

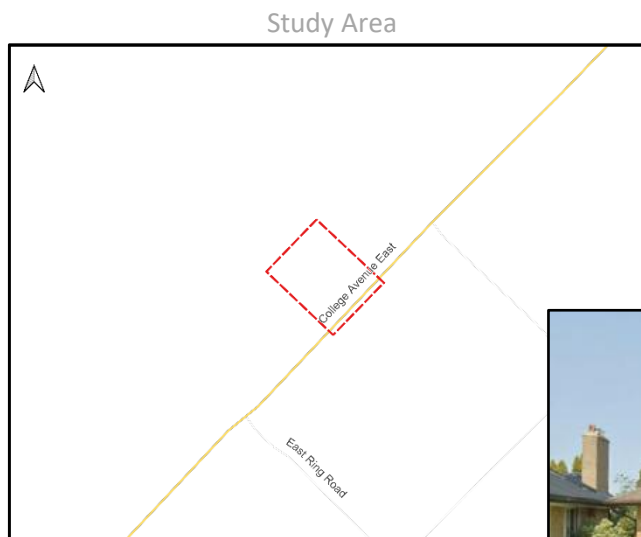
# Yarra c/o Elysium Investments Inc.



**I<sup>2</sup>S**  
Infrastructure  
Intelligence  
Services Inc.

INTEGRITY | COLLABORATION | PERFORMANCE

**SUE – Quality Level B – Utility Locates**  
210-222 College Avenue East, Guelph



**Project # 2025-1001**  
December 12, 2025

615 Main St. E.  
Milton, Ontario  
L9T 3J2

905-699-1065  
info@i2sinc.ca  
I2Sinc.ca

## Attachments

The following information is attached:

### Appendix A – Composite Utility Plan Drawing

- Contains a drawing(s) showing utilities based on their level of quality/confidence.
- Contains drawing detailing the on-site dye testing results

### Appendix B – Utility Circulation & On1Call Records

- Record drawings from utilities and/or stakeout sheets provided through a record drawing/ON1Call request.

### Appendix C – SUE Methodology

- Further details on the ASTM 38 Standard and the tool/approaches used to collect buried infrastructure data.

Given the size and nature of the attachments, they are provided via a digital sharing link – [Attachment Link](#).

## Closing

Please feel free to contact the undersigned if you have any questions or comments.

Sincerely,



Niall Quinlan  
Manager, I&I Services  
Tel.: 647-229-9175  
Email: [niall.quinlan@i2sinc.ca](mailto:niall.quinlan@i2sinc.ca)

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Prepared By:

**Infrastructure Intelligence Services Inc.**



Brian Lee  
Project Coordinator

**Infrastructure Intelligence Services Inc.**



Niall Quinlan  
Manager, Inflow and Infiltration Services

**Revisions Registry**

Description	Date	Comments

**Qualifications and Limitations**

Infrastructure Intelligence Services Inc. (I2S) has prepared this report for the Project Owner in accordance with the industry practices and the scope of work agreed upon for the project. The information contained is based on the judgement of data provide to I2S and collected in the field by I2S. The information is current as per the date that the information was collected, and any changes made following the investigation are not covered by this report. Third party information provided by the Project Owner has been relied upon and I2S is not responsible for the accuracy of that information. The report should be treated as confidential information and should not be used by any third parties unless agreed upon by I2S. Any damages incurred by unauthorized parties using the data is their responsibility.

# **Appendix A**

*Composite Utility Plan Drawing*

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# **Appendix B**

*Utility Circulation & On1Call Records*

<b>Project Reference</b>	<b>2025-1001_01 QLB</b>
<b>Location</b>	<b>210-222 College Ave E, Guelph</b>
<b>ON1Call #</b>	<b>2025436533</b>

### Utility Circulation List

#	Utility Name	Request Date	Contact Info	Email Address	Phone Number	Date Received	Notes
1	# Client provided drawings	2025-10-21	NA	NA	NA	2025-11-04	DWG, PDF
2	City of Guelph	2025-10-21	General Mailbox	info@guelph.ca; engineering@guelph.ca			
3	Bell Canada	2025-10-21	General Mailbox	bell.moc@telecon.ca	416 296 6587	2025-10-22	PDF
4	Enbridge Gas	2025-10-21	General Mailbox	Mark-Ups@enbridge.com	416 758 7956	2025-10-23	PDF
5	Alectra	2025-10-21	General Mailbox	customerservice@alecrautilities.com			

# **Appendix C**

*SUE Methodology*

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## 1.0 Investigation Scope and Methodology

I2S completes sub-surface investigation in accordance with the ASCE 38-22 Standard.

### 1.1 ASCE 38 Quality Level Description

All utility information collected and depicted as part of this investigation were assigned a quality level in accordance with the ASCE 38 Standard. The following is a summary of the Quality Level descriptions identified in the ASCE 38 Standard.

**Quality Level D (QL-D)** – Information shown on the drawing is based solely on information provided by Utility Owners, As-built records, verbal recounts, or other third-party sources.

**Quality Level C (QL-C)** – Information shown the drawing is based on correlating surveyed surface features with records information provided by Utility Owners, As-built records, verbal recounts, or other third-party sources.

**Quality Level B (QL-B)** – Information shown on the drawing is based on geophysical designating using a variety of geophysical sources which are outlined in the report.

**Quality Level A (QL-A)** – Information shown on the drawing is based on exposure of the utility at test hole (TH) locations, and the subsequent survey of those points.

## 2.0 Scope of Work

### 1.2 Quality Level B Investigation

Scope of work for QL-B investigations includes:

- Request and collect utility records information from the various Utility Companies. Review utility records information provided by Project Owner, and those received from our records request.
- Complete a field investigation using electromagnetic pipe and cable locate equipment to attempt to determine the horizontal alignment of the conductive utilities present within the investigation area. Any utilities that were not identified on the records will be considered as un-documented.
- I2S will attempt to find undocumented utilities however cannot confirm that we will find all undocumented utilities.
- Utilities that will be located in this investigation will be water, telecom, hydro and gas to Quality Level B where possible.
- Where Quality Level B can not be achieved for a utility, that facility will be depicted per utility record information (i.e. Quality Level D)
- Utilities that will be excluded for the investigation will be: underground storage tanks, and landscape irrigation.
- Collect measure down values at storm and sanitary manhole and catch-basin locations and use this data along with records information to determine as best as possible the alignments of the sewers at Quality Level C. Invert values will be calculated utilizing the collected measure down values and, when available, the rim elevations provided from the client's topographic survey.
- Survey paint marks in the field and tie them into the control provided for the project.

- Produce a set of signed and sealed (by a licensed professional engineer in the province of Ontario) deliverables which will include:
  - An ASCE 38 compliant drawing in Autodesk Civil 3D showing utilities at the quality level determined by the professional engineer in charge.
  - A SUE report highlighting the record information gathered, methodologies used, and key findings from the SUE investigation.

### 3.0 Investigation Techniques Utilized

I2S uses a number of techniques for the collection of information contained in this report.

#### 1.3 Pipe and Cable Locators (PCL's)

Pipe and cable locators (PCLs) were essential tools used for the investigation. Various equipment models were employed. Scans were conducted at different frequencies, including 8kHz, 33kHz, and passive 60Hz mode.

PCLs function by transmitting a signal onto the utility being sought and then pinpointing its location based on the electromagnetic field detected by the receiver. The utility must have conductive properties for the PCL to be effective.

The outcomes obtained from PCL readings can be influenced by several factors. These include the quality of electrical conductivity in the conductor or tracer wire, the conductivity of the ground, and the presence or interference from nearby utilities or other conductive elements.



#### 1.4 Measuring Rods

We utilized a measuring rod to record the inverts collected during the project. The rod was modified to enhance measurement accuracy, especially in pipes that are not directly aligned with the manhole lid.



#### 1.5 Survey Equipment

We use a total station and local control points provided by the client to survey the paint markings, utility features and to record invert information collected on

