

# RECONNECTING THE WORKING WATERFRONT

by

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## **ABSTRACT**

This thesis addresses the disconnect between the coastal city and its waterfront. After decades of industrial development roads, railways, buildings and barriers have severed this connection leaving the coastal city with a void alongside its greatest natural resource.

This thesis proposes a strategy to reconnect the city of St. John's with its waterfront by repairing the existing urban fabric and layering both public and industrial space. With a desire for post industrial uses along its industrial harbour, St. John's must balance both needs, maximizing its limited waterfront space.

## **ACKNOWLEDGEMENTS**

I would like to thank Talbot and Sarah for their advice and criticisms.

I would also like to thank my parents for their encouragement and support.

## CHAPTER 1: INTRODUCTION

### Thesis Question

How can architecture reconnect the city of St. John's with its waterfront while balancing the desire for both public and industrial space?

### Waterfront Development

The waterfront is constantly being adapted to meet the changing needs of society. Despite this, most harbours can be defined by four main stages of development:

**Ecological:** Before settlers arrived, the waterfront was a place where the ocean water met the natural landscape. Rivers, vegetation, terrain and wildlife all coexisted, unaffected by human intervention.

**Historical:** Settlers, fishermen, merchants and the military developed the waterfront out of necessity building wooden piers, fishing shacks, warehouses and battlements along the waters edge.

**Industrial:** The industrial revolution brought many changes to harbour fronts around the world. Large ships and shipping containers replaced merchant vessels and required large, more uniform concrete wharfs. Access roads, train tracks and warehouses were built to facilitate the efficient transportation of goods and while they helped bolster the economy, they often disconnected cities from their waterfronts.

**Post Industrial:** As social values shift and industries

continue to move outside the city limits, residents are beginning to realize the potential their harbours hold as a place of leisure. People increasingly want to exercise, eat, shop, live and relax along the waterfront.

### **Adaptation**

Each stage has had a distinct impact on the waterfront, often defining an area for decades. As many industries leave the city in search of more affordable and accessible space, the shift from industrial harbours to waterfronts that support post industrial leisure activities is top of mind. “Cities seek a waterfront that is a place of public enjoyment. They want a waterfront where there is ample visual and physical public access-all day, all year-to both the water and the land” (Fisher and Benson 2004, 11).

### **St. John’s, Newfoundland**

As a small island off the east coast of Canada, Newfoundland still relies heavily on the ocean for its connection to the rest of the world. While there are many ports of call on the island, most activity is concentrated at the capital, St. John’s which is known as the oldest port city in North America (Rusted 1995, 29). Although the nature of the economy has evolved, the harbour continues to play a critical role in the economic success of the province. While other major cities have been afforded a clean slate due to the departure of major industry. St. John’s harbour is still at the centre of the province’s shipping, fishing and offshore oil industries. As other cities enjoy the benefits of more accessible waterfronts, residents of St. John’s are demanding a renewed connection to their own.



St. John’s, Newfoundland

## Ecological

The most striking natural features of the harbour are the 200 metre cliffs that shield the city from the Atlantic ocean. These cliffs wrap the entire coastline with the exception of a sliver of water know as “the Narrows” that connects the harbour with the open water. This ideal natural harbour is what first attracted fishermen to St. John’s as it offered a safe haven from the harsh North Atlantic.

The Grand Banks which are located several miles off the shores of Newfoundland were once a world renowned fishing ground and the main driver of Newfoundland’s economy. Sadly, many local species in particular the cod fish have been negatively impacted by industrialization and over fishing (Heritage Newfoundland & Labrador 2009).

View through The Narrows (Library and Archives Canada 2014)







Two hundred metre cliffs along the south side of the harbour protect the city from the harsh North Atlantic, leaving a small entrance called “the Narrows”. The Waterford River feeds into the west end of the harbour, exiting through the existing dry dock (Base map from the City of St. John’s).

## Historical

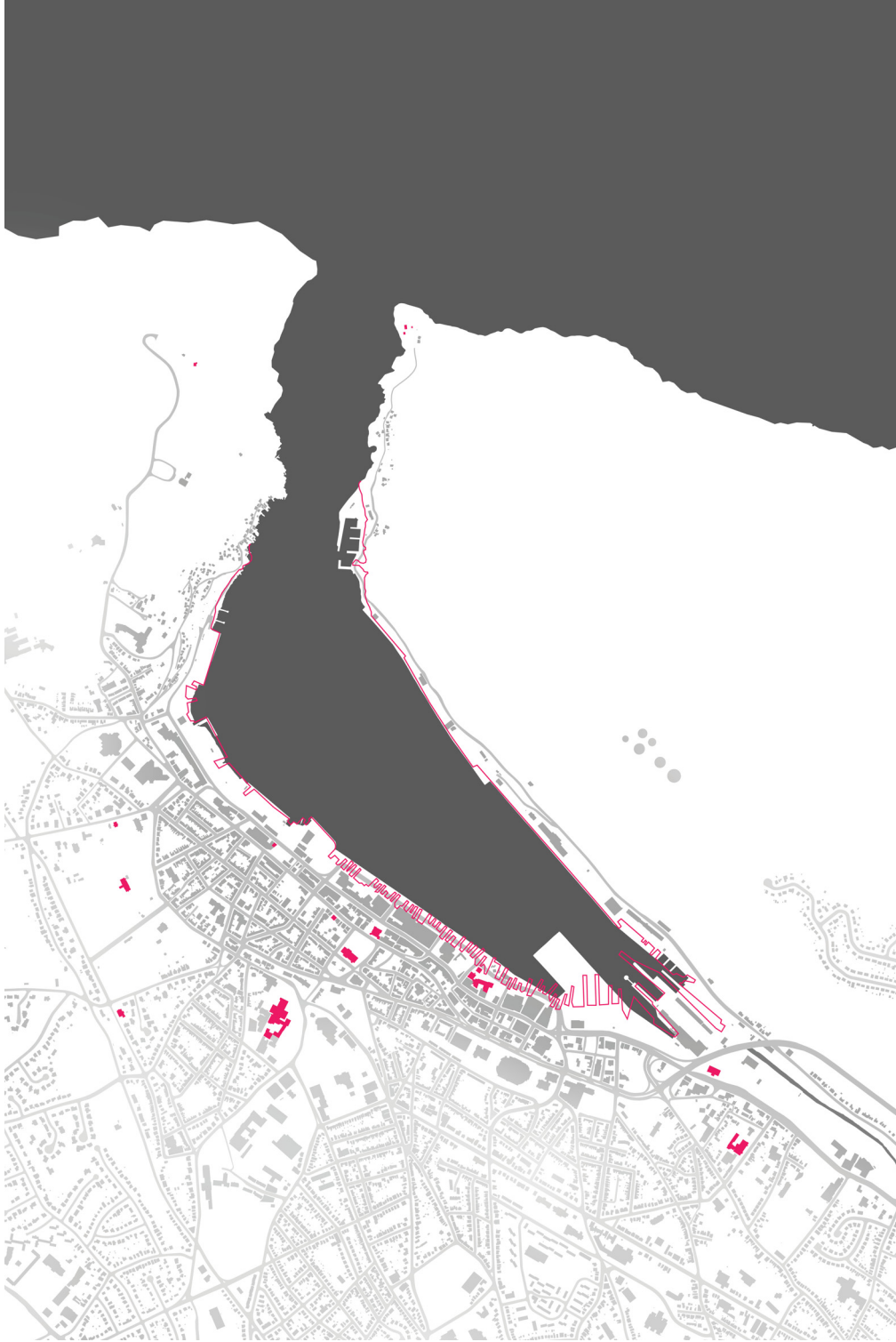
St. John's has the distinction of being the oldest port city in North America. Originally used as a safe haven for Spanish, Portuguese, French and British fishermen as they fished for cod off the Grand Banks. Over time, the island was settled by the British and it continued to operate as a British colony until confederation in 1949 (Rusted 1995, 1). As Newfoundland grew, St. John's became its economic hub. Fishermen would dock along the wooden finger piers that extended out into the harbour and dry their fish on fishing stages that dotted the shoreline. Merchants built premises that backed onto the water and sold goods from their storefronts along Water Street. They would also ship goods to small coastal communities by schooner in exchange for fish (A Beautiful Sight 2015). During both World Wars, Newfoundland's strategic location on the eastern edge of North America earned it a reputation as a, "floating fortress in the Atlantic" (Rusted 1995, 15). Many relics remain today including the battlements at Fort Amherst that once guarded the mouth of the Narrows from enemy ships.



Fort Amherst ruins, St. John's, 2015



Active wooden finger pier (A Beautiful Sight 2015)



Before the redevelopment of the waterfront, wooden finger piers lined the north side of the harbour. Many buildings in the downtown core have been designated national historic sites and have become iconic reminders of the past (Base map from the City of St. John's).

## Industrial

In the 1960's sweeping changes to the harbour saw the demolition of the old wooden finger piers and fishing stages in favor of a continuous concrete wharf and four lane access road along the north side of the harbour. These changes were meant to ensure that St. John's remained competitive with other ports on the eastern seaboard but also dramatically impacted the character of the city (Rusted 1995, 50). The majority of St. John's harbour is still used for industrial purposes including shipping, fishing, offshore oil and ship repair. Other services, such as the Canadian Coast Guard are also located along the south side of the harbour. In 2007, the Port Authority erected a security fence along Harbour Drive to mitigate safety concerns of a "post 911 world." This decision left the majority of the harbour inaccessible to pedestrians, upsetting many residents of city (CBC 2013).



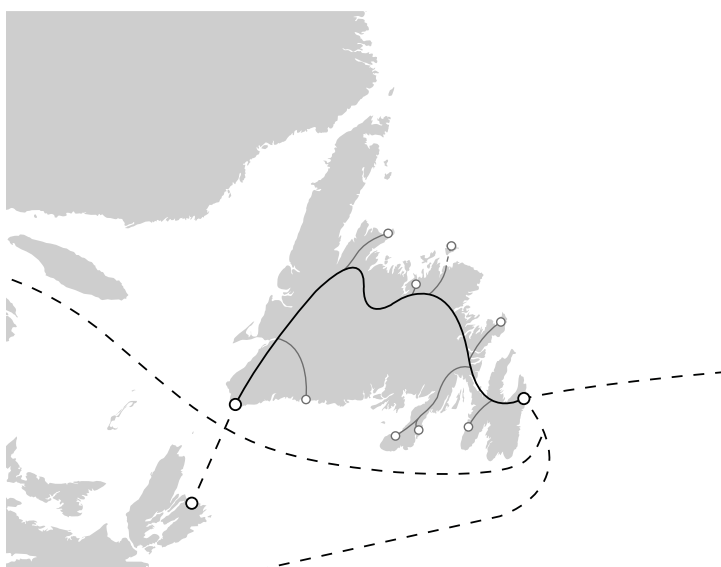
Dry dock (Newdock 2014)



Complete harbour redevelopment (A Beautiful Sight 2015)

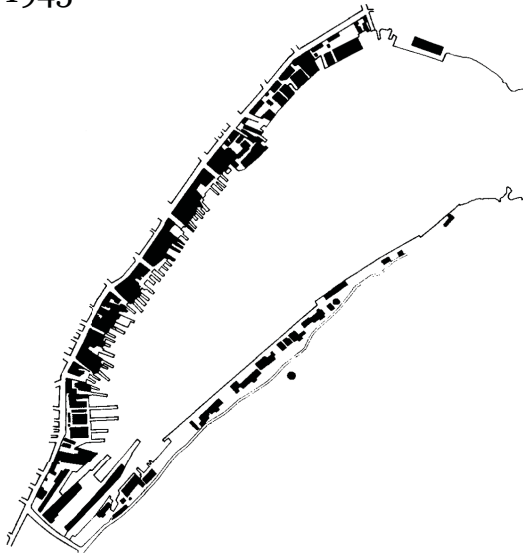


Prior to the 1950's the only way to access the majority of Newfoundland's coastal communities was by sea. Merchant schooners from St. John's would supply these communities with goods in exchange for fish that would then be processed and resold (Rusted, 1995).

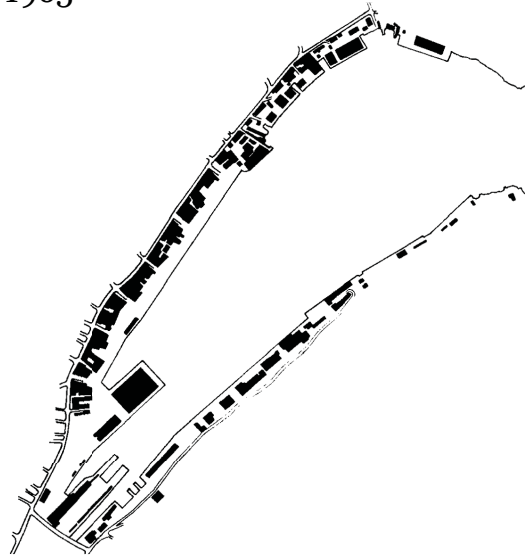


With the construction of the Trans Canada Highway and several other access roads in the late 1950's, outport communities were accessible by land for the first time. Now most goods arrive in St. John's or Port aux Basques by boat and are trucked across the island (Rusted, 1995).

1945



1965



In 1956, the federal department of public works began a study to modernize the harbour. In order to remain competitive with Halifax and other ports along the east coast, the iconic wooden finger piers were replaced by a marginal wharf and a four lane access road was constructed in order to support the larger scale operations (Rusted, 1995).



Today the majority of prime waterfront real-estate is taken up by industrial activity leaving very little accessible space to the public (Base map from the City of St. John's).

## Post Industrial

The residents of St. John's have an increasing desire to reconnect with, access and enjoy their waterfront like many other modern cities around the world. Since the city limited waterfront access with the erection of the security fence in 2007, there have been many calls for a better solution but thus far nothing has materialized. There are currently a few accessible locations along the water but these spaces are under programmed, under-used and have no connection to each other or the larger network of public spaces. Segments of the East Coast Trail and the Waterford River trail converge on the harbour but do not currently connect or engage with it.

A portion of the East Coast Trail near the Narrows, St. John's, 2015





The few remaining accessible spaces along the waterfront are under programmed and disconnected. The East Coast Trail and the Waterford River Trail all converge on the harbour but don't currently connect (Base map from the City of St. John's).



## **Moving Forward**

As cities around the world regain access to their waterfronts, the residents of St. John's have an increasing desire to restore the connection to their own. While the industrial activity of the harbour still remains at the centre of the cities economy, both industrial and post industrial uses should be able to coexist.

In order to move forward and reconnect the residents of St. John's with their waterfront, it is important to understand the issues that currently exist. These issues can be placed into two categories; barriers and urban fabric.

### **Barriers**

During the redevelopment of the harbour in 1956, a new four lane access road was constructed along the north side of the harbour. This road was designed to provide easy access to the marginal wharf and to keep large supply trucks off of the smaller streets of the original city grid (Rusted 1995, 50). While the road did this successfully, it also became a barrier to the waterfront forcing pedestrians to cross four lanes of busy traffic in what was traditionally a two lane pedestrian friendly downtown core.

Despite the uninviting conditions, the waterfront still remained relatively accessible. Pedestrians were welcome to walk the wharf, examine the ships and watch the fishermen as they unloaded their catch (Rusted 1995, 31). Large civic events continued to take place along the wharf with residents gathering to watch the New Years Eve fireworks each year. In 2013, the Port Authority and



## **Fabric**

Downtown St. John's is unique because of its winding roads, unpredictable terrain, storefront shops and colourful yet consistent urban fabric. Water Street is perhaps the best example of this and is lined with 3 - 4 storey buildings that all have storefront shops and restaurants making it a welcoming place to walk and explore. Harbour Drive is only one street below but it feels like a completely different place. The urban wall is broken by large empty parking lots, the three storey buildings are replaced with nine storey office buildings and at street level, pedestrians are met with parking structures built to support the out of town commuters.

The city has its back turned to the harbour, relegating what was once a celebrated space to the role of a parking lot, designed to support activity in other parts of the downtown. The entire street is out of scale and the buildings respond solely to the vehicle, paying no attention to the cities residents.

Parking lot along Harbour Drive,  
St. John's, 2015

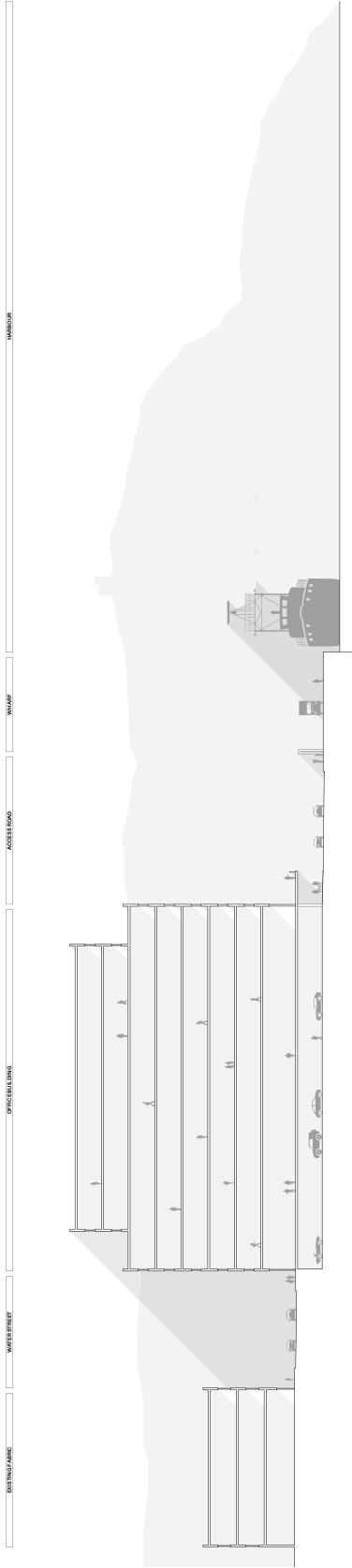


Seven story parking garage  
along Harbour Drive, St. John's,  
2015

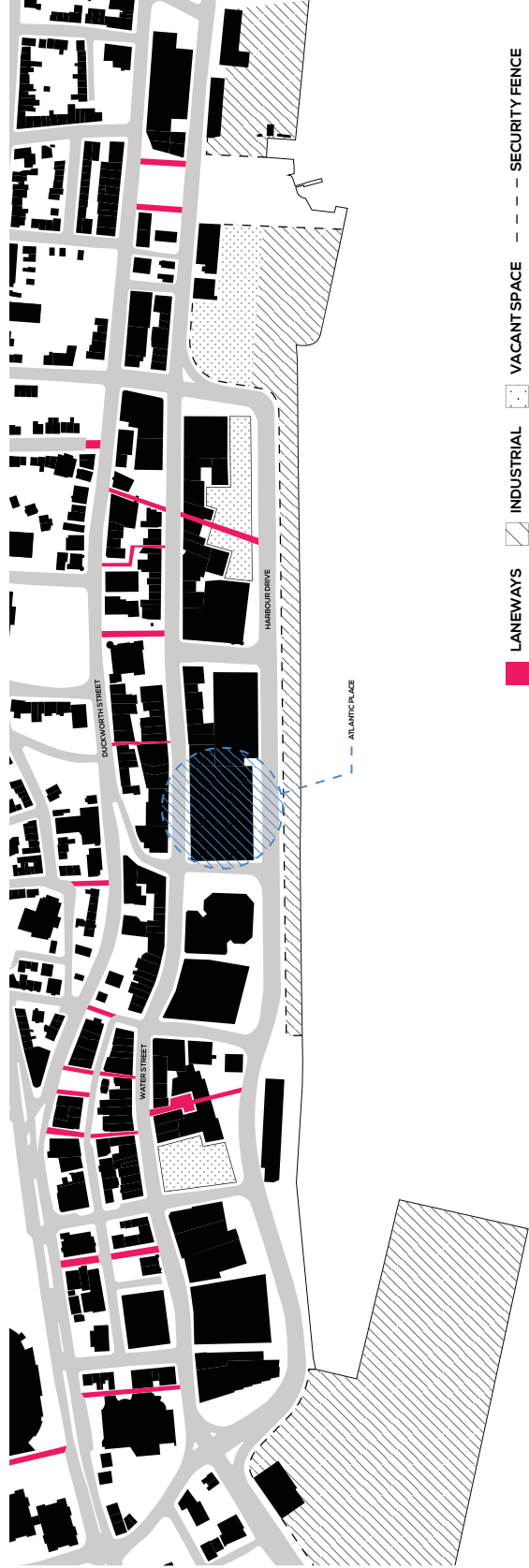


Atlantic Place, St. John's, 2015





Existing section through Atlantic Place.



Existing plan.

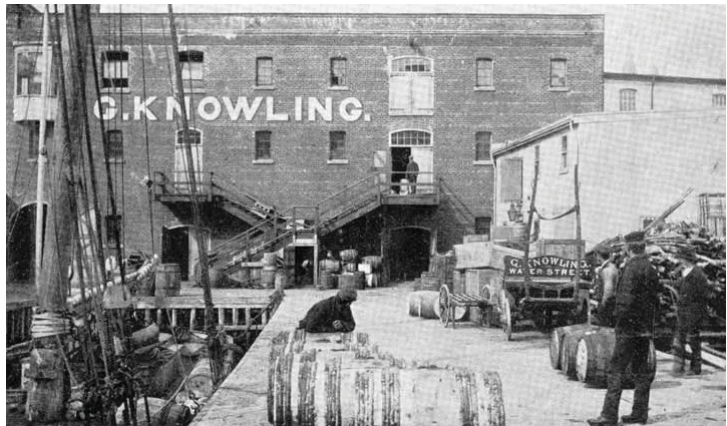
## Merchant Premises

Prior to the redevelopment of 1956, the harbourfront was lined with Merchant Premises. In contrast to the large monolithic structures that exist along Harbour Drive today, these clusters of buildings were of a scale and construction that was much more in line with the rest of the city.

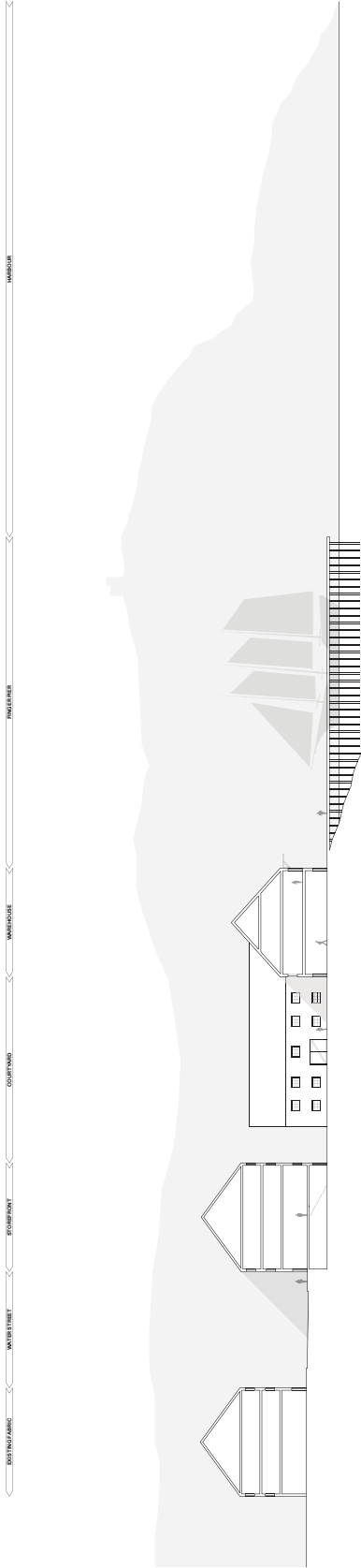


Merchant Warehouse (A Beautiful Sight 2015)

Merchants situated their premises so that they had storefront along Water Street and warehouse space along the harbourfront. Schooners would dock at each merchant's wooden finger piers and stevedores would unload fish and other goods to store and process them in the adjacent warehouses. From there, some goods would be sent to supply remote outport communities while the rest would be sold in the merchant's shops along Water Street. The merchants were essential to Newfoundland's economy, importing goods and exporting fish (A Beautiful Sight 2015). Their premises acted as the lynchpin between St. John's, the rest of the island and the rest of the world.



Merchant Warehouse (A Beautiful Sight 2015)

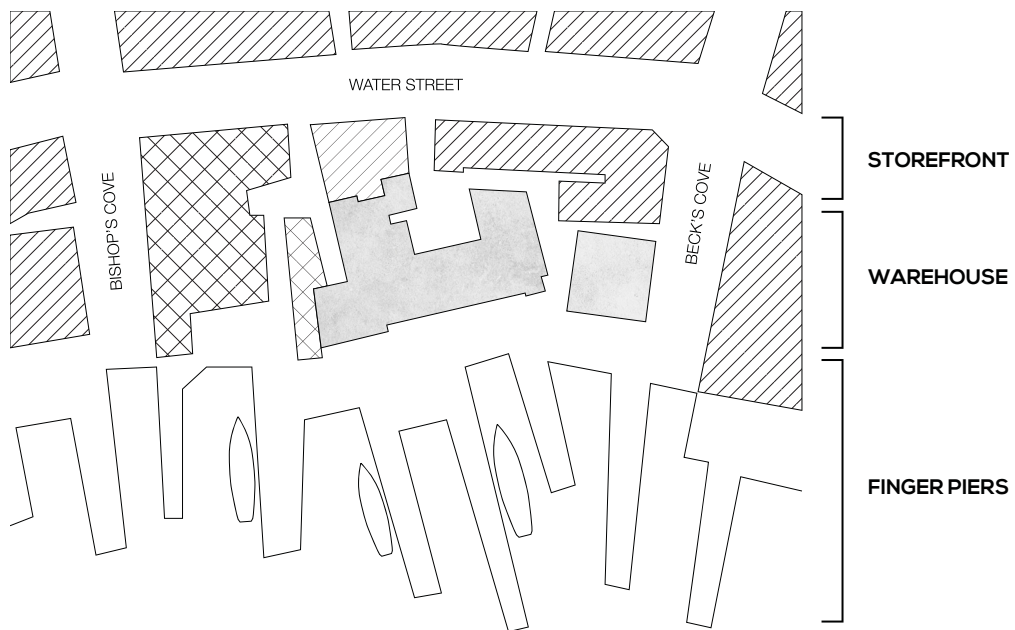


Historic section through a traditional merchant premises.



Historic plan.

LANEWAYS + WORK YARDS



Merchants situated their premises so that they had storefront along Water Street and warehouse space along the harbourfront. (A Beautiful Sight 2015)



View of the renovated Murray Premises (Murray Premises Hotel 2014)



## The Murray Premises

The great fire of 1892 decimated St. John's commercial district, almost entirely destroying Water Street. Becks Cove was one of the few city blocks to survive and is now home to some of the oldest remaining examples of Newfoundland vernacular architecture. Construction on the A. H Murray Premises began in 1847 with the series of structures evolving over time to meet the expanding needs of the mercantile trade. The only remaining example of a 19th century mercantile premises in St. John's, it's massing and material construction are consistent with those that once lined the waterfront (St. John's Heritage Foundation 1977, 1-11).

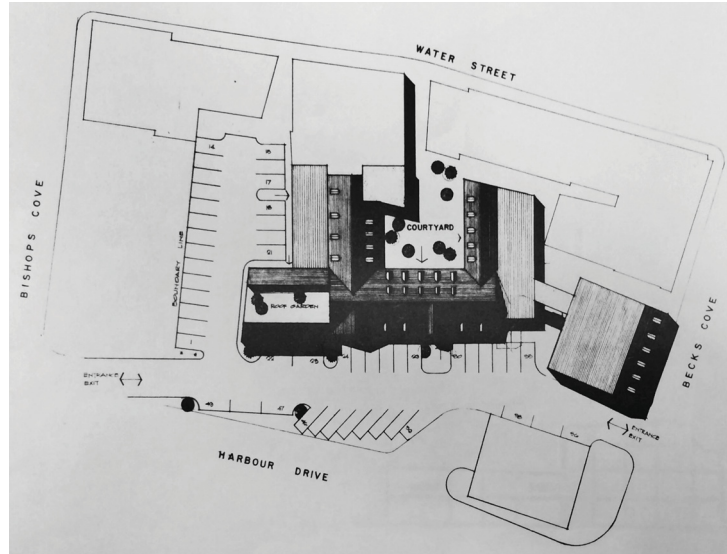
### *Massing*

The Murray Premises is a collection of six buildings that once contained warehouses for drying and packaging fish, commercial retail shops, a carpentry shop, pork house, hotel, offices and even housing (Atlantic Leasing Limited 1978, 1). The buildings are arranged around a courtyard that provided a sheltered workspace away from the famously harsh winds and an opening that allowed for direct access to the street.



Murray Premises Courtyard, St. John's, 2015

Murray Premises Site Plan (St. John's Heritage Foundation 1977)



### ***Material Construction***

Vernacular architecture is a response to a local condition using local techniques and resources. The Murray Premises clearly exemplifies this as it's rough post and beam construction contains knee bracing and joinery that reflects ship building techniques, something that was quite familiar to the locals. Unlike the primarily wooden interiors, brick and masonry were used for the exterior cladding. After two major fires in the downtown core many businesses opted for a fire retardant option to the traditional wooden singles and clap board (St. John's Heritage Foundation 1977, 11-12).



The Murray Premises rough post and beam construction contains knee bracing and joinery that reflect ship building techniques (St. John's Heritage Foundation 1977)

## Laneways

In addition to the Merchant Premises, narrow laneways also provided direct connections between Water Street and the harbour. Some of these linkages were no more than a narrow gap between buildings while others tunneled directly through the streets fabric. These informal connections were integral in the transportation of people and goods and gave St. John's a unique character (A Beautiful Sight 2015). New construction along Harbour Drive has left only one of these unique connections to the waterfront but luckily many have been preserved in other parts of the city.



An existing laneway that connects Water Street with Harbour Drive, St. John's, 2015

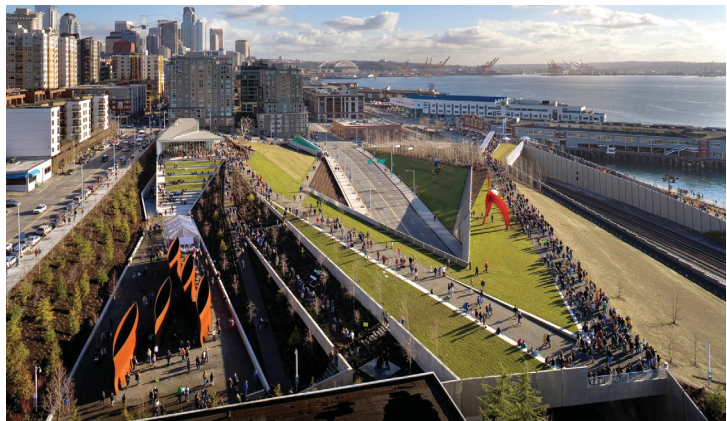


Diagram of existing laneways

## Precedent: Olympic Sculpture Park

Decades of industrial development have separated cities across the world from their waterfront. Since this challenge is not unique to St. John's, many lessons can be learned by examining other cities' success. One of the more interesting solutions to this design challenge is the Olympic Sculpture Park located in Seattle, Washington.

The Olympic Sculpture Park by Weiss/Manfredi Architects set out to do three things: create a space to display large works of art, restore public access to the waterfront and bring back a functioning ecosystem (Huber 2008, 6). In the book *Weiss/Manfredi: Surface and Subsurface*, Weiss states that, "Every city now wants to reclaim its waterfront. But all these waterfronts are strangled by the infrastructure of trains, industry, warehouses, and highways, because cities were built from the inside out, while trade grew from the outside in. Cities are now interested in inverting that relationship"(14). This is true for Seattle as the site, a 8.5 acre industrial brownfield that was once home to a fuel storage and transfer facility, contains an operational railway and four lane artillery



Olympic Sculpture Park (Huber 2008)

road that separates the city from its waterfront.

For Weiss/Manfredi Architects, the solution was a continuous z-shaped landscape that spanned over the tracks and road, connecting the city with its waterfront. The park combines art, landscape, infrastructure, remediation systems and existing transportation routes in an attempt to create, "...linkages where separations now exist and slip in new uses that will integrate the site into a city's network of public spaces"(Manfredi and Weiss 2008, 15).

## CHAPTER 2: DESIGN

Upon analysis, two main challenges have been identified along the St. John's waterfront:

### ***1: Connecting***

One of the biggest issues with the waterfront isn't the space itself but how that space is connected with the rest of the city. Large monolithic buildings, parking garages and vacant lots create an uninviting space and limit the number of meaningful connections between Harbour Drive and Water Street.

### ***2: Layering***

Once people reach the waterfront they need a place that they can safely enjoy. With leisure and industrial activities competing for a limited amount of space, how can these opposing interests coexist?

## **The Human Scale**

For over 50 years, St. John's harbour has been developed with one goal in mind: increase economic activity by creating the best possible space for industrial development. This vision worked! Shipping capacity and offshore oil development grew, but it did so at a great cost. With this growth came access roads and security fences, leaving the residents of St. John's behind. In order to make the waterfront an appealing place for human activity attention must be paid to the "human scale." Jan Gehl is one of the leading architects in this area of study and many of his ideas and principles will guide the design process.

## Connecting

In *Life Between Buildings*, Gehl focuses heavily on the issue of scale stating that, “In cities throughout Europe, medieval urban spaces are exceptionally well suited to urban outdoor activities by virtue of their spatial qualities and ample dimensioning. Urban spaces from later periods are much less successful in this respect, generally tending to be too large, too wide, and too straight” (38). According to this analysis, St. John’s does a lot of things right. Built over time it is the result of incremental and quite often haphazard development that makes it such an enjoyable place to explore. Winding roads, laneways that dart between buildings and a consistent urban fabric give the city much of its identity. Everything just fits, that is until you reach the waterfront.

If the early residents of St. John’s had this issue of scale right from the start, how did they treat the waterfront? Looking back at the historical analysis in chapter one, the waterfront was reserved for merchants. Instead of a buffer between the city and the water, the merchant premises acted as the complete opposite; St. John’s only link to the rest of the world. The premises was the city’s lifeline, facilitating the movement of goods and information up to the city (A Beautiful Sight 2015).

New shipping routes and more efficient modes of communication have made this link obsolete but could this connection be used in other ways? Can the merchant premise typology that once brought goods up to the city be reversed to reconnect the residents of St. John’s with their waterfront?

## **A New Typology**

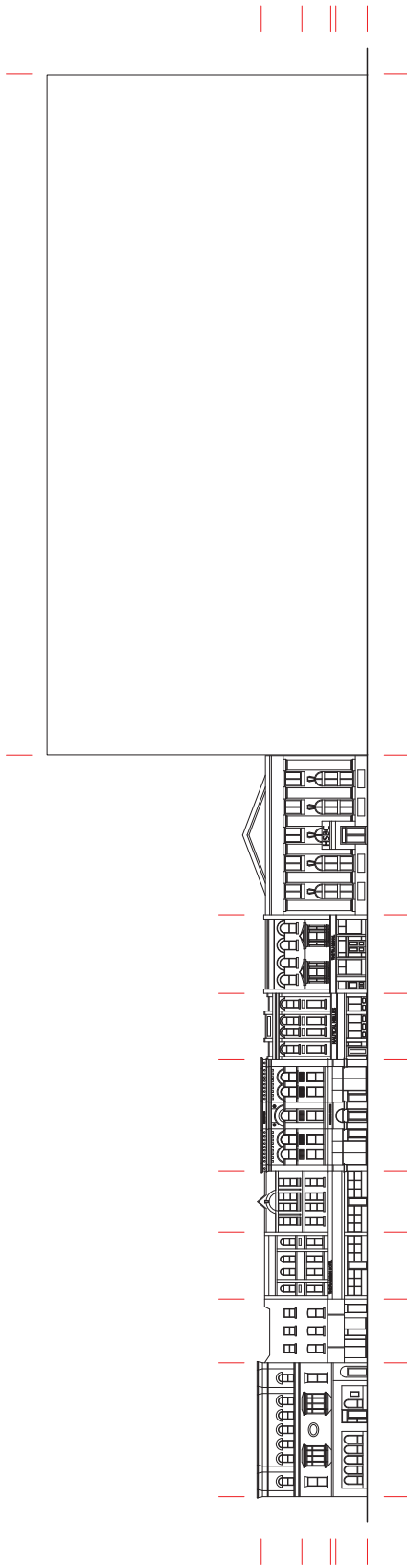
As ageing offices buildings are replaced and vacant lots are developed along Harbour Drive, a new typology is needed to ensure a coherent waterfront design. A new typology that takes cues from the traditional merchant premises would enhance the connection between the city and it's waterfront. Instead of a medium for goods to enter the city, this modern adaptation would encourage people to travel to the waterfront.

## **The Street**

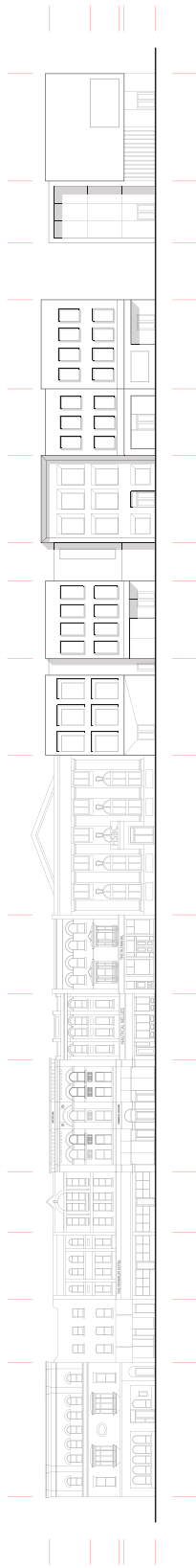
Many modern buildings along Water Street are out of scale with the rest of the city. One example of this is Atlantic Place: a nine story structure that casts a constant shadow on the street and blocks neighboring waterfront views. Verticality isn't the only issue though as its continuous facade spans half a block and offers very little to the street. The traditional shops that line Water Street are replaced with a blank wall of insular shops, detracting from street life.

As Gehl states in *Life Between Buildings*, "Big buildings with long facades, few entrances, and few visitors mean an effective dispersal of events. The principle, in contrast, should be narrow units and many doors" (93). "When buildings are narrow, the street length is shortened, the walking distances are reduced, and street life is enhanced" (94). A new premises typology should be sensitive to the existing rhythm of the street and provide storefront spaces for small business that attract people and promote life in the street. Once the ground floor is addressed, the upper floors could be used as intercon-





Existing facade with Atlantic Place.



Proposed facade that keeps with the rhythm and height of the street.

nected office spaces that allow people to work downtown.

### **The Laneway**

To strengthen the connection between Water Street and the waterfront, the traditional laneway system should be incorporated into the new premises typology. These informal routes cut through buildings making the urban fabric more porous. They also enhance the feeling of exploration as people wind their way through what seems to be a series of secrete passageways.

### **The Courtyard**

Traditional fishing premises (including the Murray Premises) often contained courtyards where employees could work while being sheltered from the harsh North Atlantic winds. A new premises typology would also take advantage of this design but use it instead as a place of leisure. Cool winds often keep people inside but a protected, sunny courtyard could extend Newfoundland's short summer season and be an ideal location for restaurant decks.

Courtyards also help denote a level of privacy and increase the level of interaction between those that live or work in the area. "Physical Structure must reflect and support the desired social structure. Living room is where the family meets, courtyard allows for larger interaction then everything surrounds the street."(Gehl 2006, 58) A large public courtyard would offer the public a place to meet and interact while a smaller private courtyard would give residents living in the premises

their own outdoor space.

### **Housing + Hotels**

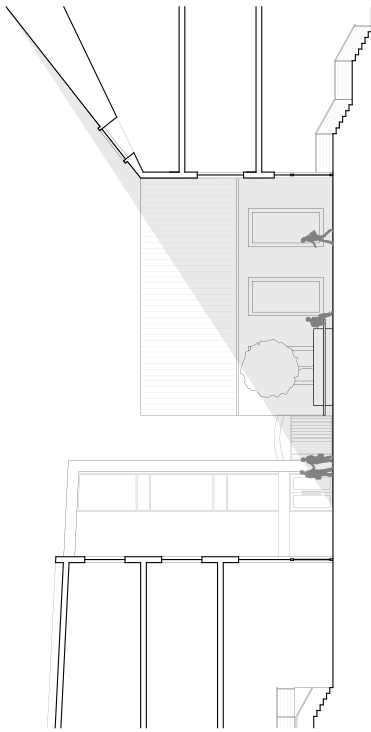
The main reason for the large number of parking lots and parking garages along the harbour is that there aren't enough people living in the downtown core. Housing along the waterfront would reduce the number of commuters and ensure that the downtown core is lively at all times during the week, not just during the traditional 9-5 peak.



Proposed Laneway

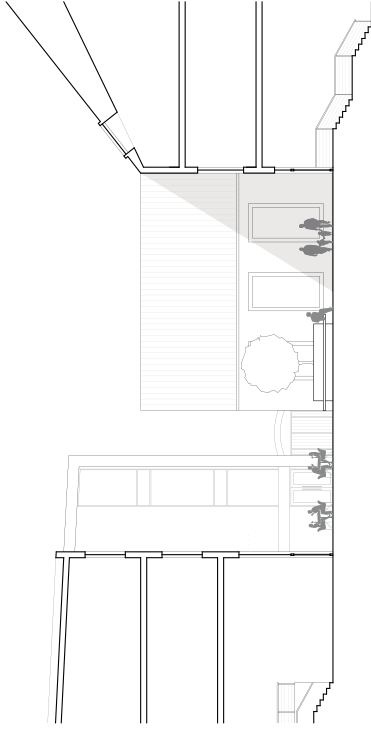


Proposed Courtyard



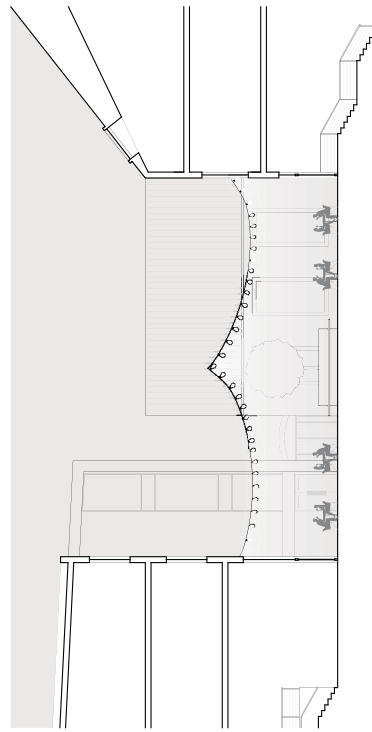
**SUMMER MORNING**

During the morning the courtyard is busy with people heading to work. Some enjoy a coffee from the courtyard cafe while others meet colleagues and discuss the days upcoming events.



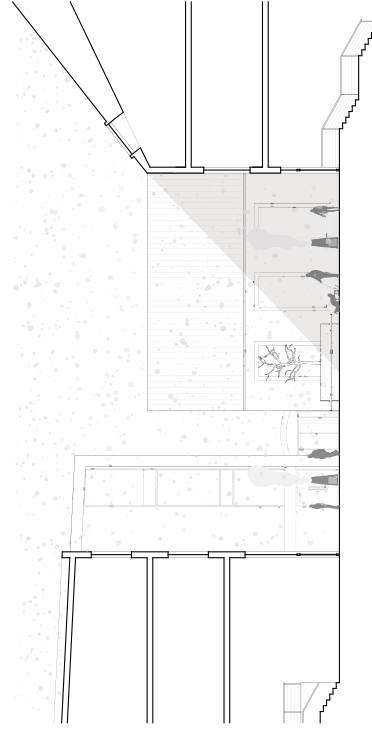
**SUMMER AFTERNOON**

During the afternoon the courtyard is filled with light. Families make their way down to enjoy a day in the park while others take their lunch break at the courtyard cafe.



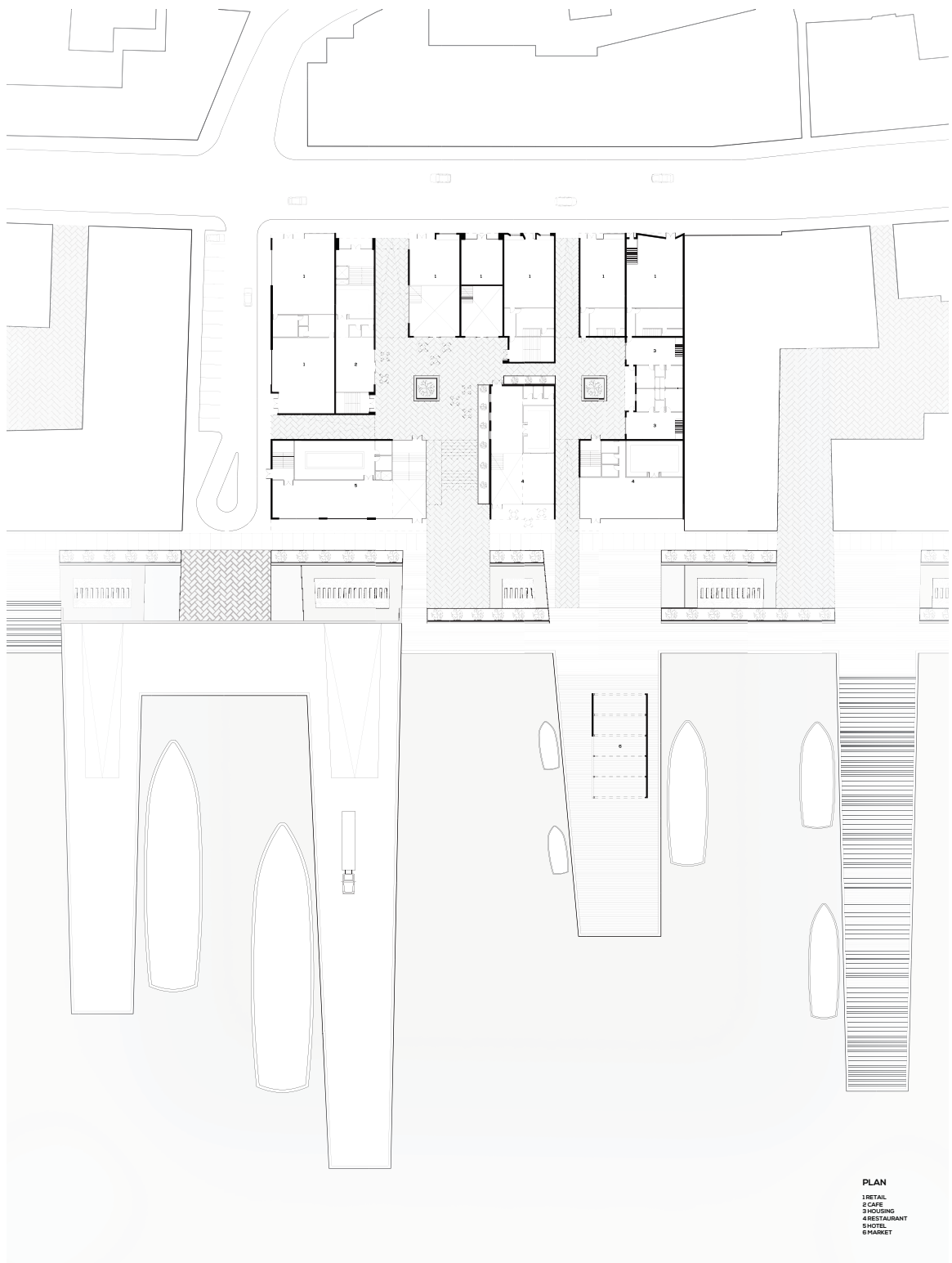
**SUMMER EVENING**

During the evening the courtyard is transformed into an outdoor dining room. Restaurants put out more tables and turn on the outdoor lighting.



**WINTER AFTERNOON**

During the winter the courtyard is a place of refuge from the harsh winter wind. People take a break from winter activities in the park to warm up next to the outdoor heaters and grab a hot drink.



Proposed Site Plan



## **Layering**

Today, the waterfront consists of an access road, security fence and marginal wharf that are all geared to support existing industry. Unlike many other cities, these industries aren't leaving anytime soon. While the competing economic and social interests do pose a design problem they also present a unique opportunity.

## ***Authenticity***

"Port uses-with their cargo and fishing vessels, dramatic industrial cranes, monumental dry-docks, and gritty ship repair yards-add vitality and authenticity to urban waterfronts, enhancing their aesthetic appeal"(Fisher and Benson 2004, 14).

These industrial elements have been at the centre of harbour cities for centuries and have become part of their identity. While many harbour redevelopments have relegate industry to areas outside the city in favor of a boardwalk and waterfront shops. St. John's limited waterfront space requires an innovative solution in which both uses can coexist and perhaps even enhance each other.

## **Safety**

There are very real safety concerns surrounding industrial harbour activities for both bystanders and the operators themselves. Barriers are necessary to keep everyone safe but they don't have to be as obstructive as a chain link fence. Differing planes, viewing platforms and even the water itself can serve as barriers that don't limit those who would like to enjoy the waterfront.



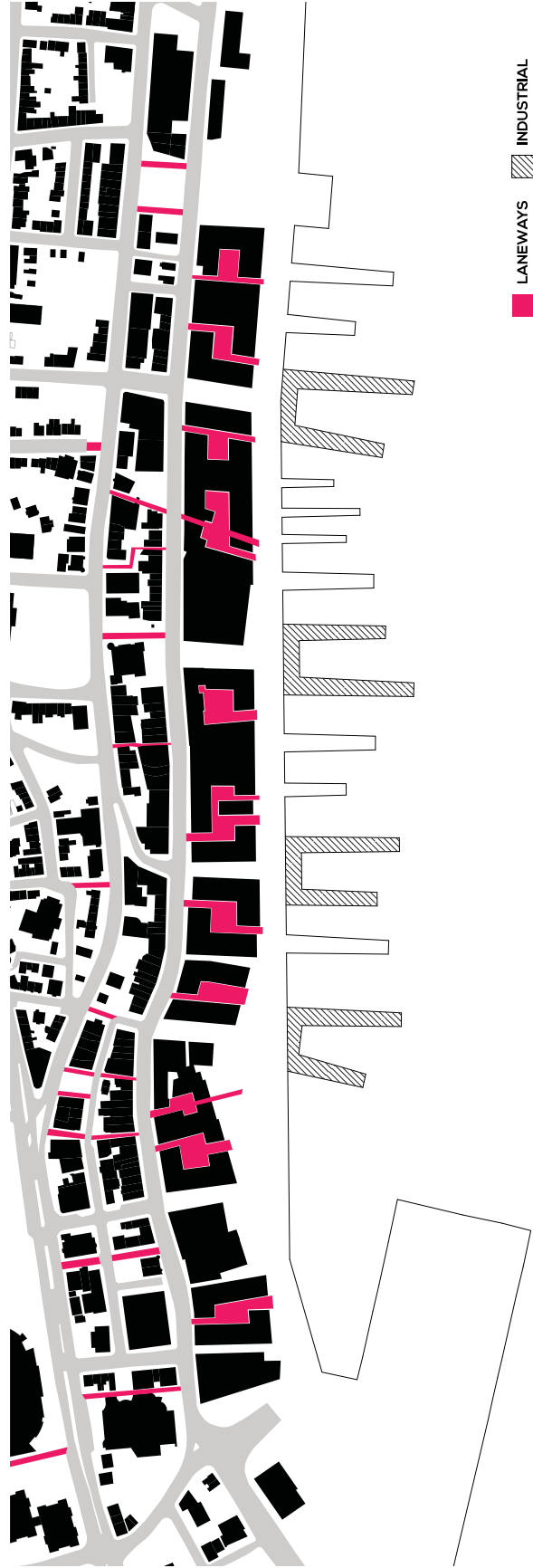
## **The Solution**

### ***Linear Park + Access Road***

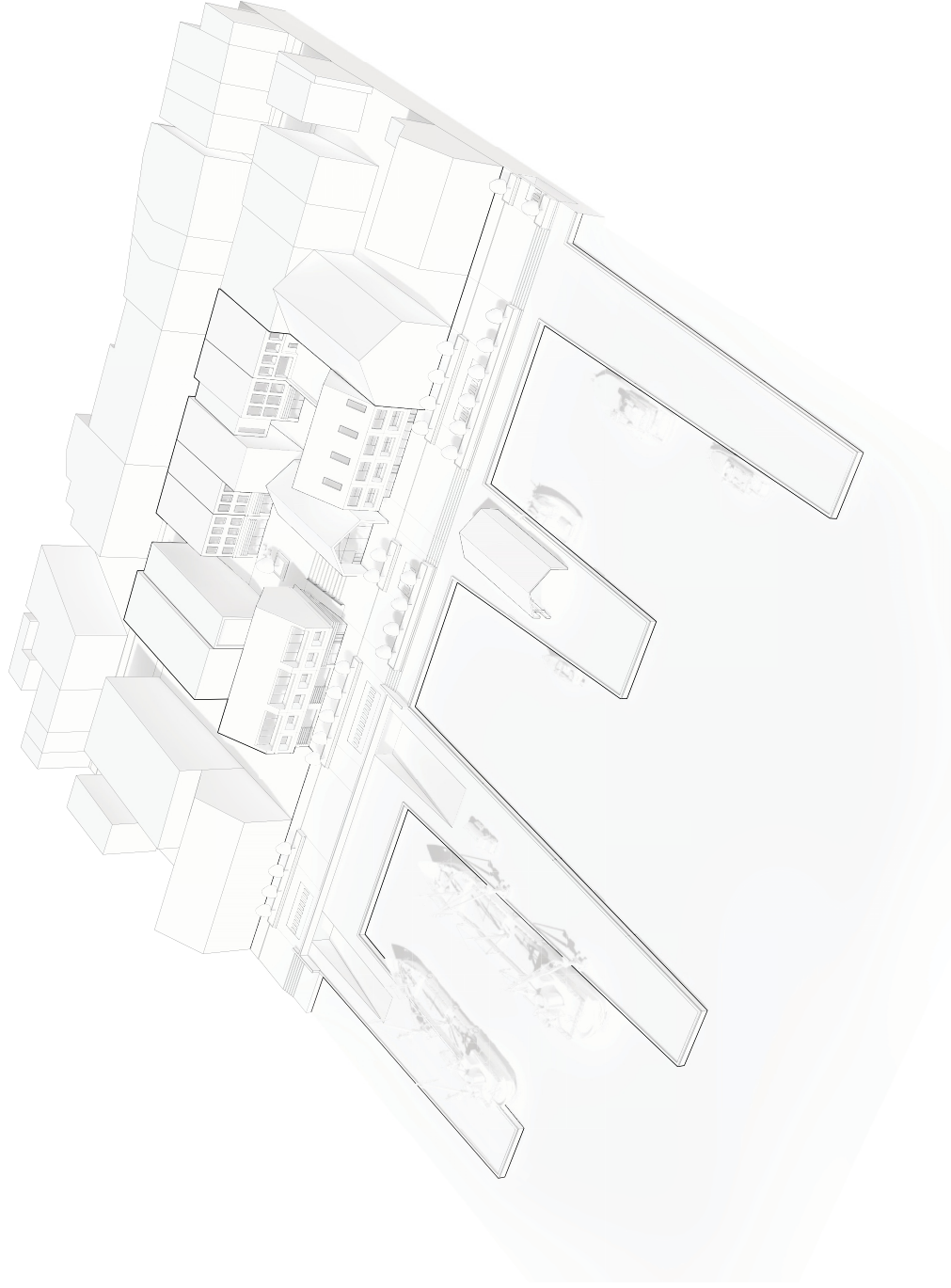
The Olympic Sculpture Park is a great example of the layering of industrial and social programs. The existing highway and train track were bridged over with a public sculpture park, connecting the city with the waterfront (Huber 2008, 6). In St. John's, the access road along Harbour Drive is critical, giving industry a direct link to the highway and keeping heavy traffic out of the downtown. Unfortunately, it also forces pedestrians to cross a busy street. By lowering Harbour Drive and constructing a continuous linear park over top both industrial and post industrial uses can take advantage of direct waterfront access. Eliminating the traditional safety concerns that exist along the harbour today.

### ***Finger Piers***

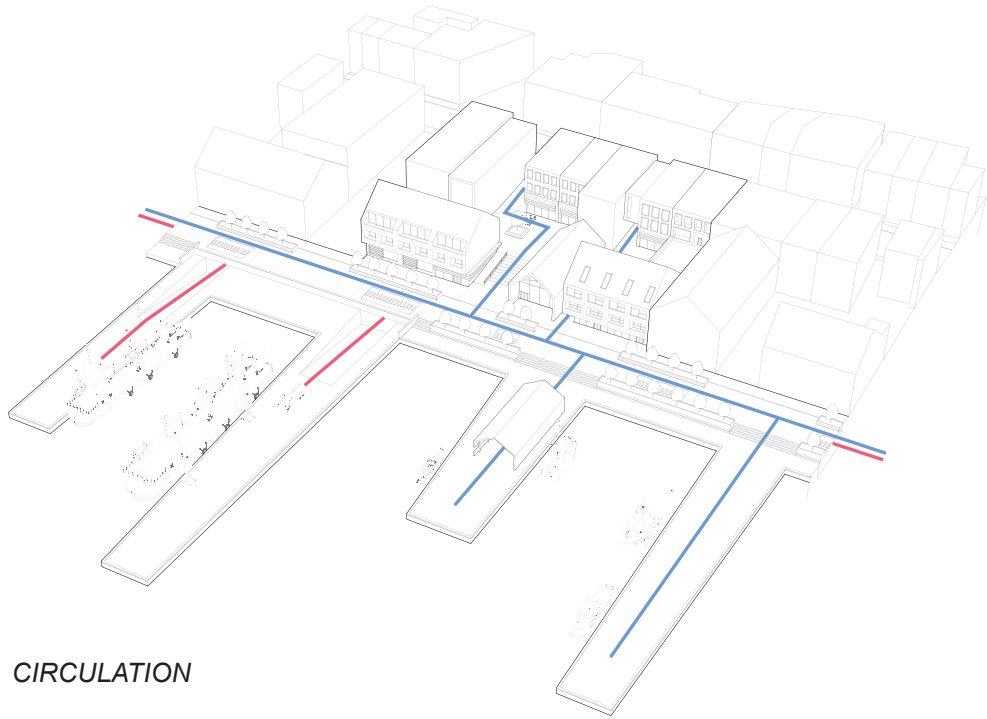
The wharf currently runs parallel to the city providing limited space that is almost completely taken up by industrial activity. By reintroducing finger piers to the harbour, the perimeter of accessible waterfront can be greatly increased. Additionally, industrial and social programming be safely staggered giving both interests safe, unobstructed access to the water. Public piers will be accessible from the linear park while industrial piers will be accessible by ramp from the underground access road.



Proposed Site Plan with repeated premises typology.

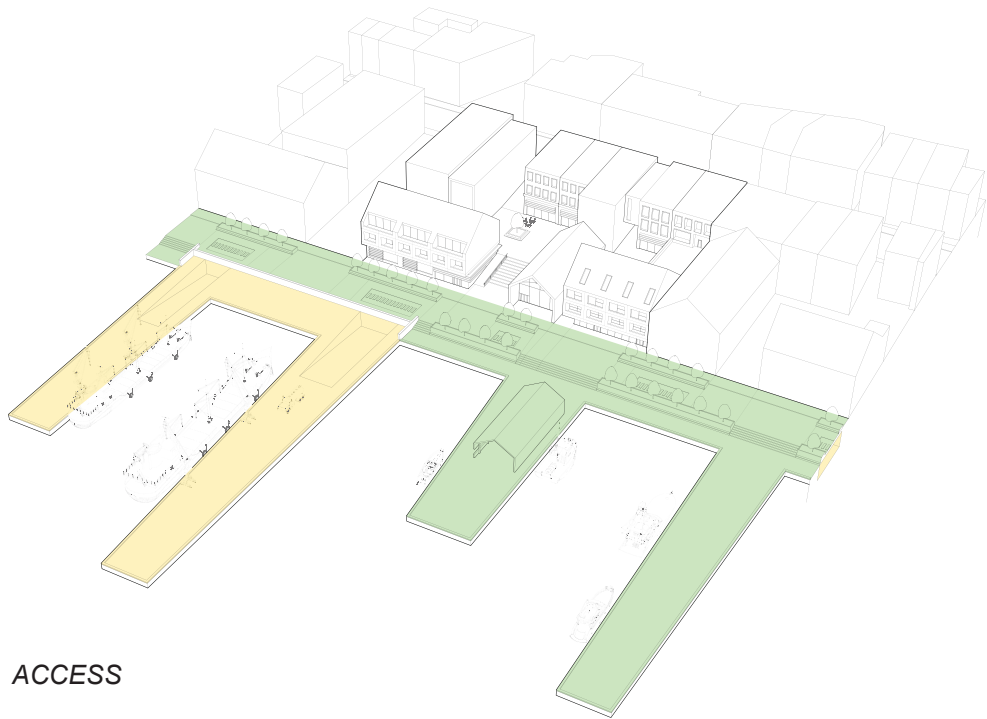


Proposed axonometric showing the premises, linear park and finger piers.



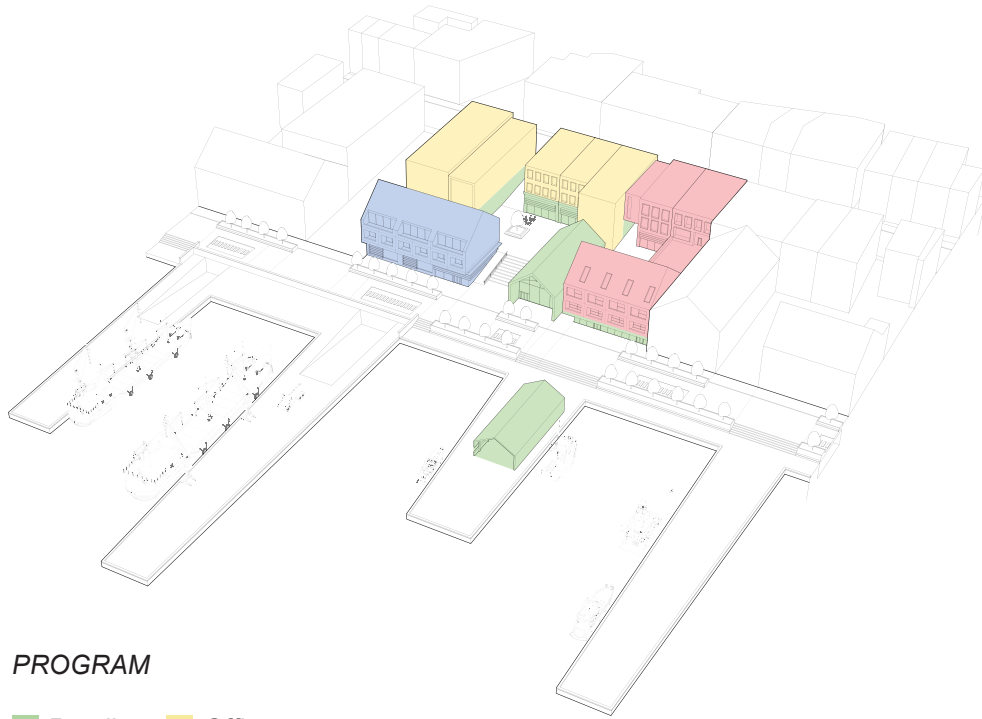
*CIRCULATION*

■ Public ■ Industry



*ACCESS*

■ Public ■ Industry



*PROGRAM*

- Retail
- Office
- Hotel
- Housing

## **Phasing**

A project of this scale will require intense planning and cooperation from many different groups. While any new building restrictions are designed to improve the city as a whole they will no doubt be contentious for the developers and land owners who have a stake in the area.

### ***Phase I***

Providing an accessible waterfront should be the first priority and will be the basis for any future development. Lowering the access road, constructing a linear park above and projecting finger piers into the harbour will make the harbour functional for both pedestrians and existing industries. This area is the easiest to redevelop as it is owned by the City of St. John's and operated by the St. John's Port Authority.

### ***Phase II***

Once the waterfront is under development the next step is to focus on the connection to the rest of the city. This involves implementing the new premises typology to increase porosity and activity. Creating new development regulations will ensure that any new construction will be in line with the premises typology design. The parking lots and vacant spaces along Harbour Drive most likely represent the first steps in realizing a consistent waterfront concept.

### ***New Building Regulations***

- 1) Buildings must be between three to four stories in height.

2) The Water Street facade must have street level storefront and maintain the existing rhythm of the street.

3) Each half block must contain a courtyard and adjacent laneway.

### ***Phase III***

Phase III is the most difficult and requires a longer point of view. The large office buildings that currently line the harbour don't fit within the new waterfront plan but still represent a massive capital investment. Obviously these buildings shouldn't immediately be torn down and replaced with the new premises typology. They should however slowly be replaced as their useful lives run their course.

According to a study by Forintek Canada Corp, 80% of steel buildings have a lifespan of less than 50 years, with the majority being decommissioned after just 26-50 years. The building owners surveyed provided many reasons for decommissioning with the most common reasons being the physical condition of the building and the suitability of the building for its intended use (O'Connor 2004, 3). With many corporate clients heading outside the downtown core in search of cheaper rent and the existing office buildings approaching the end of their estimated lifespan. There seems to be an opportunity to totally reimagine the waterfronts built environment.

### ***Fortis Building***

Constructed: 1969

End of Life: 2019

**Atlantic Place**

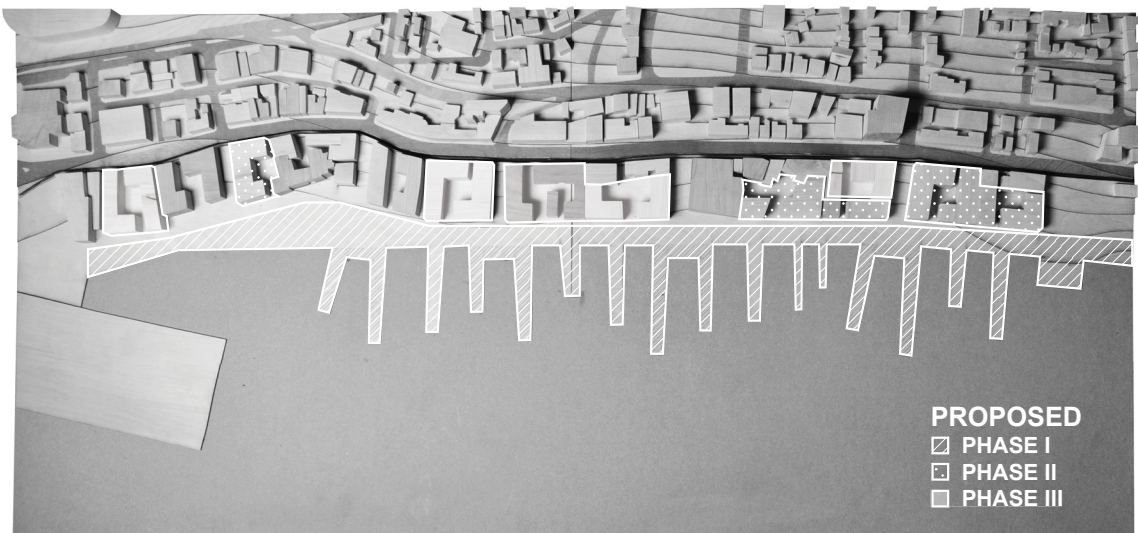
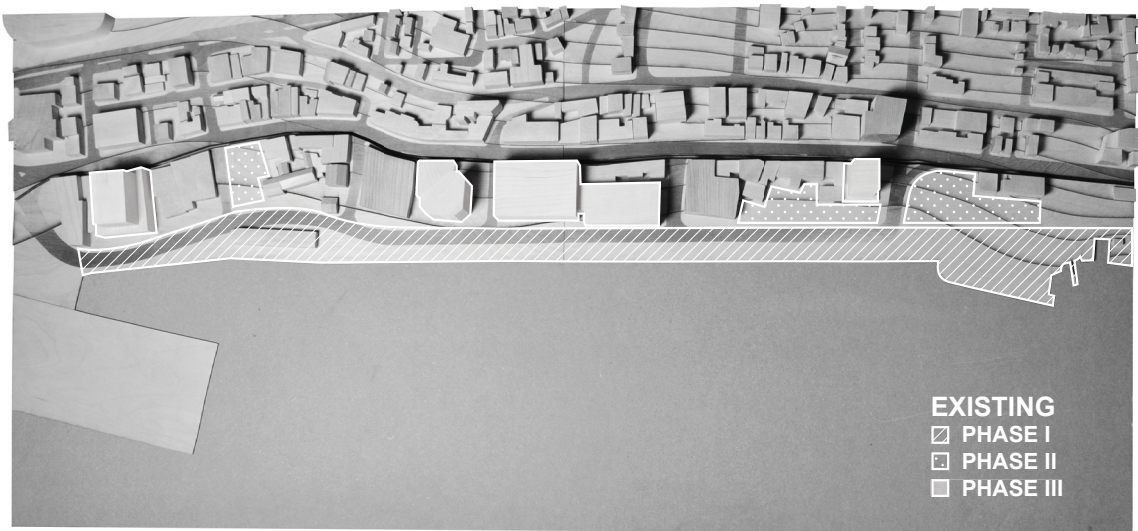
Constructed: 1975

End of Life: 2025

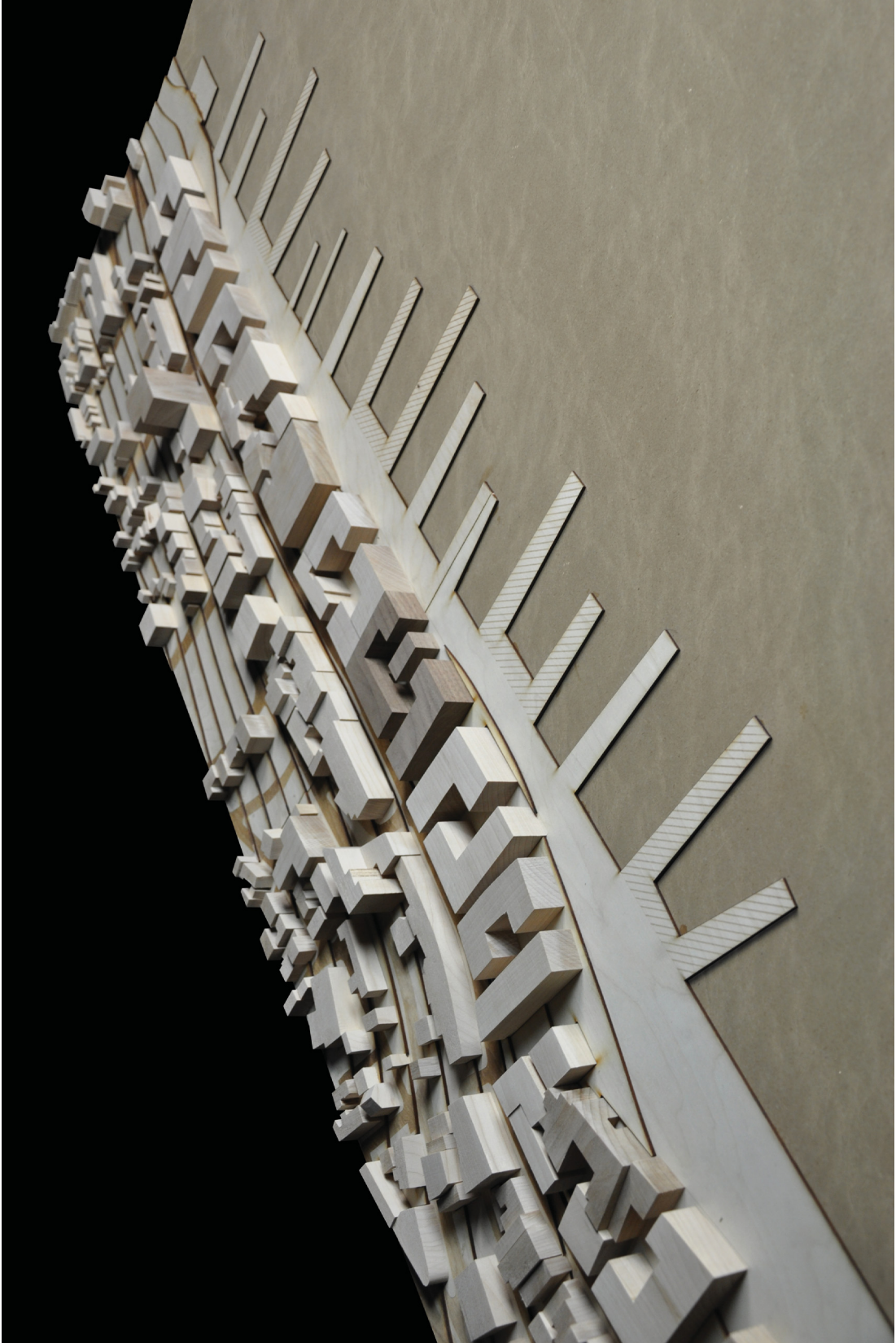
**Scotia Centre**

Constructed: 1987

End of Life: 2037







Massing model showing the waterfront proposal.

## CHAPTER 3: CONCLUSION

As cities transition from working industrial harbours to those that support post-industrial leisure activities, the design strategies outlined in this thesis demonstrate that there is potential to support elements of both. By layering industrial and post industrial programming it is possible to create a safe, modern harbour without losing the authenticity of a working waterfront. This thesis also demonstrates the possibilities of a local design approach that is sensitive to the context and history of the place. Such a design moves the waterfront into the future while celebrating it's past.

As for St. John's, this is a dramatic proposal that completely reimagines what the waterfront could be. A project of this magnitude would take decades to complete as buildings are decommissioned and new ones are built to take their place. While this certainly isn't the only way to approach the problem, it is one that is sensitive to the existing context and history of the place. Right now, the most urgent need for the St. John's waterfront is a comprehensive harbour plan that would ensure that any new development will meet the vision for the future. The waterfront could once again become the focal point of the city but without a long term plan the harbour will never reach it's full potential.

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