



Construction Update - The Next Six Months

The aggressive construction schedule for the Gordie Howe International Bridge project will continue over spring and summer 2019. To reduce the duration of construction and to have the bridge open to traffic in late 2024, Bridging North America will:

- organize the construction sequencing in the best possible manner
- use prefabricated components where possible
- establish construction entrances/exits points to allow for unlimited access to construction areas while maintaining traffic flow to adjacent properties.

In an effort to minimize the length of time that the project takes, construction will be ongoing simultaneously throughout the four project components – the bridge, Canadian and US Ports of Entry and Michigan Interchange.

Construction activities that are in progress and will occur over the next few months include:

Design work

As a design-build project, design on project components will be undertaken in stages to allow for construction to begin on some aspects while design continues on others. Bridging North America continues to work on advancing the designs from 30 per cent to construction ready.

Geotechnical exploration

Geotechnical exploration is currently underway throughout the US and Canadian project footprints to help prepare for full construction. Geotechnical sampling is critical to confirm design assumptions by providing engineers with the information they need to design foundations and other structures. Crews drill into the ground to pull core samples and verify soil conditions to inform the design. Approximately 1000 geotechnical samples will be taken across the Canadian and US project sites.

Site preparation

Bridging North America continues to mobilize and prepare the construction sites which will include fence installation around worksites and the establishment of offices on both sides of the border. On the Canadian site, Bridging North America's permanent offices will be located on lands adjacent to the intersection of Sandwich Street and Prospect Street. Field offices and staging areas will also be established in areas adjacent to the US POE, see *Figure 1*.

Given the locations of the site offices, traffic controls are currently being reviewed, including entrances to/from the site and adjacent intersections to minimize local traffic impacts.

Survey and utility relocations activities

A major effort to relocate utilities through Preparatory Activities has been underway in Canada and the US since 2015 through contracts managed by Windsor-Detroit Bridge Authority (WDBA) and the Michigan Department of Transportation (MDOT).

Bridging North America continues to have crews reviewing property lines, existing utilities and site design details, along with verifying site conditions. Major US utility suppliers and providers scheduled for removals, relocations and new installations in Spring 2019, include DTE – Electric, DTE – Gas, ITC, Comcast, AT&T and Sprint/Nextel. The work is mainly being conducted by the utility companies with coordination from Bridging North America.

Ten new siphon chambers will be installed to connect existing or recently installed sewers within the project limits along the Michigan Interchange. Siphon work beginning in spring 2019 will be at the following three locations:

- Dragoon Street (between Fort Street and I-75)
- Military Street (between Fort Street and I-75)
- Cavalry Street (between Fort Street and I-75).

At the Canadian Port of Entry, Hydro One transmission line relocation continues to be underway with an anticipated completion date in late summer 2019. This work includes moving high voltage cabling from overhead to underground.

Site Prep/US advance fill and wick drain installation

Wick drains are man-made drainage paths to allow faster settling of certain types of soils. They also provide greater strength in areas where a significant amount of fill will be placed. Once the wick drains are installed, fill will be placed to build up embankments to get the Phase One area of the US POE ready for building and road construction. This work is anticipated to begin in June 2019 with the site prep work (fencing, clearing and grubbing) to begin May 2019.



Figure 1: Phase One US Construction Locations

Test shaft work

Construction of test piles on the Canadian and US sites for the main bridge are anticipated to begin in 2019. This work will provide a test program to inform and finalize the design of the tower foundations. Work will include:

- Installation of a 'full-size' (three metre) test shaft that will mimic the future work to be performed on the permanent tower foundation drilled shafts.
- Once installed and concrete has cured to the specified strength, testing of the shaft will commence.
- The test is comprised of a system of hydraulic jacks sitting on the base of the drilled shaft that is embedded six metres into bedrock.
- Once the system is pressurized, the intent is to measure the force required to mobilize the shaft upward.
- Measurements will then be correlated with the load resistance to be incorporated into the final design.

Haul Routes

Construction traffic will use designated haul routes to minimize community impacts, traffic congestion and wear and tear on existing infrastructure while maximizing public and construction safety. Construction traffic will respect restrictions on truck movements that are in place in the City of Windsor and City of Detroit. Routes for construction traffic in the US will include: M-85 (Fort St), Green St (from Fort to Jefferson Ave), Livernois Ave (from I-75 to Norfolk Southern Railroad), Dragoon St (from I-75 to Norfolk Southern Railroad), Campbell St (from Fort St to Jefferson Ave), Jefferson Ave (from Campbell to the west City limits) and any permanently closed roadways. Designated haul routes will be maintained and cleared of tracked mud.

Required drainage works

Drainage control including, temporary drainage work, will be provided where needed to ensure drainage standards for all roads and private property is maintained throughout construction.

