For Office Use Only: File Number Related File Number Pre-consultation Meeting Application Submitted Complete Application	BNPL 2621014 BNPL 2621013 ZNDL 2015112 BNPL2149 *BURGEROOD Dec 23/20 TGO 15/21	Public Notice Sign Application Fee Conservation Authority Fee Well & Septic Info Provided Planner	2.816.00 × Z = 5,632 serving report / N.G. (Intake)
Official Plan A Zoning By-Lav Temporary Us Draft Plan of S Condominium Site Plan Appl Consent/Seve Minor Variance Easement/Rig Extension of a Part Lot Contre Cash-in-Lieu of Renewable Er Please explain the de provision on the subject lands, creatin Severance of the La	v Amendment e By-law Subdivision/Vacant Land Exemption ication rance X C e ht-of-Way Temporary Use By-law of Parking nergy Project or Radio 6 estred end result of this ect lands, changing the ig a certain number of I nd located at 159 LaSa	d Condominium Communication Tower application (for example zone and/or official plan	designation of the of land. One to
Property Assessme	ent Roll Number: 4910	1611000	



A. Applicant Information

Name of Owner	Jeff Descheemaeker	
It is the responsibility of the ownership within 30 days	he owner or applicant to notify the of such a change.	ne planner of any changes in
Address	159 LaSalette Road	
Town and Postal Code	LaSalette, N0E 1H0	
Phone Number		
Cell Number		
Email	jdishmaker@gmail.com	
Name of Applicant	same as above	
Address		
Town and Postal Code		
Phone Number		
Cell Number	<u></u>	
Email		
Name of Agent	Cathy Weatherall	
Address	682 Peel Street	
Town and Postal Code	Woodstock, N4S 1L3	
Phone Number	519-879-6875	
Cell Number		
Email		
• •	all communications should be se notices in respect of this applicati	·
Owner	Agent	Applicant
Names and addresses of encumbrances on the sul	any holder of any mortgagees, object lands:	charges or other



B. Location, Legal Description and Property Information

1. Legal Description (include Geographic Township, Concession Number, Lot Number, Block Number and Urban Area or Hamlet):

Lot1, Block C, Registered Plan 52-B of Part of Lot 23 Concession 7 in the geographic township of Windham in Norfolk County

	Municipal Civic Address: 159 LaS	alette Road
	Present Official Plan Designation(s)	E4 7 0040
	Present Zoning: RH	
	Is there a special provision or site sp	
	Yes No If yes, please specify	y:
3.	Present use of the subject lands: undeveloped	

4. Please describe all existing buildings or structures on the subject lands and whether they are to be retained, demolished or removed. If retaining the buildings or structures, please describe the type of buildings or structures, and illustrate the setback, in metric units, from front, rear and side lot lines, ground floor area, gross floor area, lot coverage, number of storeys, width, length, and height on your attached sketch which must be included with your application:

undeveloped

5. If an addition to an existing building is being proposed, please explain what it will be used for (for example: bedroom, kitchen, or bathroom). If new fixtures are proposed, please describe.

Two houses complete with garages and hard surface driveways. Also there is to be two new septic tile beds and two new wells.

6. Please describe all proposed buildings or structures/additions on the subject lands. Describe the type of buildings or structures/additions, and illustrate the setback, in metric units, from front, rear and side lot lines, ground floor area, gross floor area, lot coverage, number of storeys, width, length, and height on your attached sketch which must be included with your application:

Two houses complete with garages and hard surface driveways. Also there is to be two new septic tile beds and two new wells.



7.	Are any existing buildings on the subject lands designated under the <i>Ontario</i> Heritage Act as being architecturally and/or historically significant? Yes No If yes, identify and provide details of the building:
8.	If known, the length of time the existing uses have continued on the subject lands: N/A
9.	Existing use of abutting properties: N/A
10). Are there any existing easements or restrictive covenants affecting the subject lands?
	Yes No If yes, describe the easement or restrictive covenant and its effect:
	ote: Please complete all that apply. Please explain what you propose to do on the subject lands/premises which makes this development application necessary: Sever the lands to be able to develop 2 new single family dwellings.
2.	Please explain why it is not possible to comply with the provision(s) of the Zoning By-law/and or Official Plan:
	The land is in one piece and can not be developed to contain the two family dwellings.
3.	Does the requested amendment alter all or any part of the boundary of an area of settlement in the municipality or implement a new area of settlement in the municipality? Yes No If yes, describe its effect:
4.	Does the requested amendment remove the subject land from an area of employment? Yes No If yes, describe its effect:



5.		es, identify the policy, and also include a proposed text of the
		it (if additional space is required, please attach a separate sheet):
6.	Description of lan	d intended to be severed in metric units:
	Frontage:	Lot 1 - 30 m Lot 2 - 30 m
	Depth:	Lot 1 - 135 m Lot 2 - 135 m
	Width:	Lot 1 - 39.547 m Lot 2 - 30 m
	Lot Area:	Lot 1 - 0.477 ha Lot 2 - 0.404 ha
	Present Use:	undeveloped
	Proposed Use:	Single Family Dwelings
	Proposed final lot	size (if boundary adjustment):
	If a boundary adju	ustment, identify the assessment roll number and property owner of
	the lands to which	n the parcel will be added:
	Description of lan	ed intended to be retained in metric units:
	Frontage:	31.5 m
	Depth:	459 m
	Width:	varies but greater than 31.5m
	Lot Area:	2.56 ha
	Present Use:	undeveloped
	Proposed Use:	undeveloped
	Buildings on retai	ned land: N/A
7.		pposed right-of-way/easement:
	Frontage:	
	Depth:	
	Width:	
	Area:	
	Proposed use:	
8.	Name of person(s), if known, to whom lands or interest in lands to be transferred,
	leased or charge	d (if known):



9.	Site Information	Existing	Proposed
Ple	ease indicate unit of measuren	nent, for example: m, m² or %	
Lo	t frontage		
Lo	t depth		
Lo	t width	<u></u>	
Lo	t area	***	
Lo	t coverage		· -
Fre	ont yard		
Re	ear yard		
Le	ft Interior side yard		
Ri	ght Interior side yard		
Ex	terior side yard (corner lot)		
La	ndscaped open space		
En	trance access width		
Ex	it access width		
Siz	ze of fencing or screening		
Ту	pe of fencing		
10	.Building Size		
Nu	mber of storeys		
Bu	ilding height		
То	tal ground floor area		
То	tal gross floor area		
То	tal useable floor area		
11	. Off Street Parking and Loadin	ng Facilities	
Nu	mber of off street parking spac	ces	
Nu	mber of visitor parking spaces		
Nu	mber of accessible parking sp	aces	
	mber of off street loading facili		



12. Residential (if applicable)	
Number of buildings existing		
Number of buildings propose	_{ed:} 2	
Is this a conversion or additi	on to an existing building?	OYes ⊙ No
If yes, describe:		
Туре	Number of Units	Floor Area per Unit in m ²
Single Detached	2	232 m2
Semi-Detached		Ala Caraciana de C
Duplex		
Triplex		
Four-plex		
Street Townhouse		
Stacked Townhouse		
Apartment - Bachelor		
Apartment - One bedroom		
Apartment - Two bedroom		
Apartment - Three bedroom		
	example: play facilities, un	derground parking, games room,
13. Commercial/Industrial Us	ses (if applicable)	
Number of buildings existing	y :	
Number of buildings propos	ed:	
Is this a conversion or addit	ion to an existing building?	OYes ● No
If yes, describe:		
Indicate the gross floor area	by the type of use (for exa	mple: office, retail, storage):



Seating Capacity (for assembly halls or similar):
Total number of fixed seats:
Describe the type of business(es) proposed:
Total number of staff proposed initially:
Total number of staff proposed in five years:
Maximum number of staff on the largest shift:
Is open storage required: OYes ONo
Is a residential use proposed as part of, or accessory to commercial/industrial use?
OYes ONo If yes please describe:
14. Institutional (if applicable)
Describe the type of use proposed:
Seating capacity (if applicable):
Number of beds (if applicable):
Total number of staff proposed initially:
Total number of staff proposed in five years:
Maximum number of staff on the largest shift:
Indicate the gross floor area by the type of use (for example: office, retail, or storage):

15. Describe Recreational or Other Use(s) (if applicable)



D.	Previous use of the Property
1.	Has there been an industrial or commercial use on the subject lands or adjacent lands? Yes No Unknown
	If yes, specify the uses (for example: gas station or petroleum storage):
2.	Is there reason to believe the subject lands may have been contaminated by former uses on the site or adjacent sites? Yes No Unknown
3.	Provide the information you used to determine the answers to the above questions:
4.	If you answered yes to any of the above questions in Section D, a previous use inventory showing all known former uses of the subject lands, or if appropriate, the adjacent lands, is needed. Is the previous use inventory attached? Yes No
E.	Provincial Policy
1.	Is the requested amendment consistent with the provincial policy statements issued under subsection 3(1) of the <i>Planning Act, R.S.O. 1990, c. P. 13</i> ?
	If no, please explain:
2.	It is owner's responsibility to be aware of and comply with all relevant federal or provincial legislation, municipal by-laws or other agency approvals, including the Endangered Species Act, 2007. Have the subject lands been screened to ensure that development or site alteration will not have any impact on the habitat for endangered or threatened species further to the provincial policy statement subsection 2.1.7? Yes No
	If no, please explain:



3.	Have the subject lands been screened to ensure that development or site alteration will not have any impact on source water protection? Yes No
	If no, please explain:
	site is small and unlikely to have an effect.
	site is small and unlikely to have an effect.
	Note: If in an area of source water Wellhead Protection Area (WHPA) A, B or C please attach relevant information and approved mitigation measures from the Risk Manager Official.
4.	Are any of the following uses or features on the subject lands or within 500 metres of the subject lands, unless otherwise specified? Please check boxes, if applicable.
	Livestock facility or stockyard (submit MDS Calculation with application)
	On the subject lands or within 500 meters – distance
	Wooded area
	On the subject lands orwithin 500 meters – distance
	Municipal Landfill
	On the subject lands or within 500 meters – distance
	Sewage treatment plant or waste stabilization plant
	On the subject lands orwithin 500 meters – distance
	Provincially significant wetland (class 1, 2 or 3) or other environmental feature
	On the subject lands or within 500 meters – distance
	Floodplain
	On the subject lands orwithin 500 meters – distance
	Rehabilitated mine site
	On the subject lands or within 500 meters – distance ————————————————————————————————————
	On the subject lands or within 500 meters – distance
	Active mine site within one kilometre
	On the subject lands or within 500 meters – distance
	Industrial or commercial <u>use</u> (specify the use(s))
	On the subject lands or within 500 meters – distance
	Active railway line
	On the subject lands or within 500 meters – distance
	Seasonal wetness of lands
	On the subject lands or within 500 meters – distance
	Erosion
	On the subject lands or within 500 meters – distance
	Abandoned gas wells
	On the subject lands orwithin 500 meters – distance



	Servicing and Access	
۱.	Indicate what services are available or proposed: Water Supply	Communal wells
	Municipal piped water	
	Individual wells	Other (describe below)
	Sewage Treatment	
	Municipal sewers	O Communal system
	Septic tank and tile bed in good working order	Other (describe below)
	Storm Drainage	
	Storm sewers	Open ditches
	Other (describe below)	
	underground storage	
2.	Existing or proposed access to subject lands:	
	Municipal road	Provincial highway
	O Unopened road	Other (describe below)
	Name of road/street: Windham Road 19	
G.	Other Information	
1.	Does the application involve a local business?	Yes No
-	If yes, how many people are employed on the sub	
2.	Is there any other information that you think may be application? If so, explain below or attach on a se	
	white-contains it and architect and account as account as a contact as a	-



H. Supporting Material to be submitted by Applicant

In order for your application to be considered complete, **folded** hard copies (number of paper copies as directed by the planner) and an **electronic version (PDF) of the properly named site plan drawings, additional plans, studies and reports** will be required, including but not limited to the following details:

- 1. Concept/Layout Plan
- 2. All measurements in metric
- 3. Key map
- 4. Scale, legend and north arrow
- 5. Legal description and municipal address
- 6. Development name
- 7. Drawing title, number, original date and revision dates
- 8. Owner's name, address and telephone number
- 9. Engineer's name, address and telephone number
- 10. Professional engineer's stamp
- 11. Existing and proposed easements and right of ways
- 12. Zoning compliance table required versus proposed
- Parking space totals required and proposed
- 14. All entrances to parking areas marked with directional arrows
- 15. Loading spaces, facilities and routes (for commercial developments)
- 16. All dimensions of the subject lands
- 17. Dimensions and setbacks of all buildings and structures
- 18. Location and setbacks of septic system and well from all existing and proposed lot lines, and all existing and proposed structures
- 19. Gross, ground and useable floor area
- 20. Lot coverage
- 21. Floor area ratio
- 22. Building entrances, building type, height, grades and extent of overhangs
- 23. Names, dimensions and location of adjacent streets including daylighting triangles
- 24. Driveways, curbs, drop curbs, pavement markings, widths, radii and traffic directional signs
- 25. All exterior stairways and ramps with dimensions and setbacks
- 26. Retaining walls including materials proposed
- 27. Fire access and routes
- 28. Location, dimensions and number of parking spaces (including visitor and accessible) and drive aisles
- 29. Location of mechanical room, and other building services (e.g. A/C, HRV)
- 30. Refuse disposal and storage areas including any related screening (if indoors, need notation on site plan)
- 31. Winter snow storage location



- 32. Landscape areas with dimensions
- 33. Natural features, watercourses and trees
- 34. Fire hydrants and utilities location
- 35. Fencing, screening and buffering size, type and location
- 36. All hard surface materials
- 37. Light standards and wall mounted lights (plus a note on the site plan that all outdoor lighting is to be dark sky compliant)
- 38. Business signs (make sure they are not in sight lines)
- 39. Sidewalks and walkways with dimensions
- 40. Pedestrian access routes into site and around site
- 41. Bicycle parking
- 42. Architectural elevations of all building sides
- 43. All other requirements as per the pre-consultation meeting

	may also be required as part of the complete application submission:
	Zoning Deficiency Form
	On-Site Sewage Disposal System Evaluation Form (to verify location and condition)
	Architectural Plan
	Buildings Elevation Plan
	Cut and Fill Plan
	Erosion and Sediment Control Plan
	Grading and Drainage Control Plan (around perimeter and within site) (existing and proposed)
	Landscape Plan
	Photometric (Lighting) Plan
	Plan and Profile Drawings
	Site Servicing Plan
	Storm water Management Plan
	Street Sign and Traffic Plan
	Street Tree Planting Plan
	Tree Preservation Plan
	Archaeological Assessment
	Environmental Impact Study
_	■



	Geotechnical Study / Hydrogeological Review
	Minimum Distance Separation Schedule
	Noise or Vibration Study
	Record of Site Condition
	Storm water Management Report
	Traffic Impact Study – please contact the Planner to verify the scope required
Sit	e Plan applications will require the following supporting materials:
	 Two (2) complete sets of the site plan drawings folded to 8½ x 11 and an electronic version in PDF format Letter requesting that the Holding be removed (if applicable) A cost estimate prepared by the applicant's engineer An estimate for Parkland dedication by a certified land appraiser Property Identification Number (PIN) printout
Sta	andard condominium exemptions will require the following supporting materials:
	Plan of standard condominium (2 paper copies and 1 electronic copy)
	Draft condominium declaration
	Property Identification Number (PIN) printout

Your development approval might also be dependent on Ministry of Environment and Climate Change, Ministry of Transportation or other relevant federal or provincial legislation, municipal by-laws or other agency approvals.

All final plans must include the owner's signature as well as the engineer's signature and seal.

I. Development Agreements

A development agreement may be required prior to approval for site plan, subdivision and condominium applications. Should this be necessary for your development, you will be contacted by the agreement administrator with further details of the requirements including but not limited to insurance coverage, professional liability for your engineer, additional fees and securities.



J. Transfers, Easements and Postponement of Interest

The owner acknowledges and agrees that if required it is their solicitor's responsibility on behalf of the owner for the registration of all transfer(s) of land to the County, and/or transfer(s) of easement in favour of the County and/or utilities. Also, the owner further acknowledges and agrees that it is their solicitor's responsibility on behalf of the owner for the registration of postponements of any charges in favour of the County.

K. Permission to Enter Subject Lands

Permission is hereby granted to Norfolk County officers, employees or agents, to enter the premises subject to this application for the purposes of making inspections associated with this application, during normal and reasonable working hours.

L. Freedom of Information

For the purposes of the *Municipal Freedom of Information and Protection of Privacy Act*, I authorize and consent to the use by or the disclosure to any person or public body any information that is collected under the authority of the *Planning Act*, *R.S.O.* 1990, *c. P.* 13 for the purposes of processing this application.

Owner/Applicant Signature	Date
M. Owner's Authorization	
If the applicant/agent is not the registered application, the owner(s) must complete the	owner of the lands that is the subject of this ne authorization set out below.
I/We	am/are the registered owner(s) of the
lands that is the subject of this application	
I/We authorize	- ·
Owner	Date
Owner	Date



N. Declaration

1, JEST DESCUFFEMENTAN COUNTY OF WORLD

solemnly declare that:

all of the above statements and the statements contained in all of the exhibits transmitted herewith are true and I make this solemn declaration conscientiously believing it to be true and knowing that it is of the same force and effect as if made under oath and by virtue of *The Canada Evidence Act*.

Declared before me at:

185 Robinson St Sinive

Owner/Applicant Signature

In Norfolk County

This Dom day of becomber

A.D., 20 A O

A Commissioner, etc.

Susan Diana Wakeling, a Commissioner, etc., Province of Ontario, for the Corporation of Norfolk County. Expires March 11, 2022.





FUNCTIONAL SERVICING AND STORMWATER MANAGEMENT REPORT

PROPOSED LOTS OF PART OF LOT 23, CONCESSION 7 AND PART OF BLOCK C, REGISTERED PLAN 52-B IN THE GEOGRAPHIC FORMER TOWNSHIP OF WINDHAM, NORFOLK COUNTY

PREPARED FOR:

JEFF DESCHEEMAEKER

PREPARED BY:

GIRARD ENGINEERING 682 PEEL STREET, WOODSTOCK, ONTARIO N4S 1L3

DECEMBER 2020

FILE No.: 19-252

Table of Contents

List of Ta	blesii
List of Fig	guresii
List of Ab	obreviationsii
1 Ba	ckground 1
2 Sit	e Description1
3 Sto	ormwater Management2
3.1	Existing Drainage Conditions
3.2	Proposed Drainage Conditions
3.3	Quantity Control
3.4	Quality Control4
3.5	Hydrologic Model4
4 Sej	ptic Design5
4.1	Septic System5
4.2	Design Calculations
5 Co	onclusion6
Appendix	A – Zoning Map
Appendix	B – Detailed Design Drawings
Appendix	C – Soil Results
Appendix	D1 – MIDUSS Files for Lot 1
Annendix	D2 – MIDUSS Files for Lot 2

List of Tables

Table 1. IDF Curve Parameters for Norfolk County3	
·	
Table 2. Summary of pre and post-development runoff volumes for Lot 14	,
Table 3. Summary of pre and post-development runoff volumes for Lot 24	
List of Figures	
Figure 1. Site location (Source: Norfolk County Zoning map)2	

List of Abbreviations

UTRCA Upper Thames Conservation Authority

MOECC Ministry of the Environment and Climate Change

MNR Ministry of Natural Resource- Ontario

MTO Ministry of Transportation- Ontario

1 Background

Girard Engineering has been retained by Mr. Deschemarker to perform both a functional servicing and stormwater management (SWM) assessment design for the proposed development of an empty lot in La Salette, Ontario. The proposed development of the site requires the addition of a stormwater management system to be implemented in order to control the discharge of stormwater runoff from the site into the municipal system.

The purpose of this report is to analyze, assess and address the stormwater management requirements according to the criteria established by the County of Norfolk, Upper Thames River Conservation Authority (UTRCA), Ministry of Transportation (MTO) — Ontario, and Ministry of Environment and Climate Change (MOECC) — Ontario. Details of the design are illustrated in this report and drawings have been attached accordingly.

2 Site Description

The site (Figure 1) is located north of La Salette Road, west of Windham Road 19, and bounded by Souder street. The legal description of the property is Lot 1, Block C, Registered Plan 52-B of Part of Lot 23 Concession 7 in the geographic township of Windham in Norfolk County. The proposed site is to be severed into three (3) lots, with Lot 1 and Lot 2 to the west being connected to Windham Road 19. A zoning map can be found in Appendix A of this report.

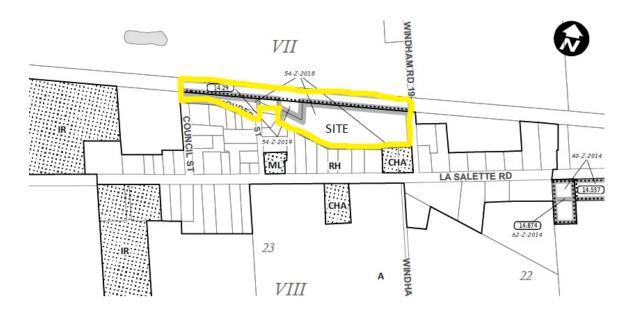


Figure 1. Site location (Source: Norfolk County Zoning map)

3 Stormwater Management

3.1 Existing Drainage Conditions

The existing site property can be characterized as an undeveloped piece of land. There are no structures or hard pavement that currently happens on the land. After discussions with the Drainage Superintendent, it was discovered that this piece of land is not included in any of the Municipal drains and is therefore uncontrolled. Drainage, as it exists right now, flows from Northeast to Southwest towards La Salette Road.

3.2 **Proposed Drainage Conditions**

Lot 1

Lot 1 has a total area of 0.477 ha. The runoff created by Lot 1 will split from front to back, with the front being contained within the site and discharged through infiltration. The site has been designed to provide storage for excess runoff during major storm events (1/100yr IDF). The drainage is designed to convey runoff via sheet flow to the low-lying

catch basins where it is collected and stored in an underground system before being infiltrated into the ground.

Lot 2

Lot 2 has a total area of 0.404 ha. The runoff created by Lot 2 will split from front to back, with the front being contained within the site and discharged through infiltration. The site has been designed to provide storage for excess runoff during major storm events (1/100yr IDF). The drainage is designed to convey runoff via sheet flow to the low-lying catch basins where it is collected and stored in an underground system before being infiltrated into the ground.

3.3 Quantity Control

25

50

100

The stormwater management design criteria were established with the use of the Norfolk County Design Criteria, 2012. Within the Development and Engineering Standards it suggests that the following IDF parameters be used for a 3 hour Chicago type:

Return b Period С а (Years) 529.711 4.501 0.745 3.007 583.017 0.703 5 670.324 3.007 10 0.698

Table 1. IDF Curve Parameters for Norfolk County

The overall quantity control of the Lots will be achieved through infiltration from an underground storage area.

2.253

1.898

1.501

0.679

0.668

0.657

Detailed design drawings can be found in Appendix B of this report.

721.533

766.038

801.041

3.4 Quality Control

Stormwater management quality control has not been considered for these Lots because rural residential areas are usually highly wooded/grassed and all swales have been designed to ensure the best possible natural quality of runoff is achieved before discharge of site.

3.5 Hydrologic Model

To determine the pre and post-development peak flows as well as run off volumes discharge, the hydrologic model MIDUSS was used. A summary of the peak flows are presented in Table 2 and detailed MIDUSS model results provided in Appendix D.

Table 2. Summary of pre and post-development runoff volumes for Lot 1

Return Period (Years)	Pre- Development Runoff Volume (m³)	Post-Development Runoff Volume (m³)	Difference (m³)
2	25.55	34.63	9.08
5	52.38	64.14	11.76
10	73.33	86.51	13.18
25	102.54	117.24	14.7
50	127.24	143.04	15.8
100	152.58	169.26	16.68

Table 3. Summary of pre and post-development runoff volumes for Lot 2

Return Period (Years)	Pre- Development Runoff Volume (m³)	Post-Development Runoff Volume (m³)	Difference (m³)
2	21.61	30.42	8.81
5	44.29	55.62	11.33
10	61.98	74.73	12.75
25	86.68	100.73	14.05
50	107.58	122.69	15.11
100	128.98	144.71	15.73

As indicated in the Tables above, the underground holding tanks need to be at least 16.68 m³ and 15.73 m³ respectively. In order to reduce the risk of overloading, the underground storage is to be 17 m³ as designed.

From the geotechnical data, both sites have a percolation rate of 8 min/cm which is very conducive to infiltration. Geotechnical Data can be found in Appendix C of this report.

4 Septic Design

4.1 Septic System

The projected waste water flows from the proposed buildings were based on the following from table 8.2.1.3.(1) from the Ontario Building Code:

- 1. 4 bedroom dwelling = 2,000 liters/day
- 2. Additional $10m^2$ over $200m^2 = 500$ liters/day

Based on the above the total sewage flow for both lots can be equated to 2,500 liters/day. Since the minimum tank size needs to be 2 times the daily flow, the holding tank will be set at 5,000 liters.

4.2 **Design Calculations**

The percolation time (T = 8 min/cm) for the underlying soil was obtained from the soil testing that is located in Appendix C of this report. Taking into account the soil type and the ethicists of the land, underground filter beds (OBC 8.7.5) where chosen as the base of the septic system.

Filter Bed:

Effective Area for filter bed, (A) = Daily Flow/ 75

Therefore $A = 2,500/75 = 33.33 \text{ m}^2$

Pipe Length:

L = daily flow x percolation rate / 200

 $L = 2,500 \times 8 / 200$

L = 100 m or 8 runs of 12.5 m

Mantle/ Loading Area:

Mantle Area is calculated based on loading rates:

Table 8.7.4.1.

Loading Rates for Fill Based Absorption Trenches and Filter Beds
Forming Part of Sentences 8.7.4.1.(1) and 8.7.5.2.(2)

Item	Column 1	Column 2
Percolation Time (T) of	Loading Rates, (L/m ₂)/	
Soil, min	day	
1.	$1 < T \le 20$	10
2.	$20 < T \le 35$	8
3.	$35 < T \le 50$	6
4.	T > 50	4

For the proposed site T = 8 min/cm

Loading rare from the table 8.7.4.1, OBC = 10

Loading Area required = $Q / (Loading Rate) = 2,500 / 10 = 250 \text{ m}^2$

5 Conclusion

Based on the information presented in this report, the following can be assumed:

1. The majority of both Lots stormwater runoff will discharge into the existing ground through infiltration, while having an overflow into the existing municipal ditch on the right of way of Windham Road 19.

2. Septic design will work with a filter bed in the back and will conform to OBC

standards.

Therefore, it can be concluded that the proposed development meets the requirements of

the County of Norfolk from both a stormwater management and functional servicing

perspective.

Prepared By

Cathy Weatherall, P.Eng

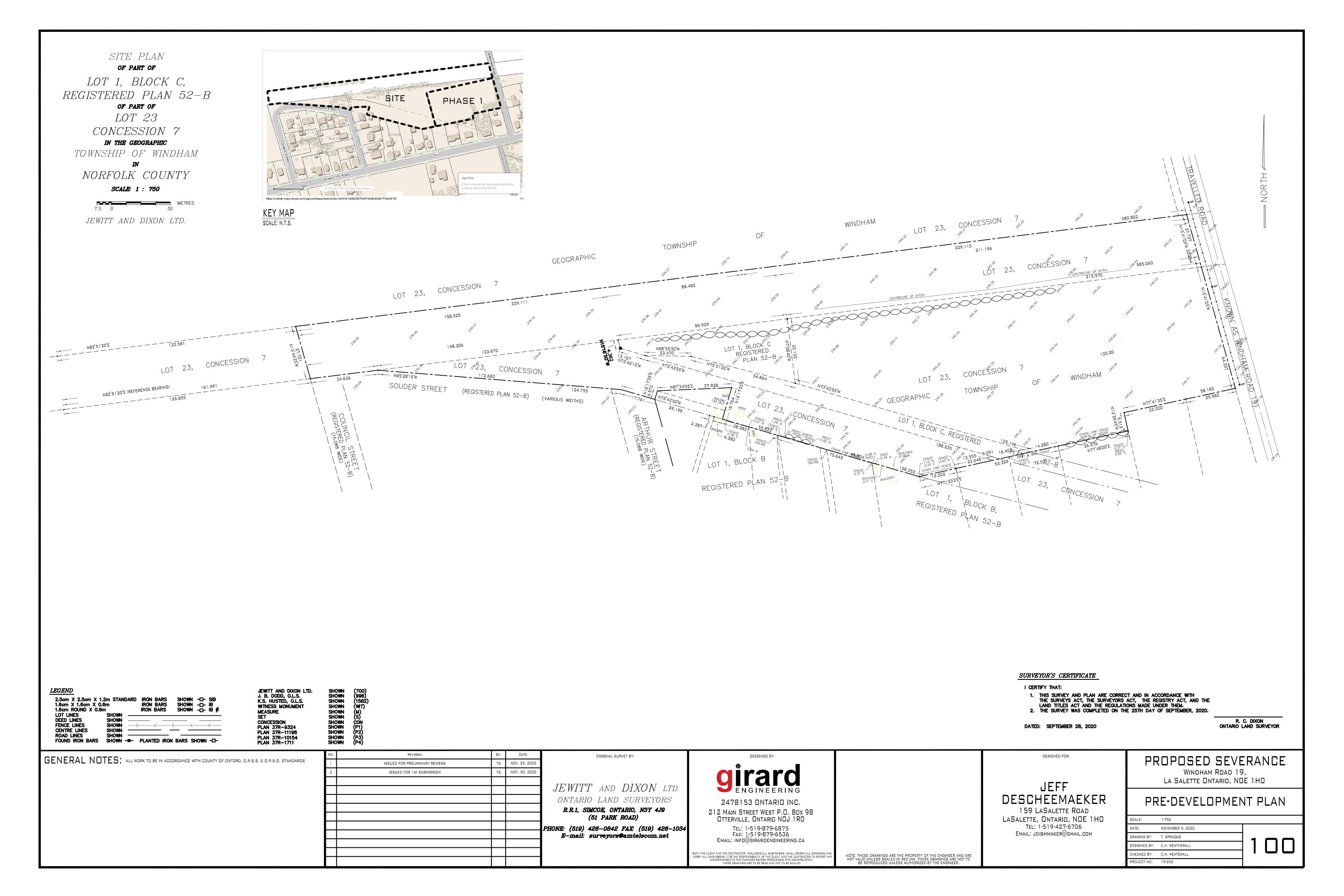
Municipal Engineer

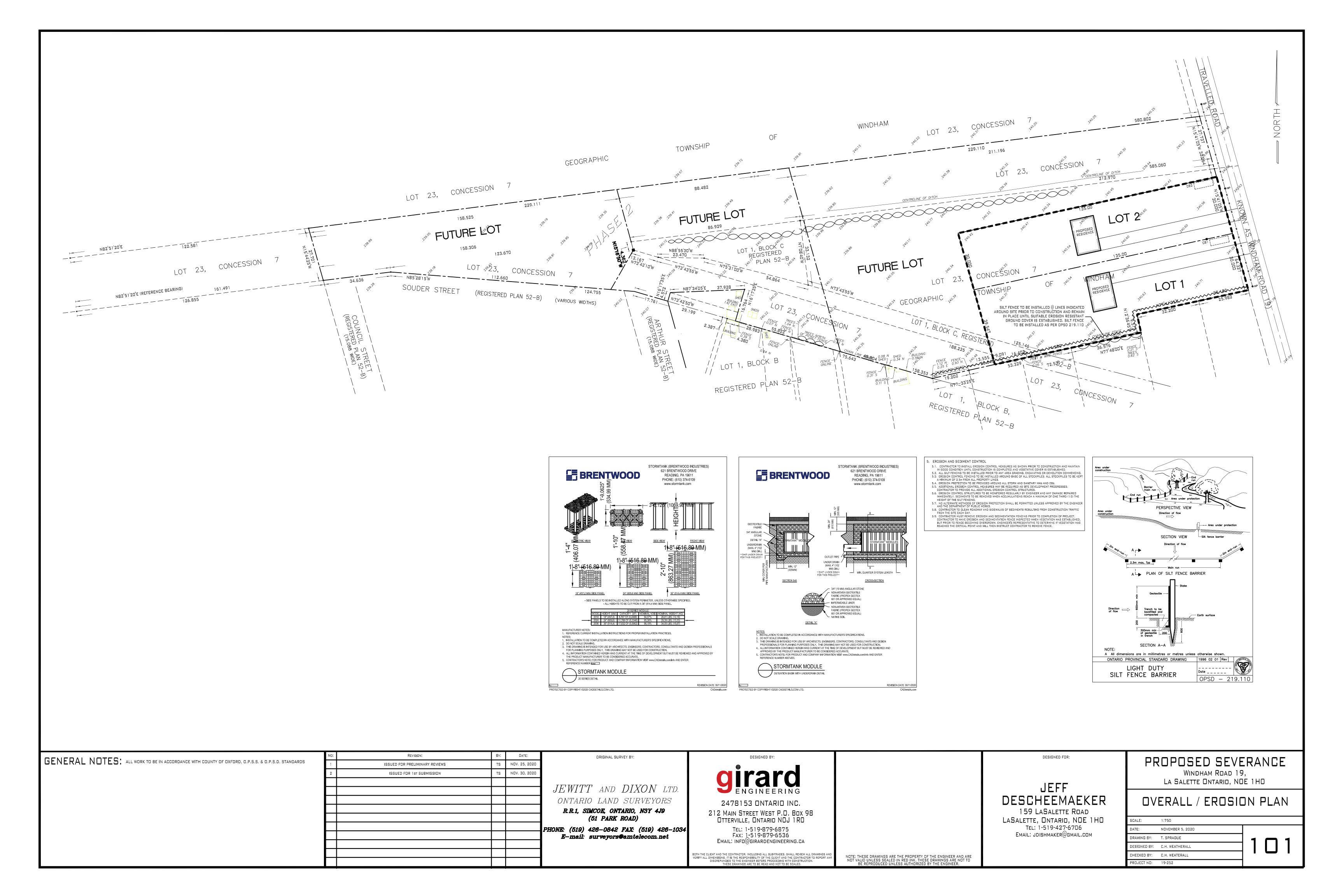
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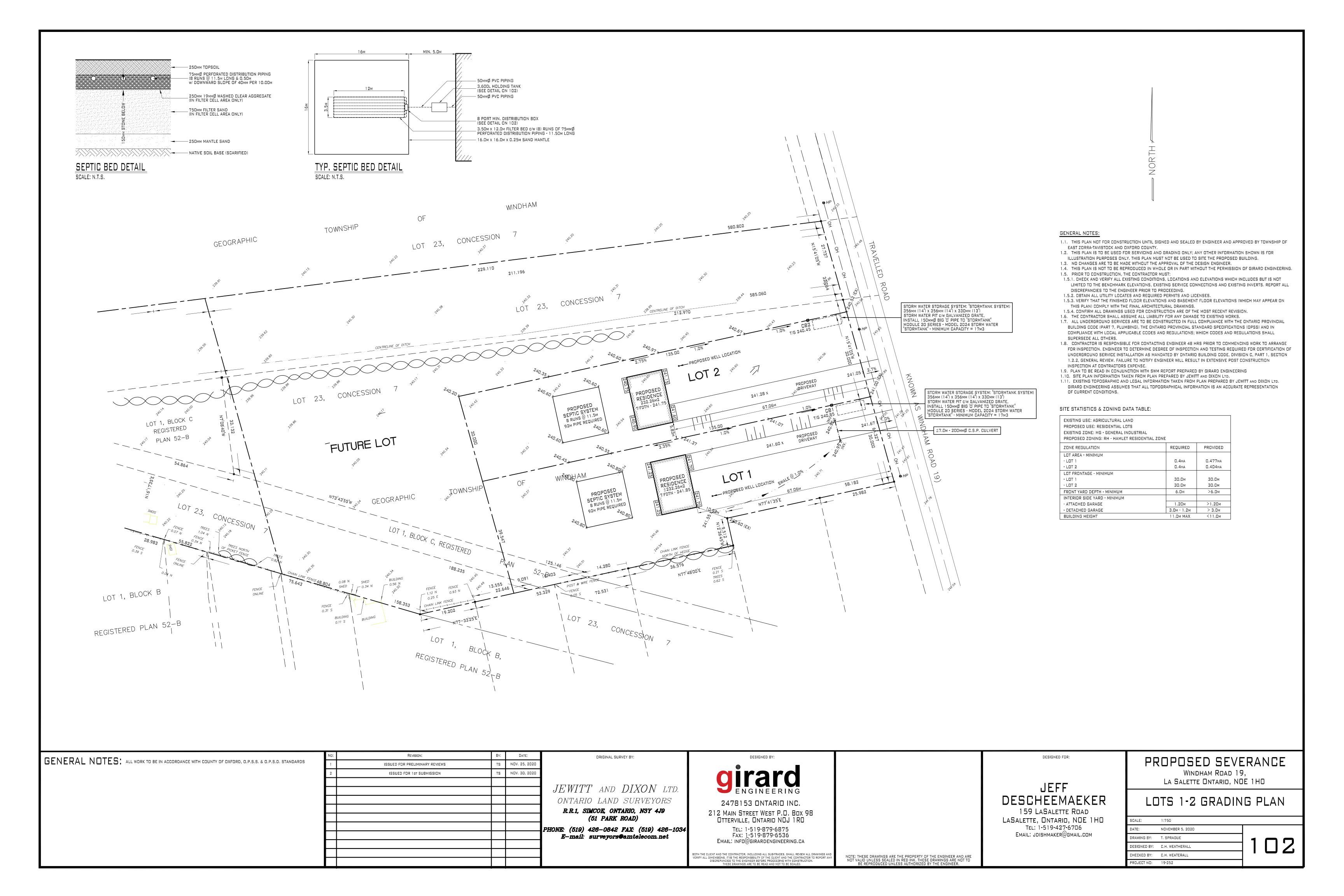


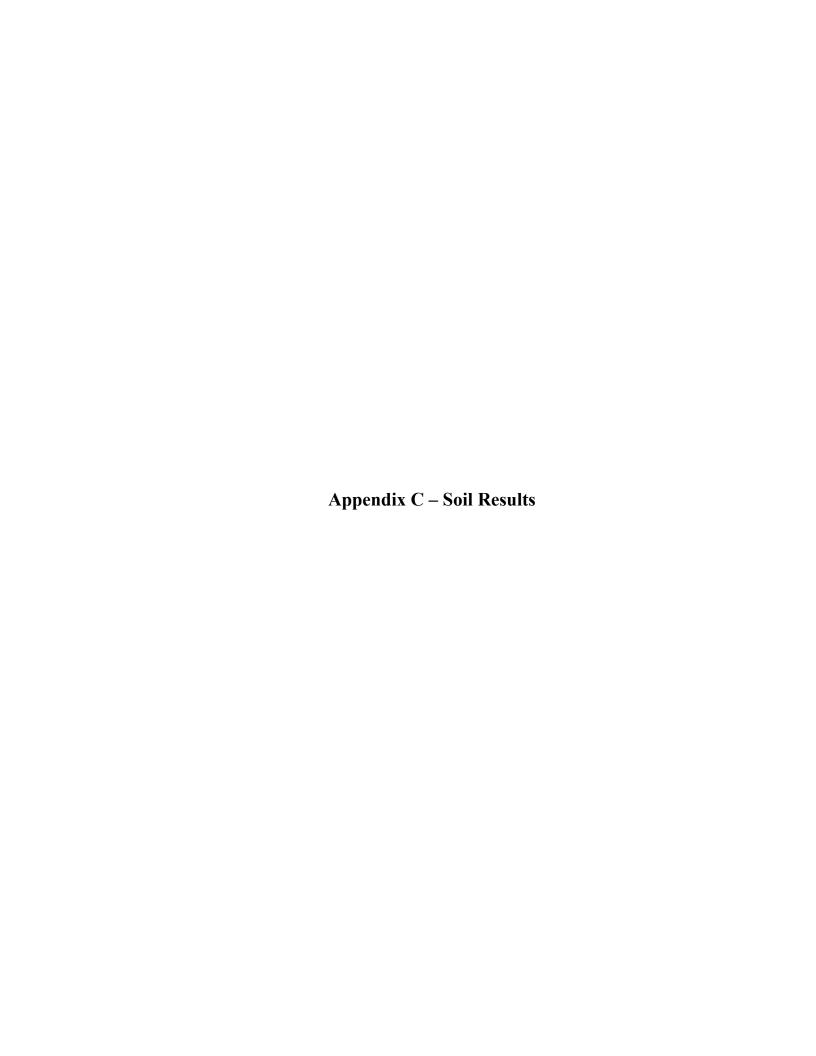












55 Gibson Drive, Simcoe ON N3Y3L1, 519 410 6111, email: norfolksoils@gmail.com

January 17, 2020

Project #: 2020005

To:

Jeff Descheemaeker

351 Courtland street

Delhi N4B 0A8

Project: Soils Analysis. **Soil Sample 1**: Property of Jeff Descheemaeker, with respect to PROPOSED LOTS OF PART OF LOT 23, CONCESSION 7AND PART OF BLOCK C, R. P. 52—B IN THE GEOGRAPHIC formerTOWNSHIP OF WINDHAM, Norfolk County (See attached Jewitt and Dixon Sketch dated July 2, 2019 attached.

Soils analysis in accordance with Section 8.2.1.2 of the Ontario Building Code, The Unified soil Classification System, and ASTM D6913 of which the distribution graph representing the sample provided is attached.

Based on the testing of the materials as provided it is our opinion that the Percolation Rate is $T = 8 \, \text{min/cm}$. The drainage characteristics of the soil appears to be suitable for an in ground leeching bed system. The soil sample as provided produced the results as follows;

Coefficient of Uniformity = 1.97 Coefficient of Curvature = 2.06

Therefore the sample is classified as SP- Poorly Graded Sand consisting of fines <12% (1.53% actual content).

I trust this meets with your requirements for the soil sample provided.

Yours Truly,

D Free

D. R. Free, MBA, CPA, CET BCIN 109582

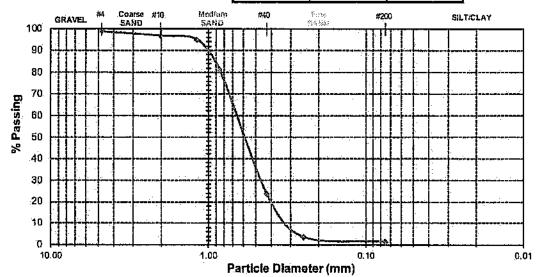




Sieve Analysis Data Sheet ASTM D422-63(2007)

Project Name:	SA2020005 (Soll	Sample 1)	Tested By:	DRF	Date:	2020-01-17	
Location:	PROPOSED LOTS LOT 23, CONCES PART OF BLOCK O IN THE GEOG	SION 7AND C, R. P. 52—B	Checked By:	DRF BCIN 109582	Date:	2020-01-17	_
Cilent	Jeff Deschee 351 Courtland Delhi N4B	d street	Property Owner	Jeff Descheen	naeker		
Boring No: NA		Test Number:	1				
Sample Depth:	NA NA		Gnd Elev.:	NA			
	USCS Soll C	lassification:	SP-F	Poorly graded sand,	with fines <12	%	
AASHTO Soil Classification: Weight of Container (g): 77.1			A-1-a			_	
		_	Weight of Contain	er & Soll (g): _	533.2		
Weight of	Dry Sample (g):	430.6	_	Moisture Con	tent %	6%	

Sleve Number	Diameter (mm)	Mass of Sieve (g)	Mass of Sieve & Soll (g)	Soil Retained (g)	Soil Retained (%)	Soll Passing (%)
#4	4.75	501.2	506,6	5.4	1.3	98.7
#10	2.00	433.2	441.5	8.3	1.9	96.8
#16	1.18	410.0	418.1	8.1	1.9	94.9
#30	0.85	357.3	417;2	59.9	13.9	81.0
#50	0.43	329,0	576.8	247,8	57.5	23.5
#100	0.25	309.7	394,3	84,6	19.6	3.8
#200	0,075	303,7	313.6	9.9	2.3	1,5
Pan		283.1	289.7	6.6	1,5	0.0
			TOTAL:	430.6	100.0	



Grain Size Distribution Curve Results:



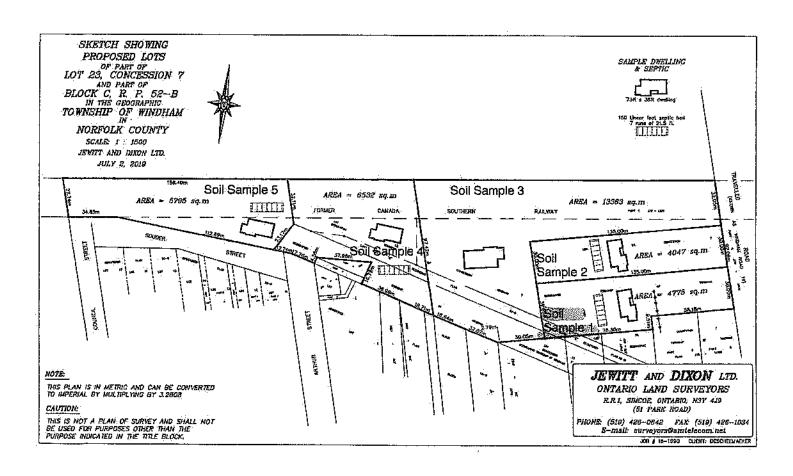
l:	17.00
d:	81.47
3:	1.53
	100.00

D ₁₀ :	0.340
D ₃₃ ;	0.470
D ₆₀ ;	0.670

Cu:	1.97	
C.	2,063	

Notice to Reader & Limitations:

These test results are unique to this soil sample and for the client as identified on the date for which the tests were performed. These test results cannot be used by any other party other than the client stated above within the text of this report without the consultants prior written approval.



55 Gibson Drive, Simcoe ON N3Y3L1, 519 410 6111, email: norfolksoils@gmail.com

January 17, 2020

Project #: 2020006

To:

Jeff Descheemaeker 351 Courtland street

Delhi N4B 0A8

Project: Soils Analysis. Soil Sample 2: Property of Jeff Descheemaeker, with respect to PROPOSED LOTS OF PART OF LOT 23, CONCESSION 7AND PART OF BLOCK C. R. P. 52-B IN THE GEOGRAPHIC formerTOWNSHIP OF WINDHAM, Norfolk County (See attached Jewitt and Dixon Sketch dated July 2, 2019 attached.

Soils analysis in accordance with Section 8.2.1.2 of the Ontario Building Code, The Unified soil Classification System, and ASTM D6913 of which the distribution graph representing the sample provided is attached.

Based on the testing of the materials as provided It is our opinion that the Percolation Rate is T = 8 min/cm. The drainage characteristics of the soil appears to be suitable for an in ground leeching bed system. The soil sample as provided produced the results as follows:

Coefficient of Uniformity = 2.05 Coefficient of Curvature = 1.75

Therefore the sample is classified as SP- Poorly Graded Sand consisting of fines <12% (2.51% actual content).

I trust this meets with your requirements for the soil sample provided.

Yours Truly,

D Free

D. R. Free, MBA, CPA, CET BCIN 109582



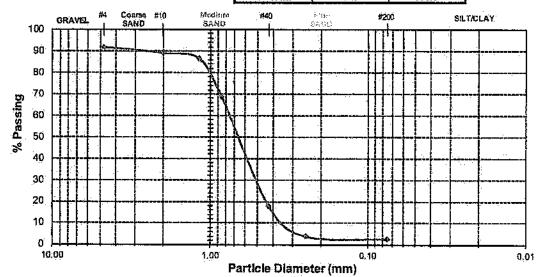
Encls

Sieve Analysis Data Sheet

ASTM D422-63(2007)

Project Name:	SA2020008 (Soll Sample 2)	Tested By:	DRF	Date:	2020-01-17	
Location:	PROPOSED LOTS OF PART OF LOT 23, CONCESSION 7AND PART OF BLOCK C, R. P. 52—8 IN THE GEOGRAPHIC	Checkeri Sv:	DRF BCIN 109582	Date:	2020-01-17	
Client	Jeff Descheemaeker 351 Courtland street Delhi N4B OAB	Property Owner	Jeff Descheem	aeker		
Boring No:	NA	Test Number:	1			
Sample Depth: NA USCS Soil Classification: AASHTO Soil Classification:		Gnd Elev.:	NA			
		SP-Poorly graded sand, with fines <12%				
		A-1-a				
Weight of Container (g): 77.1			Weight of Contains	er & Soil (g):	683.0	
Weight of Dry Sample (g): 574.5		_	Moisture Conf	tent %	5.2%	

Sleve Number	Diameter (mm)	Mass of Sieve (g)	Mass of Sleve & Soll (g)	Soll Retained (g)	Soli Retained (%)	Soll Passing (%)
#4	4.75	501.2	548.5	47,3	8.2	91.8
#10	2.00	433.2	448.0	14.8	2.6	89.2
#16	1,18	410.0	425,5	15.5	2.7	86.5
#30	0.85	357.3	459.5	102.2	17,8	68.7
#50	0,43	329.0	622.1	293.1	5 1.0	17.7
#100	0.25	309.7	388.6	78:9	13.7	4;0
#200	0.075	303.7	312.0	8.3	1.4	2.5
Рап		283.1	297.5	14.4	2.5	0,0
			TOTAL:	574,5	100.0	







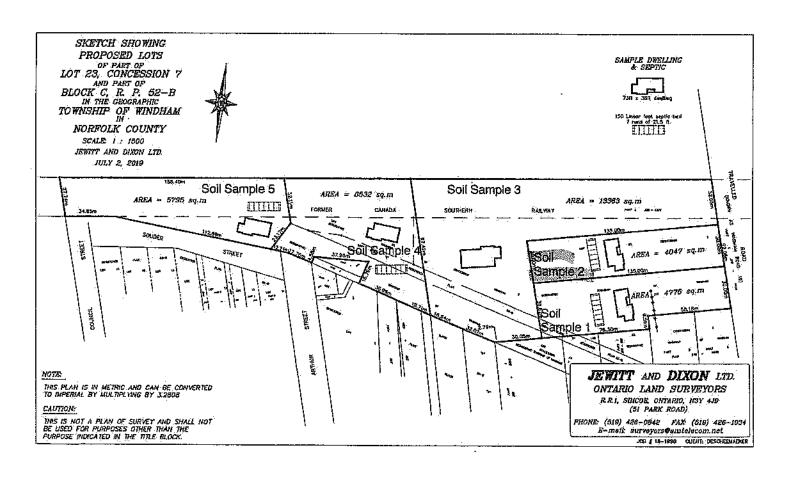
17.00
80.49
2,51
100.00

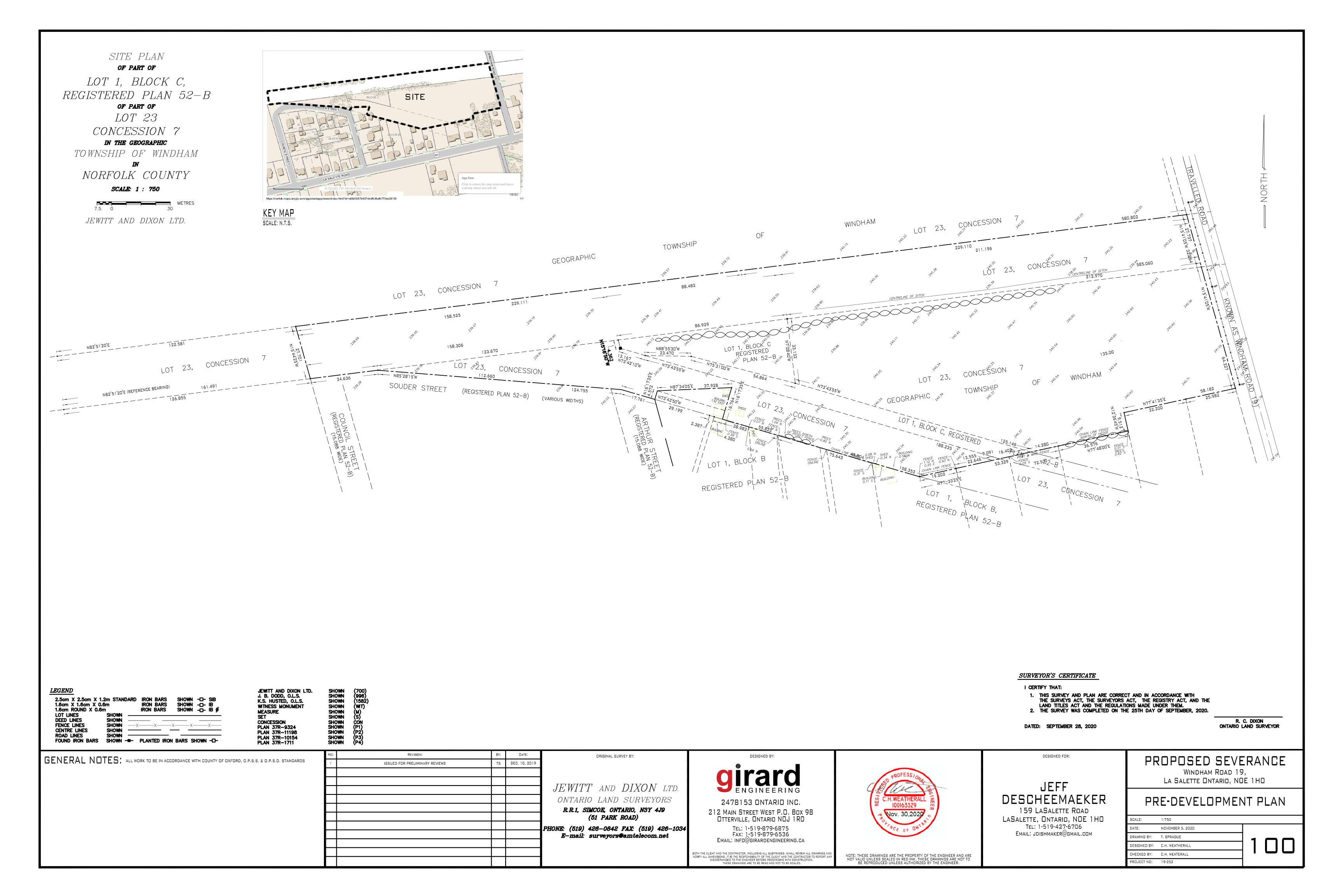
D:0:	0.380	
D ₃₀ :	0.520	
D _{en} :	.0.780	

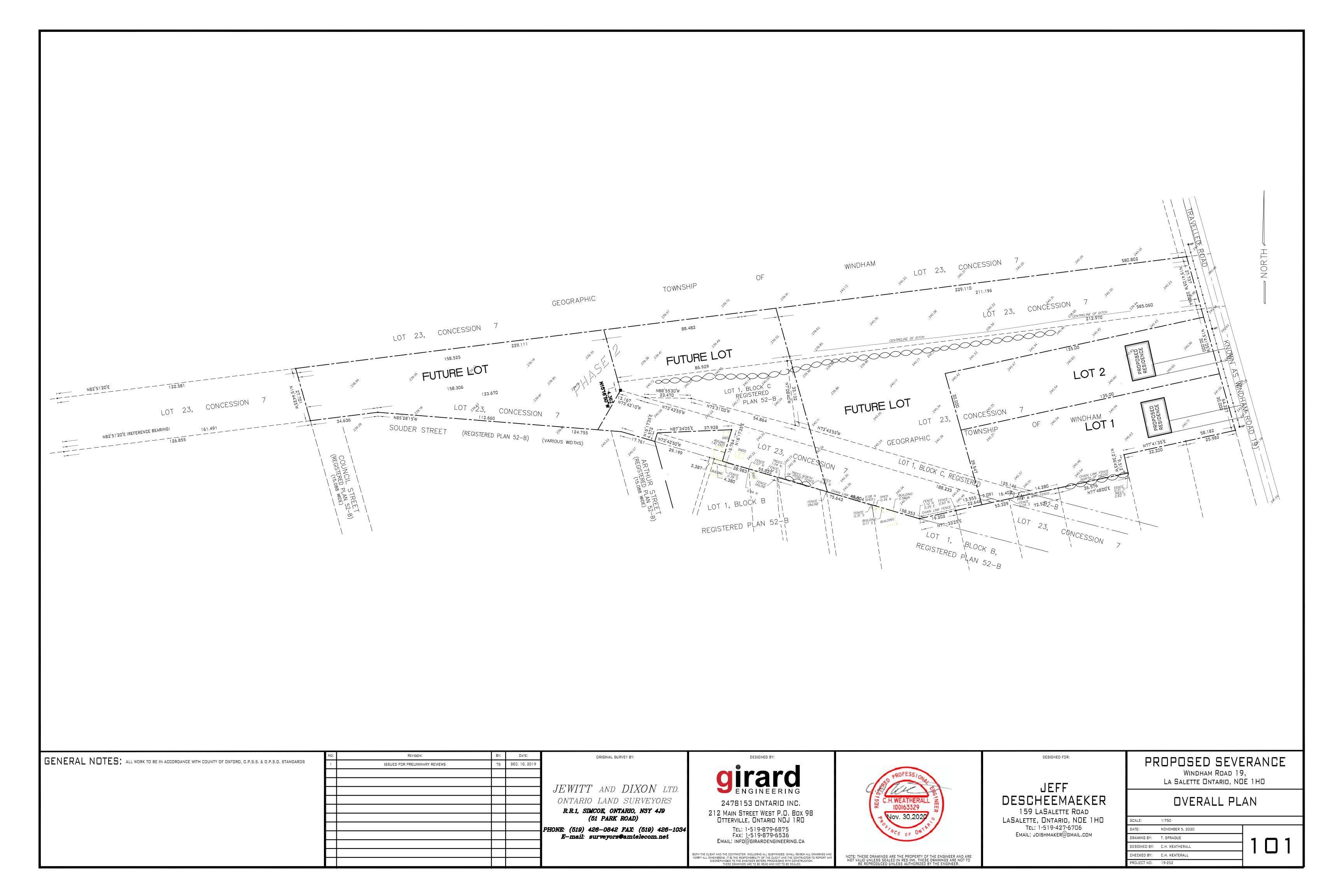
Cu:	2,05
Ct:	1.754

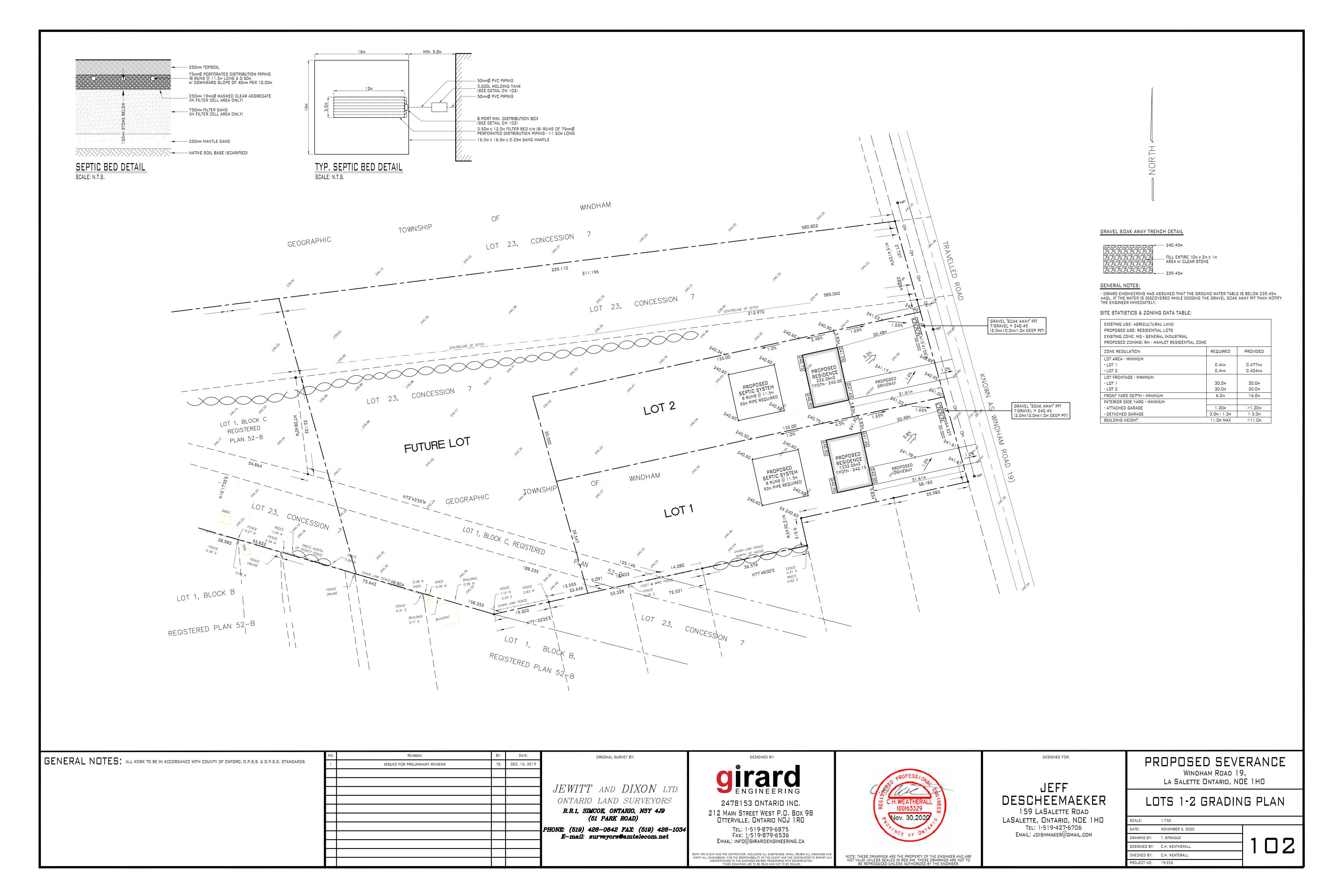
Notice to Reader & Limitations:

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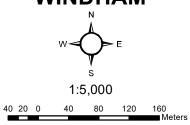


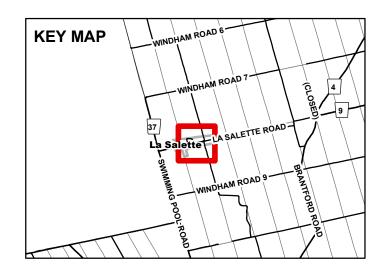


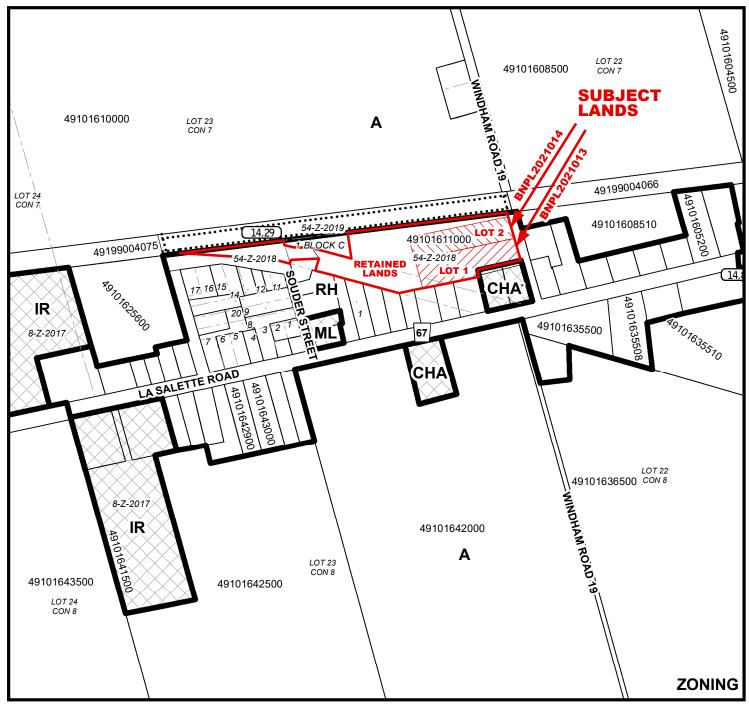


MAP 1 File Number: BNPL2021013 & BNPL2021014

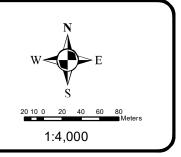
Geographic Township of **WINDHAM**

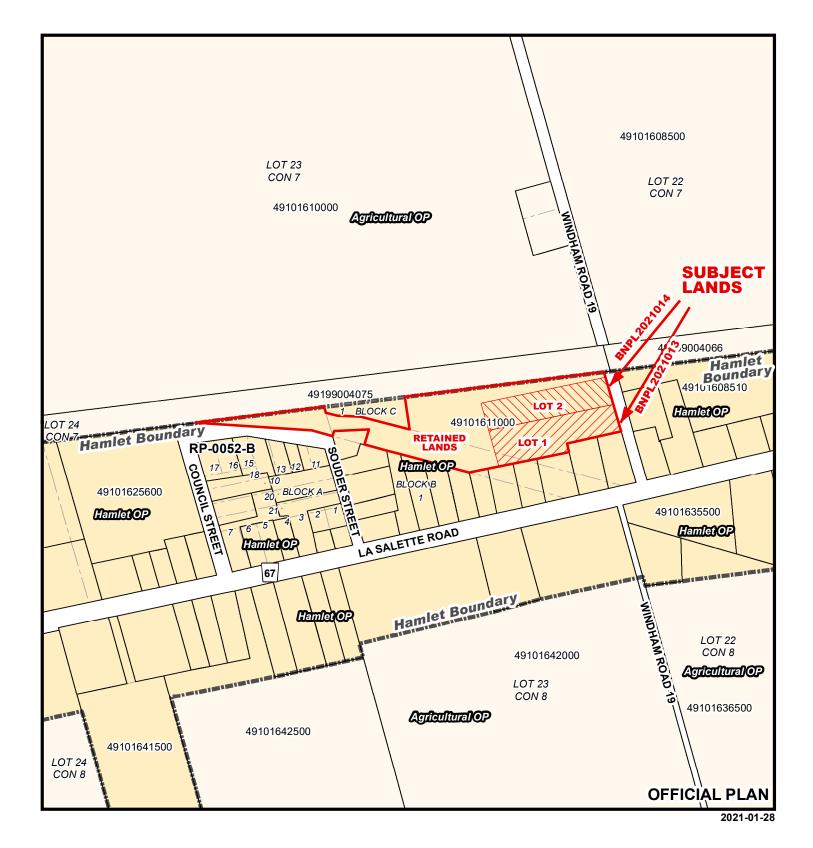




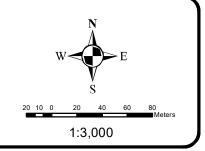


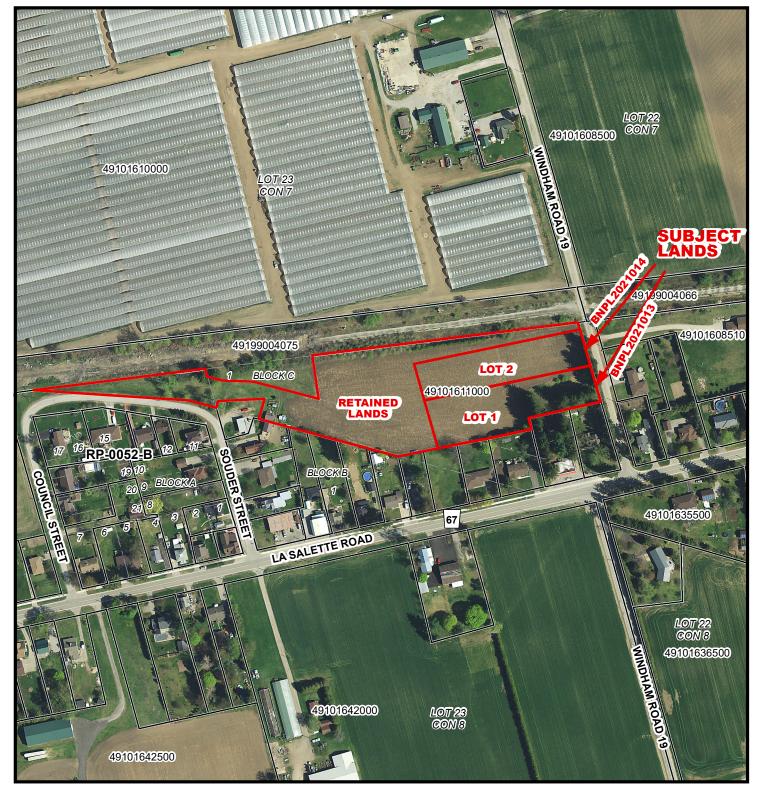
MAP 2
File Number: BNPL2021013 & BNPL2021014
Geographic Township of WINDHAM



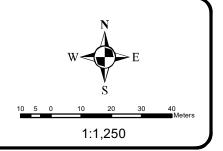


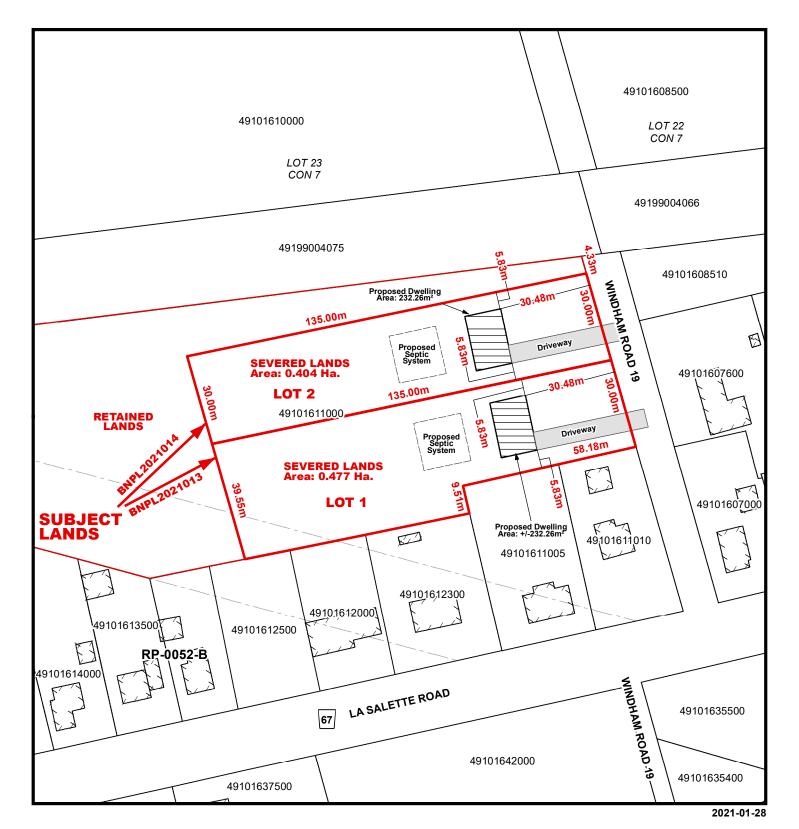
MAP 3
File Number: BNPL2021013 & BNPL2021014
Geographic Township of WINDHAM





MAP 4
File Number: BNPL2021013 & BNPL2021014
Geographic Township of WINDHAM





LOCATION OF LANDS AFFECTED

File Number: BNPL2021013 & BNPL2021014

Geographic Township of WINDHAM

