

# VIBRATION MONITORING PROGRAM

#### **BACKGROUND**

The Windsor-Detroit Gateway is the busiest commercial land border crossing between Canada and the US and is vital to the economies of Ontario, Michigan, Canada and the United States.

Windsor-Detroit Bridge Authority (WDBA) is delivering the Gordie Howe International Bridge project between Windsor, ON and Detroit, MI with the collaboration of the State of Michigan and Bridging North America (BNA). As private-sector partner, BNA will design, build, finance and operate the project including construction of the Bridge, the US Port of Entry (US POE) and an interchange connection to Interstate-75 (I-75).

The project requires significant construction activity, including demolition and removal of existing infrastructure, reconstruction of roadways and bridges, and construction of new infrastructure

Seven I-75 bridges will be removed at Springwells Street, Green Street, Waterman Street, Livernois Avenue, Dragoon Street, Junction Street, and Clark Street. Bridges will be reconstructed at Springwells (and ramps), Green Street, Livernois Avenue, and Clark Street.

#### VIBRATION MONITORING PROGRAM

With any major construction activity, the use of heavy machinery may cause noise and vibration above existing levels and beyond the project footprint. The Gordie Howe International Bridge project team understands the concern that those living and working adjacent to the construction areas have regarding noise and vibration and will make every effort to reduce impacts to residents, historical structures and businesses.

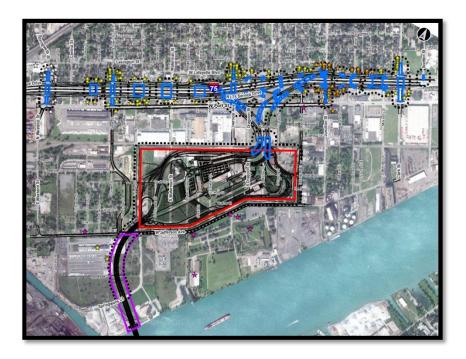
The predicted levels of vibration indicate that no structural damage is expected as a result of construction activities. However, the project team, in accordance with the Final Environmental Impact Statement (FEIS) and Record of Decision (ROD), is implementing a vibration monitoring program for the owners of properties located within 150 feet (approximately 45 metres) of specific construction zones at the site of the US Port of Entry (POE) and the Michigan Interchange activities.

Vibration monitoring determines the current condition of structures and shows if construction activities adversely impact them during construction activities. The program includes the completion of pre-construction, construction and post-construction foundation surveys as well actual vibration monitoring.

The vibration monitoring program began in September 2019 and will continue throughout construction of the Gordie Howe International Bridge project.

Three areas identified as sites for potentially high vibration activity and properties within those zones are eligible for the vibration monitoring program.

# Michigan Interchange Vibration Monitoring Zones



Zone One 2019

Zone Two 2021

Zone Three 2022\*

Image above represents the overall scope of work within the three zones where construction may cause vibrations.

The boundaries for vibrational monitoring for all three zones include Springwells Street to Scotten Street along MI-75. Also included in vibrational monitoring are the lands around the US Port of Entry and the US Bridge approach that include Historic Fort Wayne and local road reconstruction.

\* Zone Three timeline is subject to change due to possible construction scheduling

#### **ZONE ONE**

**Zone One (Began in 2019):** 19 properties in proximity to construction work scheduled for:

- Springwells Street auto bridge, I-75 section from Springwells Street east to Green Street,
- Livernois Avenue crossing bridge; and
- Clark Avenue crossing bridge.

Construction started in Fall 2019 with anticipated completion in Summer 2021.

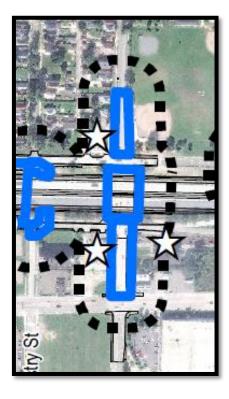




Top Left: Springwells Street crossing bridge

Top Right: Livernois Avenue crossing bridge

Bottom Right: Clark Avenue crossing bridge

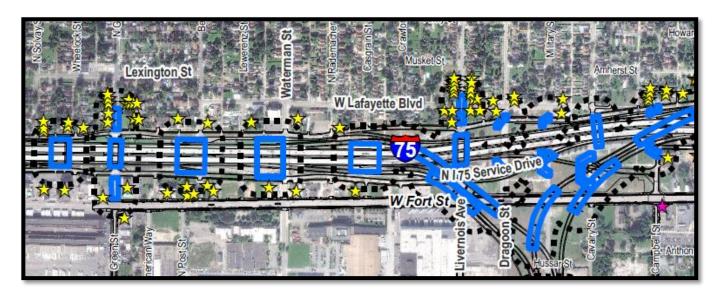


### **ZONE TWO**

### Zone Two (2021):

Approximately 120 properties will be included in this phase of construction, including Berwalt Manor.

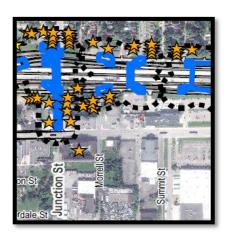
This work includes the I-75 median, northbound and southbound Service Drives between Green Street and Clark Street, Green Street Vehicular Bridge.

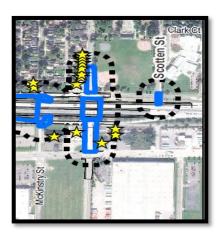


Top: The image above represents the work from the Solvay pedestrian bridge to the Campbell Street siphon work.

Bottom left: The image below represents pedestrian bridge and siphon work between Junction Street and Lansing Street.

Bottom right: The image below represents the Clark vehicular bridge and siphon work between McKinstry and Scotten Street.





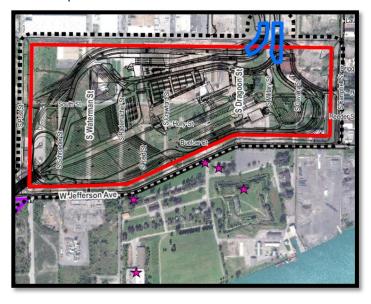
### **ZONE THREE**

# Zone Three (2022):

This work includes five properties at the Historic Fort Wayne; local road reconstruction; Perimeter of US POE, US Bridge approach.

Construction is anticipated to begin in Summer 2022 and finish in Summer 2024.

Below: The below image shows the local road reconstruction work adjacent to the US POE from Post Street to Campbell Street and Jefferson Street.



# **Vibration Monitoring Steps**

BNA will directly contact owners of properties identified within the three zones. Owners of properties that are not located within 150 feet of these areas will not be contacted.

Other key activities include:

- Property owners who wish to participate in the program are required to complete, sign and return a Property Owner Authorization Form to BNA.
- In cases where the owner agrees to participate in the vibration monitoring program but does not occupy the property, the occupant needs to complete and sign an Occupant Authorization Form, then return it to BNA.
- Once authorizations are in place, BNA will work with the property owner to schedule an
  initial survey used to determine the condition of the property prior to the start of
  construction. (In cases where someone other than the owner occupies the property,
  BNA will work with both the owner and occupant to schedule an appointment for the
  initial property survey.)
- BNA will schedule a second appointment to return to the property during the construction period to assess if any changes have occurred.
- Once construction in a particular zone is complete, BNA will return a third time to assess for any changes from the initial visit.

BNA will not enter properties without an appointment and personnel will be easily identifiable with identification (ID) cards. The vibration monitoring process is free of charge and will not damage properties.

If construction-related damage occurs to a property that is participating in the vibration monitoring program, BNA will work with the property owner to assess the cause and extent of the damages.

Owners of identified properties with questions about the vibration monitoring program can call the project team at 1-844-322-1773 or send an email to info@wdbridge.com.