

Imperial

Esso Mobil

Imperial's Sarnia Products Pipeline

# Waterdown to Finch Project



# Safety and reliability: pipeline replacement from Waterdown to Finch

Imperial's Sarnia Products Pipeline is important infrastructure that provides fuels used by households and businesses across the Greater Toronto and Hamilton Area (GTHA). This includes a significant portion of jet fuel for Toronto Pearson International Airport, as well as gasoline and diesel fuel that keeps people, goods and services moving throughout our region.

Operating safely in the region for many years, Imperial is proactively replacing approximately 63 kilometres of the line with new pipe. This section runs from Imperial's Waterdown pump station in rural Hamilton to the company's terminal storage facility in Toronto's North York area.

## **Project highlights**

### **Working within the existing pipeline corridor:**

Most replacement work will take place in close vicinity to the pipeline.

Imperial is committed to ensuring the safety and reliability of the Sarnia Products Pipeline throughout the construction period of the Waterdown to Finch Project. The existing pipeline will continue to operate reliably until the Waterdown to Finch Project is complete.

In addition to receiving OEB approval in March 2020, Imperial has since passed a number of additional permit approvals and is now able to begin construction of the proactive replacement initiative in early December 2020.

**Informing community members:** Imperial is committed to meaningful community, government and Indigenous engagement throughout the duration of the project.

**Protecting our local environment:** Imperial is continuing to work with government and regulators to protect our local environment and ensure that the highest standards of environmental safety are observed during the replacement process.

**Keeping local traffic moving:** Imperial is working closely with municipalities and residents to ensure that impacts on traffic are as limited as possible during the replacement process.

If traffic impacts are anticipated, Imperial will proactively notify municipalities and residents.

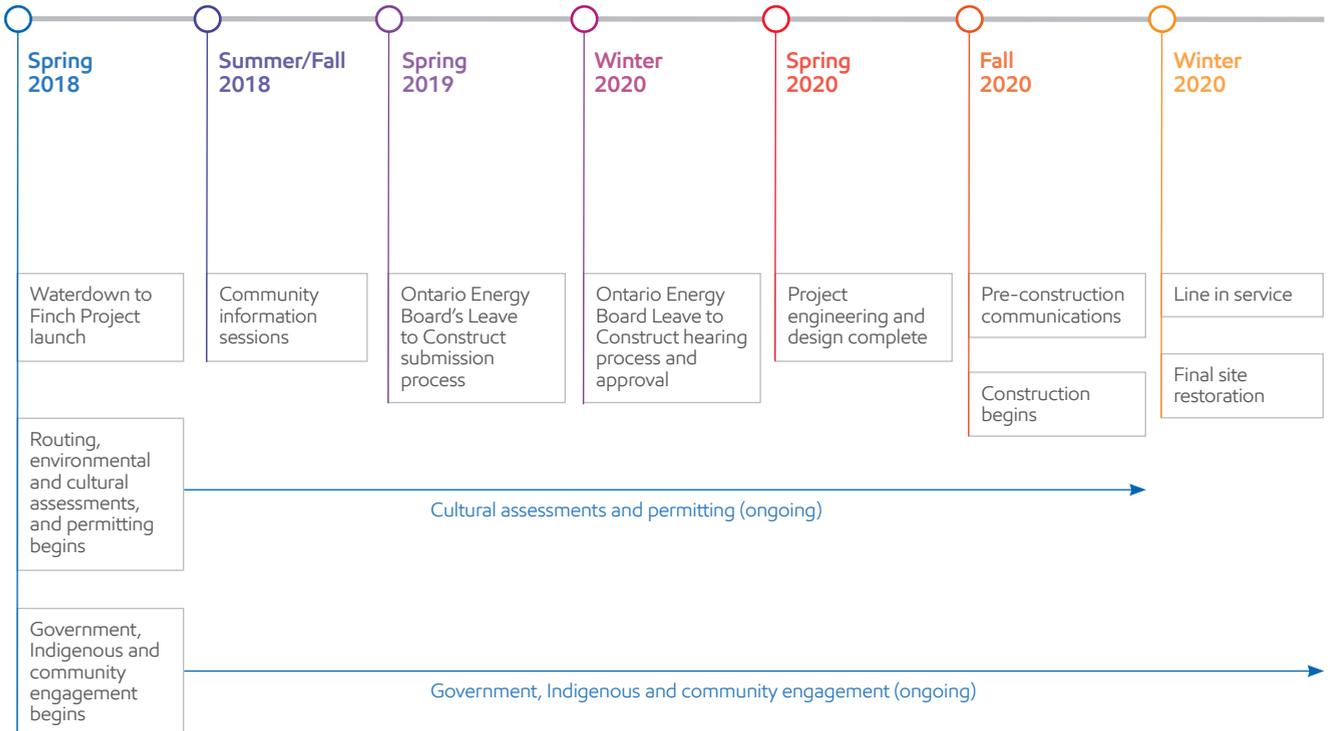
**Creating jobs here in Ontario:** Imperial employs approximately 1,200 employees and up to 3,500 contractors per day in Ontario. Imperial has selected a third-party contractor to complete the initial phase of construction.

The replacement project is anticipated to create 400 direct jobs in Ontario supporting project management and construction activities. Imperial and our third-party contractor will look to work with local and Indigenous contractors and business services throughout the life of the Waterdown to Finch Project.

## Waterdown to Finch Project location



## Work timeline\*



\* Timeline is subject to regulatory and permitting approvals

# Land, regulatory and permitting approvals

In addition to landowner access and Indigenous collaboration, Imperial has worked closely with a broad range of local, provincial and federal entities on permits and project approvals related to the Waterdown to Finch Project including the Ontario Energy Board and its Leave to Construct process. A full list of all regulatory and permitting bodies is included below.

Before construction began, Imperial engaged with landowners regarding access to our easements on their property. Concurrently, we engaged with Indigenous groups to understand their interests and explore opportunities to further collaborate in the region.

In addition to landowner access and Indigenous collaborations, Imperial has received regulatory approval, permits or project approvals from the following entities listed in alphabetical order:

- **Federal**
  - Environment and Climate Change Canada
  - Fisheries and Oceans Canada
  - Transport Canada
- **Provincial**
  - Infrastructure Ontario
  - Niagara Escarpment Commission
  - Ontario Energy Board, and the Ontario Pipeline Coordinating Committee
  - Ontario Ministry of Agriculture, Food and Rural Affairs
  - Ontario Ministry of the Environment, Conservation and Parks
  - Ontario Ministry of Indigenous Affairs
  - Ontario Ministry of Natural Resources and Forestry
  - Ontario Ministry of Tourism, Culture and Sport
  - Ontario Ministry of Transportation

- **Conservation Authorities**
  - Conservation Halton
  - Credit Valley Conservation Authority
  - Hamilton Conservation Authority
  - Toronto and Region Conservation Authority
- **Municipalities/Regions**
  - City of Burlington
  - City of Hamilton
  - City of Mississauga
  - City of Toronto
  - Region of Halton
  - Region of Peel
  - Town of Milton
  - Town of Oakville
- **Other**
  - Technical Standards and Safety Authority



# Minimizing construction impacts

Imperial is working carefully with the regulator and different levels of government to plan the Waterdown to Finch Project so that construction impacts are as limited as possible.

## **Routing, environmental assessments and permitting**

- Engineers and environmental surveyors work together to identify a pipeline route that minimizes impact to the environment and surrounding community.
- Engineering, Indigenous technicians and environmental experts work to understand the soil, below ground conditions, vegetation, species, archaeologically sensitive sites, water crossings and environmentally sensitive areas.
- These reports have been reviewed and approved by permitting and regulatory authorities.

## **Preparing for construction**

- Following the completion of the engineering design plan, Imperial has begun mobilizing teams along the first section of the Project.
- Beginning early December 2020, the first 11km of the pipeline route will be cleared and temporary workspaces, including safety barricades, will be installed.

## **Commissioning/activating the new line**

- The new pipeline will ultimately be connected and tied into Imperial's Waterdown Station and Finch Terminal.
- The pipeline's integrity is inspected by a hydrostatic pressure test. Once the pipe is cleaned and dried, it can be slowly filled with diesel, gasoline or jet fuel.

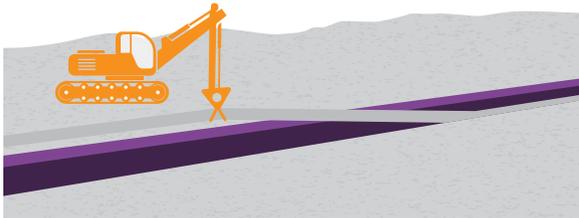
## **Deactivation of current line**

- The deactivated pipe will be removed from service, cleaned, filled with nitrogen, and left in place.
- Deactivation is undertaken to reduce environmental impacts (soil stability, slope stabilization and settlement issues), avoid short and long-term community construction impacts and minimize safety risk for other pipelines sharing the right-of-way.
- Imperial deactivates pipeline segments in accordance with industry best practices (Canadian Standards Association's Oil and Gas Pipeline Systems Code) and provincial regulations (*Technical Standards and Safety Act*).
- Imperial remains responsible for ongoing monitoring, line identification and crossing management of the deactivated line.

# Construction methods

Based on the engineering and environmental surveys, Imperial will perform one of two construction techniques:

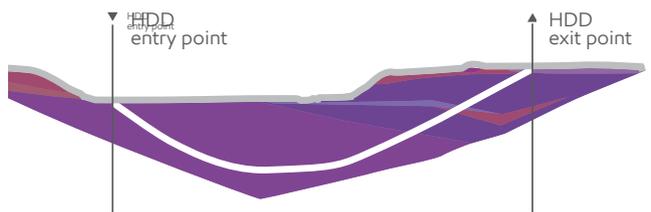
## 1. Open cut construction



Open cut construction is the fastest method for pipeline installation.

- Lay and bend the pipe to match contours of the land.
- Weld, test and inspect the pipe.
- Lower pipe into the trench and cover it for protection.

## 2. Trenchless technology



A horizontal directional drill (HDD) is a method of installing underground pipe using a drilling rig at the surface level. It is best used at sensitive areas, or in dense residential or commercial areas.

- Drill a hole along a designed directional path.
- Enlarge the pilot hole to a diameter suitable for installation of the pipeline.
- Pull the pipeline back into the enlarged hole.

# Our commitment to community engagement and the environment

We appreciate the patience of our neighbours, Indigenous groups and community members as we work to enhance the long-term safety and reliability of our existing operations.

## Community engagement

In order to minimize the impact of disruption, we look to local residents to help inform solutions.

As part of our ongoing efforts to share information, community members have several ways to receive information and ask questions:



[imperialoil.ca/waterdowntofinch](http://imperialoil.ca/waterdowntofinch)



Email: [questions@imperialon.ca](mailto:questions@imperialon.ca)  
Telephone: 416.586.1915



Community information sessions



Construction notices will be delivered to landowners and adjacent landowners a minimum of two weeks before activity begins

## Protecting the local environment

- Every day, our employees work hard to safely supply fuel to keep cars, trucks and planes in our province moving.
- Our Sarnia and Nanticoke refineries play a critical role in meeting Ontario's energy needs. Since 1990, refinery sector greenhouse gas emissions in Ontario have been reduced by 32 per cent.

- In the last five years, we have spent approximately \$1.1 billion at Nanticoke and Sarnia to improve the reliability and safety of our operations.
- Sarnia and Nanticoke both achieved a number of best-ever safety and environmental performance in 2016 and 2017.
- We remain committed to operating our facilities in an environmentally responsible manner and in compliance with provincial regulations.



# Our proactive protection and preventative maintenance program

We attribute our record of safe and reliable operations to our preventative maintenance and proactive pipeline inspection programs.

We work closely with independent pipeline regulators and government permitting authorities to ensure our facilities comply with all applicable laws and regulations.



## Focused on safety

- Imperial's safety performance is among the best in the Canadian energy industry.
- Imperial conducts routine and frequent aerial and daily ground monitoring of the pipeline path.
- Imperial's emergency response plan prioritizes the protection of people and the environment.
- The emergency response team in Ontario is highly trained, appropriately resourced and ready to respond quickly in the unlikely event of a pipeline emergency.



## Monitored 24 hours a day, 365 days a year

- Our pipelines are monitored around the clock.
- Skilled workers in a dedicated control centre with access to monitoring tools can remotely shut down the pipeline and dispatch local workers to inspect the pipeline.



## Adhering to public health measures

- To protect all of our stakeholders including employees, contractors and the general public, Imperial will follow all relevant public health measures and COVID-19 workplace guidelines along the entire Project footprint.



## Pipeline protection measures

- Imperial uses protected steel pipe that is coated to safeguard against external corrosion.
- Cathodic protection, a technique that uses low-voltage electric currents to curb corrosion, works with the coating to protect the pipe from external elements.
- The pipe is buried below ground to protect it from damage.
- Valves are strategically placed along the pipeline path to allow sections of the pipeline to be closed off as needed.
- Automated valves can automatically close if they sense an unexpected pressure drop or be remotely controlled by the operations centre.



## Using innovative technologies and assessment methods

- Industry-leading inspection tools confirm both internal and external characteristics of the steel to identify and prioritize repairs.
- Imperial will use the inspection findings to determine where a pipeline dig and visual inspection are necessary, which informs maintenance and any additional work, such as replacing a section of the pipeline.

# Imperial in Ontario: supporting economic growth

The total Waterdown to Finch Project investment is anticipated to be approximately \$385 million and an estimated 400 direct jobs are expected to be created in Ontario supporting project management and construction activities.

As an integrated products company, at Imperial we explore for, produce, refine and market products essential to society.

We are Canada's largest refiner, producing over 400 thousand barrels per day (kbd).

**Founded in Ontario:** As Canada's largest refiner of petroleum products, we have more than 130 years of experience providing Canadians with reliable energy, while supporting our economy and protecting the environment.

**Supporting Ontario households:** Imperial employs approximately 1,200 employees and up to 3,500 contractors a day in Ontario.

**Major capital projects:** Imperial continues to invest in Ontario with more than \$750 million at our two refineries in Sarnia and Nanticoke. Investments include environmental improvements, energy conservation projects, clean fuel facilities and infrastructure improvements.

**Research and development in Ontario:** Over the past decade, Imperial has invested more than \$300 million in research and development in the province.



**\$886M**

Provincial fuel taxes

### Imperial's ongoing contributions to Ontario

Imperial and Canada's energy industry support economic growth across the whole province. Imperial contributes to Ontario's economy through taxes, employment, investing in technology, creating opportunities for suppliers to provide goods and services to our projects, and supporting education and training programs that develop our skilled workforce of the future.

**\$89M**

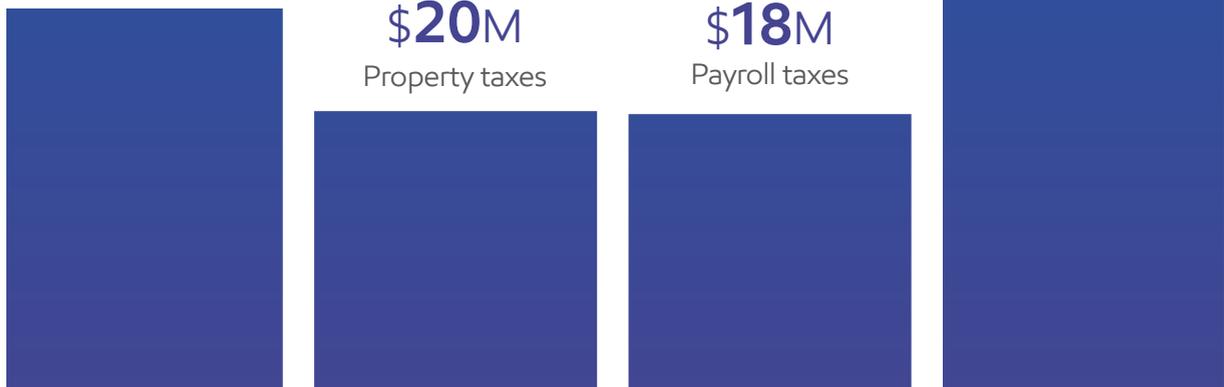
Income taxes

**\$20M**

Property taxes

**\$18M**

Payroll taxes



Based on 2016 contributions

Source: Business Council of Canada 2016 Total Tax Contribution Survey.



We want to hear from you

T: 416.586.1915

E: [questions@imperialon.ca](mailto:questions@imperialon.ca)

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