

GO Expansion Projects Overview Meeting with the Aurora Historical Society

March 8, 2021

Follow Up Questions

1. **Attridge Drive, Moorcrest, & Walton back onto the railway tracks within Valhalla Aurora. From my understanding the second track will be installed closer to the homes plus a third track behind part of Walton. My concerns are the following;**
 - a. **Vibrations because of the current passenger cars and locomotives that will be used**

Given the significant changes to service levels, types of trains, and infrastructure proposed as part of the GO Expansion program, Metrolinx has reassessed the noise and vibration modeling under the GO Rail Network Electrification Addendum (2021).

The most effective form of mitigation is reducing or eliminating the sound and vibration at the source. The largest reduction of potential increases will come from electrification on core segments of the network. Where mitigation at the source is not sufficient, receptor-based mitigation, such as noise walls, is then considered to protect the most affected areas.

The area north of Wellington St, along the rail corridor, has been identified for proposed noise mitigation walls under the 2021 GO Electrification Addendum. You can find more details about the proposed noise mitigation walls on this interactive map, here:

<https://maps.metrolinx.com/arcgis/apps/webappviewer/index.html?id=199ded6da5e746c08f4742df9c921f8c>.

- b. **Short cut that residents are using to go over the tracks thru Wilson Park that backs onto the tracks to get to Industrial Parkway. What barriers will be installed along ALL the tracks in Aurora to stop residents from crossing?**

Safety is critical to everything we do. Nothing we plan or do can compromise safety. Our tracks and infrastructure are inspected twice weekly per Transport Canada

regulations for any signs of degradation or trespassing.

In addition to the regulatory requirements, we take a risk-based approach to public and passenger safety. We regularly deploy members of our Transit Safety team to monitor various locations along the rail corridor for trespassing and/or vandalism. They will continue to coordinate with your local law enforcement as needed.

If you see incidents of trespassing along the corridor, I would encourage you to reach out to our Transit Safety team and report it immediately for their investigation. Transit Safety can be reached 24 hours a day at 1-877-297-0642.

Furthermore, your area, along Attridge Drive, north of Wellington, has been identified as an area for proposed noise walls. More information about this can be found in the above response to Question #1a.

c. I have health concerns about the 50kV electrification of each of the track.

Based on the preliminary Electromagnetic Interference / Electromagnetic Fields assessment completed as part of the GO Rail Network Electrification Transit Project Assessment Process (TPAP) (June 14, 2017), no adverse EMI effects are anticipated due to the installation/operation of the electrified GO Transit system. This will be confirmed during design and construction.

The OCS will be a 25kV system. Per Health Canada, there are no health concerns about this system or the associated voltage.

For more information, you may be interested in reading this handout:

https://www.metrolinxengage.com/sites/default/files/info_sheet_4_emf_emi_final.pdf

d. Since along Attridge & Moorcrest the train is about 20 feet below the property in some spots. I'm concerned about possible shocks that residents may receive when the electrical lines will be at their body height when working or relaxing in their backyard.

The Overhead Contact System (OCS) infrastructure proposed as part of the 2017 GO Rail Network Electrification Environmental Project Report (EPR) and current EPR Addendum is anticipated to be contained entirely within the existing Metrolinx Right-of-Way within this segment of the Barrie Corridor. The height of the portals/cantilevers used to support the OCS wires over the electrified tracks will

range between approximately 7.6m to 12m above the top of the highest rail. Contact wire height will range from 6m to 7.6m.

In areas of depressed corridor where the adjacent accessible walking/standing surface is at an elevation above the top of rail and within 3m of an electrified part, a parallel barrier is recommended to protect public safety and the safe operation of the railroad.

As part of the conceptual design phase, an initial assessment of areas that may require installation of a parallel barrier for safety was carried out. It is noted that the portion of the Barrie Corridor adjacent to Attridge Drive and Moorcrest Drive in the Town of Aurora was not identified as an area of concern based on the current Reference Concept Design (RCD). As part of detailed design phase, a more detailed assessment of these locations will be evaluated.

2. Currently there is construction taking place in Aurora under railway bridge on Yonge to stop a sink hole from forming. Will this area of Yonge Street need to be dug up again to install a new bridge for the second track or can the current bridge accommodate both tracks?

The current rail bridge over Yonge Street in Aurora is not wide enough to accommodate a second track. Therefore, we have designed an abutment to the existing bridge that will support the second track. This means that we will be adding supports at the sides to expand the existing bridge which will provide room for the second track.

To accommodate the construction of the abutment, there will be some work required on Yonge Street to install the support structure below the bridge. Having said this, the work will be mostly limited to the berm on the sides of Yonge Street and there will be traffic control measures undertaken during construction to minimize impacts to the public.

As we move forward with the project, we are committed to keeping the community informed. The best way to stay up to date is by signing up for our bi-weekly e-newsletter here: www.metrolinx.com/york.

3. Arching during the winter. YouTube shows a number of videos of electrical arching during the winter that has caused injury & damage. Will Metrolinx be using a different technology to stop winter arching?

The OCS for the GO Rail Network Electrification Project will be designed to meet both Canadian Standards Association (CSA) and American Railway Engineering and Maintenance-of-Way Association (AREMA) standards. Both standards require the OCS to be designed for extreme weather conditions, including temperatures of -40°C, wind speeds of up to 125 kph, and ice accumulation of 12.5 millimeters. Additionally, the OCS will be installed with tension compensation devices. These devices allow for changes due to climatic conditions, without causing the added stresses to the system. Typically, the best way to avoid ice accumulation on the OCS is by train operation, which shakes the ice from the wires.

For more information regarding the OCS design and safety standards outlined in the 2017 GO Rail Network Electrification Environmental Project Report, Volume 1 is available for review at:

http://www.metrolinx.com/en/electrification/docs/GO%20Rail%20Network%20Electrification%20Environmental%20Project%20Report_Volume%201.pdf

- 4. England, about four years ago, produced a technology where only one electrical line is required for the train, reducing visual pollution. The train also uses much less energy, produces less noise, and no electrical line is required to be installed under bridges, saving tens of thousands of dollars in construction costs. Has this technology been reviewed?**

Metrolinx is committed to finding the most sustainable solution for electrifying the GO rail network. The objectives of GO expansion and electrification are to increase rail services, lower operational costs and reduce reliance on carbon-based energy sources.

The successful proponent team will be responsible for selecting and delivering the right trains and infrastructure to unlock the benefits of GO Expansion. The contract is in a multi-year procurement process, and currently teams are completing the bids that will close in 2021. Construction will get underway in 2022/3.

If you're interested in reading more about why we chose this type of electrification, you may be interested to check out Volume 1 of the 2017 GO Rail Electrification Environmental Project Report here:

www.metrolinx.com/en/electrification/docs/GO%20Rail%20Network%20Electrification%20Environmental%20Project%20Report_Volume%201.pdf

- 5. It was suggested about four years ago to Metrolinx to help make their trains safer for the public and those who are hearing impaired, to have the front lights on the locomotive flash in rotation when nearing a crossing. They do this with train in Europe. It has been proven the get the public and those who are hearing impaired that a train is approaching much more quickly from some distance away. Can you tell us if this will be implemented?**

Safety is our number one priority, and bells and whistles play an important role in helping to keep people out of harm's way. Having said this, we understand that not everyone is able to hear the bells and whistles used by GO trains.

That is why, every time a whistle is blown, or a bell is rung on a GO train, the train's ditch lights also flash. The ditch lights on the train are lower than the headlights and are on the sides rather than the front of the train which allows for more visibility on either side of the tracks.

- 6. Approximately when the Community Advisory Committee for Aurora will start to have meetings?**

The Community Liaison Committee (CLC) will begin meeting following the Environmental Assessment (EA) addendum, which will start later this year.

Once we're through the EA addendum process, the CLC will convene to review early designs and provide more feedback. The committee will also discuss any concerns and answer questions as we move forward with the project.

As the project takes shape, the members of the CLC will be informed about aspects of the project and its construction; the CLC will act as a two-way conduit between the project team and various aspects of the community.

- 7. Just as houses are typically not built under hydro towers for health reasons, what do your studies show as far as EMF's resulting from the electrification?**

There have been numerous studies over many decades to examine the effects of Electromagnetic Interference (EMI)/Electromagnetic Frequency (EMF) on health and the environment.

The GO Rail Network Electrification TPAP (2017) included an EMI/EMF study to assess background EMF levels along the rail corridors, to document existing EMF and EMI conditions, and to determine the potential effects of an electrified system. An

updated EMI/EMF Impact Assessment Study was completed in 2021 to document potential impacts and mitigations associated with electrification of the infrastructure proposed in the [New Track and Facilities TPAP](#).

Additionally, during the detailed design phase, further analysis and measurements will be completed once the electric rolling stock specifications are determined in order to confirm the results and any mitigation measures that may be required.

If you are interested in more information on the EMI/EMF studies, you may wish to review the below material:

- The [2021 EMI/EMF Impact Assessment Report](#) in the [GO Rail Network Electrification Addendum Environmental Project Report](#) (2021).
- This [information sheet](#) prepared for the Public Meeting held in February 2020

8. GO routes 65 and 95 used to run from Newmarket to Aurora GO via Yonge and Wellington. Now, these routes are running down Leslie. What's up with this? Will there be GO buses returning to Yonge St.?

GO bus routes 65 and 95 were re-routed when we moved our services out of the Newmarket downtown bus terminal. Therefore, there are not plans to move services back to the previous Yonge Street route.

If you are looking to catch a bus from Yonge Street to the Aurora GO station, you may wish to take York Region Transit services. You can plan your trip by visiting www.yrt.ca.

9. Will the parking lot at Scanlon become a permanent lot?

Yes. This lot will act as overflow parking once complete and will be a permanent lot. Additionally, pedestrian connections are included in the scope of this work to help customers move from the parking lot on Scanlon Court to the Aurora GO Station.