

Memo



To: John Pennachetti – Project Manager
c/o Northbridge Capital Inc.

From: Dave Poole

c.c.: Mike Walters, Dillon

Date: March 10, 2025

Subject: Technical Memorandum – Rail Safety Considerations at 2172 Wyecroft Road, Oakville, Ontario

Our File: 23-6586-4000

Background

Northbridge Capital Group (Northbridge) is proposing a mixed use residential and commercial/retail development at 2172 Wyecroft Road in Oakville, Ontario, herein called the Development. To the southeast of the Development (see Figure 1), Metrolinx owns and operates the Oakville Subdivision. To the southwest of the Development is a CN Rail spur that services Mauser Packaging solutions – a manufacturer of metal, plastic, fire and hybrid packaging for the food, beverage, personal care and pharmaceutical industries. There is an additional CN Rail spur to the southeast of the Development.

Within Figure 1, we have designated “Railway North” to be perpendicular to the Oakville Subdivision, and henceforth in this memo, any reference to North, South, East or West will be in relation to Railway North, not True North.

The intent of this Technical Memorandum is to document the rail safety considerations of the Oakville Subdivision as it pertains to the Development to determine if rail safety mitigation measures are required to address the established risks.

Rail Operations

A review of the Canadian Rail Atlas¹ indicates that the Oakville Subdivision consists of three active tracks, all designated at Main Track. Rail operations along these three tracks are both passenger rail (Metrolinx) and freight rail (CN Rail). Within Figure 1, we have highlighted the property line for the Oakville Subdivision right-of-way (ROW) which identify those lands designated for current and future rail operations. The section of the Oakville Subdivision that was considered is between Mileposts 24 and 25.

According to the Transport Canada grade crossing database, for the grade level crossing at Burloak Drive (Milepost 26.98), there are 110 trains per day that travel along this section of the Oakville Subdivision with a maximum train speed of 95 mph. An Oakville Subdivision Timetable² references that the freight rail maximum train speed is 30 mph.

¹ <https://rac.imaponline.net/canadianrailatlas/>

² <https://www.cwrailway.ca/cnrha.ca/Timetables%2007/Great%20Lakes%20South/Oakville.pdf>

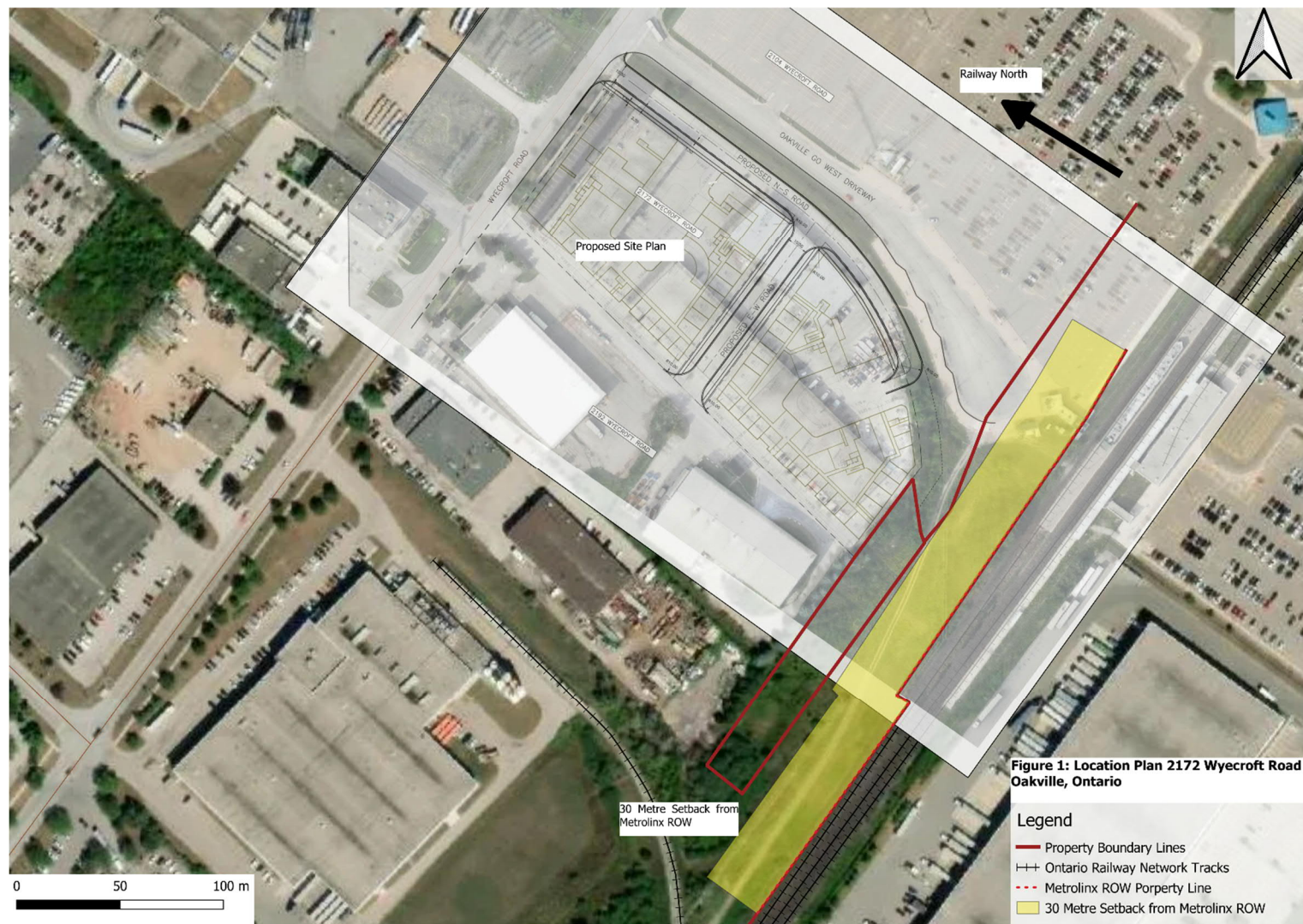


Figure 1: Location Plan – 2172 Wyecroft Road, Oakville, Ontario

Site Details

The Development is located approximately 55 metres north of the closest ROW property line for the Oakville Subdivision as highlighted in Figure 1. The land between the Development and the Oakville Subdivision ROW is currently a green space and as part of the Development, there will be a 16 metre ROW lane dedication.

Construction Details

Given the preliminary stage for the Development, specific construction details are not available at this time; however, for the purpose of this analysis, the following assumptions are considered reasonable:

- Most construction activities will be contained within the property boundary of the development;
- It is anticipated that, at times, construction activities will encroach approximately 10 to 15 metres upon the adjacent green space to the south of the Development; and
- Construction activities will not encroach upon area defined by the 30 metre setback from the Oakville Subdivision ROW.

Rail Proximity Requirements for Proposed Development

FCM-RAC Guidelines

The Federation of Canadian Municipalities (FCM) along with the Railway Association of Canada (RAC) published a guidance document in May 2013 entitled “*Guidelines for New Development in Proximity to Railway Operations*” – herein called FCM-RAC Guidelines. The FCM-RAC Guidelines communicate relevant information to parties interested in undertaking a development project adjacent to railway operations.

The Oakville Subdivision is classified as a “Main Line” under the FCM-RAC Guidelines as defined by:

- Volumes generally exceed five trains per day;
- High speeds, frequently exceeding 80 km/hr; and
- Crossings, gradients, etc. may increase normal railway noise and vibration.

The recommended setback distance is defined in the FCM- RAC Guidelines as “the recommended separation distance between rail corridor and a sensitive use, such as a residence”. The separation distance, measured horizontally from the property line of the rail corridor to the sensitive use in 30 metres as illustrated in Figure 2.

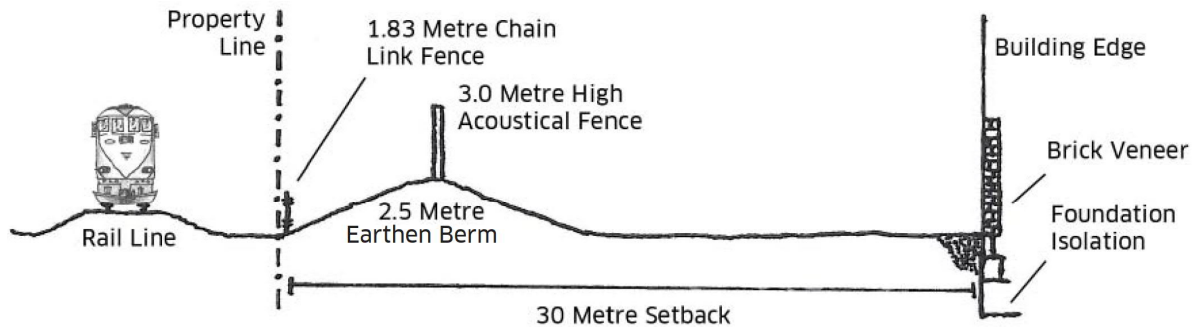


FIGURE 2 // STANDARD MITIGATION FOR NEW RESIDENTIAL DEVELOPMENT IN PROXIMITY TO A MAIN LINE RAILWAY

Figure 2: Setback Distance in FCM-RAC Guidelines

Metrolinx Adjacent Development Guidelines – GO Transit Heavy Rail Corridors

Metrolinx published a guidance document in June 2023 entitled “*Metrolinx Adjacent Development Guidelines – GO Transit Heavy Rail Corridors, Third Party Projects Review (TPPR), Version 6.0*” – herein called Metrolinx (2023). Metrolinx (2023), as with FCM-RAC Guidelines, communicates relevant information to parties interested in undertaking a development project adjacent to railway operations.

Building setback requirements based on land use relevant to the Development are:

- 30 metres for residential occupancy.

Key considerations regarding setbacks include:

- The minimum building setback distance is measured from the mutual property line (i.e. between the Rail Corridor and the private property) to the building face where the Sensitive Use [residential] is located.
- The mutual property line may be redefined in cases where the Rail Corridor expansion is required or there is intervening Metrolinx-owned land outside of the active Rail Corridor (such as a station building or parking lot); in such cases, the minimum setback distance would be measured from the “adjusted” property line.
- In its most basic form, the setback is assumed to be measured as a straight-line horizontal distance – see Figure 3.

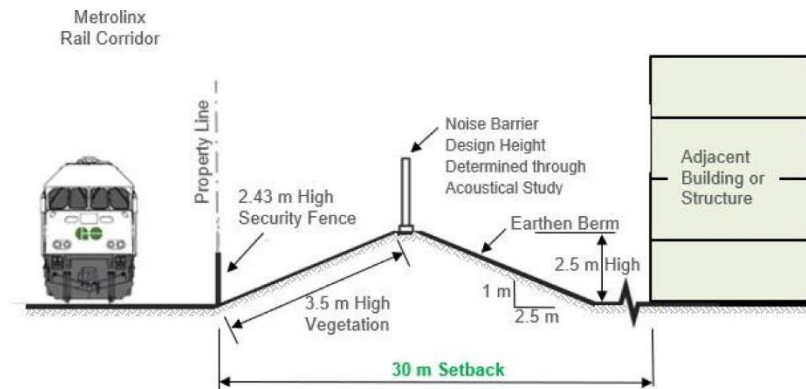


Figure 5.1: Typical Setback and Safety Barrier Requirements

Figure 3: Setback Distance in Metrolinx (2023)

Rail Safety Analysis

In consideration of FCM-RAC Guidelines and Metrolinx (2023), the following were noted:

- The Oakville Subdivision ROW property line is shown in Figure 1. Given the southern extent of the parking lot to the east (along with the position of the Bronte GO Station), which aligns with the Oakville Subdivision ROW property line, it is reasonable to expect that any future expansion of rail operations by either Metrolinx or CN would be confined within the existing defined Oakville Subdivision ROW.
- There is no mutual property line between the Oakville Subdivision ROW and the Development as shown in Figure 1.
- In consideration of the above, the setback distance was measured from the southern most extent of the Development to the property line that defines the Oakville Subdivision ROW.
- The total setback distance, as previously defined, is approximately 55 metres.
- When the standard setback distance of 30 metres is measured from the Oakville Subdivision, as shown in Figure 1, there is an additional 25 metres of separation to the Development.

Conclusion

Based on the evidence presented in the rail safety analysis, it is reasonable to conclude that the safety mitigation requirements of the FCM-RAC Guidelines and Metrolinx Guidelines do not apply given the separation distance between the Development and the Oakville Subdivision ROW. As such, it is our professional opinion that the Development is considered safe, in the context of Metrolinx and CN Rail operations.

Dave Poole