

## Backgrounder: North Plug Removal – Port Lands Flood Protection November 2024

Removing the “north plug” is the most significant flood protection milestone in the \$1.4B project’s history. This milestone completes the new mouth of the Don River, allowing the river to flow freely, and demonstrates the success of tri-government collaboration over 20 years to deliver a complex project through innovative city-building efforts. It marks the creation of a new island on Toronto’s waterfront and brings the vision of a waterfront city within reach. Across the Eastern Waterfront, plans include homes for more than 100,000 people and over 97,000 jobs along the Eastern Waterfront.

The new island that has been created through this ambitious engineering feat totals 39.6 hectares. The longer-term vision for the island includes:

- Over 15,000 residents; over 9,000 housing units; nearly 3,000 jobs
- 20.2 hectares of parkland as part of a comprehensive 35-hectare park system
- 19.4 hectares of developable land
- Extending waterfront transit along Queens Quay East into the Port Lands
- A complete community – new island community advancing best-in-Canada sustainable development practices

### About the North Plug

The entire river valley is surrounded by cutoff walls – underground and underwater walls that contain the new river system. In the locations where water needs to flow, these walls were reinforced so they could function like dams once excavation was complete and the river was flooded. These reinforced sections are known as “plugs” because they were separating the new river from the surrounding water bodies.

In January 2024, the new river was filled with water, but the plugs remained to allow for a slow and controlled process. Once the water in the river was at the same level as the lake water, the plugs that separate the river from the lake could be removed.

The first to be removed was the “west plug” at the location where the new river meets Lake Ontario, in July 2024. Now, the north plug is being removed, which will finally reconnect the existing Don River with the new river valley we built, allowing the river to flow.

- The north plug is the portion of the wall that separates the existing Don River and Keating Channel from the new river valley through the Port Lands. It is south of the Lake Shore Bridge.
- To remove the plug, first the concrete will be ground off of the reinforcing steel beams. Once the concrete has been ground away, divers will cut through the beams so that they can be pulled out by an excavator.
- Until now, the North Plug has largely prevented the Don River from flowing through the new river valley. With its removal, the river can now flow freely. This is a major milestone towards achieving flood protection.

## The Location



The “north plug” is south of the Lake Shore Bridge, where the Don River will flow into the new river valley – its location is identified on this map.

## The Port Lands: History and Context



*Looking southeast from downtown Toronto towards 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, the Port Lands 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

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 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 and more waterfront access for everyone. An Indigenous Advisory Circle has chosen “Ookwemin Minising” (pronounced Oh-kway-min Min-nih-sing) as the island’s name meaning “place of the black cherry trees” in Anishinaabemowin/Ojibwemowin. Toronto City Council will consider the name next week. 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. The 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 Bridges replace the existing bridge over the Keating Channel and accommodate the future extension of transit into the Port Lands
- Cherry Street South Bridge spans the new river valley north of the Ship Channel
- Commissioners Street Bridge spans the new river valley west of Don Roadway
- Existing Lake Shore Bridge 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>