

**ADDENDUM TO HYDROGEOLOGICAL STUDY
PROPOSED BUMSTEAD AGGREGATE PIT
INVENTORY OF PRIVATE WATER SUPPLY WELLS**

**WEST HALF OF LOT 27 CONCESSION 7
FORMER TOWNSHIP OF HOLLAND
TOWNSHIP OF CHATSWORTH**

**GAMSBY AND MANNEROW LIMITED
CONSULTING PROFESSIONAL ENGINEERS
GUELPH OWEN SOUND LISTOWEL KITCHENER EXETER**

June, 2014
Our File: 210099



Gamsby and Mannerow
ENGINEERS

TABLE OF CONTENTS

1.0	INTRODUCTION.....	1
2.0	DOOR TO DOOR SURVEY	2
2.1	Defined Survey Area	2
2.2	Survey Methodology and Tracking	2
2.3	Survey Response	3
3.0	FINDINGS.....	3
3.1	Updated Review of MOE Well Records	3
3.2	Summary of Well Inventory Results – Shallow Wells	4
3.3	Groundwater Use.....	5
4.0	UPDATED IMPACT ASSESSMENT AND MITIGATION MEASURES.....	6
5.0	UPDATED HIGH GROUNDWATER ELEVATION	7

LIST OF TABLES

Table 1 Summary of Well Survey Information Provided with Correlation to the MOE Well Records

LIST OF FIGURES

Figure 2 Site Setting Showing Well Locations (Based on MOE Well Records and Well Survey)

Figure 4 Groundwater Elevation May 2014

LIST OF APPENDICES

Appendix A MOE Correspondence
Appendix B Delivery Package: Generic and Addressed Letters and Well Information Request Form
Appendix C Letter Drop-off Tracking Sheets
Appendix D Returned Survey Forms and Corresponding MOE Well Records (Inferred)





Gamsby and Mannerow
ENGINEERS



**INVENTORY OF PRIVATE WATER SUPPLY WELLS
PROPOSED BUMSTEAD AGGREGATE PIT
WEST HALF OF LOT 27 CONCESSION 7
FORMER TOWNSHIP OF HOLLAND
TOWNSHIP OF CHATSWORTH**

File No. 210099

June, 2014

1.0 INTRODUCTION

Gamsby and Mannerow Limited (G&M) was retained by Pearl and Brian Bumstead to complete an Inventory of the Private Water Supply Wells in the area surrounding the proposed Bumstead Pit in the Township of Chatsworth, Ontario. The survey was conducted to further support the Category 1 Class "A" aggregate license application for a 39.6 ha property at Veteran's Road South and Sideroad 60, southwest of Berkeley. The proposed 18.9 ha aggregate pit is located on the west half of Lot 27, Concession 7 in the former Township of Holland, where shown on Figure 1.

As part of the application process, a Level 1 Hydrogeological Study (dated September 2013) for the proposed aggregate extraction pit was provided to the MOE. MOE review comments pertaining to the hydrogeological report, dated February 3, 2014, provided in Appendix A, requested that *'the consultant provide supporting evidence that shallow "unlicensed" domestic water supplies do not exist within the 500 meter radius surrounding the site.... Ministry staff is requesting this be further investigated through, as a minimum, a door to door survey to provide the assurance required. Should shallow domestic wells be found to exist, the requirement of the installation of additional shallow monitoring wells should be reassessed.'*

This letter report, which is intended to supplement the Hydrogeological Study, documents the completion of a door-to-door survey/inventory of water supply wells within a 500 m radius surrounding the Bumstead property. The purpose of the well survey is to identify private wells, namely shallow "unlicensed" wells (i.e. dug wells), in the vicinity of the proposed aggregate pit and if present, to assess the measures required to protect these water sources. It is important to note that the proposed pit operations will be conducted to the depth of the high water table, therefore no dewatering or water diversion will occur.

This addendum to the Hydrogeological Study presents: (i) an outline of the steps taken to complete the private supply well inventory; (ii) an updated summary of the data obtained from the Ministry of the Environment (MOE) Well Records and comparison to information obtained from the well survey; (iii) a discussion of the results of the survey and any additional level of risk for impacts; and (iv) an updated impact assessment and discussion of the measures required to protect the domestic wells surrounding the proposed pit. In addition, based on the time period since the original application and the relatively "wet" conditions in 2014, this report provides an update with respect to the water level monitoring on site. It is noted that the MOE Well Record

people engineering environments

Gamsby and Mannerow Limited • Guelph, Owen Sound, Listowel, Kitchener, Exeter

1260 - 2nd Avenue E., Unit 1, Owen Sound, ON N4K 2J3 519-376-1805 fax 519-376-8977 www.gamsby.com

review and discussion from the Hydrogeological Report is provided herein for context during the discussion of findings. However, the reader is referred to the original submission documents for details regarding the local geologic and hydrogeologic conditions.

2.0 DOOR TO DOOR SURVEY

2.1 DEFINED SURVEY AREA

To obtain an accurate assessment of the local private water supplies, a door-to-door survey was conducted to establish an inventory of the water supply wells surrounding the proposed pit in order to *further provide assurance of the protection of potential shallow domestic water wells should they exist either hydraulically lateral or downgradient of the property* (as per MOE Comments provided in Appendix A). The survey area incorporated all properties located within the 500 m radius surrounding Bumstead property, as outlined on Figure 2, herein referred to as the '*defined survey area*'.

2.2 SURVEY METHODOLOGY AND TRACKING

On March 18, 2014 a package prepared by G&M was hand delivered, where possible,. Within the package was a letter informing the local residents of the proposed pit and the associated requirement to identify water supply wells in the area for the purpose of providing more certainty regarding the well types and locations. As it was recognized that some property owners were seasonal residents or did not live in the area, three packages were prepared separately and sent via Canada Post to Peter and Rose Chiefari, Ian and Lorysa Bond and John Quinn. The delivered package included the following:

1. A generic letter briefly describing the proposed aggregate pit location and explaining the well inventory program (copies of the letters delivered and sent are provided in Appendix B);
2. A 'Well Information Request Form' (provided in Appendix B); and
3. A postage paid return envelope so the Form could be easily returned to Gamsby and Mannerow.

During the delivery of the packages, a 'Letter Drop-Off Tracking Sheet' was completed. In total, 19 properties were recorded on the tracking sheet. Information recorded on the tracking sheet included the address, owner information on the mailbox (where present) and a brief description of the property. A copy of the completed tracking sheet is provided in Appendix C.

Due to the use of a PO Box System in the Community, a total of 14 letter packages were left with the homeowner (if present at home), placed in the mailboxes (where mailbox was present), or were delivered to available locations at the respective property (such as within doorways). Furthermore, a total of five packages were sent via Canada Post to ensure that all property owners surrounding the proposed pit received the survey. For five known vacant properties, packages were mailed out on March 18, 2014 or March 20, 2014.

2.3 SURVEY RESPONSE

As the time of this report (i.e., May 2014), a total of 12 responses were received (i.e. forms returned or contact made). Copies of the returned survey forms and letters are provided in Appendix D. Where possible, an attempt was made to correlate the well information provided within the completed forms with the MOE well records to determine or confirm the private well details for each subject property. Due to the limited information generally provided by the respondents in the returned *Well Information Request Forms*, the well records inferred to belong to each respondent's property are also provided in Appendix D.

3.0 FINDINGS

3.1 UPDATED REVIEW OF MOE WELL RECORDS

Registered Wells within Defined Survey Area

A review of Ministry of the Environment (MOE) well records for the site and surrounding area was conducted as part of the Hydrogeological Study. A copy of the pertinent MOE well records were provided in the Hydrogeological Report and a summary of the well search results, correlated with the well survey data, is provided in Table 1.

Based on the UTM coordinates provided in the well records and comparison to the location of residential dwellings and other buildings, one well was identified on the subject property and eleven (11) wells, inferred to be associated with the surrounding residential homes and outbuildings, were identified within the defined survey area (Figure 2). The well records indicate that the wells are completed into the underlying bedrock to depths in the range of 29 to 108 m below ground surface (bgs).

Within the Hydrogeological Report, one additional well was inferred to exist based on the absence of an MOE plotted record and the known location of a residence serviced with a well. Based on the information provided by the homeowner as part of the survey, MOE Well No. 7048024 belongs to this residence located at 495492 Veterans Road South, as shown on Figure 2.

Bedrock Wells to the West of the Bumstead Property

Based on the MOE well records, a total of four residential wells were identified directly to the west within Lot 27 Concession 6, on the opposite side of Veteran's Road from the proposed pit location. Given the upgradient location of these wells relative to the proposed pit and the documented well depths of between 29 and 50 m for these proximal wells identified, it is unlikely that aggregate removal activities, above the water table, would affect the quantity or quality of groundwater at these bedrock well locations.

Given the UTM coordinates provided, one additional residential well was shown to exist to the northwest and within the defined survey area. However, based on the description of the well location provided by the property owner as being '*next to the house*', it is inferred that this drilled well (MOE Well No. 25-10723) is actually located outside of the 500 m survey radius. Based on the crossgradient location of this well, the documented depth of approximately 35 m and the separation distance of greater than 500 m, no impacts are anticipated at this location.

Bedrock Wells to the South of the Bumstead Property

Three residential wells, and one well inferred to be associated with an existing airplane hanger, were identified directly to the south of the site. One additional well (i.e. MOE Well No. 25-01401) is plotted in the fields to the southeast, however is inferred to belong to the observed vacant buildings to the southeast, along the 500 m survey limit, where shown on Figure 2. It is noted that, of the six survey packages delivered within the defined survey area and to the south of Sideroad 60, only one response was provided.

Based on the inferred groundwater flow direction, these wells are generally located upgradient of the subject property. Of these wells identified, only one well will likely be within 500 m of the estimated pit location. This well, which is approximately 17 m deeper than the on-site well, is situated 150 m south of the on-site residential well and approximately 300 to 350 m upgradient of the proposed pit location, where impacts are not anticipated.

Bedrock Wells Downgradient of the Bumstead Property (i.e to the North and East)

Based on the MOE well records, a drilled well does not exist on the property to the north of the site within Lot 26, Concession 7. However, three bedrock wells were identified downgradient to the east of the proposed pit, with only one well inferred to exist within the defined survey area. While the closest supply well plotted in this direction is approximately 300 m from the property boundary (based on the UTM coordinates provided), it appears that one additional bedrock well exists within the 500 m radius, as shown on Figure 2. Based on the information provided by the homeowner in the *Well Information Request Form* completed, MOE Well No. 25-04723 is likely associated with the residence located at 584161 Sideroad 60. This residence is separated from the Bumstead property by a distance of greater than 400 m as well as a surface water feature (i.e. pond/marsh). Based on the separation distances, the geology, and the occurrence of an intermediary surface water feature, impacts to off-site bedrock wells downgradient of the subject property are not anticipated.

3.2 SUMMARY OF WELL INVENTORY RESULTS – SHALLOW WELLS

The main purpose of the well inventory was to identify whether any shallow ‘unlicensed’ domestic water supplies exist within the 500 m radius surrounding the Bumstead property. Based on the findings of the survey, two shallow dug wells do exist within the defined survey area. The approximate locations of these reported dug wells, based on the descriptions provided, are shown on Figure 2.

495546 Veterans Road South – Conc. 6, Lot 26 - Crocker

One dug well, associated with the Crocker property, is located to the northwest of the proposed pit in a field/wooded area. In a letter provided by the respondent (Appendix D), it is indicated that the dug well is located by the fence between the first two fields (to the south) - in the first field amongst the saplings and has not been used for 50 years. Based on this description it is estimated that this shallow well is situated crossgradient to and within 200 m of the Bumstead property. Therefore, it is not likely that this shallow well would be impacted by operations in the proposed pit.

Based on the survey information and MOE well records, the property also has a drilled well in the vicinity of the house that is used for domestic purposes.

Additional information regarding the Crocker property provided by the Bumsteads suggests that a residential home was situated close to this dug well until 1957, at which time the residence burned down. This information also suggests that this well has not likely been used for greater than 50 years.

The Crocker property is also noted to have a small Lake/pond, known as Walker Lake. The Lake is approximately 500 m from the northwesterly corner of the licensed area. Based on information provided, the Lake provides domestic water to the residence. Based on the groundwater flow direction, surface water flow directions, and topography, Walker Lake is considered to be upgradient of the subject property. Further, based on the separation distance of approximately 500 m combined with the site-specific scenario where no water taking or diversion is proposed, the potential for impacts to the water quality or quantity associated with Walker Lake is considered to be low.

584022 Sideroad 60 – Conc. 7, Lot 28 - Kurita

One shallow well was identified on the Kurita property located to the south of the proposed pit. This property is reported to be serviced with a drilled well that is the source of domestic water. The shallow/dug well is described by the respondent as being an “*architecturally archaic*” well located in a pond. Reportedly this well is submerged under water until the late summer-early fall, when pond levels become low enough to access the well. Additional information provided by the Bumsteads, as provided by the previous property owner, indicates that this dug well was a spring that was unearthed while having the pond dug circa 1962. Since that time a stone casement was put up around the spring when water levels were low enough to permit doing so. According to the Kuritas, this dug well is *‘still sound and of good use when needed’*.

Based on the topographic contours and the reported location of the dug well in a pond, the source of water for the well is inferred to be at an elevation of between 410 and 415 masl. In particular, the Kurita property is located atop the drumlin feature, above the lower-lying outwash “valley” area, where the pit is proposed. Comparatively, the water levels within the estimated pit boundaries, located greater than an estimated 400 m downgradient of the ponds, are in the range of 398 to 400 masl. Based on the upgradient location of this dug well to the proposed pit, the separation distance of an estimated 400 m and the higher elevation associated with the groundwater source for the spring/dug well, groundwater quantity and quality impacts from the proposed pit operations are not anticipated.

3.3 GROUNDWATER USE

MOE well records indicate that there are several bedrock wells in the area that are used as domestic water supplies. Based on the response from the well surveys, at least eight of the wells within the defined survey area are domestic bedrock wells and majority of them use the well water for drinking. Based on the limited information provided in the surveys returned pertaining to the existing water quantity and quality and whether a treatment system is present, it appears

that the majority of the respondents have not experienced any problems, to date, and treatment systems are not typically utilized.

Based on the well survey responses obtained, two shallow dug wells exist with the defined survey area, however, it is noted that drilled wells also associated with the subject properties provide the domestic water source. Of the shallow dug wells, the Crocker well has not been used for a period of greater than 50 years and the Kurita well is associated with a groundwater discharge area within a pond. Both of these shallow wells are inferred to be upgradient of the proposed Aggregate Pit and a relatively large separation distances. Most notably, the shallow dug well associated with the Kurita property is located at an elevation of approximately 10 to 15 m above the proposed pit boundary.

4.0 UPDATED IMPACT ASSESSMENT AND MITIGATION MEASURES

The well inventory and assessment program carried out for Pearl and Brian Bumstead involved the review of the MOE well records in the vicinity of the proposed pit and hand delivery of information packages and a well survey within the defined study area. Of the 19 packages delivered, there were 12 respondents.

The main purpose of the well survey was to identify whether any shallow 'unlicensed' domestic water supplies exist within the 500 m radius surrounding the Bumstead property. The survey identified two shallow dug wells, including the Crocker and Kurita wells. As per the MOE Comments *'Should shallow domestic wells be found to exist, the requirement of the installation of additional shallow monitoring wells should be reassessed'*. Given the upgradient to crossgradient location of these shallow wells, the distance of greater than an estimated 200 meters from the property boundary, and in consideration of the limited use, if any, impacts to these shallow dug wells are not anticipated and the installation of additional shallow monitoring wells is not deemed warranted at this time.

Based on the results of the door to door survey and the assessment of the shallow wells in the area surrounding the proposed pit, the general conclusions of stated in the Hydrogeological Study remain the same. That is *'based on the proposed maximum extraction of aggregate to the water table (i.e., not within saturated soils) with no proposed dewatering or water diversion, the reported occurrence of the hardpan overlying the bedrock, and in consideration of the setback distances, it is reasonable to expect that the proposed aggregate extraction will not impact the water supply wells or surface water features in the area.'*

Additionally, the list of standard mitigative measures provided to be protective of the shallow water table aquifer provided in the Hydrogeological Study continues to be considered sufficient with one addition that provides additionally certainty regarding the elevation of the "high" water table:

- *Yearly water level monitoring shall be conducted in the spring by a qualified professional. Water levels will be compared to the proposed bottom contours, which will be adjusted to the maximum expected water table, as necessary.*

5.0 UPDATED HIGH GROUNDWATER ELEVATION

On May 16, 2011 three monitoring wells were installed to depths ranging between 5.5 and 10.64 mbgs to monitor water levels at the site (i.e., MW-1, MW-2, and MW-3). These monitoring wells are used to measure the groundwater elevations and determine the “high” water levels associated with the property. As part of the Hydrogeological Study, the water level in each of the monitoring wells was measured by G&M personnel on May 16, 2011 (following the well installation activities), May 24, 2011, October 25, 2011, March 12, 2012, and May 23, 2013.

Based on the time period since the ARA application submission and the relatively “wet” conditions observed in 2014, additional water level measurements were collected on May 20, 2014. The 2014 spring conditions are anecdotally considered to be one of the wettest in the last 10 to 15 years. Several areas, have been documented to have had flood conditions, with high groundwater and surface water observed at several locations throughout Grey and Bruce Counties.

Based on the groundwater conditions, timing of the freshet, and precipitation events, the spring water level measurements collected in 2014 is considered to be representative of the “high” water level measurements under wet conditions. The 2014 water levels are summarized on Table 2, enclosed with this report. The 2014 water levels are approximately 0.2 to 0.6 m above those from 2013. It is recommended that the operational plans be updated to account for the 2014 “high” groundwater conditions.

In the portion of the site where extraction is proposed (i.e. the northern area), the watertable is considered to decline from 400.5 masl in the west to 398.2 masl in the east, as shown on the updated Figure 4. Based on extraction to the watertable, these elevations represent the proposed maximum depth of the bottom contours of the pit. It is noted that the groundwater elevations may vary, such that the excavation depths may be limited to shallower depths where groundwater is encountered, as per the established mitigative measures.

All of which is respectfully submitted.

GAMSBY AND MANNEROW LIMITED

Per:



M. D. Nelson, M.Sc., P.Geo., P.Eng.

TABLE 1
SUMMARY OF WELL SURVEY INFORMATION PROVIDED WITH CORRELATION TO THE MOE WELL RECORDS

WELL SURVEY RESULTS				MOE WATER WELL RECORDS												
FIRE NO.	CURRENT PROPERTY OWNER	TYPE OF WELL	WELL USAGE (As per survey)	CONC	LOT	WELL NO. (records)	EASTING	NORTHING	ELEVATION ft asl. (m asl)	DATE INSTALLED	CASING DIAMETER	STATIC WATER LEVEL ft (m)	WATER USE	OB or BDRK	DEPTH TO BEDROCK ft (m)	WELL DEPTH ft (m)
				Holland Township												
495546	Doug Crocker	Drilled *Dug*	NA None	6	26	25-10723	518,205	4,910,268	1325 (404)	July 1990	6	---	DO	BDRK	75 (22.8)	116 (35.3)
495498	Stuart and Sharon Hyde	Drilled	DO	6	27	7035895	518,598	4,910,077	----	August 2006	6	32 (9.8)	DO	BDRK	24 (7.3)	97 (29.5)
495504	Richard and Joanne Bickley	Drilled	DO	6	27	25-11009	518,575	4,909,878	1310 (399)	August 1990	5	28 (8.5)	DO	BDRK	38 (11.6)	140 (42.6)
495464	Jean Buchanan	Drilled	DO	6	27	25-11117	518,652	4,909,571	1325 (404)	August 1990	5	36 (10.9)	DO	BDRK	29 (8.8)	155 (47.1)
				6	27	25-15271	517,271	4,909,181	----	Nov 2002	6	29 (8.8)	DO	BDRK	7 (2.1)	156 (47.4)
495492	Don and Doris Sowerby	Drilled	DO	6	27	7048024	518,598	4,909,749	----	June 2007	6	75 (22.9)	DO	BDRK	22 (6.7)	145 (44.2)
584015	Pearl and Brian Bumstead	Drilled	DO	7	27	25-01400	518,900	4,909,400	1350 (411)	Jan 1951	6	47 (14.3)	DO	BDRK	57 (17.3)	98 (29.8)
				7	27	25-08084	519,700	4,909,500	1275 (389)	August 1983	5	48 (14.6)	DO	BDRK	75 (22.8)	355 (108)
584161	H&W Macho	Drilled	DO	7	27	25-04723	520,125	4,909,533	1295 (395)	Jan 1974	5	42 (12.8)	DO	BDRK	57 (17.3)	97 (29.5)
				7	27	25-16235	519,901	4,909,610	----	July 2004	6	30 (9.1)	DO/ST	BDRK	48 (14.6)	102 (31.0)
584022	Naohiko and Anne Kurita	Drilled *Dug*	NA None	7	28	25-03209	518,950	4,909,250	1360 (415)	June 1970	6	50 (15.2)	DO	BDRK	57 (17.3)	155 (47.1)
				7	28	25-06838	518,950	4,908,950	1375 (419)	June 1979	5	80 (24.3)	DO	BDRK	85 (25.8)	185 (56.2)
				7	28	25-05833	518,930	4,909,040	1375 (419)	Oct 1976	5	71 (21.6)	DO	BDRK	71 (21.6)	285 (86.6)
				7	28	25-01401	519,599	4,909,300	1318 (402)	March 1951	6	25 (7.6)	DO	BDRK	65 (19.8)	97 (29.5)
				7	28	25-13495	519,457	4,909,088	----	April 1998	6	42 (12.8)	DO	BDRK	65 (19.8)	97 (29.5)
SURVEY RETURNED - ALTHOUGH A PORTION OF THE PROPERTY FALLS WITHIN THE 500 meter LIMIT, WELL IS LIKELY OUTSIDE THE DEFINED SURVEY AREA																
580025	Gregory Elchuk	Drilled	DO/Livestock	3 SR W	60	25-10065	519,885	4,910,551	1330 (405)	August 1, 1989	5	60 (18)	DO	BDRK	79 (24)	170 (52)
583697	Andrew and Patricia Caine	Drilled	DO	6	27	No matching well record available										
SURVEY RETURNED - NO WELL ON PROPERTY																
Vacant lot	Julia Robinson	None	NA	6	27											
Vacant lot	Patti Buchanan	None	NA	6	27											

Notes:

- Information was obtained from the MOE Water Well Data System.
- = Information not available.
- OB = overburden well ; BDRK = bedrock well ; DO = Domestic ; ST = Livestock
- ft = feet; ft asl. = feet above sea level
- CONC = Concession; EL. = Elevation
- Well locations are presented on Figure 2.
- Northing and Eastings were provided by the MOE Water Well Data System are considered to be approximate. These are given in relation to the NAD 83 datum.

**ADDENDUM TO HYDROGEOLOGICAL STUDY
PROPOSED BUMSTEAD AGGREGATE PIT
INVENTORY OF PRIVATE WATER SUPPLY WELLS**

**WEST HALF OF LOT 27 CONCESSION 7
FORMER TOWNSHIP OF HOLLAND
TOWNSHIP OF CHATSWORTH**

FIGURES

210099 Aggregate Pit Hydrogeologic Study Township of Chatsworth



LEGEND

- 495498 (HYDE) FIRE NUMBER (PRESENT OWNER)
- SITE BOUNDARY
- 25-08084 WELL LOCATION BASED ON M.O.E. WELL RECORD SEARCH WITH M.O.E. WELL NUMBER
- x 397 SPOT ELEVATION (FROM TOPOGRAPHIC MAP, masl)
- INFERRED WELL LOCATION BASED ON SITE RECONNAISSANCE
- INFERRED LOCATION OF SHALLOW 'DUG' WELL
- INFERRED GROUNDWATER FLOW DIRECTION

SCALE: 1:10,000
APRIL 2014

SITE SETTING

Part Lot 27, Conc. 7
(Former Township of Holland)
County of Grey

Figure No. 2



AIRPHOTO FROM: GREY COUNTY GIS MAPPING



210099 Aggregate Investigation Hydrogeologic Study Township of Chatsworth



LEGEND

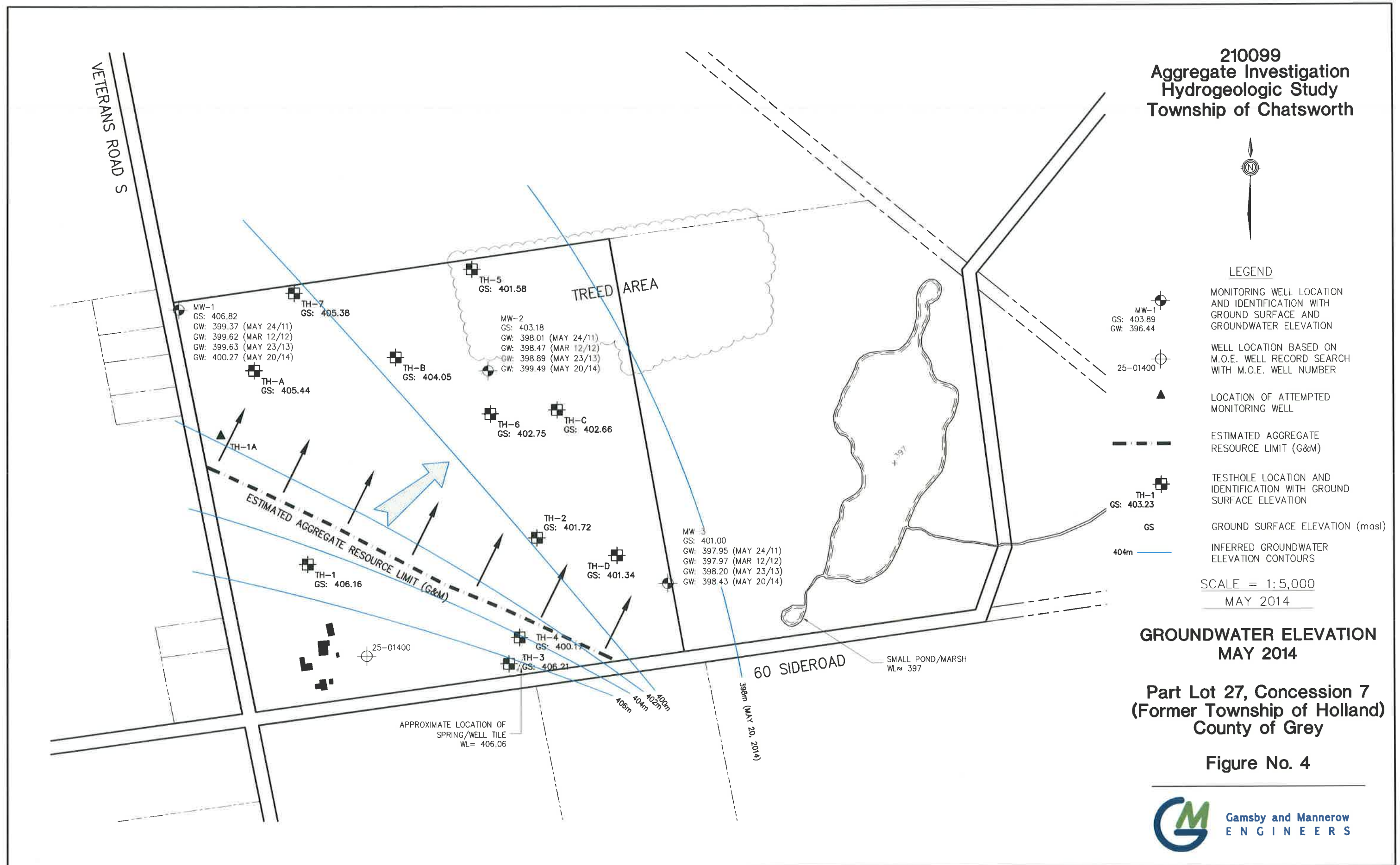
- MONITORING WELL LOCATION AND IDENTIFICATION WITH GROUND SURFACE AND GROUNDWATER ELEVATION
- WELL LOCATION BASED ON M.O.E. WELL RECORD SEARCH WITH M.O.E. WELL NUMBER
- LOCATION OF ATTEMPTED MONITORING WELL
- ESTIMATED AGGREGATE RESOURCE LIMIT (G&M)
- TESTHOLE LOCATION AND IDENTIFICATION WITH GROUND SURFACE ELEVATION
- GROUND SURFACE ELEVATION (masl)
- INFERRED GROUNDWATER ELEVATION CONTOURS

SCALE = 1:5,000
MAY 2014

GROUNDWATER ELEVATION MAY 2014

Part Lot 27, Concession 7
(Former Township of Holland)
County of Grey

Figure No. 4



**ADDENDUM TO HYDROGEOLOGICAL STUDY
PROPOSED BUMSTEAD AGGREGATE PIT
INVENTORY OF PRIVATE WATER SUPPLY WELLS**

**WEST HALF OF LOT 27 CONCESSION 7
FORMER TOWNSHIP OF HOLLAND
TOWNSHIP OF CHATSWORTH**

APPENDIX A

MOE CORRESPONDENCE

Ministry of the Environment

733 Exeter Road
London ON N6E 1L3
Tel: 519 873-5000
Fax: 519 873-5020

Ministère de l'Environnement

733, rue Exeter
London ON N6E 1L3
Tél: 519 873-5000
Télééc: 519 873-5020



February 3, 2014

Genevieve Scott
Cuesta Planning Consultants
978 Frist Avenue West
Owen Sound, Ontario
N4K 4K5

Dear Ms Scott:

RE: Proposed Bumstead Pit, Part Lot 27 Concession 7, Township of Chatsworth (geog Holland)

The above referenced proposal is to obtain an ARA Category 1 Class A aggregate license for a 39.6 hectare property at Veteran's Road South and Sideroad 60 southwest of Berkeley. The proposed extraction area is 18.9 hectares. It is proposed to extract 150,000 tonnes annually over an estimated 11 years.

The Ministry of the Environment has been requested to review the "Level 1 Hydrogeological Study" completed by Gamsby & Mannerow (Sept 2013) whose aim it is to characterize the geology, groundwater occurrence and water table elevations. It also has reported to have investigated the potential for adverse effects on the local groundwater resources. The investigative methodology included a review of background data and field investigations inclusive of test pitting, monitoring well installations and a site survey. The report indicates the geological data compiled to date has determined this location consists of prime aggregate material of coarse sand and gravel. The report also claims no dewatering or water diversion will occur as part of the operation.

The local water well records on file with the Ministry of the Environment Water Well Information System were reviewed and summarized by the consultant to assess both geology and hydrogeology. It is noted that all water well records on file with the Ministry for this immediate area indicate that all domestic water wells were completed in the underlying bedrock to depths of between 29 and 108 metres below ground surface. The bedrock aquifer has been reported as a confined to semi-confined aquifer. Ministry staff concur with this assessment, however, it is noted the report is silent on the potential existence of shallow domestic water wells, dug or otherwise, that are typically common to rural settings where shallow groundwater is available.

A shallow unconfined or water table aquifer has been documented to exist on site. This application proposes to forego the standard 1.5 metre buffer distance or setback above the water table in order to mine the local gravel to depths near or equal to the seasonal high water table elevation. As a result of this decision, the proposed operation has been formally registered as a "Class A below the water table operation" and will therefore be subject to all criteria and scrutiny that would normally be associated with a licensed operation where excavation into the

groundwater would occur.

The report clearly states that excavation will not proceed past the depth where water enters the excavation. Should water enter an excavation the standard operating procedure will be to document the water level elevation and stop adjacent excavations approximately 0.3 meters above the water table elevation as encountered.

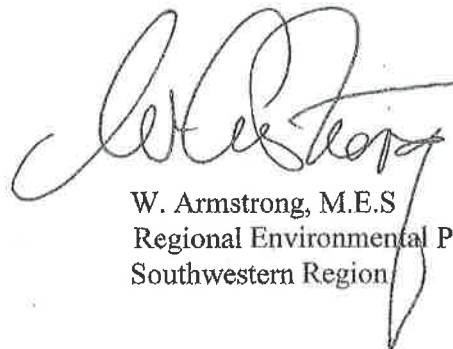
The flow direction of the shallow water table aquifer has been reported to be to the east and northeast. We concur with this assessment based on the information provided from 3 monitoring wells and note this flow direction appears to be away from local residences as they have been shown on the illustrations provided. Additional monitors would provide a higher level of confidence in the assessment of shallow groundwater flow direction and further provide assurance of the protection of potential shallow domestic water wells should they exist either hydraulically lateral or downgradient of the property. In this regard, and while not impossible, we find it unusual that shallow wells either for domestic, livestock or irrigation purposes, do not exist in such a granular environment where water is close to ground surface.

The report concludes that it is reasonable to expect the proposed aggregate operation will not impact local water supply wells. While it is staff's general opinion that the proposed operation will not impact domestic water supplies as presented in the report, we suggest the consultant be asked to provide supporting evidence that shallow "unlicensed" domestic water supplies do not exist within the 500 meter radius surrounding the site. As mentioned, shallow dug wells are not uncommon in such rural environments and as such the Ministry staff is requesting this be further investigated through, as a minimum, a door to door survey to provide the assurance required. Should shallow domestic wells be found to exist, the requirement of the installation of additional shallow monitoring wells should be reassessed. If they are found to not exist, staff accept the conclusions of this report that impact on local water well supplies is not anticipated.

The report also provides a list of standard mitigative measures that are protective of the shallow water table aquifer. Ministry staff concur with the use of these measures as they have been presented.

If questions arise or if clarification is needed please contact the undersigned at (519) 873-5013 or via email at bill.armstrong@ontario.ca.

Yours truly,



W. Armstrong, M.E.S
Regional Environmental Planner
Southwestern Region

cc. B. Harman
J. McLay

**ADDENDUM TO HYDROGEOLOGICAL STUDY
PROPOSED BUMSTEAD AGGREGATE PIT
INVENTORY OF PRIVATE WATER SUPPLY WELLS**

**WEST HALF OF LOT 27 CONCESSION 7
FORMER TOWNSHIP OF HOLLAND
TOWNSHIP OF CHATSWORTH**

APPENDIX B

**DELIVERED PACKAGE:
GENERIC AND ADDRESSED LETTERS AND
WELL INFORMATION REQUEST FORM**

**WELL INFORMATION REQUEST FORM
PROPOSED BUMSTEAD PIT
PART LOT 27 CONCESSION 7, TOWNSHIP OF CHATSWORTH**

STEP 1 – GENERAL INFORMATION

Name of Owner: _____
Name of Occupant: _____
Phone Number of Owner: _____
Lot/Concession: _____
Fire Number (if applicable): _____

MAILING ADDRESS:

PROPERTY ADDRESS:

E-mail address: _____

STEP 2 – WELL CONSTRUCTION DETAILS

Please provide as much of the following information as possible regarding the well(s) on your property. If you have more than one well, please indicate information as pertains to each well:

Date Constructed: _____
Contractor: _____
Type of Well (please check): Drilled ☐ Dug ☐
Original Well Depth: _____
Well Diameter: _____
Type of well/source of water (please check): Bedrock ☐ Overburden ☐
Name of past property owner(s): _____
Well usage: Domestic ☐ Irrigation ☐ Livestock ☐ Other: _____
MOE Well Number: _____

1. Have you ever had any water supply *quantity* or water *quality* issues in the past? If so please describe: (frequency, duration, appearance, odour, taste, etc.)

2. Do you have a copy of the well record provided by the drilling contractor: YES ☐ NO ☐
(if possible, please provide a copy of the well record)

3. Do you have a water treatment system? If so, please describe:

STEP 3 –

Please provide the name and signature of the person who completed this form below:

(Name – Please print)

(Signature)

--It will be assumed that a form not returned is an indication of not being interested--

PLEASE RETURN THE FORM TO GAMSBY AND MANNEROW IN THE ENCLOSED
SELF-ADDRESSED POSTAGE-PAID ENVELOPE, FAX TO 519-376-8977 OR VIA EMAIL
TO mnelson@gamsby.com



Gamsby and Mannerow
ENGINEERS



March 20, 2014
Our File: 210099

Ian & Lorysa Bond
31 Gardiner Road
Toronto, ON M5P 3B6

Re: Proposed Bumstead Pit
Part of Lot 27 Concession 7
Township of Chatsworth

Dear Ian and Lorysa Bond:

As part of the application for an Aggregate Resources Act (ARA) Category I Class A aggregate license, Pearl and Brian Bumstead are requesting your cooperation in mapping the locations of the private water supply wells in the area surrounding the proposed Bumstead Pit in the Township of Chatsworth, Ontario. The proposed aggregate pit is located at 584015 Sideroad 60 and is situated northeast of the intersection of Sideroad 60 and Veterans Road South. Gamsby and Mannerow Limited (G&M), consulting professional engineers, has been retained to assist with this project.

This local survey is being conducted to provide more certainty regarding the location of private water supply wells in the area in order to ensure protection of the local water resources. On behalf of the Bumsteads, we request that you please complete the enclosed form requesting information about the water supply well(s) on your property (i.e. Part of Lot 26 Concession 7 in the Township of Chatsworth), to the best of your ability, and return it to Gamsby and Mannerow in the enclosed, self-addressed and postage paid envelope by April 11, 2014. If you have any questions regarding the water supply well inventory please contact Matthew Nelson at Gamsby and Mannerow, (519)376-1805. Following a review of the existing water supply wells in the area, you may be contacted should additional information be needed.

Personal information collected will be used by the Bumsteads, Cuesta Planning Consultants, Gamsby and Mannerow Limited, the Ministry of Natural Resources, the Ministry of the Environment, the Township of Chatsworth and the County of Grey to support the planning and ARA applications. By providing us with your personal information for the purposes listed above, you consent to our collection, use and disclosure of the information for those purposes. We will not collect, use or disclose your personal information for other purposes without your consent. You may refuse or withdraw your consent at any time by contacting the undersigned.

Your cooperation and time are greatly appreciated.

Matthew Nelson, P.Eng, P.Geo.

people engineering environments

Gamsby and Mannerow Limited • Guelph, Owen Sound, Listowel, Kitchener, Exeter
1760 - 2nd Avenue E. Unit 1, Owen Sound, ON N4K 3J3 519-376-1805 fax 519-376-8977 www.gamsby.com



Gamsby and Mannerow
ENGINEERS



March 20, 2014
Our File: 210099

Mr. Peter & Rosa Chiefari
17476 Centreville Creek Road
Caledon, ON L7K 2L5

Re: Proposed Bumstead Pit
Part of Lot 27 Concession 7
Township of Chatsworth

Dear Peter and Rosa Chiefari:

As part of the application for an Aggregate Resources Act (ARA) Category I Class A aggregate license, Pearl and Brian Bumstead are requesting your cooperation in mapping the locations of the private water supply wells in the area surrounding the proposed Bumstead Pit in the Township of Chatsworth, Ontario. The proposed aggregate pit is located at 584015 Sideroad 60 and is situated northeast of the intersection of Sideroad 60 and Veterans Road South. Gamsby and Mannerow Limited (G&M), consulting professional engineers, has been retained to assist with this project.

This local survey is being conducted to provide more certainty regarding the location of private water supply wells in the area in order to ensure protection of the local water resources. On behalf of the Bumsteads, we request that you please complete the enclosed form requesting information about the water supply well(s) on your property at 584140 Sideroad 60 in the Township of Chatsworth, to the best of your ability, and return it to Gamsby and Mannerow in the enclosed, self-addressed and postage paid envelope by April 11, 2014. If you have any questions regarding the water supply well inventory please contact Matthew Nelson at Gamsby and Mannerow, (519)376-1805. Following a review of the existing water supply wells in the area, you may be contacted should additional information be needed.

Personal information collected will be used by the Bumsteads, Cuesta Planning Consultants, Gamsby and Mannerow Limited, the Ministry of Natural Resources, the Ministry of the Environment, the Township of Chatsworth and the County of Grey to support the planning and ARA applications. By providing us with your personal information for the purposes listed above, you consent to our collection, use and disclosure of the information for those purposes. We will not collect, use or disclose your personal information for other purposes without your consent. You may refuse or withdraw your consent at any time by contacting the undersigned.

Your cooperation and time are greatly appreciated.

Matthew Nelson, P.Eng, P.Geo.

people engineering environments

Gamsby and Mannerow Limited • Guelph, Owen Sound, Listowel, Kitchener, Exeter

1200 7th Avenue E, Unit 1, Owen Sound, ON N4K 2J3 • 519-376-1805 • fax 519-376-8977 • www.gamsby.com



Gamsby and Mannerow
ENGINEERS



March 20, 2014
Our File: 210099

Mr. John Quinn
Box 543
207 3rd Avenue South West
Chesley, ON N0G 1L0

Re: Proposed Bumstead Pit
Part of Lot 27 Concession 7
Township of Chatsworth

Dear John Quinn:

As part of the application for an Aggregate Resources Act (ARA) Category I Class A aggregate license, Pearl and Brian Bumstead are requesting your cooperation in mapping the locations of the private water supply wells in the area surrounding the proposed Bumstead Pit in the Township of Chatsworth, Ontario. The proposed aggregate pit is located at 584015 Sideroad 60 and is situated northeast of the intersection of Sideroad 60 and Veterans Road South. Gamsby and Mannerow Limited (G&M), consulting professional engineers, has been retained to assist with this project.

This local survey is being conducted to provide more certainty regarding the location of private water supply wells in the area in order to ensure protection of the local water resources. On behalf of the Bumsteads, we request that you please complete the enclosed form requesting information about the water supply well(s) on your property at 583710 Sideroad 60 in the Township of Chatsworth, to the best of your ability, and return it to Gamsby and Mannerow in the enclosed, self-addressed and postage paid envelope by April 11, 2014. If you have any questions regarding the water supply well inventory please contact Matthew Nelson at Gamsby and Mannerow, (519)376-1805. Following a review of the existing water supply wells in the area, you may be contacted should additional information be needed.

Personal information collected will be used by the Bumsteads, Cuesta Planning Consultants, Gamsby and Mannerow Limited, the Ministry of Natural Resources, the Ministry of the Environment, the Township of Chatsworth and the County of Grey to support the planning and ARA applications. By providing us with your personal information for the purposes listed above, you consent to our collection, use and disclosure of the information for those purposes. We will not collect, use or disclose your personal information for other purposes without your consent. You may refuse or withdraw your consent at any time by contacting the undersigned.

Your cooperation and time are greatly appreciated.

Matthew Nelson, P.Eng, P.Geo.

people engineering environments

Gamsby and Mannerow Limited • Guelph, Owen Sound, Listowel, Kitchener, Exeter

11260 - 2nd Avenue E. Unit 1, Owen Sound, ON N4K 2J1 Tel: 519-376-1805 Fax: 519-376-8977 www.gamsby-on.com



Gamsby and Mannerow

ENGINEERS



March 14, 2014

Our File: 210099

Re: Proposed Bumstead Pit
Part of Lot 27 Concession 7
Township of Chatsworth

Owner/Occupant:

As part of the application for an Aggregate Resources Act (ARA) Category I Class A aggregate license, Pearl and Brian Bumstead are requesting your cooperation in mapping the locations of the private water supply wells in the area surrounding the proposed Bumstead Pit in the Township of Chatsworth, Ontario. The proposed aggregate pit is located at 584015 Sideroad 60 and is situated northeast of the intersection of Sideroad 60 and Veterans Road South. Gamsby and Mannerow Limited (G&M), consulting professional engineers, has been retained to assist with this project.

This local survey is being conducted to provide more certainty regarding the location of private water supply wells in the area in order to ensure protection of the local water resources. On behalf of the Bumsteads, we request that you please complete the enclosed form requesting information about the water supply well(s) on your property, to the best of your ability, and return it to Gamsby and Mannerow in the enclosed, self-addressed and postage paid envelope by April 4, 2014. If you have any questions regarding the water supply well inventory please contact Matthew Nelson at Gamsby and Mannerow, (519)376-1805. Following a review of the existing water supply wells in the area, you may be contacted should additional information be needed.

Personal information collected will be used by the Bumsteads, Cuesta Planning Consultants, Gamsby and Mannerow Limited, the Ministry of Natural Resources, the Ministry of the Environment, the Township of Chatsworth and the County of Grey to support the planning and ARA applications. By providing us with your personal information for the purposes listed above, you consent to our collection, use and disclosure of the information for those purposes. We will not collect, use or disclose your personal information for other purposes without your consent. You may refuse or withdraw your consent at any time by contacting the undersigned.

Your cooperation and time are greatly appreciated.

Matthew Nelson, P.Eng, P.Geo.

people engineering environments

Gamsby and Mannerow Limited • Guelph, Owen Sound, Listowel, Kitchener, Exeter
1260 - 2nd Avenue E. Unit 1, Owen Sound, ON N4H 2J3 519-376-1805 fax 519-376-8977 www.gamsby.com

**ADDENDUM TO HYDROGEOLOGICAL STUDY
PROPOSED BUMSTEAD AGGREGATE PIT
INVENTORY OF PRIVATE WATER SUPPLY WELLS**

**WEST HALF OF LOT 27 CONCESSION 7
FORMER TOWNSHIP OF HOLLAND
TOWNSHIP OF CHATSWORTH**

APPENDIX C

LETTER DROP-OFF TRACKING SHEET

	Fire Number	Road	Conc	Pt. 1 Lot 5	Name and/or address on Mailbox	Description (if >1, indicate #)						Additional Comments
						House	Barn	Farm	Livestock	Crops	Ind/Com	
✓ ①	584015	Sd. Rd. 600 Emailed Reply m/c 17/14	7	27	Brian & Pearl Burnstead	✓	2	✓				Additional Outbuilding Drive Shed, woodshed Detached Garage
✓ ②	584022	Sd. Rd. 60	7	28	Nachiko & Anne Kuwita	✓	✓					3 - Detached Out buildings
③	584140	Sd. Rd. 60	7	28	Peter & Rosa Chieftari	✓	✓	✓	✓			land is rented out - All buildings in ill repair not inhabited
✓ ④	584161	Sd. Rd. 60	7	27	Willie & Helen Machio	✓						One detached garage/shed.
✓ ⑤	580035	Sd. Rd. 60	3 SW 38	60	Greg & Darlene Elehuk	✓		✓	✓			Small out building.
⑥	No Fire # seen	Veterans Rd. S.	7	26	Tan Bond & Korysa Bond							All buildings in ill repair - not lived in
✓ ⑦	495546	Veterans Rd. S	6	26	Doug Crocker *	✓						Two detached garage & Shop.
✓ ⑧	495504	Veterans Rd. S.	6	27	Richard & Jeanne Bickley	✓						
✓ ⑨	495498	Veterans Rd. S	6	27	Stuart & Sharon Hyde	✓						Detached Garage
⑩	No Fire # seen	Veterans Rd. S.	6	27	Clinton Smith & Michelle Leering							1 - 2 R.V. Trailers

Notes:

* Doug Crocker lives @
563475 Glenely Holland
Townline, Rd #2
Holland Centre, ON N0H 1R0.

Fire Number	Road	Conc	Pt. L. Lot S	Name and/or address on Mailbox	Description (if > 1, indicate #)						Additional Comments
					House	Barn	Farm	Livestock	Crops	Ind/Com	
✓ 11 495492	Veterans Rd. S.	6	37	Don Sweetby	✓						Detached garage - work shop
12 495464	Veterans Rd. S.	6	37	Sean Buchanan	✓						Small Shed
13 No Fire # seen	Veterans Rd. S.	6	37	Ruth Buchanan							vacant lot.
14 No Fire # seen	Veterans Rd. S.	6	37	Julia Robinson							vacant lot.
Pearl 15 583724	Sd Rd. 600	6	28	Stephen Martin							Two R.V. Trailers.
16 583710	Sd. Rd. 60	6	28	John Guim	✓						Two detached Storage - Shed - Garage
✓ 17 495413	Veterans Rd. S.	7	28	Donald & Gloria Coffey	✓						Numerous out buildings, lg. Air Plane Hanger
✓ 18 495405	Veterans Rd. S.	7	28	Robert Westing & Richard Devine	✓						3-4 Small out buildings
✓ 19 583697	Sd. Rd. 60	7	27	Andrew & Pattie Caine	✓	✓					Detached Garage - Shop - BUSINESS mechanical water systems

Notes:

Pt. L. = Part lot

SWTSR = South West Toronto Spoken Rd.

G&M = Gamsby & Mannerow making road survey cover letter.

Pearl m = Pearl B. mailed out March 18, 2014

✓ = Pearl delivered either to person, mail box or left in door.

0 Delivered # 13 & # 14 to

Sean Buchanan.

**ADDENDUM TO HYDROGEOLOGICAL STUDY
PROPOSED BUMSTEAD AGGREGATE PIT
INVENTORY OF PRIVATE WATER SUPPLY WELLS**

**WEST HALF OF LOT 27 CONCESSION 7
FORMER TOWNSHIP OF HOLLAND
TOWNSHIP OF CHATSWORTH**

APPENDIX D

**RETURNED SURVEY FORMS AND CORRESPONDING
MOE WELL RECORDS (INFERRED)**

March 17, 2014
up-dated Edited - Copy -

WELL INFORMATION REQUEST FORM
PROPOSED BUMSTEAD PIT
PART LOT 27 CONCESSION 7, TOWNSHIP OF CHATSWORTH

STEP 1 - GENERAL INFORMATION

Name of Owner: BRIAN + PEARL BUMSTEAD
Name of Occupant: _____
Phone Number of Owner: 519-986-2467
Lot/Concession: LOT 27 CON. 7
Fire Number (if applicable): 584015

MAILING ADDRESS:

584015 LODGE RD
RR #2 HOLLAND CENTRE
NOBILCO ONT

PROPERTY ADDRESS:

E-mail address: bbumstead@eratus.ca

STEP 2 - WELL CONSTRUCTION DETAILS

Please provide as much of the following information as possible regarding the well(s) on your property. If you have more than one well, please indicate information as pertains to each well:

Date Constructed: JANUARY 1951
Contractor: 1317
Type of Well (please check): Drilled ☒ Dug ☐
Original Well Depth: 1350 ASL
Well Diameter: 6"
Type of well/source of water (please check): Bedrock ☒ Overburden ☐
Name of past property owner(s): J. WHITNEY
Well usage: Domestic ☒ Irrigation ☐ Livestock ☐ Other: Groundwater Spring
MOE Well Number: 25-01400 DUG outlined on P. 1 of map
Sept 2013 Hydrogeological Study

1. Have you ever had any water supply *quantity* or water *quality* issues in the past? If so please describe: (frequency, duration, appearance, odour, taste, etc.)

NO

2. Do you have a copy of the well record provided by the drilling contractor: YES ☐ NO ☒
(if possible, please provide a copy of the well record) we do have a copy of the well record - copy

3. Do you have a water treatment system? If so, please describe:

YES - Sediment filter & water softener

STEP 3 –

Please provide the name and signature of the person who completed this form below:

Brian Bumstead
(Name – Please print)

B. Bumstead
(Signature)

--It will be assumed that a form not returned is an indication of not being interested--

PLEASE RETURN THE FORM TO GAMSBY AND MANNEROW IN THE ENCLOSED
SELF-ADDRESSED POSTAGE-PAID ENVELOPE, FAX TO 519-376-8977 OR VIA EMAIL
TO mnelson@gamsby.com

Berkeley Jan 25th 1951
Mr. J. Whitney Sr.
To Mr. S. Bellamy.

encl.
Well Information
Request Form
March 17, 2014
Brian A Pearl
Burnstead

To 51 ft. drilling @ 4.00	204.00
44 " casing @ 2.25	99.00
22 " 1 1/2 in pipe rod.	13.20
Time on pump.	4.00
	<hr/>
	320.20
By cash.	100.00
	<hr/>
	220.20

25 № 1400

The Well Drillers Act

Department of Mines, Province of Ontario

Water Well Record, R.

Date Completed Jan 23, 1961 Cost of Well (not including pump)

Pipe and Casing Record

Casing diameter(s) . . . 6" 8" 10"
Length(s) of casing(s) . . . 37
Length of screen . . .
Type of screen . . .
Type of pump . . . hand dug well
Capacity of pump . . . 10 gal / min
Depth of pump setting . . . 70 ft

Pumping Test

Date... Jan. 23
Developed Capacity... 1200 gal per hr.
Duration of Test... 1 hr.
Pumping Rate... 12.5 gal/min
Drawdown... Nil
Static level of completed well... 4.7 ft. below ground
Is well a gravel-wall type?... Yes

Water Record

Kind (fresh or mineral) . . . *Fresh*
 Quality (hard, soft, contains iron, sulphur etc.) *Medium Hard.*

 Appearance (clear, cloudy, coloured) . . . *clear*
 For what purpose(s) is the water to be used? *Domestic &*
watering stock.
 How far is well from possible source of contamination? *50 yards.*
 What is source of contamination? *Barn yard.*
 Enclose a copy of any mineral analysis that has been made of water . . .

[illegible]

Well Log

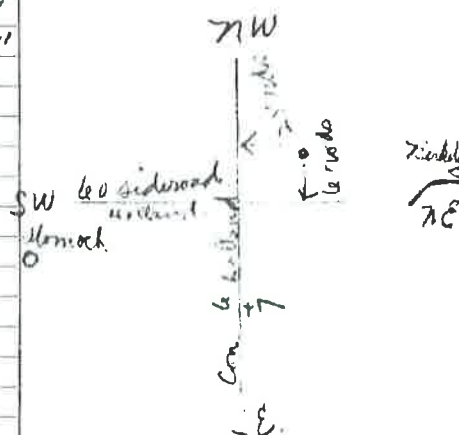
Drift and Bedrock Record

Hard pan + gravel.
Some fine rock.

From	To
0 ft.	48 ft.
48	57
57	98'

Location of Well

In diagram below show distances of well from road and lot line



Situation: Is well on upland, in valley, or on hillside? Upland

Drilling Firm M. A. Smith

Address 1971 1st St NE

Recorded by 70-12286-69

Date Jan. 23 1951

Address 30 / 2

Licence Number 48 1950

CSS SR

**WELL INFORMATION REQUEST FORM
PROPOSED BUMSTEAD PIT
PART LOT 27 CONCESSION 7, TOWNSHIP OF CHATSWORTH**

STEP 1 – GENERAL INFORMATION

Name of Owner: H. W. MACHO
Name of Occupant: _____
Phone Number of Owner: 519-370-8471
Lot/Concession: 222 ft. EAST HALF C.7
Fire Number (if applicable): 584161

MAILING ADDRESS: 584161 SR. 60
HOLLAND CTR. ON
MOH 120
PROPERTY ADDRESS: _____

E-mail address: _____

STEP 2 – WELL CONSTRUCTION DETAILS

Please provide as much of the following information as possible regarding the well(s) on your property. If you have more than one well, please indicate information as pertains to each well:

Date Constructed: 1974
Contractor: WRIGHT WELL DRILL.
Type of Well (please check): Drilled ☒ Dug ☐ KEP WORTH
Original Well Depth: 90' 5"
Well Diameter: _____
Type of well/source of water (please check): Bedrock ☐ Overburden ☐ CHECK W/ WRIGHT
Name of past property owner(s): N/A
Well usage: Domestic ☒ Irrigation ☐ Livestock ☐ Other: _____
MOE Well Number: _____

1. Have you ever had any water supply *quantity* or water *quality* issues in the past? If so please describe: (frequency, duration, appearance, odour, taste, etc.)

NEVER

2. Do you have a copy of the well record provided by the drilling contractor: YES ☐ NO ☒
(if possible, please provide a copy of the well record)

3. Do you have a water treatment system? If so, please describe:

STEP 3 –

Please provide the name and signature of the person who completed this form below:

H. H. MACHO

(Name – Please print)

H. H. Macho

(Signature)

--It will be assumed that a form not returned is an indication of not being interested--

PLEASE RETURN THE FORM TO GAMSBY AND MANNEROW IN THE ENCLOSED
SELF-ADDRESSED POSTAGE-PAID ENVELOPE, FAX TO 519-376-8977 OR VIA EMAIL
TO mnelson@gamsby.com

**WELL INFORMATION REQUEST FORM
PROPOSED BUMSTEAD PIT
PART LOT 27 CONCESSION 7, TOWNSHIP OF CHATSWORTH**

STEP 1 – GENERAL INFORMATION

Name of Owner: Gregory Elchuk
Name of Occupant: Gregory Elchuk
Phone Number of Owner: 519-986-4946
Lot/Concession: _____
Fire Number (if applicable): 580025 Sideroad 60

MAILING ADDRESS:

580025 Sideroad 60
RR#7 Markdale, ONT
NOC 2H0

PROPERTY ADDRESS:

Same as Mailing

E-mail address: CrazyScarecrow@hotmail.com

STEP 2 – WELL CONSTRUCTION DETAILS

(only lived here 1 year and we do not have any documents)
Please provide as much of the following information as possible regarding the well(s) on your property. If you have more than one well, please indicate information as pertains to each well:

Date Constructed: Unknown
Contractor: Unknown
Type of Well (please check): Drilled ☐ Dug ☐ Unknown
Original Well Depth: Unknown
Well Diameter: Unknown
Type of well/source of water (please check): Bedrock ☐ Overburden ☐ Unknown
Name of past property owner(s): Barry & Vivien Tilton
Well usage: Domestic ☒ Irrigation ☐ Livestock ☒ Other: _____
MOE Well Number: Unknown

1. Have you ever had any water supply *quantity* or water *quality* issues in the past? If so please describe: (frequency, duration, appearance, odour, taste, etc.)

None known only lived here 1 year.

2. Do you have a copy of the well record provided by the drilling contractor: YES ☐ NO ☒
(if possible, please provide a copy of the well record)

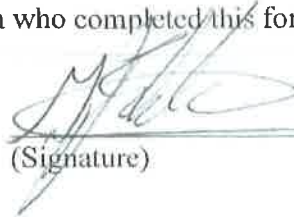
3. Do you have a water treatment system? If so, please describe:

No, only have water softener installed by previous owner but is bypassed at present

STEP 3 -

Please provide the name and signature of the person who completed this form below:

Gregory Elchuk
(Name - Please print)


(Signature)

--It will be assumed that a form not returned is an indication of not being interested--

PLEASE RETURN THE FORM TO GAMSBY AND MANNEROW IN THE ENCLOSED
SELF-ADDRESSED POSTAGE-PAID ENVELOPE, FAX TO 519-376-8977 OR VIA EMAIL
TO mnelson@gamsby.com

My signature on this form does not
indicate that I am in support of
this application or the proposed
Bumstead Gravel Pit because I do
not support it.

Please verify receipt and review
via my e-mail.

Thank you





WATER WELL RECORD

1 PRINT ONLY IN SPACES PROVIDED
2 CHECK ☒ CORRECT BOX WHERE APPLICABLE

251 0065

PRICE	250.99	CODE	5414
-------	--------	------	------

193

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)					
GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH FEET	
				FROM	TO
	TOP SOIL			0	Z
BROWN	HARD PAN			2	79
BROWN	LIMESTONE ROCK			79	170

31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
41		WATER RECORD		51		CASING & OPEN HOLE RECORD		61		PLUGGING & SEALING RECORD																																																											
WATER FOUND AT - FEET		KIND OF WATER		INSIDE DIAM (INCHES)		MATERIAL		WELL TAGS (TAGS)		DEPTH - FEET																																																											
1 - FRESH		3 - SULPHUR		1 - STEEL		1 - CONCRETE		1 - PLASTIC		1 - PLUG																																																											
2 - SALTY		4 - MINERALS		2 - GALVANIZED		2 - CONCRETE		2 - PLASTIC		2 - PLUG																																																											
3 - FRESH		5 - MINERALS		3 - STEEL		3 - CONCRETE		3 - PLASTIC		3 - PLUG																																																											
4 - SALTY		6 - GAS		4 - STEEL		4 - CONCRETE		4 - PLASTIC		4 - PLUG																																																											
5 - FRESH		7 - SULPHUR		5 - STEEL		5 - CONCRETE		5 - PLASTIC		5 - PLUG																																																											
6 - SALTY		8 - MINERALS		6 - STEEL		6 - CONCRETE		6 - PLASTIC		6 - PLUG																																																											
7 - FRESH		9 - MINERALS		7 - STEEL		7 - CONCRETE		7 - PLASTIC		7 - PLUG																																																											
8 - SALTY		10 - GAS		8 - STEEL		8 - CONCRETE		8 - PLASTIC		8 - PLUG																																																											
9 - FRESH		11 - SULPHUR		9 - STEEL		9 - CONCRETE		9 - PLASTIC		9 - PLUG																																																											
10 - SALTY		12 - MINERALS		10 - STEEL		10 - CONCRETE		10 - PLASTIC		10 - PLUG																																																											
11 - FRESH		13 - MINERALS		11 - STEEL		11 - CONCRETE		11 - PLASTIC		11 - PLUG																																																											
12 - SALTY		14 - GAS		12 - STEEL		12 - CONCRETE		12 - PLASTIC		12 - PLUG																																																											
13 - FRESH		15 - SULPHUR		13 - STEEL		13 - CONCRETE		13 - PLASTIC		13 - PLUG																																																											
14 - SALTY		16 - MINERALS		14 - STEEL		14 - CONCRETE		14 - PLASTIC		14 - PLUG																																																											
15 - FRESH		17 - MINERALS		15 - STEEL		15 - CONCRETE		15 - PLASTIC		15 - PLUG																																																											
16 - SALTY		18 - GAS		16 - STEEL		16 - CONCRETE																																																															

PUMPING TEST	PUMPING TEST METHOD		PUMPING RATE		DURATION OF PUMPING		LOCATION OF WELL	
	1 <input type="checkbox"/> PUMP <input checked="" type="checkbox"/> AIR		5 GPM		2 HOURS 20 MIN		IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROW AND LOT LINE. INDICATE NORTH BY ARROW.	
	STATIC LEVEL		WATER LEVEL DURING		PUMPING			
	18 IN		18 IN		7 <input type="checkbox"/> PUMPING 8 <input checked="" type="checkbox"/> RECOVERY			
	60 FEET		80 FEET		60 FEET		# 10	
	130 FEET		62 FEET		60 FEET		4	
	IF FLOWING		PUMP INFEED SIZE AT		WATER AT END OF TEST		4	
	SIZE NAME		AIR 170 GPM		1 <input type="checkbox"/> CLEAR 2 <input checked="" type="checkbox"/> CLOUDY		4	
	RECOMMENDED PUMP TYPE		RECOMMENDED PUMP		RECOMMENDED PUMP AL		4	
	<input type="checkbox"/> SHALLOW <input checked="" type="checkbox"/> DEEP		SETTING 160 FEET		DATE		4	

FINAL STATUS OF WELL	<input checked="" type="checkbox"/> WATER SUPPLY <input type="checkbox"/> OBSERVATION WELL <input type="checkbox"/> TEST HOLE <input type="checkbox"/> RECHARGE WELL	<input type="checkbox"/> ABANDONED INSUFFICIENT SUPPLY <input type="checkbox"/> ABANDONED POOR QUALITY <input type="checkbox"/> UNFINISHED <input type="checkbox"/> DEWATERING
WATER USE	<input checked="" type="checkbox"/> DOMESTIC <input type="checkbox"/> STOCK <input type="checkbox"/> IRRIGATION <input type="checkbox"/> INDUSTRIAL <input type="checkbox"/> OTHER	<input type="checkbox"/> COMMERCIAL <input type="checkbox"/> MUNICIPAL <input type="checkbox"/> PUBLIC SUPPLY <input type="checkbox"/> COOLING OR AIR CONDITIONING <input type="checkbox"/> NOT USED
METHOD OF CONSTRUCTION	<input type="checkbox"/> CABLE TOOL <input checked="" type="checkbox"/> ROTARY (CONVENTIONAL) <input type="checkbox"/> ROTARY (REVERSE) <input type="checkbox"/> ROTARY (AIR) <input type="checkbox"/> AIR PERCUSSION	<input type="checkbox"/> BORING <input type="checkbox"/> DIAMOND <input type="checkbox"/> JETTING <input type="checkbox"/> DRIVING <input type="checkbox"/> DIGGING <input type="checkbox"/> OTHER

CONTRACTOR	NAME OF WELL CONTRACTOR		WELL CONTRACTOR'S LICENCE NUMBER		DATE SOURCE	CONTRACTOR	DATE RECEIVED	SS	NO
	DURHAM DRILLING ENT NO 1804					1804	AUG 14 1989		
	ADDRESS				DATE OF INSPECTION	INSPECTOR			
	RR2 DURHAM NOGIRO								
	NAME OF WELL TECHNICIAN		WELL TECHNICIAN'S LICENCE NUMBER		PERMITS				
	JACKSON & MAHER								
	SIGNATURE OF TECHNICIAN/CONTRACTOR		SUBMISSION DATE						
	[Signature]		DAY 2 MO 8 89						

**WELL INFORMATION REQUEST FORM
PROPOSED BUMSTEAD PIT
PART LOT 27 CONCESSION 7, TOWNSHIP OF CHATSWORTH**

STEP 1 – GENERAL INFORMATION

Name of Owner: Naohiko Kurita and Anne-Marie Kurita
Name of Occupant: "
Phone Number of Owner: 519-986-1357
Lot/Concession: _____
Fire Number (if applicable): _____

MAILING ADDRESS:

584022 SDRD. 60
G.D. Berkeley
ON N0H 1C6

PROPERTY ADDRESS:

E-mail address: _____

STEP 2 – WELL CONSTRUCTION DETAILS

Please provide as much of the following information as possible regarding the well(s) on your property. If you have more than one well, please indicate information as pertains to each well:

Date Constructed: _____

Contractor: _____

Type of Well (please check): Drilled ☒ Dug ☒

Original Well Depth: _____

Well Diameter: _____

Type of well/source of water (please check): Bedrock ☐ Overburden ☐

Name of past property owner(s): _____

Well usage: Domestic ☐ Irrigation ☐ Livestock ☐ Other: _____

MOE Well Number: _____

1. Have you ever had any water supply *quantity* or water *quality* issues in the past? If so please describe: (frequency, duration, appearance, odour, taste, etc.)

2. Do you have a copy of the well record provided by the drilling contractor: YES ☐ NO ☐
(if possible, please provide a copy of the well record)

3. Do you have a water treatment system? If so, please describe:

STEP 3 –

Please provide the name and signature of the person who completed this form below:

(Name – Please print)

(Signature)

--It will be assumed that a form not returned is an indication of not being interested--

PLEASE RETURN THE FORM TO GAMSBY AND MANNEROW IN THE ENCLOSED
SELF-ADDRESSED POSTAGE-PAID ENVELOPE, FAX TO 519-376-8977 OR VIA EMAIL
TO mnelson@gamsby.com

Matthew Nelson, P.Eng. P. Geo
Gamsby And Mannerow Limited
Owen Sound, Ontario

March 25, 2014

Dear Mr. Nelson,

We have indicated on the attached survey that we have one drilled well and one dug well.

We have no documents which would answer the questions about the drilled well. Except the results of regular testing that show consistent absence of coliforms and E coli. Clean, fresh tasting water is delivered with consistent high levels without interruptions.

The dug well is under 3 feet of snow. In the summer, it is under 3 feet of water, located in a pond. The pond level drops in late August or early September, sufficient to examine it's features. It is within 500 metres of the licenced boundary of the proposed Bumstead Pit. It is architecturally archaic and most likely built during early settlement times. Still sound and of good use when needed.

In their comments to Cuesta, the Ministry of the Environment gives specific instructions that "shallow dug wells.....be further investigated through, as a minimum, a door to door survey to provide the assurance required. Should shallow wells be found to exist, the requirement of the installation of additional shallow monitoring wells should be reassessed."

Please make arrangements to have a site examination of our dug well by your technical experts, employed by yourselves, Gamsby & Mannerow.

We expect to be notified and be present during any visit for that purpose. Until then, it is not appreciated that any person (s), the proponent or their consultants, make unauthorised entry to our property at any point for any purpose in the planning or supporting of the ARA application. As we do not have a road side mail box, all mail should be directed to us at our mailing address below, through the services of Canada Post.

This letter explicitly and most emphatically indicates our interest in all matters to do with the protection and preservation of the lands and waters of our home and all life which is sustained therein.

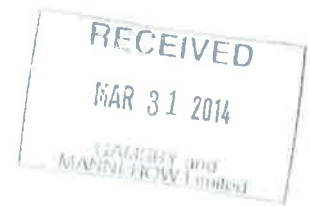
Yours truly,

Naohiko and Anne Kurita
584022 Sideroad 60
G.D. Berkeley
ON N0H 1C0

cc. Jason McLay (MNR)
Scott Taylor (Grey County)
Township of Chatsworth
Bill Armstrong M.E.S. (MOE)

Matthew Nelson, P.Eng. P. Geo
Gamsby And Mannerow Limited
Owen Sound, Ontario

March 25, 2014



Dear Mr. Nelson,

We have indicated on the attached survey that we have one drilled well and one dug well.

We have no documents which would answer the questions about the drilled well. Except the results of regular testing that show consistent absence of coliforms and E coli. Clean, fresh tasting water is delivered with consistent high levels without interruptions.

The dug well is under 3 feet of snow. In the summer, it is under 3 feet of water, located in a pond. The pond level drops in late August or early September, sufficient to examine it's features. It is within 500 metres of the licenced boundary of the proposed Bumstead Pit. It is architecturally archaic and most likely built during early settlement times. Still sound and of good use when needed.

In their comments to Cuesta, the Ministry of the Environment gives specific instructions that "shallow dug wells.....be further investigated through, as a minimum, a door to door survey to provide the assurance required. Should shallow wells be found to exist, the requirement of the installation of additional shallow monitoring wells should be reassessed."

Please make arrangements to have a site examination of our dug well by your technical experts, employed by yourselves, Gamsby & Mannerow.

We expect to be notified and be present during any visit for that purpose. Until then, it is not appreciated that any person (s), the proponent or their consultants, make unauthorised entry to our property at any point for any purpose in the planning or supporting of the ARA application. As we do not have a road side mail box, all mail should be directed to us at our mailing address below, through the services of Canada Post.

This letter explicitly and most emphatically indicates our interest in all matters to do with the protection and preservation of the lands and waters of our home and all life which is sustained therein.

Yours truly,


Naohiko and Anne Kurita

584022 Sideroad 60
G.D. Berkeley
ON N0H 1C0



cc. Jason McLay (MNR)
Scott Taylor (Grey County)
Township of Chatsworth
Bill Armstrong M.E.S. (MOE)



WATER WELL RECORD

41 A T W C

Water management in Ontario 1 PRINT ONLY IN SPACES PROVIDED
2 CHECK ☒ CORRECT BOX WHERE APPLICABLE

11 2503209

MUNICIP 25008 WEST 1 01 07

COUNTY OR DISTRICT <u>Simcoe</u>	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE <u>Holland</u>	CON., BLOCK, TRACT, SURVEY, ETC. <u>7-E.G. R.</u>	LOT <u>028</u>
R. 2. Holland Centre		DATE COMPLETED DAY <u>02</u> MO <u>June</u> YR <u>70</u>	
ELEVATION <u>1360</u>		BASIN CODE <u>22</u>	

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

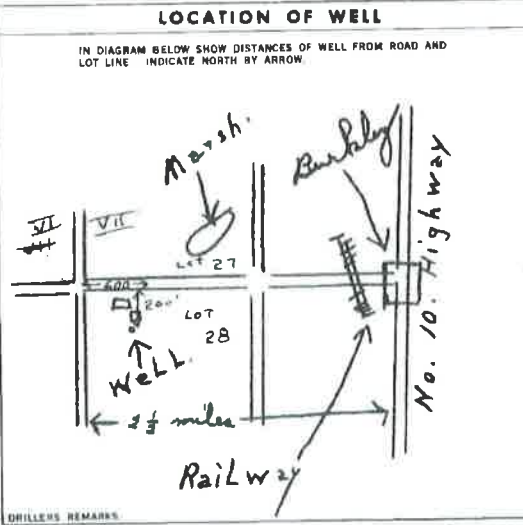
GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET	
				FROM	TO
				0	57'
				57'	130'
				130'	145'
				145'	155'

31 2057/1225 0130/115 0145/315 0155/151

41 WATER RECORD	51 CASING & OPEN HOLE RECORD	61 PLUGGING & SEALING RECORD
<p>WATER SHOWN AT FEET <u>0075</u></p> <p>KIND OF WATER <input checked="" type="checkbox"/> FRESH <input type="checkbox"/> SALTY <input type="checkbox"/> SULPHUR <input type="checkbox"/> MINERAL</p> <p><u>0145</u></p> <p><input type="checkbox"/> FRESH <input type="checkbox"/> SALTY <input type="checkbox"/> SULPHUR <input type="checkbox"/> MINERAL</p> <p><input type="checkbox"/> FRESH <input type="checkbox"/> SALTY <input type="checkbox"/> SULPHUR <input type="checkbox"/> MINERAL</p> <p><input type="checkbox"/> FRESH <input type="checkbox"/> SALTY <input type="checkbox"/> SULPHUR <input type="checkbox"/> MINERAL</p> <p><input type="checkbox"/> FRESH <input type="checkbox"/> SALTY <input type="checkbox"/> SULPHUR <input type="checkbox"/> MINERAL</p>	<p>WALL THICKNESS INCHES <u>188</u></p> <p>DEPTH - FEET FROM <u>0</u> TO <u>58</u></p> <p><u>0058</u></p> <p><u>0155</u></p> <p><u>58</u></p>	<p>DEPTH SET AT - FEET FROM <u>0</u> TO <u>58</u></p> <p>MATERIAL AND TYPE <u>CEMENT GROUT, LEAD PACKER, ETC.</u></p>

71 PUMPING TEST	10 PUMPING RATE	11 DURATION OF PUMPING
<p>PUMPING TEST METHOD <input checked="" type="checkbox"/> PUMP <input checked="" type="checkbox"/> BAILEY</p> <p>STATIC LEVEL <u>050</u></p> <p>WATER LEVEL END OF PUMPING <u>090</u></p> <p>WATER LEVELS DURING 15 MINUTES <u>090</u> 30 MINUTES <u>090</u> 45 MINUTES <u>090</u> 60 MINUTES <u>090</u></p> <p>RECOMMENDED PUMP TYPE <input type="checkbox"/> SHALLOW <input checked="" type="checkbox"/> DEEP</p> <p>RECOMMENDED PUMP SETTING <u>100</u></p> <p>RECOMMENDED PUMPING RATE <u>0022</u></p> <p>RECOMMENDED PUMPING RATE <u>0006</u></p>	<p>PUMPING RATE <u>0025</u></p>	<p>DURATION OF PUMPING 10-15 HOURS <u>30</u> 15-20 HOURS <u>30</u></p>

FINAL STATUS OF WELL	54 WATER SUPPLY	55 WATER USE	56 METHOD OF DRILLING
<input checked="" type="checkbox"/> WATER SUPPLY <input type="checkbox"/> OBSERVATION WELL <input type="checkbox"/> TEST HOLE <input type="checkbox"/> RECHARGE WELL	<input type="checkbox"/> ABANDONED, INSUFFICIENT SUPPLY <input type="checkbox"/> ABANDONED, POOR QUALITY <input type="checkbox"/> UNFINISHED	<input checked="" type="checkbox"/> DOMESTIC <input type="checkbox"/> STOCK <input type="checkbox"/> IRRIGATION <input type="checkbox"/> INDUSTRIAL <input type="checkbox"/> OTHER	<input checked="" type="checkbox"/> CABLE TOOL <input type="checkbox"/> ROTARY (CONVENTIONAL) <input type="checkbox"/> ROTARY (REVERSE) <input type="checkbox"/> ROTARY (AIR) <input type="checkbox"/> AIR PERCUSSION



CONTRACTOR	NAME OF WELL CONTRACTOR <u>Orville Wright</u>	LICENCE NUMBER <u>5506</u>
	ADDRESS <u>Sturton</u>	
	NAME OF DRILLER OR BORE <u>Ron & Orville</u>	LICENCE NUMBER <u>5506</u>
	SIGNATURE OF CONTRACTOR <u>Orville Wright</u>	SUBMISSION DATE DAY <u>2</u> MO <u>June</u> YR <u>70</u>

OFFICE USE ONLY	DATA SOURCE <u>1</u>	CONTRACTOR <u>5506</u>	DATE OF INSTALLATION <u>15/6/71</u>	INSPECTOR <u>P/C</u>
REMARKS:				

OWRC COPY

**WELL INFORMATION REQUEST FORM
PROPOSED BUMSTEAD PIT
PART LOT 27 CONCESSION 7, TOWNSHIP OF CHATSWORTH**

STEP 1 – GENERAL INFORMATION

Name of Owner: Richard + Loanne Bickley
Name of Occupant: Richard + Loanne Bickley
Phone Number of Owner: 519-986-4242
Lot/Concession: Con 6 Part Lot 27
Fire Number (if applicable): 495504

MAILING ADDRESS:

495504 Veterans Rd S
RR2 Holland Centre, ON
N0H 1R0

PROPERTY ADDRESS:

E-mail address: _____

STEP 2 – WELL CONSTRUCTION DETAILS

Please provide as much of the following information as possible regarding the well(s) on your property. If you have more than one well, please indicate information as pertains to each well:

Date Constructed: _____
Contractor: _____
Type of Well (please check): Drilled ☒ Dug ☐
Original Well Depth: _____
Well Diameter: _____
Type of well/source of water (please check): Bedrock ☐ Overburden ☐
Name of past property owner(s): Goodley
Well usage: Domestic ☒ Irrigation ☐ Livestock ☐ Other: _____
MOE Well Number: _____

1. Have you ever had any water supply *quantity* or water *quality* issues in the past? If so please describe: (frequency, duration, appearance, odour, taste, etc.)
Absolutely no problem with water supply quantity or water quality.

2. Do you have a copy of the well record provided by the drilling contractor: YES ☐ NO ☐
(if possible, please provide a copy of the well record)

3. Do you have a water treatment system? If so, please describe:

STEP 3 -

Please provide the name and signature of the person who completed this form below:

(Name - Please print)

(Signature)

--It will be assumed that a form not returned is an indication of not being interested--

PLEASE RETURN THE FORM TO GAMSBY AND MANNEROW IN THE ENCLOSED
SELF-ADDRESSED POSTAGE-PAID ENVELOPE, FAX TO 519-376-8977 OR VIA EMAIL
TO mnelson@gamsby.com

I am definitely interested in our water/well situation as pertains to the Burnstead Pit application. I, in no way, support this application and cannot understand how your company can make assumptions and expect someone who objects to this pit to supply information to support the proponents plan. I am afraid that your company will have to do its job and find the missing information itself as I really don't know any more.

Joanne Bickley
Joanne Bickley

Ministry
of the
Environment

The Ontario Water Resources Act

WATER WELL RECORD

2511009

25008 CON

106

1. PRINT ONLY IN SPACES PROVIDED
2. CHECK ☒ CORRECT BOX WHERE APPLICABLE

2 CHECK <input checked="" type="checkbox"/> CORRECT BOX WHERE APPLICABLE			
COUNTY OR DISTRICT <i>Shen</i>	TOWNSHIP, ROROUGH, CITY, TOWN, VILLAGE <i>Jalland</i>	CON. BLOCK, TRACT, SURVEY, RTE. <i>Cons VI, Part 14</i>	EDITION <i>27</i>
ADDRESS <i>Jalland Centre</i>		DATE COMPLETED DAY <i>20</i> MO <i>09</i> YR <i>10</i>	

17 518578 4409878

1310

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

[illegible]

41	WATER RECORD	51	CASING & OPEN HOLE RECORD																																																																																																																							
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 10%;">WATER FOUND AT - FEET</th> <th style="width: 90%;">KIND OF WATER</th> </tr> <tr> <td>60</td> <td>1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR</td> </tr> <tr> <td>140</td> <td>1 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL</td> </tr> <tr> <td>15-18</td> <td>1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR</td> </tr> <tr> <td></td> <td>2 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL</td> </tr> <tr> <td>20-23</td> <td>1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR</td> </tr> <tr> <td></td> <td>2 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL</td> </tr> <tr> <td>28-30</td> <td>1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR</td> </tr> <tr> <td></td> <td>2 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL</td> </tr> <tr> <td>30-31</td> <td>1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR</td> </tr> <tr> <td></td> <td>2 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL</td> </tr> </table>	WATER FOUND AT - FEET	KIND OF WATER	60	1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR	140	1 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL	15-18	1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR		2 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL	20-23	1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR		2 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL	28-30	1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR		2 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL	30-31	1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR		2 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 10%;">INSIDE DIA. INCHES</th> <th style="width: 20%;">MATERIAL</th> <th style="width: 10%;">WALL THICKNESS INCHES</th> <th style="width: 20%;">DEPTH FEET</th> <th style="width: 10%;">FROM</th> <th style="width: 10%;">TO</th> </tr> <tr> <td>5-31</td> <td>1 <input type="checkbox"/> STEEL</td> <td>188</td> <td>0</td> <td>4</td> <td>4</td> </tr> <tr> <td>16</td> <td>1 <input type="checkbox"/> GALVANIZED</td> <td></td> <td></td> <td>44</td> <td>140</td> </tr> <tr> <td></td> <td>2 <input type="checkbox"/> CONCRETE</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>3 <input type="checkbox"/> OPEN HOLE</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>18-19</td> <td>1 <input type="checkbox"/> STEEL</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>2 <input type="checkbox"/> GALVANIZED</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>3 <input type="checkbox"/> CONCRETE</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>4 <input type="checkbox"/> OPEN HOLE</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>22-23</td> <td>1 <input type="checkbox"/> STEEL</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>2 <input type="checkbox"/> GALVANIZED</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>3 <input type="checkbox"/> CONCRETE</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>4 <input type="checkbox"/> OPEN HOLE</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	INSIDE DIA. INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH FEET	FROM	TO	5-31	1 <input type="checkbox"/> STEEL	188	0	4	4	16	1 <input type="checkbox"/> GALVANIZED			44	140		2 <input type="checkbox"/> CONCRETE						3 <input type="checkbox"/> OPEN HOLE					18-19	1 <input type="checkbox"/> STEEL						2 <input type="checkbox"/> GALVANIZED						3 <input type="checkbox"/> CONCRETE						4 <input type="checkbox"/> OPEN HOLE					22-23	1 <input type="checkbox"/> STEEL						2 <input type="checkbox"/> GALVANIZED						3 <input type="checkbox"/> CONCRETE						4 <input type="checkbox"/> OPEN HOLE					<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 30%;">SHEET OF OPENING SLOT NO. 1</th> <th style="width: 10%;">DIAMETER</th> <th style="width: 10%;">INCHES</th> <th style="width: 10%;">LENGTH</th> <th style="width: 10%;">FEET</th> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="2" style="text-align: center;">MATERIAL AND TYPE</td> <td colspan="3" style="text-align: center;">DEPTH TO TOP OF SCREEN</td> </tr> <tr> <td colspan="2"></td> <td colspan="3"></td> </tr> </table>	SHEET OF OPENING SLOT NO. 1	DIAMETER	INCHES	LENGTH	FEET						MATERIAL AND TYPE		DEPTH TO TOP OF SCREEN							
WATER FOUND AT - FEET	KIND OF WATER																																																																																																																									
60	1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR																																																																																																																									
140	1 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL																																																																																																																									
15-18	1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR																																																																																																																									
	2 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL																																																																																																																									
20-23	1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR																																																																																																																									
	2 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL																																																																																																																									
28-30	1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR																																																																																																																									
	2 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL																																																																																																																									
30-31	1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR																																																																																																																									
	2 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL																																																																																																																									
INSIDE DIA. INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH FEET	FROM	TO																																																																																																																					
5-31	1 <input type="checkbox"/> STEEL	188	0	4	4																																																																																																																					
16	1 <input type="checkbox"/> GALVANIZED			44	140																																																																																																																					
	2 <input type="checkbox"/> CONCRETE																																																																																																																									
	3 <input type="checkbox"/> OPEN HOLE																																																																																																																									
18-19	1 <input type="checkbox"/> STEEL																																																																																																																									
	2 <input type="checkbox"/> GALVANIZED																																																																																																																									
	3 <input type="checkbox"/> CONCRETE																																																																																																																									
	4 <input type="checkbox"/> OPEN HOLE																																																																																																																									
22-23	1 <input type="checkbox"/> STEEL																																																																																																																									
	2 <input type="checkbox"/> GALVANIZED																																																																																																																									
	3 <input type="checkbox"/> CONCRETE																																																																																																																									
	4 <input type="checkbox"/> OPEN HOLE																																																																																																																									
SHEET OF OPENING SLOT NO. 1	DIAMETER	INCHES	LENGTH	FEET																																																																																																																						
MATERIAL AND TYPE		DEPTH TO TOP OF SCREEN																																																																																																																								
		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 10%;">SCREEN</th> <th style="width: 40%;">DEPTH SET AT FEET</th> <th style="width: 50%;">MATERIAL AND TYPE</th> </tr> <tr> <td></td> <td>FROM TO</td> <td></td> </tr> <tr> <td></td> <td>10-15 16-17</td> <td></td> </tr> <tr> <td></td> <td>18-21 22-25</td> <td></td> </tr> <tr> <td></td> <td>26-29 30-33</td> <td></td> </tr> </table>	SCREEN	DEPTH SET AT FEET	MATERIAL AND TYPE		FROM TO			10-15 16-17			18-21 22-25			26-29 30-33		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 10%;">61</th> <th style="width: 40%;">PLUGGING & SEALING RECORD</th> </tr> <tr> <td></td> <td></td> </tr> </table>	61	PLUGGING & SEALING RECORD																																																																																																						
SCREEN	DEPTH SET AT FEET	MATERIAL AND TYPE																																																																																																																								
	FROM TO																																																																																																																									
	10-15 16-17																																																																																																																									
	18-21 22-25																																																																																																																									
	26-29 30-33																																																																																																																									
61	PLUGGING & SEALING RECORD																																																																																																																									

71	PUMPING TEST METHOD		PUMPING RATE		DURATION OF PUMPING	
	<input checked="" type="checkbox"/> PUMP <input type="checkbox"/> BAILER		10		15 MIN 15 MIN 15 MIN	
	STATIC LEVEL		WATER LEVELS DURING		1. PUMPING 2. RECOVERING	
	28 140 <small>IN 21 IN 34</small> <small>FEET FEET</small>		<small>10 MINUTES 30 MINUTES</small> 140.28 140.31 <small>FEET FEET</small>		<small>45 MINUTES 90 MINUTES</small> 140.34 140.37 <small>FEET FEET</small>	
IF FLOWING GIVE RATE		PUMP INTAKE SET AT		WATER AT END OF TEST		
<small>CPM</small> 140 <small>FEET</small>		Rods 140 <small>FEET</small>		1 <input type="checkbox"/> CLEAR 2 <input checked="" type="checkbox"/> CLOUDY <small>NO. NO.</small>		
RECOMMENDED PUMP TYPE		RECOMMENDED PUMP SETTING		RECOMMENDED PUMPING RATE		
<input type="checkbox"/> SHALLOW <input checked="" type="checkbox"/> DEEP		110		5 + <small>CPM CPM</small>		

FINAL STATUS OF WELL	1 <input type="checkbox"/> WATER SUPPLY	5 <input type="checkbox"/> ABANDONED, INSUFFICIENT SUPPLY
	2 <input type="checkbox"/> OBSERVATION WELL	6 <input type="checkbox"/> ABANDONED, POOR QUALITY
	3 <input type="checkbox"/> TEST HOLE	7 <input type="checkbox"/> UNFINISHED
	4 <input type="checkbox"/> RECHARGE WELL	
WATER USE	1 <input type="checkbox"/> DOMESTIC	5 <input type="checkbox"/> COMMERCIAL
	2 <input type="checkbox"/> STOCK	6 <input type="checkbox"/> MUNICIPAL
	3 <input type="checkbox"/> IRRIGATION	7 <input type="checkbox"/> PUBLIC SUPPLY
	4 <input type="checkbox"/> INDUSTRIAL	8 <input type="checkbox"/> COOLING OR AIR CONDITIONING
	<input type="checkbox"/> OTHER	9 <input type="checkbox"/> NOT USED
METHOD OF DRILLING	1 <input type="checkbox"/> CABLE TOOL	5 <input type="checkbox"/> BORING
	2 <input type="checkbox"/> ROTARY (CONVENTIONAL)	6 <input type="checkbox"/> DIAMOND
	3 <input type="checkbox"/> ROTARY (REVERSE)	7 <input type="checkbox"/> JETTING
	4 <input type="checkbox"/> ROTARY (AIR)	8 <input type="checkbox"/> DRIVING
	5 <input type="checkbox"/> AIR PERCUSSION	

CONTRACTOR	NAME OF WELL CONTRACTOR		LICENCE NUMBER
	Wm. Wright & Wall Builders Ltd		5507
	ADDRESS		
	204 167 2nd Avenue East		
	NAME OF DRILLER OR ROVER		LICENCE NUMBER
	Wm. Wright &		T-022
	SIGNATURE OF CONTRACTOR		SUBMISSION DATE
	Wm. Wright &		DAY _____ MO _____ YR _____

LOCATION OF WELL.

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE INDICATE NORTH BY ARROW

Con 16
Part 1 of Lot 27
Holland Sup
Grey County

OFFICE USE ONLY	DATE SOURCE	SR	CONFERENCE	SR	DATE RECEIVED	SR-50
			5507		NOV 22 1990	
	DATE OF INSPECTION		INSPECTOR			
	REASON: <i>Inaccessible Ramp Installed by Union & caught a fall rollers Had <i>SSA</i> <i>J. J. J.</i> <i>Spencer</i> </i>					
FORM NO. 0508 - 77 FORM						

FORM NO 0508 4-77 FORM 1

MINISTRY OF THE ENVIRONMENT COPY

**WELL INFORMATION REQUEST FORM
PROPOSED BUMSTEAD PIT
PART LOT 27 CONCESSION 7, TOWNSHIP OF CHATSWORTH**

STEP 1 – GENERAL INFORMATION

Name of Owner: STUART & SARON HYDE
Name of Occupant: "
Phone Number of Owner: 519-986-2046
Lot/Concession: CONC 7 PLOT 27 RP16R4356
Fire Number (if applicable): 495498 VETERANS RD S.

MAILING ADDRESS:

495498 VETERANS RD S
R. 2
HOLLAND CENTRE NORTH

PROPERTY ADDRESS:

CONC 7 PLOT 27 RP16R4356
PART 2
REG
~~RECEIVED~~

E-mail address: _____

STEP 2 – WELL CONSTRUCTION DETAILS

Please provide as much of the following information as possible regarding the well(s) on your property. If you have more than one well, please indicate information as pertains to each well:

Date Constructed: _____
Contractor: _____
Type of Well (please check): Drilled ☒ Dug ☐ *DRILLED WELL*
Original Well Depth: _____
Well Diameter: _____
Type of well/source of water (please check): Bedrock ☐ Overburden ☐
Name of past property owner(s): _____
Well usage: Domestic ☒ Irrigation ☐ Livestock ☐ Other: _____
MOE Well Number: _____

1. Have you ever had any water supply *quantity* or water *quality* issues in the past? If so please describe: (frequency, duration, appearance, odour, taste, etc.)

NO PROBLEM.

2. Do you have a copy of the well record provided by the drilling contractor: YES ☐ NO ☒
(if possible, please provide a copy of the well record)

3. Do you have a water treatment system? If so, please describe:

STEP 3 -

Please provide the name and signature of the person who completed this form below:

(Name - Please print)

(Signature)

--It will be assumed that a form not returned is an indication of not being interested--

PLEASE RETURN THE FORM TO GAMSBY AND MANNEROW IN THE ENCLOSED
SELF-ADDRESSED POSTAGE-PAID ENVELOPE, FAX TO 519-376-8977 OR VIA EMAIL
TO mnelson@gamsby.com

I DO NOT SUPPORT THIS APPLICATION

YOU NEED TO DO THIS JOB

I Am AGAINST THIS APPLICATION

Sharon Hyde

SHARON HYDE

I ALSO UNDERSTAND THIS WAS
DELIVERED BY THE BUMSTEADS
A NO NO.

**WELL INFORMATION REQUEST FORM
PROPOSED BUMSTEAD PIT
PART LOT 27 CONCESSION 7, TOWNSHIP OF CHATSWORTH**

STEP 1 – GENERAL INFORMATION

Name of Owner: Don & Doris Sowerby

Name of Occupant: Don & Doris Sowerby

Phone Number of Owner: 519-986-2558

Lot/Concession: CON. 6 PT LOT 27 RP 16R 4356

Fire Number (if applicable): 495492

MAILING ADDRESS:

495492 Veterans Rd South
Holland Centre, ON
N0H 1R0

PROPERTY ADDRESS:

495492 Veterans Rd South
Holland Centre, ON
N0H 1R0

E-mail address: dsowerby59@gmail.com

STEP 2 – WELL CONSTRUCTION DETAILS

Please provide as much of the following information as possible regarding the well(s) on your property. If you have more than one well, please indicate information as pertains to each well:

Date Constructed: June 26/2007

Contractor: Durham Well Drilling

Type of Well (please check): Drilled ☒ Dug ☐

Original Well Depth: _____

Well Diameter: 6"

Type of well/source of water (please check): Bedrock ☒ Overburden ☐

Name of past property owner(s): Newly Built Home

Well usage: Domestic ☒ Irrigation ☐ Livestock ☐ Other: _____

MOE Well Number: _____

1. Have you ever had any water supply *quantity* or water *quality* issues in the past? If so please describe: (frequency, duration, appearance, odour, taste, etc.)

None - water is perfect

2. Do you have a copy of the well record provided by the drilling contractor: YES ☒ NO ☐
(if possible, please provide a copy of the well record)

3. Do you have a water treatment system? If so, please describe:

No

STEP 3 –

Please provide the name and signature of the person who completed this form below:

Donnie Keith Sowerby

(Name – Please print)

Don Sowerby

(Signature)

--It will be assumed that a form not returned is an indication of not being interested--

PLEASE RETURN THE FORM TO GAMSBY AND MANNEROW IN THE ENCLOSED
SELF-ADDRESSED POSTAGE-PAID ENVELOPE, FAX TO 519-376-8977 OR VIA EMAIL
TO mnelson@gamsby.com



Ministry of
the Environment

Well Tag

A 057155

or below)

7048024

Well Record

Regulation 903 Ontario Water Resources Act

page ___ of ___

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 1/10th of a metre.**
- Please print clearly in blue or black ink only.

Well Owner's Information and Location of Well Information

First Name: [blank] Last Name: [blank] Mailing Address (Street Number/Name, RR, Lot, Concession): [blank]
County/District/Municipality: [blank] Township/City/Town/Village: [blank] Province: Ontario Postal Code: N0H-1R0 Telephone Number (include area code): [blank]

Address of Well Location (County/District/Municipality): [blank] Township: [blank] Lot: [blank] Concession: [blank]
RR#/Street Number/Name: [blank] City/Town/Village: [blank] Site/Compartment/Block/Tract etc: [blank]

GPS Reading: NAD 83 Zone 18 Easting 528598 Northing 4908719 Unit Make/Model: [blank] Mode of Operation: ☐ Undifferentiated ☒ Averaged ☐ Differentiated, specify [blank]

Log of Overburden and Bedrock Materials (see instructions)

General Colour	Most common material	Other Materials	General Description	Depth From	Metres To
		STONES		0	2.5
		Shale & sandstone		2	2.5
		bedrock		32	14.5

Hole Diameter		
Depth From	Metres To	Diameter Centimetres
0	2.5	11.5
2.5	2.5	11.5
2.5	14.5	11.5

Water Record		
Water found at	Kind of Water	
1.5 m	Fresh	Sulphur
Gas	Salty	Minerals
Other:		
1.5 m	Fresh	Sulphur
Gas	Salty	Minerals
Other:		
1.5 m	Fresh	Sulphur
Gas	Salty	Minerals
Other:		

After test of well yield, water was

Clear and sediment free

Other, specify: [blank]

Chlorinated ☒ Yes ☐ No

Construction Record					
Inside diam centimetres	Material	Wall thickness centimetres	Depth From	Metres To	
Casing					
	<input checked="" 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				
Screen					
Outside diam	<input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass	Slot No.			
	<input type="checkbox"/> Plastic <input type="checkbox"/> Concrete				
	<input type="checkbox"/> Galvanized				
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) 11.5	Static Level	9.5		10.0
Pumping rate (litres/min) 1.0	1	8.2	1	9.3
Duration of pumping 2 hrs 1 min	2	8.9	2	8.6
Final water level end of pumping 11.5 metres	3	9.6	3	7.9
Recommended pump type <input type="checkbox"/> Shallow <input checked="" type="checkbox"/> Deep	4	10.0	4	7.5
Recommended pump depth 12.5 metres	5		5	
Recommended pump rate 7.9 (litres/min)	10		10	
	15		15	
If flowing give rate (litres/min)	20		20	
	25		25	
If pumping discontinued, give reason,	30		30	
	40		40	
	50		50	
	60		60	

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)	
0	3.0	32mm Grout Slurry		
		1.50 m³ to 1.60 m³		

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 (water/foam)	<input type="checkbox"/> Auger	<input type="checkbox"/> Lifting	<input type="checkbox"/> Other

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

	centimetres	centimetres	From	To			min	metres	min	metres
Casing					Pump intake set at - (metres) <u>145</u> Pumping rate (litres/min) <u>750</u> Duration of pumping <u>2</u> hrs + <u>0</u> min Final water level end of pumping <u>96</u> metres Recommended pump type <input type="checkbox"/> Shallow <input checked="" type="checkbox"/> Deep Recommended pump depth <u>125</u> metres Recommended pump rate (litres/min) <u>750</u> If flowing give rate (litres/min) <u>750</u> If pumping discontinued, give reason.					
<input checked="" type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized					Static Level <u>95</u> 1 <u>82</u> 1 <u>93</u> 2 <u>89</u> 2 <u>86</u> 3 <u>96</u> 3 <u>79</u> 4 <u>100</u> 4 <u>73</u> 5 <u> </u> 5 <u> </u> 10 <u> </u> 10 <u> </u> 15 <u> </u> 15 <u> </u> 20 <u> </u> 20 <u> </u> 25 <u> </u> 25 <u> </u> 30 <u> </u> 30 <u> </u> 40 <u> </u> 40 <u> </u> 50 <u> </u> 50 <u> </u> 60 <u> </u> 60 <u> </u>					
Screen										
Outside diam <u> </u> <input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized					Slot No. <u> </u>					
No Casing or Screen										
<input checked="" type="checkbox"/> Open hole					<u>24</u> <u>145</u>					

Plugging and Sealing Record				<input type="checkbox"/> Annular space <input type="checkbox"/> Abandonment	
Depth set at - Metres		Material and type (bentonite slurry, neat cement slurry) etc.		Volume Placed (cubic metres)	
From	To				
<u>0</u>	<u>3.0</u>	<u>30% Bentonite Slurry</u>		<u>0.9</u>	
Method of Construction					
<input type="checkbox"/> Cable Tool		<input type="checkbox"/> Rotary (air)		<input type="checkbox"/> Diamond	
<input checked="" type="checkbox"/> Rotary (conventional)		<input type="checkbox"/> Air percussion		<input type="checkbox"/> Jetting	
<input type="checkbox"/> Rotary (reverse)		<input type="checkbox"/> Boring		<input type="checkbox"/> Driving	
Water Use					
<input checked="" type="checkbox"/> Domestic		<input type="checkbox"/> Industrial		<input type="checkbox"/> Public Supply	
<input type="checkbox"/> Stock		<input type="checkbox"/> Commercial		<input 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 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	
Well Contractor/Technician Information					
Name of Well Contractor			Well Contractor's Licence No.		
<u>Technical Investments Ltd</u>			<u>66038</u>		
Business Address (street name, number, city etc)					
<u>1000 1st Avenue, Vancouver</u>					
Name of Well Technician (last name, first name)			Well Technician's Licence No.		
<u>John Fournier</u>			<u>7-1922</u>		
Signature of Technician/Contractor			Date Submitted		
<u>[Signature]</u>			YYYY MM DD		

Location of Well			
In diagram below show distances of well from road, lot line, and building. Indicate north by arrow.			
Audit No. <u>Z 74721</u>		Date Well Completed	
		YYYY MM DD <u>2007 12 12</u>	
Was the well owner's information package delivered? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Date Delivered	
		YYYY MM DD	
Ministry Use Only			
Data Source		Contractor	
Date Received		Date of Inspection	
YYYY MM DD		YYYY MM DD	
Remarks		Well Record Number	



Ministry of
the Environment

Well Tag N
A 057155
A 057155

Well No. 7048024

Well Record

Regulation 903 Ontario Water Resources Act

page ___ of ___

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 1/10th of a metre.
- Please print clearly in blue or black ink only.

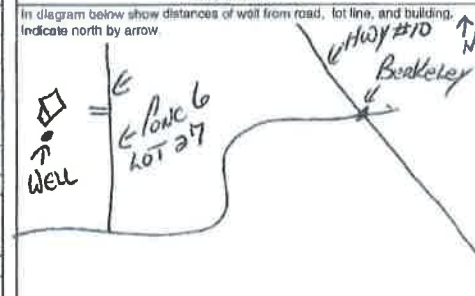
Ministry Use Only

Address of Well Location (County/District/Municipality) **CHATHAM** Township **HOLLAND** Lot **27** Concession **6**
RR#/Street Number/Name _____ City/Town/Village _____ Site/Compartment/Block/Tract etc. _____
GPS Reading NAD **83** Zone **17N** Easting **518598** Northing **4908749** Unit Make/Model **MAGELLAN** 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 From	Metres To
		STONES		0	2 FT.
		CLAY & STONES		2	22 FT.
		LIMESTONE	HARD	22	145 FT.

Hole Diameter Depth From To Metres Centimetres 0 20 FT 10 INCH 20 24 FT 9 INCH 24 145 FT 10 INCH	Construction Record Inside diam. Material Wall thickness Depth Metres centimetres centimetres From To Casing <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Fibreglass <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized 10 inch 1.88 0 24 FT Screen Outside diam. <input type="checkbox"/> Steel <input type="checkbox"/> Fibreglass Slot No. <input type="checkbox"/> Plastic <input type="checkbox"/> Concrete <input type="checkbox"/> Galvanized No Casing or Screen <input checked="" type="checkbox"/> Open hole 24 145 FT.	Test of Well Yield Pumping test method AIR-PUMP. Pump intake set at (metres) AIR 145' Pumping rate (litres/min) 78 gal Duration of pumping 2 hrs + 0 min Final water level end of pumping 100' metres Recommended pump type Shallow (2-100 ft) Recommended pump depth 125 FT Recommended pump rate 78 gal (litres/min) If flowing give rate (litres/min) If pumping discontinued, give reason
Water Record Water found at _____ Kind of Water <input checked="" 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 checked="" type="checkbox"/> Other, specify cloudy Chlorinated <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Test of Well Yield Draw Down Time Water Level Static Level min Metres min Metres 1 75 FT 2 82 3 89 4 96 5 100 FT 10 100 15 100 20 100 25 100 30 100 40 100 50 100 60 100	Test of Well Yield Recovery Time Water Level min Metres min Metres 1 93 2 86 3 79 4 75 FT 5 75 10 75 15 75 20 75 25 75 30 75 40 75 50 75 60 75

Plugging and Sealing Record Depth set off Metres From To 0 20 FT Material and type (bentonite slurry, neat cement slurry) etc. 30 gal GROUT Slurry 150 LBS 3/8 Hale Plug.	Location of Well In diagram below show distances of well from road, lot line, and building. Indicate north by arrow. 
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	Audit No. 2 74721 Date Well Completed 2007 06 19 Was the well owner's information package delivered? <input type="checkbox"/> Yes <input type="checkbox"/> No 2007 06 19
Water Use <input checked="" 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 <input type="checkbox"/> Irrigation <input type="checkbox"/> Municipal <input type="checkbox"/> Cooling & air conditioning	Ministry Use Only Data Source 6634 Date Received AUG 14 2007 Date of Inspection 2007 07 31 Remarks _____ Well Record Number _____
Final Status of Well <input checked="" 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 <input type="checkbox"/> Test Hole <input type="checkbox"/> Abandoned, poor quality <input type="checkbox"/> Replacement well	Well Contractor/Technician Information Name of Well Contractor Kaufman Investments Ltd. Well Contractor's Licence No. 6634 Business Address (street name, number, city etc.) RR#1, Chatham, Ontario Name of Well Technician (last name, first name) Kaufman, Paul Well Technician's Licence No. 7-1922 Signature of Technician/Contractor Paul Kaufman Date Submitted 2007 07 31

**WELL INFORMATION REQUEST FORM
PROPOSED BUMSTEAD PIT
PART LOT 27 CONCESSION 7, TOWNSHIP OF CHATSWORTH**

STEP 1 – GENERAL INFORMATION

Name of Owner: JEAN BUCHANAN
Name of Occupant: SAME
Phone Number of Owner: 519-986-2895
Lot/Concession: Pt. Lot 27 / 6
Fire Number (if applicable): 495+64

MAILING ADDRESS:

R.R. 2, HOLLAND CENTRE, ONT
N0H 1R0
VETERAN'S RD S

PROPERTY ADDRESS:

E-mail address: _____

STEP 2 – WELL CONSTRUCTION DETAILS

Please provide as much of the following information as possible regarding the well(s) on your property. If you have more than one well, please indicate information as pertains to each well:

Date Constructed: 1990
Contractor: STAN WAIGHT
Type of Well (please check): Drilled ☒ Dug ☐
Original Well Depth: ABOUT 150'
Well Diameter: "
Type of well/source of water (please check): Bedrock ☐ Overburden ☐
Name of past property owner(s): _____
Well usage: Domestic ☒ Irrigation ☐ Livestock ☐ Other: _____
MOE Well Number: _____

1. Have you ever had any water supply *quantity* or water *quality* issues in the past? If so please describe: (frequency, duration, appearance, odour, taste, etc.)

No

2. Do you have a copy of the well record provided by the drilling contractor: YES ☐ NO ☒
(if possible, please provide a copy of the well record)

3. Do you have a water treatment system? If so, please describe:

No

STEP 3 –

Please provide the name and signature of the person who completed this form below:

JEAN BUCHANAN
(Name – Please print)

Jean Buchanan
(Signature)

--It will be assumed that a form not returned is an indication of not being interested--

PLEASE RETURN THE FORM TO GAMSBY AND MANNEROW IN THE ENCLOSED
SELF-ADDRESSED POSTAGE-PAID ENVELOPE, FAX TO 519-376-8977 OR VIA EMAIL
TO mnelson@gamsby.com

Ministry
of the
Environment

The Ontario Water Resources Act

WATER WELL RECORD

2511117

25008 CON

DE

1. PRINT ONLY IN SPACES PROVIDED
2. CHECK ☒ CORRECT BOX WHERE APPLICABLE

COUNTY OR DISTRICT <i>Shen</i>	TOWNSHIP BORDOUGH CITY TOWN VILLAGE <i>Holland Twp</i>	CON. BLK. TRACT SURVEY ETC <i>CON VI Part of</i>	27
OWNER (TOWN OR FIRST) <i>[Redacted]</i>	ADDRESS <i>Holland Twp</i>	DATE COMPLETED <i>20</i>	MO <i>09</i> YR <i>14</i>

17 518652 4909571 1325

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

[illegible]

41 WATER RECORD	
WATER FOUND AT - FEET	KIND OF WATER
80-28	1 <input checked="" type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR
155	2 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL
15-18	1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR
	2 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL
50-53	1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR
	2 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL
25-28	1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR
	2 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL
10-13	1 <input type="checkbox"/> FRESH 3 <input type="checkbox"/> SULPHUR
	2 <input type="checkbox"/> SALTY 4 <input type="checkbox"/> MINERAL

CASING & OPEN HOLE RECORD				
HOLE DIA. INCHES	MATERIAL	WELL IN CASING INCHES	DEPTH - FEET	
			FROM	TO
5 7/8	<input checked="" type="checkbox"/> STEEL <input type="checkbox"/> GALVANIZED <input type="checkbox"/> CONCRETE <input checked="" type="checkbox"/> OPEN HOLE	188	0	34
10 1/8	<input type="checkbox"/> STEEL <input type="checkbox"/> GALVANIZED <input type="checkbox"/> CONCRETE <input type="checkbox"/> OPEN HOLE		34	155
16 1/8	<input type="checkbox"/> STEEL <input type="checkbox"/> GALVANIZED <input type="checkbox"/> CONCRETE <input type="checkbox"/> OPEN HOLE			

SCREEN	DATE - V. OF OPENING (LIST NO.)	DATE	DIAMETER	LENGTH	SS #
				INCHES	FEET
	MATERIAL AND TYPE		DEPTH TO TOP OF SCREEN		SS #

61		PLUGGING & SEALING RECORD	
DEPTH SET AT		MATERIAL AND TYPE	CEMENT GROUT LEAD PACKER, ETC.
FROM	TO		
10-11	18-17		
18-11	28-25		
28-28	30-33		

71	PUMPING TEST METHOD		10	PUMPING RATE		10-14	DURATION OF PUMPING	
	444 PUMP	2 <input type="checkbox"/> BAILER		10	10	10-14	2	10-14
STATIC LEVEL		WATER LEVEL END OF PUMPING	15	WATER LEVELS DURING		1 <input type="checkbox"/> PUMPING 2 <input checked="" type="checkbox"/> RECOVERY		
36	155		15 MINUTES	30 MINUTES	45 MINUTES	1 <input checked="" type="checkbox"/> 10-14	2	10-14
36	155		15 FEET	36	36	15 FEET	15 FEET	15 FEET
IF FLOWING GIVE RATE		15-21	PUMP INFUSE SET AT		WATER 15 END OF TEST			
			15		1 <input type="checkbox"/> CLEAR 2 <input checked="" type="checkbox"/> CLOUDY			
RECOMMENDED PUMP TYPE		RECOMMENDED PUMP SETTING	15-25	RECOMMENDED PUMPING RATE		15-25		
<input type="checkbox"/> SHALLOW <input checked="" type="checkbox"/> DEEP		125 FEET	125 FEET		5 +			

FINAL STATUS OF WELL	<input checked="" type="checkbox"/> 1 WATER SUPPLY <input type="checkbox"/> 2 OBSERVATION WELL <input type="checkbox"/> 3 TEST HOLE <input type="checkbox"/> 4 RECHARGE WELL	<input type="checkbox"/> 5 ABANDONED INSUFFICIENT SUPPLY <input type="checkbox"/> 6 ABANDONED POOR QUALITY <input type="checkbox"/> 7 UNFINISHED
	<input checked="" type="checkbox"/> 1 DOMESTIC <input type="checkbox"/> 2 STOCK <input type="checkbox"/> 3 IRRIGATION <input type="checkbox"/> 4 INDUSTRIAL <input type="checkbox"/> 5 OTHER	<input type="checkbox"/> 6 COMMERCIAL <input type="checkbox"/> 7 MUNICIPAL <input type="checkbox"/> 8 PUBLIC SUPPLY <input type="checkbox"/> 9 COOLING OR AIR CONDITIONING <input type="checkbox"/> 10 NOT USED
WATER USE		
METHOD OF DRILLING	<input type="checkbox"/> 1 CABLE TOOL <input type="checkbox"/> 2 ROTARY (CONVENTIONAL) <input type="checkbox"/> 3 ROTARY (REVERSE) <input type="checkbox"/> 4 ROTARY (AIR) <input checked="" type="checkbox"/> 5 AIR PERCUSSION	<input type="checkbox"/> 6 BORING <input type="checkbox"/> 7 DIAMOND <input type="checkbox"/> 8 JETTING <input type="checkbox"/> 9 DRIVING

LOCATION OF WELL

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND
LOT LINE INDICATE NORTH BY ARROW

*Section 27
T27S R27E
Holland Township
Cheyenne County*

(X) ↑

CONTRACTOR	NAME OF WELL CONTRACTOR	LICENSE NUMBER
	<i>Wm Wight Well Drillers Ltd</i>	<i>5507</i>
	ADDRESS	
	<i>244 167 Uppermost Crst</i>	
	NAME OF DRILLER OR BOPER	LICENSE NUMBER
	<i>Wm Wight</i>	
	SIGNATURE OF CONTRACTOR	SUBMISSION DATE
	<i>Wm Wight</i>	DAY _____ MO _____ YR _____

OFFICE USE ONLY	DATE SOWDER	BY COMPTON	DATE RECEIVED JAN 10 1991
	5507		
	DATE OF INSPECTION	INSPECTOR	
	1. Submersible Pump Installed in 2. 1/2" x 1/2" x 1/2" Drill Hole 3. 1/2" x 1/2" x 1/2"		

MINISTRY OF THE ENVIRONMENT COPY

FORM NO 0508-4-77 FORM

March 19, 2014
Mr. Matthew Nelson,
Gamsby and Mannerow



Re: Proposed Bumstead Pit
Part of Lot 27 Concession 7
Township of Chatsworth
File: 210099

Dear Mr. Nelson,

I received your request dated March 14, 2014 asking for assistance with mapping the locations of private water supply wells in the area surrounding the proposed pit.

My reply is to simply state that to the best of my knowledge, the drilled well next to the house is healthy and has never had water supply quantity or quality issues. When I purchased the property, my lawyer received three Bacteriological Analyses of Drinking Water from our drilled well, dated July 26/13, October 23/13 and November 7/13, and all three tests confirmed that there was no significant evidence of bacterial contamination. The well has only been used for domestic purposes and has a very adequate flow rate.

We have a dug well on the property and the previous owner said "The dug well was in the first field, you will find a cement frame by the fence between the first two fields (to the south). It is in amongst the saplings. The well has not been used for 50 years." I believe it is within 500m of the proposed pit.

In addition, I would like to add that Walker Lake, a 23 acre shallow lake which is approximately 680m from the edge of the proposed pit, has had consistent water levels that have not fallen below one foot in any given year. This information was provided by the previous owner who has 70 years of family history on the lake. It is a healthy habitat for both midland painted turtles and snapping turtles and the lake is their over-wintering area. The previous owner would count between 10 to 12 turtles on any given paddle around the lake. In addition, the house on east side of the lake draws its water directly from Walker Lake.

Please note that my not completing the detailed survey *does not in any way indicate a disinterest on my part* as stated in your letter. Quite the opposite in fact.

Sincerely,

Doug Crocker, Owner
495546 Veterans Road South
RR 2, Holland Centre, ON
N0H 1R0

cc Jason McLay (MNR)
cc County of Grey
cc Township of Chatsworth
cc Ministry of the Environment

The Ontario Water Resources Act WATER WELL RECORD

1. PRINT ONLY IN SPACES PROVIDED

2. CHECK ☒ CORRECT BOX WHERE APPLICABLE

11 2510723

MUNICIPALITY

25008

COM

1990

COUNTY OR DISTRICT

TOWNSHIP, ROTHURST CITY, TOWN, VILLAGE

CONTRACTOR'S SURVEY ETC.

LOT

11

Holland

Con 6

26

12

560000 Square Picking

DATE COMPLETED

40 11

13

10268

1828

DAY 3

MO 7

YE 90

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH FEET	
				FROM	TO
Brown	gravel	clay		0	22
Gray	clay	gravel		22	31
Brown	gravel			31	36
Brown	Sand		(Water)	36	68
Brown	clay			68	73
	gravel			73	75
White	Limestone			75	109
Brown	Limestone		Hard	109	116

31

32

41 WATER RECORD

WATER FOUND AT FEET	KIND OF WATER
80	1 <input checked="" type="checkbox"/> FRESH 2 <input checked="" type="checkbox"/> SULPHUR 3 <input checked="" type="checkbox"/> MINERALS 4 <input checked="" type="checkbox"/> SALT 5 <input checked="" type="checkbox"/> GAS
112	1 <input checked="" type="checkbox"/> FRESH 2 <input checked="" type="checkbox"/> SULPHUR 3 <input checked="" type="checkbox"/> MINERALS 4 <input checked="" type="checkbox"/> SALT 5 <input checked="" type="checkbox"/> GAS
20-22	1 <input type="checkbox"/> FRESH 2 <input type="checkbox"/> SULPHUR 3 <input type="checkbox"/> MINERALS 4 <input type="checkbox"/> SALT 5 <input type="checkbox"/> GAS
23-25	1 <input type="checkbox"/> FRESH 2 <input type="checkbox"/> SULPHUR 3 <input type="checkbox"/> MINERALS 4 <input type="checkbox"/> SALT 5 <input type="checkbox"/> GAS
26-28	1 <input type="checkbox"/> FRESH 2 <input type="checkbox"/> SULPHUR 3 <input type="checkbox"/> MINERALS 4 <input type="checkbox"/> SALT 5 <input type="checkbox"/> GAS
29-31	1 <input type="checkbox"/> FRESH 2 <input type="checkbox"/> SULPHUR 3 <input type="checkbox"/> MINERALS 4 <input type="checkbox"/> SALT 5 <input type="checkbox"/> GAS

51 CASING & OPEN HOLE RECORD

INSIDE DIAM. (INCHES)	MATERIAL	WELL DEPTH (FEET)	DEPTH (FEET)
6	1 <input checked="" type="checkbox"/> STEEL 2 <input checked="" type="checkbox"/> GALVANIZED 3 <input checked="" type="checkbox"/> CONCRETE 4 <input checked="" type="checkbox"/> OPEN HOLE 5 <input checked="" type="checkbox"/> PLASTIC	188	79
6	1 <input checked="" type="checkbox"/> STEEL 2 <input checked="" type="checkbox"/> GALVANIZED 3 <input checked="" type="checkbox"/> CONCRETE 4 <input checked="" type="checkbox"/> OPEN HOLE 5 <input checked="" type="checkbox"/> PLASTIC	79	116

61 PLUGGING & SEALING RECORD

DEPTH SET AT FEET	MATERIAL AND TYPE	CEMENT GROUP
0	15	Benseal
10-12		
13-15		
16-18		
19-21		
22-24		
25-27		
28-30		

71 PUMPING TEST

PUMPING TEST METHOD ☒ P.A.T.R. BAILER

PUMPING RATE 6-7 GPM

WATER LEVELS DURING PUMPING

TIME	WATER LEVEL (FEET)
15 MINUTES	57
30 MINUTES	55.36
45 MINUTES	55.36
60 MINUTES	55.36
75 MINUTES	55.36
90 MINUTES	55.36
105 MINUTES	55.36
120 MINUTES	55.36
135 MINUTES	55.36
150 MINUTES	55.36
165 MINUTES	55.36
180 MINUTES	55.36
195 MINUTES	55.36
210 MINUTES	55.36
225 MINUTES	55.36
240 MINUTES	55.36
255 MINUTES	55.36
270 MINUTES	55.36
285 MINUTES	55.36
300 MINUTES	55.36

RECOMMENDED PUMP TYPE ☒ SHALLOW ☒ DEEP

RECOMMENDED PUMP SETTING 100 FEET

RECOMMENDED PUMP RATE 6 GPM

LOCATION OF WELL

IN DIAGRAM BELOW SHOW DISTANCES OF WELL FROM ROAD AND LOT LINE. INDICATE NORTH BY ARROW.

Holland

Con 7

Con 6

Lot 26

75781

FINAL STATUS OF WELL

1 ☒ WATER SUPPLY 2 ☒ OBSERVATION WELL 3 ☒ TEST HOLE 4 ☒ RECHARGE WELL 5 ☒ DEWATERING

WATER USE

1 ☒ DOMESTIC 2 ☒ STOCK 3 ☒ IRRIGATION 4 ☒ INDUSTRIAL 5 ☒ OTHER

METHOD OF CONSTRUCTION

1 ☒ CABLE TOOL 2 ☒ ROTARY (CONVENTIONAL) 3 ☒ ROTARY (REVERSE) 4 ☒ ROTARY (AIR) 5 ☒ AIR PERCUSSION

6 ☐ BORING 7 ☐ DIAMOND 8 ☐ JETTING 9 ☐ DRIVING 10 ☐ DIGGING 11 ☐ OTHER

CONTRACTOR

NAME OF WELL CONTRACTOR Highland Water Wells

WELL CONTRACTOR'S LICENCE NUMBER 2576

NAME OF WELL TECHNICIAN Box 141 Durham

WELL TECHNICIAN'S LICENCE NUMBER 70113

SIGNATURE OF TECHNICIAN/CONTRACTOR E. Wilson

SUBMISSION DATE DAY 4 MO 7 YE 90

OFFICE USE ONLY

DATE RECEIVED 2576 JUL 10 1990

DATE OF INSPECTION

REMARKS

INSPECTOR

**WELL INFORMATION REQUEST FORM
PROPOSED BUMSTEAD PIT
PART LOT 27 CONCESSION 7, TOWNSHIP OF CHATSWORTH**

STEP 1 – GENERAL INFORMATION

Name of Owner: ANDREW & PATRICIA CAINE
Name of Occupant: Same ↑
Phone Number of Owner: 519 986 4743
Lot/Concession: _____
Fire Number (if applicable): 583697

MAILING ADDRESS:

583697 Sd Rd 60
RR#2
HOLLAND CENTRE ON NOH1RO

PROPERTY ADDRESS:

← Same

E-mail address: andrew@mcconn water systems.ca

STEP 2 – WELL CONSTRUCTION DETAILS

Please provide as much of the following information as possible regarding the well(s) on your property. If you have more than one well, please indicate information as pertains to each well:

Date Constructed: _____
Contractor: _____
Type of Well (please check): Drilled ☒ Dug ☐
Original Well Depth: _____
Well Diameter: 5"
Type of well/source of water (please check): Bedrock ☐ Overburden ☐
Name of past property owner(s): _____
Well usage: Domestic ☒ Irrigation ☐ Livestock ☐ Other: _____
MOE Well Number: _____

1. Have you ever had any water supply *quantity* or water *quality* issues in the past? If so please describe: (frequency, duration, appearance, odour, taste, etc.)

NO

2. Do you have a copy of the well record provided by the drilling contractor: YES ☐ NO ☒
(if possible, please provide a copy of the well record)

3. Do you have a water treatment system? If so, please describe:

WATER SOFTENER

STEP 3 –

Please provide the name and signature of the person who completed this form below:

PATRICIA CAINE
(Name – Please print)


(Signature)

--It will be assumed that a form not returned is an indication of not being interested--

PLEASE RETURN THE FORM TO GAMSBY AND MANNEROW IN THE ENCLOSED
SELF-ADDRESSED POSTAGE-PAID ENVELOPE, FAX TO 519-376-8977 OR VIA EMAIL
TO mnelson@gamsby.com

**WELL INFORMATION REQUEST FORM
PROPOSED BUMSTEAD PIT
PART LOT 27 CONCESSION 7, TOWNSHIP OF CHATSWORTH**

STEP 1 – GENERAL INFORMATION

Name of Owner: PATTI BUCHANAN
Name of Occupant: NON RESIDENT
Phone Number of Owner: _____
Lot/Concession: _____
Fire Number (if applicable): _____

MAILING ADDRESS:

PROPERTY ADDRESS:

E-mail address: _____

STEP 2 – WELL CONSTRUCTION DETAILS

Please provide as much of the following information as possible regarding the well(s) on your property. If you have more than one well, please indicate information as pertains to each well:

Date Constructed: There is no well on the property.
Contractor: _____
Type of Well (please check): Drilled ☐ Dug ☐
Original Well Depth: _____
Well Diameter: _____
Type of well/source of water (please check): Bedrock ☐ Overburden ☐
Name of past property owner(s): _____
Well usage: Domestic ☐ Irrigation ☐ Livestock ☐ Other: _____
MOE Well Number: _____

1. Have you ever had any water supply *quantity* or water *quality* issues in the past? If so please describe: (frequency, duration, appearance, odour, taste, etc.)

2. Do you have a copy of the well record provided by the drilling contractor: YES ☐ NO ☐
(if possible, please provide a copy of the well record)

3. Do you have a water treatment system? If so, please describe:

STEP 3 –

Please provide the name and signature of the person who completed this form below:

JEAN BUCHANAN
(Name – Please print)


(Signature)

--It will be assumed that a form not returned is an indication of not being interested--

PLEASE RETURN THE FORM TO GAMSBY AND MANNEROW IN THE ENCLOSED
SELF-ADDRESSED POSTAGE-PAID ENVELOPE, FAX TO 519-376-8977 OR VIA EMAIL
TO mnelson@gamsby.com

**WELL INFORMATION REQUEST FORM
PROPOSED BUMSTEAD PIT
PART LOT 27 CONCESSION 7, TOWNSHIP OF CHATSWORTH**

STEP 1 – GENERAL INFORMATION

Name of Owner: JULIA ROBINSON
Name of Occupant: NEW RESIDENT
Phone Number of Owner: _____
Lot/Concession: _____
Fire Number (if applicable): _____

MAILING ADDRESS:

PROPERTY ADDRESS:

E-mail address: _____

STEP 2 – WELL CONSTRUCTION DETAILS

Please provide as much of the following information as possible regarding the well(s) on your property. If you have more than one well, please indicate information as pertains to each well:

Date Constructed: There is no well on property
Contractor: _____
Type of Well (please check): Drilled ☐ Dug ☐
Original Well Depth: _____
Well Diameter: _____
Type of well/source of water (please check): Bedrock ☐ Overburden ☐
Name of past property owner(s): _____
Well usage: Domestic ☐ Irrigation ☐ Livestock ☐ Other: _____
MOE Well Number: _____

1. Have you ever had any water supply *quantity* or water *quality* issues in the past? If so please describe: (frequency, duration, appearance, odour, taste, etc.)


2. Do you have a copy of the well record provided by the drilling contractor: YES ☐ NO ☐
(if possible, please provide a copy of the well record)

3. Do you have a water treatment system? If so, please describe:

STEP 3 –

Please provide the name and signature of the person who completed this form below:

JEAN BUCHANAN
(Name – Please print)


(Signature)

--It will be assumed that a form not returned is an indication of not being interested--

PLEASE RETURN THE FORM TO GAMSBY AND MANNEROW IN THE ENCLOSED
SELF-ADDRESSED POSTAGE-PAID ENVELOPE, FAX TO 519-376-8977 OR VIA EMAIL
TO mnelson@gamsby.com