REVITALIZATION
AND
GENTRIFICATION IN NEWTOWN

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CAN URBAN REGENERATION STRENGTHEN AN EXISTING COMMUNITY?

BY
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ABSTRACT

This thesis examines gentrification and the process of urban regeneration through proposing an adaption of a modernist heritage building in Newtown, Wellington, New Zealand to prevent the displacement of an existing community. Council policies for urban regeneration support future residential development in Newtown (eg. Adelaide Road – Planning for the Future, Wellington Urban Growth Plan 2014-2043, NZ Transport Agency (Let's Get Wellington Moving Project)) and, as funding is geared towards upgrading the city to become more liveable, private investment will potentially occur. These initiatives may attract affluent user groups, increasing the likelihood of lower income residents becoming displaced. Newtown therefore is a suburb where existing residents may be displaced as gentrification occurs. Although there have been studies on urban regeneration and the effects of gentrification in Wellington, none have attempted to offer a built environment design solution to mitigate the adverse effects of gentrification on an existing community in Wellington.

The Riddiford Building, which is part of an Institutional Precinct - a hospital site, and may be demolished. This thesis argues that building adaption to accommodate a new user group for this building is feasible and could save a building with cultural significance from demolition. Further, the building could accommodate students and lower socio-economic occupants in order to prevent the displacement of existing Newtown residents.

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Thank you to my supervisor, Christine McCarthy

and

to my family, friends and the people I have met along the way.

Fig i. The Riddiford Building.

1.0

INTRODUCTION

INTRODUCTION

This thesis explores the potential of adaptive reuse and building revitalization, to moderate the potential negative effects of gentrification for a specific site and building, the Riddiford Building in Newtown (see fig i). Newtown is an inner-city suburb in Wellington, the capital city of New Zealand and the Riddiford Building is located within a hospital site, in Newtown (see figs 1.1 - 1.3). An analysis of the site context in Newtown has aimed to better understand the effects of gentrification on an existing community and the potential for architectural design to positively contribute to the problem of population displacement. The Riddiford Building was built as accommodation and has fallen into disrepair and is currently vacant. The importance of this thesis is to offer research and a new solution to revitalize a modernist housing estate as social housing in a inner-city suburb which may experience gentrification. Further, the thesis argues that the heritage cultural value of the Riddiford Building can add to the diverse building stock and strengthen social mixing to create positive economic effects for future development and gentrification.

The importance of design for this thesis is to provide physical connections within the community that will allow all members of Newtown to participate in activities and opportunities while also supporting growth and future development. In order to achieve this, the design provides links within the existing community facilities placing all of the facilities needed within walking distance and close to public transport infrastructure. This is important for the new economic growth because it is generated by the creative and service class combined and so it is important for them to be located close together. The thesis aims to strengthen the existing community to provide opportunities for all members of Newtown.

Adaption will preserve the integrity of the original building by providing a suitable new use. The building will be earthquake strengthened with minimal alterations to the structure: a defining feature of the aesthetic of the Riddiford Building. Where alteration is made to the building, the architecture will be distinctively different to the original building. This thesis aims to strengthen the existing community with the provision of good public space and community facilities that will attract new residents and private investment while providing additional residential capacity for existing residents.

The thesis is organized as follows;

- Literature Review
- Case Studies
- Site Analysis
- Design
- Conclusion

The literature review will discuss international literature on a strategy of urban regeneration: gentrification. Two processes of gentrification will be discussed: mixed-tenure urban environments and building revitalization. The case studies chapter discusses examples of modernist housing block accommodation and landscape architecture. The examples of modernist housing will inform the adaption of the Riddiford Building and the landscape architecture research informs the redesign of the existing carpark and physical connection between the community and building. The site analysis chapter provides a case study of Thorndon, comparing the original process of gentrification of Wellington with Newtown. It will provide analysis of the existing site and outline the cultural and heritage significance of the existing building. The design chapter will propose the new design adaption of the existing building and site. Finally, the conclusion will reflect on whether the design has been successful in mitigating the adverse effects of gentrification in a potentially growing inner-city suburb Newtown, in Wellington, New Zealand.

Fig 1.1 Site plan.

Fig 1.2 Wider site context perspective.

Fig 1.3 Site context perspective.

2.0

LITERATURE REVIEW

Section Introduction

This chapter outlines the international literature on urban regeneration in American and European cities. There are three categories important to this design thesis that this chapter will specifically review: Gentrification, and two processes of gentrification: Mixed-tenure urban environments, and building revitalization. The chapter will conclude with how existing urban regeneration strategies will be integrated into this thesis to strengthen the existing community of Newtown.

Glossary of Terms

ODPM:

Office of the Deputy Prime Minister Creating Sustainable Communities (UK Government).

OTB:

OTB Research Institute for Housing and the Built Environment, Delft University of Technology, the Netherlands.

UNESCO:

United Nations Educational, Scientific and Cultural Organization.

WCC:

Wellington City Council.

Historical Context of Urban Regeneration

The strategy of “urban regeneration”¹ is evident prior to 1950 in America, and refers to the revitalization of deteriorating downtown buildings. In order to rebuild derelict² areas of the city, dating from 1930, urban redevelopment methods were investigated and by 1941 metropolitan land commissions made derelict properties available below their current value for development (Hoffman, 2008, p. 283). From 1954 “rehabilitation” was one official process to improve an area that was derelict (Wedge, 1958, p. 57). In the mid 1950s a process of city planning aimed at reviving business in city centres was to return the middle class to inner-city living (Wagner, 2014, p. 194). Europe had been experimenting with pedestrianization and mixed-use zoning and in 1958 the International Seminar on Urban Renewal saw American planners interested in European planning (Wagner, 2014, p. 189). More recently there has been literature that suggests that strategies of urban regeneration have been shifting toward processes to create mixed-use environments, for example, mixed-tenure urban environments. In 2001 Europe and combined nations implemented a neighbourhood renewal strategy with the aim of reducing inequality in urban environments (Couch, et al., 2003, p. 37). A strategy of urban regeneration is gentrification, and mixed-tenure urban environments is one process used to bring affluent use into deteriorating city suburbs. Building revitalization is another process. Both embody the same objective but with different physical effects on the built environment and few quantifiable results on the mixing of communities.

¹ There are two classifications of a strategy aimed at the renewal of inner city centres and they both have different terminologies: urban regeneration and urban renewal. The *Oxford English Dictionary* definition of urban regeneration and urban renewal follows respectively: “Urban Regeneration (n). The process of improving derelict or dilapidated districts of a city, typically through redevelopment.” (Oxford English Dictionary, 2017) and “Urban Renewal (n). The redevelopment of areas within a large city, typically involving the clearance of slums.” (Oxford English Dictionary, 2017). For the purpose of this thesis urban regeneration will be the terminology used.

² “Rehabilitation is the approach used in a run-down area not yet beyond repair where the homes can be repaired, refurbished, and brought back to the status of good housing. The neighbourhood, of course, must be improved...if rehabilitation is to be successful” (Wedge, 1958, p. 57).

Fig 2.1 Run down warehouses of Shad Thames. Image removed for copyright reasons.

Gentrification

As class structure changes so too does gentrification and the physical built environment. The *Oxford English Dictionary* definition of “gentrification” (n) “is a process by which middle-class people take up residence in a traditionally working-class area of a city, changing the character of the area” (Oxford English Dictionary, 2017). In 1964 Ruth Glass, a British sociologist, described gentrification as follows:

One by one, many of the working-class quarters of London have been invaded by the middle classes - upper and lower. Shabby modest mews and cottages - two rooms up and two down - have been taken over, when their leases have expired, and have become elegant, expensive residences. Once this process of 'gentrification' starts in a district it goes on rapidly until all or most of the original working-class occupiers are displaced and the whole social character of the district is changed (Glass, 1964, p. xviii).

Chris Hamnett, professor of geography at Kings College in London, studied gentrification indicators, employment, population, and income with statistics from the London census and database. He observed a new wave of gentrification, see fig 2.1, with a shift in the occupational class structure from industrial industry (see fig 2.5 and fig 2.6) (Hamnett, 2003, p. 2401) towards older professionals and managers, who were moving from the inner-city to the suburbs, potentially replaced by young professionals, cultural and creative industry workers (Hamnett, 2000, p.332).

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Fig 2.2 Balfron Tower. Image reproduced with permission.

Fig 2.3 Old Kent Road. Image reproduced with permission.

Fig 2.4 Restaurant, Old Kent Road. Image reproduced with permission.

Gentrification studies have two main arguments about its cause and there may be “links” between these. One theory suggests a ‘supply side’ and the other ‘demand-side’. Redfern suggests that these provide explanations of why gentrification occurs, with a gap in the existing research being the question of *how* gentrification occurs (Redfern, 1997, p. 1275). The ‘supply side’ theory refers to the rent gap account by Neil Smith, who was a geographer and academic, and the consumption orientated explanations are credited to David Ley a geographer and professor (Redfern, 1997, p. 1275). In 1979 Smith identified that the gentrification research focused on the effects³ of gentrification rather than historical explanations of the process and its causes, with two categories of explanation: cultural and economic (Smith, 1979, p. 538). Smith theorized that “as the cost of newly constructed housing continues to rise and its distance from the city centre to increase...” which is a situation currently happening in New Zealand, Wellington. Smith continues, “...Old but structurally sound properties can be purchased and rehabilitated for less than the cost of a comparable new house” (Smith, 1979, pp. 538-539). “The whole point of the rent gap theory...that it is most likely to occur in areas experiencing a sufficiently large gap between actual and potential land values” (Smith, 1987, p. 464). He concluded that the ‘rent gap theory’ occurred because of gentrification (Smith, 1979, pp. 538-547). In the contrast, Smith wrote that Ley tested a hypothesis that education, occupation and high accommodation costs shared geographic correlations, and found that higher socio-economic groups cluster in areas with higher housing costs (Smith, 1987, p. 464). Following, Hamnett described gentrification as, “simultaneously a physical, economic, social and cultural phenomenon” (Hamnett quoted, Hamnett, 1991, p. 175). Further, “The crucial point about gentrification is that it involves not only a social change but also, at the neighbourhood scale, a physical change in the housing stock...” (Smith quoted, Hamnett, 1991, p.175). Hamnett described a new wave of gentrification where gentrification to city centres and inner-city neighbourhoods occurs because “the new class” can access the culture, lifestyles, food and entertainment they desire⁴. A new wave of gentrification has developed into a process that occurs because of both culture and economics, see figs 2.2 - 2.4, and there is a need for future research on different indicators that describe *how* gentrification occurs.

³ “the socioeconomic and cultural characteristics of immigrants, displacement, the federal role in redevelopment, benefits to the city, and creation and...of community” (Smith, 1979, p. 538).

⁴ “...If, hypothetically, members of the “new class,” ...were not interested in living in inner-city properties...and were uninterested in what the city centre had to offer in terms of culture, lifestyles, food, and entertainment, I see no reason why gentrification should emerge...in this respect the cultural dimensions of gentrification are crucial and should not be downplayed or ignored...” (Hamnett, 2000, p. 334).

Fig 2.5 Income indicators can show a change in income in an area which can indicate gentrification. Image removed for copyright reasons.

Fig 2.6 Employment change indicators can show a shift in class structure and when compared with location this can indicate gentrification. Image removed for copyright reasons.

Third wave gentrification is new build development on vacant or underutilized land in the city suburbs (see fig 2.7). In 2005 Davidson and Lees commented that since 1990 gentrification processes have changed and are “operating in a new economic, cultural, social, and political environment” (Davidson & Lees, 2005, p. 1165). Davidson and Lees, both professors of geography, argue that the term “new build gentrification” was one of the mutations of the gentrification process during the third wave gentrification following the early 2000 recession (Davidson & Lees, 2005, p. 1165). They write that “new build gentrification” has direct and indirect displacement and described the four types of displacement conceptualized by Marcuse (1985). The three types of displacement that may affect Wellington, Newtown are;

- direct chain displacement⁵
- exclusionary displacement⁶
- displacement pressure⁷.

A theoretical distinction between gentrification and redevelopment is that building revitalization has been replaced with the construction of new buildings on vacant or underutilized land in redevelopment (Davidson & Lees, 2009). As Davidson and Lees ask in the 2005 article, “New Build ‘Gentrification’ and London’s Riverside Renaissance”:

How are we to distinguish adequately between the rehabilitation of nineteenth-century housing, the construction of new condominium towers...and the construction of modern and postmodern office buildings employing thousands of professionals, all looking for a place to live?...Gentrification is no longer about a narrow and quixotic oddity in the housing market but has become the leading residential edge of a much larger endeavour: the class remake of the central urban landscape (Davidson & Lees, 2005, p. 1166).

Within these categories of displacement it is apparent that the Riddiford Building has experienced direct chain displacement and there is potential that the existing members of the community in Newtown may experience exclusionary displacement and displacement pressure in the future.

⁵ “... previous households who were forced to move out due to deterioration of the building...” (Davidson & Lees, 2009, p. 398).

⁶ “...here residents cannot access housing because it has been gentrified...” (Davidson & Lees, 2009, p. 398).

⁷ “this is the dispossession suffered by low income groups during the gentrification of their neighbourhoods” (Davidson & Lees, 2009, p. 398).

Fig 2.7 Belfron Tower. Image reproduced with permission.

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Mixed-Tenure Urban Environments

Mixed-tenure urban environments is one type of gentrification. They have aims to reduce the exclusion of lower socio-economic groups with housing diversity in the built environment in order to generate social mixing of income levels. "In the Netherlands and Great Britain, housing diversification is the core of urban renewal policy" (Kleinhans, 2004, p. 368). The government document from ODPM explains mixed tenure as follows:

A well-integrated mix of decent home of different types and tenures, to support a range of household sizes, ages and incomes (Kearns & Mason, 2007, p. 662).

The strategy⁸ of mixed-tenure urban environments in European cities⁹ has involved "new build gentrification", 'pepper plotting' of privately owned or rented housing¹⁰, and the integration of modernist housing blocks into the urban network¹¹. In 2000 there was a shift in British policy from focusing on the social effects of mixed-tenure towards supporting the housing market, and the result of this is that specialist planning of mixed-tenure urban environments is now open to the public and housing market (Kleinhans, 2004, p. 372). This shift in policy has brought middle-class and higher-income households into lower socio-economic neighbourhoods (Kleinhans, 2004, p. 368). The assumed results of social mixing can include:

- an improved housing market and diverse building stock
- less stigma
- reduced maintenance costs
- less social exclusion
- social cohesion
- increased community participation
- role models, and
- greater neighbourhood support (Kleinhans, 2004, p. 368).

Kleinhans reviewed research with OTB Research Institute on the actual results of mixed-tenure development in Great Britain and the Netherlands (Kleinhans, 2004, p. 371). Kleinhans found that mixed-tenure can include the demolition, upgrade and sale of council or social rented housing and the construction of new, owner-occupied or private rented housing to provide a variation of housing size, form, quality, price and tenure¹² (Kleinhans,

2004, p. 368). In 2008 Davidson wrote that social mixing had been included in the gentrification debate because research had shown neighbourhoods undergoing gentrification were not able to remain socially mixed (Davidson, 2010, p. 524). He carried out a mixed method study of three neighbourhoods undergoing "new-build gentrification" in UK to examine the social mixing between new build gentrification and existing communities. The study concluded that there was little social mixing and that residents shared few perceptions of community (Davidson, 2010, pp. 524-544). Ade Kearns and Phil Mason published a paper where their findings indicated that the level of social housing is more of an important influence on improved urban environments than the degree of tenure-mixing (Kearns & Mason, 2007, p. 661). The paper addressed key strategies for achieving social mixing which included;

- (1) role model effects¹³
- (2) community effects, and
- (3) transformation effects (Kearns & Mason, 2007, p. 661).

Alan Berube, in a study¹⁴ which explored the British Government's current goal of building new communities with a greater social and economic mix of residents, stated that the success of mixed income communities depends on how it is done (Berube, 2005; Brophy & Smith, 1997; Kearns & Mason, 2007, p. 668). Recommendations include, complete spatial mixing of high and low income residents as this "has important positive effects on the overall functioning of developments" (Berube, 2005, p. 31; Kearns & Mason, 2007, p. 668; Brophy & Smith, 1997). As well as spatial mixing, it is recommended that the architectural quality of the housing should not change in quality or typology because of income differences (Brophy & Smith, 1997, p. 1; Berube, 2005, p. 3). Kearns & Mason cite Leventhal & Brooks-Gunn, stating that communities benefit from better community facilities, which include parks (Kearns & Mason, 2007, p. 668). Further Brophy and Smith suggest that activities to provide opportunities in mixed-tenure is crucial for upward mobility (Brophy & Smith, 1997, p. 1); design is necessary to connect mixed-tenure into an urban network that provides equal opportunities regardless of class.

⁸ Housing policies of mixed-tenure urban environments for neighbourhoods in the Netherlands and Great Britain, from 1997 and 1990 respectively, became strategies for housing diversification and social mixing (Kleinhans, 2004, pp. 368-371).

⁹ The 1995 British White Paper, Urban Task Force (DETR) and Social Exclusion Unit (SEU) have included mixed-tenure urban environments. The assumed result has been social mixing (Kleinhans, 2004, p. 370).

¹⁰ "The two major categories of tenure in the UK are private market housing for sale and social rented, formerly from a council or local authority, currently from a housing association..." (Roberts, 2007, p. 185).

¹¹ Social stigma and isolation is associated with council estates/social housing and British policy has recommended for these estates to be integrated into the urban network (Roberts, 2007, p. 185).

¹² Mixed-income can be at a neighbourhood and project scale (Brophy & Smith, 1997, p. 5).

¹³ "Again, the mixing of tenures is expected to bring benefits via the diversification of the resident group, in particular through the provision of role models..." (Kearns & Mason, 2007, p. 667).

¹⁴ "Examining evidence from the United Kingdom and the United States, this study details the trends and consequences associated with long-term growth in economic segregation and concentrated poverty in both countries... The paper concludes with a set of principles that might guide efforts to build, transform, and sustain mixed communities now and in the future" (Berube, 2005, p. i).

Building Revitalization

Building revitalization is another type of gentrification. It brings an existing building back into economic use. Studies from cities in America and the United Kingdom suggest that public urban regeneration strategies can evaluate cultural and economic value to find suitable development scenarios for unprotected heritage buildings. Further the Council of Europe and UNESCO state that conservation, preservation and rehabilitation can create a sense of place and become places for community events (Luke, 2013, p. 351). Few studies argue for preservation because of economic value of historic preservation, and this is an emerging area of research (Mason, 2005, p. 1; Ijla, et al., 2011, p. 267). A 2011 study focused on whether or not preservation added value in urban regeneration and the results showed that properties in Heritage Areas had higher sale prices than similar homes not in Heritage Areas (Ijla, et al., 2011, p. 275). The paper suggests that historic preservation increases the property value in Heritage Areas and improves the pedestrian-friendly character of the environment for a stable community (Ijla, et al., 2011, p. 267). The effect of elevated property values in Heritage Areas can possibly be explained by the displacement of affordable housing to form exclusive residential areas (Glaeser, 2017; Ijla, et al., 2011, pp. 263-279). An example of preservation that successfully engaged the community is from Place Economics in a report titled, "Beyond Tourism: Historic Preservation in the Economy and life of Savannah and Chatham County" (Paxton, n.d., p. 5). The report found that:

- the historic district attracts employment
- small firms disproportionately choose to locate in Savannah's neighbourhoods, and
- strategic investment in the Savannah College of Art was a catalyst for future investment (Paxton, n.d., p. 3).

There are three notable market criteria that attracted people to the Heritage Area included in the report: walkability, mixed use neighbourhoods and the provision of parks. The report cites a survey and walkability score where 60% of people said that they preferred mixed use neighbourhoods and the percentage of an area's walkability is said to have become a major variable in consumer housing choice (Paxton, n.d., pp. 34-35). Another successful aspect of the Heritage Area was found in two studies that indicated that the accessibility of parks in Savannah was greater in the Heritage Area (Paxton, n.d.). Further there is an opportunity to reinvent past housing estates as pedestrian friendly, and provide additional affordable housing in inner-city centres.

Fig 2.8 The Aylesbury Estate is a public housing estate in Europe that may be demolished and replaced with a mixed-tenure development (Mark Davidson, 2009, p. 403). Image removed for copyright reasons.

Deteriorating accommodation estates are now under threat of demolition as they have often fallen into disrepair but they are potential candidates for revitalization (see fig 2.8). For the buildings that do not have District Plan heritage protection - like the Riddiford Building, which have heritage value are particularly vulnerable. The WCC relies on private investment to maintain or demolish the building(s). These buildings can be expensive to maintain and upgrade, and typically the landlords have no obligation to maintain their property. Jacobs describes old buildings as follows:

By old buildings I do not mean museum old buildings, not old buildings in an excellent and expensive state of rehabilitation – although these make fine ingredients – but also a good lot of plain, ordinary, low value old buildings, including some rundown old buildings (Jacobs, 1961, p. 244).

The HOPE VI Programme¹⁵ in Denver was part of an urban revitalization programme to address deteriorating accommodation estates that had not been maintained, and were physically and socially isolated from the surrounding urban community (Bauman, 2003, p. 1). It aimed to reconnect the site to the surrounding neighbourhood (see figs 2.9 - 2.11). “New urbanism” principles aimed to increase pedestrian friendliness with the inclusion of pedestrian paths, open courtyards, well designed landscapes and spaces for recreational activities (Cloud & Roll, 2011, pp. 196-197). The project intended to restore a sense of community within the project site (Cloud & Roll, 2011, pp. 196-197). The Denver HOPE project demonstrates that there is potential to create additional affordable housing in existing social housing estates with mixed-tenure urban environments to create socially-mixed communities.

¹⁵ US Department of Housing and Urban Development’s (HUD’s) HOPE VI programme, designed to replace social housing/estates with mixed-tenure (Brophy & Smith, 1997, p. 1).

Fig 2.9 Denver project (see appendix 1). Image removed for copyright reasons.

Fig 2.10 Denver project. Image removed for copyright reasons.

Fig 2.11 Denver project. Image removed for copyright reasons.

Section Conclusion

The two key architectural aspects of gentrification are: mixed-tenure urban environments (because they result in a variety of built form), and the revitalization of historic building stock. If managed well there is potential to minimize the displacement of socio-economic groups, by, for example the adequate provision of social housing. Gentrification changes the physical characteristics of an area, from modest heritage buildings to renovated or high-cost or new residencies. The literature on mixed-tenure developments discusses the ability for gentrified inner-city suburbs to retain social mixing. This is important for Newtown if it is to retain its existing population and character. The literature indicated it is very important to provide social housing in mixed-tenure urban environments in order to retain lower socio-economic members of a community because of the 'rent gap theory'. The success of the social housing will depend on how it is done and this includes providing an architectural typology of social housing that can not be stigmatised. Building revitalisation can improve an area's value and harbour greater community engagement. The alteration and revitalization of the Riddiford Building could be successful and encourage future growth in the inner-city suburb if it is able to be integrated into the existing urban network and be adapted to provide modern accommodation facilities.

3.0

CASE STUDIES

3.1 Housing Blocks

Project: Unité D'habitation
Architect: Le Corbusier
Location: Marseilles, France
Project Year: 1952

Section Introduction

The case study chapter presents relevant projects to inform the adaptive reuse proposal for the Riddiford Building and urban regeneration to strengthen the existing community in the suburb of Newtown. The case studies include examples of international post war housing, low income housing, an international urban regeneration project and landscape architecture. These case studies have been selected to represent the different aspects of the Riddiford Building project, as a modernist residential block (former nurses' home) adjacent to a car park which is proposed to be redeveloped into a residential apartment block, and needs improved site linkages to transport and retail facilities.

Fig 3.1 Unité showing a modular facade and central access core. Image removed for copyright reasons.

Project: Robin Hood Gardens
Architect: Alison and Peter Smithson
Location: London, England
Project Year: 1972

Fig 3.2 Robin Hood Gardens modular facade. Image removed for copyright reasons.

Unité D'habitation

The Unité, see fig 3.1, was an housing experiment that provided modern conveniences and facilities to form a community. It included a gymnasium, swimming pool, children's nursery, and accommodated 1200 people (Sbriglio, 2004, pp. 40, 78). The building design has a "main structural topographic core" of two maisonettes, one above the other, accessed from a central 'internal street' (see fig 3.3, fig 3.4 and fig 3.9) (Sbriglio, 2004, p. 76). There is a set of lifts and three fire escape staircases positioned along one side of the building that the apartments can be accessed from (see fig 3.7) (Sbriglio, 2004, p. 71). Each apartment uses storage units to separate the space into different functions which was a new model of apartment design (see fig 3.5 and fig 3.6) (Sbriglio, 2004, p. 80). The Unité had three aspects that have been valuable as design research for the Riddiford Building:

- (1) building organization
- (2) community through amenities and 'internal streets', and
- (3) modernist apartment planning.

The Riddiford Building in its original layout had specific rooms for communal space as the building use was strictly zoned for a specific set of users, nursing students. To revitalize the Riddiford Building a "main structural topographic core", like that of the Unité with smaller and larger apartments could be adopted. The internal corridors will then become 'internal streets,' that could bring the external community inside, with swipe card access providing security for the resident only levels. The apartment plans make greater use of the floor area, creating open plan living through the use of storage to separate spaces. Finally painted door surfaces and kitchenettes, like those, in the Unité could be used in the Riddiford Building to provide a connection with the colours of the landscape design. To revitalize the Riddiford Building community facilities could be provided within the building. These facilities could be designed to attract both the residents within the building and from the surrounding community.

Fig 3.3 The modular maisonettes shown in section and plan. Image removed for copyright reasons.

Fig 3.4 Section showing the interlocking maisonettes.
Image removed for copyright reasons.

Fig 3.5 Image of the maisonette living space with
an internal staircase. Image removed for copyright
reasons.

Fig 3.6 Kitchen cabinetry with colours. Image removed
for copyright reasons.

Fig 3.7 Ground level access with columns. Image removed for copyright
reasons.

Fig 3.8 'Internal street'. Image removed for copyright
reasons.

Fig 3.9 Foyer open space with planting inside and col-
umns. Image removed for copyright reasons.

Robin Hood Gardens

Robin Hood Gardens, see fig 3.2, was built in 1972 and was designed by Alison and Peter Smithson. The New Brutalist housing experiment was specific to its location with an emphasis on urban renewal of an industrial district, intended to be “a little pool of calm in central London” (The Smithsons on Housing, 1970). The garden was a communal space for the residents with the formation of a hill intended to reduce noise, control activity and provide variation of landscape form (see fig 3.11, fig 3.13 and fig 3.14) (The Smithsons on Housing, 1970). The maisonettes have internal staircases and are above and below with external access through ‘streets in the sky’ on every third level (see fig 3.12). Similar to the “internal Streets” of the Unité they were intended to support the formation of a community. The communal garden space and ‘streets in the sky’ was an important feature that was a response to the ‘garden city’ council estates to prevent vandalism, a major criticism of social housing projects (The Smithsons on Housing, 1970). The Smithsons’ design of Robin Hood Gardens provided valuable research on:

- (1) post war architecture
- (2) community shared space and ‘streets in the sky’, and
- (3) apartment design (see fig 3.10).

The apartment design could include a combination of single level maisonettes and two level maisonettes similar to the Robin Hood Garden. As well as this, the apartments could include kitchenettes for food preparation as the kitchen has been an important element in both the Unité and Robin Hood Garden apartment design and was not included in the original Riddiford Building, which only provided cooking facilities for light meals and snacks in communal areas because the nurse meals were prepared in a dining hall located within the hospital site.

Fig 3.11 Raised typology with planting creating privacy and reducing the scale of the building. Image removed for copyright reasons.

Fig 3.12 Section of the maisonette showing ‘streets in the sky’. Image removed for copyright reasons.

Fig 3.10 Maisonette interior view of the living space. Image removed for copyright reasons.

Fig 3.13 Plan and section showing communal garden. Image removed for copyright reasons.

Fig 3.14 Section perspective showing the 'streets in the sky' and communal garden. Image removed for copyright reasons.

Section Conclusion

Both the Unité and Robin Hood Gardens were experimental housing projects to provide affordable accommodation in a new model of urban residential living. The Unité experimented with 'internal streets' to form a community with maisonettes both above and below intended as open plan living. The Robin Hood Gardens was a response to the 'garden cities' designs to reduce vandalism and include community spaces (The Smithsons on Housing, 1970). The Riddiford Building will learn from both housing models and proposes that mixed-tenure apartments as social housing, similar to the Hope VI Denver project, can retain social mixing in suburbs that may experience gentrification, to create better urban spaces, and available community. The following case study section identifies successful urban landscape design that could inform how the community space and facilities are designed.

3.2 Landscape

Project: Prudential Centre Redevelopment
Location: Boston's Back Bay
Project Year: Revitalization between 2001 and 2003

Fig 3.15 *Prudential Centre.*
Image removed for copyright reasons.

Project: Superkilen
Location: Copenhagen
Project Year: 2007
Area: 32m²

Fig 3.16 *Superkilen.*
Image removed for copyright reasons.

Roberto Burle Marx Projects

"The careful sculpting of the terrain produces such varied environments that walking round the park becomes a real adventure (Montero, 2001, p. 68)".

Fig 3.17 *Parque do Flamengo.*
Image removed for copyright reasons.

Fig 3.18 Prudential Centre. Image removed for copyright reasons.

Prudential Centre, see fig 3.15 and fig 3.18, was redeveloped 35 years after it was built and is now established as a large scale, mixed use complex for office, retail, hotel and residential buildings (Anderson, 2007, p. 51). Anderson suggests that the Prudential Centre was suffering the consequences of a 1960 site plan that walled it off from the surrounding urban streetscape (Anderson, 2007, p. 51).

A primary goal of the redevelopment and expansion of Prudential Centre was to link our arcades with the streets surrounding neighbourhoods (Anderson, 2007, p. 51).

The Riddiford Building, although it has no such physical wall, suffers from a similar problem where the Heritage Area shops and car park within the hospital site blocks it off from the main pedestrian pathway along Riddiford Street. In order to encourage people to enter the hospital site from the Riddiford Street and to engage with the Riddiford Building new paths could be created for accessibility.

Fig 3.20 Red, black and green squares.
Image removed for copyright reasons.

Superkilen

Superkilen, see fig 3.16, is a 39m² urban park revitalized as a “mono-functional transit area” in a central neighbourhood in Copenhagen (Daily, 2012; Anon., 2013). The concept for Superkilen is a diverse landscape with a “physical framework” to bring local communities together with activities represented by three painted surfaces: green (park), black and red (see fig 3.19 and fig 3.20) (Daily, 2012; Anon., 2013). Some features of Superkilen are:

- (a) New connections for bike paths and better public transport through the neighborhood (see fig 3.27).
- (b) Recreation space with material variation accessible to residents. Some activity includes: physical activity and games, a central square, open air movies, a café, car and cycle parking, and an outdoor fitness area (see figs 3.23 - 3.25).
- (c) The landscape surface and colour slopes onto buildings and connects buildings both physically and visually, both inside and outside (see fig 3.21 and fig 3.26) (Daily, 2012).

There are many aspects of the landscape design of Superkilen which can inform the redesign of the Riddiford Building and its context which include:

- (1) The separation of space and clear identification of public space through the use of colour.
- (2) Improved sustainable transport infrastructure.
- (3) Public facilities that engage with the community.
- (4) Use of an architectural language that reflects the public space both within the landscape and onto the building.

Fig 3.19 Three images of the landscape. (Top image) the black square, (bottom left) the red square and (bottom right) the green square. Images removed for copyright reasons.

For example, the entrance to the Riddiford Building could be adapted to merge inside and outside the foyer similar to Superkilen with the landscape visually and physically sloping onto the building. Superkilen has also used colour to organize the park into different squares for community activities which could be incorporated into the redesign of the Riddiford Building carpark.

Superkilen

(all images on this page are of the Superkilen design)

Fig 3.21 Facade treatment. Image removed for copyright reasons.

Fig 3.22 Facade treatment. Image removed for copyright reasons.

Fig 3.23 Play equipment. Images removed for copyright reasons.

Fig 3.24 Activities. Images removed for copyright reasons.

Fig 3.25 Activities and sport. Images removed for copyright reasons.

Fig 3.26 Surface treatment. Image removed for copyright reasons.

Fig 3.27 Seating and planting. Images removed for copyright reasons.

Roberto Burle Marx Projects

Parque do Flamengo had to form a transition area between the natural elements and the city, and by moulding the ground into different levels the park was able to be isolated visually and acoustically from the main road while also separating the different cultural and recreational activities (Montero, 2001, p. 68). There are pedestrian crossings between different park levels and the roads have two different speeds where visitors travel to the park for specific activities (see fig 3.34) (Montero, 2001, p. 68). Riddiford Street is a busy main link through Newtown into the city centre with one intersection at one of multiple hospital entries and, another on the corner of John Street and Riddiford Street providing public access into the hospital. Moulding the existing ground to create a pedestrian friendly entry into the hospital with a separate speed limit to the park entry could allow different spaces for community activities and be a transition between the Riddiford Building and Riddiford Street.

On Sundays one of the highways in the Parque do Flamengo is closed to allow for pedestrian and cyclists to access the activity spaces, which include stages for music and theatre, tree-lined car parks, areas for picnicking, relaxing and playing games, restaurants and sport infrastructure (Montero, 2001, p. 68). The programme of the Riddiford Building car park should engage with the wider Newtown community bringing activity into the suburb that people can engage with. The car park at the Riddiford Building is most often used during the week, which could mean that a car park/park hybrid could be zoned to allow for fewer parking spaces on the weekend enabling the remaining spaces to be used for recreation and community activities.

Plant selection at Parque do Flamengo was arranged in an “harmonious balance of solids and voids” (Montero, 2001, p. 68). Where Burle Marx intended a rest area he separated space from the main path with dense planting and trees for wind protection and in some places planting can be seen from the passing cars (see fig 3.28) (Montero, 2001, p. 68). This differs from how Burle Marx used texture in the gardens of the Petrobras Building where from within, the ground level garden appears as a composition of predominantly green textures that reproduces the architectural language with the regular woven pattern of the horizontal planes of water, stone and vegetation “to creating a sense of calm” (see fig 3.30) (Montero, 2001, p. 82). The pedestrian bridges in Parque do Flamengo have “gentle slopes” to make them easily usable and one of the pedestrian paths that was paved in concrete is now used for jogging (Montero, 2001, p. 68). Trees which bloom at different times of the year bring colour to the park and are cost effective compared to flower beds (Montero, 2001, p. 68). The Riddiford Building car park could reproduce the modular architectural language of the structural facade and window grid, similar to the Petrobras Building, into the landscape composition to visually connect the building, pathways and park to Riddiford Street. Further this connection could be enhanced by visually connecting the planting through the view shafts for passing vehicle and pedestrian traffic to visually connect with the landscape. The planting composition will be arranged to provide privacy and shelter from the wind both in rest areas, similar to the Parque do Flamengo and in the zones where different activities occur. There will be ‘gentle slopes’ for pedestrians and vehicles to access the different zones within the park that will be reduced speed zones to allow jogging and cycling to be combined with vehicle access.

Fig 3.28 Four photos of the Parque do Flamengo showing different planting groups. Images removed for copyright reasons.

Fig 3.29 *Praça Senador Salgado Filho seating integrated into the pathway for people to rest. Image removed for copyright reasons.*

Fig 3.30 *Raised garden beds along path in the Petrobras Building. Image removed for copyright reasons.*

Fig 3.31 *CAEMI Foundation tiled pathway. Image removed for copyright reasons.*

In contrast, the Largo da Carioca is “a giant abstract picture designed to be viewed from the surrounding buildings” (see fig 3.35) (Montero, 2001, p. 94). A design using red, white and black Portuguese stone paved a picture around existing facilities within the square (Montero, 2001, p. 94). The re-design of the Riddiford Building car park could use a similar technique with the existing architectural language of the building reproduced and paved around the existing facilities. The hospital building has large windows which overlook the car park towards the city and the Riddiford Building, if it is adapted, will also overlook the car park. The car park should become a public space that is pleasant to look at, that will inspire people to use it and enjoy looking at it. Combined with the paving, planting will also be important – Burle Marx does not use many flower beds in his design for the Parque de Flamengo as they are costly. Instead he uses trees for shade and privacy and native plants. The car park redesign will also aim to use dense areas of native plants and trees for shade similar to the Parque do Flamengo.

Burle Marx, for the design of the CAEMI Foundation, extended the mosaic floor of the entrance plaza onto the exterior pavement (see fig 3.31 and fig 3.33) (Montero, 2001, p. 110). The proposed paved car park re-design and desire lines of the Riddiford Building could extend from the proposed Riddiford Street allyways onto the building facade and into the ‘internal streets’ connecting the building car park re-design and Adelaide Road. The design of the Praça Senador Salgado Filho has long cement benches along the path with mainly native vegetation grouped by species for shaded and luminous areas (see fig 3.29 and fig 3.32) (Montero, 2001, p. 62). The car park re-design could have benches along the pathways integrated into the different zones and activities with native planting of trees and shrubs grouped in areas that may require more shade and privacy than others.

Fig 3.32 Image of the plan showing plant grouping of Praça Senador Salgado Filho.
Image removed for copyright reasons.

Fig 3.33 Tiled building elevation CAEMI Foundation.
Image removed for copyright reasons.

Fig 3.34 Plan of the Parque do Flamengo showing paths and a transition from the sea to the road.
Image removed for copyright reasons.

Fig 3.35 Plan as an abstract picture of the Largo Da Carioca.
Image removed for copyright reasons.

Section Conclusion

Revitalization can create good public space such as parks with improved connections between buildings to generate better site engagement and better use. This thesis argues that the new creative class¹⁶ value, and are attracted to, areas with community and cultural experiences that can be provided through adequate provision of public meeting spaces as seen in the Superkilen design. The Superkilen design is a landscape that provides the “physical framework” to connect a diverse community which could be applied to the revitalization of the car park within the hospital site. The Prudential Centre was economically improved by reconnecting it to the wider urban environment and the redesign of the car park in the hospital site could do this by connecting the Heritage Area and Riddiford Street to the Riddiford Building. Further in Newtown, where there is a diverse socio-economic population, a housing revitalization project will cause gentrification and may displace the existing community threatening the character of the area¹⁷. Through the provision of community space and a transition between the social housing, the Riddiford Building, and Riddiford Street, similar to Parque do Flamengo, that is viewed from the street as a well-used positive welcoming landscape, stigmatization of social housing will be reduced. The creative class will be attracted to the area for the diverse built form and cultural and community experiences that they see are offered.

¹⁶ Richard Florida's definition of the creative class. See Chapter 4 for further study on the creative class and community.

¹⁷ Rent gap theory by Neil Smith.

4.0

GENTRIFICATION ANALYSIS

Fig 4.0 New Zealand locating Wellington.

Fig 4.1 Wellington locating Newtown.

Fig 4.2 Newtown Locating the hospital site.

Fig 4.3 The hospital site locating the Riddiford Building.

WCC Growth Plan

Introduction

Because the thesis is interested in aspects pertaining to gentrification, the substantive part of this site analysis does not take the form of a conventional site analysis. Instead it conducts a comparison between Newtown and Thorndon in order to better understand local dynamics of gentrification. Newtown is one of Wellington's first outlying suburbs (see figs 4.0 - 4.3). The decision to compare it with Thorndon, is because Thorndon is one of the first inner-city suburbs to experience gentrification. The comparison will include three experiments designed to analyze the existing community and will consider whether or not the gentrification of Newtown will likely strengthen the existing community. The final section of the site analysis is focused on the hospital site and specific issues of heritage relevant to the Ridgford Building.

Fig 4.4 (see appendix 2).

WCC Transport Regeneration Plan

LEGEND

- Growth area
- Growth area
- Newtown
- Bus upgrade
- Cycle upgrade
- Priority Transport Line
- Hospital Site

Fig 4.5 (see appendix 3).

Built Heritage and Contaminated Land

LEGEND

- Heritage listed buildings
- Contaminated Land (SLUR) Selected Land Use Register

Fig 4.6

Contaminated Land and Density

LEGEND

- 24 Unoccupied Buildings
- 69 Unoccupied Buildings
- 186 Unoccupied Buildings
- Contaminated Buildings

Fig 4.7 The Urban Task Force identified underutilized contaminated land (old industrial sites) in the UK as ideal locations for development.

Newtown

Newtown (8418 people, .idcommunity, n.d.)) is a growing suburb located close to Wellington's inner-city and has a diverse community and a range of activities and facilities which form its character (see figs 4.8 - 4.12). It is part of an urban regeneration council-funded scheme in the next 5-7 years and is identified as a priority 2 transport project (see fig 4.4 and fig 4.5) (WCC, 2014-2043; WCC, 2008). The 'Regeneration of Adelaide Road'¹⁸ includes physical works to improve the street for various modes of transport and facilitation work to stimulate high-quality, mixed-use development in the area and deliver housing for up to 2000 people (WCC, 2008). The document, 'Adelaide Road – planning for the future', states that there is developer and investor interest in Newtown and that the key aim of the council scheme is improvement for all people living and working there (see fig 4.6 and fig 4.7). To do this the things that people value about the area will need to be protected, and high-quality development, which leads to a more pedestrian-friendly and accessible city, should be encouraged (WCC, 2008, p. 3). The area has examples of new 'higher-end' apartment developments and an expanding residential component including student accommodation (WCC, 2008, p. 20). The character of an area, which contributes to its uniqueness of place includes streets and buildings and traditional associations and communities (WCC, n.d., p. 18). For Newtown the physical element that makes up a large portion of its character is the Wellington City Hospital which has local and landmark significance.

¹⁸ WCC intended to establish a strategic cycling network and "improving local cycling routes delivered in six packages with Newtown in the Southern package which connects Newtown, Berhampore and Island Bay with the city after the first 3 years under the long-term plan" (WCC, 2014-2043).

Thorndon

In contrast, Thorndon (4125 people, .idcommunity, n.d.), another inner-city Wellington suburb) has experienced both first and second wave gentrification (see figs 4.13 - 4.17). It will operate as a contrast to Newtown with respect to its stage in the gentrification process for the purpose of this site analysis. The area declined in Edward prosperity by the mid-twentieth century and developed into an inner city slum (Ormsby, 2009, p. 7). In 1961 Thorndon became the route for the Wellington Urban Motorway and the new transport and housing policies encouraged a move to outer suburbs (Ormsby, 2009, p. 7). The Bolton Street Cemetery and an estimate of 400 houses were lost from the new transport infrastructure which increased the awareness of the value of material heritage (Ormsby, 2009, p. 7). Community initiatives, the Thorndon Society and Thorndon Trust, were formed in the early 1970s to preserve and protect this heritage (Ormsby, 2009, p. 5). In 1970 the inner-city suburbs became sought after locations again, including Thorndon (Ormsby, 2009, p. 7).

Fig 4.8

RIDDIFORD STREET EAST ELEVATION

Fig 4.9

RIDDIFORD STREET WEST ELEVATION

Fig 4.10 Site plan.

Fig 4.11 Transport and pedestrian network.

Fig 4.12 Green space and car parking.

Scale 1:16000

Legend

Legend

Newtown and Thorndon Case Study

The Newtown/Thorndon comparison asks whether or not gentrification similar to Thorndon would positively renew the Newtown area. It consequently assumes, as a starting point, that if Newtown is gentrified it will, at some time in the future, have a similar socio-economic and built environment as Thorndon does today. Three experiments aim to understand this transition¹⁹. These are focused on:

- Income, age and density (see fig 4.18 and fig 4.19)
- Industry and employment (see fig 4.20 and fig 4.21)
- Building use (see fig 4.22 and fig 4.23)

The study uses Richard Florida's definition of the creative class (see appendix 7) and the human capital theory. Davidson and Lees explanation of 'new build gentrification'²⁰ and Glass' original terminology will be referred to as "gentrification"²¹. Although these are the definitions, theories, processes and academics selected, there is recognition of other theories and debate. The study is aimed at analysing the existing creative class and service class in Newtown by a comparison with Thorndon to find potential effects of urban regeneration on an existing community.

¹⁹ Smith writes that the indicators of gentrification can have a strong correlation with the meaning of the concept. He further mentions income to locate class as an indicator and provides a combination of indicators that can reduce these theoretical problems: income and rent (Smith, 1987, p. 463). The study conducted above argues that the creative class will have different indicators.

²⁰ 'New build gentrification' will be used when referring to gentrification occurring along Adelaide Road and Ridgford Street (see appendix 4).

²¹ 'Gentrification' will be referred to when referring to gentrification occurring in the Heritage Area of Newtown.

“The most successfull regions welcome all kinds of people”
(Florida, 2002, p. xviii).

Fig 4.18 and 4.19: Income, Age and Density Correlations

Current policy aims to increase the density along Adelaide Road and Riddiford Street with 'new build gentrification'. Both diagrammes show the spatial arrangement of the creative class and the service class in Thorndon and Newtown. The Newtown population distribution shows few members of the creative class located far away from the Heritage Area and Adelaide Road, whereas Thorndon shows a high percentage of the creative class located in the Heritage Area, along Tinikori Road where 'gentrification' has already occurred. As well as this Thorndon, shows a moderate, and Newtown a much larger, population of the service class.

...The growth of the service class is in large measure a response to the demands of the creative economy. Members of the creative class, because they are well compensated and work long and unpredictable hours, require a growing pool of low-end service workers to take care of them... This class has thus been created out of economic necessity because of the way the creative economy operates. Some people are temporary members of the service class, have high upward mobility and will soon move into the creative class-college students working nights or summers as food clerks or office cleaners... (Florida, 2002, p. 71).

The study places having a medium or above medium income as an indicator that you are a member of the creative class because of Richard Florida's definition of the members of the creative class. However, students who may have lower incomes can also be members of the creative class, working service class jobs to support themselves through study (Florida, 2002, p. 71). In Newtown, the process of 'new build gentrification' will increase the likelihood of a higher socio-economic demographic in Newtown and potentially displace existing Newtown residents. The displacement is likely to include, but is not limited to, young people - high school leavers and young adults who are studying/working service class jobs. This is why it is important to provide additional accommodation for lower income people in the inner-city suburb, Newtown.

Newtown

Fig 4.18 (see appendix 6).
Scale 1:20000

Thorndon

Fig 4.19 (see appendix 6).
Scale 1:20000

Legend

Data Source: Statistics New Zealand (Statistics New Zealand, 2016).

Fig 4.20 and 4.21 Industry and Employment Correlations

The correlation between industry and employment in Newtown and Thorndon is shown in Fig 4.20 and Fig 4.21 shows the correlation between the change in industry and employment between 2006 and 2013. Newtown shows an increase in the creative class industry and employment, while Thorndon has a higher percentage of creative class industry and employment but has a negative correlation with the change in industry of creative employment. This suggests that Newtown is experiencing growth of the creative class population. Florida writes expectations re: gentrification relate to that the creative class are moving towards more economically successful creative centres²² which have successful rates of employment and creative industry (Florida, 2002). New indicators of the process of gentrification can include creative class members choosing to locate in a centre before creative industries and business. For an economically successful region, it is important to provide a mix of tenure at a neighbourhood scale to strengthen a community through social mixing.

²² The creative class are moving away from traditional corporate communities which have had success through access to natural resources or transportation routes, tax breaks or other business incentives aimed at growing business, sports stadiums, freeways, urban malls and tourism-and-entertainment districts. The creative class are moving towards creative centres that have high concentrations of Creative Class people. These creative centres show (Florida, 2002, p. 218):

(1) strong economic success (2) innovations and high-tech industry growth (3) strong signs of overall regional vitality, such as increases in regional employment and population, and (4) the beginning and growth of "creativity-artistic and cultural, technological and economic" (Florida, 2002, p. 218).

The creative class desire creative centres and business is created from the relocation (Florida, 2002, p. 218).

2013 Occupation

Fig 4.20 (see appendix 9).

2013 Change in Industry Between 2006 and 2013

Fig 4.21 (see appendix 8).

Legend

Newtown Thorndon

Occupation

Industry

Data Source: Statistics New Zealand (Statistics New Zealand, 2016).

Newtown

Fig 4.22
Scale 1:3000

LEGEND

Single Boutique		Single Franchise
Single Boutique and residential		Single Franchise and Residential
Multiple Boutique		Multiple Franchise and Residential
Public Infrastructure		Residential
		Apartments

Fig 4.22 and 4.23 Building Use Diagramme

Direct observation recorded the types of building use in the Heritage Areas. Newtown has a larger proportion of franchise and vacant buildings than Thorndon. The Thorndon stores are boutique and provide services for the high socio-economic residents living there. Newtown stores are franchise and bohemian 'thrift shops,' which also provide a service to the residents. The boutique stores are likely to produce higher rent and taxes. Research into the land value and capital value correlations between the two suburbs would offer further insight into the actual economic gains of Heritage Areas, however this is outside the scope of this thesis. The assumption is that, if a similar gentrification as happened in Thorndon occurs in Newtown, and boutique stores replace the uses of the existing Heritage Area, then the existing community will be displaced both in terms of the work available for them and access to clothing, food etc. because these boutique shops are aimed at customers from a higher socio-economic class. Building use in both Thorndon and Newtown directly correlates with the existing socio-economic class of employees and customers (eg. A student who has residence in Newtown may be working part time at one of the franchise fast food stores in Newtown).

Newtown/Thorndon Comparison Conclusion

The research has shown that in Thorndon, where the original gentrification occurred in Wellington, there is a high percentage of high income households and members of the creative class. While Newtown has a much smaller percentage of high income households and members of the creative class, there is evidence of a growing creative class population. The residents in Newtown who will be displaced by this increase in creative class population, from increased cost for accommodation, are students, service workers and low socio-economic residents. If Newtown follows similar gentrification as Thorndon it may lose the creative capital that Richard Florida argues as a necessity to grow the creative economy²³. The study could be furthered after the next census to show how the development of Riddiford Street has affected the existing creative and service class population of Newtown.

Gentrification studies have speculated on the cause and effects of gentrification and there is potential for future analysis on the indicators, and *how* gentrification occurs. There are two indicators which could be used for future study on the creative class and gentrification:

- Education and Population Correlations.
- Creative class identity - communities with a distinctive character and openness to diversity with high quality amenities are preferred instead of generic suburbs that may be alienating and “tightly knit” (Florida, 2002, pp. 15, 226).

These Indicators would include:

- The population increase in Newtown and Thorndon between 2006 and 2013 correlated with education statistics. Richard Florida, argues that place is the key economic and social organizing unit of our time and argues that educated people will create economic growth (Florida, 2002, pp. 223, xix). Correlations between educated people and city-suburb growth would show if the creative class are moving into Newtown.
- The creative class are moving towards creative centres and indicators of a creative centre might be slightly different from traditional city centres. Florida writes that traditional cost-related factors of tax breaks and highway construction are no longer the key to successful regions (Florida, 2002, p. 221). The indicators therefore might be the type of transport people choose to travel to work, internet connection and type of tenure, eg. rented, owned – social housing (mixed-tenure). With the internet people are able to work from home without needing transport to get to a traditional office. The creative class are moving to Newtown at a higher rate than creative industries are being located in Newtown, which means that currently they will be using transport to get to work either in the CBD or other suburbs.

²³ Service workers and members of the creative class who may not have high incomes and people with high upward mobility, likely to move into the creative class.

Fig 4.24
Scale 1:20000

The proposed car park site and Riddiford Building is located in an Institutional Precinct - which the Wellington City Hospital is located within, in the inner city-suburb, Newtown, Wellington (see fig 4.24 and fig 4.26). The Heritage Area is currently aligned with a main thoroughfare, Riddiford Street, and a busy intersection at the corner of John Street, with no defining centre or pedestrian route (see figs 4.33 - 4.36). The existing community facilities include a supermarket, retail spaces for clothing, furniture, a kindergarten and gymnasium within walking distance of the hospital site (see fig 4.25). The Riddiford Building is two separate structures, with a 150mm seismic gap separating a North and South Block (see fig 4.28). The Riddiford Building's front facade faces west, see figs 4.29 - 4.32, and is adjacent with a car park, which is used by hospital staff and the public (see fig 4.27 and fig 4.37). With the proposed transport infrastructure upgrade, this thesis proposes that fewer car parks will be required on the hospital site. Based on the research the current number of car parks could be reduced to half (see appendix 12) (see figs 4.38 - 4.43). As discussed later in Chapter 5 the proposed thesis design proposes a way to better use the car park space and progressively reduce the number of car parks. The site could also benefit from a link to the town belt, and the corner of John Street intersection would benefit from being redesigned and better linked to the proposed site.

²⁴ See appendix 10 for Wellington Hospital Design Guides relevant for this section.

Fig 4.25 (see appendix 5).
Scale 1:2000

LEGEND

Fig 4.26 Sketch diagramme.

LEGEND

Fig 4.28
Scale 1:1000

Fig 4.27 Sketch elevation of the Heritage Area showing the potential activation of the existing laneways (blue dots).

Sun Study

Summer Solstice

Fig 4.29 Image Overlay.

Scale 1:4500

Winter Solstice

Fig 4.31 Image Overlay.

Scale 1:4500

Fig 4.30 Images.

Fig 4.32 Images.

Fig 4.33 Riddiford Street looking toward Countdown.

Fig 4.34 Existing laneway in Heritage Area.

Fig 4.35 Riddiford Street looking toward Newtown.

Fig 4.36 Existing car park looking toward the Heritage Area.

Existing View Shafts and Proposed Laneway Activation through the Heritage Area

Fig 4.37 Private spaces which overlook public spaces, provide good natural surveillance. If public space overlooks private space this is invasive. Overtime, in stages, Riddiford Street could become less of a thoroughfare and more of a people hub. (Prudential Centre development did this by revitalization of the existing buildings and through the provision of laneways). The residential spaces and commercial will interweave with the laneway activation and pedestrian paths that connect the different uses of the site (see fig 4.28).

Car Park Study Photographs

9:00 a.m.

10:00 a.m.

11:00 a.m.

12:00 p.m.

1:00 p.m.

2:00 p.m.

3:00 p.m.

4:00 p.m.

5:00 p.m.

Fig 4.38 Wednesday.

Fig 4.39 Friday.

Fig 4.40 Saturday.

Car Park Study Photograph Overlay

Fig 4.41 Wednesday.

Fig 4.42 Friday.

Fig 4.43 Saturday.

Hospital Site Description

The hospital moved from its original site in Pipitea (see fig 4.44). It was constructed on the current site on Riddiford Street in 1879. The Riddiford Building began construction in 1940, but the outbreak of WWII disrupted the building construction and limited the availability of materials (Towers, n.d., p. 82). The original plan included 126 single bedrooms for nurses, and six self-catering maisonettes for senior sisters with the layout of the original nursing home designed for communal living with shared bathroom, cooking and common room space (see figs 4.45 - 4.55) (Towers, n.d., p. 78). The nursing home was constructed during a time period where married woman did not work and therefore the nurses would have been single women. The purpose of the building, as student nurse accommodation, became obsolete in 1980 when polytechnics began to train nurses (Revington, 2017). Since then the building has accommodated multiple user groups as affordable accommodation. The current debate over the building's future has involved suggestions for providing accommodation for the homeless, affordable accommodation and demolishing the building to make way for a children's hospital. (e.g. "run-down Wellington hospital building will be demolished rather than converted into affordable housing" (Torrie, 2012)). WCC spokesman Richard MacLean has said that it was not feasible to bring the building up to scratch, which was why the idea was off the table (Torrie, 2012). The required upgrades to the Riddiford Building make the project unfeasible in its current architectural form. The provision of housing for lower socio-economic members of the community is valuable and, if the Riddiford Building could be converted to social housing, it would be an asset to the existing community. The Riddiford Building is a unique building that could attract the creative class to the inner-city suburb, Newtown.

Fig 4.44 Wellington Hospital, Pipitea Street.
Image removed for copyright reasons.

Fig 4.45 Demolished building, adjacent Riddiford Building.
Image removed for copyright reasons.

Fig 4.46 The Riddiford Building.
Image removed for copyright reasons.

Fig 4.47 Staircase.

Riddiford Building Existing Drawings 1953

GROUND LEVEL PLAN (BELOW) AND FIRST FLOOR PLAN (ABOVE)

Fig 4.48 (See appendix 10). Image reproduced with permission.

Fig 4.49 Floor surface with chair marks.

Fig 4.50 Floor tiles and original concrete structural floor.

Fig 4.51 Ceiling and ceiling mounted light fitting.

Riddiford Building Existing Drawings 1953

GROUND LEVEL PLAN

Fig 4.53 Original programme. Image reproduced with permission.

Fig 4.52 150mm seismic gap.

60

Riddiford Building Existing Drawings 1953

WEST ELEVATION

Fig 4.55 The building western and eastern facade is structural with deep pier/spandrel moment resisting frames. The building was designed as a series of single bedrooms and the facade and window treatment represents this. Image reproduced with permission.

Heritage

The Riddiford Building could be protected from demolition if it was adapted to a new use. The feasibility of this should include conservation and the aspects of the building that have cultural heritage value, but a feasibility study (incl. economics) is beyond the scope of this thesis. Scott, *On Altering Architecture*, identifies three possible outcomes of a building once its use has become obsolete: to remain unchanged, altered or demolished (Scott, 2008, p. 1).

How then can the alteration that is inevitable if a building is to remain in use be executed and be recognized as the equivalent of that which is altered? How might the original and the alteration become intrinsic? (Scott, 2008, p. 13).

The successful adaption of a heritage building should be complementary and distinctively different from the original building with a focus on, "...preserving the links to the past that make it so special" (Trust, 2011, pp. 2-3). Adapting the Riddiford Building for current living standards as social housing can be supported by conservation principles if the proposed changes can be distinguished between existing and proposed.

The Riddiford Building has cultural heritage value and the aspects that make the building significant include four aspects from a heritage perspective, scientific, social, aesthetic values and historic architectural values. The historic architectural values include the form, scale and materiality of the building (see figs 4.56 - 4.59). The historic group qualities are that the Riddiford Building has association with the history of the hospital, and their employment of woman. From 1880 "woman of good character" were enrolled to be nurses and from 1937 the Hospital Board provided nurses with better living accommodation rather than a pay increase (Towers, n.d., p. 23 & 77). The historic scientific values come from the education of how the past building layout was designed with the matron rooms with a hierarchy to the nurse student rooms (see figs 4.60 - 4.63). The Riddiford Building provides evidence of how some employed woman lived and worked in 1950. The historic social values are evident from the community sentiment. Past residents are said to become nostalgic remembering their date nights beginning at the Riddiford Building (Revington, 2017). Past employee Miss Woodhouse says: "Each floor is like its own street or community and it has a nice friendly feel to the place" (Revington, 2017).

Fig 4.56 Central stairway.

Fig 4.57 Existing window Riddiford Building.

Fig 4.58 Existing window Riddiford Building.

Fig 4.59 Typical view of the existing 'internal street'.

Riddiford Building Existing Drawings 1953

NURSE ROOM PLAN

Fig 4.61 There were two single bed rooms between two shear walls. Image reproduced with permission.

MATRON ROOM PLAN

Fig 5.63 There were two matron rooms between three shear walls and they shared the cooking and kitchen facilities. Image reproduced with permission.

Fig 5.60 Photographs from inside the Riddiford Building showing the existing condition of one of the nurse's room.

Fig 5.62 Photographs from inside the Riddiford Building showing the existing condition of one of the matron's rooms.

Section Conclusion

The Riddiford Building could include mixed-tenure accommodation for students with improved pedestrian access within the facility and to existing facilities in Newtown. The site would also benefit from having a link to the town belt and, the corner of Adelaide Road and John Street that would benefit from also being redesigned and linked to the site, however that is outside the scope of this project.

5.0

DESIGN

Section Introduction

This chapter presents a design for the adaptive reuse of the Riddiford Building and its immediate landscape context. The design draws on aspects of the case studies and aims to address needs identified in the site analysis, including the need to expand the initial proposal beyond the building to include the immediate surroundings and connection to Riddiford Street.

Connecting Spaces with the Community

The description of the design begins with the wider landscape site before addressing the redesign. The proposal aims to produce a mixed-use facility that supports urban living and sharing of space. To address the desire of members of the creative class a potential scenario would be:

- Tenure-mixed accommodation for students.
- A landscape that supports car park and park activities.
- Urban regeneration of the existing area to provide the amenities to attract residents to the Riddiford Building and encourage its reuse.

The programme added to the building will be student accommodation, shared office space, a restaurant and independently owned small businesses to provide provisions. This is to create local facilities that are easily accessible for the residents and surrounding community. The Riddiford Building is set within a larger hospital site that has a car park, entry to an underground car park and public main access to the hospital building. The east site boundary of the hospital site is set along the rear of buildings in an Heritage Area with building shop frontages that face Riddiford Street, and a busy intersection that reduces pedestrian friendliness. The hospital site is frequently accessed by the public using the existing car park which separates the Riddiford Building from the Heritage Area and street frontage. The site lacks pedestrian friendly areas that could engage foot traffic from Riddiford Street, through the Heritage Area and towards the Riddiford Building (see fig 5.1).

Project: Washington Square Park
Location: Lower Manhattan, New York City
Project year: 1871

Fig 5.1 Washington Square Park with street performance and people sitting. There are a variety of community events that are held at the park. Image reproduced with permission.

Neighbourhood Connection and Landscape Design

The following section will describe how the thesis proposal aims to landscape design resolve the disconnection with the neighbourhood. There have been four major changes to the landscape to physically connect the neighbourhood into the hospital site and Riddiford Building to encourage its reuse:

1. provisions to access the town belt from Hospital Road
2. paths through the Heritage Area into the hospital site (see figs 5.2 - 5.4)
3. a new entry into the hospital site from Hospital Road to reduce traffic congestion at the John Street and Riddiford Street intersection, and
4. a park that creates a sense of place for the community in Newtown.

The above design decisions have considered environmental design principles from CPTED (Crime Prevention through Environmental Design) as follows;

(1) Currently the rear (east) facing facade has large concrete retaining walls with one entry between the rear facade and Hospital Road. This current design is unsafe because it creates entrapment areas and isolated areas (Anon., 2005, p. 11). The proposed road through a void in the Riddiford Building and proposed earthworks to level the landscape with the ground level of the Riddiford Building will achieve a safe place by removing these areas and adding natural surveillance from the Riddiford Building with clear sight lines along Hospital Road (Anon., 2005, p. 11). Further this will enable Hospital Road to become a shared service lane and park space with the potential to then connect Riddiford Street with the town belt (see figs 5.10 - 5.12).

(2) The paths through the Historic Area into the hospital site aim to create a good layout with clear and logical orientation (Anon., 2005, p. 11). The paths will remove the isolation of the car park. They will do this by providing easily understood pedestrian networks, safe movement and connections to enable people to locate the entrance to each building and by providing an activity mix that will place “eyes on the street” (Anon., 2005).

(3) The design has provided a new entry into the hospital site from Hospital Road. The aim of this has been to reduce vehicle traffic at the corner of Riddiford and John Street and allow people to gather more easily in the Heritage Area and hospital site. A CPTED study suggests that neighbourhoods can be improved through design with “calming entries” that mitigate the impact of major roads. The careful sculpting of the landscape and planting has aimed to reduce noise and create a “sense of calm” next to the busy Riddiford Street, similar to Parque do Flamengo.

(4) Finally, the design will provide recreation facilities, desired by the creative class, but available to all members of the community to engage with similar to the Superkilen design. This has been to create a sense of public ownership to encourage community care of the urban landscape (Anon., 2005, p. 12). A study from the CPTED research suggests that there is evidence that “place making enhances a sense of identity through both physical and social influences” with good design fundamental for improved city centres (Saville, 2002, p. 19). The changes to the existing landscape have aimed to create a centre accessible for all people in Newtown to participate in the activities and facilities aimed to strengthen and connect community engagement.

Fig 5.2 Existing building in Heritage Area (see fig 5.3 and 5.4) for proposed changes to one building in the Heritage Area.

Fig 5.3 The existing building in the Heritage Area faces Riddiford Street with an entry to a bike store and café. The thesis design proposes a café extension to the rear of the building with a new door opening onto the proposed laneway activation. This will allow seating to be placed at the rear of the Heritage Area for better engagement with the car park re-design and Riddiford Building.

Fig 5.4 Section perspective of the proposed laneway in the Heritage Area. The existing bikes and seating on Riddiford Street at the entry to the building will extend to the rear of the Heritage Area. Image removed for copyright reasons.

Project: Parking des Célestins
Architect: Michel Targe and Jean-Michel
Wilmotte
Year: 1996

Shared Roads and Laneway Activation

Desire lines developed to become connecting paths that separate zones for parking and community activity. The entry and exit points have linked and unified the existing community facilities and the proposed Riddiford Building adaption. Where multiple desire lines crossed the landscape was sculpted to separate activities acoustically and visually from one and other similar to Burle Marx's Parque do Flamengo and the Robin Hood Gardens land formation (hill). The zones will provide an opportunity for community engagement to spill out from the Riddiford Building and existing buildings into the landscape.

The provision of paths aims to increase the pedestrian use of the site and increase alternative non-car transport (see fig 5.6). The paths will be shared with vehicles, bikes and pedestrians. Larger circulation roads will be used by all three groups. These roads are visible with white paint lines similar to the Superkilen design. The secondary narrower roads (blue tiles) will only be used by bikes and pedestrians. There will be vehicle access at reduced speeds in each zone, car parks, and painted signals on the tiled surfaces for cars, bikes and pedestrians, similar to the Superkilen design. The design has aimed to include pedestrians, vehicles and alternative transport methods in a unified landscape design (see fig 5.5).

Royal HaskoningDHV
Location: Katwijk, Netherlands
Year: 2016

Fig 5.5 The underground car park design was based on a seven-storey cylindrical pattern. The modular pattern from the Riddiford Building will be translated onto the landscape to provide a modular layout for car parks. Image removed for copyright reasons.

Fig 5.6 Multi-purpose underground car park with undulating hills to reduce wave inertia in a tsunami. The land formation has raised park space between paths transitioning from a road to the sea. The hospital site is a transition from the Riddiford Street to the Riddiford Building and the paths will be connections similar to these paths. Image removed for copyright reasons.

Fig 5.7 Painting of concept design of site with desire lines and changing use depicted by different colours.

Car Park Redesign Rationale

The rationale for the car park redesign has been to connect the Riddiford Building as mixed-tenure accommodation with the existing community. The importance of this is to provide better community space and parks that can create a sense of place. As future transport development is geared toward improving public transport and alternative vehicle transport, the proposed redesign of the hospital car park will reduce the number of car parks to allow space for better community public space. Lastly, walkability and allocation of park space in inner-city suburbs has been assessed by Place Economics to be important characteristics that make Heritage Areas desirable locations, the design supports better walkability and provision of park space.

The proposed design has timeshared car park spaces that encourage different users to enter the hospital site through the Heritage Area during different periods of the day (see fig 5.7 and fig 5.8) (Anon., 2005). This will strengthen the identity of the place and provide a variety of “eyes on the street” for security. The tiled surface indicates that the space is public and the colour of these spaces indicate that they are used for different purposes. To demonstrate what the different spaces are used for, signage at the beginning of the park will clearly demonstrate the colour and use of each zone. For example, the pink-tiled surface represents semi-private space, mainly near the Heritage Area where the car park spaces are reserved for lease by permanent residents to formulate a neighbourhood watch. The following provides a detailed description of each of the colour zone and its function:

Connecting Spaces Programme Between Connection Points

Permanent Resident Parking Zone:

A secure area with trees and planting for privacy. Car users will be familiar with the space and will create security as part of a neighbourhood watch.

Temporary Parking Zone:

One hour parking with trees and seating provided for pedestrians to share the space.

Half Day Parking (6 hours max):

Similar to temporary parking with trees and seating and space for play equipment.

Full Day Parking Zone:

Car spaces allocated for parking from 8 a.m. till 5 p.m. (weekdays). The spaces will have community activities after 5 p.m. on weekdays and on the weekends.

Nurses Car Park Zone:

138 (See appendix 12).

Communal Area:

Landscaped and open space with a grey multi-purpose surface for performance and events, similar to Washington Square Park and the Superkilen design.

Path:

Connecting path for vehicles and pedestrians.

Car park size from WCC Design Guide.

CAR PARK TYPE	Nº.
NURSE	136
TEMPORARY	50
HALF DAY (6 HOUR MAX)	54
FULL DAY	104
PERMANENT RESIDENT	23
BIKES TO RENT	75

Fig 5.8 Car park redesign.
Scale 1:1000

Landscape and Building Connections

There are two aspects of the building facade that have connected the landscape design with the building: desire lines and colour (see fig 5.13). The desire lines seen on the urban landscape will be followed through onto the front facade of the Riddiford Building. This will transfer the same architectural language from the landscape onto the building. One outcome will be that through the view shafts from the Heritage Area and Riddiford Street, the Riddiford Building will be visibly connected to the landscape from the passing vehicle traffic and pedestrian traffic.

Concrete shear walls in the transverse direction at regular 5600mm intervals are located at either side of the central hallway, with a 5600mm by 4000mm modular layout that enables apartment designs to 'slot' between the shear walls (see figs 5.16 - fig 5.18). The window grid forms the proportions for the tiled landscape surface and has been translated from the building to the landscape as allocated car parks and back onto the building with the use of colour.

The alterations to the existing Riddiford Building that will be visible from the exterior will be the protruding overhang front and back, that was originally used as the matron's room and the shop frontage openings (see fig 5.9). The overhang will have a double glazed curtain wall with a steel frame attached to the existing concrete structure and spider connections attaching the glazing to the frame (see fig 5.14 and figs 5.46 - 5.49). From outside, the glazed overhangs will appear frameless and floating on the concrete structure. The colour and materiality of the glazing expresses the difference between the existing and the alteration. The ground floor will have large glazed shopfront windows on the west facing facade to create an active edge for people to view the interior of the shops as they walk by and to access the ground floor shops. On the rear of the building, where the shotcrete is added to the facade, the café doors will reveal the original facade (see fig 5.15). The alterations to the existing Riddiford Building, from the exterior are minimal and where changes have been made they are clearly distinguishable from the original building.

Fig 5.9 Proposed new windows and ground floor shopfront door openings.

Scale 1:700

Fig 5.10 View from the new ground floor shops will provide natural surveillance from shopkeepers and people accessing the facilities.

Fig 5.11 View from the road will provide visual surveillance from the vehicles and pedestrians using the road.

Fig 5.12 View from the glazing and circulation stairway will create surveillance from the building users.

Fig 5.13 Front elevation (above) and rear elevation (below). Early sketch of landscape transitioning onto the building facade.

Fig 5.14 Sketch section showing the initial concept of the glass attached to existing overhangs, the shotcrete and door opening.

Fig 5.15 Building adaption.
Image removed for copyright reasons.

Fig 5.16

Scale 1:300

EXISTING FLOOR PLAN
STRUCTURE AND CIRCULATION

Fig 5.18 Typical space between two shear walls.

Scale 1:100

Fig 5.17 Plug in architecture.
Image removed for copyright reasons.

The Riddiford Building Redesign

Building Adaption - Vacant Building

Fig 5.19

Scale 1:700

Circulation and Fire

Fig 5.20 Vertical access, lift and staircases.

'Internal Streets'

Fig 5.21

Maisonettes

This section describes the proposed apartment planning for the Riddiford Building (see figs 5.19 - 5.21). A number of concepts were tested (see figs 5.22 - 5.24) with the final layout being based on the literature of mixed-tenure. The selected concept, mixed-tenure, combine three apartment tenures in the Riddiford Building that vary in size. A brief description of each of the initial concepts is provided below.

Scale 1:200

PLAN (SINGLE AND DOUBLE UNIT)

Concept: Single & Double Unit

Fig 5.22 Single studio units bedroom separate structure. There were two tenure types created in the concept but entry was not similar to the Unité. The required alterations would be similar to the Double Unit concept. The entry is a staircase shared between two tenures to reduce alteration requirements but achieve the effect of the 'internal streets'.

Concept: Single Studio

Fig 5.23 Single student units with shops below. This approach would limit the type of tenures within the building but fewer alterations would be required – potentially reducing the cost of revitalization.

PLAN (SINGLE STUDIO)
Scale 1:200

Concept: Double Unit

Fig 5.24 Two bedroom units above and below with a central 'internal street' tested the same structural typology as the Unité. This requires adaption to include internal staircases for each unit, floor penetrations and trimming studs which would be extensive.

PLAN (DOUBLE UNIT)
Scale 1:200

Concept: Mixed-Tenure

LEGEND

Proposed Adaption
Existing Structure
Student Unit
Two Bedroom Unit
Three Bedroom Unit
Building Information
Restaurant
Office
Shops

A combination of single student studios (see fig 5.26), two bedroom units (see fig 5.25) and three bedroom units (see fig 5.27). Shops below, restaurant and office space. This is the selected concept and will be described in the following section (see figs 5.28 - 5.68).

Scale 1:100

Fig 5.25

Fig 5.26 (see fig 5.50 and 5.51).

PLAN (THREE BEDROOM UNIT)

Fig 5.27

TRANSVERSE SECTIONS

Fig 5.28

Scale 1:300

Fig 5.29

Fig 5.30 The alteration for twelve three bedroom maisonettes would require 12 staircases between level 6 and 7. The alteration for twenty-four two-bedroom maisonettes would require 24 stairs between level 3 and 4.

Scale 1:300

Fig 5.31 Proposed site plan.
Scale 1:300

Riddiford Building Proposed Plans

- Ground Level - seating, provisions store, grocery, butcher, bakery & café, juice bar, public toilets and a road through the building.
- Level 1 - 6x57m² units with 23.5m² loggia above (level 2) and a restaurant 454m² with waiting area & kitchen.
- Level 2 & 3 - 7x23.5m² student units and 12xtwo bedroom studios, 23.5m² loggia and 57m² above.
- Level 4 - 12x23.5m² student units and office space 350m² 37 people.
- Level 5 - 25x23.5m² student units.
- Level 6 & 7 - 12x108m² three-bedroom family units.

Scale 1:200

LEGEND	
	Proposed Adaption
	Existing Structure
	Student Unit
	Two Bedroom Unit
	Three Bedroom Unit
	Building Information
	Restaurant
	Office
	Shops

Fig 5.32
Scale 1:200

GROUND LEVEL (WITH GROUND LEVEL ACCESS)

Fig 5.33
Scale 1:200

LEVEL 1 (RESTAURANT ENTRY ONLY)

Fig 5.34
Scale 1:200

Fig 5.35
Scale 1:200

Fig 5.36
Scale 1:200

LEVEL 4 (UNIT AND OFFICE ENTRY LEVEL)

Fig 5.37
Scale 1:200

LEVEL 5 (UNIT ENTRY LEVEL)

Fig 5.38
Scale 1:200

LEVEL 6 (UNIT ENTRY LEVEL)

Fig 5.39
Scale 1:200

LEVEL 7

TRANSVERSE SECTIONS

Fig 5.40 North block fire exit.

Fig 5.41. The circulation remains unchanged.
The elevator will be repaired or replaced and all stairways will be repaired to their original state.

Fig 5.42

Scale 1:300

WEST ELEVATION

Fig 5.43

EAST ELEVATION

NORTH ELEVATION

Fig 5.44

SOUTH ELEVATION

Fig 5.45

Scale 1:300

Fig 5.46 Interior view of Tate Modern and the glass facade treatment. Image removed for copyright reasons.

Fig 5.47 Similar to the Tate Modern (see fig 5.46) the glass will encase the original structure. The pattern of the glass panels reflect the existing building facade window and door openings from the matron rooms (see fig 5.13).

Fig 5.48 Section through the pultruding overhang originally designed as an outdoor area for the matron rooms.
Scale 1:50

Fig 5.49 Proposed alteration of the glass curtainwall attaches to the existing structure.
Scale 1:5

Student Unit

1. 'Internal street'
2. Fold-out bed and couch
3. Fold-up dining table
4. Half size fridge under bench
5. Kitchenette
6. Hot water cylinder with storage above
7. Desk and storage
8. Toilet
9. Bathroom

Note: Communal Laundry

Fig 5.50 *Sleeping.*

Scale 1:50

This is a small open plan unit aimed at the student market. The kitchen is a basic kitchenette; an oven hood sits above a stove while a half fridge sits under the bench between the sink and oven. A built-in desk and storage unit along the window facing wall will allow space to study while also providing storage space for clothes and books. Shelves will be attached to the exposed concrete wall to secure the cabinetry to the wall and to leave the concrete longitudinal spandrel frame exposed. Each bathroom has a toilet, small wash basin and feature shower which has a small shower splash wall and exposed, polished concrete walls and floor.

Fig 5.51 Living space.

Scale 1:50

Student Unit

PERSPECTIVE SECTION 6

Fig 5.52
Scale 1:25

Fig 5.53 Bathroom.

Fig 5.54 Perspective image of a typical 'internal street' which is generous in width to provide a common area.

Fig 5.55 Perspective image of the ground floor 'internal street' looking toward the foyer.

Fig 5.56 Perspective view from inside the cafe looking out toward the community space.

Fig 5.57 Riddiford Building entry.

Structural Upgrade²⁵

- North Building: 7 piers of concrete shear walls founded on existing driven reinforced concrete piles. An exception is at the southern end, adjacent to the seismic gap to the southern block founded on shallow foundation pads. Proposed upgrade of the existing driven piles.

- South Building: features a partial basement underneath and 7 levels above with 8 piers of concrete shear walls in east/west transverse direction and shallow foundations. Proposed larger foundation pads to stop overturning.

Building Adaption

Structural and Service Changes

- New boiler and services to the units.
- Penetrations in ground floor spandrel frame with new shear walls on the ground level in the internal corridor reinforced concrete 300mm thick and 200mm shotcrete up to Level 4 of rear facade.
- Four penetrations in shear walls on the ground floor of the Northern building.
- Void in the ground level of the South Building. To achieve this new 1.5m deep transfer beam will support of the Eastern and Western facades with new beams spanning the building to support the transfer beam. On the higher floors above compression struts will assist in transferring these loads.
- New steel primary and secondary trimming beams in floor openings.
- New window openings on Level 6 for 12 new double glazed windows.

²⁵Advice regarding the structural upgrade was given by structural engineer Andrew Charlson.

Fig 5.59 Laneway connection to the Riddiford Building through the Heritage Area.

Fig 5.60 Community space.

Fig 5.61 View of the full day parking zone being used as a car park.

Fig 5.62 View of the full day parking zone being used as a community sports space on the weekend.

Fig 5.63 6 a.m. service lane - truck parked and goods delivered to the ground floor shops.

Fig 5.64 8 a.m. service lane - café open and seating placed outside.

Raised garden with native shrub and a ledge for seating.

Kowhai trees provide shelter and privacy

Rubber surface for a multi purpose community space

Fig 5.65 Perspective section of the relationship between the landscape and Riddiford Building.

Cabbage tree

Link to the town belt.

Landscape folded onto the Riddiford Building.

Fig 5.66 Perspective section of the relationship between the existing community facilities, landscape and the Riddiford Building.

Fig 5.67 View from the Riddiford Building looking towards Newtown.

Fig 5.68 The landscape is designed to be viewed as art from within the hospital and Riddiford Building.

Section Conclusion

The design has resolved the provision of public space that will connect the urban landscape with the Riddiford Building that has been adapted as mixed-tenure accommodation. The provision of public space has been achieved with bright colours that provide clear allocation of activities and parking zones but the design could benefit from further development of the private space and public space interaction. The semi-public space has begun to resolve this issue with the provision of a darker colour tiled surface and the planting of trees for privacy. The tenure mix provided a layout for all the unit types which was able to be used to give an indication to the number of units and bedrooms generated from the adaption.

5.0

CONCLUSION

Thesis Conclusion

Newtown has the potential to gentrify in a way that reduces the negative impact on lower socio-economic classes due to displacement if it ensures adequate provision of social housing. This will also support the retention of the creative class, which Florida has identified as both a driver of gentrification and a new driver of economic growth, which is dependent on service workers because of their long and irregular hours of work.

The creative class are attracted to areas which offer diversity, including built form, character and heritage architecture which potentially could be a catalyst to improve the economy of an area. Place Economics demonstrates the important role of heritage and historic architecture in this. The Newtown/Thorndon comparison suggests that Newtown is in the process of gentrification by the creative class, which is a different type of gentrification of that of Thorndon. This is not completely black and white and does not suggest that the creative class from Thorndon is different from the creative class that may move to Newtown. The assumption is that the type of buildings that they move to will change: as gentrification processes have evolved so too has how gentrification occurs and the effect on the built environment. Gentrification typically was a process where middle class residents would move to working class cottages and renovate them, (e.g. Thorndon). Newtown may experience this type of gentrification in the Heritage Area but may also experience a new type of gentrification with development of dense new buildings on underutilized land as seen in literature from European and American cities. An adaptive re-use of the Riddiford Building could provide additional accommodation for lower-socio economic residents. This will retain social mixing. The thesis suggests that building revitalization of a deteriorating housing estate, the Riddiford Building as social housing, can attract the creative class to the suburb, Newtown to strengthen the existing community. For an economically successful region, it is important to provide a mix of tenure at a neighbourhood scale to strengthen a community through social mixing.

This thesis design focused on the adaptive reuse of the Riddiford Building to provide social housing, but this cannot be simply a change in use. It must also ensure that the building better engages with the Newtown environment/neighbourhood, as currently the building is isolated from its community. The landscape design has aimed to connect people into the redesign of the car park and to create a pedestrian friendly public space. It has done this by providing pathways/desire lines from Riddiford Street, to the Riddiford Building and existing community facilities. The car park redesign has aimed to strengthen the existing community of Newtown through the provision of good public space. The importance of providing accommodation for lower-socio economic groups is to provide equal opportunities for all members of a community.

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List of Figures

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INTRODUCTION

Fig 1.1 Site Plan.

Source: Anon., 2017. Google Maps. [Online]
Available at: <https://www.google.co.nz/maps>

LITERATURE REVIEW

Fig 2.1 *Image removed for copyright reasons.*

Fig 2.2, Fig 2.3 and Fig 2.4 and Fig 2.7 *Images reproduced with permission.*

Source: Secombe, D., 2014. *The London Column*. [Online]
Available at: <https://thelondoncolumn.com/tag/gentrification/>

Fig 2.5 and Fig 2.6 *Images removed for copyright reasons.*

Fig 2.6 *Image removed for copyright reasons.*

Fig 2.8 The Aylesbury Estate. *Image removed for copyright reasons.*

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Fig 3.16 Superkilen. *Image removed for copyright reasons.*

Fig 3.17 Parque do Flamengo. *Image removed for copyright reasons.*

Fig 3.19 and 3.20 **Three perspective images of the landscape. The top view shows the black square, the bottom left view shows the red square and the bottom right view shows the green square.**
Images removed for copyright reasons.

Fig 3.21 Facade. *Image removed for copyright reasons.*

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Fig 3.23 and 3.25 and 3.27 Superkilen. *Images removed for copyright reasons.*

Fig 3.24 and 3.26 Superkilen. *Images removed for copyright reasons.*

Fig 3.28 to Fig 3.35 Roberto Burle Marx projects. *Images removed for copyright reasons.*

SITE ANALYSIS

Fig 4.24 and Fig 4.26 Source: Anon., 2017. Google Maps. [Online]
Available at: <https://www.google.co.nz/maps>

Fig 4.44 Wellington Hospital, Pipitea Street. *Image removed for copyright reasons.*

Fig 4.45 Demolished building, adjacent Riddiford Building. *Image removed for copyright reasons.*

Fig 4.46 The Riddiford Building. *Image removed for copyright reasons.*

Fig 4.48, Fig 4.53 including all images up to Fig 4.54, Fig 4.55 and Fig 4.61 and Fig 4.63 *Images reproduced with permission.*
Source: All existing drawings of the Riddiford Building are compliments of the Technical Document Management Contractor to CCDHB

DESIGN

Fig 5.1 Washington Square Park with street performance and people sitting. *Image reproduced with permission.*
Source: Photos, M. o. T., 2017. Washington Square park. [Online]
Available at: www.mountainsoftravelphotos.com/USA%20-%20New%20York%20City/20%20Washington%20Square%20Park/index.html

Fig 5.4 Graffiti art. *Image removed for copyright reasons.*

Fig 5.5 Underground carpark. *Image removed for copyright reasons.*

Fig 5.6 Underground car park. *Image removed for copyright reasons.*

Fig 5.15 Building adaption. *Image removed for copyright reasons.*

Fig 5.17 Plug in architecture. *Image removed for copyright reasons.*

Fig 5.46 Interior view of Tate Modern and the glass facade treatment. *Image removed for copyright reasons.*

APPENDICES

Appendix 1: *Image removed for copyright reasons.*
The Denver project master plan.

Ref: DHA, 2016. *DHA Denver Housing Authority Creating Vibrant Communities*. [Online]
Available at: [≤www.denverhousing.org/development/parkavenue/Pages/RedevelopmentPlan.aspx>](http://www.denverhousing.org/development/parkavenue/Pages/RedevelopmentPlan.aspx)

Summary Plan **The Wellington Urban Growth Plan**

The construction of the Petone to Grenada link road will help encourage development in the Lincolnshire Farm and Stebbings Valley as greenfield growth areas.

Johnsonville and the town centre will be a targeted regeneration area with major roading improvements and further medium-density housing.

The delivery of the public transport spine and cycle lanes will encourage development in the Adelaide Road area. Berhampore and Island Bay will be looked at as future growth areas.

A number of projects will happen in the CBD. The Victoria Street upgrade will be followed by improvements and regeneration in east Te Aro.

Other precincts will also be targeted for investment, including the civic centre, our laneways and Parliamentary precinct. A Port Access Plan will look at improving port access.

Transport improvements will include the public transport spine, safe cycle lanes and reviewing the efficiency of our city's one-way streets.

Investments will be made in public transport, cycle facilities and the airport precinct. Support and regeneration of Kilbirnie and Miramar town centres will continue as well as guidance on appropriate development for Shelly Bay and Watts Peninsula.

Key transport improvements

Transmission Gully

Petone to Grenada link road

Karori cycleway and bus improvements

Bus priority spine

Tunnel to tunnel improvements

Airport to Mount Victoria Tunnel improvements

Miramar and Wellington Airport bus improvements

Island Bay cycleway and bus improvements

Great Harbour Way

Appendix 4: *Reproduced with permission.*
 The changes to the height zone may increase the density if ‘new build gentrification’ is to occur and private investment.

Ref: WCC, 2008. *Adelaide Road – Planning for the Future*. [Online]
 Available at: <wellington.govt.nz/~media/your-council/projects/files/adelaide-draftframework.pdf>

» encouraging a variety of housing choices, including affordable and accessible housing for lower-income, student and ageing population groups.

Relevant actions (see Part 3):
 A1, A2, A3, A4, A5, A10, A11, A12, A13, A14, A15, A20

Figure 14(a) – Possible Adelaide Road height zones and mix of uses

Figure 14(b) – Height zone 1 and 2 areas – possible boundaries

Ref: WCC, 2008. *Adelaide Road – Planning for the Future*. [Online]
Available at: www.wellington.govt.nz/~media/your-council/projects/files/adelaide-draftframework.pdf

Figure 2 highlights some of the key issues and concerns raised through the consultation process.

Appendix 6:

Author's images with all data from Statistics New Zealand, unless otherwise stated. "This work is based on/includes Stats NZ's data which are licensed by Stats NZ for re-use under the Creative Commons Attribution 4.0 International licence."

Ref: Statistics New Zealand, 2016. *Statistics New Zealand*. [Online]
Available at: <http://www.stats.govt.nz/tools_and_services/find-data-using-our-tools.aspx>

Creative Class

Newtown

Thorndon

Highest Income
+ \$40,000

Highest Density

Age
30.5 - 36.5

Service Class

Newtown

Thorndon

Income Below
- \$40,000

Lowest Density

Age
23-30

Appendix 7:

Ref: Florida, R., 2002. *The Rise of the Creative Class. and how its transforming work, leisure, community, & everyday life*. New York: Basic Books.

There are two catagories of the creative class, super creative core and creative professionals, the creative professionals are desribed below:

- Management occupations

- Business and financial operations occupations

- Legal Occupations

- Healthcare practitioners and technical occupations

- High-end sales and sales management (Florida, 2002, p.g. 329).

Appendix 8:

Authors image with all data from Statistics New Zealand. Industry is measured in percentage. "This work is based on/includes Stats NZ's data which are licensed by Stats NZ for re-use under the Creative Commons Attribution 4.0 International licence."

Ref: Statistics New Zealand, 2016. Statistics New Zealand. [Online]
Available at: http://www.stats.govt.nz/tools_and_services/find-data-using-our-tools.aspx

Industrty						
	Newtown			Thorndon		
	2006	2013	Change	2006	2013	Change
Creative Class	23.8	24.2	60	35.6	34.3	-39
Service Class	22.9	23.3	66	14.1	15.3	30
Public Service/Working class	33.9	37.7	243	36.9	38.3	39
Trade	6.5	5.4	-42	4.7	5.1	12
Undescribed	9.5	7	-96	5.7	5.1	-21
Primary Sector of the Economy (Agriculture & Mining)	0.2	0.3	3	0.3	0.3	0
Manufacturing (Industrial)	3.2	2.2	-39	2.5	1.8	-21

Appendix 9:

Authors image with all data from Statistics New Zealand. Occupation is measured in people.

"This work is based on/includes Stats NZ's data which are licensed by Stats NZ for re-use under the Creative Commons Attribution 4.0 International licence."

Ref: Statistics New Zealand, 2016. *Statistics New Zealand*. [Online]
Available at: http://www.stats.govt.nz/tools_and_services/find-data-using-our-tools.aspx

Car Park Study

Occupations						
	Newtown			Thorndon		Change
	2006	2013	Change	2006	2013	
Creative Class	44	46.5	204	63	60.4	-72
Service	18.7	19.1	54	11.6	12.5	27
Public Service	12.8	10.7	-72	13.8	14.6	24
Manufacturing (Industrial)	2.6	2.6	3	0.5	0.7	6
Unknown	5.2	6.1	51	5	5.7	18
Trade	16.6	15	-42	6.2	6	-6

Appendix 10:
Wellington Hospital Design Guide:

Ref: WCC, 2017. *Wellington Hospital Design Guide Table of Contents*. Wellington:

<http://wellington.govt.nz/~media/your-council/plans-policies-and-bylaws/district-plan/volume02/files/v2wgtnhosp.pdf?la=en>.

- Community-based services will continue to develop on the peripheral areas to the north towards Adelaide and Hospital Roads (WCC, 2017, p. 2).
- With a lack of obvious public through routes, the Hospital site is a barrier to convenient pedestrian access between the city and parts of the nearby residential area of Newtown (WCC, 2017, p. 5).
- The Hospital is set in an area that is characterized by a diversity of building scale and form (WCC, 2017, p. 4).
- To project the presence of people and activity out onto Riddiford Street and the main pedestrian circulation routes within the Hospital (WCC, 2017, p. 3).

Source: All existing drawings of the Riddiford Building are compliments of the Technical Document Management Contractor to CCDHB.

Riddiford Building Existing Drawings 1953

Riddiford Building Existing Drawings 1953

Appendix 12:

Ref: Information on the number of nurse staff at Wellington City Hospital is compliments of:
HRMIS Systems & Reporting Analyst | HRMIS/Payroll | Capital & Coast District Health Board, New Zealand.

There are 1699 nurse staff employed to work at the Wellington City Hospital. If each nurse works a 40 hour week, and 8 hour day then they would have 5 shifts a week. That would mean that 273 staff may be at the hospital for a shift. The estimated amount of car parks required would be reduced by half. The estimated number of required car parks for nurse staff would be 136.

Car Park Study

Wednesday: Graph showing parked cars

	9:00 a.m.	10:00 a.m.	11:00 a.m.	12:00 p.m.	1:00 p.m.	2:00 p.m.	3:00 p.m.	4:00 p.m.	5:00 p.m.
Total parked cars	84	103	163	156	149	163	162	147	130
Estimate of the number of required car parks	42	51	81	78	74	81	81	74	65

Friday:

	9:00 a.m.	10:00 a.m.	11:00 a.m.	12:00 p.m.	1:00 p.m.	2:00 p.m.	3:00 p.m.	4:00 p.m.	5:00 p.m.
Total	127	149	184	196	191	222	223	192	153
Estimate of the number of required car parks	63	74	92	98	95.5	111	111.5	96	77

Saturday

	9:00 a.m.	10:00 a.m.	11:00 a.m.	12:00 p.m.	1:00 p.m.	2:00 p.m.	3:00 p.m.	4:00 p.m.	5:00 p.m.
Total	52	51	60	82	66	77	89	86	78
Estimate of the number of required car parks	26	25	30	41	33	38.5	44.5	43	36

The formula used for the estimate of the number of required car parks is the total parked cars divided by two.

Red highlight indicates the highest total parked cars at a given time during the study.

Estimate of the number of required car parks after the Adelaide Road transport regeneration (eg. Adelaide Road – Planning for the Future, Wellington Urban Growth Plan 2014-2043, NZ Transport Agency (Let's Get Wellington Moving Project)).