

Backgrounder: Cherry Street North Bridge

As part of the \$1.25-billion Port Lands Flood Protection project, Waterfront Toronto will install four new bridges. Two of these bridges will cross the Keating Channel south of Lake Shore Boulevard at the location of New Cherry Street, which will be built west of the existing Cherry Street. The first of these Cherry North Bridges is leaving Dartmouth, Nova Scotia for Toronto in October 2020.

About the Cherry North Bridge

- The Cherry North bridge arriving in November weighs 340 tonnes and measures 57 metres long
- The cost for all four bridges is \$100 million
- The bridges were designed and engineered by Entuitive, Grimshaw and Schlaich Bergermann
- After an open procurement process, Halifax-based Cherubini Metal Works won the contract to fabricate the bridges. Some specialized work was also done in the Netherlands by a firm called CGI Specifically, 3D bending of steel plates, which is something only a limited number of firms do
- The steel is Canadian with the exception of the 3D shell components
- The steel bridges are being painted white, each with a distinctive colour on the interior to contrast with the white exterior and accentuate the bridges' curves
- Bridges will be delivered by barge in large sections and assembled on site in the Port Lands

The Delivery Route



The bridge will leave Dartmouth, Nova Scotia, by barge and travel along the St. Lawrence Seaway to Toronto. The bridge foundations have already been completed. When the barge arrives in Toronto's Inner Harbour, the prefabricated steel superstructure will be placed on the completed foundations and crews will proceed with the installation process.

The bridge's journey along the St. Lawrence will be tracked at <https://twitter.com/WaterfrontTO> with daily updates using #BridgeWatchTO

The Port Lands: History and Context



Looking southeast from downtown Toronto towards the Port Lands.

The Port Lands, bounded by the Keating Channel/Don River and Lake Shore Boulevard in the north, the Toronto Inner Harbour in the west, Ashbridges Bay in the east and Lake Ontario and Tommy Thompson Park in the south, was created by decades of infilling what was once one of the largest wetlands on Lake Ontario. Beginning in the late 1800s, the area was gradually filled in to make more land available for industry and shipping. As the natural mouth of the Don River was filled in, the Keating Channel was created to provide an outlet for the Don River watershed into Lake Ontario and a means to convey storm water.

Today, the Port Lands area sits within a designated floodplain, which is an area anticipated to experience flooding in the event of a regional storm or the 100-year flood – whichever is greater. Providing flood protection for the Port Lands was identified as a top priority by all three orders of government when they first established Waterfront Toronto in 2001.

In the last decade, governments across the country have had to contend with weather events that are occurring with more frequency and severity. In particular, floods are happening more often in urban areas and the financial risk to governments to pay for the damages is also increasing.

About Port Lands Flood Protection



Area shown in blue is currently at risk of flooding from the Don River during a Regulatory Storm, defined as the greater of 100-year storm or 1954's Hurricane Hazel.

Currently, about 290 hectares (715 acres) of southeastern downtown Toronto, including parts of the Port Lands, South Riverdale, Leslieville, south of Eastern Avenue and the East Harbour development site, are at risk of flooding from the Don River watershed and cannot be revitalized until they are flood protected. Port Lands Flood Protection is a comprehensive solution to flood protection that also addresses the fundamental challenge of transforming the underused and post-industrial Port Lands into a long-term asset that will support Toronto's growth and economic competitiveness.

The project will create a new mouth for the Don River in the middle of the Port Lands between the Ship Channel and the Keating Channel, as well as the foundations of a new urban island neighbourhood called Villiers Island, and more waterfront access for everyone. It will also create new natural habitats and re-establish wetlands in the area, which provide social and environmental benefits and naturally moderate the effects of flooding and erosion. Naturalizing the mouth of the Don River will provide the necessary flood protection and unlock the development potential of this premier waterfront area.

Project Breakdown



Left: An aerial view of the Port Lands before the start of construction. Right: Future vision of the Port Lands once Port Lands Flood Protection is complete. Villiers Island will emerge as a connected and complete community with parks and opens spaces along the Don River, the Keating Channel and Lake Ontario.

The project's separate components can be divided among four broad categories:

Flood Protection

This includes:

- Excavating the river valley and remediating contaminated soil
- Creating the new grading around the river's banks
- Creating the wetlands and Don Greenway
- Structures and features that allow for better conveyance and control of storm waters

Bridges

This includes:

- New Cherry Street North Bridges will replace the existing bridge over the Keating Channel and accommodate the future extension of transit into the Port Lands
- Cherry Street South Bridge will span the new river valley north of the Ship Channel
- Commissioners Street Bridge will span the new river valley west of Don Roadway
- Existing Lake Shore Bridge will be lengthened to accommodate widening of the Don River

Roads and other municipal infrastructure

This includes:

- Stormwater and wastewater systems
- Realigning a section of Cherry Street
- Rebuilding a section of Commissioners Street
- Rebuilding a section of the Don Roadway

Parks

Includes:

- Parks along the new river valley
- Park along the edge of Toronto Harbour
- Pedestrian and bike trails and paths, and waterfront access through new naturalized areas

Find a project breakdown with details about each component at <https://portlandsto.ca/interactive-project-map/>

Project Timeline:

The project has been informed by extensive engagement and consultation with the public, government agencies, stakeholders, landowners and developers, and is consistent with the City of Toronto's primary waterfront planning document, the Central Waterfront Secondary Plan. Waterfront Toronto has worked closely with Indigenous communities throughout the process of studies, envisioning the waterfront design and early construction and has continued to engage and consult as design and construction progress.

In October 2016, Waterfront Toronto completed a Due Diligence Report, which was aimed at providing more information on the project to inform government decision-making on funding. The report provides great certainty on the costs, risks, scheduling and implementation strategy associated with the project. This report is available on the project website: <https://goo.gl/HjWv9>

In June 2017, \$1.25 billion in shared funding was announced by the governments of Canada, Ontario and Toronto to deliver the full Port Lands Flood Protection project.

In December 2017, construction began on the Cherry Street Lakefilling project, part of the larger Port Lands Flood Protection project. This early start was thanks to \$65-million in tri-government funding through the Clean Water and Wastewater Fund. Construction on Cherry Street Lakefilling was completed in 2020.

Construction began on the full Port Lands Flood Protection project in July 2018. Work to date includes installation of on-site soil management and water treatment facilities, completion of dock walls in the Keating Channel, extensive marine landscaping, site preparation at the location of future parks and roads, bridge foundations at three locations, site preparation north of Lake Shore Boulevard and ongoing deep excavation of the river valley and Don Greenway. The project is forecasted to be complete by 2024.

Find more details about our construction timeline

<https://www.youtube.com/watch?v=95p8t6pVMr8&list=PLE79616CC7AB546D8&index=16>

What does Flood Protection Deliver?

[Live](#)

Unlocking the Port Lands for revitalization will help address the critical need for family and affordable housing as part of a development of new sustainable communities next to Toronto's downtown core that are connected by transit and cycling networks.

- An estimated 18,000 to 25,000 people will live in the Port Lands, after it is fully developed
- 20 per cent of residential units will be affordable rental housing
- An additional five per cent of residential units will be affordable ownership

A new island community – Villiers Island – will emerge as a result of this project. The aim is to establish Villiers Island as an innovative model for a climate positive community and to demonstrate excellence in sustainable community design. Further, flood protection is vital for the development of the East Harbour commercial development site, which offers significant potential as an employment hub.

Work

- Employment estimates project 25,000 to 30,000 jobs in the revitalized Port Lands
- Projected employment opportunities in the East Harbour development

Play

The naturalized river will include:

- 25 hectares of publicly accessible greenspace
- 11 hectares of parkland

Economic Impact and Jobs

A 2016 update to the study completed by urbanMetrics estimates that the project's construction phase has the potential to deliver wide economic benefits. Spending on design and construction of the project will generate approximately:

- \$1.1 billion in value to the Canadian economy
- 10,829 person years of employment
- \$373 million in tax revenues to all orders of government

Economic benefits related to future development unlocked by the project (not including the impact of the proposed East Harbour development), including approximately:

- \$4 billion in value added to the Canadian economy
- 41,100 person years of employment
- \$1.5 billion in revenues to the three orders of government

This creative approach to flood protection will improve Toronto's resiliency by creating:

- More than 1,000 metres of new river channel
- 14 hectares of new coastal wetland
- Three hectares of terrestrial habitat to strengthen biodiversity and help clean our water