

**Obsolescence as Opportunity:  
A Case for Adaptive Reuse of Century Old Industrial  
Architecture, Saint John, New Brunswick**

by

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for the degree of Master of Architecture

at

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Dalhousie University is located in Mi'kmaq'i,  
the ancestral and unceded territory of the Mi'kmaq.  
We are all Treaty people.

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# **Abstract**

This thesis explores adaptive reuse architecture as a strategy for reviving small-scale turn of the century industrial buildings located in historic urban centres. Through urban analysis, this research develops an approach and tool kit for the design of scalable rehabilitation approaches particular to the adaptive reuse of modest industrial structures.

The proposal centers around an argument that these vacant, underused, and obsolete century old, everyday buildings are an opportunity to utilize our existing built resources and that the retention of buildings from this period promotes urban strengthening, encourages revitalization, plays a vital role in developing sustainable communities and combats climate change, as well aids in the linking of a city's past to its future.

The Canadian maritime city of Saint John, New Brunswick is used as a testing environment due to its small urban district and the dense concentration of historically significant industrial structures.

# Acknowledgements

I would like to thank everyone who has supported me along this journey, and who have indulged in my passion for the subject.

Specifically, I would like to thank my committee, Susan Fitzgerald and Sarah Bonnemaïson for providing their thoughtful advice and meaningful discussion around my thesis topic. I would also like to thank Cristina Verissimo, for providing guidance through the early stages of thesis, but also for advising and overseeing my preliminary Rossetti research explorations.

To my Mum, for always encouraging me to follow my dreams and aspirations, and to my family who have unconditionally loved and supported me through the up and down journey that is architecture school.

To my partner, Liam Guitard, thank you for your love, patience, and encouragement throughout all of my architectural pursuits.

Last, but not least, to all my Halifax architecture pals, new and old, thank you for your constant enthusiasm and friendship, it has been a pleasure to grow with you; you have truly made the experience worthwhile.

## Chapter 1: Introduction

Nineteenth century industrial architecture serve as tangible exhibits that contribute to our collective past. From the humble to elaborate, these turn of the century buildings tell the story of our built environment. Old and historic urban buildings and spaces can become, or already are, a defining characteristic for a neighborhood and community. “They not only provide shelter for places to work, sleep, eat and play, but they also affect us with their form, color, materials, and aesthetic” (Merlino 2014, 71). The turn of the twentieth century, and industrialization, is a period responsible for shaping the initial growth of most North American urban centers. Many of these buildings stand as icons at the core of communities that grew around them (Stratton 2000, 1). They “were built to the highest standards of their day and, despite the passage of time, remain in remarkably good conditions” (Stratton 2000, 1).

Clear influences of urban impacts of nineteenth and early twentieth century industrial architecture can be observed in Canada’s largest cities; Toronto and Montreal (Appendix A). These industrial structures occupied advantageous locations along the waterfront, and adjacent transportation corridors. Following the Industrial Revolution, deindustrialization led to the abandonment and obsolescence of many of these industrial sites. The growth in the use of the automobile allowed for expansion in the suburban peripheries, enabling working class individuals to live away from the previous hardship, and poor living conditions of city life, and subsequently for industries to vacate spaces in the urban core and transfer to new facilities on the urban fringes. These vacant and abandoned sites became associated

with post-industrial blight, eventually leading to the decline of such urban neighbourhoods. As the stage for historic narrative, the continuing existence of these longstanding buildings creates a tangible connection to our cultural and historical past (Merlino 2014, 71). However, in the last 30 years, approximately 21% of Canada's old and historic building stock have been demolished due to factors such as abandonment, economic pressures, social changes, and lack of public awareness (National Trust for Canada n.d.). These buildings are resource-intensive, and have immense cultural, historical, and environmental value, and are an opportunity to utilize and retain our existing build environment.

There has been a shift in urban culture, where many individuals find themselves migrating back to cities in a movement to live more sustainable urban lifestyles. At a specific local scale, this thesis will investigate methods and opportunities for architectural conservation, using contemporary program intervention, through methods of adaptive reuse of a century old industrial building in Saint John, New Brunswick.

While its population and urban growth did not follow the same trends of that of Toronto and Montreal, the city of Saint John, New Brunswick is an industrial city in transition with a significant architectural and historical past. A city that has been: devastated by fire; ravaged by modernist urban renewal schemes; faces urban challenges of declining population and capital base; building and land abandonment; as well as an aggressive municipal approach to demolition. Where many large cities can rely on greater financial resources, smaller urban landscapes such as Saint John have scarce resources to heavily invest in major

historic redevelopment. However, despite its size, Saint John has been able to retain, while not necessarily preserve, a significant portion of its architectural heritage, out of neglect and years of inherent development, making this small urban center an ideal testing location for the adaptive reuse of small-scale industrial historic buildings.

The purpose of this thesis is to offer a tool kit for approaching design in smaller, historically significant urban spaces. While a specific approach would need to be individually developed for use in alternate locations, the broader strategies discussed in this thesis can be generalized across varying contexts. Specifically, it will pose the question: How can adaptive reuse methods be tailored to small-scale turn of the century industrial architecture, and be tested in small urban centers?

There is a need to understand design and architectural approaches that embrace mixed uses, pedestrians, historic preservation, and wide social buy in (Leroux 2018, 14). This thesis analyzes specific urban influences to determine an appropriate program that can meld together the urban needs of the character groups who utilize the Central Peninsula neighbourhood of Saint John, New Brunswick.



## Chapter 2: Saint John

### Brief History

Saint John, New Brunswick, a city of significant history in maritime culture and economy is situated on Canada's eastern Atlantic coast, where the St. John River/Wolastoq meets the Bay of Fundy. Saint John was inhabited by the Mi'kmaq and Maliseet long before its European discovery, and settled by American-British loyalists in 1783. In 1785 Saint John became Canada's first incorporated city, its early industrial history is tied to its prominent shipbuilding, lumbering exports and its locationally advantageous and protected harbour which allowed for winter trade as the drastic tides provided an 'ice-free' port (Raska 2020).

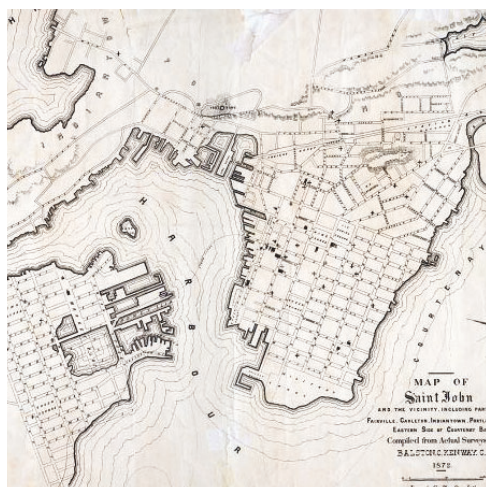
In the late nineteenth century, Saint John experienced downturn in its booming economy; as wooden shipbuilding ended and steel-bottomed ships became the preferred method of marine transportation (Hale 1990, 1). Leading up to a devastating moment in the history of Saint John is the Great Fire of 1877, termed as "one of the most destructive



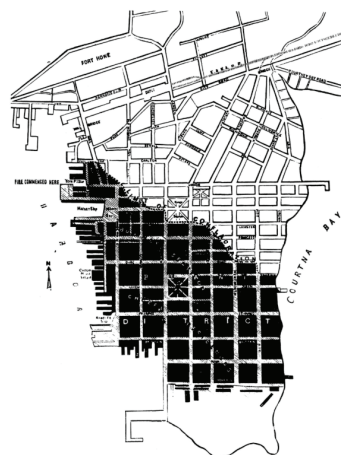
Saint John Harbour, 1929, PA-049781. (Library and Archives Canada n.d., as cited in Raska 2020)



Map of Atlantic Canada. (Base imagery sourced from OpenStreetMap 2021)



Saint John historic context 1872, (New Brunswick Museum 2007)



Area burned in the Great Fire of 1877 (Hale 1990, 4)

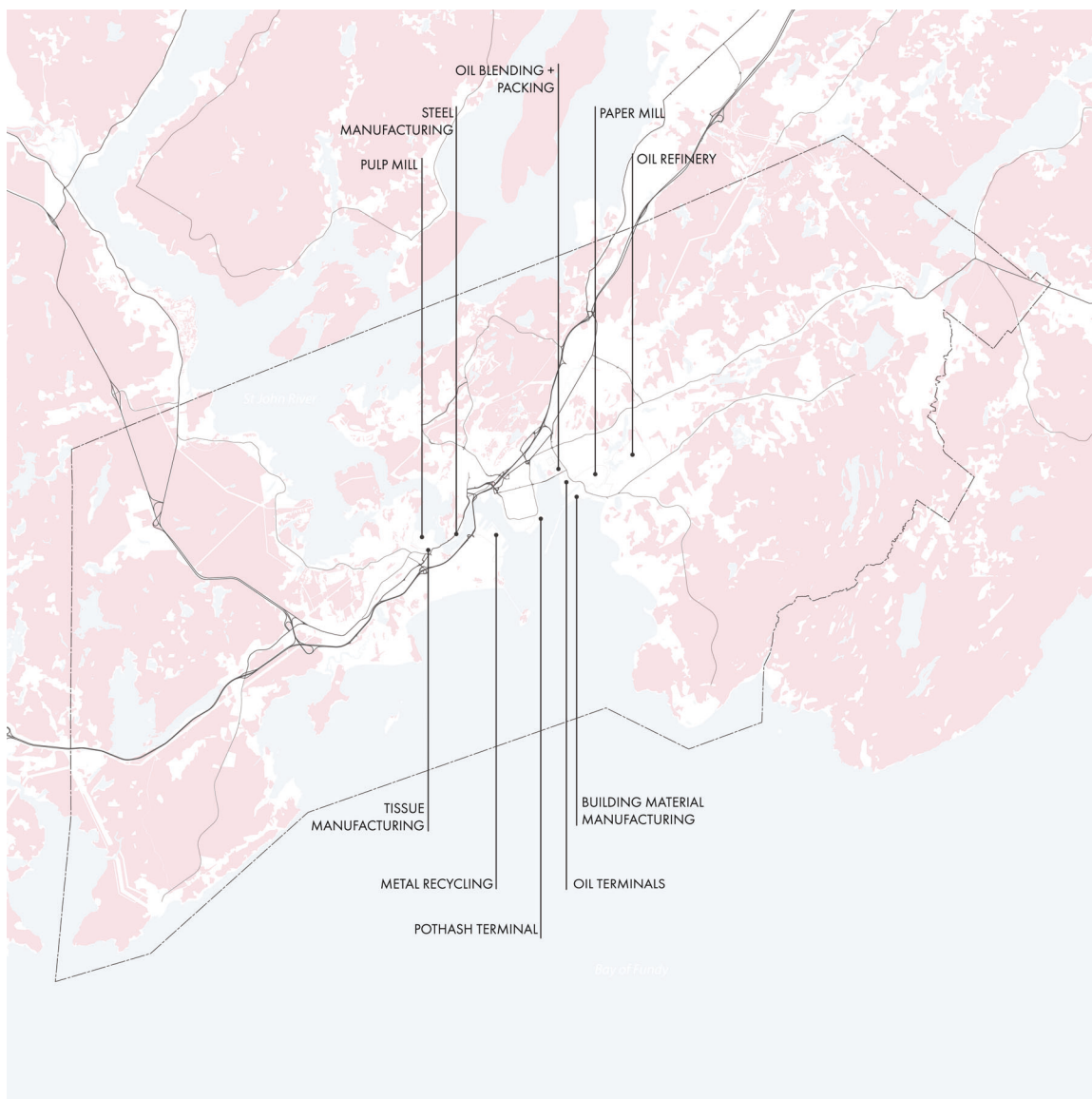
urban fires in 19th century North America” (Hale 1990, 1). Two-thirds of the central portion of the city, approximately sixteen hundred buildings were destroyed (Shorter 1967, 15). The rebuilding of the core after the fire is attributed to the historical and cultural significance of Saint John today. There was a dramatic shift in the architectural vision for the city, transitioning from its previous Georgian wooden structures to a new sophisticated, Second Empire style, Victorian city constructed of brick and masonry. These Victorian neighborhoods of the city, surrounded by the port industry is what has ultimately shaped today’s observation of the urban landscape.

Saint John’s urban economic development remained slow, if not stagnant, up until the World Wars, when the shipbuilding docks were retrofitted to manufacture steel vessels. Between 1960 and 1976, Saint John began efforts to modernize the city, engaging in urban renewal schemes that were intended to rid the city of urban slums and ‘blight’. The modernist perception of a more efficient city was intended to attract the potential for larger urban industry. Saint John was seen as a blank slate for development, nothing was deemed important enough to stand in the way. Urban renewal meant the loss of shopping and wholesaling in the central core, as small businesses and jobs relocated to outlying retail and service strips, malls, and industrial-commercial parks near highways (Marquis 2010, 93).

Architectural historian John Leroux notes that “at the cusp of the 1960s, Saint John perceived itself as a city that had to continuously fight for every economic opportunity. In certain neighbourhoods’ historical patterns of living took a back seat to the aspiration of lucrative commercial development. The city repurposed sizeable expanses of land from high density

residential uses to industrial and commercial” (Leroux 2018, 13). The demolition schemes that resulted from urban renewal allowed for the development of large infrastructure projects and unattractive and polluting industries.

Through the smaller scale historic industries no longer operate in their original locations in Saint John, heavy industrial sites instead dominate all corners of the city’s landscape today. Saint John has become reliant on these single entity industrial corporations for employment and economic viability. This in turn, has been detrimental to the economic diversity and sustainability of the urban centre.



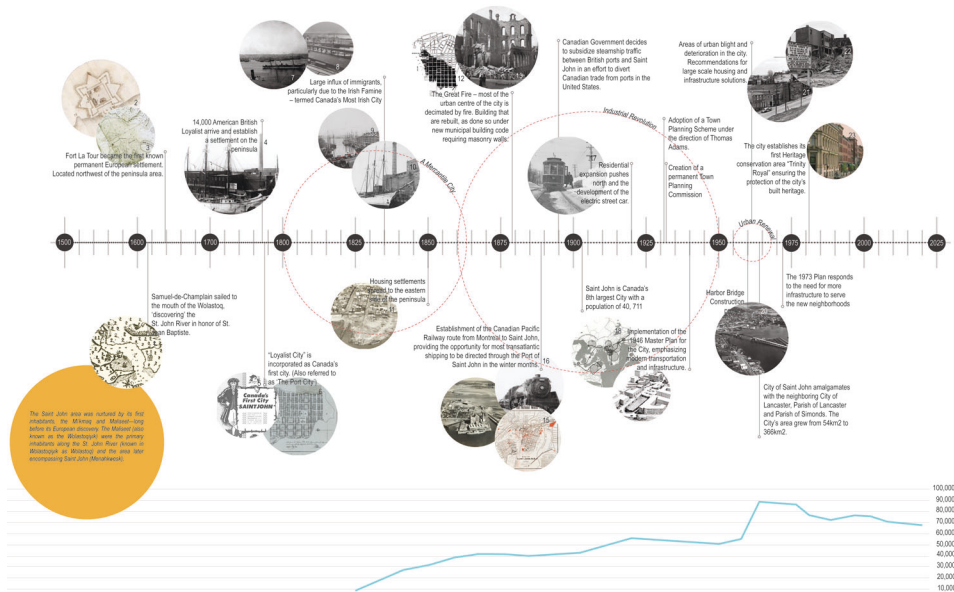
Map of major industrial facilities surrounding Saint John (Base imagery sourced from OpenStreetMap 2021)



Oil Refinery, East Saint John, New Brunswick, 2006, Mark Hemmings NBM-F25-26 (New Brunswick Museum 2007)



Pulp and Paper Limited, Saint John, New Brunswick, Mark Hemmings, 2006 NBM-F25-47 (New Brunswick Museum 2007)

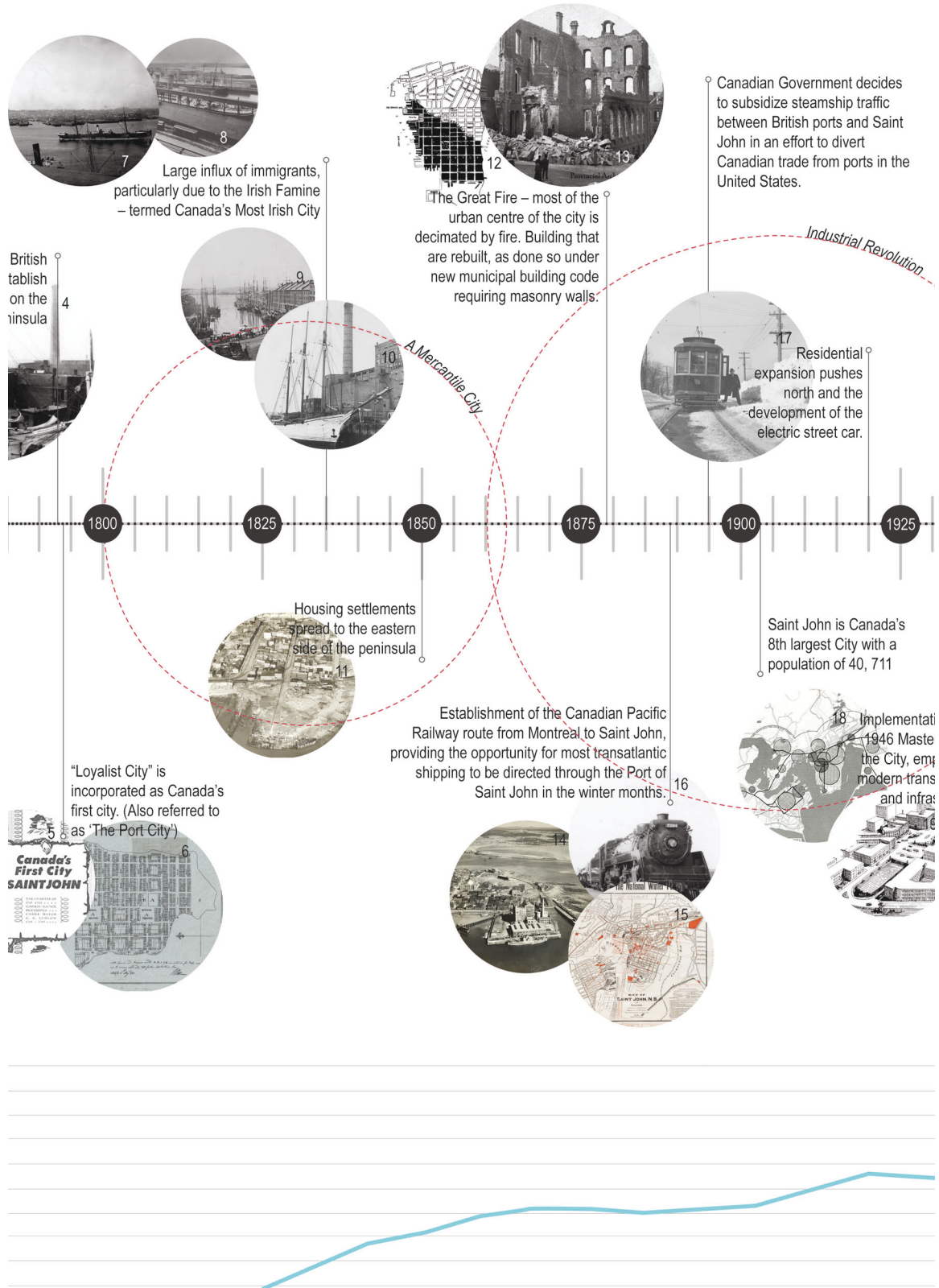


Historic timeline and population changes of Saint John, New Brunswick.

1 Champlain's Plan of Saint John Harbour, 1604 (New Brunswick Museum 2007); 2 Plan of Fort La Tour, 1631 (New Brunswick Museum 2007); 3 Plan of Saint John Harbour, n.d., (New Brunswick Museum 2007); 4 Site of the first Loyalist landing, 1783 (Discover Saint John 2007); 5 Canada's First City Saint John: The Charter of 1785 (Teed 1962); 6 Town plot map of Parr Town, New Brunswick, 1784. (Provincial Archives of New Brunswick as cited in The Loyalist Collection 2019); 7 View of Saint John Harbour, N.B, 1908 (Library and Archives Canada n.d. as cited in Raska 2020); 8 Canadian Pacific Railway Docks, West Saint John, N.B. 1929 (Canada. Dept. of Interior & Library and Archives Canada n.d. as cited in Raska 2020); 9 Market Slip, Saint John, in about 1863 (New Brunswick Museum 2007); 10 The vessel, "Burpee L. Tucker" at Atlantic Sugar Refineries Limited Wharf showing large coal pile, Saint John, New Brunswick, 1920, (Lantic Sugar Refineries Limited fonds as cited in New Brunswick Museum 2007); 11 Wharf Construction, n.d., (New Brunswick Museum 2007); 12 Area burned in the Great Fire of 1877 (Hale 1990); 13 Aftermath of the great fire of 1877 (New Brunswick Provincial Archives as cited in Collins 2002); 14 Aerial view of Atlantic Sugar Refineries and Lower Cove showing the Barracks and Exhibition Building, Saint John, New Brunswick, 1925 (Lantic Sugar Refineries Limited fonds as cited in New Brunswick Museum 2007); 15 St. John, New Brunswick -- The National Winter Port of Canada, 1920 (New Brunswick Museum 2007); 16 No. 42 engine 2394 doing headend work. Overnight sleeper train from Montreal to Saint John, NB. Mc.Adam, 1952 (Ken MacDonald/Bruce Chapman Collection as cited in Old Time Trains n.d.); 17 Streetcar in Winter, Sydney J. Wakeham on Step, Manawagonish Road, Saint John, New Brunswick, 1934, (Louis Merritt Harrison Collection as cited in New Brunswick Museum 2007); 18 Dwelling & Employment Centres, Master Plan of the Municipality of the City and County of Saint John, New Brunswick, 1964 (New Brunswick Library Collection as cited in New Brunswick Museum 2007); 19 Replanning of Market Square and Market Slip, Master Plan of the Municipality of the City and County of Saint John, New Brunswick, 1946 (New Brunswick Library Collection as cited in New Brunswick Museum 2007); 20 Construction of the Harbor Bridge, n.d. (New Brunswick Museum 2007) ; 21 Houses, Swell Street, 1968 (Ian MacEachern as cited in Leroux 2018); 22 Urban Renewal with Sailors, 1968, (Ian MacEachern as cited in Leroux 2018); 23 Prince William Streetscape, 1992 (Parks Canada n.d.).

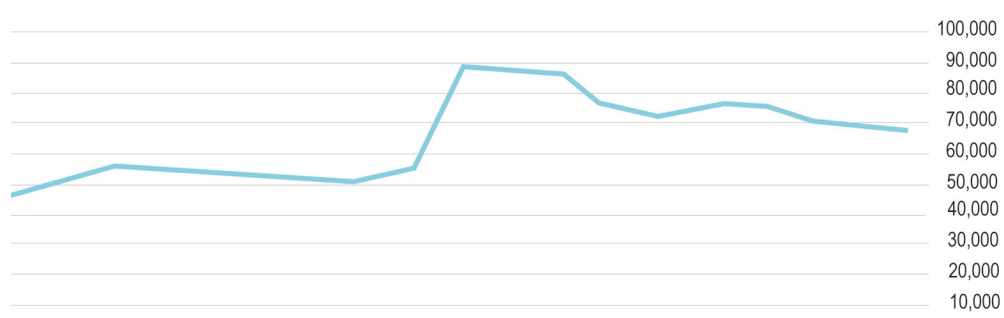
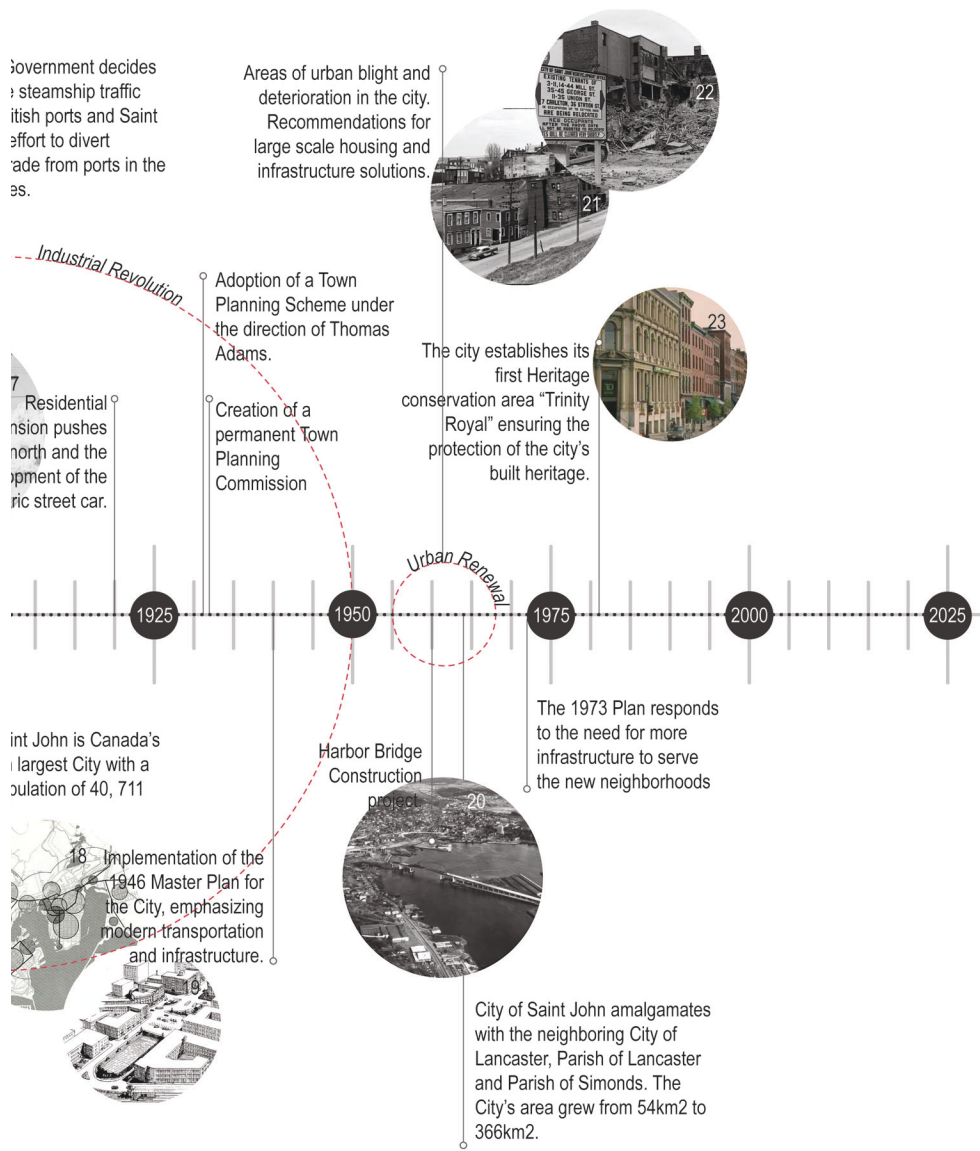
Census of Canada, 1861 (Statistics Canada 2015); Census of Canada, 1871-1921 (Statistics Canada 2014); Canada Year Book 1951 (Statistics Canada 2008a, 152); Canada Year Book 1961 (Statistics Canada 2008b, 153); Canada Yearbook 1976-77 (Statistics Canada 2008c, 187); New Brunswick: Part 1 Profile (Statistics Canada 1987 as cited in Marquis 2010); Census Canada 1991 (Statistics Canada 2019); Census Canada 1996 (Statistics Canada 2012a); Census Canada 2001 (Statistics Canada 2012a); Census Canada 2006 (Statistics Canada 2012b); Census Canada 2011 (Statistics Canada 2012b); Census Saint John 2016 (Statistics Canada 2016)





Historic timeline of Saint John, New Brunswick. Part 2





Historic timeline of Saint John, New Brunswick. Part 3

## **Central Peninsula**

The Central Peninsula is the urban core of Saint John, a hub for employment, entertainment, and tourism. Saint John and its surroundings supports 20-25% of New Brunswick's provincial Gross Domestic Product (GDP) through its industrial base, which includes Canada's largest oil refinery, responsible for nearly 60% of New Brunswick's total exports in 2017 (Government of New Brunswick 2019, 1). In addition to petroleum production, the Saint John Port moved 30.5 million metric tonnes of cargo in 2017. The port also plays a key role in tourism, bringing over 200,000 cruise ship visitors annually to the city (Government of New Brunswick 2019, 1). The industrial base of the city contributes to the provincial and local economies; however, the city's significant industrial presence represents health and safety concerns, in addition industrial employment is a contributor to the inflow of daily commuters to the Central Peninsula, placing stress on the availability and quality of service provisions in the city (City of Saint John 2017b).

## **The Built Environment**

Saint John faces an abundance of urban challenges. On the Central Peninsula, there are growing concerns involving land abandonment and building vacancy. While Saint John has retained more of its built heritage than many other places, with 62% of the built environment constructed prior to 1960 (City of Saint John 2020, 17), the combination of population loss, building neglect and demolition threaten the urban historic fabric of the Central Peninsula. This is particularly noteworthy as there is a high concentration of vulnerable smaller historic buildings. The development of an architectural design approach that can be applied to



Central Peninsula, Saint John (Base imagery sourced from OpenStreetMap 2021)



Uptown Saint John from the harbor;  
Photograph by Paul Saulnier (Saulnier 2013)



Brick Alleyways, Uptown Saint John. (City of Saint John 2021)

these smaller spaces, specifically when dealing with post-industrial cities in decline, can curb this loss of cultural and architectural heritage in these small, often overlooked places.

In 2018 the City of Saint John passed a by-law, Unsightly Premises and Dangerous Buildings and Structures By-law, which manages a growing list of vacant and dangerous buildings in the city. Building vacancy alone allows for many buildings to qualify for enforced demolition.

Whereas, Common Council considers that unsightly premises dangerous, vacant and unoccupied buildings or structures are a major blight affecting the quality of life in residential and non-residential neighbourhoods, and that these conditions can negatively impact the property value of real estate due to negative perceptions of unsafe and deteriorating residential and non-residential neighbourhoods;

And whereas, buildings or structures that become vacant or unoccupied, dilapidated, or unsound due to their structural strength, can become a hazard to the safety of the public. (City of Saint John 2018, 4)

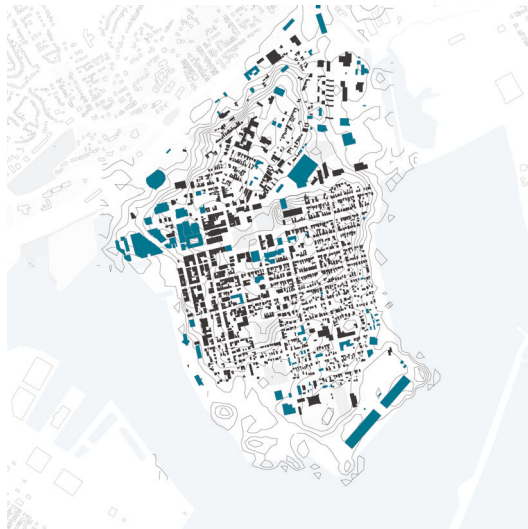
Decades of growth at the edges of the city have led to disinvestment in the core. This has caused an increase in vacant properties which often become progressively derelict until they require to be demolished. Many brownfield sites exist on the peninsula due to previous industrial and manufacturing activities. There are currently approximately 300 undeveloped lots in the Central Peninsula (City of Saint John 2020, 19). The vacant lots that result from demolition, detract from the character of the neighbourhoods, discouraging further investment.



Built Form 1960



Demolitions Between 1960–2021



New Buildings Since 1960

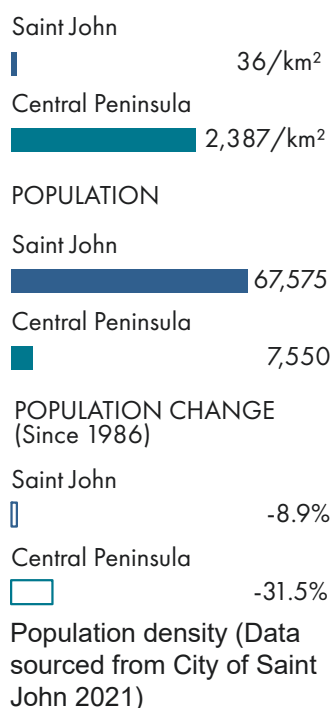


Vacant Lots + Surface Parking

Changes to the built environment, Saint John Central Peninsula (Base imagery sourced from OpenStreet Map 2021)

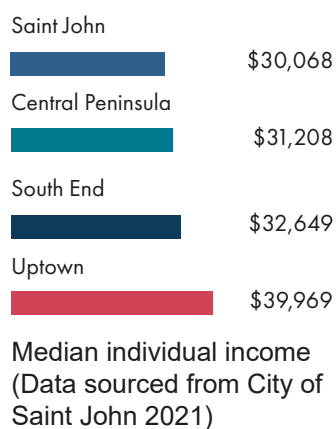
## Demographics

### *Socio-Economic*

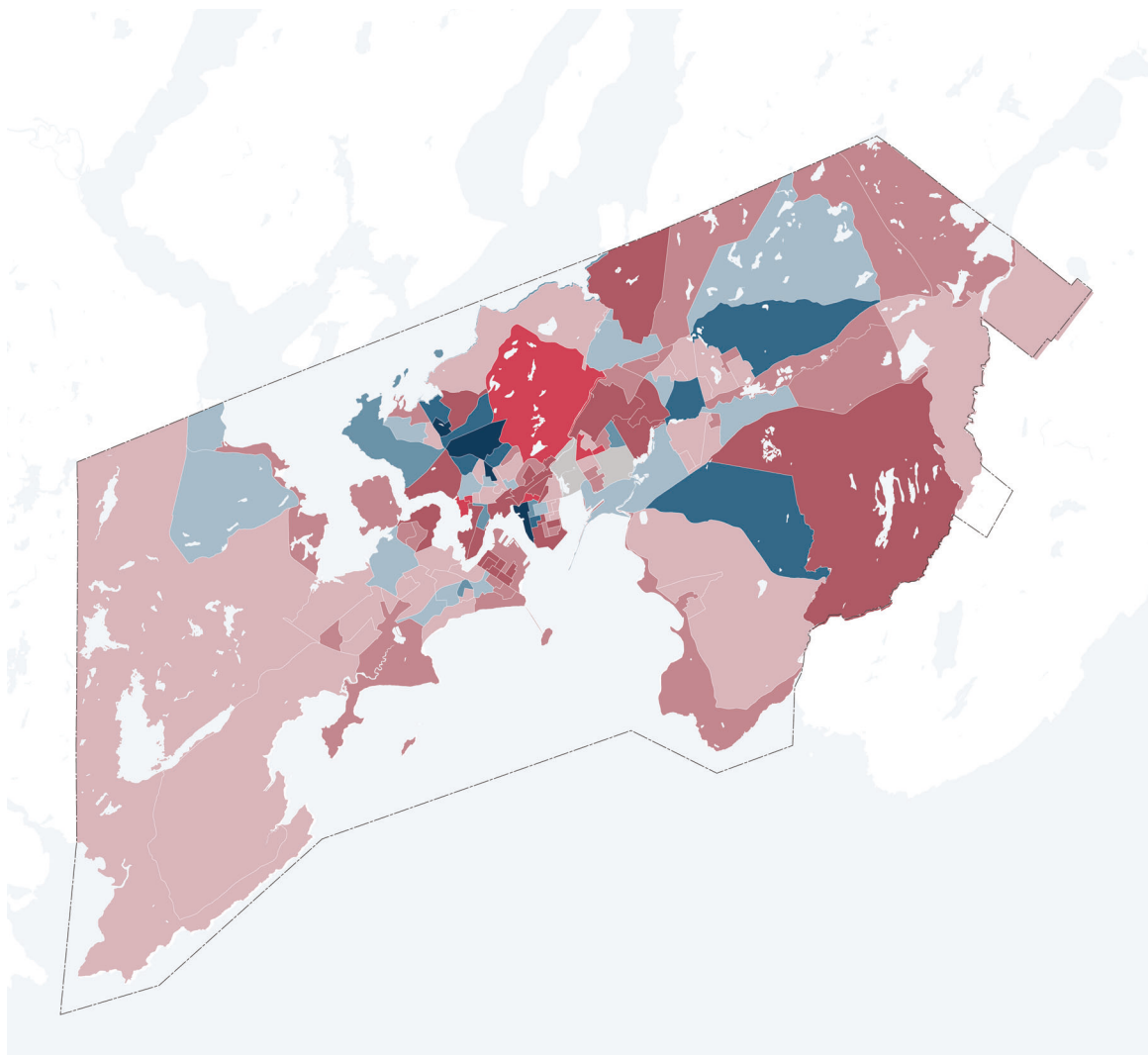


The city's population began to decline after its attempts at modernization, with a mass exodus of individuals from the urban core to newly developed periphery neighbourhoods, creating a doughnut effect of the Saint John urban Central Peninsula. Between 1971 and 2016, the population for the Saint John Census Metropolitan Area had fallen from 89,039 to 67,575 (Statistics Canada 2008c, 2016).

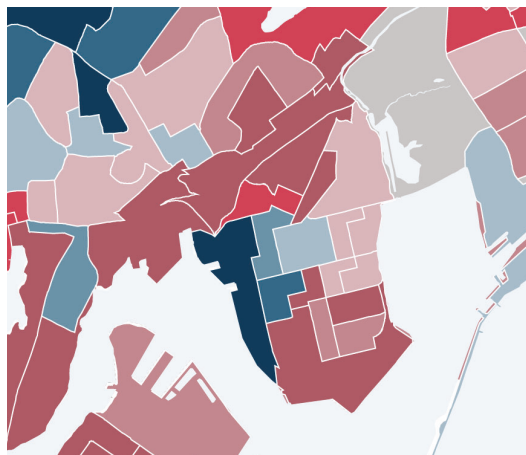
In addition to its shrinking population base, poverty rates of 33% in the city of Saint John sit higher than the 2016 Canadian national average of 17% (University of New Brunswick n.d., 7). These statistics are shocking considering that Saint John is an employment centre, hosting businesses with over 100 employees, and the regional hub, where many neighbouring communities rely on the city for employment, recreation, leisure, and entertainment facilities. It is estimated that more than 15,000 residents from outlying communities commute to Saint John each week (Government of New Brunswick 2019, 1).



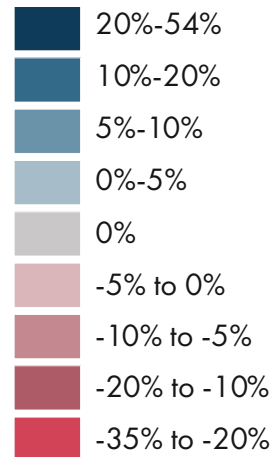
The Central Peninsula is challenged by intergenerational poverty and unemployment which are exacerbated by the disparity between those who live and those who work in the area. As the regional employment hub, many of the jobs located in the Central Peninsula are held by middle income individuals living outside of the area (City of Saint John 2020, 17). The unemployment rate for the area is 11.8% compared to the Saint John Region's 6.6% (City of Saint John 2020, 17).



Population changes between 2011-2016 , Saint John region (Data sourced from City of Saint John 2017a)



Population changes between 2011-2016, Saint John, Central Peninsula (Data sourced from City of Saint John 2017a)



Population change 2011-2016 (Data sourced from City of Saint John 2017a)

### ***Peninsula Characters***

Within the Central Peninsula, there are four-character groups who interact and influence the urban spaces; the Central Peninsula resident and the non-peninsula resident who are social contributors and the tourist visitors and cruise ship visitors who can be categorized as peninsula consumers.

### ***Central Peninsula Residents and Non-Peninsula Residents***

Many Saint John residents are employed by one company. Work opportunities typically revolve around heavy industry surrounding the city. The Central Peninsula residents account for the local urban population who are participating within the community year-round. As the employment, recreational and entertainment hub, the Central Peninsula plays an important role to those individuals who live outside the boundaries of the urban core. The non-peninsula residents are frequent commuters to the Central Peninsula (City of Saint John 2017b).

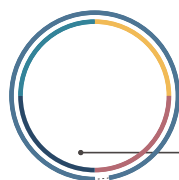
The schools within the Central Peninsula have catchment areas that reach far past the boundaries of the peninsula, as well as beyond the border of the Saint John Regional area (Elections New Brunswick 2022). Many non-peninsula youth account as part of the weekly commuters to the Central Peninsula.

### ***Cruise Visitors and Tourists***

As a port city, the peninsula is a stopping point for many cruise ships and visiting tourists as the heritage areas within the city are of significant interest. There is a distinction between the two visiting groups, as the duration of time spent in the



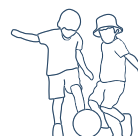
CENTRAL PENINSULA RESIDENT



Families



Elderly

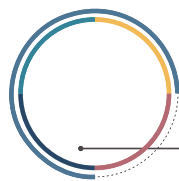


Children + Youth



Adults

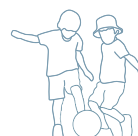
NON- PENINSULA RESIDENT



Families



Elderly

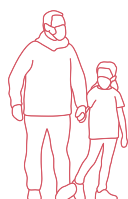
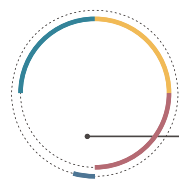


Children + Youth



Adults

CRUISE SHIP TOURIST



Families

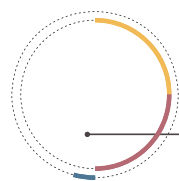


Elderly



Adults

TOURIST



Families

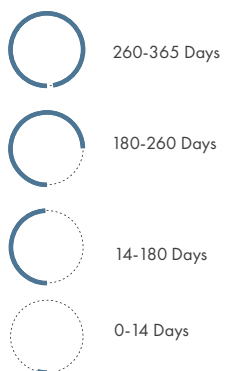


Elderly

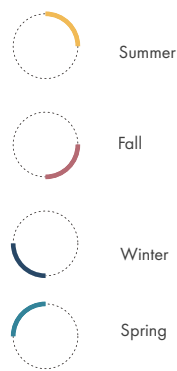


Adults

DURATION OF STAY



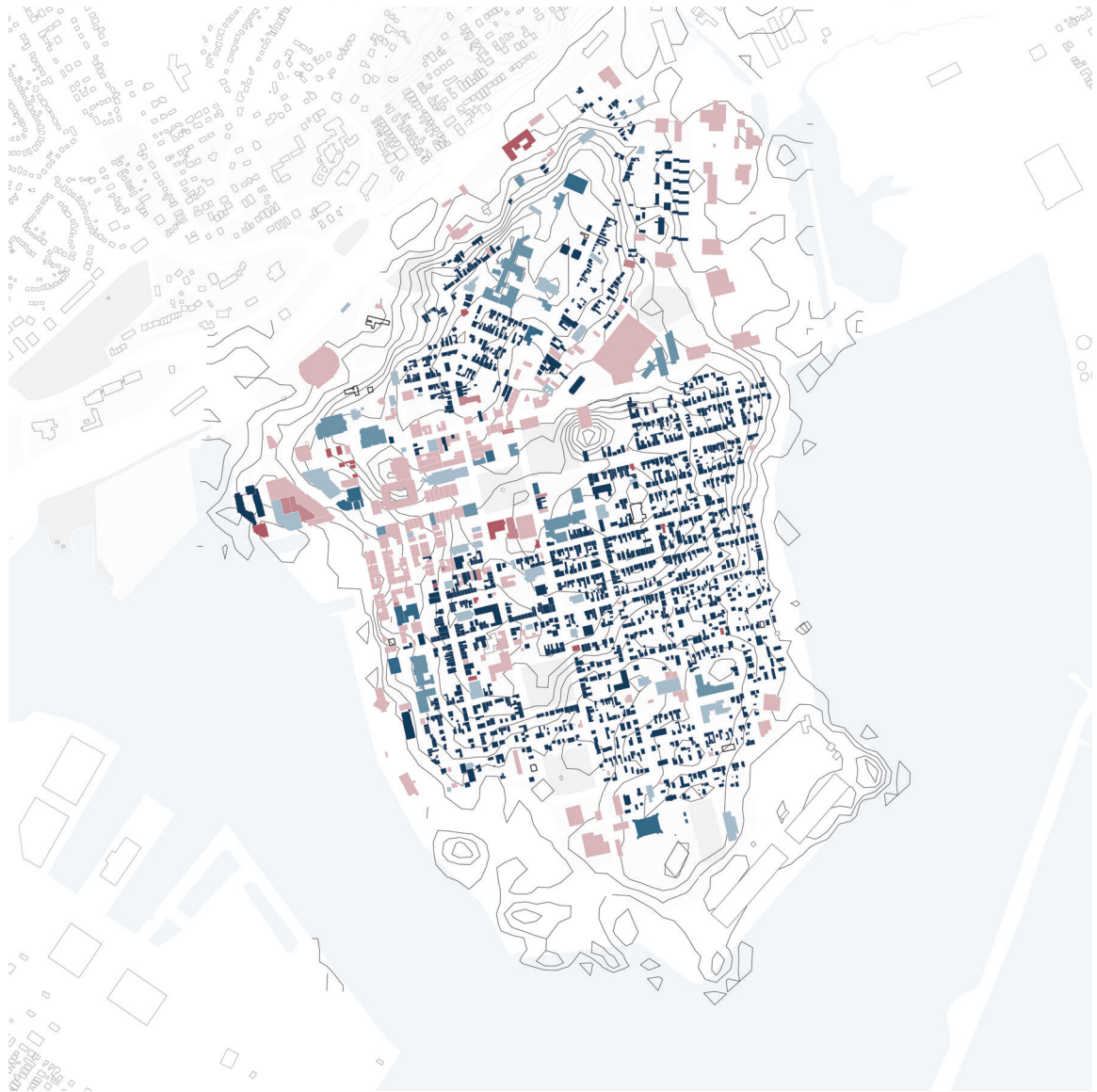
TIME OF YEAR



Central Peninsula actors

city as a cruise ship visitor will usually be substantially less (potentially one day) compared to a tourist visitor (three or more days). As well the economic impact on the city from the two groups vary as cruise visitors are likely not to require overnight accommodations, and many times their meals are provided on-board. Whereas tourist visitors are more likely to seek overnight accommodation, as well will patron local restaurants.

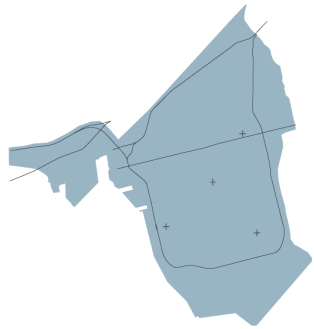
There is a distinct separation between how spaces on the peninsula are treated by each character group. Commercial spaces that are aimed at visitors (hotels, shops, museums, and restaurants), outnumber the commercial spaces aimed at locals (childcare, grocery stores, health services and schools). With 85 bars and restaurants concentrated in a ten-block radius (Webber 2019), it can be argued that a large portion of the historic city is geared towards tourists and visitors rather than accommodating the residents, limiting the availability of necessary goods and services. This thesis pays particular attention to the Central Peninsula residents, who account for the most densely populated area within Saint John, yet there are many community and social needs of these residents that are going unmet.



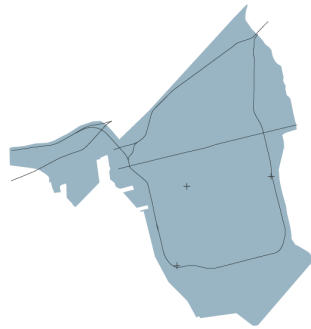
- Community Services
- Institutional
- Government
- Residential
- Hotel
- Museum + Theatre
- Shops + Offices
- Public Green Space
- Industrial

Central Peninsula uses (Base imagery sourced from OpenStreet Map 2021)

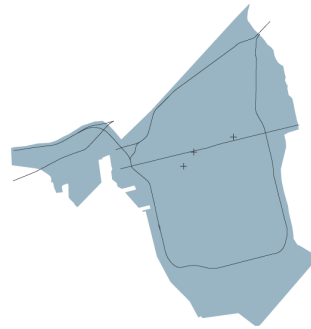
RESIDENTS



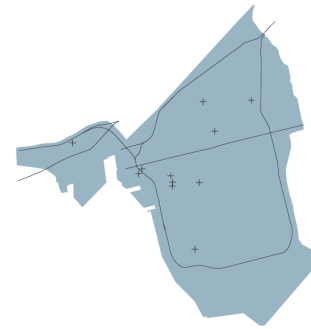
schools



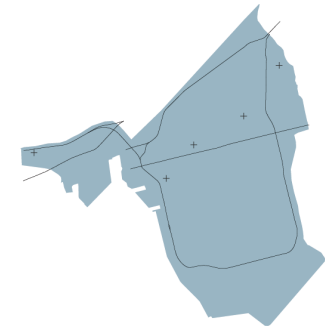
childcare



grocery

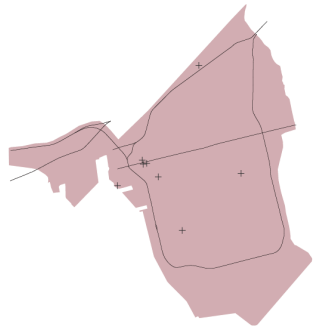


healthcare

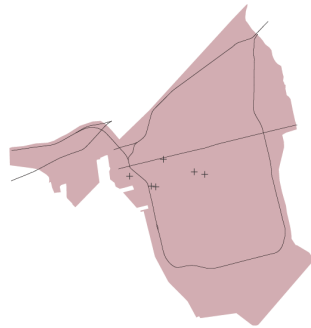


knowledge

VISITORS



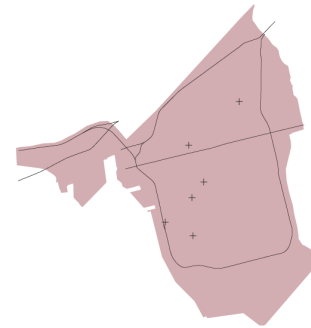
hotels



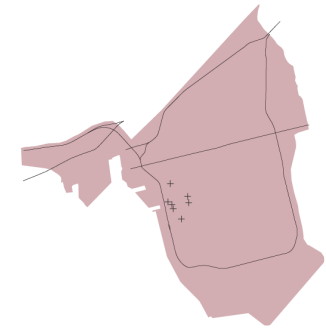
museums



restaurants



theaters



galleries

## Chapter 3: Conservation

### Traditions in Conservation

“The field of architectural conservation emerged in the nineteenth and twentieth centuries out of European ideals, buildings, monuments, antiquities, and major historic sites that were singled out for their historic value, with a preference for those that were able to represent originality and authenticity” (Merlino 2014, 75). Consequently, common everyday buildings lost ‘value’ in comparison, while certain historic monuments gained importance (Merlino 2014, 75). The leading trend in retaining buildings was to keep them in their primary state. This is a viewpoint that formulated early preservationist theory, and likely influenced the policies that resulted from amendments to permit the designation of architecturally significant buildings as national historic sites in Canada’s 1955 Historic Sites and Monuments Act.

Within Canada, the Canadian Register of Historic Places (CRHP) acts as the primary source, in the form of a national inventory of information regarding historic places that are recognized for their heritage value at the local, provincial, territorial and national level. The CRHP coordinates and supports efforts to identify, evaluate, and protect Canada’s historic buildings and sites (Fulton 2006). Regulated by Parks Canada, the inventory maintains information on more than 200,000 pre-1914 buildings across the country (Fulton 2006).

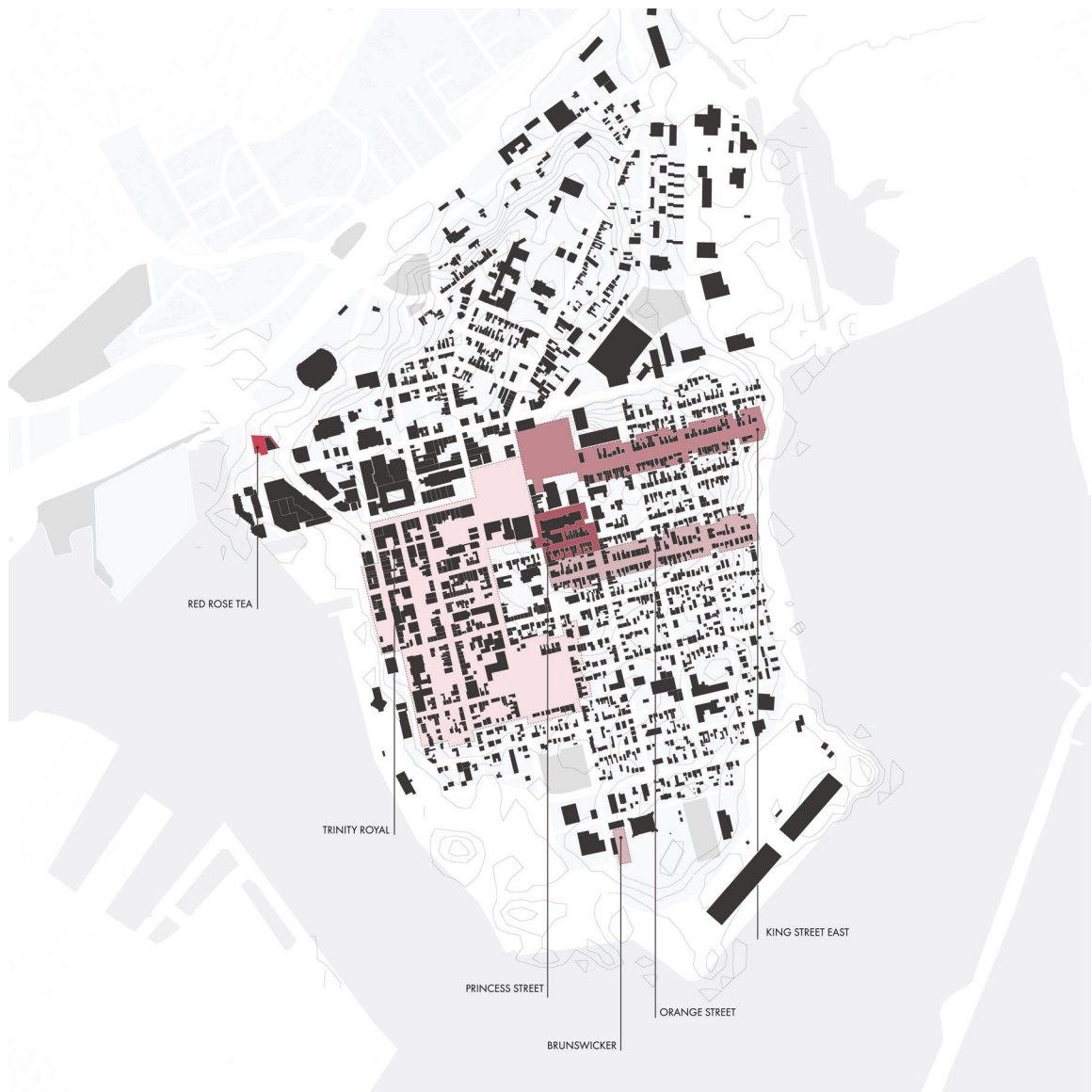
Inventories for historic sites, places and buildings exist at municipal, regional, provincial, and national levels. However most inventories frequently distinguish between listing on the inventory, and a proper designation. A site or property

listed as 'heritage' means that the property does not quite fit the criteria for protection, however has the potential to allow an appointed heritage board to review future development applications. Whereas designation involves legal protection of the property, site or structure.

In New Brunswick, historic places have the ability to be designated and protected under the *Heritage Conservation Act*. The Act allows municipalities to designate a portion or portions of the municipality which are considered significant as conservation areas, and make bylaws for the protection of those buildings, structures, or lands which lie in these designated area (Government of New Brunswick 2021). Any such actions take place under an appointed heritage board, these reviews become part of the development review process. In Saint John, conservation efforts in the 1980s focused on protecting many neighbourhoods within the Central Peninsula. Within the boundaries of Saint John a total of 770 buildings are designated across 11 Heritage Conservation Areas, 6 of which are located on the Central Peninsula (City of Saint John 2020, 18).

In Canada, traditionally the value of a building is measured through its historical, cultural, or architectural significance that have emerged through historic conservation practices. This is an important part of preserving cultural heritage, however these criteria do not apply to many buildings, nor do they illustrate the total value of older buildings in general, especially those with little historic connections or architectural value (Merlino 2014, 72).

While the process of being included on the register is important for many historic sites, being listed on the national register does not protect buildings from change or



Heritage conservation areas, Central Peninsula (Base imagery sourced from OpenStreet Map 2021)



Uptown Streetscape. (Discover Saint John n.d.)



Uptown Saint John. (Discover Saint John n.d.)

demolition. And while the designation of historic properties is a critical venue for saving our most historically significant buildings, it does not account for those that fall outside of the established categories of significance (Merlino 2014, 70). Additionally, structures and buildings that are located outside of historic conservation districts, have little framework to preserve existing buildings, allowing these structures to fall into vulnerable states (Merlino 2014, 77).

### **Options for Conservation**

The *Standards and Guidelines of Heritage Conservation in Canada*, identify three key types of architectural conservation: preservation, rehabilitation, and restoration. Plans for conservation can combine multiple methods in a project. The term conservation, while used broadly, encompasses all activities that are engaged in the safeguarding of character-defining elements of a historic place to retain its heritage value and extend its physical life (Parks Canada 2010, 17). The City of Saint John adopted these guidelines in 2008 and developed their own practical conservation guidelines pertaining to their blanketed neighbourhood conservation areas (Saint John Heritage 2020).

Preservation refers to protecting an existing place or building's materials from further decay and to promote its continued existence. The original materials do not change, supporting the idea of keeping a building "frozen" in a moment of time from when preservation initiatives begin to take place. Whereas restoration involves returning a building back to its previous, originally documented appearance, either by removing newer elements or replacing missing components. In this case, original elements are potentially uncovered. However, preservation and restoration have



limitations when dealing with future uses that can be accommodated within the structure.

Rehabilitation methods have the capability to sensitively adapt a historic place and can revitalize contextual historic relationships (Parks Canada 2010, 17). In these instances, the building is returned to a usable state through repair and sensitive changes. Rehabilitation allows for the introduction and incorporation of a contemporary use, while still preserving and retaining character defining elements and features.

Historic conservation, as a method to save buildings and promote reuse, through rehabilitation, is extremely limited as it omits most buildings that lack an elevated historic, cultural, or architectural significance. Common and everyday buildings that sit on the edge of significance or lack any of these values are therefore considered insignificant, supporting the argument by early preservationist theorists that those with “authenticity” and “integrity” are the only types of buildings worth saving. As a result, many perfectly useable existing buildings disappear without consideration of their intrinsic cultural, community, and environmental value. Associated with everyday actions of human behavior and commonplace events, they embody the culture of place, represent individual histories, and promote community between generations (Merlino 2014, 76).

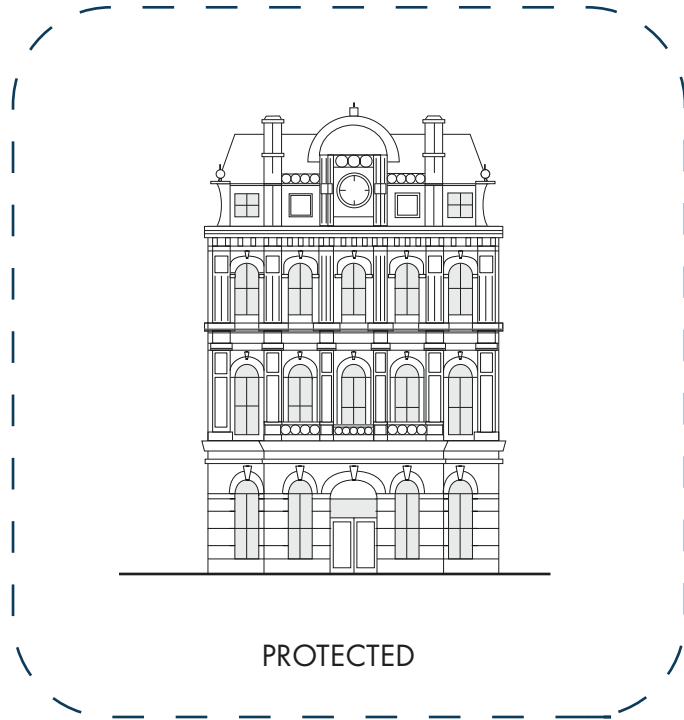
## **Conservation + Heritage**

Tensions exist in the trends of building conservation in the urban landscape, as well as conflicting ideologies which concern what is worthy of representing a national identity, typically targeting elite and monumental architecture (Lynch 1972, 31; Larkham 1996, 2). Opinions clash when it comes

down to what should be saved and idealized, and who identifies the worthy buildings and areas (Larkham 1996, 4). Lynch argues that these conservation trends represent a skewed perception of the past, as they only highlight a specific “prosperous classes in prosperous times” (Lynch 1972, 31).

In the proceedings from the 1977 Heritage Conservation New Brunswick conference on *How to Save Our Nice Old Buildings*, historian Stuart Smith notes that New Brunswick does not have an architectural style that is worth preserving, but rather it has architectural history, “a record of stone, brick and wood of people’s aspirations and ambitions at different times and under different conditions for roughly 200 years” (Smith 1978, 4). It is the totality of this process that is worth preserving. “When the day comes that a historian can write the political history of this province using only the best dates or only three days out of every year. I will be prepared to play the style game” (Smith 1978, 4). Smith’s statement further supports Lynch’s questioning on whether “things [should] be saved because they were associated with important persons or events? Because they are unique or nearly so or, quite the contrary, because they were most typical of their time” (Lynch 1972, 36). Further emphasizing that “everything, every event, every person is ‘historic’” (Lynch 1972, 36). Heritage conservation “should illustrate not simply the ‘great’ monuments of the period but full spectrum of its culture” (Lynch 1972, 53).

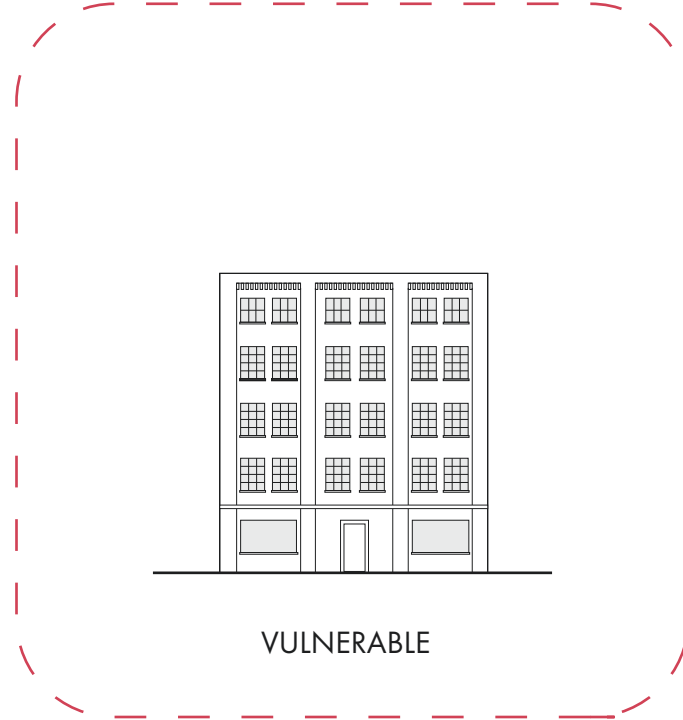
Larkham further notes that conservation and heritage are separate and that “urban areas must change, or they will stagnate” (Larkham 1996, 2, 13). Every generation has the opportunity to renew their own heritage not only through the protection of existing buildings, but also by



PROTECTED

Saint John Post Office  
Constructed 1881

Designated as a Local Historic  
Place for its architecture and former  
use as a post office



VULNERABLE

McClary Manufacturing  
Constructed 1912

No designation for significant  
architecture, cultural or historic  
significance

Examples of protected and vulnerable architecture.

adapting and changing them for present needs. “We must acknowledge that heritage is a living and flexible body that needs continuous revision and addition to remain healthy and vibrant” (Merlino 2014, 75). The “adaptation of the townscape becomes necessary, as building age and become structurally, functionally, and economically obsolete” (Larkham 1996, 4).

Buildings that fall far from the standards of historic designation are most often vulnerable to demolition, reflecting a common problem with historic designation being the only available standard in which to protect buildings from demolition (Merlino 2014, 74). Value and significance can be difficult to assess, and what constitutes ‘significant’ historic value in a building is often debated among historians, politicians, and community groups. When significance cannot be established, it can become difficult to declare something as historic, therefore, the building lack’s value. This is a narrow way of measuring cultural and historic worth but is traditionally the leading argument for anyone who wants to tear down an old building. “The word ‘historic’ saves it, but ‘old’ or ‘existing’ does not” (Merlino 2014, 74).

## Chapter 4: Adaptive Reuse

Old ideas can sometimes use new building. New ideas must use old buildings.

—Jane Jacobs, *The Death and Life of Great American Cities* (Jacobs 1961, 188)

Acknowledging the past and present urban conditions of Saint John, this thesis investigates solutions related to how old and historical buildings can be retained when they no longer suit their original prescribed function. Employing adaptive reuse, as a strategy for saving less ‘significant’ buildings, allows for sympathetic interventions as a progressive approach to old building rehabilitation which involves less constraints around the integration of future uses.

While heritage preservation confirms the past and freezes it in time, adaptive reuse architecture can connect history and innovation in unexpected forms (Robiglio 2017, 214). It is a careful balance between conservation and transformation, which inserts new creative instances other than museum memories into old buildings, elevating obsolete forms and establishing modern programs into a combination of new and old hybrid constructions (Robiglio 2017, 214).

### Sustainability

Sustainability in an urban context “means working with what is already there – whether it is buildings, infrastructure, resources, or people involved” (Baum and Christiaanse 2012, 9). Modernity and sustainability are closely tied in the challenge of creating better places to live and work (Condello and Lehmann 2016, 55). The existing urban environment represents a valuable resource in terms of social, cultural, economic, and environmental sustainability. “There is an

opportunity and duty to preserve the existing fabric and reuse buildings which have lost their original function, which are physically obsolete, or which no longer meet today's ever-more demanding standards" (Condello and Lehmann 2016, 55).

### **Cultural**

There is "power [in] historic places to help citizens define their public pasts: places trigger memories for insiders, who have shared a common past and at the same time places often can represent shared pasts to outsiders who might be interested in knowing about it in their present" (Hayden 1997, 46). Adaptive reuse architecture can make local projects accountable to residents, focusing an attention of citizens on the cultural identity of the everyday life of the city.

### **Social**

When focusing on existing industrial buildings, they can equally contribute to urban identification and orientation as well as represent a social value. The suitable adaptive reuse of these existing buildings, can continue as an active part of the urban fabric and as a connection in the network of relationships, interlacing throughout the everyday urban space. Leading to greater connections to healthy and affordable lifestyle choices, such as walkability, active transportation, and enabling greater density (National Trust for Historic Preservation 2014).

### **Economic**

Adaptive reuse as an urban tool, has the potential for neighbourhood revitalization that can positively stimulate the local creative economy (National Trust for Canada 2020, 6). There is a cost effectiveness to utilizing a structure

that already exists as well fosters an opportunity for new enterprises and provides spaces that encourage a strong local economy (Interior Architects 2019).

Jobs are created with every construction project, and adaptive reuse projects often rely on techniques and trades associated with the artisan economy (Interior Architects 2019). Additionally, research conducted by the National Trust for Historic Preservation found that more small businesses and start-ups were found in old and repurposed buildings. Small enterprise spaces can create a more diversified economy, resulting in a heightened resilience to future economic turbulence. “New and repurposed spaces foster creativity and encourage community, which in turn improve quality of life for employees and residents alike” (Interior Architects 2019).

## **Environment**

From an environmental stance point, building reuse has not been the norm in Canada as industry standards are typically geared towards new construction ventures, which carries a higher carbon and environmental impact than building reuse (National Trust for Canada 2020, 3, 19). The path of least resistance is the construction of a new building, where viable older buildings are needlessly demolished in this pursuit, including heritage structures.

However, recent studies have begun to position buildings in a new light: as repositories of energy worth preserving for their environmental value in addition to, or despite a lack of, cultural or architectural significance (Merlino 2014, 72). This understanding of both historic and environmental value positions existing buildings at the forefront of the sustainability movement (Merlino 2014, 72). This is

supported by Larkham's acknowledgment that there are changing attitudes towards the global 'green' arguments. "The concept of 'embodied energy' is now more widely accepted: calculating the energy cost of building an existing structure and modifying it, compared to the energy costs of its demolition and replacement, often suggests that the former is a more energy-efficient solution" (Larkham 1996, 8).

The construction and building industry are widely understood to be Canada's largest single source of energy use and emissions generating nearly half of the country's Green House Gasses (GHG). Opportunities for building reuse offer one of the quickest ways to help Canada achieve its climate change goals (National Trust for Canada 2020, 3). In 2020, the National Trust for Canada published, "Making Reuse the New Normal" which emphasizes the role that the reuse of existing, old and heritage buildings can play in meeting Canada's Climate Targets (National Trust for Canada 2020, 9). The works of Lina Bo Bardi associate adaptive reuse with reducing the negative impacts of construction on the environment in addition to maintaining a place of memory and identity (Condello and Lehmann 2016, 6).

### **Adaptive Reuse of Century Old Industrial Architecture**

This thesis pays particular attention to the adaptive reuse of historic industrial buildings, "finding creative ways to interpret modest buildings as part of the flow of contemporary city life" (Hayden 1997, 11).

Over the last 30 years, the desire for urbanity, identity and identification has above all been projected onto maintaining and converting derelict structures dating from the industrial era. As a contrast to the characterless buildings and cityscapes that are all the same all over the world, these locations stand



for a type of architecture that has a specific feature and relates to history and context, while at the same time offering space for current and future needs. . . they can become spaces full of potential (Baum and Christiaanse 2012, 8).

## **Case Studies**

Using a selection of Canadian case studies from research conducted during a Bruce and Dorothy Rossetti travel scholarship, and subsequently conducting analysis of the spatial layouts of many of these industrial buildings, there are apparent similarities in the standardization of structure, access to light, and circulation strategies, due to the manufacturing functions that took place throughout these structure's previous lives (Appendix A). The open plan nature of most industrial buildings provides an immense flexibility in the adaptability of spaces. The many different users that have made their homes in these types of industrial buildings, suggests that there are endless possibilities in adapting them to future uses.

The industrial adaptive reuse projects discussed further demonstrate how contemporary rehabilitation can inform the design of new urban and architectural spaces. The case study examples are selected according to their location, historical significance, and proximity to either waterways or railway tracks (current or previously existing). These subject sites are of significance because they have been repurposed to incorporate community functions rather than single use, privatized, residential projects.

***401 Richmond, Toronto ON***

The study of the formation of 401 Richmond is supported by literature works on urban, cultural, and social policy and planning (Graduate Programme in Communication and Culture Ryerson University & York University 2003, 6). Originally the site of the MacDonald Manufacturing Company, tin lithographers. The architectural heritage of this buildings provided the foundations for its present function: housing the “work and display spaces of a creative cluster of for-profit and not-for profit fine arts, cultural industries, and social and health services” (Graduate Programme in Communication and Culture Ryerson University & York University 2003, 7).

In the early 1990s there was a significant shortage of workspaces for artists in downtown Toronto. The adaptive reuse venture envisioned an attractive mixed-use space, based on a neighbourhood model where individuals could get everything, they needed under one roof. Termed as a ‘Village in a Box’ by 401 tenant Michael Cochrane (401 Richmond n.d.a).

A study commissioned by Canadian Heritage attributes the projects success due to the buildings “natural and diffused light, high ceilings, the original pillars and beams, hardwood floors, windows that now open, and plants, have brought the work environment alive. The spacious interior hallways are reminiscent of a streetscape of Victorian houses, their individuality expressed by the design and colour of their doors” (Graduate Programme in Communication and Culture Ryerson University & York University 2003, 8).



People touring 401 Richmond courtyard during Doors Open Toronto (401 Richmond n.d.c)



The garden (401 Richmond n.d.b)



Landscaped Courtyard, 2021

***Wychwood Barns, Toronto ON***

The Wychwood Barns is a reuse project which includes the conversion of an abandoned streetcar storage facility into a multiuse community space, in addition to the creation of a new urban park. Programming for the conversion includes 26 affordable live/work artist studios, 15 work only artist studios, office space for 11 environmental not-for-profit organizations, a small children's theatre, and a community food hub including a production greenhouse, teaching space with commercial kitchen, community gardens and space for a farmers' market (Lobko 2011, 398).

There is an abundance of community support that has made this project, bursting with creative individuals, a success. The flexibility of community spaces has allowed for extensive programming that hosts a range of activities from a children's theater, conferences, parties, a farmers market and a green barn that produces fresh produce. The interactions that ensue from the cross-programming creates a platform and venue for people to talk about how to make the city better, a space to share food as well as opens up "discussion around health and wellbeing and what it means to be living in one of the most culturally diverse cities in the world" (Lobko 2011, 411).

***Fonderie Darling, Montreal QC***

Fonderie Darling is an important symbol of industrial history in Montreal. It now operates as a visual arts venue that was founded and directed by the not-for-profit art organization Quartier Éphémère, who's mission revolves around supporting the creation, production, and promotion of contemporary art.



Wychwood Barns, Ted Chai Photography (Artscape n.d.)



Wychwood Barns, Ted Chai Photography, (Artscape n.d.)



Wychwood Barns, Rear Entrance, 2021

Quartier Éphémère saved Fonderie Darling from demolition. This location is home to an exhibition space and artists' studios. The presence of Quartier Éphémère in what was once a neglected neighbourhood responds to its mandate for revitalization of peripheral urban zones through art activities. The many in situ projects produced were instrumental in introducing art in a neighbourhood that had been indifferent to it and it is now integrated it into the local culture.

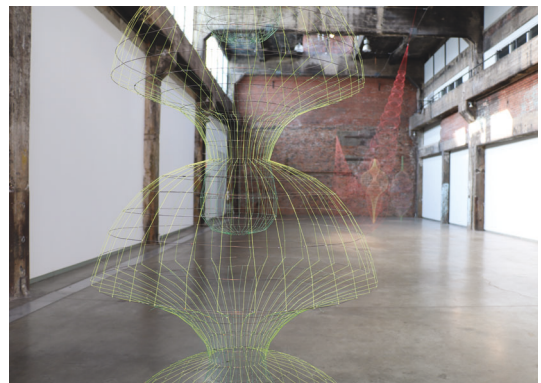
In 2005, Fonderie Darling created la Place Publique, a summertime public area in front of its buildings, by closing the street to traffic. Every summer, a stage is assembled for programmed special events. The hope is to make la Place Publique permanent; this strategic site for raising the public's awareness of art hosts temporary artworks and performances that attract neighbourhood residents (Fonderie Darling n.d.).



Fonderie Darling from Nadir to Zenith: summer exhibition opening, 2018, Adrian Morillo Photography (Fonderie Darling 2018a)



Fonderie Darling, Fermons Les Yeux... 4, 2018 (Fonderie Darling 2018b)



Fonderie Darling, Before the Storm Exhibition, 2021

## Chapter 5: Methodology

There are benefits, and positive impacts of retaining and reusing large century-old industrial buildings that have been tested in sizable urban centers. The repetitious conditions that exist within these structures, lend themselves to the creation of a toolkit of methods. And, while these industrial structures are flexible and considerably adaptable, this thesis combines adaptive reuse strategies into a model that will allow one to study and specifically respond to the question: how can one tailor adaptive reuse methods to small-scaled turn of the 20th century industrial architecture, and test the results in small urban centers?

### Design Tool 1: Adaptive Reuse Strategies

Francoise Bollack's visual reference, *Old Buildings New Forms*, overlooks the limitations and restrictions that typically surround traditional historic conservation practices, the subject is approached through the restoring and reusing old fabric in an open manner. Structuring an analysis of restorative reuse through distinguishing strategies of wraps, weaving, juxtaposition, parasites, and insertions.

For this thesis, particular attention is given to Bollack's analysis of juxtapositions, and weavings. Where a juxtaposition method is identified as an addition which stands next to an original building and does not engage in an obvious dialogue with the older structure (Bollack 2013, 141). The new contributes through an aloofness, at a distance. Weaving is identified when the seams between the old and new become less apparent, the existing elements are edited and altered, melding the new into the existing;





WRAPS



WEAVING



JUXTAPOSITION



PARASITES



INSERTIONS

an exercise of interconnectivity with the new necessary building components (Bollack 2013, 179).

A condition that is not depicted in Bollack's strategies is the simple re-inhabitation of a building. When the original use changes within an existing structure, it still falls into the category of adaptive reuse in a general sense, however minimal to no changes take place on the physical exterior condition of the building.



## RE-HABITATION

A primary aim is to encourage practitioners of all genres to restore and reuse obsolete fabric through a range of viable alternative strategies. Using the existing building is a design generator, and the expression of the combined work as contemporary method.

### **Adaptive Reuse Trends, Saint John**

Delores Hayden notes that the prevalent trend in conservation “at local levels, tends to be the adaptive reuse of historic structures by local real estate developers, with little public access or interpretation – [it] often involves gentrification. . . and displacement for low-income residents” (Hayden 1997, 53). This statement is not dissimilar to trends currently taking place in Saint John, where many of the old and historic industrial structures have been converted to private high end residential and retail.



Existing adaptive reuse of industrial heritage buildings, Saint John (Base imagery sourced from OpenStreet Map 2021).



### **E. LEONARD + SONS BUILDING**

**DISTRICT:**  
Trinity Royal

**BUILT:**  
1885

**ORIGINAL USE:**  
Freight shed for New Brunswick Railway

**CURRENT USE:**  
Commercial Space



### **BOWES BUILDING**

**DISTRICT:**  
Trinity Royal

**BUILT:**  
Between 1877- 1879

**ORIGINAL USE:**  
Metal Products Manufacturing

**CURRENT USE:**  
Museum + Government



### **JONES BUILDING**

**DISTRICT:**  
Trinity Royal

**BUILT:**  
Between 1877-1881

**ORIGINAL USE:**  
Textile Manufacturing, O'Brien Motors

**CURRENT USE:**  
Micro-brewery, Gallery, General store, High End Apartments



### **HAYWARD + WARWICK WAREHOUSE**

**DISTRICT:**  
Trinity Royal

**BUILT:**  
1894

**ORIGINAL USE:**  
Warehouse

**CURRENT USE:**  
Commercial Space

Existing adaptive reuse of industrial heritage buildings, Saint John (Base imagery sourced from Google Maps 2021). Part 1



### EMERSON FISHER BUILDING

**DISTRICT:**  
Trinity Royal

**BUILT:**  
1901

**ORIGINAL USE:**  
Industrial complex for paper box, rubber, hardware and auto parts manufacturing

**CURRENT USE:**  
Private Office Space



### RED ROSE TEA BUILDING

**DISTRICT:**  
Red Rose Tea

**BUILT:**  
1903

**ORIGINAL USE:**  
Red Rose Tea Factory

**CURRENT USE:**  
Private Office space



### MOTOR CAR + EQUIPMENT GARAGE

**DISTRICT:**  
Trinity Royal

**BUILT:**  
1911

**ORIGINAL USE:**  
Automotive Garage

**CURRENT USE:**  
Theatre



### AMES-HOLDEN McCREDY FOOTWEAR

**DISTRICT:**  
Trinity Royal

**BUILT:**  
1912

**ORIGINAL USE:**  
Shoe Manufacturer

**CURRENT USE:**  
Mixed Residential and Office Space

Existing adaptive reuse of industrial heritage buildings, Saint John (Base imagery sourced from Google Maps 2021). Part 2

## Design Tool 2: Small Buildings

Jane Jacobs' 1961 book, *The Death and Life of Great American Cities*, launched a conversation about retaining the liveliness of our cities. Jacobs asserted that urban renewal, which replaced richly textured streets of small, mixed-age buildings with blocks of much larger new structures, drained life from neighborhoods and deadened urban centers. She argued that older buildings provide critical spaces for entrepreneurial ventures and a healthy mix of local businesses.

Research by the National Trust for Historic Preservation for older, smaller, better buildings, supports Jane Jacobs urban hypothesis and generators of diversity that a mix of older, smaller buildings perform better than districts with larger, newer structures (National Trust for Historic Preservation 2014, 3). "Older buildings employ time-tested, practical solutions: mixed daytime and nighttime uses; common entrances and shared services; creative use of small spaces; and very little space dedicated for cars. With the new 'sharing economy' emerging, older buildings also offer lessons in how to get more round-the-clock performance from our bricks and mortar investments" (National Trust for Historic Preservation 2014, 3). These mixed-used smaller buildings are human-scaled places for walking, shopping, and social interaction. These modest, often overlooked buildings are irreplaceable assets for the new urban age.

Older, smaller buildings provide flexible space for entrepreneurs and small-business owners. Moreover, the small-business owners are more likely to be women or minorities (National Trust for Historic Preservation 2014, 34). These types of buildings support the creative

economy with businesses in media, production, software publishing and performing arts. Furthermore, young people love old buildings (National Trust for Historic Preservation 2014, 33). In several cities, the median age of residents in areas of older, smaller buildings is lower than areas with predominately new buildings (National Trust for Historic Preservation 2014, 33).

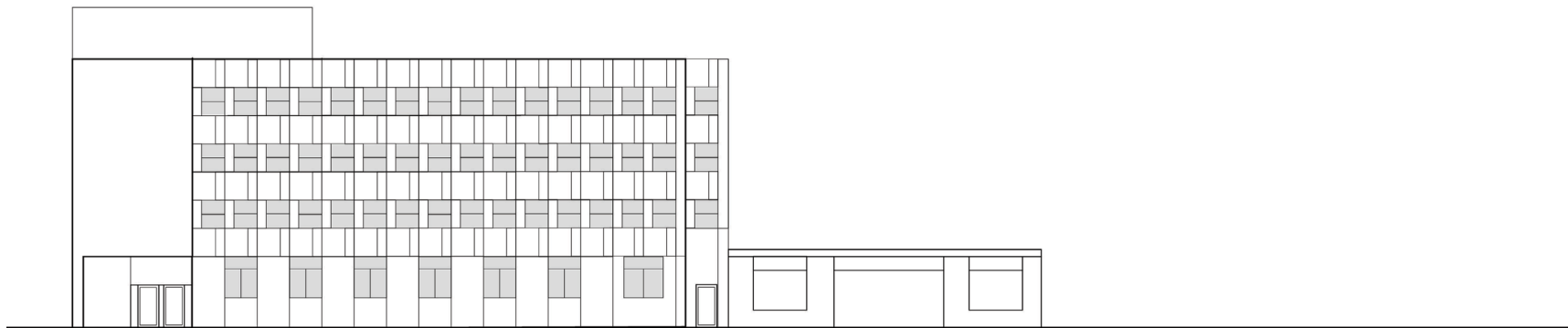
From a design stance point “fine old buildings . . . provide discipline. Architects and planners like a blank slate. They usually do their best work, however, when they don’t have one. When they must work with impossible lot lines and bits and pieces of space, beloved old eyesore, irrational street layouts, and other such constraints. They frequently produce the best of their new designs – and the most neighborly” (Whyte 1980, 93).

While this research indicates that successful commercial and mixed-use districts benefit from new construction, these changes should be gradual. The rate of change is important. The higher performance of areas containing small-scale buildings of mixed ages suggests that successful districts evolve over time, adding and subtracting buildings incrementally, rather than comprehensively and all at once (National Trust for Historic Preservation 2014, 5).

In Saint John, many of the old and historic building stock have small footprints, allowing for many buildings to populate a block. These mixed-use spaces provide multiple destinations and reasons to visit and populate the sidewalk, whereas some new modern developments that have replaced these frequent streetscapes, are large mono purpose buildings that in addition to taking up significant space on a block also utilize valuable urban space for vehicles.



PRINCE WILLIAM STREET NORTH



PRINCE WILLIAM STREET SOUTH

Multipurpose and mono-purpose street scapes, Saint John



## Chapter 6: Design

### Site Selection + Context

#### Neighbourhood

At an urban scale on the Central Peninsula there is an intersection at the end of Prince William Street, where Uptown ends and abruptly changes to the South End of the peninsula. The intersection of these neighbourhood boundaries presents an intersection between the peninsula resident users and the spaces used by visitors, making it an ideal location to test the capabilities of an adaptive reuse intervention that can address the needs of all the peninsula character groups.

#### Existing Site

The McClary Manufacturing Building sits adjacent to a sloped vacant lot, which was previously a steep street, as well as the remaining foundational stone ruins from the demolished Customs House, which is currently used as a surface parking lot. The demolition of the Customs



Custom House, Prince William Street, Saint John, New Brunswick, 1877 Isaac Erb & Son, demolished in 1961 (New Brunswick Museum 2007)

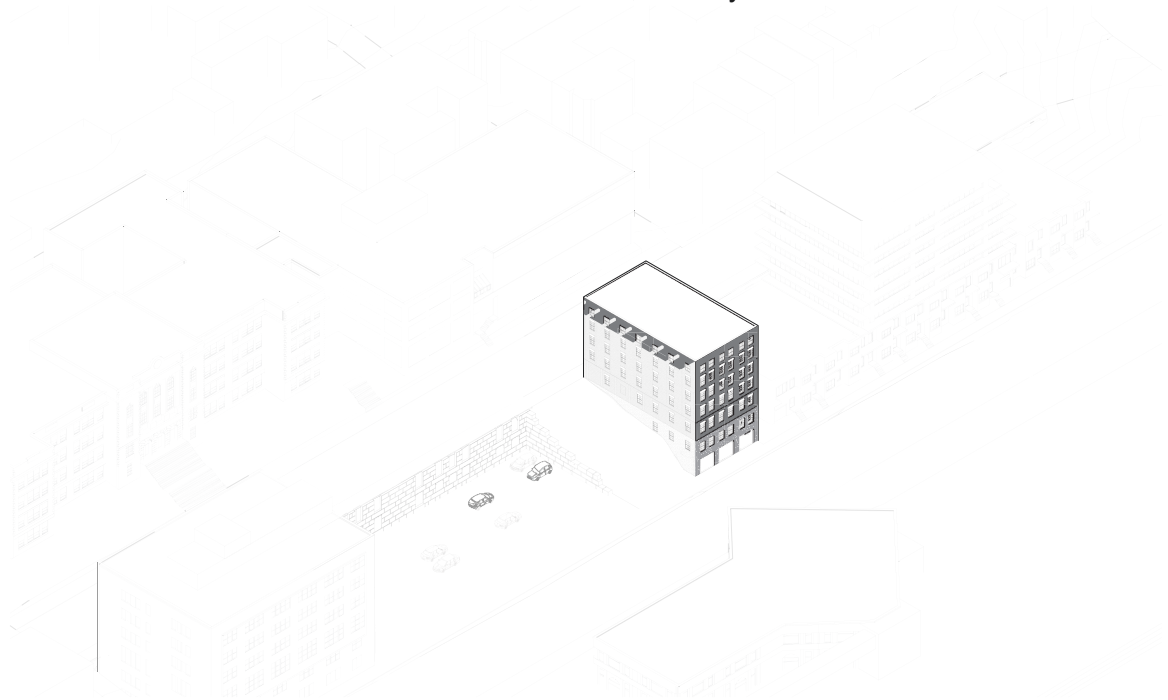


Neighbourhood map of South End and Uptown intersection (Base imagery sourced from OpenStreet Map 2021)

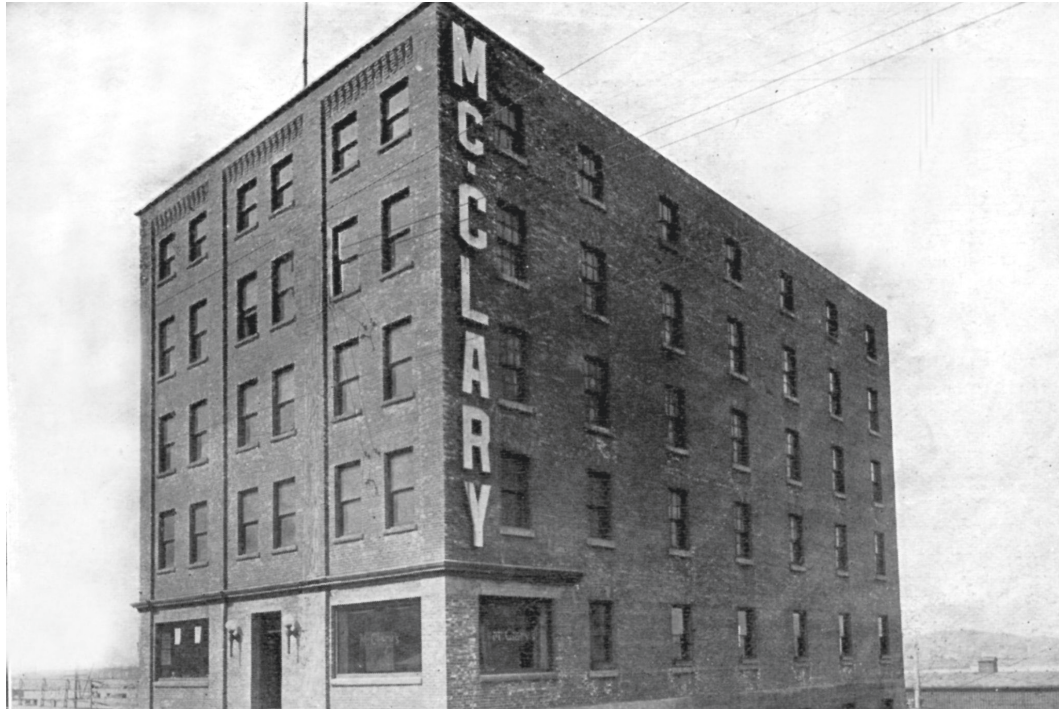
House has left the lot with ruins from the buildings previous structure, that act as a retaining wall to the steeply sloped topography of the city. The vacant lot has since been utilized as a hard surfaced parking, offering little contribution to the urban fabric of the city.

### **McClary Manufacturing Building**

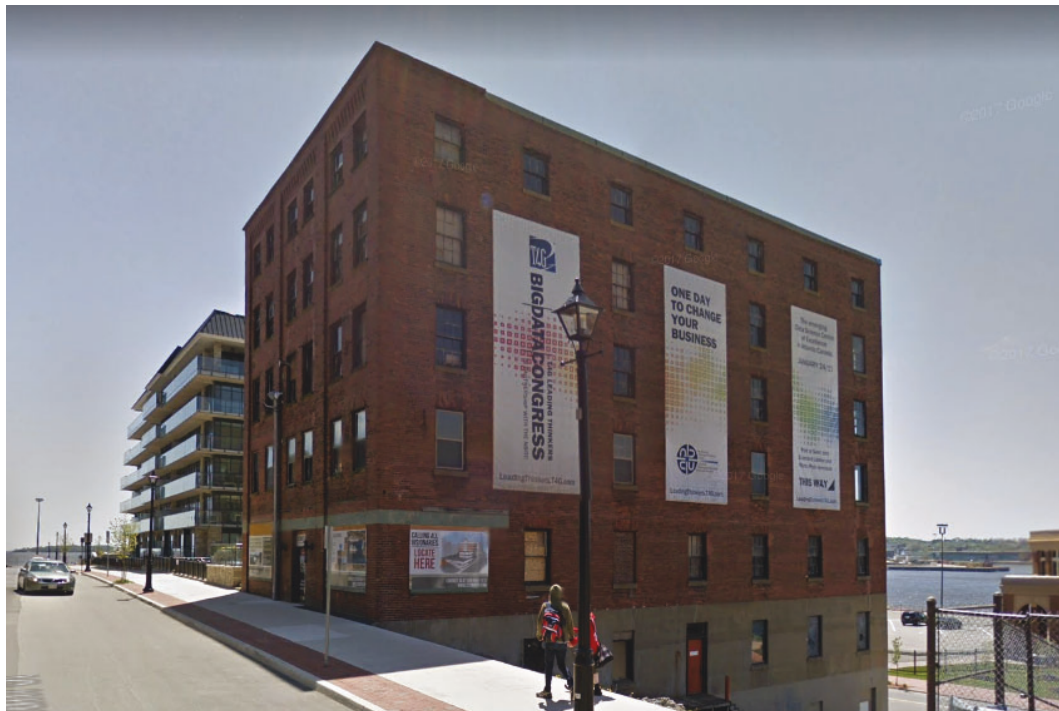
Awaiting its fate, the McClary Manufacturing Building, once a small-scale cast iron product warehouse adjacent to the rail tracks and harbor waters, lies vacant. This site is of interest, as there have been efforts from the population to save the building. The trace remnants on the neighboring lot anchor this site back to its historical past, reinforcing the need to give the structure, and vacant site a second lease on life (Letson 2015). In combination with its visible prominence from the harbor and adjacent vacant lots, its former industrial program, and proximity to additional heritage assets make this an ideal candidate to test out adaptive reuse techniques on a small, vacant, century old industrial structure.



McClary Manufacturing Building, existing site conditions



McClary Manufacturing Building as constructed in 1912 (Wright n.d.)



McClary Manufacturing Building in its vacant condition, 2013 (Google Maps 2019)

“Old buildings, even quite unremarkable one, often have certain advantages over new structures . . . They are likely to have richer form, with the impress of many occupants, a well-adjusted fit between activity and, a luxurious ‘wastefulness’ of odd pieces of space, a more intimate scale, mellowed surfaces, and detail” (Lynch 1972, 56).

The site is of interest not because it is a monumental structure by any means, but it is an everyday building that speaks to the collective memory of Saint John in relation to their industrial city. Previous proposals have been developed in hopes of saving the structure, however it is not designated as having significant heritage or architectural value, therefore is in a vulnerable state, considered obsolete and at risk of being demolished.

## Design Proposal

This design proposal suggests combining Bollack’s strategies of juxtaposition and weaving in addition with re-habitation as a hybrid method that can allow for the continued existence and appreciation of a vacant, obsolete, and abandoned building while adapting and upgrading to suit new modern uses.

There has been a conscious decision to pursue adaptive reuse as an attempt to renew the building’s history by adapting



WEAVING



JUXTAPOSITION

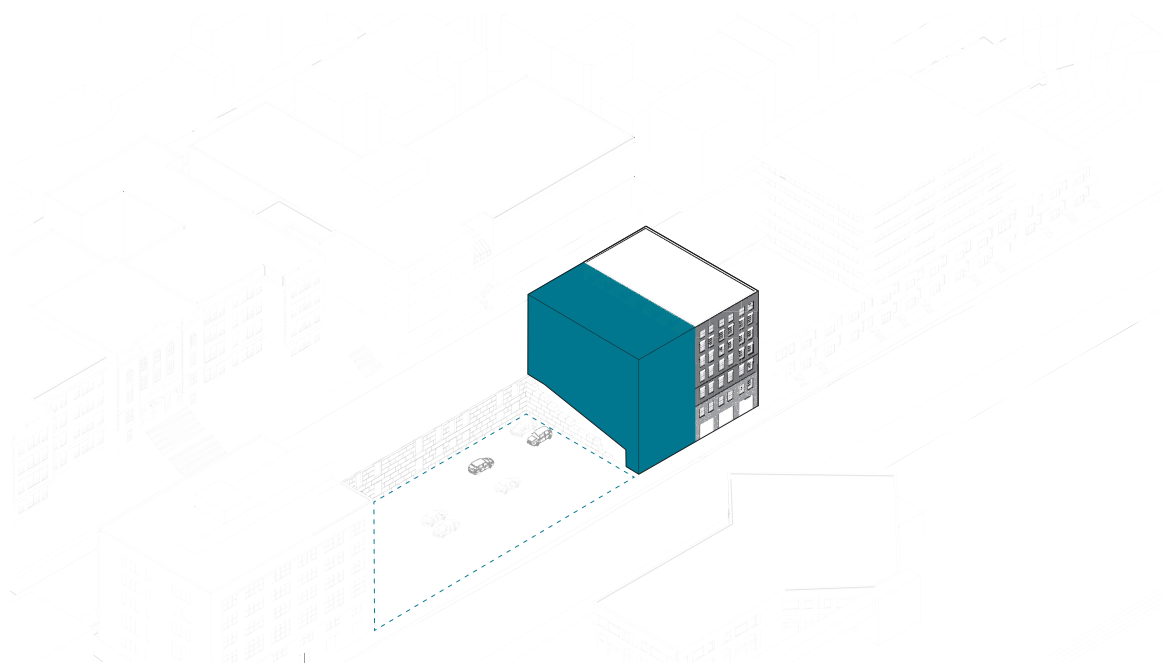


RE-HABITATION

and changing for present needs, rather than freezing it in time as a museum monument. “The old environment is seen as an opportunity for dramatic enhancement and becomes richer than it was. This is not preservation, or even simple addition, but a particular use of old and new” (Lynch 1972, 38-39).

### **Program**

The design program focuses on providing spaces and activities that can benefit the local, Central Peninsula resident population directly, by activating the space with productive work opportunities and skill development. In Saint John, one in every five people are affected by food insecurity, which refers to the inability of individuals and households to access adequate food because of financial constraints (Human Development Council 2017, 1; Tarasuk 2017). With lower-income levels across the peninsula a main focal point of this thesis is providing an opportunity for a cooperative business model centered around access to food. Recently



McClary Manufacturing Building, proposed adaptive reuse strategy

FOOD ACCESS



HEALTHY FOOD SKILLS  
+ EDUCATION



CO-WORKING



COMMUNITY  
MEALS

PRODUCE  
MARKET

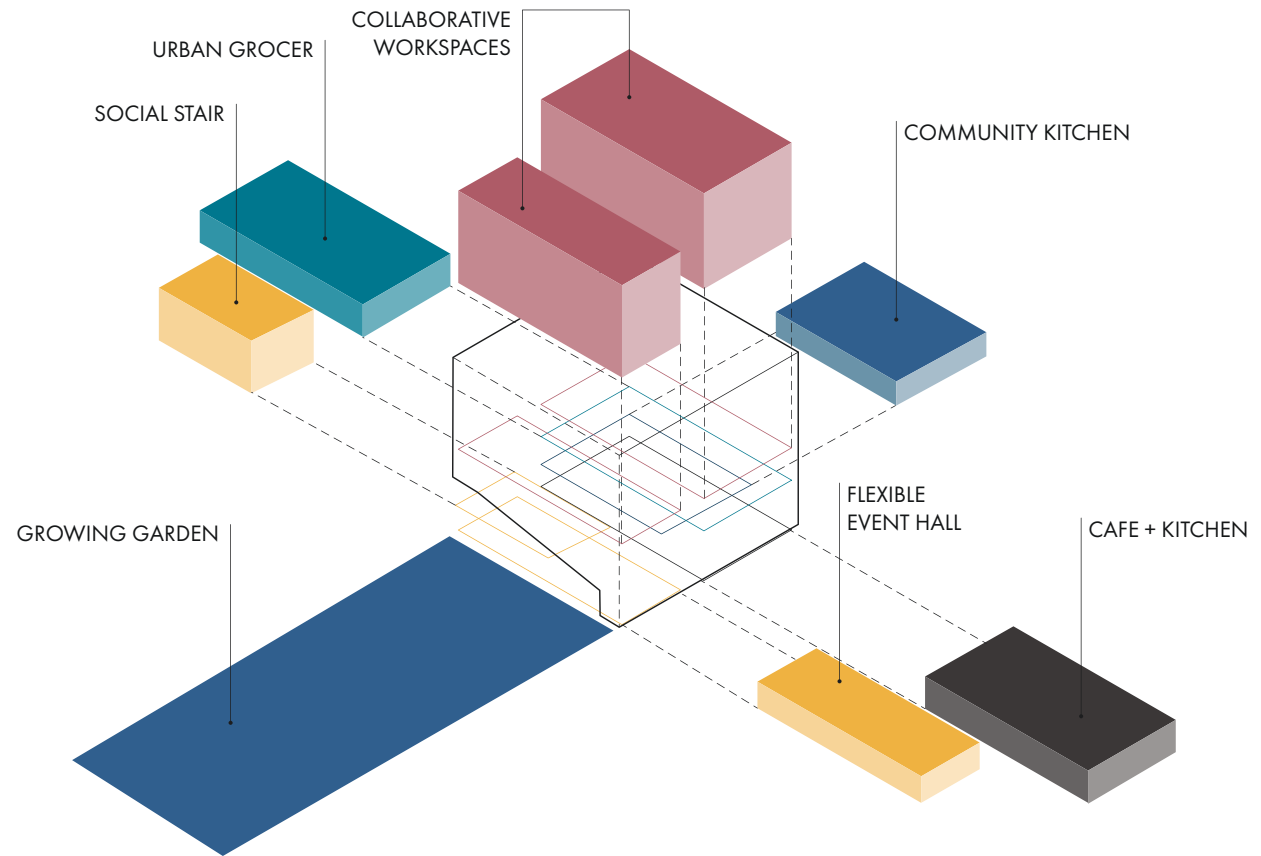
GARDENING

EDUCATION +  
ENGAGEMENT

COOKING

SKILL SHARE

SMALL  
ENTERPRISE  
GROWTH



Programming diagram



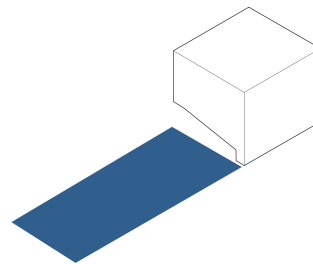
neighbourhood groups on the Central Peninsula have been working to improve the lives of residents by promoting food drives, healthy eating, and community gardening, initiatives in which this design thesis proposes to incorporate into its contemporary programming.

The program encompasses a growing garden, neighbourhood owned cooperative urban grocer, community kitchen, collaborative workspaces and a retail component café and kitchen. The intent is to develop a public participatory space, where anyone can take part. A place to meet, participate in the conversation about local food systems, share food and experience the everyday life of the city.

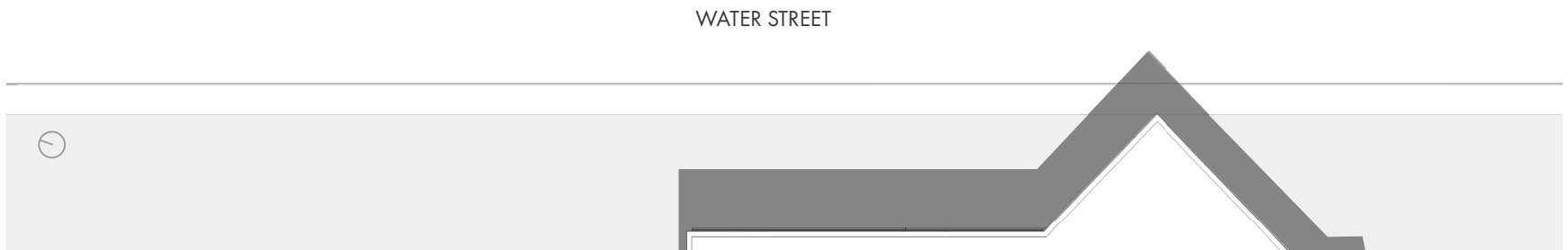
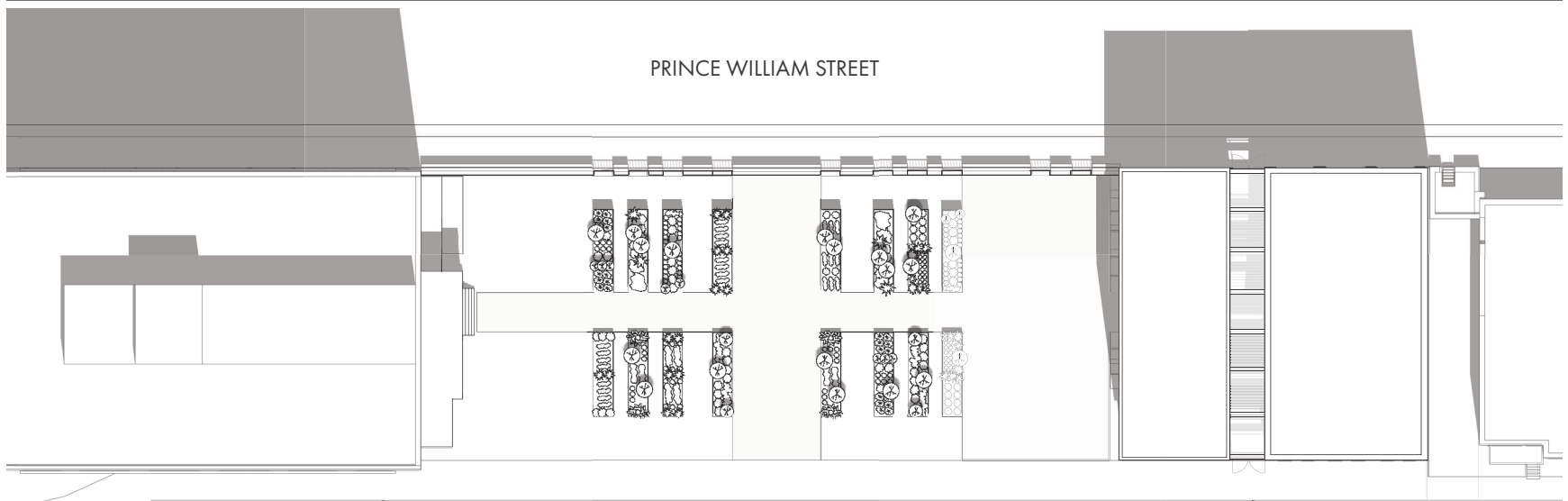
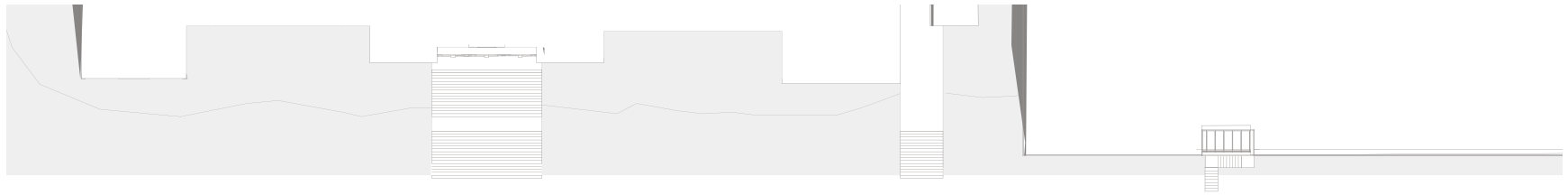
### **Community + Education**

While many of the heritage buildings in Saint John have been transformed into private enterprises. As a counterpoint, programs proposed for the McClary Manufacturing Building expand on activities that are lacking within the peninsula, by offering spaces for exchange and collaboration.

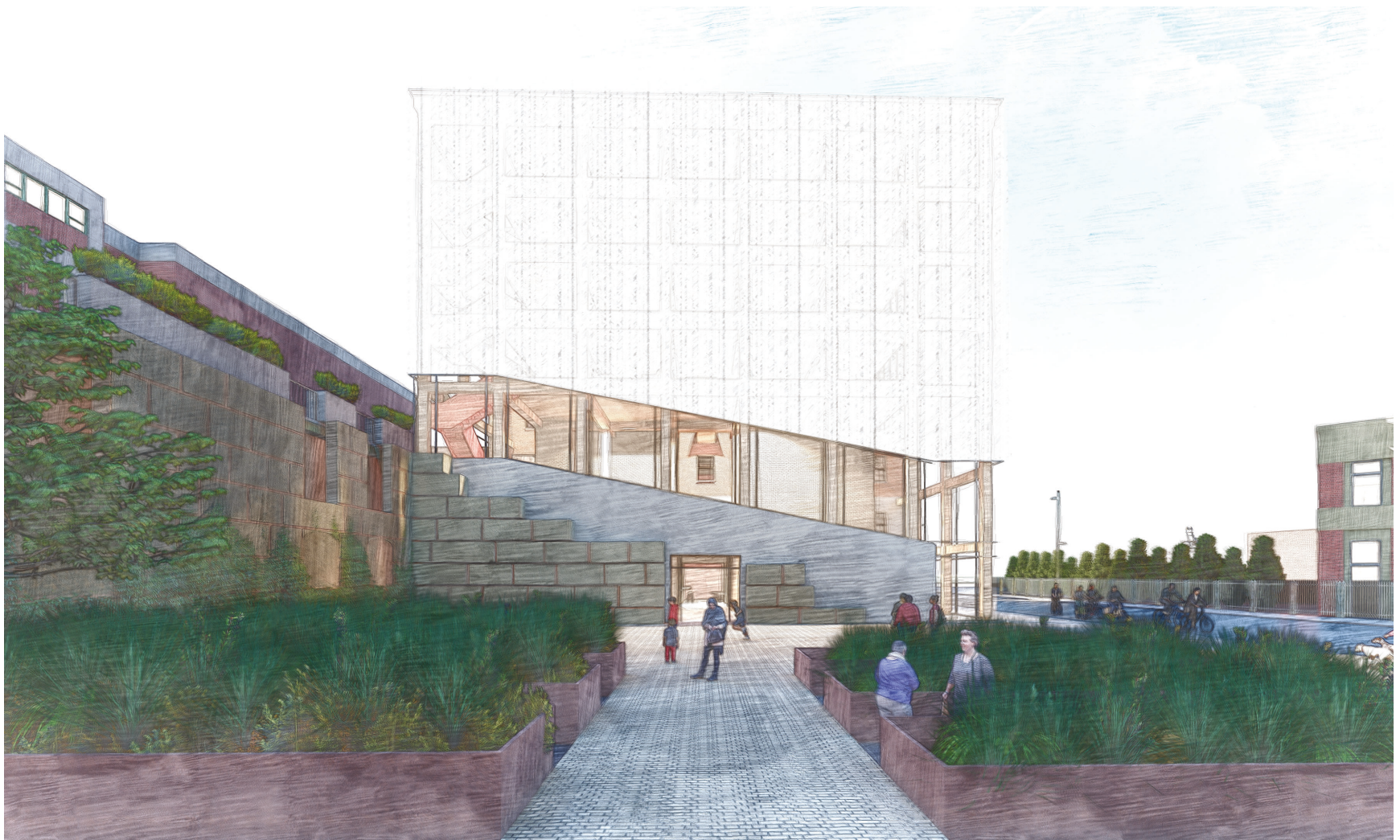
#### ***The Growing Garden***



The 0.49-acre urban parking lot is transformed into a growing garden, that also acts as an urban plaza located within the ruins of the previous Customs House and between the proposed juxtaposition and the existing Canada Customs building.



Landscape plan



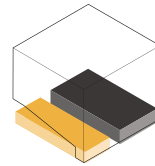
View from growing garden

Entrance to the existing Canada Customs building is accessed from the interior of the existing parking lot, an additional side entrance is introduced to the new juxtaposition design component which will be in-line with this entrance creating an axial landscape plan, which reflects the remaining window voids left over from the wall ruins. The vegetable garden fills a highly visible setting and acts as an extension and learning opportunity to the nearby Saint John High School and South End Day Care.

The growing garden is a sophisticated urban space, it is productive and multi-functional as public space, green space, and community space.

## **Activation + Flexibility**

### ***Event Venue + Café***

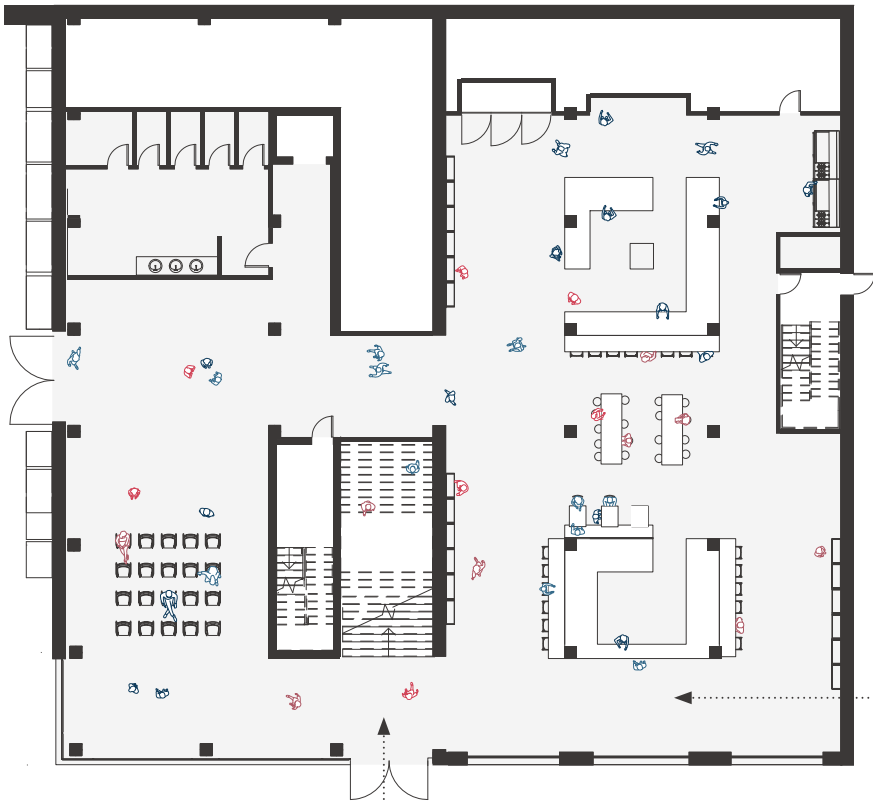


On the ground floor, adjacent to Water Street is the publicly accessible event space that can hold small gallery displays, public workshops, events, lectures and can spill back out to the growing garden.

The kitchen and café are a revenue generating component of the program, in addition to providing an opportunity for employment, has the functionality to act as a community meal preparation and pick up location.

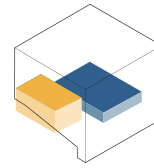
Within the existing McClary structure, the flooring from the second level is removed to expose the structural system, as well as provide a visual connection to the program above.

1



Ground floor plan and associated views

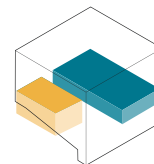
### ***Community Kitchen***



The second-floor houses flexible cooking space fitted with domestic style appliances to promote cooking skills with familiar pieces of equipment that participants might find in their own-living spaces, as well as a space to host drop-in community meals.

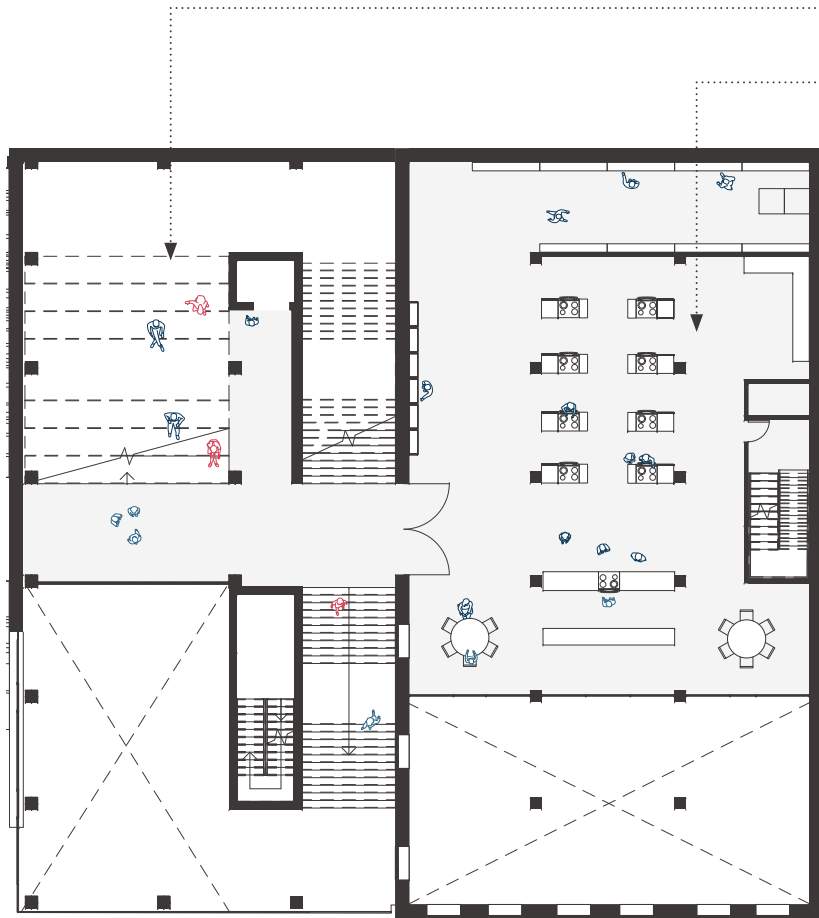
There are opportunities to integrate community classes and programs that promote better food literacy. Currently within the peninsula there is a lack of education and awareness, the introduction of these types of community programs and initiatives, can create a positive change for the local population (New Brunswick Food Security Action Network 2018, 16).

### ***Cooperative Urban Grocer***

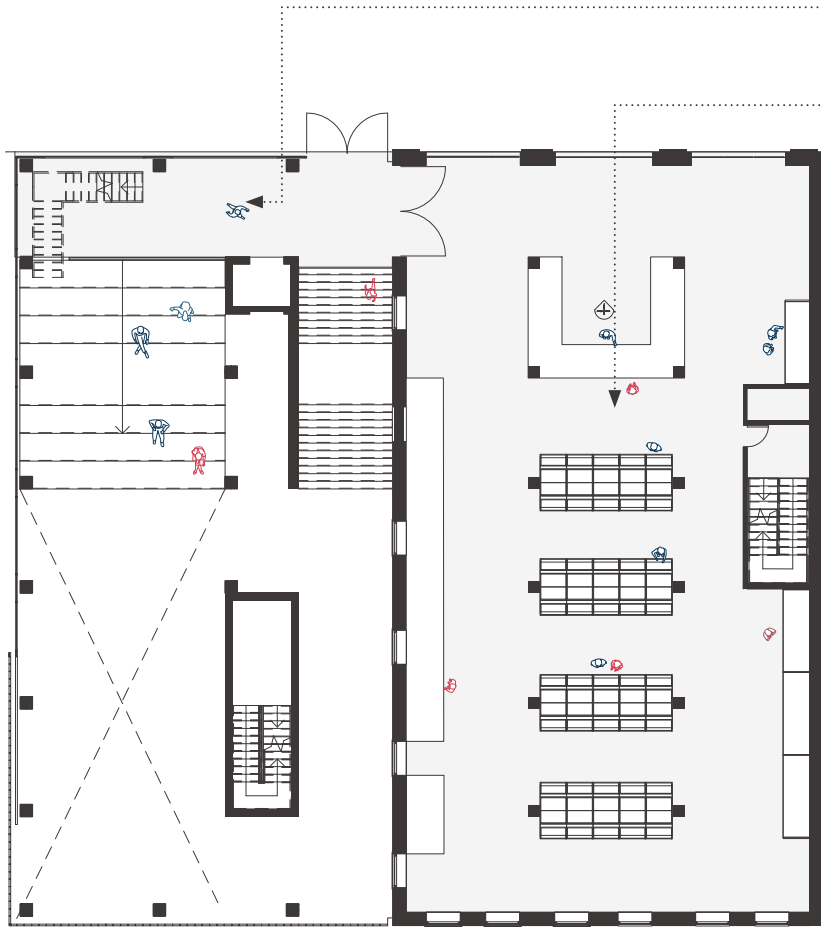


With only two grocers located on the peninsula, and both located within the commercial strip of Uptown. The South End of the Peninsula falls into the realm of being considered a food desert. The introduction of a food co-op within the McClary intends to address the lack of fresh food accessibility, while anchoring the ownership of the co-op in the low-income neighbourhood that can benefit from the store as a community owned asset.

The small-scale produce market also acts as a space for learning about local resources. This space is accessible from Water Street, strengthening ties with the Saint John



Second floor plan and associated views



Third floor plan and associated views



High School students, offering healthier options for meals. As well as providing greater access for Central Peninsula residents, to high-quality food in a dignified setting through healthy meals and affordable produce.

### **Connection**

These three highly public programmatic spaces are layered over three levels, connected by a large public stair that allows for free-flowing circulation (up and down) between Prince William Street and Water Street, essentially from the cruise terminal to the high school.

In the words of Jane Jacobs, each character plays a role in the ballet of the city sidewalk. The introduction of the large public stair adds to the daily movement and dance of both Prince William Street, mixed with high school students and Water Street interacting with the potential cruise ship visitors. There is an ability for the coming and going of individuals day and night.

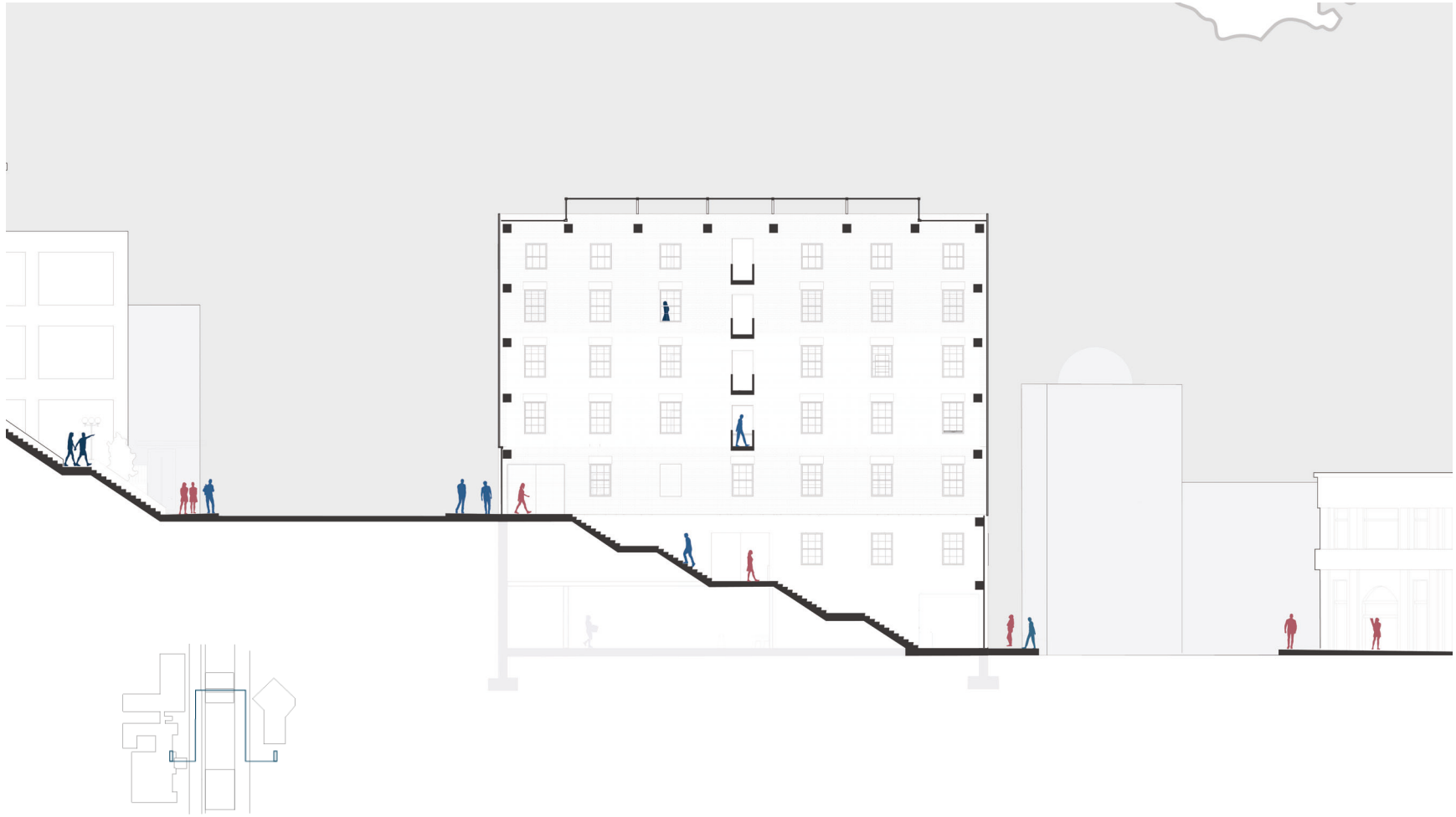
For a vacant, and disused building to be reintegrated back into the everyday city, there must be easy accessibility for pedestrians. This is being facilitated by introducing common entry points at the top and bottom of the site, connected by the public stair, providing an additional connection point between the steep grade changes of the urban environment. The design extends the public realm through the building by creating an indoor “street” that is materially consistent with the sloped and pedestrianized historic streets in Saint John.



Site section

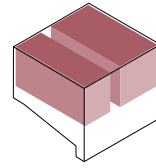


North view from Prince William Street



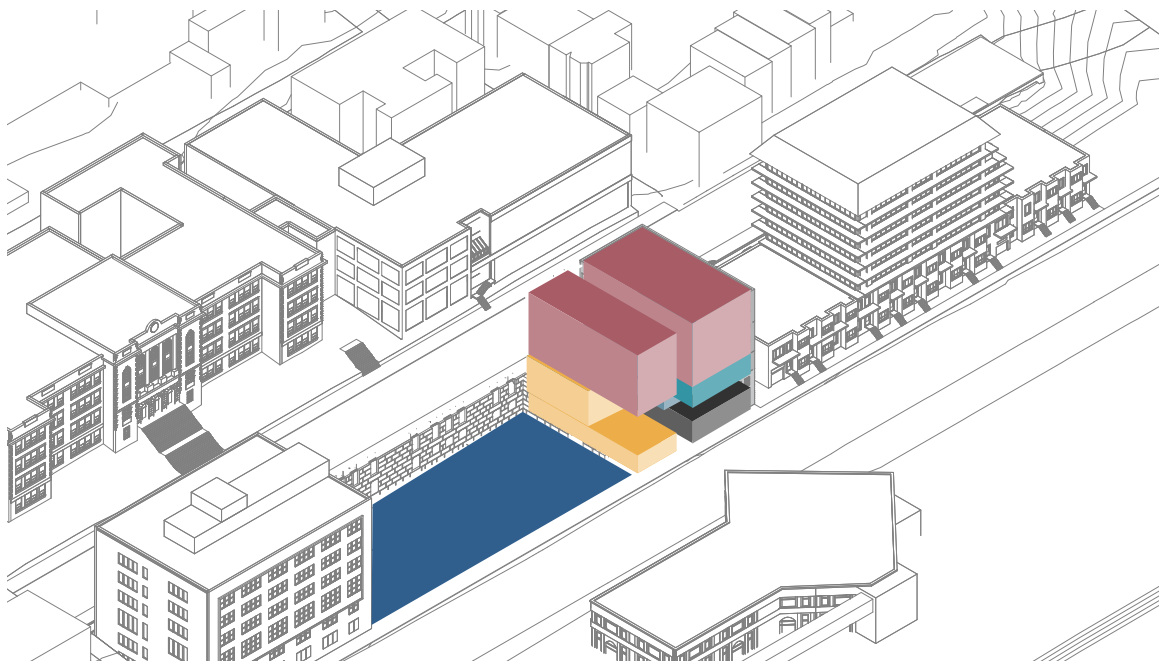
Building section

### ***Small Enterprise Workspace***

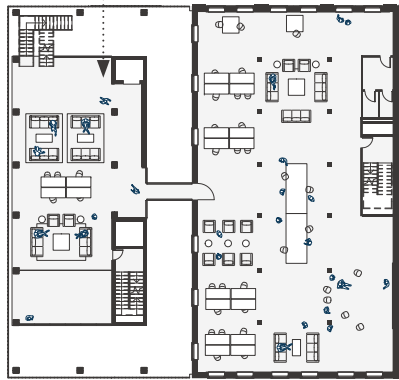


Moving up past the third floor there are co-operative offices, and workspaces for small enterprise businesses. These spaces will facilitate any administrative requirements of the programming below while also creating opportunities for small start up business to have a space where resources can be shared collectively, allowing for the business to grow in a supporting environment.

These co-working spaces consist of members and non-members who are working for a range of different companies, on multiple ventures, and projects. There are varied seating areas and working spaces that gradually transition to quieter and more private the higher up in the building you go, allowing for more fixed workspaces to exist within the flexibility of casual spaces. The new and the old



Combined program in urban context



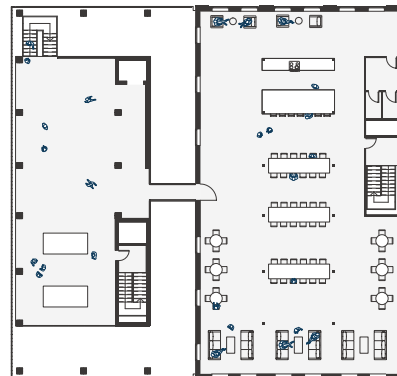
Floor 4



Floor 5



Floor 6



Floor 7



Upper floor plans and associated views

are linked by a crossover bridge, under the atrium, and over the public stair.

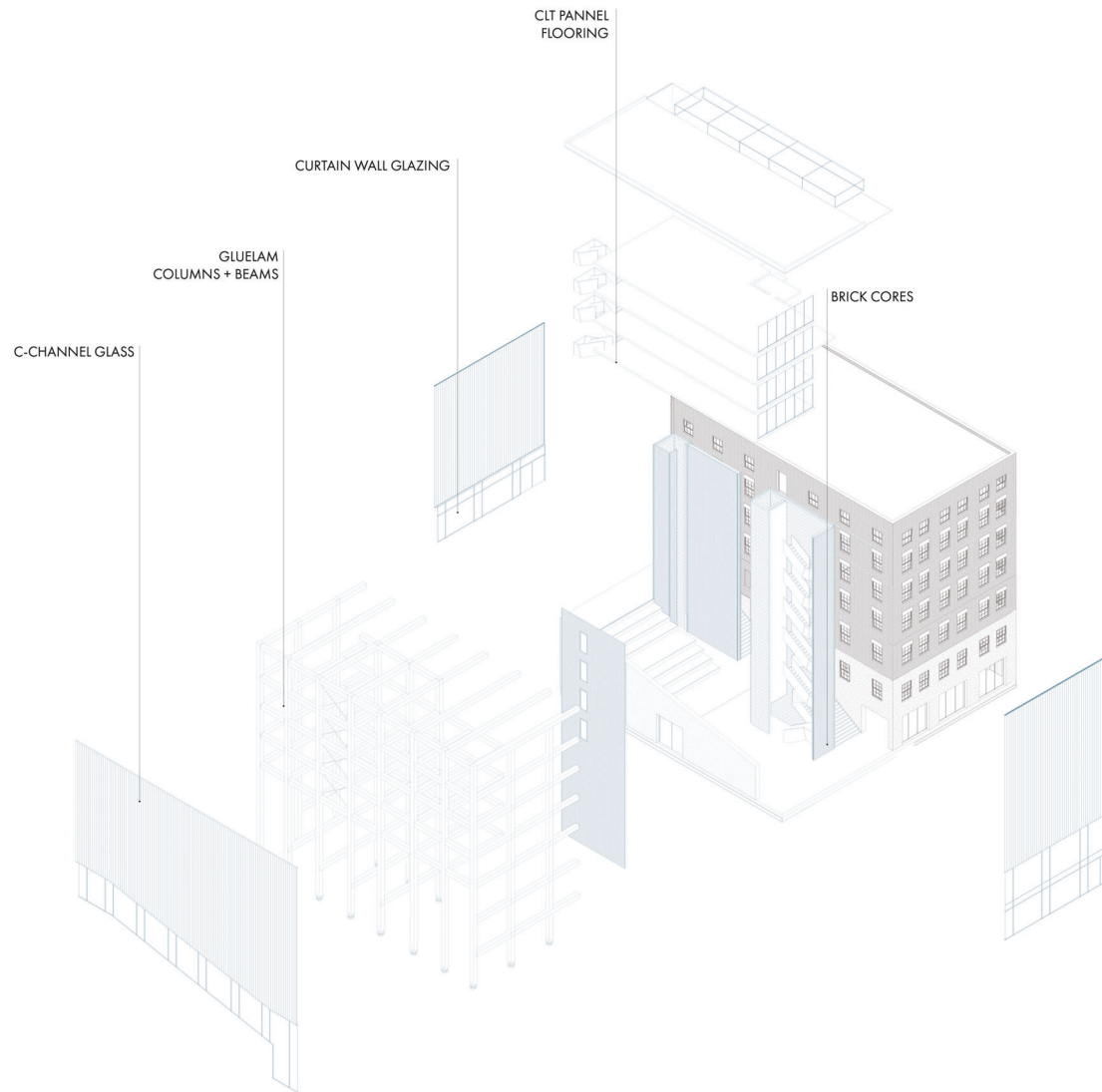
## **Building Components**

Structural cores within the juxtaposition help to fulfill the burden of exiting and accessibility requirements that many old and historic building face when being renovated. The short framing grid follows that of the existing structural grid within the McClary. The use of a brick façade on the core and glulam timber framing is an attachment to past, but also an expression of technological advancements of construction methods since the building of the original structure. The surrounding envelope is encompassed by c-channel glass panels, that will allow for an abundance of natural light to penetrate the structure, while preserving privacy. The reduced opacity of the facade allows for a curious visual into the everyday activities within. The rooftop atrium allows for light to access the windows on the existing McClary façade that is now encompassed within the new envelope.

## **Overview**

Utilizing Bollack's strategy of juxtaposition, the original McClary remains fully legible, while the buildings are bound together by height, volume, continuous floor levels, and the delineation of the façade edges. The McClary retains its visual prominence, while the new juxtaposition sits aside, offering a contrast, allowing a reference back to the original.

Within the McClary, most of the existing structure has been left 'as is', the interventions here are minimal and the character of the original McClary still perceptible, with the addition of some new elements. The floors now weave in and out of the old and new physical construction, as well,



Exploded building components



the architecture is woven into the fabric of the city and the neighbourhood through its openness to pedestrian traffic, its mixed-use programs, and the potential for spontaneous use of the open space on the ground floor, and growing garden.

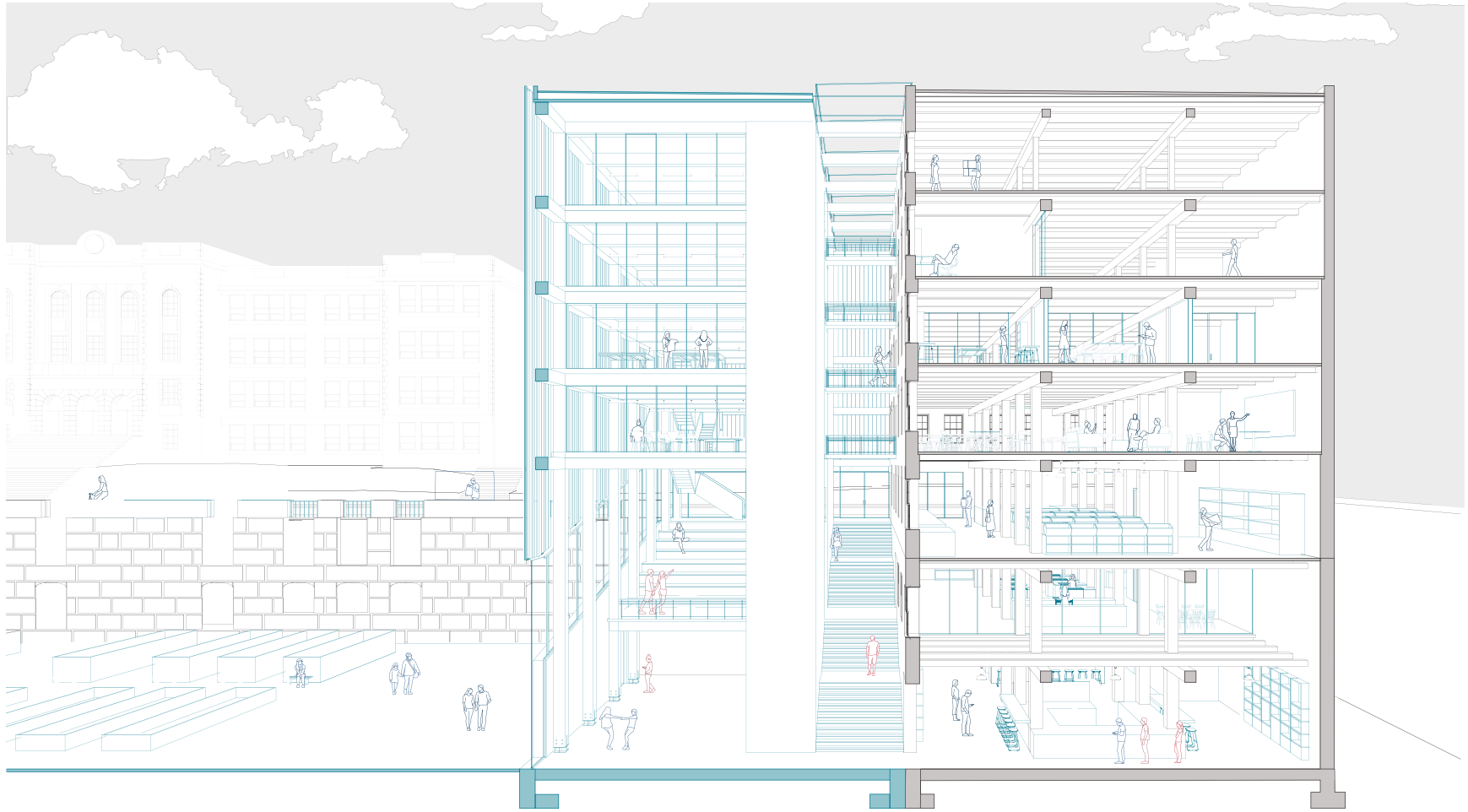
Reusing and repurposing this vacant urban building and site will extend the urban reach of the peninsula residents. An intersection with city visitors who can come together to grow, cook, and share.

While current conservation practices can be limiting to a building that can be saved, there are options and opportunities for hybrid adaptive reuse approaches. Bringing a building back into a new history rather than ultimately wasting an opportunity that allows for the reintegration of life back into a neighbourhood and the urban realm.

This has been an exercise in understanding how to use our existing resources wisely, A building exists; why not reuse it. Becoming an object of the present.



Assembled design proposal



Short section through front of building from Water Street



View from Water Street

## Chapter 7: Conclusions

Saving the past can be a way of learning for the future, just as people change themselves by learning something now that they may employ later.

—Kevin Lynch, *Conservation and the City* (Lynch 1972, 43)

The objective of this thesis is to investigate the possibility of reusing the McClary Manufacturing Building through a hybrid approach of architectural adaptive reuse. This initiated an urban analytical approach to determine an appropriate programmatic intervention.

While not historically protected or deemed significant as a heritage asset, the McClary Manufacturing Building is a prominent piece of early twentieth century industrial architecture which contributes to the urban cultural identity of Saint John. Balancing the building 'value' with its vacant condition, as well as the urban heritage of Saint John, the hybrid approach to reusing the building and infilling a small urban lot is a relevant strategy for the site's continuity in the everyday life of the city.

This research has been a discourse of difficult heritage topics, however, is important considering the number of vacant and under-utilized existing building stock that exist in Canada, which are threatened by neglect, potential development speculation and likely, future demolition. "The prevailing message here is to maintain, repair and reuse, rather than to neglect, demolish and replace" (National Trust for Canada n.d., 6).

### Building Demolition

A lack of protection, and lack of recognition of the building's cultural, historic, architectural, or environmental significances ultimately led to the loss of the McClary



Partially Demolished McClary Manufacturing Building, December 2021



Partially McClary Manufacturing Building, December 2021 (Adam Theriault 2021)



Partially McClary Manufacturing Building, December 2021

Manufacturing Building, a missed opportunity for reuse and an erasure of the urban environment. It is disheartening in a community that is flush with heritage and 'old' building stock, to see the clearing of an urban lot. The demolition of the McClary Manufacturing Building further strengthens the argument that building vacancy and neglect threaten the urban historic fabric, not just of Saint John, but many other older Canadian urban centres.

Obsolete structures must be provided with opportunities for renewed ideas, and recognized for their ability to bring life back into a challenging urban environment.

# **Appendix A: Bruce and Dorothy Rossetti Travel Scholarship Research + Exhibit**

## **Adaptive Reuse of Industrial Heritage**

Locations: Montreal and Toronto

Throughout the nineteenth century and early twentieth century, industrialization shaped the growth of our major cities. This historic period was a time of innovation, new technologies, and transformations in methods of production. Unlike today, industrial districts were concentrated and integrated into urban centres that provided access to transportation routes, fuel, and distribution networks.

Industrial architecture is often a defining historic characteristic of urban neighbourhoods and communities. It provides a tangible connection to our cultural and historical past. Unfortunately, due to neglect and/or lack of appreciation, industrial buildings have been susceptible to abandonment and demolition.

This research carried out case studies of adaptive reuse projects in Montreal and Toronto. It investigated new and old adaptations of historic industrial buildings and observed their current state. The subject sites were selected according to their location, historical significance, and proximity to either waterways or railway tracks. Industrial buildings that were repurposed for single-use residential were avoided, as the incorporation of community uses will be relevant to my eventual thesis project.

Investigating these adaptive reuse projects reinforced my belief that reviving industrial landmarks can provide important social and urban benefits, encouraging pride in a community's sense of place. Additionally, reusing existing buildings reduces environmental impact by retaining resources, reducing demolition waste, and minimizing new construction. Observing the many different uses that have made their homes in these industrial buildings suggests that there are endless possibilities in adapting them to the future.



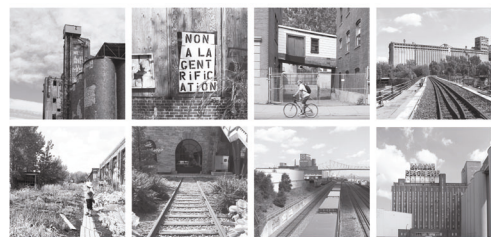


**INDUSTRIAL MONTREAL**

Located in the province of Quebec on an 80-kilometre island in the St. Lawrence River, present day Montreal is Canada's second largest city and economic center after Toronto. The historic center of Montreal is strategically located at the southernmost part of the river, allowing for essential access to the waterway, which was crucial to its early economic growth and later supported European exploration and shipping between Europe and North America.

What started as a French settlement during the fur trade, expanded into New France in the mid-1600s. Montreal development as the economic center of Canada in the mid-1800s can be attributed to the Lachine Rapids (what later became the Lachine Canal). The rapids supplied hydro power which accelerated the first wave of Canadian industrialization.

The impact of the Lachine Canal is illustrated in the nineteenth century through the development and creation of new working-class neighbourhoods such as Griffintown, St. Henri, and Pointe St. Charles. By the middle of the 19th century and the beginning of the 20th century, the population of Montreal had grown four times. However, by the mid 1900s the factories which were the employment hubs for the working-class neighbourhoods began to close. De-industrialization of these urban spaces lead to the eventual decline of the areas, however, now, in present day, such neighbourhoods are centers of the knowledge economy, the creative class and its accompanying gentrification.



Rossetti research exhibition “Adaptive Reuse of Industrial Heritage” (October 26, 2021)



**NEW CITY GAS | NEW CITY GAS COMPANY**  
 Griffintown  
 BUILT: 1847  
 ORIGINAL USE: Coal to Gas Plant  
 CURRENT USE: Art Gallery | Event Venue | Market | Restaurant



**LOCOSHOP ANGUS | CPR ANGUS YARDS**  
 NEIGHBOURHOOD: Angus  
 BUILT: 1902  
 ORIGINAL USE: CN Railway Workshop  
 CURRENT USE: Retail | Workspace | Restaurants



**COMPLEXE DU CANAL LACHINE | SIMMONS COMPANY MATTRESS**  
 NEIGHBOURHOOD: Saint Henri  
 BUILT: 1919  
 ORIGINAL USE: Mattress factory  
 CURRENT USE: Art Gallery | Community Space | Workspace



**ARSENAL ART CONTEMPORAIN | MONTREAL MARINE WORKS**  
 NEIGHBOURHOOD: Griffintown  
 BUILT: 1853  
 ORIGINAL USE: Ship Yard  
 CURRENT USE: Art Gallery | Cafe



**COMPLEXE DOMPARK | MOUNT ROYAL SPINNING MILL**  
 NEIGHBOURHOOD: Cote-Saint Paul  
 BUILT: 1908  
 ORIGINAL USE: Textile Mill  
 CURRENT USE: Workspace | Event Hall | Restaurant | Fitness | Childcare



**THE FOUNDRY | DARLING BROTHERS FOUNDRY**  
 NEIGHBOURHOOD: Griffintown  
 BUILT: 1918  
 ORIGINAL USE: Metal Works  
 CURRENT USE: Exhibition Space | Artist Residences



**CHATEAU ST AMBROISE | MERCHANT COTTON MILL**  
 NEIGHBOURHOOD: Saint Henri  
 BUILT: 1882  
 ORIGINAL USE: Textile Mill  
 CURRENT USE: Creative Agencies | Restaurant



**USINE - C | ALPHONSE RAYMOND LTD. PLANT**  
 NEIGHBOURHOOD: Centre-Sud  
 BUILT: 1913  
 ORIGINAL USE: Jam and Pickles Factory  
 CURRENT USE: ART GALLERY + EVENT VENUE



**BÂTIMENT 7 | CN YARDS TRAIN SHOP**  
 NEIGHBOURHOOD: Pointe Saint Charles  
 BUILT: 1925  
 ORIGINAL USE: CN Railway Workshop  
 CURRENT USE: Grocery | Brewery | Workshops | Community Garden



**ENTREPÔTS DOMINION | MERCHANT COTTON WAREHOUSE**  
 NEIGHBOURHOOD: Saint Henri  
 BUILT: 1889  
 ORIGINAL USE: Textile Storage  
 CURRENT USE: Co-Working | Event Venue

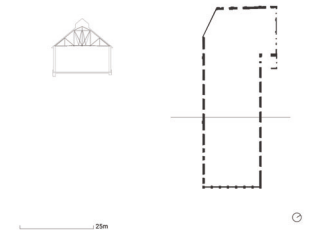
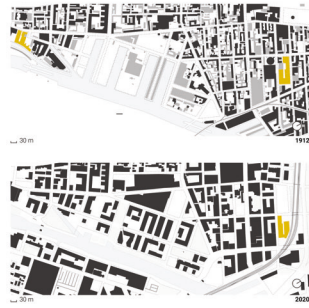


**NORDLEC | NORTHERN ELECTRIC COMPANY**  
 NEIGHBOURHOOD: Pointe Saint Charles  
 BUILT: 1913  
 ORIGINAL USE: Telephone and Electronic Manufacturer  
 CURRENT USE: Retail | Cafe | Residential

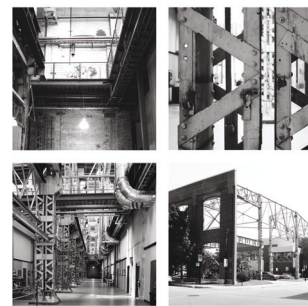
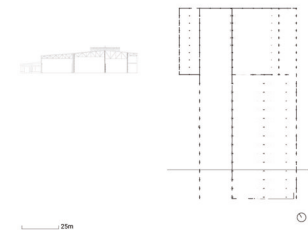


**ALLEZ UP | REDPATH SUGAR REFINERY**  
 NEIGHBOURHOOD: Pointe Saint Charles  
 BUILT: 1854-1927  
 ORIGINAL USE: Refinery  
 CURRENT USE: Climbing Gym

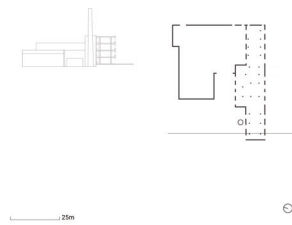
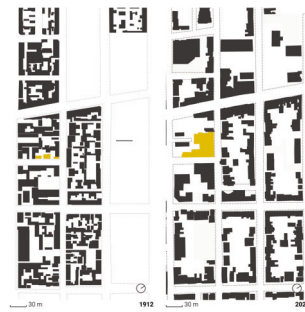
### NEW CITY GAS



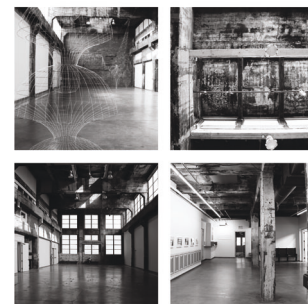
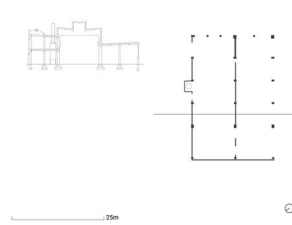
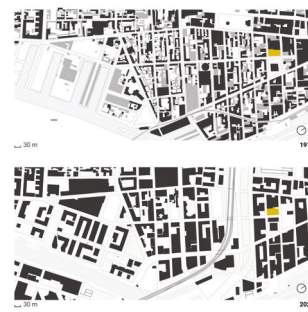
### LOCOSHOP ANGUS

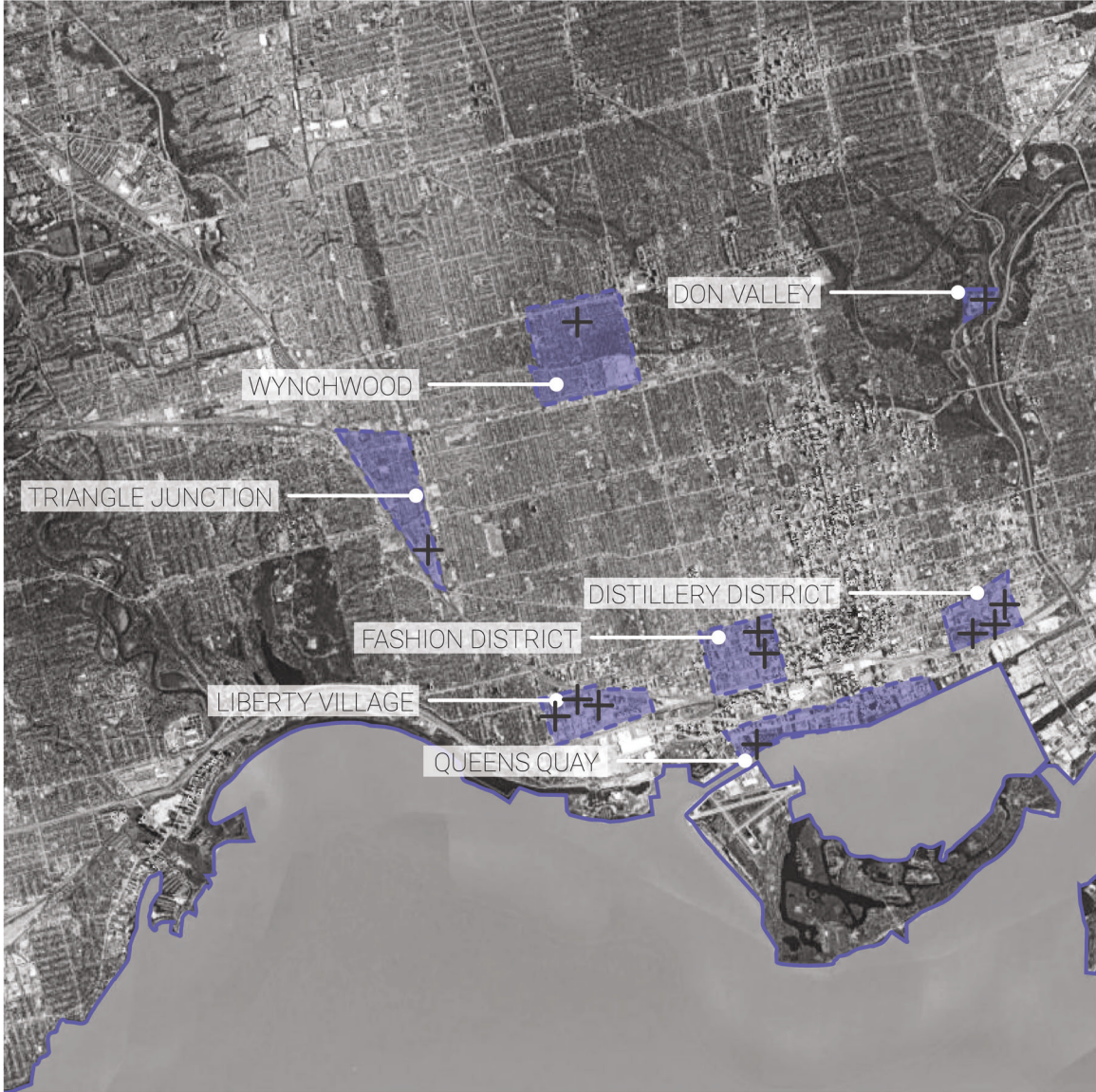


**USINE - C**



**THE FOUNDRY**





**INDUSTRIAL TORONTO**

Toronto's urban growth started in 1787, the site, then known as York, was the capital of the new province of Upper Canada and was located within a large, protected bay formed by the Toronto Islands. Its advantageous location on Lake Ontario, allowed Toronto to become a major gateway to interior Canada and the US.

Toronto became a popular destination for immigrants, growing the populations from 9,000 in 1800 to 65,000 in 1860. Settlements began along the eastern end of what is now known as the Corktown-St. Lawrence. The harbour, with access to long distance rail and ports, was transformed into an industrial zone. The manufacturing sector became a major employment source for residents. The industrial portland was seen as such an important asset, that the old shoreline was infilled, and the shoreline moved further southward.

After the Second World War Toronto's population had already reached one million. The growth of the automobile allowed for a growth in suburbanization. These suburbs allowed for individuals to live away from city life, and subsequently for industries to transfer facilities to areas with lower land costs. By the 1980s, Toronto had surpassed Montreal as the largest primary economic centre.



Rossetti research exhibition "Adaptive Reuse of Industrial Heritage" (October 26, 2021)



**BALZAC'S COFFEE | DISTILLERY PUMPHOUSE**  
 NEIGHBOURHOOD: Distillery District  
 BUILT: 1869  
 ORIGINAL USE: Fire Pump House  
 CURRENT USE: Cafe



**YOUNG CENTER PERFORMING ARTS | TANK HOUSE 9+10**  
 NEIGHBOURHOOD: Distillery District  
 BUILT: 1888  
 ORIGINAL USE: Whiskey Tank House  
 CURRENT USE: Theater | Performance Education



**401 RICHMOND | MACDONALD MANUFACTURING**  
 NEIGHBOURHOOD: Fashion District  
 BUILT: 1889-1923  
 ORIGINAL USE: Lithography and Tin Manufacturers  
 CURRENT USE: Gallery | Cafe | Arts + Cultural Producers | Studio Spaces



**TORONTO CARPET FACTORY | TORONTO CARPET MANUFACTURING**  
 NEIGHBOURHOOD: Liberty Village  
 BUILT: 1899  
 ORIGINAL USE: Carpet Manufacturers  
 CURRENT USE: Workspaces



**BRUNSWICK BALKE COLLENDER CO.**  
 NEIGHBOURHOOD: Liberty Village  
 BUILT: 1905  
 ORIGINAL USE: Billiard Tables and Bowling Supplies  
 CURRENT USE: Brewery | Workspaces | Residential



**DUFFERIN LIBERTY CENTRE | SUNBEAM INCANDESCENT LAMP CO.**  
 NEIGHBOURHOOD: Liberty Village  
 BUILT: 1908  
 ORIGINAL USE: Light-bulb Factory  
 CURRENT USE: Exhibition Hall | Arts + Cultural Producers



**THE ROBERTSON BUILDING | JAMES ROBERTSON CO.**  
 NEIGHBOURHOOD: Fashion District  
 BUILT: 1911  
 ORIGINAL USE: Warehouse + Showroom  
 CURRENT USE: Workspace | Retail | Cafe



**ARTSCAPE WYNCHWOOD BARS | WYNCHWOOD CAR BARN**  
 NEIGHBOURHOOD: Wynchwood  
 BUILT: 1913-1929  
 ORIGINAL USE: Street Car storage and Workshops  
 CURRENT USE: Artist Residences | Event Hall | Community Garden | Studio



**MUSEUM OF CONTEMPORARY ARTS | TOWER AUTOMOTIVE**  
 NEIGHBOURHOOD: Triangle Junction  
 BUILT: 1919  
 ORIGINAL USE: Aluminum Foundry + Manufacturing  
 CURRENT USE: Museum | Cafe



**EVERGREEN BRICKWORKS | DON VALLEY BRICKWORKS**  
 NEIGHBOURHOOD: Don Valley  
 BUILT: 1889-1926, 1956-57  
 ORIGINAL USE: Brick Manufacturing  
 CURRENT USE: Market | Event Hall | Garden | Gallery | Future Cities Centre

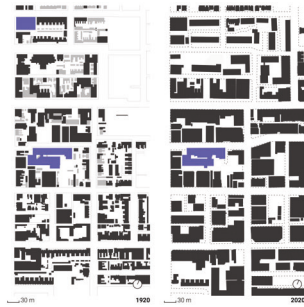


**THE POWER PLANT CONTEMPORARY ART GALLERY | THE POWER PLANT**  
 NEIGHBOURHOOD: Queens Quay  
 BUILT: 1926  
 ORIGINAL USE: Coal Power Plant  
 CURRENT USE: Art Gallery | Museum

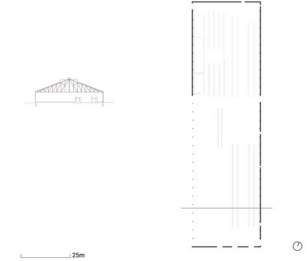
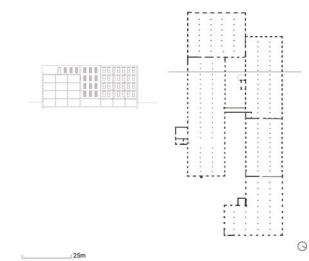
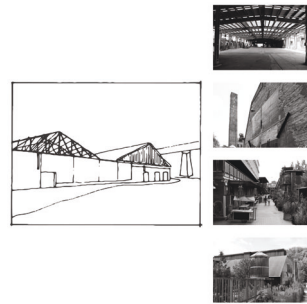
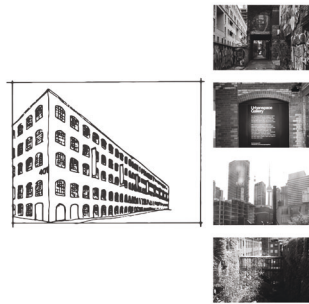
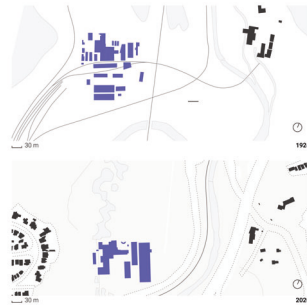


**DISTILLERY ARTSCAPE | CASE GOODS WAREHOUSE**  
 NEIGHBOURHOOD: Distillery District  
 BUILT: 1928  
 ORIGINAL USE: Warehouse  
 CURRENT USE: Artist Studios

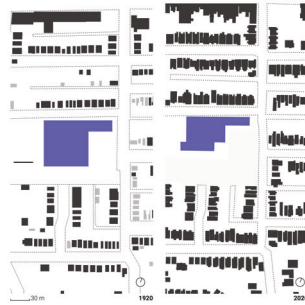
### 401 RICHMOND



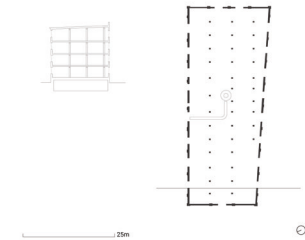
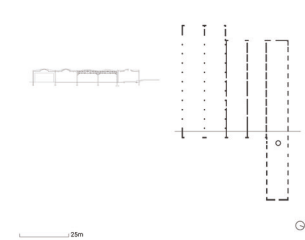
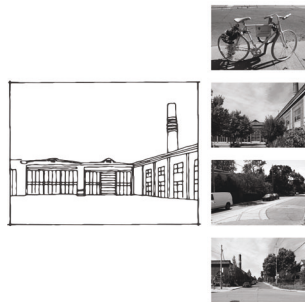
### EVERGREEN BRICKWORKS



WYNCHWOOD BARN



DISTILLERY ARTSCAPE





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