

February 24, 2022  
29248-21

Michael Grabowski  
409 Geddes Street  
Elora, ON  
N0B 1S0

**Re: Servicing Brief  
639 Eramosa Road  
All of Lot 4 & 5  
Part of Lot 3 & 6, Plan 549  
City of Guelph**

## 1.0 Introduction

Van Harten Surveying Inc. was retained by Michael Grabowski to prepare an application for an Official Plan Amendment and Zoning By-Law Amendment. As part of this application, we will be preparing a Site Plan and reviewing and analyzing existing site conditions, including parking layout, grading, and existing servicing.

As illustrated on the attached Site Plan in Appendix A, the project involves the renovation of the existing building on the property to create a medical clinic. The property is located on Eramosa Road, north of Hyland Road in the northeast of Guelph.

This report will summarize the proposed plan as it pertains to site servicing including water, sanitary and storm. This will be done in accordance with the accepted engineering practices and criteria as noted by the local approval agencies, as well as municipal servicing standards.

## 2.0 Site and Project Description

The developer of the subject property proposes to renovate the existing place of worship to a medical clinic. It is noted the developer does not propose to construct any additions to the building or re-grade or add any hard surfaces or parking to the existing site but take advantage of the current configuration as is. Overall, based on the current proposal, some asphalt will be removed to comply with city by-laws and standards, and to allow for additional landscaping on the property. All renovations will be internal to the existing building.

As illustrated in Appendix A, the subject property is generally rectangular in shape. All drainage on site is handled by two existing catchbasins located in the rear parking lot. Most of the property is covered in

572 Weber Street North, Unit 7  
Waterloo ON N2L 5C6  
519-742-8371

Elmira, ON:  
519-669-5070

423 Woolwich Street  
Guelph, ON N1H 3X3  
519-821-2763

660 Riddell Road, Unit 1  
Orangeville, ON L9W 5G5  
519-940-4110

Collingwood, ON:  
249-499-8359

asphalt parking, with a section of landscape area immediately in front of the existing building. All drainage not captured by the catchbasins is drained overland to Eramosa Road.

Water servicing to the building is in the form of an existing 19mm water service connected to the watermain under Eramosa Road.

Sanitary servicing to the site is in the form of an existing 100 mm diameter sanitary service connected to the sanitary sewer under Eramosa Road.

Storm servicing for the rear parking lot catchbasins is handled by two separate storm services connected directly to the storm sewer under Eramosa Road. Roof drainage from the existing building appears to connect directly to these catchbasin services. A separate 150mm storm service for the building also ties directly to the storm sewer on Eramosa Road to service the foundation drainage.

The proposal for this development will continue to utilize the site generally in its existing state. No new asphalt or hard surfaces will be created. Also, as previously stated, some asphalt will be removed to comply with city by-laws and standards, and to allow for additional landscaping on the property. As such, it is assumed that new on-site stormwater management controls will not be necessary.

Renovations of the existing building will not add any new fixtures to the building. This being the case, it is assumed all existing on-site servicing will be suitable to continue servicing the renovated building. The proposed usage will have a low water demand and will not exceed peak demands associated with the building's previous use.

### **3.0 Water Supply**

It is understood water servicing in the form of a 19 mm copper water service was constructed in 1967 to service the property during the original development of the site. The existing watermain on Eramosa Road is understood to be a 150 mm diameter main.

Based on the proposed use of the building, the new water demand will not exceed the existing demand. It is understood the existing building features three water closets and a kitchenette, and no new plumbing fixtures will be added. Per Table 7.6.3.2.A., of the 2012 Ontario Building Code (OBC), the building contains a total of 12.2 Fixture Units (FU). Referencing Table 7.6.3.4, a  $\frac{3}{4}$ " (19mm) water supply is suitable to service up to 16 FU. Therefore, the existing water service to the building is suitable for continued use.

### **4.0 Sanitary Servicing**

It is understood sanitary servicing in the form of a 100 mm gravity sewer service was constructed to service the property during the original development of the site. The existing sanitary sewer on Eramosa Road is understood to be a 250 mm diameter main.

Based on the proposed use of the building, the new sanitary demand will not exceed the existing demand. It is understood the existing building features three water closets and a kitchenette, and no new plumbing

fixtures will be added. The intent is to provide a facility for no more than four practitioners. Per Table 8.2.1.3.B, and assuming one support staff per practitioner, a total flow rate from the building of 1,400 L/day is calculated. This roughly translates to 0.04 L/second, assuming a peaking factor of 2.5. Peak flows per flush are typically in the range of 2.8 L/second. A 100 mm diameter pipe installed at 2.0% has a capacity of about 7.0 L/second. Therefore, the existing sanitary service to the property is suitable for continued use based on the proposed usage.

## **5.0 Storm Servicing**

It is understood storm servicing in the form of a 150 mm gravity sewer service was constructed to service the property during the original development of the site. The existing storm sewer on Eramosa Road is understood to be a 300 mm diameter main.

Storm servicing to the site in the form of two 150 mm diameter laterals to each catchbasin located in the rear yard of the subject property are understood to be in service to the site. Although it is acknowledged these laterals are undersized considering typical servicing standards, these laterals appear to be in good working order. No additional hard surfaces will be added, and some existing asphalt will be removed as part of this proposal.

Each catchbasin appears to service approximately 400 m<sup>2</sup> of asphalt parking area and 105 m<sup>2</sup> of building area. Assuming the 5-year, ten-minute rainfall event per the City of Guelph Development Engineering Manual (DEM), a peak flow rate to each catchbasin is calculated to be about 13.7 L/second. The storm laterals to each catchbasin are assumed to slope between 2.0% and 7.5% based on measured inverts and storm sewer main depth. Pipe capacities based on these criteria are between 21.5 L/second and 41.7 L/second. Therefore, the existing storm servicing to the catchbasins is adequate considering existing and proposed conditions.

## **6.0 Conclusions**

The completed Functional Servicing Report is specific to the subject property and cannot be applied to different properties. It has been determined that municipal servicing exists for this property and is suitable for the proposed development.

I trust that this report and design has been completed within our terms of reference and is suitable for your present requirements. Please contact our office if you have any questions or require further consultation.

Van Harten Surveying Inc.



**Mike Vaughan**, P. Eng.



Encl. Appendix A – Site Plan Drawings



## **Appendix A**

### **Site Plan Drawings**

**LEGEND:**

- DENOTES SURVEY MONUMENT SET
- DENOTES SURVEY MONUMENT FOUND
- SIB DENOTES .025 x .025 x 1.20 STANDARD IRON BAR
- IB DENOTES .015 x .015 x 0.60 IRON BAR
- RP DENOTES ROCK POST
- OU DENOTES ORIGIN UNKNOWN
- 375 DENOTES BLACK, SHOEMAKER et. al., O.L.S.'s
- VH DENOTES VAN HARTEN SURVEYING INC., O.L.S.'s
- P1 DENOTES REGISTERED PLAN 549
- P2 DENOTES SURVEY BY (375), PROJ. No. 326-67, JUNE 16, 1967
- P3 DENOTES SURVEY BY (VH), PROJ. No. 14524-01, MAY 24, 2001
- P4 DENOTES SURVEY BY (VH), PROJ. No. 81-5434, JUNE 4, 1981

EXISTING ELEVATION x 206.55  
 TOP OF FOUNDATION T/F=206.33  
 FINISHED FLOOR ELEVATION F/F=206.33

UTILITY POLE ● UP DECIDUOUS TREE  
 HYDRO POLE ● HP CONIFEROUS TREE  
 HP WITH LIGHT HPL CONIFEROUS TREE  
 LIGHT STANDARD LS  
 HYDRO METER HM BELL PEDESTAL BELL  
 FIRE HYDRANT FH TV PEDESTAL CATV  
 WATER VALVE WV HANDWELL HW GARDEN  
 CATCHBASIN CB GAS METER GM ASPHALT  
 MANHOLE MH PAVESTONE  
 WATER LINE  
 SANITARY SEWER  
 STORM SEWER  
 DITCH/SWALE  
 OVERHEAD HYDRO  
 FENCELINE  
 TOP OF BANK

TRAFFIC FLOW

**BEARING AND COORDINATE NOTE:**

- BEARINGS ARE GRID BEARINGS AND ARE DERIVED FROM GPS OBSERVATIONS AND ARE REFERRED TO THE UTM PROJECTION, ZONE 17, NAD 83 (CSRS-2010) ADJUSTMENT.
- DISTANCES SHOWN ON THIS PLAN ARE ADJUSTED GROUND DISTANCES AND CAN BE CONVERTED TO GRID DISTANCES BY MULTIPLYING BY AN AVERAGED COMBINED SCALE FACTOR OF 0.99959594.
- COORDINATES ON THIS PLAN ARE UTM, ZONE 17, NAD83 (CSRS-2010) ADJUSTMENT AND ARE BASED ON GPS OBSERVATIONS FROM A NETWORK OF PERMANENT GPS REFERENCE STATIONS.

**BEARING COMPARISONS:**

FOR THE PURPOSES OF BEARING COMPARISONS, PREVIOUS SURVEYS HAVE BEEN ROTATED TO UTM BEARINGS BY THE ANGLES SHOWN BELOW.

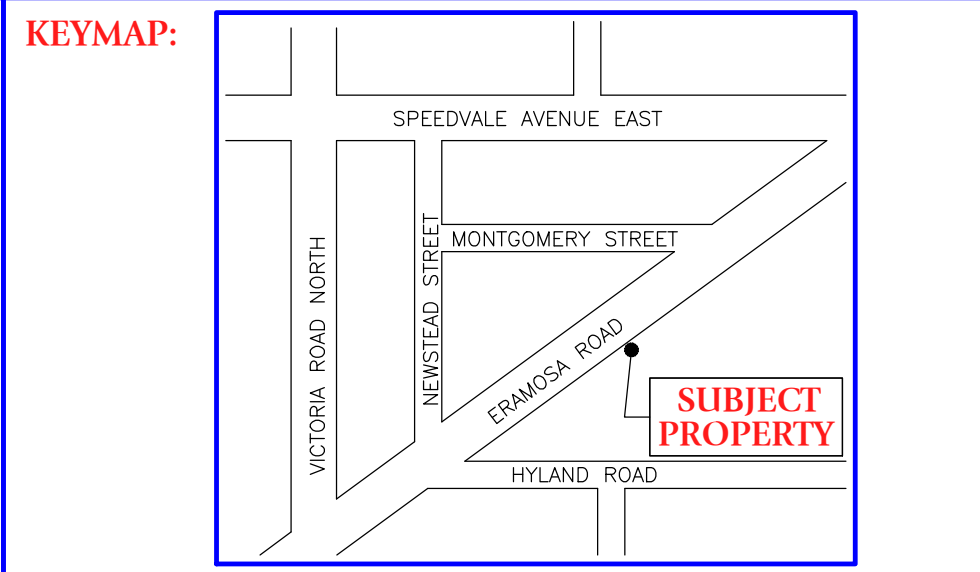
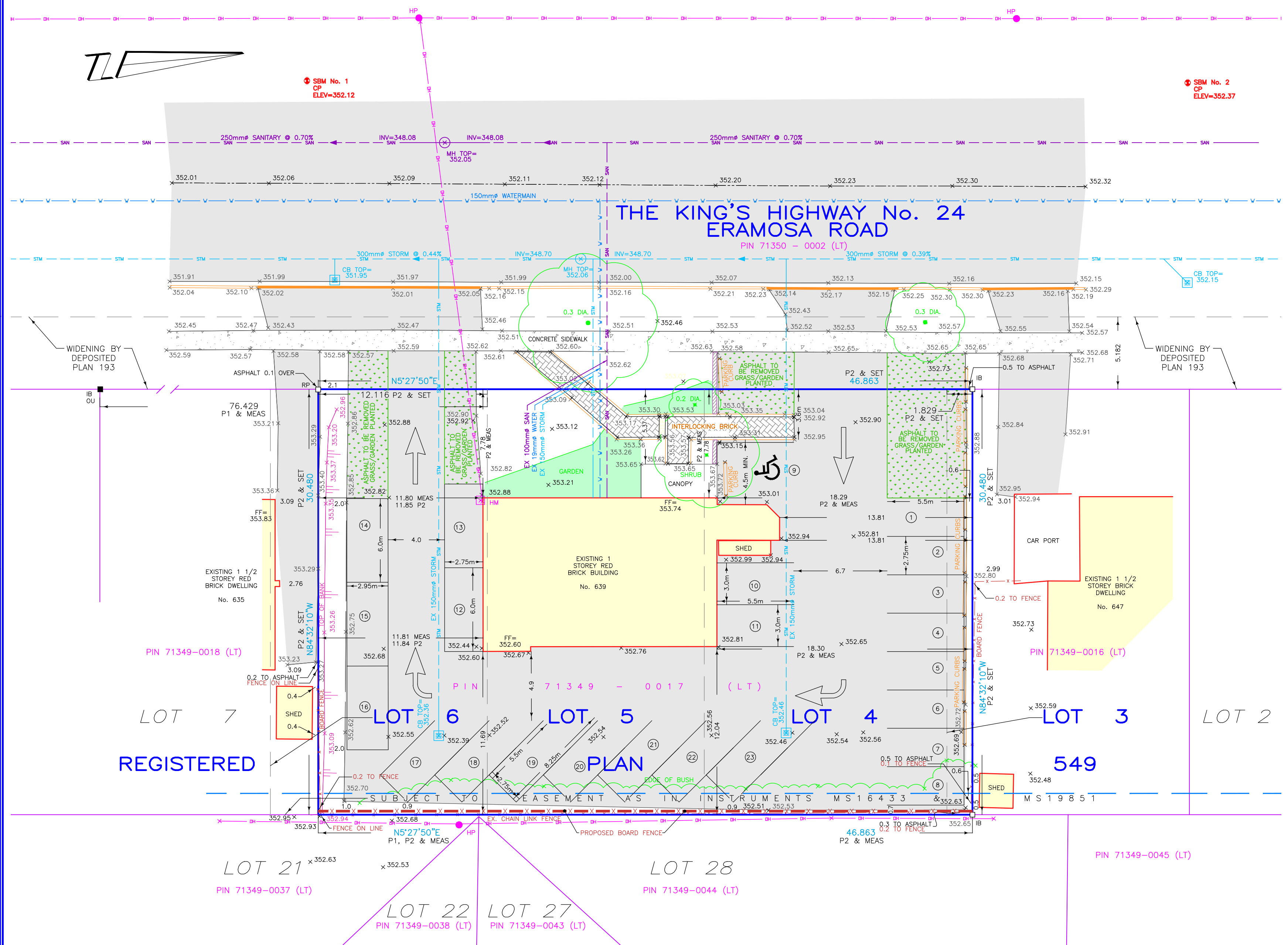
PLANS	ROTATION FOR NORTHEAST BEARINGS
P1, P2, P3 & P4	-0°33'20"

**UNDERGROUND SERVICES:**

**WATER :** BASED ON CITY OF GUELPH SERVICE DRAWING No. P-98.  
**STORM :** BASED ON LOCATION OF CATCH BASINS, MANHOLES, AND CITY OF GUELPH SERVICE DRAWING No. P-98.  
**SANITARY :** BASED ON LOCATION OF MANHOLES, AND CITY OF GUELPH SERVICE DRAWING No. P-98.

**CALL BEFORE YOU DIG**

THE LOCATION OF SERVICES ON THIS DRAWING ARE ONLY APPROXIMATE AND BASED ON SURFACE FEATURES LOCATED AT THE TIME OF THE TOPOGRAPHIC SURVEY. PRIOR TO ANY CONSTRUCTION IT IS THE RESPONSIBILITY OF THE CONTRACTOR/BUILDER TO ENSURE THE EXACT LOCATION OF ALL UTILITIES.



**PROPERTY DESCRIPTION:**

- PIN 71349-0017 (LT)
- ALL OF LOTS 4 & 5, AND PART OF LOTS 3 & 6, REGISTERED PLAN 549, AS IN INSTRUMENT MS49723
- ADDRESS: 639 ERAMOSA ROAD
- CITY OF GUELPH

**EASEMENTS**

- SUBJECT TO EASEMENT AS IN INSTRUMENTS MS16433 & MS19851

**ZONING: OFFICE RESIDENTIAL (OR)**

REQUIRED	PROPOSED
MINIMUM LOT AREA = 370m <sup>2</sup>	(1,428m <sup>2</sup> )
MINIMUM LOT FRONTAGE = 12m	(46.863m)
MINIMUM FRONT YARD = 3m	(5.37m)
MINIMUM INTERIOR SIDE YARD = 3m	(11.80m)
MINIMUM REAR YARD = 10m	(11.69m)
MINIMUM PARKING SET BACK FROM STREET = 3m	(3.6m)
MINIMUM REQUIRED PARKING SPACES (MEDICAL CLINIC) = 25 FOR 380m <sup>2</sup> GROSS FLOOR AREA	(25)
MINIMUM REQUIRED ACCESSIBLE PARKING SPACES = 1	(1)
MINIMUM DRIVEWAY WIDTH = 3m	(3.7m)

**PROPOSED DWELLING:**

TOP OF FOUNDATION = ( )  
 UNDERSIDE OF FOOTING = ( )  
 BASEMENT FLOOR = ( )  
 FINISHED FLOOR = ( )  
 GARAGE CUT = ( )

NOTES:

- GARAGE SLAB SLOPE REQUIRED.
- " FOUNDATION WALLS.

**SURVEY INFORMATION:**

**BENCHMARK REFERENCE:**

ELEVATIONS ARE BASED ON GPS OBSERVATIONS FROM PERMANENT REFERENCE STATIONS IN THE NAD83 (CSRS-2010) COORDINATE SYSTEM, WITH HEIGHTS CONVERTED TO ORTHOMETRIC ELEVATIONS ON THE CVG28 DATUM (1978 ADJUSTMENT) WITH GEOID MODEL HTv2.0, AS SUPPLIED BY NATURAL RESOURCES CANADA.

**SITE BENCHMARK:**

- CUT CROSS WEST OF SOUTHWEST CORNER OF SUBJECT PROPERTY HAVING AN ELEVATION OF 352.12 METRES.
- CUT CROSS NORTHWEST OF NORTHEAST CORNER OF SUBJECT PROPERTY HAVING AN ELEVATION OF 352.37 METRES.

**TOPOGRAPHIC SURVEY DATE:**

THIS TOPOGRAPHIC SURVEY WAS COMPLETED ON THE 19TH DAY OF JULY, 2021.

JEFFREY E. BUISMAN  
 ONTARIO LAND SURVEYOR

**CAUTION:** - THIS IS NOT A PLAN OF SURVEY AND SHALL NOT BE USED FOR TRANSACTION OR MORTGAGE PURPOSES.

- THIS SKETCH IS PROTECTED BY COPYRIGHT. ©

**METRIC:** DISTANCES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048.

**SITE PLAN FOR**  
**ALL OF LOTS 4 & 5, AND PART OF LOTS 3 & 6**  
**REGISTERED PLAN 549**  
**CITY OF GUELPH**  
**COUNTY OF WELLINGTON**  
**DRAWING REVISION SCHEDULE**

NO.	REVISION	DATE

**PROJECT No. 29248-21**  
**DRAWING SCALE 1 : 200**

**Van Harten**  
 SURVEYING INC.  
 LAND SURVEYORS and ENGINEERS

Kitchener/Waterloo: Ph: 519-742-8371  
 Guelph: Ph: 519-821-2763  
 Orangeville: Ph: 519-940-4110

www.vanharten.com info@vanharten.com

DRAWN BY: S.A.P. CHECKED BY: K.M.W.C.  
 Feb 24, 2022-11:38am  
 G:\GUELPH\549\acad\SITELOTS 3-6 (GRABOWSKI)UTM-2010.dwg