THE GRAND CENTRAL MARKETS

HERITAGE-LED REGENERATION THROUGH ADAPTIVE REUSE

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To Mum and Dad,
Sydney, Olivia, Immie, Jamie

Peter Wood and Michael Dunning,
and all my architecture buddies,

thank you for the endless support and encouragement
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ABSTRACT

There is growing acceptance that heritage buildings are an important element of New Zealand’s social capital and that heritage conservation provides economic, cultural and social benefits to urban communities. The role of building conservation has changed from preservation to being part of a broader strategy for urban regeneration and sustainability. Heritage-led regeneration through reuse presents an opportunity to encourage the enhancement and protection of both existing built heritage and New Zealand’s historic building stock.

Over the years, there has been significant loss of historic heritage in the Auckland city centre, and a number of heritage buildings continue to suffer from neglect, decay, under-use or insensitive new design. There is a need to properly integrate these heritage assets into New Zealand’s future planning strategies. This thesis investigates strategic planning schemes and visions for a mixed-use development to support urban regeneration in Auckland’s City Centre.

Imposing a design-led approach, this research will begin by a broad critique of building preservation, adaptive reuse and placemaking theories. In conjunction with this, internationally recognised adaptive reuse, mixed-use and urban regeneration projects will be reviewed. Utilising international literature and precedents, an adaptive research approach is applied to the former Auckland Railway Station in order to demonstrate its potential to be revitalised into a contemporary mixed-use development that reflects Auckland’s diverse cultural mix. The objective of this research investigation is to form a critical design approach to allow the former Auckland Railway Station to become the heart and soul of the community whilst establishing an ecologically sound future. The process will involve a layered response; respecting and conserving the existing fabric, harnessing the ‘sense of place’ and applying interventions that promotes occupation and community engagement.

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1. INTRODUCTION

- 1.1 The Urban Condition
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This research explores the relationship between heritage preservation, adaptive reuse and placemaking and the long-term social and economic impacts a mixed-use development can have in the surrounding community. The design of The Grand Central Markets combines offices, accommodation, retail, dining and entertainment within the footprint of the Former Auckland Railway (FARS) site. Its design celebrates the heritage, land-scape and social character of the site and wider Auckland, delivering a mixed-use development that is uniquely placed to assist Auckland City Centres Masterplan.

1.1 THE URBAN CONDITION

“Protect and conserve Auckland’s historic heritage for the benefit and enjoyment of present and future generations” (Auckland Council, 2016, p. 8).

All sectors in society are responsible for shaping, managing and re-imagining the built environment. Statistic’s New Zealand has models three scenarios for the future of Auckland’s population – high, medium and low growth. With Auckland’s current rapid economic and demographic growth, Auckland council is prudent to base future planning on the high-growth scenario. The high-growth model foresees significant urban change, projecting a population of 2.5 million in 2041 (Auckland Council, 2012, p. 26). In addition, Auckland employment projections suggest that even under a medium-growth scenario the total number of employees could increase from 679,700 in 2011 to 955,800 in 2041, representing a growth of around 40% (Auckland Council, 2012, p. 26).

To support this growth, The Auckland City Council have implemented numerous plans and strategies to shape and guide the future development of Auckland over the next thirty to fifty years. Each plan sets out an essential framework for sustainable urban development and regeneration.

Fig 1. Map highlighting Auckland Region

1.2 THE IMPORTANCE OF HERITAGE CONSERVATION

The transformation of former industrial sites for urban regeneration is a current topic associated with architectural conservation. Industrial heritage conveys archaeological evidence of past industrial technology and processes, architecture, town planning and social life (Plevoets & Van Cleempoel , 2019, p. 15). Due to rapid economic and demographic growth and development in technology, many former industrial structures and premises have been neglected or abandoned. Successful adaptive reuse projects will be critical to maintain our historical places, which are left without a function and are under pressure from urban development.

Investment in New Zealand’s historic heritage is vital to protecting it. Leveraging investment in the management and conservation of Auckland’s heritage creates new opportunity to focus on re-using our existing historic buildings through well informed and creative adaptation strategies. Understanding and unlocking the full potential of New Zealand’s historic heritage can stimulate environmental, economic and community regeneration. Historical places are often rightfully valued for their architectural and heritage qualities, however this is not the sole reason making them important to people’s lives. According to conservation architect Jeremy Salmond “Buildings weren’t erected to be historic” (NZ Historic Places Trust, 2011, p. 2).

Salmonds statement suggests that buildings are erected to be used, not revered. Historical places are equally valuable for the social functions they create and the emotions they evoke in people. Over recent decades conservation has changed from preservation to being part of a broader strategy for urban regeneration and sustainability.

The connection between heritage as a consumable experience and urban regeneration as an economic development activity can be used as a valuable tool. The use of heritage in regeneration is often connected to strategies using a process called ‘placemaking’ (Pendlebury & Porfyriou , 2017, p. 429). Placemaking can help restore historic social functions of a building and bring together diverse interests to improve a community’s economic, social and environmental wellbeing. Within this research, preservation, adaptive reuse and placemaking theories and strategies are explored simultaneously.

1.3 SITE FOR TESTING

The Auckland City Masterplan has identified Quay Park Quarter as a precinct with significant potential for redevelopment, increased density and enhanced amenity (Auckland Council , 2012, p. 33). To achieve this potential and to bring people to this part of the city centre, a destination development opportunity is likely to be required as part of mixed-use development.

Railway sites are part of the industrial heritage of cities and they are one of the most important urban public places. The Former Auckland Railway Station (FARS), constructed between 1928 and 1930, is located in heart of Quay Park Quarter. The station severed as the sole rail terminus for Auckland CBD until its closure in July 2003 (Auckland Station (1930) , n.d.). Since then the station has been subjected to many cheap and insensitive adaptations, and is currently suffering detrimental neglect and decay. For this reason, the former Auckland Railway Station was selected for my research to be revitalised into a contemporary mixed-use development that responds to the identified needs for Quay Park precinct, while adding value to the community and to the building itself.

1.4 RESEARCH QUESTION

The study addresses the aim by posing the main research question:

How can the Former Auckland Railway Station site retain economic viability and become an important community and tourist destination? How can it become the heart and soul of a community today?

1.4 RESEARCH OBJECTIVES

The core of this research is to improve the use the FARS and premises through increased connectivity, community involvement, and the positive integration between people and the built environment through preservation and placemaking strategies. The principal objective of this design-led research investigation is to present an interesting and aesthetically pleasing design solution that creates a place that adds cultural richness, historical context, and sense of community to the FARS and to greater Auckland. Each space will be designed to holistically and incrementally respond to people’s needs to improve the environment in which they live, work and visit.

1. ECONOMY

A key outcome of the redevelopment is to produce a destination that can be a catalyst for investment, improve business confidence and overall perception of Quay Park Quarter.

2. PLACE FOR PEOPLE

For the adaption to be successful the design must consider the various users and deliver a mixed-use development and public space that reflects their requirements. This research looks to address the needs of these groups by working towards following areas:

- Prioritising the safe movement of people
- Improving our placemaking
- Reinforcing local distinctiveness
- Streets as social spaces
- Historic and cultural heritage

3. FUTURE

The design needs to take into account the changing face of Auckland City Centre, more directly Quay Park Quarter. Also in conjunction the changing needs of its community as well as fitting in with Auckland Council’s vision for the city. Key factors that need to be considered are:

- Durability
- Sustainability
- Connection of public transport
- Preservation of heritage

1.5 APPROACH AND METHODS

SUMMARY

The primary concern of this research is to examine the historical significance of the FARS in the context of Auckland’s architectural history and urban context. I have summarised its status as a city heritage asset and examined its relationship with preservation, placemaking and urban regeneration. With the primary focus being on heritage revitalisation and how it can promote holistic engagement of the economy, environment, society, and culture. The research involves five steps:

- 1. Review Auckland plans developed by the Auckland City Council
- 2. Explore and analyse theories for preservation and placemaking
- 3. Collect and review the progress for adaptive reuse projects
- 4. Analyse the FARS on three scales; Auckland, Quay Park Quarter and the FARS site / building
- 5. Reposition the FARS with design strategies that can produce a city-level heritage asset that meets the research objectives.

METHODOLOGICAL APPROACH

This research espouses a design-led research methodology that is framed around architectural preservation, placemaking and adaptive reuse. The preservation component will assist in creating essential value and historical context for the FARS. The Placemaking element will assist in generating community excitement and interest in the station and its various functions. Lastly, the adaptive reuse component will add a new function and assist sustainability factors. It is a combination of research for design and research through design.

This study commenced with a comprehensive review of Auckland City’s urban regeneration plans. This gained insight to other urban regeneration projects currently being implemented within Auckland and future plans for Quay Park Quarter. The findings were collected from various available sources and reviewed. This was followed by a qualitative analysis of the railway station in relation to its form, function, history and connection with its urban context. This was obtained through notices, newspapers, reports, original construction drawings and data from the Auckland City Council and New Zealand National Library. The results outlined the significance of the cultural, and historical value of the FARS.

Urban regeneration, preservation and placemaking theories and strategies were then examined, focusing on site specific issues and architectural interventions. Concurrently, an investigation of international precedents of adaptive reuse projects aided in understanding successful design principles and strategies. The building was assessed for its architectural merits and previous adaptive reuse strategies.

To record and assess the existing and current physical conditions and historical values of the railway station, a detailed digital 3D model was produced. The previous stages of investigation and analysis allowed me to define and redevelop a series of design strategies that drove the redevelopment of the FARS adaptive reuse development.

These design interventions and alterations were driven by three primary visions; refined identity, diversity and integration. The strategies were then implemented and ‘tested’ in the design response stage of the research. This resulted in a final design outcome.

Mixed method Research

1) Review of Former Documents: Secondary sources, government and council documents and newspaper reports concerning the development of Auckland City Centre were reviewed to get an overview of the process of urban revitalisation, especially the Quay Park Quarter.

2) Theories and Case Studies: Journal articles and books in the field of urban revitalisation, urban planning, mixed-use developments, land use, adaptive reuse, and conservation were reviewed to acquire the knowledge of necessary theories and the study paradigm.

3) Photography: The landscape on and around the site and peripherals were recorded using a digital camera to show the current land uses and context.

4) Mapping and Diagramming: Compressive urban and site analysis was undertaken to achieve a greater understanding of the environment and context. Mapping also aided knowledge of people movement and community spaces.

5) Digital Model: A detailed model of the building and site was produced using the architectural software Revit. Three models were created; The Auckland Railway Station 1930 (modelled to the original hand drawings by Gummer and Ford), The Railway Campus 1990 (the repurposed university campus) and lastly The Grand Central Markets 2020 (a mixed-use development). The 3D model allowed a compressive understanding of the building and site. This informed numerous architectural qualities such as: scale, atmosphere, space, form, third space, circulation and materials.

RESEARCH QUESTION

The research question forms the basis from which the theoretical framework is constructed.

How can the Former Auckland Railway Station site retain economic viability and become an important community and tourist destination? How can it become the heart and soul of a community today?

THE THEORETICAL FRAMEWORK

KEY RESEARCH VARIABLES

REVIEW KEY SOCIAL SCIENCE THEORIES

The theories are the conceptual basis for understanding, analysing, and helps investigate relationships within social systems. Firstly, literature is reviewed to find how scholars have addressed variables related to the research question. Secondly, assumptions are identified from which the author(s) addressed and grouped into independent and dependent variables. Key social science theories that best explain the relationships between the key variables are reviewed. To that end, the outcomes served by a theory helped guide the TGCM design development.

HERITAGE PRESERVATION

ADAPTIVE REUSE

PLACEMAKING

METHOD

LITERATURE

CASE STUDIES

Case study analysis of successful adaptive reuse projects identified through research. This method was selected to narrow down the very broad field of research into six researchable examples.

CONTEXT ANALYSIS

STUDY OF THE SITE, PEOPLE AND ENVIRONMENT

The physical site serves as the base of the project. The analysis provides the basis for an informed and meaningful design approach that responds to the inherent qualities of the site, neighbourhood and city.

THE CITY

THE NEIGHBOURHOOD

THE SITE

METHOD

MAPPING

A variety of mapping techniques are used to uncover site information. This method forms a geo-spatial representation of information, which is selected, organised, and abstracted for visual clarity.

SITE VISITS

Multiple site visits were recorded to understand the context. Each visit was recorded through photography. This allowed a detailed understanding of the scale of the site, key views, utilities, vegetation quality and current site issues.

REFLECTION

TGCM VISION

Three visions are identified from the previous phase for the TGCM development.

REDEFINED IDENTITY

DIVERSITY

INTERGENERATION

REFLECTION

TGCM DESIGN RESPONSES

STRATEGY ACTIVATORS

Based on the previous stage a strategic theoretical approach has been selected for this project. A collaborative design process is formed which aims to shape the existing building and public realm. Considering different preservation, placemaking and urban regeneration approaches, several design intervention are selected and aim to create better urban design. Each design intervention is grouped under one of the three following response categories.

PROGRAMME & ACTIVATION

ARCHITECTURAL RESPONSE

LANDSCAPE RESPONSE

METHOD

SKETCHING

DIGITALLY MODELLING

REFLECTION

FINAL DESIGN

TGCM WALK-THROUGH

The findings of the research were then expressed in the redevelopment of the FARS into TGCM. A combination of conservation, adaptive reuse and placemaking strategies were applied to the FARS site.

METHOD

RENDERS

FLOOR PLANS AND DIAGRAMS

REFLECTION

2. THEORY

- 2.1 General Introduction
- 2.2 Heritage Preservation
- 2.3 Adaptive Reuse
- 2.4 Placemaking
- 2.5 Reflection

2.1 INTRODUCTION

Auckland City Centre has a large building stock, including protected heritage buildings (Auckland Council , 2012). In the past, the common approach to the built fabric had been to conserve protected a building’s original appearance as much as possible, while replacing other buildings that are structurally unstable. This way of thinking has separated heritage from development, causing Auckland to lose opportunities for development and innovation. Over the last decade, this approach has changed. The adaptive reuse of buildings have become exceptionally valuable as an architectural, urban, and conservation strategy (Brooker & Stone, 2004).

This chapter sets up the framework for how and why the FARS can contribute positively to Auckland's urban fabric through adaptive reuse. Firstly, by investigating the evolving position of heritage throughout the twentieth century. Followed by ways in which adaptive reuse can be an embodied driver for place-making and urban regeneration.

2.2 HERITAGE

This section briefly explores what is meant by the term ‘heritage’ and its importance to New Zealand. An adequate understanding of what constitutes “heritage” as a concept is required to help demonstrate the fundamental importance of the Former Auckland Railway Station.

CULTURAL HERITAGE

What constitutes ‘cultural heritage’ has various meanings and therefore definitions attached to it. What one person or group values, others may not. Over recent decades, growing research and international cooperation have greatly contributed to improve the appreciation of heritage and to increase the collaboration between stakeholders and professionals. A corpus of international references and guidelines by ICOMOS (The International Council of Monuments and Sites) and the implementation of international recommendations by UNESCO (The United Nations Educational, Scientific and Cultural Organization), have contributed to this growth of knowledge. The New Zealand ICOMOS defines ‘cultural heritage’ as

“something possessing historical, archaeological, architectural, technological, aesthetic, scientific, spiritual, social, traditional or other special cultural significance, associated with human activity” (Ministry for the Environment, 1997).

“Our cultural heritage connects us to all who came before us” (Ministry for the Environment). Each New Zealand’s ethnic group has a distinctive history and culture that contribute in diverse ways to our cultural heritage. Over time, much evolution and adaption has befallen within the New Zealand environment. This has resulted in an evolving mix of European, Polynesian, Maori and increasingly Asian cultures, making each generation of New Zealanders somewhat different from the previous one, however intimately linked (Ministry for the Environment, 1997).

A comprehensive analysis of all the aspects of New Zealand’s cultural heritage is beyond the scope of this research, where the focus being mainly on the natural and physical environment. As a result, discussion is confined to aspects of heritage that includes fixed tangible objects, areas and places.

PLACES OF CULTURAL HERITAGE

The interest in New Zealand’s cultural heritage and how to preserve it has grown over time. An indicator of this growing interest is the large increase in memberships for the Historic Places Trust and the sheer number of visitors at numerous heritage sites. However, it not only New Zealanders who are showing interest. Visits by overseas tourists to heritage sites, such as museums and art galleries, have increased dramatically over recent years (Ministry for the Environment, 1997).

Managing Cultural Heritage. Numerous different Acts of Parliament and agencies manage aspects of our cultural heritage. A Parliamentary Commissioner’s report identified a problem concerning New Zealand’s absence of co-ordination and overall direction for all types of heritage protection (Ministry for the Environment). The New Zealand Historic Places Trust/Pouhere Taonga and the Department of Conservation are the two leading heritage protection agencies in New Zealand.

The Historic Places Trust is responsible for identifying and protecting New Zealand’s cultural heritage. The main way the Trust achieves this is by creating a heritage identification system called the New Zealand Heritage List / Rārangī Kōrero (formerly the register). This register is set up under the Historic Places Act, 1993, and identifies New Zealand’s significant and valued historical and cultural heritage places (Ministry for the Environment). It also liaises with local councils to identify and protect sites in certain districts. New Zealand’s places of historical and cultural heritage can be roughly separated into four overlapping categories:

The Department of Conservation is restricted by government policy to manage cultural heritage resources on conservation land and are already protected in some manner (Department of Conservation, 1995). It is a challenge to get an outline of the state of New Zealand’s cultural heritage due to the numerous agencies involved in heritage, and the lack of one integrated database.

1. Place of significance to Maori.
Māori heritage can be described as, ngā taonga tuku iho nō ngā tūpuna = treasures handed down by our ancestors. This includes ‘everyday’ sites, such as marae (gathering place), pa sites and mahinga kai (food gathering areas), as well as waahi tapu (Manatu Māori, 1991).

2. Archaeological sites.
Archaeological sites may be on land, in water, or in the coastal marine area and are the relics and ruins of our past. The Heritage New Zealand Pouhere Taonga Act, 2014, defines an archaeological site as, “a place associated with pre-1900 human activity, where there may be evidence relating to the history of New Zealand. A place associated with post-1900 human activity may be declared by Gazette as an archaeological site under the Act” (Ministry for the Environment). There are a variety of archaeological sites in New Zealand including Maori pa sites, cultivation areas and gardens, rock art sites and shipwrecks.

3. Historic buildings and structures.
Along with buildings, these places include a number of other sites such as ruins, lighthouses, bridges and industrial sites. Historic buildings vary from an individual outstanding building to an entire urban setting (Ministry for the Environment).

4. Cultural Landscapes.
Nearly all of New Zealand’s landscapes are classified as cultural, excluding the true wilderness areas. They reflect the generations of interaction between natural environments and people (Parliamentary Commissioner for the Environment, 1996b) .

INDUSTRIAL SITES

The International Committee for the Conservation of Industrial Heritage (TICCIH) adopted the Nizhny Tagil Charter for the Industrial Heritage in 2003, the first international reference text to guide protection and conservation in the field. TICCIH define industrial heritage as consisting of:

“Industrial heritage consists of the remains of industrial culture which are of historical, technological, social, architectural or scientific value. These remains consist of buildings and machinery, workshops, mills and factories, mines and sites for processing and refining, warehouses and stores, places where energy is generated, transmitted and used, transport and all its infrastructure, as well as places used for social activities related to industry such as housing, religious worship or education.” (The Nizhny Tagil Charter For The Industrial Heritage, 2003)

Throughout the world, a great diversity of sites, structures, cities and landscapes demonstrate human activities of industrial extraction and production. TICCIH reasons that the essential value of industrial heritage is in the evidence of these activities that have historical meaning (The Nizhny Tagil Charter For The Industrial Heritage, 2003). This evidence can be within the tangible heritage associated with industrial technology and processes, architecture and town-planning, but also can include intangible dimensions embodied in the skills, memories and social life of workers and their communities. Industrial buildings often become obsolete because they were designed and constructed for a very specific purpose or technology, which means that it can be difficult to adjust them as technologies evolve.

LOSS OF HERITAGE

Despite the increasing attention in protecting our cultural heritage physical remnants, a large amount is being demolished, renovated, or ploughed under. The Parliamentary Commissioner for the Environment published that New Zealand’s heritage is under threat of being lost (Report of the Parliamentary Commissioner for the Environment, 2006). There is widespread anxiety related to heritage protection for many historic and cultural sites and places being permanently lost. While some positive things are happening on a local scale, significant losses of all types of historic and cultural heritage are still occurring.

2.3 ADAPTIVE REUSE

WHAT IS ADAPTIVE REUSE?

“The best way to conserve a heritage building, structure or site is to use it... Adaptation links the past to the present and projects into the future.” New Uses for Heritage Places". (Clark , Wolkenberg, & Mansell , 2013).

The concept of ‘adaptive reuse’ was seen as a historical moment in the 1970s, establishing a creative discipline with theoretical and philosophical bases. Authors Shen and Langston, define adaptive reuse as, *“a way of breathing new life into existing buildings by leaving the basic structure and fabric of the building intact, and changing its use” (Langston , Shen , & Tan , 2015).* When a site is being reused, the new use should support the continuing interpretation and understanding of heritage value while accommodating new functions. The new function becomes part of the long history of the site, adding a new layer without forgetting the past. Adaptive reuse is a strategy that provides opportunity to make heritage fabric, spaces and sites available to new generations.

For this research, understanding what exemplifies a successful adaptive reuse project is critical. Defining what constitutes a “successful adaptive reuse project” cannot be achieved by one definition, but analysis of a variety of case studies and theoretical literature can cumulatively assist with recognising a successful project (Listokin & Burchell, 1981).

CONTEMPORARY ADAPTIVE REUSE THEORY

Adaptive reuse as an approach for preservation of Industrial heritage

Although classified as a discipline, contemporary reuse translates to numerous approaches and theories. In fact, several theoretical approaches have existed alongside each other previously. This section compares and classifies existing adaptive reuse theories based on the efficacy for urban regeneration, perspectives of architecture and heritage preservation. In 1986, Cantacuzinos expanded on his publication “New Uses for Old Buildings, describing adaptive reuse by creating six different building categories, with each containing several building types. Several authors then expanded this logic and created a **typological theoretical approach** towards adaptive reuse (Plevoets & Van Cleempoel , 2019, p. 16). This comprises an historical analysis of adapted case studies, which are organised according to the building category or building type of host space typologies. The main focus of this approach is on the cause of the building deterioration, the barriers and critical success factors towards reusing each building typology (Plevoets & Van Cleempoel, 2011).

Some authors have approached the building adaption as a technical question. A **technical theoretical approach** focuses on the technical improvements of the load-bearing structure, the building envelope, and the comfort, safety and energy efficiency of the adapted buildings (Douglas, 2006; Highfield and Gorse, 2009). Highfield published a small booklet in 1987 called ‘The rehabilitation and re-use of old buildings’, expounding the advantages of rehabilitation and discussing the improvement of fire resistance, thermal performance, acoustic performance, and condensation, etc. Over time he has published several updated versions of this book following the same concept but further expanding on a number of technical issues. He approaches the host space as merely a shell and gives minimal attention to the conservation and heritage aspect (Plevoets & Van Cleempoel , 2019, p. 18).

The **strategic theoretical approach** of adaptive reuse focuses on the analysis of the different strategies and processes for the conversion of existing historical buildings. Philippe Robert refers to the metaphor of the palimpsest to examine the concept of conservation. He develops several concepts of conservation; building within, building over, building alongside, recycling materials or vestiges, adapting the new function and building in the style of. All of the concepts developed refer to a physical intervention. Authors Brooker and Stone defined a new design strategy developed by model cases of contemporary conservations. They concluded with three strategies being; intervention, insertion, and installation (Brooker & Stone, 2004). This approach begins with the physical intervention but draws attention to the affective feature of each adaption. The most important factor for each adaptive reuse project is the existing building. Author Jager presents a similar approach, examining a range of selected case studies based on three applied strategies to the existing building, being; addition, transformation and conservation (Jäger, 2010). Authors Cramer and Breitling, divide ‘design strategies’ and ‘architectonic expressions’ into two categories. Design strategies is described as physical interventions and alterations to the building and architectonic expressions are the interventions relating to aesthetic qualities (Cramer Johannes & Breitling , 2012, p. 95).

ADAPTIVE REUSE AND URBAN REGENERATION

There are opportunities and challenges associated with the adaptive reuse of buildings that influence the final outcome of a project. In modern conservation theory, adaptive reuse could be seen as a necessary approach towards actualising sustainable urban regeneration strategies. Bullen and Love found that, there are multiple factors that contribute to the success of adaption and regeneration. These factors include economic, socio-cultural and environmental aspects (Bullen & Love, The rhetoric of adaptive reuse or reality of demolition: Views from the field, 2010). The identified factors are discussed briefly in the subsequent sub-sections.

ECONOMIC ASPECT

A successful adaptive reuse project’s new function possesses the potential to generate a profit for its future maintenance. The adaptive reuse strategy has also been seen to be preferable in the revitalisation of a community’s economic condition through increased property values and increased cultural tourism (Yiu & Leung, 2005). In addition, the cost of an adaptive reuse project compared to a demolition or rebuild project is usually lower (Douglas, 2006).This is due to the contract period usually being shorter, and/or reduced borrowing costs due to the structural materials of the existing building already being in place.

SOCIO-CULTURAL ASPECTS

These aspects include the impact the newly adapted function has to the local area, the quality of life in the community and other socio-cultural activities. These historical buildings can serve as a collective memory, linking people to their past while revealing personal and cultural identities. The most suitable new function should lead to an increase in the quality of lifestyle in the area, enhance the cultural diversity and endorse continuity of societal life (Douglas, 2006). Socio-cultural aspects for adaptive reuse projects are often overlooked, because they can be challenging to measure. However, to achieve a successful adaptive reuse redevelopment all socio-cultural aspects should be considered.

ENVIRONMENTAL ASPECTS

The process of repurposing historical buildings can reduce material consumption, energy consumption, transportation energy and pollution from construction. All these benefits endorse resilient and sustainable places. In addition, the adaptive reuse process can reduce the emissions of CO2 which contribute to climate change (Bullen , 2007). Instead of property owners/developers just settling for demolition, adaptive reuse offers an improved way to efficiently redevelop these buildings and pose less harm to the environment. The majority of historical buildings contain embodied energy, that could be saved by reusing the building’s functionality, recycled materials and components (Bullen & Love, 2010).

While some historic buildings have been modified in a somewhat pragmatic way to fit new functions over the years, a critical reflection on the feasibility of the adaptive reuse approach to urban regeneration is relatively recent. There is a need for better understanding of the strategies that could impact the reuse of obsolete historical buildings, toward achieving resilient urban areas.

The adaptive reuse of the FARS has the opportunity to be a key driver for urban regeneration for Auckland’s wider area. The site can play an important role in strengthening a sense of local character and identity, providing a tourism drawcard to the area, improving amenity and environmental conditions and acting as the focus of economic development. The reuse of the FARS can provide numerous opportunities to link the urban environment together while still enhancing the legibility of the sites heritage.

Fig 2. Adaptive Reuse Project: School of Fine Arts, Nantes
Fig 3. Adaptive Reuse Project: Empire Stores

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2.4 PLACEMAKING

There is extensive research on the concept of ‘placemaking’ or how to make a place successful. Some of this writing simply alludes to the factors that make places successful, while others have developed a distinct criteria. This section will examine key factors proposed by theorists specialising in this realm and identify the ‘common’ themes in their research. The outcome, along with the previous research, will then be used as a tool for the redevelopment of the FARS.

WHAT MAKES A PLACE SUCCESSFUL?

Over the last few decades urban planning, landscape and architectural researchers have funded studies and theories on successful placemaking. Numerous theorists have developed criteria that has measurable design traits. A few in particular have influenced the way many Architects and Urban Designers operate today. This section analyses key theorists and organisations specialising in the topic of placemaking and identifies any overlapping themes that can be applied to the redevelopment of the FARS.

JANE JACOBS (1916-2006)

Jan Jacobs was an influential Urban Designer, who supported novel community-based approaches to planning. Her main publication ‘The Death and Life of Great American Cities’, published in 1961, influenced generations of urban designers and planners. Her primary focus was observing why certain places were more successful than others. Her key perspectives were based on ‘Cities as Ecosystems’ – suggesting that ‘cities are dynamic organisms that change over time and their composite elements ,being footpaths, parks, neighbourhoods, government and economy, all work in a synergy together, influenced by one another’ (Jacobs, 1961).

Additionally, Jacobs focused greatly on mixed-use developments and how activity in spaces within the city can create a vibrant, living place. This concept of a vibrant city would be achieved with her ‘bottom-up community planning’ approach, making local expert’s key planners. *“Cities have the capability of providing something for everybody, only because, and only when, they are created by everybody”* (Jacobs, 1961). As well, higher density living, with a high level of diversity amongst people is essential to city life. Jacob’s research never advocated a specific design criteria, such as size of space or materials. She provided a foundation for how places need to join the greater city network in order to become or remain successful.

“...the sight of people attracting still other people, is something that city planners and city architectural designers seem to find incomprehensible. They operate on the premise that city people seek the sight of emptiness, obvious order and quiet. Nothing could be less true. The presences of great numbers of people gathered together in cities should not only be frankly accepted as a physical fact – they should also be enjoyed as an asset and their presence celebrated...” (Jacobs, 1961).

WILLIAM H. WHYTE (1917 - 1999)

Whyte is often referred to as the forefather of successful place making theory, due to his influential research in human behaviour and settings. His research explored why spaces within a city were or were not working, with particular focus on the design of urban spaces. He identified design elements that resulted in a successful place. His primary work, the ‘*Street life Project*’, was a pioneering study on the relationship between pedestrian behaviour and city dynamics. The majority of the study was filmed throughout New York City, in urban parks, plazas, street and other open spaces. The research used a range of methods including time lapses, quantitative data collection, interviews and observations with people on the street. The short film *“The social life of small urban spaces”* summarises the research and provides a basis for much of Whyte’s writing (William H. Whyte, 2010).

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Table 1. Table showing Whyte's indication of design elements that result in a successful place.

JAN GEHL (1936 -)

Gehl is an Urban Design Professor at the School of Architecture in Copenhagen and is a practising Urban Design Consultant. Gehl has an extensive body of research and produced a wide variety of publications based on the form and use of public spaces. His research has been put to practice throughout the world, including in Christchurch, New Zealand. His first publication, *‘Life Between Buildings’* (1987), focused predominantly on the spaces between buildings as the main strategy when designing a city.

“First life, then spaces, then buildings – the other way around never works” (Gehl, Life Between Buildings, 1971, p. 193).

The activities and vision of public life within a space has to be established before any attention can be given to surrounding buildings and how they can work together to create a successful public space. Gehl’s extensive research has produced a sequence of vital drivers to creating a successful space (Gehl People, n.d.). One of the theories in ‘life between buildings’ comprised all the activities people engage in when using a common city space. Gehl separates these activities into three categories and believes that best kinds of communal spaces in cities are where all types of these activities occur.

Necessary activities generally have to be undertaken by people regardless of the physical space (Gehl, Life Between Buildings, 1971).

Optional activities are linked with recreational activates and are heavily influenced on what the physical space has to offer. The more optional activities happening the better the place (Gehl, Life Between Buildings, 1971).

Social activities are the third way in which people animate public space. These activities happen when people congregate in a place and socialise, such as children playing or friends coming together to converse (Gehl, Life Between Buildings, 1971).

“Man is Man’s Greatest Joy” (Gehl , Cities for People, 2013, p. 23). This quote comes from Havamal, a more than 1,000-year-old Icelandic Eddic poem, explaining that there is nothing more important than human delight. It is watching, listening and experiencing others, which is all connected to the important theme in human life, people.

Gehl is inspired by Havamal and continues to explore the ‘human aspect’ of space by focusing on human mobility and human senses, as they offer the basis for activities and communication in a space. His research analyses people’s horizontal field of vision, speed and perception and concludes with the need to design spaces for humans. To assess the success of his designs, he developed twelve key quality criteria that defines project results. This criteria addresses the urban experience and assesses the protection, comfort, and enjoyment a design provides an individual. The findings then suggest how to achieve a successful urban space (Gehl , Cities for People, 2013).

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PROJECT FOR PUBLIC SPACE

Project for Public Spaces (PPS) is a non-profit planning, designing and educational organisation founded in 1975. The vision for PPS was to expand the work done by Whyte and help create spaces that build stronger communities. Through large quantities of research and strategic partnerships the ‘*Placemaking*’ approach was developed. This approach aims to transform community’s public spaces into energetic places that serve common needs and highlight local assets. The theory ‘*The Power of Ten*’ was developed and used to start the placemaking process (Projects for Public Spaces, 2007). In simple terms, the theory believes that to transform public spaces into vibrant community places any place needs to have at least 10 things to do or 10 reasons to be there.

When you focus on place, you do everything differently” (Projects for Public Spaces, 2007).

Fig 5. 10 things to do or 10 reasons to be there illustrations.

PLACEMAKING REFLECTION

One common placemaking theme all the theorists discuss is how to measure the success of a place, and that is people. With people comes activity. Hence, **People = Success**. The research highlights that a predominant way to measure the success of a place is the number of people present during different times of the day. It is a successful place if it is frequently full of people, fostering a sense of life and well-being. However, a high number of visitors isn’t the sole means of determining if a place is successful.

The following are factors to consider in the redevelopment of the FARS; architectural relationship, legibility, linkage and sequencing, safety, activities, hybridity and adaptability and comfort.

Fig 6. What makes a great place illustration

2.5 REFLECTION

This chapter has provided theories and strategies that can be used for the redevelopment of the FARS. They collectively can be used to direct a common understanding of the attributes required to make The Grand Central Markets great.

MIXED USE

Businesses serving the needs of the local community including appropriately pitched retail, leisure, entertainment, and cultural offerings. Accommodation serving the needs of the community.

There are currently limited commercial and retail spaces in Quay Park Quarter, creating limited diversity and reduced engagement with the street. Quay Park Quarter would benefit from a better mix of retail, commercial and residential offerings through adaptive reuse of existing character buildings and new infill development. This would create a more dynamic environment with different user groups engaging with the street at different times. Cafés and restaurants should be encouraged to utilise the proposed widened footpath areas for outdoor dining.

PLACEMAKING

A place that can be shaped over time by the people that live there.

Adaptable and flexible environments provide a clear and legible framework for a range of activities. This is often achieved by establishing a clear spatial hierarchy and building in a level of flexibility for different purposes. Maintaining clear and legible circulation at all times is key to the ongoing success of the street environment.

LOCATION

A successful place has a large number of people passing through and coming together.

The location of the FARS on a major road and its relationship to Spark arena makes it a place that many people pass through. Providing commercial / residential offerings and a quality public realm will transform the FARS into a place where people will stop or head to as a destination.

FOR PEOPLE

A great mixed-use development is a place that serves the needs of the community, local businesses, visitors and stakeholders with a quality experience that keeps them coming back.

The FARS was once was a thriving railway station that met the needs of its community. To reconnect the community, a greater diversity of businesses that actively engage with the street front will allow The Grand Central Markets to contribute to its sense of place. The public realm should support this through ease of movement and creating safe welcoming environments for people to inhabit.

AVAILABLE TRANSPORT

Accessibility for multiple transport options.

The Grand Central Markets site needs to be served by a range of transport options including rail, buses, cars, cycles and pedestrian network. Managing the interrelationship of a range of user groups such as bus users and cyclists needs to be considered.

3. CASE STUDIES

INTRODUCTION

Six precedent projects have been selected for analysis. The projects in this chapter demonstrate their own unique opportunities and challenges. While their new uses are wide-ranging, a few dominant trends present. The common element is their industrial past and their transformation from formerly mono-functional complexes to mixed-use, living components of the city (Baum & Christiaanse, 2016).

Who were the principal figures involved, how were the reuse projects financed, and what design strategies were used? These questions affect the ‘how’ of reuse.

What benefits have each of the cities received from the reuse projects and can any lessons be learned from the experiences for transformation of these city districts?

The six precedent projects and the articles presented in this chapter offer an insight into the design strategies used and everyday life in the developments. There is one clear conclusion from all the information reviewed: it’s all about places, people and vision (Baum & Christiaanse, 2016).

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SELECTED CASE STUDIES

- 1. CASA MEDITERRANEO HEADQUARTERS
- 2. CONTERIE MURANO
- 3. PONCE CITY MARKET
- 4. CHELSEA MARKET
- 5. HIGH LINE

KEY

PROGRAM

Art (artist studio's, galleries)

Leisure and Recreation

Creative industries

Eduction

Gastronomy

Residential

Tourist Attraction

Manufacturing / Production

Retail

USAGE OF OUTDOOR SPACE

Gastronomy

Parking

Park

Playground

Recreation

Eduction

Art Installation

CASA MEDITERRANEO HEADQUARTERS

REFURBISHMENT

Fig 8. Aerial view highlighting Casa Mediterraneo HQ

CLIENT	Casa Mediterraneo
SCOPE OF WORK	Adaptive Reuse. Architecture. Interior
SIZE	33 368 SF
LOCATION	Alicante, Spain
COMPLETION	2012
ARCHITECT	Manuel Ocana del Valle

In the Mediterranean city of Alicante, Spain, an old historic railway station was converted into a vibrant office for Casa Mediterraneo, a non-profit institution aimed at fostering a common identity among Mediterranean villages. This adaptive reuse transformation helped Casa Mediterraneo’s new headquarters deliver the required program within the existing building envelope, while providing a beautiful example of how the organisation can reinvigorate old perceptions. The project’s brief stressed the importance of preserving the building and site appropriately for the program, but in a way that honoured its heritage value. Manuel Ocana del Valle Architects decided against any large modernist intervention, and they went for a straight-forward and sophisticated renovation that emphasised the bold lines of the old train station (Louw, 2018, p. 60).

The whole project was spread over a large surface of 3,100 square meters. The spaces were separated into smaller individual pavilions surrounding a larger 1,500 square metre room (Louw, 2018, p. 60). The large central room was once dark and unwelcoming. A Klein-blue, translucent roof filters the incoming sunlight, then reverberates through a vibrant aluminium lattice, colouring the old walls and floor. This design intervention floods the space, turning it into a sea of blue shadows. The large central room has been transformed into a multi-coloured, everchanging stage for events, parties, and exhibits. The conventional program is fitted into an array of small equipped and climatized pavilions scattered along the perimeter aisles. These spaces enable any eventual worker or visitor to enjoy and appreciate the original structure and space. The rest of the building is not climatized. The spaces are protected by shelter but –not closed, allowing a constant flow of fresh air inside. The floors were cast of compact sand, and the gardening was dispersed in polished ceramic pots. The result was a new occupation and transformation protocol for heritage buildings; a new state in which the old building and the inhabitant empathises, retaining the memory while avoiding any nostalgic concession (Louw, 2018, p. 60).

Fig 9. The Old Benalua Station : Isometric

Fig 10. The Old Benalua Station: Floor Plan

Fig 11. Daylighting within the office space	11
Fig 12. Railway lines remain present in design	12
Fig 13. The pavilions within the station are daylight	13
Fig 14. Glass cubical are located within the interior	14

TIMELINE

Fig 15. The Old Benalua Station before transformation

LOCATION

PROGRAM

USAGE OF OUTDOOR SPACE

FINANCING

Profit
Permanent Government Aid

STAKEHOLDER

Property Owner: Private
Development: Private

VISITORS

SIZE

GFA -3100 sqm

- 259 apartments
- 30,700 sqm of retail
- 51,100 sqm office space

DISTANCE

C 1.8 km

Time to
Walk: 22 min
Cycle: 7 min
Drive: 10 min

PONCE CITY MARKET

REFURBISHMENT

Fig 16. Aerial view highlighting Ponce City Market

CLIENT	Jamestown
SCOPE OF WORK	Adaptive Reuse. Architecture. Interior
SIZE	200 000 m2
LOCATION	675 Ponce de Leon Ave Northeast. Atlanta. Georgia

Atlanta's Ponce City Market, a former Sears, Roebuck & Co. distribution centre has been revamped as a lively community space and example of urban regeneration. This \$21 million, mixed-use project for Jamestown saw a neglected historic property converted into a site that links together surrounding communities, improving its character with retail and dining options, residential units, and versatile office space. The complex connects directly with the city's Beltline multi-purpose trail, linking Ponce City Market with the greater urban setting, providing an innovative shopping, dining, and entertainment destination for all Atlanta (S9architecture).

Architecture included innovative interventions to adapt the site into a porous public intersection, accessible from multiple directions. Novel features of the additive architecture were initiated as opportunities for place-making. The public courtyard, passageways and bridge excavated from the existing structure, all offer moments of exploration, create public green space, and provide pedestrian and bicycle access from the street-scape to the elevated Beltline. The double-height marketplace acts as a meeting and gathering space filled with local food and boutiques (S9architecture). The building's history is celebrated through the interior design by refurbishing the original freight elevators and restoring the antique floors and windows. The revitalisation of this considerable large historical complex demonstrates how good design can enrich and link communities within urban settings (Green , 2018).

Fig 17. Connecting Belt Line entrance

Fig 18. Building Facade, showing main entrance and signage

Fig 19. Landscaping, showing seating options

Fig 21. Building facade shopfront

Fig 23. Atrium space, showing view to lower level

Fig 20. Roof Top Bar

Fig 22. Outdoor foodcourt, showing exposed structure

TIMELINE

1860- 1824	1926- 1980	1980- 2010	2011- Present
SITE USAGE Natural springs	USAGE Warehouse facility as well as a retail store for Sears and Roebuck.	USAGE The City of Atlanta opened government offices	USAGE Mixed-use development
HISTORICAL NAME Ponce de Leon Springs	HISTORICAL NAME The Sears Building	RENAMED City Hall East	CURRENT NAME Ponce City Market
			DEVELOPER Jamestown (a private-equity group)
			ARCHITECT Nimmons, Carr, and Wright, Architects

LOCATION

Located in Atlanta, where the Belt-line crosses Ponce de Leon Avenue in the Old Fourth Ward where that neighbourhood touches the Virginia Highland, Ponce-Highland and Midtown neighbourhood.

PROGRAM

USAGE OF OUTDOOR SPACE

FINANCING

Profit
Permanent Government Aid

STAKEHOLDER

Property Owner: Public
Development: Public / Private

VISITORS

na

SIZE

0.6 ha
GFA ~200,000 sqm
AoPS 30%

- 259 apartments
- 30,700 sqm of retail
- 51,100 sqm office space

DISTANCE

C 8.8 km

Time to
Walk: 1 hr 52 min
Cycle: 41 min
Drive: 16 min

CONTERIE MURANO

NEW RESIDENTIAL NEIGHBOURHOOD

Fig 24. Aerial view highlighting Conterie Murano

CLIENT	Municipality of Venice- Insula S.p.a
SCOPE OF WORK	Adaptive Reuse. Architecture. Interior
SIZE	3950 m2
LOCATION	Calle de le Conterie, 21, 30141 Venezia VE, Italy
COMPLETION	2015
ARCHITECT	Studio Macola

This project was part of a plan to revitalise the Conterie, an industrial site built during the end of the 18th century. The Conterie was a total of 2-hectares located in the centre of the island of Murano. The business on the site began to decline in the 1970s and it was finally closed in 1993. Two years later, the Municipality of Venice inherited the complex. The Conterie, having lost its original function in the late 20th century, became a fenced-off area (Louw, 2018, p. 160). The scale of the complex contrasted sharply with the densely constructed urban space that surrounded it. The tension between the two areas was exemplified by the thick wall that encircles the Conterie. This made the former industrial complex completely inaccessible, prohibiting any kind of interaction with the neighbouring areas of the island (Louw, 2018, p. 160). This situation was rectified by the regeneration program initiated by the Venice Municipality. The objective was to restore the Conterie industrial buildings and assign new functions.

The inauguration of new public routes also contributed to turning the area into an open space, integrating with its surrounding environment. New residential developments (Building A-36 units, Building B-16 units) were built inside the derelict factory. The challenge was that the factory had a large portion which had to be preserved. To overcome this challenge the architect ensured that the design of each residential unit spoke to the existing urban fabric. The former factory's north-facing façade (which had to be preserved) shaped the units in building A (Louw, 2018, p. 160).

The juxtaposition of two duplex units and three simplex units created a comb-shaped structure, providing ample south facing sunlight, natural light and ventilation. The complex layout of structures meant that the distance between the Building A façade and the new building differed, producing a sequence of urban spaces. On completion of Building A Building B began restoration. Building B was built inside the existing industrial complex, which had been duly 'emptied'. The new building consisted of two blocks, each comprising of eight residential units and a commercial area. The architecture plans also created space for the realisation of an indoor square, which has become the core of the new development. Building B is fitted with a photovoltaic plant on the roof of the previous building, exploiting its arch structure. This permitted the installation of 20 south-facing panels with a gradient fluctuating between 20 percent and 90 percent (Louw, 2018, p. 160).

CONTRERIE MURANO

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TIMELINE

1898- 1993

SITE USAGE
Glass Factory, primarily
manufactured seed beads

HISTORICAL NAME
Società Veneziana per
l'Industria delle Conterie

1995- 2015

USAGE
Building A: Residential

OWNER
Municipality of Venice

LOCATION

Located in the heart if Murano, a
small island the forms part of the
Venetain lagoon.

PROGRAM

USAGE OF OUTDOOR SPACE

FINANCING

Profit
Permanent Government Aid

STAKEHOLDER

Property Owner: Private
Development: Private

VISITORS

na

SIZE

2 ha
GFA -sqm
AoPS 100%

DISTANCE

C 0.5 km
Murano Navagero (dock
connecting to Venice)

Time via
Walk: 7 min
Cycle: -
Drive: -

CHELSEA MARKET

OREO FACTORY TURNED INTO MIXED-USE DEVELOPMENT

Fig 27. Aerial view highlighting Chelsea Market

CLIENT	Vandeberg Architects , Jamestown
SCOPE OF WORK	Adaptive Reuse. Architecture. Interior
LOCATION	75 9th Ave, New York, NY 10011, USA

*“New York is food, clothing, and shelter. We had lots of clothing in Long Island City, so I said, ‘Let’s do food.’”
- Cohen (Ng, 2013).*

Chelsea Market is a mixed-use development located in the heart of New York City’s Meatpacking District. Chelsea Markets complex was built in the former National Biscuit Company Factory (Nabisco), which was constructed in the 1890’s. The existing building was designed by the firm Roymeyn & Stever, consisting of heavy timber wood construction and a brick façade. Nabisco continued to occupy the building until the company relocated in 1958. Over the decades following Nabisco’s departure there was varying levels of occupancy and light industrial use. In 1993, investor Irwin Cohen, purchased the Nabisco complex at auction. Together with Vandeberg Architects, he planned and redesigned the complex to form his vision, being Chelsea Market (Ng, 2013).

Numerous key design decisions were made prior and following the public opening of Chelsea Markets in 1997. One major design feature was two self-supporting catenary arches that were cut into old blockhouses brick façade, located in the centre of the complex. This created in a distinct entrance and a central pathway through the building from 9th to 10th Avenue. The redevelopment respected the complexes industrial past by retaining large portions of the original structure and services. It quickly became apparent that visitors had trouble locating Chelsea Markets.

To resolve this issue, Vandeberg Architects refurbished the entire exterior façade of the complex with patina brass ribbons. The brass ribbons added aesthetic value and helped distinguish Chelsea Markets from the surroundings. In addition, a suspended eave was added over the markets main entrance to increase awareness and presence. The High Line, case study six in this research, also passes through the Tenth Avenue side of the buildings. This elevated urban greenway now forms a continuous route from Javits Center to the Meatpacking District, bringing being directly to Chelsea Markets (Ng, 2013).

Chelsea Market fosters community by bringing a diverse range of tenants, businesses, and vendors together. Cohens encouraged a symbiotic relationship between the tenants and the vendors, ensuring ingredients are fresh and preferably locally sourced. The Chelsea Market complex now takes up the entire city block bounded by Ninth and Tenth Avenues and 15th and 16th Streets, developing into a large mixed-use developing offer a range or food, retail, and office spaces, including google who has moved into some of the floor. Cohens purchased the industrial complex for less than \$10 million in the early 1990s. In February 2011, property developer, Jamestown Properties acquired the Cheaslea Market building for a total of \$225 million. The entire complex is values at \$795 million (Ng, 2013).

Fig 28. Chelsea Market side entrance showing signage

Fig 29. Chelsea Market brick facade and sidewalk cover

Fig 30. Chelsea Market lively experience interior foodcourt

TIMELINE

LOCATION

Located in Manhattan, in the heart of the Meatpacking District. The Chelsea Market complex occupies an entire city block with a connecting bridge over 10th Avenue. The High Line passes through the 10th Avenue side of the building.

PROGRAM

FINANCING

Profit
Permanent Government Aid

STAKEHOLDER

Property Owner: Private
Development: Private

SIZE

DISTANCE

VISITORS

> 6,000,000 / year

THE HIGH LINE

A RICH PUBLIC SPACE

Fig 31. Aerial view highlighting-the High Line

CLIENT James Corner Field Operations
SCOPE OF WORK UrbanDesign. Landscape Architecture.
LOCATION New York, NY 10011, USA

“This constant change, the tension between beauty and decay, is akin to the energy that drives the High Line. Unlike the city, the gardens reveal a dichotomy that becomes a force of inspiration. When people talk about the High Line they talk about the plants, but they also talk about the crowds. The people are as important as the perennials.” - Piet Oudolf (Oudolf & Darke, 2017, p. 14).

The High Line is a 2.3 km elevated urban oasis, greenway, and linear park build on the former central railroad spur which forms a continuous route from Javits Center to the Meatpacking District in Manhattan, New York City. In October 1999, a small nonprofit organization called Friends of the High Line was formed (Oudolf & Darke, 2017, p. 14). The organization advocated for the High Line’s preservation when the structure was threatened to be demolished. In 2000, permission was given to photographer Joel Sternfeld to capture the natural beauty of the railroad, which was later used to help save the High Line. In 2003, Friends of the High Line funded a design competition that resulted in hundreds of proposals for the railroad. The High Line since opening in 2009 has become an icon of landscape architecture and a tourism drawcard. The redesign of the spur was a collaboration between James Corner Field Operations (Project Lead), Diller Scofidio + Renfro, and Piet Oudolf (Oudolf & Darke, 2017).

The design draws from multiple disciplines, landscape architecture, urban design, and ecology, creating a “living system”. The liner park is a monumental example of America’s heavy industry, but still represents an extraordinary lightness. The conflicting nature of the High Line to compact skyline allows it to be a cosmopolitan destination and a defining neighbourhood place. The success of the project has increased real-estate values and prices along the route, sparking real estate development in adjacent neighbourhoods. It has inspired cities throughout the United States and internationally to redevelop obsolete infrastructure into successful public spaces. The High Line as of September 2014, is recorded to have nearly five million visitors annually (Oudolf & Darke, 2017).

IN CONSTRUCTION

Fig 32. The High Line 1932

IN USE AS RAILWAY

Fig 33. The High Line 1936

ABANDONED

Fig 35. The High Line abandoned in 1980

Fig 36. The High Line becoming overgrown

CURRENT USE

Fig 34. The High Line new use as a public urban green space

TIMELINE

1934- 1980

USAGE
Freight railway

HISTORICAL NAME
High Line / West Side Freight
Line

1980- 2009

INITIATORS
Mid 1980s: Peter Obletz 1999:
Friends of the High Line

2009- Present

USAGE
Recreational areas and plant
features, park usage, venues
for public programs and
rentals

MANAGEMENT
City of New York (owner),
Friends of the High Line
together with New York
City Department of Parks &
Recreation (operator)

LOCATION

Located in Manhattan; running through the
West Side neighbourhood of the Meatpacking
District, West Chelsea and Clinton/Hell's
Kitchen

PROGRAM

USAGE OF OUTDOOR SPACE

FINANCING

Non-Profit
Permanent Government Aid

STAKEHOLDER

Property Owner: Public
Development: Public / Private

SIZE

2.7 ha
GFA - sqm
AoPS 100%

DISTANCE

3,5 km

VISITORS

> 3,000,000 / year

4. CONTEXT AND HISTORY

- 4.1 Introduction
- 4.2 Urban Auckland
- 4.3 The Neighbourhood
- 4.4 Site and Location
- 4.5 Reflection

Fig 37. Conceptual Map of Auckland Region

4.1 INTRODUCTION

This chapter comprises of a contextual analysis, looking at the existing condition of the FARS site, along with imminent and potential future conditions. This is done through analysis at three different scale: Auckland City, Quay Park Precinct and the FARS site. All three scales are important to ensure that TGCM design response reflects the surrounding context and aligns with any relevant Auckland Council plans. Understanding the context of the site and surrounding is key to weave the new design in with the existing fabric of the site.

4.2 URBAN AUCKLAND

INTRODUCTION

Auckland’s population is predicted to increase significantly over the next 20 years (Auckland Council, 2012, p. 26). Auckland City Council have identified the need to create opportunities for more intensive living and working environments, accommodating growth in the city centre. This section summarises the priorities identified by the council for creating successful urban places that accommodate all Aucklanders. It also illustrates how quality impact environments can be achieved, with emphasis on developments that improve the places where we live and work.

Fig 38. Aerial View of Auckland City Centre

AUCKLAND CITY HISTORY AND FUTURE

Fig 39. Conceptual map of North Island highlighting Auckland Region

Auckland (Tamaki Makaurau) is city located in the North Island of New Zealand. It is the largest and most populous urban area in the country, with a population of approximately 1.6 million people (as of June 2018). The human history of the area goes as far back as Maori settlers in the 14th century. In the late 18th century, when the first European explorers entered New Zealand, it was regarded as the country's capital (Belich, 2007). Auckland is a multicultural, diverse and cosmopolitan city, which has been constantly evolving since its settlement. Advances in transportation from the first European development in the early 1840s defined the growth of the urban area. In the early 1900s, tram and ferry networks were established, allowing suburban development to extend over the central isthmus. Both living and working activities became concentrated around transport route stops (Belich, 2007).

The area is characterised by its distinguished harbour setting, volcanic landscape, its narrow isthmus and rural surroundings. Auckland's natural environment serves neighbourhoods and communities with unique character. Over the last decade there has been renewed interest in living close to the city centre, with areas such as Ponsonby and Freemans Bay developing more intensification (Auckland Council, 2012, p. 241).

Over the last decade, business has also charged in urban areas. Traditionally there was a clear separation between business types, with only commerce and trade in town centres and all other industrial activities outside. With the cities growth, industry has moved towards the periphery, opening up redevelopment opportunities. The urban area will need to respond to the expected continuous change in the configuration of Auckland's economy. Auckland must be an attractive place for business. This will provide successful economic development and wealth creation (Auckland Council, 2012, p. 241).

Auckland Council has identified a renewed focus for good design. Opportunities for more intensive development have been identified and will be vital to ensure our built environment is successful and contributes to Auckland's sense of place and liveability (Auckland Council, 2012, p. 247). All development proposals, are expected to take a 'design-led' approach following the good design principals. An Auckland Design Manual has been developed, expanding on the principals identified and providing acceptable solutions related to Auckland's landform, local context, historic heritage, climate and public space qualities. Additionally, all developments will be encouraged to follow the environmental design principals developed by New Zealand Green Building Council.

THE CITY CENTRE

82 Fig 40. Conceptual map highlighting Auckland City Centre

83 Fig 41. Conceptual map highlighting precincts in the Auckland City Centre

AUCKLAND PLAN &
CITY CENTRE MASTER PLAN

EVERY GREAT CITY HAS A HEART. AUCKLAND'S
HEART IS THE CITY CENTRE.

*“Cities are about the exchange of ideas and new ways of doing things. The more people there are, the greater the chance of this exchange, leading to more innovation and higher productivity.”
(Auckland Council , 2012)*

The Auckland City Council have formed ‘The Auckland City Centre Masterplan’, a comprehensive, long-term plan to support Auckland’s growth and development over the next 30 years. The document is designed to guide the transformation of the city centre, maximising its full potential. In conjunction, a ‘Waterfront Masterplan’ has been prepared to understand waterfront development opportunities. Applicable information from the two documents are summarised in the following section and provide guidance for the redevelopment of the FARS in the following chapters of this research.

The area described as the city centre in the two masterplans is the area that falls within the urban motorway system and the harbour edge. The City Business District (CBD) in the plan is more compact. The area referred to as the city fringe is that beyond the motorway. This outer boundary includes the urban villages of Ponsonby, Parnell and Devonport. The masterplan focuses primarily on the city centre. The main aim is making the city centre a more accessible and attractive place to live and work (Auckland Council , 2012).

One primary objective of the masterplan is to improve the amenity of the City. A successful centre has great amenity and choices for residents, workers and visitors and attracts an increasing number of businesses, employees and households. Other relevant sections from the masterplan have been selected and highlighted to the right.

- + New retail and activities. There must be enough development capacity in the city centre to accommodate commercial growth and support the centres’ network. Retail draws people to centres and is essential in retaining and attracting other activities. All retail must be designed to contribute to the ‘place-making’ of the centre and integrate with other centre activities (Auckland Council , 2012, p. 47).
- + The network of the city centre is important for gathering commercial activity and promoting economic activity. They provide opportunities for specialisation or strategic roles, and unique precincts. There needs to be emphasis on providing local services within a walkable catchment (Auckland Council , 2012, p. 50).
- + Intensification of business activity should make the most efficient use of land available in the existing centres and business areas. Alongside this there must be improvements to local transport accessibility, especially by public transport (Auckland Council , 2012, p. 38)

THE VISION

BY 2032 AUCKLAND'S CITY CENTRE WILL BE HIGHLY REGARDED INTERNATIONALLY AS A CENTRE
FOR BUSINESS AND LEARNING, INNOVATION, ENTERTAINMENT, CULTURE AND URBAN LIVING.

OUTCOME 1	OUTCOME 2	OUTCOME 3	OUTCOME 4	OUTCOME 5
A vibrant and engaging international destination- an iconic destination.	A globally significant centre for business.	A city centre that meets the needs of a growing and changing residential population.	A culturally rich and creative centre- a window on the world where all of Auckland's many cultures are celebrated.	Hub of an integrated regional transport system - with a range of public transport options.
OUTCOME 6	OUTCOME 7	OUTCOME 8		
A walkable and pedestrian-friendly city centre- well connected to its urban villages.	An exceptional natural environment and leading environmental performer.	World-leading centre for higher education, research and innovation- the hub of creative and innovative products and services.		

IMPORTANCE OF HERITAGE

The Auckland City Masterplan identifies the importance of Auckland's heritage and how it directly influences people's perceptions of the city centre as a place to live, work, play and visit. The city centre must have a distinctive environment, which celebrates and makes the most of Auckland's unique history, heritage and character (Auckland Council , 2012, p. 69). Heritage places at risk from neglect, decay or underuse need to be conserved and used in keeping with their heritage values.

A wealth of natural, Maori and colonial settlement heritage can be found in Auckland's city centre. The original shoreline of was changed considerably by reclamation works in the 19th to early 20th centuries, development of rail connections, and the construction of the Harbour Bridge and motorway during the 1950s and 60s (Auckland Council , 2012, p. 69). The commercial wharves and marinas have changed from the original foreshore observed by the first settlers to Auckland, shown in map to the left.

Despite significant losses over the years, the city centre still has many valued heritage buildings and is home to 20 percent of the region's scheduled historic heritage. It is this heritage that gives Auckland its rich texture, a sense of continuity, and a strong basis from which to develop and grow its city centre (Auckland Council , 2012, p. 69). Below are important factors to consider for the design of TGCM:

- + The Grand Central Markets will incorporate initiatives to identify record, interpret, protect and enhance heritage.
- + The Grand Central Market will be sympathetic to the character and heritage of Quay Park Quarter and Auckland City.
- + Heritage will be celebrated through storytelling, visual/performing arts, festival events, community activities and the creation of a heritage walk / cycle route that connected with the FARS

Auckland Council have created a mapped out an original shoreline heritage walk , encompassing 25 sites and information panels showcasing past and present Auckland. This heritage walk covers the 5km route between Point Erin and the Parnell Baths.

Fig 42. Conceptual map of Auckland Waterfronts Original Shoreline

AUCKLAND CITY CENTRE KEY DESTINATIONS

1. Elliot Stables

Fig 44. Elliot Stables main food laneway

2. Queens Street

Fig 45. Queens Street main street during rush hour

3. Viaduct Harbour

Fig 46. Viaduct Harbour development

Britomart

Fig 47. Britomart open space, including seating

High Street

Fig 48. High Street pedestrian only street

Parnell Rd

Fig 49. Parnell Rd aerial view

4.3 THE NEIGHBOURHOOD

QUAY PARK QUARTER

Quay Park Precinct is located to at the eastern end of the city centre and along the City Centre waterfront. The precedent's natural setting is identified between the flat reclaimed land of the original bay and the rolling headlands. Numerous high-volume arterial routes such as Quay Street and The Stand separate the precinct to surrounding areas (Auckland Council, 2011, p. 1). Quay Streets joins onto Tamaki Drive, which forms a major eastern traffic route into the city centre. The Stand is a designated state highway, forming part of the heavy truck traffic that connects the port and the motorway (Auckland Council, 2011, p. 1). The existing designed rail corridor dissects the Precinct to the east and south-east, fragmenting land uses and activates.

Majority of the land was previously owned by the New Zealand Railways Corporation and later administered by the Department of Survey and Land Information. The precinct was the site of the FARS, shunting yards, and associated warehouse and industrial uses. However, the FARS is one of the only structures that has been retained and making it a prominent feature and an important heritage building within the precinct. The railway station's unique and distinctive architectural style along with the memorial garden (Te Toau Reserve) at the front of the site, contribute to the visual amenity of Beach Roads frontage. The Ngati Whatua O Orakei Maori Trust Board claim for the land was successful and was granted a 150-year lease to a private company to aid any future development (Auckland Council, 2011). Majority of the development below the escarpment fronting Beach Road forms a contiguous strip of buildings of a similar height to the escarpment behind. This provides unobstructed views from the top of the escarpment to the Port.

Fig 50. Conceptual map highlighting Quay Park Quarter Precinct

ZONING

The zoning of land in Quay Park Quarter is Business – City Centre Zone and Strategic Transport Corridor Zone. This document is referred to throughout this research to ensure that The Grand Central Market development upholds the Auckland Councils guidelines (Auckland Council, 2011). The primary challenge associated with Quay Park Quarter is the major infrastructure within and surrounding the precinct making it difficult to achieve a well-connected and high-amenity precinct. Three main objectives have been identified in the Quay Park Quarter District Plan (14.13- Quay Park Precinct, 2011, p. 3). The third objective and most applicable to The Grand Central Market development is listed below.

1) To provide for a scale and form of development that acknowledges the importance of the Precinct as a gateway to the Central Area, that is sensitive to the public open spaces and the former Railway Station building, and that ensures a transition in scale between the core of the Central Area and its periphery. (14.13 - Quay Park Precinct, 2011, p. 3)

PRECINCT FACTORS TO CONSIDER FOR THE GRAND CENTRAL MARKET DESIGN

- + Provide a mix of activities compatible with its location on the eastern edge of the city centre and its proximity to the port and transport network
- + Consider the scale and form of development within the precinct
- + Provide a transition to surrounding neighbourhoods by enhancing and defining street networks
- + Be sensitive to public open spaces, and the former railway station buildings heritage
- + Provide a variation in building height and form. The Auckland-wide and zone policies apply in this precinct.
- + Respond innovatively to potential adverse noise and amenity effects generated by the port, and the strategic transport network.
- + Acknowledge the role the precinct plays as the eastern gateway to the city centre.

PRECINCT PLANS

BUILDING HEIGHT CONTROL & BOUNDARY OF PRECINCT

Fig 53. Quay Park Quarter Land Use Photos

LAND USE

This analysis identifies activities and land uses in the surrounding area that will inform the arrangement and location of activities within the site. The map below specifies the activity status of activities in the Quay Park Zone. The use of land in the Quay Park Precinct surrounding the Auckland Railway Station was also identified as needing change.

Current development within the precinct consists of a mix of entertainment, private business, retail, and residential. In addition to Spark Arena the only other public buildings are small retail shops located on the ground floor (outlined in green on the plan below).

- KEY
- RESIDENTIAL
 - COMMERCIAL
 - MIXED-USE
 - ENTERTAINMENT

Fig 54. Quay Park Quarter Land Use Map

TRANSPORT ROUTES

THE MOVEMENT NETWORK

The design of roads, paths, and links (the movement network) are important design decisions to create prosperous and safe places. Auckland Transport is frequently updating the Regional Public Transport Plan to adapt to fast changing environment. This document, alongside The Auckland Plan, identifies the need for a transformation shift in public transport including doubling public transport trips and increasing the proportion of people living within walking distance of frequent public transport stops. It is critical that TGCM takes these changes into account and ensure that its design integrates into these plans (Auckland Council , 2012).

The map below outlines the current main transport routes surrounding the TGCM site and main transition areas (bus tops and train station). Currently the TGCM is surrounded by numerous options for transport but has no direct stop within a 10 m radius of the site. By ensuring that there is an area for buses to stop and cyclists to park their bikes will create a connected network that is convenient. This will allow TGCM to be an accessible destination, with a direct, safe route.

- KEY
- Railway Lines
 - Bus Routes
 - Main Bus Stop
 - Train Station

OPEN SPACES

LACK OF PUBLIC SPACE HIERARCHY

Urban open space is open-space areas reserved for parks, green space or any other open areas. The landscape for these open spaces can vary from fields to well-maintained environments. They are usually open to the public but can occasionally be privately owned. The plan below outlines current open spaces within Auckland CBD.

Open spaces are significant for amenity and environmental reasons. The design of these spaces can have substantial impact on occupant’s wellbeing and the value they attach to the area. As the city centre is becoming more compact, the quality of open outdoor spaces becomes important (Mixed Use Development Design). Quality open spaces can a way of mitigating the negative effects of living in the city centre. These communal open spaces can provide areas for children to play, businessmen and businesswomen a place to eat their lunch and public activates to take place. They play an important role in fostering a sense of community within precedents.

There are three large open spaces that surround the FARS site, including Te Taou Reserve. Currently these spaces are not being maintained, making them not safe, uninviting and vacant majority of the day. These spaces need to be considered and integrated into The Grand Central Markets design.

- KEY
- 1. Albert Park
 - 2. Emily Palace Reserve
 - 3. Feijoa Forest
 - 4. Mahuhukiterangi Reserve
 - 5. Te Taou Reserve
 - 6. Auckland Domain
 - 7. Fraser Park
 - 8. Unused Former Railway Yard
 - 9. Dove Myer Robinson Park

CYCLING IN THE CITY

CYCLING AS A DESIRABLE TRANSPORT MODE

Beach Road Cycleway was completed in 2015 and is a central arterial route in Auckland CBD. The cycleway was funded by Auckland Transport, Auckland Council and NZ Transport Agency (Beach Road Walking and Cycling Project, 2015). The Beach Road cycling and walking project creates a central link in Auckland’s first urban cycleway. The cycleway links with Grafton Gully Cycleway and the cycle route on Quay Street.

The purpose of the project was to create a continuous, safe and convenient path for people to get around the city centre via a bike. The projects design sought to improve cycling facilities by providing a two-way dedicated route, which was physically separated from any other modes of transport. Numerous other cycleway projects around the CBD have been constructed or are under construction, to help advance Auckland’s overall masterplan of creating a bicycle friendly city centre (Projects & upgrades, n.d.).

Fig 57. Map of Cycleways in Auckland City Centre

BEACH ROAD CYCLE WAY DEVELOPMENT

Fig 58. Aerial photo of Beach Rd cycleway

Fig 59. Beach Road cycleway landscaping

Fig 60. Beach Road Cycleway landscaping illustration

PARKING IN THE CITY

Parking is an essential part of the road network and public transport. Majority of vehicular journeys involves the need to park at both the start and end of a trip. People allocating to drive influences cohesion on the road network and public transport patronage (Auckland Transport Parking Strategy, 2015). Access to parking and its location on site are critical considerations when designing a mixed-use development. The choice in parking will impact the developments relationship with surrounding streets and adjoining public spaces.

Parking needs considered early in the developments design process, as effective and efficient management of parking will create a functional and safe environment for drivers and pedestrians. Parking impacts so many elements, including access, street frontages and structural grids. There are numerous options for parking on site. The suitable solution will depend on the project and factors such as

PARKING DEMAND- this will control the required total parking area.

SITE DIMENSIONS & PLANNING CONTROLS - these will regulate the height and potential shape of the parking areas

LAND VALUE- will define if parking can be elevated, underground, or stacked.

Fig 61. Parking locations in Auckland city centre

4.4 SITE AND LOCATION

EXISTING BUILDING AND SITE ANALYSIS. Understanding the quality of the existing building on site and in its surroundings- edges, facade, circulation, heritage, function and density. This section will introduce a study of the existing site and how the exploitation of its particular attributes can influence and inform design strategies. The site is located on the FAR site, 132- 148 Beach Road, and is part eastern edge of the Auckland CBD (Auckland Station (1930) , n.d.). Majority of the FARS building is to be restored, with only the necessary parts demolished, to make space for new interventions. The East end of the site area will be ear-marked for further parking.

THE AUCKLAND RAILWAY STATION (1930)

Fig 62. Aerial image of the Former Auckland Railway Station in operation

Fig 63. Conceptual map highlighting FAR site

NEW ZEALAND HERITAGE LIST ENTRY INFORMATION

List Entry Status:	Listed
List Entry Type:	Historic Place Category
Public Access:	Private / No Public Access
List Number:	93

This existing site plan analyses and records the characteristics of the site. This includes the natural and built features that contribute to the site's identify and character. A site plan is the first step in understanding the current site situation and should be the starting point of any development. The objective of the site analysis is to understand the key attributes of TGCM site and its immediate surroundings. It gives a review of the land and the existing environmental, cultural and physical elements that are located within it (refer to next page).

Fig 64. Aerial image of the FAR site

Fig 65. Main lobby of the FARS

Fig 66. Concourse of the FARS

RAILWAY STATIONS AN ENDURING
MEMORIAL TO THE RAILWAY AGE

From the 1860s onwards, the New Zealand rail system grew from independent entrepreneurs or individual provinces. In 1870, Colonial Treasurer and Premier Sir Julius Vogel made rail a significant plank in his colony development programme. New Zealand Railways (NZR) operated over 1,900 kilometres of track by 1880 and transported approximately 3 million passengers and 830,000 tonnes of freight a year (New Zealand Rail System SWOT, 2018). During the beginning of twentieth century was labelled the ‘golden age’ for rail.

The Former Auckland Railway Station is an elated memory of then train travel was more than just an accepted means of travel. In those days travelling by train was the primary means of transport and railway stations were often the hub of the neighbourhood. They were the city rail citadel Mecca for thousands of travellers (New Zealand Rail System SWOT, 2018).

The first 50 years of the twentieth century were considered the golden age of rail, although the period from 1880 to 1960 was probably more significant in terms of rail travel. During this time railway became established as the primary means of transporting freight and held sway as the most popular way to get from A to B around New Zealand (Atkinson , 2010). Trains took people to work, school and town. Trains linked communities and created communities in themselves. Railway Stations are areas of transit, where two opposing types of traffic, people and trains, engage and co-exist.

Fig 67. The FARS and Te Taou Reserve

Fig 68. Crowd outside the Auckland Railway Station in 1930

Fig 69. Soldiers leaning out of train as they depart to serve in WW II

Fig 70. Midland Railway Line, rock boring

Fig 71. New Zealand New Railway Station

THE FARS HISTORY AND SOCIAL CONTEXT

In 1884, Auckland City started to grow in size, density and commerce and plans started for a new railway station to be built in the heart of the city centre. It wasn’t until 1873 that a temporary platform was erected at Point Britomart. The construction of the Auckland Railway station was delayed due to the site still being in the process of land reclamation. This temporary platform served as an anchorage for many of the old sailing vessels. The simplistic wooden station was finally began construction and was completed in 1874. Shortly after completion inadequacies such as, congestion problems and no accommodation, were found by the General Manger of the New Zealand Railways station. This resulted in the construction of the two storied Queen Street Station (Auckland Station (1930)).

In 1931 the Auckland Railway Station opened just off beach road and began operating as the last station on the railway line. This grand Beaux Arts style building was constructed on reclaimed land in 1928-30 by architects Gummer and Ford and the Railways chief engineer F. C. Widdop (Jones, 2001). The station was designed to accommodate the people of Auckland, a microcosm of the much larger city. The building stood as ‘a recognition not only of the status of Auckland as a city, but of the importance of out national railways in the life of the community. The railway stations at the top and bottom of the north island were regarded as ‘gateways to our country’ (Salmond Architects, 1989). It was were both New Zealand citizens and overseas visitors passed though and formed impressions of our national status, our civic pride and our sense of services. The station provided transportation and a myriad of amenities for the populace to enjoy. The great entrance to the station was an architectural expression and a symbol of Aucklands high status (Jones, 2001). It linked to the tramway system that looped Te Taou Reserve, connecting the station to the rest of the city centre.

The materials were largely extracted from the Auckland province: ‘granite from Coromandel, marble from Whangarei, etc’ The natural New Zealand materials created architecture that's was for Auckland, celebrating civic and national pride (Jones, 2001).

The station served as the lifeblood of the Auckland Central district in Auckland but by the late 1940s it had begun to lose relevance as neighbouring stations grew and developed. The Railway Station had been out of commission as a railway station for many years, although one track remains active at the rear of the site.

Fig 73. The FARS timeline

THE CASINO REDEVELOPMENT

Auckland land use planner, Alan Bradbourne, was commissioned by Railcorp to find an alternative use for the site. This resulted in the site zone change in 1988. With the new zoning a firm from Vancouver developed a plan called 'QuayPark'. This plan divided the area into different zones, one being called the 'entertainment zone' (Shaw, 1990). With the former Auckland Railway Station being situated in the entertainment zone, a scheme was created for the building to be converted into a casino. However, this plan did not go ahead due to the high cost to extend the architectural style of the building (Casino represents opportunity for station restoration, 1990).

RAILWAY CAMPUS

During the 1990's the station was partly converted into 'The Railway Campus' by the University of Auckland. This was one of the largest student accommodations at the time, having 426 bedrooms and 230 apartments. Due to weather tightness problems emerging in 2008 the building became vacant (Gibson, 2008).

GRAND CENTRAL APARTMENTS

Following extensive works, the complex is now in residential use and is known as the Grand Central Apartments. The long structure opens to the Te Taou Reserve to the south, while bounded to Spark Arena to the west. Along the east elevation the Stand Station operates active train tracks (Jones, 2001).

GRAND CENTRAL APARTMENT
PROGRAMME

KEY

- Residential - Single Room Units
- Stairs and Lifts - Circulation Routes
- Storage and Services
- Covered Parking
- Communal Space
- Corridors and Open Space

Ground Level Plan

Promenade Level Plan

Level 2 Plan

Level 3 Plan

Level 4 Plan

THE AUCKLAND RAILWAY STATION
CHARACTER

This section has been produced in order to document the historic architectural items highlighted by Heritage New Zealand. Key elements identified as being significant to the heritage value of the FARS have been recorded and itemised.

DESIGN CHANGES

The Auckland Railway Station was traditionally designed to separate passengers and vehicular traffic separate. Railway Stations were designed having two conjoined areas which conflicted in scale. One area was an industrial space where trains would connect to, and the other was the stations main entrance designed for travellers to congregate (Davidson , 1927). The FARS acted as a ‘filter’ between the railway lines and the urban fabric of the city. The buildings sheer size and structure was designed to deliberately stand out. The basement level was traditionally designated for luggage and storage. The promenade level was designed form travelling passengers, consisting of the main lobby, booking hall, waiting room, and retail service areas (Davidson , 1927). The upper levels were entirely offices, including goods traffic management and administrative offices. Due to the upper levels being private all lifts and stairs were designed to be hidden behind walls and out of the public eye.

When the FARS was converted into student accommodation the interior layout of the floors was significantly altered and extensions were added to the promenade level and level 1 to accommodate for more apartment units. The basement level has predominately been converted to a Wilson carpark open to the public. The only entry to the carpark is through a garage door located on the North façade (Davidson , 1927). The promenade level main entrance lobby is still open to the public and remains in its ordinal condition. The booking hall has been converted to the main reception for The Grand Central apartments. The doors dividing the booking hall with the central concourse require a key, this point separates public and private. One typical feature of 19th century railway stations was its concourse. This area of the building was designed as a main circulation route, connecting the entire building and often conceived as an urban promenade (Jones, 2001). The FARS central concourse remains in its original condition, however, is now not the spine of which public amenities stem from. The wings running parallel to the concourse, have been converted into small single self-contained apartments. The levels remain disconnected, with only addition egress stairs being added to the exterior façade.

STRENGTHS

+	Contributing strongly to the character of the site and Quay Park Quarter is the FARS building. The colours of the facades creates a vibrancy which should be preserved	+	The cultural diversity of Quay Park Quarter is represented to some degree, but could be further celebrated.
+	Close to the city centre, universities, and the affluent neighbourhood of Quay Park Quarter. There are already connecting cycle and walkways, nearby bus stops and is only a 10 minute walk to Britomart train station.	+	The existing building is well suited for adaptive reuse and could be complimented by high quality mixed use development

WEAKNESSES

+	The narrowness of the footpaths combined with unsightly views of rubbish and overgrown weeds compromises the overall quality of the site.	+	Unified floor levels create a unified building and site, overall complicating visual contract and accessibility.
+	At street level the lack of street activation creates a subdued experience for pedestrians.	+	The FARS has overlapping movement routes and circulation systems
+	Numerous repairs and detract from the character building façade is required.	+	Unclear traffic movements downgrade the space quality. The building lies in bits and pieces, while the pedestrian links around the building is unattractive.

POOR SITE CONDITIONS

Fig 76. The Grand Central Apartment site photos

HERITAGE CHARACTERISTICS

EXTERIOR

Fig 77. The FARS West facade: Isometric

Fig 78. The FARS West facade: Image

BRICK AND GRANITE FACADE

The Auckland Railway Station was once one of New Zealand's premium stations. It represented an effort to emulate the large American railway stations built prior in the 20th century. The west part of the building is a three storey classical building, with a basement and with mezzanine additions, is of steel-frame construction faced with brick and granite (Davidson , 1927). The materials were largely extracted from the Auckland province: granite from Coromandel and marble from Whangarei (Jones, 2001). The natural New Zealand materials created architecture that's was for Auckland, celebrating civic and national pride.

The west elevation is symmetrical around the main entrance and is dominated by the sweeping ramp that separates the basement from the ground floor. This elevation has a central portion with three massive arched windows and a suspended verandah (Davidson , 1927). To enliven all four elevations of the traditional building rusticated stonework was used. Large sash windows are used around the building and are arranged orderly. Extended off the classical part of the building is a large double height concourse, running through the centre of the building. The concourse has a skylight that runs the entire length and exposed steel trusses. There were passageways and ramps around and within the building that lead to railway platforms.

Fig 79. The FARS West facade panel

HERITAGE CHARACTERISTICS

INTERIOR

Fig 80. The FARS main lobby interior: Isometric

Fig 81. The FARS original light fixture

Fig 82. The FARS tiled column

Fig 83. The FARS mailboxes

The classical building interior is dominated by a three storeys high lobby area, and the former booking hall (New Zealand Railways Magazine, 1930). Both areas are classically and ornately decorated, and have not be altered during any phases of conversion. The concourse also remains in its original condition. Features that remain untouched include; the decorative marble floor, ornamental ceiling and columns, exposed steel trusses, decorative light fixtures, tiled walls and the train station opening plank (attached to the wall). Unfortunately the rest of the building has been divided into small self-containing single unit apartments which have been converted on a cheap budget and lack any architectural flare (New Zealand Railways Magazine, 1930). The white GIB interior walls of the units contrast with the magnificent brick and marble of the original building.

Fig 84. The FARS opening plank

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Fig 85. The Stand Platform current condition

THE STAND - PLATFORM 7

When the Auckland Railway Station closed, platform 7 (now referred to as Platform 1) was retained and renamed to 'The Stand Station'. Following the opening of the Britomart Railway Station, the platform continued to function but only by a limited number of peak-hour suburban trains. The platform slowly deteriorated into a decrepitude state and was closed from 2003 to 2011. In August 2011 two platforms were re-developed and in 2015 the platform became the terminus of Auckland's sole long-distance train service (Jones, 2001).

TE TAOU RESERVE

Te Taou Reserve is a memorial garden located in front of the FARS. A garden and walls surround a central flagstaff, planted to oner the railway working who died in the First World War (Halpin, 2016). A number of native trees around the former station are scheduled for protection in Schedule of Trees in the District Plan, including six exotic Canary Island Palms and two kauri (The Auckland Waterfront- A Heritage Study, 2011, p. 6). Te Taou Reserve is a large public space that acts as a grand entrance and gateway for TGCM with sweeping ramps surrounding the garden. Wilson parking is located around the garden edge, creating conflict between car and pedestrian areas. Te Taou Reserve has the potential to be developed within the scope of TGCM and be a positive addition.

CURRENT SITE CONDITION

KEY

Service Road	Foot Path
Minor/ Unclassified Road	Cycle Path
Secondary Road

Fig 86. Aerial image of Te Taou Reserve

“People experience the city centre’s built form at different scales. Prominent buildings act as landmarks and assist people with orientation when in the city centre. All new developments - particularly those that are prominent because of their location, design or height - must enhance the cityscape, as this represents the identity and image of Auckland’s city centre.”
(Auckland Council , 2012)

4.5 REFLECTION

The FARS structure and site has deteriorated environmentally, socially, and economically. The Grand Central Market redevelopment can serve as an economic stimulus that could support the regeneration of its context and the Quay Park Quarter. This could potentially be supported by the local government as part of their regeneration and development strategies. Implementing a range of design strategies will ensure that the building, streets, garden and open spaces on site are attractive, pleasant places for people to walk and sit. It is important that new development in the city centre continues to provide amenity for pedestrians and users of public open space. The city centre is the most intensive urban environment in Auckland. Space is at a premium, so it needs to be used effectively to support social and economic growth. High density development in this location achieves the most effective use of land to support sustainability objectives for a quality compact city.

The size and architectural features of the FARS make the building and site a prominent feature and landmark in the surrounding landscape. In addition, its unique appearance and atmosphere provides opportunities for The Grand Central Market to act as a tourist drawcard. The building can act as a repository of social and technological memory and meaning, which gives value in terms of both tangible and intangible heritage. The adaptive reuse of the FARS can provide opportunities to strengthen the community and the project could provide a higher percentage of employment than new construction.

In terms of public space, new urban development typically produces public space of a large scale, unsuitable for human scale. The site is well located in terms of transportation but is disconnected from the urban network. Currently the FARS has very little useable outdoor space, however it has great potential to create various forms of public space. Clusters of activities in an area or quarter strongly influence the scale of this built form and character. The new building additions or extensions need to be carefully designed to ensure they are well integrated and enhance local distinctiveness and activity. The relationship of buildings to streets and open spaces influences the way people experience the city centre.

An urban development typically creates large scale blocks and buildings of homogenous functions. The FARS site was previously of homogeneous function. To create a successful place, it is critical that various functions are included within the site to be able to serve a wide range of people and consequently create a lively and active environment. Furthermore, their various functions will be most successful when they’re mutually dependent and work in unison.

5. DESIGN RESPONSE

- 5.1 Introduction
- 5.2 Programme and Activation
- 5.3 Architectural Response
- 5.4 landscape Response

"At Gehl, we focus on working with our clients to create mutually beneficial relationships between people's quality of life and their built environment." (Gehl People)

REDEFINED IDENTITY

Heritage, landscape, built form, people and communities together establish the context for Quay Park Quarter and the sites unique sense of place. Good design must recognise and respond to this context, with the development enriching character, quality and thereby a sense of place.

DIVERSITY

The redevelopment of the FARS should accommodate a rich mix of uses, activities, urban form and architecture, which supports variety, vibrancy and safety. Good design must encourage diversity, adaptability and embed flexibility, to ensure continued provision for changing communities, cultures, built form and environments.

INTEGRATION

The redevelopment should support uses, energy systems and movement networks which are well connected, and provide convenient and universal access to a range of services and amenities. The cumulative picture of a building, a street, a neighbourhood and the city must be recognised. Good design must ensure that the FARS supports existing and/or creates integrated urban form (including streets and spaces) to facilitate well-being, movement and access.

5.1 INTRODUCTION

As discussed in chapter two, in modern conservation theory, adaptive reuse can be an essential approach towards actualising urban regeneration strategies. After comparing existing theories on adaptive reuse approaches based on its efficacy for urban regeneration a strategic theoretical approach has been selected for this project. The design aim of the The Grand Central Markets is to inspires people to collectively reimagine and reinvent the FARS as the heart of the community. Strengthening the connection between people and place.

The following chapter outlines the collaborative design process that aims to shape the existing building and public realm to enhance and reinforce local character, heritage and identity; create a sense of place; and is supported by good accessibility and public transport connections. Considering different preservation, placemaking and urban regeneration approaches, several design intervention are selected and aim to create better urban design, while paying attention to the physical, cultural, and social identities that define the FARS and support its ongoing evolution. Using the results of stage one investigation this chapter discusses the design responses in detail, showcasing the design interventions grouped according to the following three response categories.

1. PROGRAMME AND ACTIVATION
2. ARCHITECTURAL RESPONSE
3. LANDSCAPE RESPONSE

The scope of design work presented includes:

- + Overview of the full urban regeneration plan, including various integrated activities.
- + Interventions for the extension of a public passage through both underground arcades, outdoor laneways and general markets.
- + A circulation plan to integrate the various areas of the building and site, with associated activities.
- + Level plans for integrated functions for public focused retail, entertainment and dining, with consideration to traffic flow and user experience throughout the levels.
- + A new addition added in the south-east end of the site, to provide a facility for more retail, entertainment and dining.
- + Renewal of the entrance to the lower ground level and multiple new entry points, to provide direct pedestrian access to the new transportation links and underground public passage area.

PROGRAMME AND ACTIVATION

CREATE A MULTIFUNCTIONAL LOCATION
IMPROVE SAFETY

CREATE A MULTIFUNCTIONAL LOCATION

IDENTIFIED SITE FACTORS TO ADDRESS

The FARS is currently underutilised, only functioning as self-contained residential units and parking. This urban area is not contributing positively to its surroundings. In addition, the rail yard space at the rear end of the site, which extends onto Judges Bay, is vacant.

TGCM DESIGN RESPONSE

Create a well-designed 'sense of place' to attract business and employment uses, and a diverse range of good quality residential accommodation. Industrial buildings do not always lend themselves to standard commercial uses. The FARS has a complex spatial configuration, which requires a suitable brief and mix of uses (Mesher, 2010). Different programs have been strategically located, both on and off site. This section looks at choosing appropriate uses for the site and managing potential conflicts through good design.

KEY DESIGN RESPONSE FACTORS

- + Respect the valued architectural features of the FARS, whilst accommodating contemporary activities.
- + Ensure integration of offices, apartments, retail stores, dining, and entertainment in the individual building on site.
- + Retail, dining and entertainment located on the first two floors, offices and apartments on the upper floors.
- + Provide for a mix of uses that range in operating times.
- + Functionally separate the experiential public spaces, circulation routes and the private spaces.

DISTRICT POLICIES AND AUCKLAND COUNCIL FACTORS

In Precinct Area 1, as identified in Precinct Plan A, activities allowed are those listed for less pedestrian-orientated areas under Part 5.5.1 (Part 5- Activities, 2013). These activities include: **Accommodation**, community care facilities and emergency services, **food & beverage**, education, **entertainment / gatherings**, industrial storage, **offices**, services and **retail** (<1,000m2 gfa per site). The Auckland City Masterplan Factors below helps guide The Grand Central Markets programming.

AUCKLAND CITY MASTERPLAN FACTORS

	FACTORS IDENTIFIED	MASTERPLAN RESPONSE	TGCM RESPONSE
+	Limited demand for new Grade A office space	Find vacant area in buildings in the City Centre	High-end commercial investment is included in programming.
+	The emerging fashion retail district	Britomart’s growth is to be encouraged. A retail experience based on the city centre laneway circuits (Quay Park included) is proposed to ensure a complementary relationship and greater synergy between the areas	Include retail in the mixed-use development programme. More activity day and night in retail areas. Retailers will be encouraged to operate as a coordinated entity to achieve this.
+	A retail sector under threat from regional shopping malls	A city centre retail action plan is being prepared. Continued streetscape improvements will lead to a quality shopping environment. New Retail is proposed in Quay Park, to ensure the retail offering is diverse and has critical mass	
+	Finishing and maintaining an appropriate balance between commercial and residential growth, to avoid one flourishing at the expense of the other	Growth capacity has been considered across the city centre. The suggested split between commercial and residential growth will ensure equilibrium	Respond to the market situation in Quay Park Quarter regarding commercial vs residential programming
+	Entertainment and dining will continue to expand in areas such as the waterfront, Ponsonby and Parnell, and along streets connecting these areas such as Victoria Street and Beach Road.		Include entertainment and dining into programming

RESIDENTIAL

The residential profile of the city centre is dominated by young apartment dwellers, who tend to be a transient population. This inner city population is complemented by lower-density, family-orientated accommodation in the city fringe. A future challenge is for the city centre to broaden its housing choices to retain workers (Part 5-Activities, 2013, p. 5).

TGCM will need to provide accommodation to meet a range of needs and increase the desirability of the city centre as a place to live. The quality of the open space and building design will be central to attracting and retaining residents. Well-designed, dense living environments in the city centre need to be complemented by safe, private access to communal open spaces. The trend away from home ownership towards renting, the ageing population, and increasing numbers of students living in the city centre will ensure that city centre living will increasingly be seen as an attractive lifestyle option.

OFFICE SPACE

With the growing population, traffic is increasing and becoming a major factor to consider. The business services sector is very important to the future of the city centre. Almost one in three regional jobs in the business services sector are in the city centre; they account for 50 percent of all jobs there. The employment projections in the Auckland Plan indicate 145,000 – 160,000 workers will be employed in the city centre by 2041 (Auckland Plan 2012). Auckland city centre requires more commercial office space, with there being specific demand for new Grade A office space.

RETAIL, ENTERTAINMENT AND DINING

Auckland is one of New Zealand’s largest retail centres, generating over \$1 billion of retail expenditure per annum. It offers broad shopping choices ranging from malls to value retail locations, along with a limited range of niche, independent shops and luxury stores (Part 5-Activities, 2013, p. 3). Despite this, the city centre needs to broaden its shopping choices and operating hours to create a lively mix of world-class shopping experiences. Entertainment and dining opportunities are becoming increasingly diverse, but there is a lack of coherence, with clusters of activity throughout the city centre.

A strategic theoretical adaptive re-use approach will be used for the alteration, upgrade and renovation of the existing FARS for a new mix of uses. When planning the building's function and layout it is critical to consider the needs of the occupants and respond to the buildings context. The below outlines the factors considered to programming The Grand Central Market.

Consider whether the FARS is suited to adaptive reuse.
Consider if the FARS character may be beneficial from a marketing standpoint.

The FARS provides an excellent opportunity for a mix of retail, commercial, and residential spaces. The existing FARS was built with high quality materials and has large floor to ceiling heights. In addition, the existing building has a modular grid structural system and floor layouts, which makes it easier to adapt to both residential and commercial use. The former industrial space within the concourse has a long-span roof, which is rare in dense urban environments. This industrial aesthetic offers a unique space with numerous options for conversion. The large spaces are supported by smaller ancillary spaces, which can prove to be difficult to work with, but can often retain their role as subservient spaces to the larger volume. This means that the building can lend itself to adaptation into a variety of functional uses. In addition, the existing brick and masonry building has large floor to floor heights, making this section of the building ideal for apartments and offices.

The FARS is much larger in scale than the newer buildings that surround it. This offers many opportunities in terms of inserting a new function, which requires more floor area than might typically be available elsewhere. The development can act as an anchor or draw card for Quay Park Quarter. In addition, the high quality character and design of the retrofitted FARS will a very desirable place to work and live.

The value of mixed-use

With good connections and high intensity of different uses, TGCM mix-used development can:

- allow parking and transport infrastructure to be used more efficiently
- lower expenditure on transport
- increase the viability of local facilities and shops
- encourage walking and cycling, reducing car use and thus reducing emissions
- improve social equity
- enhance personal safety
- provide people with convenience, choices and opportunity

Consider the best suited design practice for the FARS

VERTICAL MIXED-USE

The most common form of mixed use development and most appropriate for The Grand Central Market is a vertical mixed use approach. Vertical mixed use developments are better suited for city centres, due to the demand for commercial activates and street-front retail. Following this concept, The Grand Central Market encompasses non-residential uses on the ground floor and residential uses above. By locating residential dwellings above street level, they will be separated from street noise, have greater privacy and better access to the waterfront views. Diverse uses in one location can activate an area. However, this creates potential for different uses to conflict with each other, both with adjoining sites and within the development. There are numerous advantages including:

- 1. Activation of the street edge through ground floor commercial and retail uses;
- 2. The upper level residential apartments benefit from improved privacy, views of waterfront and Te Taou Reserve, whilst also providing passive surveillance of other public spaces in the development.
- 3. An increased demand for local services;
- 4. Local employment opportunities are created.

BUFFERS

There is a need to separate incompatible uses, both internally within the mixed-use development and externally with the surrounding neighbourhood. The buffers appropriate for The Grand Central Station can be spatially or through incorporation of physical barriers.

OUTDOOR SPACES

Outdoor space is vital for both amenity and environmental reasons. These spaces improve the overall liveability of a development, while also providing amenity for those living in the development’s apartments. The Grand Central Markets open spaces are public and communal, apart from the rooftop gardens that are private to residences. These outdoor spaces play an important role in maintaining and fostering a sense of community. The spaces range from gathering places to places of retreat. The size, location, privacy and security are all considered for the different intended function. To ensure that the spaces are as safe as possible, these spaces will be accessible to pedestrians only. Open outdoor spaces surrounding The Grand Central Market building can provide the desirable continuous street frontage for retail, dining, and entertainment.

Fig 87. TGCM programme diagramming

IMPROVE SAFETY

PASSIVE SURVEILLANCE

Create lively areas at night-time.

The analysis chapter indicated that certain areas on site and in the surrounding area change character significantly between night and day. Busy areas that are safe and secure during the day become deserted at night. A design strategy to reduce this isolation in areas at night to accommodate passive surveillance. This can be done in numerous ways, including maintaining a lively flow of people movement along the streets and encouraging activity in the evening hours. The Grand Central Station will require a comfortable and safe passage through the site. By providing a mix of uses in one area, restaurants, shops and street stalls that are operating during evening hours activate the building edges of the public realm. Residents also provide a form of passive surveillance by offering the impression that the building is occupied with people looking into the public realm. Providing a combination of commercial, residential and office use would be beneficial to the safety of The Grand Central Markets.

Fig 88. Table showing TGCM programme operating hours

ARCHITECTURAL RESPONSE

A UNIFIED SITE
RESTORE A SENSE OF PLACE

<p>This adaptive reuse project includes the restoration of the building's façade and parts of the interior to resemble what it was like in the past. The Grand Central Market (TGCM) showcases aesthetics that modern buildings simply cannot afford, with the FARS structure having a much higher attention to ornamental detail than those built today. Adapting the FARS to suit contemporary needs requires an in-depth approach to the issues that may arise. Such issues and restrictions may be decided by the dimensions and materials as well as its condition. It should be understood what is possible to save and what needs to be overhauled in order to ensure the structure is secure and the building will be able to meet current building regulations for health and safety, accessibility and sustainability.</p>	
<p>The most innovative solutions obtained from the case studies was when the architect attempted to renew the building whilst also retaining the original footprint and as many architectural features as possible. When possible, all historic architectural elements are preserved include sculpted stone, columns and capitals, elaborate masonry and vaulted ceilings. Through a strategic theoretical adaptive reuse approach, much of the character and aesthetics of the FARS will be retained by incorporating these elements into the new framework. Implementing design outcomes driven from the theory and site analysis study, the design objectives focus on the following aspects:</p>	
<ul style="list-style-type: none"> + Meeting the functional requirements in developing a fit-for-purpose building. This includes adopting Auckland design principles and guidelines. + Promoting greater strong genius loci or spirit of place by creating an enhanced welcoming experience. + Integration into the surrounding site and Auckland City Masterplan. + Exploring key sustainable objectives that would promote a positive environment. 	

ARCHITECTURAL RESPONSE: A UNIFIED SITE

IDENTIFIED SITE FACTORS TO ADDRESS

- + The change in levels complicate the visual contract and accessibility.
- + Unclear traffic movements downgrade the public space quality. The building is fragmented, while the pedestrian links around the building are unattractive.

TGCM DESIGN RESPONSE

The FARS has very poor vertical circulation. Lobbies, stairs, lifts and corridors have been designed to improve the circulation spaces with TGCM. These design decisions have an immediate relationship with the building’s layout, form and articulation. The main objective is to create easy pedestrian movement throughout the building and site that is safe and durable.

The FARS provides the opportunity to create an architectural promenade that gradually reveals the narrative of the existing building. Considering The Grand Central Markets new program, circulation routes have been located to create effective pedestrian flow that is easily assessable. Privacy is considered in the early stages of design with all private areas of the building being separated from the main circulation paths with restricted access. The main circulation routes have been designed to offer a glimpse into the FARS history, almost like a window into the past. The design objective is to recreate the passenger movement that excited when the building functioned as a railway station.

The circulation route becomes more experiential than expedient. These experiential routes mean visitors can become more aware of their spatial qualities and the tactility of surfaces, enabling a multi-sensory experience.

Egress was considered and brought up to the New Zealand building code during the conversion into student accommodation. To meet the required egress, fire stairs where attached to multiple sides the exterior façade of the building. However, these additions detract from the buildings historical features and have been relocated to the interior of the building. Public stairways and lifts have been added to the interior of the building and ramps are integrated into the overall landscape design.

THE ARCADE

Breaking the massing and cutting a void into the centre of the passageway, presents an opportunity to connect the ground and prominent levels in the concourse. The objective is to create a visual connection with the internal central passageway as visitors enter the building and form interaction between multiple levels. The void will extend the current lightwell, created from the long spanning skylight, to the ground level. This natural light welcomes visitors into the warm centre of the building, while promoting a feeling of health and wellbeing (Brooker & Stone, 2004). This space creates a light portal, capturing light during most hours of the day and conveying transparency. It also draws attention to the exposed original trusses that sweep over the arcade and the original preserved textured tiles on the walls and floors. The Arcade provides a pleasant space, that is attached to the main circulation route through the building. Interior plants have been used to soften the space and add texture and colour.

Fig 89. Sketch exploring void through central concourse

THE BOX

By removing the low-cost additions made by Auckland University at the end of the 1990's, vacant space has been formed on the south side of the site. A new extension has been added, delivering a contrasting modern atmosphere to the existing FARS structure (Brooker & Stone, 2004). The design's main objective was to create a solid massing concept that would position the new addition within its site context while sitting comfortably alongside the existing FARS building. The new building is integral to the very nature of its design by relating at a human scale to the visitors approaching the building and creating a richness in rhythm and narrative that captures interest without being overwhelming. The original façade on the ground level followed a 45 degree angle towards the center of the building. This distinct angle was used to position the new building and the existing grid structure and create a clear entry point into the South side of the building. The concept of the Box is defined by clean, light and polished facades. The curtain wall brings in natural light and the East mosaic concrete façade acts as a sculptural element.

Fig 90. Sketch exploring new addition on the South-East zone

Fig 91. Sketch exploring connecting bridge

ACTIVE STREET EDGE

To create an inviting environment and a sense of place, focus has been given to the design of the area where the building and outdoors spaces meet (Gehl, Life Between Buildings, 1971). Due to the dense urban environment a clear and contiguous active street edge has been designed to have minimal front yard setback. Focus was on the interaction between the lower levels of the building and the street, creating an active, interesting and engaging streetscape. Intermittent retail / commercial residential (access to upper floors) uses on the ground floor will provide public realm activation with the benefits of vitality, safety, and an overall attractive urban space. (Gehl, Cities for People, 2013). Where existing buildings edge the public realm activation should be investigated in the form of re-purposing buildings and outlook with new openings and windows. To support existing buildings which may not be ideal for activation adjacent development will be critical to achieve activation along the Greenway. This design decision has been created to contribute positively to the amenity of the street.

ARCHITECTURAL RESPONSE: RESTORE A SENSE OF PLACE

IDENTIFIED SITE FACTORS TO ADDRESS

- + Over time the FARS has lost its strong genius loci or spirit of place through numerous adaptive reuse attempts.

TGCM DESIGN RESPONSE

It is important to connect the spirit of a local community and reinforce a sense of place either through the materials used or in gestures that reference a suburb's history or identity (Salmond Reed Architects Limited, 2011). The original FARS materials and features need to be preserved but still provide for the required new functions of TGCM. It can be a challenge to achieve the right balance between the new requirements and the original 'mood' of the building (Louw, 2018). The TGCM needs to achieve the right balance that satisfies both the need for retention of original atmosphere, and the creation of new atmospheres.

Internally heritage fabric remains in the main lobby, booking hall and concourse, therefore the proposed works aim to capture the essence of the original building. Contemporary proposals will complement and respectfully enhance the heritage values of the building, allowing old and new to sit seamlessly alongside one another.

Where elements of significant historic value remain internally, such as the main staircase and features within the main lobby, original fabric will be removed, refurbished and stored for reuse within the proposed scheme. Where original fabric no longer remains or has been damaged beyond repair, new works to match original will ensure the original character is maintained. The FARS industrial aesthetic has been designed to contrast with modern, minimalist interventions that help emphasise the coarse industrial finishes, materials and patina on the old structure. This is consistent with good heritage practice, which enables one to clearly distinguish between the new and the existing and allows more layered reading of the building.

Fig 92. Conceptual sketch exploring materials in main lobby

MATERIALS

- + Light concrete external walls- exposed aggregate creating a pattern. There is anticipation that cultural engagement during the next phases will result in a narrative tailored for this building and site.
- + Natural materials are to be used where possible in the interior design palette. Timber battens and timber ceilings are proposed to be used in smaller interior spaces, such as the retail stores, offices and apartment units.
- + Windows and Doors- aluminium joinery will be black to contrast with the brick and stone of the original FARS and match the colour of the exposed original trusses in The Arcade (original concourse). The three massive arched windows and a suspended verandah will also be restored.
- + The exterior walls surrounding The Box (the new South addition) will be formed by a curtain wall system with a composition of transparent and opaque glass panels. Selected facades will have an expanded metal mesh cladding system to prevent over heating in this area and create a unique aesthetic. This material is 100% recyclable. This new addition presents an opportunity for a colourful, bright and light façade that contrast with the original buildings brick and stone material palette.
- + Most of the corridor floors will be exposed polished concrete or have a layer of restored mosaic tiles from the FARS. This flooring system is versatile and easy maintenance, perfect for large foot traffic, office spaces and home environments.
- + The intention is that entry points into the different zones within the building, such as the concourse, are to be treated in a way that allows for easy wayfinding and a sense of unique identity. This can be achieved through using contrasting materials such as timber or steel.
- + The exterior envelope of the main building has remained largely intact and presents the important historic aspect of the railway station. The proposed works offer an opportunity to restore and repair the significant architecture qualities of the exterior, while reserving the unsympathetic and inappropriate recent additions. The steel-frame construction faced with brick and granite stone façade will be restored.

Fig 94. TGCM West facade. showing original brick and granite materials

Fig 93. TGCM new addition: The Block, showing curtain facade, timber ceiling panels and mesh cladding

THE NARRATIVE

The strongest reminder of a building’s previous life is when visitors can interact with buildings history (Jäger, 2010). In numerous case studies, architects have managed to interact and capture the stories of former occupants of the buildings and find ways to include them through narration. The embedded stories make most of these buildings living museums that play an educational role and act as repositories for societal memory (Douglas, 2006). Adaptive reuse projects allow the current generation to add its own contribution, future generations to understand the changing conditions over time and still preserve memories of the past.

This can be achieved by creating moments of repose throughout the building, providing visitors with information about the building’s features and memories. This can be done using plaques that present information, images and descriptions of the FARS when it was operating as a Railway Station (Baum & Christiaanse, 2016). Special features throughout the building can be restored to a good condition and have an attached plaque describing its architectural importance. It will be important that the circulation through the building ensures that the areas, like the main lobby or booking hall, are part of the main circulation route. Wayfinding can aid this.

Fig 97. The FARS West Elevation

Fig 95. The FARS North Elevation. Parts of the building with heritage value are displayed in colour.

Fig 96. The FARS South Elevation. Parts of the building with heritage value are displayed in colour.

LANDSCAPE RESPONSE

A DISTINCT STREET HIERARCHY
A UNIFIED SITE
CHARACTERISTIC AND WELCOMING PUBLIC SPACES

MASTERPLAN THEMING: SHOPPING DINING AND WORKING IN THE PARK

The overall landscape concept envisages an achievable future, where TGCM becomes strongly linked with the landscape, nature, the surrounding neighbourhood and its community. According to placemaking and urban regeneration theorists, these interrelationships go hand in hand with physical exercise, social and community engagement and mental well-being (Gehl People, n.d.). Physical improvement through design provides for the comfort, engagement and entertainment of future users, inviting a range of popular uses. The selected interventions present opportunities for innovation, surprise and unique transient and permanent design. This project endeavours to connect people with people and people to a place. It invites residents and visitors to create and participate in everyday experiences in public space, fostering community cohesion in Quay Park Quarter.

MASTERPLAN KEY PRINCIPALS

- Community.** Reflect the community’s personality and local character. Encourage activity and community use via green spaces and walking / cycling track. Form equitable access, regardless of position or transport mode. From this research scope the next phase would be to integrate cultural aspects through collaboration with various user groups.
- Ecosystem.** Protects existing heritage listed trees. Provides additional local biodiversity. Delivers a rich local green patch to benefit flora and fauna within the wider region. With cognisance to the sustainability objectives, manage storm water flow and treatment.
- Comfort and Safety.** Provide a sense of comfort and safety to people using the space. Reduce strain by forming clear wayfinding and a network of welcoming green spaces. Creates green outlooks from all areas of the building. Provide scent, seasonality & familiarity. Forms space that promote sitting, standing or activities. Support the surrounding networks.
- Social Interaction.** Foster social interaction and create a sense of community and encourage use among a diverse cross section of the public.

LANDSCAPE RESPONSE - LANDSCAPE ZONING

The landscape entails of a series of zones comprising of their own character. These zones contribute to the overall visitor, staff and residence experience and journey through TGCM.

Fig 98. Sketches exploring landscaping zones

LANDSCAPE RESPONSE - A DISTINCT STREET HIERARCHY

IDENTIFIED SITE FACTORS TO ADDRESS

- + The majority of the streets on or surrounding the site generally serve the same purpose as transport corridors, primarily for vehicular traffic, as service roads and as parking spaces.
- + The Te Taou Reserve has been filled to its maximum capacity with vehicular parking.
- + Many of streets look alike and the distinction between them is weak. This makes the general orientation hard and creates a sense of indifference towards the individual streets and adjoining open areas.

TGCM DESIGN RESPONSE

The way a street feels and looks is critical to creating safe and attractive environment that brings people to the site. A quality development should address the site, while contributing to and enhancing the street. By forming a better public realm TGCM can enhance the desirability of the neighbourhood, consequently increasing the value to tenants. This landscape response provides design tactics that contribute to creating a distinct street hierarchy.

- Differentiate the various streets by introducing distinct design profiles related to the difference in traffic use.
- Ensure that the streets are not only transport, but also cater for a wide range of more recreational activities as well as social meeting places.
- Ensure that the streets are inviting and safe.

BOULEVARD

PEDESTRIAN STREET

DEFINING THE ENTRANCE

The TGCM main entrance is the threshold between the exterior and the interior and supports the overall identity of the development. A grand staircase has been added as a powerful entry statement, linking Te Taou Reserve to the main entrance that lead into the common entry lobby and private spaces for residents only. The entrance is the first point experienced by visitors. The green veil on the concrete wall surrounding Te Taou Reserve was designed to soften the hard form and reinforce the extension of the external landscape through into the laneway.

TE TAOU RESERVE

LANEWAY

Laneways have been successful in connecting two larger streets (William H. Whyte, 2010). Their compactness creates atmospheric, transient spaces whilst forming a practical short cut. Shops and cafés spill out onto the lane, activating the space. Using the north of the site to create a laneway will transform the currently underutilised area into a busy “outdoor room” with cafés, bars, live performances and open air galleries.

- Enhance wayfinding and create a strong sense of arrival and an accessible, attractive, and welcoming entry into the laneway.
- Use awnings to provide shade and shelter.
- Provide a highly sensory inviting entry landscape through use of texture, colour, and patterning.

WEST ELEVATION

Create a passageway from Te Taou Reserve to The Laneway. Currently used to store rubbish.

Fig 102. Sketches exploring possible shading in the Laneway

PLAN OF NORTH ZONE OF SITE

LANDSCAPE RESPONSE - A UNIFIED SITE

IDENTIFIED SITE FACTORS TO ADDRESS

- + The change in levels complicate the visual contract and the accessibility.
- + The railing following Te Taou Crescent forms a barrier between the Railway Station and Te Taou Reserve.
- + Unclear traffic movements downgrade the public space quality. The site is fragmented, while the pedestrian links around the building are unattractive.

TGCM DESIGN RESPONSE

Create a unified and pedestrianised site, by connecting the site levels. The FARS needs to be levelled out to optimise accessibility and provide a smooth pedestrian link to surrounding streets. The vision is to establish a coherent and more attractive area around the Station where the North, South, East and West areas of the site form a new and upgraded public domain which will be linked to the surrounding main road and waterfront.

- Dedicate the ramp to vehicular access and provide a dedicate parking area in the eastern part of the Railway site.
- Create direct and attractive walking links to the FARS which are integrated parts of a connected pedestrian network for the whole city centre. This will be upgraded and better pedestrian conditions created to invite the surrounding neighbourhoods to the new development and its outdoor spaces.

Fig 105. Sketches exploring possible configuration of green space

Fig 106. Sketches exploring possible layouts of external works on site

PARKING

Vehicle access will be primarily from the north of Spark Arena and Nagoho Place into the east of the development site. Carpaking should be internalised within the site in podium parking structures or potentially creating a separate carparking building in the vacant land east of FARS. Communal parking buildings maybe a viable option however it is important that they are sleeved with development to maintain the active street edges. It is also important that parking structures are designed with flexibility to adapt and re-purposed for alternative uses in the future.

CYCLEWAY

Streetscapes are integral to TGCM program. As part of the buildout of transit and trail infrastructure, TGCM aims to improve Quay Park Quarter for multi-modal use. Bike lanes, and pedestrian-friendly infrastructure are part of streetscapes enhancements. Transit is a core component in the TGCM, playing a major role in realising Auckland City’s vision of linking precincts, connecting people and providing a safe travel option. Pedestrian and cycle connections are designed to connect with gathering spaces and activate the sides and rears of building. Some already exist such as Beach Road Cycleway and Quay Street Cycleway.

The new lane will run around the rear and south side of TGCM building, connecting the two existing cycleways together. The map below shows how the TGCM can connect with the current cycle routes from the Auckland City Council Plans, creating a loop that joins the waterfront with Beach Road. This connecting loop will make TGCM more accessible, including for tourists that arrive via cruise ship. The cycleway will act as a corridor filled with an eclectic mix of commercial and hospitality offerings that contribute to the vibrancy, interest and distinctiveness of the central city in varied ways, such as by:

- + Increasing walk-ability and connectivity by providing linkages and pedestrian-friendly environments.
- + Creating a sense of discovery to the city through discreet locations, varied character and intimate scale.

174 Fig 107. Sketches exploring possible cycleway surrounding the main building on site.

PLAN OF SOUTH ZONE OF SITE Fig 108. Ground and Promenade Floor Plans of current site conditions

175 Fig 109. Plan view exploring possible cycleway surrounding the main building on site.

LANDSCAPE RESPONSE - CHARACTERISTIC AND WELCOMING PUBLIC SPACES

TGCM DESIGN RESPONSE

The public space created capitalises on the FARS building’s scale, architecture, and proportionality to create interesting visual experiences.. Each public space accommodates multiple users and multiple uses. All public spaces are accessible via walking or biking. Each space aims to use, enhance and protect the environment and natural features. They reflect Quay Park local character, promote social interaction, provide a sense of comfort or safety to people using the space, encourage interaction among a diverse cross-section of the public and generate a sense of community.

ART WORKS AND INSTALLATIONS

The TGCM features public art collections as well as temporary exhibitions designed to engage the local community. A general strategy for the overall use of public art is very useful. Art is displayed throughout the site, striving to make art accessible to all. This gallery represents artists from across New Zealand and ranges in mediums including, sculptures, music, murals, photography, and fashion.

ACTIVITIES & SOCIABILITY

The laneway, courtyards and Te Taou Reserve has been designed to activate the surrounding neighbourhood by drawing in restaurants, and shops, as well as Spark Arena. TGCM now provides a much-needed central public space for year-round community events such as cultural festivals, pop-up markets and even public viewings of local art. The site has the potential to once again be one of Auckland’s most vibrant and active destinations.

LITERATURE TRAIL

The rich natural and cultural history of the FARS provides the opportunity for the extension of the Auckland City Heritage Trail into Quay Park Quarter. This could provide community engagement to identify and develop suitable ‘content’. The New Zealand National Library can help provide a suitable starting point to identify narratives and content which capture the history and spirit of site.

GREENERY

Greenery has a softening effect on the streetscape and effectively muffles the noise of traffic as well as cleans the air. Given the constraints on the street tree planning in terms of harsh climate conditions and lack of space, there needs to be a strategy.

WATER ELEMENTS

The fact that Auckland is a waterfront city should be felt in all of the City Centre, either though celebrating views to and from the water or by installing water elements reminding visitors and residents of the larger context. Water elements generally have a positive effect on the general quality and attractiveness of the public realm.

This content is unavailable. Please consult the figure list for further details.

Fig 110. Wynyard Quarter landscaping design done by Auckland Council

6. FINAL DESIGN

6.1 Architectural Drawings and Renders

THE GRAND CENTRAL MARKET

LOCATION: Quay Park Quarter, Auckland
ADDRESS: 26 Te Taou Crescent, Auckland CBD, Auckland 1010
PROGRAMME: Mixed-use Development
GROSS FLOOR AREA: 24000m²

This section brings to life The Grand Central Market, featuring drawings and renders of the final design outcome.

CONCEPTUAL SITE PLAN

Note. Drawings
not to scale

181 Fig 111. TGCM Site Plan

GROUND LEVEL

Fig 113. TGCM Ground Level Floor Plan

LEVEL 2

LEVEL 3

LEVEL 4

Scale 1:600
Use scale bar on previous page

SECTION 1

SECTION LOCATION

Cuts between grid line Y13 and Y14.
Refer to Ground Floor Plan for exact location.

HORIZONTAL CIRCULATION

Note. Drawings
not to scale

Promenade Level Floor Plan

Level 3 Floor Plan

Fig 127. TGCM West facade, showing brick and stone

Fig 128. TGCM South facade and connecting bridges, The Box in foreground

Fig 129. TGCM new Arcade modelled in Revit

TE TAOU RESERVE

TE TAOU RESERVE INTERVENTIONS

1. Beach Road Cycle Lane

Strengthen connectivity and supports the cities sustainability goals.

2. P60 Paid Parking

Profits customers a place to park for short term visits, while allowing a fast change over.

3. Walkway

Provides a safe transitional spaces between the building and Beach Road.

4. Garden and Parkland

Provide a transitional space between the building while protecting notable tress and reinforce the history and characters of the site's parkland.

5. Open Space

Provides a space for human interaction and relaxation for the community.

6. Main Entrances

Engage with the built, natural and cultural heritage of the site through clear entrances. Concrete stairs have been integrated to connect Te Taou Reserve with the main entrance of TGCM.

MAIN ENTRANCE

THE LOBBY

Fig 136. TGCM main lobby from level 2 window

Fig 137. TGCM main lobby at human eye level

THE LANEWAY

216 Fig 138. TGCM Laneway looking towards the waterfront

217 Fig 139. TGCM Laneway detailed plan

Fig 140. TGCM The Laneway shopfront

Located on ground floor between grid lines
Y17 & Y19, X3 & X9

220 Fig 141. TGCM retail store detailed floor plan

RETAIL

221 Fig 142. TGCM retail store, exposing original concrete structure

THE ARCADE

Fig 146. TGCM The Arcade render. Promenade Level looking down at Ground Level

Fig 147. TGCM The Arcade render. Walking down central staircase to Ground Level

Located on level 3 between grid lines
Y5 & Y8, X1 & X3

230 Fig 148. TGCM Level 3 Apartment detailed floor plan

APARTMENT

231 Fig 149. TGCM Level 3 Apartment bedroom , showing exposed brick

Fig 150. TGCM Level 3 Apartment open plan living and kitchen area

Located on the ground floor between grid lines
Y12 & Y14, X12 & X15

1:200

0

15

234 Fig. 151. TGCM Ground Level Cafe detailed floor plan

CAFE

235 Fig. 152. TGCM Ground Level Cafe, showing exposed concrete beams and timber ceiling panels

Fig 153. TGCM Ground Level Cafe

Located on level 2 between grid lines
Y5 & Y9, X14 & X16

1:200
0 15 N

238 Fig 154. TGCM Level 2 Office detailed floor plan

OFFICE

239 Fig 155. TGCM Level 2 Office, with original brick facade contrasting with timber flooring

Fig 156. TGCM Level 2 Office interior fitout

ROOFTOP BAR

242 Fig 157. TGCM Level 3 Roof Top Bar balcony looking out over waterfront

243 Fig 158. TGCM Level 3 Roof Top Bar detailed floor plan

Located on level 2 between grid lines
Y15 & Y23, X3 & X9

Fig 159. TCCM Level 3 Roof Top Bar interior fitout, with exposed timber ceiling

THE BOX

Fig 161. TGCM Ground Level external render approaching The Box

Fig 162. TGCM Aerial View of The Box and surrounding cycleway & pedestrian path

THE JUNCTION

7. CONCLUDING REMARKS

- 7.1 Design Summary and Findings
- 7.2 Next Phase

7.1 DESIGN SUMMARY & FINDINGS

The FARS structure and site has deteriorated environmentally, socially, and economically. The Grand Central Market redevelopment can serve as an economic stimulus that will support the regeneration of its context and the Quay Park Quarter. This research explored adaptive reuse as a strategy to maintain urban cohesiveness and preserve historic character, while still moving towards the future. On reflection, the research logically progresses a dialogue between research and design. The proposed approach for The Grand Central Markets puts heritage preservation, placemaking and urban regeneration into focus. TGCM’s final design is a culmination of the learnings, producing the most appropriate design outcome that answers the research question.

A key component of this research was understanding the general history and key theories in conservation, adaptive reuse and placemaking. This provided internationally tried and tested design concepts and principals which were used to formulate appropriate design strategies for TGCM development. The definition of placemaking has expanded far beyond its formative roots in the works of Jane Jacobs and William H. Whyte and has extended to include conservation. One common placemaking theme which defines how to measure the success of a place is the presence of people. With people comes activity. Therefore, people equals success. Factors also important and considered in the redevelopment of the FARS were the architectural relationship, linkage and sequencing, heritage value, safety, activities, adaptability and comfort. The different theories and strategies are collectively used to direct a common understanding of the attributes required to make TGCM an important community and tourist destination.

The context analysis identified the potential for the FARS site, due Auckland’s current rapid economic and demographic growth, building gross floor area, heritage value and location. One of the main objectives of this project was to reintegrate the FARS site, Quay Park Quarter and Auckland by offering a program that appeals to the community. The Quay Park Precinct Utility Plan guided TGCM programming by identifying accommodation, bars, restaurants, entertainment, office space, and retail space as being the most desirable.

Auckland Council has validated the importance of historical conservation of heritage to preserve identity and a sense of community. It was critical to start with a clear frame of reference and a coherent strategy for determine the heritage value of the FARS and site. The protection of the FARS, by means of injecting meaningful and accessible spaces and functions, was identified as a highly valid strategy to simultaneously create necessary social spaces and to protect and increase awareness of industrial heritage. The analysis of international adaptive reuse case studies advanced further detail of what heritage and social spaces can look like and how they can work in the FARS context.

The findings of the research were then expressed in the redevelopment of the FARS into TGCM. A combination of conservation, adaptive reuse and placemaking strategies were applied to the FARS site. The application of these strategies resulted in the FARS site being greatly enhanced, creating a finer urban grid and increasing permeability and visibility. Connections were strengthened within the site vertically and horizontally using stairs, ramps, walkways, laneways, bridges, cycleways and creating an atrium space through the centre of the building. The site has always been well located in terms of transportation but now joins the urban network with connecting cycleways, walkways, and bridges.

The size and architectural features of the FARS make the building and site a prominent feature and landmark in the surrounding landscape. The exterior envelope of the main building has remained largely intact and preserves the important historic aspect of the railway station. The proposed works presents an opportunity to restore and repair the significant architectural qualities of the exterior, while removing the unsympathetic and inappropriate recent additions. This will serve to enhance and protect the exceptional historic value of the FARS and most importantly, maintain its significant presence within Quay Park Quarter. The repairs to the original form and classical detailing will be finished to a high standard, ensuring all works comply with building conservation best practice. In addition, its unique appearance and atmosphere provide opportunity for TGCM to act as a tourist drawcard. The building can act as a repository of social and technological memory and meaning, which gives value in both tangible and intangible heritage.

The FARS was once was a thriving railway station that met the needs of its community. To reconnect the community, a greater diversity of businesses that actively engage with the street front will allow TGCM to contribute to its sense of place. The public realm should support this through ease of movement and creating safe welcoming environments for people to inhabit. The new building addition has been carefully designed to ensure that it is integrated, while enhancing the local distinctiveness and activity. Clusters of activities in an area or quarter strongly influence the scale of this built form and character.

Using public life and placemaking strategies the public spaces on site are connected to each other and the surrounding urban fabric, as well as to their adjacent indoor functions. The various facades and scales of the building create the volume and scale of each public space, and in their variety create different spaces that allow for varying activities to occur.

7.2 NEXT PHASE

The formulation of strategies for the adaptive reuse of the FARS can be viewed as a contributing addition to the Auckland City Centre and Auckland Regions development plans currently in place. The design proposal for TGCM could be used as a starting point for further research and then developed to be ultimately applied in practice. It is important to note that the design options discussed in this research are not exhaustive and the framework is open to creative exploration. Also, due to time constraints and resource restrictions cultural, economic and environmental considerations were not fully investigated in this research. Focus was given primarily to architectural design decisions that could answer my research question.

It is important to note that these types of projects require the support of a range of specialists. This situation can provide an opportunity to form collaborative partnerships with a variety of professionals, including project managers, engineers, quality surveyors, landscape architects, interior architects, and urban designers. In addition, other professionals such as heritage practitioners, industrial archaeologists, restoration experts, environmental practitioners and decontamination specialists could be involved.

In order to develop this research further, several further research points could be explored to enhance my findings. *What are the details of urban policy that would restrict and support the development of a mixed-use development? Who are the stakeholders in such a development and what could the management structure look like that would develop and operate the mixed-use development? What is the economic feasibility of such a development?* Matters of structural integrity and the environmental quality of the former industrial site are further matters of interest and would contribute to the economic feasibility of the project. To go into greater detail, various design methods of adaptive reuse could be explored.

A community engagement should also be considered in any further decision-making processes, to help identify and select the most appropriate new function based on the identified needs of invested communities.

THANK YOU

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