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**To:** Greg Pinchin **Copy to:** File  
**From:** Adam Wilson  
**Date:** September 30, 2020  
**Ref:** 174 Maitland Drive Draft Plan Application – Hydrogeology Memo **File:** 19628-1

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## **Background:**

Quinte Broadcasting Ltd. is proposing a Draft Plan of Subdivision on the south side of Maitland Drive, west of Highway 62 and immediately east of Deerfield Park Subdivision (**Figure 1**). It is proposed to develop the land with thirty-six (36) single family residential units and sixty-one (61) townhouse units as shown in **Figure 2**. The purpose of this memo is to provide a review of Hydrogeology for the study area and any potential impacts to surrounding residents from the proposed draft plan.

## **Existing Conditions:**

The subject property is 4.84 hectares (ha) in size, and is mostly vacant and treed; the only structures on the property are a transmitting tower and building, which are proposed to be removed for the development. The topography on the site gently slopes to the southeast. Soils within the subject site have been identified as Solmesville Clay Loam and Farmington Loam (**Figure 3**; Gillespie et al., 1962). Geological mapping of the area identifies bedrock as interbedded limestone and calcareous shale of the Verulam Formation (Chapman and Putnam, 1984). No outcrops in the immediate area have been reported.

## **Surrounding Wells:**

The Ontario Ministry of the Environment, Conservation and Parks (MECP) interactive Water Well Records Database was used to identify existing wells and view the well records for the area (**Appendix A**). There are no existing wells on the subject property. Well records in the vicinity of the subject property identify bedrock as shale and / or grey limestone, consistent with the geological mapping for the area. The depth to bedrock identified in the well records ranges from 1.8 to 3.1m below ground surface. The soils identified in the records include clay, clay loam, clay gravel, and sand / gravel, which is consistent with the soils mapping for the area. The depth to groundwater recorded in the wells ranged from 2.4 to 14.9m below

ground surface (MECP, 2020).

The majority of developments surrounding the subject property (i.e. Lowe's, Deerfield Park Subdivision, Settler's Ridge Subdivision) are connected to the Municipal watermain. There is a 400mm diameter watermain under Maitland Drive that is available for connection to service the proposed subdivision at 174 Maitland Drive. There are only six (6) known well users within the vicinity of the subject property: 143, 149, 154, 156, 161, and 187 Maitland Drive. These properties are located to the north, northwest, and west of the subject property, and are therefore all upgradient from the development.

**Proposed Conditions:**

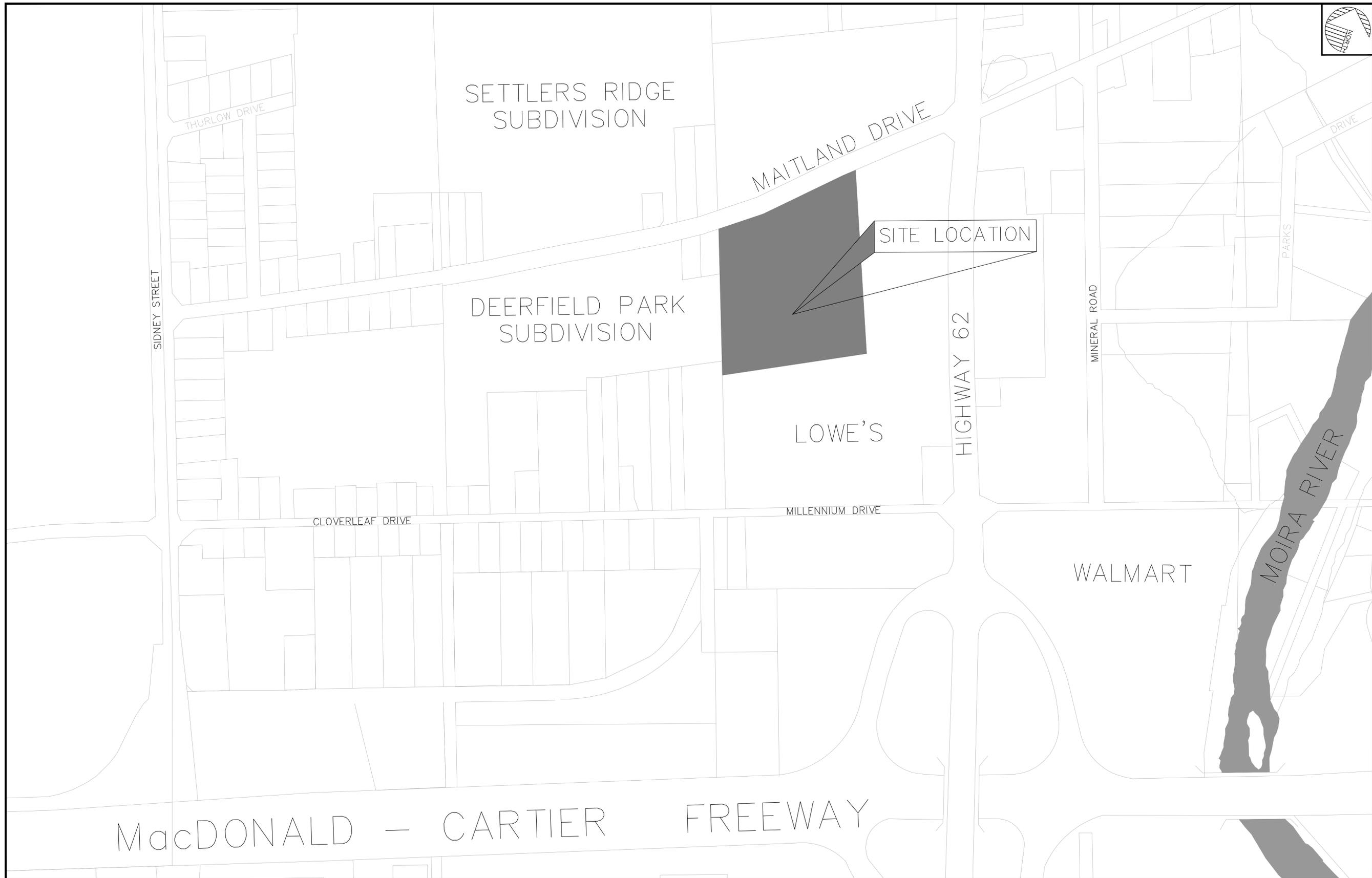
The proposed subdivision will be serviced with new Municipal watermain and sanitary sewer, to be connected to the existing mains under Maitland Drive (i.e. no new wells or septic beds are required). Further, the six identified drinking water wells near the proposed development are all located upgradient from the site. Therefore, the proposed development is not anticipated to impact the surrounding wells.

**References:**

Chapman, L.J., and Putnam, D.F, 1984. *The Physiography of Southern Ontario, 3<sup>rd</sup> Edition, Ontario Geological Survey.*

Gillespie, J.E., Wicklund, R.E., and Richards, N.R., 1962. *The Soils of Hastings County.* Report No. 27 of the Ontario Soil Survey. Research Branch, Canada Department of Agriculture and the Ontario Department of Agriculture.

Ontario Ministry of the Environment, Conservation and Parks, 2020. Interactive Water Well Records Database. <https://www.ontario.ca/environment-and-energy/map-well-records> Site accessed March 30, 2020.



174 MAITLAND DRIVE  
CITY OF BELLEVILLE

FIGURE 1  
KEY MAP





EXISTING RESIDENTIAL



PART 1  
21R-5534

LOT 8

21M  
LOT 7

LOT 6

182  
LOT 5

LOT 4

LOT 3

LOT 2

LOT 1

PART 2, PLN

PART 1, PLAN 21R-22195

EXISTING COMMERCIAL

PART 2, 21R-18796

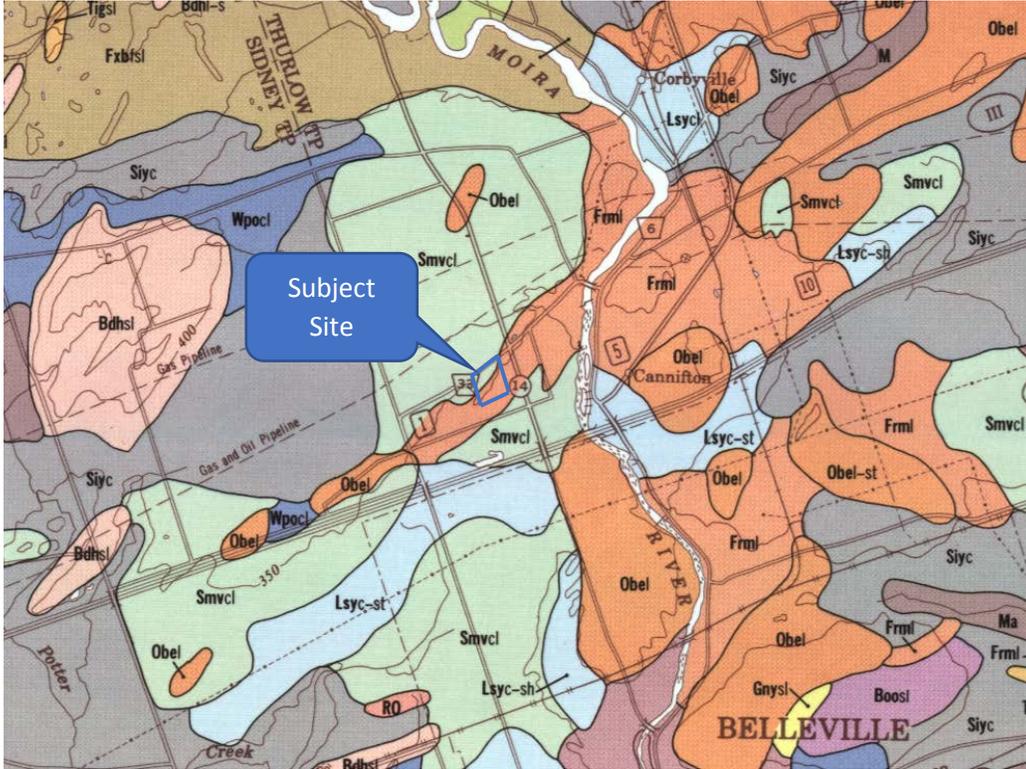
PART 2, 21R-18796  
VACANT LAND

174 MAITLAND DRIVE  
CITY OF BELLEVILLE

FIGURE 2  
CONCEPT PLAN



Soil Classification  
(Ontario Soil Survey Report No 27, Hastings County)



CONVENTION

Map symbol, surface texture, soil phase - Map symbol, surface texture, soil phase

SOIL TEXTURE

- c clay
- l loam
- cl clay loam
- sl sandy loam
- sil silt loam
- fsl fine sandy loam
- gs gravelly sand
- ls loamy sand

SOIL PHASE

- b bouldery
- R rock outcrop
- s steep
- sh shallow
- st stony

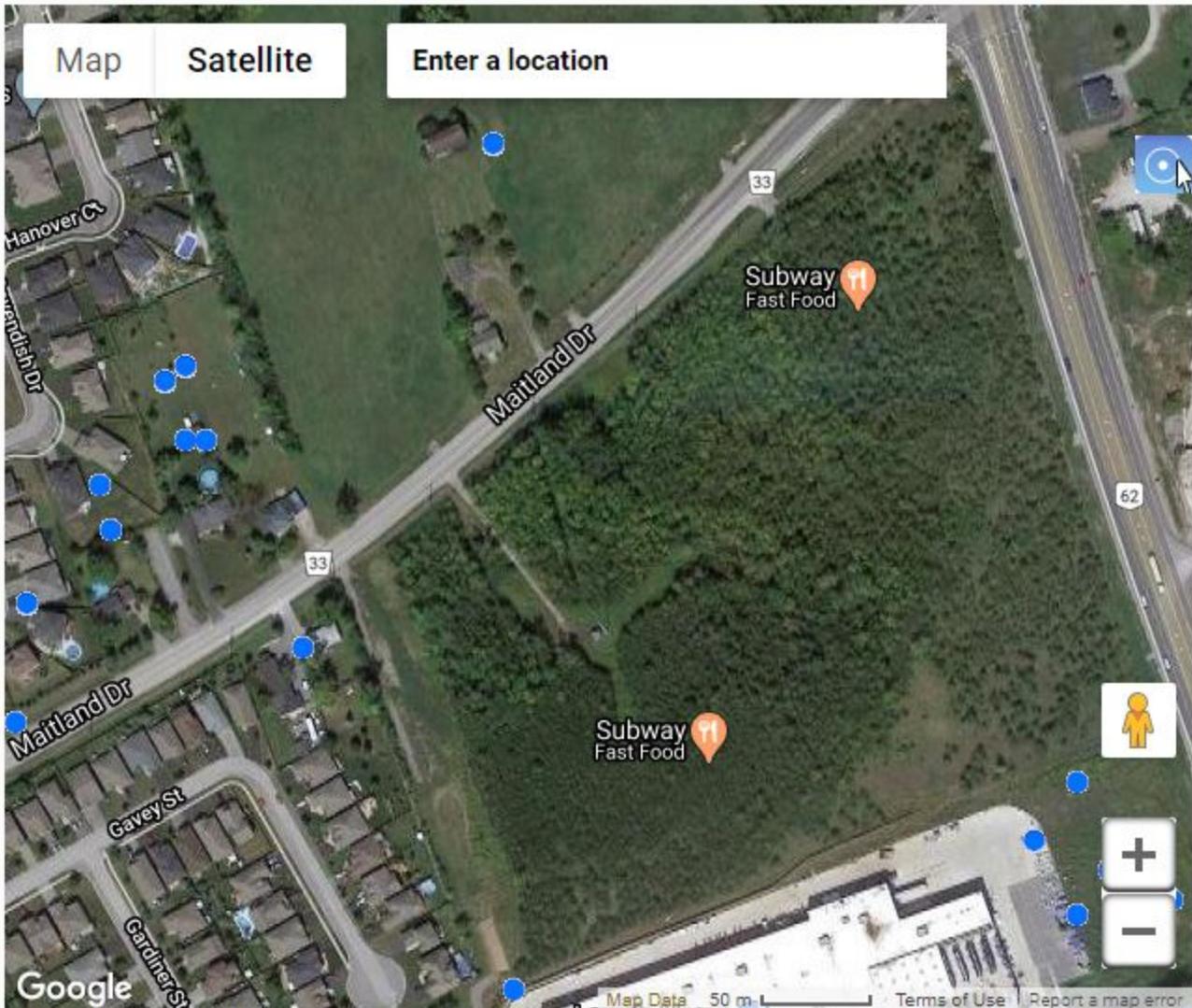
Eok	<b>ELMBROOK</b>	Gray-Brown Podzolic	Imperfect
Frm	<b>FARMINGTON</b>	Brown Forest	Variable
Fxb	<b>FOXBORO</b>	Dark Gray Gleysolic	Poor
Siy	<b>SIDNEY</b>	Dark Gray Gleysolic	Poor
Smv	<b>SOLMESVILLE</b>	Gray-Brown Podzolic	Imperfect
Str	<b>ST PETERS</b>	Podzol	Good to excessive

**APPENDIX A**  
**MECP Well Records**

Map

Satellite

Enter a location



Google

Map Data 50 m

Terms of Use Report a map error

Latitude:44.20065, Longitude:-77.40777 (UTM Zone:18, Easting:307609, Northing:4896977)

69



WATER RESOURCES COMMISSION  
29 No 2901  
C

UTM [ ] Z [ ] E

[9] R [ ] N

The Ontario Water Resources Commission Act

Elev. [9] R [93514]

# WATER WELL RECORD

Basin [24] County of District [Hastings]

Township, Village, Town or City [Thurston]

Con. [11] Lot [Rt 2 37]

Date completed [27] [May] [1965] (day month year)

Address [Belleville R. #5]

### Casing and Screen Record

Inside diameter of casing 6 1/4"  
Total length of casing 10  
Type of screen -  
Length of screen -  
Depth to top of screen -  
Diameter of finished hole 6 1/4"

### Pumping Test

Static level 30 ft.  
Test-pumping rate 25 G.P.M.  
Pumping level 37 ft.  
Duration of test pumping 1 hr.  
Water clear or cloudy at end of test clear  
Recommended pumping rate up to 25 G.P.M.  
with pump setting of 55 feet below ground surface

### Well Log

### Water Record

#### Overburden and Bedrock Record

	From ft.	To ft.	Depth(s) at which water(s) found	Kind of water (fresh, salty, sulphur)
clay loam	0	2		
Haddon	2	8		
Grey limestone	8	60	53 ft.	fresh

For what purpose(s) is the water to be used? new house

Is well on upland, in valley, or on hillside? upland

Drilling or Boring Firm George J. Chalk

Address R. #6 Napawa

Licence Number 1871

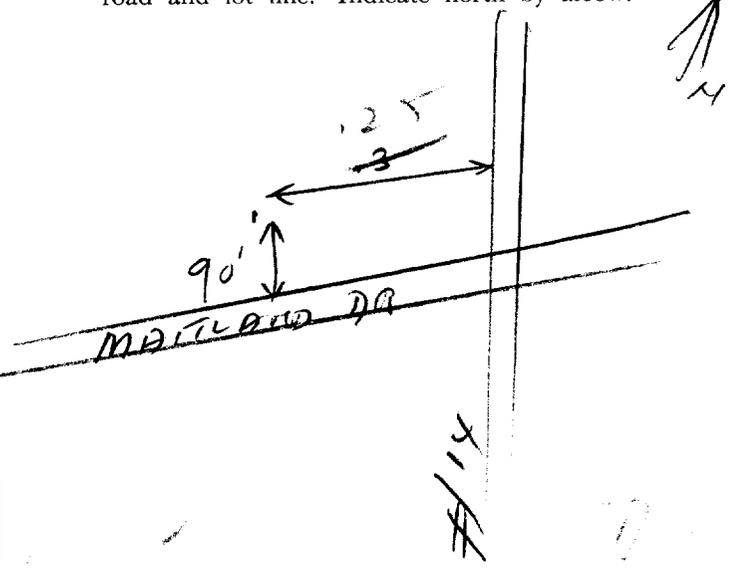
Name of Driller or Borer Keith Sills

Address R. #6 Napawa

Date May 27 1965  
George J. Chalk  
(Signature of Licensed Drilling or Boring Contractor)

### Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Form 7 15M-60-4138

**Instructions for Completing Form**

- For use in the **Province of Ontario** only. This document is a permanent **legal** document. Please retain for future reference.
- All Sections **must** be completed in full to avoid delays in processing. Further instructions and explanations are available on the back of this form.
- Questions regarding completing this application can be directed to the Water Well Management Coordinator at 416-235-6203.
- **All metre measurements shall be reported to 1/10<sup>th</sup> of a metre.**
- Please print clearly in blue or black ink only.

**Ministry Use Only**

W	
Fi	
Co	

Address of Well Location (County/District/Municipality) <b>HASTINGS</b>		Township <b>THURLOW</b>	Lot <b>1</b>	Concession <b>III</b>
RR#/Street Number/Name		City/Town/Village <b>BELLEVILLE</b>	Site/Compartment/Block/Tract etc.	
GPS Reading	NAD <b>83</b>	Zone <b>18</b>	Easting <b>307650</b>	Northing <b>4896746</b>
Unit Make/Model <b>MAGELLAN</b>		Mode of Operation: <input type="checkbox"/> Undifferentiated <input checked="" type="checkbox"/> Averaged <input type="checkbox"/> Differentiated, specify _____		

**Log of Overburden and Bedrock Materials (see instructions)**

General Colour	Most common material	Other Materials	General Description	Depth Metres	
				From	To
<del>GREY</del>	<b>CLAY</b>	<b>GRAVEL</b>		<b>0</b>	<b>5.79</b>
<del>GREY</del>	<b>LIMESTONE</b>			<b>5.79</b>	<b>7.31</b>
<b>GREY</b>	<b>LIMESTONE</b>			<b>7.31</b>	<b>15.24</b>

Hole Diameter		
Depth	Metres	Diameter
From	To	Centimetres
<b>0</b>	<b>15.24</b>	<b>15.2</b>
Water Record		
Water found at <b>14.9</b> Metres / Kind of Water		
<input type="checkbox"/> m	<input type="checkbox"/> Fresh	<input type="checkbox"/> Sulphur
<input type="checkbox"/> Gas	<input type="checkbox"/> Salty	<input type="checkbox"/> Minerals
<input checked="" type="checkbox"/> Other: <b>UNTESTED</b>		
<input type="checkbox"/> m	<input type="checkbox"/> Fresh	<input type="checkbox"/> Sulphur
<input type="checkbox"/> Gas	<input type="checkbox"/> Salty	<input type="checkbox"/> Minerals
<input type="checkbox"/> Other: _____		
After test of well yield, water was		
<input type="checkbox"/> Clear and sediment free		
<input type="checkbox"/> Other, specify _____		
Chlorinated <input type="checkbox"/> Yes <input type="checkbox"/> No		

Construction Record				
Inside diam centimetres	Material	Wall thickness centimetres	Depth From	Metres To
<b>5.0</b>	<input checked="" type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized		<b>0</b>	<b>9.14</b>
Casing				
	<input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized			
Screen				
Outside diam	<input checked="" type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized	Slot No.	<b>9.14</b>	<b>15.24</b>
<b>5.1</b>				
No Casing or Screen				
<input type="checkbox"/> Open hole				

Test of Well Yield				
Pumping test method	Draw Down		Recovery	
	Time min	Water Level Metres	Time min	Water Level Metres
Pump intake set at - (metres)	Static Level			
Pumping rate - (litres/min)	<b>1</b>		<b>1</b>	
Duration of pumping hrs + min	<b>2</b>		<b>2</b>	
Final water level end of pumping metres	<b>3</b>		<b>3</b>	
Recommended pump type <input type="checkbox"/> Shallow <input checked="" type="checkbox"/> Deep			<b>4</b>	
Recommended pump depth metres	<b>5</b>		<b>5</b>	
Recommended pump rate (litres/min)	<b>10</b>		<b>10</b>	
If flowing give rate - (litres/min)	<b>15</b>		<b>15</b>	
	<b>20</b>		<b>20</b>	
	<b>25</b>		<b>25</b>	
If pumping discontinued, give reason.	<b>30</b>		<b>30</b>	
	<b>40</b>		<b>40</b>	
	<b>50</b>		<b>50</b>	
	<b>60</b>		<b>60</b>	

Plugging and Sealing Record			<input checked="" type="checkbox"/> Annular space <input type="checkbox"/> Abandonment
Depth set at - Metres From	To	Material and type (bentonite slurry, neat cement slurry) etc.	Volume Placed (cubic metres)
<b>0</b>	<b>0.15</b>	<b>CONCRETE</b>	<b>0.0026</b>
<b>0.15</b>	<b>6.09</b>	<b>BENTONITE</b>	<b>0.1049</b>
<b>6.09</b>	<b>15.24</b>	<b>SAND</b>	<b>0.1616</b>
Method of Construction			
<input checked="" type="checkbox"/> Cable Tool	<input type="checkbox"/> Rotary (air)	<input type="checkbox"/> Diamond	<input type="checkbox"/> Digging
<input type="checkbox"/> Rotary (conventional)	<input type="checkbox"/> Air percussion	<input type="checkbox"/> Jetting	<input type="checkbox"/> Other
<input type="checkbox"/> Rotary (reverse)	<input type="checkbox"/> Boring	<input type="checkbox"/> Driving	
Water Use			
<input type="checkbox"/> Domestic	<input type="checkbox"/> Industrial	<input type="checkbox"/> Public Supply	<input checked="" type="checkbox"/> Other
<input type="checkbox"/> Stock	<input type="checkbox"/> Commercial	<input type="checkbox"/> Not used	<b>MONITOR WELL</b>
<input type="checkbox"/> Irrigation	<input type="checkbox"/> Municipal	<input type="checkbox"/> Cooling & air conditioning	
Final Status of Well			
<input type="checkbox"/> Water Supply	<input type="checkbox"/> Recharge well	<input type="checkbox"/> Unfinished	<input type="checkbox"/> Abandoned, (Other)
<input checked="" type="checkbox"/> Observation well	<input type="checkbox"/> Abandoned, insufficient supply	<input type="checkbox"/> Dewatering	
<input type="checkbox"/> Test Hole	<input type="checkbox"/> Abandoned, poor quality	<input type="checkbox"/> Replacement well	

Location of Well	
In diagram below show distances of well from road, lot line, and building. Indicate north by arrow.	
Audit No. <b>Z 02801</b>	Date Well Completed <b>2007 05 10</b>
Was the well owner's information package delivered? <input type="checkbox"/> Yes <input type="checkbox"/> No	Date Delivered <b>2007 05 10</b>

Well Contractor/Technician Information	
Name of Well Contractor <b>LISSON EARTH SCIENCES</b>	Well Contractor's Licence No. <b>6683</b>
Business Address (street name, number, city etc.) <b>67 KINGST. UNIT #3 PICTON, ON K0K 2T0</b>	
Name of Well Technician (last name, first name) <b>PORRITT, JOHN</b>	Well Technician's Licence No. <b>T-2165</b>
Signature of Technician/Contractor <i>[Signature]</i>	Date Submitted <b>2007 05 10</b>

Ministry Use Only	
Data Source	Contractor <b>6683</b>
Date Received <b>2007 05 10</b>	Date of Inspection <b>2007 05 10</b>
Remarks <b>JUN 04 2007</b>	Well Record Number

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- **All metre measurements shall be reported to 1/10<sup>th</sup> of a metre.**
- Please print clearly in blue or black ink only.

**Well Owner's Information and Location of Well Information**

Ministry Use Only		
MUN	CON	LOT

First Name <b>Settlers Ridge Developments Inc.</b>		Last Name		Mailing Address (Street Number/Name, RR, Lot, Concession) <b>RR 2</b>			
County/District/Municipality <b>Hastings</b>		Township/City/Town/Village <b>Belleville</b>		Province <b>Ontario</b>	Postal Code <b>K8N 4Z2</b>	Telephone Number (include area code) <b>613-813-0555</b>	
Address of Well Location (County/District/Municipality) <b>Hastings</b>				Township <b>Thurlow</b>		Lot <b>2</b>	Concession <b>III</b>
RR#/Street Number/Name <b>Maitland Drive</b>				City/Town/Village <b>Belleville</b>		Site/Compartment/Block/Tract etc.	
GPS Reading	NAD	Zone	Easting	Northing	Unit Make/Model	Mode of Operation: <input type="checkbox"/> Undifferentiated <input checked="" type="checkbox"/> Averaged <input type="checkbox"/> Differentiated, specify _____	
	<b>83</b>	<b>18</b>	<b>307678</b>	<b>4896792</b>	<b>Garmin ETREX</b>		

**Log of Overburden and Bedrock Materials (see instructions)**

General Colour	Most common material	Other Materials	General Description	Depth	
				From	Metres To
Brown	Clay	Small Stone	Packed	0	3.1
Grey	Limestone		Hard	3.1	5.8
White	Limestone		Hard	5.8	7.3
Grey	Limestone		Hard	7.3	15.2

Hole Diameter		
Depth	Metres	Diameter
From	To	Centimetres
0	15.2	15.5

Construction Record				
Inside diam centimetres	Material	Wall thickness centimetres	Depth	
			From	To
<b>Casing</b>				
5.1	<input checked="" type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input checked="" type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized	Sch. 40	+1m	15.2
<b>Screen</b>				
Outside diam	<input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input checked="" type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized	Slot No.	9.1	15.2
<b>No Casing or Screen</b>				
<input type="checkbox"/> Open hole				

Test of Well Yield				
Pumping test method	Draw Down		Recovery	
	Time min	Water Level Metres	Time min	Water Level Metres
Pump intake set at - (metres)	Static Level			
Pumping rate - (litres/min)	1		1	
Duration of pumping _____ hrs + _____ min	2		2	
Final water level end of pumping _____ metres	3		3	
Recommended pump type. <input type="checkbox"/> Shallow <input type="checkbox"/> Deep	4		4	
Recommended pump depth. _____ metres	5		5	
Recommended pump rate. (litres/min)	10		10	
If flowing give rate - (litres/min)	15		15	
	20		20	
	25		25	
If pumping discontinued, give reason.	30		30	
	40		40	
	50		50	
	60		60	

Water Record	
Water found at _____ Metres	Kind of Water
<input type="checkbox"/> m <input type="checkbox"/> Fresh <input type="checkbox"/> Sulphur <input type="checkbox"/> Gas <input type="checkbox"/> Salty <input type="checkbox"/> Minerals <input type="checkbox"/> Other: _____	
<input type="checkbox"/> m <input type="checkbox"/> Fresh <input type="checkbox"/> Sulphur <input type="checkbox"/> Gas <input type="checkbox"/> Salty <input type="checkbox"/> Minerals <input type="checkbox"/> Other: _____	
<input type="checkbox"/> m <input type="checkbox"/> Fresh <input type="checkbox"/> Sulphur <input type="checkbox"/> Gas <input type="checkbox"/> Salty <input type="checkbox"/> Minerals <input type="checkbox"/> Other: _____	
After test of well yield, water was <input type="checkbox"/> Clear and sediment free <input type="checkbox"/> Other, specify _____	
Chlorinated <input type="checkbox"/> Yes <input type="checkbox"/> No	

Plugging and Sealing Record		
Depth set at - Metres	Material and type (bentonite slurry, neat cement slurry) etc.	Volume Placed (cubic metres)
From	To	
15.2	6	Sand .19
6	.3	Bentonite .14
13	0	Cement .02

Method of Construction			
<input checked="" type="checkbox"/> Cable Tool	<input type="checkbox"/> Rotary (air)	<input type="checkbox"/> Diamond	<input type="checkbox"/> Digging
<input type="checkbox"/> Rotary (conventional)	<input type="checkbox"/> Air percussion	<input type="checkbox"/> Jetting	<input type="checkbox"/> Other
<input type="checkbox"/> Rotary (reverse)	<input type="checkbox"/> Boring	<input type="checkbox"/> Driving	

Water Use			
<input type="checkbox"/> Domestic	<input type="checkbox"/> Industrial	<input type="checkbox"/> Public Supply	<input type="checkbox"/> Other
<input type="checkbox"/> Stock	<input type="checkbox"/> Commercial	<input type="checkbox"/> Not used	<b>Monitoring</b>
<input type="checkbox"/> Irrigation	<input type="checkbox"/> Municipal	<input type="checkbox"/> Cooling & air conditioning	

Final Status of Well			
<input type="checkbox"/> Water Supply	<input type="checkbox"/> Recharge well	<input type="checkbox"/> Unfinished	<input type="checkbox"/> Abandoned, (Other)
<input type="checkbox"/> Observation well	<input type="checkbox"/> Abandoned, insufficient supply	<input type="checkbox"/> Dewatering	<b>Monitoring</b>
<input type="checkbox"/> Test Hole	<input type="checkbox"/> Abandoned, poor quality	<input type="checkbox"/> Replacement well	

Well Contractor/Technician Information	
Name of Well Contractor <b>CHALK WELLDRILLING LTD.</b>	Well Contractor's Licence No. <b>1507</b>
Business Address (street name, number, city etc.) <b>31 Johnsons Side Rd., RR 6 Napanee ON K7R 3L1</b>	
Name of Well Technician (last name, first name) <b>Chalk, Andrew</b>	Well Technician's Licence No. <b>T-3303</b>
Signature of Technician/Contractor <b>X CHALK WELL DRILLING LTD.</b>	Date Submitted <b>2007/05/11</b>

Location of Well	
In diagram below show distances of well from road, lot line, and building. Indicate north by arrow.	
Audit No. <b>Z 66112</b>	Date Well Completed <b>2007 05 11</b>
Was the well owner's information package delivered? <input type="checkbox"/> Yes <input type="checkbox"/> No	Date Delivered _____

Ministry Use Only	
Data Source	Contractor <b>1507</b>
Date Received <b>2007 02 07</b>	Date of Inspection _____
Remarks	Well Record Number



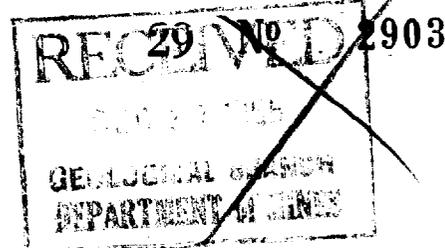




UTM 19 R 11031514



ONTARIO



Elev. 191 11031514

The Water-well Drillers Act, 1954

Department of Mines

Basin 1243

# Water-Well Record

County or Territorial District HASTINGS Township Thurlow Village, Town or City Thurlow  
 Village, Town or City R.R. #5  
 address R.R. #5 Bellefleur  
 (day) (month) (year)

## Pipe and Casing Record

## Pumping Test

Casing diameter(s) 5 3/8 Static level 9.4  
 Length(s) 24 ft Pumping rate 60 GPM  
 Type of screen 2 1/2 inch Pumping level 21  
 Length of screen 7 Duration of test 1 HR

## Well Log

## Water Record

Overburden and Bedrock Record	From ft.	To ft.	Depth (s) at which water (s) found	No. of feet water rises	Kind of water (fresh, salty, or sulphur)
<del>21 feet of pit</del>		9 ft	21	12 ft	fresh
SAND GRAVEL	0	9	21	12	FRESH

For what purpose(s) is the water to be used?  
House

Is water clear or cloudy? clear

Is well on upland, in valley, or on hillside? upland

Drilling firm Thurlow

Address Thurlow

Name of Driller Bradley

Address Castleton

Licence Number 1056

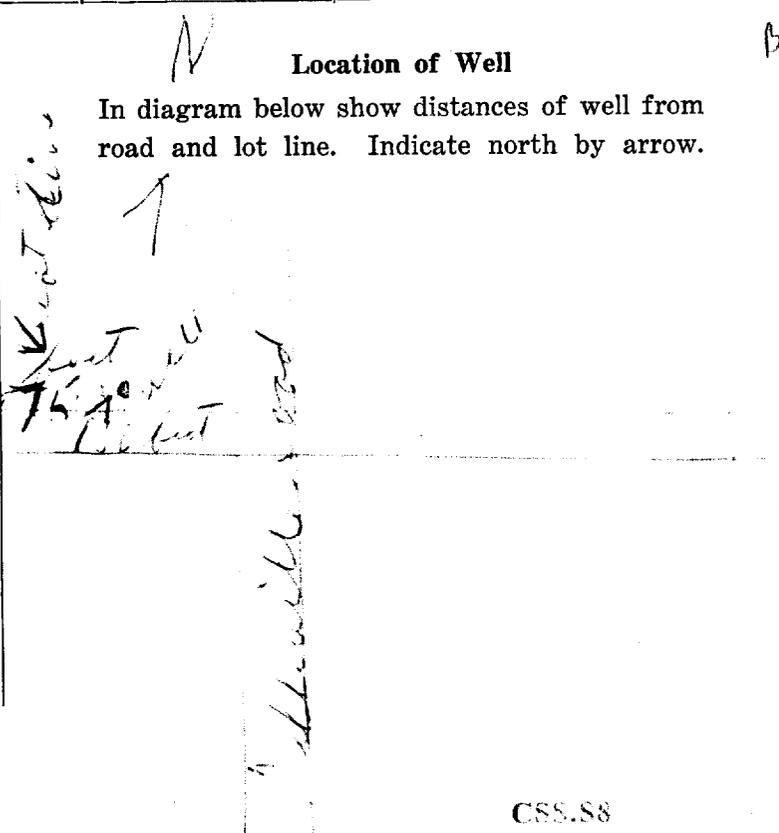
I certify that the foregoing statements of fact are true.

Date 21 September

Signature of Licensee

## Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



A053321

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- **All metre measurements shall be reported to 1/10<sup>th</sup> of a metre.**
- Please print clearly in blue or black ink only.

**Ministry Use Only**

MUN \_\_\_\_\_ CON \_\_\_\_\_ LOT \_\_\_\_\_

**Well Owner's Information and Location of Well Information**

First Name **LOWE'S COMPANIES CANADA** Last Name \_\_\_\_\_ Mailing Address (Street Number/Name, RR, Lot, Concession) **5160 YOUNG ST SUITE 200 P.O. BOX 25**

County/District/Municipality \_\_\_\_\_ Township/City/Town/Village **NORTH YORK** Province **Ontario** Postal Code **M2N 6L9** Telephone Number (include area code) \_\_\_\_\_

Address of Well Location (County/District/Municipality) **HASTINGS** Township **THURLOW** Lot **3** Concession **3**

RR#/Street Number/Name **219 MILLENNIUM PARKWAY** City/Town/Village **BELLEVILLE** Site/Compartment/Block/Tract etc. \_\_\_\_\_

GPS Reading NAD **83** Zone **18** Easting **308113** Northing **4896646** Unit Make/Model **GARMIN-76CSX** Mode of Operation:  Undifferentiated  Averaged  Differentiated, specify \_\_\_\_\_

**Log of Overburden and Bedrock Materials (see instructions)**

General Colour	Most common material	Other Materials	General Description	Depth Metres	
				From	To
		<b>ABANDONMENT</b>	<b>MW # 2</b>		

Hole Diameter			Construction Record				Test of Well Yield					
Depth From	Metres To	Diameter Centimetres	Inside diam centimetres	Material	Wall thickness centimetres	Depth From	Metres To	Pumping test method	Draw Down Time min	Water Level Metres	Recovery Time min	Water Level Metres
			<b>3.4</b>	<input checked="" type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized	<b>.4</b>			<b>ABANDONED</b>				
<b>Water Record</b>			<b>Casing</b>				<b>Screen</b>					
Water found at _____ Metres Kind of Water _____			Slot No. _____				Outside diam _____					
After test of well yield, water was _____			<b>3.8</b>				<b>10 10.66 18.74</b>					
Chlorinated <input type="checkbox"/> Yes <input type="checkbox"/> No			<b>No Casing or Screen</b>				<b>Open hole</b>					
			<b>Plugging and Sealing Record</b>				<b>Location of Well</b>					
			Depth set at - Metres From To _____				In diagram below show distances of well from road, lot line, and building. Indicate north by arrow.					
			Material and type (bentonite slurry, neat cement slurry) etc. <b>BENTONITE CLAY</b>									
			Volume Placed (cubic metres) <b>100%</b>				<p>Audit No. <b>Z 59835</b> Date Well Completed <b>2008 04 12</b></p> <p>Was the well owner's information package delivered? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>					
			<b>Method of Construction</b>				<b>Ministry Use Only</b>					
			<input type="checkbox"/> Cable Tool <input type="checkbox"/> Rotary (air) <input type="checkbox"/> Diamond <input type="checkbox"/> Digging <input type="checkbox"/> Rotary (conventional) <input type="checkbox"/> Air percussion <input type="checkbox"/> Jetting <input type="checkbox"/> Other <input type="checkbox"/> Rotary (reverse) <input type="checkbox"/> Boring <input type="checkbox"/> Driving				Data Source _____ Contractor _____ Date Received <b>MAY 06 2008</b> Date of Inspection _____ Remarks _____ Well Record Number _____					
			<b>Water Use</b>									
			<input type="checkbox"/> Domestic <input type="checkbox"/> Industrial <input type="checkbox"/> Public Supply <input type="checkbox"/> Other <input type="checkbox"/> Stock <input type="checkbox"/> Commercial <input checked="" type="checkbox"/> Not used <input type="checkbox"/> Irrigation <input type="checkbox"/> Municipal <input type="checkbox"/> Cooling & air conditioning									
			<b>Final Status of Well</b>									
			<input type="checkbox"/> Water Supply <input type="checkbox"/> Recharge well <input type="checkbox"/> Unfinished <input checked="" type="checkbox"/> Abandoned, (Other) <input type="checkbox"/> Observation well <input type="checkbox"/> Abandoned, insufficient supply <input type="checkbox"/> Dewatering <input type="checkbox"/> Test Hole <input type="checkbox"/> Abandoned, poor quality <input type="checkbox"/> Replacement well									
			<b>Well Contractor/Technician Information</b>									
			Name of Well Contractor <b>TRI-COUNTY WELL DRILLING</b> Well Contractor's Licence No. <b>7070</b>									
			Business Address (street name, number, city etc.) <b>194 PRINCE EDWARD ST BRIGATON</b>									
			Name of Well Technician (last name, first name) <b>CROWE, JOHN</b> Well Technician's Licence No. <b>T-2388</b>									
			Signature of Technician/Contractor <b>[Signature]</b> Date Submitted <b>2008 04 12</b>									

A053328

**Instructions for Completing Form**

- For use in the **Province of Ontario** only. This document is a permanent **legal** document. Please retain for future reference.
- All Sections **must** be completed in full to avoid delays in processing. Further instructions and explanations are available on the back of this form.
- Questions regarding completing this application can be directed to the Water Well Help Desk (Toll Free) at 1-888-396-9355.
- **All metre measurements shall be reported to 1/10<sup>th</sup> of a metre.**
- Please print clearly in blue or black ink only.

**Well Owner's Information and Location of Well Information**

First Name		Last Name		Mailing Address (Street Number/Name, RR, Lot, Concession)			
LOWE'S		COMPANIES CANADA		5160 YOUNG ST SUITE 200 P.O. BOX 25			
County/District/Municipality		Township/City/Town/Village		Province	Postal Code	Telephone Number (include area code)	
HASTINGS		NORTH YORK		Ontario	M2N 6L9		
Address of Well Location (County/District/Municipality)				Township	Lot	Concession	
219 MILLENNIUM PARKWAY				THURLOW	3	3	
RR#/Street Number/Name				City/Town/Village		Site/Compartment/Block/Tract etc.	
219 MILLENNIUM PARKWAY				BELLEVILLE			
GPS Reading	NAD	Zone	Easting	Northing	Unit Make/Model	Mode of Operation:	
	83	18	307824	4896530	GARMIN-76CSX	<input type="checkbox"/> Undifferentiated <input checked="" type="checkbox"/> Averaged <input type="checkbox"/> Differentiated, specify	

**Log of Overburden and Bedrock Materials (see instructions)**

General Colour	Most common material	Other Materials	General Description	Depth Metres	
				From	To
		ABANDONMENT	MW1		

Hole Diameter			Construction Record				Test of Well Yield					
Depth From	Metres To	Diameter Centimetres	Inside diam centimetres	Material	Wall thickness centimetres	Depth From	Metres To	Pumping test method	Draw Down Time min	Water Level Metres	Recovery Time min	Water Level Metres
			3.4	<input checked="" type="checkbox"/> Plastic	.4	.30	5.6	ABANDONED				
<b>Water Record</b>			<b>Casing</b>				<b>Screen</b>					
Water found at _____ metres			<input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input checked="" type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized				<input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized					
Kind of Water			Slot No.				Outside diam					
<input type="checkbox"/> m <input type="checkbox"/> Fresh <input type="checkbox"/> Sulphur <input type="checkbox"/> Gas <input type="checkbox"/> Salty <input type="checkbox"/> Minerals <input type="checkbox"/> Other:			10				3.8					
<input type="checkbox"/> m <input type="checkbox"/> Fresh <input type="checkbox"/> Sulphur <input type="checkbox"/> Gas <input type="checkbox"/> Salty <input type="checkbox"/> Minerals <input type="checkbox"/> Other:			<input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized				<input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized					
<input type="checkbox"/> m <input type="checkbox"/> Fresh <input type="checkbox"/> Sulphur <input type="checkbox"/> Gas <input type="checkbox"/> Salty <input type="checkbox"/> Minerals <input type="checkbox"/> Other:			<input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized				<input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized					
After test of well yield, water was			<b>No Casing or Screen</b>				Recommended pump rate (litres/min): 15, 20, 25, 30, 40, 50, 60					
<input type="checkbox"/> Clear and sediment free <input type="checkbox"/> Other, specify			<input type="checkbox"/> Open hole				Recommended pump depth (metres): 4, 5, 10, 15, 20, 25, 30, 40, 50, 60					
Chlorinated <input type="checkbox"/> Yes <input type="checkbox"/> No												

Plugging and Sealing Record			
Depth set at - Metres	Material and type (bentonite slurry, neat cement slurry) etc.	Volume Placed (cubic metres)	<input type="checkbox"/> Annular space <input checked="" type="checkbox"/> Abandonment
From To			
0 18.28	BENTONITE CLAY 100%	.0158	
Method of Construction			
<input type="checkbox"/> Cable Tool	<input type="checkbox"/> Rotary (air)	<input type="checkbox"/> Diamond	<input type="checkbox"/> Digging
<input type="checkbox"/> Rotary (conventional)	<input type="checkbox"/> Air percussion	<input type="checkbox"/> Jetting	<input type="checkbox"/> Other
<input type="checkbox"/> Rotary (reverse)	<input type="checkbox"/> Boring	<input type="checkbox"/> Driving	
Water Use			
<input type="checkbox"/> Domestic	<input type="checkbox"/> Industrial	<input type="checkbox"/> Public Supply	<input type="checkbox"/> Other
<input type="checkbox"/> Stock	<input type="checkbox"/> Commercial	<input checked="" type="checkbox"/> Not used	
<input type="checkbox"/> Irrigation	<input type="checkbox"/> Municipal	<input type="checkbox"/> Cooling & air conditioning	
Final Status of Well			
<input type="checkbox"/> Water Supply	<input type="checkbox"/> Recharge well	<input type="checkbox"/> Unfinished	<input checked="" type="checkbox"/> Abandoned, (Other)
<input type="checkbox"/> Observation well	<input type="checkbox"/> Abandoned, insufficient supply	<input type="checkbox"/> Dewatering	
<input type="checkbox"/> Test Hole	<input type="checkbox"/> Abandoned, poor quality	<input type="checkbox"/> Replacement well	

Location of Well	
In diagram below show distances of well from road, lot line, and building. Indicate north by arrow.	
Audit No.	Date Well Completed
Z 59830	2008 04 14
Was the well owner's information package delivered?	Date Delivered
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

Well Contractor/Technician Information	
Name of Well Contractor	Well Contractor's Licence No.
TRI-COUNTY WELL DRILLING	7020
Business Address (street name, number, city etc.)	
194 PRINCE EDWARD ST BRIGHTON	
Name of Well Technician (last name, first name)	Well Technician's Licence No.
CROWE, JOHN	T-2388
Signature of Technician/Contractor	Date Submitted
<i>[Signature]</i>	2008 04 21

Ministry Use Only	
Data Source	Contractor
Date Received	Date of Inspection
MAY 06 2008	
Remarks	Well Record Number