Frequently Asked Questions and Clarifications on Ground Disturbance Works

The purpose of this document is to provide clarity and general guidance on ground disturbance works adjacent to in-service track(s) within Metrolinx right-of-way. The objective of this document is to:

- Clarify the definition of ground disturbance activities;
- Summarize requirements for geotechnical engineering scope and track inspection for various activities; and
- Facilitate the submission, review, and approval process of Ground Disturbance Permits (GDP).

Reference Documents:

- GO Transit Track Standards
- GO Track Standards Bulletin #008
- Excavation Zone Calculator
- Metrolinx Trenchless Utility Works Design and Construction Guidelines

Definitions

Metrolinx Right-of-Way (ROW) is any Metrolinx-owned land on which a railway line is situated, including yard tracks, sidings, and spurs, including up to the fence line or, if there is no fence at a station, up to the furthest platform edge.

Subject Matter Expert (SME) is an employee, supervisor or individual in a managerial position with a minimum of five (5) years in the railway and experienced in various activities including Construction, Maintenance and Engineering. The individual must be trained and current in Track Inspection Guidelines (TIG) or Metrolinx Ground Disturbances Around Tracks Training.

Frequently Asked Questions (FAQ)

1 Where does the GDP apply?

All ground disturbance work (with the exceptions in item 3) within Excavation Zone 1, 2 or 3 of Metrolinx ROW, as defined in Appendix W of the GO Transit Track Standards (GTTS), requires an approved GDP.

2 What is the definition of ground disturbance work?

Ground disturbance work is classified as mechanical excavation, hand digging, daylighting, caisson and borehole drilling, trenching or grading. This includes any work, operation, or activity that results in a disturbance of the soil mass.

3 Is there work that would be considered exempt from needing a GDP?

- Trenchless works (Jack & Bore, Microtunneling, Pipe Ramming and Horizontal Directional Drilling). However, if the sending and receiving pits are located within Metrolinx right-of-way, a permit is required;
- Installation of tiebacks on previously excavated shoring walls;

- Backfilling or granular fill placement of previously excavated areas;
- Work on Metrolinx lands outside and adjacent to the Metrolinx right-of-way, including work on municipal rights-of-way, which pass under the Metrolinx right-of-way;
- Excavation works on CN or CP territory; and
- Refer to Table 1 for additional details.

4 Does GTTS Appendix W needs to be followed when the ground disturbance is outside the Metrolinx ROW?

Yes. Although a ground disturbance permit is not required for works that are not within Metrolinx ROW, any ground disturbance work adjacent to an in-service track must conform to all Metrolinx Standards including GTTS Appendix W.

~~4~~**5 Do all ground disturbance activities require separate permits?**

One permit per Work Plan Methodology (WPM) is required. WPM can include multiple activities.

~~5~~**6 If I have a previously approved WPM, do I need to stop work, and is a permit required?**

Yes, excavation work must stop until a permit is approved.

~~6~~**7 Once a permit is submitted, what is the timeline for review/approval?**

10 business days ~~(urgent review 2-3 days)~~.

8 How long is the permit valid for? How do I renew the permit?

Permits have a typical lifecycle of 90 calendar days. At the end of this lifecycle, the permits expire. It is the responsibility of the Project Delivery Teams (PDT)/Contractor (permit submitter) to seek new permits/renewals at least two weeks before the existing permit expires, as NO WORK is allowed with an expired permit.

Permits being renewed/extended will be given a 90-day extension (or up to a 180-day extension per Table 1 below – if approved by a reviewer based on project scope, excavation zones involved, and if any safety infractions have occurred). Permit renewals will only be given based on the following conditions, which PDTs must confirm in writing:

- The scope has not changed; if a significant change to the scope is proposed, a NEW permit should be applied for;
- Updated utility locates documents; and
- PDT must submit both original approved copy and renewal request.

~~7~~**9 Is a permit required for the installation and removal of the monitoring points?**

A permit is not required for shallow in-ground points (up to 1.2 m) installation. However, a permit is required to install deep in-ground points within the Metrolinx right-of-way. A permit is not required for the removal of monitoring points. Refer to Table 1 for additional details.

~~8~~10 Does fence post foundation installation require a permit?

Yes. Refer to Table 1 for additional details.

~~9~~11 Is a permit required for lagging installation for shoring walls?

Yes. Refer to Table 1 for additional details.

~~10~~12 Is a permit required for the removal of utilities?

No, a permit is not required for overhead utilities. If excavation is necessary to remove underground utilities, a Permit is required.

~~11~~13 Does Backfilling require a permit?

Backfilling does not require a permit.

~~12~~14 Do works around bridges and superstructures require a permit?

Does not require a permit but must be reviewed by Metrolinx Bridges & Structures.

~~13~~15 Is daylighting included in the permit, or will we have to submit a separate WPM for it?

Daylighting would require a permit. However, it can be included in the WPM when submitted.

~~14~~16 How do I send large files?

WeTransfer or SharePoint is acceptable for larger files.

17 I don't have valid utility locates yet, how will this affect my request?

A lack of valid utility locates will not be considered reasoning for refusal of a GDP. A completed Locate request email confirmation will suffice in lieu.

~~15~~18 Within the USRC, how is the existing CMO permitting process different from this new permit?

This is a new process. Both EAM and CMO are looking to align these two processes.

~~16~~19 While backfilling a Zone 3 excavation, what is required from the site?

Upon completion of backfilling and prior to cancellation of track protection, a daily report (including relevant photos) on the backfilling activities will be submitted to: track.coe.dept@metrolinx.com. Refer to Table 1 for additional details.

20 I have both a WPM and a GDP request for the same project, should I submit simultaneously?

Yes. The WPM is to be submitted for approval at the same time as GDP. PDTs are to ensure that the WPM and GDP are aligned before submission. This practice will facilitate a wholesome and expeditious review of the documents in tandem.

Table 1 clarifies the requirements for Ground Disturbance Permits, Geotechnical Engineering Scope, and TIG Inspection for ground disturbance works to ensure compliance with Metrolinx Requirements and Standards. The table below intends to provide general guidance and clarification only.

Table 1 - Ground Disturbance Permits, Geotechnical Engineering Scope, and TIG Inspection Requirements

Ground Disturbance Works	Ground Disturbance Permit	Excavation Zone (GTTS Appendix W)	Geotechnical Engineering Scope	TIG Inspection (Track Inspection Guidelines)	Maximum duration of extension after initial 90 days
• **Soil removal using an excavator** • **Grading work by backhoe/dozer**	Required	1	Written authorization/design from a Geotechnical Engineer or under onsite Supervision of a Geotechnical Engineer	Not Required	Up to 180 [2]
		2		Required ***(A TIG inspector must inspect the track if any track movement or settlement is observed)***	90
		3 ***(Not allowed under train load)***	• Written authorization/design from a Geotechnical Engineer • A Geotechnical Engineer or their designate (identified in writing) must supervise the backfilling and compaction work before the passage of the next train. The minimum degree of compaction is 98% SPMDD, and the maximum lift thickness is 6 - 12 inches (150 - 300 mm).	Required ***(A TIG inspector must inspect the track prior to returning the track in service)***	90

Ground Disturbance Works	Ground Disturbance Permit	Excavation Zone (GTTS Appendix W)	Geotechnical Engineering Scope	TIG Inspection (Track Inspection Guidelines)	Maximum duration of extension after initial 90 days
• **Pile driving, including micropiles and helical piles** • **Installation of Shoring / Lagging** • **Caisson and Secant Pile drilling, and soil stabilization work (including soil nails)**	Required	1	Geotechnical Engineering design required	Not Required	Up to 180
		2		Required[1]	Up to 180 [2]
		3 *(Not allowed under train load)*		Required[1]	90
Trenchless drilling	Not Required *(An excavation permit is ONLY required for sending and receiving pits located within the ROW)*	All zones	Geotechnical Engineering design required	Not Required	See recommendations for the soil removal by excavator.
• **Borehole drilling** • **Installation of Deep-in-Ground Monitoring Points (DIMP)** *(Deeper than 1.2 m below ground surface)*	Yes	1	Geotechnical Engineering Design or written direction required	Not Required	Up to 180
		2			Up to 180 [2]
		3	• Geotechnical Engineering Design or written direction required • A written geotechnical authorization is required to drill in zone 3 under train load	Required* *(Boreholes located within the track infrastructure will require a TIG inspection)*	90 (or up to 180 [2] if 9.1 m (30 ft) away from the nearest rail)

Ground Disturbance Works	Ground Disturbance Permit	Excavation Zone (GTTS Appendix W)	Geotechnical Engineering Scope	TIG Inspection (Track Inspection Guidelines)	Maximum duration of extension after initial 90 days
Interconnected Hydrovac holes that form a trench	Required	1	Not Required	Not Required	Up to 180
		2	Written authorization/design from a Geotechnical Engineer or under onsite Supervision of a Geotechnical Engineer	Required[1]	90
		3 ***(Not allowed under train load)***			90
• **Single / Spot Hydrovac hole** ***Diameter not larger than 12 inches (305 mm)*** • **Fence Post Foundation**	Required	1	Not Required	Not Required	Up to 180
		2		Required[1]	Up to 180 [2]
		3 ***(Not allowed under train load)***			90
Hand Digging using shovel	Required	1	Not Required	Not Required	Up to 180
		2		Required[1]	Up to 180 [2]
		3 ***(Not allowed under train load)***			90
• **Stakes** • **U-post Installation by driving** • **Decommissioning of monitoring points (shallow and deep)**	Not Required	All Zones	Not Required	Not Required	N/A
Track and Signalling work, limited to any activity that disturbs only the ballast section	Not Required	All zones	Not Required	Required	N/A

[1] TIG inspection is only required if the ground disturbance work is proposed within the track infrastructure (including ballast section) or has potential impacts to the track.

[2] Permit renewal/extensions may **not** go beyond April 15 due to potential changed ground conditions in the thaw season. This decision will consider the extent of the ground disturbance works (excavation size, depth, and excavation zone, etc.), site location, complexity of the work, and/or history of the prior infraction at the site. Please check with the E&AM - Track team in case of any confusion or clarification required.