23.0 Utilities

23.1 Guiding Principles

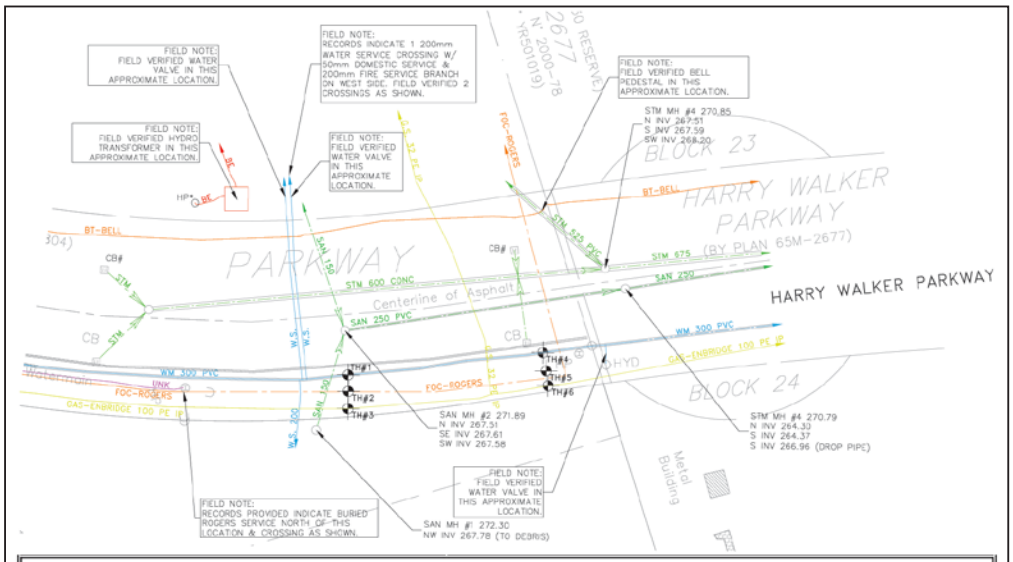
i) Any excavation, drilling or tunneling within the Regional right-of-way requires the Developer to first conduct a Subsurface Utility Engineering Level B (SUE QL-B) investigation. This means that utility information must be obtained through the application of appropriate surface geophysical methods to determine the existence and approximate location of subsurface utilities.

ii) If, upon review of the site plan submission, it becomes apparent that site development work may conflict with a utility, the Region may require a further Subsurface Utility Engineering Level A (SUE QL-A) investigation to be conducted. This means that precise horizontal and vertical location of utilities should be obtained by the actual exposure and subsequent survey of subsurface utilities at expected points of conflict.

iii) The results of the SUE QL-B and SUE QL-A investigations should be depicted on the servicing plan and profile drawings, grading plan and profile drawings, landscape drawings and any other drawings where development works may conflict with subsurface utilities.

iv) In the event that a utility needs to be relocated as a result of development works, the Developer must follow the process as outlined in the Utility Relocation Process Chart. The Owner shall also contact the Region's Corridor Control and Safety Section for specific information regarding the Process Chart, and utilities location and investigation.

Sample Subsurface Utility Engineering Drawing and Test Hole Report

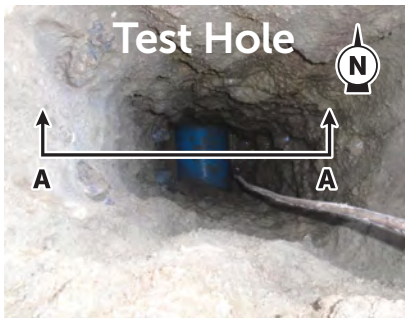


Surface Type

A Asphalt C Concrete I Interlock NG Natural Ground

TH #	Client Reference No.	TH Date (m/d/yy)	Utility Type	Utility Material	Utility Width (Nom.)	Elevation of Utility			Manual Depth of Utility From Grade		Depth of Excavation from Grade	ID'd By	Surface Type	Pavement Thickness	
						REF	Top	Bottom	Top	Bottom					
					mm.	m	m	m	m	m	m			mm.	
1	1	9/2/16	WM	PL	300	271.99	269.99	-	2.00	-	2.10	Rod & Cap	NG	-	
2	2	9/2/16	EXP	-	-	272.00	-	-	-	-	1.80	Rod & Cap	NG	-	

Locate all your utilities up front and prevent surprises in the field.



v) Prior to Engineering Approval, the Developer shall confirm, to the satisfaction of the Region, that the proposed development can meet the hydro authority's requirements for clearance between the building and electrical transmission poles situated within the Regional right-of-way, when implemented in accordance with Regional standards and practices, and considering the future location of transmission poles along vivaNext Rapidway and other Regional road widening projects. If the clearance requirements provided by the electrical authority cannot be met, the Developer shall, at their own expense, implement a solution to provide the appropriate clearances to the satisfaction of the Region.

vi) The Developer must review, or ensure that any consultants retained by the Developer, review, at an early stage, the applicable authority's minimum vertical clearances for aerial cable systems (See OPSD 2245.020) and their minimum spacing and cover requirements. The Developer shall be entirely responsible for making any adjustments or relocations, if necessary, prior to the commencement of any construction.

vii) The Developer must be aware that on **vivaNext Rapidway corridors** and other Regional road widening projects, the horizontal and/or vertical locations of existing utilities are likely to change. It may therefore be necessary for site plan designs to be based on the future location of utilities, not on their current locations.

No locates are to be left to subcontractors in the field.

23.2 Guidelines and Standards

The Developer can consult the following guidelines and standards for additional information to support utility investigations, relocation and other related activities:

- Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data, CI/ASCE 38-02
- York Region Utility Relocation Process Chart
- 2012 Building Code Compendium 3.2.5.6 Access Route Design
- Standard Development Construction Practices for Work on Regional Roads

23.3 Submission Requirements

Prior to Engineering Approval, the Development must submit, to the Region's satisfaction, the following documents:

i) A Site Servicing Plan or individual Utility Plan showing the location of all utilities where such utilities may conflict with servicing and/or other infrastructure for the proposed development.

ii) If requested, the Developer shall submit a Utility Plan depicting the results of the SUE QL-B and SUE QL-A investigations undertaken as part of the site plan application.