). The Gathering Tree Community project's success has lead to it supplying further community groups within Kilburn creating pathways for gardeners to other community programs and events (Ireland & Simmons, 2008, p. 5).

The social interaction generated and fostered by the community gardening projects within the public environment of the garden space provides an appropriate threshold. Gardening provides an appropriately non stigmatising environment where inherent interests and skills of gardening and domesticity alike are recognised and observed between normalised society and mental health consumers. This social interaction and support by peers within the community provides a setting that can break down misunderstandings and societal stigma whilst encouraging and providing genuine recognition and empowerment to mental health consumers in the larger community.

Both community garden case studies examined above are operated as isolated programs by non government and government organisations. There is no evident attempt to use the successful peer support environment of community gardening as a threshold between the greater public and PARF's in order to combat societal stigma and encourage genuine integration of Psychiatric Accommodation and Recovery Facilities within the community.

PROJECT COST ESTIMATE

Cost estimation of the PARF case study is a crucial phase in evaluating the proposed scheme against contemporary PARF's recently built in New Zealand. The Following portion of this chapter outlines the Project Estimate Cost of developing the chosen site within the inner edge context of Kilbirnie.

SITE LAND VALUE

Figure 88 Property boundary lines diagram for Childers Terrace Site

LAND VALUE

Land and Capital Value of property acquired from the Wellington City Council.

Current Date of Valuation is as at 1 September 2009.

51 Childers Terrace

Site area: 396 m²

Proposed site area used: 50%

Land value: 255,000

Capital value: 350,000

Sub Total (LV+CV) : 605,000

TOTAL PROPOSED COST: $302,500

53 Childers Terrace

Site area: 617 m²

Proposed site area used: 70%

Land value: 331,000

Capital value: 385,000

Sub Total (LV+CV) : 716,000

TOTAL PROPOSED COST: $501,200

55 Childers Terrace

Site area: 366 m²

Proposed site area used: 85%

Land value: 255,000

Capital value: 295,000

Sub Total (LV+CV) : 550,000

TOTAL PROPOSED COST: $467,500

57 Childers Terrace

Site area: 395 m²

Proposed site area used: 85%

Land value: 310,000

Capital value: 450,000

Sub Total (LV+CV) : 760,000

TOTAL PROPOSED COST: $646,000

59 Childers Terrace

Site area: 396 m²

Proposed site area used: 75%

Land value: 310,000

Capital value: 370,000

Sub Total (LV+CV) : 680,000

TOTAL PROPOSED COST: $510,000

62 Bay Road

Site area: 2095 m²

Proposed site area used: 15%

Land value: 2,100,000

Capital value: 2,100,000

Sub Total (LV+CV) : 4,200,000

TOTAL PROPOSED COST: $315,000

Note: Cost of 62 Bay Road Parcel of land excludes capital value as this portion is unused site with no capital of reliance upon the operation of retail on Bay Road.

CAPITAL COST OFFSET

All existing buildings are required to be removed from site prior to redevelopment. It can be assumes that 30% of capital cost can be retained through the removal of existing houses on site for resale

Total capital value on proposed site: $ 1,210,000

30% OF TOTAL CAPITAL : $368,000

TOTAL COST OF REAL ESTATE

The Total cost of Real Estate reflects the cost of the portion of land used for the PARF precinct development, it does not include the neighbouring apartment precinct. The Total cost also do not reflect the cost of the development or acquisition of land for Mews Walk and the Garden Lane.

TOTAL COST OF REAL ESTATE: $ 2,742,200

(Includes 51-59 Childers Terrace & 62 Bay Road)

APT

PARF

APT

COMMUNITY ROOM

CAFE

COMMUNITY GARDEN

MEWS WA

Z
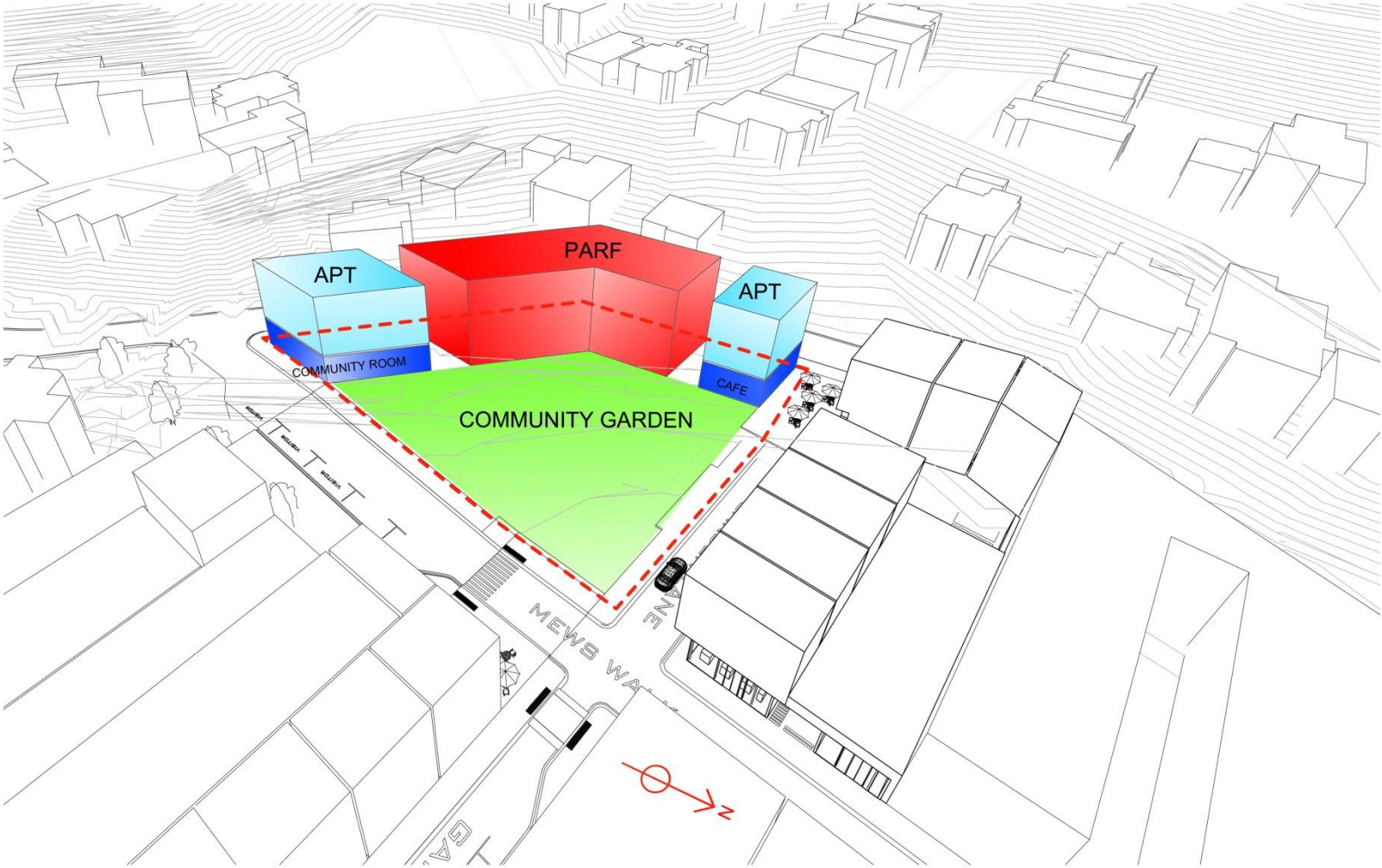
Rawlinson's 2009 Building Cost Estimation

This Building cost estimation is based on Rawlinson's 2009 Template

PROJECT DETAILS - Pricing

1. CAR PARKING

(i) **Rawlinson's Category:** Partially Under Ground Parking

(ii) **Rawlinson's Description:** One level, including additional excavation and substructure, ramps sprinklers, partial mechanical ventilation, no roof over (as included in building above)

(iii) **Rawlinson's Costs $/m² with adjustments:**

Base Wgtn $/m²: 830-930

Additional $150/m² for retaining of Childers Terrace street edge

Adjusted $/m²: **1,030 $/m²**

2. PARF

(i) **Rawlinson's Category:** Elderly Persons Home

(ii) **Rawlinson's Description:** Single storey. Combined care: 75% residential care, 25% hospital care. Single rooms, shared ensuites, day lounges, main kitchen and dining, central nursing station and utility rooms

(iii) **Rawlinson's Costs $/m² with adjustments**:

Base Wgtn $/m²: 2,250-2,550

Additional $500/m² for multi storey construction and $100/m² for dedicated ensuites per room.

Adjusted $/m²: **3,000 $/m²**

3. CAFE & COMMUNITY ROOM

(i)   **Rawlinson's Category:** City Retail- Department Store

(ii)   **Rawlinson's Description:** 3 or 4 storeys standard construction and finishes, fully serviced. Includes air conditioning, sprinklers, all facilities and amenities (excludes shop fittings)

(iii)   **Rawlinson's Costs $/m²**

      Base Wgtn $/m²: **2,150 $/m²**

4. APARTMENTS

(i)   **Rawlinson's Category:** Multiple Units- High Rise

 (ii)   **Rawlinson's Description:** Multi storey apartments. Kitchen. bathroom, WC, laundry. Includes lift to each floor. Excludes balconies and loose fittings.

(iii)   **Rawlinson's Costs $/m²**

      Base Wgtn $/m²: **2,450 $/m²**

5. GARDEN

(i)   **Rawlinson's Category:** External Works

(ii)   **Rawlinson's Description:**

      a.   **Paving: 108 $/m²**

            Base Course: 32 $/m²

      b.   **Insitu Concrete Paving: 73 $/m²**

      c.   **Top soil 300mm thick: 38 $/m²**

      d.   **Ground Cover Planting: 8 $/#**

      e.   **Shrubs: 20 $/#**

      f.   **2-3 metre trees: 100 $/#**

      g.   **Precast Concrete retaining walls (garden beds): 315 $/m²**

      h.   **Street/ garden furniture: 1000 $/# table**

400 $/# Seat

400 $/# Litter Bin

1500 $/# Street Lamp

i. **Pergola structure: 1800$/m²**

j. **Lawn: 10$/m²**

k. **Earth works: 10$/m²**

Building Works Cost Estimation for PARF Precinct

1. CAR PARKING

1030$/m² x 980 m² = $1,009,400

Includes half the cost of shared Garden Walk entrance to car park.

2. PARF

3000$/m² x 1233 m² = $3,699,000

3. CAFE & COMMUNITY ROOM

2150$/m² x 265 m² = $569,750

1800$/m² x 80 m² = $144,000 (Childers TCE Platform)

4. APARTMENTS

2450$/m² x 530 m² = $1,298,500

5. GARDEN

a. 108$/m² x 450 m² = $48,600

b. 73$/m² x 180 m² = $13,140

c. 38$/m² x 500 m² = $19,000

d. 8$/# x 600 = $4,800

e. 20$/# x 150 = $3,000

f. 100$/# x 10 = $1,000

g. 315$/m x 295.2 m = $100,000

h.　　1000 $/# x 4 = $4,000

　　　400 $/# x 45 = $18,000

　　　400 $/# x 6 = $2,400

　　　1500 $/# x 6 = $9,000

i. 1800$/m² x 72 m² = $129,600

j. 10$/m² x 173 m² = $1,730

k. $300,000

TOTAL GARDEN = $ 654,270

SUBTOTAL FOR BUILDING WORKS	
$7,944,670	

SUBTOTAL FOR BUILDING WORKS	
$7,944,670	
Allowance for fluctuations over period of project **Add** 6% $476,680	
Allowance for building works contingency **Add** 5% $397,234	

TOTAL FOR BUILDING WORKS	**$8,818,584**

Professional Consultant Fees **Add**   12%
$1,058,230

(12% Professional Consultant fees includes MH facility design
consultants and peer research)

Project Contingency **Add**   3%
$264,557

(in addition to building works contingency above)

PROJECT ESTIMATE **SUBTOTAL**

$10,141,371

(Excludes the cost of developing Mews Walk and Garden Lane.)

Land acquisition (Includes 51-59 Childers Terrace & 62 Bay Road)
Add $2,742,200

Capital cost offset (removal of existing homes for resale) **Sub**
$398,000

PROJECT ESTIMATE **TOTAL**   **$12,485,571**

Goods and Services Tax   15% $1,872,836

TOTAL Including GST   **$14,358,407**