Highway 400/Dunlop Street Bridge Replacement and Reconstruction of the Highway 400/Dunlop Street Interchange Barrie, Ontario

PROJECT UPDATE

Ministry of Transportation

Group 'B' Class Environmental Assessment and Detail Design Study

G.W.P. 2128-18-00



MCINTOSH PERRY

WELCOME/OVERVIEW

Welcome to the Project Update for the Class Environmental Assessment (EA) and Detail Design Study for the Highway 400/Dunlop Street Bridge Replacement and Reconstruction of the Highway 400/Dunlop Street Interchange and associated work in Barrie, Ontario. The purpose of this Project Update is to present the work completed to date including:

- 1. Detail Design of the EA approved plan for Highway 400
- 2. Project Background & Study Area
- 3. Project Works
- 4. Potential environmental impacts and mitigation measures
- 5. Construction staging
- 6. Next steps

To provide a comment, question or request additional information related to the project, please fill out the form on the <u>Contact Us</u> page of the website.

For email, please send to: highway400dunlopannesunnidale@mcintoshperry.com

CLASS ENVIRONMENTAL ASSESSMENT

This Study is following the approved planning process under the MTO Class Environmental Assessment for Provincial Transportation Facilities (2000) for a Group "B" project.

This includes an assessment of potential impacts of the project works on the study area and the development of mitigation measures to address environmental concerns.

Following this Project Update, the Detail Design of project works will be finalized and a Design and Construction Report (DCR) will be prepared and made available for a 30-day public comment period. Further notification will be provided to the public at that time.

Planning and Preliminary Design Study 2004 & 2017

Environmental Assessment Approved 2006 & 2017

Detail Design – Current Study Notice of Study Commencement

Refine the Technically Preferred Alternative, Project Impacts and Mitigation Measures

Project Update
WE ARE HERE

Finalize Detail Design

Prepare and Submit Design and Construction Report for 30-day Public Comment Period

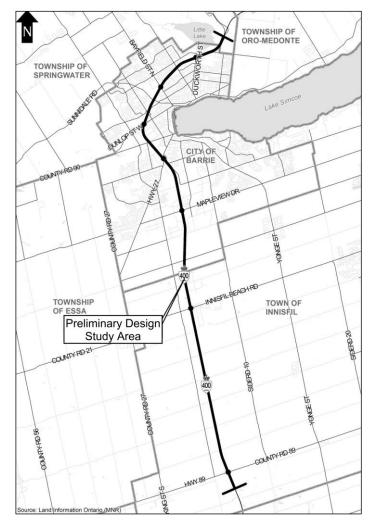


BACKGROUND

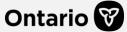
In 2001, the Ministry of Transportation of Ontario (MTO) initiated a Preliminary Design and Class EA Study to identify improvements and widening requirements for the 30 km section of Highway 400 from 1 km south of Highway 89 northerly to the junction with Highway 11.

In 2014, a subsequent Preliminary Design and Class EA Study was initiated to update the previous recommendations based on future (2031) long term traffic projections.

Both studies found that the widening of Highway 400 to 10 lanes was required to accommodate future growth. In association with the widening, major improvements to the corridor include upgrading all bridges, various interchange improvements and installation of noise walls. Environmental clearance for the studies was obtained in July 2006 and December 2017.



Highway 400 from Highway 89 to Highway 11

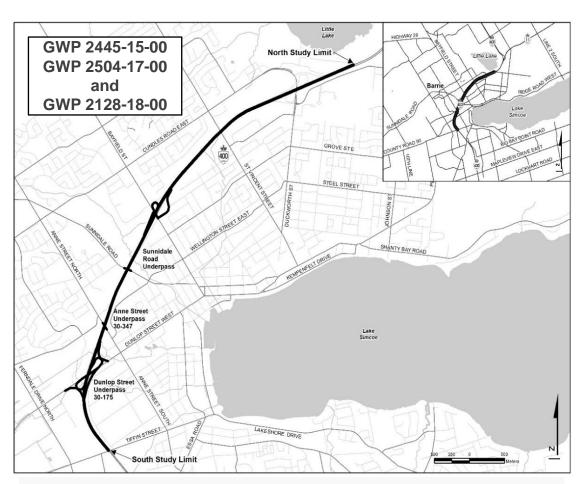


STUDY AREA

The MTO is currently undertaking the Class Environmental Assessment and Detail Design Study for Highway 400 for the following:

- Replacement of three bridges on Highway 400 at Dunlop Street, Anne Street and Sunnidale Road*;
- Reconstruction of the Highway 400 interchange at Dunlop Street;
- Highway 400 pavement resurfacing from Dunlop Street to north of St. Vincent Street including Bayfield Street ramps;
- Highway 400 median barrier replacement and drainage improvements;
- Noise walls in the vicinity of Dunlop, Anne and Duckworth streets, and
- Provisions for future Highway 400 illumination.

A Notice of Study Commencement was posted in the Barrie Advance on March 21, 2019.



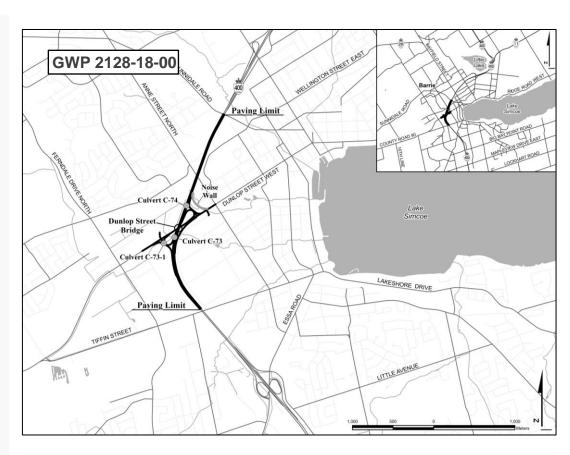
* Anne Street construction is complete. Sunnidale Road construction commenced in Spring 2023



PROJECT WORKS

The Dunlop Street bridge replacement and interchange reconfiguration project is the third, and last, in a series of contracts that is being completed in the Study Area. The project work includes:

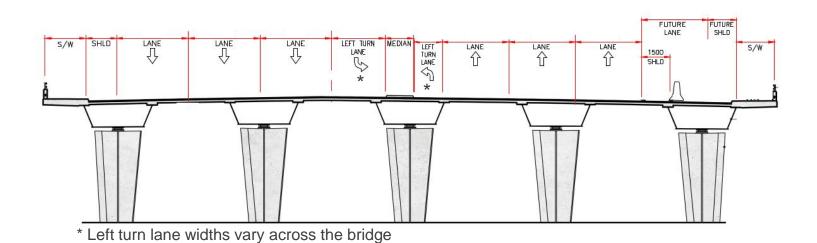
- Lengthening the new Dunlop Street bridge to accommodate the future widening of Highway 400;
- Widening the new Dunlop Street bridge to accommodate City of Barrie requests;
- Realignment of all interchange ramps including intersection improvements;
- Highway 400 median barrier replacement and drainage improvements;
- Replacement of two culverts along Dyments Creek (C-73 & C-73-1);
- Replacement of Highway 400 culvert at Bunkers Creek (C-74);
- Pavement resurfacing of Highway 400 from south of Dunlop Street to south of Sunnidale Road; and
- Construction of a new noise wall along the Highway 400/Dunlop Street northbound onramp.



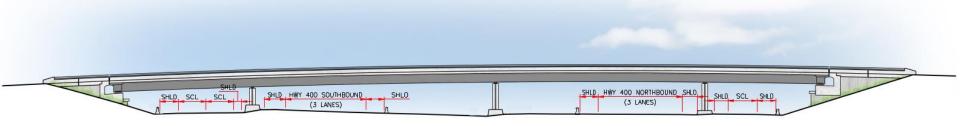
The key map above illustrates the location of project works.



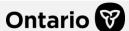
NEW DUNLOP STREET BRIDGE



New Dunlop Street Bridge lane configuration



New Dunlop Street Bridge and Highway 400 lane configuration



NOISE WALL INSTALLATION

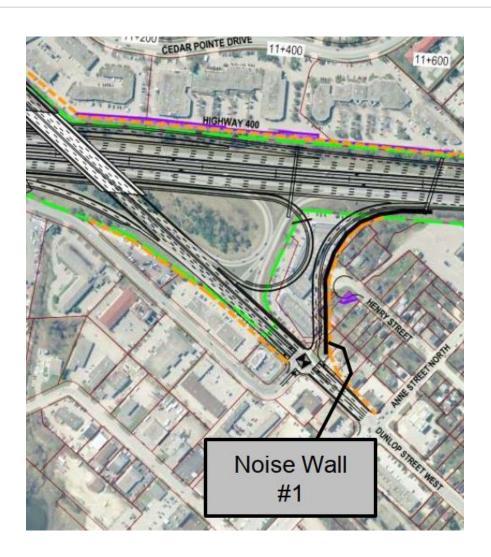
A Noise Analysis was completed for the Highway 400 corridor through Barrie.

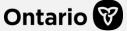
Where mitigation of noise was determined to be warranted, noise walls were recommended.

The recommended noise walls have been approved through the previously completed EA Studies.

One noise wall will be constructed as part of the Dunlop Street project:

 Northeast side of the Highway 400/Dunlop Street northbound on-ramp





ENVIRONMENTAL IMPACTS AND MITIGATION

Environmental conditions of the project area have been studied to determine potential impacts of the construction project. The following is an overview of potential environmental impacts and prescribed mitigation measures, to be implemented during construction.

Aquatic Habitat and Fish Communities

- Dyments Creek, south of Dunlop Street, flows through the project site and has been identified as suitable spawning and nursery habitat for a variety of species of baitfish.
 - Mitigation Measures and Best Management Practices will be implemented during construction
- Bunkers Creek, north of Dunlop Street, flows through the project site and has been identified as not direct fish habitat.
 - Mitigation Measures and Best Management Practices will be implemented during construction

Terrestrial Ecosystems

- Vegetation removals are required for various elements of project work.
 - Tree planting and landscaping will be undertaken at the conclusion of construction to mitigate vegetation removals and re-establish vegetation within the MTO right-of-way.

Species at Risk (SAR)

- No SAR were identified within the project area.
- Erosion and Sedimentation will be controlled throughout construction

Construction Noise

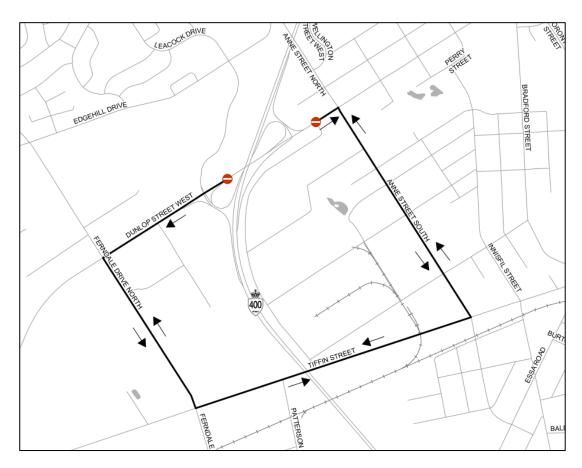
Night work is required to complete the project work. Equipment will be maintained in an operating condition that
prevents unnecessary noise, including but not limited to non-defective muffler systems, properly secured
components, and the lubrication of moving parts. The idling of equipment will be restricted to the minimum necessary
to perform the specified work.





CONSTRUCTION STAGING

DUNLOP STREET



Dunlop Street One-night Closure Detour Route

Proposed construction staging to complete the Dunlop Street bridge replacement includes:

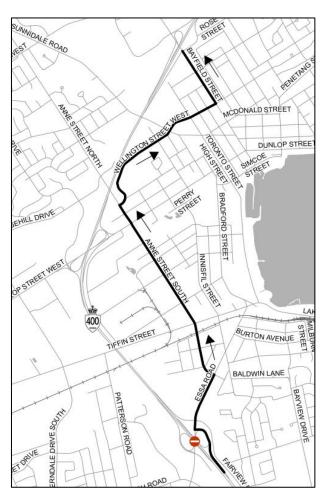
- Two lanes of traffic on Dunlop Street will be maintained throughout construction.
- Periodic off-peak single-lane closures will be required throughout the construction
- A one-night full closure is required for bridge demolition.
- A detour will be implemented east and west of the Dunlop Street bridge during the onenight closure.





CONSTRUCTION STAGING

HIGHWAY 400

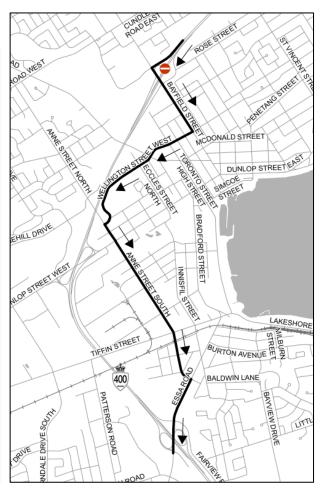


Northbound Traffic Detour

Highway 400 staging will be completed such that 6-lanes (3 per direction) will remain open at all times, excluding:

- One (1) nighttime full closure of Highway 400 at Dunlop Street to facilitate demolition of existing bridge.
- Off-peak (nightly) lane closures on Highway 400 to accommodate bridge construction.

Highway 400 lane closures will be communicated with the public well in advance of the closures through the MTO's Information Messaging System and signage.



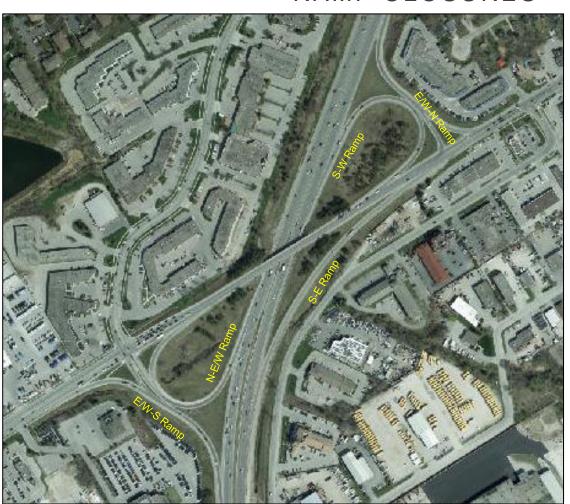
Southbound Traffic Detour





CONSTRUCTION STAGING

HIGHWAY 400 - DUNLOP STREET RAMP CLOSURES



Highway 400 staging will require the closure of Dunlop Street ramps periodically throughout construction.

The duration of ramp closures varies for select construction works.

Dunlop Street ramp closures will be communicated with the public well in advance of the closures through the MTO's Information Messaging System and signage.

Detour routes will be in place for long duration ramp closures – more than two consecutive nights.



NEXT STEPS

Summer 2023 Respond to comments received on the Project Update

Summer/Fall 2023 Advance utility relocations to begin

Summer/Fall 2023 Finalize the Detail Design of the project works.

Fall 2023 Prepare a Design and Construction Report and submit for a 30-Day

Public Comment Period. Additional notification will be provided at that time.

2024-2027 Construction anticipated to begin*







^{*}The timing of projects is subject to change based on funding, planning approvals, design, property acquisition and construction requirements.

For questions/comments or to be added to the Project Contact List please Contact Us.



Freedom-of-Information and Protection of Privacy Act

Comments—and Information regarding this study are being collected to satisfy the requirements of the *Environmental Assessment Act*, and in accordance with the *Freedom of Information and Protection of Privacy Act*. With the exception of personal information, all comments will become part of the public record.

