Prepared By:

Maximum Predicted Water Table And Hydrogeological Assessment Report
Proposed Class "A" Pit Above Water
Watson Pit

311804 Highway 6, Mt. Forest
Municipality of West Grey
Teeswater Concrete Ltd.

GMBP File: 218045-1

November 2023

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311804 HIGHWAY 6, MT. FOREST

MAXIMUM PREDICTED WATER TABLE AND HYDROGEOLOGICAL ASSESSMENT REPORT

PROPOSED CLASS 'A' PIT ABOVE WATER

NOVEMBER 2023

GMBP FILE: 218045-1

1. INTRODUCTION

GM BluePlan Engineering Limited (GMBP) was retained by Teeswater Concrete Ltd. to conduct a Maximum Predicted Water Table and Hydrogeological Assessment Report to support the application for a proposed Class "A" Pit above water. The proposed aggregate pit is situated on the west side of Highway 6 and south of Grey Road 9, approximately 6.5 km northwest of the Town of Mt. Forest. The property is located on Lot 19 and 20, Concession 1W of Owen Sound Road, and on the eastern portion of Lot 46, Concession 2W of Owen Sound Road in the former Township of Normanby, Municipality of West Grey. The civic address of the subject property is 311804 Highway 6, Mt. Forest. The location of the Site is shown on Figure 1.

This Hydrogeological Study is being prepared to characterize the geology, the potential groundwater occurrence, and the elevation of the water table within the proposed extraction area in order to support development and licensing under the Aggregate Resources Act (ARA). Additionally, this Study investigates the potential adverse impacts that the proposed pit may have on the local groundwater and surface water resources in the area. It is our understanding that the proposed pit operations will be conducted to a maximum depth of 1.5 metres above the "high" groundwater table elevation.

The subject property encompasses approximately 133.3 ha (329.4 acres) and is used primarily for agricultural purposes. Two residential dwellings are situated on the southeastern portion and eastern portions of the property, respectively. Additionally, a number of auxiliary agricultural buildings are also present along the eastern property boundary, adjacent to the western side of the Highway 6 Right-Of-Way (ROW). All of these structures, with the exception of the residential building in the southeastern portion of the property, are proposed to be removed prior to aggregate extraction operations on the Site.

The western portion of the property (i.e. the eastern portion of Lot 46, Concession 2W of Owen Sound Road) is currently licenced under ALPS 5110 as a Class "A" licenced aggregate pit. It is noted that this existing pit licence was issued in February 2014, but had not undergone any aggregate extraction operations between 2014 and 2023. Teeswater Concrete Ltd. commenced aggregate extraction in this licenced area in summer of 2023.

The majority of the property currently consists of agricultural fields consisting of crops and a naturalized treed and vegetated areas to the south in the vicinity of, and associated with, the Letterbreen Bog. Two small depressions are present adjacent to the eastern property boundary and the Highway 6 ROW. These depressions were observed to have a small amount of water in them during periods of high groundwater elevation (i.e. spring freshet) but are observed to be generally dry during periods of the year with low water table elevations (i.e. summer and fall). The water levels in these locations are considered to be generally consistent with fluctuating groundwater table elevations.

The ground surface across the Site is generally hummocky with low, rolling hills. The elevation moderately declines in the southern portion of the property toward the Letterbreen Bog and to the east toward the Highway 6 ROW.

A gravel access roadway currently extends from Highway 6 in the southeastern portion of the property to the existing licenced gravel pit area on the western portion of the Site.

The Site boundaries and features are shown on Figure 2.

2. METHODOLOGY

2.1 Background Data Collection/Review

Available information from the following sources was reviewed to support the site-specific information gathered from field investigations to prepare the hydrogeological assessment:

- Ministry of the Environment Conservation and Parks (MECP) well records,
- MECP publications, geologic publications,
- Review of the Grey and Bruce Counties Groundwater Study (Waterloo Hydrogeologic, July 2003), and pertinent maps
- Review of the Municipal Water Supply Wellhead Protection Areas (WHPAs) established through the Grey and Bruce Counties Groundwater Study, completed in July 2003 and prepared by Waterloo Hydrogeologic Inc.

2.2 Field Investigations

2.2.1 Monitoring Well Installations and Water Level Monitoring

In order to provide more certainty regarding the on-site groundwater elevations and flow direction, monitoring wells were installed in six (6) locations, with four (4) of the locations consisting of a shallow and deep well. These wells were installed between March 9 to 10, and March 21, 2023 by London Soil Test Limited (LST) with a track-mounted drill under the direction of GMBP, to depths of between 7.4 and 18.8 mbgs. Borehole logs are provided in Appendix B.

These monitoring wells have been used to measure the groundwater elevations and determine the seasonal “high” water levels across with the property. The water levels at each of the monitoring locations were measured by GMBP personnel during a total of three (3) site visits between March and October 2023.

During the site visits, a review of the site conditions, including the surface topography, natural features, surface water features, and the characteristics of the neighboring properties (i.e. surrounding land use) were noted. In addition, the potential for the presence of springs or groundwater seeps was investigated.

On April 25, 2023, the monitoring well elevations and topographical elevations across the Site were surveyed by GMBP using a Trimble GPS and drone survey, respectively, in order to provide elevation and spatial data.

3. REVIEW OF BACKGROUND INFORMATION

3.1 Physiography and Geology

Based on our review, the site is located within the physiographic region of the Horseshoe Moraines. In general, the Horseshoe Moraines are characterized by drumlinized till plains, kame moraines, and outwash deposits (Chapman and Putnam, 1984).

The soils on the subject site are identified as well sorted gravelly outwash of the Burford series (Soil Survey Report No. 17). The physiographic mapping (Map 2225) indicates that the subject property is located in an area of kame moraines in the western, northern, and central portions of the Site, with the eastern and southernmost portions of the Site consisting of glacial outwash deposits. This is consistent with the Ontario Geological Survey's Surficial Geology of Southern Ontario dataset, which identifies the majority of the property as glaciofluvial ice-contact deposits and the southern and eastern portions of the property as glaciofluvial outwash deposits.

The bedrock underlying the Site is reported to consist of dolostone of the Salina formation. Based on the mapping provided by the Grey and Bruce Groundwater Study and an analysis of MECP registered water well logs in the area, the depth to bedrock in the vicinity of the subject property is reported to be greater than 71 meters below ground surface (mbgs) (i.e. 236 feet bgs).

As discussed, the ground surface across the Site is generally hummocky with low, rolling hills. The elevation moderately declines in the southern portion of the property, south of the access roadway, toward the Letterbreen Bog and to the east toward the Highway 6 ROW.

3.2 Conservation Authority and Screening Areas

The site is situated within the boundary of the Saugeen Valley Conservation Authority (SVCA). From a review of the site with respect to regulated areas, the following is noted:

- An approximate 30 metre buffer associated with the wetland boundary of the Letterbreen Bog on the property is considered to be a screening area under Ontario Regulation 169/06.

The SVCA mapping is presented in Appendix "D".

Additionally, the Grey County Official Plan (GCOP) identifies a slightly smaller area than the noted SVCA screening area as *Hazard Lands*, as per Schedule "A" of the official plan, and are subject to the associated developmental restrictions. It is noted that this designation identifies lands that *"can be impacted by flooding, erosion, and/or dynamic beach hazards or have poor drainage, or any other physical condition that is severe enough to pose a risk for the occupant, property damage, or social disruption if developed."*

It is of particular note that the seasonal depressions on the eastern property boundary that are subject to seasonal ponding are not identified in either the GCOP or by the Conservation Authority.

The Grey County Official Plan mapping is presented in Appendix "E".

3.3 Hydrogeology

The Grey and Bruce Counties Groundwater Study (Waterloo Hydrogeologic, 2003), existing water well logs, and observations during on-site drilling provide an overview of the regional setting and more general information about the site and the surrounding area. The pertinent findings are summarized as follows:

- The depth to bedrock in the area is estimated to be greater than 40 metres, with a few bedrock wells to the north of the Site where bedrock was encountered at depths of between 44 and 49 metres;
- The onsite well located in the southeastern portion of the Site was reported to have overburden greater than 72 metres in thickness;
- The water table elevation in the shallow overburden has been measured to be between approximately 395.0m in the southern portion of the property adjacent to the Letterbreen Bog and descending in a generally northward direction to an elevation of approximately 389.0m in the northern portion of the Site based on March 22, 2023 measurements, which are considered to be representative of the annual "high" groundwater table elevation;
- The shallow soils (i.e. upper 4 to 5 metres) were observed to consist of primarily sand and gravel with varying cobble and boulder content across the majority of the Site. This is with the exception of the southeastern and southern portions of the property. The shallow overburden in this location was observed to generally consist of interbedded layers of silt & sand and sand & gravel. Across the Site, soils below approximately 5 mbgs generally consist of increased interbeds of generally silt and fine sand and sand and gravel of varying thicknesses.
- A hard, silt till layer was encountered in MW-1 and 2 at depths of approximately 15m and 5.2m, respectively. This till was not encountered in any of the other boreholes advanced for the installation of the monitoring well network.
- The seasonal ponding areas in the central portion of the Site are inferred to be associated with the shallow water table elevation due to the presence of coarse textured soils across the Site and the absence of a surface water inlet or outlet from these areas.

It is noted that a report was prepared by GMBP for Teeswater Concrete Ltd. titled, *"Scoped Aggregate Resource Assessment, Watson Pit",* dated February 17, 2023, which provides more details on the nature and occurrence of the overburden materials across the Site.

To confirm the site-specific geology, a review of the Ministry of the Environment (MECP) well records for the site and surrounding area was conducted. MECP records were utilized from the MECPs online database (last updated October 18, 2021). A copy of the pertinent MECP well records is enclosed in Appendix A and a summary of the results of the well search within a 500 m radius of the subject site is provided in Table 1.

Eleven (11) well records were found within the 500 m well search radius, including the onsite well on the southeastern portion of the property. Each well location correlates with known residential/agricultural or commercial properties in the vicinity of the Site.

Shallow groundwater flow is generally expected to mimic topography and usually flows towards surface water features. However, based on measured shallow groundwater table elevations across the Site, it is inferred that the local groundwater on the Site descends and flows in a northerly direction, away from the southern Letterbreen Bog.

From field observations and groundwater elevation data collected, the occurrence of surface water on the Site (i.e. in the Letterbreen Bog and the eastern seasonal ponding areas) is expected to be approximately consistent with the occurrence of the groundwater elevation. As noted, the highest measured elevation of the groundwater across the proposed extraction area of the Site is inferred to be between 395m in the southern portion of the Site and 389m in the northern portion of the property, based on the March 22, 2023 measurements. This is presented in Figure 3 and the associated cross-sections are presented in Figures 4A and 4B.

The more regional, or bedrock flow patterns are expected to be in a northwesterly direction, towards Lake Huron, which is consistent with the trend of the overall catchment area.

4. FIELD INVESTIGATIONS

4.1 Monitoring Well Installations

As discussed, between March 8 and 21, a series of ten (10) monitoring wells (MW-1S/D, MW-2, MW-3, MW-4S/D, MW-5S/D, and MW-6S/D) were installed across the subject property. Borehole logs, including monitoring well installation details, are provided in Appendix B.

The water levels at each of the monitoring locations were measured by GMBP personnel during a total of three site visits between March 2023 and October 2023. A summary of the water level elevations measured to date is provided in Table 2.

Based on the water level elevations measured, the localized groundwater flow direction across the site is observed to be in a northerly direction, away from the Letterbreen Bog. This is expected to be influenced by the coarse-textured nature of the overburden soils onsite.

5. ESTIMATED WATER TABLE ELEVATION

Based on the geologic mapping, MECP well records, and Grey and Bruce Counties Groundwater Study, the high water table elevation in the area is generally estimated to be in the range of 395 to 389m, which corresponds to a water table between approximately 1.4 and 13.8 metres below the ground surface. This is generally consistent with the site topography (i.e. elevated western and central areas), water level elevations measured from the monitoring wells and surface water elevations measured on the Site.

Based on the water level elevations measured, the localized major groundwater flow direction across the Site is expected to be to the north, influenced by the Beatty Saugeen River, which is situated approximately 2.0 kilometres north of the subject property at its closest point and flows in a northwesterly direction.

Based on the groundwater conditions, timing of the freshet, and precipitation events, the water level measurements collected, the “high” groundwater table elevations are expected to be consistent with the water levels measured on March 22, 2023 It is noted that these measurements were made following a period of significant snow melt and precipitation.

It is recommended that the monitoring wells continue to be monitoring during the pit application process in order to ensure the collection of data that is reflective of the “high” water table elevation.

As discussed, in the portion of the site where extraction is proposed, the high water table is considered to decline from approximately 395.0m in the southern portion of the property adjacent to the Letterbreen Bog and descending in a generally northward direction to an elevation of approximately 389.0m in the northern portion of the Site, as shown in Figure 3. Therefore, in order to maintain the 1.5 m separation from the high water table, based on the proposed limits of onsite extraction, the maximum depth of the pit would be approximately 396.5m the southern portion of the area of extraction and sloping downward to approximately 390.5 masl in the northern-most portion of the proposed extraction area. The expected "high" water table and corresponding proposed maximum pit depths are shown on the Figures 4A and 4B.

6. IMPACT ASSESSMENT

6.1 Impacts to Local Groundwater and Groundwater Resources

With respect to impacts to groundwater resources from development activities, these can often be separated into: 1) quality, or 2) quantity.

With respect to quality, potential changes to groundwater are not typically caused by excavation works in overburden above the water table.

The moving and stockpiling of native/existing soils may cause disruption at surface, but does not typically lead to the release of compounds to the subsurface. With respect to the on-site equipment, a potential for environmental impact may be associated with petroleum hydrocarbons (fuel) used in on-site equipment. Standard best management practices and standards under the Aggregate Resources Act require the implementation of a spill prevention and contingencies measures plan, mitigating this risk.

With respect to quantity, the proposed bottom contours of the aggregate pit have been selected to prevent alteration to the groundwater flow regime. As discussed, the proposed bottom contours are a minimum of 1.5 metres above the estimated "high" water table elevation. Therefore, pit operations will not include dewatering or groundwater diversion. Thus, no impacts to groundwater are anticipated by mining aggregate above the water table. Groundwater will not be diverted or altered during the aggregate extraction process. Since there are no proposed interactions with the water table or surface water features, the overall water budget, pre- to post-development, is expected to remain unchanged.

Regardless of the fact that impacts are not expected, a further investigation of potential receptors has been conducted as part of this assessment. A review of MECP well records for the site and surrounding area was conducted and indicated ten (10) offsite domestic supply wells within 500m of the subject property. Additionally, from a review of surrounding properties, it is expected that an additional seven (7) properties are likely to have groundwater supply wells that are currently being used. Supply wells not documented in the MECP water well database are expected to be located at the following addresses:

- 312043 Highway 6 – Located approximately 500 metres north and hydraulically downgradient of the property boundary;
- 312022 Highway 6 Allan Park Road – Located approximately 480 metres north and hydraulically downgradient of the property boundary;
- 122775 Grey Road 9 – Located approximately 75 metres north and hydraulically downgradient of the property boundary;

- 122769 Grey Road 9 – Located approximately 100 metres north and hydraulically downgradient of the property boundary;
- 122763 Grey Road 9 – Located approximately 200 metres northwest and hydraulically downgradient of the property boundary;
- 311847 Highway 6 – Located approximately 80 metres east, across the Highway 6 ROW, and hydraulically cross-gradient from the property boundary.
- 311827 Highway 6 – Located approximately 120 metres east, across the Highway 6 ROW, and hydraulically cross-gradient from the property boundary.

Copies of the pertinent MECP well records are enclosed in Appendix A and a summary of the results of the well search within 500 m is provided as Table 1, which includes a summary of both the MECP well record locations as well as those properties inferred to have a water supply well.

As noted, ten well records were identified within a 500 m radius of the property, with seven additional wells inferred to exist based on the presence of developed properties. Although the MECP well records indicate that the majority of documented wells within 500 metres are overburden wells, it was reported that each of these wells are screened in a confined layer underlying approximately 3 to 37 metres of fine-textured clay/silt soils that would be expected to effectively act as an aquitard layer. This aquitard is expected to reduce the potential for surface water/activity influences to the groundwater quantity and quality in each of these water supply wells.

It is noted that the lands south and southeast, and hydraulically upgradient of the subject property, are largely undeveloped and are designated as Hazard Lands in the Grey County Official Plan and SVCA screening areas under Ontario Regulation 169/06. These development limitations are associated with the inferred 100 year flood levels of the Letterbreen Bog. As such, the Letterbreen Bog and any developed properties south or southeast, and hydraulically upgradient of the Site are expected to be hydraulically separated and upgradient from the Site.

Based on the proposed extraction above the water table elevation and the fact that water quality is not expected to be altered due to proposed operations, it is reasonable to expect that the proposed aggregate extraction would not impact the groundwater supply resources in the area.

6.2 Municipal Wells

6.2.1 Municipal Wells - Regulatory Setting

The Clean Water Act (CWA) was established in 2006 to protect and to ensure the quality and sustainability of municipal supplies of drinking water sources within the province. A focus of the CWA is the preparation of locally developed source protection plans and vulnerability assessments which can then be used to identify *threats* to the municipal wells. Under the CWA, a drinking water threat is defined as *an activity or condition that adversely affects or has the potential to adversely affect the quality or quantity of any water that is or may be used as a source of drinking water, and includes an activity or condition that is prescribed by the regulations as a drinking water threat.*

Based on a review of mapping, the site is not located within a regulated area, such as well head protection zone or intake protection zone. The nearest areas regulated under the CWA are located greater than 7.0 km away and would have no bearing on this development.

6.3 Potential Interference with Surface Water Resources

6.3.1 Letterbreen Bog

As discussed, the northerly margin of the Letterbreen Bog is situated in the southern portion of the property. Based on our onsite groundwater elevation measurements, it is inferred that the surface water elevation in the bog is generally consistent with the water table elevation. Further, it has been determined that the potentiometric surface across the Site declines in a northerly direction, driving shallow groundwater flow towards the north, and away from the Letterbreen Bog. This northerly groundwater flow is expected to significantly reduce the potential for negative impacts to the water balance of the bog.

In order to reduce the potential for impacts to this feature, a setback of 30 metres from the wetland's edge has been established for aggregate extraction. The edge of the wetland was determined by Ken Dance of Dance Environmental Inc. (the ecological consultant for this application) and was subsequently surveyed by GMBP personnel.

The proposed onsite pit operations are required to have a setback from the areas of the property designated as Hazard Lands as part of the Grey County Official Plan. It is noted that the SVCA regulated screening area extends approximately 50 to 100 metres beyond the noted Hazard Land boundary. It is our understanding that development within the area designated as an SVCA screening area is not prohibited as long as suitable consultation with the SVCA has been conducted and written permissions or permits (if required) have been obtained. It is our understanding that Teeswater Concrete Ltd. has already undertaken pre-consultation discussions with SVCA personnel.

It is of particular note that the proposed operations are to be above the water table. No dewatering or water diversion will take place onsite as part of aggregate extraction operations. Based on the occurrence of coarse-grained soils (i.e., the sand and gravel) below the groundwater table, the pre- to post-development groundwater flows are expected remain similar to the present conditions. Considering both the water budget and flow direction is expected to remain unchanged from pre-extraction to post-extraction when appropriate setback distances are maintained, no impacts to this area is anticipated.

6.3.2 Surface Water – Quality

The proposed licensed area is expected to be located at least 30 metres from the lands designated as *Hazard Land* in the GCOP and the limits of the observed wetland, as marked by Ken Dance.

Based on the required setback from both the boundary of the Letterbreen Bog, the northerly groundwater flow direction, as well as the implementation of best management practices for sediment and run-off control, no impacts to these surface water features are anticipated.

Based on the proposed pit activities, the primary quality concerns relate to the potential degradation of water quality through:

- Increased sediment/suspended solids loading, and
- Increased temperature.
  - With respect to increased sediment and/or turbidity, this is caused through mobilization of fine-grained silt and clay sized soil particles (fines). In this particular scenario the following mechanisms will act to prevent fines:
- The distance and low topographic relief between the pit activities and the Letterbreen Bog will act as a buffer.

Potential impacts to water temperature are not considered to be an issue between pre- and post-development since:

- No surface water ponding is proposed/expected to occur in the proposed areas of extraction,
- Equal infiltration to the subsurface will continue post-development.

Based on proposed extraction to the water table, no water ponding (nor diversion) would occur. During aggregate pit development, precipitation would continue to infiltrate. As such, there is no increased potential for warming of groundwater recharging to the shallow system in the vicinity of the aggregate pit.

The Pit operations will include a spills response plan, which includes training for the proper and safe use, handling, and storage of fuel or other potential contaminants. All spills or releases of contaminants are to be reported immediately to the MECP Spills Action Centre. Further, a spills response plan will be posted onsite at all times.

6.3.3 Surface Water– Quantity

The surface water quantity is expected to remain the same pre- and post-development since:

- the surface water features, including outlet elevations and controls, are not to be adjusted as part of the pit development,

To mitigate potential impacts to water quantity we recommend the following mitigative measure:

- To generally maintain surface water flows to the same low-lying locations, sloping of the restored grades to maintain similar catchment areas (pre- and post-development) shall be conducted.

7. SUMMARY OF FINDINGS

The purpose of this Maximum Predicted Water Table Elevation and Hydrogeological Assessment Report is to assess the hydrogeological information available in the vicinity of the subject property to characterize the geology, potential groundwater occurrence, and the inferred elevation of the water table within the proposed extraction area. Additionally, this study investigates the potential adverse Impacts the pit may have on the local groundwater and surface water resources.

Based on the geologic mapping, MECP well records, Grey and Bruce Counties Groundwater Study, and on the site-specific investigations completed to date, it was observed that shallow groundwater flows in a generally northerly direction across the Site. Regional groundwater flow is expected to be generally influenced by the Beatty Saugeen River, located approximately 2 kilometres north of the Site. From these observations, based on the proposed pit above groundwater, the maximum elevation of the floor of the quarry would be controlled by the inferred high groundwater elevations.

Currently, the “high” water levels at the site have been estimated to be 395m the southern portion of the property and sloping to approximately 389m in the northern portion of the property (i.e. MW-3). Therefore, to maintain the 1.5 m separation, and based on the proposed limits of onsite extraction, the maximum depth of the pit would be 396.5m the southern portion of the proposed extraction area and sloping to 390.5 masl in the northern portion of the proposed extraction area. As schedule permits, it is recommended that water levels continue to be measured during the application process so that direct measurement of the “high” water level can be made, and the pit floor elevation be updated accordingly.

Based on the proposed extraction of aggregate to depths associated with the high water table elevation with no proposed dewatering or water diversion, and assuming that minimum setback distances are maintained for the sensitive features of the property (as identified and recommended by the Natural Environment Technical Report), it is reasonable to expect that the proposed aggregate extraction would not impact the local water supply wells in the area, surface water features, or associated ecological receptors in the area.

Based on this review, the development standards developed under the ARA are considered to be sufficient to protect the local water resources.

8. QUALIFICATIONS OF ASSESSORS

The Hydrogeological Investigation was completed by Mr. Corbin Sweet, H.B.Sc., P.Geo., and Mr. Matthew Nelson, P.Geo., P.Eng., M.Sc. of GMBP in consultation with applicant.

Mr. Corbin Sweet, H.B.Sc., P.Geo. has an honours B.Sc. degree in Earth Sciences (Geology) from the University of Waterloo and a diploma in Earth Resources from Sir Sandford Fleming College. He has over seven years of experience conducting numerous hydrogeological investigations and relevant public and agency consultation in support of pit and quarry ARA applications resulting in successful licences issued to applicants. He is also a member of the Professional Geoscientists of Ontario (PGO).

Mr. Matthew Nelson, P.Geo., P.Eng., M.Sc. is an Environmental Engineer / Hydrogeologist with over sixteen years of experience with hydrogeological investigations in support of pit and quarry ARA applications and associated consultation, resulting in successful licences issued to applicants. He is also a member of the Professional Geoscientists of Ontario (PGO) and Professional Engineers of Ontario (PEO).

All of which is respectfully submitted,

GM BLUEPLAN ENGINEERING LIMITED

Per:

C.J. Sweet, H.B.Sc., P.Geo.

CJS/kd

Per:

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

FIGURES:

218045-1
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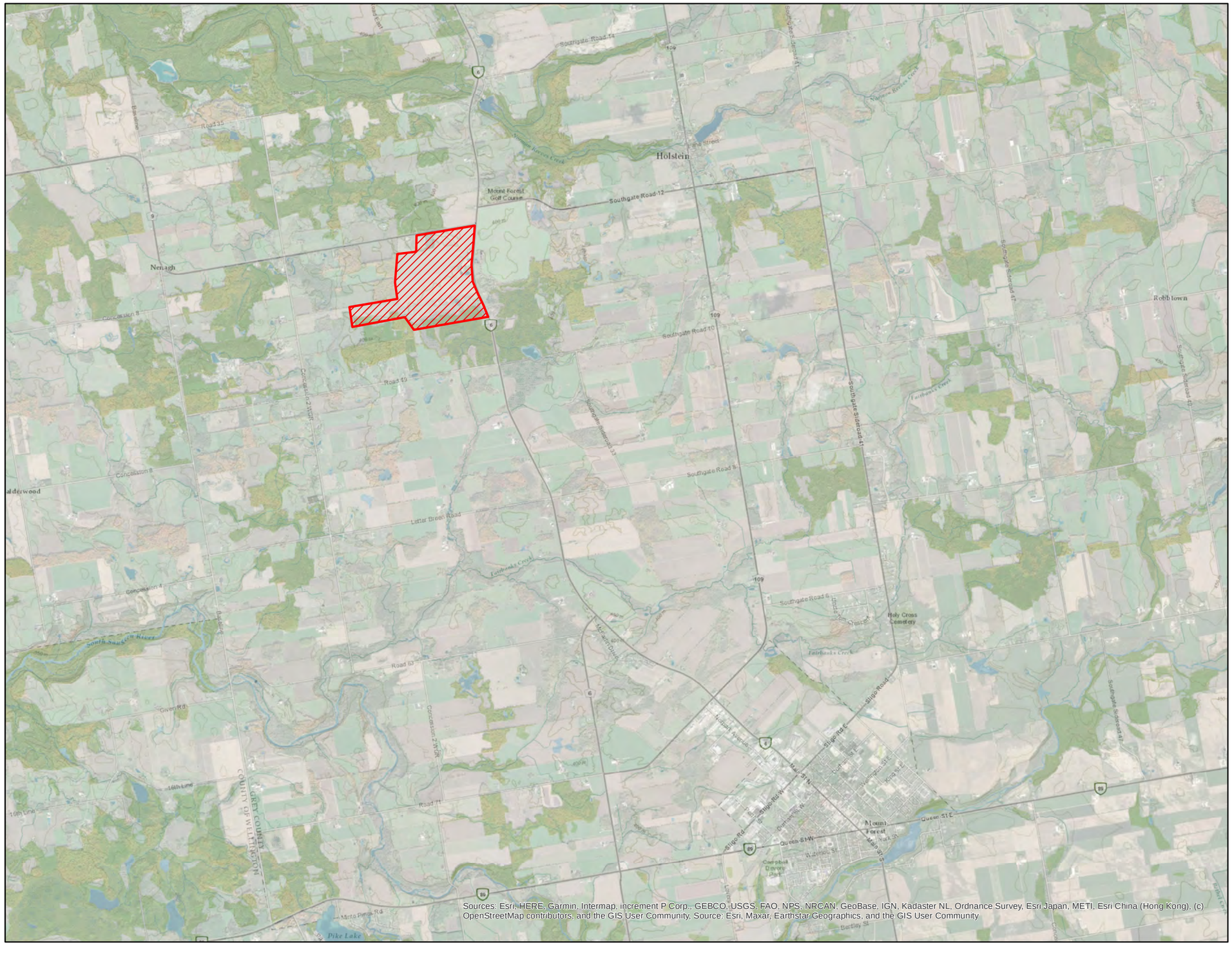
311804 Highway 6
Mount Forest, ON
Teeswater Concrete Ltd.



N

LEGEND

Approximate Subject Property Boundary

Scale

0 0.4 0.8 1.6 2.4 3.2 Kilometers

1:50,000

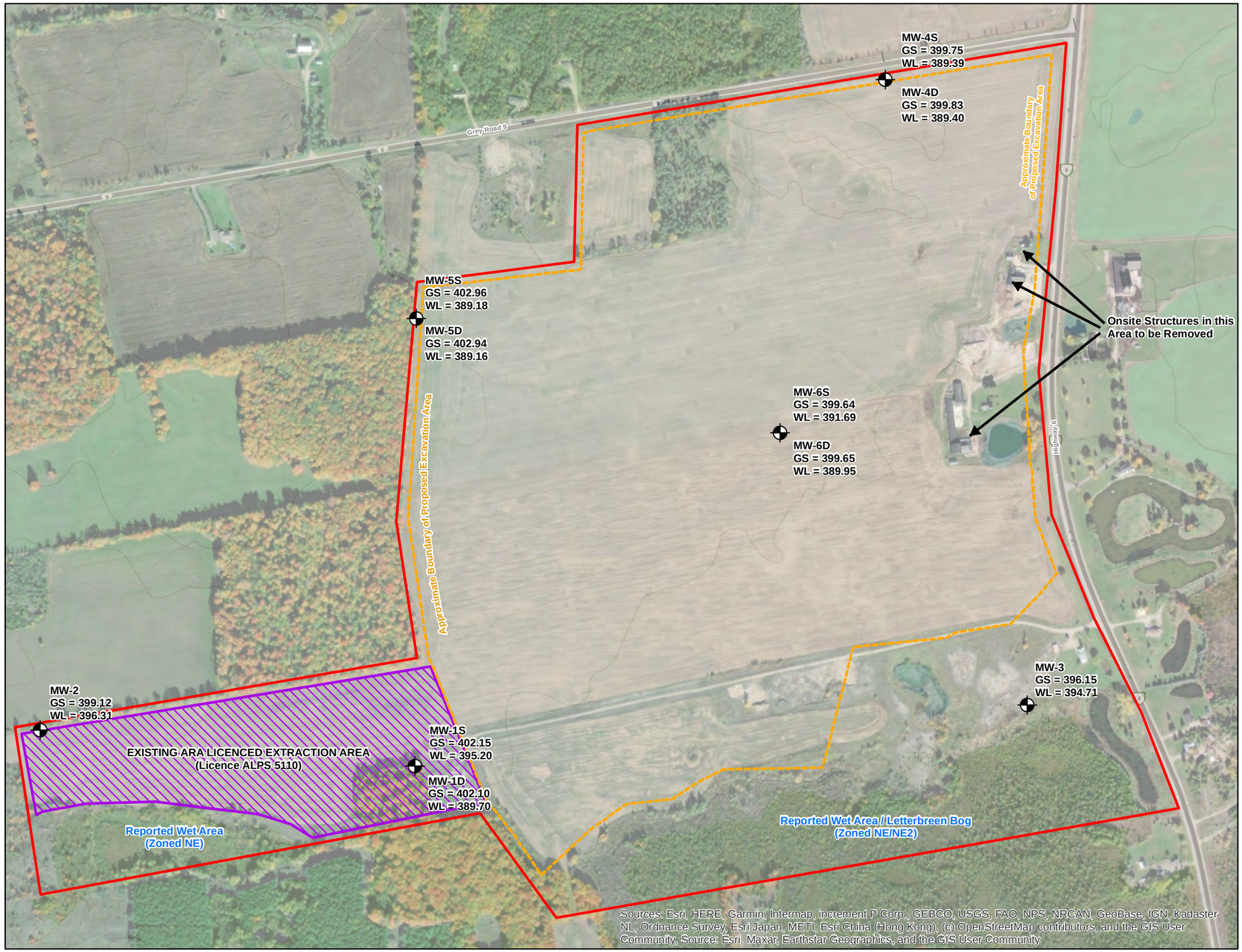
November 2023

SITE LOCATION MAP

Normanby Con 1, Divisions 1 to 3,
Part Lots 19 and 20, Con 2, Part Lot 46
Municipality of West Grey

Figure No. 1

BluePlan ENGINEERING



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Mount Forest, ON
Teeswater Concrete Ltd.

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LEGEND

- Approximate Property Boundary and Proposed Licenced Boundary
- Existing ARA Licenced Extraction Area (Licence ALPS 5110)
- Total Proposed Above the Water Table Extraction Boundary (Approximately 88.6 ha)
- Groundwater Monitoring Well Location (WLs from March 22, 2023)

Scale

0 50 100 200 300 400 Meters

1:6,000

November 2023

SITE LAYOUT AND MONITORING WELL LOCATION PLAN

Normanby Con 1, Divisions 1 to 3,
Part Lots 19 and 20, Con 2, Part Lot 46
Municipality of West Grey

Figure No. 2

BluePlan ENGINEERING

Notes: - Proposed extraction area is set back 15 metres from property boundaries and treelines, 30 metres from the boundaries adjacent to Highway 6, and 30 metres from onsite water features (i.e. southern Letterbreen Bog).
- Interpreted high groundwater elevations are from measurements taken on March 22, 2023.

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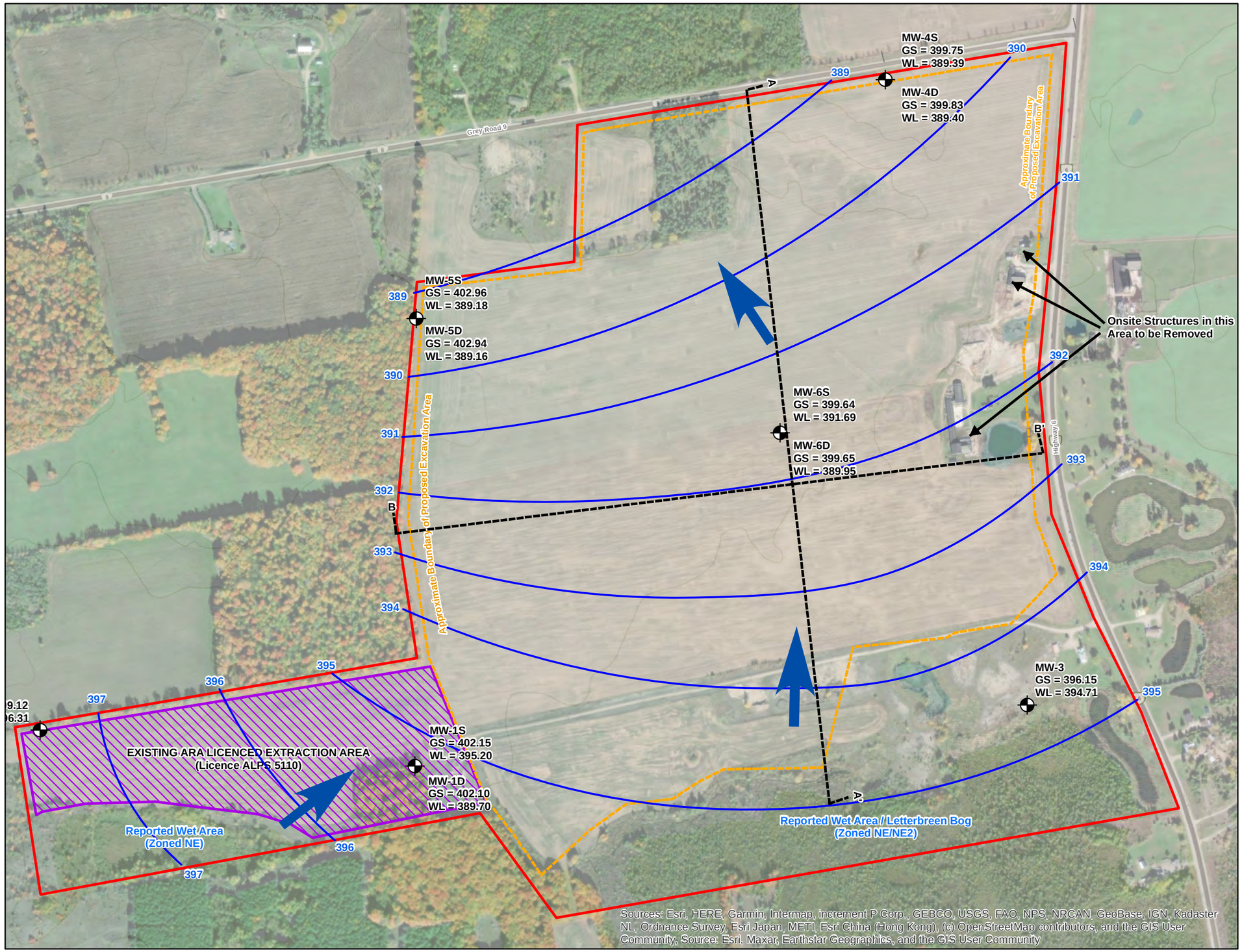

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LEGEND

- Approximate Property Boundary and Proposed Licenced Boundary
- Existing ARA Licenced Extraction Area (Licence ALPS 5110)
- Total Proposed Above the Water Table Extraction Boundary (Approximately 88.6 ha)
- A — Cross-Section Reference
- Interpreted Seasonal High Groundwater Table Contour
- Inferred Direction of Shallow Groundwater Flow
- Groundwater Monitoring Well Location (WLs from March 22, 2023)

Scale

0 50 100 200 300 400 Meters

1:6,000

November 2023

GROUNDWATER FLOW PLAN

Normanby Con 1, Divisions 1 to 3,
Part Lots 19 and 20, Con 2, Part Lot 46
Municipality of West Grey

Figure No. 3

BluePlan ENGINEERING

Notes: - Proposed extraction area is set back 15 metres from property boundaries and treelines, 30 metres from the boundaries adjacent to Highway 6, and 30 metres from onsite water features (i.e. southern Letterbreen Bog).
- Interpreted high groundwater elevations are from measurements taken on March 22, 2023.

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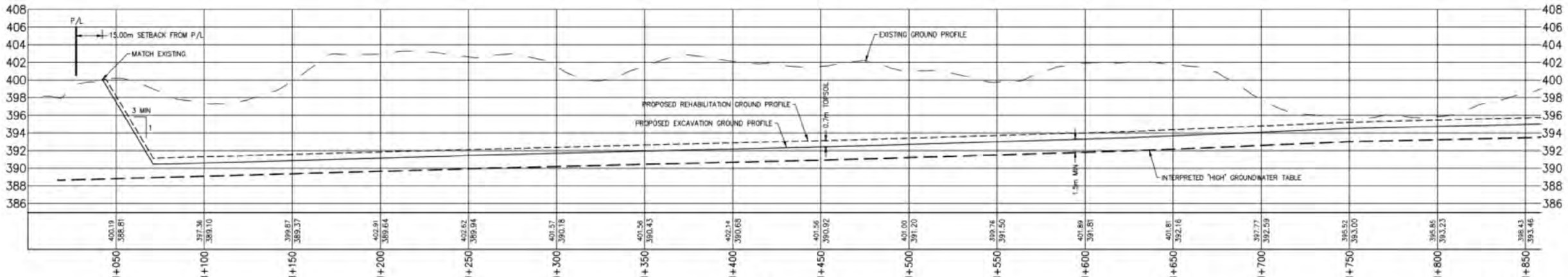
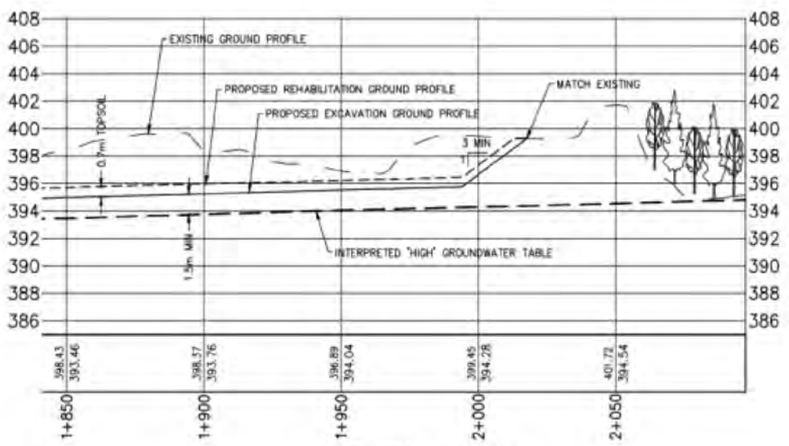


SECTION A-A



SECTION A-A cont'd

January 2024

CROSS-SECTION A-A'

Normanby Con 1, Divisions 1 to 3,
Part Lots 19 and 20, Con 2, Part Lot 46
Municipality of West Grey

Figure No. 4A

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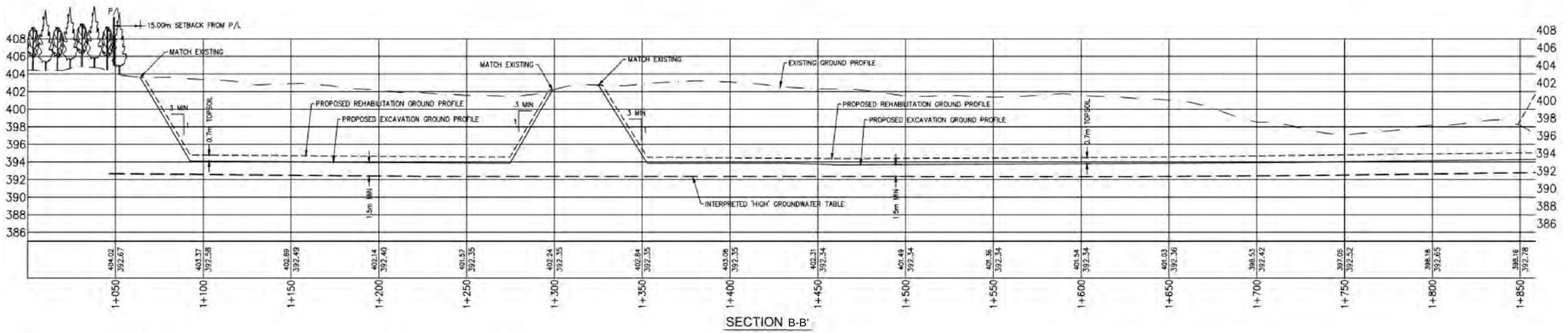
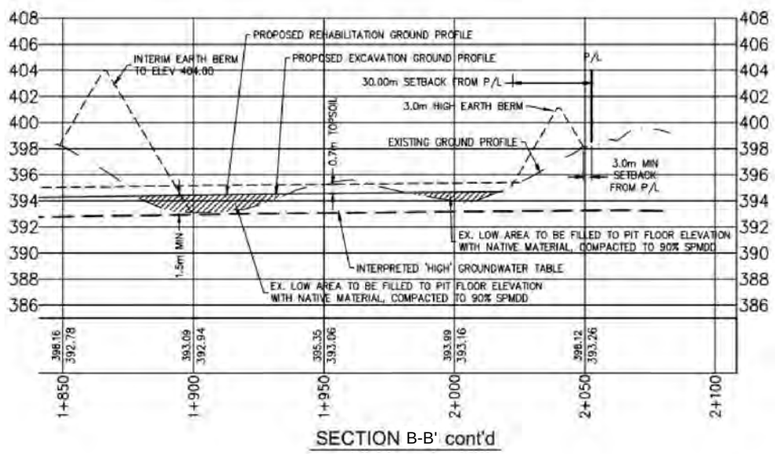
311804 Highway 6
Mount Forest, ON
Teeswater Concrete Ltd.



SECTION B-B'



SECTION B-B' cont'd

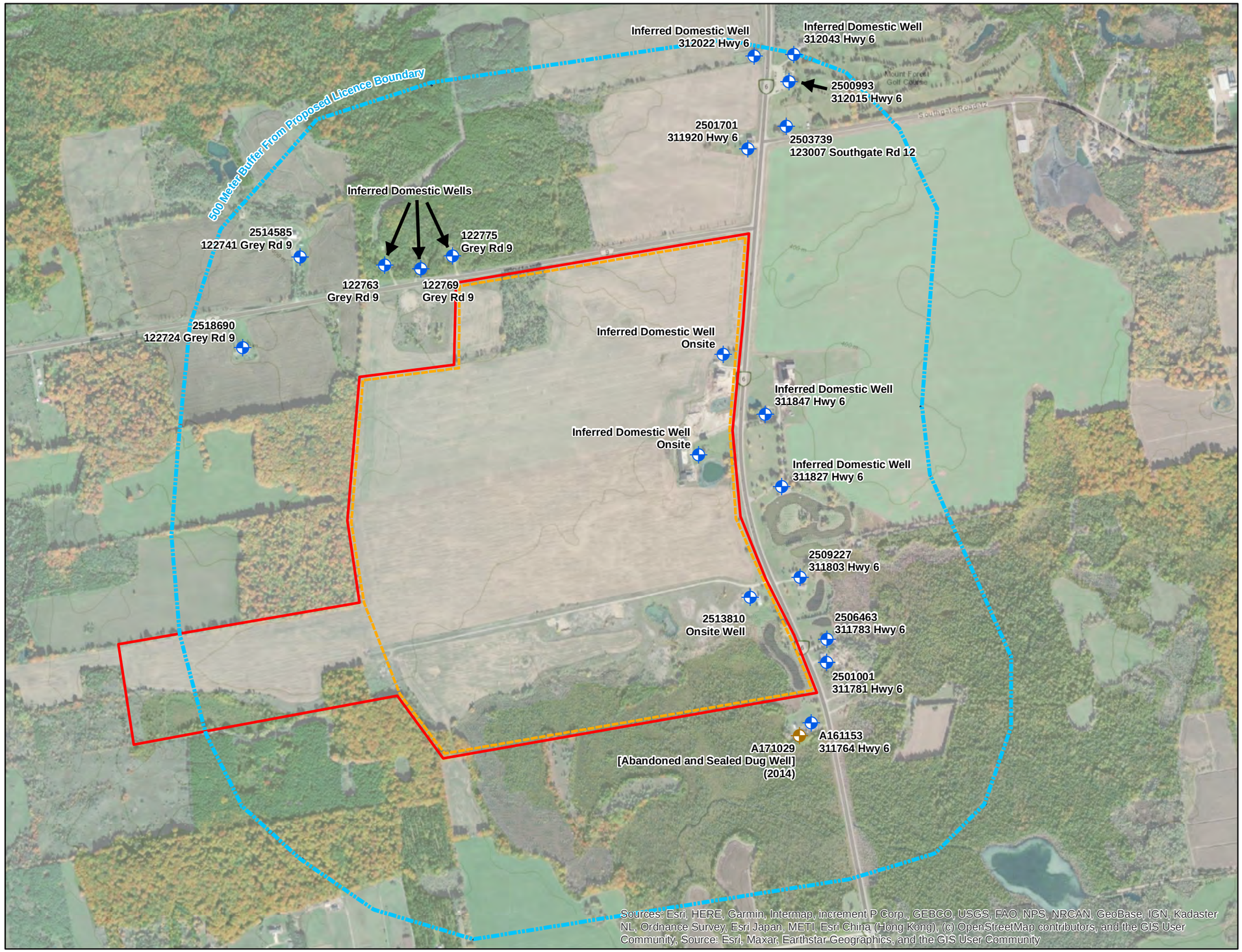
January 2024

CROSS-SECTION B-B'

Normanby Con 1, Divisions 1 to 3,
Part Lots 19 and 20, Con 2, Part Lot 46
Municipality of West Grey

Figure No. 4B

BluePlan ENGINEERING



218045-1
Maximum Predicted Water Table Elevation and Hydrogeological Assessment Report
311804 Highway 6
Mount Forest, ON
Teeswater Concrete Ltd.

N

LEGEND

- Approximate Subject Property Boundary
- Approximate Boundary of Proposed Licenced Area
- 500 Metre Buffer From Proposed Licence Boundary
- Approximate Location of Onsite and Area Water Supply Wells
- Approximate Location of Reported Abandoned Supply Well

Scale

0 75 150 300 450 600 Meters

1:10,000

November 2023

AREA SUPPLY WELL MAP

Normanby Con 1, Divisions 1 to 3,
Part Lots 19 and 20, Con 2, Part Lot 46
Municipality of West Grey

Figure No. 5

BluePlan ENGINEERING

TABLES:

Table 1:
Summary of Nearby Domestic Water Supply Wells

MECP Well ID	Address	Approximate Distance From Site (m)	Lot	Conc.	Easting	Northing	Township	County/ Municipality	Well Use	Bedrock/ Overburden	Depth to Bedrock (m)	Total Depth of Well (m)	Static Water Level (m)	Year Drilled
Onsite Domestic Well														
2513810	311804 Hwy 6	--	20	1W	516497	4876543	Egremont	West Grey	Domestic	Overburden	>71.9	71.9	4.3	1999
Inferred	311804 Hwy 6	--	19	1W	516352	4876923	Egremont	West Grey	Domestic	No Information				
Inferred	311804 Hwy 6	--	19	1W	516418	4877171	Egremont	West Grey	Domestic					
Registered Wells on Neighbouring Properties														
2509227	311803 Hwy 6	75	20	1	516612	4876592	Egremont	Southgate	Domestic	Overburden	>35.1	35.1	3.0	1988
2506463	311783 Hwy 6	50	20	1	516672	4876447	Egremont	Southgate	Domestic	Overburden	>37.2	37.2	5.5	1978
2501001	311781 Hwy 6	70	20	1	516670	4876175	Egremont	Southgate	Domestic	Overburden	>47.5	47.5	6.1	1957
2500993	312015 Hwy 6 Mount Forest Golf	420	18	1	516640	4877450	Egremont	Southgate	Commercial	Bedrock	45.1	57.9	16.5	1959
2503739	123007 Southgate Rd 12	320	18	1	516592	4877750	Egremont	Southgate	Domestic	Bedrock	48.8	58.5	13.7	1972
2501701	311920 Hwy 6	240	18	1W	516468	4877713	Normanby	West Grey	Domestic	Bedrock	44.2	53.3	9.8	1954
2518690	122724 Grey Rd 9	300	43	2W	515771	4877168	Normanby	West Grey	Domestic	Overburden	>22.4	22.4	11.6	2006
2514585	122741 Grey Rd 9	390	42	2W	515315	4877421	Normanby	West Grey	Domestic	Overburden	>23.2	23.2	7.9	2001
A161153	311764 Hwy 6	80	21	1W	516646	4876217	Normanby	West Grey	Domestic	Overburden	>35.1	35.1	12.2	2014
A171029		95	21	1W	516611	4876190	Normanby	West Grey	Domestic	Overburden	Dug well filled and abandoned in 2014. Inferred to be a historical livestock well.			
Inferred Wells on Neighbouring Properties														
--	312043 Hwy 6	500	18	1	516648	4878101	Egremont	Southgate	Domestic	No Information				
	312022 Hwy 6	480	18	1W	516500	4877950	Normanby	West Grey	Domestic					
	122775 Grey Rd 9	75	18	1W	515706	4877415	Normanby	West Grey	Domestic					
	122769 Grey Rd 9	100	18	1W	515614	4877394	Normanby	West Grey	Domestic					
	122763 Grey Rd 9	200	18	1W	515534	4877396	Normanby	West Grey	Domestic					
	311847 Hwy 6	80	19	1	516514	4877016	Egremont	Southgate	Domestic					
	311827 Hwy 6	120	20	1	516563	4876829	Egremont	Southgate	Domestic					

Table 2:
Onsite Water Level Measurements

Well ID	Ground Surface [GS] Elevation (masl)	Top of Pipe [TOP] Elevation (masl)	Top of Casing [TOC] Elevation (masl)	22-Mar-2023		18-Jul-2023		23-Oct-2023	
				(mbTOP)	(masl)	(mbTOP)	(masl)	(mbTOP)	(masl)
MW-1S	402.15	402.94	403.07	7.74	395.20	7.28	395.66	7.60	395.34
MW-1D	402.10	402.95	403.14	13.24	389.71	12.74	390.21	13.15	389.80
MW-2	399.12	399.87	400.05	2.63	397.24	5.36	394.51	5.60	394.27
MW-3	396.15	396.96	397.12	2.25	394.71	2.27	394.69	2.58	394.38
MW-4S	399.75	400.56	400.73	11.17	389.39	10.63	389.93	11.05	389.51
MW-4D	399.83	400.64	700.78	11.24	389.40	10.69	389.95	11.11	389.53
MW-5S	402.96	403.80	403.99	14.62	389.18	14.07	389.73	14.42	389.38
MW-5D	402.94	403.72	403.86	14.56	389.16	*Broken / Well Collapsed @ 8.8 mbgs*			
MW-6S	399.64	400.49	400.66	8.8	391.69	9.19	391.30	9.58	390.91
MW-6D	399.63	400.42	400.57	10.47	389.95	10.03	390.39	10.4	390.02

Note: The groundwater elevations measured on March 22, 2023 are considered to be the annual maximum groundwater table elevation for the Site, measured following a period of significant snow melt and precipitation.

APPENDIX A:
MECP WELL RECORDS

Ministry of Environment and Energy
Ontario

The Ontario Water Resources Act
WATER WELL RECORD

Print only in spaces provided.
Mark correct box with a checkmark, where applicable.

11 (1 2) — 2513810 — Municipality 25010 (10 14) — Con. GR W 01 (15 22 23 24)

County or District	Township/Borough/City/Town/Village	Con block tract survey, etc.	Lot (25-27)
Grey	Normanby	CONCESSION	20

Owner's surname (26-47) First name	Address	Date completed (48-53) day month year
Wodson Properties	RR#3 Mount Forest	18 01 99

21 (1 2) — Zone (10) — Easting (12 17) — Northing (18 24) — RC (25) — Elevation (26) — RC (30) — Basin Code (31 47) — ii — iii — iv

LOG OF OVERBURDEN AND BEDROCK MATERIALS (see instructions)

General colour	Most common material	Other materials	General description	Depth – feet From	Depth – feet To
	Topsoil			0	1
Brown	Sand	gravel		1	29
Gray	Sand	gravel		29	50
Gray	gravel		wet	50	58
Gray	Quick	Sand		58	70
Gray	Silt	gravel		70	141
Gray	Clay		soft	141	185
Gray	Dark	Clay		185	218
Brown	gravel		coarse	218	236

31
32 (10 14 15 21 32 43 54 65 75 80)

41 WATER RECORD

Water found at – feet	Kind of water
218-236 (10-13)	1 ☒ Fresh 2 ☐ Salty 3 ☐ Sulphur 4 ☐ Minerals 5 ☐ Gas (14)
(15-18)	1 ☐ Fresh 2 ☐ Salty 3 ☐ Sulphur 4 ☐ Minerals 5 ☐ Gas (19)
(20-23)	1 ☐ Fresh 2 ☐ Salty 3 ☐ Sulphur 4 ☐ Minerals 5 ☐ Gas (24)
(25-28)	1 ☐ Fresh 2 ☐ Salty 3 ☐ Sulphur 4 ☐ Minerals 5 ☐ Gas (29)
(30-33)	1 ☐ Fresh 2 ☐ Salty 3 ☐ Sulphur 4 ☐ Minerals 5 ☐ Gas (34) (60)

51 CASING & OPEN HOLE RECORD

Inside diam inches	Material	Wall thickness inches	Depth – feet From	Depth – feet To
6 (10-11)	1 ☒ Steel (12) 2 ☐ Galvanized 3 ☐ Concrete 4 ☐ Open hole 5 ☐ Plastic	.188	+1	236 (13-16)
(17-18)	1 ☐ Steel (19) 2 ☐ Galvanized 3 ☐ Concrete 4 ☐ Open hole 5 ☐ Plastic			(20-23)
(24-25)	1 ☐ Steel (26) 2 ☐ Galvanized 3 ☐ Concrete 4 ☐ Open hole 5 ☐ Plastic			(27-30)

SCREEN

Sizes of opening (Slot No.) (31-33)	Diameter (34-38) inches	Length (39-40) feet
Material and type	Depth at top of screen (41-44) feet	(30)

61 PLUGGING & SEALING RECORD

☐ Annular space ☐ Abandonment

Depth set at – feet From	Depth set at – feet To	Material and type (Cement grout, bentonite, etc.)
0 (10-13)	45 (14-17)	Bonseal
(18-21)	(22-25)	
(26-29)	(30-33) (80)	

71 PUMPING TEST

Pumping test method (10): 1 ☐ Pumping 2 ☒ Bailer
Pumping rate (11-14): 50 GPM
Duration of pumping (15-16) ..1.. Hours (17-18) ..... Mins

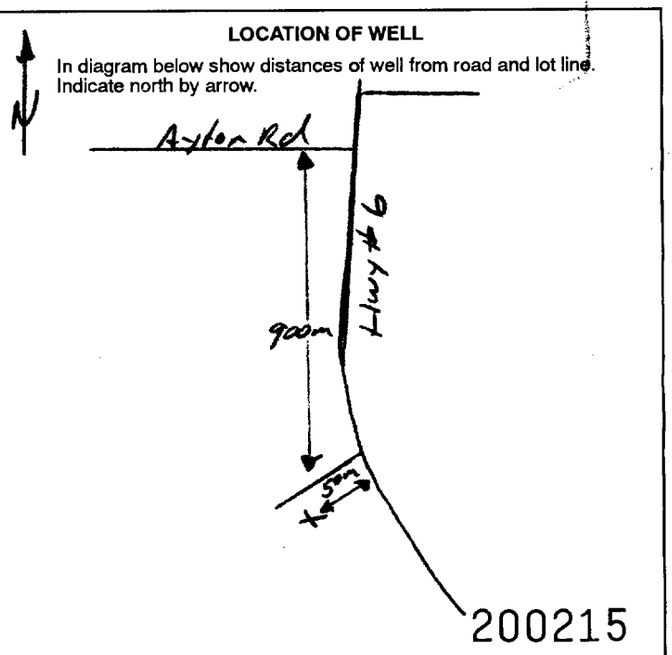
Static level (19-21)	Water level end of pumping (22-24)	Water levels during (25): 1 ☐ Pumping 2 ☒ Recovery	15 minutes (26-28)	30 minutes (29-31)	45 minutes (32-34)	60 minutes (35-37)
14 feet	feet		feet	feet	14 feet	14 feet

If flowing give rate (38-41)	Pump intake set at	Water at end of test (42)	Recommended pump type	Recommended pump setting (43-45)	Recommended pump rate (46-49)
GPM	feet	☒ Clear ☐ Cloudy	☐ Shallow ☒ Deep	100 feet	25 GPM

(50-53)

LOCATION OF WELL

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



200215

FINAL STATUS OF WELL (54)

1 ☒ Water supply 2 ☐ Observation well 3 ☐ Test hole 4 ☐ Recharge well 5 ☐ Abandoned, insufficient supply 6 ☐ Abandoned, poor quality 7 ☐ Abandoned (Other) 8 ☐ Dewatering 9 ☐ Unfinished 10 ☐ Replacement well

WATER USE (55-56)

1 ☒ Domestic 2 ☐ Stock 3 ☐ Irrigation 4 ☐ Industrial 5 ☐ Commercial 6 ☐ Municipal 7 ☐ Public supply 8 ☒ Cooling & air conditioning 9 ☐ Not used 10 ☐ Other .....

METHOD OF CONSTRUCTION (57)

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 .....

Name of Well Contractor	Well Contractor's Licence No.
Highland Water Wells	2576
Address: Box 141 Durham	
Name of Well Technician	Well Technician's Licence No.
Nigel Poppleton	72130
Signature of Technician/Contractor	Submission date: day 30 mo 1 yr 99

MINISTRY USE ONLY

Data source (58)	Contracctor (59-62)	Date received (63-68) (80)
	2576	FEB 05 1999
Date of inspection	Inspector	
Remarks		

CSS.ES9

0506 (07/94) Front Form 9

2 - MINISTER OF ENVIRONMENT & ENERGY COPY

UTM 17 Z 516640 E

C 5 R 4877450 N

Garafraxa Rd. East

Elev. 5 R 1350

Basin ~~23~~

LOT - 18

41A/24 C

The Ontario Water Resources Commission Act, 1957

WATER WELL RECORD

County or District Grey Township, Village, Town or City Egremont

Con. ~~LGR~~ 18 Lot ~~14~~ Date completed 3rd Dec 1959 (day month year)

[redacted] ress R.R. #3 Ayton Ont

Casing and Screen Record	
Inside diameter of casing	4 IN.
Total length of casing	148
Type of screen	
Length of screen	
Depth to top of screen	
Diameter of finished hole	4 IN

Pumping Test	
Static level	54 ft
Test-pumping rate	20 G.P.M.
Pumping level	60 ft.
Duration of test pumping	4 hrs
Water clear or cloudy at end of test	Clear
Recommended pumping rate	20 G.P.M.
with pumping level of	60 ft.

Well Log / Water Record

Overburden and Bedrock Record	From ft.	To ft.	Depth(s) at which water(s) found	No. of feet water rises	Kind of water (fresh, salty, sulphur)
GRAVEL + BOULDERS	0	20	180	126	FRESH
COURSE SAND + GRAVEL	20	35			
HARDPAN	35	92			
BROWN CLAY	92	100			
HARD PAN	100	148			
BROWN LIME STONE	148	190			

For what purpose(s) is the water to be used? ~~Domestic~~ Coffee shop

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

Drilling Firm Durham Drillers

Address Box 299 Durham Ont.

Licence Number 327

Name of Driller Ronald A Peters

Address RR #1 Hanover Ont

Date Jan 20 1959

Percy Johnston

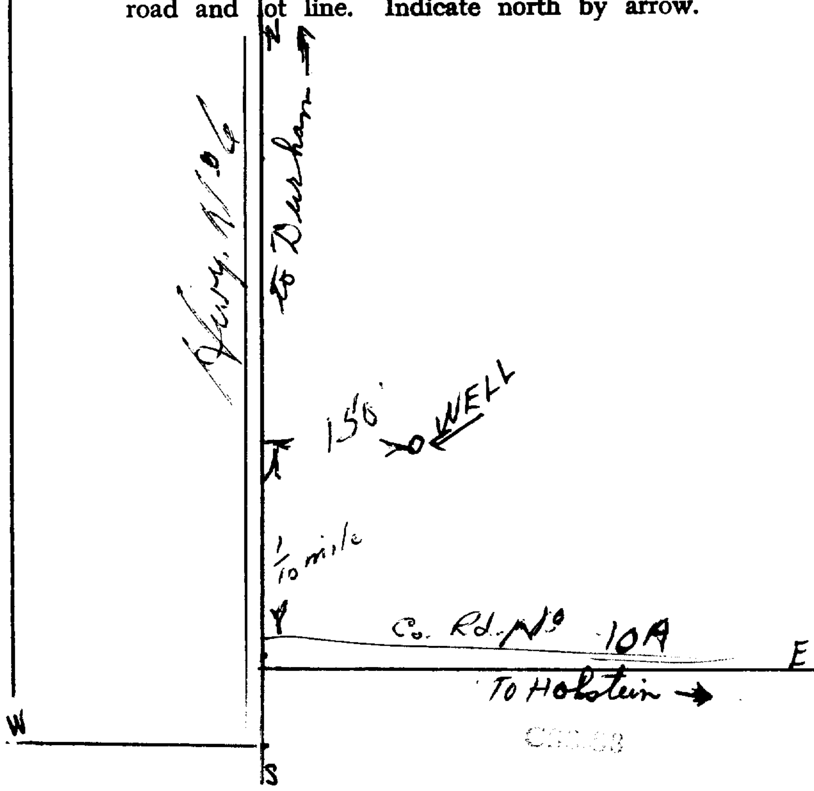
(Signature of Licensed Drilling Contractor)

Form 5

Location of Well

111

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



UTM | 1 | 7 | Z | 5 | 1 | 6 | 6 | 7 | 0 | E
| 9 | R | 4 | 8 | 7 | 6 | 1 | 7 | 5 | N

Elev. 9 R 4 3 0 9 EAST

Basin 2 #

20

25 №1001

GROUND WATER BRANCH ... 1 1953 ... RESOURCES DIVISION

4/A/2 C

ONTARIO

The Well Drillers Act

Department of Mines, Province of Ontario

Water Well Record

[redacted], Village, Town or City Egremont
[redacted] Town or City)
[redacted]

Date Completed 18 (day) Oct (month) 57 (year) Cost of Well (excluding pump)

Pipe and Casing Record		Pumping Test	
Casing diameter(s)	4	Date	Oct 18 '57
Length(s) of casing(s)	156 ft	Static level	20 ft
Type of screen		Pumping level	6 ft
Length of screen		Pumping rate	6 gal per min
Distance from top of screen to ground level		Duration of test	6 hrs
Is well a gravel-wall type?	~~yes~~	Distance from cylinder or bowls to ground level	

Water Record

Kind (fresh or mineral) ~~mineral~~ FRESH
Quality (hard, soft, contains iron, sulphur, etc.) hard (~~some iron~~)
Appearance (clear, cloudy, coloured) clear
For what purpose(s) is the water to be used? domestic

How far is well from possible source of contamination? 35 ft
What is the source of contamination? privy
Enclose a copy of any mineral analysis that has been made of water

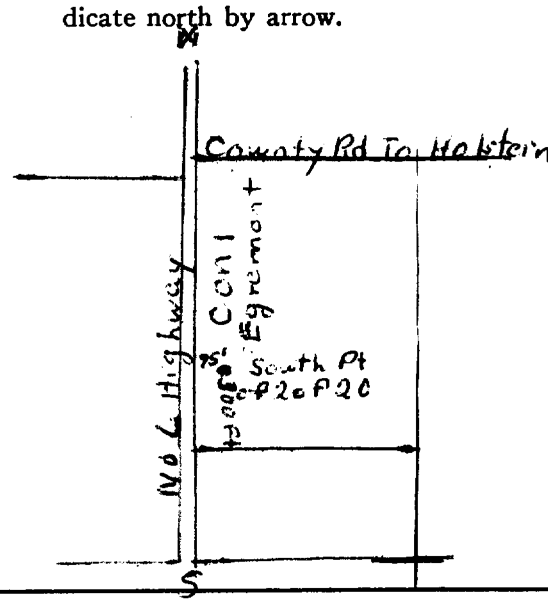
Depth(s) to Water Horizon(s)	Kind of Water	No. of Feet Water Rises
156	hard fresh	136 ft

Well Log

Overburden and Bedrock Record	From 0 ft.	To ....ft.
gravel	0	50 ft
sand	50	90
quick sand	90	95
silt	95	110
sand and quick sand	110	150
hard pan	150	156
water in gravel		156

Location of Well

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



Situation: Is well on upland, in valley, or on hillside? upland
Drilling Firm Pratt Bros
Address R.R.#4 Durham Ont.
Name of Driller Wallace Pratt Address Durham
Date Oct 18 '57 Licence Number 531

Wallace Pratt
Signature of Licensee

FORM 5

UTM 1 7 Z 5 1 5 6 4 0 E
1 9 R 4 8 8 3 5 4 0 N
Elev. 1 9 R 1 1 2 7 5
Basin 2 2

41A/2

25 № 1701

RECEIVED
GEOLOGICAL SURVEY
DEPARTMENT of MINES

ONTARIO

The Well Drillers Act
Department of Mines, Province of Ontario

Water Well Record

[redacted]p, Village, Town or City Normanby
[redacted]own or City)
[redacted]s Ayton, Ontario
Date Completed 4 (day) Dec. (month) 1954 (year) Cost of Well (excluding pump)

Pipe and Casing Record		Pumping Test	
Casing diameter(s)	4 in O.D.	Date	Dec 4, 1954
Length(s) of casing(s)	162 ft.	Static level	32 ft.
Type of screen		Pumping level	45 ft.
Length of screen		Pumping rate	6 gal per min.
Distance from top of screen to ground level		Duration of test	6 hr
Is well a gravel-wall type?		Distance from cylinder or bowls to ground level	

Water Record

Kind (fresh or mineral) fresh
Quality (hard, soft, contains iron, sulphur, etc.) hard
Appearance (clear, cloudy, coloured) clear
For what purpose(s) is the water to be used? farm
How far is well from possible source of contamination? 100 ft.
What is the source of contamination? barnyard
Enclose a copy of any mineral analysis that has been made of water

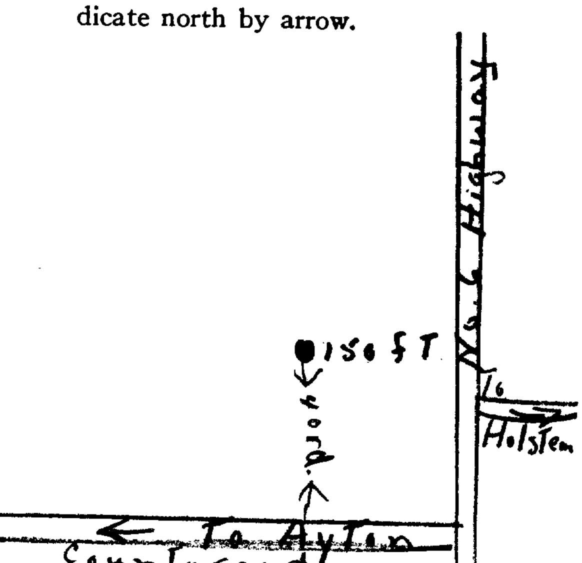
Depth(s) to Water Horizon(s)	Kind of Water	No. of Feet Water Rises
175 ft.	fresh	143 ft.

Well Log

Overburden and Bedrock Record	From	To
loose ~~sandy~~ coarse gravel	0 ft.	25 ft.
sandy clay	25 ft.	60 ft.
blue clay	60 ft.	145 ft.
shaky rock, blue in colour	145	165 ft.
hard blue rock	165 ft.	175 ft.

Location of Well

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



Situation: Is well on upland, in valley, or on hillside? upland
Drilling Firm Pratt Bros
Address R.R.4, Durham, Ont.
Name of Driller Newman Pratt Address R.R.4, Durham, Ont.
Date Dec. 6/54 Licence Number 530

Newman Pratt
Signature of Licensee

Form 5

41A/2W

The Ontario Water Resources Commission Act

WATER WELL RECORD

Water management in Ontario

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

11 | 2503739 | MUNICIP. 25905 | CON. GR E C 01

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON., BLOCK, TRACT, SURVEY, ETC.	LOT
Grey	Egremont	Con I GRE	018

[redacted] RR# Mt Forest

DATE COMPLETED: DAY 04 MO. 03 YR. 72

[redacted] 77555 | RC 4 | ELEVATION 1320 | RC 5 | BASIN CODE 2Z

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH – FEET FROM	TO
Black	Top Soil			0	1
Brown	Gravel	Boulders		1	42
Blue	Clay		Soft	42	160
Brown	LimeStone		Hard	160	185
Grey	Limestone		Hard	185	192

31 | 0001802 | 0042111 3 | 0160305 | 0185015 | 0192215

32

41 WATER RECORD

WATER FOUND AT – FEET	KIND OF WATER
0190	1 ☒ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL
	1 ☐ FRESH 2 ☐ SALTY 3 ☐ SULPHUR 4 ☐ MINERAL

51 CASING & OPEN HOLE RECORD

INSIDE DIAM. INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH – FEET FROM	TO
04	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	188	0	~~160~~ 0160
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☒ OPEN HOLE		160	192
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE			

SCREEN

SIZE(S) OF OPENING (SLOT NO.)	DIAMETER	LENGTH
	INCHES	FEET

MATERIAL AND TYPE | DEPTH TO TOP OF SCREEN: FEET

61 PLUGGING & SEALING RECORD

DEPTH SET AT – FEET FROM	TO	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)

71 PUMPING TEST

PUMPING TEST METHOD	PUMPING RATE	DURATION OF PUMPING
1 ☒ PUMP 2 ☐ BAILER	0020 GPM.	00 HOURS 30 MINS.

1 ☒ PUMPING 2 ☐ RECOVERY

STATIC LEVEL	WATER LEVEL END OF PUMPING	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
045 FEET	045 FEET	045 FEET	045 FEET	045 FEET	045 FEET

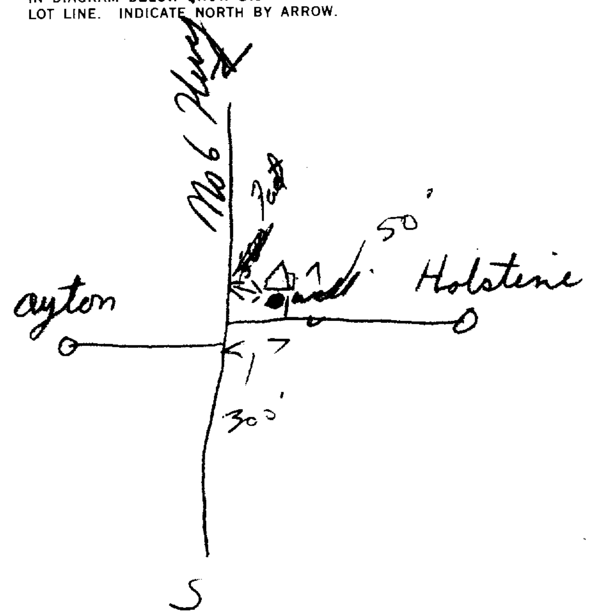
IF FLOWING, GIVE RATE	PUMP INTAKE SET AT	WATER AT END OF TEST
GPM.	60 FEET	1 ☒ CLEAR 2 ☐ CLOUDY

RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING	RECOMMENDED PUMPING RATE
☐ SHALLOW ☒ DEEP	060 FEET	0010 GPM.

040.0 GPM./FT. SPECIFIC CAPACITY

LOCATION OF WELL

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



DRILLERS REMARKS:

FINAL STATUS OF WELL

1 ☒ WATER SUPPLY 2 ☐ OBSERVATION WELL 3 ☐ TEST HOLE 4 ☐ RECHARGE WELL 5 ☐ ABANDONED, INSUFFICIENT SUPPLY 6 ☐ ABANDONED, POOR QUALITY 7 ☐ UNFINISHED

WATER USE

01

1 ☒ DOMESTIC 2 ☐ STOCK 3 ☐ IRRIGATION 4 ☐ INDUSTRIAL ☐ OTHER 5 ☐ COMMERCIAL 6 ☐ MUNICIPAL 7 ☐ PUBLIC SUPPLY 8 ☐ COOLING OR AIR CONDITIONING 9 ☐ NOT USED

METHOD OF DRILLING

1 ☐ CABLE TOOL 2 ☒ ROTARY (CONVENTIONAL) 3 ☐ ROTARY (REVERSE) 4 ☐ ~~ROTARY (AIR)~~ 5 ☐ AIR PERCUSSION 6 ☐ BORING 7 ☐ DIAMOND 8 ☐ JETTING 9 ☐ DRIVING

CONTRACTOR

NAME OF WELL CONTRACTOR	LICENCE NUMBER
M & S Well Drilling	3737

ADDRESS: RR#5 Mt Forest

NAME OF DRILLER OR BORER	LICENCE NUMBER
Ray Spencer	3737

SIGNATURE OF CONTRACTOR: Ray Spencer | SUBMISSION DATE: DAY 21 MO. 11 YR. 72

OFFICE USE ONLY

DATA SOURCE 1 | CONTRACTOR 3737 | DATE RECEIVED 100472

DATE OF INSPECTION | INSPECTOR

REMARKS: | P | WI

OWRC COPY

41 A/2W

Ministry of the Environment
Ontario

The Ontario Water Resources Act

WATER WELL RECORD

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

(11) 2506463 MUNICIP 25005 CON. GR E 01

COUNTY OR DISTRICT	TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE	CON., BLOCK, TRACT, SURVEY, ETC.	LOT
GREY	EGERMONT	Con IE G.R.E.	020

[redacted] RR# 5 MT FOREST

DATE COMPLETED DAY 15 MO 06 YR 78

876250 RC 5 ELEVATION 1300 RC 5 BASIN CODE 22

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
Black	TOP SOIL			0	1
BROWN	GRAVEL	SAND		1	35
GREY	CLAY			35	60
GREY	HARDPAN	GRAVEL		60	85
GREY	CLAY	SAND		85	115
BROWN	GRAVEL			115	122

(31) 0001802 | 0035611128 | 0060205 | 0085214111 | 0115120528 | 0122611

32

(41) WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
0120	☒ FRESH ☐ SALTY ☐ SULPHUR ☐ MINERAL
	☐ FRESH ☐ SALTY ☐ SULPHUR ☐ MINERAL
	☐ FRESH ☐ SALTY ☐ SULPHUR ☐ MINERAL
	☐ FRESH ☐ SALTY ☐ SULPHUR ☐ MINERAL
	☐ FRESH ☐ SALTY ☐ SULPHUR ☐ MINERAL

(51) CASING & OPEN HOLE RECORD

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
04	☒ STEEL ☐ GALVANIZED ☐ CONCRETE ☐ OPEN HOLE	205	0	0122
	☐ STEEL ☐ GALVANIZED ☐ CONCRETE ☐ OPEN HOLE			
	☐ STEEL ☐ GALVANIZED ☐ CONCRETE ☐ OPEN HOLE			

SCREEN

SIZE(S) OF OPENING (SLOT NO.)	DIAMETER INCHES	LENGTH FEET

MATERIAL AND TYPE | DEPTH TO TOP OF SCREEN FEET

(61) PLUGGING & SEALING RECORD

DEPTH SET AT - FEET FROM	TO	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)

(71) PUMPING TEST

PUMPING TEST METHOD	PUMPING RATE	DURATION OF PUMPING
☒ PUMP ☐ BAILER	0020 GPM	02 HOURS 30 MINS

STATIC LEVEL	WATER LEVEL END OF PUMPING	15 MINUTES	30 MINUTES	45 MINUTES	60 MINUTES
018 FEET	040 FEET	040 FEET	040 FEET	040 FEET	040 FEET

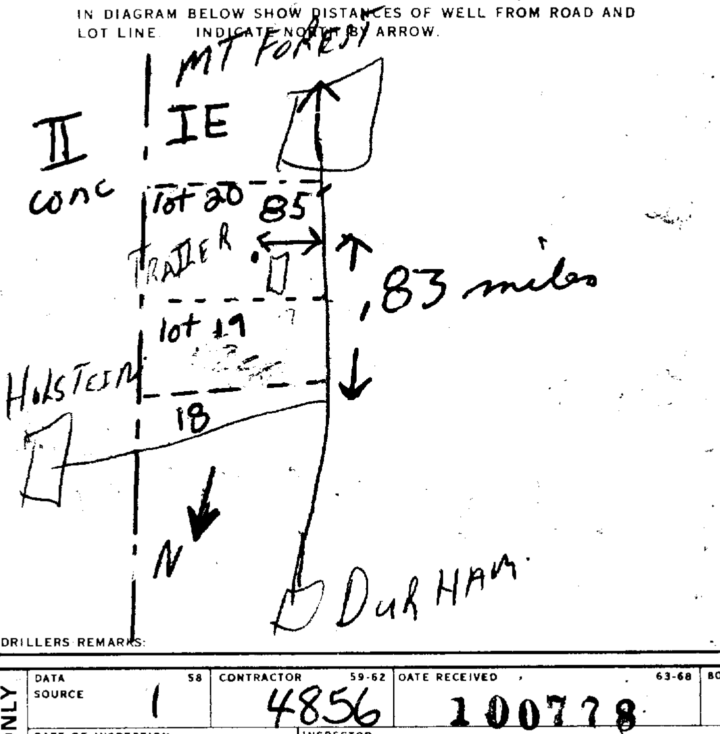
WATER LEVELS DURING: ☒ PUMPING ☐ RECOVERY

IF FLOWING, GIVE RATE: GPM | PUMP INTAKE SET AT: 40 FEET | WATER AT END OF TEST: ☐ CLEAR ☒ CLOUDY

RECOMMENDED PUMP TYPE: ☐ SHALLOW ☒ DEEP | RECOMMENDED PUMP SETTING: 040 FEET | RECOMMENDED PUMPING RATE: 0006 GPM

LOCATION OF WELL

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



DRILLERS REMARKS:

FINAL STATUS OF WELL: 1 — ☒ WATER SUPPLY ☐ OBSERVATION WELL ☐ TEST HOLE ☐ RECHARGE WELL ☐ ABANDONED, INSUFFICIENT SUPPLY ☐ ABANDONED, POOR QUALITY ☐ UNFINISHED

WATER USE: 01 — ☒ DOMESTIC ☐ STOCK ☐ IRRIGATION ☐ INDUSTRIAL ☐ OTHER ☐ COMMERCIAL ☐ MUNICIPAL ☐ PUBLIC SUPPLY ☐ COOLING OR AIR CONDITIONING ☐ NOT USED

METHOD OF DRILLING: 2 — ☐ CABLE TOOL ☒ ROTARY (CONVENTIONAL) ☐ ROTARY (REVERSE) ☐ ROTARY (AIR) ☐ AIR PERCUSSION ☐ BORING ☐ DIAMOND ☐ JETTING ☐ DRIVING

CONTRACTOR

NAME OF WELL CONTRACTOR: RAY SPENCER-SONWELL DR INC | LICENCE NUMBER: 4856

ADDRESS: RR#5 MT FOREST

NAME OF DRILLER OR BORER: RAY SPENCER | LICENCE NUMBER: 4856

SIGNATURE OF CONTRACTOR: Ray Spencer | SUBMISSION DATE DAY ___ MO ___ YR ___

OFFICE USE ONLY

DATA SOURCE: 1 | CONTRACTOR: 4856 | DATE RECEIVED: 100778

DATE OF INSPECTION: 29,5,79 | INSPECTOR

REMARKS: P LL / WI LL

MINISTRY OF THE ENVIRONMENT COPY

FORM NO. 0506-4-77

Ministry of the Environment
Ontario

The Ontario Water Resources Act

41A/2W

WATER WELL RECORD

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

11 2509227 MUNICIP 25005 CON. GR. E 01

COUNTY OR DISTRICT [redacted] | TOWNSHIP, BOROUGH, CITY, TOWN, VILLAGE EGREMONT | CON. BLOCK, TRACT, SURVEY, ETC. I DIV. 2 GRE | LOT 20

[redacted] R.R. #3 MOUNT FOREST NOG 2L0 | DATE COMPLETED DAY 22 MO 05 YR 87

UTM 676,575 | RC | ELEVATION 1300 | RC | BASIN CODE

LOG OF OVERBURDEN AND BEDROCK MATERIALS (SEE INSTRUCTIONS)

GENERAL COLOUR	MOST COMMON MATERIAL	OTHER MATERIALS	GENERAL DESCRIPTION	DEPTH - FEET FROM	DEPTH - FEET TO
BROWN	TOP SOIL	SAND STONES	LAYERED	0	18
GREY	CLAY		SOFT	18	22
BROWN	SAND	STONES	LAYERED	22	65
GREY	CLAY	SILT	SOFT	65	105
GREY	SILT	SAND	"	105	110
BROWN	SAND		"	110	113
BROWN	GRAVEL		LOOSE	113	115

31

32

41 WATER RECORD

WATER FOUND AT - FEET	KIND OF WATER
115	1 ☒ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL
	1 ☐ FRESH 3 ☐ SULPHUR; 2 ☐ SALTY 4 ☐ MINERAL

51 CASING & OPEN HOLE RECORD

INSIDE DIAM INCHES	MATERIAL	WALL THICKNESS INCHES	DEPTH - FEET FROM	DEPTH - FEET TO
6 1/4	1 ☒ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE	.188	0	115
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE			
	1 ☐ STEEL 2 ☐ GALVANIZED 3 ☐ CONCRETE 4 ☐ OPEN HOLE			

SCREEN

SIZE(S) OF OPENING (SLOT NO.)	DIAMETER INCHES	LENGTH FEET

MATERIAL AND TYPE | DEPTH TO TOP OF SCREEN FEET

61 PLUGGING & SEALING RECORD

DEPTH SET AT - FEET FROM	DEPTH SET AT - FEET TO	MATERIAL AND TYPE (CEMENT GROUT, LEAD PACKER, ETC.)
10-13	14-17	
18-21	22-25	
26-29	30-33	

71 PUMPING TEST

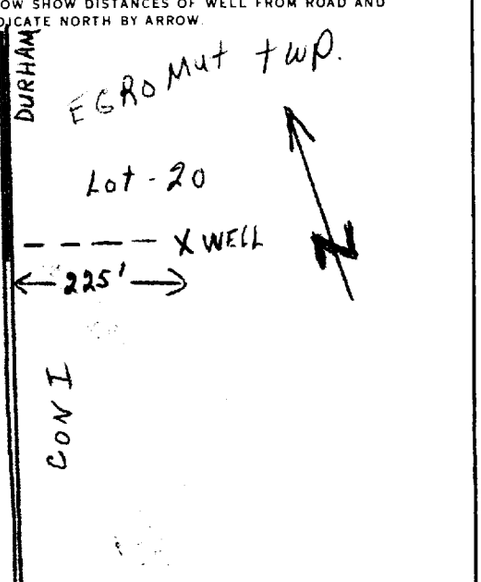
PUMPING TEST METHOD	PUMPING RATE GPM	DURATION OF PUMPING HOURS / MINS
AIR ☒ PUMP 2 ☐ BAILER	30	2 / 30

STATIC LEVEL FEET	WATER LEVEL END OF PUMPING FEET	WATER LEVELS DURING: 1 ☐ PUMPING 2 ☒ RECOVERY	15 MINUTES FEET	30 MINUTES FEET	45 MINUTES FEET	60 MINUTES FEET
10	25		10	—	—	—

IF FLOWING, GIVE RATE GPM	PUMP INTAKE SET AT FEET	WATER AT END OF TEST	RECOMMENDED PUMP TYPE	RECOMMENDED PUMP SETTING FEET	RECOMMENDED PUMPING RATE GPM
	60	1 ☒ CLEAR 2 ☐ CLOUDY	☐ SHALLOW ☐ DEEP	45	15

LOCATION OF WELL

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



DRILLERS REMARKS:

FINAL STATUS OF WELL

1 ☒ WATER SUPPLY; 2 ☐ OBSERVATION WELL; 3 ☐ TEST HOLE; 4 ☐ RECHARGE WELL; 5 ☐ ABANDONED, INSUFFICIENT SUPPLY; 6 ☐ ABANDONED, POOR QUALITY; 7 ☐ UNFINISHED

WATER USE

1 ☒ DOMESTIC; 2 ☐ STOCK; 3 ☐ IRRIGATION; 4 ☐ INDUSTRIAL; ☐ OTHER; 5 ☐ COMMERCIAL; 6 ☐ MUNICIPAL; 7 ☐ PUBLIC SUPPLY; 8 ☐ COOLING OR AIR CONDITIONING; 9 ☐ NOT USED

METHOD OF DRILLING

1 ☒ CABLE TOOL; 2 ☐ ROTARY (CONVENTIONAL); 3 ☐ ROTARY (REVERSE); 4 ☐ ROTARY (AIR); 5 ☐ AIR PERCUSSION; 6 ☐ BORING; 7 ☐ DIAMOND; 8 ☐ JETTING; 9 ☐ DRIVING

CONTRACTOR

NAME OF WELL CONTRACTOR: McLAUGHLIN WATER WELLS | LICENCE NUMBER: 3518

ADDRESS: 38 DOLMAN ST BRESLAU ont

NAME OF DRILLER OR BORER: ROB McLAUGHLIN | LICENCE NUMBER: T-0348

SIGNATURE OF CONTRACTOR: R McLaughlin | SUBMISSION DATE: DAY 24 MO 06 YR 87

OFFICE USE ONLY

DATA SOURCE | CONTRACTOR | DATE RECEIVED: FEB 18 1988

DATE OF INSPECTION: 9/11/88 | INSPECTOR

REMARKS:

MINISTRY OF THE ENVIRONMENT COPY

FORM NO. 0506—4—77 FORM 7

Ontario **Ministry of the Environment**

The Ontario Water Resources Act

WATER WELL RECORD

Print only in spaces provided.
Mark correct box with a checkmark, where applicable.

11 **2514585** Municipality 25010 GR W

County or District	Township/Borough/City/Town/Village	Con block tract survey, etc.	Lot
[redacted]	Normanby	CONCESSION	42
	Address RR#1 Molsten	Date completed 25 day 4 month 01 year	

21 Northing RC Elevation RC Basin Code

LOG OF OVERBURDEN AND BEDROCK MATERIALS (see instructions)

General colour	Most common material	Other materials	General description	Depth - feet From	Depth - feet To
Brown	gravel	stones sand		0	48
Brown	sand	silt	wet	48	54
Brown	gravel	course sand	water	54	76

31

32

41 WATER RECORD

Water found at - feet	Kind of water
70-76	1 ☐ Fresh 2 ☐ Salty 3 ☐ Sulphur 4 ☐ Minerals 5 ☐ Gas — UNKNOWN
	1 ☐ Fresh 2 ☐ Salty 3 ☐ Sulphur 4 ☐ Minerals 5 ☐ Gas
	1 ☐ Fresh 2 ☐ Salty 3 ☐ Sulphur 4 ☐ Minerals 5 ☐ Gas
	1 ☐ Fresh 2 ☐ Salty 3 ☐ Sulphur 4 ☐ Minerals 5 ☐ Gas
	1 ☐ Fresh 2 ☐ Salty 3 ☐ Sulphur 4 ☐ Minerals 5 ☐ Gas

51 CASING & OPEN HOLE RECORD

Inside diam inches	Material	Wall thickness inches	Depth - feet From	Depth - feet To
6	1 ☑ Steel 2 ☐ Galvanized 3 ☐ Concrete 4 ☐ Open hole 5 ☐ Plastic	188	+1	72
	1 ☐ Steel 2 ☐ Galvanized 3 ☐ Concrete 4 ☐ Open hole 5 ☐ Plastic			
	1 ☐ Steel 2 ☐ Galvanized 3 ☐ Concrete 4 ☐ Open hole 5 ☐ Plastic			

SCREEN

Sizes of opening (Slot No.)	Diameter	Length
20 SS	6" tel inches	3' feet
Material and type	**Depth at top of screen**	
S.S 2' leadpipe	73 feet	

61 PLUGGING & SEALING RECORD

☑ Annular space ☐ Abandonment

Depth set at - feet From	Depth set at - feet To	Material and type (Cement grout, bentonite, etc.)
0	40	Benseal

71 PUMPING TEST

Pumping test method	Pumping rate	Duration of pumping
☐ Pump ☑ Bailer	30 GPM	1 Hours ..... Mins

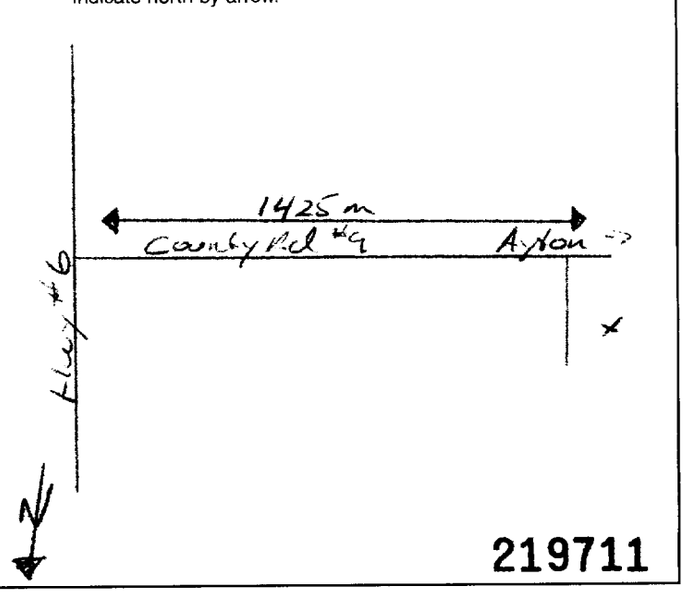
Static level	Water level end of pumping	Water levels during ☐ Pumping ☑ Recovery			
		15 minutes	30 minutes	45 minutes	60 minutes
26 feet	feet	feet	feet	26 feet	26 feet

If flowing give rate	Pump intake set at	Water at end of test
GPM	feet	☑ Clear ☐ Cloudy

Recommended pump type	Recommended pump setting	Recommended pump rate
☐ Shallow ☑ Deep	60 feet	20 GPM

LOCATION OF WELL

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



219711

FINAL STATUS OF WELL

1 ☑ Water supply 2 ☐ Observation well 3 ☐ Test hole 4 ☐ Recharge well 5 ☐ Abandoned, insufficient supply 6 ☐ Abandoned, poor quality 7 ☐ Abandoned (Other) 8 ☐ Dewatering 9 ☐ Unfinished 10 ☐ Replacement well

WATER USE

1 ☑ Domestic 2 ☐ Stock 3 ☐ Irrigation 4 ☐ Industrial 5 ☐ Commercial 6 ☐ Municipal 7 ☐ Public supply 8 ☐ Cooling & air conditioning 9 ☐ Not use 10 ☐ 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 .....

Name of Well Contractor	Well Contractor's Licence No.
Highland Water Wells	2576
Address Box 141 Durham N0G 1R0	
Name of Well Technician	Well Technician's Licence No.
Erich Wilson	7013
Signature of Technician/Contractor	Submission date day 26 mo 4 yr 01

MINISTRY USE ONLY

Data source | Contractor 2576 | Date received MAY 08 2001

Date of inspection | Inspector

Remarks

CSS.ES1

0506 (11/98) Front Form 9

2 - MINISTRY OF THE ENVIRONMENT COPY

Ontario Ministry of the Environment

06-30K

Well Tag No. (below) A026068

A026068

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 Management Coordinator at 416-235-6203.
- **All metre measurements shall be reported to 1/10th of a metre.**
- Please print clearly in blue or black ink only.

Ministry Use Only

MUN | CON | LOT

Well Owner's Information and Location of Well Information

[redacted]

GREY | NORMANBY | 43 | 2 W GR

RR#/Street Number/Name: 122724 GREY ROAD 9 | City/Town/Village | Site/Compartment/Block/Tract etc.

GPS Reading: NAD 83 | Zone 17 | Easting 515171 | Northing 4877168 | Unit Make/Model: GARMIN ETREX | Mode of Operation: [X] Undifferentiated [ ] Averaged [ ] Differentiated, specify

Log of Overburden and Bedrock Materials (see instructions)

General Colour	Most common material	Other Materials	General Description	Depth From	Depth To
BROWN	SAND			0	4.6
	GRAVEL	SAND		4.6	8.5
	CLAY	GRAVEL		8.5	10.7
	CLAY	GRAVEL SAND.		10.7	20.7
	GRAVEL			20.7	22.5

DEPTH 73'

Hole Diameter

Depth From	Depth To	Diameter Centimetres
0	21.4	23
21.4	22.5	15.6

Water Record

Water found at ___ Metres / Kind of Water

- 22 m [X] Fresh [ ] Sulphur [ ] Gas [ ] Salty [ ] Minerals [ ] Other:
- ___ m [ ] Fresh [ ] Sulphur [ ] Gas [ ] Salty [ ] Minerals [ ] Other:
- ___ m [ ] Fresh [ ] Sulphur [ ] Gas [ ] Salty [ ] Minerals [ ] Other:

After test of well yield, water was: [X] Clear and sediment free [ ] Other, specify

Chlorinated [X] Yes [ ] No

Construction Record

Inside diam centimetres	Material	Wall thickness centimetres	Depth From	Depth To
Casing				
16	[X] Steel [ ] Fibreglass [ ] Plastic [ ] Concrete [ ] Galvanized	.48	.76 +0	21.4
	[ ] Steel [ ] Fibreglass [ ] Plastic [ ] Concrete [ ] Galvanized			
	[ ] Steel [ ] Fibreglass [ ] Plastic [ ] Concrete [ ] Galvanized			
Screen				
Outside diam	[X] Steel [ ] Fibreglass [ ] Plastic [ ] Concrete [ ] Galvanized	Slot No.		
14		MAASS SANDBLOCKER	21.4	22.4
No Casing or Screen				
	[ ] Open hole			

Test of Well Yield

Pumping test method: PUMP

	Draw Down Time min	Draw Down Water Level Metres	Recovery Time min	Recovery Water Level Metres
Static Level		11.62		11.89
1	1	11.82	1	11.68
2	2	11.82	2	11.68
3	3	11.82	3	11.68
4	4	11.86	4	11.66
5	5	11.86	5	11.66
10	10	11.86	10	11.66
15	15	11.89	15	11.62
20	20	11.89	20	11.62
25	25	11.89	25	11.62
30	30	11.89	30	11.62
40	40	11.89	40	11.62
50	50	11.89	50	11.62
60	60	11.89	60	11.62

Pump intake set at - (metres): 18

Pumping rate - (litres/min): 55

Duration of pumping: 1 hrs + 0 min

Final water level end of pumping: 11.89 metres

Recommended pump type: [ ] Shallow [X] Deep

Recommended pump depth: 18 metres

Recommended pump rate: 38 (litres/min)

If flowing give rate - (litres/min):

If pumping discontinued, give reason.

Plugging and Sealing Record

[X] Annular space [ ] Abandonment

Depth set at - Metres From	Depth set at - Metres To	Material and type (bentonite slurry, neat cement slurry) etc.	Volume Placed (cubic metres)
0	12	BENTONITE SLURRY	.3

Method of Construction

[ ] Cable Tool [ ] Rotary (air) [ ] Diamond [ ] Digging
[X] Rotary (conventional) [ ] Air percussion [ ] Jetting [ ] Other
[ ] Rotary (reverse) [ ] Boring [ ] Driving

Water Use

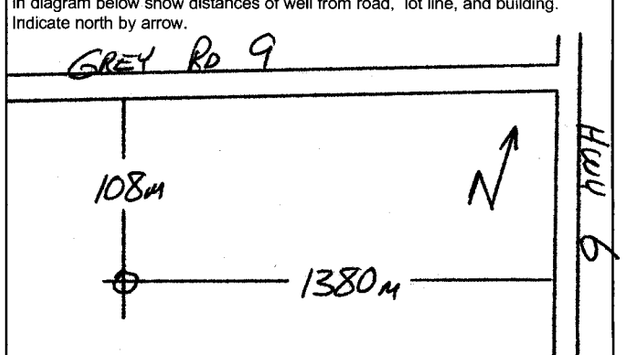
[X] Domestic [ ] Industrial [ ] Public Supply [ ] Other
[ ] Stock [ ] Commercial [ ] Not used
[ ] Irrigation [ ] Municipal [ ] Cooling & air conditioning

Final Status of Well

[X] Water Supply [ ] Recharge well [ ] Unfinished [ ] Abandoned, (Other)
[ ] Observation well [ ] Abandoned, insufficient supply [ ] Dewatering
[ ] Test Hole [ ] Abandoned, poor quality [ ] Replacement well

Location of Well

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



Audit No. Z 38450

Date Well Completed: YYYY 2006 MM 07 DD 18

Was the well owner's information package delivered? [X] Yes [ ] No

Date Delivered: YYYY 2006 MM 07 DD 20

Well Contractor/Technician Information

Name of Well Contractor: MEADOWBANK DRILLING SERVICES | Well Contractor's Licence No.: 6865

Business Address (street name, number, city etc.): RR 1 FLORA ON N0B 1S0

Name of Well Technician (last name, first name): HUGH BROADFOOT | Well Technician's Licence No.: T1897

Signature of Technician/Contractor: X [signature] | Date Submitted: YYYY 2006 MM 07 DD 31

Ministry Use Only

Data Source | Contractor: 6865

Date Received: YYYY AUG 02 2006 MM DD | Date of Inspection: YYYY MM DD

Remarks | Well Record Number

0506E (09/03) Contractor's Copy [ ] Ministry's Copy [ ] Well Owner's Copy [ ]

Cette formule est disponible en français

Ontario — Ministry of the Environment

Well Tag#: A161153 (t Below)

TAG # A161153

Well Record

Regulation 903 Ontario Water Resources Act

Page ____ of ____

Measurements recorded in: ☐ Metric ☑ Imperial

Well Owner's Information

First Name	Last Name / Organization	E-mail Address	☐ Well Constructed by Well Owner
1262841	ONT. INC		

Mailing Address (Street Number/Name)	Municipality	Province	Postal Code	Telephone No. (inc. area code)
Box 23 AYTON	WEST GREY	ONTARIO	N0G 1C0	

Well Location

Address of Well Location (Street Number/Name)	Township	Lot	Concession
FIRE # 311764	NORMANBY	20	GRD 1

County/District/Municipality	City/Town/Village	Province	Postal Code
WEST GREY		Ontario	N0G 1C0

UTM Coordinates	Zone	Easting	Northing	Municipal Plan and Sublot Number	Other
NAD 83	17	507015	4890969		

Overburden and Bedrock Materials/Abandonment Sealing Record *(see instructions on the back of this form)*

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	Depth (m/ft) To
	Topsoil			0	2FT
	STONES & GRAVEL & SAND			2	100
BROWN	CLAY			100	110
	GRAVEL			110	115

Annular Space

Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m^3/ft^3)
0	20FT	50 GAL Grout Slurry	
		150 LBS 3/8 Hole Plug	

Method of Construction

☐ Cable Tool ☐ Diamond
☑ Rotary (Conventional) ☐ Jetting
☐ Rotary (Reverse) ☐ Driving
☐ Boring ☐ Digging
☐ Air percussion
☐ Other, specify

Well Use

☐ Public ☐ Commercial ☐ Not used
☑ Domestic ☐ Municipal ☐ Dewatering
☐ Livestock ☐ Test Hole ☐ Monitoring
☐ Irrigation ☐ Cooling & Air Conditioning
☐ Industrial
☐ Other, specify

Construction Record - Casing

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	Depth (m/ft) To
6 INCH	STEEL	1188	0	112FT

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From	Depth (m/ft) To

Status of Well

☑ Water Supply
☐ Replacement Well
☐ Test Hole
☐ Recharge Well
☐ Dewatering Well
☐ Observation and/or Monitoring Hole
☐ Alteration (Construction)
☐ Abandoned, Insufficient Supply
☐ Abandoned, Poor Water Quality
☐ Abandoned, other, specify
☐ Other, specify

Water Details

Water found at Depth (m/ft)	Kind of Water	Other, specify
115 (m/ft)	☑ Fresh ☐ Untested ☐ Gas	
(m/ft)	☐ Fresh ☐ Untested ☐ Gas	
(m/ft)	☐ Fresh ☐ Untested ☐ Gas	

Hole Diameter

Depth (m/ft) From	To	Diameter (cm/in)
0	20FT	10 inch
20	112FT	9 inch
112	115FT	6 inch

Results of Well Yield Testing

After test of well yield, water was:
☑ Clear and sand free
☐ Other, specify

If pumping discontinued, give reason:

Pump intake set at (m/ft): AIR-Pump 115FT

Pumping rate (l/min / GPM): 10 GPM

Duration of pumping: 2 hrs + ____ min

Final water level end of pumping (m/ft): 55FT

If flowing give rate (l/min / GPM)

Recommended pump depth (m/ft): 80FT

Recommended pump rate (l/min / GPM): 7 GPM

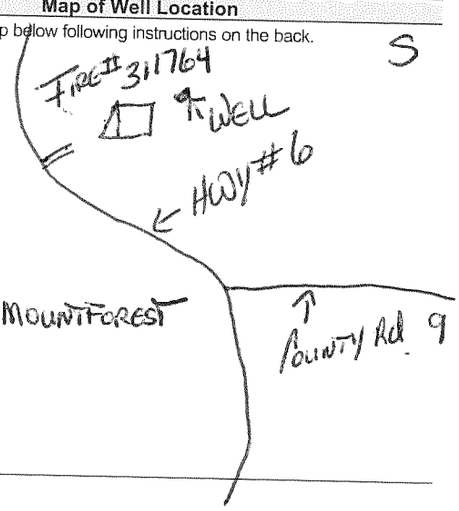
Well production (l/min / GPM): 10 GPM

Disinfected? ☑ Yes ☐ No

	Draw Down Time (min)	Draw Down Water Level (m/ft)	Recovery Time (min)	Recovery Water Level (m/ft)
Static Level		40FT		50FT
1		47FT	1	43
2		50FT	2	40FT
3			3	
4			4	
5			5	
10			10	
15			15	
20			20	
25			25	
30			30	
40			40	
50			50	
60			60	

Map of Well Location

Please provide a map below following instructions on the back.



Comments:

Well Contractor and Well Technician Information

Business Name of Well Contractor	Well Contractor's Licence No.
KAUFMAN INVESTMENTS LTD.	L0634

Business Address (Street Number/Name)	Municipality	Province	Postal Code	Business E-mail Address
214023 HWY #6 RR#1 DURHAM	WEST GREY	ONTARIO	N0G 1R0	

Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)	Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted
1936933344	KAUFMAN, PAUL	1252		2014/12/31

Well owner's information package delivered	Date Package Delivered	Date Work Completed
☐ Yes ☐ No	2014 09 25	2014 09 04

Ministry Use Only

Audit No Z 195649

Received JAN 21 2015

Ministry's Copy

Ontario — Ministry of the Environment

Well Tag No. (Plate below): Tag #: A171029
TAG# A 171029

Well Record

Regulation 903 Ontario Water Resources Act

Page ____ of ____

Measurements recorded in: ☐ Metric ☑ ~~Imperial~~

Well Owner's Information

First Name	Last Name / Organization	E-mail Address	☐ Well Constructed by Well Owner
1262841	ONT. INC		

Mailing Address (Street Number/Name)	Municipality	Province	Postal Code	Telephone No. (inc. area code)
BOX 23 AYTON		ONTARIO	N0G1C0	

Well Location

Address of Well Location (Street Number/Name)	Township	Lot	Concession
FIRE # 311764	NORMANBY	20	GREY 1

County/District/Municipality	City/Town/Village	Province	Postal Code
WESTGREY		Ontario	N0G1C0

UTM Coordinates	Zone	Easting	Northing	Municipal Plan and Sublot Number	Other
NAD 8 3	17	516611	4876190		

Overburden and Bedrock Materials/Abandonment Sealing Record *(see instructions on the back of this form)*

General Colour	Most Common Material	Other Materials	General Description	Depth (m/ft) From	Depth (m/ft) To
			SEALING off 8 FOOT DUG WELL		

Annular Space

Depth Set at (m/ft) From	To	Type of Sealant Used (Material and Type)	Volume Placed (m^3/ft^3)
8FT	4FT	GRAVEL	
4FT	1FT	3/8 HOLEPLUG	
1	OFT	GROUND.	

Method of Construction

☐ Cable Tool ☐ Diamond
☐ Rotary (Conventional) ☐ Jetting
☐ Rotary (Reverse) ☐ Driving
☐ Boring ☐ Digging
☐ Air percussion
☐ Other, *specify*

Well Use

☐ Public ☐ Commercial ☑ ~~Not used~~
☐ Domestic ☐ Municipal ☐ Dewatering
☐ Livestock ☐ Test Hole ☐ Monitoring
☐ Irrigation ☐ Cooling & Air Conditioning
☐ Industrial
☐ Other, *specify*

Construction Record - Casing

Inside Diameter (cm/in)	Open Hole OR Material (Galvanized, Fibreglass, Concrete, Plastic, Steel)	Wall Thickness (cm/in)	Depth (m/ft) From	Depth (m/ft) To

Construction Record - Screen

Outside Diameter (cm/in)	Material (Plastic, Galvanized, Steel)	Slot No.	Depth (m/ft) From	Depth (m/ft) To

Status of Well

☐ Water Supply
☐ Replacement Well
☐ Test Hole
☐ Recharge Well
☐ Dewatering Well
☐ Observation and/or Monitoring Hole
☐ Alteration (Construction)
☐ Abandoned, Insufficient Supply
☑ ~~Abandoned~~, Poor Water Quality
☐ Abandoned, other, *specify*
☐ Other, *specify*

Water Details

Water found at Depth (m/ft)	Gas	Kind of Water: Fresh	Untested	Other, *specify*
	☐	☐	☐	☐
	☐	☐	☐	☐
	☐	☐	☐	☐

Hole Diameter

Depth (m/ft) From	To	Diameter (cm/in)

Results of Well Yield Testing

After test of well yield, water was:
☐ Clear and sand free
☐ Other, *specify*

If pumping discontinued, give reason:

Pump intake set at (m/ft)

Pumping rate (l/min / GPM)

Duration of pumping ____ hrs + ____ min

Final water level end of pumping (m/ft)

If flowing give rate (l/min / GPM)

Recommended pump depth (m/ft)

Recommended pump rate (l/min / GPM)

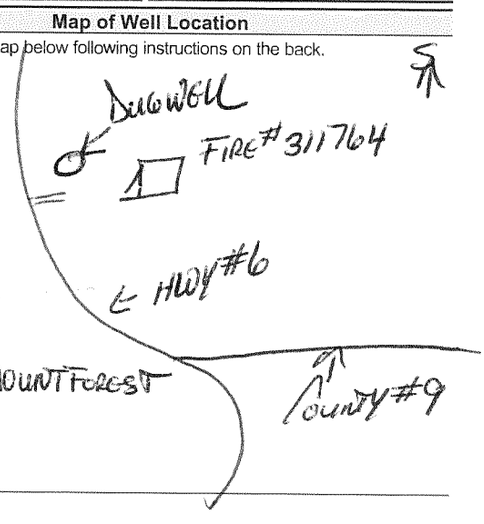
Well production (l/min / GPM)

Disinfected? ☐ Yes ☐ No

	Draw Down Time (min)	Draw Down Water Level (m/ft)	Recovery Time (min)	Recovery Water Level (m/ft)
Static Level				
1			1	
2			2	
3			3	
4			4	
5			5	
10			10	
15			15	
20			20	
25			25	
30			30	
40			40	
50			50	
60			60	

Map of Well Location

Please provide a map below following instructions on the back.



Comments:

Well Contractor and Well Technician Information

Business Name of Well Contractor	Well Contractor's Licence No.
KAUFMAN INVESTMENTS LTD.	6634

Business Address (Street Number/Name)	Municipality	Province	Postal Code	Business E-mail Address
314023 HWY #6 RR#1	DURHAM WESTGREY	ONTARIO	N0G1R0	

Bus. Telephone No. (inc. area code)	Name of Well Technician (Last Name, First Name)	Well Technician's Licence No.	Signature of Technician and/or Contractor	Date Submitted
5193693344	KAUFMAN PAUL	1922		2014/12/31

Well owner's information package delivered	Date Package Delivered	Date Work Completed
☐ Yes ☑ ~~No~~	2014/09/25	2014/09/04

Ministry Use Only

Audit No. Z 195648

JAN 21 2015 Received

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APPENDIX B:
BOREHOLE LOGS

Testhole ID: BH-1

CLIENT Teeswater Concrete Ltd.
PROJECT NAME Aggregate Resource Assessment
PROJECT NUMBER 218045-1
PROJECT LOCATION 311804 Hwy 6, Mount Forest
DATE COMPLETED 02-Feb-2023
CONTRACTOR Choice Sonic Drilling
LOGGED BY Corbin Sweet
METHOD Sonic Drill
WELL CONSTRUCTION
DATE MEASURED

DEPTH (m)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION
		0.46	TOPSOIL, Dark Brown, Frozen, trace SAND and GRAVEL
		1.30	GRAVELLY SAND with trace SILT, dry, light brown
		2.67	SAND with some GRAVEL and SILT, dry, light brown
5		5.18	GRAVEL and SAND with trace COBBLES, dry, light greyish brown
		6.10	Fine-to-Medium SAND with some GRAVEL, dry, light brown
		6.40	SILT, SAND, and GRAVEL, dry, darker brown
		8.53	CLAYEY SILT, moist, greyish brown
10		9.75	CLAY with some SILT, moist-to-saturated, greyish brown [Groundwater Inferred to be encountered @ ~9.1 mbgs during drilling]
		11.58	GRAVELLY SILT with some CLAY, Brownish Grey

Testhole Terminated at 11.60 m.

Testhole ID: BH-2

CLIENT Teeswater Concrete Ltd.
PROJECT NAME Aggregate Resource Assessment
PROJECT NUMBER 218045-1
PROJECT LOCATION 311804 Hwy 6, Mount Forest
DATE COMPLETED 02-Feb-2023
CONTRACTOR Choice Sonic Drilling
LOGGED BY Corbin Sweet
METHOD Sonic Drill
WELL CONSTRUCTION
DATE MEASURED

DEPTH (m)	SAMPLE TYPE NUMBER	GRAPHIC LOG		MATERIAL DESCRIPTION
			0.61	TOPSOIL, Dark Brown, Frozen
			3.05	SAND and GRAVEL with some COBBLES, dry, light greyish brown
			4.88	COBBLES and BOULDERS with SAND and GRAVEL
5			7.62	SAND and GRAVEL with trace COBBLES, dry, light brown
			8.38	SAND with some GRAVEL and trace SILT, dry, light brown
			9.45	SILT and SAND, moist, brown
10			11.58	SILT with some SAND, moist, light brown
			13.11	SANDY SILT with trace GRAVEL and Organics, light brown, dry-to-moist
			13.64	SILT with some CLAY, dry-to-moist, light brown
			14.63	CLAY with some SILT, stiff, grey, moist

Testhole Terminated at 14.60 m.

Testhole ID: BH-3

CLIENT Teeswater Concrete Ltd.
PROJECT NAME Aggregate Resource Assessment
PROJECT NUMBER 218045-1
PROJECT LOCATION 311804 Hwy 6, Mount Forest
DATE COMPLETED 02-Feb-2023
CONTRACTOR Choice Sonic Drilling
LOGGED BY Corbin Sweet
METHOD Sonic Drill
WELL CONSTRUCTION
DATE MEASURED

DEPTH (m)	SAMPLE TYPE NUMBER	GRAPHIC LOG		MATERIAL DESCRIPTION
			0.61	TOPSOIL, dark brown, frozen
			1.98	GRAVELLY COBBLES and SAND, dry, greyish brown
			5.50	SAND and GRAVEL with COBBLES and trace BOULDERS, dry - Increasing sand content below ~4.9 mbgs
5			7.62	Fine SAND and GRAVEL with some COBBLES and trace SILT, dry
			8.53	SANDY SILT with some GRAVEL, dry-to-moist
			9.75	SAND with some SILT and trace GRAVEL and Organics, dry
10			10.06	SILT and CLAY, moist, mottled brown and grey
			13.11	SAND and GRAVEL, dry, greyish brown
			14.63	SAND, GRAVEL, and some SILT, dry, light brown
15			15.85	SAND and GRAVEL with trace SILT, dry, light brown
			16.46	Fine to Medium SAND with some GRAVEL, dry, light brown
			17.68	Fine-to-Medium SAND with some SILT and GRAVEL, dry, light brown
			19.20	SAND and GRAVEL with Trace SILT, wet, brown
20			19.81	SAND and GRAVEL, moist-to-dry, greyish brown
			20.73	SILTY Fine-to-Medium SAND, moist-to-saturated, brown
			23.77	Coarse SAND, saturated, brownsih grey, saturated

Testhole Terminated at 23.80 m.

Testhole ID: BH-4

CLIENT Teeswater Concrete Ltd. **PROJECT NAME** Aggregate Resource Assessment

PROJECT NUMBER 218045-1 **PROJECT LOCATION** 311804 Hwy 6, Mount Forest

DATE COMPLETED 02-Feb-2023 **CONTRACTOR** Choice Sonic Drilling

LOGGED BY Corbin Sweet **METHOD** Sonic Drill

WELL CONSTRUCTION **DATE MEASURED**

DEPTH (m)	SAMPLE TYPE NUMBER	GRAPHIC LOG		MATERIAL DESCRIPTION
			0.46	TOPSOIL, dark brown, frozen
				SAND and GRAVEL with some COBBLES, light grey, dry
5			6.10	
				Medium SAND with some GRAVEL and trace SILT, greyish brown, dry
			8.53	
			9.45	SAND, GRAVEL, COBBLES, and BOULDERS, greyish brown, dry - Increasing cobbles and boulders with depth
10				SAND, GRAVEL, and COBBLES with minor silty interbeds (-0.3 to 0.5m thick), greyish brown, dry - Difficult drilling due to cobbles and boulders
			10.97	
				SAND and GRAVEL, greyish brown, dry - Decreasing gravel content with depth
			13.11	
			14.02	SAND with some GRAVEL, light brown, dry
			14.63	SAND with some GRAVEL and SILT, dry, light brown - Increasing silt content with depth
15				SILTY SAND, light brown, dry
			16.15	
				SAND, GRAVEL, and COBBLES with minor thin, silty interbeds (i.e. ~0.05 m thick), dry-to-moist
			17.68	
				Coarse GRAVEL and COBBLES, greyish brown, wet-to-saturated Saturated @ ~ 19.2 mbgs
20			20.12	
			20.73	SILTY CLAY, firm-to-stiff, saturated, brownish grey
				Coarse GRAVEL with some SAND, light greyish brown, saturated
			22.25	
				SAND and GRAVEL with trace SILT, saturated, light brown
			23.77	
				GRAVEL with some Coarse SAND, saturated, greyish brown
25			25.30	
				SILTY SAND grading to CLAYEY SILT, saturated, light greyish brown
			26.82	

Testhole Terminated at 26.80 m.

Testhole ID: BH-5

CLIENT Teeswater Concrete Ltd.
PROJECT NAME Aggregate Resource Assessment
PROJECT NUMBER 218045-1
PROJECT LOCATION 311804 Hwy 6, Mount Forest
DATE COMPLETED 03-Feb-2023
CONTRACTOR Choice Sonic Drilling
LOGGED BY Corbin Sweet
METHOD Sonic Drill
WELL CONSTRUCTION
DATE MEASURED

DEPTH (m)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION
		0.25	TOPSOIL, dark brown, frozen
		1.22	CLAYEY SILT with some SAND and GRAVEL
			SAND and GRAVEL, dry, light brown - coarser sand with depth
		4.57	
5		5.49	SAND with some GRAVEL and a little SILT, light brown, dry
		6.55	Medium SAND, dry, light brown
		8.53	Medium-to-Fine SAND with some SILT, dry, light brown
		8.99	SILT with SAND, dry, light brown
10			SAND and GRAVEL -minor sand interbeds (~0.3 to 0.5 m thick) below ~10.6 mbgs
		11.58	
			CLAY with some SILT, firm, mottled brown and grey
		14.63	
15		15.85	SILTY CLAY with some SAND, firm, greyish brown
		16.61	Coarse SAND and GRAVEL, dry, light greyish brown
		17.68	SAND and GRAVEL with some SILT, light brown, dry - Increasing SILT with depth
			SILT and SAND, light brown, dry
20		20.73	

Testhole Terminated at 20.70 m.

Testhole ID: BH-6

CLIENT Teeswater Concrete Ltd.
PROJECT NAME Aggregate Resource Assessment
PROJECT NUMBER 218045-1
PROJECT LOCATION 311804 Hwy 6, Mount Forest
DATE COMPLETED 03-Feb-2023
CONTRACTOR Choice Sonic Drilling
LOGGED BY Corbin Sweet
METHOD Sonic Drill
WELL CONSTRUCTION
DATE MEASURED

DEPTH (m)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION
		0.30	TOPSOIL, dark brown, frozen
		1.22	CLAYEY SILT, dark brown, moist
			Coarse SAND and GRAVEL, light brown, dry
5		5.18	
			SILTY SAND with some minor interbeds of sand and gravel, greyish brown, dry
10		10.97	
		11.73	Coarse-to-Medium SAND with some GRAVEL and trace SILT, light brown, dry
			SILTY SAND, light brown, dry - Increasing silt with depth
		13.11	
			Coarse SAND with GRAVEL, dry, light greyish brown
		14.63	
15			Coarse SAND and GRAVEL with COBBLES, light greyish brown, dry-to-saturated
			[Inferred Groundwater Table @ ~ 16.5 mbgs]
20		21.64	
			Coarse SAND with GRAVEL, light brown, saturated - Increasing gravel and cobbles with depth
		23.77	
			SILTY SAND, light brown, saturated
25		25.91	
		26.82	CLAY with some SILT, greyish brown, saturated

Testhole Terminated at 26.80 m.

Testhole ID: BH-7

CLIENT Teeswater Concrete Ltd.
PROJECT NAME Aggregate Resource Assessment
PROJECT NUMBER 218045-1
PROJECT LOCATION 311804 Hwy 6, Mount Forest
DATE COMPLETED 03-Feb-2023
CONTRACTOR Choice Sonic Drilling
LOGGED BY Corbin Sweet
METHOD Sonic Drill
WELL CONSTRUCTION
DATE MEASURED

DEPTH (m)	SAMPLE TYPE NUMBER	GRAPHIC LOG		MATERIAL DESCRIPTION
			0.61	TOPSOIL, dark brown, frozen
			1.07	SAND, GRAVEL, COBBLES, and trace Organics, dark brown, moist
				SAND, GRAVEL, and COBBLES, dark brown, moist
			3.96	
5				SILT with SAND, light brown, dry-to wet - Appears wet between ~4.9 and 5.4 mbgs
			5.49	
			6.40	Medium-to-Fine SAND, moist-to-dry, light brown
				SILTY SAND, light brown, dry-to-moist
10			10.36	
				SILT and Fine SAND, wet-to-saturated, light greyish brown - Saturated ~ 10.7 mbgs - Increased compaction with depth
			14.02	
			14.63	GRAVEL, COBBLES, and Coarse SAND, saturated, brownish grey
15			15.09	SILTY SAND, saturated, light brown
				SAND, GRAVEL, and COBBLES, saturated, greyish brown - increasing coarse gravel and cobble content with depth
			17.68	
				GRAVEL and COBBLES with some SAND, saturated, grey - Increasing sand and decreasing cobble content with depth
20				
25			25.91	
			26.52	Coarse SAND with some SILT, saturated, greyish brown
			26.82	SILT with some SAND and CLAY, saturated, firm, light brown
				Testhole Terminated at 26.80 m

Testhole ID: BH-8

CLIENT Teeswater Concrete Ltd.
PROJECT NAME Aggregate Resource Assessment
PROJECT NUMBER 218045-1
PROJECT LOCATION 311804 Hwy 6, Mount Forest
DATE COMPLETED 03-Feb-2023
CONTRACTOR Choice Sonic Drilling
LOGGED BY Corbin Sweet
METHOD Sonic Drill
WELL CONSTRUCTION
DATE MEASURED

DEPTH (m)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION
		0.30	TOPSOIL, dark brown, frozen
			SAND and GRAVEL with COBBLES, light greyish brown, dry - Increasing sand content below ~4.6 mbgs
5		5.49	
			Interbedded Layers (i.e. 0.3 to 0.5 m thick beds) of SAND, SILT, and GRAVEL, dry, brown to light brown
		7.62	
		8.53	SAND, GRAVEL, and COBBLES with trace SILT, dry, light brown **Rod Manipulator Rod Broke on Sonic Drill Rig, Drilling Program Halted**

Testhole Terminated at 8.50 m.

Testhole ID: TH-1

CLIENT Teeswater Concrete Ltd.
PROJECT NAME Aggregate Resource Assessment
PROJECT NUMBER 218045-1
PROJECT LOCATION 311804 Hwy 6, Mount Forest
DATE COMPLETED 02-Feb-2023
CONTRACTOR Teeswater Concrete
LOGGED BY Corbin Sweet
METHOD Excavator
WELL CONSTRUCTION
DATE MEASURED

DEPTH (m)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION
			TOPSOIL, dark brown, frozen
0.30			Medium-to-Coarse SAND and GRAVEL with COBBLES and trace BOULDERS
1			
2			
3			
4			
5			
5.50			Testhole Terminated at 5.50 m.

Testhole ID: TH-10

CLIENT Teeswater Concrete Ltd.
PROJECT NAME Aggregate Resource Assessment
PROJECT NUMBER 218045-1
PROJECT LOCATION 311804 Hwy 6, Mount Forest
DATE COMPLETED 02-Feb-2023
CONTRACTOR Teeswater Concrete
LOGGED BY Corbin Sweet
METHOD Excavator
WELL CONSTRUCTION
DATE MEASURED

DEPTH (m)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION
			TOPSOIL, dark brown, frozen
		0.20	Fine SAND and SILT with trace CLAY, dark brown, moist-to-dry
1		1.00	SAND and GRAVEL with some COBBLES and trace BOULDERS
2			
3			
4		4.00	Testhole Terminated at 4.00 m.

Testhole ID: TH-11

CLIENT Teeswater Concrete Ltd.
PROJECT NAME Aggregate Resource Assessment
PROJECT NUMBER 218045-1
PROJECT LOCATION 311804 Hwy 6, Mount Forest
DATE COMPLETED 02-Feb-2023
CONTRACTOR Teeswater Concrete
LOGGED BY Corbin Sweet
METHOD Excavator
WELL CONSTRUCTION
DATE MEASURED

DEPTH (m)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION
			0.15 TOPSOIL, dark brown, frozen
1			Fine SAND and SILT with trace CLAY, dark brown, moist-to-dry
			1.50 SAND and GRAVEL with COBBLES and trace BOULDERS, brown, dry
2			
3			
			3.66 SAND with some SILT and trace CLAY
4			
			4.60

Testhole Terminated at 4.60 m.

Testhole ID: TH-12

CLIENT Teeswater Concrete Ltd.
PROJECT NAME Aggregate Resource Assessment
PROJECT NUMBER 218045-1
PROJECT LOCATION 311804 Hwy 6, Mount Forest
DATE COMPLETED 02-Feb-2023
CONTRACTOR Teeswater Concrete
LOGGED BY Corbin Sweet
METHOD Excavator
WELL CONSTRUCTION
DATE MEASURED

DEPTH (m)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION
			TOPSOIL, dark brown, frozen
0.30			SAND and GRAVEL with COBBLES and trace BOULDERS - Minor fine sand seam ~2.7 mbgs
1			
2			
3			
4			
4.30			Testhole Terminated at 4.30 m.

Testhole ID: TH-13

CLIENT Teeswater Concrete Ltd.
PROJECT NAME Aggregate Resource Assessment
PROJECT NUMBER 218045-1
PROJECT LOCATION 311804 Hwy 6, Mount Forest
DATE COMPLETED 03-Feb-2023
CONTRACTOR Teeswater Concrete
LOGGED BY Corbin Sweet
METHOD Excavator
WELL CONSTRUCTION
DATE MEASURED

DEPTH (m)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION
		0.10	TOPSOIL, dark brown, frozen
			GRAVELLY SILT and SAND, moist-to-dry, brown
1		1.07	
			SAND and GRAVEL with some COBBLES, dry-to-wet
2		2.60	
			Reported Fine-to-Medium GRAVEL with some SAND, saturated - Static Groundwater in the testhole @ 2.6 mbgs
3		3.40	

Testhole Terminated at 3.40 m.

Testhole ID: TH-14

CLIENT Teeswater Concrete Ltd.
PROJECT NAME Aggregate Resource Assessment
PROJECT NUMBER 218045-1
PROJECT LOCATION 311804 Hwy 6, Mount Forest
DATE COMPLETED 03-Feb-2023
CONTRACTOR Teeswater Concrete
LOGGED BY Corbin Sweet
METHOD Excavator
WELL CONSTRUCTION
DATE MEASURED

DEPTH (m)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION
			TOPSOIL, dark brown, frozen
			0.25
			SAND, GRAVEL, and COBBLES, light brown, dry
1			
			1.22
			Interbeds of SAND with SILT and GRAVEL, dry, light brown
			1.52
			Fine SAND with some SILT, dry, light brown
			1.83
2			COBBLES and GRAVEL with some coarse SAND, brownish grey
			2.74
			Coarse SAND with some minor GRAVEL interbeds, dry, light brownish grey
3			
4			
			4.40
			4.50 SILT with SAND, dry, light brown

Testhole Terminated at 4.50 m.

Testhole ID: TH-15

CLIENT Teeswater Concrete Ltd.
PROJECT NAME Aggregate Resource Assessment
PROJECT NUMBER 218045-1
PROJECT LOCATION 311804 Hwy 6, Mount Forest
DATE COMPLETED 03-Feb-2023
CONTRACTOR Teeswater Concrete
LOGGED BY Corbin Sweet
METHOD Excavator
WELL CONSTRUCTION
DATE MEASURED

DEPTH (m)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION
0			SAND and SILT with some Organics, dry, dark brown
1.00			SAND, GRAVEL, and COBBLES, with some BOULDERS, greyish brown, dry
4.90			Testhole Terminated at 4.90 m.

Testhole ID: TH-16

CLIENT Teeswater Concrete Ltd.
PROJECT NAME Aggregate Resource Assessment
PROJECT NUMBER 218045-1
PROJECT LOCATION 311804 Hwy 6, Mount Forest
DATE COMPLETED 03-Feb-2023
CONTRACTOR Teeswater Concrete
LOGGED BY Corbin Sweet
METHOD Excavator
WELL CONSTRUCTION
DATE MEASURED

DEPTH (m)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION
			TOPSOIL, dark brown, frozen
			0.35
			COBBLES, GRAVEL, and SAND with some small BOULDERS, dry, brownish grey
1			
2			
3			
4			
5			5.00
			Testhole Terminated at 5.00 m.

Testhole ID: TH-17

CLIENT Teeswater Concrete Ltd.
PROJECT NAME Aggregate Resource Assessment
PROJECT NUMBER 218045-1
PROJECT LOCATION 311804 Hwy 6, Mount Forest
DATE COMPLETED 03-Feb-2023
CONTRACTOR Teeswater Concrete
LOGGED BY Corbin Sweet
METHOD Excavator
WELL CONSTRUCTION
DATE MEASURED

DEPTH (m)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION
			TOPSOIL, dark brown, frozen
			0.30
			SAND, GRAVEL, and COBBLES with trace SILT and Organics, dark brown, dry
1			0.91
			Fine-to-Medium laminated SAND, dry, brown
			1.68
2			COBBLES, GRAVEL, and Coarse-to-Medium SAND, brownish grey, dry
3			
4			
			4.90

Testhole Terminated at 4.90 m.

Testhole ID: TH-18

CLIENT Teeswater Concrete Ltd.
PROJECT NAME Aggregate Resource Assessment
PROJECT NUMBER 218045-1
PROJECT LOCATION 311804 Hwy 6, Mount Forest
DATE COMPLETED 03-Feb-2023
CONTRACTOR Teeswater Concrete
LOGGED BY Corbin Sweet
METHOD Excavator
WELL CONSTRUCTION
DATE MEASURED

DEPTH (m)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION
			TOPSOIL, dark brown, frozen
		0.20	SANDY SILT with trace CLAY, dry, brown
1			
		1.22	COBBLES, GRAVEL, and SAND with trace BOULDERS, dry, brownish grey
2			
3			
		3.70	Testhole Terminated at 3.70 m.

Testhole ID: TH-19

CLIENT Teeswater Concrete Ltd.
PROJECT NAME Aggregate Resource Assessment
PROJECT NUMBER 218045-1
PROJECT LOCATION 311804 Hwy 6, Mount Forest
DATE COMPLETED 03-Feb-2023
CONTRACTOR Teeswater Concrete
LOGGED BY Corbin Sweet
METHOD Excavator
WELL CONSTRUCTION
DATE MEASURED

DEPTH (m)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION
			TOPSOIL, dark brown, frozen
			0.30
			COBBLES, SAND, and GRAVEL, brownish grey, dry
1			
2			
			2.70
			SAND and SILT with some GRAVEL, light brown, dry
3			
4			
			4.30

Testhole Terminated at 4.30 m.

Testhole ID: TH-2

CLIENT Teeswater Concrete Ltd.
PROJECT NAME Aggregate Resource Assessment
PROJECT NUMBER 218045-1
PROJECT LOCATION 311804 Hwy 6, Mount Forest
DATE COMPLETED 02-Feb-2023
CONTRACTOR Teeswater Concrete
LOGGED BY Corbin Sweet
METHOD Excavator
WELL CONSTRUCTION
DATE MEASURED

DEPTH (m)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION
			TOPSOIL, dark brown, frozen
		0.25	COBBLES, GRAVEL, Coarse SAND, and BOULDERS, dry, minor imbrications,
1			
2			
3			
4			
5			
		5.50	

Testhole Terminated at 5.50 m.

Testhole ID: TH-20

CLIENT Teeswater Concrete Ltd.
PROJECT NAME Aggregate Resource Assessment
PROJECT NUMBER 218045-1
PROJECT LOCATION 311804 Hwy 6, Mount Forest
DATE COMPLETED 03-Feb-2023
CONTRACTOR Teeswater Concrete
LOGGED BY Corbin Sweet
METHOD Excavator
WELL CONSTRUCTION
DATE MEASURED

DEPTH (m)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION
			TOPSOIL, dark brown, frozen
			0.30
			SAND and GRAVEL with COBBLES, light brown, dry
1			
2			
3			
			3.05
			SAND, SILT, and GRAVEL with some COBBLES
4			
			4.90

Testhole Terminated at 4.90 m.

Testhole ID: TH-21

CLIENT Teeswater Concrete Ltd.
PROJECT NAME Aggregate Resource Assessment
PROJECT NUMBER 218045-1
PROJECT LOCATION 311804 Hwy 6, Mount Forest
DATE COMPLETED 03-Feb-2023
CONTRACTOR Teeswater Concrete
LOGGED BY Corbin Sweet
METHOD Excavator
WELL CONSTRUCTION
DATE MEASURED

DEPTH (m)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION
			TOPSOIL, dark brown, frozen
			0.30
			SILT and Fine SAND with some GRAVEL and trace COBBLES, dry, light brown
1			
2			
3			
			3.40
			Testhole Terminated at 3.40 m.

Testhole ID: TH-22

CLIENT Teeswater Concrete Ltd.
PROJECT NAME Aggregate Resource Assessment
PROJECT NUMBER 218045-1
PROJECT LOCATION 311804 Hwy 6, Mount Forest
DATE COMPLETED 02-Feb-2023
CONTRACTOR Teeswater Concrete
LOGGED BY Corbin Sweet
METHOD Excavator
WELL CONSTRUCTION
DATE MEASURED

DEPTH (m)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION
			TOPSOIL, dark brown, frozen
		0.23	SAND and GRAVEL, greyish brown, dry
		0.46	Laminated Fine-to-Medium SAND with trace SILT, brown, dry
		0.76	SAND, GRAVEL, and COBBLES with trace BOULDERS, brownish grey, dry
1			
2		2.29	Interbedded Coarse-to-Medium SAND and Fine GRAVEL, light brown, dry
3		3.35	Coarse SAND and GRAVEL, brown, dry
4		4.90	

Testhole Terminated at 4.90 m.

Testhole ID: TH-3

CLIENT Teeswater Concrete Ltd.
PROJECT NAME Aggregate Resource Assessment
PROJECT NUMBER 218045-1
PROJECT LOCATION 311804 Hwy 6, Mount Forest
DATE COMPLETED 02-Feb-2023
CONTRACTOR Teeswater Concrete
LOGGED BY Corbin Sweet
METHOD Excavator
WELL CONSTRUCTION
DATE MEASURED

DEPTH (m)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION
			TOPSOIL, dark brown, frozen
			0.30
			SAND, GRAVEL, COBBLES, and BOULDERS, dry, light greyish brown
1			
2			
3			
4			
5			
			5.18
			SAND and SILT with some GRAVEL, dry, light brown
			5.50

Testhole Terminated at 5.80 m.

Testhole ID: TH-4

CLIENT Teeswater Concrete Ltd.
PROJECT NAME Aggregate Resource Assessment
PROJECT NUMBER 218045-1
PROJECT LOCATION 311804 Hwy 6, Mount Forest
DATE COMPLETED 02-Feb-2023
CONTRACTOR Teeswater Concrete
LOGGED BY Corbin Sweet
METHOD Excavator
WELL CONSTRUCTION
DATE MEASURED

DEPTH (m)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION
0			TOPSOIL, dark brown, frozen
0.32			SAND, GRAVEL, and COBBLES, dry, light brown
1			
1.83			SAND with some minor interbeds of fine-to-coarse GRAVEL, brown, dry
2			
3			
3.35			GRAVEL with some coarse SAND and trace COBBLES, light brown, dry
4			
5			
5.18			Interbedded SAND and GRAVEL, light brown, dry
5.50			Testhole Terminated at 5.50 m.

Testhole ID: TH-5

CLIENT Teeswater Concrete Ltd.
PROJECT NAME Aggregate Resource Assessment
PROJECT NUMBER 218045-1
PROJECT LOCATION 311804 Hwy 6, Mount Forest
DATE COMPLETED 02-Feb-2023
CONTRACTOR Teeswater Concrete
LOGGED BY Corbin Sweet
METHOD Excavator
WELL CONSTRUCTION
DATE MEASURED

DEPTH (m)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION
			TOPSOIL, dark brown, frozen
			0.25
			SAND, GRAVEL, COBBLES, and BOULDERS - Less boulders / cobbles below ~3.0 mbgs
1			
2			
3			
			3.70
			Testhole Terminated at 3.70 m.

Testhole ID: TH-6

CLIENT Teeswater Concrete Ltd.
PROJECT NAME Aggregate Resource Assessment
PROJECT NUMBER 218045-1
PROJECT LOCATION 311804 Hwy 6, Mount Forest
DATE COMPLETED 02-Feb-2023
CONTRACTOR Teeswater Concrete
LOGGED BY Corbin Sweet
METHOD Excavator
WELL CONSTRUCTION
DATE MEASURED

DEPTH (m)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION
			TOPSOIL, dark brown, frozen
			0.25
			SAND, GRAVEL, and COBBLES with minor (~0.05m) interbeds of fine SAND, light brown, dry
1			
2			
			2.44
			Fine SAND with trace SILT, dry, light brown
			2.82
3			SAND, GRAVEL, and COBBLES, dry, light brown
4			
			4.30

Testhole Terminated at 4.30 m.

Testhole ID: TH-7

CLIENT Teeswater Concrete Ltd.
PROJECT NAME Aggregate Resource Assessment
PROJECT NUMBER 218045-1
PROJECT LOCATION 311804 Hwy 6, Mount Forest
DATE COMPLETED 02-Feb-2023
CONTRACTOR Teeswater Concrete
LOGGED BY Corbin Sweet
METHOD Excavator
WELL CONSTRUCTION
DATE MEASURED

DEPTH (m)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION
			TOPSOIL, dark brown, frozen
			0.30
			SAND and GRAVEL with COBBLES and BOULDERS with minor interbeds of sand and trace silt
1			
2			
3			
			3.70
			Testhole Terminated at 3.70 m.

Testhole ID: TH-8

CLIENT Teeswater Concrete Ltd.
PROJECT NAME Aggregate Resource Assessment
PROJECT NUMBER 218045-1
PROJECT LOCATION 311804 Hwy 6, Mount Forest
DATE COMPLETED 02-Feb-2023
CONTRACTOR Teeswater Concrete
LOGGED BY Corbin Sweet
METHOD Excavator
WELL CONSTRUCTION
DATE MEASURED

DEPTH (m)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION
			TOPSOIL, dark brown, frozen
			0.40
			SAND, GRAVEL, and COBBLES, dry, light greyish brown
1			
2			
3			
4			
			4.30
			Testhole Terminated at 4.30 m.

Testhole ID: TH-9

CLIENT Teeswater Concrete Ltd.
PROJECT NAME Aggregate Resource Assessment
PROJECT NUMBER 218045-1
PROJECT LOCATION 311804 Hwy 6, Mount Forest
DATE COMPLETED 02-Feb-2023
CONTRACTOR Teeswater Concrete
LOGGED BY Corbin Sweet
METHOD Excavator
WELL CONSTRUCTION
DATE MEASURED

DEPTH (m)	SAMPLE TYPE NUMBER	GRAPHIC LOG	MATERIAL DESCRIPTION
			TOPSOIL, dark brown, frozen
			0.40
			SAND, GRAVEL, and COBBLES, dry, light greyish brown
1			
2			
3			
4			
			4.30
			Testhole Terminated at 4.30 m.

APPENDIX C:
SITE PHOTOGRAPHS

Photograph 1: Proposed Pit Area (Sept 1, 2023).

Photograph 2: Existing Pit Area (Sept 1, 2023).

Photograph 3: Existing Pit Area and Proposed Pit Area (Sept 1, 2023).

Photograph 4: Southerly Wetland Area (Oct 23, 2023).

Photograph 5: Southerly Wooded Area (Sept 1, 2023).

Photograph 6: Site Terrain (Oct 23, 2023).

Photograph 7: Sand and Gravel subsurface material (Oct 23, 2023).

Photograph 8: Test Pit profile (Feb 1, 2023).

Photograph 9: Test Pit profile (Feb 1, 2023).

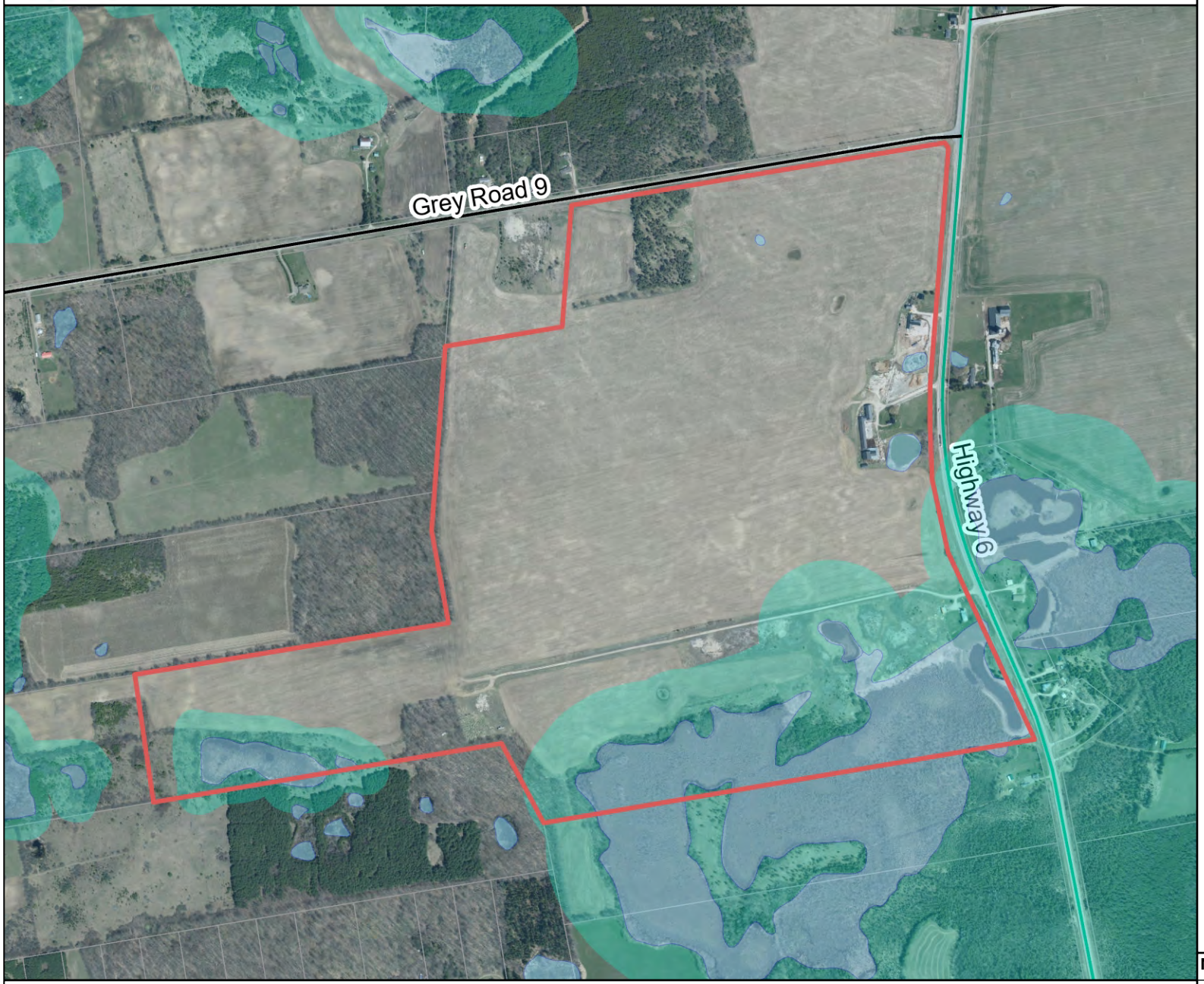
Photograph 10: Drilling Set-up (Feb 1, 2023).

Photograph 11: Material Samples (Feb 1, 2023).

Photograph 12: Material Samples (Feb 1, 2023).

APPENDIX D:
SAUGEEN VALLEY CONSERVATION AUTHORITY MAPPING

SVCA Reg 169/06 Screening Areas



Legend

- Water Features
- Watercourses
- Approximate Regulated and Screen SVCA
  - Approximate Regulated Area
  - Approximate Screening Area
- Large Scale Roads
  - Provincial Highway
  - County Road
  - Township Road
  - Seasonal Road
- Parcels - Current

Notes

787 0 394 787 Meters

WGS_1984_Web_Mercator_Auxiliary_Sphere

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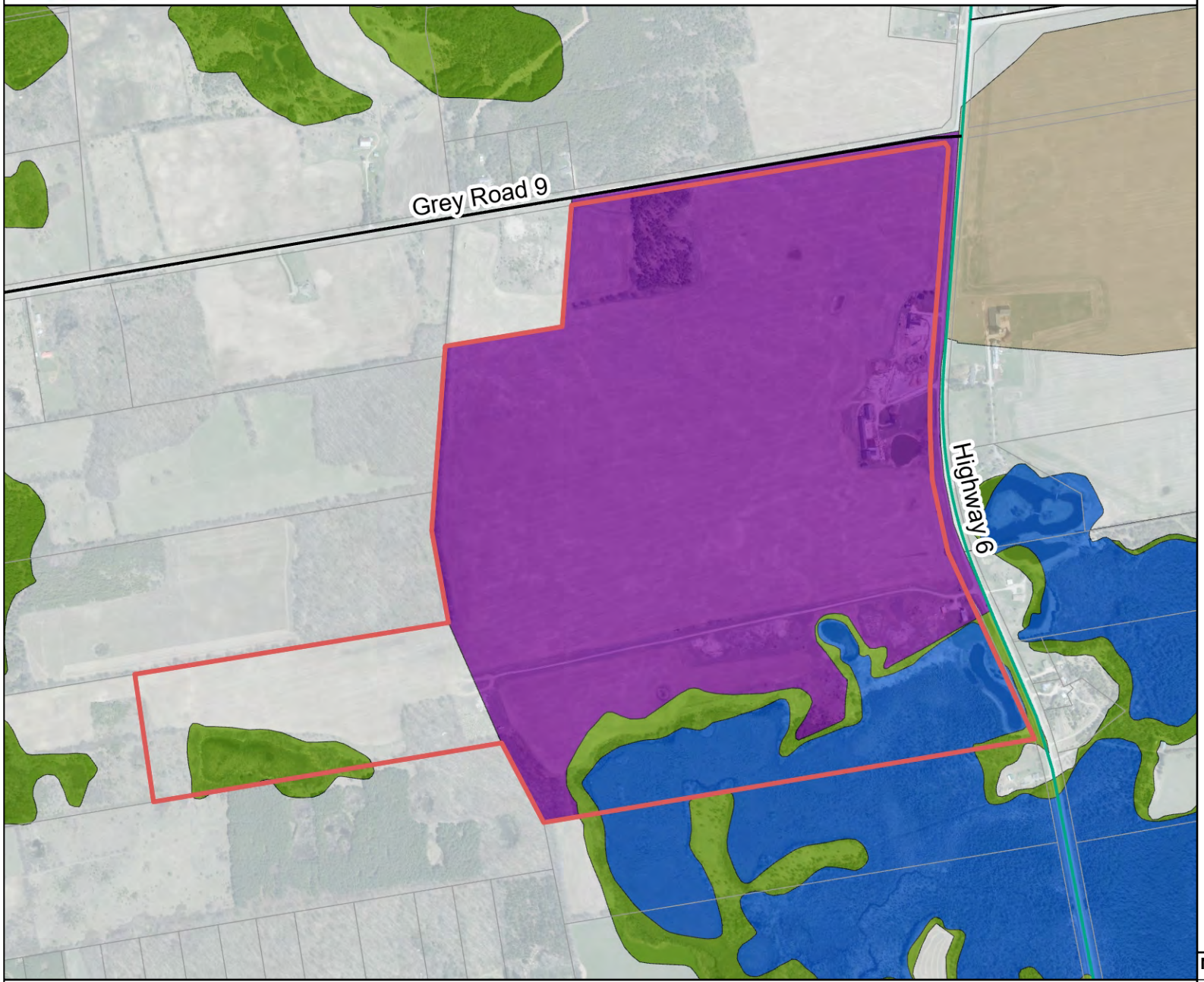
APPENDIX E:
GREY COUNTY OFFICIAL PLAN MAPPING AND INFORMATION

GCOP Zoning Map



Legend

Large Scale Roads
- Provincial Highway
- County Road
- Township Road
- Seasonal Road

Parcels - Current

Land use
- Primary Settlement Area
- Secondary Settlement Area
- Agricultural
- Escarpment Recreation Area
- Hazard Lands
- Escarpment Natural Area
- Inland Lakes & Shoreline
- Niagara Escarpment Plan Area
- Rural
- Space Extensive Industrial and Commerci
- Sunset Strip Area
- Industrial Business Park
- Special Agriculture
- Provincially Significant Wetlands
- Recreation Resort Area

Notes

787 0 394 787 Meters

WGS_1984_Web_Mercator_Auxiliary_Sphere

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