



Detailed Factual Geotechnical and Hydrogeological Subsurface Investigation Report Mayfield Golf Course Redevelopment Golf Course Lands and South Lands Caledon, Ontario

GEMTEC Project: 101987.001



Submitted to:

Mayfield Golf Course Inc. 3190 Steeles Avenue East, Suite 300 Markham, Ontario L3R 1G9

Detailed Factual Geotechnical and Hydrogeological Subsurface Investigation Report Mayfield Golf Course Redevelopment Golf Course Lands and South Lands Caledon, Ontario

> September 26, 2024 GEMTEC Project: 101987.001

GEMTEC Consulting Engineers and Scientists Limited 44 Cedar Point Drive, Units 1101-1104 Barrie, ON, Canada L4N 5R7

September 26, 2024

File: 101987.001 - Rev2

Mayfield Golf Course Inc. 3190 Steeles Avenue East, Suite 300 Markham, Ontario L3R 1G9

Attention: Vimal Patel, P.Eng.

# Re: Detailed Factual Geotechnical and Hydrogeological Subsurface Investigation Report – Mayfield Golf Course Redevelopment 12552 and 12580 Torbram Road, Caledon, Ontario

Enclosed is our Factual Geotechnical and Hydrogeological Subsurface Investigation Report for the detailed design of the proposed subdivision redevelopment project at the Mayfield Golf Course Lands at 12552 and 12580 Torbram Road and the South Lands in Caledon, Ontario. The report presented herein is based on the scope of work summarized in our updated proposal dated April 6, 2023. This report was prepared by Derek M. Franceschini, P.Eng., and Andy Weatherson, M.Env.Sc., P.Geo., and reviewed by Graeme Skinner, PhD., P.Eng. and Chris Kozuskanich, P.Geo.

Derek M. Franceschini, P.Eng. Geotechnical Engineer

Chris Kozuskanich, P.Geo. Senior Hydrogeologist

DMF/AW/CMK/GDS/CLK/sv

Graeme Skinner, PhD., P.Eng. Senior Geotechnical Engineer

\Lucid\Drawings and Files\Projects\101900\101987.001\Deliverables\Reports\Factual\_Report\_2023\101987.001\_RPT\_Rev2\_2024'09'26\_Factual Summary Mayfield Golf Course.docx



ii

# TABLE OF CONTENTS

| 1.0        | INTRODUCTION1   |    |
|------------|---|----|
| 2.0        | PROJECT DESCRIPTION AND SITE GEOLOGY1                               |    |
| 2.1<br>2.2 | Background1<br>Surficial Geology and Physiography2                  |    |
| 2.3        |   |    |
| 2.4        |   |    |
| 3.0        | METHODOLOGY   | 3  |
| 3.1        | Geotechnical Investigation3   | 5  |
| 3.2        | Hydrogeological Investigation5                                      | ,  |
| 3          | 3.2.1 Site Instrumentation  |    |
| 3          | 3.2.2 Hydraulic Response Testing6                                   | j  |
| 4.0        | SUBSURFACE CONDITIONS6  | ;  |
| 4.1        | Topsoil and Organic Materials7                                      | ,  |
| 4.2        | Fill Materials  | ,  |
| 4.3        | Non-Cohesive Sand, Silt and Gravel Deposits8                        | ;  |
| 4.4        | Silty Clay to Clayey Silt or Silty Sand to Sandy Silt Glacial Till8 | ;  |
| 4.5        | Silty Clay9   | )  |
| 4.6        | Slightly Weathered to Fresh Bedrock10                               | )  |
| 4.7        | Groundwater and Surface Water Conditions11                          |    |
| 4.8        | Hydraulic Response Test Results12                                   | •  |
| 4.9        | South Lands Western Half13  | \$ |
| 5.0        | CLOSURE14   | ŀ  |

### LIST OF APPENDICES

- APPENDIX A Conditions and Limitations of This Report
- APPENDIX B Site Figures
- APPENDIX C Record of Boreholes
- APPENDIX D Geotechnical Laboratory Testing Results
- APPENDIX E Rock Core Photos
- APPENDIX F Monitoring Well Construction Information
- APPENDIX G Hydrographs
- APPENDIX H Hydraulic Response Testing Results



### **1.0 INTRODUCTION**

GEMTEC Consulting Engineers and Scientists Limited (GEMTEC) has been requested by Mayfield Golf Course Inc. (Geranium / the Client) to carry out a detailed subsurface investigation for the proposed subdivision redevelopment at the Mayfield Golf Course Lands at 12552 and 12580 Torbram Road and the South Lands in Caledon, Ontario, herein referred to as the Site.

The purpose of the investigation was assess the subsurface conditions at the Site by means of a limited number of boreholes and, based on the factual data obtained, to provide geotechnical engineering and hydrogeological comments and recommendations on the design aspects of developing the Site, including construction considerations that could influence design or construction methodology.

The geotechnical and hydrogeological reporting contained herein is intended to provide a summary of the factual subsurface information collected as part of the field investigation. Recommendations and comments on the design aspects of the development Site will be provided under separate cover.

This report is subject to the Conditions and Limitations of This Report, which follow the text of the report, and are considered an integral part of the report (see Appendix A).

# 2.0 PROJECT DESCRIPTION AND SITE GEOLOGY

### 2.1 Background

The subject property is comprised of two parcels (the Mayfield Golf Course at 12552 and 12580 Torbram Road, the "Mayfield Golf Course Lands", and existing agricultural lands south of the Mayfield Golf Course Lands, the "South Lands") as shown on Figure 1 in Appendix B. The Site is located on the southwest side of Torbram Road approximately 1.2 km to 4.3 km north of Mayfield Road. The Site presently consists of an operating golf course in the Mayfield Golf Course Lands and an open agricultural field in the South lands; pockets of forested land are present within the Mayfield Golf Course Lands. The parcels are bounded on the northeast by Torbram Road and on all other sides by a mixture of residential (near Torbram Road), agricultural, and forested lands. The total Site area is approximately 71 hectares (ha) for the Mayfield Golf Course Lands and 20 ha for the South Lands.

The Mayfield Golf Course Lands vary topographically in elevation (EI.) with undulating terrain ranging from the highest points (approximately EI. 253 m to 258 m) located on the east and west of the central creek (an un-named tributary to Salt Creek) valley to lower elevations (between approximately EI. 239 m and EI. 250 m) observed throughout the central creek valley. The central creek valley is typically about 5 m to 10 m below the uplands to the east and west. The Mayfield Golf Course Lands topography results in variable slope inclinations from the central valley to the uplands areas with most slopes exceeding 18.4° (approximately 3H:1V – Horizontal:Vertical) and

the steepest slopes approaching 40° (approximately 1.2H:1V). The South Lands is generally flat with gently undulating terrain and ground surface elevations ranging from approximately El. 245 m to El. 248 m. The creek valley meanders through the South Lands from northwest to southeast.

It is understood that the Client is planning to develop the Site for residential use with approximately 442 residential units, three stormwater management (SWM) ponds in the Mayfield Golf Course Lands and one SWM pond in the South Lands, and park blocks located along the margin of the central creek valley in both parcels. Stormwater management ponds are anticipated to have permanent pool depths of about 3 m and invert elevations of about El. 247 m, El. 245.5 m, El. 243.5 m, and El. 240 m from the northern to the southern ponds, respectively. The development will have water main and storm/sanitary sewer servicing as well as roadway infrastructure to support the residential lots. The sewer services are proposed to have invert depths up to about 6 m below final grade throughout the Site except along Street A from Torbram Road to Street G where invert depths will range from about 6 m in the central valley to about 16 m at the limits of the Site. The central portion of the Site (within about 75 m to 100 m of the central valley), which currently consists of forested and open lands, is understood to be proposed to remain as such. The current draft plan for the Site is presented on Figure 2 in Appendix B and the approximate Site topography is presented on Figure 3 in Appendix B.

# 2.2 Surficial Geology and Physiography

Surficial geology mapping (Ontario Geological Survey, 2010) indicates that the majority of Site is underlain by predominantly clay- to silt-textured tills, with modern alluvial deposits of clay, silt, sand, and gravel associated with the un-named tributary to Salt Creek (Figure 4, Appendix B). The till is identified as primarily the Wildfield Till, with the older Halton Till present towards the west side of the Site. Paleozoic bedrock geology mapping (Armstrong and Dodge, 2007) indicates that the Site is underlain by shale, siltstone, and minor limestone and sandstone of the Georgian Bay and Queenston Formations.

The Site is located within the physiographic region defined as the South Slope, consisting of clayey silt till and silty clay till, and at lower elevations, consisting of alternating deposits of dense lacustrine sands and silts and over consolidated lacustrine clays and clay tills, all overlying bedrock (Chapman and Putnam, 1984). At this location, drumlinized till plains are the dominant physiographic landform, consistent with surficial geology mapping.

# 2.3 MECP Water Well Records

A review of the Ministry of the Environment, Conservation, and Parks (MECP) water well records (WWR) (MECP, 2021) indicated that there are approximately 23 WWR located within 500 m of the Site (Figure 5, Appendix B), including five domestic supply wells (one of which is also identified as a livestock supply well), one public supply well, three monitoring wells, eight wells no longer in use, and six wells with unidentified uses. Four of the WWR are mapped on-site (locations not confirmed by GEMTEC), including one public supply and one domestic water well, one well of

unknown use and one well that is not used. According to the WWR, overburden thickness ranges from about 7 m to 15 m thick and consists of clay, till, silt, gravel, and some sand (generally consistent with the Record of Boreholes in Appendix C). Bedrock was encountered in eight of the WWR and identified as shale. Static groundwater levels within the overburden ranged from 1.8 m to 7.6 m below ground surface (bgs) in the nearby WWR.

# 2.4 Previous Investigations

GEMTEC was previously retained to carry out a geotechnical investigation at the Site in 2022, at which time six boreholes were advanced across the Site to depths ranging from about 7.8 m to 8.1 m bgs. GEMTEC's previous geotechnical Site investigation is presented in the following report:

• Report No. 101987.001 (2) titled "Due Diligence, Geotechnical and Hydrogeological Assessment Report, Mayfield Golf Course Development, Caledon, Ontario", prepared by GEMTEC and dated July 25, 2023.

The results of the previous geotechnical and hydrogeological site investigation have been reviewed and the factual information from GEMTEC's earlier site investigation has been considered in the current geotechnical and hydrogeological assessment presented herein. GEMTEC understands that minimal to no re-working (i.e., addition / importation, removal / exportation or regrading of the on-site materials as part of ongoing course maintenance) has occurred at the Site since the time of the previous geotechnical investigation. The previous Record of Borehole sheets created for the subject Site have been provided in Appendix C.

### 3.0 METHODOLOGY

### 3.1 Geotechnical Investigation

The field work for the current geotechnical and hydrogeological investigation was carried out between February 6 and March 22, 2023, at which time thirty-one boreholes, identified as Boreholes BH23-E1 to BH23-E3 and BH23-1 to BH23-28, were advanced at the Site to depths ranging between about 7.3 m and 18.3 m bgs. No boreholes were advanced within the western half of the South Lands (i.e., to the west of the central watercourse) due to access constraints. As such, comments provided for the western half of the South Lands below are preliminary and will need to be confirmed through additional Site drilling within that area.

The boreholes were advanced using a track mounted drill rig operated by Walker Drilling Inc. of Utopia, Ontario, who is an MECP-licensed Water Well Contractor. The field work was observed throughout by a member of our geotechnical engineering staff who directed the drilling operations and logged the samples and boreholes.

Standard Penetration Testing (SPT) and sampling were carried out at regular intervals of depth in the boreholes using conventional 38-milimeter (mm) internal diameter split spoon sampling



equipment driven by an automatic hammer in accordance with the SPT procedures outlined in ASTM International Standard D1586: "Standard Test Method for Standard Penetration Test (SPT) and Split-Barrel Sampling of Soils". The split-spoon samplers used in the investigations limit the maximum particle size that can be sampled and tested to about 38 mm. Therefore, particles or objects that may exist within the soils that are larger than this dimension were not sampled or represented in the grain size distributions. The results of the in situ field tests (i.e., SPT "N"-values), as presented on the Record of Borehole sheets and in subsequent sections of this report, are the values measured directly in the field and are unfactored / uncorrected. Bedrock coring was carried out in Boreholes BH23-11, BH23-12 and BH23-17 using HQ-sized rotary diamond drilling equipment to investigate the depth, type, and quality of the bedrock at the borehole locations.

Following the fieldwork, the soil samples and rock cores were returned to GEMTEC's laboratory for examination by a geotechnical engineer. Selected samples of the soil and rock were tested for water content, grain size distribution, Atterberg limits, chemical analysis (i.e., corrosivity) testing, and unconfined compressive strength (UCS), as applicable.

All of the boreholes advanced as part of drilling program were completed with nominal 50 mm diameter monitoring wells except for Boreholes BH23-3, BH23-13, BH23-14, BH23-16, BH23-20, BH23-25 and BH23-27. Six selected boreholes (i.e., BH23-6S/D, BH23-10S/D, BH23-17S/D, BH23-21S/D, BH23-23S/D and BH23-28S/D) were also completed with bi-level monitoring well installations (i.e., monitoring wells in separate and adjacent boreholes screened at different depths) to assess vertical hydraulic gradient. Monitoring well installation details are presented on the Record of Borehole sheets included in Appendix C. Otherwise, the boreholes were backfilled upon completion in accordance with the requirements of the Revised Regulations of Ontario (R.R.O.) 1990, Ontario Regulation 903 (as amended) of the Ontario Water Resources Act. It is understood that the monitoring wells installed as part of subsequent development activities at the Site.

The borehole locations were selected by GEMTEC in consultation with the project team and staked out on Site by R-PE Surveying Ltd. (R-PE). The ground surface elevations for each borehole location were taken from the Site layout figure created by R-PE for Project Number 22-206, dated March 30, 2023. The as-built monitoring well installations, drive-point piezometers and staff gauges were also surveyed by R-PE relative to a geodetic datum and the coordinates and elevations were provided to GEMTEC.

Descriptions of the subsurface conditions observed in the boreholes are provided on the Record of Borehole sheets in Appendix C. The results of the laboratory tests on soil samples are also provided on the Record of Borehole sheets (Appendix C), and detailed laboratory testing results are presented in Appendix D. Photographs of the collected rock core samples, identifying the tested segments of core, are presented in Appendix E.

#### 3.2 Hydrogeological Investigation

#### 3.2.1 Site Instrumentation

Monitoring wells were installed at 24 locations in the overburden, overburden and bedrock, and bedrock as follows:

- Overburden Boreholes BH23-E1, BH23-E2, BH23-E3, BH23-1, BH23-2, BH23-4, BH23-5, BH23-6S/D, BH23-7, BH23-8, BH23-9, BH23-10S/D, BH23-11, BH23-15, BH23-17S, BH23-19, BH23-21S/D, BH23-22, BH23-3S, BH23-24, BH23-26, and BH23-28S/D.
- Overburden and Bedrock (2 locations) Boreholes BH23-18 and BH23-23D.
- Bedrock Boreholes BH23-12 and BH23-17D.

Bi-level monitoring well installations (i.e., shallow (S) and deep (D) monitoring well pairs) were installed at Boreholes BH23-6, BH23-10, BH23-17, BH23-21, BH23-23 and BH23-28 for a total of thirty monitoring well standpipes. The monitoring wells were constructed using nominal 50 mm diameter, Schedule 40 polyvinyl chloride (PVC) pipe with a No. 10 machine slotted screen (0.01-inch slot). The annular space between the monitoring well screen and surrounding soils was backfilled with a silica sand pack to a maximum of 0.9 m above the top of the screen, and the remainder of the annular space was filled with bentonite. The monitoring wells were mostly completed with above-ground protective steel casings, except for BH23-E1 and BH23-E2 which had flush-mounted protective steel casings installed at ground surface. Detailed of the well construction methodology and hydrogeological observations are summarized on Tables F-1 to F-3 in Appendix F.

Following installation, the monitoring wells selected for hydraulic response testing along with those that were sampled for environmental purposes were developed to remove drilling fluids (if used), solids or other particles that may have been introduced during drilling/installation. The monitoring wells were purged using dedicated 16 mm inside diameter low density polyethylene (LDPE) tubing and a D-25 Waterra<sup>™</sup> foot valve. The monitoring wells were developed by removing three well volumes or pumping until dry.

In addition, and in communication with Beacon Environmental (Beacon), GEMTEC manually installed four pairs of drive-point piezometers (DP23-1 to DP23-4) and staff gauges (SG23-1 to SG23-4) on April 14, 2023, to monitor shallow groundwater and surface water levels, respectively. The locations were determined by Beacon and included tributaries and vegetated swales in the northwestern portion of the Site (as shown on Figure 1 in Appendix B). The drive-point piezometers were constructed using 0.0254 m diameter black steel piping with barbless 0.02 m diameter by 0.3 m long stainless steel Solinst Model 615 drive-point tips. The staff gauges consisted of T-bar fenceposts. The drive-point piezometers were installed adjacent to the

tributaries and the staff gauges were installed within the tributaries, both of which were installed using a fencepost driver. The drive-point piezometers were installed to depths ranging from about 1.3 m to 1.7 m bgs, each of which extended below the adjacent tributary bed.

To provide continuous record of water level monitoring from spring to fall 2023, a Van Essen TD-Diver datalogger was installed at each drive-point piezometer and staff gauge location. Hydrographs for the water level data obtained to date are provided as Figures G-1 to G-4 in Appendix G.

### 3.2.2 Hydraulic Response Testing

In-situ hydraulic response testing was carried out in twelve of the monitoring wells (i.e., Boreholes BH23-2, BH23-5, BH23-6D, BH23-9, BH23-10D, BH23-11, BH23-12, BH23-21S, BH23-21D, BH23-23S, BH23-23D and BH23-26) to estimate the bulk horizontal hydraulic conductivity (K<sub>b</sub>) of the overburden and/or bedrock materials adjacent to the screened intervals. The testing consisted of creating an instantaneous change through rapid purging in the well by removing a known volume of water, followed by recording the time taken for the water level to return to static conditions (i.e., rising head test). The data was analyzed using the Hvorslev (1951) solution. Sheets summarizing the test data, analysis interval, input parameters and estimated bulk hydraulic conductivity for each test location are provided as Figures H-1 to H-12 in Appendix H.

# 4.0 SUBSURFACE CONDITIONS

As previously indicated, the soil and groundwater conditions identified in the boreholes are presented on the Record of Borehole sheets in Appendix C. The Record of Borehole sheets indicate the subsurface conditions at the specific borehole locations only. Boundaries between zones on the Record of Borehole sheets are often not distinct, but rather are transitional and have been interpreted from discontinuous drilling observations. The precision with which subsurface conditions are indicated depends on the method of drilling, the frequency and recovery of samples, the method of sampling, and the uniformity of the subsurface conditions. Subsurface conditions at locations other than the boreholes may vary from the conditions encountered in the boreholes, both laterally and with depth. In addition to soil variability, fill of variable physical and chemical composition is present in portions of the Site associated with previous construction activities (i.e., parking areas, buildings, etc.).

The groundwater conditions described in this report refer only to those measured at the place and time of observation, as noted in the report. These conditions may vary seasonally and annually, or as a result of groundwater takings in the area.

The soil descriptions in this report are based on commonly accepted methods of classification and identification employed in geotechnical practice. Classification and identification of soil and rock involves judgement and GEMTEC does not guarantee descriptions as exact but infers accuracy to the extent that is common in current geotechnical practice.

The subsurface soil conditions at the Site generally comprise of surficial topsoil and fill materials overlying interlayered deposits of glacial till (cohesive and non-cohesive) and silty clay to clayey silt, as well as silt, sand and gravel, all underlain by bedrock consisting of interbedded limestone and shale. The cohesive glacial till and clay deposits were typically found in the upland areas at higher elevations while the non-cohesive silt, sand and gravel and glacial till deposits were typically found in the valley lands, underlying the cohesive deposits. The following presents an overview of the subsurface conditions encountered in the boreholes advanced during the current geotechnical Site investigation, in consideration of the conditions reported in the previous geotechnical investigations (GEMTEC 2022).

# 4.1 Topsoil and Organic Materials

A surficial layer of topsoil ranging in thickness from about 80 mm to 690 mm was encountered across the majority of the Site outside of the roadways, cart paths and parking areas. Additionally, organic soil materials were encountered in Boreholes BH23-E1, BH23-4, BH23-5 and BH23-16 at depths ranging from about 0.3 m to 2.1 m and ranged in thickness from about 0.3 m to 2.1 m. The organic materials were fully penetrated in all boreholes where they were encountered to depths ranging from about 0.6 m to 4.0 m.

Please note that the topsoil and organic materials encountered during the investigation were not tested for soil fertility and may not be able to support the long-term growth of new or existing plant life as part of the proposed development work.

# 4.2 Fill Materials

Various fill materials were found at surface in Boreholes BH23-1 to BH23-6, BH23-13 and BH23-E2 extending to depths of up to about 2.9 m. The fill materials are assumed to be associated with the construction of maintenance areas and grade raise fill within the northern portion of the Mayfield Golf Course Lands from the previous development(s). The fill materials were typically comprised of sandy gravel or silty sand (non-cohesive) and silty clay (cohesive). Most of the fill materials at the Site were observed to contain organic inclusions.

Standard penetration tests carried out in the non-cohesive sandy gravel or silty sand fill materials gave SPT N-values ranging from about 17 blows to 24 blows per 0.3 m of penetration, which generally indicates a compact state of compactness.

Standard penetration tests carried out in the cohesive silty clay fill materials gave SPT N-values ranging from about 4 blows to 33 blows per 0.3 m of penetration, which generally suggests a soft to hard consistency.

The single water content value measured on a sample of the non-cohesive fill material was about 19 per cent. The water content values measured on samples of the cohesive fill materials ranged

from about 18 per cent to 33 per cent. No additional laboratory testing was carried out on the fill materials.

# 4.3 Non-Cohesive Sand, Silt and Gravel Deposits

Native deposits of gravel, silty gravel, sand, silty sand, silt, silt of slight plasticity and deposits containing mixtures of sand and gravel or silt and sand were encountered in all boreholes except Boreholes BH23-E1, BH23-E3, BH23-1, BH23-4, BH23-5, BH23-8, BH23-11 to BH23-14, BH23-17, BH23-20, BH23-22 to BH23-24 and BH23-25. The non-cohesive deposits were frequently associated with rock fragments and slow auger advancement resulting from grinding against presumed cobbles and boulders. The deposits were typically encountered below and interlayered with the finer grained glacial till and cohesive soils (as described below).

Standard penetration tests carried out in the non-cohesive deposits gave SPT N-values ranging from about 16 blows per 0.3 m of penetration to 50 blows per 0.08 m of penetration, which generally indicates a compact to very dense compactness condition.

The water content values measured on samples of the non-cohesive deposits ranged from about 4 per cent to 21 per cent with higher water content values encountered below the water table.

Fourteen grain size distribution tests were undertaken on the non-cohesive deposits and the detailed results are presented in Appendix D.

### 4.4 Silty Clay to Clayey Silt or Silty Sand to Sandy Silt Glacial Till

Cohesive and non-cohesive glacial till deposits were encountered in all boreholes except Borehole BH23-3 and were generally interlayered with each other as well as with the silty clay deposits. The cohesive glacial till deposits were typically comprised of silty clay or silty clay to clayey silt, were frequently observed to contain rock fragments and be sandy and/or gravelly with isolated sand pockets and sand seams present within the deposits. The non-cohesive glacial till typically comprised of silty sand to sandy silt with frequent rock fragments and occasional silt seams. The cohesive glacial till deposits were typically found at higher elevations overlying the non-cohesive sand, silt and gravel deposits, and the non-cohesive glacial till was typically encountered near the overburden/bedrock contact. All of the glacial till deposits were frequently associated with slow auger advancement resulting from grinding against presumed cobbles and boulders.

Standard penetration tests carried out in the cohesive till deposits gave SPT N-values ranging from about 12 blows to 98 blows per 0.3 m of penetration, which suggests a stiff to hard consistency. However, most SPT N-values were approximately 20 blows or more per 0.3 m of penetration, suggesting a very stiff to hard consistency.



Standard penetration tests carried out in the non-cohesive till deposits gave SPT N-values ranging from about 30 blows per 0.3 m of penetration to 50 blows per 0.08 m of penetration, which indicates a dense to very dense compactness condition with greater values encountered at depth.

The water content values measured on samples of the cohesive glacial till ranged from about 8 per cent to 18 per cent, but were generally between about 10 per cent to 15 per cent. The water content values measured on samples of the non-cohesive glacial till ranged from about 7 per cent to 10 per cent.

Seven grain size distribution tests were undertaken on the glacial till deposits and the detailed results are presented in Appendix D.

Atterberg limits testing was carried out on selected samples of the cohesive glacial till deposits and returned plastic limits ranging from about 14 per cent to 16 per cent, liquid limits ranging from about 20 per cent to 27 per cent, and plasticity indices ranging from about 6 per cent to 11 per cent; indicating that the deposits have low plasticity.

# 4.5 Silty Clay

Cohesive deposits of silty clay were encountered in all boreholes except Boreholes BH23-11, BH23-12, BH23-16 and BH23-21 and were generally interlayered with the glacial till deposits (described above). Oxidation staining was noted in isolated portions of the deposits and organic inclusions were noted within about the upper 1.5 m of the deposits in Boreholes BH23-E1, BH23-E2 and BH23-23. The deposits contained isolated sand seems and sand pocket as well as rock fragments which were typically encountered at greater depth near the interface with the non-cohesive deposits or underlying bedrock. The deposits were interlayered with the glacial till deposits and were typically found at higher elevations overlying the non-cohesive sand, silt and gravel deposits.

Standard penetration tests carried out in the silty clay deposits gave SPT N-values ranging from about 5 blows per 0.3 m of penetration to 50 blows per 0.13 m of penetration, suggesting a firm to hard consistency. However, the SPT N-Values typically ranged from about 15 blows to 45 blows per 0.3 m of penetration, suggesting a very stiff to hard consistency. Field shear vane testing was not carried out due to the high relative in situ stiffness of the materials.

The water content values measured on samples of the silty clay deposits ranged from about 9 per cent to 27 per cent.

Three grain size distribution tests were undertaken on the silty clay deposits and the detailed results are presented in Appendix D.

Atterberg limits testing was carried out on selected samples of the silty clay deposits and returned plastic limits ranging from about 17 per cent to 22 per cent, liquid limits ranging from about



28 per cent to 38 per cent, and plasticity indices ranging from about 12 per cent to 18 per cent; indicating that the deposits have low plasticity.

# 4.6 Slightly Weathered to Fresh Bedrock

Bedrock coring was undertaken at Boreholes BH23-11, BH23-12 and BH23-17 at depths ranging from about 7.3 m to 18.3 m bgs. The encountered bedrock generally consisted of grey, weathered to fresh LIMESTONE bedrock of the Georgian Bay Formation with interbedded SHALE layers. Cobbles and boulders of both the native bedrock and transported rock material (i.e., not native to the Site) were encountered overlying the bedrock in Borehole BH23-11 between approximately 3 m and 7.8 m bgs. Auger/SPT refusal on presumed bedrock contact was also encountered in Boreholes BH23-5, BH23-8, BH23-18, BH23-23 and BH23-28. Details of the depths at which bedrock was encountered in each borehole are provided below in Table 0.

| Borehole No.          | Overburden Depth<br>(m bgs) | Surface of Bedrock<br>(El. m) |
|-----------------------|-----------------------------|-------------------------------|
| BH23-5 <sup>1.</sup>  | 10.7                        | 247.5                         |
| BH23-8 <sup>1.</sup>  | 7.3                         | 245.7                         |
| BH23-11               | 7.8                         | 238.2                         |
| BH23-12               | 7.9                         | 247.0                         |
| BH23-17               | 13.3                        | 239.7                         |
| BH23-18 <sup>1.</sup> | 16.2                        | 238.3                         |
| BH23-23 <sup>1.</sup> | 14.4                        | 235.5                         |
| BH23-28 <sup>1.</sup> | 18.3                        | 237.6                         |

#### Table 0 – Estimated Bedrock Depths and Elevations.

Note: 1. Denotes inferred bedrock contact based on SPT and auger refusal without bedrock coring.

Rock Quality Designation (RQD) values between about 38 per cent and 97 per cent were measured. However, below the upper 0.5 m to 1.0 m of bedrock, RQD values of 89 per cent to 97 percent were typically encountered. The measured RQD values generally indicate that the quality of the bedrock is poor to fair in the upper 0.5 m to 1.0 m and excellent below the upper 1.0 m according to the classification system provided in Section 3.2.4.5 of the Canadian Foundation Engineering Manual (CFEM).

Unconfined compressive strength (UCS) testing of two bedrock core samples within the lower, higher quality bedrock was undertaken and resulted in UCS values of about 62 MPa and 74 MPa, indicating the bedrock strength can be classified as strong according to the classification system provided in Section 3.2.4.1 of CFEM. Details of the UCS testing results are presented in Appendix D. It should be noted that UCS testing tends to provide results more typical of the

stronger portions of the bedrock core due to the test requirements for specimen dimensions (i.e., intact specimens with roughly a 1:1 to 2:1 height to width ratio). Bedrock core photographs are provided in Appendix E indicating the sections of the core which were submitted for laboratory testing.

# 4.7 Groundwater and Surface Water Conditions

Details of the monitoring well installations are summarized in Table F-1 in Appendix F. Groundwater and surface water levels were measured in the monitoring wells between April 11 and 14, 2023 and on May 18, 2023. The water level data are provided in Table F-2, Appendix F. The groundwater levels were measured relative to the top of the PVC standpipe (top of steel pipe for drive-point piezometers) at each monitoring well location and drive-point piezometer, and the surface water levels were measured relative to the top of the T-bar fencepost. Groundwater conditions may not have stabilized at all monitoring well and drive-point piezometer locations on the dates measured. The groundwater conditions described in this report refer only to those measured at the place and time of observation. Seasonal and annual fluctuations should be anticipated.

On May 18, 2023, the depth to groundwater ranged from about -0.55 m bgs (i.e., 0.55 m above grade (Borehole BH23-1) to 6.91 m bgs (Borehole BH23-26), and from approximate elevations of El. 258.5 m above sea level (asl) (Borehole BH23-1) to El. 241.8 m asl (Borehole BH23-26). The groundwater elevation data measured on May 18, 2023 are presented on Figure 6 in Appendix B. An exception occurred at BH23-28S/D where flowing artesian conditions were encountered on the measurement dates. Static groundwater levels and elevations have not been assessed at this location at the time of reporting.

On May 18, 2023, the vertical hydraulic gradients at the drive-point piezometer and staff gauge pairs were downward (i.e., recharging conditions) at DP23-1/SG23-1, DP23-3/SG23-3 and DP23-4/SG23-4, and upward (i.e., discharging conditions) at DP23-2/SG23-2. The hydrographs presented in Appendix G typically show similar vertical hydraulic gradient directions over the current monitoring period (i.e., April 17 to May 18, 2023), although some vertical gradient direction changes are recorded at DP23-3/SG23-3 and DP23-4/SG23-4.

At the bi-level monitoring well locations (i.e., Boreholes BH23-6S/D, BH23-10S/D, BH23-17S/D, BH23-21S/D, BH23-23S/D, and BH23-28S/D), vertical hydraulic gradients were assessed from the groundwater elevations measured on May 18, 2023. The approximate vertical hydraulic gradients for the bi-level monitoring wells were as follows:

- BH23-6S/D: -0.40 m/m
- BH23-10S/D: -0.21 m/m
- BH23-17S/D: -0.08 m/m
- BH23-21S/D: 0.04 m/m



- BH23-23S/D: -0.33 m/m
- BH23-28S/D: Undetermined due to flowing artesian conditions in both wells.

The majority of the vertical hydraulic gradients are negative, indicating downward gradients (i.e., recharging conditions). The vertical hydraulic gradient at BH23-21S/D is positive, indicating an upward gradient (i.e., discharging conditions) at this location. Flowing artesian conditions were observed at both BH23-28S and BH23-28D. As such, the vertical hydraulic gradient could not be estimated at this location. Artesian conditions were also observed at Borehole BH23-1.

### 4.8 Hydraulic Response Test Results

The results of the hydraulic response testing carried out in the monitoring wells are presented as Figures H-1 to H-12, Appendix H. The hydraulic conductivity values estimated from the rising head tests are presented in Table G-3, Appendix G. The following provides a summary of the test results:

| Predominant Unit                           | No. of<br>Tests | Minimum K₀<br>[m/s]  | Maximum K <sub>♭</sub><br>[m/s] | Geomean K₅<br>[m/s]  |
|--|-----------------|----------------------|---------------------------------|----------------------|
| Silt and/or Sand,<br>Silt and/or Sand Till | 7               | 9 x 10 <sup>-8</sup> | 3 x 10 <sup>-6</sup>            | 3 x 10 <sup>-7</sup> |
| Silty Clay & Silty Clay Till               | 3               | 1 x 10 <sup>-8</sup> | 4 x 10 <sup>-8</sup>            | 2 x 10 <sup>-8</sup> |
| Sand & Silt Till & Bedrock                 | 1               | 1 x 10 <sup>-7</sup> | 1 x 10 <sup>-7</sup>            | 1 x 10 <sup>-7</sup> |
| Bedrock                                    | 1               | 2 x 10 <sup>-8</sup> | 2 x 10 <sup>-8</sup>            | 2 x 10 <sup>-8</sup> |

# Table 4.7 – Summary Hydraulic Conductivity Estimates

Notes:  $K_b = bulk$  hydraulic conductivity; m/s = metres per second

The hydraulic conductivity of the silt and/or sand and silt and/or sand tills ranged from approximately 9 x  $10^{-8}$  m/s to 3 x  $10^{-6}$  m/s with a geometric mean of 3 x  $10^{-7}$  m/s (n=7). These hydraulic conductivity values fall within the literature range for silty sand to glacial till of  $10^{-8}$  m/s to  $10^{-5}$  m/s (Fetter, 1994).

The hydraulic conductivity of the silty clay and silty clay till materials ranged from approximately 1 x  $10^{-8}$  m/s to 4 x  $10^{-8}$  m/s with a geometric mean of 2 x  $10^{-8}$  m/s. These hydraulic conductivity values fall within the literature range for clay of  $10^{-11}$  m/s to  $10^{-8}$  m/s and glacial till of  $10^{-8}$  to  $10^{-6}$  m/s (Fetter, 1994).

The hydraulic conductivity of the sand and silt till and bedrock was  $1 \times 10^{-7}$  m/s. This hydraulic conductivity value falls within the literature range for glacial till of  $10^{-8}$  m/s to  $10^{-6}$  m/s (Fetter, 1994) and limestone of  $5 \times 10^{-9}$  to  $5 \times 10^{-6}$  m/s (Freeze & Cherry, 1979).

The hydraulic conductivity of the limestone bedrock was  $2 \times 10^{-8}$  m/s. This hydraulic conductivity value falls within the literature range for limestone of  $5 \times 10^{-9}$  to  $5 \times 10^{-6}$  m/s (Freeze & Cherry, 1979).

# 4.9 South Lands Western Half

No boreholes were advanced within the west half of the South Lands as part of previous or current site investigations. As such, the material within this portion of the Site has been inferred based on the nearby boreholes on the east half of the parcel and publicly available geological data for the area.

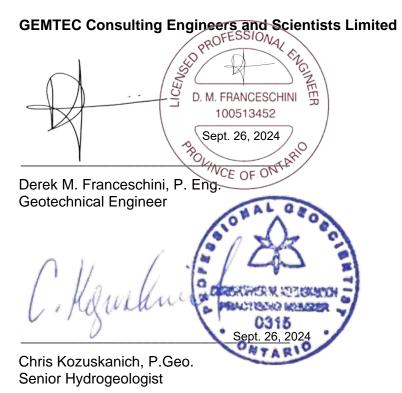
Based on the geotechnical boreholes, provincial overburden mapping by the Ontario Geological Survey (OGS) and well records available from the Ministry of Environment, Conservation and Parks (MECP), the soils within the western half of the South Lands are anticipated to be consistent with the soils encountered within the remainder of the parcel (i.e., interlayered cohesive glacial till and silty clay generally overlying non-cohesive deposits of silt, sand, gravel and glacial till, all underlain by an inferred bedrock contact).



#### 5.0 CLOSURE

We trust that this report provides sufficient geotechnical and hydrogeological information to advance the detailed design of the proposed development. If you have any questions regarding the contents of this report or require additional information, please do not hesitate to contact this office.

Regards,



Yin

Graeme Skinner, PhD., P. Eng. Senior Geotechnical Engineer

# APPENDIX A

Conditions and Limitations of This Report





- 1. **Standard of Care:** GEMTEC has prepared this report in a manner consistent with generally accepted engineering or environmental consulting practice in the jurisdiction in which the services are provided at the time of the report. No other warranty, expressed or implied is made.
- 2. **Copyright:** The contents of this report are subject to copyright owned by GEMTEC, save to the extent that copyright has been legally assigned by us to another party or is used by GEMTEC under license. To the extent that GEMTEC owns the copyright in this report, it may not be copied without our prior written agreement for any purpose other than the purpose indicated in this report. The methodology (if any) contained in this report is provided to the Client in confidence and must not be disclosed or copied to third parties without the prior written agreement of GEMTEC. Disclosure of that information may constitute an actionable breach of confidence or may otherwise prejudice our commercial interests.
- 3. **Complete Report:** This report is of a summary nature and is not intended to stand alone without reference to the instructions given to GEMTEC by the Client, communications between GEMTEC and the Client and to any other reports prepared by GEMTEC for the Client relative to the specific site described in the report. In order to properly understand the suggestions, recommendations and opinions expressed in this report, reference must be made to the whole of the report. GEMTEC can not be responsible for use of portions of the report without reference to the entire report.
- 4. Basis of Report: This Report has been prepared for the specific site, development, design objectives and purposes that were described to GEMTEC by the Client. The factual data, interpretations and recommendations pertain to a specific project as described in this report and are not applicable to any other project or site location. The applicability and reliability of any of the findings, recommendations, suggestions, or opinions expressed in the document, subject to the limitations provided herein, are only valid to the extent that this report expressly addresses the proposed development, design objectives and purposes. Any change of site conditions, purpose or development plans may alter the validity of the report and GEMTEC cannot be responsible for use of this report, or portions thereof, unless GEMTEC is requested to review any changes and, if necessary, revise the report.
- 5. **Time Dependence:** If the proposed project is not undertaken by the Client within 18 months following the issuance of this report, or within the timeframe understood by GEMTEC to be contemplated by the Client, the guidance and recommendations within the report should not be considered valid unless reviewed and amended or validated by GEMTEC in writing.
- 6. **Use of This Report:** The information, recommendations and opinions expressed in this report are for the sole benefit of the Client. No other party may use or rely on this report or any portion thereof without GEMTEC's express written consent. If the report was prepared to be included for a specific permit application process, then upon the reasonable request of the client, GEMTEC may authorize in writing the use of this report by the regulatory agency as an Approved User for the specific and identified purpose of the applicable permit review process.

Contractors bidding on, or undertaking the work, should rely on their own investigations, as well as their own interpretations of the factual data presented in the report, as to how subsurface conditions may affect their work, including but not limited to proposed construction techniques, schedule, safety and equipment capabilities.

7. **No Legal Representations:** GEMTEC makes no representations whatsoever concerning the legal significance of its findings, or as to other legal matters touched on in this report, including but not limited to, ownership of any property, or the application of any law to the facts set forth herein. With respect to regulatory compliance issues, regulatory statutes are subject to interpretation and change. Such interpretations and regulatory changes should be reviewed with legal counsel.

- 8. **Decrease in property value:** GEMTEC shall not be responsible for any decrease, real or perceived, of the property or site's value or failure to complete a transaction, as a consequence of the information contained in this report.
- 9. Reliance on Provided Information: The evaluation and conclusions contained in this report have been prepared on the basis of conditions in evidence at the time of site inspections and on the basis of information provided to us. We have relied in good faith upon representations. information and instructions provided by the Client and others concerning the site. Accordingly, we cannot accept responsibility for any deficiency, misstatement or inaccuracy contained in this report as a result of misstatements, omissions, misrepresentations. or fraudulent acts of the Client or other persons providing information relied on by us. We are entitled to rely on such representations, information and instructions and are not required to carry out investigations to determine the truth or accuracy of such representations, information and instructions.
- 10. **Investigation Limitations:** Site investigation programs are a professional estimate of the scope of investigation required to provide a general profile of subsurface conditions but even a comprehensive investigation, sampling and testing program may fail to detect all or certain subsurface conditions.

The data derived from the site investigation program and subsequent laboratory testing are interpreted by trained personnel and extrapolated across the site to form an inferred geological representation and an engineering opinion is rendered about overall subsurface conditions and their likely behaviour with regard to the proposed development. Conditions between and beyond the borehole/test hole locations may differ from those encountered at the borehole/test hole locations at the site might differ from those inferred to exist, since no subsurface exploration program, no matter how comprehensive, can reveal all subsurface details and anomalies. Accordingly, GEMTEC does not warrant or guarantee the exactness of of the subsurface descriptions.

Soil and groundwater conditions shown in the factual data and described in the report are the observed conditions at the time of their determination-or measurement. Unless otherwise noted, those conditions form the basis of the recommendations in the report. Groundwater conditions may vary between and beyond reported locations and can be affected by annual, seasonal and meteorological conditions. The condition of the soil, rock and groundwater may be significantly altered by construction activities (traffic, excavation, groundwater level lowering, pile driving, blasting, etc.) on the site or on adjacent sites. Excavation may expose the soils to changes due to wetting, drying or frost. Unless otherwise indicated the soil must be protected from these changes during construction.

In addition, fill of variable physical and chemical composition can be present over portions of the site or on adjacent properties. The professional services retained for this project include only the geotechnical aspects of the subsurface conditions at the site, unless otherwise specifically stated and identified in the report. The presence or implication(s) of possible surface and/or subsurface contamination resulting from previous activities or uses of the site and/or resulting from the introduction onto the site of materials from off-site sources are outside the terms of reference for this project and have not been investigated or addressed.

- 11. **Sample Disposal:** GEMTEC will dispose of all uncontaminated soil and/or rock samples 60 days following issue of this report or, upon written request of the Client, will store uncontaminated samples and materials at the Client's expense. In the event that actual contaminated soils, fills or groundwater are encountered or are inferred to be present, all contaminated samples shall remain the property and responsibility of the Client for proper disposal.
- 12. Follow-Up and Construction Services: All details of the design were not known at the time of submission of GEMTEC's report. GEMTEC should be retained to review the final design, project plans and documents prior to construction, to confirm that they are consistent with the intent of GEMTEC's report.

During construction, GEMTEC should be retained to perform sufficient and timely observations of encountered conditions to confirm and document that the subsurface conditions do not



materially differ from those interpreted conditions considered in the preparation of GEMTEC's report and to confirm and document that construction activities do not adversely affect the suggestions, recommendations and opinions contained in GEMTEC's report. Adequate field review, observation and testing during construction are necessary for GEMTEC to be able to provide letters of assurance, in accordance with the requirements of many regulatory authorities. In cases where this recommendation is not followed, GEMTEC's responsibility is limited to interpreting accurately the information encountered at the borehole locations, at the time of their initial determination or measurement during the preparation of the Report.

- 13. **Changed Conditions:** Where conditions encountered at the site differ significantly from those anticipated in this report, either due to natural variability of subsurface conditions or construction activities, it is a condition of this report that GEMTEC be notified of any changes and be provided with an opportunity to review or revise the recommendations within this report. Recognition of changed soil and rock conditions requires experience and it is recommended that GEMTEC be employed to visit the site with sufficient frequency to detect if conditions have changed significantly.
- 14. **Drainage:** Drainage of subsurface water is commonly required either for temporary or permanent installations for the project. Improper design or construction of drainage or dewatering can have serious consequences. GEMTEC takes no responsibility for the effects of drainage unless specifically involved in the detailed design and construction monitoring of the system.

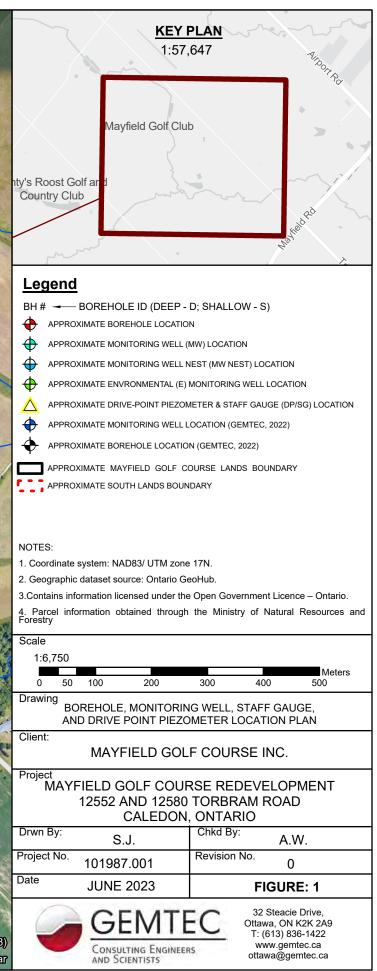


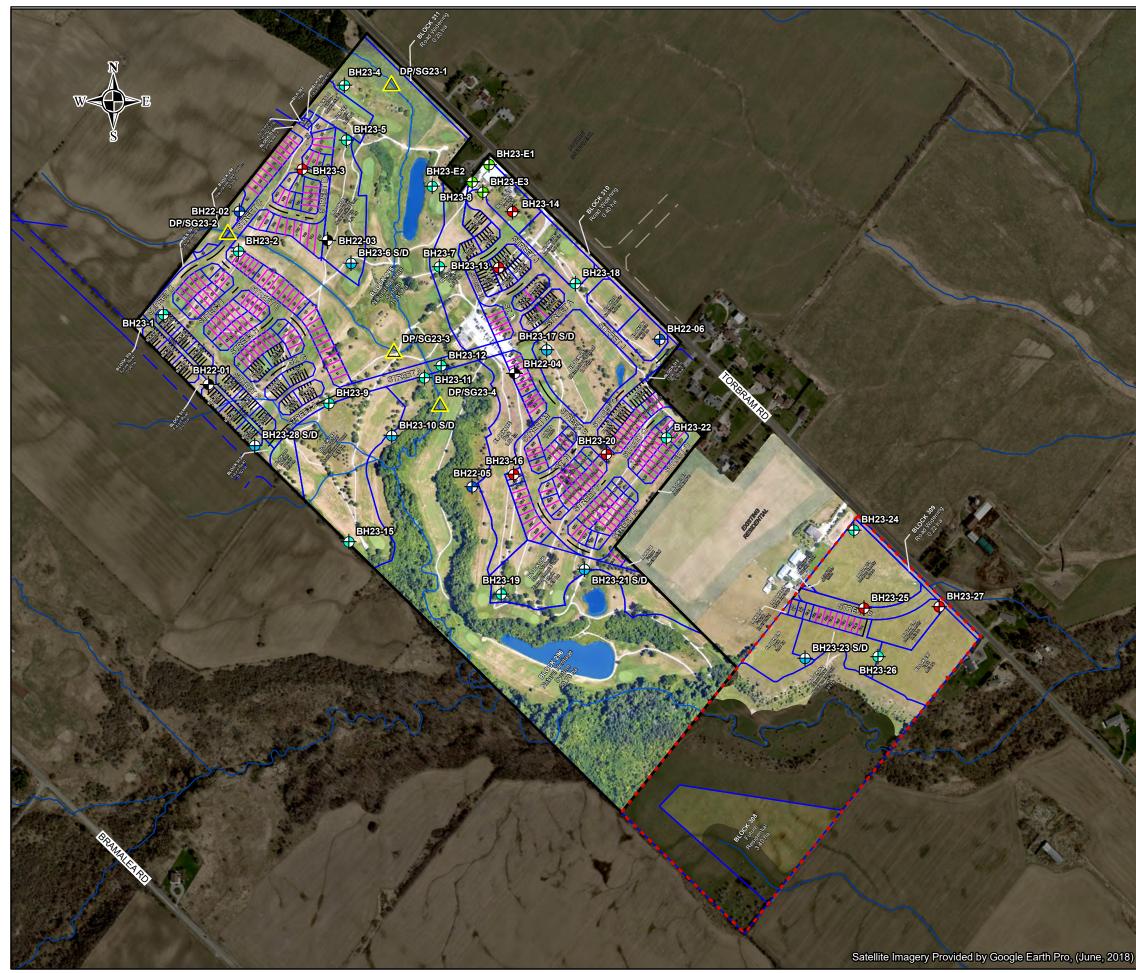
# **APPENDIX B**

# **Site Figures**

Figure 1: Investigation Location Plan Figure 2: Proposed Concept Plan Figure 3: Topography and Natural Heritage Figure 4: Surficial Geology Figure 5: Groundwater Elevations Figure 6: Well Records







## Legend

BH # - BOREHOLE ID (DEEP - D; SHALLOW - S)

APPROXIMATE BOREHOLE LOCATION

- APPROXIMATE MONITORING WELL (MW) LOCATION
- APPROXIMATE MONITORING WELL NEST (MW NEST) LOCATION
- APPROXIMATE ENVRONMENTAL (E) MONITORING WELL LOCATION
- APPROXIMATE DRIVE-POINT PIEZOMETER & STAFF GAUGE (DP/SG) LOCATION
- APPROXIMATE MONITORING WELL LOCATION (GEMTEC, 2022)

APPROXIMATE BOREHOLE LOCATION (GEMTEC, 2022)

- WATERCOURSE

WATERBODY

APPROXIMATE NORTH PARCEL BOUNDARY

APPROXIMATE SOUTH PARCEL BOUNDARY

#### NOTES:

1. Coordinate system: NAD83/ UTM zone 17N.

2. Geographic dataset source: Ontario GeoHub.

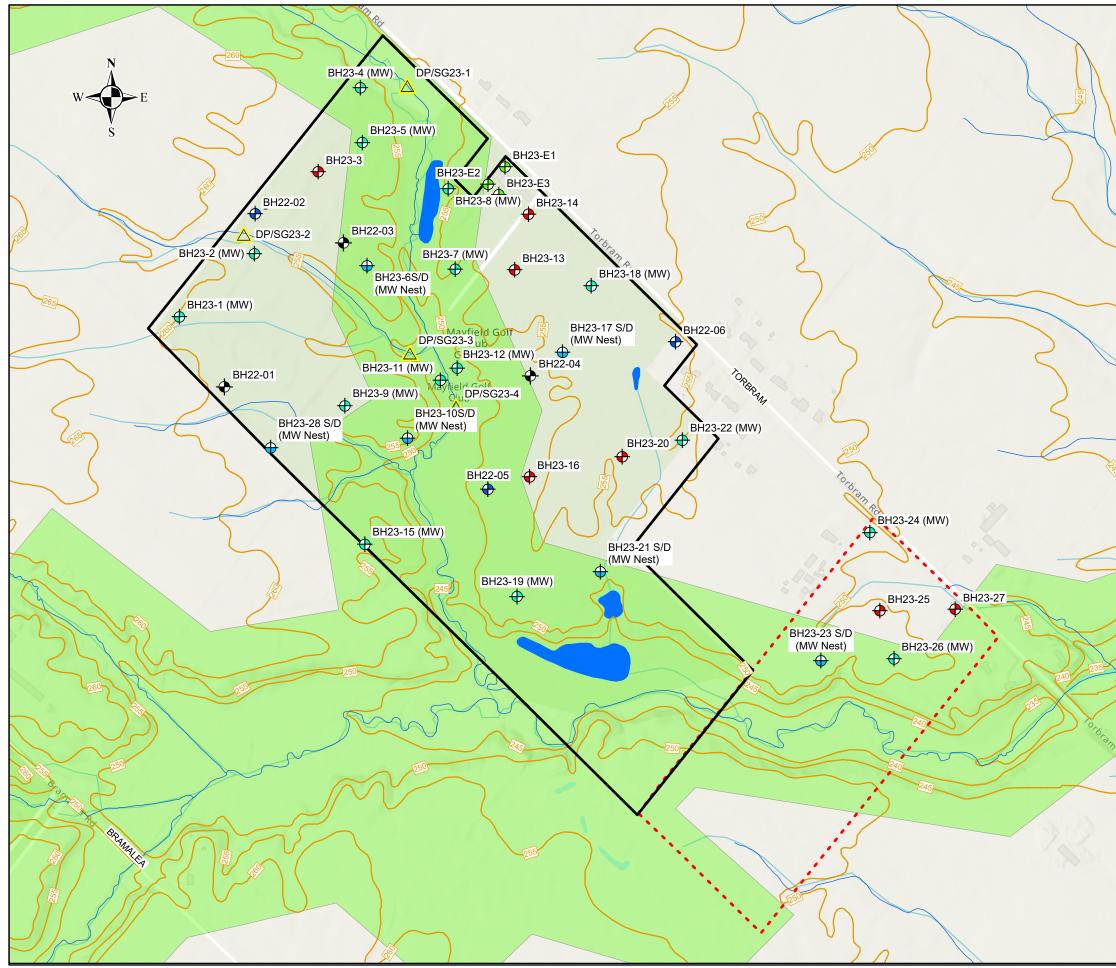
3.Contains information licensed under the Open Government Licence – Ontario.

4. Parcel information obtained through the Ministry of Natural Resources and Forestry

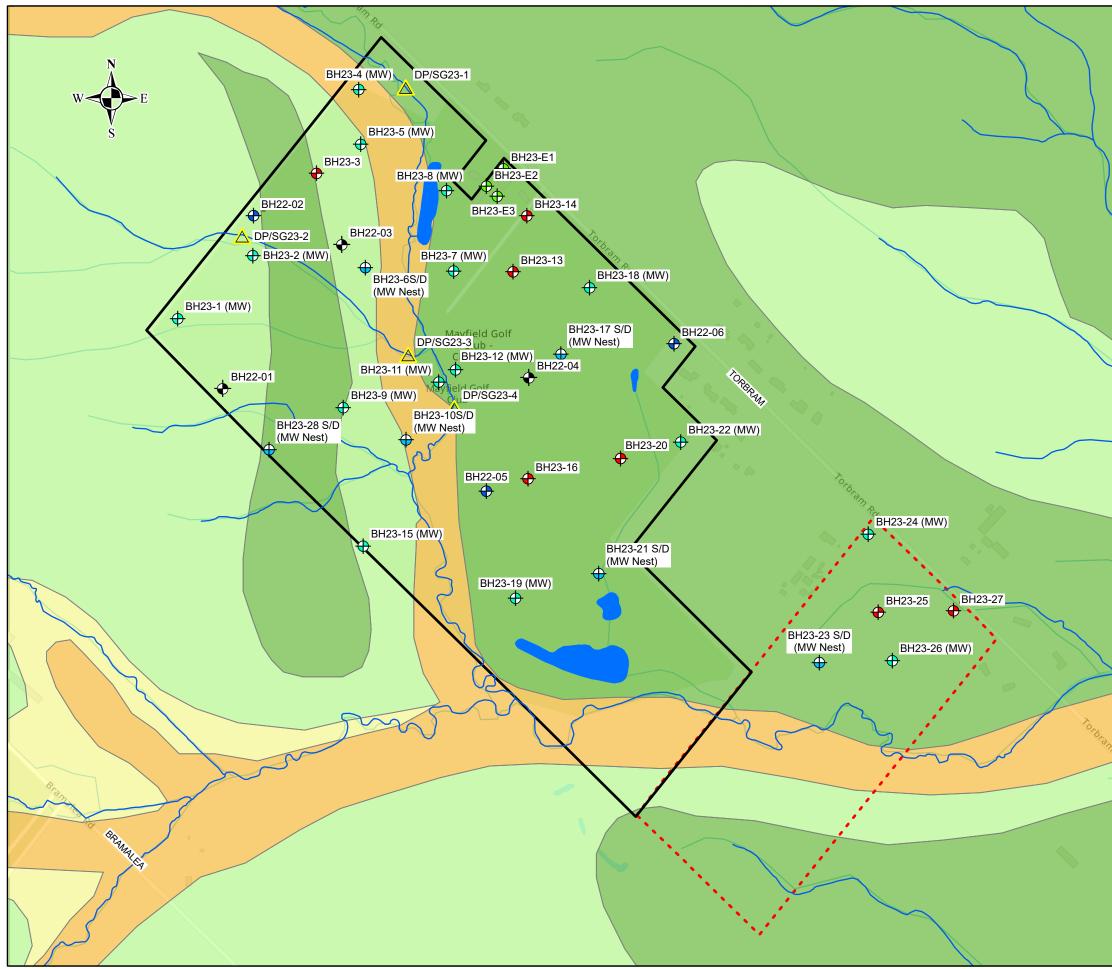
5. "Concept Plan" provided by MGP, October 02, 2024.

6. Service Layer Credits: World Imagery: Peel Region, Maxar

| Scale      |                    |                       |         |   |                               |
|------------|--------------------|-----------------------|---------|---|-------------------------------|
| 1:6,75     | 0                  |                       |         |   |                               |
|            |                    |                       |         |   | Meters                        |
|            | 50 100             | 200                   | 300     | 400   | 500                           |
| Drawing    |                    |                       |         |   |                               |
|            | PRO                | OPOSED (              | ONCEF   | 'I PLAN   |                               |
| Client:    |                    |                       |         |   |                               |
|            | MAY                | FIELD GO              | LF COU  | RSE INC.  |                               |
| Project    |                    |                       |         |   |                               |
| IMA        |                    |                       |         |   |                               |
|            | 12552              |                       |         |   | J                             |
|            |                    | CALEDO                |         |   |                               |
| Drwn By:   | S                  | .J.                   | Chkd B  | <sup>y:</sup> D.N   | I.F                           |
| Project No | <sup>.</sup> 10198 | 7.001                 | Revisio | <sup>n No.</sup> 0  |                               |
| Date       | ОСТОВ              | ER 2024               |         | FIGURE  | : B-2                         |
| 9          | Consi              | EMT<br>DILTING ENGINE |         | 32 Steacie<br>Ottawa, ON<br>T: (613) 83<br>www.gen<br>ottawa@ge | K2K 2A9<br>36-1422<br>ntec.ca |



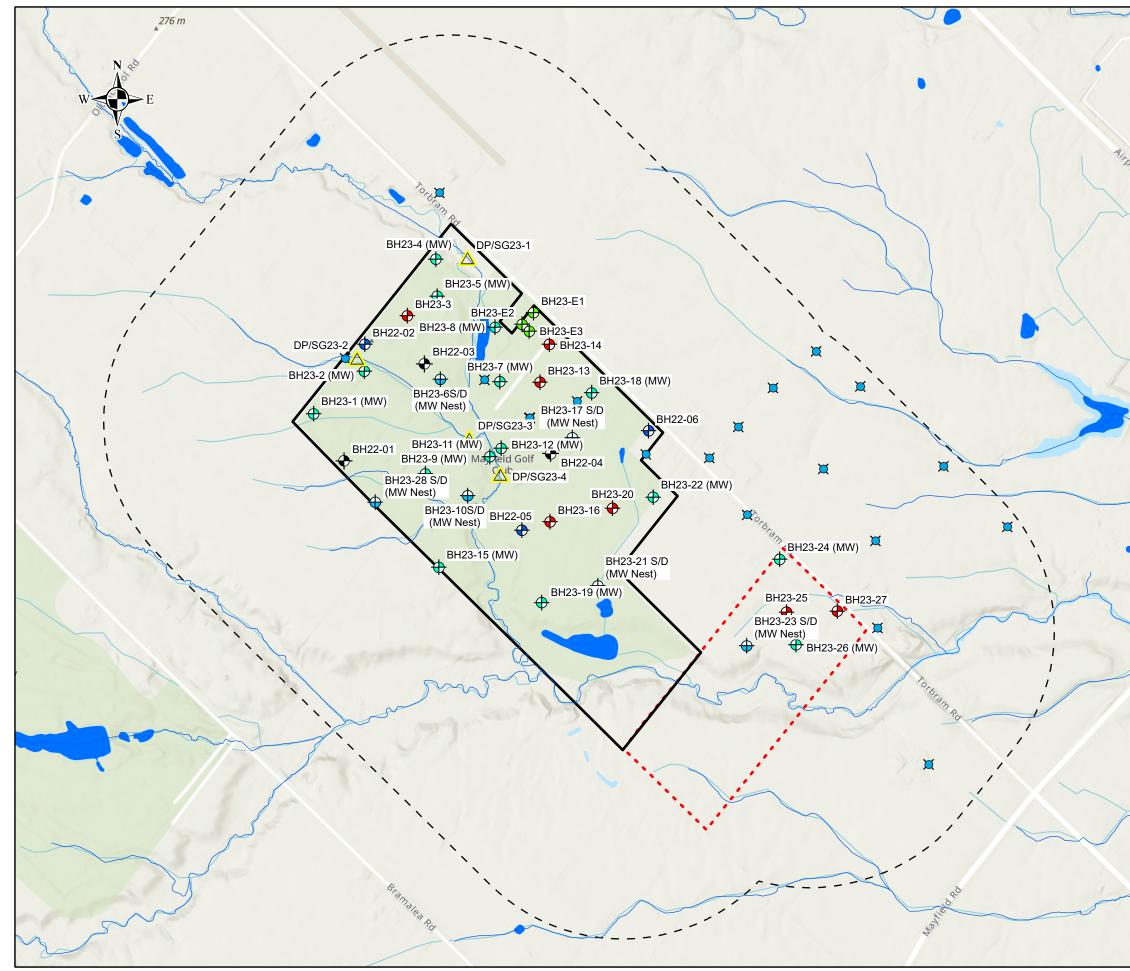
|                     | •   |   |
|---------------------|---|---|
| <u>Leg</u>          | lend  |   |
| BH #                | BOREHOLE ID (DEE  | P - D; SHALLOW - S)   |
| +                   | APPROXIMATE BOREHOLE LOCATI   | ON  |
|                     | APPROXIMATE MONITORING WELL   | (MW) LOCATION   |
| •                   | APPROXIMATE MONITORING WELL   | NEST (MW NEST) LOCATION   |
| <ul> <li></li></ul> | APPROXIMATE ENVRONMENTAL (E   | ) MONITORING WELL LOCATION  |
| $\Delta$            | APPROXIMATE DRIVE-POINT PIEZO   | DMETER & STAFF GAUGE (DP/SG) LOCATION   |
| •                   | APPROXIMATE MONITORING WELL   | LOCATION (GEMTEC, 2022)   |
| •                   | APPROXIMATE BOREHOLE LOCATI   | ON (GEMTEC, 2022)   |
|                     | APPROXIMATE MAYFIELD GOLF CO  | DURSE LANDS BOUNDARY  |
| 12.5                | APPROXIMATE SOUTH LANDS BOU   | INDARY  |
|                     | WATERCOURSE   |   |
|                     | ELEVATION CONTOUR, IN METERS  |   |
|                     | WATERBODY   |   |
|                     | NHS AREA (GREENBELT ACT)  |   |
|                     |   |   |
|                     |   |   |
|                     |   |   |
|                     |   |   |
|                     |   |   |
|                     |   |   |
|                     |   |   |
|                     |   |   |
|                     |   |   |
|                     |   |   |
|                     |   |   |
| NOTES               | S:<br>rdinate system: NAD83/ UTM zone 17N.  |   |
|                     | graphic dataset source: Ontario GeoHut  |   |
|                     | ains information licensed under the Ope<br>el information obtained through the Mini |   |
| 5. Serv             | vice Layer Credits: World Topographic I   | Map: Esri Community Maps Contributors, Province   |
| USGS,<br>World I    | EPA, NPS, US Census Bureau, USDA,<br>Hillshade: Sources: Esri, Airbus DS, U         | Map: Esri Community Maps Contributors, Province<br>, SafeGraph, GeoTechnologies, Inc, METI/NASA,<br>NRCan, Parks Canada<br>SGS, NGA, NASA, CGIAR, N Robinson, NCEAS,<br>staat, GSA, Geoland, FEMA, Intermap and the GIS |
| user co             | ommunity  | staat, GSA, Geoland, FEMA, Intermap and the GIS   |
| Scale               | 1   |   |
| 1:6                 | 6,750   |   |
| 0                   | 50 100 200  | 300 400 500   |
| Drawi               |   |   |
|                     | I OPOGRAPHY AND   | NATURAL HERITAGE  |
| Client              |   |   |
|                     | MAYFIELD GOL  | F COURSE INC.   |
| Proje               |   |   |
|                     |   | RSE REDEVELOPMENT<br>) TORBRAM ROAD   |
|                     |   | I, ONTARIO  |
| Drwn                |   | Chkd By: A.W.   |
| Projec              | t No  | A.w.<br>Revision No.  |
|                     | 101987.001  | 0   |
| Date                | JUNE 2023   | FIGURE: 3   |
| 1                   | OFMAT   | 32 Steacie Drive,   |
|                     | GEMTI   | C Ottawa, ON K2K 2A9<br>T: (613) 836-1422   |
|                     | CONSULTING ENGINEE  | www.gemtec.ca   |
|                     | AND SCIENTISTS  | ottawa@gemtec.ca  |



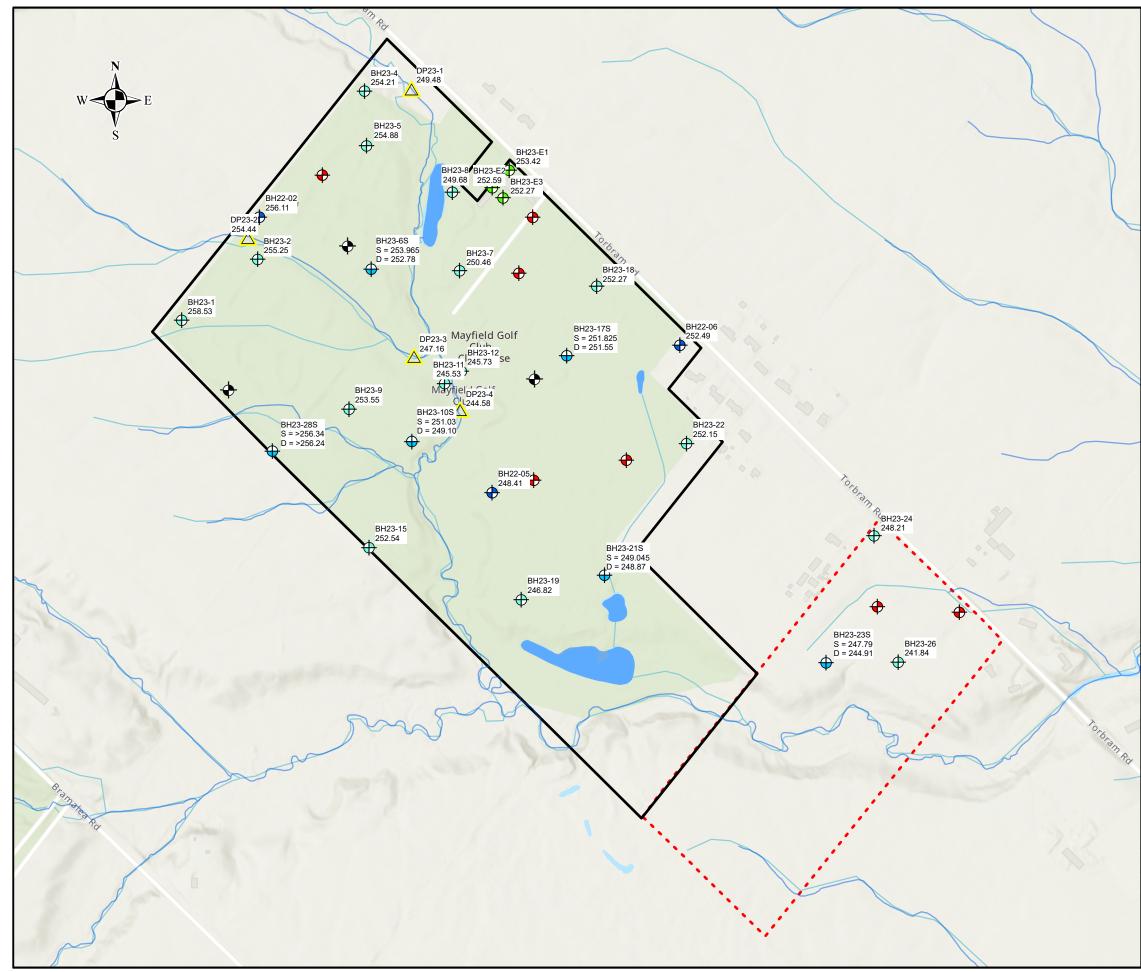
Folder: N:\Projects\101900\101987.001\Drafting\1. Drawings\Factual\_R0\_2023\_05\

# Logond

| Le                             | gen   | <u>a</u>                                      |   |                 |                 |              |  |  |
|--------------------------------|---|---|---|-----------------|-----------------|--------------|--|--|
| вн #                           |   |   | HOLE ID (DEE<br>BOREHOLE L  |                 | ALLOW - S)      |              |  |  |
| <b>↓</b>                       |   |   |   |                 | N) LOCATION     | J            |  |  |
| •                              | APPR  | OXIMATE                                       |   | WELL NE         | ST (MW NES      | T) LOCATION  |  |  |
| ¢                              |   | OXIMATE                                       | ENVRONMEN   |                 |                 | ,            |  |  |
| $\triangle$                    |   | OXIMATE<br>CATION                             | DRIVE-POINT   | PIEZOME         | TER & STAFF     | = GAUGE (DP/ |  |  |
| <del>\</del>                   | APPR  | OXIMATE                                       |   | WELL LO         | CATION (GEN     | MTEC, 2022)  |  |  |
| <b>\</b>                       | APPR  | OXIMATE                                       | BOREHOLE L  | OCATION         | (GEMTEC, 20     | )22)         |  |  |
|                                | WATE  | RCOURS  | SE .  |                 |                 |              |  |  |
|                                | WATE  | RBODY   |   |                 |                 |              |  |  |
|                                | APPR  | OXIMATE                                       | MAYFIELD G  | OLF COUR        | SE LANDS B      | OUNDARY      |  |  |
| 615                            | APPR  | OXIMATE                                       | SOUTH LANE  | S BOUND         | ARY             |              |  |  |
|                                |   |   |   |                 |                 |              |  |  |
| SUR                            | FICIA   | L GEOI  | _OGY  |                 |                 |              |  |  |
|                                | HALTO   | ON TILL (                                     | CLAY TO SILT-   | TEXTURED        | D TILL)         |              |  |  |
|                                |   | ONTACT  | STRATIFIED D<br>D TILL)   | RIFT (SAN       | D AND GRAV      | EL, MINOR    |  |  |
|                                |   | RN ALLU                                       | JVIUM (CLAY, S<br>ERIAL)  | SILT, SAND      | , GRAVEL, M     | AY CONTAIN   |  |  |
|                                | WILDF   | FIELD TIL                                     | L (CLAY TO SI   | LT-TEXTUR       | RED TILL)       |              |  |  |
| 2. Geog<br>3.Conta<br>4. Parce | dinate sys<br>graphic da<br>ins inform  | taset source<br>nation licens<br>tion obtaine | 3/ UTM zone 17N.<br>:: Ontario GeoHub.<br>ed under the Open<br>d through the Minist<br>orld Topographic Ma<br>ri, HERE, Garmin,<br>is Bureau, USDA, N | ry of Natural R | esources and Fo |              |  |  |
| Scale                          |   |   |   |                 |                 |              |  |  |
| 1:6                            | 6,750   |   |   |                 |                 | Meters       |  |  |
| 0                              | 50  | 100   | 200   | 300             | 400             | 500          |  |  |
| Draw                           | ing   |   | SURFICIAL   | GEOLO           | GY              |              |  |  |
| Client                         | t:  | MAY   | FIELD GOL   | F COUR          | SE INC.         |              |  |  |
| Proje                          |   |   | GOLF COUF   |                 |                 |              |  |  |
|                                |   |   | AND 12580<br>CALEDON  | TORBR           | AM ROAD         |              |  |  |
| Drwn                           | By:   | S   | .J.   | Chkd By:        |                 | Ι.           |  |  |
| Projec                         | ct No.  | 10198   | -   | Revision        |                 |              |  |  |
| Date                           |   | JUNE  | 2023  |                 | FIGURE          | : 4          |  |  |
|                                | GENTEC<br>Consulting Engineers<br>AND SCIENTISTS<br>32 Steacie Drive,<br>Ottawa, ON K2K 2A9<br>T: (613) 836-1422<br>www.gemtec.ca<br>ottawa@gemtec.ca |   |   |                 |                 |              |  |  |



|    | Legend   |
|----|--|
|    | BH # BOREHOLE ID (DEEP - D; SHALLOW - S)   |
|    |  |
|    | APPROXIMATE MONITORING WELL (MW) LOCATION  |
| 1  |  |
|    | APPROXIMATE MONITORING WELL NEST (MW NEST) LOCATION     APPROXIMATE ENVRONMENTAL (E) MONITORING WELL LOCATION  |
|    | APPROXIMATE ENVRONMENTAL (E) MONITORING WELL LOCATION  |
| 1  | APPROXIMATE DRIVE-POINT PIEZOMETER & STAFF GAUGE (DP/SG) LOCATION<br>APPROXIMATE MONITORING WELL LOCATION (GEMTEC, 2022)   |
| X  |  |
|    | APPROXIMATE BOREHOLE LOCATION (GEMTEC, 2022)   |
| -  | WATERCOURSE  |
|    | WATERBODY  |
|    | APPROXIMATE WATER WELL RECORD LOCATION   |
|    | I 500M FROM SITE BOUNDARY  |
|    | APPROXIMATE MAYFIELD GOLF COURSE LANDS BOUNDARY  |
|    | APPROXIMATE SOUTH LANDS BOUNDARY   |
|    |  |
| 1  |  |
|    |  |
|    |  |
| 11 |  |
|    |  |
|    |  |
|    |  |
|    |  |
| 1  |  |
|    |  |
|    | NOTES:   |
| -  | <ol> <li>Coordinate system: NAD83/ UTM zone 17N.</li> <li>Geographic dataset source: Ontario GeoHub.</li> </ol>  |
|    | <ol> <li>Beographic dataset source: Ontano Georgia.</li> <li>Contains information licensed under the Open Government Licence – Ontario.</li> </ol>   |
|    | 4. Parcel information obtained through the Ministry of Natural Resources and Forestry  |
|    | <ol> <li>Service Layer Credits: World Topographic Map: Esri Community Maps Contributors, Province<br/>of Ontario, Esri Canada, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA,<br/>USGS. EPA, NPS, US Census Bureau, USDA, NRCan, Parks Canada<br/>World Hillshade: Esri, NASA, NGA, USGS, FEMA</li> </ol> |
| 1  | World Hillshade: Esri, NASA, NGA, USGS, FEMA   |
|    | 1:10,000   |
| /  | Meters   |
|    | 0 125 250 500 750<br>Drawing   |
|    | Drawing<br>WELL RECORDS WITHIN 500 METRES OF SITE  |
|    | Client:  |
|    | MAYFIELD GOLF COURSE INC.  |
|    | Project  |
|    | MAYFIELD GOLF COURSE REDEVELOPMENT   |
|    | 12552 AND 12580 TORBRAM ROAD   |
| 1  | CALEDON, ONTARIO   |
|    | S.J. A.W.  |
|    | Project No. 101987.001 Revision No. 0  |
| 1  | Date JUNE 2023 FIGURE: 5   |
|    |  |
|    | GEMTEC 32 Steacie Drive,<br>Ottawa, ON K2K 2A9<br>T: (613) 836-1422  |
|    | Consulting Engineers www.gemtec.ca   |
| 1  | AND SCIENTISTS Ollawa@gemiec.ca  |



| Lege   | <u>nd</u>  |  |                                 |
|--|--|--|---------------------------------|
| BH #<br>XX.XX  |  | EP - D; SHALLOW - S)<br>LEVATIONS, IN METEF<br>LEVEL                       | RS                              |
| AF   | PPROXIMATE BOREHOLE LOCATIO  | )N   |                                 |
| *  | PPROXIMATE MONITORING WELL (   | (MW) LOCATION  |                                 |
| I ¥  | PPROXIMATE MONITORING WELL   | NEST (MW NEST) LOCATION  |                                 |
|  | PPROXIMATE ENVRONMENTAL (E)  | MONITORING WELL LOCATIO  | ON                              |
|  | PPROXIMATE DRIVE-POINT PIEZON  | METER & STAFF GAUGE (DP/   | SG) LOCATION                    |
| AF   | PPROXIMATE MONITORING WELL L   | LOCATION (GEMTEC, 2022)  |                                 |
| - AF   | PROXIMATE BOREHOLE LOCATIO   | ON (GEMTEC, 2022)  |                                 |
| w  | ATERCOURSE   |  |                                 |
| w  | ATERBODY   |  |                                 |
| AF   | PPROXIMATE MAYFIELD GOLF CO  | URSE LANDS BOUNDARY  |                                 |
| AF   | PPROXIMATE SOUTH LANDS BOUN  | NDARY  |                                 |
|  |  |  |                                 |
| <ol> <li>Coordi</li> <li>Geogra</li> <li>Contai</li> <li>Parce<br/>Forestry.</li> <li>Servi<br/>Contribut<br/>GeoTech<br/>NRCan.1<br/>World Hil</li> </ol> | ound surface elevation at each thy map provided by the client. Ared approximate<br>inate system: NAD83/ UTM zone<br>aphic dataset source: Ontario Gr<br>ns information licensed under th<br>il information obtained through<br>ce Layer Credits: World Top<br>iors, Province of Ontario, Esri (<br>nologies, Inc, METI/NASA, USC<br>Parks Canada<br>Ishade: Esri, NASA, NGA, USG<br>agery: Maxar | e 17N.<br>ieoHub.<br>ne Open Government Licen<br>n the Ministry of Natural | ice – Ontario.<br>Resources and |
| 1:6,2  | 750  |  | Meters                          |
| 0  | 50 100 200   | 300 400  | 500                             |
| Drawing  | GROUNDWATE   | R ELEVATIONS<br>8, 2023  |                                 |
| Client:  | MAYFIELD GOL   | F COURSE INC.  |                                 |
|  |  | TORBRAM ROAD<br>, ONTARIO  |                                 |
| Drwn By  | <sup>/:</sup> S.J.   | Chkd By: A.V   | V.                              |
| Project N  | <sup>lo.</sup> 101987.001  | Revision No. 0   |                                 |
| Date   | JUNE 2023  | FIGURE:  | 6                               |
|  | GEMTE<br>CONSULTING ENGINEER<br>AND SCIENTISTS   |  | K2K 2A9<br>6-1422<br>rec.ca     |

# APPENDIX C

# **Record of Boreholes**

Abbreviations and Terminology Used on Records of Boreholes and Test Pits Record of Borehole Sheets BH23-E1 to BH23-E3 Record of Borehole Sheets BH23-1 to BH23-28 Record of Borehole Sheets BH22-1 to BH22-6

# ABBREVIATIONS AND TERMINOLOGY USED ON RECORDS OF BOREHOLES AND TEST PITS

|    | SAMPLE TYPES                   |  |  |  |  |  |  |  |
|----|--------------------------------|--|--|--|--|--|--|--|
| AS | Auger sample                   |  |  |  |  |  |  |  |
| CA | Casing sample                  |  |  |  |  |  |  |  |
| CS | Chunk sample                   |  |  |  |  |  |  |  |
| BS | Borros piston sample           |  |  |  |  |  |  |  |
| GS | Grab sample                    |  |  |  |  |  |  |  |
| MS | Manual sample                  |  |  |  |  |  |  |  |
| RC | Rock core                      |  |  |  |  |  |  |  |
| SS | Split spoon sampler            |  |  |  |  |  |  |  |
| ST | Slotted tube                   |  |  |  |  |  |  |  |
| то | Thin-walled open shelby tube   |  |  |  |  |  |  |  |
| TP | Thin-walled piston shelby tube |  |  |  |  |  |  |  |
| WS | Wash sample                    |  |  |  |  |  |  |  |

#### PENETRATION RESISTANCE

#### Standard Penetration Resistance, N

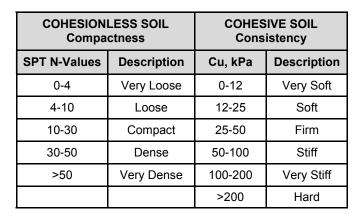
The number of blows by a 63.5 kg (140 lb) hammer dropped 760 millimetres (30 in.) required to drive a 50 mm split spoon sampler for a distance of 300 mm (12 in.). For split spoon samples where less than 300 mm of penetration was achieved, the number of blows is reported over the sampler penetration in mm.

#### **Dynamic Penetration Resistance**

The number of blows by a 63.5 kg (140 lb) hammer dropped 760 mm (30 in.) to drive a 50 mm (2 in.) diameter 60° cone attached to 'A' size drill rods for a distance of 300 mm (12 in.).

| WH | Sampler advanced by static weight of hammer and drill rods |
|----|--|
| WR | Sampler advanced by static weight of drill rods            |
| РН | Sampler advanced by hydraulic pressure from drill rig      |
| РМ | Sampler advanced by manual pressure                        |

|                    | SOIL TESTS                                 |  |  |  |  |  |  |  |
|--------------------|--|--|--|--|--|--|--|--|
| w                  | Water content                              |  |  |  |  |  |  |  |
| PL, w <sub>p</sub> | Plastic limit                              |  |  |  |  |  |  |  |
| LL, $w_L$          | Liquid limit                               |  |  |  |  |  |  |  |
| С                  | Consolidation (oedometer) test             |  |  |  |  |  |  |  |
| D <sub>R</sub>     | Relative density                           |  |  |  |  |  |  |  |
| DS                 | Direct shear test                          |  |  |  |  |  |  |  |
| Gs                 | Specific gravity                           |  |  |  |  |  |  |  |
| М                  | Sieve analysis for particle size           |  |  |  |  |  |  |  |
| MH                 | Combined sieve and hydrometer (H) analysis |  |  |  |  |  |  |  |
| MPC                | Modified Proctor compaction test           |  |  |  |  |  |  |  |
| SPC                | Standard Proctor compaction test           |  |  |  |  |  |  |  |
| OC                 | Organic content test                       |  |  |  |  |  |  |  |
| UC                 | Unconfined compression test                |  |  |  |  |  |  |  |
| Y                  | Unit weight                                |  |  |  |  |  |  |  |





BOULDER

PIPE WITH BENTONITE

SCREEN WITH SAND







BEDROCK

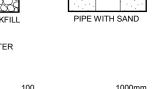




PIPE WITH SAND







|                                   | 0.01 | 0.1           |           | 1,0                         | )  |        | 10  |               | 100      | 1000mm      |
|-----------------------------------|------|---------------|-----------|-----------------------------|----|--------|-----|---------------|----------|-------------|
|                                   | 5    | SILT          |           | SAND                        |    |        | C   |               | COBBLE   | BOULDER     |
| GRAIN SIZE                        | CLAY | CLAY          | Fine      | Medi                        | um | Coarse | G   | GRAVEL        | COBBLE   | BOULDER     |
|                                   |      | 0.08          |           | 0.4                         | 2  | 2 !    | 5   |               | 80 20    | 0           |
|                                   | 0    |               | 10        | 2                           | 0  |        | 3   | 5             |          |             |
| DESCRIPTIVE TERMINOLOGY           |      | TRACE         | SON       | /IE                         |    | ADJECT | IVE | noun > 35     | % and ma | in fraction |
| (Based on the CANFEM 4th Edition) |      | ace clay, etc | some grav | some gravel, etc. silty, et |    | С.     | san | d and gravel, | etc.     |             |

# **RECORD OF BOREHOLE BH23-1**

 CLIENT:
 Mayfield Golf Course Inc.

 PROJECT:
 Mayfield Golf Course - Detailed Investigation

 JOB#:
 101987.001

 LOCATION:
 See Borehole Location Plan

| SHEET:       | 1 OF 1      |
|--------------|-------------|
| DATUM:       | CGVD28      |
| BORING DATE: | Mar 22 2023 |

an

| Щ                     | Ð             | SOIL PROFILE  |  |                       |        | SAM  | IPLES           |            | ●PR                                   | ENE<br>ESIS |             | TION<br>ICE (N                        | ), BLO  | WS/0        | .3m | SHEAR STRENGTH (Cu), kPA<br>+ NATURAL ⊕ REMOULDED |                                       |            |    |                                       |                                       |                            |                                      |      |
|-----------------------|---------------|---|--|-----------------------|--------|------|-----------------|------------|---------------------------------------|-------------|-------------|---------------------------------------|---------|-------------|-----|---|---------------------------------------|------------|----|---------------------------------------|---------------------------------------|----------------------------|--------------------------------------|------|
| DEPTH SCALE<br>METRES | BORING METHOD | DESCRIPTION   | STRATA PLOT                                  | ELEV.<br>DEPTH        | NUMBER | ТҮРЕ | RECOVERY,<br>mm | BLOWS/0.3m | ▲ <sup>D</sup> <sub>R</sub>           | YNA<br>ESIS | MIC<br>STAN | PENE<br>ICE, B                        | TRATIO  | 0N<br>⁄0.3m |     | W <sub>F</sub>                                    | WATE                                  | R CON<br>W |    |                                       | ,<br>∣w <sub>L</sub>                  | ADDITIONAL<br>LAB. TESTING | PIEZOME<br>OR<br>STANDP<br>INSTALLA  | IPE  |
|                       | BOF           | 5   | STR  | (m)                   | N      |      | RE              | BLC        |                                       | 10          | 2           | 03                                    | 30<br>I | 40          | 50  | 6   | 07                                    | 70<br>     | 80 | 90                                    | )                                     | ב א                        | ¥                                    |      |
| — o                   |               | Ground Surface  | - 17 - 11                                    | 257.98                |        |      |                 |            |                                       |             |             |                                       |         |             |     |   |                                       |            |    |                                       |                                       |                            | Monument                             | _    |
|                       |               | TOPSOIL<br>FILL - (CL) SILTY CLAY, trace sand,<br>trace organics; dark brown, cohesive,   |  | <u>257.68</u><br>0.30 | 1      | SS   | 356             | 7          |                                       |             |             |                                       | 0       |             |     | · · · · · · · · · · · · · · · · · · ·             |                                       |            |    |                                       |                                       |                            |                                      |      |
| - 1                   |               | w>PL, firm to stiff   |  | 256 61                | 2      | SS   | 305             | 11         |                                       | •           |             | 0                                     |         |             |     |   |                                       |            |    | · · ·                                 | · · · · · ·                           | -                          |                                      |      |
|                       |               | (CL) SILTY CLAY, trace sand, trace<br>gravel; grey; cohesive, w~PL to w>PL,<br>very stiff                                       |  | 256.61<br>1.37        | 3      | SS   | 457             | 20         |                                       |             | O           |                                       |         |             |     |   | · · · · · · · · · · · · · · · · · · · |            |    | · · · · · · · · · · · · · · · · · · · |                                       |                            |                                      |      |
| - 2                   |               | (CL) sandy SILTY CLAY, trace gravel;<br>brown (TILL); cohesive, w <pl to="" w~pl,<br="">hard</pl>                               |  | 255.85<br>2.13        | 4      | SS   | 457             | 54         |                                       | 0           |             |                                       |         |             |     | •   | · · · · · · · · · · · · · · · · · · · |            |    |                                       | · · · · · · · · · · · · · · · · · · · |                            |                                      |      |
| - 3                   | ĺ             |   |  |                       |        |      |                 |            |                                       |             |             | · · · · · · · · · · · · · · · · · · · |         |             |     | · · · · · · · · · · · · · · · · · · ·             | · · · · · · · · · · · · · · · · · · · |            |    |                                       | · · · · · ·                           |                            | Bentonite                            |      |
|                       |               | (210mm  |  |                       | 5      | SS   | 457             | 56         |                                       | O           |             | · · · · · · · · · · · · · · · · · · · |         |             |     |   |                                       |            |    |                                       |                                       |                            |                                      |      |
| 4                     | Power Auger   | (CL) SILTY CLAY, trace sand; grey;<br>cohesive, w~PL to w>PL, very stiff  |  | <u>253.94</u><br>4.04 |        |      |                 |            | · · · · · · · · · · · · · · · · · · · |             |             | · · · · · · · · · · · · · · · · · · · |         |             |     | · · · · · · · · · · · · · · · · · · ·             | · · · · · · · · · · · · · · · · · · · |            |    | · · ·                                 | · · · · · · · · · · · · · · · · · · · | -                          |                                      |      |
| 5                     | 5             | cohesive, w~PL to w>PL, very stiff<br>항<br>장  |  |                       | 6      | SS   | 457             | 20         |                                       |             | <b>D</b>    |                                       |         |             |     | · · · · · · · · · · · · · · · · · · ·             |                                       |            |    | · · · · · · · · · · · · · · · · · · · |                                       |                            |                                      |      |
|                       |               | <ul> <li>(ML) SILT, slight plasticity, trace sand;</li> </ul>   |  | <u>252.42</u><br>5.56 |        |      |                 |            |                                       |             |             |                                       |         |             |     | · · · · · · · · · · · · · · · · · · ·             |                                       |            |    |                                       |                                       |                            |                                      |      |
| 6                     |               | (WL) SIL , sign plasticity, take said,<br>grey (TILL); non-cohesive, moist, very<br>dense                                       |  |                       |        |      |                 |            |                                       |             |             | · · · · · ·                           |         |             |     |   |                                       |            |    |                                       | · · · · · ·                           |                            | Filter sand                          |      |
|                       |               |   | • 0 °  |                       | 7      | SS   | 457             | 59         |                                       |             | Ò.          | · · · · · · · · · · · · · · · · · · · |         |             |     |   |                                       |            |    | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |                            | 50mm dia. well                       |      |
| - 7                   |               |   | 0<br>0                                       |                       |        |      |                 |            |                                       |             |             |                                       |         |             |     |   |                                       |            |    |                                       | · · · · ·                             |                            | screen                               |      |
| 8                     |               |   |  | <u>249.90</u><br>8.08 | 8      | SS   | 457             | 87         |                                       |             | Э.          |                                       |         |             |     |   |                                       |            |    | •                                     |                                       |                            |                                      |      |
|                       |               | End of Borehole<br>Notes:   |  | 8.08                  |        |      |                 |            |                                       |             |             | · · · · · · · · · · · · · · · · · · · |         |             |     | · · · · · · · · · · · · · · · · · · ·             |                                       |            |    |                                       |                                       |                            |                                      |      |
| 9                     |               | 1. Borehole dry upon completion of drilling.  |  |                       |        |      |                 |            |                                       |             |             |                                       |         |             |     |   |                                       |            |    |                                       |                                       |                            |                                      |      |
|                       |               | <ol> <li>2. Piezometer installed as shown upon<br/>completion of drilling.</li> <li>3. Groundwater level measured in</li> </ol> |  |                       |        |      |                 |            |                                       |             |             |                                       |         |             |     |   |                                       |            |    |                                       |                                       |                            |                                      |      |
| - 10<br>-             |               | installed monitoring well on May 18,<br>2023 at a height of about 0.6 m above<br>the ground surface.                            |  |                       |        |      |                 |            |                                       |             |             |                                       |         |             |     |   |                                       |            |    |                                       |                                       |                            |                                      |      |
| -<br>- 11             |               |   |  |                       |        |      |                 |            |                                       |             |             |                                       |         |             |     |   |                                       |            |    |                                       |                                       | -                          |                                      |      |
|                       |               |   |  |                       |        |      |                 |            | · · · · · · · · · · · · · · · · · · · |             |             | · · · · · · · · · · · · · · · · · · · |         |             |     | · · · · · · · · · · · · · · · · · · ·             | · · · · · · · · · · · · · · · · · · · |            |    |                                       |                                       |                            |                                      |      |
| - 12                  |               |   |  |                       |        |      |                 |            |                                       |             |             |                                       |         |             |     |   |                                       |            |    |                                       |                                       |                            |                                      |      |
|                       |               |   |  |                       |        |      |                 |            | · · · · · · · · · · · · · · · · · · · |             |             |                                       |         |             |     |   |                                       |            |    |                                       | · · · · · · · · · · · · · · · · · · · |                            | GROUNDW/<br>OBSERVATI                |      |
| - 13<br>-             |               |   |  |                       |        |      |                 |            | · · · ·<br>· · · ·<br>· · · ·         |             |             |                                       |         |             |     |   |                                       |            |    |                                       | · · · · · · · · · · · · · · · · · · · |                            | DATE DEPTH<br>(m)<br>23/05/18 -0.6 5 | ELEV |
| 10 11 12 13           |               |   |  |                       |        |      |                 |            |                                       |             |             |                                       |         |             |     |   | · · · · · · · · · · · · · · · · · · · |            |    |                                       |                                       |                            |                                      |      |
|                       |               | GEMTEC  | <u>ı                                    </u> |                       |        | 1    | 1               | 1          | 1                                     | <u>.  </u>  | •••         |                                       | 1       | 1           | • • |   |                                       | 1          |    |                                       |                                       |                            | ED: AS                               |      |
| <                     |               | CONSULTING ENGINEERS<br>AND SCIENTISTS  |  |                       |        |      |                 |            |                                       |             |             |                                       |         |             |     |   |                                       |            |    |                                       |                                       |                            | KED: DMF                             |      |

# **RECORD OF BOREHOLE BH23-2**

 CLIENT:
 Mayfield Golf Course Inc.

 PROJECT:
 Mayfield Golf Course - Detailed Investigation

 JOB#:
 101987.001

 LOCATION:
 See Borehole Location Plan

| SHEET:       | 1 OF 1      |
|--------------|-------------|
| DATUM:       | CGVD28      |
| BORING DATE: | Mar 22 2023 |

● PENETRATION SHEAR STRENGTH (Cu), kPA RESISTANCE (N), BLOWS/0.3m + NATURAL ⊕ REMOULDED SHEAR STRENGTH (Cu), kPA SOIL PROFILE SAMPLES BORING METHOD ADDITIONAL LAB. TESTING DEPTH SCALI METRES STRATA PLOT PIEZOMETER RECOVERY mm 3g OR WATER CONTENT, % NUMBER ELEV. TYPE DYNAMIC PENETRATION BLOWS/0. W DESCRIPTION RESISTANCE, BLOWS/0.3m W ⊣w, INSTALLATION DEPTH (m) 20 30 50 60 70 80 90 10 40 Ground Surface 256.42 Monument 0 FILL - (CL) SILTY CLAY, some sand, trace gravel; brown and grey; organic inclusions, rootlets, oxidative staining; 1 SS 457 10 cohesive, w~PL, stiff <u>255.51</u> 0.91 2 SS 457 33 (CL) SILTY CLAY, some sand, trace È  $\nabla$ gravel; brown; cohesive, w>PL, stiff to very stiff 3 SS 457 11 0 2 457 18 4 SS <u>253.52</u> 2.90 (CL-ML) Sandy SILTY CLAY to CLAYEY SILT, trace to some gravel; brown to grey, rock fragments (TILL); cohesive, 3 5 SS 457 45 h w<PL, hard 4 Auger (210mm OD) Bentonite 6 SS 152 98 MH 0 5 Auger 2<u>50.86</u> 5.56 Power (ML) SILT, trace sand, trace plastic fines; Stem , grey; non-cohesive, wet, 6 Hollow SS 457 76 Ċ 7A . <u>250.07</u> 6.35 (SM) SILTY SAND, some gravel, trace plastic fines; grey (TILL); non-cohesive, 7B SS :0 Ò. wet, very dense \$ 7 o. ø C Q. 8 SS 127 50/0.13 O \$ ·Ø 8 ¢. C φ . . ¢ C 9 Filter sand 50/0.08 : Ö 9 76 \$ GPJ GEMTEC 2018.GDT 6/2/23 Ö. ţ Ð <u>246.48</u> 9.94 50mm dia. well 10 screen (ML) sandy SILT, trace plastic fines; grey; non-cohesive, wet, very dense 245.62 10.80 10 SS 125 50/0.1 Ò: MH Ś. End of Borehole 11 Notes: 1. Groundwater level measured in open borehole at approximately 10.1 m below 101987.001'2023'06'02. ground surface upon completion of 12 drilling. 2. Piezometer installed as shown upon completion of drilling. GROUNDWATER OBSERVATIONS 3. Groundwater level measured in installed monitoring well on May 18, 2023 at a depth of about 1.2 m below 13 DEPTH ELEV DATE (m) (m) GEO - BOREHOLE LOG ground surface. 23/05/18 1.2 🕎 255.3 14 GEMTEC LOGGED: AS CONSULTING ENGINEERS CHECKED: DMF

| RECORD | OF | BOREH | OLE | BH23-3 |
|--------|----|-------|-----|--------|
|--------|----|-------|-----|--------|

 CLIENT:
 Mayfield Golf Course Inc.

 PROJECT:
 Mayfield Golf Course - Detailed Investigation

 JOB#:
 101987.001

 LOCATION:
 See Borehole Location Plan

| SHEET:       | 1 OF 1      |
|--------------|-------------|
| DATUM:       | CGVD28      |
| BORING DATE: | Mar 22 2023 |

| ш   | Τ     | 0                 | SOIL PROFILE   |   | SAM                     | IPLES  | The RESISTANCE (N), BLOWS/0.3m + NATURAL ⊕ REMOULDED |                 |            |                                       |     |                                       |      |                                       |                                       |      |             |                                       |                                       |                                       |                            |   |
|---|-------|-------------------|--|---|-------------------------|--------|--|-----------------|------------|---------------------------------------|-----|---------------------------------------|------|---------------------------------------|---------------------------------------|------|-------------|---------------------------------------|---------------------------------------|---------------------------------------|----------------------------|---|
| DEPTH SCALE<br>METRES   |       | BORING METHOD     | DESCRIPTION  | STRATA PLOT                                   | ELEV.<br>DEPTH<br>(m)   | NUMBER | TYPE   | RECOVERY,<br>mm | BLOWS/0.3m |                                       |     | IC PER<br>ANCE                        |      |                                       | N<br>.3m                              | w    | WATE        | R CON<br>W                            | TENT,                                 |                                       | ADDITIONAL<br>LAB. TESTING | PIEZOMETER<br>OR<br>STANDPIPE<br>INSTALLATION |
|   |       |                   | Ground Surface   |   | 255.54                  |        |  |                 |            |                                       |     | : ::                                  |      | :::                                   |                                       | :::: |             |                                       |                                       |                                       |                            |   |
|   |       |                   | FILL - (CL) SILTY CLAY, trace sand,<br>trace gravel; dark brown, trace organics;<br>cohesive, w>PL, firm               |   |                         | 1      | SS   | 457             | 5          | •                                     |     |                                       |      |                                       |                                       |      |             | · · · · · · · · · · · · · · · · · · · |                                       |                                       |                            |   |
|   | 1     |                   | - Organics/topsoil encountered between approximately 0.9 m and 1.2 m depths.   |   |                         | 2      | SS   | 457             | 8          |                                       |     |                                       |      | · · · · · · · · · · · · · · · · · · · |                                       |      |             |                                       |                                       |                                       |                            | _   |
| Ē   |       |                   |  |   | 253.92<br>1.62          | 3A     | SS   |                 |            |                                       |     | 0                                     |      |                                       |                                       |      |             |                                       |                                       |                                       |                            |   |
|   | 2     |                   | (CL) SILTY CLAY, some sand to sandy,<br>trace gravel; brown; cohesive, w <pl to<br="">w~PL, stiff to hard</pl>         |   | 1.02                    | 3B     | SS   | 457             | 13         |                                       | •C  |                                       |      | · · · · ·                             | · · · · · ·                           |      |             | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |                                       |                            |   |
|   |       |                   |  |   |                         | 4      | SS   | 457             | 33         |                                       | C   |                                       |      |                                       | · · · · · · · · · · · · · · · · · · · |      |             |                                       |                                       |                                       |                            |   |
|   | 3     | (DO mm            |  |   |                         | 5      | SS   | 457             | 44         |                                       | 0   | · · · · · · · · · · · · · · · · · · · |      | · · · · · · · · · · · · · · · · · · · | •                                     |      |             |                                       |                                       |                                       |                            |   |
|   | 1     | Stem Auger (210mm | ,<br>  |   | 251.50<br>4.04          |        |  |                 |            |                                       |     | · · · · · · · · · · · · · · · · · · · |      | · · · · · · · · · · · · · · · · · · · | · · · · ·                             |      |             |                                       |                                       |                                       |                            |   |
|   |       | tem Aua           | (SM) SILTY SAND, some gravel to<br>gravelly; grey; non-cohesive, moist to<br>wet, very dense                           |   | 4.04                    |        |  |                 |            |                                       |     |                                       |      |                                       |                                       |      |             |                                       |                                       |                                       |                            |   |
|   | 5     | Hollow S          |  |   | •                       | 6      | SS   | 457             | 50/0.      | 3 0                                   |     | · · · ·                               |      |                                       | · · · · · ·                           |      |             |                                       |                                       |                                       |                            |   |
|   |       |                   |  |   |                         |        |  |                 |            |                                       |     |                                       |      |                                       |                                       |      |             |                                       |                                       | · · · · · · · · · · · · · · · · · · · |                            |   |
| E e   |       |                   |  |   |                         |        |  |                 |            |                                       |     | · · · · · · · · · · · · · · · · · · · |      |                                       |                                       |      |             | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |                            | -   |
| Ē   |       |                   |  |   | •                       | 7      | SS   | 254             | 50/0.      | 08 C                                  |     | · · · · · · · · · · · · · · · · · · · |      |                                       |                                       |      |             |                                       |                                       |                                       |                            |   |
| Ē   |       |                   |  |   | •                       |        |  |                 |            |                                       |     |                                       |      |                                       | · · · · · · · · · · · · · · · · · · · |      |             |                                       |                                       |                                       |                            |   |
|   |       |                   |  |   | 047.40                  |        |  |                 |            | · · · · · · · · · · · · · · · · · · · |     | · · · · · · · · · · · · · · · · · · · |      | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |      |             | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |                            |   |
|   |       |                   | - Wet below 7.6 m depth  |   |                         |        | 8  | SS              | 457        | 79                                    |     |                                       |      |                                       |                                       |      |             |                                       |                                       |                                       |                            |   |
|   | ,<br> | T                 | - Rock fragments between 7.6 m and<br>8.1 m.<br>End of Borehole  | <u>, , , , , , , , , , , , , , , , , , , </u> | . <u>247.46</u><br>8.08 |        |  |                 |            |                                       |     |                                       |      |                                       |                                       |      |             |                                       |                                       |                                       |                            |   |
| Ē   |       |                   | Notes:   |   |                         |        |  |                 |            |                                       |     | · · · · · · · · · · · · · · · · · · · |      |                                       |                                       |      |             |                                       |                                       | · · · · · · · · · · · · · · · · · · · |                            |   |
|   | 1     |                   | 1. Groundwater level measured in open<br>borehole at approximately 7.3 m below<br>ground surface prior to backfilling. |   |                         |        |  |                 |            |                                       |     |                                       |      |                                       |                                       |      |             |                                       |                                       |                                       |                            |   |
|   |       |                   | 2. Borehole caved to approximately<br>7.3 m depth.   |   |                         |        |  |                 |            |                                       |     | · · · · · · · · · · · · · · · · · · · |      |                                       |                                       |      |             |                                       |                                       |                                       |                            |   |
| 8.GDT   |       |                   | 3. Borehole backfilled with bentonite and  |   |                         |        |  |                 |            |                                       |     |                                       |      |                                       |                                       |      |             |                                       |                                       |                                       |                            |   |
| EC 201  |       |                   | soil cuttings upon completion of drilling.   |   |                         |        |  |                 |            |                                       |     | · · · · · · · · · · · · · · · · · · · |      |                                       |                                       |      |             |                                       |                                       |                                       |                            |   |
|   |       |                   |  |   |                         |        |  |                 |            |                                       |     |                                       |      |                                       |                                       |      |             |                                       |                                       |                                       |                            |   |
| 12<br>12<br>12  | ,     |                   |  |   |                         |        |  |                 |            |                                       |     | · · · · · · · · · · · · · · · · · · · |      | · · · · · · · · · · · · · · · · · · · |                                       |      |             |                                       | · · · · · · · · · · · · · · · · · · · |                                       |                            |   |
| 2023'06   |       |                   |  |   |                         |        |  |                 |            |                                       |     |                                       |      | · · · · · · · · · · · · · · · · · · · |                                       |      |             |                                       |                                       |                                       |                            |   |
| GEO - BOREHOLE LOG 101987.001'2023'06'02.GPJ GEMTEC 2018.GDT 6/2/23 | 3     |                   |  |   |                         |        |  |                 |            |                                       |     |                                       |      |                                       |                                       |      |             |                                       |                                       |                                       |                            |   |
| 0101<br>1111<br>1   |       |                   |  |   |                         |        |  |                 |            |                                       |     |                                       |      |                                       |                                       |      |             |                                       |                                       |                                       |                            |   |
|   |       |                   |  |   |                         |        |  |                 |            |                                       |     |                                       |      |                                       |                                       |      |             |                                       |                                       |                                       |                            |   |
|   | 1     |                   |  |   |                         |        |  |                 |            |                                       | ::: | : ::                                  | ::[: | :::                                   | ::::                                  | :::  | : : : : : : | :::                                   |                                       | ::::                                  |                            |   |
| 0 - BOI   | 0     |                   | SEMTEC   |   |                         |        |  |                 |            |                                       |     |                                       |      |                                       |                                       |      |             |                                       |                                       |                                       |                            | ED: AS  |
| Ŭ   |       | AP                | DISULTING ENGINEERS  |   |                         |        |  |                 |            |                                       |     |                                       |      |                                       |                                       |      |             |                                       |                                       |                                       | CHEC                       | KED: DMF                                      |

| RECORD ( | OF BOREHO | LE BH23-4 |
|----------|-----------|-----------|
|----------|-----------|-----------|

 CLIENT:
 Mayfield Golf Course Inc.

 PROJECT:
 Mayfield Golf Course - Detailed Investigation

 JOB#:
 101987.001

 LOCATION:
 See Borehole Location Plan

| 1 OF 1      |
|-------------|
| CGVD28      |
| Mar 20 2023 |
|             |

| ш   |     | 0                  | SOIL PROFILE  |             |                        |        | SAM  | IPLES           |            | ● PE  |                         | [RA]                                    |      |                                       | )W/S                                  | /0 3m                                    | S⊢                                    | IEAR S | TRENG | GTH (Cu                                      | J), kPA   | . (7)   |                  |                                       |                         |
|---|-----|--------------------|---|-------------|------------------------|--------|------|-----------------|------------|---|-------------------------|---|------|---------------------------------------|---------------------------------------|--|---------------------------------------|--------|-------|--|-----------|---|------------------|---------------------------------------|-------------------------|
| DEPTH SCALE   |     | BORING METHOD      | DESCRIPTION   | STRATA PLOT | ELEV.<br>DEPTH<br>(m)  | NUMBER | туре | RECOVERY,<br>mm | BLOWS/0.3m | ■ RESISTANCE (N), BLOWS/0.3m + NATURAL ⊕ REMOULDED<br>PI<br>WATER CONTENT, %<br>DYNAMIC PENETRATION<br>RESISTANCE, BLOWS/0.3m<br>WPI<br>0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 |                         |   |      |                                       |                                       |  |                                       |        | S     | PIEZOMETER<br>OR<br>STANDPIPE<br>NSTALLATION |           |   |                  |                                       |                         |
|   | +   | Τ                  | Ground Surface  |             | 258.00                 |        |      |                 |            |   | ::                      | ::                                      |      |                                       | : :                                   |  |                                       |        |       |  |           |   | Mor              | nument                                |                         |
|   | 0 - |                    | FILL - (CL) SILTY CLAY, trace to some<br>sand, trace gravel; brown, rootlets;<br>cohesive, w>PL, firm to stiff  |             | 200.00                 | 1      | SS   | 203             | 7          |   |                         | • |      |                                       |                                       |  |                                       |        |       |  |           |   |                  |                                       | -                       |
|   | 1   |                    |   |             |                        | 2      | SS   | 203             | 7          |   |                         | ••••                                    | 0    |                                       |                                       |  |                                       |        |       |  |           | -   |                  |                                       |                         |
|   |     |                    | (OL) ORGANIC SILTY CLAY, trace sand;  |             | 256.12<br>1.88         | 3      | SS   | 457             | 14         |   |                         |   | 0    |                                       |                                       | · · · · · · · · · · · · · · · · · · ·    |                                       |        |       |  |           |   |                  |                                       |                         |
|   | 2   |                    | dark grey; cohesive, w~PL, stiff  |             | 1.00                   | 4      | SS   | 457             | 11         |   | •                       | ••••                                    | 0    |                                       | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · ·    |                                       |        |       |  |           |   |                  |                                       | -                       |
|   | 3   |                    |   |             |                        | 5      | SS   | 254             | 10         |   |                         | ••••                                    | O:   | · · · · · · · · · · · · · · · · · · · |                                       | · · · ·                                  | · · · · · · · · · · · · · · · · · · · |        |       |  |           |   | Ве               | ntonite                               | -                       |
|   |     | vuger<br>ar (210mm |   |             | 050.00                 | 5      | 33   | 234             |            |   |                         |   |      |                                       |                                       | · · · · · · · · · · · · · · · · · · ·    |                                       |        |       |  |           |   |                  | Ţ                                     |                         |
|   | 4   | Stem Auder (210mm  | (CL) SILTY CLAY, trace sand, trace gravel; brown; cohesive, w~PL, hard  |             | 253.96<br>4.04         |        |      |                 |            |   |                         | ••••                                    |      |                                       |                                       | · · · · · · · · · · · · · · · · · · ·    |                                       |        |       |  |           |   |                  | -                                     |                         |
|   | 5   | Hollow             | - Sand seam between approximately<br>6.5 m and 6.6 m depths.  |             |                        | 6      | SS   | 457             | 51         | · · · · · ·   | <b>0</b> ∷<br> <br> ::: | ••••                                    |      | · · · · · · · · · · · · · · · · · · · |                                       |  |                                       |        |       |  |           | -   |                  |                                       | -                       |
|   |     |                    |   |             |                        |        |      |                 |            |   |                         | • • • • • • • • • • • •                 |      |                                       |                                       | · · · ·<br>· · · ·<br>· · · ·<br>· · · · |                                       |        |       |  |           |   | Filte            | r sand                                |                         |
|   | 6   |                    |   |             |                        | 7      | SS   | 457             | 38         |   | · · ·<br>· · ·<br>· · · |   | 0    |                                       |                                       | · · · ·<br>· · · ·<br>· · · ·<br>· · · · |                                       |        |       |  |           | · · ·<br>· · ·<br>· · ·<br>· ·<br>· ·<br>· ·<br>· · |                  | ter sand                              |                         |
|   | 7   |                    | (CL-ML) SILTY CLAY to CLAYEY SILT<br>and SAND, some gravel; grey (TILL),<br>cohesive, w-PL, very stiff  |             | 2 <u>50.91</u><br>7.09 |        |      |                 |            |   |                         | ••••                                    |      |                                       |                                       | · · · · · · · · · · · · · · · · · · ·    |                                       |        |       |  |           | -   | 50mm di          | a. well                               |                         |
|   | 8   |                    | End of Borehole   |             | 249.92<br>8.08         | 8 SS   | 8 SS | 203             | 29         | :0  |                         | ••••                                    |      |                                       |                                       |  |                                       |        |       |  |           | -   |                  |                                       |                         |
|   |     |                    | Notes:  |             | 0.00                   |        |      |                 |            |   |                         |   |      |                                       |                                       | · · · · · · · · · · · · · · · · · · ·    | · · · · · · · · · · · · · · · · · · · |        |       |  |           |   |                  |                                       |                         |
| F   | 9   |                    | <ol> <li>Groundwater level measured in open<br/>borehole at approximately 7.6 m below<br/>ground surface upon completion of<br/>drilling.</li> </ol>    |             |                        |        |      |                 |            |   |                         |   |      |                                       |                                       | · · · ·                                  |                                       |        |       |  |           | -   |                  |                                       |                         |
| DT 6/2/23   | 0   |                    | 2. Piezometer installed as shown upon completion of drilling.   |             |                        |        |      |                 |            |   |                         | ••••                                    |      |                                       |                                       |  |                                       |        |       |  |           | -   |                  |                                       |                         |
| EC 2018.G   |     |                    | <ol> <li>Groundwater level measured in<br/>installed monitoring well on May 18,<br/>2023 at a depth of about 3.8 m below<br/>ground surface.</li> </ol> |             |                        |        |      |                 |            |   |                         |   |      |                                       |                                       | · · · · · · · · · · · · · · · · · · ·    |                                       |        |       |  |           |   |                  |                                       |                         |
| GEO-BOREHOLE LOG 101987.001'2023'06'02.GPJ GEMTEC 2018.GDT 6/2/23 | 1   |                    |   |             |                        |        |      |                 |            |   |                         |   |      |                                       |                                       |  |                                       |        |       |  |           |   |                  |                                       |                         |
| 1.2023'06'0   | 2   |                    |   |             |                        |        |      |                 |            |   |                         | ••••••                                  |      |                                       |                                       |  |                                       |        |       |  |           | -   |                  |                                       |                         |
| 101987.00<br>11111  | 3   |                    |   |             |                        |        |      |                 |            |   |                         |   |      |                                       |                                       |  |                                       |        |       |  |           | -   | GR<br>OB<br>DATE | OUNDWATE<br>SERVATION<br>DEPTH<br>(m) | R<br>IS<br>ELEV.<br>(m) |
|   | 4   |                    |   |             |                        |        |      |                 |            |   |                         | • |      |                                       |                                       |  |                                       |        |       |  |           |   | 23/05/18         | 3.8 又                                 | 254.2                   |
| HH H  |     |                    |   |             |                        |        |      |                 |            |   | ::                      | ::                                      | :::: | :::                                   | :   :                                 | :::                                      | ::::                                  | ::::   | ::::  | ::::   | · · · · · |   |                  |                                       |                         |
| EO - BOI  | 2   |                    | SEMTEC  |             |                        |        |      |                 |            |   |                         |   |      |                                       |                                       |  |                                       |        |       |  |           |   | BED: AS          |                                       |                         |
| Ū   |     | ٨                  | ND OCIENTISTS   |             |                        |        |      |                 |            |   |                         |   |      |                                       |                                       |  |                                       |        |       |  |           |   |                  |                                       |                         |

 CLIENT:
 Mayfield Golf Course Inc.

 PROJECT:
 Mayfield Golf Course - Detailed Investigation

 JOB#:
 101987.001

 LOCATION:
 See Borehole Location Plan

| 1 OF 1      |
|-------------|
| CGVD28      |
| Mar 21 2023 |
|             |

| ш   | 6           | UD                | SOIL PROFILE  |              |                        |           | SAM      | IPLES           |                   | • PI                  |      |                                       | WE/0 2      | SH<br>Bm +1 |       |            | GTH (Cu | . (1)                      |                  |                                       |                     |
|---|-------------|-------------------|---|--------------|------------------------|-----------|----------|-----------------|-------------------|-----------------------|------|---------------------------------------|-------------|-------------|-------|------------|---------|----------------------------|------------------|---------------------------------------|---------------------|
| DEPTH SCALE<br>METRES   |             | שטאואט אבו אטט    | DESCRIPTION   | STRATA PLOT  | ELEV.<br>DEPTH<br>(m)  | NUMBER    | ТҮРЕ     | RECOVERY,<br>mm | aLOWS/0.3m        | ▲ <sup>D'</sup><br>Ri |      | C PENE<br>ANCE, E                     | ON<br>/0.3m | W           | WATE  | R CON<br>W | NTENT,  | ADDITIONAL<br>LAB. TESTING | ST               | Zometer<br>Or<br>Andpipe<br>Fallation |                     |
| <u> </u>  | ŀ           |                   | Cround Sturface   | ٥<br>ا       | 057.00                 |           |          |                 | ш                 | ::::                  | 1::: | =                                     |             |             | 1:::: | 1:::       |         |                            | Mon              | mont                                  |                     |
|   |             |                   | Ground Surface<br>FILL - (CL) SILTY CLAY, some sand;<br>brown, organic inclusions; cohesive,<br>w>PL, firm  |              | 257.83                 | 1         | SS       | 305             | 6                 |                       |      |                                       |             |             |       |            |         | -                          | Monu             | ument                                 |                     |
|   |             |                   |   |              |                        | 2         | SS       | 152             | 6                 | •                     |      | Ð                                     |             |             |       |            |         |                            |                  |                                       |                     |
|   |             |                   |   |              |                        | 3         | SS       | 203             | 8                 |                       |      | 0                                     |             |             |       |            |         |                            |                  |                                       |                     |
| 2   |             |                   | (OL) ORGANIC SILTY CLAY, trace sand;<br>dark grey; cohesive, w~PL, stiff  |              | 255.70<br>2.13         |           |          |                 |                   |                       |      |                                       |             |             |       |            |         |                            |                  |                                       |                     |
|   |             |                   | (CL) SILTY CLAY, some sand, trace   | 1, <u>1,</u> | <u>254.93</u><br>2.90  | 4A<br>-4B | SS<br>SS | 305             | 15                |                       |      | 0                                     |             |             |       |            |         |                            |                  | Ā                                     |                     |
|   |             |                   | gravel; brown; cohesive, w <pl, hard<="" td=""><td></td><td></td><td>5</td><td>SS</td><td>457</td><td>37</td><td></td><td></td><td><math>\mathbf{\hat{\mathbf{D}}}</math></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></pl,>         |              |                        | 5         | SS       | 457             | 37                |                       |      | $\mathbf{\hat{\mathbf{D}}}$           |             |             |       |            |         |                            |                  |                                       |                     |
| 4   |             |                   | (CL) sandy SILTY CLAY, some gravel;<br>brown (TILL); cohesive, w <pl, hard<="" td=""><td></td><td>253.79<br/>4.04</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>-</td><td></td><td></td><td></td></pl,> |              | 253.79<br>4.04         |           |          |                 |                   |                       |      |                                       |             |             |       |            |         | -                          |                  |                                       |                     |
|   |             | (DD mm            | brown (TILL); cohesive, w <pl, hard<="" td=""><td></td><td></td><td>6</td><td>SS</td><td>457</td><td>55</td><td></td><td>0</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Ben</td><td>tonite</td><td></td></pl,>                                      |              |                        | 6         | SS       | 457             | 55                |                       | 0    |                                       |             |             |       |            |         |                            | Ben              | tonite                                |                     |
| 5   | Power Auger | Stem Auger (210mm |   |              |                        |           |          |                 |                   |                       |      | · · · · · · · · · · · · · · · · · · · |             |             |       |            |         | <br>-                      |                  |                                       |                     |
|   | Pow         | v Stern A         |   |              |                        |           |          |                 |                   |                       |      | · · · · · · · · · · · · · · · · · · · |             |             |       |            |         | _                          |                  |                                       |                     |
|   |             | Hollow (          |   |              |                        | 7         | SS       | 457             | 49                |                       | 0    |                                       |             |             |       |            |         |                            |                  |                                       |                     |
|   |             |                   | (CL) SILTY CLAY; trace to some sand,<br>trace to some gravel; grey; cohesive,   |              | <u>250.74</u><br>7.09  |           |          |                 |                   |                       |      | · · · · · · · · · · · · · · · · · · · |             |             |       |            |         | <br>-                      |                  |                                       |                     |
|   |             |                   | - Auger grinding at about 7.6 m depth   |              |                        | 8         | SS       | 457             | 50/0.4            | 0 C                   |      |                                       |             |             |       |            |         | мн                         |                  |                                       |                     |
|   |             |                   |   |              |                        |           |          |                 |                   |                       |      |                                       |             |             |       |            |         |                            | Filter           | sand                                  |                     |
|   |             |                   |   |              |                        | 9         | SS       | 457             | 44                |                       | 0    |                                       |             |             |       |            |         |                            |                  |                                       |                     |
| E 10  |             |                   |   |              |                        |           |          |                 |                   |                       |      |                                       |             |             |       |            |         |                            | 50mm dia<br>so   | n. well                               |                     |
| L<br>L<br>L<br>L<br>L<br>L<br>L<br>L<br>L<br>L<br>L<br>L<br>L<br>L<br>L<br>L<br>L<br>L<br>L | _           |                   | - Inferred bedrock (highly weathered shale) at 10.7 m depth   |              | <u>247.13</u><br>10.70 | -10       | -88-     | -25-            | <del>50/0.(</del> | 0                     |      |                                       |             |             |       |            |         |                            |                  |                                       | :                   |
|   |             |                   | End of Borehole<br>Notes:   |              |                        |           |          |                 |                   |                       |      |                                       |             |             |       |            |         |                            |                  |                                       | -                   |
| E 12  |             |                   | <ol> <li>Borehole dry upon completion of<br/>drilling.</li> <li>Piezometer installed as shown upon</li> </ol>   |              |                        |           |          |                 |                   |                       |      |                                       |             |             |       |            |         |                            |                  |                                       | -                   |
|   |             |                   | completion of drilling.<br>3. Groundwater level measured in   |              |                        |           |          |                 |                   |                       |      |                                       |             |             |       |            |         |                            | GRC              | OUNDWATER<br>SERVATIONS               |                     |
| - 13  |             |                   | installed monitoring well on May 18,<br>2023 at a depth of about 3.0 m below<br>ground surface.   |              |                        |           |          |                 |                   |                       |      |                                       |             |             |       |            |         |                            | DATE<br>23/05/18 | DEPTH EI<br>(m)                       | LEV.<br>(m)<br>54.9 |
| E<br>- 14   |             |                   |   |              |                        |           |          |                 |                   |                       |      |                                       |             |             |       |            |         | -                          |                  |                                       |                     |
|   |             | C                 | SEMTEC  | •            | •                      |           |          |                 |                   |                       |      |                                       | <br>1       |             |       | 1          |         |                            | ED: AS           | I                                     |                     |
|   | 1           |                   | INSULTING ENGINEERS   |              |                        |           |          |                 |                   |                       |      |                                       |             |             |       |            |         |                            | KED: DI          | MF                                    |                     |

CLIENT: Mayfield Golf Course Inc. 
 PROJECT:
 Mayfield Golf Course Inc.

 JOB#:
 101987.001
 LOCATION: See Borehole Location Plan

SHEET: 1 OF 2 DATUM: CGVD28 BORING DATE: Mar 20 2023

|        | DOH-              | SOIL PROFILE  |             | 1                     |          | SAN      | IPLES           |            | ● F      | RESI                                  | STAN                                     | NCE (          | N), BL        | SWC                                   | 6/0.3m                                | ⊦צ<br>1+ ו                            | IEAR S<br>NATUR | AL 🕀                                     | REI                                   | ч (Cu<br>MOU                          | ), KPA<br>LDED                           | NG AL                                 |                                     |
|--------|-------------------|---|-------------|-----------------------|----------|----------|-----------------|------------|----------|---------------------------------------|--|----------------|---------------|---------------------------------------|---------------------------------------|---------------------------------------|-----------------|--|---------------------------------------|---------------------------------------|--|---------------------------------------|-------------------------------------|
| METRES | BORING METHOD     | DESCRIPTION   | STRATA PLOT | ELEV.<br>DEPTH<br>(m) | NUMBER   | ТҮРЕ     | RECOVERY,<br>mm | BLOWS/0.3m | ▲ [<br>F | YNA<br>RESI:<br>10                    | STAM                                     | PENI<br>NCE, I | ETRAT<br>BLOW | 10N<br>S/0.3<br>40                    | 3m<br>51                              | W <sub>I</sub>                        | ┝┝──            | R COI                                    |                                       | INT, 9                                | ⊣w                                       | ADDITIONAL<br>LAB. TESTING            | PIEZOME<br>OR<br>STANDP<br>INSTALLA |
|        |                   | Ground Surface  | ى<br>ن      | 256.73                |          |          |                 |            | :::      |                                       | :::                                      |                |               | : :                                   |                                       |                                       |                 |  |                                       |                                       |  |                                       | Monument                            |
| 0 -    |                   | TOPSOIL<br>FILL - (CL) SILTY CLAY, some sand;<br>brown, rootlets; cohesive, w>PL, firm to   |             | 0.05                  | 1        | SS       | 203             | 7          |          |                                       |  |                |               |                                       | · · · · · · · · · · · · · · · · · · · |                                       |                 |  |                                       |                                       |  | · · · · · · · · · · · · · · · · · · · |                                     |
| 1      |                   | stiff   |             |                       | 2        | SS       | 203             | 4          |          |                                       |  |                |               |                                       | · · · · ·                             | · · · · · ·                           |                 |  |                                       | · · · ·                               | · · · · · · · · · · · · · · · · · · ·    | · · · · · · · · · · · · · · · · · · · |                                     |
|        |                   | FILL - (SM) SILTY SAND, trace gravel,   |             | <u>254.85</u><br>1.88 | 3A<br>3B | SS<br>SS | 254             | 12         |          | •                                     |  |                | 5             | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |                                       |                 |  |                                       | · · · · · · · · · · · · · · · · · · · | · · · ·<br>· · · ·<br>· · · ·<br>· · · · | •                                     |                                     |
| 2      |                   | trace plastic fines; dark brown to grey,<br>organic inclusions, non-cohesive, moist,<br>compact   |             |                       | 4        | SS       | 305             | 24         |          |                                       | C  |                |               | · · ·                                 | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |                 | · · · ·<br>· · · ·<br>· · · ·<br>· · · · | · · · · · · · · · · · · · · · · · · · |                                       | · · · ·<br>· · · ·<br>· · · ·<br>· · · · | •                                     |                                     |
| 3      |                   | (CL) SILTY CLAY, some sand, mottled;<br>brown and grey; cohesive, w~PL to   |             | <u>253.83</u><br>2.90 | 5        | SS       | 457             | 18         |          | · · · · · · · · · · · · · · · · · · · |  | 0              |               | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |                                       |                 |  | · · · · · · · · · · · · · · · · · · · | · · · · ·                             | · · · · · · · · · · · · · · · · · · ·    | •<br>•<br>•<br>•<br>•                 |                                     |
| 4      |                   | w>PL, very stiff  |             | 252.69                |          |          |                 |            |          |                                       |  | 0              |               |                                       | · · · · · · · · · · · · · · · · · · · |                                       |                 |  |                                       | · · · · · · · · · · · · · · · · · · · | · · · ·<br>· · · ·<br>· · · ·<br>· · · · |                                       | Ţ                                   |
| 4      |                   | (CL) Gravelly sandy SILTY CLAY, brown<br>to grey; rock fragments (TILL); cohesive,<br>w <pl hard<="" td="" to="" w~pl,=""><td></td><td>252.69<br/>4.04</td><td></td><td></td><td></td><td></td><td></td><td></td><td>· · · · ·</td><td></td><td></td><td>· · · · · · · · · · · · · · · · · · ·</td><td>· · · · · · · · · · · · · · · · · · ·</td><td>· · · · · · · · · · · · · · · · · · ·</td><td></td><td>· · · · · · · · · · · · · · · · · · ·</td><td>· · · · · · · · · · · · · · · · · · ·</td><td>· · · · · · · · · · · · · · · · · · ·</td><td>· · · ·<br/>· · · ·<br/>· · · ·<br/>· · · ·</td><td>·<br/>•<br/>•<br/>•<br/>•</td><td>_</td></pl> |             | 252.69<br>4.04        |          |          |                 |            |          |                                       | · · · · ·                                |                |               | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |                 | · · · · · · · · · · · · · · · · · · ·    | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · | · · · ·<br>· · · ·<br>· · · ·<br>· · · · | ·<br>•<br>•<br>•<br>•                 | _                                   |
| 5      | ()                |   |             |                       | 6        | SS       | 457             | 40         |          | C                                     | <u>) : :</u>                             |                |               | •                                     | · · · · · · · · · · · · · · · · · · · | · · · · · ·                           |                 |  |                                       | · · · ·                               | · · · · · · · · · · · · · · · · · · ·    | •<br>•<br>•<br>•<br>•                 | Bentonite                           |
|        | gci<br>(210mm OD) |   |             |                       |          |          |                 |            |          |                                       | · · · ·<br>· · · ·<br>· · · ·<br>· · · · |                |               | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |                                       |                 |  | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · | · · · ·<br>· · · ·<br>· · · ·<br>· · · · | •                                     |                                     |
| 6      | Stern Auger (21   | - Grey below about 6.1 m depth<br>- Silty clay seam / layer between   |             |                       | 7        | SS       | 457             | 49         |          | · · · · · · · · · · · · · · · · · · · | Ö  |                |               | · · ·                                 |                                       |                                       |                 |  | · · · · · · · · · · · · · · · · · · · | · · · ·                               | · · · · · · · · · · · · · · · · · · ·    | •<br>•<br>•<br>•<br>•                 |                                     |
| 7      | Hollow Sten       | approximately 6.1 m and 6.6 m depths  |             |                       |          |          |                 |            |          |                                       |  |                |               |                                       | · · · · · · · · · · · · · · · · · · · |                                       |                 |  | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |  | •<br>•<br>•<br>•<br>•                 |                                     |
|        | Ĕ                 |   |             |                       | 8        | SS       | 406             | 65/0.3     | 25 . (   |                                       |  |                |               | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |                                       |                 |  |                                       | · · · · · · · · · · · · · · · · · · · | · · · ·<br>· · · ·<br>· · · ·<br>· · · · | мн                                    |                                     |
| 8      |                   |   |             | 248 14                |          |          |                 |            |          | · · · · · · · · · · · · · · · · · · · | · · · ·                                  |                |               | · · ·                                 | · · · ·                               |                                       |                 |  | · · · · · · · · · · · · · · · · · · · | · · · ·                               | · · · · · · · · · · · · · · · · · · ·    | •<br>•<br>•<br>•<br>•                 |                                     |
| 9      |                   | (ML) Gravelly sandy SILT, trace plastic<br>fines; grey, rock fragments;<br>non-cohesive, moist to wet, very dense   |             | <u>248.14</u><br>8.59 |          |          |                 |            |          |                                       |  |                |               |                                       |                                       |                                       |                 |  |                                       |                                       |  | ·<br>·<br>·<br>·                      |                                     |
|        |                   |   |             |                       | 9        | SS       | 254             | 50/0.      | 08:::    | <b>)</b> :                            | · · · · · · · · · · · · · · · · · · ·    |                |               |                                       | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |                 |  | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · ·    |                                       |                                     |
| 10     |                   |   |             |                       |          |          |                 |            |          |                                       |  |                |               |                                       |                                       |                                       |                 |  |                                       |                                       |  | ·<br>·<br>·<br>·                      | Filter sand                         |
| 11     |                   |   |             |                       | 10       | SS       | 254             | 50/0.      |          |                                       |  |                |               |                                       |                                       |                                       |                 |  |                                       |                                       |  | · · · · · · · · · · · · · · · · · · · | i noi suna                          |
|        |                   |   |             |                       |          |          |                 |            |          |                                       | · · · · · · · · · · · · · · · · · · ·    |                |               |                                       | · · · · · · · · · · · · · · · · · · · |                                       |                 |  |                                       | · · · · · · · · · · · · · · · · · · · |  |                                       | 50mm dia. well<br>screen            |
| 12     |                   |   |             | 244.26                | 11       | SS       | 305             | 50/0.      | 3        | 0                                     |  |                |               |                                       |                                       |                                       |                 |  |                                       |                                       |  | MH                                    |                                     |
| 13     |                   | End of Borehole<br>Notes:   |             | 244.26<br>12.47       |          |          |                 |            |          |                                       |  |                |               |                                       |                                       |                                       |                 |  |                                       | · · · ·                               |  |                                       |                                     |
|        |                   | 1. Groundwater level measured in open<br>borehole at approximately 11.9 m below<br>ground surface upon completion of<br>drilling.   |             |                       |          |          |                 |            |          |                                       | · · · · · · · · · · · · · · · · · · ·    |                |               |                                       |                                       | · · · · · · · · · · · · · · · · · · · |                 |  |                                       | · · · · · · · · · · · · · · · · · · · |  | · · · · · · · · · · · · · · · · · · · |                                     |
| 14     |                   | ig.   |             |                       |          |          |                 |            |          | :   :<br>:<br>:   :                   | ::::<br>::::                             |                |               |                                       | :::                                   |                                       |                 |  | :   :<br>:   :                        |                                       |  | :                                     |                                     |

|     | RECORD OF BOREHOLE BH23-6D |
|-----|----------------------------|
| Inc |                            |

 CLIENT:
 Mayfield Golf Course Inc.

 PROJECT:
 Mayfield Golf Course - Detailed Investigation

 JOB#:
 101987.001

 LOCATION:
 See Borehole Location Plan

SHEET:2 OF 2DATUM:CGVD28BORING DATE:Mar 20 2023

| OP       SOIL PROFILE         U       DESCRIPTION         2. Piezometers installed as shown upon upon completion of drilling. Shallow piezometer installed in second borehole drilled within approximately 2 m of initial installation.         3. Groundwater levels measured in the installed monitoring well on May 18, 2023 at a depth of about 4.0 m below ground surface. | STRATA PLOT | ELEV.<br>DEPTH<br>(m) | NUMBER | ТҮРЕ   | RECOVERY, | BLOWS/0.3m |                                       |                                       | PENET<br>NCE, BL                      |                                       |      | 50<br>    | ′ <sub>₽</sub> ├── | ER COI<br>W<br>70 |                                       | r, %<br>→ W <sub>L</sub><br>90<br>    | ADDITIONAL<br>LAB. TESTING | PIEZOMETER<br>OR<br>STANDPIPE<br>INSTALLATION |
|---|-------------|-----------------------|--------|--------|-----------|------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|------|-----------|--------------------|-------------------|---------------------------------------|---------------------------------------|----------------------------|---|
| 2. Piezometers installed as shown upon<br>upon completion of drilling. Shallow<br>piezometer installed in second borehole<br>drilled within approximately 2 m of initial<br>installation.     3. Groundwater levels measured in the<br>installed monitoring well on May 18,<br>2023 at a depth of about 4.0 m below   | STRA        |                       |        | F      | REC       | BLOW       |                                       |                                       |                                       |                                       |      |           | r                  | 70                | 80                                    |                                       | AD                         |   |
| <ul> <li>upon completion of drilling. Shallow piezometer installed in second borehole drilled within approximately 2 m of initial installation.</li> <li>3. Groundwater levels measured in the installed monitoring well on May 18, 2023 at a depth of about 4.0 m below</li> </ul>   |             |                       |        |        |           |            |                                       |                                       |                                       |                                       |      |           |                    |                   |                                       |                                       |                            |   |
| <ul> <li>upon completion of drilling. Shallow piezometer installed in second borehole drilled within approximately 2 m of initial installation.</li> <li>3. Groundwater levels measured in the installed monitoring well on May 18, 2023 at a depth of about 4.0 m below</li> </ul>   |             |                       |        |        |           |            |                                       |                                       |                                       |                                       |      |           |                    |                   |                                       |                                       |                            |   |
| installation.<br>3. Groundwater levels measured in the<br>installed monitoring well on May 18,<br>2023 at a depth of about 4.0 m below  |             |                       |        |        |           |            |                                       |                                       |                                       |                                       |      |           | 1::::              |                   | 1 1 1 1                               |                                       | . /                        | 1   |
| installed monitoring well on May 18,<br>2023 at a depth of about 4.0 m below  |             |                       |        |        |           |            |                                       |                                       |                                       |                                       | :::: |           |                    |                   |                                       |                                       |                            |   |
| 2023 at a depth of about 4.0 m below  |             |                       |        |        |           |            |                                       |                                       |                                       |                                       |      |           |                    |                   |                                       |                                       |                            |   |
|   |             |                       |        |        |           |            |                                       |                                       |                                       |                                       |      |           |                    |                   |                                       |                                       |                            |   |
|   |             |                       |        |        |           |            |                                       |                                       |                                       |                                       |      |           |                    |                   |                                       | · · · · · ·                           | -                          |   |
|   |             |                       |        |        |           |            |                                       |                                       |                                       |                                       |      |           |                    |                   |                                       |                                       |                            |   |
|   |             |                       |        |        |           |            | · · · · · ·                           | · · · · · · · · · · · · · · · · · · · |                                       |                                       |      |           |                    |                   | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · | -                          |   |
|   |             |                       |        |        |           |            |                                       |                                       |                                       |                                       |      |           |                    |                   |                                       |                                       |                            |   |
|   |             |                       |        |        |           |            |                                       | · · · · · · · · · · · · · · · · · · · |                                       | · · · · ·                             |      |           |                    |                   |                                       |                                       | -                          |   |
|   |             |                       |        |        |           |            |                                       |                                       |                                       |                                       |      |           |                    |                   |                                       |                                       |                            |   |
|   |             |                       |        |        |           |            |                                       |                                       |                                       |                                       |      |           |                    |                   |                                       |                                       |                            |   |
|   |             |                       |        |        |           |            |                                       | · · · · · · · · · · · · · · · · · · · |                                       |                                       |      |           |                    |                   |                                       |                                       |                            |   |
|   |             |                       |        |        |           |            | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |      |           |                    |                   |                                       | · · · · · · · · · · · · · · · · · · · |                            |   |
|   |             |                       |        |        |           |            |                                       |                                       |                                       |                                       |      |           |                    |                   |                                       |                                       |                            |   |
|   |             |                       |        |        |           |            | · · · · · · · · · · · · · · · · · · · |                                       |                                       | · · · · · · · · · · · · · · · · · · · |      |           |                    |                   |                                       |                                       |                            |   |
|   |             |                       |        |        |           |            |                                       |                                       |                                       | · · · · ·                             |      |           |                    |                   |                                       | · · · · · ·                           |                            |   |
|   |             |                       |        |        |           |            |                                       |                                       |                                       |                                       |      |           |                    |                   |                                       |                                       |                            |   |
|   |             |                       |        |        |           |            | · · · · ·                             |                                       |                                       |                                       |      |           |                    |                   |                                       |                                       | -                          |   |
|   |             |                       |        |        |           |            |                                       |                                       |                                       |                                       |      |           |                    |                   |                                       |                                       |                            |   |
|   |             |                       |        |        |           |            |                                       |                                       |                                       |                                       |      |           |                    |                   |                                       |                                       | -                          |   |
|   |             |                       |        |        |           |            | · · · · · · · · · · · · · · · · · · · |                                       |                                       | · · · · · · · · · · · · · · · · · · · |      |           |                    |                   |                                       |                                       |                            |   |
|   |             |                       |        |        |           |            |                                       | ::::                                  |                                       |                                       |      |           | 1                  |                   | : : : :<br>: : : : :                  | · · · · · · · · · · · · · · · · · · · | -                          |   |
|   |             |                       |        |        |           |            |                                       |                                       |                                       |                                       |      |           |                    |                   |                                       |                                       |                            |   |
|   |             |                       |        |        |           |            |                                       |                                       |                                       |                                       |      | + • • • • |                    |                   |                                       |                                       | -                          |   |
|   |             |                       |        |        |           |            |                                       |                                       |                                       |                                       |      |           |                    |                   |                                       |                                       |                            |   |
|   |             |                       |        |        |           |            |                                       |                                       |                                       |                                       |      |           |                    |                   |                                       |                                       |                            |   |
|   |             |                       |        |        |           |            |                                       |                                       |                                       |                                       |      |           |                    |                   | : : : :                               |                                       |                            |   |
|   |             |                       |        |        |           |            |                                       |                                       |                                       |                                       |      |           |                    |                   |                                       |                                       |                            | GROUNDWATER                                   |
|   |             |                       |        |        |           |            |                                       |                                       |                                       |                                       |      |           |                    |                   |                                       |                                       |                            | DATE DEPTH (m)                                |
|   |             |                       |        |        |           |            |                                       |                                       |                                       |                                       |      |           |                    |                   | · · · · · · · · · · · · · · · · · · · |                                       |                            | 23/05/18 4.0 💆 2                              |
|   |             |                       |        |        |           |            |                                       |                                       |                                       |                                       |      |           |                    |                   |                                       |                                       | -                          |   |
| GEMTEC  |             |                       |        |        |           |            |                                       |                                       |                                       |                                       |      |           |                    |                   |                                       |                                       |                            |   |
| -   |             |                       | GEMTEC | GEMTEC | GEMTEC    |            |                                       |                                       |                                       |                                       |      |           |                    |                   |                                       |                                       |                            |   |

 CLIENT:
 Mayfield Golf Course Inc.

 PROJECT:
 Mayfield Golf Course - Detailed Investigation

 JOB#:
 101987.001

 LOCATION:
 See Borehole Location Plan

SHEET:1 OF 1DATUM:CGVD28BORING DATE:Mar 20 2023

| <u> </u> | ДОН           | SOIL PROFILE  | <b>.</b> .  | 1                     |          | SAM      | IPLES           |            | ●R                            | ENE<br>ESIS | TRA<br>STAN | TION<br>ICE (N)                       | , BLOV                                | VS/0.3    | s<br>m + | HEAR S | AL 🕀       | GTH (C<br>REMO | u), kPA<br>ULDED         | NG≜                        |   |
|----------|---------------|---|-------------|-----------------------|----------|----------|-----------------|------------|-------------------------------|-------------|-------------|---------------------------------------|---------------------------------------|-----------|----------|--------|------------|----------------|--------------------------|----------------------------|---|
| METRES   | BORING METHOD | DESCRIPTION   | STRATA PLOT | ELEV.                 | NUMBER   | ТҮРЕ     | RECOVERY,<br>mm | BLOWS/0.3m | ▲ <sup>D</sup> <sub>R</sub>   | YNA<br>ESIS | MIC<br>STAN | PENET<br>ICE, BL                      | RATIC<br>.OWS/                        | N<br>0.3m | v        |        | R CON<br>W |                | , %<br>—  W <sub>L</sub> | ADDITIONAL<br>LAB. TESTING | PIEZOMETE<br>OR<br>STANDPIPE<br>INSTALLATIC |
|          | BC            |   | STF         | (m)                   | 2        |          | R               | Ē          |                               | 10          | 2           | 0 3                                   | 0 4                                   | 0         | 50       | 60     | 70         | 80<br>         | 90                       |                            |   |
| 0        |               | Ground Surface  |             | 256.66<br>0.05        |          |          |                 |            |                               |             | ::          | ::::                                  | ::::                                  |           |          |        |            | :::            |                          | -                          | Monument                                    |
|          |               | FILL - (CL) SILTY CLAY, some sand;<br>brown, rootlets; cohesive, w>PL, firm to<br>stiff   |             | 0.00                  | 1        | SS       | 203             | 7          |                               |             |             |                                       |                                       |           |          |        |            |                |                          |                            |   |
| 1        |               |   |             |                       | 2        | SS       | 203             | 4          | •                             |             |             | 0                                     |                                       |           |          |        |            |                |                          |                            |   |
| 2        |               | FILL - (SM) SILTY SAND, trace gravel,   |             | <u>254.78</u><br>1.88 | 3A<br>3B | SS<br>SS | 254             | 12         |                               | •           |             | 0                                     |                                       |           |          |        |            |                |                          |                            | _   |
| 2        |               | trace plastic fines; dark brown to grey,<br>organic inclusions, non-cohesive, moist,<br>compact   |             |                       | 4        | SS       | 305             | 24         |                               |             | O           | •                                     |                                       |           |          |        |            |                |                          |                            | ₽   |
| 3        |               | (CL) SILTY CLAY, some sand, mottled;  |             | 253.76<br>2.90        |          |          |                 |            |                               |             |             | · · · · · · · · · · · · · · · · · · · |                                       |           |          |        |            |                |                          |                            | Bentonite                                   |
|          |               | brown and grey; cohesive, w~PL to<br>w>PL, very stiff   |             |                       | 5        | SS       | 457             | 18         |                               |             | ė           | 0                                     |                                       |           |          |        |            |                |                          |                            |   |
|          |               |   |             |                       |          |          |                 |            |                               |             |             |                                       |                                       |           |          |        |            |                |                          |                            |   |
| 4        |               | (CL) Gravelly sandy SILTY CLAY, brown   |             | 252.62<br>4.04        |          |          |                 |            |                               |             |             | · · · · · ·                           |                                       |           |          |        |            |                |                          |                            |   |
|          |               | to grey; rock fragments (TILL); cohesive,<br>w <pl hard<="" td="" to="" w~pl,=""><td>¢Ø/</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>· · · · · · · · · · · · · · · · · · ·</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></pl> | ¢Ø/         |                       |          |          |                 |            |                               |             |             | · · · · · · · · · · · · · · · · · · · |                                       |           |          |        |            |                |                          |                            |   |
| 5        |               |   | 1/Z         |                       | 6        | SS       | 457             | 40         |                               | 0           | ::          |                                       |                                       |           |          |        |            |                |                          |                            |   |
|          |               |   |             |                       |          |          |                 |            | · · · ·<br>· · · ·<br>· · · · |             |             | · · · · · · · · · · · · · · · · · · · |                                       |           |          |        |            |                |                          |                            |   |
| 6        |               | - Grey below about 6.1 m depth  |             |                       |          |          |                 |            |                               |             |             | · · · · · · · · · · · · · · · · · · · |                                       |           |          |        |            |                |                          | _                          | Filter sand                                 |
|          |               | - Silty clay seam / layer between<br>approximately 6.1 m and 6.6 m depths   |             |                       | 7        | SS       | 457             | 49         |                               |             | 0           | · · · · · · · · · · · · · · · · · · · |                                       |           |          |        |            |                |                          |                            |   |
| 7        |               | approximately 6.1 m and 6.6 m depuis  |             |                       |          |          |                 |            |                               |             |             | · · · · · · · · · · · · · · · · · · · |                                       |           |          |        |            |                |                          | -                          | 50mm dia. well screen                       |
|          |               | End of Borehole   | A/C         | 249.04<br>7.62        |          |          |                 |            |                               |             |             | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |           |          |        |            |                |                          |                            | · · ·                                       |
| 8        |               | Notes:  |             |                       |          |          |                 |            |                               |             | ::          | <u></u>                               |                                       |           |          |        |            |                |                          | -                          |   |
|          |               | 1. Piezometers installed as shown upon<br>upon completion of drilling.  |             |                       |          |          |                 |            |                               |             |             |                                       |                                       |           |          |        |            |                |                          |                            |   |
| 9        |               | 2. Groundwater levels measured in the installed monitoring well on May 18, 2023 at a depth of about 2.1 m below   |             |                       |          |          |                 |            |                               |             |             |                                       |                                       |           |          |        |            |                |                          |                            |   |
| 10       |               | ground surface.<br>3. Subsurface descriptions based on<br>borehole BH23-6D.   |             |                       |          |          |                 |            |                               |             |             |                                       |                                       |           |          |        |            |                |                          |                            |   |
|          |               |   |             |                       |          |          |                 |            |                               |             |             |                                       |                                       |           |          |        |            |                |                          |                            |   |
| 11       |               |   |             |                       |          |          |                 |            |                               |             |             |                                       |                                       |           |          |        |            |                |                          |                            |   |
|          |               |   |             |                       |          |          |                 |            |                               |             |             |                                       |                                       |           |          |        |            |                |                          |                            |   |
| 12       |               |   |             |                       |          |          |                 |            |                               |             |             |                                       |                                       |           |          |        |            |                |                          |                            |   |
|          |               |   |             |                       |          |          |                 |            |                               |             |             |                                       | · · · · · · · · · · · · · · · · · · · |           |          |        |            |                |                          |                            |   |
| 13       |               |   |             |                       |          |          |                 |            |                               |             |             |                                       |                                       |           |          |        |            |                |                          |                            | GROUNDWATE<br>OBSERVATION                   |
|          |               |   |             |                       |          |          |                 |            |                               |             |             |                                       |                                       |           |          |        |            |                |                          |                            | DATE DEPTH<br>(m)<br>23/05/18 2.1 <u>V</u>  |
| 14       |               |   |             |                       |          |          |                 |            |                               |             |             |                                       |                                       |           |          |        |            |                |                          |                            |   |
|          | C             | SEMTEC  | I           |                       | <u> </u> |          |                 |            | <u> :::</u>                   | :[::        | ::          |                                       | ::::                                  |           | 1::::    | 1::::  | 1::::      | :::            | : [ : : : :              | 1.000                      |   |
|          |               |   |             |                       |          |          |                 |            |                               |             |             |                                       |                                       |           |          |        |            |                |                          |                            | ED: AS<br>KED: DMF                          |

| RECORD O | F BOREHOL | E BH23-7. |
|----------|-----------|-----------|
|----------|-----------|-----------|

 CLIENT:
 Mayfield Golf Course Inc.

 PROJECT:
 Mayfield Golf Course - Detailed Investigation

 JOB#:
 101987.001

 LOCATION:
 See Borehole Location Plan

| SHEET:       | 1 OF 1      |
|--------------|-------------|
| DATUM:       | CGVD28      |
| BORING DATE: | Feb 10 2023 |
|              |             |

| ALE  |               |                   | SOIL PROFILE  | T L           | 1                     |        | SAN  | IPLES           |            | ● PE<br>RE | NETR<br>SISTA  | ATION<br>NCE ( | N), BLO                               | WS/0.3      | Sł<br>m + | HEAR S<br>NATUR                       | TRENG      | STH (Cu<br>REMOU                      | ı), kPA<br>JLDED     | AL<br>NG                   | PIEZOMETER                      |
|--|---------------|-------------------|---|---------------|-----------------------|--------|------|-----------------|------------|------------|----------------|----------------|---------------------------------------|-------------|-----------|---------------------------------------|------------|---------------------------------------|----------------------|----------------------------|---------------------------------|
| DEPTH SCALE<br>METRES  | BORING METHOD |                   | DESCRIPTION   | STRATA PLOT   | ELEV.<br>DEPTH        | NUMBER | ТҮРЕ | RECOVERY,<br>mm | BLOWS/0.3m |            | (NAMI<br>SISTA | C PEN<br>NCE,  | ETRATIO<br>BLOWS                      | 0N<br>/0.3m | W         |                                       | R CON<br>W | TENT,                                 | %<br>⊣w <sub>L</sub> | ADDITIONAL<br>LAB. TESTING | OR<br>STANDPIPE<br>INSTALLATION |
|  | ď             | 3                 |   | STF           | (m)                   | z      |      | R               | BLG        |            | 10             | 20             | 30                                    | 40          | 50 (      | 60 7                                  | 70 8       | 30 9                                  | 90                   |                            |                                 |
| _ 0  |               | _                 | Ground Surface<br>TOPSOIL   | 1. 1. N.      | 251.92<br>251.74      |        |      |                 |            |            |                |                |                                       |             |           |                                       |            |                                       |                      |                            | Monument<br>Concrete 🔀          |
|  |               |                   | (CL) sandy SILTY CLAY, trace gravel;<br>brown; cohesive, w>PL, stiff  |               | 0.18                  | 1      | SS   | 279             | 9          |            |                |                |                                       |             |           |                                       |            |                                       |                      |                            |                                 |
| - 1  |               |                   | (CL) sandy SILTY CLAY, trace gravel;<br>brown, oxidative staining, (TILL);<br>cohesive, w~PL to w>PL, hard                          |               | <u>251.31</u><br>0.61 | 2      | SS   | 305             | 35         |            | 0              |                |                                       |             |           |                                       |            |                                       |                      |                            |                                 |
|  |               |                   |   |               |                       |        |      |                 |            |            |                |                |                                       |             |           |                                       |            |                                       |                      |                            | $\nabla$                        |
| 2  |               |                   |   | r Or<br>g /s/ |                       | 3      | SS   | 432             | 39         |            | 0              |                |                                       |             |           | · · · · · · · · · · · · · · · · · · · |            |                                       |                      |                            |                                 |
|  |               |                   |   |               |                       | 4      | SS   | 457             | 23         |            |                | •              |                                       |             |           |                                       |            |                                       |                      |                            | Bentonite                       |
| - 3  |               | mm OD)            | - Auger grinding at about 3.1 m depth   |               |                       | 5      | SS   | 457             | 30/0.      | 0          | 0              |                |                                       |             |           |                                       |            |                                       |                      |                            | Demonite                        |
|  | - Auger       | ger (210          |   |               | 248.01<br>3.91        |        |      |                 |            |            |                |                |                                       |             |           |                                       |            |                                       |                      |                            |                                 |
|  | Power /       | Stem Auger (210mm | (SM) SILTY SAND, trace to some gravel,<br>trace plastic fines; brown to grey;<br>non-cohesive, moist to wet, very dense             |               | . 3.91                |        |      |                 |            |            |                |                | · · · · · · · · · · · · · · · · · · · |             |           | · · · · · · · · · · · · · · · · · · · |            | · · · · · · · · · · · · · · · · · · · |                      |                            |                                 |
| - 5  |               | Hollow            |   |               |                       | 6      | SS   | 356             | 50/0.0     | 08 . (     |                |                | · · · · · · · · · · · · · · · · · · · |             |           |                                       |            |                                       |                      |                            |                                 |
|  |               |                   |   |               |                       |        |      |                 |            |            |                |                | · · · · · · · · · · · · · · · · · · · |             |           |                                       |            |                                       |                      |                            |                                 |
| 6  |               |                   |   |               | •                     |        |      |                 |            |            |                |                | · · · · · · · · · · · · · · · · · · · |             |           |                                       |            |                                       |                      |                            | Filter sand                     |
|  |               |                   | - Gravelly and wet from approximately 6.1 m to 6.3 m depths   |               |                       | _7     | SS   | 127             | 50/0.1     | 3          | O<br>          |                |                                       |             |           |                                       |            |                                       |                      |                            |                                 |
| - 7  |               | -                 | (SP) gravelly SAND, some non-plastic fines; grey; non-cohesive, wet, very   | 0             | 245.00<br>6.92        |        |      |                 |            |            |                |                | · · · · · · · · · · · · · · · · · · · |             |           | · · · · · · · · · · · · · · · · · · · |            |                                       |                      |                            | 50mm dia. well                  |
|  |               |                   | dense   | 0             | 244.02                | 8      | SS   | 432             | 50/0.      | 3          | 0              |                |                                       |             |           |                                       |            |                                       |                      |                            |                                 |
| - 8  |               |                   | End of Borehole   |               | 7.90                  |        |      |                 |            |            |                |                |                                       |             |           |                                       |            |                                       |                      |                            |                                 |
|  |               |                   | Notes:<br>1. Groundwater level measured in open<br>borehole at approximately 4.4 m below  |               |                       |        |      |                 |            |            |                |                |                                       |             |           |                                       |            |                                       |                      |                            |                                 |
| - 9<br>  |               |                   | ground surface upon completion of drilling.   |               |                       |        |      |                 |            |            |                |                |                                       |             |           |                                       |            |                                       |                      |                            |                                 |
| 6/2/23<br>1 1 1 1 1  |               |                   | 2. Piezometer installed as shown upon completion of drilling.   |               |                       |        |      |                 |            |            |                |                |                                       |             |           |                                       |            |                                       |                      |                            |                                 |
| 18.GDT   |               |                   | 3. Groundwater level measured in<br>installed monitoring well on May 18,<br>2023 at a depth of about 1.5 m below<br>ground surface. |               |                       |        |      |                 |            |            |                |                | · · · · · · · · · · · · · · · · · · · |             |           |                                       |            |                                       |                      |                            |                                 |
| Z -<br>  |               |                   | ground surface.   |               |                       |        |      |                 |            |            |                |                | · · · · · · · · · · · · · · · · · · · |             |           |                                       |            |                                       |                      |                            | -                               |
| GPJ GE   |               |                   |   |               |                       |        |      |                 |            |            |                |                | · · · · · · · · · · · · · · · · · · · |             |           |                                       |            |                                       |                      |                            |                                 |
| 12<br>12<br>12<br>12<br>12<br>12<br>12<br>12                       |               |                   |   |               |                       |        |      |                 |            |            |                |                |                                       |             |           |                                       |            |                                       |                      |                            | _                               |
| 7.001'20:  |               |                   |   |               |                       |        |      |                 |            |            |                |                |                                       |             |           |                                       |            |                                       |                      |                            | GROUNDWATER<br>OBSERVATIONS     |
| 13 13 13   |               |                   |   |               |                       |        |      |                 |            |            |                |                |                                       |             |           |                                       |            |                                       |                      |                            | DATE DEPTH ELEV.<br>(m) (m)     |
| GEO - BOREHOLE LOG 101987.001'202306'02.GPJ GEMTEC 2018.GDT 6/2/23 |               |                   |   |               |                       |        |      |                 |            |            |                |                |                                       |             |           |                                       |            |                                       |                      |                            | 23/05/18 1.5 💆 250.5            |
| KEH  |               |                   |   |               |                       |        |      |                 |            | ::::       | ::::           |                | : : : : :                             | ::::        | ::::      | ::::                                  | 1::::      |                                       |                      |                            |                                 |
| Э<br>ЕО-ВС   | ,             | _                 |   |               |                       |        |      |                 |            |            |                |                |                                       |             |           |                                       |            |                                       |                      |                            | ED: IO<br>KED: DMF              |

3m

BLOWS/0.3

SAMPLES

TYPE

NUMBER

1 SS 203 5

2 SS 457 21

3

4

5 SS 457 44

6 SS 457 38

7

ELEV.

DEPTH (m)

253.06

<u>252.81</u> 0.25

250.93 2.13

4 R 249.02 4.04

3

C

ь С φ.

<u>م لل م</u> 0 þ 0

٠i

245.74 7.32

°0 0 \$

Ô ٠ö

0 ò

RECOVERY, mm

457 37

SS 127 50/0.1

SS

SS 457 45

CLIENT: Mayfield Golf Course Inc. PROJECT: Mayfield Golf Course - Detailed Investigation JOB#: 101987.001

DESCRIPTION

(CL) SILTY CLAY, trace to some sand, trace gravel; brown, oxidative staining; cohesive, w~PL to w>PL, firm to hard

(CL) SILTY CLAY, some sand to sandy, trace gravel; brown, rock fragments (TILL); cohesive, w<PL to w~PL, hard

(SM) SILTY SAND, some gravel, trace plastic fines; grey (TILL); non-cohesive, moist, dense

- Inferred cobbles/boulders or bedrock at about 7.3 m depth

1. Borehole was terminated at 7.3 m due to assumed bedrock contact.

2. Borehole was dry and open upon

4. Groundwater level measured in installed monitoring well on May 18, 2023 at a depth of about 3.4 m below

3. Piezometer installed as shown upon

End of Borehole

completion of drilling.

completion of drilling.

around surface.

GEMTEC

CONSULTING ENGINEERS

Notes:

SOIL PROFILE

STRATA PLOT

11.

| SHEET:       | 1 OF 1 |
|--------------|--------|
| DATUM:       | CGVD2  |
| BORING DATE: | Mar 21 |

LOCATION: See Borehole Location Plan

Ground Surface

TOPSOIL

DEPTH SCALE METRES BORING METHOD

0

1

2

3

4

5

6

7

8

9

10

11

Stem Auger (210mm OD)

Hollow

Power Auger

| Bentonite |  |
|-----------|--|
|           |  |

GEO - BOREHOLE LOG 101987.001'2023'06'02.GPJ GEMTEC 2018.GDT 6/2/23 12 13 14

LOGGED: AS

CHECKED: DMF

 CLIENT:
 Mayfield Golf Course Inc.

 PROJECT:
 Mayfield Golf Course - Detailed Investigation

 JOB#:
 101987.001

 LOCATION:
 See Borehole Location Plan

| SHEET:       | 1 OF 1     |
|--------------|------------|
| DATUM:       | CGVD28     |
| BORING DATE: | Mar 8 2023 |

| щ                     |             | 0                 | SOIL PROFILE  |             |                       |          | SAM      | <b>IPLES</b>    |            | ● PE                  | ENE |             |                                       | N) BL                                 | าพร                                   | \$/0 3r                               |                                       |                                       | TRENG<br>AL ⊕ F |       | u), kPA                               | . (7)                      |   |                       |
|-----------------------|-------------|-------------------|---|-------------|-----------------------|----------|----------|-----------------|------------|-----------------------|-----|-------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|-----------------|-------|---------------------------------------|----------------------------|---|-----------------------|
| DEPTH SCALE<br>METRES |             | BORING METHOD     | DESCRIPTION   | STRATA PLOT | ELEV.<br>DEPTH<br>(m) | NUMBER   | ТҮРЕ     | RECOVERY,<br>mm | BLOWS/0.3m | ▲ <sup>D`</sup><br>RE | YNA | MIC<br>STAP | PEN                                   | ETRAT<br>BLOW                         | ION                                   | ßm                                    | , , ,<br>W <sub>F</sub><br>0 6        | WATE                                  | R CON<br>W      | TENT, |                                       | ADDITIONAL<br>LAB. TESTING | PIEZOMETER<br>OR<br>STANDPIPE<br>INSTALLATIOI |                       |
|                       |             |                   | Ground Surface  |             | 254.29                |          |          |                 |            |                       | ::  |             | ::::                                  |                                       | : :                                   | :::                                   | · · · · ·                             |                                       |                 |       |                                       |                            | Monument                                      | _                     |
|                       |             |                   | TOPSOIL<br>(CL) SILTY CLAY, trace sand; brown,<br>oxidative staining; cohesive, w>PL, firm<br>to very stiff   |             | 254.04<br>0.25        | 1A<br>1B | SS<br>SS | 457             | 8          |                       |     | D           |                                       |                                       | · · · · · · · · · · · · · · · · · · · |                                       |                                       |                                       |                 |       |                                       |                            | Ϋ́  |                       |
| - 1                   |             |                   | to very suit  |             | 252 92                | 2        | SS       | 305             | 28         |                       |     | 9           |                                       |                                       |                                       |                                       | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |                 |       |                                       |                            | <u> </u>                                      | ŀ                     |
|                       |             |                   | (CL) sandy SILTY CLAY, trace to some<br>gravel; brown, oxidative staining (TILL);<br>cohesive, w <pl stiff="" td="" to="" to<="" very="" w~pl,=""><td></td><td>252.92<br/>1.37</td><td>3</td><td>SS</td><td>457</td><td>26</td><td></td><td>Ċ</td><td>D.</td><td>•</td><td>· · · · · · · · · · · · · · · · · · ·</td><td></td><td></td><td></td><td>· · · · · · · · · · · · · · · · · · ·</td><td></td><td></td><td></td><td></td><td></td><td></td></pl> |             | 252.92<br>1.37        | 3        | SS       | 457             | 26         |                       | Ċ   | D.          | •                                     | · · · · · · · · · · · · · · · · · · · |                                       |                                       |                                       | · · · · · · · · · · · · · · · · · · · |                 |       |                                       |                            |   |                       |
|                       |             |                   | hard  |             |                       | 4        | SS       | 457             | 66         |                       |     |             |                                       | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |                                       |                                       |                                       |                 |       | · · · · · · · · · · · · · · · · · · · |                            |   |                       |
| Ē,                    |             |                   |   |             |                       |          |          |                 |            |                       |     |             |                                       |                                       |                                       | · · · · · · · · · · · · · · · · · · · |                                       | · · · · · · · · · · · · · · · · · · · |                 |       |                                       |                            |   |                       |
|                       |             |                   |   |             |                       | 5        | SS       | 457             | 51         |                       | 0   |             |                                       |                                       |                                       |                                       |                                       |                                       |                 |       |                                       |                            |   |                       |
| 4                     |             |                   |   |             | 250.25<br>4.04        |          |          |                 |            |                       |     |             |                                       |                                       |                                       |                                       |                                       |                                       |                 |       |                                       | -                          |   |                       |
|                       |             | (do               | (SM) gravelly SILTY SAND; grey, rock<br>fragments; non-cohesive, moist, dense   |             | 4.04                  |          |          |                 |            |                       |     |             |                                       |                                       |                                       |                                       |                                       |                                       |                 |       |                                       |                            | Bentonite                                     |                       |
| - 5                   |             | 0mm0              | (ML) SILT slight plasticity trace sand:   |             | 249.31                | 6        | SS       | 457             | 43         |                       | 0   |             |                                       |                                       |                                       | <u>.</u>                              |                                       |                                       |                 |       |                                       | -                          |   |                       |
|                       | Power Auder | Stem Auger (210mm | (ML) SILT, slight plasticity, trace sand;<br>grey; non-cohesive, moist to wet,<br>compact to very dense   |             |                       |          |          |                 |            |                       |     |             |                                       |                                       |                                       |                                       |                                       |                                       |                 |       |                                       |                            |   |                       |
| E 6                   |             | v Stem            |   |             |                       | _        |          | 457             | 00         |                       |     | 0           |                                       |                                       | : :<br>: :<br>: :                     |                                       |                                       |                                       |                 |       |                                       | -                          |   |                       |
|                       |             | Hollow            |   |             |                       | 7        | SS       | 457             | 90         |                       |     | 0           |                                       |                                       |                                       |                                       |                                       |                                       |                 |       |                                       |                            |   |                       |
|                       |             |                   |   |             |                       |          |          |                 |            |                       |     |             | · · · · · · · · · · · · · · · · · · · |                                       | · · · · · · · · · · · · · · · · · · · | · · · ·                               |                                       | · · · · · ·                           |                 |       | · · · · · · · · · · · · · · · · · · · |                            |   |                       |
|                       |             |                   |   |             |                       | 8        | SS       | 457             | 46         |                       |     | 0           |                                       |                                       |                                       | •                                     |                                       |                                       |                 |       |                                       |                            |   |                       |
|                       |             |                   |   |             |                       |          |          |                 |            |                       |     |             |                                       |                                       |                                       |                                       |                                       |                                       |                 |       |                                       |                            |   |                       |
| -<br>- 9              |             |                   |   |             |                       |          |          |                 |            |                       |     |             |                                       |                                       |                                       |                                       |                                       |                                       |                 |       |                                       |                            | Filter sand                                   |                       |
|                       |             |                   |   |             |                       | 9        | SS       | 457             | 16         |                       |     | •C          |                                       |                                       |                                       |                                       |                                       |                                       |                 |       |                                       |                            |   |                       |
| - 10                  |             |                   |   |             |                       |          |          |                 |            |                       |     |             |                                       |                                       |                                       |                                       |                                       |                                       |                 |       |                                       | -                          | 50mm dia. well                                |                       |
|                       |             |                   | - Wet below about 9.1 m depth   |             |                       |          |          |                 |            |                       |     |             |                                       |                                       |                                       | · · · · · · · · · · · · · · · · · · · |                                       |                                       |                 |       |                                       |                            | 50mm dia. well                                |                       |
| í⊢<br>⊢ 11            |             |                   |   |             | 243 16                | 10       | SS       | 457             | 28         |                       |     | (           | þ: : : <b>(</b>                       |                                       |                                       |                                       |                                       |                                       |                 |       |                                       | -                          |   | -<br>-                |
|                       |             |                   | End of Borehole   |             | 243.16<br>11.13       |          |          |                 |            |                       |     |             |                                       |                                       |                                       |                                       |                                       |                                       |                 |       |                                       |                            |   | <u> </u>              |
| E<br>- 12             |             |                   | Notes:<br>1. Groundwater level measured in open   |             |                       |          |          |                 |            |                       |     |             |                                       |                                       |                                       |                                       |                                       |                                       |                 |       |                                       | -                          |   | -                     |
|                       |             |                   | borehole at approximately 10.8 m below<br>ground surface upon completion of<br>drilling.  |             |                       |          |          |                 |            |                       |     |             |                                       |                                       |                                       | · · · · · · · · · · · · · · · · · · · |                                       |                                       |                 |       |                                       |                            |   |                       |
| E<br>- 13             |             |                   | 2. Piezometer installed as shown upon<br>completion of drilling.  |             |                       |          |          |                 |            |                       |     |             |                                       |                                       |                                       |                                       |                                       |                                       |                 |       |                                       |                            | GROUNDWATER<br>OBSERVATIONS                   | ; _                   |
| Ē                     |             |                   | 3. Groundwater level measured in<br>installed monitoring well on May 18,  |             |                       |          |          |                 |            |                       |     |             |                                       |                                       |                                       |                                       |                                       |                                       |                 |       | · · · · · · · · · · · · · · · · · · · |                            | DATE (m)                                      | ELEV.<br>(m)<br>253.6 |
| 2<br>                 |             |                   | 2023 at a depth of about 0.7 m below ground surface.  |             |                       |          |          |                 |            |                       |     |             |                                       |                                       |                                       |                                       |                                       |                                       |                 |       |                                       |                            |   |                       |
| 6                     |             | 0                 | Semtec  | I           |                       |          |          |                 |            | [::::                 | 1:: | :::         | :::                                   | :   : : :                             | : [ :                                 | :::                                   | ::::                                  | ::::                                  | <u> ::::</u>    | ::::  | ::::                                  |                            | ED: AS  |                       |
| <                     | /           | Ct                |   |             |                       |          |          |                 |            |                       |     |             |                                       |                                       |                                       |                                       |                                       |                                       |                 |       |                                       |                            | ED. AS<br>KED: DMF                            |                       |
| ′ <b>L</b>            | _           |                   |   |             |                       |          |          |                 |            |                       |     |             |                                       |                                       |                                       |                                       |                                       |                                       |                 |       |                                       |                            |   |                       |

| -                 | ATION: See Borehole Location Plan  |                |                          |        | SAM  | IPLES       |      | PE                                    | NETR                                  |                |                 |            | Sł | IEAR S | TREN       | GTH (( | Cu), kPA  |                            |                                      |
|-------------------|--|----------------|--------------------------|--------|------|-------------|------|---------------------------------------|---------------------------------------|----------------|-----------------|------------|----|--------|------------|--------|---|----------------------------|--------------------------------------|
| BORING METHO      | O SOIL PROFILE   | STRATA PLOT    | ELEV.<br>DEPTH<br>(m)    | NUMBER | ТҮРЕ | RECOVERY, I | -    | ▲ DY<br>RE                            | 'NAMIC<br>SISTA                       | PENE<br>NCE, B | TRATIC<br>LOWS/ | 0N<br>0.3m | W  | WATE   | R COI<br>W | NTENT  | Cu), kPA<br>OULDED<br><sup>-</sup> , %<br>  W <sub>L</sub><br>90  | ADDITIONAL<br>LAB. TESTING | PIEZOME<br>OR<br>STANDPI<br>INSTALLA |
| $\overline{\Box}$ | Ground Surface   |                | 252.82                   |        |      |             |      |                                       |                                       |                |                 |            |    |        |            |        |   |                            | Monument                             |
|                   | TOPSOIL  | <u> 11/1 1</u> | 252.51<br>0.31           | 1      | SS   | 457         | 6    |                                       |                                       |                |                 |            |    |        |            |        |   | ]                          |                                      |
|                   | (CL) SILTY CLAY, trace sand, trace<br>gravel; brown, rootlets; cohesive, w>PL<br>firm to very stiff  |                | 0.31                     | 2      | SS   | 457         | 17   |                                       |                                       |                |                 |            |    |        |            |        | · · · · · · · · · · · · · · · · · · ·   |                            |                                      |
|                   |  |                |                          |        |      |             |      |                                       |                                       |                |                 |            |    |        |            |        | · · · · · · · · · · · · · · · · · · ·   |                            |                                      |
|                   |  |                | 250.69<br>2.13           | 3      | SS   | 457         | 27   |                                       | 0                                     |                |                 |            |    |        |            |        |   | -                          |                                      |
|                   | (CL) sandy SILTY CLAY, some gravel;<br>brown, oxidative staining (TILL);<br>cohesive, w <pl hard<="" td="" to="" w~pl,=""><td></td><td>2.13<br/></td><td>4</td><td>SS</td><td>457</td><td>38</td><td></td><td>0</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>· · · · · · · · · · · · · · · · · · ·</td><td></td><td></td></pl> |                | 2.13<br>                 | 4      | SS   | 457         | 38   |                                       | 0                                     |                |                 |            |    |        |            |        | · · · · · · · · · · · · · · · · · · ·   |                            |                                      |
|                   |  |                |                          | 5      | SS   | 457         | 41   |                                       | :0:                                   |                |                 | •          |    |        |            |        | · · · · · · · · · · · · · · · · · · ·   | -                          |                                      |
|                   | (ML) sandy SILT, some gravel; brown, oxidative staining (TILL); non-cohesive,  |                | 248.78<br>4.04           |        |      |             |      |                                       |                                       |                |                 |            |    |        |            |        | ·         · |                            | Ţ                                    |
|                   | oxidative staining (TLL); non-cohesive,<br>moist, very dense   | • 0.*          |                          |        |      |             |      |                                       |                                       |                |                 |            |    |        |            |        |   |                            |                                      |
|                   |  | • 0 (<br>• 0 • |                          | 6      | SS   | 457         | 82/0 | 28                                    | 0                                     |                |                 |            |    |        |            |        | · · · · · · · · · · · · · · · · · · ·   |                            | Bentonite                            |
|                   | (ML) SILT, slight plasticity, trace sand,<br>trace to some plastic fines; grey;<br>non-cohesive, moist to wet, dense to  |                | 247.26<br>5.56           |        |      |             |      |                                       |                                       |                |                 |            |    |        |            |        | ·         ·         ·         ·         ·           ·         ·         ·         ·         ·         ·           ·         ·         ·         ·         ·         ·           ·         ·         ·         ·         ·         ·           ·         ·         ·         ·         ·         ·           ·         ·         ·         ·         ·         ·           ·         ·         ·         ·         ·         ·           ·         ·         ·         ·         ·         ·           ·         ·         ·         ·         ·         ·           ·         ·         ·         ·         ·         ·   |                            |                                      |
| Power Auger       | (ML) SILT, slight plasticity, trace sand,<br>trace to some plastic fines; grey;<br>non-cohesive, moist to wet, dense to<br>very dense  |                |                          | 7      | SS   | 457         | 42   |                                       | ::O                                   |                |                 | •          |    |        |            |        | · · · · · · · · · · · · · · · · · · ·   |                            |                                      |
|                   | Hollow Stel  |                |                          |        |      |             |      | · · · · · · · · · · · · · · · · · · · |                                       |                |                 |            |    |        |            |        | · · · · · · · · · · · · · · · · · · ·   | -                          |                                      |
|                   | Ϋ́   |                |                          | 8      | SS   | 457         | 70   |                                       | · · · · · · · · · · · · · · · · · · · |                |                 |            |    |        |            |        | · · · · · · · · · · · · · · · · · · ·   |                            |                                      |
|                   |  |                |                          | 0      |      | 457         | 10   |                                       |                                       |                |                 |            |    |        |            |        | ·         · | MH                         |                                      |
|                   |  |                |                          |        |      |             |      |                                       |                                       |                |                 |            |    |        |            |        |   | -                          |                                      |
|                   |  |                |                          | 9      | SS   | 457         | 33   |                                       |                                       |                | •               |            |    |        |            |        | · · · · · · · · · · · · · · · · · · ·   |                            |                                      |
|                   |  |                |                          |        |      |             |      |                                       |                                       |                |                 |            |    |        |            |        |   | -                          | <b>F</b> iller                       |
|                   |  |                |                          | 10     | SS   | 457         | 32   |                                       |                                       | 0::::          | •               |            |    |        |            |        | · · · · · · · · · · · · · · · · · · ·   |                            | Filter sand                          |
|                   | (GP-GM) Sandy SILTY GRAVEL; grey,  |                | <u>241.16</u><br>11.66 ن |        |      |             |      |                                       |                                       |                |                 |            |    |        |            |        |   |                            | 50mm dia. well<br>screen             |
|                   | (TILL) rock fragments; non-cohesive,<br>wet, very dense  |                |                          | 11     | SS   | 457         | 55   |                                       |                                       |                |                 |            |    |        |            |        | · · · · · · · · · · · · · · · · · · ·   | м                          |                                      |
| $\left  \right $  | End of Borehole  | <u> </u>       | <u>240.17</u><br>12.65   |        |      |             |      |                                       |                                       |                |                 |            |    |        |            |        |   |                            |                                      |
|                   | Notes:<br>1. Groundwater level measured in oper<br>borehole at approximately 6.7 m below<br>ground surface on Mar 10, 2023, prior t  |                |                          |        |      |             |      |                                       |                                       |                |                 |            |    |        |            |        |   |                            |                                      |

|            | QOH           | SOIL PROFILE  |             | 1              |        | SAN  | IPLES           |            | ● PE<br>RE | NETR.<br>SISTA | ATION<br>NCE (N | ), BLO\         | NS/0.3      |             | HEAR S<br>NATUR |             |        | u), kPA<br>JLDED     | Ч <sup>р</sup>             |  |
|------------|---------------|---|-------------|----------------|--------|------|-----------------|------------|------------|----------------|-----------------|-----------------|-------------|-------------|-----------------|-------------|--------|----------------------|----------------------------|--|
| METRES     | BORING METHOD | DESCRIPTION   | STRATA PLOT | ELEV.<br>DEPTH | NUMBER | ТҮРЕ | RECOVERY,<br>mm | BLOWS/0.3m | ▲ DY<br>RE | NAMIO<br>SISTA | PENE<br>NCE, B  | TRATIC<br>LOWS/ | 0N<br>0.3m  | v           | WATE            | R COI       | NTENT, | %<br>⊣w <sub>L</sub> | ADDITIONAL<br>LAB. TESTING | PIEZOMETE<br>OR<br>STANDPIPI<br>INSTALLATIO  |
| _          | BO            |   | STR         | (m)            | z      |      | RE              | BLO        | 1          | 0              | 20 3<br> ::::   | 30 4            | 10<br> :::: | 50<br> :::: | 60 7            | 70<br> :::: | 80     | 90                   |                            |  |
| 14 ·<br>15 |               | piezometer installation.<br>2. Piezometers installed as shown upon<br>completion of drilling. Shallow<br>piezometer installed in second borehole<br>drilled within approximately 2 m of initial |             |                |        |      |                 |            |            |                |                 |                 |             |             |                 |             |        |                      |                            |  |
| 16         |               | installation.<br>3. Groundwater levels measured in the<br>installed monitoring well on May 18,<br>2023 at a depth of about 3.7 m below<br>ground surface.                                       |             |                |        |      |                 |            |            |                |                 |                 |             |             |                 |             |        |                      |                            |  |
| 17         |               |   |             |                |        |      |                 |            |            |                |                 |                 |             |             |                 |             |        |                      |                            |  |
| 18         |               |   |             |                |        |      |                 |            |            |                |                 |                 |             |             |                 |             |        |                      |                            |  |
| 20         |               |   |             |                |        |      |                 |            |            |                |                 |                 |             |             |                 |             |        |                      |                            |  |
|            |               |   |             |                |        |      |                 |            |            |                |                 |                 |             |             |                 |             |        |                      |                            |  |
| 21         |               |   |             |                |        |      |                 |            |            |                |                 |                 |             |             |                 |             |        |                      |                            |  |
| 23         |               |   |             |                |        |      |                 |            |            |                |                 |                 |             |             |                 |             |        |                      |                            |  |
| 24         |               |   |             |                |        |      |                 |            |            |                |                 |                 |             |             |                 |             |        |                      |                            |  |
| 25         |               |   |             |                |        |      |                 |            |            |                |                 |                 |             |             |                 |             |        |                      |                            |  |
| 26         |               |   |             |                |        |      |                 |            |            |                |                 |                 |             |             |                 |             |        |                      |                            |  |
| 27         |               |   |             |                |        |      |                 |            |            |                |                 |                 |             |             |                 |             |        |                      |                            | GROUNDWAT<br>OBSERVATIO<br>DATE DEPTH<br>(m) |
|            |               |   |             |                |        |      |                 |            |            |                |                 |                 |             |             |                 |             |        | · · · · · ·          |                            | 23/05/18 3.7 💆                               |

٦

Γ

 CLIENT:
 Mayfield Golf Course Inc.

 PROJECT:
 Mayfield Golf Course - Detailed Investigation

 JOB#:
 101987.001

| See | DUIEIIUIE | LUCATION     | FIGIL                 |
|-----|-----------|--------------|-----------------------|
|     |           |              |                       |
|     |           |              |                       |
|     | Jee       | See Dorenole | See Borehole Location |

| SHEET:       | 1 OF 1     |
|--------------|------------|
| DATUM:       | CGVD28     |
| BORING DATE: | Mar 9 2023 |

|        |               |  |               |        | <b></b> |      |                 |            | -                  |                   |       |                    |        |            |               | <b>C</b> • • •                        | ·                           |                 |                |   | 1                          |            |                     | _  |
|--------|---------------|--|---------------|--------|---------|------|-----------------|------------|--------------------|-------------------|-------|--------------------|--------|------------|---------------|---------------------------------------|-----------------------------|-----------------|----------------|---|----------------------------|------------|---------------------|----|
|        | Q             | SOIL PROFILE   |               |        |         | SAN  | /IPLES          |            | ● <sup>PE</sup> RE | ENET              | RATIO | ON<br>E (N)        | ), BLO | ws/0       | ).3m          | SHE<br>+ N/                           | EAR S<br>ATUR/              | TRENC<br>AL ⊕ I | GTH (C<br>REMO | Cu), kPA<br>IULDED                      | ں<br>ت                     |            |                     |    |
| METRES | BORING METHOD |  | -oT           |        | _<br>س  |      | ٢,              | 3m         |                    |                   |       | . /                |        |            |               |                                       |                             | R CON           |                |   | ADDITIONAL<br>LAB. TESTING | PIE        | ZOMETE<br>OR        | R  |
| ШЦЦ    | ע<br>פו       | DESCRIPTION  | STRATA PLOT   | ELEV.  | NUMBER  | ТҮРЕ | RECOVERY,<br>mm | BLOWS/0.3m |                    | YNAM              |       |                    | RATIO  | DN         |               |                                       |                             | R CON<br>W      |                |   | ĔË                         | ST         | ANDPIPE             | E  |
| Σ      | <b>JRIN</b>   | DEGORI HON   | RAT           | DEPTH  | MUN     | ≿    |                 | ŇŎ         | - RI               | 25151             | ANC   | E, BL              | _005   | /0.3m      | 1             | W <sub>P</sub>                        |                             |                 |                | —   W <sub>L</sub>                      | <b>P</b> A                 | INS        | TALLATIC            | JV |
|        | ğ             |  | STI           | (m)    | _       |      | R               | ВГ         |                    | 10                | 20    | 3                  | 0      | 40         | 50            | 60                                    | ) 7                         | 70 8            | 80             | 90                                      |                            |            |                     |    |
|        |               | Ground Surface   | - 1.7 .1      | 252.93 |         |      |                 |            |                    |                   | : :   |                    |        |            |               | ::::<br>::::                          |                             |                 |                |   |                            | Mon        | ument               |    |
|        |               | TOPSOIL  | <u></u>       | 252.62 | 1       | SS   | 457             | 6          |                    |                   |       |                    |        |            |               |                                       |                             |                 |                |   |                            |            |                     |    |
|        |               | (CL) SILTY CLAY, trace sand, trace<br>gravel; brown, rootlets; cohesive, w>PL,   |               | 0.31   | Ŀ       |      |                 | Ľ          |                    |                   |       |                    |        |            |               |                                       |                             |                 |                |   |                            |            |                     |    |
|        |               | firm to very stiff   |               |        |         |      |                 |            |                    |                   | : :   | : : :              |        |            |               |                                       |                             |                 |                | : : : : : :                             |                            |            |                     |    |
|        |               |  |               |        | 2       | SS   | 457             | 17         |                    |                   |       | · · · ·            |        | ::         |               |                                       |                             |                 |                |   |                            |            |                     |    |
|        |               |  |               |        |         |      |                 |            |                    |                   |       |                    |        |            |               |                                       |                             |                 |                |   |                            |            |                     |    |
|        |               |  |               |        | 3       | SS   | 457             | 27         |                    | 0                 |       | •                  |        |            |               |                                       |                             |                 |                |   |                            |            |                     |    |
|        |               |  |               | 250.80 |         |      |                 | -          |                    | <u>:::</u><br>::: | : :   | :::                | ::::   | ::         | <u>:::</u> :: | :::<br>:::                            | <u>: : : :</u><br>: : : : : | <u> </u>        | :::            | <u>: ::::</u><br>: ::::                 | -                          | Ben        | tonite              |    |
|        |               | (CL) sandy SILTY CLAY, some gravel;<br>brown, oxidative staining (TILL);   |               | 2.13   |         |      |                 |            |                    |                   | : :   | · · · ·<br>· · · · |        |            |               | :::                                   |                             |                 | :::            |   |                            |            | $\overline{\nabla}$ |    |
|        |               | cohesive, w <pl hard<="" td="" to="" w~pl,=""><td><math>\mathcal{N}</math></td><td></td><td>4</td><td>SS</td><td>457</td><td>38</td><td></td><td>:O:</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></pl> | $\mathcal{N}$ |        | 4       | SS   | 457             | 38         |                    | :O:               |       |                    |        |            |               |                                       |                             |                 |                |   |                            |            |                     |    |
|        |               |  | 6/0           |        |         |      |                 |            |                    |                   | : :   | · · · ·            |        |            |               | :::<br>:::                            | <u></u>                     |                 | :::            | : : : : :<br>                           | -                          |            |                     |    |
|        |               |  |               |        | 5       | SS   | 457             | 41         |                    | :0:               |       |                    |        |            |               |                                       |                             |                 |                |   |                            |            |                     |    |
|        |               |  |               |        |         |      |                 |            |                    |                   | : :   | : : :              |        |            |               |                                       |                             |                 |                |   |                            |            |                     |    |
|        |               |  | X/Z           | 248.89 |         |      |                 |            |                    |                   | : :   | · · · ·<br>· · · · |        | ::         |               | ::::                                  | · · · · ·                   |                 | :::            |   |                            |            |                     |    |
|        |               | (ML) sandy SILT, some gravel; brown,<br>oxidative staining (TILL); non-cohesive,   | 6 Ú (C        | 4.04   |         |      |                 |            |                    |                   |       |                    |        |            |               |                                       |                             |                 |                |   |                            | Filter     | sand                |    |
|        |               | moist, very dense  | le D.         |        |         |      |                 |            |                    |                   | : :   |                    |        |            |               |                                       |                             |                 |                |   |                            |            |                     | ĺ  |
|        |               |  |               |        | 6       | SS   | 457             | 82/0.      | 28 : : :           | þi∷               | : :   | ::::               |        |            |               |                                       | ::::                        |                 | :::            | : : : : :                               |                            |            |                     | İ  |
|        |               |  | 0.7.0         |        |         |      |                 |            |                    |                   |       |                    |        |            |               |                                       |                             |                 |                |   |                            | 50mm dia   |                     |    |
|        |               |  |               | 247.37 |         |      |                 |            |                    |                   | : :   | : : :              |        |            |               |                                       | ::::                        |                 | :::            |   |                            |            | creen               |    |
|        |               | (ML) SILT, slight plasticity, trace sand,<br>trace to some plastic fines; grey;  |               | 5.56   |         |      |                 |            |                    |                   | : :   |                    |        |            |               |                                       |                             |                 | :::            |   |                            |            |                     |    |
|        |               | non-cohesive, moist to wet, dense to very dense  |               | 246.83 |         |      |                 |            |                    |                   | : :   | · · · ·            |        |            |               |                                       | <u></u>                     |                 |                | <u></u>                                 | -                          |            |                     |    |
|        |               | End of Borehole  | <i>′</i>      | 0.10   |         |      |                 |            |                    |                   | : :   | ::::               |        | : :<br>: : |               |                                       | ::::                        |                 | :::            | : |                            |            |                     |    |
|        |               | Notes:   |               |        |         |      |                 |            |                    |                   |       |                    |        |            |               |                                       |                             |                 |                |   |                            |            |                     |    |
|        |               | 1. Piezometers installed as shown upon   |               |        |         |      |                 |            |                    |                   | : :   |                    |        |            |               |                                       | <u></u>                     |                 |                | · · · · · ·                             | -                          |            |                     |    |
|        |               | completion of drilling.  |               |        |         |      |                 |            |                    |                   | : :   |                    |        |            |               |                                       |                             |                 | :::            |   |                            |            |                     |    |
|        |               | 2. Groundwater levels measured in the  |               |        |         |      |                 |            |                    |                   |       |                    |        |            |               |                                       |                             |                 |                |   |                            |            |                     |    |
|        |               | installed monitoring well on May 18, 2023 at a depth of about 2.6 m below  |               |        |         |      |                 |            |                    |                   | : :   | · · · ·            |        |            |               | <u></u>                               | <u></u>                     |                 | :::            | · · · · ·                               | -                          |            |                     |    |
|        |               | ground surface.  |               |        |         |      |                 |            |                    |                   |       | · · · ·            |        |            |               |                                       |                             |                 |                |   |                            |            |                     |    |
|        |               | <ol> <li>Subsurface description based on<br/>borehole BH23-10D.</li> </ol>   |               |        |         |      |                 |            |                    |                   | : :   | ::::               |        |            |               |                                       | ::::                        |                 | :::            | : |                            |            |                     |    |
|        |               |  |               |        |         |      |                 |            |                    |                   | : :   | :::                |        | ::         |               |                                       |                             |                 | :::            |   |                            |            |                     |    |
|        |               |  |               |        |         |      |                 |            |                    |                   |       |                    |        |            |               |                                       |                             |                 |                |   |                            |            |                     |    |
|        |               |  |               |        |         |      |                 |            |                    |                   | : :   | · · · ·<br>· · · · |        |            |               | · · · · · · · · · · · · · · · · · · · | ::::                        |                 |                | : : : : :                               |                            |            |                     |    |
|        |               |  |               |        |         |      |                 |            |                    |                   |       |                    |        |            |               |                                       |                             |                 |                |   |                            |            |                     |    |
|        |               |  |               |        |         |      |                 |            | ::::               |                   | : :   | :::                | ::::   | ::         | :::::         |                                       |                             |                 | :::            |   | 1                          |            |                     |    |
|        |               |  |               |        |         |      |                 |            |                    |                   |       |                    |        |            |               |                                       |                             |                 |                |   |                            |            |                     |    |
|        |               |  |               |        |         |      |                 |            |                    |                   |       |                    |        |            |               |                                       |                             |                 |                |   | 1                          |            |                     |    |
|        |               |  |               |        |         |      |                 |            |                    |                   |       |                    |        |            |               |                                       |                             |                 |                | · · · · · · · · · · · · · · · · · · ·   | 1                          |            |                     |    |
|        |               |  |               |        |         |      |                 |            |                    |                   |       |                    |        |            |               |                                       |                             |                 |                |   |                            |            |                     |    |
|        |               |  |               |        |         |      |                 |            |                    |                   | : :   |                    |        |            |               | ::: <br>:::                           |                             |                 |                |   | 1                          |            |                     |    |
|        |               |  |               |        |         |      |                 |            |                    | :::               | : :   | :::<br>:::         |        |            |               |                                       |                             | ::::<br>::::    | <u> </u>       |   | -                          |            |                     |    |
|        |               |  |               |        |         |      |                 |            |                    |                   |       |                    |        |            |               |                                       |                             |                 |                |   | 1                          |            |                     |    |
|        |               |  |               |        |         |      |                 |            |                    |                   |       |                    |        |            |               |                                       |                             |                 |                |   | 1                          |            |                     |    |
|        |               |  |               |        |         |      |                 |            |                    |                   |       | · · · ·            |        |            |               | · · · ·                               | <u></u>                     |                 |                | :   : : : :<br>-   : : : : :            | 4                          | GRC<br>OBS |                     |    |
|        |               |  |               |        |         |      |                 |            |                    |                   |       |                    |        |            |               | · · · · · · · · · · · · · · · · · · · |                             |                 |                |   | 1                          | DATE       | DEPTH<br>(m)        |    |
|        |               |  |               |        |         |      |                 |            |                    |                   |       |                    |        |            |               |                                       |                             |                 |                | · · · · · · · · · · · · · · · · · · ·   |                            | 23/05/18   | 2.6 모               |    |
|        |               |  |               |        |         |      |                 |            |                    |                   |       |                    |        |            |               |                                       |                             |                 |                |   | 1                          |            |                     | -  |
| L      |               |  |               |        |         |      |                 |            | ::::               | :::               | : :   | :::                | ::::   | ::         | :: :          | :::                                   | ::::                        | ::::            | :::            | : ::::                                  |                            |            |                     |    |
|        | C             | SEMTEC   |               |        |         |      |                 |            |                    |                   |       |                    |        |            |               |                                       |                             |                 |                |   | LOGG                       | GED: AS    |                     |    |
| 1      |               | NSULTING ENGINEERS<br>D SCIENTISTS   |               |        |         |      |                 |            |                    |                   |       |                    |        |            |               |                                       |                             |                 |                |   |                            | KED: DI    | MF                  |    |
|        | AND           | D OCIENTISTS   |               |        |         |      |                 |            |                    |                   |       |                    |        |            |               |                                       |                             |                 |                |   | 520                        |            |                     |    |

 CLIENT:
 Mayfield Golf Course Inc.

 PROJECT:
 Mayfield Golf Course - Detailed Investigation

 JOB#:
 101987.001

 LOCATION:
 See Borehole Location Plan

| SHEET:       | 1 OF 2      |
|--------------|-------------|
| DATUM:       | CGVD28      |
| BORING DATE: | Mar 13 2023 |

| 1      | DOH.                             | SOIL PROFILE  | <b>I</b> .   |                       |        | SAN  | IPLES           |            | ● <sup>PE</sup><br>RE | NETRA        | TION<br>NCE (N         | ), BLO       | WS/0.3              |              |                                       |   |                                       | Cu), kPA<br>DULDED               | NG A                       |                                     |      |
|--------|----------------------------------|---|--|-----------------------|--------|------|-----------------|------------|-----------------------|--------------|------------------------|--------------|---------------------|--------------|---------------------------------------|---|---------------------------------------|----------------------------------|----------------------------|-------------------------------------|------|
| METRES | BORING METHOD                    | DESCRIPTION   | STRATA PLOT  | ELEV.<br>DEPTH<br>(m) | NUMBER | ТҮРЕ | RECOVERY,<br>mm | BLOWS/0.3m | RE                    | SISTA        | PENE<br>NCE, B<br>20 ( | LOWS         | /0.3m               | V<br>50      |                                       |   | NTEN<br>N<br>80                       | τ, %<br>──┤ ₩ <sub>L</sub><br>90 | ADDITIONAL<br>LAB. TESTING | PIEZOME<br>OR<br>STANDP<br>INSTALLA | PIPE |
| 0      | OD)                              | Ground Surface<br>TOPSOIL   | $\frac{1}{2} \cdot \frac{1}{2} \cdot \frac{1}$ | 245.98                | 1      | SS   | 203             | 7          | •                     |              |                        |              |                     |              |                                       |   |                                       |                                  |                            | Monument                            |      |
| 1      | Auger<br>ger (210mm              | (ML) SILT, trace to some sand, trace to<br>some gravel, trace plastic fines; brown,<br>mottling (TILL); non-cohesive, moist,<br>compact to very dense |  | 245.29<br>0.69        | 2      | SS   | 406             | 21         |                       | 0            |                        |              |                     |              | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · ·   | · · · · · · · · · · · · · · · · · · · |                                  |                            |                                     |      |
| 2      | Power Au<br>Hollow Stem Auger    |   |  |                       | 3      | SS   | 457             | 85/0.      | 20 ·                  |              |                        |              |                     |              |                                       | · · · · · · · · · · · · · · · · · · ·   |                                       |                                  |                            |                                     |      |
|        | Hollow S                         |   |  |                       | 4      | SS   | 406             | 65         |                       |              |                        |              |                     |              |                                       | · · · · · · · · · · · · · · · · · · ·   |                                       |                                  |                            | Bentonite                           |      |
| 3 -    | Ulamond Rotary Core<br>HQ Casing | (GP/GM) sandy SILTY GRAVEL, some<br>fines, cobbles and boulders; grey (TILL);<br>non-cohesive, wet, very dense  |  | <u>242.98</u><br>3.00 | RC 1   | RC   | 1670            | TCR        | = 1009                | 6, SCR       | = 53%                  | RQD          | = 23%               |              |                                       | .         . |                                       |                                  | -                          | Filter sand                         |      |
| 5      | (DD)                             |   | ° 0 °  |                       | RC 2   | RC   | 508             | TCR        | = 100%                | SCR          | <u>≕ 90%</u>           | RQD          | = 25%               |              |                                       |   |                                       |                                  |                            |                                     |      |
|        | uger<br>(210mn                   |   | 0<br>0<br>0  |                       | 6      | SS   | 152             | 58/0.      | 25                    |              | 0                      |              |                     |              |                                       |   |                                       |                                  | М                          | 50mm dia. well<br>screen            |      |
| 6      | Holldw Stem Auger (210mm         |   |  |                       | _7     | SS   | 127             | 50/0.      | 20 C                  |              |                        |              |                     |              |                                       |   |                                       |                                  | _                          | Filter sand                         |      |
| 7<br>8 | Lore Holldw                      | Weathered to fresh, grey to dark grey,<br>LIMESTONE and SHALE BEDROCK<br>(GEORGIAN BAY FORMATION)   |  | <u>238.18</u><br>7.80 | RC 3   | RC   | 1499            | TCR        | = 100%                | , SCR        | = 97%                  | RQD          | = 64%               |              |                                       |   |                                       |                                  |                            |                                     |      |
|        | Ulamond Kotary Co<br>HQ Casing   |   |  |                       | RC 4   | RC   | 1092            | TCR        | =<br>= 100%           | , SCR        | = 100                  | % RQI        | D = 93ª             | /6           |                                       |   |                                       |                                  | UCS=<br>62<br>MPa          | Bentonite                           |      |
| 10     |                                  |   |  |                       | RC 5   | RC   | 1600            | TCR        | ± 100%                | , SCR        | = 100                  | %; RQI       | ) = 97 <sup>1</sup> | ×            |                                       |   |                                       |                                  | _                          |                                     |      |
| 11     | +                                | End of Borehole   |  | 235.03<br>10.95       |        |      |                 |            |                       |              |                        |              |                     |              |                                       |   |                                       |                                  |                            |                                     |      |
| 12     |                                  | Notes:<br>1. Borehole started on Mar 13, 2023 and<br>completed on Mar 14, 2023.   |  |                       |        |      |                 |            |                       |              |                        |              |                     |              |                                       |   |                                       |                                  |                            |                                     |      |
|        |                                  | 2. Sample 5 not shown due to 0 mm penetration.  |  |                       |        |      |                 |            |                       |              |                        |              |                     |              |                                       |   |                                       |                                  |                            |                                     |      |
| 13     |                                  | 3. Rock coring discontinued between<br>approximately 5.2 m and 6.8 m depths<br>due to subsurface conditions.  |  |                       |        |      |                 |            |                       |              |                        |              |                     |              |                                       |   |                                       |                                  | -                          |                                     |      |
| 14     |                                  | <ol> <li>Water level not measured upon<br/>completion of drilling due to use of water<br/>during rock coring.</li> </ol>                              |  |                       |        |      |                 |            |                       |              |                        |              |                     |              |                                       |   |                                       |                                  |                            |                                     |      |
|        | G                                | GEMTEC  |  | <u> </u>              |        |      |                 | <u> </u>   | <u></u>               | <u> ::::</u> | <u> ::::</u>           | <u> ::::</u> | <u> ::::</u>        | <u> ::::</u> | :::                                   | ::::  | :   : : :                             | ::::::                           | LOGO                       | GED: AS                             |      |

|        | ğ             | SOIL PROFILE  |             |       |        | SAN  | <b>IPLES</b>    |            | ● R | ENETR<br>ESISTA | ATION | ), BLO           | NS/0.3r |   |      | AL 🕀  |    |   | j<br>u<br>u  |  |
|--------|---------------|---|-------------|-------|--------|------|-----------------|------------|-----|-----------------|-------|------------------|---------|---|------|-------|----|---|--|--|
| MEIKES | BORING METHOD | DESCRIPTION   | STRATA PLOT | ELEV. | NUMBER | ТҮРЕ | RECOVERY,<br>mm | BLOWS/0.3m |     | YNAMI           |       | TRATIC<br>BLOWS/ | N       | w | WATE | R COI |    |   | TIONA  | PIEZOMETE<br>OR<br>STANDPIPE<br>INSTALLATIC                        |
|        |               |   | STI         | (m)   | -      |      | R               | B          |     | 10              | +     | 30 4             | 10 5    |   | i0   | 70    | 80 | 90  | -  |  |
| 14     |               | <ol> <li>5. Piezometer installed as shown upon<br/>completion of drilling.</li> <li>6. Groundwater level measured in<br/>installed monitoring well on May 18,<br/>2023 at a depth of about 0.5 m below</li> </ol> |             |       |        |      |                 |            |     |                 |       |                  |         |   |      |       |    |   | ·<br>·<br>·<br>·<br>·<br>·<br>·                                    |  |
| 5      |               | ground surface.   |             |       |        |      |                 |            |     |                 |       |                  |         |   |      |       |    |   |  |  |
| 6      |               |   |             |       |        |      |                 |            |     |                 |       |                  |         |   |      |       |    | ·         ·         ·         ·         ·           ·         ·         ·         ·         ·         ·           ·         ·         ·         ·         ·         ·           ·         ·         ·         ·         ·         ·           ·         ·         ·         ·         ·         ·           ·         ·         ·         ·         ·         ·           ·         ·         ·         ·         ·         ·           ·         ·         ·         ·         ·         ·           ·         ·         ·         ·         ·         ·           ·         ·         ·         ·         ·         ·           ·         ·         ·         ·         ·         ·           ·         ·         ·         ·         ·         ·           ·         ·         ·         ·         ·         ·   | •  |  |
| 7      |               |   |             |       |        |      |                 |            |     |                 |       |                  |         |   |      |       |    |   | ·<br>·<br>·<br>·<br>·<br>·<br>·<br>·<br>·<br>·<br>·<br>·<br>·<br>· |  |
| 9      |               |   |             |       |        |      |                 |            |     |                 |       |                  |         |   |      |       |    |   | · · · · · · · · · · · · · · · · · · ·                              |  |
| 0      |               |   |             |       |        |      |                 |            |     |                 |       |                  |         |   |      |       |    |   | · · · · · · · · · · · · · · · · · · ·                              |  |
| :1     |               |   |             |       |        |      |                 |            |     |                 |       |                  |         |   |      |       |    |   | · · · · · · · · · · · · · · · · · · ·                              |  |
| 2      |               |   |             |       |        |      |                 |            |     |                 |       |                  |         |   |      |       |    |   | ·<br>·<br>·<br>·<br>·<br>·   |  |
| 3      |               |   |             |       |        |      |                 |            |     |                 |       |                  |         |   |      |       |    | .         .         .         .         .           .         .         .         .         .         .           .         .         .         .         .         .           .         .         .         .         .         .           .         .         .         .         .         .           .         .         .         .         .         .           .         .         .         .         .         .           .         .         .         .         .         .           .         .         .         .         .         .           .         .         .         .         .         .           .         .         .         .         .         .           .         .         .         .         .         .           .         .         .         .         .         .           .         .         .         .         .         . | ·<br>·<br>·<br>·<br>·  |  |
| 4      |               |   |             |       |        |      |                 |            |     |                 |       |                  |         |   |      |       |    |   | · · · · · · · · · · · · · · · · · · ·                              |  |
| 5      |               |   |             |       |        |      |                 |            |     |                 |       |                  |         |   |      |       |    |   | · · · · · · · · · · · · · · · · · · ·                              |  |
| 6      |               |   |             |       |        |      |                 |            |     |                 |       | 1 : : : :        |         |   |      |       |    | ·         ·         ·         ·           ·         ·         ·         ·         ·           ·         ·         ·         ·         ·           ·         ·         ·         ·         ·           ·         ·         ·         ·         ·           ·         ·         ·         ·         ·           ·         ·         ·         ·         ·           ·         ·         ·         ·         ·           ·         ·         ·         ·         ·           ·         ·         ·         ·         ·   | · · · · · · · · · · · · · · · · · · ·                              |  |
| 7      |               |   |             |       |        |      |                 |            |     |                 |       |                  |         |   |      |       |    |   | •  | GROUNDWATE   |
| 8      |               |   |             |       |        |      |                 |            |     |                 |       |                  |         |   |      |       |    |   |  | DATE         DEPTH<br>(m)           23/05/18         0.5         ∑ |

 CLIENT:
 Mayfield Golf Course Inc.

 PROJECT:
 Mayfield Golf Course - Detailed Investigation

 JOB#:
 101987.001

 LOCATION:
 See Borehole Location Plan

SHEET:1 OF 1DATUM:CGVD28BORING DATE:Mar 15 2023

| Image: Control Surface         Image: Control Surface<   | S                       | 20        | SOIL PROFILE   | L L          |                |        | SAN  | IPLES   |            | ● PE<br>RE                            | NETI                  | rati<br>Anc                           | ON<br>E (N)                           | , BLO                                 | WS/0.3            |                                       | HEAR<br>NATUI  |                                       |                                       |  | AL                                    | PIEZOMETE                      |
|---|-------------------------|-----------|--|--------------|----------------|--------|------|---------|------------|---------------------------------------|-----------------------|---------------------------------------|---------------------------------------|---------------------------------------|-------------------|---------------------------------------|----------------|---------------------------------------|---------------------------------------|--|---------------------------------------|--------------------------------|
| Image: control during model and 7 m degree         Image: control during model and 7 m degree<  | METRES<br>30RING METHOR |           | DESCRIPTION  | TRATA PLC    | DEPTH          | NUMBER | ТҮРЕ | RECOVER | 3LOWS/0.3n | RE                                    | SIST                  | ANC                                   | E, Bl                                 | .ows/                                 | 0.3m              |                                       | v <sub>₽</sub> |                                       | W                                     | <br>⊣w <sub>L</sub>                      | ADDITIOI<br>LAB. TESI                 | OR<br>STANDPIPI<br>INSTALLATIO |
| 1         1000000000000000000000000000000000000   |                         | <u>'</u>  | Ground Surface   | S            | 245 78         |        |      |         |            |                                       |                       |                                       |                                       |                                       |                   |                                       |                |                                       | ::                                    |  |                                       | Monumentz                      |
| 1         Color         Col   | 0                       |           |  |              |                | 1      | SS   | 152     | 4          |                                       |                       | · · · · · · · · · · · · · · · · · · · |                                       |                                       |                   |                                       |                |                                       | · · · · · · · · · · · · · · · · · · · |  |                                       | <u> </u>                       |
| 2         -Aboyer productional allocal 1.5 m and from - Approximately 2.1 m to 2.3 m degree         3         5         47         43         0         •••           1         -Aboyer productional allocal 1.5 m and from - Approximately 2.1 m to 2.3 m degree         5         5         7         ••   | 1                       |           |  | 0 P C        | 0.69           | 2      | SS   | 457     | 37         | ·····                                 | :::<br>₽::::<br>₽:::: | · · · · · · · · · · · · · · · · · · · |                                       | •                                     |                   |                                       |                |                                       | · · · · · · · · · · · · · · · · · · · |  |                                       |                                |
| 2       1   |                         |           | dense to very dense  | 。0 C         | -<br>-<br>-    | 3      | SS   | 457     | 43         |                                       | )                     | · · · · · · · · · · · · · · · · · · · |                                       |                                       |                   |                                       |                |                                       | · · ·<br>· · ·<br>· · ·<br>· · ·      |  | •                                     |                                |
| a       a       b   | 2                       |           |  | οδ           |                | 4      | SS   | 304     | 50/0.      | 3.0                                   |                       | · · · · · · · · · · · · · · · · · · · |                                       |                                       |                   |                                       |                |                                       | · · · · · · · · · · · · · · · · · · · |  | MH                                    |                                |
| 8         0   | 3                       | (DD)      |  |              |                | 5      | ss   | 76      |            |                                       |                       | · · · · · · · · · · · · · · · · · · · | · · · ·                               |                                       |                   |                                       |                |                                       | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · ·    | · · · · · · · · · · · · · · · · · · · |                                |
| 5     3     5     5     7     5000     6     5     7     5000     8     9     1 <t< td=""><td>uger</td><td>- (210mm</td><td></td><td>0 C</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>· · · · · · · · · · · · · · · · · · ·</td><td>· · · · · · · · · · · · · · · · · · ·</td><td></td><td></td><td></td><td></td><td></td><td>· · ·<br/>· · ·<br/>· · ·</td><td>· · · · · · · · · · · · · · · · · · ·</td><td>•</td><td>Bentonite</td></t<>  | uger                    | - (210mm  |  | 0 C          |                |        |      |         |            |                                       |                       | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |                                       |                   |                                       |                |                                       | · · ·<br>· · ·<br>· · ·               | · · · · · · · · · · · · · · · · · · ·    | •                                     | Bentonite                      |
| 5     3     5     5     7     500     6     0<  | 4<br>Power Al           | em Auger  |  | • 0 C        | -<br>-<br>-    |        |      |         |            | · · · · · · · · · · · · · · · · · · · |                       | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |                                       |                   |                                       |                |                                       | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · ·    | · · · · · · · · · · · · · · · · · · · |                                |
| 6       - Rock fragments at 7.7 m depth       - S - S - 101 5000       - S - S - 1000       - S   | 5                       | Hollow St |  |              |                | 6      | ss   | 76      | 50/0.      | 08                                    | þ                     | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |                                       |                   |                                       |                |                                       |                                       |  |                                       |                                |
| 6       -Rock fragments at 7.7 m depth       -Rock fragments at 7   |                         |           |  |              |                |        |      |         |            |                                       |                       |                                       |                                       |                                       |                   | · · · · · · · · · · · · · · · · · · · |                |                                       |                                       | · · · ·<br>· · · ·<br>· · · ·<br>· · · · |                                       |                                |
| 8      Rock fragments at 7.7 m depth         8       8      Rock fragments at 7.7 m depth         9       0      Rock fragments at 7.7 m depth         9       0      Rock fragments at 7.7 m depth      Rock  | 6                       |           |  | 0 C<br>0 0 0 |                | _7     | SS   | 101     | 50/0       |                                       | 0.                    | · · · · · · · · · · · · · · · · · · · | · · · ·                               | · · · · · ·                           |                   |                                       |                |                                       | · · · · · · · · · · · · · · · · · · · |  | МН                                    |                                |
| 8      Rock fragments at 7.7 m depth         8       8      Rock fragments at 7.7 m depth         9       0      Rock fragments at 7.7 m depth         9       0      Rock fragments at 7.7 m depth      Rock  | 7                       |           |  |              |                |        |      |         |            |                                       |                       | · · · · · · · · · · · · · · · · · · · |                                       |                                       |                   |                                       |                |                                       | · · ·<br>· ·<br>· ·<br>· ·            | · · · · · · · · · · · · · · · · · · ·    | •                                     |                                |
| 8       Slightly weathered to fresh, grey,<br>LIMESTONE BEDROCK with shale<br>increased in scale<br>portion of dilling due to use of water<br>during rock coring       7.85       RC1       RC       381       TCR = 59%, SCR = 59%, ROD = 38%;       ICR = 38%;       ICR = 59%;       ROD = 38%;       ICR = 59%;       IC  |                         |           |  |              |                |        |      |         |            |                                       |                       | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |                   |                                       |                | · · · · · · · · · · · · · · · · · · · |                                       |  | •                                     | Filter sand                    |
| Some size of the second sec |                         | $\neg$    |  |              |                |        |      |         |            | 13222                                 | 1 : : :               |                                       |                                       |                                       | 2004              |                                       |                |                                       |                                       |  |                                       |                                |
| 9       9       7       RC2       RC       1524       TCR = 100%, SCR = 100%, ROL = 03%       UCS=         0       End of Borehole       236.03       9.75       9.75       MPa         1       Vates:       1. Water level not measured upon completion of drilling due to use of water during rock coring       9.75       9.75       9.75         2       2       2. Piezometer installed as shown upon completion of drilling.       3. Groundwater level measured in installed monitoring well on May 18, 2023 at a depth of about 0.1 m below ground surface.       9.75       9.75       9.75         3       4  | Core                    | bu        | LIMESTONE BEDROCK with shale<br>interbeds (GEORGIAN BAY                      |              |                |        | RC   | 301     |            | 94.70                                 | 30r                   | 0                                     |                                       |                                       | 30,70             |                                       |                |                                       | · · · · · · · · · · · · · · · · · · · |  |                                       |                                |
| 0     End of Borehole     9.75       1     Notes:       1     Water level not measured upon completion of drilling due to use of water during rock coring       2     Scroundwater level measured in installed monitoring well on May 18, 2023 at a depth of about 0.1 m below ground surface.       3     Image: Completion of drilling due to use of water during rock coring   | 9 2 9                   | HQ Casi   |  |              |                | RC2    | RC   | 1524    | TCR        | = 100%                                | i, SC                 | R=                                    | 100%                                  | 6 <del>, RQ</del> I                   | ) <del>=</del> 93 | %<br>                                 |                |                                       | · · ·                                 |  |                                       | screen                         |
| Notes:       1. Water level not measured upon completion of drilling due to use of water during rock coring       2. Piezometer installed as shown upon completion of drilling.         12       3. Groundwater level measured in installed monitoring well on May 18, 2023 at a depth of about 0.1 m below ground surface.       Image: Completion of about 0.1 m below ground surface.  | Dian                    |           | End of Borehole  |              | 236.03<br>9.75 |        |      |         |            |                                       |                       | · · · · · · · · · · · · · · · · · · · |                                       |                                       |                   |                                       |                |                                       | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · ·    | 74                                    |                                |
| 11       completion of drilling due to use of water during rock coring         11       2. Piezometer installed as shown upon completion of drilling.         12       3. Groundwater level measured in installed monitoring well on May 18, 2023 at a depth of about 0.1 m below ground surface.         13       Image: Completion of drilling due to use of water during rock coring         14       Image: Completion of drilling.   | 0                       |           | Notes:   |              |                |        |      |         |            |                                       |                       |                                       | · · · ·                               |                                       |                   |                                       |                |                                       |                                       |  |                                       |                                |
| 12       12       12       12       12       13       13       14 <td< td=""><td></td><td></td><td>completion of drilling due to use of water</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>:::<br/>:::</td><td></td><td></td><td></td></td<>  |                         |           | completion of drilling due to use of water                                   |              |                |        |      |         |            |                                       |                       |                                       |                                       |                                       |                   |                                       |                |                                       | :::<br>:::                            |  |                                       |                                |
| 2 2023 at a depth of about 0.1 m below<br>ground surface.   |                         |           | completion of drilling.  |              |                |        |      |         |            | · · · · · · · · · · · · · · · · · · · |                       |                                       |                                       |                                       |                   | · · · · · · · · · · · · · · · · · · · |                |                                       |                                       | · · · · · · · · · · · · · · · · · · ·    |                                       |                                |
| 13<br>13<br>14<br>13<br>13<br>14<br>15<br>15<br>15<br>15<br>15<br>15<br>15<br>15<br>15<br>15  | 2                       |           | installed monitoring well on May 18,<br>2023 at a depth of about 0.1 m below |              |                |        |      |         |            |                                       |                       | · · · · · · · · · · · · · · · · · · · |                                       |                                       |                   |                                       |                |                                       | <u></u>                               | · · · · · · · · · · · · · · · · · · ·    |                                       |                                |
|   | 13                      |           |  |              |                |        |      |         |            |                                       |                       |                                       |                                       |                                       |                   |                                       |                |                                       | · · · · · · · · · · · · · · · · · · · |  |                                       | GROUNDWATE                     |
|   |                         |           |  |              |                |        |      |         |            |                                       |                       | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |                                       |                   |                                       |                |                                       | · · · · · · · · · · · · · · · · · · · |  |                                       | (m)                            |
|   | 14                      |           |  |              |                |        |      |         |            |                                       |                       | <u>: :</u><br>: :                     | :::                                   |                                       |                   | <u> </u>                              |                |                                       | ::                                    | · · · · ·                                |                                       |                                |

 CLIENT:
 Mayfield Golf Course Inc.

 PROJECT:
 Mayfield Golf Course - Detailed Investigation

 JOB#:
 101987.001

 LOCATION:
 See Borehole Location Plan

| SHEET:       | 1 OF 1     |
|--------------|------------|
| DATUM:       | CGVD28     |
| BORING DATE: | Feb 6 2023 |

| щ  | Τ        | ₿                 | SOIL PROFILE   |             |                       |        | SAN  | IPLES           |            | ● PEI<br>RES                          | NETR.<br>SISTA | ATION<br>NCE (N     | I), BLO | NS/0.3       |                                       |                                       |                                       | GTH (C<br>REMO | u), kPA<br>JLDED | _ U                        |   |
|--|----------|-------------------|--|-------------|-----------------------|--------|------|-----------------|------------|---------------------------------------|----------------|---------------------|---------|--------------|---------------------------------------|---------------------------------------|---------------------------------------|----------------|------------------|----------------------------|---|
| DEPTH SCALE<br>METRES  |          | BORING METHOD     | DESCRIPTION  | STRATA PLOT | ELEV.<br>DEPTH<br>(m) | NUMBER | ТҮРЕ | RECOVERY,<br>mm | BLOWS/0.3m | RE                                    | SISTA          | PENE<br>NCE, B      | LOWS    | 0.3m         | W <sub>F</sub>                        | .⊢–                                   |                                       |                | w <sub>L</sub>   | ADDITIONAL<br>LAB. TESTING | PIEZOMETER<br>OR<br>STANDPIPE<br>INSTALLATION |
|  | +        | m<br>T            |  | SI          |                       |        |      | <u>ш</u>        |            | 10                                    |                | 20 3                | 30 4    | 10 (<br>:::: | 50 6                                  | 50 7<br> ::::                         | 70<br> :::                            | 80             | 90               |                            |   |
| - 0  | $\vdash$ | +                 | Ground Surface<br>TOPSOIL  |             | 253.50<br>0.08        |        |      |                 |            |                                       | ::::           | ::::                |         |              | <u> </u>                              |                                       |                                       |                |                  |                            |   |
|  |          |                   | FILL - (CL) SILTY CLAY, some sand;<br>brown, contains clay pockets and<br>rootlets; cohesive, w>PL, firm to very stiff |             | 0.00                  | 1      | SS   | 102             | 6          |                                       |                |                     |         |              |                                       |                                       |                                       |                |                  |                            |   |
|  |          |                   | (CL) SILTY CLAY, some sand, trace  |             | 252.13<br>1.37        | 2      | SS   | 356             | 18         |                                       |                | • <del>:0 : :</del> |         |              |                                       | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |                |                  | -                          |   |
| 2  | 2        |                   | gravel; brown to grey; cohesive, w~PL to<br>w>PL, stiff to hard  |             | 1.07                  | 3      | SS   | 305             | 23         |                                       |                |                     |         |              |                                       |                                       |                                       |                |                  | _                          | _   |
|  |          |                   |  |             |                       | 4      | SS   | 152             | 42         |                                       |                | 0                   |         | •            |                                       |                                       |                                       |                |                  |                            |   |
|  | 3        |                   |  |             |                       | 5      | SS   | 330             | 27         |                                       | D              |                     |         |              | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |                                       |                |                  | -                          | _   |
| 4  |          | Stem Auger (210mm |  |             |                       |        |      |                 |            |                                       |                |                     |         |              |                                       |                                       |                                       |                |                  | -                          | _   |
|  | Dower    | v Stem Au         |  |             |                       |        |      | 457             | 05         |                                       |                |                     |         |              |                                       |                                       |                                       |                |                  |                            |   |
| 5  | 5        | Hollow            |  |             |                       | 6      | SS   | 457             | 25         |                                       |                |                     |         |              |                                       | · · · · · · · · · · · · · · · · · · · |                                       |                |                  | -                          | _   |
| - 6  | 5        |                   |  |             |                       |        |      |                 |            |                                       |                |                     |         |              |                                       |                                       |                                       |                |                  | -                          | _   |
|  |          |                   | - Grey below 6.1 m depth.  |             |                       | 7      | SS   | 457             | 13         |                                       | ۲              |                     |         |              |                                       |                                       |                                       |                |                  |                            |   |
|  | ,        |                   | (SM) SILTY SAND, some gravel, trace plastic fines; grey, rock fragments (TILL);  | •           | 246.41<br>7.09        |        |      |                 |            |                                       |                |                     |         |              |                                       |                                       | · · · · · · · · · · · · · · · · · · · |                |                  |                            | _   |
|  | 3        |                   | non-cohesive, moist, very dense<br>- Auger grinding at 7.3 m depth   |             | 245.42<br>8.08        | 8      | SS   | 356             | 98         | 0                                     |                |                     |         |              |                                       |                                       |                                       |                | •                | •                          |   |
|  |          |                   | End of Borehole<br>Notes:  |             | 8.08                  |        |      |                 |            | · · · · · · · · · · · · · · · · · · · |                |                     |         |              |                                       |                                       |                                       |                |                  |                            |   |
| L<br>L<br>L<br>L   | ,        |                   | 1. Borehole dry upon completion of drilling.   |             |                       |        |      |                 |            |                                       |                |                     |         |              |                                       |                                       |                                       |                |                  | -                          | _   |
| 11111  |          |                   | 2. Borehole caved to approximately 7.4 m depth.  |             |                       |        |      |                 |            |                                       |                |                     |         |              |                                       |                                       | · · · · · · · · · · · · · · · · · · · |                |                  |                            |   |
| 9 L 10<br>9 L 10<br>9 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2  | )        |                   | 3. Borehole backfilled with bentonite and<br>soil cuttings upon completion of drilling.                                |             |                       |        |      |                 |            |                                       |                |                     |         |              |                                       |                                       |                                       |                |                  |                            |   |
|  |          |                   |  |             |                       |        |      |                 |            |                                       |                |                     |         |              |                                       |                                       |                                       |                |                  | -                          | _   |
| GPJ GEI  |          |                   |  |             |                       |        |      |                 |            |                                       |                |                     |         |              |                                       |                                       |                                       |                |                  |                            |   |
| 20,90,820  | 2        |                   |  |             |                       |        |      |                 |            |                                       |                |                     |         |              |                                       |                                       |                                       |                |                  |                            | _   |
| 87.001'20<br>11111   13  | 5        |                   |  |             |                       |        |      |                 |            |                                       |                |                     |         |              |                                       |                                       |                                       |                |                  |                            | _   |
|  |          |                   |  |             |                       |        |      |                 |            |                                       |                |                     |         |              |                                       |                                       |                                       |                |                  |                            |   |
| GEO - BOREHOLE LOG 101987, 00120230602.GPJ GEMTEC 2018.GDT 6/2/23<br>1 1 11 11 11 11 11 11 11 11 11 11 11 11 | Ļ        |                   |  |             |                       |        |      |                 |            |                                       |                |                     |         |              |                                       |                                       |                                       |                |                  |                            |   |
| - BOR  |          |                   | GEMTEC   |             |                       |        |      |                 |            |                                       |                |                     |         |              |                                       |                                       |                                       |                |                  | LOGG                       | ED: IO  |
| GE CEO   | -        | C                 | DINSULTING ENGINEERS   |             |                       |        |      |                 |            |                                       |                |                     |         |              |                                       |                                       |                                       |                |                  | CHEC                       | KED: DMF                                      |

 CLIENT:
 Mayfield Golf Course Inc.

 PROJECT:
 Mayfield Golf Course - Detailed Investigation

 JOB#:
 101987.001

 LOCATION:
 See Borehole Location Plan

| SHEET:       | 1 OF 1     |
|--------------|------------|
| DATUM:       | CGVD28     |
| BORING DATE: | Feb 6 2023 |

| щ   |        | 8                 | SOIL PROFILE   |             |                        |          | SAM      | IPLES           |            | ● PE       | NETR  | ATION                          | I), BLO                               | VS/0.3    | S⊦<br>n +1 | IEAR S             |            | GTH (Cu<br>REMOL | i), kPA | ı ٿ                        |   |
|---|--------|-------------------|--|-------------|------------------------|----------|----------|-----------------|------------|------------|-------|--------------------------------|---------------------------------------|-----------|------------|--------------------|------------|------------------|---------|----------------------------|---|
| DEPTH SCALE<br>METRES   |        | BORING METHOD     | DESCRIPTION  | STRATA PLOT | ELEV.<br>DEPTH<br>(m)  | NUMBER   | ТҮРЕ     | RECOVERY,<br>mm | BLOWS/0.3m | ▲ DY<br>RE | NAMIO | C PENE<br>NCE, B               | TRATIC<br>BLOWS/                      | N<br>0.3m | W          | WATE               | R CON<br>W | ITENT,           |         | ADDITIONAL<br>LAB. TESTING | PIEZOMETER<br>OR<br>STANDPIPE<br>INSTALLATION |
|   | $^{+}$ | T                 | Ground Surface   | 05          | 254.67                 |          |          |                 |            |            |       |                                |                                       | ::::      |            |                    |            |                  |         |                            |   |
| Ē   | "      |                   | TOPSOIL  |             | 254.54                 | 1A<br>1B | SS<br>SS | 254             | 0 (        |            |       | : :O:                          |                                       |           |            |                    |            |                  |         |                            |   |
| E   |        |                   | (CL) SILTY CLAY, some sand; brown to grey; cohesive, w~PL to w>PL, stiff to          |             |                        |          |          |                 |            |            |       |                                |                                       |           |            |                    |            |                  |         |                            | -   |
| Ē,  |        |                   | hard   |             |                        | 2        | SS       | 254             | 28         |            |       |                                |                                       |           |            |                    |            |                  |         |                            |   |
| E   |        |                   |  |             |                        |          |          | 2.04            | 20         |            |       |                                |                                       |           |            |                    |            |                  |         |                            | -   |
| Ē   |        |                   |  |             |                        | -        |          |                 |            |            |       |                                |                                       |           |            |                    |            |                  |         |                            |   |
| Ē,  |        |                   |  |             |                        | 3        | SS       | 381             | 35         |            |       | Q: : :                         |                                       |           |            |                    |            |                  |         |                            | _   |
| Ē   |        |                   |  |             |                        |          |          |                 |            |            |       |                                |                                       |           |            |                    |            |                  |         |                            |   |
| Ē   |        |                   |  |             |                        | 4        | SS       | 356             | 26         |            |       |                                |                                       |           |            |                    |            |                  |         |                            | -   |
| E 3   | 3      | ĺ                 |  |             |                        |          |          |                 |            |            |       |                                |                                       |           |            |                    |            |                  |         |                            |   |
| Ē   |        |                   |  |             |                        | 5        | SS       | 457             | 19         |            |       | Ð.                             |                                       |           |            |                    |            |                  |         |                            | -   |
| Ē   | Į,     | Stem Auder (210mm |  |             |                        |          |          |                 |            |            |       |                                |                                       |           |            |                    |            |                  |         |                            |   |
| <b>-</b> 4  |        |                   | 5<br>2   |             |                        |          |          |                 |            |            |       |                                |                                       |           |            |                    |            |                  |         |                            | -   |
| E   | Doutor |                   |  |             |                        |          |          |                 |            |            |       |                                |                                       |           |            |                    |            |                  |         |                            |   |
| F   |        | Di Mo             | - Sand pockets between approximately<br>4.6 m and 5.0 m depths                       |             |                        | 6        | SS       | 305             | 26         |            |       | <b> </b> ::::<br><b> </b> ::●: |                                       |           |            |                    |            |                  |         |                            | -   |
| - t   | 5      | Hollow            |  |             |                        |          |          |                 |            |            |       |                                |                                       |           |            |                    |            |                  |         |                            |   |
| Ē   |        |                   | - Grey below about 4.9 m depth   |             |                        |          |          |                 |            |            |       |                                |                                       |           |            |                    |            |                  |         |                            | -   |
| E   |        |                   |  |             |                        |          |          |                 |            |            |       |                                |                                       |           |            |                    |            |                  |         |                            |   |
| - e   | 5      |                   |  |             |                        |          |          |                 |            |            |       |                                |                                       | · · · · · |            |                    |            |                  |         |                            |   |
| Ē   |        |                   |  |             |                        | 7        | SS       | 356             | 23         |            |       | <b>0●</b> ::<br> ::::          |                                       |           |            |                    |            |                  |         |                            |   |
| Ē.  | ,      |                   |  |             |                        |          |          |                 |            |            |       |                                |                                       |           |            |                    |            |                  |         |                            | -   |
| Ē   |        |                   | (CL) sandy SILTY CLAY, trace gravel;   |             | 247.58                 |          |          |                 |            | · · · · ·  |       |                                |                                       |           |            |                    |            |                  |         |                            |   |
| F   |        |                   | grey, (TILL); cohesive, w>PL, very stiff   |             |                        |          |          |                 |            |            |       |                                |                                       |           |            |                    |            |                  |         |                            | l E   |
| E a   |        |                   |  | 0/0         | 246 59                 | 8        | SS       | 356             | 29         |            | 0     |                                |                                       |           |            |                    |            |                  |         |                            |   |
| Ę   | ĺ      |                   | End of Borehole  | o∕ 1.∕ 1&-  | 2 <u>46.59</u><br>8.08 |          |          |                 |            |            |       |                                |                                       |           |            |                    |            |                  |         |                            | -   |
| Ē   |        |                   | Notes:   |             |                        |          |          |                 |            |            |       |                                |                                       |           |            |                    |            |                  |         |                            |   |
| È g   | ,      |                   | 1. Borehole dry upon completion of<br>drilling.                                      |             |                        |          |          |                 |            |            |       |                                |                                       |           |            |                    |            |                  |         |                            |   |
| Ē   |        |                   | 2. Borehole caved to approximately   |             |                        |          |          |                 |            |            |       |                                |                                       |           |            |                    |            |                  |         |                            |   |
| 111   |        |                   | 7.5 m depth.   |             |                        |          |          |                 |            |            |       |                                |                                       |           |            |                    |            |                  |         |                            | -   |
| 80<br>⊢ 10  |        |                   | 3. Borehole backfilled with bentonite and soil cuttings upon completion of drilling. |             |                        |          |          |                 |            |            |       |                                |                                       |           |            |                    |            |                  |         |                            |   |
| 8.GD  |        |                   | een eaange apen eenpieren ei annig.  |             |                        |          |          |                 |            |            |       |                                |                                       |           |            |                    |            |                  |         |                            |   |
|   |        |                   |  |             |                        |          |          |                 |            |            |       |                                |                                       |           |            |                    |            |                  |         |                            |   |
| Ĕ⊢ 11<br>ΣΓ   |        |                   |  |             |                        |          |          |                 |            |            |       |                                |                                       |           |            |                    |            |                  |         |                            |   |
| ۳E  |        |                   |  |             |                        |          |          |                 |            |            |       |                                |                                       |           |            |                    |            |                  |         |                            | -   |
| E E   |        |                   |  |             |                        |          |          |                 |            |            |       |                                |                                       |           |            |                    |            |                  |         |                            | -   |
| 00-12<br>00-12  | 2      |                   |  |             |                        |          |          |                 |            |            |       |                                |                                       |           |            |                    |            |                  |         |                            |   |
| 1.202   |        |                   |  |             |                        |          |          |                 |            |            |       |                                |                                       |           |            |                    |            |                  |         |                            |   |
| 00-1-   |        |                   |  |             |                        |          |          |                 |            |            |       |                                | · · · · · · · · · · · · · · · · · · · |           |            |                    |            |                  |         |                            |   |
| 13<br>13<br>10<br>10<br>10  |        |                   |  |             |                        |          |          |                 |            | · · · · ·  |       |                                |                                       |           |            |                    |            |                  |         |                            |   |
|   |        |                   |  |             |                        |          |          |                 |            |            |       |                                |                                       |           |            |                    |            |                  |         |                            |   |
|   |        |                   |  |             |                        |          |          |                 |            |            |       |                                |                                       |           |            |                    |            |                  |         |                            |   |
| GEO - BOREHOLE LOG 101987.00120230602.GPJ GEMTEC 2018.GDT 6/223<br> |        |                   |  |             |                        |          |          |                 |            | ::::       |       |                                | ::::                                  |           | :::        | : : <del>: :</del> |            |                  | :::::   |                            |   |
| ig 🥏  |        | (                 | GEMTEC   |             |                        |          |          |                 |            |            |       |                                |                                       |           |            |                    |            |                  |         | LOGG                       | ED: IO  |
| eg 🚩  | 2      |                   | ONSULTING ENGINEERS<br>ND SCIENTISTS   |             |                        |          |          |                 |            | _          | _     |                                |                                       |           | _          |                    | _          |                  |         | CHEC                       | KED: DMF                                      |

CLIENT: Mayfield Golf Course Inc. PROJECT: Mayfield Golf Course - Detailed Investigation 101987.001 JOB#:

LOCATION: See Borehole Location Plan

| SHEET:       | 1 OF 1     |
|--------------|------------|
| DATUM:       | CGVD28     |
| BORING DATE: | Mar 9 2023 |

B

SHEAR STRENGTH (Cu), kPA ● PENETRATION SHEAR STRENGTH (Cu), kPA RESISTANCE (N), BLOWS/0.3m + NATURAL ⊕ REMOULDED SOIL PROFILE SAMPLES BORING METHOD ADDITIONAL LAB. TESTING DEPTH SCALI METRES STRATA PLOT PIEZOMETER RECOVERY mm 3g OR WATER CONTENT, % NUMBER ELEV. TYPE BLOWS/0.: ▲ DYNAMIC PENETRATION RESISTANCE, BLOWS/0.3m W DESCRIPTION W⊳⊦ ⊣w, INSTALLATION DEPTH (m) 20 30 40 50 60 70 80 90 10 Ground Surface 253.31 Monument 0 TOPSOIL <u>\_\_\_\_\_</u> 1A SS 406 6 Ò <u>252.75</u> 0.56 **1**B (CL) SILTY CLAY, some sand, trace  $\nabla$ gravel; brown; cohesive, w~PL to w>PL, 2 SS 457 21 very stiff <u>251.94</u> 1.37 101 (CL) sandy SILTY CLAY, trace to some gravel; brown to grey, oxidative staining, (TILL); cohesive, w~PL to w>PL, very 32 3 SS 457 0: • stiff to hard 2 457 29 4 SS (); Bentonite 3 10 457 5A SS 24 . Ø (210mm -5R - Grey at about 3.5 m depth Power Auger Stem Auger 249.27 4.04 4 (CL) SILTY CLAY, trace sand; grey; cohesive, w~PL to w>PL, stiff 6 SS 305 11 C Hollow 5 247.75 (SM) gravelly SILTY SAND; grey, rock fragments, (TILL); non-cohesive, moist, 5 Filter sand 6 dense 6 ø 7 SS 203 30 ŕ þ C Ċ. ٠ő 50mm dia. well screen 7 246.22 7.09 - Auger grinding at 7.0 m depth (ML) SILT, trace sand, trace gravel; grey, rock fragments; non-cohesive, wet, dense 8 SS 457 46 C • 8 245.23 8.08 End of Borehole Notes: 1. Borehole was dry upon completion of 9 drilling. 2. Piezometer installed as shown upon completion of drilling. 101987.001'2023'06'02.GPJ GEMTEC 2018.GDT 6/2/23 3. Groundwater level measured in 10 installed monitoring well on May 18, 2023 at a depth of about 0.8 m below ground surface. 11 12 GROUNDWATER OBSERVATIONS 13 DEPTH ELEV. DATE (m) (m) GEO - BOREHOLE LOG 23/05/18 0.8 🕎 252.5 14 GEMTEC LOGGED: AS CONSULTING ENGINEERS CHECKED: DMF

CLIENT: Mayfield Golf Course Inc. PROJECT: Mayfield Golf Course - Detailed Investigation 101987.001 JOB#: LOCATION: See Borehole Location Plan

BORING METHOD

TOPSOIL

DEPTH SCALI METRES

0

2

3

5

6

7

8

9

10

11

12

13

14

GEMTEC

CONSULTING ENGINEERS

Notes:

(210mm OD)

Hollow

Power Auger Stem Auger 4

| SHEET:       | 1 OF 1      |
|--------------|-------------|
| DATUM:       | CGVD28      |
| BORING DATE: | Mar 16 2023 |

SHEAR STRENGTH (Cu), kPA SOIL PROFILE SAMPLES ● PENETRATION SHEAR STRENGTH (Cu), kPA RESISTANCE (N), BLOWS/0.3m + NATURAL ⊕ REMOULDED ADDITIONAL LAB. TESTING STRATA PLOT PIEZOMETER RECOVERY 3g OR STANDPIPE INSTALLATION WATER CONTENT, % NUMBER ELEV. TYPE ▲ DYNAMIC PENETRATION RESISTANCE, BLOWS/0.3m BLOWS/0.3 W DESCRIPTION W⊳⊦ ⊣w∟ DEPTH (m) 10 20 30 40 50 60 70 80 90 Ground Surface 251.96 <u>, 17. . 1</u> 1 SS 305 6 Ò 11, 251.29 0.67 İX (CL) SILTY CLAY, some sand; brown, organic inclusions; cohesive, w~PL to w>PL, very stiff 2 SS 406 20 250.59 1.37 10 (CL) sandy SILTY CLAY, trace to some gravel; brown to grey, oxidative staining, rock fragments (TILL); cohesive, w~PL to w>PL, very stiff to hard 406 26 3 SS O • 4 SS 178 31 Ö 5 SS 457 37 Ö 6 SS 406 19 a le l Grey below about 4.7 m depth - Contains sand seams between 7 381 40 SS approximately 6.1 m and 6.6 m depths 244.87 7.09 (SM) SILTY SAND, some gravel; grey; non-cohesive, moist, very dense SS 305 50/0. 8 3:30 244.06 7.90 End of Borehole 1. Groundwater level measured in open borehole at approximately 7.3 m below ground surface prior to backfilling. 2. Borehole caved to approximately 7.6 m upon completion. 3. Borehole backfilled with soil cuttings upon completion of drilling.

101987.001'2023'06'02.GPJ GEMTEC 2018.GDT 6/2/23 **GEO - BOREHOLE LOG** 

LOGGED: AS

CHECKED: DMF

|   | Б<br>Н            | SOIL PROFILE   |                  |                           |        | SAM  | IPLES           |            | ● <sup>PE</sup> RI | ENETF<br>ESIST/       | RATIO<br>ANCE                         | N<br>(N),                             | BLO                                   | NS/0.            | 3m                                    | SHI<br>+ N     | EAR S<br>ATUR | TREN<br>AL € | IGTH<br>REI  | H (Cu<br>MOU                          | ), kPA<br>LDED                        | 귀입                         |                                      |
|---|-------------------|--|------------------|---------------------------|--------|------|-----------------|------------|--------------------|-----------------------|---------------------------------------|---------------------------------------|---------------------------------------|------------------|---------------------------------------|----------------|---------------|--------------|--|---------------------------------------|---------------------------------------|----------------------------|--------------------------------------|
|   | BORING METHOD     | DESCRIPTION  | STRATA PLOT      | ELEV.<br>DEPTH<br>(m)     | NUMBER | ТҮРЕ | RECOVERY,<br>mm | BLOWS/0.3m | R                  | (NAMI<br>ESIST)<br>10 | IC PE<br>ANCE<br>20                   | NETF<br>, BLC<br>30                   | )WS/                                  | )N<br>0.3m<br>10 | 50                                    | W <sub>P</sub> |               |              |  | :NT, 9                                | ⊣w <sub>L</sub>                       | ADDITIONAL<br>LAB. TESTING | PIEZOME<br>OR<br>STANDPI<br>INSTALLA |
| t |                   | Ground Surface   |                  | 253.04                    |        |      |                 |            |                    |                       | : ::                                  |                                       |                                       |                  |                                       |                |               |              | : :  |                                       |                                       |                            | Monument                             |
|   |                   | TOPSOIL  | <u>717</u> 71    | 252 58                    | 1      | SS   | 51              | 5          | •                  |                       |                                       |                                       |                                       |                  |                                       |                |               |              |  |                                       |                                       |                            |                                      |
|   |                   | (CL) SILTY CLAY, trace to some sand,<br>trace gravel; brown, oxidative staining;<br>cohesive, w~PL to w>PL, very stiff |                  | 252.58<br>0.46            | 2      | SS   | 305             | 19         |                    |                       | •                                     | ;;;<br>;;;<br>;;;                     |                                       |                  | · · · · · · · · · · · · · · · · · · · |                |               |              |  | · · · ·                               |                                       |                            |                                      |
|   |                   |  |                  |                           | 3      | SS   | 457             | 17         |                    |                       |                                       | · · · · · · · · · · · · · · · · · · · |                                       |                  | · · · · · · · · · · · · · · · · · · · |                |               |              | · · · · · · · · · · · · · · · · · · ·              | · · · · · · · · · · · · · · · · · · · |                                       |                            | Ţ                                    |
|   |                   |  |                  |                           | -      |      |                 |            | · · · · ·          |                       |                                       | :::<br>:::                            |                                       |                  | : :<br>: :                            |                | · · · · ·     |              | : :  | <u></u>                               | · · · · · ·                           |                            |                                      |
|   |                   |  |                  |                           | 4      | SS   | 457             | 24         |                    |                       |                                       |                                       |                                       |                  |                                       |                |               |              | · · · · · · · · · · · · · · · · · · ·              | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |                            |                                      |
|   |                   |  |                  |                           | 5      | SS   | 457             | 20         |                    |                       | •                                     | · · ·                                 | · · · · · ·                           |                  | · · · · · · · · · · · · · · · · · · · |                |               |              | · · ·<br>· · ·<br>· · ·<br>· · ·<br>· · ·<br>· · · | · · · ·                               | · · · · · · · · · · · · · · · · · · · |                            |                                      |
|   |                   | (CL-ML) sandy SILTY CLAY to CLAYEY   |                  | <u>249.00</u><br>4.04     |        |      |                 |            |                    |                       | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |                                       |                  | · · · · · · · · · · · · · · · · · · · |                |               |              | · · · · · · · · · · · · · · · · · · ·              | · · · · ·                             |                                       |                            |                                      |
|   |                   | SILT, trace to some gravel; brown to grey<br>(TILL); cohesive, w~PL, stiff to hard                                     |                  |                           | 6      | SS   | 457             | 56         |                    | 0::::                 |                                       |                                       |                                       |                  | · · · · · · · · · · · · · · · · · · · | •              |               |              | · · · · · · · · · · · · · · · · · · ·              |                                       | · · · · · · · · · · · · · · · · · · · |                            |                                      |
|   | (DO)              | - Auger grinding at about 5.2 m depth  |                  |                           |        |      |                 |            |                    |                       | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |                                       |                  |                                       |                |               |              |  |                                       |                                       |                            |                                      |
|   | Stem Auger (210mm | - Grey below about 6.1 m depth   |                  |                           | 7      | SS   | 457             | 14         |                    | •                     |                                       | · · · · · · · · · · · · · · · · · · · |                                       |                  | · · · · · · · · · · · · · · · · · · · |                |               |              | · · · · · · · · · · · · · · · · · · ·              |                                       |                                       | МН                         |                                      |
|   | ow Stem Aug       |  |                  |                           |        |      |                 |            |                    |                       |                                       | · · · · · · · · · · · · · · · · · · · |                                       |                  | · · · · · · · · · · · · · · · · · · · |                |               |              | · · · · · · · · · · · · · · · · · · ·              |                                       | · · · · · · · · · · · · · · · · · · · |                            | Bentonite                            |
|   | Hollow            |  |                  |                           | 8      | SS   | 457             | 31         |                    | 0                     |                                       | •                                     |                                       |                  |                                       |                |               |              | · · ·<br>· · ·<br>· · ·<br>· · ·                   | · · · ·                               |                                       |                            |                                      |
|   |                   |  |                  |                           |        |      |                 |            |                    |                       |                                       | · · · · · · · · · · · · · · · · · · · |                                       |                  | · · · · · · · · · · · · · · · · · · · |                |               |              | · · · · · · · · · · · · · · · · · · ·              |                                       | · · · · · · · · · · · · · · · · · · · |                            |                                      |
|   |                   |  |                  |                           | 9      | SS   | 457             | 38         |                    |                       |                                       | ••••                                  | •                                     |                  |                                       |                |               |              |  |                                       |                                       |                            |                                      |
|   |                   | - Auger grinding at about 9.8 m and from<br>approximately 10.1 m to 10.7 m depths<br>(GM/GP) Sandy SILTY GRAVEL, some  |                  | 2 <u>42.91</u><br>10.13   |        |      |                 |            |                    |                       |                                       |                                       |                                       |                  |                                       |                |               |              |  |                                       |                                       |                            |                                      |
|   |                   | plastic fines; grey (TILL); non-cohesive,<br>wet, very dense   | • () •           | -<br>                     | 10     | ss   | 76              | 50/0.      | 08                 | þ                     |                                       |                                       | · · · · · · · · · · · · · · · · · · · |                  |                                       |                |               |              |  |                                       |                                       |                            |                                      |
|   |                   | - Auger grinding from approximately<br>10.7 m to 12.2 m depths   | 0 C              |                           |        |      |                 |            |                    |                       |                                       | · · · · · · · · · · · · · · · · · · · |                                       |                  | · · · · · · · · · · · · · · · · · · · |                |               |              | · · ·  |                                       | · · · · · ·                           |                            |                                      |
|   |                   | Crowd and abole for must be trans  | 0<br>0<br>0<br>0 |                           | 14     | 00   | 054             | 50/2       |                    |                       |                                       |                                       |                                       |                  |                                       |                |               |              | · · ·  |                                       |                                       |                            |                                      |
|   |                   | - Gravel and shale fragments between<br>approximately 2.2 m and 12.5 m depths  |                  |                           | 11     | SS   | 254             | 50/0.      | 10                 | 0                     |                                       |                                       |                                       |                  |                                       |                |               |              |  |                                       |                                       | МН                         |                                      |
|   | +                 | Slightly weathered to fresh, fine grained,<br>grey LIMESTONE BEDROCK with<br>interbedded shale (GEORGIAN BAY           |                  | <u>\$ 239.73</u><br>13.31 | DC4    |      | 1055            | TOD        | · «حن ·            |                       |                                       |                                       |                                       | 500)             |                                       |                |               |              | · · · · · · · · · · · · · · · · · · ·              |                                       |                                       |                            | Filter sand                          |
|   |                   | FORMATION)   | ┝┶╌┯┙            | 1                         | RC1    | RC   | 1055            | TCR        | = 97%              | , SĊŔ                 | · 90                                  | /0, K                                 |                                       | JZ:/0            |                                       |                |               |              |  |                                       |                                       |                            | ļ                                    |

|   | 8                                | SOIL PROFILE  |             |                         |        | SAM  | <b>IPLES</b>    |            | ● PE                  |       |   | N) BLC  | N/S/0 ?      | SH<br>3m +1 |      |            |       | u), kPA | . (7)                      |   |
|---|----------------------------------|---|-------------|-------------------------|--------|------|-----------------|------------|-----------------------|-------|---|---|--------------|-------------|------|------------|-------|---------|----------------------------|---|
|   | BORING METHOD                    | DESCRIPTION   | STRATA PLOT | ELEV.<br>DEPTH<br>(m)   | NUMBER | TYPE | RECOVERY,<br>mm | BLOWS/0.3m | ▲ <sup>D`</sup><br>RE |       |   | ETRATI  | ON<br>6/0.3m | W           | WATE | R CON<br>W | TENT, |         | ADDITIONAL<br>LAB. TESTING | PIEZOME<br>OR<br>STANDP<br>INSTALLA                       |
| t |                                  |   |             |                         |        |      |                 |            |                       |       |   |   |              |             |      |            |       |         |                            |   |
|   | Diamond Kotary Core<br>HO Casind | 0   |             | -                       |        |      |                 |            |                       |       |   |   |              |             |      |            |       |         |                            |   |
|   | Liamond                          |   |             | -                       | RC2    | RC   | 1600            | TCR        | = 1009                | %, SC | R = 95  | %, RQE  | ) = 89%      |             |      |            |       |         | -                          | 50mm dia., well<br>screen                                 |
| - | +                                | End of Borehole<br>Notes:   |             | 2 <u>37.04</u><br>16.00 |        |      |                 |            |                       |       | · · · · · · · · · · · · · · · · · · ·   | · · · · · · · · · · · · · · · · · · ·   |              |             |      |            |       |         | -                          |   |
|   |                                  | 1. Water level not measured upon<br>completion of drilling due to use of water<br>during rock coring.   |             |                         |        |      |                 |            |                       |       | · · · · · · · · · · · · · · · · · · ·   | · · · · · · · · · · · · · · · · · · ·   |              |             |      |            |       |         | -                          |   |
|   |                                  | 2. Piezometers installed as shown upon<br>completion of drilling. Shallow<br>piezometer installed in second borehole<br>drilled within approximately 2 m of initial |             |                         |        |      |                 |            |                       |       | · · · · · · · · · · · · · · · · · · ·   | · · · · · · · · · · · · · · · · · · ·   |              |             |      |            |       |         | -                          |   |
|   |                                  | <ul><li>installation.</li><li>3. Groundwater level measured in the installed monitoring well on May 18, 2023 at a depth of about 1.5 m below</li></ul>              |             |                         |        |      |                 |            |                       |       |   |   |              |             |      |            |       |         |                            |   |
|   |                                  | ground surface.   |             |                         |        |      |                 |            |                       |       | ·         ·         ·         ·         ·           ·         ·         ·         ·         ·         ·           ·         ·         ·         ·         ·         ·           ·         ·         ·         ·         ·         ·           ·         ·         ·         ·         ·         ·           ·         ·         ·         ·         ·         ·           ·         ·         ·         ·         ·         ·           ·         ·         ·         ·         ·         ·           ·         ·         ·         ·         ·         ·         ·           ·         ·         ·         ·         ·         ·         ·         ·           · | .         .         .         .         .           .         .         .         .         .           .         .         .         .         .           .         .         .         .         .           .         .         .         .         .           .         .         .         .         .           .         .         .         .         .           .         .         .         .         .           .         .         .         .         .           .         .         .         .         .           .         .         .         .         .           .         .         .         .         . |              |             |      |            |       |         |                            |   |
|   |                                  |   |             |                         |        |      |                 |            |                       |       |   |   |              |             |      |            |       |         | -                          |   |
|   |                                  |   |             |                         |        |      |                 |            |                       |       | .         .         .         .           .         .         .         .         .           .         .         .         .         .           .         .         .         .         .           .         .         .         .         .           .         .         .         .         .           .         .         .         .         .           .         .         .         .         .           .         .         .         .         .           .         .         .         .         .           .         .         .         .         .           .         .         .         .         .   | · · · · · · · · · · · · · · · · · · ·   |              |             |      |            |       |         |                            |   |
|   |                                  |   |             |                         |        |      |                 |            |                       |       | · · · · · · · · · · · · · · · · · · ·   |   |              |             |      |            |       |         | -                          |   |
|   |                                  |   |             |                         |        |      |                 |            |                       |       |   | · · · · · · · · · · · · · · · · · · ·   |              |             |      |            |       |         | -                          |   |
|   |                                  |   |             |                         |        |      |                 |            |                       |       |   |   |              |             |      |            |       |         | -                          |   |
|   |                                  |   |             |                         |        |      |                 |            |                       |       |   |   |              |             |      |            |       |         |                            |   |
|   |                                  |   |             |                         |        |      |                 |            |                       |       |   |   |              |             |      |            |       |         |                            |   |
|   |                                  |   |             |                         |        |      |                 |            |                       |       |   |   |              |             |      |            |       |         |                            |   |
|   |                                  |   |             |                         |        |      |                 |            |                       |       |   |   |              | :   : : : : |      |            |       |         | -                          | GROUNDW/<br>OBSERVAT<br>DATE DEPTH<br>(m)<br>23/05/18 1.5 |
|   |                                  |   |             |                         |        |      |                 |            |                       |       |   |   |              |             |      |            |       |         |                            |   |

|   | ᅙ             | SOIL PROFILE   |                |                       |        | SAM  | IPLES           |            | ● PE<br>RE            | NETR<br>SISTA    | ATION<br>NCE (N  | I), BLO | NS/0.:                                | 3m -                                  | SHEA | AR ST                                 | rreno<br>∿L⊕I | STH (C<br>REMO                        | u), kP<br>ULDEI                       |                                       | פ                                |           |
|---|---------------|--|----------------|-----------------------|--------|------|-----------------|------------|-----------------------|------------------|------------------|---------|---------------------------------------|---------------------------------------|------|---------------------------------------|---------------|---------------------------------------|---------------------------------------|---------------------------------------|----------------------------------|-----------|
|   | BORING METHOD | DESCRIPTION  | STRATA PLOT    | ELEV.<br>DEPTH<br>(m) | NUMBER | ТҮРЕ | RECOVERY,<br>mm | BLOWS/0.3m | ▲ <sup>D`</sup><br>RE | 'NAMIO<br>ESISTA | C PENE<br>NCE, E | TRATIO  | N                                     | 50                                    |      |                                       | R CON<br>W    |                                       |                                       |                                       | PIEZOM<br>OF<br>STAND<br>INSTALL | R<br>PIPE |
| 0 |               | Ground Surface   | - 1 7 1        | 253.03                |        |      |                 |            |                       |                  |                  |         | :::                                   | : ::                                  |      |                                       |               |                                       |                                       |                                       | Monument                         |           |
| - |               | TOPSOIL<br>(CL) SILTY CLAY, trace to some sand,  | <u>\''' \'</u> | 252.57<br>0.46        | 1      | SS   | 51              | 5          | •                     |                  |                  |         |                                       |                                       |      |                                       |               |                                       |                                       |                                       |                                  |           |
| 1 |               | trace gravel; brown, oxidative staining;<br>cohesive, w~PL to w>PL, very stiff   |                |                       | 2      | SS   | 305             | 19         |                       |                  | Ö                |         |                                       |                                       |      |                                       |               |                                       |                                       |                                       | $\overline{\nabla}$              | 7         |
|   |               |  |                |                       | 3      | SS   | 457             | 17         |                       |                  | 0                |         |                                       |                                       |      |                                       |               |                                       |                                       |                                       |                                  |           |
| 2 |               |  |                |                       |        | 00   | 457             | 04         |                       |                  |                  |         | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |      | · · · · · · · · · · · · · · · · · · · |               | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |                                       |                                  |           |
| 3 |               |  |                |                       | 4      | SS   | 457             | 24         | · · · · · ·           |                  |                  |         |                                       |                                       |      | · · · · · · · · · · · · · · · · · · · |               |                                       | · · · · · · · · · · · · · · · · · · · | •                                     |                                  |           |
|   |               |  |                |                       | 5      | SS   | 457             | 20         |                       |                  |                  |         |                                       | · · · · · · · · · · · · · · · · · · · |      | · · · · · · · · · · · · · · · · · · · |               |                                       |                                       | •                                     |                                  |           |
| 1 |               | (CL-ML) sandy SILTY CLAY to CLAYEY<br>SILT, trace to some gravel; brown to grey<br>(TILL); cohesive, w~PL, stiff to hard   | × ×            | 248.99<br>4.04        |        |      |                 |            |                       |                  |                  |         |                                       | · · · · · · · · · · · · · · · · · · · |      | · · · · · · · · · · · · · · · · · · · |               |                                       |                                       | ·<br>·<br>·<br>·<br>·                 |                                  |           |
| 5 |               |  |                |                       | 6      | SS   | 457             | 56         |                       |                  |                  |         |                                       |                                       |      |                                       |               |                                       |                                       |                                       |                                  |           |
|   |               | - Auger grinding at about 5.2 m depth  |                |                       |        |      |                 |            |                       |                  |                  |         |                                       |                                       |      |                                       |               |                                       |                                       |                                       | Bentonite                        |           |
| 5 |               | - Grey below about 6.1 m depth   |                |                       | 7      | SS   | 457             | 14         |                       |                  |                  |         |                                       | · · · · · · · · · · · · · · · · · · · |      |                                       |               | · · · · · · · · · · · · · · · · · · · |                                       | :<br>:<br>: M⊦                        | 4                                |           |
| , |               |  |                |                       |        |      |                 |            |                       |                  |                  |         |                                       |                                       |      | · · · · · · · · · · · · · · · · · · · |               |                                       |                                       | · · · · · · · · · · · · · · · · · · · |                                  |           |
|   |               |  |                |                       | 8      | SS   | 457             | 31         |                       | 0                |                  |         |                                       |                                       |      | · · · · · · · · · · · · · · · · · · · |               |                                       |                                       | ·<br>·<br>·<br>·                      |                                  |           |
| 5 |               |  |                |                       | -      |      |                 |            |                       |                  |                  |         | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |      |                                       |               | · · · · · · · · · · · · · · · · · · · |                                       |                                       |                                  |           |
| , |               |  |                |                       |        |      |                 |            |                       |                  |                  |         |                                       |                                       |      |                                       |               |                                       |                                       |                                       |                                  |           |
|   |               |  |                |                       | 9      | SS   | 457             | 38         |                       | )<br> <br>       |                  |         |                                       |                                       |      |                                       |               |                                       |                                       |                                       |                                  |           |
| ) |               | - Auger grinding at about 9.8 m and from<br>approximately 10.1 m to 10.7 m depths<br>(GM/GP) Sandy SILTY GRAVEL, some<br>plastic fines; grey (TILL); non-cohesive, |                | 242.90<br>10.13       |        |      |                 |            |                       |                  |                  |         |                                       |                                       |      |                                       |               |                                       |                                       |                                       |                                  |           |
| 1 |               | wet, very dense - Auger grinding from approximately  |                |                       | _10    | SS   | 76              | 50/0.      | 8                     | 0                |                  |         |                                       |                                       |      |                                       |               |                                       |                                       |                                       | Filter sand                      |           |
|   |               | 10.7 m to 12.2 m depths  | 0 0 0          |                       |        |      |                 |            |                       |                  |                  |         |                                       |                                       |      | · · · · · · · · · · · · · · · · · · · |               |                                       |                                       | ·<br>·<br>·<br>·                      | 50mm dia. well<br>screen         |           |
| 2 |               | - Gravel and shale fragments between   | 0000           |                       | 11     | SS   | 254             | 50/0.      | 0                     | 0                |                  |         |                                       |                                       |      |                                       |               |                                       |                                       |                                       |                                  |           |
| 3 |               | approximately 12.2 m and 12.5 m depths End of Borehole   |                | 240.08<br>12.95       |        |      |                 |            |                       |                  |                  |         |                                       |                                       |      |                                       |               |                                       |                                       |                                       | Sand<br>Bentonite                |           |
|   |               | Notes:   |                |                       |        |      |                 |            |                       |                  |                  |         |                                       |                                       |      |                                       |               |                                       |                                       |                                       |                                  |           |
| 1 |               | 1. Piezometers installed as shown upon completion of drilling.   |                |                       |        |      |                 |            |                       |                  |                  |         |                                       |                                       |      |                                       |               |                                       |                                       |                                       |                                  |           |

|        | Ð             | SOIL PROFILE   | -           |              |        | SAM  | IPLES           |            | ● PE<br>RE                            | NETRA<br>SISTA | ATION<br>NCE (N)                      | ), BLOV | VS/0.3    |   |     |        | u), kPA<br>JLDED      | Г<br>G                     |                  |  |
|--------|---------------|--|-------------|--------------|--------|------|-----------------|------------|---------------------------------------|----------------|---------------------------------------|---------|-----------|---|-----|--------|-----------------------|----------------------------|------------------|--|
| METRES | BORING METHOD | DESCRIPTION  | STRATA PLOT | ELEV.        | NUMBER | ТҮРЕ | RECOVERY,<br>mm | BLOWS/0.3m | ▲ DY<br>RF                            | NAMIC          | PENET                                 | rratio  | N<br>0.3m | W |     | ITENT, | %<br>  w <sub>L</sub> | ADDITIONAL<br>LAB. TESTING | s                | EZOMETEF<br>OR<br>TANDPIPE<br>STALLATIOI |
| ~      | BORII         |  | STRAI       | DEPTH<br>(m) | NUN    | -    | RECO            | BLOW       |                                       |                |                                       |         |           |   | F . | 80     | 90                    | AD                         | IN               |  |
| 14     |               |  |             |              |        |      |                 |            |                                       |                |                                       |         |           |   |     |        |                       |                            |                  |  |
| -      |               | 2. Groundwater level measured in the installed monitoring well on May 18, 2023 at a depth of about 1.2 m below |             |              |        |      |                 |            |                                       |                |                                       |         |           |   |     |        |                       |                            |                  |  |
| 5      |               | ground surface.<br>3. Subsurface conditions based on   |             |              |        |      |                 |            | · · · · · · · · · · · · · · · · · · · |                |                                       |         |           |   |     |        |                       | -                          |                  |  |
|        |               | borehole BH23-17D.   |             |              |        |      |                 |            |                                       |                |                                       |         |           |   |     |        |                       |                            |                  |  |
| 6      |               |  |             |              |        |      |                 |            |                                       |                |                                       |         |           |   |     |        |                       |                            |                  |  |
| 7      |               |  |             |              |        |      |                 |            | · · · · · · · · · · · · · · · · · · · |                |                                       |         |           |   |     |        |                       |                            |                  |  |
|        |               |  |             |              |        |      |                 |            | · · · · · · · · · · · · · · · · · · · |                | · · · · · · · · · · · · · · · · · · · |         |           |   |     |        |                       |                            |                  |  |
| 8      |               |  |             |              |        |      |                 |            |                                       |                |                                       |         |           |   |     |        |                       |                            |                  |  |
| 9      |               |  |             |              |        |      |                 |            |                                       |                |                                       |         |           |   |     |        |                       |                            |                  |  |
| 0      |               |  |             |              |        |      |                 |            |                                       |                |                                       |         |           |   |     |        |                       |                            |                  |  |
| 1      |               |  |             |              |        |      |                 |            |                                       |                |                                       |         |           |   |     |        |                       |                            |                  |  |
|        |               |  |             |              |        |      |                 |            |                                       |                |                                       |         |           |   |     |        |                       |                            |                  |  |
| 2      |               |  |             |              |        |      |                 |            |                                       |                |                                       |         |           |   |     |        |                       |                            |                  |  |
| 3      |               |  |             |              |        |      |                 |            |                                       |                |                                       |         |           |   |     |        |                       |                            |                  |  |
| 4      |               |  |             |              |        |      |                 |            | · · · · · · · · · · · · · · · · · · · |                |                                       |         |           |   |     |        |                       |                            |                  |  |
| _      |               |  |             |              |        |      |                 |            | · · · · · · · · · · · · · · · · · · · |                |                                       |         |           |   |     |        |                       |                            |                  |  |
| 5      |               |  |             |              |        |      |                 |            |                                       |                |                                       |         |           |   |     |        |                       |                            |                  |  |
| 6      |               |  |             |              |        |      |                 |            | · · · · · · · · · · · · · · · · · · · |                |                                       |         |           |   |     |        |                       |                            |                  |  |
| 7      |               |  |             |              |        |      |                 |            |                                       |                |                                       |         |           |   |     |        |                       |                            | GF<br>OE<br>DATE | ROUNDWATE<br>SSERVATION<br>DEPTH<br>(m)  |
| 8      |               |  |             |              |        |      |                 |            | · · · · · · · · · · · · · · · · · · · |                |                                       |         |           |   |     |        |                       |                            | 23/05/18         |  |

 CLIENT:
 Mayfield Golf Course Inc.

 PROJECT:
 Mayfield Golf Course - Detailed Investigation

 JOB#:
 101987.001

 LOCATION:
 See Borehole Location Plan

SHEET:1 OF 2DATUM:CGVD28BORING DATE:Feb 6 2023

| щ                                    | 6             | 3                     | SOIL PROFILE   |                  |                       |        | SAN  | IPLES           |            | ● PE                  | ENET  | RAT   | TION<br>CE (N)                        | BL O                                  | NS/0 :                                | Si<br>3m +      | HEAR S |            | GTH (C | u), kPA<br>JLDED | , U  |   |
|--------------------------------------|---------------|-----------------------|--|------------------|-----------------------|--------|------|-----------------|------------|-----------------------|-------|-------|---------------------------------------|---------------------------------------|---------------------------------------|-----------------|--------|------------|--------|------------------|------|---|
| DEPTH SCALE<br>METRES                | BORING METHOD |                       | DESCRIPTION  | STRATA PLOT      | ELEV.<br>DEPTH<br>(m) | NUMBER | ТҮРЕ | RECOVERY,<br>mm | BLOWS/0.3m | ▲ <sup>D'</sup><br>RE | VNAN  |       | PENET<br>CE, BL                       | RATIC<br>.OWS/                        | N                                     | v               | WATE   | R CON<br>W | ITENT, |                  | TION | PIEZOMETER<br>OR<br>STANDPIPE<br>INSTALLATION |
|                                      |               |                       | Ground Surface   | ى<br>م           | 254.41                |        |      | -               |            |                       |       |       |                                       |                                       |                                       |                 |        |            |        |                  |      | Monument                                      |
| - 0                                  |               |                       | TOPSOIL  |                  | 254.41                | 1A     | SS   | -               |            |                       |       |       |                                       |                                       | :::                                   |                 |        |            |        |                  |      | Wondhein                                      |
| -                                    |               |                       | (CL) SILTY CLAY, trace to some sand,<br>trace gravel; brown to grey, oxidative<br>staining; cohesive, w~PL to w>PL, firm |                  |                       | 1B     | SS   | 229             | 6          |                       |       |       | 0                                     | · · · · · · · · · · · · · · · · · · · |                                       |                 |        |            |        |                  |      |   |
| - 1                                  |               |                       | to hard  |                  |                       | 2      | SS   | 279             | 25         |                       |       |       | -                                     | · · · · · · · · · · · · · · · · · · · |                                       |                 |        |            |        |                  | -    |   |
| -                                    |               |                       |  |                  |                       |        |      |                 |            |                       |       |       |                                       |                                       |                                       |                 |        |            |        |                  |      |   |
| 2                                    |               |                       |  |                  |                       | 3      | SS   | 229             | 27         |                       |       | 0     | )::: <b>:</b>                         | · · · · · · · · · · · · · · · · · · · |                                       |                 |        |            |        |                  | -    | Ţ   |
| -                                    |               |                       | - Sand pockets between approximately 2.3 m and 2.7 m depths  |                  |                       | 4      | SS   | 381             | 27         |                       | 0     |       | •                                     | · · · · · · · · · · · · · · · · · · · |                                       |                 |        |            |        |                  |      |   |
| - 3                                  |               |                       |  |                  |                       |        |      |                 |            |                       |       |       | · · · · ·                             | · · · · · · · · · · · · · · · · · · · |                                       |                 |        |            |        |                  |      |   |
| _                                    |               |                       |  |                  |                       | 5      | SS   | 457             | 37         |                       |       | 0     |                                       | •                                     |                                       |                 |        |            |        |                  |      |   |
|                                      |               |                       |  |                  |                       |        |      |                 |            |                       |       |       | · · · · · · · · · · · · · · · · · · · |                                       |                                       |                 |        |            |        |                  |      |   |
| - 4                                  |               |                       |  |                  |                       |        |      |                 |            |                       |       |       |                                       |                                       |                                       |                 |        |            |        |                  |      |   |
| -                                    |               |                       | - Grey below about 4.6 m depth   |                  |                       | 6      | SS   | 432             | 16         |                       |       |       | · · · · · · · · · · · · · · · · · · · |                                       |                                       |                 |        |            |        |                  |      |   |
| - 5                                  |               |                       |  |                  |                       |        |      |                 |            |                       |       | · · · | · · · · ·                             | · · · · ·                             |                                       | · · · · · · · · |        |            |        |                  |      |   |
| -                                    |               |                       |  |                  |                       |        |      |                 |            |                       |       |       | · · · · · · · · · · · · · · · · · · · |                                       |                                       |                 |        |            |        |                  |      |   |
| - 6                                  |               |                       |  |                  |                       | -      |      | 054             | 10         |                       |       |       | · · · · ·                             | · · · · ·                             |                                       |                 |        |            |        |                  | -    |   |
|                                      |               |                       |  |                  |                       | 7      | SS   | 254             | 13         |                       |       | 5     |                                       |                                       |                                       |                 |        |            |        |                  |      |   |
| - 7                                  |               |                       |  |                  |                       |        |      |                 |            |                       |       |       | · · · · ·                             | · · · · ·                             |                                       |                 |        |            |        |                  | -    | Bentonite                                     |
|                                      |               | u OD)                 |  |                  |                       |        |      |                 |            |                       |       |       | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |                                       |                 |        |            |        |                  |      |   |
| - 8                                  | ger           | Stem Auger (210mm OD) |  |                  |                       | 8      | SS   | 330             | 15         |                       |       | Ø     | · · · · ·                             | · · · · · · · · · · · · · · · · · · · |                                       |                 |        |            |        |                  | _    |   |
|                                      | Power Auger   | Auger (               |  |                  | 245.80                |        |      |                 |            |                       |       |       |                                       |                                       |                                       |                 |        |            |        |                  |      |   |
| - 9                                  | Po            |                       | (SM/ML) Gravelly SILTY SAND to SILT<br>and SAND, trace plastic fines, grey<br>(TILL), non-cohesive, wet, very dense      | ° 0 °            | 8.61                  |        |      |                 |            |                       |       |       |                                       |                                       |                                       |                 |        |            |        |                  |      |   |
|                                      |               | Hollow                | - Auger grinding and possible cobbles/   |                  |                       | 9      | SS   | 102             | 50/0.      | 3                     |       |       |                                       | · · · · · · · · · · · · · · · · · · · |                                       |                 |        |            |        |                  | М    |   |
| - 10<br>- 11<br>- 12<br>- 13<br>- 14 |               |                       | boulders at 9.4 m depth  | 00<br>00         |                       | 10     | 22   | 51              | 50/0.      | 8                     |       |       |                                       |                                       |                                       |                 |        |            |        |                  |      |   |
| - 10                                 |               |                       |  |                  |                       |        |      |                 |            |                       |       |       |                                       |                                       |                                       |                 |        |            |        |                  |      |   |
|                                      |               |                       |  | ° () °           |                       | 11     | SS   | 254             | 50/0.      | 3 C                   |       |       |                                       |                                       |                                       |                 |        |            |        |                  |      |   |
| - 11                                 |               |                       | 14/  | 0<br>0<br>0<br>C |                       |        |      |                 |            |                       |       |       |                                       |                                       | · · · · · · · · · · · · · · · · · · · |                 |        |            |        |                  |      |   |
|                                      |               |                       | - Water encountered during drilling at about 11.3 m depth  | • 0.°            | \$                    |        |      |                 |            |                       |       |       |                                       |                                       |                                       |                 |        |            |        |                  |      |   |
| - 12                                 |               |                       |  |                  | Ĵ                     |        |      |                 |            |                       |       |       | <u></u>                               |                                       |                                       |                 |        |            |        |                  |      |   |
|                                      |               |                       |  |                  |                       | 12     | SS   | 279             | 50/0.      | 3 0                   |       |       | · · · · · · · · · · · · · · · · · · · |                                       |                                       |                 |        |            |        |                  |      |   |
| - 13                                 |               |                       |  | • 0 C            |                       |        |      |                 |            |                       |       |       | · · · · ·                             |                                       |                                       |                 |        |            |        |                  |      |   |
|                                      |               |                       |  |                  |                       |        |      |                 |            |                       |       |       | · · · · · · · · · · · · · · · · · · · |                                       |                                       |                 |        |            |        |                  |      |   |
| - 14                                 |               |                       | - Auger grinding from approximately  | • 0 [C           |                       | 13     | ss   | 76              | 50/0.      | <b>9</b> 8 : (        | )<br> |       |                                       |                                       |                                       |                 |        |            |        |                  |      |   |
|                                      |               | C                     | SEMTEC   | I                |                       |        |      |                 |            | ::::                  | :::   | ::    | ::::                                  | ::::                                  | :::                                   | :   : : : :     | ::::   | : : : :    |        | ::::             |      |   |
| 1                                    |               | Cor                   | NSULTING ENGINEERS   |                  |                       |        |      |                 |            |                       |       |       |                                       |                                       |                                       |                 |        |            |        |                  |      | ED: IO/AS<br>KED: DMF                         |
|                                      |               | THE                   | DISCIENTISTS   |                  |                       |        |      |                 |            |                       |       |       |                                       |                                       |                                       |                 |        |            |        |                  |      |   |

CLIENT: Mayfield Golf Course Inc. PROJECT: Mayfield Golf Course - Detailed Investigation JOB#: 101987.001

SHEET: 2 OF 2 DATUM: CGVD28 BORING DATE: Feb 6 2023

LOCATION: See Borehole Location Plan

| 1,4    | Ы<br>Н        | SOIL PROFILE  | L           |                         |         | SAN  | /IPLES          |            | ● <sup>PI</sup><br>R | ENETR<br>ESISTA | ATION<br>NCE (I | N), BLC         | WS/0.3      | s<br>Sm + | HEAR<br>NATU | STR<br>RAL                   | ENG<br>⊕R                             | TH (C<br>EMO | u), kPA<br>JLDED      | NG                         | PIEZOMETER                                   |
|--------|---------------|---|-------------|-------------------------|---------|------|-----------------|------------|----------------------|-----------------|-----------------|-----------------|-------------|-----------|--------------|------------------------------|---------------------------------------|--------------|-----------------------|----------------------------|--|
| METRES | BORING METHOD | DESCRIPTION   | STRATA PLOT | ELEV.                   | NUMBER  | ТҮРЕ | RECOVERY,<br>mm | BLOWS/0.3m | ▲ <sup>D</sup>       | YNAMI           |                 | ETRATI<br>BLOWS | ON<br>/0.3m | v         | WAT          | TER (                        |                                       | ΓENT,        | %<br>  ₩ <sub>L</sub> | ADDITIONAL<br>LAB. TESTING | OR<br>STANDPIPE<br>INSTALLATION              |
| 2      | BORIN         |   | STRAT       | DEPTH<br>(m)            | NN<br>N | F    | RECO            | BLOW       |                      |                 |                 |                 |             |           | 60           | 70                           | 8                                     | 0            | 90                    | <b>A</b> B<br>A            | INSTALLATION                                 |
| 14 -   |               |   |             |                         |         |      |                 |            |                      |                 |                 |                 |             |           |              | : :                          |                                       |              |                       |                            |  |
|        |               | 13.7 m to 14.6 m and from approximately 15.2 m to 16.2 m depths   | • 0 •       | 1                       |         |      |                 |            |                      |                 |                 |                 |             |           |              |                              |                                       |              |                       |                            | Bentonite                                    |
|        |               |   |             |                         |         |      |                 |            |                      |                 |                 |                 |             |           |              |                              |                                       |              |                       |                            | Bentonite                                    |
| 15     |               | - Gravelly between approximately 15.2 m   | o [         |                         | 14      | SS   | 152             | 50/0.1     |                      |                 |                 |                 |             |           |              |                              | · · · ·                               |              |                       | м                          | Filter sand                                  |
|        |               | and 15.m depths   |             |                         |         |      | 102             | 30/0.      |                      |                 |                 |                 |             |           |              |                              |                                       |              |                       | 101                        |  |
| 16     |               | Highly weathered grev SHALF   | <u>•</u> 0• | 2 <u>38.26</u><br>16.15 | -       |      |                 |            |                      | · · · · ·       |                 |                 |             |           |              | <u>:</u><br>:<br>:<br>:<br>: | · · · ·                               | <u></u>      |                       |                            | 50mm dia. well 50mm dia. well 50mm dia. well |
|        |               | Highly weathered grey SHALE<br>BEDROCK (GEORGIAN BAY<br>FORMATION)  |             |                         |         |      |                 | =====      |                      |                 |                 |                 |             |           |              |                              | · · · ·                               |              |                       |                            |  |
| 17     |               | End of Borehole   |             | 2 <u>37.60</u><br>16.81 | 15      | SS   | -51             | 50/0.1     | 5.0                  |                 |                 |                 |             |           |              |                              | · · · · ·                             |              |                       | -                          |  |
|        |               | Notes:<br>1. Auger refusal was reached at 10 m on   |             |                         |         |      |                 |            |                      |                 |                 |                 |             |           |              |                              | · · · · · · · · · · · · · · · · · · · |              |                       |                            |  |
| 18     |               | Feb $\vec{6}$ , 2023. Borehole was moved<br>approximately 2 m west and resumed to<br>final depth of 16.8 m on Feb 21, 2023. |             |                         |         |      |                 |            |                      |                 |                 |                 |             |           |              |                              | · · · ·                               |              |                       | -                          |  |
|        |               | 2. Water level not measured upon  |             |                         |         |      |                 |            |                      |                 |                 |                 |             |           |              |                              |                                       |              |                       |                            |  |
| 19     |               | completion of drilling due to use of water during drilling.   |             |                         |         |      |                 |            |                      |                 |                 |                 |             |           |              |                              | · · · ·                               |              |                       |                            |  |
|        |               | 3. Piezometer installed as shown upon<br>completion of drilling.  |             |                         |         |      |                 |            |                      |                 |                 |                 |             |           |              |                              |                                       |              |                       |                            |  |
| _      |               | 4. Groundwater level measured in<br>installed monitoring well on May 18,  |             |                         |         |      |                 |            |                      |                 |                 |                 |             |           |              |                              | · · · · ·                             |              |                       |                            |  |
| 20     |               | 2023 at a depth of about 2.1 m below<br>ground surface.   |             |                         |         |      |                 |            |                      |                 |                 |                 |             |           |              |                              |                                       |              |                       |                            |  |
|        |               |   |             |                         |         |      |                 |            |                      |                 |                 |                 |             |           |              |                              | · · · · ·                             |              |                       |                            |  |
| 21     |               |   |             |                         |         |      |                 |            |                      |                 |                 |                 |             |           |              |                              |                                       |              |                       | -                          |  |
|        |               |   |             |                         |         |      |                 |            |                      |                 |                 |                 |             |           |              |                              |                                       |              |                       |                            |  |
| 22     |               |   |             |                         |         |      |                 |            |                      |                 |                 |                 |             |           |              | : :<br>: :<br>: :            | : : :<br>: : :<br>: : :               |              |                       | -                          |  |
|        |               |   |             |                         |         |      |                 |            |                      |                 |                 |                 |             |           |              |                              | · · · · ·                             |              |                       |                            |  |
| 23     |               |   |             |                         |         |      |                 |            |                      |                 |                 |                 |             |           |              |                              |                                       |              |                       | -                          |  |
|        |               |   |             |                         |         |      |                 |            |                      |                 |                 |                 |             |           |              |                              |                                       |              |                       |                            |  |
| 24     |               |   |             |                         |         |      |                 |            |                      |                 |                 |                 |             |           |              |                              | · · · ·                               |              |                       |                            |  |
|        |               |   |             |                         |         |      |                 |            |                      |                 |                 |                 |             |           |              |                              |                                       |              |                       |                            |  |
| 25     |               |   |             |                         |         |      |                 |            |                      |                 |                 |                 |             |           |              |                              |                                       |              |                       |                            |  |
| 20     |               |   |             |                         |         |      |                 |            |                      |                 |                 |                 |             |           |              |                              |                                       |              |                       |                            |  |
|        |               |   |             |                         |         |      |                 |            |                      |                 |                 |                 |             |           |              |                              |                                       |              |                       |                            |  |
| 26     |               |   |             |                         |         |      |                 |            |                      |                 |                 |                 |             |           |              |                              |                                       |              |                       |                            |  |
|        |               |   |             |                         |         |      |                 |            |                      |                 |                 |                 |             |           |              |                              |                                       |              |                       |                            | GROUNDWATER                                  |
| 27     |               |   |             |                         |         |      |                 |            |                      |                 |                 |                 |             |           |              |                              |                                       |              |                       |                            | OBSERVATIONS DATE DEPTH ELE (m) (m           |
|        |               |   |             |                         |         |      |                 |            |                      |                 |                 |                 |             |           |              |                              |                                       |              |                       |                            | 23/05/18 2.1 7 252                           |
| 28     |               |   |             |                         |         |      |                 |            |                      |                 |                 |                 |             |           |              |                              | · · · ·                               |              |                       | -                          |  |
| 2      | C             | SEMTEC  | •           | •                       |         |      |                 |            |                      |                 |                 |                 |             |           |              |                              |                                       |              |                       | LOGG                       | ED: IO/AS                                    |

 CLIENT:
 Mayfield Golf Course Inc.

 PROJECT:
 Mayfield Golf Course - Detailed Investigation

 JOB#:
 101987.001

 LOCATION:
 See Borehole Location Plan

SHEET:1 OF 1DATUM:CGVD28BORING DATE:Feb 24 2023

| щ  |             | 0                     | SOIL PROFILE  | _  |                       |        | SAM  | IPLES           |            | • F                                   | PEN | ETR.                                  |              | N<br>(N)                              | BLC         | SW | S/0.3    | 3m | SH<br>+ N |      | STRE                                      | NGT<br>Ð RE                           | H (Cu                                 | ı), kPA<br>ILDED |                            |                  |                                |              |
|--|-------------|-----------------------|---|--|-----------------------|--------|------|-----------------|------------|---------------------------------------|-----|---------------------------------------|--------------|---------------------------------------|-------------|----|----------|----|-----------|------|---|---------------------------------------|---------------------------------------|------------------|----------------------------|------------------|--------------------------------|--------------|
| DEPTH SCALE<br>METRES  |             | BORING METHOD         | DESCRIPTION   | STRATA PLOT  | ELEV.<br>DEPTH<br>(m) | NUMBER | ТҮРЕ | RECOVERY,<br>mm | BLOWS/0.3m |                                       | איר | IAMIC<br>ISTA                         | D PEN<br>NCE | NFT                                   | RATI<br>OWS |    | l<br>.3m | 50 |           | WATE | ER C                                      |                                       | ENT,                                  |                  | ADDITIONAL<br>LAB. TESTING | s                | EZOME<br>OR<br>TANDP<br>STALLA | IPE          |
|  |             |                       | Ground Surface  |  | 250.43                |        |      |                 |            |                                       | :   |                                       | ::           | :::                                   |             | :  |          |    |           |      | ::  | ::                                    |                                       |                  |                            | Mo               | nument                         |              |
|  |             |                       | TOPSOIL   | $\frac{1}{2_{1}1^{4}} \frac{1}{2_{1}1^{4}} \frac{1}{2_{1}1^{4}}$ | 249.74                | 1      | SS   | 254             | 8          |                                       | •   | · · · · · · · · · · · · · · · · · · · |              | · · ·<br>· · ·<br>· · ·<br>· · ·      |             |    |          |    |           |      |   | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |                  |                            |                  |                                |              |
|  |             |                       | (CL) sandy SILTY CLAY, some gravel;<br>brown, oxidative staining (TILL);<br>cohesive, w~PL to w>PL, very stiff to                   |  | 249.74<br>0.69        | 2      | SS   | 457             | 15         |                                       |     | ۲                                     |              | · · ·<br>· · ·<br>· · ·               | · · · ·     |    |          |    |           |      |   | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |                  |                            |                  |                                |              |
|  |             |                       | hard  |  |                       | 3      | SS   | 457             | 44         |                                       | c   | <b>.</b>                              |              | · · · · · · · · · · · · · · · · · · · |             |    | •        |    |           |      |   | · · · · · · · · · · · · · · · · · · · |                                       |                  |                            |                  |                                |              |
|  | 2           |                       |   |  |                       | 4      | SS   | 457             | 42         |                                       |     |                                       |              | · · · · · · · · · · · · · · · · · · · |             |    |          |    |           |      |   | · · · · · · · · · · · · · · · · · · · | · · · · ·                             |                  |                            |                  |                                |              |
|  | 5           |                       |   |  |                       | 4      |      | 437             | 42         |                                       |     |                                       |              | · · ·<br>· · ·<br>· · ·               | · · · ·     |    |          |    |           |      |   | · · · · · · · · · · · · · · · · · · · | · · · · · ·                           |                  |                            |                  |                                |              |
|  |             |                       |   |  |                       | 5      | SS   | 457             | 45         |                                       |     | 0                                     |              | · · ·<br>· · ·<br>· · ·               |             |    | •        |    |           |      |   | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |                  |                            |                  | Ţ                              |              |
|  | Ļ           | 0                     |   |  |                       |        |      |                 |            | · · · · · · · · · · · · · · · · · · · |     | · · · · ·                             |              | · · ·<br>· · ·<br>· · ·<br>· · ·      | · · · ·     |    |          |    |           |      | · · ·<br>· · ·<br>· · ·<br>· · ·<br>· · · | · · ·                                 | · · · · · ·                           |                  |                            | Be               | entonite                       |              |
|  | a a         | stem Auger (210mm OD) |   |  |                       | 6      | SS   | 152             | 27         |                                       |     | 0                                     |              | •                                     |             |    |          |    |           |      |   |                                       |                                       |                  |                            |                  |                                |              |
|  | Power Auder | m Auger (             | - Difficult augering between<br>approximately 5.2 m and 5.5 m depths<br>(CL) SILTY CLAY, trace to some sand,                        |  | 244.87<br>5.56        |        |      |                 |            |                                       |     |                                       |              | · · · · · · · · · · · · · · · · · · · |             |    |          |    |           |      |   | · · · · · · · · · · · · · · · · · · · |                                       |                  |                            |                  |                                |              |
|  |             | Hollow Ster           |   |  |                       | 7      | SS   | 457             | 25         |                                       |     | •                                     |              | <br><br>H                             |             | :  |          |    |           |      |   | · · ·                                 | · · · · · ·                           |                  | мн                         |                  |                                |              |
|  |             |                       |   |  |                       |        |      |                 |            |                                       |     |                                       |              | · · ·<br>· · ·<br>· · ·<br>· ·        |             |    |          |    |           |      |   | · · · · · · · · · · · · · · · · · · · |                                       |                  |                            |                  |                                |              |
|  |             |                       |   |  |                       |        |      |                 |            |                                       |     |                                       |              | · · ·<br>· · ·<br>· · ·<br>· · ·      |             |    |          |    |           |      |   | · · · · · · · · · · · · · · · · · · · |                                       |                  |                            |                  |                                |              |
|  | 3           |                       | (SM) Gravelly SILTY SAND, trace plastic fines; grey; non-cohesive, moist, very  |  | 242.40<br>8.03        | 8      | SS   | 457             | 48         |                                       |     | 0                                     |              | · · ·<br>· · ·<br>· · ·               | · · · ·     |    |          |    |           |      |   | · · ·                                 | · · · · · · · · · · · · · · · · · · · |                  |                            |                  |                                |              |
|  |             |                       | dense   |  | •<br>•                |        |      |                 |            |                                       |     | · · · · · · · · · · · · · · · · · · · |              | · · ·<br>· · ·<br>· · ·               |             |    |          |    |           |      | · · · · · · · · · · · · · · · · · · ·     | · · · · · · · · · · · · · · · · · · · |                                       |                  |                            | Eilte            | er sand                        | 1            |
| È  | ,<br>       |                       | - Auger grinding between approximately  |  |                       | 9      | SS   | 254             | 50/0.      | 3 (                                   | >   |                                       |              | · · · · · · · · · · · · · · · · · · · |             |    |          |    |           |      |   |                                       |                                       |                  | мн                         | 1 110            | si sanu                        |              |
| 10 10 10 10 10 10 10 10 10 10 10 10 10 1                             | )           |                       | 9.5 m and 10.8 m depths   |  |                       |        |      |                 |            |                                       |     |                                       |              | · · · · · · · · · · · · · · · · · · · |             | :  |          |    |           |      |   |                                       |                                       |                  |                            | 50mm d           | lia. well<br>screen            |              |
| EC 2018.0  |             |                       | End of Borehole   |  | 239.63                | 10     | SS   | 127             | 50/0.      | 3                                     | Ö   |                                       |              | · · ·<br>· · ·<br>· · ·               |             |    |          |    |           |      |   | · · · · · · · · · · · · · · · · · · · |                                       |                  |                            |                  |                                |              |
| 単一 11<br>W目<br>  |             |                       | Notes:  |  |                       |        |      |                 |            |                                       |     |                                       |              |                                       |             |    |          |    |           |      |   |                                       |                                       |                  |                            |                  |                                | -            |
| 02.GPJ (   | ,           |                       | 1. Borehole was dry upon completion of drilling.  |  |                       |        |      |                 |            |                                       |     |                                       |              | · · ·<br>· · ·<br>· · ·               |             |    |          |    |           |      |   | · · · · · · · · · · · · · · · · · · · |                                       |                  |                            |                  |                                |              |
| 12<br>12<br>12<br>12<br>12<br>12<br>12<br>12<br>12<br>12<br>12<br>12 |             |                       | 2. Piezometer installed as shown upon completion of drilling.   |  |                       |        |      |                 |            |                                       |     |                                       |              |                                       |             |    |          |    |           |      |   |                                       |                                       |                  |                            |                  |                                | -            |
| 100.1987.001   | 3           |                       | 3. Groundwater level measured in<br>installed monitoring well on May 18,<br>2023 at a depth of about 3.6 m below<br>ground surface. |  |                       |        |      |                 |            |                                       |     |                                       |              | · · ·                                 |             |    |          |    |           |      |   |                                       |                                       |                  | -                          | GF<br>OE<br>DATE |                                | IONS         |
| GEO - BOREHOLE LOG 101987, 001'2023'06'02.GPJ GEMTEC 2018.GDT 6/2/23 |             |                       |   |  |                       |        |      |                 |            |                                       |     |                                       |              | · · · · · · · · · · · · · · · · · · · |             |    |          |    |           |      |   |                                       |                                       |                  |                            | 23/05/18         | (m)<br>3.6 <u>\</u>            | (m)<br>246.8 |
|  | ł           |                       |   |  |                       |        |      |                 |            |                                       | :   |                                       | ::           | ::                                    |             | :  |          |    |           |      | ::<br>::                                  | :::<br>:::                            |                                       |                  |                            |                  |                                | -            |
| - BOR  |             | (                     | SEMTEC  |  |                       |        |      |                 |            |                                       |     |                                       |              |                                       |             |    |          |    |           |      |   |                                       |                                       |                  | LOGO                       | GED: AS          | 6                              |              |
| ee 🦉   | -           | _                     | DNSULTING ENGINEERS<br>ID SCIENTISTS  |  |                       |        |      |                 |            |                                       |     |                                       |              |                                       |             |    |          |    |           |      |   |                                       |                                       |                  | CHEC                       | KED: [           | DMF                            |              |

| RECORD OF | BOREHOL | E BH23-20 |
|-----------|---------|-----------|
|-----------|---------|-----------|

 CLIENT:
 Mayfield Golf Course Inc.

 PROJECT:
 Mayfield Golf Course - Detailed Investigation

 JOB#:
 101987.001

 LOCATION:
 See Borehole Location Plan

| SHEET:       | 1 OF 1      |
|--------------|-------------|
| DATUM:       | CGVD28      |
| BORING DATE: | Feb 24 2023 |
|              |             |

| щ  | Ę        | 2          | SOIL PROFILE   |             |                         |        | SAM  | IPLES           |            | ● PE<br>RE            | ENE'<br>ESIS                          | TRA<br>STAN | TION<br>ICE (N                        | ), BLC   | ows                                   | /0.3r                                 | Sł<br>n + |                                       | STR<br>RAL                            | ENG<br>⊕ F                            | TH (C                                 | u), kF  | PA<br>D                               | ں ۲                        |   |
|--|----------|------------|--|-------------|-------------------------|--------|------|-----------------|------------|-----------------------|---------------------------------------|-------------|---------------------------------------|----------|---------------------------------------|---------------------------------------|-----------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------|---------------------------------------|----------------------------|---|
| DEPTH SCALE<br>METRES  |          |            | DESCRIPTION  | STRATA PLOT | ELEV.<br>DEPTH<br>(m)   | NUMBER | ТҮРЕ | RECOVERY,<br>mm | BLOWS/0.3m | ▲ <sup>D`</sup><br>RE | ~~~                                   | MIC         | PENE<br>ICE, B                        | траті    |                                       | m                                     | W         | WAT                                   |                                       |                                       | TENT                                  |         | /L                                    | ADDITIONAL<br>LAB. TESTING | PIEZOMETER<br>OR<br>STANDPIPE<br>INSTALLATION |
| - 0  | Ľ        |            | Ground Surface   |             | 253.12                  |        |      |                 |            |                       |                                       |             |                                       |          |                                       |                                       |           |                                       |                                       |                                       |                                       |         |                                       |                            |   |
|  |          |            | TOPSOIL<br>(CL) SILTY CLAY, trace to some sand;<br>brown, oxidative staining; cohesive,                                  |             | 252.97<br>0.15          | 1      | SS   | 305             | 7          | •                     |                                       |             |                                       |          | · · · · · · · · · · · · · · · · · · · |                                       |           | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |                                       |                                       |         | · · ·<br>· · ·<br>· · ·               |                            |   |
|  |          |            | w~PLto w>PL, firm to very stiff  |             |                         | 2      | SS   | 432             | 19         |                       |                                       |             | 0                                     |          |                                       |                                       |           |                                       |                                       | · · · ·                               |                                       |         | · · ·                                 |                            | -   |
|  |          |            |  |             |                         | 3      | SS   | 457             | 27         |                       |                                       | Ċ           | ).<br>                                |          |                                       |                                       |           |                                       |                                       |                                       | · · · · · · · · · · · · · · · · · · · |         |                                       |                            |   |
| - 2  |          |            |  |             |                         | 4      | SS   | 457             | 21         |                       |                                       |             |                                       |          |                                       | <u> </u>                              |           |                                       |                                       | <u></u>                               | · · · · · · · · · · · · · · · · · · · |         | · · · · · · · · · · · · · · · · · · · |                            | -   |
| - 3  |          |            |  |             |                         | 4      |      | 437             | 21         |                       |                                       |             |                                       |          |                                       |                                       |           |                                       |                                       |                                       |                                       |         |                                       |                            | -   |
|  |          |            |  |             |                         | 5      | SS   | 457             | 17         |                       |                                       | •           | 0                                     |          |                                       |                                       |           |                                       |                                       |                                       | · · · · · · · · · · · · · · · · · · · |         | · · · · · · · · · · · · · · · · · · · |                            |   |
| 4  |          |            |  |             |                         |        |      |                 |            |                       | · · · · · · · · · · · · · · · · · · · |             |                                       |          |                                       | · · · ·                               |           |                                       |                                       |                                       |                                       |         |                                       |                            | -   |
|  |          | (210mm OD) |  |             |                         | 6      | SS   | 457             | 20         |                       |                                       | 0           |                                       |          |                                       | · · · · · · · · · · · · · · · · · · · |           |                                       |                                       | · · · · ·                             |                                       |         | · · · · · · · · · · · · · · · · · · · |                            |   |
|  | er Auger | uger (21(  |  |             | <u>247.56</u><br>5.56   |        |      |                 |            |                       |                                       |             | · · · · · · · · · · · · · · · · · · · |          |                                       |                                       |           |                                       | · · · · · · · · · · · · · · · · · · · | · · · ·                               | · · · · · · · · · · · · · · · · · · · |         | · · · · · · · · · · · · · · · · · · · |                            | -   |
|  | Power    | あ          | (CL) sandy SILTY CLAY, trace to some<br>gravel; grey (TILL); cohesive, w~PL to<br>w>PL, very stiff                       |             | 5 5.50                  |        |      |                 |            |                       |                                       |             | · · · · · · · · · · · · · · · · · · · |          |                                       |                                       |           |                                       |                                       | · · · ·                               |                                       |         |                                       |                            | -   |
|  |          | Hollow     |  |             |                         | 7      | SS   | 457             | 26         |                       | 0                                     |             |                                       |          |                                       |                                       |           |                                       |                                       | · · · · · · · · · · · · · · · · · · · |                                       |         | · · · · · · · · · · · · · · · · · · · | MH                         |   |
| - 7  |          |            |  |             |                         |        |      |                 |            |                       |                                       |             |                                       |          | · · · · · · · · · · · · · · · · · · · | · · · · ·                             |           |                                       | · · · · · · · · · · · · · · · · · · · | · · · · ·                             |                                       |         | · · · · · · · · · · · · · · · · · · · |                            | -   |
|  |          |            |  |             |                         | 8      | SS   | 457             | 24         |                       |                                       |             | •                                     |          |                                       | · · · ·                               |           |                                       |                                       |                                       |                                       |         |                                       |                            | -   |
|  |          |            |  |             |                         |        |      |                 |            |                       |                                       |             |                                       |          |                                       |                                       |           |                                       | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |                                       |         | · · · · · · · · · · · · · · · · · · · |                            |   |
| 9  |          |            |  |             |                         | 9      | SS   | 457             | 29         |                       |                                       | 0           |                                       |          |                                       |                                       |           |                                       |                                       |                                       |                                       |         | · · ·                                 |                            | -   |
| GEO - BOREHOLE LOG 101897.00120230692.GPJ GEMTEC 2018.GDT 6/2/23 |          |            |  |             | 242.99                  |        |      |                 |            |                       |                                       |             |                                       |          |                                       |                                       |           |                                       |                                       |                                       |                                       |         |                                       |                            | -   |
| 2018.GU  |          |            | (SM) SILTY SAND, trace gravel; grey<br>(TILL); non-cohesive, moist, very dense<br>- Auger grinding between approximately |             | 242.99<br>10.13         |        |      |                 |            |                       |                                       |             |                                       |          |                                       | · · · · · · · · · · · · · · · · · · · |           |                                       |                                       |                                       |                                       |         |                                       |                            |   |
|  | ┝        |            | 10.1 m and 10.4 m depths<br>End of Borehole  | 0.9         | 2 <u>42.17</u><br>10.95 | 10     | SS   | 279             | 50/0.      | 3 C                   | 1::                                   |             |                                       |          | <u>:</u> :<br>: :                     | <u></u>                               |           |                                       |                                       |                                       |                                       |         |                                       |                            | -   |
| GPJ GE   |          |            | Notes:   |             |                         |        |      |                 |            |                       |                                       |             |                                       |          |                                       |                                       |           |                                       |                                       |                                       |                                       |         |                                       |                            |   |
| 12   |          |            | <ol> <li>Borehole was dry upon completion of<br/>drilling.</li> <li>Borehole did not cave upon</li> </ol>                |             |                         |        |      |                 |            |                       |                                       |             |                                       |          |                                       |                                       |           |                                       |                                       |                                       |                                       |         |                                       |                            | -   |
| 13   |          |            | completion of drilling.<br>3. Borehole backfilled with soil cuttings   |             |                         |        |      |                 |            |                       | · · · · · · · · · · · · · · · · · · · |             |                                       |          |                                       |                                       |           |                                       |                                       |                                       |                                       |         | · · ·<br>· · ·<br>· · ·               |                            | _   |
|  |          |            | upon completion of drilling.   |             |                         |        |      |                 |            |                       |                                       |             | · · · · · · · · · · · · · · · · · · · |          |                                       | · · · · ·                             |           |                                       |                                       |                                       |                                       |         | · · · · · · · · · · · · · · · · · · · |                            |   |
|  |          |            |  |             |                         |        |      |                 |            |                       |                                       |             | · · · · · · · · · · · · · · · · · · · |          |                                       |                                       |           |                                       |                                       |                                       |                                       |         |                                       |                            | -   |
| BOKEr  |          | C          | SEMTEC   | I           | <u>I</u>                | I      |      | I               | 1          |                       | 1.5                                   |             |                                       | <u>[</u> | <u>•   •</u>                          |                                       |           | <u>[ • • • •</u>                      | •   •                                 |                                       | <u>  • • •</u>                        | •   • • | •••                                   | LOGG                       | ED: AS  |
|  | 1        |            | NSULTING ENGINEERS<br>D SCIENTISTS   |             |                         |        |      |                 |            |                       |                                       |             |                                       |          |                                       |                                       |           |                                       |                                       |                                       |                                       |         |                                       |                            | KED: DMF                                      |

|   | Б<br>Н                | SOIL PROFILE   |             |                        |        | SAN  | IPLES           |            | ●PI<br>RI | ENETR<br>ESISTA | ATION                  | N), BLC         | WS/0              | .3m                                   | SHE<br>+ N/                           | AR S | TREN<br>AL 🕀 | GTH ((<br>REMC | Cu), kP<br>ULDEI                      |   | 2           |                                     |      |
|---|-----------------------|--|-------------|------------------------|--------|------|-----------------|------------|-----------|-----------------|------------------------|-----------------|-------------------|---------------------------------------|---------------------------------------|------|--------------|----------------|---------------------------------------|---|-------------|-------------------------------------|------|
|   | BORING METHOD         | DESCRIPTION  | STRATA PLOT | ELEV.<br>DEPTH<br>(m)  | NUMBER | ТҮРЕ | RECOVERY,<br>mm | BLOWS/0.3m | R         | ESISTA          | C PENI<br>NCE, I<br>20 | ETRATI<br>BLOWS | ON<br>/0.3m<br>40 | 50                                    | V<br>W <sub>P</sub>  <br>60           |      |              |                | , %<br>—  W<br>90                     |   | LAB. IESIII | PIEZOME<br>OR<br>STANDP<br>INSTALLA | PIPI |
| 5 |                       | Ground Surface   |             | 249.28                 |        |      |                 |            |           |                 |                        |                 |                   | : : :                                 |                                       |      |              |                |                                       |   |             | Monument                            | _    |
|   |                       | TOPSOIL<br>(CL) sandy SILTY CLAY, trace gravel;<br>brown, oxidative staining, rock fragments   |             | 248.98                 | 1      | SS   | 305             | 5          |           |                 |                        |                 |                   |                                       |                                       |      |              |                |                                       |   |             | Ţ                                   |      |
| 1 |                       | (TILL); cohesive, w~PL to w>PL, very stiff to hard   |             |                        | 2      | SS   | 457             | 35         | -         | 0               |                        | •               |                   | · · · · · · · · · · · · · · · · · · · | · · ·                                 |      |              |                | · · · · · · · · · · · · · · · · · · · |   |             |                                     |      |
| 2 |                       |  |             |                        | 3      | SS   | 457             | 40         | -         | 0               |                        |                 | •                 | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |      |              |                |                                       |   |             |                                     |      |
|   |                       |  |             |                        | 4      | SS   | 457             | 32         | -         | 0               |                        | •               |                   |                                       | · · · · · · · · · · · · · · · · · · · |      |              |                |                                       |   |             |                                     |      |
| 3 |                       |  |             |                        | 5      | SS   | 457             | 33         | <u> </u>  | 0               |                        | •               |                   | · · · · · · · · · · · · · · · · · · · | · · ·                                 |      |              |                | · · · · · · · · · · · · · · · · · · · |   |             |                                     |      |
| 1 |                       |  |             |                        |        |      |                 |            |           |                 |                        |                 |                   | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |      |              |                |                                       |   |             |                                     |      |
| 5 | 10mm OD)              |  |             |                        | 6      | SS   | 457             | 17         |           |                 |                        |                 |                   | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |      |              |                |                                       |   |             | Bentonite                           | I    |
| , | Stem Auger (210mm OD) | (ML) SILT, trace to some sand, trace   | 27/<br>20/7 | 24 <u>3.72</u><br>5.56 |        |      |                 |            |           |                 |                        |                 |                   | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |      |              |                |                                       |   |             |                                     | I    |
| 5 | Hollow Ster           | plastic fines; grey; non-cohesive, moist   |             |                        | 7      | SS   | 457             | 69         |           | C               | )<br>)<br>)            |                 |                   |                                       | · · · · · · · · · · · · · · · · · · · |      |              |                | · · · · · · · · · · · · · · · · · · · |   |             |                                     | I    |
| 7 |                       |  |             |                        |        |      |                 |            |           |                 |                        |                 |                   |                                       | · · · · · · · · · · · · · · · · · · · |      |              |                | · · · · · · · · · · · · · · · · · · · |   |             |                                     |      |
|   |                       | - Wet below about 7.6 m depth  |             |                        | 8      | SS   | 457             | 79         |           |                 |                        |                 |                   |                                       | · · · · · · · · · · · · · · · · · · · |      |              |                |                                       | M | 4           |                                     |      |
| 3 |                       |  |             | <u>240.67</u><br>8.61  |        |      |                 |            |           |                 |                        |                 |                   | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |      |              |                |                                       |   |             |                                     | I    |
| 9 |                       | (SM) SILTY SAND, some gravel, trace<br>plastic fines; grey (TILL); non-cohesive,<br>moist to wet, very dense   |             | 9 0.01                 | 9      | SS   | 457             | 77/0       | .28 . 0   |                 |                        |                 |                   | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |      |              |                |                                       |   |             | Filter sand                         |      |
| 5 |                       |  |             |                        |        |      |                 |            | -         |                 |                        |                 |                   |                                       |                                       |      |              |                |                                       |   | 5           | )mm dia. well<br>screen             |      |
|   |                       | End of Borehole  | • 0 •       | 238.51<br>10.77        | 10     | SS   | 76              | 50/0       | 20.0      | <br> <br>       |                        |                 |                   |                                       |                                       |      |              |                |                                       |   |             |                                     |      |
| 1 |                       | Notes:<br>1. Groundwater level measured in open  |             |                        |        |      |                 |            |           |                 |                        |                 |                   | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |      |              |                | · · · · · · · · · · · · · · · · · · · |   |             |                                     |      |
| 2 |                       | borehole at approximately 7.6 m below<br>ground surface upon completion of<br>drilling.  |             |                        |        |      |                 |            |           |                 |                        |                 |                   | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |      |              |                | · · · · · · · · · · · · · · · · · · · |   |             |                                     |      |
| 3 |                       | 2. Piezometer installed as shown upon<br>completion of drilling. Shallow<br>piezometer installed in second borehole<br>drilled within approximately 2 metres of<br>initial installation. |             |                        |        |      |                 |            |           |                 |                        |                 |                   |                                       | · · · · · · · · · · · · · · · · · · · |      |              |                |                                       |   |             |                                     |      |
| 1 |                       | 3. Groundwater level measured in the<br>installed monitoring well on May 18,<br>2023 at a depth of about 0.4 m below   |             |                        |        |      |                 |            |           |                 |                        |                 |                   |                                       |                                       |      |              |                |                                       |   |             |                                     |      |

|        | дон           | SOIL PROFILE    |             | _            |        | SAM  | IPLES           |            | ● PEI<br>RE                           | NETRA<br>SISTAI | TION<br>NCE (N | ), BLO\                               | NS/0.3                                | s<br>3m + | HEAR S<br>NATUR | TRENO | GTH (Cu<br>REMOL | u), kPA<br>JLDED | ۲L<br>VG                   |  |
|--------|---------------|-----------------|-------------|--------------|--------|------|-----------------|------------|---------------------------------------|-----------------|----------------|---------------------------------------|---------------------------------------|-----------|-----------------|-------|------------------|------------------|----------------------------|--|
| METRES | BORING METHOD | DESCRIPTION     | STRATA PLOT | ELEV.        | NUMBER | ТҮРЕ | RECOVERY,<br>mm | BLOWS/0.3m |                                       |                 |                | TRATIC<br>LOWS/                       |                                       |           |                 |       | ITENT,           |                  | ADDITIONAL<br>LAB. TESTING | PIEZOMETEF<br>OR<br>STANDPIPE<br>INSTALLATIO |
| 2      | BORIN         |                 | STRAT       | DEPTH<br>(m) | NUN    |      | RECO            | BLOW       | 1                                     |                 |                |                                       |                                       |           |                 |       |                  | 90               | AD                         | INSTALLATIO                                  |
| 14     |               |                 | 0,          |              |        |      |                 |            | : : : :                               |                 |                |                                       |                                       |           |                 |       |                  |                  |                            |  |
| 14     |               | ground surface. |             |              |        |      |                 |            |                                       |                 |                |                                       |                                       |           |                 |       |                  |                  |                            |  |
|        |               |                 |             |              |        |      |                 |            |                                       |                 |                |                                       |                                       |           |                 |       |                  |                  |                            |  |
| 5      |               |                 |             |              |        |      |                 |            |                                       |                 |                |                                       |                                       |           |                 |       |                  |                  |                            |  |
|        |               |                 |             |              |        |      |                 |            |                                       |                 |                |                                       |                                       |           |                 |       |                  |                  |                            |  |
| 16     |               |                 |             |              |        |      |                 |            | · · · · · · · · · · · · · · · · · · · | · · · · ·       |                |                                       |                                       |           |                 |       |                  |                  | _                          |  |
|        |               |                 |             |              |        |      |                 |            |                                       |                 |                |                                       |                                       |           |                 |       |                  |                  |                            |  |
|        |               |                 |             |              |        |      |                 |            |                                       |                 |                |                                       |                                       |           |                 |       |                  |                  |                            |  |
| 7      |               |                 |             |              |        |      |                 |            | · · · · · ·                           | · · · · · ·     |                |                                       | · · · · · · · · · · · · · · · · · · · |           |                 |       |                  |                  |                            |  |
|        |               |                 |             |              |        |      |                 |            |                                       |                 |                |                                       |                                       |           |                 |       |                  |                  |                            |  |
| 8      |               |                 |             |              |        |      |                 |            | · · · · · ·                           | · · · · · ·     |                |                                       |                                       |           |                 |       |                  |                  |                            |  |
|        |               |                 |             |              |        |      |                 |            |                                       |                 |                |                                       |                                       |           |                 |       |                  |                  |                            |  |
| 19     |               |                 |             |              |        |      |                 |            |                                       |                 |                |                                       |                                       |           |                 |       |                  |                  |                            |  |
| 15     |               |                 |             |              |        |      |                 |            |                                       |                 |                |                                       |                                       |           |                 |       |                  |                  |                            |  |
|        |               |                 |             |              |        |      |                 |            |                                       |                 |                |                                       |                                       |           |                 |       |                  |                  |                            |  |
| 20     |               |                 |             |              |        |      |                 |            | · · · · · ·                           | · · · · ·       |                |                                       |                                       |           |                 |       |                  |                  | -                          |  |
|        |               |                 |             |              |        |      |                 |            |                                       |                 |                |                                       |                                       |           |                 |       |                  |                  |                            |  |
| 21     |               |                 |             |              |        |      |                 |            |                                       | · · · · ·       |                |                                       |                                       |           |                 |       |                  |                  |                            |  |
|        |               |                 |             |              |        |      |                 |            |                                       |                 |                |                                       |                                       |           |                 |       |                  |                  |                            |  |
|        |               |                 |             |              |        |      |                 |            |                                       |                 |                |                                       |                                       |           |                 |       |                  |                  |                            |  |
| 22     |               |                 |             |              |        |      |                 |            |                                       |                 |                |                                       |                                       |           |                 |       |                  |                  |                            |  |
|        |               |                 |             |              |        |      |                 |            |                                       |                 |                |                                       |                                       |           |                 |       |                  |                  |                            |  |
| 23     |               |                 |             |              |        |      |                 |            |                                       | <u></u>         |                |                                       |                                       |           |                 |       |                  |                  | -                          |  |
|        |               |                 |             |              |        |      |                 |            |                                       |                 |                |                                       |                                       |           |                 |       |                  |                  |                            |  |
| 24     |               |                 |             |              |        |      |                 |            |                                       |                 | 1 : : : :      |                                       |                                       |           |                 |       |                  |                  |                            |  |
|        |               |                 |             |              |        |      |                 |            |                                       |                 |                |                                       |                                       |           |                 |       |                  |                  |                            |  |
|        |               |                 |             |              |        |      |                 |            |                                       |                 |                |                                       |                                       |           |                 |       |                  |                  |                            |  |
| 25     |               |                 |             |              |        |      |                 |            |                                       |                 |                |                                       |                                       |           |                 |       |                  |                  |                            |  |
|        |               |                 |             |              |        |      |                 |            |                                       |                 |                |                                       |                                       |           |                 |       |                  |                  |                            |  |
| 26     |               |                 |             |              |        |      |                 |            | · · · · · ·                           | · · · · ·       |                |                                       |                                       |           |                 |       |                  |                  |                            |  |
|        |               |                 |             |              |        |      |                 |            |                                       |                 |                | · · · · · · · · · · · · · · · · · · · |                                       |           |                 |       |                  |                  |                            |  |
|        |               |                 |             |              |        |      |                 |            |                                       |                 |                |                                       |                                       |           |                 |       |                  |                  |                            | GROUNDWATER                                  |
| 27     |               |                 |             |              |        |      |                 |            |                                       |                 |                |                                       |                                       |           |                 |       |                  |                  |                            | DATE DEPTH<br>(m)                            |
|        |               |                 |             |              |        |      |                 |            |                                       |                 |                |                                       |                                       |           |                 |       |                  |                  |                            | 23/05/18 0.4 🕎 :                             |
| 28     |               |                 |             |              |        |      |                 |            | · · · · · · · · · · · · · · · · · · · |                 |                |                                       |                                       |           |                 |       |                  |                  | -                          |  |

|      | Ъ             | SOIL PROFILE  |                    | 1                     |        | SAI  | /IPLES          |            | ● <sup>PE</sup> RI | ENET<br>ESIST                         | RAT<br>TAN(                           | TION<br>CE (N                         | ), BL(        | ows                                   | S/0.3r                                | sı<br>1 + | HEAF<br>NATI                          | STI<br>JRAL                           | RENG                                  | TH (C<br>REMO   | u), kPA<br>JLDED     | ų<br>Ū                     |          |                                     |
|------|---------------|---|--------------------|-----------------------|--------|------|-----------------|------------|--------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------|---------------------------------------|---------------------------------------|-----------|---------------------------------------|---------------------------------------|---------------------------------------|-----------------|----------------------|----------------------------|----------|-------------------------------------|
|      | BORING METHOD | DESCRIPTION   | STRATA PLOT        | ELEV.<br>DEPTH<br>(m) | NUMBER | ТҮРЕ | RECOVERY,<br>mm | BLOWS/0.3m | ▲ <sup>D'</sup> RI | YNAN<br>ESIST                         | IIC F<br>TANG                         | PENE <sup>-</sup><br>CE, BI           | TRAT<br>LOW:  | 10N<br>S/0.3                          | 3m                                    | W         | wa<br>∕ <sub>P</sub> ⊢                | TER                                   | CON<br>W                              | TENT,           | %<br>⊣w <sub>∟</sub> | ADDITIONAL<br>LAB. TESTING |          | Zomete<br>Or<br>Andpipi<br>Tallatio |
| ╉    | ă<br>T        | Ground Surface  | ST                 | 249.24                |        |      | ~               | B          |                    | 10                                    | 20                                    | ) 3                                   | 30<br>  : : : | 40                                    | 5                                     | 0         | 60                                    | 70                                    | ) 8<br>::::                           | 80<br>  : : : : | 90                   | $\left  \right $           | Mon      | ument                               |
| )  - |               | TOPSOIL   |                    | 248.94<br>0.30        | 1      | ss   | 305             | 5          |                    |                                       |                                       |                                       |               |                                       |                                       |           | · · · · · · · · · · · · · · · · · · · |                                       |                                       |                 |                      | 1                          | mone     |                                     |
|      |               | (CL) sandy SILTY CLAY, trace gravel;<br>brown, oxidative staining, rock fragments<br>(TILL); cohesive, w~PL to w>PL, very<br>stiff to hard  |                    |                       | 2      | SS   | 457             | 35         |                    | 0                                     | · · · · · · · · · · · · · · · · · · · |                                       |               |                                       |                                       |           |                                       | · · · · · · · · · · · · · · · · · · · |                                       |                 |                      |                            |          | Ţ                                   |
|      |               |   |                    |                       | 3      | SS   | 457             | 40         |                    | 0                                     |                                       |                                       |               | •                                     |                                       |           |                                       |                                       |                                       |                 |                      |                            | Bent     | tonite                              |
|      |               |   |                    |                       |        |      |                 |            |                    |                                       |                                       | · · · · ·                             |               |                                       |                                       | · · · · · | · · · · · · · · · · · · · · · · · · · |                                       |                                       |                 |                      |                            |          |                                     |
|      |               |   |                    |                       | 4      | SS   | 457             | 32         |                    | 0                                     |                                       |                                       | •             |                                       |                                       |           | · · · · · · · · · · · · · · · · · · · |                                       |                                       |                 |                      |                            |          |                                     |
| 3    |               |   |                    |                       | 5      | SS   | 457             | 33         |                    |                                       | 2:<br>2:                              | · · · · · · · · · · · · · · · · · · · | •             |                                       |                                       |           | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |                 |                      | 1                          | ⊢ilter   | sand [.'                            |
|      |               |   |                    |                       |        |      |                 |            |                    |                                       |                                       | · · · · · · · · · · · · · · · · · · · |               |                                       |                                       |           |                                       |                                       | · · · · ·                             |                 |                      |                            | 50mm dia | a. well                             |
|      |               |   |                    | 244.07                |        |      |                 |            |                    | · · · · · · · · · · · · · · · · · · · | · · ·                                 | · · · · · · · · · · · · · · · · · · · |               |                                       |                                       |           | · · · · · · · · · · · · · · · · · · · |                                       | · · · · · ·                           |                 |                      | 1                          |          |                                     |
|      |               | End of Borehole   | <u>Y · K · K -</u> | 244.67<br>4.57        |        |      |                 |            |                    |                                       |                                       |                                       |               |                                       |                                       |           |                                       |                                       |                                       |                 |                      |                            |          | Ŀ                                   |
|      |               | Notes:<br>1. Piezometers installed as shown upon<br>completion of drilling.   |                    |                       |        |      |                 |            |                    |                                       |                                       |                                       |               |                                       |                                       |           |                                       |                                       |                                       |                 |                      |                            |          |                                     |
|      |               | <ol> <li>Conjueur of drining.</li> <li>Groundwater level measured in the<br/>installed monitoring well on May 18,<br/>2023 at a depth of about 0.6 m below<br/>ground surface.</li> </ol> |                    |                       |        |      |                 |            |                    |                                       | · · · · · · · · · · · · · · · · · · · |                                       |               | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |           |                                       | · · · · · · · · · · · · · · · · · · · |                                       |                 |                      |                            |          |                                     |
|      |               | <ol> <li>Subsurface conditions based on<br/>borehole BH23-21D.</li> </ol>   |                    |                       |        |      |                 |            |                    |                                       | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |               |                                       |                                       |           | · · ·<br>· · ·<br>· · ·               | · · · · · · · · · · · · · · · · · · · |                                       |                 |                      |                            |          |                                     |
|      |               |   |                    |                       |        |      |                 |            |                    |                                       |                                       |                                       |               |                                       |                                       |           | · · ·<br>· · ·<br>· · ·               |                                       |                                       |                 |                      |                            |          |                                     |
|      |               |   |                    |                       |        |      |                 |            |                    |                                       |                                       | · · · · ·                             |               |                                       |                                       |           |                                       |                                       | · · · · ·                             |                 |                      |                            |          |                                     |
|      |               |   |                    |                       |        |      |                 |            |                    |                                       |                                       |                                       |               |                                       |                                       |           |                                       |                                       |                                       |                 |                      |                            |          |                                     |
|      |               |   |                    |                       |        |      |                 |            |                    |                                       |                                       | · · · · ·                             |               |                                       |                                       |           |                                       |                                       |                                       |                 |                      | $\left  \right $           |          |                                     |
|      |               |   |                    |                       |        |      |                 |            |                    |                                       |                                       | · · · · · · · · · · · · · · · · · · · |               |                                       | · · · · · · · · · · · · · · · · · · · |           |                                       |                                       | · · · · · · · · · · · · · · · · · · · |                 |                      |                            |          |                                     |
|      |               |   |                    |                       |        |      |                 |            |                    |                                       |                                       | · · · · · ·                           |               |                                       |                                       |           |                                       |                                       |                                       |                 |                      | $\left  \right $           |          |                                     |
|      |               |   |                    |                       |        |      |                 |            |                    |                                       |                                       |                                       |               |                                       |                                       |           |                                       |                                       |                                       |                 |                      |                            |          |                                     |
|      |               |   |                    |                       |        |      |                 |            |                    |                                       |                                       |                                       |               |                                       |                                       |           |                                       |                                       |                                       |                 |                      | $\left  \right $           |          |                                     |
|      |               |   |                    |                       |        |      |                 |            |                    |                                       |                                       | · · · · · ·                           |               |                                       |                                       |           |                                       |                                       | · · · · · · · · · · · · · · · · · · · |                 |                      |                            |          |                                     |
|      |               |   |                    |                       |        |      |                 |            |                    |                                       |                                       |                                       |               |                                       |                                       |           |                                       |                                       |                                       |                 |                      |                            |          |                                     |
|      |               |   |                    |                       |        |      |                 |            |                    |                                       |                                       | · · · · ·                             |               |                                       |                                       |           |                                       |                                       | · · · · · ·                           |                 |                      |                            | GRO      |                                     |
|      |               |   |                    |                       |        |      |                 |            |                    |                                       |                                       |                                       |               |                                       |                                       |           | · · ·                                 |                                       |                                       |                 |                      | 1                          | DATE     | DEPTH<br>(m)                        |
| 1    |               |   |                    |                       |        |      |                 |            |                    |                                       |                                       |                                       |               |                                       |                                       |           |                                       |                                       |                                       |                 |                      |                            | 23/05/18 | 0.6 💆                               |

 CLIENT:
 Mayfield Golf Course Inc.

 PROJECT:
 Mayfield Golf Course - Detailed Investigation

 JOB#:
 101987.001

 LOCATION:
 See Borehole Location Plan

SHEET:1 OF 1DATUM:CGVD28BORING DATE:Feb 17 2023

| щ  |          | <u>o</u>          | SOIL PROFILE  | •           |                        |        | SAN  | IPLES           |            | ● PE<br>RE                            | NETR<br>SIST/      | ATION               | N), BL(                               | ows                | 5/0.3n             |                                       |                |                                       | (Cu), kF<br>OULDE  | A<br>L       | ы           |   |
|--|----------|-------------------|---|-------------|------------------------|--------|------|-----------------|------------|---------------------------------------|--------------------|---------------------|---------------------------------------|--------------------|--------------------|---------------------------------------|----------------|---------------------------------------|--------------------|--------------|-------------|---|
| DEPTH SCALE<br>METRES  |          | BORING METHOD     | DESCRIPTION   | STRATA PLOT | ELEV.<br>DEPTH<br>(m)  | NUMBER | TYPE | RECOVERY,<br>mm | BLOWS/0.3m | RE                                    | SISTA              | C PEN<br>NCE,<br>20 | ETRAT<br>BLOWS<br>30                  | ION<br>S/0.3<br>40 | 3m<br>5            | W <sub>I</sub>                        | R CO<br>V<br>C |                                       | IT, %<br>  W<br>90 | ADDITIONAL   | LAB. TESTIN | PIEZOMETER<br>OR<br>STANDPIPE<br>INSTALLATION   |
|  |          | Ī                 | Ground Surface  | s<br>S      | 252.92                 |        |      |                 |            |                                       |                    |                     |                                       | : :                |                    |                                       |                | : : :                                 |                    | :            |             | Monument  |
| Ē  |          |                   | TOPSOIL<br>(CL) SILTY CLAY, trace sand; brown;  |             | 252.72                 | 1A     |      | -               |            |                                       |                    |                     |                                       | : :                |                    |                                       |                |                                       |                    | :            |             |   |
| Ē  |          |                   | cohesive, w~PL to w>PL, stiff to very stiff   |             |                        | 1B     | SS   | 254             | 9          |                                       |                    |                     |                                       |                    |                    |                                       |                |                                       |                    |              |             | Ţ   |
| - 1  |          |                   |   |             |                        | 2      | SS   | 305             | 24         |                                       |                    | <b>be</b>           | · · · · ·                             | : :                | ::::<br>::::       | · · · · ·                             |                | : : :                                 |                    | :            |             | -   |
| Ē  |          |                   | (CL) sandy SILTY CLAY, trace to some  |             | 2 <u>51.55</u><br>1.37 |        |      |                 |            |                                       |                    |                     |                                       |                    |                    |                                       |                | : : :                                 |                    | :            |             |   |
| E 2  |          |                   | gravel; grey, oxidative staining (TILL);<br>cohesive, w~PL, hard                            |             |                        | 3      | SS   | 457             | 33         | · · · · ·                             | 0                  |                     |                                       |                    |                    |                                       |                |                                       |                    |              |             |   |
| Ē  |          |                   |   | Ø.          |                        | 4A     | SS   | 457             | 44         |                                       | 0                  |                     |                                       |                    |                    | · · · · · · · · · · · · · · · · · · · |                |                                       |                    | :            |             |   |
| Ē  |          |                   |   |             |                        | 4B     |      | 437             |            |                                       | 0                  |                     |                                       |                    |                    |                                       |                |                                       |                    |              |             | Bentonite   |
| - 3  |          | (DO h             |   | × ×         |                        | 5      | SS   | 457             | 32         |                                       |                    |                     | •                                     |                    |                    |                                       |                |                                       |                    |              |             | Dentonite   |
| Ē  | Ter.     | Stem Auger (210mm | - Sand pockets between approximately 3.1 m and 3.5 m depths                                 |             |                        |        |      |                 |            |                                       |                    |                     |                                       |                    |                    |                                       |                |                                       |                    |              |             |   |
| - 4  | er Auger | vuger (           | (CL) Sandy SILTY CLAY, some gravel:   |             | 2 <u>48.88</u><br>4.04 |        |      |                 |            |                                       |                    |                     |                                       |                    | <u></u>            |                                       |                |                                       |                    | <u>.</u>     |             |   |
| Ē  | Power    | Stem A            | (CL) Sandy SILTY CLAY, some gravel;<br>grey; cohesive, w~PL to w>PL, stiff to<br>very stiff |             |                        |        |      |                 |            |                                       |                    |                     |                                       |                    |                    | · · · · · · · · · · · · · · · · · · · |                |                                       |                    |              |             |   |
| - 5  |          | Hollow 8          |   |             |                        | 6      | SS   | 457             | 15         |                                       |                    |                     |                                       |                    |                    |                                       |                |                                       |                    |              |             |   |
|  |          | Ť                 |   |             |                        |        |      |                 |            |                                       |                    |                     |                                       |                    |                    | • • • • •                             |                | · · · · · · · · · · · · · · · · · · · |                    |              |             |   |
| Ē  |          |                   |   |             |                        |        |      |                 |            |                                       |                    |                     |                                       |                    |                    |                                       |                |                                       |                    |              |             |   |
| - 6<br>-   |          |                   |   |             |                        | _      |      |                 |            |                                       |                    |                     |                                       |                    | <u></u><br>        | · · · · · ·                           |                |                                       |                    | <u>.</u><br> |             | Filter sand   |
|  |          |                   |   |             |                        | 7      | SS   | 457             | 19         |                                       |                    |                     |                                       |                    |                    |                                       |                |                                       |                    | : M          | Н           |   |
| - 7  |          |                   |   |             |                        |        |      |                 |            | · · · · · · · · · · · · · · · · · · · | · · · ·<br>· · · · |                     |                                       | : :<br>:<br>: :    | · · · ·<br>· · · · | · · · · · · · · · · · · · · · · · · · |                | · · · · · · · · · · · · · · · · · · · |                    | :            |             | 50mm dia. well  |
| Ē  |          |                   |   |             |                        |        |      |                 |            |                                       |                    |                     |                                       |                    |                    |                                       |                |                                       |                    |              |             |   |
|  |          |                   |   |             | 244.94                 | 8      | SS   | 457             | 19         |                                       | 0                  |                     | · · · · · · · · · · · · · · · · · · · |                    |                    | · · · · · · · · · · · · · · · · · · · |                |                                       |                    |              |             |   |
|  |          | $\uparrow$        | End of Borehole   |             | 244.84<br>8.08         |        |      |                 |            |                                       |                    |                     |                                       |                    |                    | · · · · · · · · · · · · · · · · · · · |                |                                       |                    |              |             | <u>[],,,,</u>   |
|  |          |                   | Notes:  |             |                        |        |      |                 |            |                                       |                    |                     |                                       |                    |                    |                                       |                |                                       |                    |              |             |   |
| - 9  |          |                   | 1. Borehole was dry upon completion of drilling.  |             |                        |        |      |                 |            |                                       |                    |                     |                                       |                    |                    |                                       |                |                                       |                    |              |             |   |
| 23   |          |                   | 2. Piezometer installed as shown upon completion of drilling.                               |             |                        |        |      |                 |            |                                       |                    |                     |                                       |                    |                    |                                       |                |                                       |                    |              |             |   |
| 201<br>191<br>101<br>10  |          |                   | 3. Groundwater level measured in installed monitoring well on May 18,                       |             |                        |        |      |                 |            |                                       |                    |                     |                                       |                    | <u></u>            |                                       |                |                                       |                    |              |             |   |
| 18.60  |          |                   | 2023 at a depth of about 0.8 m below ground surface.  |             |                        |        |      |                 |            |                                       |                    |                     |                                       |                    |                    |                                       |                |                                       |                    |              |             |   |
|  |          |                   |   |             |                        |        |      |                 |            |                                       |                    |                     |                                       |                    |                    |                                       |                |                                       |                    |              |             |   |
|  |          |                   |   |             |                        |        |      |                 |            |                                       |                    |                     |                                       |                    |                    |                                       |                |                                       |                    |              |             |   |
| GP<br>I  |          |                   |   |             |                        |        |      |                 |            | · · · · · · · · · · · · · · · · · · · |                    |                     |                                       |                    |                    |                                       |                |                                       |                    |              |             |   |
| 70,90<br>12<br>12  |          |                   |   |             |                        |        |      |                 |            |                                       |                    |                     |                                       | : :<br>:<br>: :    | ::::<br>::::       |                                       |                | : ::                                  |                    | :            |             |   |
| 1,202  |          |                   |   |             |                        |        |      |                 |            |                                       |                    |                     |                                       |                    |                    |                                       |                |                                       |                    |              |             |   |
| GEO - BOREHOLE LOG 101997.001/202306/02.GPJ GEMTEC 2018.GDT 6/2/23<br>11 11 11 11 11 11 11 11 11 11 11 11 11 |          |                   |   |             |                        |        |      |                 |            |                                       |                    |                     |                                       |                    | · · · ·            |                                       |                | : ::                                  |                    |              | ļ           | GROUNDWATER<br>OBSERVATIONS   |
|  |          |                   |   |             |                        |        |      |                 |            | · · · · · · · · · · · · · · · · · · · |                    |                     |                                       |                    |                    |                                       |                |                                       |                    |              |             | DATE         DEPTH<br>(m)         ELE<br>(m)           23/05/18         0.8         ↓         252 |
| Ĭ  |          |                   |   |             |                        |        |      |                 |            |                                       |                    |                     |                                       |                    |                    |                                       |                |                                       |                    |              |             | 20,00,10 0.0 ¥ 202  |
|  |          |                   |   |             |                        |        |      |                 |            |                                       | : : :<br>: : :     |                     |                                       | : :                |                    |                                       | <br>           |                                       |                    | :            |             |   |
|  |          |                   | SEMTEC  |             |                        |        |      |                 |            |                                       |                    |                     |                                       |                    |                    |                                       |                |                                       |                    | LO           | GGI         | ED: AS  |
|  |          | Ct                | DISULTING ENGINEERS   |             |                        |        |      |                 |            |                                       |                    |                     |                                       |                    |                    |                                       |                |                                       |                    | СН           | IECI        | KED: DMF  |

| <b>RECORD OF BOREHOLE BH23-</b> | 23D |
|---------------------------------|-----|
|---------------------------------|-----|

 CLIENT:
 Mayfield Golf Course Inc.

 PROJECT:
 Mayfield Golf Course - Detailed Investigation

 JOB#:
 101987.001

 LOCATION:
 See Borehole Location Plan

SHEET:1 OF 2DATUM:CGVD28BORING DATE:Feb 14 2023

|        | DOH.               | SOIL PROFILE  |                             |                        |          | SAM  | IPLES           |            | ●PR                                   | ENET<br>ESIS                    | RA<br>TAN                             | TION<br>CE (N                         | ), BL0             | ows                | 6/0.3m                                | SH<br>n + M                           | IEAR S                                | TRENG<br>AL ⊕ I                       | GTH (C                                | Cu), kPA<br>ULDED                     | NG<br>NG                   |   |
|--------|--------------------|---|-----------------------------|------------------------|----------|------|-----------------|------------|---------------------------------------|---------------------------------|---------------------------------------|---------------------------------------|--------------------|--------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|----------------------------|---|
| MEIKES | BORING METHOD      | DESCRIPTION   | STRATA PLOT                 | ELEV.<br>DEPTH<br>(m)  | NUMBER   | ТҮРЕ | RECOVERY,<br>mm | BLOWS/0.3m | R                                     | YNAN<br>ESIS <sup>-</sup><br>10 | /IC  <br>TAN<br>2(                    | PENE<br>CE, B                         | TRAT<br>LOW:<br>30 | 10N<br>S/0.3<br>40 | 3m<br>51                              | - W <sub>F</sub>                      | .⊢–                                   | R CON<br>W<br>O<br>70 &               | TENT                                  | , %<br>—  W <sub>L</sub><br>90        | ADDITIONAL<br>LAB. TESTING | PIEZOMETE<br>OR<br>STANDPIP<br>INSTALLATI |
| 0      |                    | Ground Surface<br>TOPSOIL   | <u>7,11<sup>x</sup> 7,1</u> | 249.95                 | 1A       | SS   | 305             | 7          |                                       |                                 | · · ·                                 |                                       |                    |                    | · · · · · · · · · · · · · · · · · · · |                                       |                                       |                                       |                                       |                                       | -                          | Monument                                  |
|        |                    | (CL) SILTY CLAY, some sand, trace<br>gravel; brown, organic inclusions;<br>cohesive, w~PL to w>PL, very stiff |                             | 249.49<br>0.46         | 1B       |      | 457             | 05         |                                       | · · ·<br>· · ·<br>· · ·         | C                                     |                                       |                    |                    | · · · · · · · · · · · · · · · · · · · |                                       |                                       |                                       |                                       | · · · · · · · · · · · · · · · · · · · |                            |   |
| 1      |                    | (CL) sandy SILTY CLAY, trace to some  |                             | <u>248.58</u><br>1.37  | 2        | SS   | 457             | 25         |                                       | · · ·<br>· · ·<br>· · ·<br>· ·  | 0                                     |                                       |                    |                    | · · · · · · · · · · · · · · · · · · · |                                       |                                       |                                       |                                       | · · · · · · · · · · · · · · · · · · · |                            |   |
| 2      |                    | gravel; brown to grey (TILL); cohesive,<br>w~PL to w>PL, very stiff to hard                                   | e Kol                       |                        | 3        | SS   | 457             | 40         |                                       | 0                               | · · ·                                 | · · · · ·                             |                    | •                  | · · · · · · · · · · · · · · · · · · · |                                       |                                       |                                       |                                       |                                       |                            |   |
|        |                    |   |                             |                        | 4        | SS   | 457             | 42         |                                       | 0                               | • •                                   |                                       |                    |                    |                                       |                                       |                                       |                                       |                                       |                                       |                            |   |
| 3      |                    |   |                             |                        | 5        | SS   | 457             | 40         |                                       | 0:                              | · · ·                                 | · · · · · ·                           |                    | •                  | · · · ·                               | · · · · · · · · · · · · · · · · · · · |                                       | · · · · · · · · · · · · · · · · · · · |                                       |                                       | -                          |   |
| 4      |                    |   |                             |                        |          |      |                 |            |                                       |                                 | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |                    |                    | · · · · · · · · · · · · · · · · · · · |                                       |                                       |                                       | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |                            |   |
| 4      |                    | - Auger grinding at about 4.0 m and from approximately 6.4 m to 7.0 m depths                                  |                             |                        |          |      |                 |            | · · · · · · · · · · · · · · · · · · · | · · ·<br>· · ·<br>· · ·<br>· ·  |                                       |                                       |                    |                    |                                       |                                       | · · · · · · · · · · · · · · · · · · · |                                       | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |                            |   |
| 5      |                    |   |                             |                        | 6A<br>6B | SS   | 305             | 34         |                                       |                                 |                                       | · · · · · · · · · · · · · · · · · · · |                    |                    |                                       |                                       |                                       |                                       |                                       |                                       | -                          |   |
|        |                    |   |                             |                        |          |      |                 |            |                                       |                                 |                                       |                                       |                    |                    |                                       |                                       |                                       |                                       |                                       |                                       |                            | Auger cuttings<br>and bentonite           |
| 6      |                    | - Grey below approximately 6.1 m depth  | 6 CP                        |                        | 7        | SS   | 356             | 34         |                                       | 0<br>0                          |                                       |                                       |                    |                    | · · · · ·                             |                                       |                                       |                                       | · · · · · · · · · · · · · · · · · · · |                                       | мн                         | Auger cuttings                            |
| 7      | ger<br>(210mm OD)  |   |                             |                        |          |      |                 |            |                                       |                                 | ••••                                  |                                       |                    |                    | · · · · · · · · · · · · · · · · · · · |                                       |                                       |                                       |                                       |                                       |                            | and bentonite                             |
|        | Auger<br>ger (210n |   |                             |                        |          |      |                 |            |                                       |                                 | •••                                   |                                       |                    |                    | · · · · · · · · · · · · · · · · · · · |                                       |                                       |                                       | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |                            |   |
| 8      | Stem Auger         |   |                             |                        | 8        | SS   | 457             | 28         | · · · · ·                             | 0                               |                                       | •                                     |                    |                    | · · · · ·                             |                                       |                                       |                                       |                                       | · · · · · · · · · · · · · · · · · · · | -                          |   |
|        | Hollow             | (SM/ML) Gravelly SAND and SILT, trace plastic fines; grey (TILL), rock fragments;                             |                             | 2 <u>41.34</u><br>8.61 |          |      |                 |            |                                       |                                 | · · · · · · · · · · · · · · · · · · · |                                       |                    |                    | · · · · · · · · · · · · · · · · · · · |                                       |                                       |                                       |                                       |                                       |                            |   |
| 9      |                    | non-cohesive, moist to wet, very dense  |                             | S<br>J                 | 9        | SS   | 76              | 50/0.      | 80                                    |                                 |                                       |                                       |                    |                    |                                       |                                       |                                       |                                       |                                       |                                       | мн                         |   |
| 10     |                    |   |                             |                        |          |      |                 |            |                                       |                                 |                                       |                                       |                    |                    | · · · · ·                             | · · · · · · · · · · · · · · · · · · · |                                       |                                       |                                       |                                       | -                          |   |
|        |                    |   | 0 C                         |                        | _10      | ss   | 76              | 50/0.      | <b>0</b> 8Q                           |                                 |                                       |                                       |                    |                    |                                       |                                       |                                       |                                       |                                       |                                       |                            |   |
| 1      |                    |   |                             |                        |          |      |                 |            |                                       |                                 |                                       |                                       |                    |                    |                                       |                                       |                                       |                                       |                                       |                                       |                            |   |
| 2      |                    |   |                             | 5                      |          |      |                 |            |                                       |                                 |                                       |                                       |                    |                    |                                       |                                       |                                       |                                       |                                       |                                       |                            |   |
|        |                    |   |                             |                        | 11       | ss   | 76              | 50/0.      | 080                                   |                                 |                                       |                                       |                    |                    |                                       | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |                                       | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |                            |   |
| 3      |                    |   |                             | -                      |          |      |                 |            |                                       |                                 |                                       |                                       |                    |                    |                                       |                                       |                                       |                                       |                                       |                                       |                            | Bentonite                                 |
|        |                    | - Wet below about 13.7 m depth  |                             |                        | 12       | ss   | 76              | 50/0.      | 08                                    | 0                               |                                       |                                       |                    |                    |                                       | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |                                       |                                       | · · · · · · · · · · · · · · · · · · · |                            | 50mm dia. well                            |
| 14     |                    | EMTEC   | ·                           |                        |          |      |                 |            | · · · ·                               | ::                              | ::                                    |                                       |                    |                    |                                       |                                       |                                       |                                       |                                       | :                                     | 1                          | 300001                                    |

|        | Q             | SOIL PROFILE   |             |                         |        | SAM  | IPLES           |            | ● PE<br>RE                            | NETR.<br>SISTA   | ATION<br>NCE ( | N), Bl  | LOWS | S/0.3m | SH<br>+ N      | EAR S | AL 🕀 | GTH (<br>REMC   | Cu), kPA<br>DULDED | μĻ                         |  |
|--------|---------------|--|-------------|-------------------------|--------|------|-----------------|------------|---------------------------------------|------------------|----------------|---|------|--------|----------------|-------|------|---|--------------------|----------------------------|--|
| METRES | BORING METHOD | DESCRIPTION  | STRATA PLOT | ELEV.<br>DEPTH<br>(m)   | NUMBER | TYPE | RECOVERY,<br>mm | BLOWS/0.3m | ▲ <sup>D`</sup><br>RE                 | 'NAMIC<br>ESISTA |                |   |      | 3m     | W <sub>F</sub> | WATE  |      | NTEN  |                    | ADDITIONAL<br>LAB. TESTING | PIEZOMETI<br>OR<br>STANDPIP<br>INSTALLATI                          |
| _      |               |  | ്           | . ,                     |        |      | _               | -          |                                       |                  |                |   |      |        |                |       |      |   |                    |                            |  |
| 14     |               | Highly weathered grey SHALE<br>BEDROCK (GEORGIAN BAY<br>FROMATION)   |             | 14.44                   |        |      |                 |            |                                       |                  |                |   |      |        |                |       |      |   |                    |                            | Filter sand  |
|        | +             | End of Borehole  |             | 2 <u>34.58</u><br>15.37 | 13     | SS   | 76              | 50/0.      | 3                                     |                  |                |   |      |        |                |       |      |   |                    |                            |  |
| 6      |               | Notes:   |             |                         |        |      |                 |            | · · · · · · · · · · · · · · · · · · · |                  |                |   |      |        |                |       |      | · · · · ·   |                    |                            |  |
| 17     |               | 1. Original Borehole reached practical<br>auger refusal at about 4 m on Feb 14,<br>2023 and was moved approximately 2 m<br>NE where it was advanced to termination<br>on Feb 15, 2023.                         |             |                         |        |      |                 |            |                                       |                  |                |   |      |        |                |       |      |   |                    |                            |  |
| 8      |               | 2. Groundwater level measured in open<br>borehole at approximately 15.2 m below<br>ground surface upon completion of<br>drilling.  |             |                         |        |      |                 |            |                                       |                  |                | · · · · · · · · · · · · · · · · · · ·   |      |        |                |       |      |   |                    |                            |  |
| °<br>9 |               | <ol> <li>Piezometers installed as shown upon<br/>completion of drilling. Shallow<br/>piezometer installed in second borehole<br/>drilled within approximately 2 metres of<br/>initial installation.</li> </ol> |             |                         |        |      |                 |            |                                       |                  |                |   |      |        |                |       |      |   |                    |                            |  |
|        |               | 4. Groundwater level measured in the installed monitoring well on May 18, 2023 at a depth of about 5.0 m below ground surface.   |             |                         |        |      |                 |            |                                       |                  |                | · · · · · · · · · · · · · · · · · · ·   |      |        |                |       |      |   |                    |                            |  |
| 20     |               |  |             |                         |        |      |                 |            |                                       |                  |                | ·         ·         ·           ·         ·         ·         ·           ·         ·         ·         ·           ·         ·         ·         ·           ·         ·         ·         ·           ·         ·         ·         ·           ·         ·         ·         ·           ·         ·         ·         ·           ·         ·         ·         ·           ·         ·         ·         ·           ·         ·         ·         ·           ·         ·         ·         ·           ·         ·         ·         ·           ·         ·         ·         ·           ·         ·         ·         · |      |        |                |       |      | ·         · |                    |                            |  |
| 2      |               |  |             |                         |        |      |                 |            |                                       |                  |                | · · · · · · · · · · · · · · · · · · ·   |      |        |                |       |      |   |                    |                            |  |
|        |               |  |             |                         |        |      |                 |            |                                       |                  |                | · · · · · · · · · · · · · · · · · · ·   |      |        |                |       |      |   |                    |                            |  |
| 23     |               |  |             |                         |        |      |                 |            |                                       |                  |                |   |      |        |                |       |      |   |                    |                            |  |
| 5      |               |  |             |                         |        |      |                 |            |                                       |                  |                | · · · · · · · · · · · · · · · · · · ·   |      |        |                |       |      | · · · · · · · · · · · · · · · · · · ·   |                    |                            |  |
| 6      |               |  |             |                         |        |      |                 |            |                                       |                  |                | · · · · · · · · · · · · · · · · · · ·   |      |        |                |       |      |   |                    |                            |  |
|        |               |  |             |                         |        |      |                 |            |                                       |                  |                | · · · · · · · · · · · · · · · · · · ·   |      |        |                |       |      |   |                    |                            | GROUNDWAT  |
| 8      |               |  |             |                         |        |      |                 |            |                                       |                  |                | · · · · · · · · · · · · · · · · · · ·   |      |        |                |       |      |   |                    |                            | DATE         DEPTH<br>(m)           23/05/18         5.0         ∑ |

 CLIENT:
 Mayfield Golf Course Inc.

 PROJECT:
 Mayfield Golf Course - Detailed Investigation

 JOB#:
 101987.001

SHEET:1 OF 1DATUM:CGVD28BORING DATE:Feb 14 20

| 1  | OPH -         | SOIL PROFILE  |                  |                       |          | SAM  | IPLES           |            | ● <sup>PI</sup> RI | ENETR<br>ESISTA  | ATION | N<br>(N),⊺ | BLOW            | S/0.3r          | -N<br>N +N                            | IEAR S<br>NATUR | TREN<br>AL 🕀 | GTH<br>REM | (Cu), kl<br>OULDE                     | PA<br>ED a                            | ξģ           |   |
|--|---------------|---|------------------|-----------------------|----------|------|-----------------|------------|--------------------|------------------|-------|------------|-----------------|-----------------|---------------------------------------|-----------------|--------------|------------|---------------------------------------|---------------------------------------|--------------|---|
| 0 U WELKES 0 U WELKES 0 U WELKES 0 U U U U U U U U U U U U U U U U U U | BORING METHOD | DESCRIPTION   | STRATA PLOT      | ELEV.<br>DEPTH<br>(m) | NUMBER   | ТҮРЕ | RECOVERY,<br>mm | BLOWS/0.3m | R                  | ESISTA           | ANCE, | BLC        | RATION<br>DWS/0 | .3m             | W                                     |                 |              |            | —   v                                 |                                       | LAB. TESTING | PIEZOMETE<br>OR<br>STANDPIPE<br>INSTALLATIC |
| _  | ă             | Orecord Outface   | ST               |                       |          |      | Ľ.              | B          |                    | 10<br> :::       | 20    | 30         | 40              | ) 5             |                                       | 50 7<br> ::::   | 70<br> ::::  | 80         | 90<br>:::::                           | ::                                    | _            | Manumant                                    |
| 0  |               | Ground Surface<br>TOPSOIL   | <u>7,1</u> ×. 7, | 249.89                | 1A       | SS   | 305             | 7          |                    |                  |       |            |                 | <u></u>         |                                       |                 |              |            |                                       |                                       |              | Monument                                    |
|  |               | (CL) SILTY CLAY, some sand, trace   |                  | 249.43<br>0.46        | 1B       |      |                 |            |                    |                  | φ.    |            |                 |                 |                                       |                 |              |            |                                       | :::                                   |              |   |
| 1  |               | gravel; brown, organic inclusions;<br>cohesive, w~PL to w>PL, very stiff                        |                  |                       | 2        | SS   | 457             | 25         |                    |                  | )     |            |                 | · · · · ·       |                                       |                 |              |            |                                       |                                       |              |   |
|  |               | (CL) sandy SILTY CLAY, trace to some  |                  | 248.52<br>1.37        |          |      |                 |            |                    |                  |       |            |                 |                 | : : : : :                             |                 |              |            |                                       | · · · · · · · · · · · · · · · · · · · |              |   |
| 2  |               | gravel; brown to grey (TILL); cohesive,<br>w~PL to w>PL, very stiff to hard                     |                  |                       | 3        | SS   | 457             | 40         |                    | Q.               |       |            |                 |                 |                                       |                 |              |            |                                       | · · ·<br>· · ·                        |              |   |
| 2  |               |   |                  |                       |          |      |                 |            |                    |                  |       |            |                 |                 | · · · · · · · · · · · · · · · · · · · |                 |              |            | · · · · · · · · · · · · · · · · · · · | · · ·<br>· · ·<br>· · ·               |              | Auger cuttings<br>and bentonite             |
|  |               |   |                  |                       | 4        | SS   | 457             | 42         |                    | 0                |       |            |                 |                 |                                       |                 |              |            |                                       | · · ·<br>· · ·<br>· · ·               |              |   |
| 3  |               |   | × X              |                       | 5        | SS   | 457             | 40         |                    | 0: :             |       |            |                 | <u></u><br><br> |                                       |                 |              |            |                                       |                                       |              |   |
|  |               |   | K<br>K<br>K      |                       |          |      |                 |            |                    |                  |       |            |                 |                 |                                       |                 |              |            |                                       |                                       |              | Auger cutting<br>and bentonite              |
| 4  |               | - Auger grinding at about 4.0 m and from approximately 6.4 m to 7.0 m depths                    |                  |                       |          |      |                 |            |                    |                  |       |            |                 | <u></u>         |                                       |                 |              |            |                                       |                                       |              |   |
|  |               | approximately 6.4 m to 7.0 m depths   |                  |                       |          |      |                 |            |                    |                  |       |            |                 |                 |                                       |                 |              |            |                                       |                                       |              |   |
| 5  |               |   |                  |                       | 6A<br>6B | SS   | 305             | 34         |                    | 0::              |       |            | •               | · · · · ·       | · · · · · · · · · · · · · · · · · · · |                 |              |            |                                       |                                       |              | Bentonite                                   |
|  |               |   |                  |                       |          |      |                 |            |                    |                  |       |            |                 |                 |                                       |                 |              |            |                                       | · · ·<br>· · ·<br>· · ·               |              |   |
|  |               |   |                  |                       |          |      |                 |            |                    |                  |       |            |                 |                 |                                       |                 |              |            |                                       | · · ·<br>· · ·<br>· · ·               |              | 50mm dia. well                              |
| 6  |               | - Grey below approximately 6.1 m depth  |                  |                       | 7        | SS   | 356             | 34         |                    | Ö H              |       |            | •               | · · · · ·       | · · · · ·                             |                 |              |            |                                       | · · · · · · · · · · · · · · · · · · · | мн           | screen                                      |
|  |               | End of Borehole   | Ø.               | <u>243.18</u><br>6.71 | -        |      |                 |            |                    |                  |       |            |                 |                 |                                       |                 |              |            |                                       |                                       |              |   |
| 7  |               | Notes:  |                  |                       |          |      |                 |            |                    | · · · ·          |       |            |                 | <u></u>         | · · · · ·                             |                 |              |            |                                       | · · ·                                 |              |   |
|  |               | 1. Piezometers installed as shown upon<br>completion of drilling.                               |                  |                       |          |      |                 |            |                    |                  |       |            |                 |                 |                                       |                 |              |            |                                       | · · ·<br>· · ·<br>· · ·               |              |   |
| 8  |               | 2. Groundwater level measured in the  |                  |                       |          |      |                 |            |                    |                  |       |            |                 | <u></u>         |                                       |                 |              |            |                                       |                                       |              |   |
|  |               | installed monitoring well on May 18,<br>2023 at a depth of about 2.2 m below<br>ground surface. |                  |                       |          |      |                 |            |                    |                  |       |            |                 |                 |                                       |                 |              |            |                                       |                                       |              |   |
| 9  |               | <ol> <li>Subsurface description based on<br/>borehole BH23-23D.</li> </ol>                      |                  |                       |          |      |                 |            |                    |                  |       |            |                 |                 |                                       |                 |              |            |                                       |                                       |              |   |
|  |               |   |                  |                       |          |      |                 |            |                    |                  |       |            |                 |                 |                                       |                 |              |            |                                       |                                       |              |   |
|  |               |   |                  |                       |          |      |                 |            |                    |                  |       |            |                 |                 |                                       |                 |              |            |                                       |                                       |              |   |
| 10   |               |   |                  |                       |          |      |                 |            |                    |                  |       |            |                 |                 |                                       |                 |              |            |                                       |                                       |              |   |
|  |               |   |                  |                       |          |      |                 |            |                    |                  |       |            |                 |                 |                                       |                 |              |            |                                       | · · ·<br>· · ·<br>· · ·               |              |   |
| 11   |               |   |                  |                       |          |      |                 |            |                    |                  |       |            |                 | <u></u>         |                                       |                 |              |            |                                       |                                       |              |   |
|  |               |   |                  |                       |          |      |                 |            |                    |                  |       |            |                 |                 |                                       |                 |              |            |                                       |                                       |              |   |
| 12   |               |   |                  |                       |          |      |                 |            |                    | : : :<br>  : : : |       |            |                 | <u></u>         | · · · · ·                             |                 |              |            |                                       | ::                                    |              |   |
|  |               |   |                  |                       |          |      |                 |            |                    |                  |       |            |                 |                 |                                       |                 |              |            |                                       |                                       |              |   |
| 13   |               |   |                  |                       |          |      |                 |            |                    |                  |       |            |                 | · · · · ·       |                                       |                 |              |            |                                       |                                       |              | GROUNDWATE<br>OBSERVATION                   |
| -  |               |   |                  |                       |          |      |                 |            |                    |                  |       |            |                 |                 |                                       |                 |              |            |                                       |                                       |              | DATE DEPTH<br>(m)                           |
|  |               |   |                  |                       |          |      |                 |            |                    |                  |       |            |                 |                 |                                       |                 |              |            |                                       | · · ·<br>· · ·<br>· ·                 |              | 23/05/18 2.2 💆                              |
| 14   |               |   |                  |                       |          |      |                 |            |                    | :::              |       |            |                 |                 |                                       |                 |              |            |                                       | ::                                    |              |   |
| 1  | G             | SEMTEC  |                  |                       |          |      |                 |            |                    |                  |       |            |                 |                 |                                       |                 |              |            |                                       | L                                     | oggi         | ED: AS                                      |

 CLIENT:
 Mayfield Golf Course Inc.

 PROJECT:
 Mayfield Golf Course - Detailed Investigation

 JOB#:
 101987.001

 LOCATION:
 See Borehole Location Plan

SHEET:1 OF 1DATUM:CGVD28BORING DATE:Feb 13 2023

| ш                     |       | 8                 | SOIL PROFILE   |   |                       |        | SAN  | IPLES           |            | ● PE                  |     |              |                |       | 2////S     | :/0 3n             | SH<br>n + M |      |     | ENG      | TH (C | u), kPA |      |                                     |         |
|-----------------------|-------|-------------------|--|---|-----------------------|--------|------|-----------------|------------|-----------------------|-----|--------------|----------------|-------|------------|--------------------|-------------|------|-----|----------|-------|---------|------|-------------------------------------|---------|
| DEPTH SCALE<br>METRES |       | BORING METHOD     | DESCRIPTION  | STRATA PLOT                             | ELEV.<br>DEPTH<br>(m) | NUMBER | ТҮРЕ | RECOVERY,<br>mm | BLOWS/0.3m | ▲ <sup>D`</sup><br>RE | YNA | AMIC<br>STAI | PENE<br>NCE, E | TRATI | ON         |                    | W           | WATE |     | NON<br>W | TENT, |         | TION | PIEZOME<br>OR<br>STANDP<br>INSTALLA | IPE     |
| - c                   |       |                   | Ground Surface   |   | 249.09                |        |      |                 |            |                       | -   |              |                |       | : :        |                    |             |      | ::  |          |       |         |      | Monument                            |         |
| Ē                     | Ί     |                   | TOPSOIL  | $\overline{r_{ij}}$ $\overline{r_{ij}}$ | <i>i</i>              | 1A     | SS   | 457             | 7          |                       |     | :::          |                | :::   | : :        | : : :<br>: : :     |             |      | ::: |          |       | :::     |      |                                     |         |
| Ē                     |       |                   | (CL) SILTY CLAY, some sand, trace  | '                                       | 248.58                | 1B     |      |                 |            |                       |     |              |                |       |            |                    |             |      |     |          |       |         |      |                                     |         |
|                       |       |                   | gravel; brown; cohesive, w~PL to w>PL, very stiff to hard                                  |   |                       | 2      | SS   | 457             | 31         |                       |     | Ö            |                | •     |            | · · · · ·          |             |      |     |          |       |         |      | <br>Bentonite                       |         |
| E                     |       |                   |  |   |                       |        |      |                 |            |                       |     |              |                |       |            |                    |             |      |     |          |       |         |      | Demonine                            |         |
| Ē                     |       |                   |  |   |                       | 3      | SS   | 457             | 35         |                       |     | Ċ            |                |       |            |                    |             |      |     |          |       |         |      |                                     |         |
|                       |       |                   |  |   |                       |        |      |                 |            |                       | :   |              |                |       |            | · · · ·<br>· · · · |             |      | : : |          |       |         |      |                                     |         |
| Ē                     |       |                   |  |   |                       | 4      | SS   | 457             | 27         |                       |     | Ċ            | )::: <b>:</b>  |       |            |                    |             |      |     |          |       |         |      |                                     |         |
| Е<br>Е з              | 3     | í                 |  |   |                       |        |      |                 |            |                       | :   | · · ·        |                |       |            | · · · ·            | · · · · ·   |      |     |          |       |         |      | Filter sand                         |         |
| Ē                     |       |                   |  |   |                       | 5      | SS   | 457             | 21         |                       |     | :::          | •              |       |            |                    |             |      |     |          |       |         |      |                                     |         |
| Ē                     | , and | 95<br>(210r       | (CL) sandy SILTY CLAY, trace gravel:   |   | 245.43<br>3.66        |        |      |                 |            |                       |     |              |                |       |            |                    |             |      |     |          |       |         |      |                                     |         |
| - 4                   |       | Stem Auger (210mm | (CL) sandy SILTY CLAY, trace gravel;<br>grey (TILL); cohesive, w~PL to w>PL,<br>very stiff | $\langle \delta \rangle$                |                       | 6      | SS   | 457             | 23         |                       | Ċ   | <u>;;;</u>   | •              |       |            | <u></u>            |             |      |     |          |       |         |      |                                     |         |
| Ē                     |       | tem Aug           |  | 2                                       |                       |        |      |                 |            |                       |     |              |                |       |            |                    |             |      |     |          |       |         |      | 50mm dia. well                      | ÷₿:     |
| Ē                     |       | Hollow S          |  |   |                       | 7      | SS   | 457             | 20         |                       | 0   | )<br>        |                |       |            |                    |             |      |     |          |       |         |      | screen                              |         |
| - 5<br>-              | 5     | F                 |  | ø K                                     |                       |        |      |                 |            |                       | :   | · · · ·      |                |       |            | · · · ·            | · · · · ·   |      |     |          |       |         |      |                                     |         |
| Ē                     |       |                   | - Auger grinding between approximately 5.2 m and 6.1 m depth                               | × Z                                     |                       |        |      |                 |            |                       |     |              |                |       |            |                    |             |      |     |          |       |         |      |                                     |         |
| E e                   |       |                   |  | $\mathcal{N}$                           |                       |        |      |                 |            |                       |     |              |                |       |            |                    |             |      |     |          |       |         |      |                                     |         |
| Ē                     | ĺ     |                   |  | 1 / Z                                   |                       | 8      | SS   | 457             | 29         |                       | 0   |              |                |       |            |                    |             |      |     |          |       |         |      | Filter sand                         |         |
| Ē                     |       |                   |  |   |                       |        |      | 407             | 20         |                       | Ĩ   |              |                |       |            |                    |             |      |     |          |       |         |      |                                     |         |
| F 7                   | ,     |                   |  | 9/                                      | 242.00                |        |      |                 |            |                       |     | <u></u>      |                |       |            | · · · ·            |             |      |     |          |       |         |      | Bentonite                           |         |
| Ē                     |       |                   | (CL) SILTY CLAY, some sand; grey;<br>cohesive, w~PL, hard                                  |   | 7.09                  |        |      |                 |            |                       |     |              |                |       |            |                    |             |      |     |          |       |         |      |                                     |         |
| Ē                     |       |                   |  |   |                       | 9      | SS   | 457             | 81/0.      |                       | 0   |              |                |       |            |                    |             |      |     |          |       |         |      |                                     |         |
| E 8                   | -     | +                 | End of Borehole  | parata                                  | 241.04<br>8.05        |        |      | 407             | 01/0.      |                       | 1   |              |                |       | : :<br>: : | ::::<br>::::       |             |      | ::  |          |       |         |      |                                     |         |
| Ē                     |       |                   | Notes:   |   |                       |        |      |                 |            |                       |     |              |                |       |            |                    |             |      |     |          |       |         |      |                                     |         |
| Ē,                    |       |                   | 1. Borehole started on Feb 13, 2023 and  |   |                       |        |      |                 |            |                       |     |              |                |       |            |                    |             |      |     |          |       |         |      |                                     |         |
| Ē                     | '     |                   | completed on Feb 14, 2023.<br>2. Water level measured at about 5.9 m                       |   |                       |        |      |                 |            |                       | :   |              |                |       |            |                    |             |      |     |          |       |         |      |                                     |         |
| Ē                     |       |                   | depth upon completion of drilling.   |   |                       |        |      |                 |            |                       |     |              |                |       |            |                    |             |      |     |          |       |         |      |                                     |         |
| - 10                  | ,     |                   | 3. Piezometer installed as shown upon completion of drilling.                              |   |                       |        |      |                 |            |                       | :   | <u></u>      |                |       | :   :      | ::::<br>::::       |             |      | ::  |          |       |         |      |                                     |         |
| Ē                     |       |                   | 4. Groundwater level measured in   |   |                       |        |      |                 |            |                       |     |              |                |       |            |                    |             |      |     |          |       |         |      |                                     |         |
| E                     |       |                   | installed monitoring well on May 18,<br>2023 at a depth of about 0.9 m below               |   |                       |        |      |                 |            |                       |     |              |                |       |            |                    |             |      |     |          |       |         |      |                                     |         |
| E 11                  |       |                   | ground surface.  |   |                       |        |      |                 |            |                       |     |              |                |       |            |                    |             |      |     |          |       |         |      |                                     |         |
| Ē                     |       |                   |  |   |                       |        |      |                 |            |                       |     |              |                |       |            |                    |             |      |     |          |       |         |      |                                     |         |
| Ē                     |       |                   |  |   |                       |        |      |                 |            |                       |     |              |                |       |            |                    |             |      |     |          |       |         |      |                                     |         |
| - 12<br>E             | 2     |                   |  |   |                       |        |      |                 |            |                       | -   |              |                |       |            |                    |             |      | ::  |          |       |         |      |                                     |         |
| Ē                     |       |                   |  |   |                       |        |      |                 |            |                       |     |              |                |       |            |                    |             |      |     |          |       |         |      |                                     |         |
| E<br>- 13             |       |                   |  |   |                       |        |      |                 |            |                       |     |              |                |       |            |                    |             |      |     |          |       |         |      | GROUNDW/<br>OBSERVAT                | _       |
| Ē                     |       |                   |  |   |                       |        |      |                 |            |                       |     |              |                |       |            |                    |             |      |     |          |       |         |      | DATE DEPTH<br>(m)                   | (m)     |
| Ē                     |       |                   |  |   |                       |        |      |                 |            |                       |     |              |                |       |            |                    |             |      |     |          |       |         |      | 23/05/18 0.9                        | ₹ 248.2 |
|                       |       |                   |  |   |                       |        |      |                 |            |                       |     | · · · ·      |                |       |            |                    |             |      |     |          |       |         |      |                                     |         |
| 6                     |       | 1                 | CENTEC   | I                                       | I                     | I      | 1    | <u> </u>        | I          | 1                     |     | . : :        | 1              | 1:::  | .   :      | . : :              |             | 1    | 1:: | :        | 1     | 1:::    | · I  | <u> </u>                            |         |
| -                     | 7     |                   | SEMTEC   |   |                       |        |      |                 |            |                       |     |              |                |       |            |                    |             |      |     |          |       |         |      | GED: AS                             |         |
|                       |       | A                 | DNSULTING ENGINEERS  |   |                       |        |      |                 |            |                       |     |              |                |       |            |                    |             |      |     |          |       |         | CHEC | CKED: DMF                           |         |

 CLIENT:
 Mayfield Golf Course Inc.

 PROJECT:
 Mayfield Golf Course - Detailed Investigation

 JOB#:
 101987.001

 LOCATION:
 See Borehole Location Plan

| SHEET:       | 1 OF 1 |
|--------------|--------|
| DATUM:       | CGVD2  |
| BORING DATE: | Feb 13 |

| <i>"</i> | THOD                        | SOIL PROFILE   |                              | <b></b>        |          | SAM    | IPLES           |            | ● PE<br>RE                            | NETR<br>SIST/                         | ATION                                 | N), BLC                               | ows            | /0.3m                                 |                                       |             | AL 🕀        |         |       |                                       | ,<br>RG                    |                             |
|----------|-----------------------------|--|------------------------------|----------------|----------|--------|-----------------|------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|----------------|---------------------------------------|---------------------------------------|-------------|-------------|---------|-------|---------------------------------------|----------------------------|-----------------------------|
| METRES   | G MET                       |  | LO14                         | ELEV.          | 3ER      | Щ<br>Ш | /ERY,<br>n      | /0.3m      |                                       | /NAMI                                 | C PEN                                 | ETRATI                                | ON             |                                       |                                       | WATE        | R CON       |         | NT, 9 |                                       | ADDITIONAL<br>LAB. TESTING | PIEZOMETE<br>OR<br>STANDPIP |
| ME       | BORING METHOD               | DESCRIPTION  | STRATA PLOT                  | DEPTH<br>(m)   | NUMBER   | ТҮРЕ   | RECOVERY,<br>mm | BLOWS/0.3m | R                                     | SIST                                  | NCE,                                  | BLOWS                                 | 5/0.3          |                                       | W <sub>P</sub>                        | .⊢          | 0           |         |       | ⊣w <sub>L</sub>                       | ADD.                       | STANDPIP                    |
|          | ă                           | Council Confer   | ST                           |                |          |        | Ľ.              | B          | ::::                                  | 10<br> ::::                           | 20                                    | 30                                    | 40             | 50<br>::::                            | ) 6<br>::::                           |             | 70<br> :::: | 80      | 9     | ע<br>:::                              |                            |                             |
| 0        | +                           | Ground Surface<br>TOPSOIL  | <u>', 1''</u> . ' <u>, r</u> | 248.82         |          |        |                 |            |                                       |                                       |                                       |                                       | :   :<br>:   : |                                       | <u></u>                               |             |             |         | :::   | <u> </u>                              | :                          | -                           |
|          |                             | (CL) SILTY CLAY, trace to some sand;<br>brown; cohesive, w~PL to w>PL, soft to<br>very stiff   |                              | 248.57<br>0.25 | 1        | SS     | 610             | 3          | •                                     |                                       |                                       |                                       |                |                                       |                                       |             |             |         |       |                                       |                            |                             |
| 1        |                             |  |                              | 247 45         | 2        | SS     | 457             | 29         |                                       |                                       |                                       |                                       |                |                                       | · · · · ·                             |             |             |         |       |                                       |                            |                             |
|          |                             | (CL) SILTY CLAY, some sand, trace<br>gravel; brown to grey, oxidative stains<br>(TILL); cohesive, w~PL to w>PL, very   |                              | 247.45<br>1.37 | 3        | SS     | 457             | 28         |                                       | ¢                                     |                                       |                                       |                | · · · · · · · · · · · · · · · · · · · |                                       |             |             |         |       | · · · · · · · · · · · · · · · · · · · | •                          |                             |
| 2        |                             | stiff to hard  |                              |                |          |        |                 |            |                                       |                                       |                                       | · · · · · · · · · · · · · · · · · · · |                | · · · ·                               | · · · · · · · · · · · · · · · · · · · |             |             |         |       | · · · · · · · · · · · · · · · · · · · | •<br>•<br>•<br>•           |                             |
| 3        | (QC                         | DESCRIPTION Ground Surface TOPSOIL (CL) SILTY CLAY, trace to some sand; brown; cohesive, w~PL to w>PL, soft to very stiff (CL) SILTY CLAY, some sand, trace gravel; brown to grey, oxidative stains (TILL); cohesive, w~PL to w>PL, very stiff to hard |                              |                | 4        | SS     | 457             | 41         |                                       | 0::                                   |                                       |                                       |                | · · · ·                               | · · · · ·                             |             |             |         |       | · · · · · · · · · · · · · · · · · · · |                            |                             |
|          | 10mm 0                      |  |                              |                | 5A<br>5B | SS     | 457             | 26         |                                       | 0::<br>0::                            |                                       |                                       |                |                                       | · · · · · · · · · · · · · · · · · · · |             |             |         |       | · · · · · · · · · · · · · · · · · · · |                            |                             |
| 4        | Power Auger<br>em Auger (21 |  |                              |                |          |        |                 |            |                                       |                                       |                                       | · · · · · · · · · · · · · · · · · · · |                | · · · ·                               | · · · · ·                             |             |             |         |       | · · · ·                               | •<br>•<br>•<br>•           |                             |
|          | v Stem ⊭                    |  |                              |                |          |        |                 |            |                                       |                                       |                                       |                                       |                |                                       |                                       |             |             |         |       |                                       |                            |                             |
| 5        | Hollow                      | cohesive, w~PL, hard<br>End of Borehole  |                              |                | 6        | SS     | 457             | 18         |                                       | 0                                     |                                       |                                       |                |                                       | · · · · · · · · · · · · · · · · · · · |             |             |         |       |                                       |                            |                             |
|          |                             |  |                              |                |          |        |                 |            |                                       |                                       |                                       |                                       |                | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |             |             |         |       |                                       | •                          |                             |
| 6        |                             |  |                              |                |          |        |                 | 457 26     |                                       |                                       | · · · · · · · · · · · · · · · · · · · | •                                     |                |                                       |                                       |             |             |         |       |                                       |                            |                             |
|          |                             |  |                              |                | 7        | SS     | 457             | 26         |                                       |                                       |                                       | r                                     |                | · · · · · · · · · · · · · · · · · · · |                                       |             |             |         |       | · · · · · · · · · · · · · · · · · · · | •                          |                             |
| 7        |                             |  |                              | 241.73<br>7.09 |          |        |                 |            | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |                                       | · · · · · · · · · · · · · · · · · · · |                | · · · ·                               | · · · · · ·                           | · · · · · · |             |         |       | · · · ·                               | •                          |                             |
|          |                             |  |                              | 240.92<br>7.90 | 8        | SS     | 280             | 50/0.      | 3                                     | 0                                     |                                       |                                       |                | · · · · ·                             |                                       |             |             |         |       | · · · · · · · · · · · · · · · · · · · |                            |                             |
| 8        |                             |  |                              | 1.90           |          |        |                 |            |                                       |                                       |                                       |                                       |                |                                       |                                       |             |             |         |       |                                       |                            |                             |
| 9        |                             |  |                              |                |          |        |                 |            |                                       |                                       |                                       |                                       |                |                                       |                                       |             |             |         |       | · · · ·                               |                            |                             |
| -        |                             | 2. Borehole did not cave upon<br>completion of drilling.   |                              |                |          |        |                 |            |                                       |                                       |                                       |                                       |                |                                       |                                       |             |             |         |       | · · · · · · · · · · · · · · · · · · · |                            |                             |
| 10       |                             | and bentonite upon completion of   |                              |                |          |        |                 |            |                                       | · · · · · · · · · · · · · · · · · · · |                                       |                                       |                |                                       |                                       |             |             |         |       |                                       |                            |                             |
|          |                             |  |                              |                |          |        |                 |            |                                       |                                       |                                       |                                       |                |                                       | · · · · · ·                           |             |             |         |       | · · · · · · · · · · · · · · · · · · · |                            |                             |
| 11       |                             |  |                              |                |          |        |                 |            |                                       | · · · · · · · · · · · · · · · · · · · |                                       |                                       |                |                                       | · · · · · ·                           |             |             |         |       |                                       |                            |                             |
|          |                             |  |                              |                |          |        |                 |            |                                       |                                       |                                       |                                       |                |                                       | · · · · · ·                           |             |             |         |       | · · · · · · · · · · · · · · · · · · · |                            |                             |
| 12       |                             |  |                              |                |          |        |                 |            |                                       |                                       |                                       |                                       |                |                                       |                                       |             |             |         |       |                                       |                            |                             |
| 12       |                             |  |                              |                |          |        |                 |            |                                       |                                       |                                       |                                       |                |                                       |                                       |             |             |         |       |                                       |                            |                             |
| 13       |                             |  |                              |                |          |        |                 |            |                                       |                                       |                                       |                                       |                |                                       |                                       |             |             |         |       |                                       |                            |                             |
| 14       |                             |  |                              |                |          |        |                 |            |                                       |                                       |                                       |                                       |                |                                       | · · · · · ·                           |             |             |         |       |                                       |                            |                             |
|          | 1                           | GEMTEC   | I                            |                |          |        |                 |            |                                       | 1:::                                  | : [ : : :                             | : [ : : :                             | : :            | :::                                   |                                       | ::::        |             | : [ : : | ::    | :::                                   |                            | GED: AS                     |
|          |                             |  |                              |                |          |        |                 |            |                                       |                                       |                                       |                                       |                |                                       |                                       |             |             |         |       |                                       |                            | GED: AS                     |

 CLIENT:
 Mayfield Golf Course Inc.

 PROJECT:
 Mayfield Golf Course - Detailed Investigation

 JOB#:
 101987.001

 LOCATION:
 See Borehole Location Plan

SHEET:1 OF 2DATUM:CGVD28BORING DATE:Feb 16 2023

|             | THOD          | SOIL PROFILE  | Ĕ                         |                       |          | SAN  | IPLES           | -          | ● PE<br>RE | NETR.<br>SISTA | ATION<br>NCE (N        | I), BLO | WS/0.3 | SH<br>Bm +  | HEAR S<br>NATUR | TREN¢<br>AL⊕ | GTH<br>REM | (Cu)<br>IOUL                          | , kPA<br>DED | NAL<br>TING                | PIEZOMET                                |
|-------------|---------------|---|---------------------------|-----------------------|----------|------|-----------------|------------|------------|----------------|------------------------|---------|--------|-------------|-----------------|--------------|------------|---------------------------------------|--------------|----------------------------|---|
|             | BORING METHOD | DESCRIPTION   | STRATA PLOT               | ELEV.<br>DEPTH<br>(m) | NUMBER   | ТҮРЕ | RECOVERY,<br>mm | BLOWS/0.3m |            |                | C PENE<br>NCE, B<br>20 |         |        | W<br>50     | F ·             |              |            |                                       | ₩L           | ADDITIONAL<br>LAB. TESTING | OR<br>STANDPIF<br>INSTALLAT             |
| ┢           |               | Ground Surface  | ى<br>ە                    | 248.75                |          |      |                 | ш          |            |                |                        |         |        |             |                 |              |            |                                       |              |                            | Monument                                |
|             |               | TOPSOIL   | <u>x1 17</u> x            |                       | 1A       | SS   | 457             | 5          |            |                |                        |         |        |             |                 |              |            |                                       |              |                            |   |
|             |               | (CL) SILTY CLAY, trace sand; brown;   | 1111                      | 248.24                |          |      | -57             |            |            |                | ::::<br> :::O          |         |        |             |                 |              |            |                                       |              |                            |   |
|             |               | cohesive, w~PL to w>PL, firm<br>(CL) sandy SILTY CLAY, trace to some              |                           | 24 <b>9:56</b>        | 2        | SS   | 457             | 26         |            |                |                        |         |        |             |                 |              |            |                                       |              |                            | 24                                      |
|             |               | gravel; brown to grey, oxidative staining<br>(TILL); cohesive, w~PL to w>PL, very |                           |                       |          | - 55 | 437             | 20         |            |                |                        |         |        |             |                 |              |            | · · ·<br>· · ·                        |              |                            |   |
|             |               | stiff to hard   | 1                         | n<br>Zj               | 3        | SS   | 457             | 30         |            | 0              |                        |         |        |             |                 |              |            | · · · · · · · · · · · · · · · · · · · | · · · · ·    |                            |   |
|             |               |   | $\langle 0 \rangle$       |                       |          | 33   | 457             | 30         |            |                |                        |         |        |             |                 |              |            | · · ·                                 | · · · · ·    |                            |   |
|             |               |   |                           | <u>/</u>              |          | 00   | 457             | 0.5        |            |                |                        |         |        |             |                 |              |            | :::                                   |              |                            | ST.                                     |
|             |               |   | × KY                      |                       | 4        | SS   | 457             | 35         |            | 0              |                        |         |        |             |                 |              |            |                                       | · · · · ·    |                            | 2-<br>(f                                |
|             |               |   | Ø                         |                       | -        |      |                 |            |            |                |                        |         |        |             |                 |              |            | ::                                    | · · · · ·    |                            |   |
|             |               |   |                           |                       | 5        | SS   | 457             | 44         |            | Υ              |                        |         |        |             |                 |              |            |                                       |              |                            |   |
|             |               |   |                           |                       |          |      |                 |            |            |                |                        |         |        |             |                 |              |            |                                       |              |                            |   |
|             |               |   | Ø.                        |                       |          |      |                 |            | · · · · ·  |                |                        |         |        |             |                 |              |            | :::<br>:::<br>:::                     | · · · · ·    |                            | N N N N N N N N N N N N N N N N N N N   |
|             |               | - Grey below about 4.6 m depth  | $\langle \rangle \rangle$ |                       |          |      |                 |            |            |                |                        |         |        |             |                 |              |            | : :<br>: :<br>: :                     |              |                            |   |
|             |               |   |                           |                       | 6        | SS   | 457             | 61         |            | 0              |                        |         |        |             | <b>P</b>        |              |            |                                       | · · · · ·    |                            |   |
|             |               |   |                           |                       |          |      |                 |            |            |                |                        |         |        |             |                 |              |            | ::                                    |              |                            |   |
|             |               |   |                           |                       |          |      |                 |            |            |                |                        |         |        |             |                 |              |            |                                       |              |                            |   |
|             |               |   |                           |                       | <u> </u> |      |                 |            |            |                |                        |         |        |             |                 |              |            | ::                                    | · · · · ·    |                            | Auger cuttings                          |
|             |               |   |                           |                       | 7        | SS   | 305             | 37         |            | <b>0</b>       |                        |         |        |             |                 |              |            |                                       | · · · · ·    |                            | Auger cuttings<br>and bentonite         |
|             | m OD)         |   |                           |                       |          |      |                 |            |            |                |                        |         |        |             |                 |              |            |                                       | · · · · ·    |                            |   |
| ŗ           | gci<br>(210mm |   |                           |                       |          |      |                 |            | · · · · ·  |                |                        |         |        |             |                 |              |            |                                       | · · · · ·    |                            |   |
| Dower Aride | nder (        |   |                           |                       |          |      |                 |            |            |                |                        |         |        |             |                 |              |            |                                       |              |                            |   |
| DOMO        | Stem Auger    |   |                           |                       | 8        | SS   | 457             | 26         |            | <b>0</b>       |                        |         |        |             |                 |              |            |                                       | · · · · ·    |                            | N N N N N N N N N N N N N N N N N N N   |
|             | ow St         |   |                           | /.<br>/               |          |      |                 |            |            |                |                        |         |        |             |                 |              |            | :::                                   |              |                            |   |
|             | Hollow        | (CL) SILTY CLAY, some sand; grey;   |                           | 240.14<br>8.61        |          |      |                 |            |            |                |                        |         |        |             |                 |              |            | : :<br>: :<br>: :                     | · · · · ·    |                            |   |
|             |               | cohesive, w~PL, hard  |                           |                       | 9        | SS   | 127             | 50/0.      | 3          | 0              |                        |         |        |             |                 |              |            |                                       |              |                            |   |
|             |               |   |                           |                       |          |      |                 |            |            |                |                        |         |        |             |                 |              |            |                                       |              |                            | שינו שינו שינו שינו שינו שינו שינו שינו |
|             |               |   |                           | 238.78                |          |      |                 |            |            |                |                        |         |        |             |                 |              |            | :::                                   | · · · · ·    |                            | 2)<br>(*                                |
|             |               | (SM/ML) SAND and SILT, some gravel, trace plastic fines; grey, rock fragments;    |                           | 9.97                  |          |      |                 |            |            |                |                        |         |        |             |                 |              |            |                                       |              |                            |   |
|             |               | non-cohesive, moist to wet, very dense  |                           |                       | 10       | 22   | 127             | 50/0.      | 3.0        |                |                        |         |        |             |                 |              |            | :::                                   |              | МН                         |   |
|             |               | - Auger grinding at about 11 m depth  |                           |                       |          |      |                 | 00/0.      |            |                |                        |         |        |             |                 |              |            | ::                                    | · · · · ·    | IVIIII                     |   |
|             |               | ragor grinaling at about 11 m appar   |                           | •                     |          |      |                 |            |            |                |                        |         |        |             |                 |              |            |                                       | · · · · ·    |                            |   |
|             |               |   |                           |                       |          |      |                 |            |            |                |                        |         |        |             |                 |              |            |                                       |              |                            | 2                                       |
|             |               |   |                           |                       | - 1 1    |      | 100             | 50/0.      |            |                |                        |         |        |             |                 |              |            |                                       |              |                            |   |
|             |               | <ul> <li>Hard augering from approximately<br/>12.2 m to 13.7 m depths</li> </ul>  |                           |                       |          | 00   | 102             | 50/0.      |            |                |                        |         |        |             |                 |              |            | ::                                    |              |                            |   |
|             |               |   |                           |                       |          |      |                 |            |            |                |                        |         |        |             |                 |              |            |                                       |              |                            | Bentonite                               |
|             |               |   |                           |                       |          |      |                 |            |            |                |                        |         |        |             |                 |              |            |                                       |              |                            | Filter sand                             |
|             |               |   |                           |                       |          |      |                 |            |            |                |                        |         |        |             |                 |              |            |                                       | · · · · ·    |                            | 50mm dia. well<br>screen                |
| 1           |               | - Wet below about 13.7 m depth  |                           | ·]                    |          |      |                 |            | L C        |                |                        |         |        |             |                 |              |            |                                       |              |                            | :                                       |
| L           |               |   |                           |                       |          |      |                 |            | ::::       | ::::           | ::::                   |         | :::    | :   : : : : | 1::::           | ::::         | : [ : :    | ::                                    | ::::         |                            |   |
| Ē           | G             | SEMTEC  |                           |                       |          |      |                 |            |            |                |                        |         |        |             |                 |              |            |                                       |              | LOGG                       | ED: AS                                  |

CLIENT: Mayfield Golf Course Inc. PROJECT: Mayfield Golf Course - Detailed Investigation JOB#: 101987.001 LOCATION: See Borehole Location Plan

2 OF 2 CGVD28 SHEET: DATUM: CGVD28 BORING DATE: Feb 16 2023

| 4      | доŗ           | SOIL PROFILE   |  |                       |        | SAM      |                 | _          | ● PE<br>RE                            | NETR/          | ATION<br>NCE (N | ), BLO         | WS/0.:                                | S<br>3m + | HEAR<br>NATU              | STRE<br>RAL                           | ENG<br>⊕ R                            | TH (Cu<br>REMOU | ı), kPA<br>ILDED     | טר                       |                 |                             |    |
|--------|---------------|--|--|-----------------------|--------|----------|-----------------|------------|---------------------------------------|----------------|-----------------|----------------|---------------------------------------|-----------|---------------------------|---------------------------------------|---------------------------------------|-----------------|----------------------|--------------------------|-----------------|-----------------------------|----|
| METRES | BORING METHOD | DESCRIPTION  | ТКАТА РLOT   | ELEV.<br>DEPTH<br>(m) | NUMBER | ТҮРЕ     | RECOVERY,<br>mm | 3LOWS/0.3m | ▲ <sup>DY</sup> RE                    | NAMIC<br>SISTA | PENE<br>NCE, B  | TRATIC<br>LOWS | 0N<br>⁄0.3m                           | v         | wat<br>v <sub>P</sub> ├── | ER C                                  |                                       | TENT,           | %<br>⊣w <sub>L</sub> | ADDITIONA<br>LAB. TESTIN | PII<br>S<br>INS | OR<br>TANDPIP               | ΡE |
| 14 -   |               |  | <u></u>  |                       |        |          |                 |            |                                       |                |                 |                |                                       |           |                           |                                       |                                       |                 |                      |                          |                 |                             | _  |
| 15     |               |  |  |                       | 12     | 55       | 457             | 81         |                                       |                |                 |                |                                       |           |                           |                                       |                                       |                 |                      | -                        | Filte           | screen :<br>::<br>er sand : |    |
| -      |               | End of Borehole  |  | 233.46<br>15.29       | 13     | ss       | 51              | 50/0.      | <b>9</b> 5 O                          |                |                 |                |                                       |           |                           |                                       |                                       |                 |                      |                          | Be              | ntonite                     |    |
| 10     |               | Notes:   |  |                       |        |          |                 |            |                                       |                |                 |                |                                       |           |                           |                                       | · · · ·                               |                 |                      |                          |                 |                             |    |
| 16     |               | 1. Groundwater level measured in open<br>borehole at approximately 13.7 m below<br>ground surface upon completion of<br>drilling.  |  |                       |        |          |                 |            |                                       |                |                 |                | · · · · · · · · · · · · · · · · · · · |           |                           |                                       | · · · · · · · · · · · · · · · · · · · |                 |                      |                          |                 |                             |    |
| 17     |               | 2. Piezometer installed as shown upon<br>completion of drilling.   |  |                       |        |          |                 |            | · · · · · · · · · · · · · · · · · · · |                |                 |                |                                       |           |                           |                                       | · · · ·                               | · · · · ·       |                      | -                        |                 |                             |    |
| 18     |               | 3. Groundwater level measured in<br>installed monitoring well on May 18,<br>2023 at a depth of about 6.9 m below<br>ground surface   | DESCRIPTION         Image: Strate Description         Image: Strate De |                       |        |          |                 |            |                                       |                |                 |                |                                       |           |                           |                                       |                                       |                 |                      |                          |                 |                             |    |
| 10     |               | Description         Set intervention         Presentation         Presentati |  |                       |        |          |                 |            |                                       |                |                 |                |                                       |           |                           |                                       |                                       |                 |                      |                          |                 |                             |    |
| 19     |               |  |  |                       |        |          |                 |            |                                       |                |                 |                |                                       |           |                           |                                       |                                       |                 |                      |                          |                 |                             |    |
|        |               |  |  |                       |        |          |                 |            |                                       |                |                 |                |                                       |           |                           |                                       |                                       |                 |                      |                          |                 |                             |    |
| 20     |               |  |  |                       |        |          |                 |            |                                       |                |                 |                |                                       |           |                           |                                       |                                       |                 |                      |                          |                 |                             |    |
| 21     |               |  |  |                       |        |          |                 |            |                                       |                |                 |                |                                       |           |                           |                                       |                                       |                 |                      |                          |                 |                             |    |
|        |               |  |  |                       |        |          |                 |            |                                       |                |                 |                |                                       |           |                           |                                       |                                       |                 |                      |                          |                 |                             |    |
| 22     |               |  |  |                       |        |          |                 |            |                                       |                |                 |                |                                       |           |                           |                                       |                                       |                 |                      |                          |                 |                             |    |
| 23     |               |  |  |                       |        |          |                 |            |                                       |                |                 |                |                                       |           |                           |                                       |                                       |                 |                      | _                        |                 |                             |    |
|        |               |  |  |                       |        |          |                 |            |                                       |                |                 |                |                                       |           |                           | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |                 |                      |                          |                 |                             |    |
| 24     |               |  | 1       1 <th1< th=""> <th1< th=""> <th1< th=""></th1<></th1<></th1<>  |                       |        |          |                 |            |                                       |                |                 |                |                                       |           |                           |                                       |                                       |                 |                      |                          |                 |                             |    |
| 25     |               |  |  |                       |        |          |                 |            |                                       |                |                 |                |                                       |           |                           |                                       |                                       |                 |                      |                          |                 |                             |    |
|        |               |  |  |                       |        |          |                 |            |                                       |                |                 |                |                                       |           |                           |                                       |                                       |                 |                      |                          |                 |                             |    |
| 26     |               |  |  |                       |        |          |                 |            |                                       |                |                 |                |                                       |           |                           |                                       |                                       |                 |                      |                          |                 |                             |    |
| 27     |               |  |  |                       |        |          |                 |            |                                       |                |                 |                |                                       |           |                           |                                       |                                       |                 |                      |                          | GF<br>OE        |                             | _  |
|        |               |  |  |                       |        |          |                 |            |                                       |                |                 |                |                                       |           |                           |                                       |                                       |                 |                      |                          |                 | (m)                         | +  |
| 28     |               |  |  |                       |        |          |                 |            |                                       |                |                 |                |                                       |           |                           |                                       |                                       |                 |                      | _                        |                 |                             | F  |
|        | 0             | EMTEC  | I  | I                     |        | <u> </u> |                 | 1          |                                       | [::::          | 1::::           | 1::::          | 1:::                                  | . [ : : : | . [ : : :                 | . [ : :                               | . : :                                 | ::::            | 1::::                |                          |                 | <u> </u>                    | L  |

| RECORD OF B | DREHOLE BH23 | -27 |
|-------------|--------------|-----|
|-------------|--------------|-----|

 CLIENT:
 Mayfield Golf Course Inc.

 PROJECT:
 Mayfield Golf Course - Detailed Investigation

 JOB#:
 101987.001

 LOCATION:
 See Borehole Location Plan

 SHEET:
 1 OF 1

 DATUM:
 CGVD28

 BORING DATE:
 Feb 13 2023

| ALE                   |             | пон               | SOIL PROFILE  | F           |                        |        | SAN  | IPLES           |            | ● <sub>R</sub>                        | ENE1<br>ESIS | rra <sup>-</sup><br>Tan               | TION<br>ICE (N                        | ), BLO | WS/   | /0.3m   | -s⊦<br>1+1                            | IEAR S<br>NATUR | TREN                                  | IGTI<br>RE                            | H (Cu<br>MOU                          | ı), kP<br>ILDEI | PA<br>D | IAL<br>ING                 | PIEZOMETER                      |
|-----------------------|-------------|-------------------|---|-------------|------------------------|--------|------|-----------------|------------|---------------------------------------|--------------|---------------------------------------|---------------------------------------|--------|-------|---------|---------------------------------------|-----------------|---------------------------------------|---------------------------------------|---------------------------------------|-----------------|---------|----------------------------|---------------------------------|
| DEPTH SCALE<br>METRES |             | JKING ME          | DESCRIPTION   | STRATA PLOT | ELEV.<br>DEPTH<br>(m)  | NUMBER | ТҮРЕ | RECOVERY,<br>mm | BLOWS/0.3m | R                                     | ESIS         | TAN                                   | ICE, B                                | TRATIO | /0.3r |         | w                                     |                 |                                       | ¥                                     |                                       | ⊣w              | Ļ       | ADDITIONAL<br>LAB. TESTING | OR<br>STANDPIPE<br>INSTALLATION |
|                       | č           | ň                 |   | ST          |                        |        |      | Υ<br>Υ          | Ē          |                                       | 10           | 20                                    | 0 3                                   | 80     | 40    | 50      | <u> </u>                              | 60  <br>        | 70<br> :::                            | 80                                    | 9<br>                                 | 90<br>  : : :   |         |                            |                                 |
| - 0                   | _           |                   | Ground Surface<br>TOPSOIL   | <u></u>     | 246.47                 |        |      |                 |            |                                       |              | ::                                    |                                       |        |       |         |                                       |                 |                                       |                                       |                                       |                 |         |                            |                                 |
| -                     |             |                   | (CL) SILTY CLAY, some sand, trace gravel; brown to grey; cohesive, w~PL to                                    |             | 246.17<br>0.30         | 1      | SS   | 406             | 7          |                                       |              | · · · · · · · · · · · · · · · · · · · |                                       |        |       |         |                                       |                 |                                       | · · · · · · · · · · · · · · · · · · · |                                       |                 |         |                            |                                 |
| - 1                   |             |                   | w>PL, very stiff to hard  |             |                        | 2      | SS   | 432             | 36         |                                       |              | Ö                                     |                                       | •      |       |         | · · · · ·                             |                 |                                       |                                       |                                       |                 |         |                            |                                 |
| -                     |             |                   |   |             |                        | 3      | SS   | 457             | 35         |                                       |              |                                       |                                       |        |       |         |                                       |                 |                                       |                                       |                                       |                 |         |                            |                                 |
| _ 2                   |             |                   |   |             |                        | 5      | 33   | 437             | 55         |                                       |              | 111                                   | · · · · · ·                           |        |       |         | · · · · ·                             |                 |                                       |                                       | <u></u>                               |                 |         |                            |                                 |
| -                     |             |                   | - Sand pocket / lenses from<br>approximately 2.5 m to 2.6 m depths  |             |                        | 4      | SS   | 457             | 45         |                                       | 0            |                                       |                                       |        |       | •       | · · · · · · · · · · · · · · · · · · · |                 |                                       |                                       |                                       |                 |         |                            |                                 |
| - 3                   |             | Im OD)            |   |             |                        | 5      | SS   | 457             | 20         |                                       | 0            |                                       |                                       |        |       |         | · · · · ·                             | · · · · ·       |                                       |                                       | <u></u>                               |                 |         |                            |                                 |
| -                     | Auger       | er (210m          |   |             |                        |        |      |                 |            |                                       |              | · · · · · · · · · · · · · · · · · · · |                                       |        |       | · · · · |                                       |                 |                                       | · · · ·                               |                                       |                 |         |                            |                                 |
| - 4                   | Power Auger | Stem Auger (210mm | (CL) sandy SILTY CLAY, trace gravel;<br>grey, (TILL); cohesive, w~PL to w>PL,<br>citiff to von citiff         |             | 242.43<br>4.04         |        |      |                 |            | · · · · · · · · · · · · · · · · · · · |              | · · ·                                 |                                       |        |       |         |                                       |                 | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · | · · · ·                               |                 |         |                            |                                 |
| - 5                   |             | Hollow St         | stiff to very stiff   |             |                        | 6      | SS   | 457             | 12         |                                       | •            | <br>                                  |                                       |        |       |         |                                       |                 |                                       |                                       |                                       |                 |         |                            |                                 |
|                       |             | T                 |   |             |                        |        |      |                 |            |                                       |              |                                       |                                       |        |       |         |                                       |                 |                                       | · · · ·                               |                                       |                 |         |                            |                                 |
| - 6                   |             |                   |   |             |                        |        |      |                 |            |                                       |              | · · · · · · · · · · · · · · · · · · · |                                       |        |       | · · · · |                                       |                 |                                       |                                       |                                       |                 |         |                            |                                 |
| -                     |             |                   |   |             |                        | 7      | SS   | 457             | 19         |                                       |              | ۲                                     |                                       |        |       |         | · · · · · · · · · · · · · · · · · · · |                 |                                       |                                       | · · · · · · · · · · · · · · · · · · · |                 |         |                            |                                 |
| - 7                   |             |                   | (SM) SILTY SAND, trace gravel; grey,  |             | 2 <u>39.38</u><br>7.09 |        |      |                 |            | · · · ·<br>· · · ·<br>· · · ·         |              | · · ·                                 |                                       |        |       |         |                                       |                 |                                       |                                       |                                       |                 |         |                            |                                 |
|                       |             |                   | rock fragments; non-cohesive, moist,<br>very dense  |             |                        |        |      |                 | 0.5/0      |                                       |              |                                       |                                       |        |       |         |                                       |                 |                                       |                                       |                                       |                 |         |                            |                                 |
| - 8                   |             |                   | End of Borehole   | 고리고         | 238.47<br>8.00         | 8      | SS   | 381             | 95/0.      |                                       |              |                                       |                                       |        |       |         |                                       |                 |                                       |                                       | <u> </u>                              |                 |         |                            |                                 |
| -                     |             |                   | Notes:<br>1. Groundwater level measured in open   |             |                        |        |      |                 |            | · · · · · · · · · · · · · · · · · · · |              |                                       |                                       |        |       |         |                                       |                 |                                       |                                       |                                       |                 |         |                            |                                 |
| - 9                   |             |                   | borehole at approximately 7.9 m below ground surface prior to backfilling.                                    |             |                        |        |      |                 |            |                                       |              |                                       |                                       |        |       |         |                                       |                 |                                       |                                       |                                       |                 |         |                            |                                 |
| 10 11 12 13 13        |             |                   | 2. Borehole did not cave upon<br>completion of drilling.     2. Deschade healfilled with early attingent      |             |                        |        |      |                 |            |                                       |              |                                       | · · · · · · · · · · · · · · · · · · · |        |       |         | · · · · · · · · · · · · · · · · · · · |                 |                                       | · · · · · · · · · · · · · · · · · · · |                                       |                 |         |                            |                                 |
| - 10                  |             |                   | <ol> <li>Borehole backfilled with soil cuttings<br/>and bentonite upon completion of<br/>drilling.</li> </ol> |             |                        |        |      |                 |            | · · · · · · · · · · · · · · · · · · · |              |                                       |                                       |        |       |         |                                       |                 |                                       |                                       |                                       |                 |         |                            |                                 |
| - 11                  |             |                   |   |             |                        |        |      |                 |            |                                       |              |                                       |                                       |        |       |         | · · · · · ·                           |                 |                                       |                                       |                                       |                 |         |                            |                                 |
| -                     |             |                   |   |             |                        |        |      |                 |            |                                       |              |                                       |                                       |        |       |         |                                       |                 |                                       |                                       |                                       |                 |         |                            |                                 |
| - 12                  |             |                   |   |             |                        |        |      |                 |            |                                       |              | · · ·                                 |                                       |        |       |         |                                       |                 |                                       |                                       |                                       |                 |         |                            |                                 |
|                       |             |                   |   |             |                        |        |      |                 |            |                                       |              | · · ·<br>· · ·<br>· · ·<br>· ·        |                                       |        |       |         |                                       |                 |                                       |                                       |                                       |                 |         |                            |                                 |
| - 13                  |             |                   |   |             |                        |        |      |                 |            |                                       |              | · · ·                                 |                                       |        |       |         |                                       |                 |                                       |                                       |                                       |                 |         |                            |                                 |
|                       |             |                   |   |             |                        |        |      |                 |            |                                       |              | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |        |       |         | · · · · · · · · · · · · · · · · · · · |                 |                                       |                                       |                                       |                 |         |                            |                                 |
| - 14                  |             |                   |   |             |                        |        |      |                 |            |                                       |              | ::                                    |                                       |        |       |         |                                       |                 |                                       |                                       |                                       |                 |         |                            |                                 |
|                       | )           |                   | SEMTEC  |             |                        |        |      |                 |            |                                       |              |                                       |                                       |        |       |         |                                       |                 |                                       |                                       |                                       |                 |         | LOGGI                      | ED: AS                          |
| 0                     |             | CD<br>AND         | NSULTING ENGINEERS<br>D SCIENTISTS  |             |                        |        |      |                 |            |                                       |              |                                       |                                       |        |       |         |                                       |                 |                                       |                                       |                                       |                 |         | CHEC                       | KED: DMF                        |

| RECORD | OF | BORE | IOLE | BH23 | -28D |
|--------|----|------|------|------|------|
|--------|----|------|------|------|------|

 CLIENT:
 Mayfield Golf Course Inc.

 PROJECT:
 Mayfield Golf Course - Detailed Investigation

 JOB#:
 101987.001

LOCATION: See Borehole Location Plan

| SHEET:       | 1 OF 2     |
|--------------|------------|
| DATUM:       | CGVD28     |
| BORING DATE: | Mar 1 2023 |

| BORING METHOD |  | 5   | 1   |   |  |  |  |   |  |   |  |   |  |   |  |   |   |   |  |   |  |  |   |  |
|---------------|--|---|---|---|--|--|--|---|--|---|--|---|--|---|--|---|---|---|--|---|--|--|---|--|
|               | DESCRIPTION  | STRATA PLOT   | ELEV.<br>DEPTH  | NUMBER  | ТҮРЕ   | RECOVERY,<br>mm  | BLOWS/0.3m   | ▲ C   | YNA  | AMIC<br>STAI  | PEN<br>NCE,  | IETF<br>BLC   | RATIC<br>OWS/  | 0N<br>10.3m   |  | WP  | WATE  |   |  | ENT,  | %<br>⊣w  |  | LAB. TESTING  | PIEZOMET<br>OF<br>STANEPII<br>INSTALLAT  |
| BOF           |  | STR   | (m)   | Ĩ   |  | RE   | BLO  |   | 10   | 2   | 20   | 30  | ) 4  | 40  | 50   | 6   | 0 7   | 70<br>  | 80   | ç   | 90   | 4  | Ċ   |  |
|               | Ground Surface   | - 17 - 1  | 255.21  | 1Δ  |  |  |  |   |  |   |  |   |  |   |  | · · ·   |   |   | : :  |   |  |  |   | Monument   |
|               | (CL) SILTY CLAY, some sand, trace gravel; brown; cohesive, w~PL to w>PL,   |   |   | 1B  | SS   | 457  | 9  |   |  | 0   |  |   |  |   |  |   | · · · · · · · · · · · · · · · · · · ·   |   |  |   |  |  |   |  |
|               | (CL) sandy SILTY CLAY, trace gravel;<br>brown (TILL); cohesive, w~PL to w>PL,<br>hard                                  |   |   | 2   | SS   | 305  | 36   |   |  | )<br>   |  |   | •  |   |  | :::<br>:::  | · · · · · · · · · · · · · · · · · · ·   |   | · · ·  |   |  |  |   |  |
|               | (SM) SILTY SAND, some gravel; brown,<br>oxidative staining (TILL); non-cohesive,<br>moist, dense                       |   | 1.37  | 3   | SS   | 457  | 43   |   | q  |   |  |   |  | •   |  | · · ·<br>· · ·<br>· · ·   |   |   | · · · · · · · · · · · · · · · · · · ·  |   |  |  |   |  |
|               | - Silt seams between approximately   |   | 5   | 4   | 22   | 305  | 46   |   |  |   |  |   | · · · · · ·  |   |  | · · ·   | · · · · · ·   |   | · · · · · · · · · · · · · · · · · · ·  |   |  |  |   |  |
|               |  |   | 252.31  | -   | 00   | 505  |  |   | Ĭ  |   |  |   |  |   |  |   |   |   |  |   |  |  |   |  |
|               | (CL) SILTY CLAY, trace sand; grey;<br>cohesive, w~PL to w>PL, very stiff to<br>hard                                    |   | 2.90  | 5   | SS   | 457  | 42   |   | Ö  |   |  |   | · · · · ·  | •   |  | · · · · · · · · · · · · · · · · · · ·   | · · · · · · · · · · · · · · · · · · ·   |   | · · ·  |   | · · ·<br>· · ·<br>· · ·  |  |   | Bentonite  |
|               |  |   |   |   |  |  |  |   |  |   |  |   |  |   |  |   | · · · · · · · · · · · · · · · · · · ·   |   |  |   |  |  |   |  |
|               |  |   |   |   |  | 457  |  |   |  |   |  |   |  |   |  |   | · · · · · · · · · · · · · · · · · · ·   |   |  |   |  |  |   |  |
|               |  |   |   | 6   | SS   | 457  | 29   |   | : :<br>:<br>: :  | · · ¢   |  |   | · · · · ·  | · · · ·   |  | ::<br>::  | · · · · ·   |   | : :  |   |  |  |   |  |
|               | (SM) SILTY SAND, some gravel; grey,  | 0   | 249.65<br>5.56  |   |  |  |  |   |  |   |  |   |  |   |  |   |   |   |  |   |  |  |   |  |
|               | rock fragments (TILL); non-cohesive,<br>moist, very dense  |   | \$  |   |  |  |  |   |  | <u></u>   |  |   |  |   |  | ::  |   |   |  |   |  |  |   |  |
|               | - Auger grinding at about 5.8 m depth  | 0 C   |   | 7   | SS   | 457  | 95/0.:   | 28 : ⊂  |  |   |  |   |  |   |  |   | · · · · · · · · · · · · · · · · · · ·   |   | · · · · · · · · · · · · · · · · · · ·  |   |  |  |   |  |
|               | (ML) sandy SILT, trace plastic fines;<br>grey: non-cohesive, wet, compact to very                                      |   | 248.12<br>7.09  |   |  |  |  | · · · · · · · · · · · · · · · · · · ·   |  | <u> </u>  |  |   | · · · · ·  |   |  | ::<br>::<br>::  |   | · · · · · · · · · · · · · · · · · · ·   | · · ·  |   |  |  |   |  |
|               | dense  |   |   | 8   | SS   | 457  | 25   |   |  |   | )<br>)   |   |  |   |  | · · ·<br>· · ·<br>· · ·   |   |   | · · ·  |   |  | N  | лн  |  |
| nm OD)        |  |   |   |   |  |  |  |   |  |   |  |   |  |   |  |   | · · · · · · · · · · · · · · · · · · ·   |   | · · · · · · · · · · · · · · · · · · ·  |   |  |  |   |  |
| er (210r      |  |   |   |   |  |  |  |   |  |   |  |   |  |   |  |   |   |   |  |   |  |  |   | Grout  |
| m Auge        |  |   |   | _9  | SS   | 76   | 50/0.  | 8::   |  | : : C   | )::::<br> ::::<br> ::::  |   |  |   |  |   |   |   |  |   |  |  |   |  |
| low Ste       |  |   | 245.27  |   |  |  |  |   |  |   |  |   |  |   |  |   |   |   |  |   |  |  |   |  |
| Нol           | (SM/GM) SILTY SAND and GRAVEL,<br>trace plastic fines; grey, rock fragments;<br>non-cohesive, moist to wet, very dense | 0.00  | 4   |   |  |  |  | · · · ·<br>· · · ·<br>· · · ·   |  |   |  |   | · · · · ·  | · · · ·<br>  · · · ·<br>  · · · ·   |  |   |   |   |  |   |  |  |   |  |
|               |  | 000   | 2   | 10  | SS   | 457  | 78   |   |  |   |  |   |  |   |  |   |   |   |  |   |  |  |   |  |
|               | - Auger grinding from approximately 11.3 m to 12.2 m depths  |   | 4   |   |  |  |  |   |  |   |  |   |  |   |  |   | · · · · · · · · · · · · · · · · · · ·   |   |  |   |  |  |   |  |
|               |  |   | 4   |   |  |  |  |   |  |   |  |   | · · · · · · · · · · · · · · · · · · ·  |   |  | ::  |   |   |  |   |  |  |   |  |
|               |  |   | ć   | 11  | SS   | 457  | 58   |   |  |   |  |   |  |   |  | •   | · · · · · · · · · · · · · · · · · · ·   |   |  |   |  | N  | лн  | Caved material   |
|               |  |   | 4   |   |  |  |  | · · · · ·   |  |   |  |   | · · · · ·  | <br>  |  | ::<br>::  | · · · · ·   | : : :<br>  : : :<br>  : : :   |  |   |  |  |   | Caved material   |
|               |  | o Y o   |   |   |  |  |  |   |  |   |  |   |  |   |  |   |   |   |  |   |  |  |   |  |
|               |  | 0,40  | )   | 12  | SS   | 254  | 50/0.  | 3 (   | ) :<br>:   :   | · · · ·   |  |   |  |   |  |   |   |   |  |   |  |  |   | <u>S</u>   |
|               | Hollow Stem Auger (210mm OD)   | TOPSOIL         (CL) SILTY CLAY, some sand, trace gravel; brown; cohesive, w~PL to w>PL, stiff         (CL) sandy SILTY CLAY, trace gravel; brown (TILL); cohesive, w~PL to w>PL, hard         (SM) SILTY SAND, some gravel; brown, oxidative staining (TILL); non-cohesive, moist, dense         - Silt seams between approximately 2.3 m and 2.7 m depths         (CL) SILTY CLAY, trace sand; grey; cohesive, w~PL to w>PL, very stiff to hard         (SM) SILTY SAND, some gravel; grey, rock fragments (TILL); non-cohesive, moist, very dense         - Auger grinding at about 5.8 m depth         (ML) sandy SILT, trace plastic fines; grey; non-cohesive, wet, compact to very dense         (ML) sandy SILT, trace plastic fines; grey; non-cohesive, wet, compact to very dense         (SM/GM) SILTY SAND and GRAVEL, trace plastic fines; grey; non-cohesive, wet, compact to very dense | Ground Surface         TOPSOIL         (CL) SILTY CLAY, some sand, trace<br>gravel; brown; cohesive, w~PL to w>PL,<br>stiff         (CL) sandy SILTY CLAY, trace gravel;<br>brown (TILL); cohesive, w~PL to w>PL,<br>hard         (SM) SILTY SAND, some gravel; brown,<br>oxidative staining (TILL); non-cohesive,<br>moist, dense         - Silt seams between approximately<br>2.3 m and 2.7 m depths         (CL) SILTY CLAY, trace sand; grey;<br>cohesive, w~PL to w>PL, very stiff to<br>hard         (SM) SILTY SAND, some gravel; grey,<br>moist, very dense         - Auger grinding at about 5.8 m depth         (ML) sandy SILT, trace plastic fines;<br>grey; non-cohesive, wet, compact to very<br>dense         (OUL)         (SM/GM) SILTY SAND and GRAVEL,<br>trace plastic fines; grey, rock fragments;<br>non-cohesive, moist to wet, very dense         - Auger grinding from approximately<br>11.3 m to 12.2 m depths | Ground Surface       255.21         TOPSOIL       0.08         (CL) SILTY CLAY, some sand, trace gravel; brown, cohesive, w-PL to w>PL, hard       0.69         (SM) SILTY SAND, some gravel; brown, oxidative staining (TILL); non-cohesive, moist, dense       0.69         - Silt seams between approximately 2.3 m and 2.7 m depths       252.31         (CL) SILTY CLAY, trace sand; grey; cohesive, w-PL to w>PL, very stiff to hard       252.31         (CL) SILTY CLAY, trace sand; grey; cohesive, w-PL to w>PL, very stiff to hard       249.65         (SM) SILTY SAND, some gravel; grey, nock fragments (TILL); non-cohesive, moist, very dense       0.60         - Auger grinding at about 5.8 m depth       0.60         (ML) sandy SILT, trace plastic fines; grey; non-cohesive, wet, compact to very dense       0.60         - Auger grinding from approximately 11.3 m to 12.2 m depths       0.90         - Auger grinding from approximately 11.3 m to 12.2 m depths       0.90         0       0       0         0       0       0         0       0       0         0       0       0         0       0       0         0       0       0         0       0       0         0       0       0         0       0       0 | Ground Surface         255.21           TOPSOIL         0.08           (CL) SILTY CLAY, some sand, trace gravel; brown, cohesive, w-PL to w>PL, hard         0.08           (CL) sandy SILTY CLAY, trace gravel; brown, oddative staining (TLL); non-cohesive, moist, dense         253.84           - Silt seams between approximately 2.3 m and 2.7 m depths         1.37           - Silt seams between approximately 2.3 m and 2.7 m depths         5           - Silt seams between approximately 2.3 m and 2.7 m depths         6           (CL) SILTY CLAY, trace sand; grey; cohesive, w-PL to w>PL, wry stiff to hard         6           (SM) SILTY SAND, some gravel; grey, nock fragments (TLL); non-cohesive, moist, very dense         7           (ML) sandy SILT, trace plastic fines; grey, nock fragments; mon-cohesive, wet, compact to very dense         7           (ML) sandy SILT, trace plastic fines; grey, non-cohesive, wet, compact to very dense         7           (SM/GM) SILTY SAND and GRAVEL, trace plastic fines; grey, noc-chesive, wet, compact to very dense         7           (SM/GM) SILTY SAND and GRAVEL, trace plastic fines; grey, noc-chesive, wet, compact to very dense         7           (SM/GM) SILTY SAND and GRAVEL, trace plastic fines; grey, noc-chesive, wet, compact to very dense         7           (SM/GM) SILTY SAND and GRAVEL, trace plastic fines; grey, noc-chesive, moist to wet, very dense         9           (SM/GM) SILTY SAND and GRAVEL, trace plastic fines; grey, noc-che | Ground Surface         255.21           (CL) SILTY CLAY, some sand, trace<br>gravel; brown; cohesive, w-PL to w-PL,<br>biff         0.08         1.4           (CL) sandy SILTY CLAY, trace gravel;<br>brown (TILL); cohesive, w-PL to w-PL,<br>hard         253.84         2         253.84           (SM) SILTY SAND, some gravel; brown,<br>oxidative staining (TILL); non-cohesive,<br>moist, dense         2         2         3         SS           - Silt seams between approximately<br>2.3 m and 2.7 m deptits         0         2         5         SS           (CL) SILTY CLAY, trace sand; grey,<br>rock fragments (TILL); non-cohesive,<br>moist, very dense         2         5         S           - Auger grinding at about 5.8 m depth<br>dense         2         2         SS           (ML) sandy SILTY SAND and GRAVEL,<br>trace plastic fines;<br>grey, non-cohesive, wet, compact to very<br>dense         7         SS           (ML) sandy SILTY SAND and GRAVEL,<br>trace plastic fines;<br>grey, non-cohesive, moist to wet, very dense         7         SS           (SMGM) SILTY SAND and GRAVEL,<br>trace plastic fines; grey, non-cohesive, moist to wet, very dense         7         9.94           (CL) statt TY SAND and GRAVEL,<br>trace plastic fines; grey, non-cohesive, moist to wet, very dense         7         9.94           (SMGM) SILTY SAND and GRAVEL,<br>trace plastic fines; grey, non-cohesive, moist to wet, very dense         7         9.94           (CL) statt TY SAND and GRAVEL,<br>trace pl | Ground Surface         255.21         I         I         I           (CL) SILTY CLAY, some sand, trace<br>gravel; brown; cohesive, w-PL to w-PL,<br>stiff         0.08         18         SS         457           (CL) SILTY CLAY, trace gravel;<br>brown (TILL); cohesive, w-PL to w-PL,<br>workit dense         253.84         1         1         1         2         SS         305           - Silf seams between approximately<br>2.3 m and 2.7 m depths         2         SS         4         SS         457           (CL) SILTY CAY, trace sand; grey;<br>cohesive, w-PL to w-PL, very stiff to<br>hard         5         SS         457           (CL) SILTY CAND, some gravel; grey;<br>most, very dense         5         SS         457           (ML) sandy SILT, trace plastic fines;<br>grey, non-cohesive, welt, compact to very<br>dense         5         SS         457           (ML) sandy SILT, trace plastic fines;<br>grey, non-cohesive, welt, compact to very<br>dense         5         6         SS         457           (ML) sandy SILTY SAND and GRAVEL,<br>trace plastic fines; grey, rock fragments;<br>non-cohesive, moist to wet, very dense         7         SS         457           (ML) sandy SILTY SAND and GRAVEL,<br>trace plastic fines; grey, rock fragments;<br>non-cohesive, moist to wet, very dense         7         SS         457           (ML) and VSILTY SAND and GRAVEL,<br>trace plastic fines; grey, rock fragments;<br>non-cohesive, moist to wet, very den | Ground Surface         255.21         I         I         I           TOPSOIL         (CL) SILTY CLAY, some sand, trace<br>gravel; brown; chesive, w-PL to w-PL,<br>stiff         0.08         18         SS         457         9           (CL) SILTY CLAY, trace gravel;<br>brown; (TLL); cohesive, w-PL to w-PL,<br>and         0.08         18         SS         457         9           (SM) SILTY SAND, some gravel; brown;<br>moist, dense         0.06         137         3         SS         457         4           - Silt seams between approximately<br>2.3 m and 2.7 m depths         2         SS         305         46           (CL) SILTY CLAY, trace sand; grey;<br>cohesive, w-PL to w-PL, very stiff to<br>hard         2         249.65         1         1           (SM) SILTY SAND, some gravel; grey;<br>moist, very dense         0         2         248.12         1         1           (ML) sandy SILT, trace plastic fines;<br>grey; non-cohesive, wel, compact to very<br>if         1         S         457         25.0           (SMGM) SILTY SAND and GRAVEL,<br>trace plastif fines; grey, non-cohesive, moist to wet, very dense         9         SS         76         5000           (SMGM) SILTY SAND and GRAVEL,<br>trace plastif fines; grey, non-cohesive, moist to wet, very dense         9         SS         78         10         SS         457         26      1 | Ground Surface         255.21         II         III         III         IIII         IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII | Ground Surface         255.21         H         I | Ground Surface         255.21         HA         HA         HA           TOPSOL         (CL) SILTY CLAY, isome sand, trace gravel; brown, cohesive, w-PL to w-PL, hard         18         58         457         9           (CL) SILTY CLAY, trace gravel; brown, cohesive, molist, dense         0         2         85         3         58         457         9           (SM) SILTY SAND, some gravel; brown, cohesive, molist, dense         0         2         5         6         5         5         5         6         5         5         5         5         5         5         6         5         5         5         6         5         5         5         6         5         5         5         5         5         5< | Ground Surface         265.21         NA         Image: Classical strategy and trace gravel, brown, cohesive, w-PL to w-PL, brow-PL to w-PL | Ground Surface         255.21         14         1 | Ground Surface         255.21         I <thi< th=""> <thi< th="">         I</thi<></thi<> | Ground Surface         255.21         14         - | Gound Surface         255.21         14         0 | Count Sufface         25.21         4         2         5 | Council Sufficient         265.21         Ha         A <td>Constant Surface         265.21         14         1         16<td>Constanting         28.21         1.4         28.21         1.4         28.21         1.4         28.21         1.4         28.21         1.4         28.21         1.4         28.21         1.4         1.5         28.21         1.4         28.21         1.4         28.21         1.4         28.21         1.4         28.21         1.4         28.21         1.4         1.5         28.21         1.4         1.5         28.21         1.4         1.5         28.21         1.5</td><td>Built 2         255 21         1         10</td><td>Groupsel<br/>(CL) SITY CLAY ions and i trans<br/>gravet. Ionson controlses w-PL to wPL,<br/>and<br/>(CL) and SLI Y CLAY ions gravet.<br/>Hand<br/>(L) controlses w-PL to wPL,<br/>and<br/>(CL) and SLI Y CLAY ions gravet.<br/>Hand<br/>(L) controlses w-PL to wPL,<br/>and<br/>(CL) and SLI Y CLAY ions gravet.<br/>Hand<br/>(L) controlses w-PL to wPL,<br/>and<br/>(CL) and SLI Y CLAY ions gravet.<br/>Hand<br/>(L) controlses w-PL to wPL,<br/>we place interval<br/>codel with staining (TLL), non-cohesive,<br/>mod. denies<br/>(CL) SITY CLAY ions gravet.<br/>Hand<br/>(CL) SITY CLAY ions gravet.<br/>Hand<br/>(CL) SITY CLAY ions gravet.<br/>Hand<br/>(CL) SITY CLAY ions gravet.<br/>Hand<br/>(CL) SITY CLAY ions for denies<br/>(CL) SITY CLAY ions and gravet.<br/>SIT scarms between approximately<br/>22.3 m and 2.7 m degfts         28.5<br/>(CL) SITY CLAY ions for degravet.<br/>SIT scarms between approximately<br/>(CL) SITY CLAY ions for degravet.<br/>SIT scarms between approximately<br/>ions for ions in the w-PL, we yield to<br/>mate to yield ions for degravet.<br/>SIT scarms between approximately<br/>(CL) SITY CLAY ions for degravet.<br/>SIT scarms between approximately<br/>ions for ions for degravet.<br/>SIT scarms between approximately<br/>ions for ions for degravet.<br/>SIT scarms between approximately<br/>ions for ions for degravet.<br/>SIT scarms between approximately<br/>ions for ions for degravet.<br/>SIT scarms between approximately<br/>ions for ions for degravet.<br/>SIT scarms between approximately<br/>ions for ions for degravet.<br/>SIT scarms between approximately<br/>ions for ions for degravet.<br/>SIT scarms between approximately<br/>ions for ions for degravet.<br/>SIT scarms between approximately<br/>ions for ions for degravet.<br/>SIT scarms between approximately<br/>ions for ions for degravet.<br/>SIT scarms between approximately<br/>ions for ions for degravet.<br/>SIT scarms between approximately<br/>ions for ions for degravet.<br/>SIT scarms between approximately<br/>ions for ions for degravet.<br/>SIT scarms between approximately<br/>ions for ions for ions for degravet.<br/>SIT scarms between approximately<br/>ions for ions /td><td>Promot Sumsor         25.21         N</td><td>Decomposition         283-21         A</td></td> | Constant Surface         265.21         14         1         16 <td>Constanting         28.21         1.4         28.21         1.4         28.21         1.4         28.21         1.4         28.21         1.4         28.21         1.4         28.21         1.4         1.5         28.21         1.4         28.21         1.4         28.21         1.4         28.21         1.4         28.21         1.4         28.21         1.4         1.5         28.21         1.4         1.5         28.21         1.4         1.5         28.21         1.5</td> <td>Built 2         255 21         1         10</td> <td>Groupsel<br/>(CL) SITY CLAY ions and i trans<br/>gravet. Ionson controlses w-PL to wPL,<br/>and<br/>(CL) and SLI Y CLAY ions gravet.<br/>Hand<br/>(L) controlses w-PL to wPL,<br/>and<br/>(CL) and SLI Y CLAY ions gravet.<br/>Hand<br/>(L) controlses w-PL to wPL,<br/>and<br/>(CL) and SLI Y CLAY ions gravet.<br/>Hand<br/>(L) controlses w-PL to wPL,<br/>and<br/>(CL) and SLI Y CLAY ions gravet.<br/>Hand<br/>(L) controlses w-PL to wPL,<br/>we place interval<br/>codel with staining (TLL), non-cohesive,<br/>mod. denies<br/>(CL) SITY CLAY ions gravet.<br/>Hand<br/>(CL) SITY CLAY ions gravet.<br/>Hand<br/>(CL) SITY CLAY ions gravet.<br/>Hand<br/>(CL) SITY CLAY ions gravet.<br/>Hand<br/>(CL) SITY CLAY ions for denies<br/>(CL) SITY CLAY ions and gravet.<br/>SIT scarms between approximately<br/>22.3 m and 2.7 m degfts         28.5<br/>(CL) SITY CLAY ions for degravet.<br/>SIT scarms between approximately<br/>(CL) SITY CLAY ions for degravet.<br/>SIT scarms between approximately<br/>ions for ions in the w-PL, we yield to<br/>mate to yield ions for degravet.<br/>SIT scarms between approximately<br/>(CL) SITY CLAY ions for degravet.<br/>SIT scarms between approximately<br/>ions for ions for degravet.<br/>SIT scarms between approximately<br/>ions for ions for degravet.<br/>SIT scarms between approximately<br/>ions for ions for degravet.<br/>SIT scarms between approximately<br/>ions for ions for degravet.<br/>SIT scarms between approximately<br/>ions for ions for degravet.<br/>SIT scarms between approximately<br/>ions for ions for degravet.<br/>SIT scarms between approximately<br/>ions for ions for degravet.<br/>SIT scarms between approximately<br/>ions for ions for degravet.<br/>SIT scarms between approximately<br/>ions for ions for degravet.<br/>SIT scarms between approximately<br/>ions for ions for degravet.<br/>SIT scarms between approximately<br/>ions for ions for degravet.<br/>SIT scarms between approximately<br/>ions for ions for degravet.<br/>SIT scarms between approximately<br/>ions for ions for degravet.<br/>SIT scarms between approximately<br/>ions for ions for ions for degravet.<br/>SIT scarms between approximately<br/>ions for ions /td> <td>Promot Sumsor         25.21         N</td> <td>Decomposition         283-21         A</td> | Constanting         28.21         1.4         28.21         1.4         28.21         1.4         28.21         1.4         28.21         1.4         28.21         1.4         28.21         1.4         1.5         28.21         1.4         28.21         1.4         28.21         1.4         28.21         1.4         28.21         1.4         28.21         1.4         1.5         28.21         1.4         1.5         28.21         1.4         1.5         28.21         1.5 | Built 2         255 21         1         10 | Groupsel<br>(CL) SITY CLAY ions and i trans<br>gravet. Ionson controlses w-PL to wPL,<br>and<br>(CL) and SLI Y CLAY ions gravet.<br>Hand<br>(L) controlses w-PL to wPL,<br>and<br>(CL) and SLI Y CLAY ions gravet.<br>Hand<br>(L) controlses w-PL to wPL,<br>and<br>(CL) and SLI Y CLAY ions gravet.<br>Hand<br>(L) controlses w-PL to wPL,<br>and<br>(CL) and SLI Y CLAY ions gravet.<br>Hand<br>(L) controlses w-PL to wPL,<br>we place interval<br>codel with staining (TLL), non-cohesive,<br>mod. denies<br>(CL) SITY CLAY ions gravet.<br>Hand<br>(CL) SITY CLAY ions gravet.<br>Hand<br>(CL) SITY CLAY ions gravet.<br>Hand<br>(CL) SITY CLAY ions gravet.<br>Hand<br>(CL) SITY CLAY ions for denies<br>(CL) SITY CLAY ions and gravet.<br>SIT scarms between approximately<br>22.3 m and 2.7 m degfts         28.5<br>(CL) SITY CLAY ions for degravet.<br>SIT scarms between approximately<br>(CL) SITY CLAY ions for degravet.<br>SIT scarms between approximately<br>ions for ions in the w-PL, we yield to<br>mate to yield ions for degravet.<br>SIT scarms between approximately<br>(CL) SITY CLAY ions for degravet.<br>SIT scarms between approximately<br>ions for ions for degravet.<br>SIT scarms between approximately<br>ions for ions for degravet.<br>SIT scarms between approximately<br>ions for ions for degravet.<br>SIT scarms between approximately<br>ions for ions for degravet.<br>SIT scarms between approximately<br>ions for ions for degravet.<br>SIT scarms between approximately<br>ions for ions for degravet.<br>SIT scarms between approximately<br>ions for ions for degravet.<br>SIT scarms between approximately<br>ions for ions for degravet.<br>SIT scarms between approximately<br>ions for ions for degravet.<br>SIT scarms between approximately<br>ions for ions for degravet.<br>SIT scarms between approximately<br>ions for ions for degravet.<br>SIT scarms between approximately<br>ions for ions for degravet.<br>SIT scarms between approximately<br>ions for ions for degravet.<br>SIT scarms between approximately<br>ions for ions for ions for degravet.<br>SIT scarms between approximately<br>ions for ions | Promot Sumsor         25.21         N | Decomposition         283-21         A |

### **RECORD OF BOREHOLE BH23-28D**

 CLIENT:
 Mayfield Golf Course Inc.

 PROJECT:
 Mayfield Golf Course - Detailed Investigation

 JOB#:
 101987.001

SHEET:2 OF 2DATUM:CGVD28BORING DATE:Mar 1 2023

| SALE   | THOD          | SOIL PROFILE  | ⊢ ⊢         |                         |        | SAN  | IPLES           |            | ● <sup>PE</sup> <sub>RE</sub>         | NETR/<br>SISTA                        | TION<br>NCE (N | ), BLO\   | VS/0.3r                               | s⊦<br>n +1             | IEAR S<br>NATUR/ | TRENC<br>AL⊕I | GTH (<br>REMO | Cu), kP<br>DULDED                | A<br>ING<br>ING            | PIEZOMETER                  |
|--|---------------|---|-------------|-------------------------|--------|------|-----------------|------------|---------------------------------------|---------------------------------------|----------------|-----------|---------------------------------------|------------------------|------------------|---------------|---------------|----------------------------------|----------------------------|-----------------------------|
| UEPTH SCALE<br>METRES  | BORING METHOD | DESCRIPTION   | STRATA PLOT | ELEV.<br>DEPTH<br>(m)   | NUMBER | TYPE | RECOVERY,<br>mm | BLOWS/0.3m |                                       |                                       | PENE<br>NCE, B |           |                                       | W <sub>1</sub><br>60 6 |                  | 0             |               | т, %<br>——  W <sub>L</sub><br>90 | ADDITIONAL<br>LAB. TESTING | STANDPIPE<br>INSTALLATION   |
| 14   | T             |   | S           |                         |        |      |                 |            |                                       |                                       |                |           |                                       |                        |                  |               |               |                                  |                            |                             |
| • 14 -   |               |   | 000         |                         |        |      |                 |            |                                       |                                       |                |           |                                       |                        |                  |               |               |                                  |                            | Caved material              |
|  |               |   | 0.000       |                         |        |      |                 |            |                                       |                                       |                |           |                                       |                        |                  |               |               |                                  |                            | Caved material              |
| 15   |               |   | 000         |                         |        |      |                 |            |                                       |                                       |                |           |                                       |                        |                  |               |               |                                  | :                          |                             |
|  |               |   |             |                         | 13     | SS   | 254             | 50/0.      | 3 ()                                  |                                       |                |           |                                       |                        |                  |               |               |                                  | :                          |                             |
| 16   |               |   |             |                         |        |      |                 |            |                                       | · · · · · · · · · · · · · · · · · · · |                |           |                                       |                        |                  |               |               |                                  | ·<br>·                     |                             |
|  |               |   | 0.0.0       |                         |        |      |                 |            |                                       |                                       |                |           |                                       |                        |                  |               |               |                                  | :                          |                             |
|  |               |   | 000         |                         | 14     | SS   | 102             | 50/0.      | 20 O                                  |                                       |                |           |                                       |                        |                  |               |               |                                  | :                          | 50mm dia. well              |
| 17   |               |   |             |                         |        |      |                 |            |                                       | · · · · · · · · · · · · · · · · · · · |                |           |                                       |                        |                  |               |               |                                  | <u>.</u>                   |                             |
|  |               | (CL) SILTY CLAY, trace sand; grey,  |             | 2 <u>37.63</u><br>17.58 |        |      |                 |            |                                       |                                       |                |           |                                       |                        |                  |               |               |                                  | :                          | 50mm dia. well<br>screen    |
| 18   |               | shale fragments; cohesive, w~PL to w>PL, hard   |             |                         |        |      |                 |            |                                       |                                       |                |           |                                       |                        | <br> <br>        |               |               |                                  | ·<br>·                     |                             |
| ŀ  | +             | End of Borehole   | μιπι        | 2 <u>36.87</u><br>18.34 | 15     | SS   | 51              | 50/0.      | <b>0</b> 5                            | O                                     |                |           |                                       |                        |                  |               |               |                                  | :                          |                             |
| 19   |               | Notes:  |             |                         |        |      |                 |            |                                       | · · · · ·                             |                |           |                                       |                        |                  |               |               |                                  | :                          |                             |
|  |               | 1. Borehole started on Mar 1, 2023 and completed on Mar 2, 2023.  |             |                         |        |      |                 |            |                                       |                                       |                |           |                                       |                        |                  |               |               |                                  | :                          |                             |
|  |               | <ol> <li>Groundwater encountered at about</li> <li>7.6 m depth during drilling.</li> </ol>  |             |                         |        |      |                 |            |                                       |                                       |                |           |                                       |                        |                  |               |               |                                  | :                          |                             |
| 20   |               | 3. Inferred bedrock contact at 18.3 m   |             |                         |        |      |                 |            | · · · · · · · · · · · · · · · · · · · | · · · · ·                             |                | · · · · · | · · · · ·                             |                        |                  | · · · · ·     |               |                                  | ·<br>·<br>·                |                             |
| 21   |               | depth based on spoon refusal.<br>4. Groundwater observed flowing above<br>surface on March 2, 2023 prior to<br>resuming drilling. |             |                         |        |      |                 |            |                                       |                                       |                |           |                                       |                        |                  |               |               |                                  | •                          |                             |
|  |               | 5. Initial hole backfilled with grout prior to  |             |                         |        |      |                 |            |                                       |                                       |                |           |                                       |                        |                  |               |               |                                  | :                          |                             |
|  |               | drilling additional boreholes within<br>approximately 2 m of original location for<br>well installations.                         |             |                         |        |      |                 |            |                                       |                                       |                |           |                                       |                        |                  |               |               |                                  |                            |                             |
| 22   |               | 6. Piezometer installed as shown upon   |             |                         |        |      |                 |            | · · · · ·                             | · · · · ·                             |                |           | · · · · ·                             |                        | · · · · ·        |               |               |                                  | •<br>•<br>•<br>•           |                             |
|  |               | completion of drilling.   |             |                         |        |      |                 |            |                                       |                                       |                |           |                                       |                        |                  |               |               |                                  | :                          |                             |
| 23   |               | 7. The groundwater was observed<br>flowing out of the top of the monitoring<br>well on May 18, 2023. The top of the               |             |                         |        |      |                 |            |                                       |                                       |                |           |                                       |                        |                  |               |               |                                  | <u>:</u>                   |                             |
|  |               | well casing is located about 1 m above ground surface.  |             |                         |        |      |                 |            |                                       |                                       |                |           |                                       |                        |                  |               |               |                                  |                            |                             |
| 24   |               |   |             |                         |        |      |                 |            |                                       |                                       |                |           |                                       |                        |                  |               |               |                                  | · · ·                      |                             |
|  |               |   |             |                         |        |      |                 |            |                                       |                                       |                |           |                                       |                        |                  |               |               |                                  |                            |                             |
|  |               |   |             |                         |        |      |                 |            |                                       |                                       |                |           |                                       |                        |                  |               |               |                                  |                            |                             |
| 25   |               |   |             |                         |        |      |                 |            |                                       |                                       |                |           |                                       |                        |                  |               |               |                                  |                            |                             |
|  |               |   |             |                         |        |      |                 |            |                                       |                                       |                |           |                                       |                        |                  |               |               |                                  | :                          |                             |
| 26   |               |   |             |                         |        |      |                 |            |                                       |                                       |                |           |                                       |                        |                  |               |               |                                  | :                          |                             |
|  |               |   |             |                         |        |      |                 |            |                                       |                                       |                |           |                                       |                        |                  |               |               |                                  |                            |                             |
| 27   |               |   |             |                         |        |      |                 |            |                                       |                                       |                |           |                                       |                        |                  |               |               |                                  | :                          | GROUNDWATER<br>OBSERVATIONS |
|  |               |   |             |                         |        |      |                 |            |                                       |                                       |                |           | · · · · · · · · · · · · · · · · · · · |                        |                  |               |               |                                  |                            | DATE DEPTH E                |
|  |               |   |             |                         |        |      |                 |            |                                       |                                       |                |           |                                       |                        |                  |               |               |                                  |                            | 23/05/18 -1.0 💆 2           |
| <ul> <li>24</li> <li>25</li> <li>26</li> <li>27</li> <li>28</li> </ul> |               |   |             |                         |        |      |                 |            |                                       |                                       |                |           |                                       |                        |                  |               |               |                                  | :                          |                             |
| -  | 0             | SEMTEC  |             |                         |        |      |                 |            |                                       |                                       |                |           |                                       |                        |                  |               |               |                                  | LOGO                       | GED: AS                     |

| RECORD | OF | BORE | IOLE | BH23-28 | S |
|--------|----|------|------|---------|---|
|--------|----|------|------|---------|---|

 CLIENT:
 Mayfield Golf Course Inc.

 PROJECT:
 Mayfield Golf Course - Detailed Investigation

 JOB#:
 101987.001

LOCATION: See Borehole Location Plan

| SHEET:       | 1 OF 1     |
|--------------|------------|
| DATUM:       | CGVD28     |
| BORING DATE: | Mar 1 2023 |

| N L                        | THOD          | SOIL PROFILE   | L F              |                        |        | SAM  | PLES            |            | ● PE<br>RE                            | NETR/<br>SISTA | ATION<br>NCE (N | ), BLO | WS/0              | .3m |                                       |                                       | rreng<br>∿L⊕F                         |                    | D   | ING                        |                  | ZOMET                           | IEB |
|----------------------------|---------------|--|------------------|------------------------|--------|------|-----------------|------------|---------------------------------------|----------------|-----------------|--------|-------------------|-----|---------------------------------------|---------------------------------------|---------------------------------------|--------------------|-----|----------------------------|------------------|---------------------------------|-----|
| METRES                     | BORING METHOD | DESCRIPTION  | STRATA PLOT      | ELEV.<br>DEPTH<br>(m)  | NUMBER | ТҮРЕ | RECOVERY,<br>mm | BLOWS/0.3m | RE                                    | SISTA          | PENE<br>NCE, B  | LOWS   | DN<br>/0.3m<br>40 | 50  | ۷<br>W <sub>P</sub><br>60             |                                       | R CON<br>W<br>O                       | <br>%<br>  W<br>90 | Ĺ   | ADDITIONAL<br>LAB. TESTING | ST               | ONE I<br>OF<br>ANDPIF<br>TALLAT | PE  |
| 0                          |               | Ground Surface   |                  | 255.32                 | 1.0    |      |                 |            |                                       |                |                 |        |                   |     |                                       |                                       |                                       |                    | : : |                            | Monu             | ument                           |     |
| Ŭ                          |               | TOPSOIL<br>(CL) SILTY CLAY, some sand, trace<br>gravel; brown; cohesive, w~PL to w>PL,<br>stiff        |                  | 0.08<br>254.63<br>0.69 | 1B     | SS   | 457             | 9          |                                       | Ó              |                 |        |                   |     |                                       | · · · · · · · · · · · · · · · · · · · |                                       |                    |     |                            |                  |                                 |     |
| 1                          |               | (CL) sandy SILTY CLAY, trace gravel;<br>brown (TILL); cohesive, w~PL to w>PL,<br>hard                  |                  |                        | 2      | SS   | 305             | 36         |                                       | Ö              |                 | ٠      |                   |     |                                       | · · · · · ·                           | · · · · · · · · · · · · · · · · · · · |                    |     |                            |                  |                                 |     |
| 2                          |               | (SM) SILTY SAND, some gravel; brown,<br>oxidative staining (TILL); non-cohesive,<br>moist, dense       |                  | 253.95<br>1.37         | 3      | SS   | 457             | 43         | C                                     |                |                 |        |                   |     | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |                                       |                    |     |                            |                  |                                 |     |
| 2                          |               | - Silt seams between approximately 2.3 m and 2.7 m depths  | 0<br>0<br>0<br>0 |                        | 4      | SS   | 305             | 46         |                                       | >              |                 |        |                   |     |                                       | · · · · · · · · · · · · · · · · · · · |                                       |                    |     |                            |                  |                                 |     |
| 3                          |               | (CL) SILTY CLAY, trace sand; grey;   |                  | 252.42<br>2.90         |        |      |                 |            | · · · · · · · · · · · · · · · · · · · |                |                 |        |                   |     |                                       | · · · · ·                             | · · · · · · · · · · · · · · · · · · · |                    |     |                            |                  |                                 |     |
|                            |               | cohesive, w~PL to w>PL, very stiff to<br>hard  |                  |                        | 5      | SS   | 457             | 42         |                                       | Ô.             |                 |        | •                 |     |                                       |                                       |                                       |                    |     |                            | Ben              | tonite                          |     |
| 4                          |               |  |                  |                        |        |      |                 |            | · · · · · · · · · · · · · · · · · · · |                |                 |        |                   |     |                                       | · · · · · ·                           |                                       |                    |     |                            |                  |                                 |     |
| 5                          |               |  |                  |                        | 6      | SS   | 457             | 29         |                                       |                |                 |        |                   |     |                                       | · · · · ·                             |                                       |                    |     |                            |                  |                                 |     |
| -                          |               | (SM) SILTY SAND, some gravel; grey, rock fragments (TILL); non-cohesive,                               | 0                | 249.76<br>5.56         |        |      |                 |            |                                       |                |                 |        |                   |     |                                       | · · · · · · · · · · · · · · · · · · · |                                       |                    |     |                            |                  |                                 |     |
| 6                          |               | rock fragments (TILL); non-cohesive,<br>moist, very dense  | 0                |                        |        |      |                 |            |                                       |                |                 |        |                   |     |                                       | · · · · ·                             |                                       |                    |     |                            |                  |                                 |     |
|                            |               | - Auger grinding at about 5.8 m depth  | 0°C              |                        | 7      | SS   | 457             | 95/0.:     | 28 Q                                  |                |                 |        |                   |     |                                       | · · · · · ·                           |                                       |                    |     |                            |                  |                                 |     |
| 7                          |               | (ML) sandy SILT, trace plastic fines;<br>grey; non-cohesive, wet, compact to very<br>dense             |                  | 248.23<br>7.09         |        |      |                 |            |                                       |                |                 |        |                   |     | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |                                       |                    |     |                            | Filter           | sand .                          |     |
| 8                          |               |  |                  |                        | 8      | SS   | 457             | 25         |                                       |                |                 |        |                   |     |                                       |                                       |                                       |                    |     | MH                         |                  |                                 |     |
|                            |               |  |                  |                        |        |      |                 |            | · · · · · · · · · · · · · · · · · · · |                |                 |        |                   |     | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |                                       |                    |     |                            | 50mm dia<br>so   | . well :<br>creen :             |     |
| 9                          |               | End of Borehole  |                  | 246.18<br>9.14         |        |      |                 |            | · · · · · · · · · · · · · · · · · · · |                |                 |        |                   |     |                                       |                                       |                                       |                    |     |                            |                  | •                               | Ē   |
| 10                         |               | Notes:<br>1. Piezometer installed as shown upon  |                  |                        |        |      |                 |            |                                       |                |                 |        |                   |     |                                       |                                       |                                       | <br>               |     |                            |                  |                                 |     |
| 10                         |               | completion of drilling.<br>2. The groundwater was observed<br>flowing out of the top of the monitoring |                  |                        |        |      |                 |            |                                       |                |                 |        |                   |     |                                       |                                       |                                       |                    |     |                            |                  |                                 |     |
| 11                         |               | well casing is located about 1 m above<br>ground surface.  |                  |                        |        |      |                 |            |                                       |                |                 |        |                   |     |                                       | · · · · · ·                           |                                       |                    |     |                            |                  |                                 |     |
|                            |               | <ol> <li>Subsurface conditions based on<br/>borehole BH23-28D.</li> </ol>                              |                  |                        |        |      |                 |            |                                       |                |                 |        |                   |     |                                       | · · · · · · · · · · · · · · · · · · · |                                       |                    |     |                            |                  |                                 |     |
| 12                         |               |  |                  |                        |        |      |                 |            |                                       |                |                 |        |                   |     |                                       | · · · · · ·                           |                                       |                    |     |                            |                  |                                 |     |
| 13                         |               |  |                  |                        |        |      |                 |            |                                       |                |                 |        |                   |     |                                       |                                       |                                       |                    |     |                            | GRC              | UNDWAT                          | TEF |
| 10<br>11<br>12<br>13<br>14 |               |  |                  |                        |        |      |                 |            |                                       |                |                 |        |                   |     |                                       |                                       |                                       |                    |     |                            | DATE<br>23/05/18 | DEPTH<br>(m)<br>-1.0            | +   |
| 14                         |               |  |                  |                        |        |      |                 |            |                                       |                |                 |        |                   |     |                                       |                                       |                                       |                    |     |                            |                  |                                 | +   |

|        | THOD                  | SOIL PROFILE  |             |                       | ┢ | SAN  | IPLES           |            | ●R                                    | ENE         | TRA                                     | TION<br>ICE (N | I), BLO     | )<br>DWS/                             | /0.3m                                 |                                       | IEAR :<br>NATUF                       |                                       |                                       |                                       | NG                                    |  |     |
|--------|-----------------------|---|-------------|-----------------------|---|------|-----------------|------------|---------------------------------------|-------------|---|----------------|-------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|--|-----|
|        | BORING METHOD         | DESCRIPTION   | STRATA PLOT | ELEV<br>DEPTI<br>(m)  |   | ТҮРЕ | RECOVERY,<br>mm | BLOWS/0.3m | <b>▲</b> <sup>D</sup> <sub>R</sub>    | YNA<br>ESIS | MIC<br>TAN<br>2                         | PENE<br>ICE, B | TRAT<br>LOW | ION<br>S/0.3r<br>40                   | m<br>5                                | W<br>D (                              |                                       |                                       |                                       | %<br>  w <sub>∟</sub><br>90           | ADDITIONAL<br>LAB. TESTING            | PIEZOME <sup>-</sup><br>OR<br>STANDPI<br>INSTALLAT                 | IPE |
| ,      |                       | Ground Surface  |             | 254.51                |   |      |                 |            |                                       |             |   |                | :::         | : ::                                  |                                       |                                       |                                       | : :                                   |                                       | :::                                   | :                                     | Flush Mount  |     |
|        |                       | CONCRETE<br>(CL) SILTY CLAY, trace to some sand,<br>trace gravel; brown; cohesive, w~PL to<br>w>PL, stiff to very stiff             |             | <u>254.18</u><br>0.33 | 1 | SS   | 127             | 9          |                                       | •           |   |                |             |                                       | · · · · · · · · · · · · · · · · · · · |                                       |                                       |                                       |                                       |                                       | Combusti<br>Gas<br>Reading<br>5 ppm   |  |     |
|        |                       | - Organic inclusions above about 0.6 m  |             |                       | 2 | SS   | 203             | 17         |                                       |             |   | Ö              |             |                                       |                                       |                                       |                                       |                                       |                                       |                                       | 5 ppm                                 | Ţ  |     |
| 2      |                       |   |             |                       | 3 | SS   | 305             | 15         | · · · · · · · · · · · · · · · · · · · |             |   | 0              |             | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |                                       |                                       | · · · · · · · · · · · · · · · · · · · |                                       | · · · · · · · · · · · · · · · · · · · | 0 ppm                                 | Bentonite  |     |
|        |                       | - Contains silty sand seams from approximately 2.3 m to 2.7 m depths  |             |                       | 4 | SS   | 610             | 20         |                                       |             | Q                                       |                |             |                                       |                                       |                                       |                                       | • • •                                 |                                       |                                       | 0 ppm                                 |  |     |
| 8      | 10mm OD)              |   |             |                       | 5 | SS   | 254             | 19         |                                       |             |   |                |             |                                       | · · · · · · · · · · · · · · · · · · · |                                       |                                       | · · · · · · · · · · · · · · · · · · · |                                       | · · · · · · · · · · · · · · · · · · · | 0 ppm                                 |  |     |
|        | Stem Auger (210mm OD) | (CL) sandy SILTY CLAY, trace gravel;<br>grey (TILL); cohesive, w~PL to w>PL,  |             | 250.40<br>4.11        | _ |      |                 |            |                                       |             | ••••                                    |                |             |                                       |                                       |                                       |                                       | · · ·                                 |                                       |                                       | •<br>•<br>•<br>•<br>•<br>•            | :<br>Filter sand   |     |
| i<br>S | Hollow Sterr          | very stiff  |             |                       | 6 | SS   | 610             | 20         |                                       | 0           |   |                |             |                                       |                                       |                                       |                                       |                                       |                                       |                                       | 5 ppm                                 |  |     |
| 5      |                       | └<br>(CL) SILTY CLAY, some sand; grey;<br>cohesive, w~PL to w>PL, very stiff  |             | 248.87<br>5.64        |   |      |                 |            |                                       |             |   |                |             |                                       |                                       | · · · · · · · · · · · · · · · · · · · |                                       |                                       | · · · · · · · · · · · · · · · · · · · |                                       |                                       |  |     |
| Ϊ      |                       |   |             |                       | 7 | SS   | 610             | 17         |                                       |             |   | 0              |             |                                       |                                       |                                       |                                       |                                       |                                       | · · · · · · · · · · · · · · · · · · · | 5 ppm                                 | 50mm dia. well screen  |     |
| ,      |                       | (ML) sandy SILT, trace gravel; grey<br>(TILL); non-cohesive, moist, very dense  | 0           | <u>247.35</u><br>7.16 |   |      |                 |            | · · · · · · · · · · · · · · · · · · · |             |   |                |             |                                       |                                       |                                       | · · · · · · · · · · · · · · · · · · · |                                       |                                       |                                       | · · · · · · · · · · · · · · · · · · · |  |     |
| 3      |                       |   |             | 246.28                | 8 | SS   | 381             | 86         |                                       | 0           |   |                |             |                                       |                                       |                                       |                                       |                                       |                                       |                                       | 0 ppm                                 | :<br>Filter sand   | Ę   |
|        |                       | End of Borehole<br>Notes:   |             | 8.23                  |   |      |                 |            |                                       |             | ••••                                    |                |             |                                       |                                       |                                       |                                       |                                       | · · · · · · · · · · · · · · · · · · · |                                       |                                       |  | _   |
| )      |                       | Borehole Started Feb 8, 2023 and<br>completed on Feb 10, 2023.     Borehole dry upon completion of                                  |             |                       |   |      |                 |            |                                       |             |   |                |             |                                       |                                       |                                       |                                       |                                       |                                       |                                       |                                       |  |     |
| )      |                       | drilling.<br>3. Piezometer installed as shown upon<br>completing of drilling.   |             |                       |   |      |                 |            |                                       |             |   |                |             |                                       |                                       |                                       |                                       |                                       |                                       |                                       |                                       |  |     |
|        |                       | 4. Groundwater level measured in<br>installed monitoring well on May 18,<br>2023 at a depth of about 1.1 m below<br>ground surface. |             |                       |   |      |                 |            |                                       |             |   |                |             |                                       |                                       |                                       |                                       |                                       |                                       |                                       |                                       |  |     |
|        |                       |   |             |                       |   |      |                 |            | · · · · · · · · · · · · · · · · · · · |             | ••••••••••••••••••••••••••••••••••••••• |                |             |                                       |                                       |                                       |                                       |                                       |                                       |                                       |                                       |  |     |
| 2      |                       |   |             |                       |   |      |                 |            | · · · · · · · · · · · · · · · · · · · |             |   |                |             |                                       |                                       |                                       |                                       |                                       |                                       |                                       |                                       | 000/11-11  |     |
| 3      |                       |   |             |                       |   |      |                 |            |                                       |             |   |                |             |                                       |                                       |                                       |                                       |                                       |                                       |                                       |                                       | GROUNDWA<br>OBSERVATI<br>DATE DEPTH<br>(m)<br>23/05/18 1.1 <u></u> |     |

**RECORD OF BOREHOLE BH23-E1** 

| <b>RECORD OF BOREHOLE BH23-E2</b> |
|-----------------------------------|
|-----------------------------------|

 CLIENT:
 Mayfield Golf Course Inc.

 PROJECT:
 Mayfield Golf Course - Detailed Investigation

 JOB#:
 101987.001

 LOCATION:
 See Borehole Location Plan

SHEET:1 OF 1DATUM:CGVD28BORING DATE:Feb 7 2023

| ALE *                                | <u>дон.</u>                          | SOIL PROFILE  |             | -                     |        | SAM  | PLES            | -          | ●F | PENE                                  | TRA<br>STAI                           | ATION<br>NCE (N | I), BLC                               | ows                                   | 5/0.3m                                | SH<br>+N       | EAR S<br>IATUR/                       | TRENG<br>AL ⊕ F | STH (C<br>REMOL | u), kPA<br>JLDED | RGAL                       |   |    |
|--------------------------------------|--------------------------------------|---|-------------|-----------------------|--------|------|-----------------|------------|----|---------------------------------------|---------------------------------------|-----------------|---------------------------------------|---------------------------------------|---------------------------------------|----------------|---------------------------------------|-----------------|-----------------|------------------|----------------------------|---|----|
| DEPTH SCALE<br>METRES                | BORING METHOD                        | DESCRIPTION   | STRATA PLOT | ELEV.<br>DEPTH<br>(m) | NUMBER | ТҮРЕ | RECOVERY,<br>mm | BLOWS/0.3m | ,  | אעער                                  | AMIC<br>STAI                          | PENE<br>NCE, B  | TRAT                                  |                                       |                                       | W <sub>F</sub> | WATE                                  | R CON<br>W      | TENT,           |                  | ADDITIONAL<br>LAB. TESTING | PIEZOME<br>OR<br>STANDPI<br>INSTALLA      | PE |
|                                      |                                      | Ground Surface  | 0,          | 254.01                |        |      |                 |            |    | : :                                   |                                       |                 |                                       | : :                                   |                                       |                |                                       |                 |                 |                  |                            | Flush Mount                               |    |
| - 0                                  |                                      | FILL - (GP) sandy GRAVEL, trace<br>non-plastic fines; brown; non-cohesive,<br>moist, compact  |             | 253.32<br>0.69        | 1      | SS   | 178             | 17         |    |                                       | ٠                                     |                 | · · · · · · · · · · · · · · · · · · · |                                       |                                       |                |                                       |                 |                 | C                | mbusti<br>Gas<br>eading    | <b>s</b> :                                | 8  |
| • 1                                  |                                      | (CL) SILTY CLAY, trace to some sand,<br>trace gravel; brown; cohesive, w~PL to<br>w>PL, firm to hard  |             | 0.69                  | 2      | SS   | 203             | 7          |    |                                       | · · · · · · · · · · · · · · · · · · · | 0               | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |                | · · · · · · · · · · · · · · · · · · · |                 |                 |                  | 5 ppm<br>0 ppm             |   |    |
| - 2                                  |                                      | - Organic inclusions between<br>approximately 0.8 m and 1.4 m depths  |             |                       | 3      | SS   | 356             | 20         |    | · · · · · · · · · · · · · · · · · · · | 0                                     |                 |                                       | · · · · · · · · · · · · · · · · · · · |                                       |                |                                       |                 |                 |                  | 0 ppm                      |   |    |
|                                      |                                      |   |             |                       | 4      | SS   | 508             | 29         |    | · · · · · · · · · · · · · · · · · · · | 0                                     |                 |                                       | · · · · · · · · · · · · · · · · · · · |                                       |                |                                       |                 |                 |                  | 0 ppm                      |   |    |
| - 3                                  | (DO mm                               |   |             |                       | 5      | SS   | 610             | 36         |    | <u> </u>                              | <u></u><br><br>                       |                 |                                       | · · · · · · · · · · · · · · · · · · · |                                       |                | · · · · · · · · · · · · · · · · · · · |                 |                 |                  | 0 ppm                      |   |    |
| • 4                                  | Power Auger<br>Stem Auger (210mm OD) |   |             |                       |        |      |                 |            |    |                                       | · · · · · · · · · · · · · · · · · · · |                 |                                       |                                       |                                       |                |                                       |                 |                 |                  | -                          | Filter sand                               |    |
| - 5                                  | Pow<br>Hollow Stem /                 |   |             |                       | 6      | SS   | 610             | 22         |    |                                       | Q                                     | •               |                                       | · · · · · · · · · · · · · · · · · · · |                                       |                |                                       |                 |                 |                  | 0 ppm                      |   |    |
| 5                                    | 면                                    |   |             |                       |        |      |                 |            |    |                                       |                                       |                 |                                       |                                       |                                       |                |                                       |                 |                 |                  |                            |   |    |
| 6                                    |                                      |   |             |                       | 7      | SS   | 356             | 13         |    |                                       | <u></u>                               |                 |                                       | · · · · · · · · · · · · · · · · · · · |                                       |                | · · · · · · · · · · · · · · · · · · · |                 |                 |                  | 3 ppm                      | 50mm dia. well<br>screen                  |    |
| - 7                                  |                                      |   |             | 246.85<br>7.16        |        |      |                 |            |    |                                       | · · · · · · · · · · · · · · · · · · · |                 |                                       | · · · · · · · · · · · · · · · · · · · |                                       |                |                                       |                 |                 |                  | _                          | -   |    |
|                                      |                                      | (ML) SILT, slight plasticity, some sand,<br>trace gravel; grey (TILL); non-cohesive,<br>moist, dense  |             | , 7.16                | 8      | ss   | 432             | 44         |    |                                       | · · · · · · · · · · · · · · · · · · · |                 |                                       | · · · · · · · · · · · · · · · · · · · |                                       |                |                                       |                 |                 |                  | 0 ppm                      | Filter sand                               |    |
| - 8                                  |                                      | End of Borehole   | 0 C         | 245.78<br>8.23        | 0      |      | 432             |            |    |                                       | · · · ·                               |                 | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |                                       |                |                                       |                 |                 |                  |                            |   |    |
| - 9                                  |                                      | Notes:<br>1. Borehole started on Feb 7, 2023 and<br>completed on Feb 8, 2023.   |             |                       |        |      |                 |            |    |                                       |                                       |                 |                                       | · · · · · · · · · · · · · · · · · · · |                                       |                |                                       |                 |                 |                  | -                          |   |    |
| - 10                                 |                                      | 2. Groundwater level measured in open<br>borehole at approximately 5.0 m below<br>ground surface prior to well construction.  |             |                       |        |      |                 |            |    |                                       |                                       |                 |                                       |                                       |                                       |                |                                       |                 |                 |                  |                            |   |    |
| -                                    |                                      | <ol> <li>Borehole caved to approximately</li> <li>7 m depth.</li> <li>Piezometer installed as shown upon</li> </ol>   |             |                       |        |      |                 |            |    |                                       | · · · · · · · · · · · · · · · · · · · |                 |                                       |                                       |                                       |                |                                       |                 |                 |                  |                            |   |    |
| - 11                                 |                                      | <ol> <li>Frezonteter installed as shown upon<br/>completion of drilling.</li> <li>Groundwater level measured in<br/>installed monitoring well on May 18,</li> </ol> |             |                       |        |      |                 |            |    |                                       |                                       |                 |                                       |                                       |                                       |                |                                       |                 |                 |                  |                            |   |    |
| - 12                                 |                                      | 2023 at a depth of about 1.4 m below<br>ground surface.   |             |                       |        |      |                 |            |    |                                       |                                       |                 |                                       |                                       |                                       |                |                                       |                 |                 |                  | _                          |   |    |
|                                      |                                      |   |             |                       |        |      |                 |            |    |                                       | · · · · · · · · · · · · · · · · · · · |                 |                                       |                                       |                                       |                |                                       |                 |                 |                  |                            | GROUNDWA                                  |    |
| - 13                                 |                                      |   |             |                       |        |      |                 |            |    |                                       |                                       |                 |                                       |                                       |                                       |                |                                       |                 |                 |                  |                            | DATE DEPTH<br>(m)<br>23/05/18 1.4 <u></u> | E  |
| - 14                                 |                                      |   |             |                       |        |      |                 |            |    |                                       | · · · ·                               |                 |                                       | · · · · · · · · · · · · · · · · · · · |                                       |                |                                       |                 |                 |                  |                            |   |    |
| - 10<br>- 11<br>- 12<br>- 13<br>- 14 |                                      |   |             |                       |        |      |                 |            |    |                                       |                                       |                 |                                       |                                       |                                       |                |                                       |                 |                 |                  | LOGG                       | GED: 10                                   |    |

|   | ДŎ                | SOIL PROFILE  |                  | 1                      |        | SAM  | PLES            |            | ● PE<br>RE | NETR<br>SIST/ | ATION<br>NCE (N  | I), BLO         | NS/0.3     | s<br>m + | HEAR S | STREN       | GTH<br>REM                     | (Cu)<br>OUL                             | ), kpa<br>_ded       | ڭ ب                                   |                     |                             |
|---|-------------------|---|------------------|------------------------|--------|------|-----------------|------------|------------|---------------|------------------|-----------------|------------|----------|--------|-------------|--------------------------------|---|----------------------|---------------------------------------|---------------------|-----------------------------|
|   | BORING METHOD     | DESCRIPTION   | STRATA PLOT      | ELEV.<br>DEPTH<br>(m)  | NUMBER | ТҮРЕ | RECOVERY,<br>mm | BLOWS/0.3m | ▲ DY<br>RE | NAMI<br>SISTA | C PENE<br>NCE, E | TRATIC<br>BLOWS | )N<br>0.3m | v        | WATE   | ER CON<br>W | NTEN                           | IT, %                                   | %<br>⊣w <sub>L</sub> | ADDITIONAL<br>LAB. TESTING            |                     | or<br>Ndpif                 |
| ╈ | Ĭ                 | Ground Surface  | ST               | 254.11                 |        |      | R               | В          | 1          | 0             | 20               | 30 4            |            | 50       | 60     | 70          | 80                             | 90                                      | )<br>:::::           |                                       | Flush Mo            |                             |
|   |                   | TOPSOIL<br>(CL) SILTY CLAY, some sand, trace<br>gravel; brown to grey; cohesive, w~PL to  |                  | 253.81<br>0.30         | 1      | SS   | 229             | 9          |            |               |                  |                 |            |          |        |             |                                | · · · · · · · · · · · · · · · · · · ·   | C                    | cmbusti<br>Gas<br>Reading             | ble                 | rete 🔀                      |
|   |                   | w>PL, stiff to hard<br>- Rootlets between approximately 0.8 m<br>and 1.4 m depths   |                  |                        | 2      | SS   | 254             | 22         |            |               | •                |                 |            |          |        |             |                                | · · · · · · · · · · · · · · · · · · ·   |                      | 5 ppm<br>5 ppm                        |                     |                             |
|   |                   |   |                  |                        | 3      | SS   | 457             | 23         |            |               |                  |                 |            |          |        |             |                                |   |                      | 0 ppm                                 | Bentor              | $\underline{\nabla}$        |
|   |                   |   |                  |                        | 4      | SS   | 483             | 22         |            |               |                  |                 |            |          |        |             |                                | · · · · · · · · · · · · · · · · · · ·   |                      | 0 ppm                                 |                     | nte                         |
|   | ger<br>(210mm OD) |   |                  |                        | 5      | SS   | 178             | 31         |            |               |                  | •               |            |          |        |             |                                | · · ·<br>· · ·<br>· · ·<br>· · ·<br>· · | <u> </u>             | 0 ppm                                 |                     |                             |
|   |                   |   |                  |                        |        |      |                 |            | -          |               |                  |                 |            |          |        |             |                                | · · · · · · · · · · · · · · · · · · ·   |                      | · · · · · · · · · · · · · · · · · · · |                     |                             |
|   | Hollow Stem Auger |   |                  |                        | 6      | SS   | 356             | 21         | _          | C             |                  |                 |            |          |        |             |                                | · · · · · · · · · · · · · · · · · · ·   |                      | 5 ppm                                 | Filter sa           | 100 .                       |
|   | PH                |   |                  |                        |        |      |                 |            |            |               |                  |                 |            |          |        |             | · · ·<br>· · ·<br>· · ·<br>· · | · · ·<br>· · ·<br>· · ·<br>· · ·<br>· · |                      |                                       |                     | -                           |
| ; |                   |   |                  |                        | 7      | SS   | 508             | 14         | <u></u>    |               |                  |                 |            |          |        |             |                                | · · ·<br>· · ·                          |                      | 5 ppm                                 | 50mm dia. v<br>scre |                             |
|   |                   |   |                  | 246.95<br>7.16         |        |      |                 |            |            |               |                  |                 |            |          |        |             |                                |   |                      |                                       |                     |                             |
|   |                   | (SM) SILTY SAND, some gravel; grey<br>(TILL); non-cohesive, moist, dense  |                  |                        |        |      |                 |            |            |               |                  |                 |            |          |        |             |                                | · · · · · · · · · · · · · · · · · · ·   |                      |                                       |                     |                             |
| - |                   | End of Borehole   | 0<br>0<br>0<br>1 | 2 <u>45.88</u><br>8.23 | 8      | SS   | 229             | 33         |            |               |                  |                 |            |          |        |             |                                | · · · · · · · · · · · · · · · · · · ·   |                      | 5 ppm                                 | Filter sa           | and .                       |
|   |                   | Notes:<br>1. Borehole dry upon completion of<br>drilling.   |                  |                        |        |      |                 |            |            |               |                  |                 |            |          |        |             |                                | · · ·                                   |                      | · · · · · · · · · · · · · · · · · · · |                     |                             |
|   |                   | <ol> <li>2. Piezometer installed as shown upon<br/>completing of drilling.</li> <li>3. Groundwater level measured in</li> </ol> |                  |                        |        |      |                 |            |            |               |                  |                 |            |          |        |             |                                | · · ·<br>· · ·<br>· · ·<br>· ·          |                      | · · · · · · · · · · · · · · · · · · · |                     |                             |
|   |                   | installed monitoring well on May 18,<br>2023 at a depth of about 1.8 m below<br>ground surface.                                 |                  |                        |        |      |                 |            |            |               |                  |                 |            |          |        |             |                                | · · · · · · · · · · · · · · · · · · ·   |                      |                                       |                     |                             |
|   |                   |   |                  |                        |        |      |                 |            |            |               |                  |                 |            |          |        |             |                                | · · · · · · · · · · · · · · · · · · ·   |                      |                                       |                     |                             |
| 2 |                   |   |                  |                        |        |      |                 |            |            |               |                  |                 |            |          |        |             |                                |   |                      |                                       |                     |                             |
|   |                   |   |                  |                        |        |      |                 |            |            |               |                  |                 |            |          |        |             |                                |   |                      |                                       | GROU                |                             |
|   |                   |   |                  |                        |        |      |                 |            |            |               |                  |                 |            |          |        |             |                                | •••                                     |                      |                                       | DAIL                | DEPTH<br>(m)<br>1.8 <u></u> |

| 0           |                          | SOIL PROFILE   |             |                       |          | SAN  | IPLES           |            | ● <sup>Pl</sup> R           | ENET<br>ESIS                              | rra <sup>:</sup><br>Tan   | TION<br>ICE (N | N), BI     | LOW   | S/0.3                                 | ßm ∘ | SHE<br>+ N/                           | EAR S<br>ATUR                         | TREN<br>AL⊕                           | GTH<br>REN | (Cu)<br>10UL                          | ), kPA<br>_DED                        | Ъ                          |                                     |
|-------------|--------------------------|--|-------------|-----------------------|----------|------|-----------------|------------|-----------------------------|---|---|----------------|------------|---|---------------------------------------|------|---------------------------------------|---------------------------------------|---------------------------------------|------------|---------------------------------------|---------------------------------------|----------------------------|-------------------------------------|
|             | BORING METHOD            | DESCRIPTION  | STRATA PLOT | ELEV.<br>DEPTH<br>(m) | NUMBER   | ТҮРЕ | RECOVERY,<br>mm | BLOWS/0.3m | ▲ <sup>D</sup> <sub>R</sub> | ~~~~~~                                    |   | PENE<br>ICE, E | трл        |   | l<br>.3m                              | 50   |                                       | NATE                                  | R COI<br>M<br>C                       | NTEN       |                                       | %<br>⊣w <sub>L</sub>                  | ADDITIONAL<br>LAB. TESTING | PIEZOMI<br>OR<br>STANDI<br>INSTALL/ |
| _           |                          | Ground Surface   | ~~~~        | 257.70                |          |      |                 |            |                             |   | :::   |                | : :<br>: : |   |                                       |      |                                       |                                       |                                       |            |                                       |                                       |                            |                                     |
|             |                          | FILL - (CL) SILTY CLAY, some sand;<br>brown, rootlets, cohesive, w <pl to<br="">w~PL, firm.</pl>                                   |             |                       | 1        | SS   | 228             | 5          |                             |   | O.  |                |            | · · · · · · · · · · · · · · · · · · ·   |                                       |      | · · · · · · · · · · · · · · · · · · · |                                       |                                       |            |                                       |                                       |                            |                                     |
|             |                          | (CL) sandy SILTY CLAY, trace to some   |             | 256.63<br>1.07        | 2A<br>2B | ss   | 127             | 5          | •                           |   | · · ·<br>· · ·<br>· · ·   | Э              |            |   |                                       |      |                                       |                                       |                                       |            |                                       |                                       |                            |                                     |
|             |                          | gravel; brown to grey, oxidation staining<br>(TILL); cohesive, w <pl to="" w="">PL, stiff to<br/>hard</pl>                         |             |                       |          |      |                 |            |                             |   |   |                |            |   |                                       |      |                                       |                                       |                                       |            |                                       |                                       |                            |                                     |
|             |                          |  |             |                       | 3        | SS   | 305             | 25         |                             | 0   | · · · · · · · · · · · · · · · · · · ·   | •              |            | · · ·<br>· · ·<br>· · ·   |                                       |      |                                       |                                       |                                       |            |                                       |                                       |                            |                                     |
|             |                          |  |             |                       | 4        | SS   | 457             | 40         |                             | 0   | · · · · · · · · · · · · · · · · · · ·   |                |            | •   |                                       |      |                                       |                                       |                                       |            |                                       |                                       |                            |                                     |
|             |                          | - grey below approximately 3.0 m depth   |             |                       |          |      |                 |            |                             |   |   |                |            |   | · · · · ·                             |      |                                       | · · · · ·                             |                                       |            |                                       | · · · · · · · · · · · · · · · · · · · |                            |                                     |
|             | 2mm OD)                  | <ul> <li>- oxidation staining to approximately</li> <li>3.1 m depth</li> </ul>   |             |                       | 5        | SS   | 457             | 30         |                             |   | · · ·<br>· · ·<br>· · ·<br>· · ·<br>· · ·   |                | •          | · · · · · · · · · · · · · · · · · · ·   |                                       |      | · · · · · · · · · · · · · · · · · · · |                                       |                                       |            |                                       |                                       |                            |                                     |
| Power Auger | Auger (152               |  |             |                       |          |      |                 |            |                             |   | · · · · · · · · · · · · · · · · · · ·   |                |            | · · ·<br>· · ·<br>· · ·   | · · · · · · · · · · · · · · · · · · · |      | · · · · · · · · · · · · · · · · · · · |                                       |                                       |            |                                       |                                       |                            |                                     |
| 0<br>L      | Hollow Stem Auger (152mm |  |             |                       | 6        | SS   | 457             | 18         |                             | 0   |   |                |            | · · · · · · · · · · · · · · · · · · ·   |                                       |      | · · · · · · · · · · · · · · · · · · · |                                       |                                       |            |                                       |                                       |                            |                                     |
|             |                          |  |             |                       |          |      |                 |            |                             | <b>·</b> ···                              | •   |                |            |   | · · · · · · · · · · · · · · · · · · · |      |                                       | · · · · · · · · · · · · · · · · · · · |                                       |            |                                       | · · · · · · · · · · · · · · · · · · · |                            |                                     |
|             |                          | (ML) sandy SILT, trace gravel; grey<br>(TILL), non-cohesive, moist, compact  |             | 252.14<br>5.56        |          |      |                 |            |                             |   | · · · · · · · · · · · · · · · · · · ·   |                |            | · · · · · · · · · · · · · · · · · · ·   |                                       |      | · · · · · · · · · · · · · · · · · · · |                                       |                                       |            |                                       |                                       |                            |                                     |
|             |                          |  |             |                       | 7        | SS   | 457             | 27         |                             |   | · · · · · · · · · · · · · · · · · · ·   |                |            | · · · · · · · · · · · · · · · · · · ·   | · · · · · · · · · · · · · · · · · · · |      | · · · · · · · · · · · · · · · · · · · | · · · · · ·                           |                                       |            |                                       | · · · · · · · · · · · · · · · · · · · |                            |                                     |
|             |                          |  |             |                       |          |      |                 |            |                             |   | · · ·<br>· · ·<br>· · ·<br>· · ·  |                |            | · · ·<br>· · ·<br>· · ·<br>· · ·<br>· ·   |                                       |      | · · · · · · · · · · · · · · · · · · · |                                       |                                       |            |                                       |                                       |                            |                                     |
|             |                          | (ML) SILT, some sand, grey;<br>non-cohesive, moist, compact  |             | 7.09                  |          |      |                 |            |                             | · · ·<br>· · ·<br>· · ·                   | · · · · · · · · · · · · · · · · · · ·   |                |            |   |                                       |      |                                       |                                       |                                       |            |                                       |                                       |                            |                                     |
|             |                          | 5 - (2 - 1 -   |             | 249.62<br>8.08        | 8        | ss   | 457             | 25         |                             | · · · · · · · · · · · · · · · · · · ·     | · · · · · · · · · · · · · · · · · · ·   |                |            | · · · · · · · · · · · · · · · · · · ·   |                                       |      | · · · · · · · · · · · · · · · · · · · |                                       |                                       |            |                                       |                                       |                            |                                     |
|             |                          | End of Borehole<br>Notes:<br>1. Borehole was open and dry upon<br>completion of drilling.<br>2. Borehole backfilled with bortonite |             | 0.00                  |          |      |                 |            |                             |   | <ul> <li></li> /ul> |                |            | · · ·<br>· · · |                                       |      | · · · · · · · · · · · · · · · · · · · |                                       |                                       |            |                                       |                                       |                            |                                     |
|             |                          | <ol> <li>Borehole backfilled with bentonite<br/>upon completion of drilling.</li> </ol>  |             |                       |          |      |                 |            |                             | · · ·<br>· · ·<br>· · ·<br>· · ·<br>· · · | · · · · · · · · · · · · · · · · · · ·   |                |            | · · · · · · · · · · · · · · · · · · ·   |                                       |      | · · · · · · · · · · · · · · · · · · · |                                       | · · · · · · · · · · · · · · · · · · · |            | · · · · · · · · · · · · · · · · · · · |                                       |                            |                                     |
|             |                          |  |             |                       |          |      |                 |            |                             |   | :::   |                |            |   |                                       |      |                                       | · · · · ·                             |                                       |            |                                       |                                       |                            |                                     |

| T | Q                 | SOIL PROFILE  |             |                        |        | SAN  | IPLES           |            | ●PR | ENE<br>ESIS                           |   | TION<br>ICE (N | ), BLC        | WS/0. | .3m                                   | SHE<br>+ N/                           | AR S                                  | TRENO      | GTH (C | u), kP |                                       |             |  |
|---|-------------------|---|-------------|------------------------|--------|------|-----------------|------------|-----|---------------------------------------|---|----------------|---------------|-------|---------------------------------------|---------------------------------------|---------------------------------------|------------|--------|--------|---------------------------------------|-------------|--|
|   | BORING METHOD     | DESCRIPTION   | STRATA PLOT | ELEV.<br>DEPTH<br>(m)  | NUMBER | TYPE | RECOVERY,<br>mm | BLOWS/0.3m | ▲ R |                                       | MIC                                     | PENE<br>ICE, B | TRATI<br>LOWS |       |                                       |                                       | WATE                                  | R CON<br>W | TENT,  |        |                                       | LAB. IESIIN | PIEZOME<br>OR<br>STANDPI<br>INSTALLAT                              |
| ┝ | _                 | Ground Surface<br>FILL - (CL) SILTY CLAY, some sand to  |             | 256.30                 |        |      |                 |            |     |                                       |   |                |               |       |                                       | ::                                    |                                       |            |        |        | :                                     |             |  |
|   |                   | sandy, trace gravel; brown, rootlets,<br>grey, cohesive, w <pl firm.<="" td="" to="" w~pl,=""><td></td><td></td><td>1</td><td>SS</td><td>457</td><td>5</td><td></td><td></td><td>•••••••••••••••••••••••••••••••••••••••</td><td></td><td></td><td></td><td></td><td>· · · · · · · · · · · · · · · · · · ·</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></pl> |             |                        | 1      | SS   | 457             | 5          |     |                                       | ••••••••••••••••••••••••••••••••••••••• |                |               |       |                                       | · · · · · · · · · · · · · · · · · · · |                                       |            |        |        |                                       |             |  |
|   |                   |   |             | <u>254.93</u><br>1.37  | 2      | SS   | 76              | 7          |     |                                       | ə                                       |                |               |       |                                       | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |            |        |        |                                       |             | 2022-07-28   |
|   |                   | (CL) SILTY CLAY, some sand; grey,<br>rootlets; cohesive, w~PL, stiff to very stiff  |             | 1.37                   | 3      | SS   | 457             | 18         |     |                                       |   |                |               |       |                                       | · · · · · · · · · · · · · · · · · · · |                                       |            |        |        |                                       |             |  |
|   |                   | (CL) sandy SILTY CLAY, trace gravel,<br>grey, (TILL); cohesive, w <pl to="" w="">PL,</pl>   |             | 254.17<br>2.13         | 4A     |      |                 |            |     |                                       |   |                |               |       |                                       |                                       |                                       |            |        |        |                                       |             | 50 mm dia  |
|   |                   | stiff to very stiff<br>- inferred cobbles/boulders from auger<br>grinding at approximately 2.6 m depth<br>(ML) SILT, slight plasticity, trace sand,   |             | 2 <u>53.63</u><br>2.67 | 4B     | SS   | 406             | 25         |     | 0                                     | ••••                                    | •              |               |       |                                       |                                       |                                       |            |        |        |                                       | n           | 50 mm dia.<br>nonitoring well.<br>Monument<br>Casing.<br>Bentonite |
|   | 03mm OD)          | grey; non-cohesive, moist to wet,<br>compact  |             |                        | 5      | SS   | 381             | 19         |     |                                       | •                                       |                |               |       |                                       | · · · · · · · · · · · · · · · · · · · |                                       |            |        |        | M                                     | -           |  |
|   | Stem Auger (203mm |   |             |                        |        |      |                 |            |     |                                       | · · · · · · · · · · · · · · · · · · ·   |                |               |       | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |            |        |        |                                       |             |  |
|   | Hollow S          |   |             |                        | 6      | SS   | 406             | 21         |     |                                       | Q                                       | •              |               |       |                                       | · · · · · · · · · · · · · · · · · · · |                                       |            |        |        | •                                     |             |  |
| ; |                   | (SM) SILTY SAND, some gravel, grey,<br>(possible TILL); non-cohesive, wet, very   |             | 251.04<br>5.26         |        |      |                 |            |     | · · · · · · · · · · · · · · · · · · · |   |                |               |       |                                       | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |            |        |        | ·<br>·<br>·<br>·                      |             |  |
| 5 |                   | dense<br>- inferred cobbles/boulders from<br>auger grinding between<br>approximately 5.5 m and 5.6 m depth  |             | •                      | 7      | SS   | 432             | 56         |     | Ð                                     |   |                |               |       |                                       | •                                     |                                       |            |        |        | •                                     |             | -  |
|   |                   |   |             | •                      | 8      | SS   | 381             | 55         |     | C                                     | >                                       |                |               |       |                                       |                                       |                                       |            |        |        | •                                     |             | Sand   |
|   |                   |   |             | -<br>-<br>-<br>-       |        |      |                 |            |     |                                       |   |                |               |       |                                       | · · · · · · · · · · · · · · · · · · · |                                       |            |        |        |                                       |             | Screen   |
| 3 |                   | End of Borehole<br>Notes:   |             | 248.55<br>7.75         | 9      | SS   | 127             | 50/0       | .13 | 2                                     | · · · · · · · · · · · · · · · · · · ·   |                |               |       |                                       |                                       |                                       |            |        |        | · · · · · · · · · · · · · · · · · · · |             | -<br>-<br>-  |
|   |                   | 1. Water level measured at<br>approximately 3.4 m bgs upon<br>completion of drilling.   |             |                        |        |      |                 |            |     |                                       | · · · · · · · · · · · · · · · · · · ·   |                |               |       |                                       |                                       |                                       |            |        |        |                                       |             |  |
|   |                   | <ol> <li>Groundwater level monitoring well<br/>installed upon completion of drilling.</li> <li>Water level measured in installed<br/>monitoring well at approximately 0.9 m<br/>bgs on July 28, 2022.</li> </ol>  |             |                        |        |      |                 |            |     |                                       | · · · · · · · · · · · · · · · · · · ·   |                |               |       |                                       | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |            |        |        | · · · · · · · · · · · · · · · · · · · |             | GROUNDWA<br>OBSERVATI<br>DATE DEPTH<br>(m)                         |
|   |                   |   |             |                        |        |      |                 |            |     |                                       | · · · · · · · · · · · · · · · · · · ·   |                |               |       |                                       |                                       |                                       |            |        |        |                                       | _           | 2/07/28 0.9 <u></u>  |

|        | ₽               | SOIL PROFILE  |             |                          |           | SAM  | IPLES           |            | ●PR | ENE |       | FION<br>CE (N                         | ), BL | ows | 5/0.3m                                | SH<br>1 + 1                           | EAR S | TRENO      | GTH (C<br>REMO | Cu), kPA<br>ULDED                     | ٥٢                         |   |
|--------|-----------------|---|-------------|--------------------------|-----------|------|-----------------|------------|-----|-----|-------|---------------------------------------|-------|-----|---------------------------------------|---------------------------------------|-------|------------|----------------|---------------------------------------|----------------------------|---|
| MEIKES | BORING METHOD   | DESCRIPTION   | STRATA PLOT | ELEV.<br>DEPTH<br>(m)    | NUMBER    | ТҮРЕ | RECOVERY,<br>mm | BLOWS/0.3m |     | γνα | MIC   | PENE<br>CE, B                         | TRAT  |     |                                       | W                                     | WATE  | R CON<br>W | ITENT          |                                       | ADDITIONAL<br>LAB. TESTING | PIEZOMETE<br>OR<br>STANDPIPE<br>INSTALLATIC |
| 0      | $\square$       | Ground Surface<br>TOPSOIL (75 mm)   | <u></u>     | 256.50                   |           |      |                 |            |     |     |       |                                       |       |     |                                       |                                       |       |            |                |                                       |                            |   |
|        |                 | FILL - (CL) SILTY CLAY, some sand to<br>sandy; brown to grey; cohesive, w <pl to<br="">w~PL, firm to stiff</pl>                                   |             | 200:08                   | 1         | SS   | 381             | 10         |     | •   |       |                                       |       |     |                                       |                                       |       |            |                |                                       |                            |   |
| 1      |                 | -contains rootlets between approximately 0.1 m and 0.5 m depth  |             |                          | 2         | SS   | 406             | 10         |     | •   | >     |                                       |       |     |                                       |                                       |       |            |                |                                       |                            |   |
|        |                 |   |             |                          |           |      |                 |            |     |     |       | · · · · · · · · · · · · · · · · · · · |       |     |                                       | · · · · · · · · · · · · · · · · · · · |       |            |                |                                       |                            |   |
| 2      |                 |   |             |                          | 3         | SS   | 406             | 14         |     |     | D     |                                       |       |     | · · · · · · · · · · · · · · · · · · · |                                       |       |            |                |                                       |                            |   |
|        |                 |   |             |                          | 4         | SS   | 457             | 11         |     | •   | Ō     |                                       |       |     | · · · · · · · · · · · · · · · · · · · |                                       |       |            |                |                                       |                            |   |
| 3      | OD)             |   |             |                          |           |      |                 |            |     |     |       |                                       |       |     |                                       |                                       |       |            |                | · · · · · · · · · · · · · · · · · · · |                            |   |
|        | gei<br>(152mm O | - grey at approximately 3.4 m depth   |             |                          | 5         | SS   | 457             | 8          |     |     |       | 0                                     |       |     |                                       |                                       |       |            |                |                                       |                            |   |
| 4      | Auger           | - contains organics at approximately 3.4 m depth  |             | <u>252.46</u><br>4.04    |           |      |                 |            |     |     |       |                                       |       |     | · · · · · · · · · · · · · · · · · · · |                                       |       |            |                |                                       |                            |   |
| ſ      | Hollow Stem     | (CL) sandy SILTY CLAY, trace gravel;<br>brown, oxidation staining, (TILL);<br>cohesive, w <pl to="" w="">PL, very stiff to<br/>hard</pl>          |             | 4.04                     |           |      |                 |            |     |     |       |                                       |       |     |                                       |                                       |       |            |                |                                       |                            |   |
| 5      | Ĭ               |   |             |                          | 6         | SS   | 457             | 43         |     | С   | )<br> | · · · · ·                             |       |     |                                       | · · · · · · · · · · · · · · · · · · · |       |            |                |                                       |                            |   |
| 5      |                 |   |             |                          |           |      |                 |            |     |     |       |                                       |       |     |                                       |                                       |       |            |                |                                       |                            |   |
| 6      |                 | - inferred cobbles/boulders from<br>auger grinding at approximately<br>5.8 m depth  |             |                          |           |      |                 |            |     |     |       |                                       |       |     |                                       |                                       |       |            |                |                                       |                            |   |
|        |                 | - grey at approximately 6.4 m<br>depth  |             |                          | 7         | SS   | 457             | 48         |     |     |       |                                       |       |     | •                                     |                                       |       |            |                |                                       | МН                         |   |
| 7      |                 | :-ffffff  |             |                          |           |      |                 |            |     |     |       |                                       |       |     |                                       |                                       |       |            |                |                                       |                            |   |
| 8      | +               | - inferred cobbles/boulders from<br>auger grinding at approximately<br>7.6 m depth<br>(ML) sandy SILT, trace gravel,<br>grey, non-cohesive, moist | <u> </u>    | 248.83<br>248.88<br>7.82 | 8A<br>-8B | SS   | 203             | 50/ 0      | .05 | 0   |       |                                       |       |     |                                       |                                       |       |            |                |                                       |                            |   |
|        |                 | End of Borehole<br>Notes<br>1. Borehole caved at approximately  |             |                          |           |      |                 |            |     |     |       |                                       |       |     |                                       |                                       |       |            |                |                                       |                            |   |
| 9      |                 | <ol> <li>Borehole caved at approximately</li> <li>5 m depth.</li> <li>Borehole dry upon completion of<br/>drilling.</li> </ol>                    |             |                          |           |      |                 |            |     |     |       |                                       |       |     |                                       |                                       |       |            |                |                                       |                            |   |
|        |                 | <ol> <li>Borehole backfilled with bentonite and<br/>soil cuttings upon completion of drilling.</li> </ol>   |             |                          |           |      |                 |            |     |     |       |                                       |       |     |                                       |                                       |       |            |                |                                       |                            |   |
| 10     |                 |   |             |                          |           |      |                 |            |     |     |       |                                       |       |     |                                       |                                       |       |            |                |                                       |                            |   |

| Ð                    |                   | SOIL PROFILE   |     |             |                        |        | SAM  | IPLES           |            | ●PR                         | ENE<br>ESIS |             | TION           | N), BL | LOW   | /S/0.3   | im – | SHE/                                  | AR S | TREN       | GTH<br>REM | I (Cu)<br>//OUL                       | ), kPA<br>_DED       | ں ر                        |   |
|----------------------|-------------------|--|-----|-------------|------------------------|--------|------|-----------------|------------|-----------------------------|-------------|-------------|----------------|--------|---|----------|------|---------------------------------------|------|------------|------------|---------------------------------------|----------------------|----------------------------|---|
| <b>BORING METHOD</b> |                   | DESCRIPTION  |     | STRATA PLOT | ELEV.<br>DEPTH<br>(m)  | NUMBER | ТҮРЕ | RECOVERY,<br>mm | BLOWS/0.3m | ▲ <sup>D</sup> <sub>R</sub> |             | MIC<br>STAP | Pene<br>Ice, e |        |   | N<br>.3m | 50   |                                       | /ATE | R CON<br>W | ITE        | NT, 9                                 | %<br>⊣w <sub>L</sub> | ADDITIONAL<br>LAB. TESTING | PIEZOMETI<br>OR<br>STANDPIP<br>INSTALLATI |
|                      |                   | Ground Surface<br>FILL- (GP) GRAVEL; grey; non-cohesive,<br>dry<br>(CL) SILTY CLAY, trace to some sand;                            |     |             | 251.70<br>250.05       | 1      | SS   | 457             | 7          |                             |             |             |                |        | · · · · · · · · · · · · · · · · · · ·                       |          |      | · · · · · · · · · · · · · · · · · · · |      |            |            |                                       |                      |                            |   |
|                      |                   | brown, oxidation staining; cohesive,<br>w <pl firm="" stiff<br="" to="" w~pl,="">-rootlets to approximately 0.5 m depth</pl>       |     |             |                        | 2      | SS   | 457             | 13         |                             |             |             |                |        | · · ·<br>· · ·<br>· · ·<br>· · ·                            |          |      |                                       |      |            |            |                                       |                      |                            |   |
|                      |                   | (CL) sandy SILTY CLAY, trace to some   |     |             | 250.33<br>1.37         |        |      |                 |            |                             |             |             | )<br>          |        | · · · · · · · · · · · · · · · · · · ·                       |          |      | · · · · · · · · · · · · · · · · · · · |      |            |            | · · · · · · · · · · · · · · · · · · · |                      |                            |   |
|                      |                   | gravel; brown, oxidation staining, (TILL);<br>cohesive, w <pl to="" w="">PL, stiff to hard</pl>                                    | 0   |             |                        | 3      | SS   | 457             | 14         |                             |             | •           |                |        | · · ·<br>· · ·<br>· · ·<br>· · ·                            |          |      |                                       |      |            |            | · · · · · · · · · · · · · · · · · · · |                      |                            |   |
|                      |                   |  | R A |             |                        | 4      | SS   | 457             | 33         |                             |             | 0           |                | •      | •••   |          |      |                                       |      |            |            |                                       |                      |                            |   |
|                      | n OD)             |  | 2   |             |                        | 5      | SS   | 457             | 23         |                             |             | 0           | •              |        |   |          |      |                                       |      |            |            |                                       |                      |                            |   |
| Power Auger          | Stem Auger (152mm | (CL) SILTY CLAY, trace sand; grey, cohesive, w~PL to w>PL, stiff   |     |             | 2 <u>47.66</u><br>4.04 |        |      |                 |            |                             |             |             |                |        | · · · · · · · · · · · · · · · · · · ·                       |          |      |                                       |      |            |            |                                       |                      |                            |   |
| T Cto Inclicit       | Hollow Ste        |  |     |             |                        | 6      | SS   | 457             | 11         |                             | •           | C           |                |        | · · · · · · · · · · · · · · · · · · ·                       |          |      |                                       |      |            |            | · · · · · · · · · · · · · · · · · · · |                      |                            |   |
|                      | -                 | (CL) SILTY CLAY, trace to some sand,   |     |             | 246.14<br>5.56         |        |      |                 |            |                             |             |             |                |        | · · ·<br>· · ·<br>· · ·<br>· · ·<br>· · ·<br>· · ·<br>· · · |          |      | · · · · · · · · · · · · · · · · · · · |      |            |            | · · · · · · · · · · · · · · · · · · · |                      |                            |   |
|                      |                   | trace gravel; grey, (TILL); cohesive,<br>w~PL, very stiff  |     |             |                        |        |      |                 |            |                             |             |             |                |        | · · · · · · · · · · · · · · · · · · ·                       |          |      | · · · · · · · · · · · · · · · · · · · |      |            |            | · · · · · · · · · · · · · · · · · · · |                      |                            |   |
|                      |                   |  |     |             |                        | 7      | SS   | 457             | 17         |                             | O           | •           |                |        | · · · · · · · · · · · · · · · · · · ·                       |          |      |                                       |      |            |            | · · · · · · · · · · · · · · · · · · · |                      |                            |   |
|                      | -                 | (ML) sandy SILT, trace to some<br>gravel, grey, (TILL), non-cohesive,<br>moist, dense  |     |             | 244.61<br>7.09         |        |      |                 |            |                             |             |             |                |        |   |          |      |                                       |      |            |            |                                       |                      |                            |   |
|                      |                   | End of Dorahol-  | 8   |             | 243.62<br>8.08         | 8      | SS   | 457             | 44         |                             |             |             |                |        |   | •        |      |                                       |      |            |            |                                       |                      |                            |   |
|                      |                   | End of Borehole<br>Notes:<br>1. Borehole was open and dry upon<br>completion of drilling.<br>2. Borehole backfilled with bentonite |     |             | 0.00                   |        |      |                 |            |                             |             |             |                |        |   |          |      |                                       |      |            |            |                                       |                      |                            |   |
|                      |                   | <ol> <li>Borehole backfilled with bentonite<br/>and soil cuttings upon completion of<br/>drilling.</li> </ol>                      |     |             |                        |        |      |                 |            |                             |             |             |                |        |   |          |      |                                       |      |            |            |                                       |                      |                            |   |
|                      |                   |  |     |             |                        |        |      |                 |            |                             |             |             |                |        | ::  |          |      |                                       | :::  |            |            |                                       |                      |                            |   |

|        | 0                            | SOIL PROFILE  |             |                          |        | SAM  | IPLES           |            | ● PE                                  |                 |                |                 | NS/0 3     | SF |      | TRENG<br>AL ⊕ F | TH (Cu | I), kPA | . (7)                      |  |
|--------|------------------------------|---|-------------|--------------------------|--------|------|-----------------|------------|---------------------------------------|-----------------|----------------|-----------------|------------|----|------|-----------------|--------|---------|----------------------------|--|
| METRES | BORING METHOD                | DESCRIPTION   | STRATA PLOT | ELEV.<br>DEPTH<br>(m)    | NUMBER | TYPE | RECOVERY,<br>mm | BLOWS/0.3m | ▲ <sup>DY</sup> RE                    | 'NAMIC<br>SISTA | PENE<br>NCE, B | TRATIC<br>LOWS/ | )N<br>0.3m | W  | WATE |                 | TENT,  |         | ADDITIONAL<br>LAB. TESTING | PIEZOMETEI<br>OR<br>STANDPIPE<br>INSTALLATIO                       |
| 0      |                              | Ground Surface  |             | 251.20                   |        |      |                 |            |                                       |                 |                |                 |            |    |      |                 |        |         |                            |  |
|        |                              | TOPSOIL (50 mm)<br>(CL) sandy SILTY CLAY; brown, rootlets,<br>cohesive, w <pl, firm<="" td=""><td></td><td>250.05<br/>250.59<br/>0.61</td><td>1</td><td>SS</td><td>457</td><td>6</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></pl,> |             | 250.05<br>250.59<br>0.61 | 1      | SS   | 457             | 6          |                                       |                 |                |                 |            |    |      |                 |        |         |                            |  |
| 1      |                              | (CL) sandy SILTY CLAY, trace gravel;<br>brown, oxidation staining, (TILL);<br>cohesive, w <pl to="" w="">PL, stiff to very stiff</pl>   |             |                          | 2      | SS   | 457             | 27         |                                       | 0               | •              |                 |            |    |      |                 |        |         |                            |  |
|        |                              |   |             |                          | 3      | SS   | 457             | 26         |                                       | 0               | •              |                 |            |    |      |                 |        |         |                            |  |
| 2      |                              | - inferred cobbles/boulders<br>from auger grinding at<br>approximately 1.9 m depth  |             |                          |        |      | 457             | 26         |                                       |                 |                |                 |            |    |      |                 |        |         |                            | 50 mm dia.<br>monitoring well.                                     |
| 3      |                              |   |             |                          | 4      | SS   | 457             | 26         |                                       |                 |                |                 |            |    |      |                 |        |         | MH                         | Monument<br>Casing.<br>Bentonite                                   |
|        | r<br>)3mm OD)                |   |             |                          | 5      | SS   | 457             | 29         |                                       | O               |                |                 |            |    |      |                 |        |         |                            |  |
| 4      | Hollow Stem Auger (203mm OD) |   |             |                          |        |      |                 |            |                                       |                 |                |                 |            |    |      |                 |        |         |                            |  |
| 5      | Hollow Ste                   |   |             |                          | 6      | SS   | 406             | 24         |                                       | 0               | •              |                 |            |    |      |                 |        |         |                            |  |
| 5      |                              |   |             | 245.64<br>5.56           |        |      |                 |            |                                       |                 |                |                 |            |    |      |                 |        |         |                            | 2022-07-28   |
| 6      |                              | (ML) SILT, slight plasticity, trace sand,<br>trace gravel; grey, non-cohesive, moist to<br>wet, dense to very dense   |             | 5.50                     |        |      |                 |            | · · · · · · · · · · · · · · · · · · · |                 |                |                 |            |    |      |                 |        |         |                            |  |
|        |                              |   |             |                          | 7      | SS   | 457             | 54         |                                       | 0               |                |                 |            |    |      |                 |        |         |                            |  |
| 7      |                              |   |             |                          |        |      |                 |            |                                       |                 |                |                 |            |    |      |                 |        |         |                            | Screen ::<br>Sand ::<br>   |
| 8      |                              |   |             | 243.12<br>8.08           | 8      | SS   | 457             | 43         |                                       |                 | 0              |                 | •          |    |      |                 |        |         |                            |  |
|        |                              | End of Borehole<br>Notes:<br>1. Borehole dry upon completion of   |             | 8.08                     |        | _    |                 |            |                                       |                 |                |                 |            |    |      |                 |        |         |                            |  |
| 9      |                              | drilling. 2. Groundwater level monitoring well installed upon completion of drilling 3. Water level moneured in installed   |             |                          |        |      |                 |            |                                       |                 |                |                 |            |    |      |                 |        |         |                            | GROUNDWATER<br>OBSERVATION   |
| 10     |                              | 3. Water level measured in installed<br>monitoring well at 5.5 m bgs on July 28,<br>2022.   |             |                          |        |      |                 |            |                                       |                 |                |                 |            |    |      |                 |        |         |                            | DATE         DEPTH<br>(m)           22/07/28         5.5         ∑ |

|        | 10D                          | SOIL PROFILE   |             |                          |          | SAM  | IPLES           |            | ● <sup>PE</sup>       |                 | ATION    | I<br>N), Bl                           | LOWS                                  | 5/0.3m  | SH<br>1 + N   | IEAR S | TRENG<br>AL ⊕ F | TH (C | u), kPA<br>JLDED | ں _                        |   |
|--------|------------------------------|--|-------------|--------------------------|----------|------|-----------------|------------|-----------------------|-----------------|----------|---------------------------------------|---------------------------------------|---|---|--------|-----------------|-------|------------------|----------------------------|---|
| METRES | BORING METHOD                | DESCRIPTION  | STRATA PLOT | ELEV.<br>DEPTH<br>(m)    | NUMBER   | ТҮРЕ | RECOVERY,<br>mm | BLOWS/0.3m | ▲ <sup>D'</sup><br>Ri | (NAMI<br>ESISTA | C PEN    | ETRA                                  | TION                                  |   | W   | WATE   | R CON<br>W      | TENT, |                  | ADDITIONAL<br>LAB. TESTING | PIEZOMETEF<br>OR<br>STANDPIPE<br>INSTALLATIOI         |
| 0      |                              | Ground Surface   | 17. N       | 253.50                   |          |      |                 |            |                       |                 |          |                                       |                                       |   |   |        |                 |       |                  |                            | _   |
|        |                              | TOPSOIL (125 mm)<br>(CL) SILTY CLAY, trace sand, trace to<br>some gravel; brown to grey, oxidation<br>stains; cohesive, w <pl to="" w="">PL. firm to<br/>stiff<br/>- rootlets to approximately 0.5 m depth</pl>  |             | 253.37<br>0.13           | 1        | SS   | 457             | 6          |                       |                 |          | · · · · · · · · · · · · · · · · · · · |                                       |   |   |        |                 |       |                  |                            |   |
| 1      |                              |  |             |                          | 2        | SS   | 279             | 11         |                       | •               | 0        | · · · · · · · · · · · · · · · · · · · |                                       | · · · · · · · · · · · · · · · · · · ·   |   |        |                 |       |                  |                            |   |
| 2      |                              |  |             |                          | 3        | SS   | 457             | 13         |                       | •               |          |                                       |                                       |   |   |        |                 |       |                  | мн                         | 50 mm dia.<br>monitoring well,<br>Monument<br>Casing, |
|        |                              |  |             |                          | 4        | SS   | 457             | 13         |                       | •               | 0        |                                       |                                       | · · · · · · · · · · · · · · · · · · ·   |   |        |                 |       |                  |                            | Bentonite   |
| 3      |                              | - grey below approximately 2.9 m depth   |             |                          |          |      |                 |            |                       |                 |          |                                       |                                       | · · · · · · · · · · · · · · · · · · ·   |   |        |                 |       |                  |                            | 2022-07-28  |
|        | Hollow Stem Auger (203mm OD) |  |             |                          | 5        | SS   | 457             | 14         |                       |                 |          | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |   |   |        |                 |       |                  |                            |   |
| 4      | Stem Auger (20               |  |             |                          |          |      |                 |            |                       |                 |          | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · ·   |   |        |                 |       |                  |                            |   |
| 5      | Hollow S                     |  |             |                          | 6        | SS   | 457             | 9          |                       |                 | <b>D</b> |                                       |                                       |   |   |        |                 |       |                  |                            |   |
| 6      |                              |  |             |                          |          |      |                 |            |                       |                 |          |                                       |                                       | ·         ·         ·           ·         ·         · | ·         ·         ·         ·         ·           ·         ·         ·         ·         ·           ·         ·         ·         ·         ·           ·         ·         ·         ·         ·           ·         ·         ·         ·         ·           ·         ·         ·         ·         ·           ·         ·         ·         ·         ·           ·         ·         ·         ·         ·           ·         ·         ·         ·         ·           ·         ·         ·         ·         ·           ·         ·         ·         ·         ·           ·         ·         ·         ·         ·           ·         ·         ·         ·         ·           ·         ·         ·         ·         ·           ·         ·         ·         ·         ·           ·         ·         ·         ·         ·           ·         ·         ·         ·         ·           ·         ·         ·         ·         · |        |                 |       |                  |                            |   |
|        |                              |  |             |                          | 7        | SS   | 406             | 8          |                       |                 |          |                                       |                                       |   |   |        |                 |       |                  |                            | Screen  |
| 7      |                              | (CL) SILTY CLAY, trace to some sand;<br>grey, oxidation staining, (TILL); cohesive,<br>w <pl stiff="" stiff<="" td="" to="" very="" w~pl,=""><td>8</td><td>246.42</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Sand ···</td></pl> | 8           | 246.42                   |          |      |                 |            |                       |                 |          |                                       |                                       |   |   |        |                 |       |                  |                            | Sand ···  |
| 8      |                              | (ML) sandy SILT, trace gravel, grey<br>(TILL); non-cohesive, moist<br>End of Borehole  |             | 245.58<br>245.42<br>8.08 | 8A<br>8B | SS   | 457             | 26         |                       | 0               |          | <u> </u>                              | · · · · · · · · · · · · · · · · · · · |   |   |        |                 |       |                  |                            |   |
| 9      |                              | Notes:<br>1. Wet conditions encountered at<br>approximately 6.1 m depth during<br>drilling.  |             |                          |          |      |                 |            |                       |                 |          |                                       |                                       |   |   |        |                 |       |                  |                            |   |
|        |                              | <ol> <li>Borehole dry upon completion of<br/>drilling.</li> <li>Groundwater level monitoring well<br/>installed upon drilling completion</li> </ol>  |             |                          |          |      |                 |            |                       |                 |          |                                       |                                       |   |   |        |                 |       |                  |                            |   |

|  | QO            | SOIL PROFILE  |             |                       |        | SAM  | IPLES           |            | ● PE<br>RE         | NETRA<br>SISTAI | TION<br>NCE (N | ). BLO'        | WS/0. | :<br>3m – | SHEAF | R STRE | ENG"<br>R | TH (Cu<br>EMOU | ), kPA<br>LDED | _ 0                        |         |   |
|--|---------------|---|-------------|-----------------------|--------|------|-----------------|------------|--------------------|-----------------|----------------|----------------|-------|-----------|-------|--------|-----------|----------------|----------------|----------------------------|---------|---|
| METRES                                       | BORING METHOD | DESCRIPTION   | STRATA PLOT | ELEV.<br>DEPTH<br>(m) | NUMBER | ТҮРЕ | RECOVERY,<br>mm | BLOWS/0.3m | ▲ <sup>DY</sup> RE | NAMIC<br>SISTAI | PENE<br>NCE, B | TRATIC<br>LOWS |       |           |       |        |           | ENT, '         |                | ADDITIONAL<br>LAB. TESTING | ۹<br>۱۱ | PIEZOMETEF<br>OR<br>STANDPIPE<br>ISTALLATIO |
| 10 · 111 111 111 112 112 112 112 113 113 113 |               | 4. Water level measured in installed<br>monitoring well at 2.9 m bgs on July 28,<br>2022. |             | (m)                   |        |      |                 |            |                    |                 |                |                |       |           |       |        |           |                |                |                            |         |   |
| 18<br>19<br>20                               |               |   |             |                       |        |      |                 |            |                    |                 |                |                |       |           |       |        |           |                |                |                            | DATE    | (m)   |

I

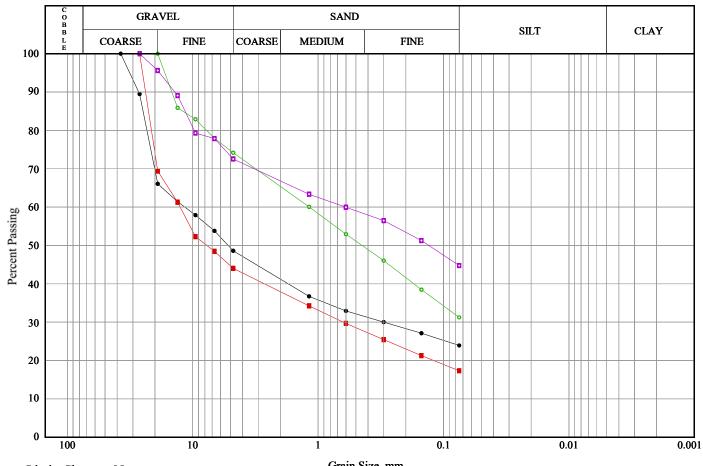
# APPENDIX D

# **Geotechnical Laboratory Testing Results**

Grain Size Distribution Testing (Sieve and Hydrometer) Atterberg Limits Testing Rock Core Testing

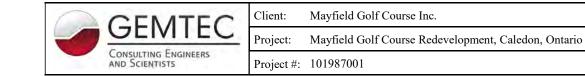


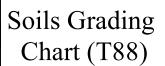
| Client:    | Mayfield Golf Course Inc.                            | Soils Grading |
|------------|--|---------------|
| Project:   | Mayfield Golf Course Redevelopment, Caledon, Ontario | C             |
| Project #: | 101987001  | Chart         |

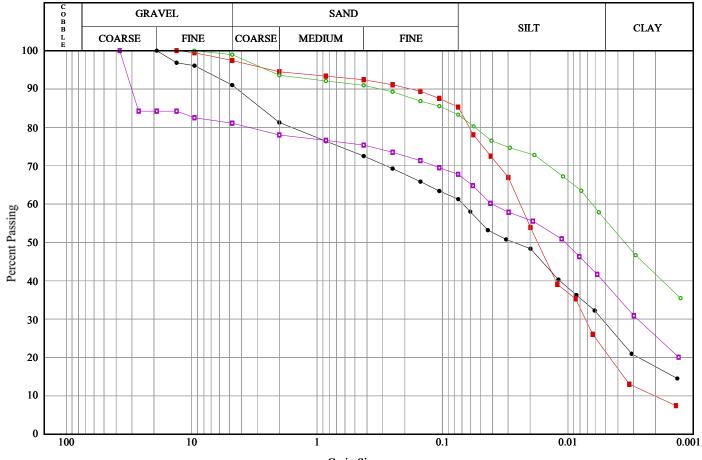


| Linns Diown. 110it | Limits | Shown: | None |
|--------------------|--------|--------|------|
|                    | Limits | Shown: | None |

| Line<br>Symbol | Sample                        |     | Boreh<br>Test |                |          | nple<br>mber    |           | Depth           |                 | ob.+<br>avel | %<br>Sa | •              | %<br>Sil | %<br>t Clay |    |     |    |  |
|----------------|-------------------------------|-----|---------------|----------------|----------|-----------------|-----------|-----------------|-----------------|--------------|---------|----------------|----------|-------------|----|-----|----|--|
|                | (GP-GM) Sandy SILTY GRAVEL T  | ILL | BH23-10D      |                | 10D SA-1 |                 | 12.2-12.7 |                 | 5               | 51.4         |         | .7             |          | 23.9        |    |     |    |  |
|                | (GP-GM) Sandy SILTY GRAVEL T  | ILL | BH23-11       |                | -11 SA-0 |                 | A-06      |                 | 50              | 56.0         |         | 5.7            |          | 17.3        |    |     |    |  |
| <b>o</b>       | (SM) Gravelly SILTY SAND      |     | BH23          | -18            | SA-09    |                 |           | 9.1-9.5         | 2:              | 25.8         |         | 42.9           |          | 31.2        |    |     |    |  |
|                | (SM/ML) Gravelly SILT and SAN | D   | BH23          | -18            | SA       | <b>\-</b> 14    | 15.2-15.5 |                 | 2′              | 7.5          | 27.8    |                | 44.7     |             |    |     |    |  |
| Line<br>Symbol | CanFEM Classification         |     | SCS<br>nbol   | D <sub>1</sub> | 0        | D <sub>15</sub> |           | D <sub>30</sub> | D <sub>50</sub> | De           | 30      | D <sub>8</sub> | 5        | % 5-75µm    |    |     |    |  |
| •              | Sandy silty gravel            | N   | N/A           |                | I/A      |                 | -         |                 |                 | 0.30         | 5.21    | 5.21 11        |          | 24.         | 87 |     |    |  |
|                | Sandy gravel , some silt      | N   | √/А -         |                | [/A      |                 | -         |                 |                 | 0.63         | 7.71    | 12.            | 12.60    |             | 51 |     |    |  |
| <b>o</b>       | Gravelly silty sand           | N   | I/A           | /A             |          |                 |           |                 |                 |              |         |                | 0.45     | 1.          | 17 | 11. | 98 |  |
| <b>D</b>       | Gravelly sandy silt           | N   | J/A           |                | /A       |                 | -         |                 |                 |              | 0.13    | 0.             | 61       | 11.         | 51 |     |    |  |







Limits Shown: None

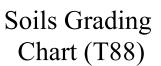
| Line<br>Symbol | Sample  |      |                |         |         |                 | Sample<br>Number |                 | Depth           |           |      | % Cob.+<br>Gravel |     | %<br>ind | %<br>Silt |   | %<br>Clay |
|----------------|---|------|----------------|---------|---------|-----------------|------------------|-----------------|-----------------|-----------|------|-------------------|-----|----------|-----------|---|-----------|
|                | (CL-ML) Sandy SILTY CLAY to<br>CLAYEY SILT TILL | 0    | BH23           |         | BH23-02 |                 | SA               | <b>A-06</b>     |                 | 4.6-5.0   |      | 9.0               | 29  | 9.7      | 32.       | 4 | 28.9      |
|                | (ML) Sandy SILT                                 | BH23 |                | BH23-02 |         | 123-02 S        |                  | SA-10           |                 | 10.7-10.8 |      | 2.5               |     | 12.2     |           | 9 | 21.4      |
| <b>o</b>       | (CL) SILTY CLAY                                 |      | BH23-          |         | SA      | <b>A-0</b> 8    |                  | 7.6-8.1         |                 | 1.0       |      | 5.7 27            |     | 5        | 55.8      |   |           |
| 0              | (CL) Gravelly sandy SILTY<br>CLAY TILL          | Η    | BH23-          | 06D     | SA-08   |                 | 7.6-8.0          |                 | 1               | 18.9      |      | 13.3              |     | 6        | 39.2      |   |           |
| Line<br>Symbol | CanFEM Classification                           |      | USCS<br>Symbol |         | 0       | D <sub>15</sub> |                  | D <sub>30</sub> | D <sub>50</sub> | D         | 60   | D                 | 85  | % :      | 5-75µm    |   |           |
| <b>•</b>       | Clayey sand and silt, trace gravel              | N    | N/A            |         | -       | 0.00            |                  | 0.01            | 0.03            | 0.        | 07   | 2.                | 78  |          | 32.4      |   |           |
|                | Clayey silt, some sand, trace gravel            | N    | N/A 0.00       |         | 0.00    |                 |                  | 0.01            | 0.02            | 0.        | 02   | 0.                | 07  |          | 63.9      |   |           |
| <b>o</b>       | Silty clay, some sand, trace gravel             | N    | N/A            |         | √/A -   |                 | -                |                 |                 |           | 0.00 | 0.                | 01  | 0.       | 10        |   | 27.5      |
|                | Silty clay, some gravel, some sand              | C    | CL             |         | -       |                 |                  | 0.00            | 0.01            | 0.        | 04   | 26.               | .95 |          | 28.6      |   |           |

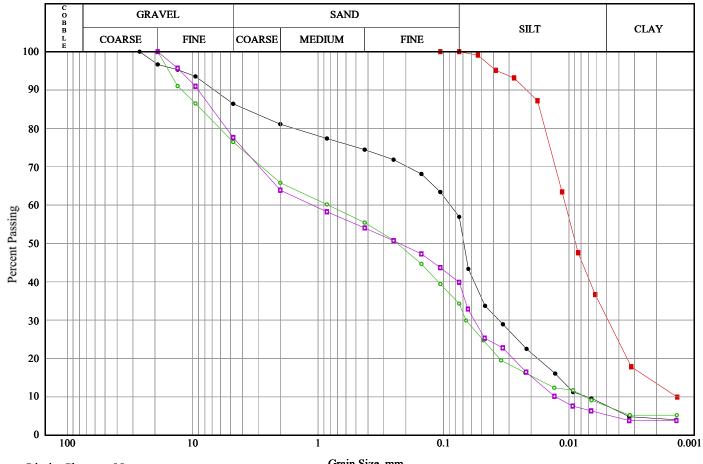


t: Mayfield Golf Course Inc.

Project: Mayfield Golf Course Redevelopment, Caledon, Ontario

Project #: 101987001





| Limits Shown: None | e |
|--------------------|---|
|--------------------|---|

| Grain S | bize, | mm |
|---------|-------|----|
|---------|-------|----|

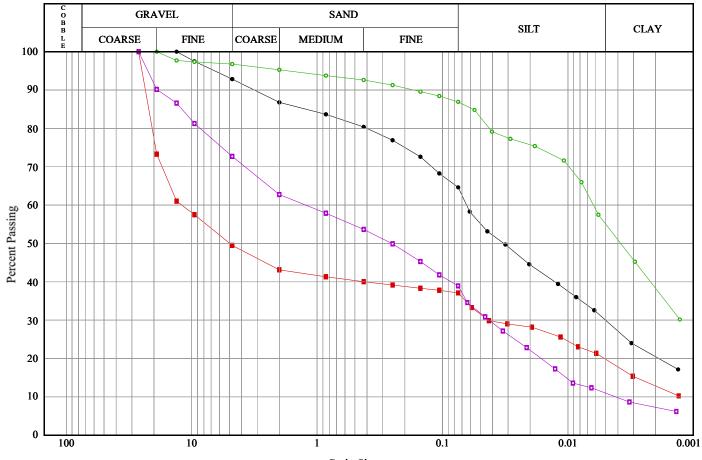
| Line<br>Symbol | Sample                   | Borehole/<br>Test Pit | Sample<br>Number | Depth     | % Cob.+<br>Gravel | %<br>Sand | %<br>Silt | %<br>Clay |
|----------------|--------------------------|-----------------------|------------------|-----------|-------------------|-----------|-----------|-----------|
|                | (ML) Gravelly Sandy SILT | BH23-06D              | SA-11            | 12.2-12.5 | 13.6              | 29.5      | 49.2      | 7.7       |
|                | (ML) SILT                | BH23-10D              | SA-08            | 7.6-8.1   | 0.0               | 0.0       | 69.3      | 30.7      |
| <b>_</b>       | (SM) Gravelly SILTY SAND | BH23-12               | SA-04            | 2.3-2.6   | 23.6              | 42.2      | 26.7      | 7.6       |
|                | (SM) Gravelly SILTY SAND | BH23-12               | SA-07            | 6.1-6.2   | 22.4              | 37.8      | 34.6      | 5.3       |
|                |                          |                       |                  |           |                   |           |           |           |

| Line<br>Symbol | CanFEM Classification                | USCS<br>Symbol | D <sub>10</sub> | D <sub>15</sub> | D <sub>30</sub> | D <sub>50</sub> | D <sub>60</sub> | D <sub>85</sub> | % 5-75µm |
|----------------|--------------------------------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|----------|
| <b>-</b> _     | Sandy silt, some gravel , trace clay | N/A            | 0.01            | 0.01            | 0.04            | 0.07            | 0.09            | 3.78            | 49.2     |
|                | Clayey silt, trace sand              | N/A            | 0.00            | 0.00            | 0.00            | 0.01            | 0.01            | 0.02            | 69.3     |
| <b>o</b>       | Gravelly silty sand, trace clay      | N/A            | 0.01            | 0.02            | 0.07            | 0.23            | 0.83            | 8.57            | 26.7     |
| 0              | Gravelly silty sand, trace clay      | N/A            | 0.01            | 0.02            | 0.06            | 0.23            | 1.11            | 6.97            | 34.6     |



Client: Mayfield Golf Course Inc.

Project: Mayfield Golf Course Redevelopment, Caledon, Ontario Soils Grading Chart (T88)



Limits Shown: None

| Grain | Size, | mm |
|-------|-------|----|
|-------|-------|----|

| Line<br>Symbol | Sample   |      | Boreh<br>Test   |      |          |                | Sample<br>Number |              |      | Depth           | % Co<br>Gra |                 | %<br>Sai        |       | %<br>Sil |         | %<br>Clay |     |        |
|----------------|--|------|-----------------|------|----------|----------------|------------------|--------------|------|-----------------|-------------|-----------------|-----------------|-------|----------|---------|-----------|-----|--------|
|                | (CL-ML) Sandy SILTY CLAY t<br>CLAYEY SILT TILL | 0    |                 |      |          | BH23-<br>17D/S |                  | <b>A-0</b> 7 | 1    | 6.1-6.6         | 7.          | 2               | 28              | .2    | 34.      | 7       | 30.0      |     |        |
|                | (GM/GP) Sandy SILTY GRAVEL T                   | TILL | ILL BH2<br>17D/ |      | 5A-1     |                | SA-11            |              | 1    | 2.2-12.4        | 50          | .5              | 12              | .4    | 17.      | 3       | 19.8      |     |        |
| <b>o</b>       | (CL) SILTY CLAY                                |      | BH23            | -19  | SA       | <b>A-</b> 07   |                  | 6.1-6.6      | 3.   | 3.2             |             | 9.8 3           |                 | 9     | 55.1     |         |           |     |        |
| <b>0</b>       | (SM) Gravelly SILTY SAND                       |      | BH23            | 8-19 | SA       | A-09           |                  | 9.1-9.4      | 27   | .3              | 33          | .8              | 28.             | 0     | 11.0     |         |           |     |        |
| Line<br>Symbol | CanFEM Classification                          |      | USCS<br>Symbol  |      |          |                |                  |              | 0    | D <sub>15</sub> |             | D <sub>30</sub> | D <sub>50</sub> | De    | 60       | D       | 35        | % 5 | 5-75µm |
|                | Clayey sand and silt, trace gravel             | CL   | L-ML            |      | -        |                |                  | 0.01         | 0.03 | 0.0             | )6          | 1.2             | 23              | ,     | 34.7     |         |           |     |        |
|                | Gravel, some sand, some silt, some clay        | N    | N/A             |      | N/A      |                | 0.0              |              |      | 0.04            | 4.97        | 12.             | 01              | 21.98 |          | 98 17.3 |           |     |        |
| <b>—</b> •—    | Silty clay, trace gravel, trace sand           | (    | CL              |      | CL       |                | -                |              |      |                 | 0.00        | 0.0             | )1              | 0.0   | 06       |         | 31.9      |     |        |
|                | Gravel and sand and silt, some clay            | [    | CL              |      | J/A 0.00 |                | 0.00             |              |      |                 |             | T               |                 |       |          |         |           |     |        |

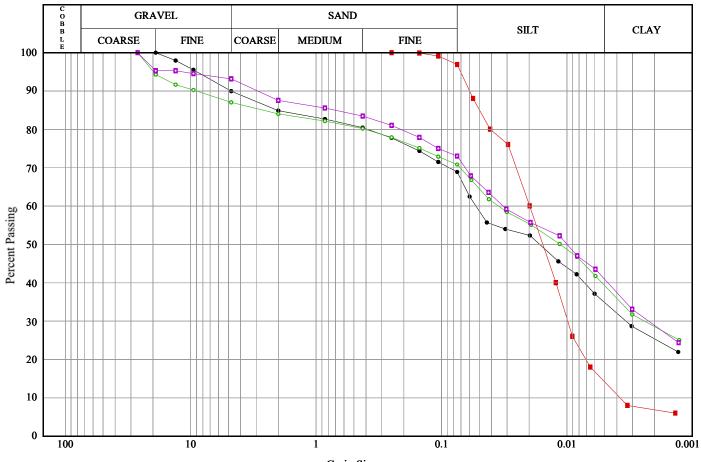


t: Mayfield Golf Course Inc.

101987001

oject: Mayfield Golf Course Redevelopment, Caledon, Ontario

Soils Grading Chart (T88)



| Limits Shown: Non | e |
|-------------------|---|
|-------------------|---|

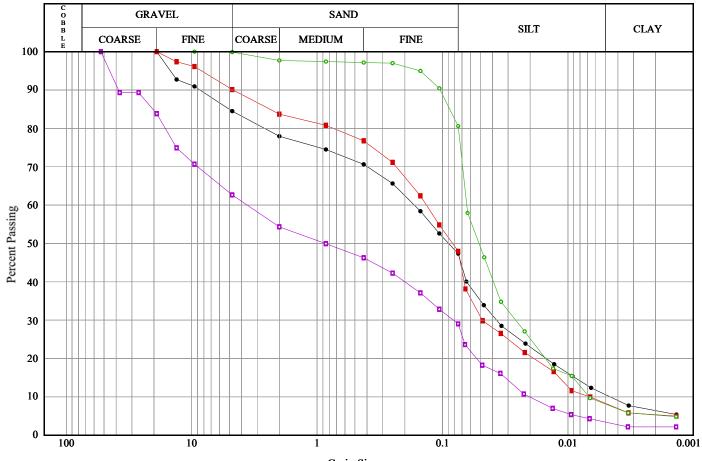
Grain Size, mm

| Line<br>Symbol | Sample                             |                |                |    | nple<br>mber    | Depth           | % Co<br>Gra     |                | %<br>Sand | %<br>Sil |      | %<br>Clay |     |      |    |     |
|----------------|------------------------------------|----------------|----------------|----|-----------------|-----------------|-----------------|----------------|-----------|----------|------|-----------|-----|------|----|-----|
| <b>•</b>       | (CL) Sandy SILTY CLAY TILL         | - BH           | BH23-20        |    | H23-20          |                 | <b>\-0</b> 7    | 6.1-6.6        | 10        | .0       | 21.1 | 34.       | .1  | 34.8 |    |     |
| <b>_</b>       | (ML) SILT                          | BH2            | BH23-21D       |    | <b>\-0</b> 8    | 7.6-8.1         | 0.              | 0              | 3.1       | 82.      | .8   | 14.1      |     |      |    |     |
| <b>o</b>       | (CL) Sandy SILTY CLAY              |                | H23-<br>D/S    | SA | <b>\-0</b> 7    | 6.1-6.6         | 12              | .9             | 16.2      | 31.      | .6   | 39.2      |     |      |    |     |
|                | (CL) Sandy SILTY CLAY TILL         | ,              | BH23-<br>23D/S |    | <b>\-</b> 07    | 6.1-6.6         | 6.              | 8              | 20.2      | 32.      | .1   | 40.9      |     |      |    |     |
| Line<br>Symbol | CanFEM Classification              | USCS<br>Symbol | D,             | 10 | D <sub>15</sub> | D <sub>30</sub> | D <sub>50</sub> | D <sub>6</sub> | 0 I       | 85       | % 5- | -75µm     |     |      |    |     |
| <b>•</b>       | Clayey sand and silt, some gravel  | CL             | CL             |    |                 | 0.00            | 0.02            | 0.0            | 5 2       | .04      | 3.   | 4.1       |     |      |    |     |
|                | Silt, some clay, trace sand        | N/A            | J/A 0.0        |    | 0.00            |                 | 0.01            | 0.01           | 0.02      | 0.0      | 2 0  | .05       | 8.  | 2.8  |    |     |
| <b>o</b>       | Silty clay, some gravel, some sand | N/A            | [/A            |    | A               |                 |                 | 0.00           | 0.01      | 0.0      | 4 2  | .63       | 3   | 1.6  |    |     |
| 0              | Sandy silty clay, trace gravel     | CL             | CL             |    | CL              |                 |                 |                |           | 0.00     | 0.01 | 0.0       | 3 0 | .70  | 32 | 2.1 |



Mayfield Golf Course Inc.

Project: Mayfield Golf Course Redevelopment, Caledon, Ontario Soils Grading Chart (T88)

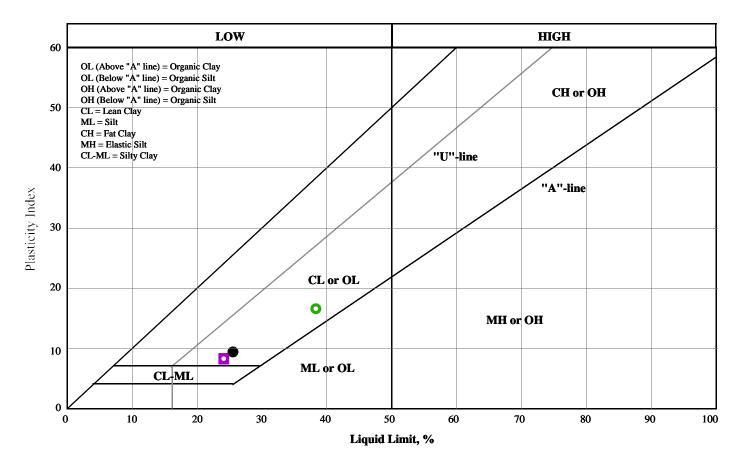


Limits Shown: None

| Line<br>Symbol | Sample                         | Borehole/<br>Test Pit | Sample<br>Number | Depth     | % Cob.+<br>Gravel | %<br>Sand | %<br>Silt | %<br>Clay |
|----------------|--------------------------------|-----------------------|------------------|-----------|-------------------|-----------|-----------|-----------|
|                | (SM/ML) Gravelly SAND and SILT | BH23-23D              | SA-09            | 9.1-9.2   | 15.5              | 37.2      | 36.8      | 10.5      |
|                | (SM/ML) SAND and SILT          | BH23-26               | SA-10            | 10.7-10.8 | 9.9               | 42.2      | 39.7      | 8.3       |
| <b>o</b>       | (ML) Sandy SILT                | BH23-<br>28D/S        | SA-08            | 7.6-8.1   | 0.1               | 19.3      | 72.5      | 8.1       |
|                | (SM/GM) SILTY SAND and GRAVEL  | BH23-28D              | SA-11            | 12.2-12.7 | 37.4              | 33.6      | 25.6      | 3.4       |

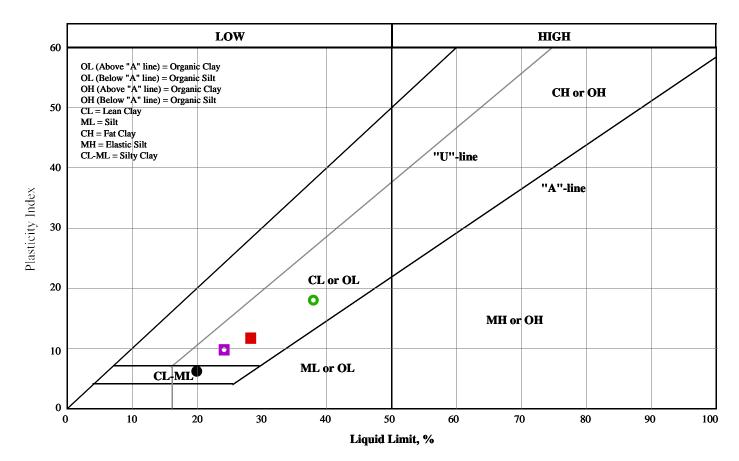
| Line<br>Symbol | CanFEM Classification                     | USCS<br>Symbol | D <sub>10</sub> | D <sub>15</sub> | D <sub>30</sub> | D <sub>50</sub> | D <sub>60</sub> | D <sub>85</sub> | % 5-75µm |
|----------------|---|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|----------|
|                | Sand and silt, some gravel, some clay     | N/A            | 0.00            | 0.01            | 0.04            | 0.09            | 0.17            | 5.02            | 36.8     |
|                | Sand and silt, trace gravel, trace clay   | N/A            | 0.01            | 0.01            | 0.05            | 0.08            | 0.13            | 2.38            | 39.7     |
| <b>o</b>       | Silt, some sand, trace gravel, trace clay | N/A            | 0.01            | 0.01            | 0.03            | 0.05            | 0.06            | 0.09            | 72.5     |
|                | Sandy silty gravel, trace clay            | N/A            | 0.02            | 0.03            | 0.08            | 0.86            | 3.61            | 20.38           | 25.6     |





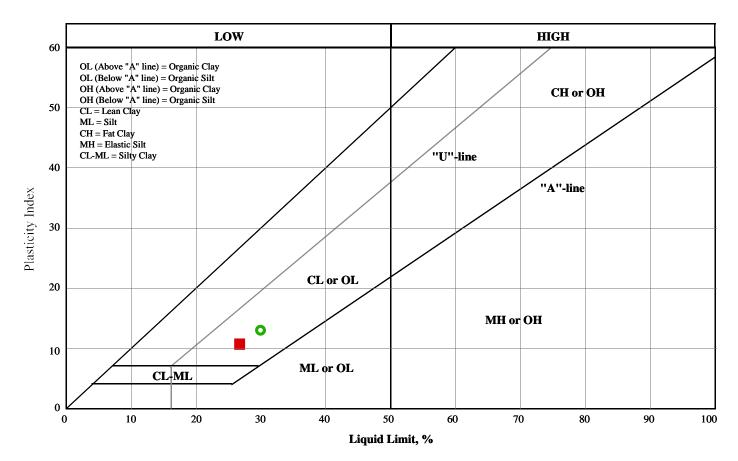
| Symbol | Borehole<br>/Test Pit | Sample<br>Number | Depth   | Liquid Limit | Plastic Limit | Plasticity<br>Index | Non-Plastic | Moisture<br>Content, % |
|--------|-----------------------|------------------|---------|--------------|---------------|---------------------|-------------|------------------------|
| •      | BH23-06D              | SA-08            | 7.6-8.0 | 25.5         | 16.1          | 9.4                 |             | 7.7                    |
|        | BH23-10               | SA-08            | 7.6-8.1 |              |               |                     |             | 18.3                   |
| 0      | BH23-14               | SA-05            | 3.1-3.5 | 38.3         | 21.7          | 16.6                |             | 22.5                   |
|        | BH23-16               | SA-06            | 4.6-5.0 | 24.1         | 15.8          | 8.3                 |             | 14.5                   |





| Symbol | Borehole<br>/Test Pit | Sample<br>Number | Depth   | Liquid Limit | Plastic Limit | Plasticity<br>Index | Non-Plastic | Moisture<br>Content, % |
|--------|-----------------------|------------------|---------|--------------|---------------|---------------------|-------------|------------------------|
| •      | BH23-17D/S            | SA-07            | 6.1-6.6 | 20.0         | 13.7          | 6.2                 |             | 13.7                   |
|        | BH23-19               | SA-07            | 6.1-6.6 | 28.3         | 16.5          | 11.7                |             | 16.1                   |
| 0      | BH23-20               | SA-04            | 2.3-2.7 | 37.9         | 19.9          | 18.0                |             | 25.9                   |
|        | BH23-20               | SA-07            | 6.1-6.6 | 24.2         | 14.4          | 9.8                 |             | 11.8                   |





| Symbol | Borehole<br>/Test Pit | Sample<br>Number | Depth   | Liquid Limit | Plastic Limit | Plasticity<br>Index | Non-Plastic | Moisture<br>Content, % |
|--------|-----------------------|------------------|---------|--------------|---------------|---------------------|-------------|------------------------|
| •      | BH23-21D              | SA-08            | 7.6-8.1 |              |               |                     |             | 18.3                   |
| -      | BH23-23D/S            | SA-07            | 6.1-6.6 | 26.7         | 16.0          | 10.7                |             | 12.9                   |
| 0      | BH23-27               | SA-05            | 3.1-3.5 | 29.9         | 16.9          | 13.0                |             | 13.7                   |
|        |                       |                  |         |              |               |                     |             |                        |



### COMPRESSIVE STRENGTH of ROCK CORE

**Date Tested:** 

GEMTEC Consulting Engineers and Scientists Limited 32 Steacie Drive Ottawa, ON K2K 2A9 Tel.: 613-836-1422 Fax.:613-836-9731

10-Apr-23

| CLIENT: Mayfield Golf Course Inc.           | PROJECT No.:      | 101987.001 |
|---|-------------------|------------|
| Project: Mayfield Golf Course Redevelopment | <b>REPORT NO:</b> | 1          |

Date Received:10-Apr-23

**Cylinder ID** RC23-11 RC23-12 BH23-11 BH23-12 Location Run 4 Run 2 Depth (m) 8.5-8.7 9.2-9.5 Cut length (mm) 130.00 130.00 Ground length (mm) 63.30 125.09 Diameter (mm) 63.28 63.09 Ground Mass (kg) 0.49 1.06 Length:Diameter ratio 1.00 1.98 **Correction factor** 0.87 1.00 Failure load (kN) 226.89 232.14 **Uncorrected Strength (MPa)** 72.10 74.30 Corrected Strength (MPa) 62.70 74.30

Remarks

More information may be provided upon request

Checked by: \_\_\_\_\_

Anth

Krystle Smith, Laboratory Manager



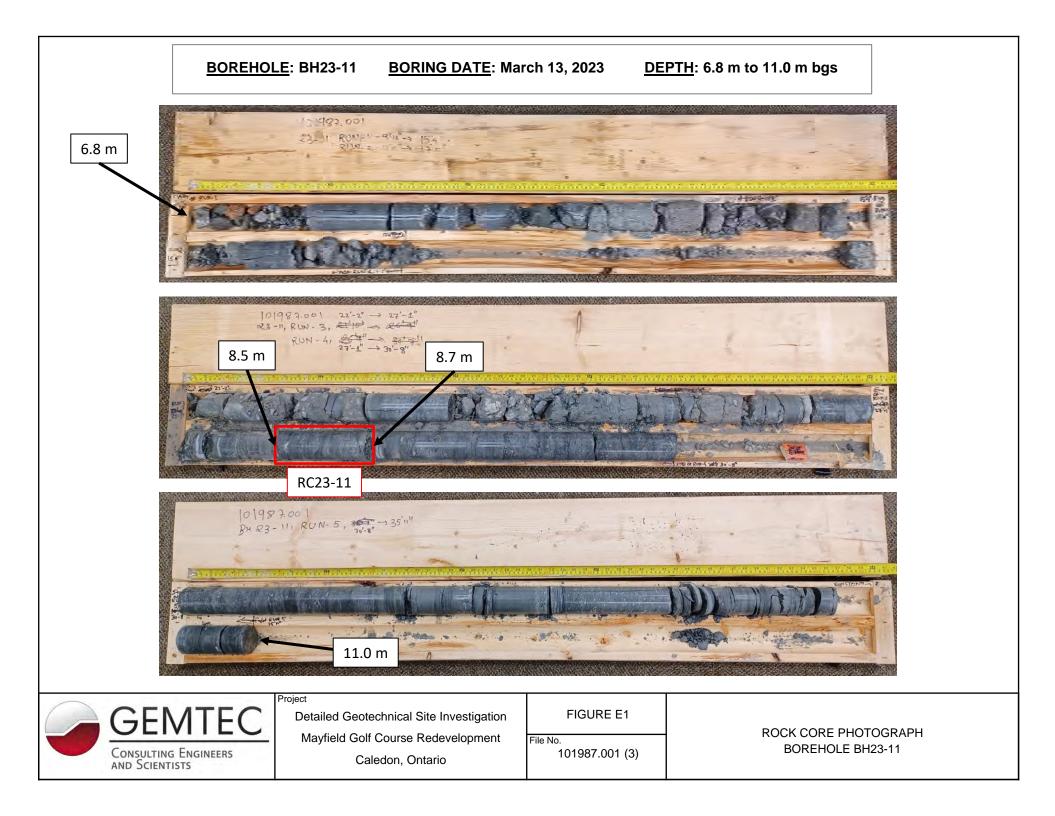
Reviewed by:

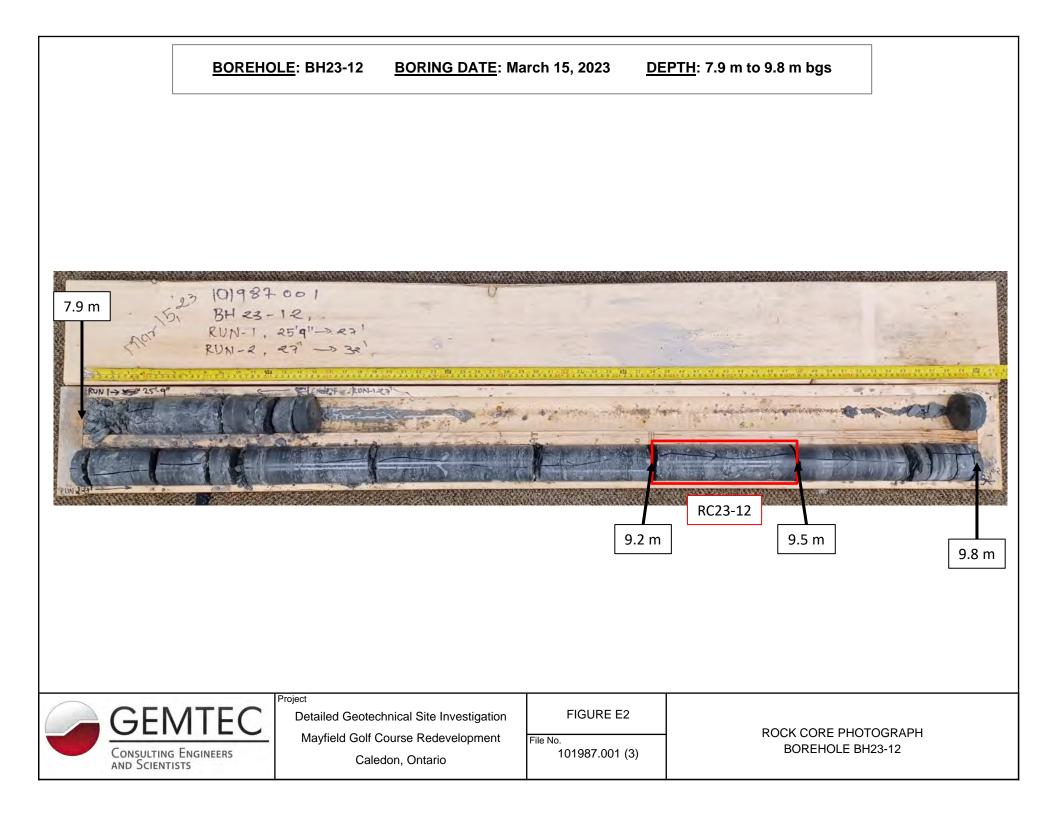
Steve Goodman, Ph.D., P.Eng.

# APPENDIX E

### **Rock Core Photos**

Rock Core Photographs for BH23-11, BH23-12 and BH23-17







# **APPENDIX F**

# Monitoring Well Construction Information

Table F-1: Monitoring Well Construction Information Table F-2: Groundwater Depths and Elevations Table F-3: Summary of Hydraulic Conductivity Values



#### Ground Top of Casing Top of Top of Bottom of Bottom of UTM Coordinates\* Installation Monitoring Surface or Gauge Stick-up Screen Screened Lithology Screen Screen Screen Location Date Elevation' Elevation\* Easting Northing (m amsl) (m amsl) (m) (m bgs) (m bgs) (m amsl) (m amsl) Monitoring Wells BH23-1 4849440 22-Mar-23 258.83 7.62 250.36 (ML) Silt 596913 257.98 0.85 6.10 251.88 BH23-2 597048 4849548 22-Mar-23 256.42 257.20 0.78 9.14 10.67 247.28 245.75 (SM) Silty Sand Till; (ML) Sandy Silt (CL) Silty Clay; (CL-ML) Silty Clay to BH23-4 597239 4849849 20-Mar-23 257.98 258.83 0.85 6.10 7.62 251.88 250.36 Clayey Silt and Sand Till 21-Mar-23 BH23-5 597245 4849754 258.57 247.16 (CL) Silty Clay 257.83 0.74 7.62 10.67 250.21 BH23-6S 597249 4849533 20-Mar-23 0.76 250.56 249.04 (CL) Gravelly Sandy Silty Clay Till 256.66 257.42 6.10 7.62 BH23-6D 597251 4849531 20-Mar-23 256.73 257.60 0.87 10.67 12.19 246.06 244.54 (ML) Gravelly Sandy Silt BH23-7 597410 4849527 10-Feb-23 251.92 252.60 0.68 6.10 7.62 245.82 244.30 (SM) Silty Sand; (SP) Gravelly Sand BH23-8 597394 4849674 21-Mar-23 253.06 253.88 0.82 5.79 7.32 247.27 245.74 (SM) Silty Sand Till BH23-9 597211 4849282 8-Mar-23 254.29 255.15 0.86 9.14 10.67 245.15 243.62 (ML) Silt BH23-10S 597322 4849226 10-Mar-23 253.91 (ML) Sandy Silt Till; (ML) Silt 252.93 0.98 4.57 6.10 248.36 246.83 BH23-10D 597323 4849224 10-Mar-23 252.82 253.79 0.97 10.67 12.19 242.15 240.63 (ML) Silt; (GP-GM) Sandy Silty Gravel Till BH23-11 597382 4849327 14-Mar-23 245.98 246.97 0.99 4.57 6.10 241.41 (GP-GM) Sandy Silty Gravel Till 239.88 BH23-12 4849349 16-Mar-23 246.73 0.95 7.92 9.75 237.86 597412 245.78 236.03 Limestone BH23-15 253.31 254.18 7.62 (SM) Gravelly Silty Sand Till; (ML) Silt 597247 4849035 9-Mar-23 0.87 6.10 247.21 245.69 (GM/GP) Sandy Silty Gravel Till BH23-17S 597602 4849375 28-Feb-23 253.04 253.94 0.90 10.97 12.50 242.07 240.54 28-Feb-23 BH23-17D 597601 4849377 253.03 253.75 0.72 13.87 16.00 239.16 237.03 Limestone (SM/ML) Gravelly Silty Sand Till; (SM/ML) BH23-18 597653 4849497 21-Feb-23 254.41 255.18 0.77 15.24 16.76 239.17 237.65 Silt and Sand Till; Shale BH23-19 597519 4848942 24-Feb-23 250.43 251.29 0.86 241.29 239.76 9.14 10.67 (SM) Gravelly Silty Sand BH23-21S 597660 4848983 22-Feb-23 249.28 250.02 0.74 3.05 246.23 244.71 (CL) Sandy Silty Clay Till 4.57 BH23-21D 597662 4848983 22-Feb-23 249.24 250.10 0.86 9.14 10.67 240.10 238.57 (SM) Silty Sand Till BH23-22 597815 4849221 17-Feb-23 252.92 253.79 0.87 6.10 7.62 246.82 245.30 (CL) Sandy Silty Clay BH23-23S 598066 4848829 15-Feb-23 249.89 250.64 0.75 5.18 6.71 244.71 243.18 (CL) Sandy Silty Clay Till BH23-23D (SM/ML) Gravelly Sand and Silt Till; Shale 598063 4848828 15-Feb-23 249.95 250.67 0.72 13.72 15.24 236.23 234.71 BH23-24 4849053 249.09 249.92 0.83 3.05 246.04 (CL) Silty Clay; (CL) Sandy Silty Clay Till 598150 14-Feb-23 6.10 242.99 BH23-26 598193 4848830 16-Feb-23 248.75 249.54 0.79 13.11 14.63 235.64 234.12 (SM/ML) Sand and Silt BH23-28S 255.32 256.34 597078 4849204 8-Mar-23 1.02 7.62 9.14 247.70 246.18 (ML) Sandy Silt BH23-28D 597076 4849207 7-Mar-23 255.21 256.24 1.03 15.24 16.76 239.97 238.45 (SM/GM) Silty Sand and Gravel (CL) Sandy Silty Clay; (CL) Silty Clay; (ML) BH23-E1 597499 4849707 10-Feb-23 254.51 254.43 -0.08 4.57 7.62 249.94 246.89 Sandy Silt Till 8-Feb-23 BH23-E2 597468 4849673 254.01 253.91 -0.10 249.44 246.39 4.57 7.62 (CL) Silty Clay; (ML) Silt BH23-E3 597489 249.54 4849655 8-Feb-23 254.11 254.86 0.75 4.57 7.62 246.49 (CL) Silty Clay; (SM) Silty Sand Till 022 Monitoring Wells (GEMTEC) BH22-02 4849625 12-Jul-22 256.30 257.28 0.98 6.10 7.62 250.20 248.68 (SM) Silty Sand Till 597051 BH22-05 597467 4849133 13-Jul-22 251.20 252.20 1.00 6.10 7.62 245.10 243.58 (ML) Silt BH22-06 597802 4849396 13-Jul-22 253.50 253.39 -0.11 6.10 7.62 247.40 245.88 (CL) Silty Clay; (CL) Silty Clay Till Drive-Point Piezometers and Staff Gauges 4849853 14-Apr-23 DP23-1 597321 250.20 251.82 1.62 1.38 1.68 248.82 248.52 N/A SG23-1 250.79 N/A 597322 4849854 14-Apr-23 N/A N/A N/A N/A N/A N/A DP23-2 597030 4849586 8-Feb-23 254.47 255.96 1.49 1.18 1.48 253.29 252.99 N/A SG23-2 N/A N/A N/A 597032 4849588 8-Feb-23 N/A 255.60 N/A N/A N/A DP23-3 8-Feb-23 597327 4849373 247.27 248.31 1.04 0.99 1.29 246.28 245.98 N/A SG23-3 597328 4849374 8-Feb-23 N/A 248.40 N/A N/A N/A N/A N/A N/A DP23-4 597409 4849275 8-Feb-23 244.81 245.93 1.12 0.95 1.25 243.86 243.56 N/A SG23-4 597408 4849275 8-Feb-23 245.67 N/A N/A N/A N/A N/A N/A N/A

#### Table F-1: Monitoring Well Construction Information - Mayfield Golf Course Development

#### Notes:

m - metre \* = UTM coordinates and elevations surveyed by R-PE Surveying Ltd.

m amsl

- metres above mean sea level

m bgs - metres below ground surface

UTM - Universal Transverse Mercator

N/A - not applicable



### Table F-2 Groundwater Depths and Elevations - Mayfield Golf Course Development

|                       | Ground                | T op of<br>Casing or | Top of        | Bottom of     |  | April 11 | -14, 2023 | May 18, 2023 |           |
|-----------------------|-----------------------|----------------------|---------------|---------------|--|----------|-----------|--------------|-----------|
| Monitoring Location   | Surface<br>Elevation* | Gauge                |               |               | Screened Lithology                     | Depth    | Elevation | Depth        | Elevation |
|                       | (m amsl)              | (m amsl)             | (m amsl)      | (m amsl)      |  | (m bgs)  | (m amsl)  | (m bgs)      | (m amsl)  |
| onitoring Wells       |                       |                      |               |               |  |          |           |              |           |
| BH23-1                | 257.98                | 258.83               | 251.88        | 250.36        | (ML) Silt                              | -0.38    | 258.36    | -0.55        | 258.53    |
| BH23-2                | 256.42                | 257.20               | 247.28        | 245.75        | (SM) Silty Sand Till; (ML) Sandy Silt  | 1.02     | 255.41    | 1.17         | 255.25    |
|                       |                       |                      |               |               | (CL) Silty Clay; (CL-ML) Silty Clay to |          |           |              |           |
| BH23-4                | 257.98                | 258.83               | 251.88        | 250.36        | Clayey Silt and Sand Till              | 3.44     | 254.54    | 3.77         | 254.21    |
| BH23-5                | 257.83                | 258.57               | 250.21        | 247.16        | (CL) Silty Clay                        | 2.67     | 255.16    | 2.95         | 254.88    |
| BH23-6S               | 256.66                | 257.42               | 250.56        | 249.04        | (CL) Gravelly Sandy Silty Clay Till    | 2.70     | 253.97    | 2.09         | 254.58    |
| BH23-6D               | 256.73                | 257.60               | 246.06        | 244.54        | (ML) Gravelly Sandy Silt               | 3.76     | 252.97    | 3.95         | 252.78    |
| BH23-7                | 251.92                | 252.60               | 245.82        | 244.30        | (SM) Silty Sand; (SP) Gravelly Sand    | 1.18     | 250.74    | 1.46         | 250.46    |
| BH23-8                | 253.06                | 253.88               | 247.27        | 245.74        | (SM) Silty Sand Till                   | 3.83     | 249.23    | 3.38         | 249.68    |
| BH23-9                | 254.29                | 255.15               | 245.15        | 243.62        | (ML) Silt                              | 0.18     | 254.11    | 0.74         | 253.55    |
| BH23-10S              | 252.93                | 253.91               | 248.36        | 246.83        | (ML) Sandy Silt Till; (ML) Silt        | 1.90     | 251.03    | 2.55         | 250.38    |
| DH20 100              | 202.00                | 200.01               | 240.00        | 240.00        | (ML) Silt; (GP-GM) Sandy Silty         | 1.00     | 201.00    | 2.00         | 200.00    |
| BH23-10D              | 252.82                | 253.79               | 242.15        | 240.63        | Gravel Till                            | 3.27     | 249.56    | 3.72         | 249.10    |
| DH25-10D              | 232.02                | 233.79               | 242.15        | 240.03        | Glaver Th                              | 5.27     | 249.50    | 5.72         | 249.10    |
| BH23-11               | 245.98                | 246.97               | 241.41        | 239.88        | (GP-GM) Sandy Silty Gravel Till        | 0.24     | 245.74    | 0.45         | 245.53    |
| BH23-11<br>BH23-12    | 245.98                | 246.97               | 237.86        | 239.00        | Limestone                              | -0.29    | 245.74    | 0.45         | 245.53    |
| DU22-12               | 245.76                | 240.73               | 237.00        | 230.03        |  | -0.29    | 240.00    | 0.05         | 245.75    |
|                       | 050.04                | 054.40               | 047.04        | 0.45 00       | (SM) Gravelly Silty Sand Till; (ML)    | 0.47     | 050.44    | 0.77         | 050 54    |
| BH23-15               | 253.31                | 254.18               | 247.21        | 245.69        | Silt                                   | 0.17     | 253.14    | 0.77         | 252.54    |
| BH23-17S              | 253.04                | 253.94               | 242.07        | 240.54        | (GM/GP) Sandy Silty Gravel Till        | 1.21     | 251.83    | 1.23         | 251.81    |
| BH23-17D              | 253.03                | 253.75               | 239.16        | 237.03        |  | 1.53     | 251.51    | 1.48         | 251.55    |
|                       |                       | /-                   |               |               | (SM/ML) Gravelly Silty Sand Till;      |          |           |              |           |
| BH23-18               | 254.41                | 255.18               | 239.17        | 237.65        | (SM/ML) Silt and Sand Till; Shale      | 2.18     | 252.23    | 2.14         | 252.27    |
| BH23-19               | 250.43                | 251.29               | 241.29        | 239.76        | (SM) Gravelly Silty Sand               | 3.35     | 247.09    | 3.61         | 246.82    |
| BH23-21S              | 249.28                | 250.02               | 246.23        | 244.71        | (CL) Sandy Silty Clay Till             | 0.23     | 249.05    | 0.64         | 248.64    |
| BH23-21D              | 249.24                | 250.10               | 240.10        | 238.57        | (SM) Silty Sand Till                   | 0.10     | 249.14    | 0.37         | 248.87    |
| BH23-22               | 252.92                | 253.79               | 246.82        | 245.30        | (CL) Sandy Silty Clay                  | 0.54     | 252.38    | 0.77         | 252.15    |
| BH23-23S              | 249.89                | 250.64               | 244.71        | 243.18        | (CL) Sandy Silty Clay Till             | 2.10     | 247.79    | 2.15         | 247.74    |
|                       |                       |                      |               |               | (SM/ML) Gravelly Sand and Silt Till;   |          |           |              |           |
| BH23-23D              | 249.95                | 250.67               | 236.23        | 234.71        | Shale                                  | 4.78     | 245.17    | 5.04         | 244.91    |
| BH23-24               | 249.09                | 249.92               | 246.04        | 242.99        | (CL) Silty Clay; (CL) Sandy Silty Clay | 0.62     | 248.47    | 0.88         | 248.21    |
| BH23-26               | 248.75                | 249.54               | 235.64        | 234.12        | (SM/ML) Sand and Silt                  | 6.63     | 242.12    | 6.91         | 241.84    |
| BH23-28S              | 255.32                | 256.34               | 247.70        | 246.18        | (ML) Sandy Silt                        | Flowing  | >256.34   | Flowing      | >256.34   |
| BH23-28D              | 255.21                | 256.24               | 239.97        | 238.45        | (SM/GM) Silty Sand and Gravel          | Flowing  | >256.24   | Flowing      | >256.24   |
|                       |                       |                      |               |               | (CL) Sandy Silty Clay; (CL) Silty      |          |           |              |           |
| BH23-E1               | 254.51                | 254.43               | 249.94        | 246.89        | Clay; (ML) Sandy Silt Till             | 0.06     | 254.45    | 1.09         | 253.42    |
| BH23-E2               | 254.01                | 253.91               | 249.44        | 246.39        | (CL) Silty Clay; (ML) Silt             | 0.08     | 253.93    | 1.42         | 252.59    |
| BH23-E3               | 254.11                | 254.86               | 249.54        | 246.49        | (CL) Silty Clay; (SM) Silty Sand Till  | 1.71     | 252.40    | 1.84         | 252.27    |
| 022 Monitoring Wells  | GEMTEC)               | •                    |               | -             |  |          | •         | •            |           |
| BH22-02               | 256.30                | 257.28               | 250.20        | 248.68        | (SM) Silty Sand Till                   |          |           | 0.19         | 256.11    |
| BH22-05               | 251.20                | 252.20               | 245.10        | 243.58        | (ML) Silt                              |          |           | 2.79         | 248.41    |
| BH22-06               | 253.50                | 253.39               | 247.40        | 245.88        | (CL) Silty Clay; (CL) Silty Clay Till  |          |           | 1.01         | 252.49    |
| Prive-Point Piezomete |                       |                      | -             |               | · · · · · · · ·                        |          |           |              |           |
| DP23-1                | 250.20                | 251.82               | 248.82        | 248.52        | N/A                                    | 1.26     | 248.94    | 0.72         | 249.48    |
| SG23-1                | N/A                   | 250.79               | N/A           | N/A           | N/A                                    |          | 249.87    |              | 249.80    |
| DP23-2                | 254.47                | 255.96               | 253.29        | 252.99        | N/A                                    | 0.02     | 254.45    | 0.03         | 254.44    |
| SG23-2                | N/A                   | 255.60               | N/A           | N/A           | N/A                                    |          | 254.45    |              | 254.44    |
|                       | 247.27                | 235.60               | 246.28        | 245.98        | N/A                                    | Dry      | <245.98   | 0.11         | 234.40    |
| SG23-3                | N/A                   |                      | 246.20<br>N/A | 245.96<br>N/A | N/A<br>N/A                             |          |           |              |           |
|                       |                       | 248.40               |               |               |  | <br>Dru/ | 247.18    |              | 247.17    |
| DP23-4                | 244.81                | 245.93               | 243.86        | 243.56        | N/A<br>N/A                             | Dry      | <243.56   | 0.23         | 244.58    |
| SG23-4                | N/A                   | 245.67               | N/A           | N/A           | IN/A                                   |          | 244.65    |              | 244.63    |

Notes:

-

-- Not Measured

- Negative values indicate that water levels are above the ground surface.
- Elev. Elevation
- m meter
- m amsl meters above mean sea level
- m bgs meters below ground surface

m toc - meters below top of casing

\* = UTM coordinates and elevations surveyed by R-PE Surveying Ltd.

Entered by: AW Checked by: CMK



#### Table F-3 Summary of Hydraulic Conductivity Values - Single Well Response Tests - Mayfield Golf Course Development

| Monitoring Location  | Date of Test | Ground<br>Surface<br>Elevation | Top of<br>Screen | Bottom of<br>Screen | Screen   | Bottom of<br>Screen<br>(m amsl) | Screened Lithology  | Type of Test | Hydraulic<br>Conductivity<br>Estimate<br>(m/s) |
|----------------------|--------------|--------------------------------|------------------|---------------------|----------|---------------------------------|---|--------------|--|
| Monitoring Wells     |              | (m amsl)                       | (m bgs)          | (m bgs)             | (m amsl) | (m amsi)                        |   |              | (11/5)   |
| BH23-1               |              | 257.98                         | 6.10             | 7.62                | 251.88   | 250.36                          | (ML) Silt   |              |  |
| BH23-2               | 11-Apr-23    | 256.4                          | 9.14             | 10.67               | 247.28   |                                 | (SM) Silty Sand Till; (ML) Sandy Silt                               | Rising Head  | 5.E-07   |
| BH23-4               |              | 258.0                          | 6.10             | 7.62                | 251.88   |                                 | (CL) Silty Clay; (CL-ML) Silty Clay to Clayey Silt and Sand Till    |              |  |
| BH23-5               | 11-Apr-23    | 257.8                          | 7.62             | 10.67               | 250.21   |                                 | (CL) Silty Clay   | Rising Head  | 4.E-08   |
| BH23-6S              |              | 256.7                          | 6.10             | 7.62                | 250.56   |                                 | (CL) Gravelly Sandy Silty Clay Till                                 |              |  |
| BH23-6D              | 11-Apr-23    | 256.7                          | 10.67            | 12.19               | 246.06   |                                 | (ML) Gravelly Sandy Silt  | Rising Head  | 2.E-07   |
| BH23-7               |              | 251.9                          | 6.10             | 7.62                | 245.82   |                                 | (SM) Silty Sand; (SP) Gravelly Sand                                 |              |  |
| BH23-8               |              | 253.06                         | 5.79             | 7.32                | 247.27   |                                 | (SM) Silty Sand Till  |              |  |
| BH23-9               | 11-Apr-23    | 254.29                         | 9.14             | 10.67               | 245.15   |                                 | (ML) Silt   | Rising Head  | 8.E-07   |
| BH23-10S             |              | 252.93                         | 4.57             | 6.10                | 248.36   |                                 | (ML) Sandy Silt Till; (ML) Silt                                     |              |  |
| BH23-10D             | 11-Apr-23    | 252.82                         | 10.67            | 12.19               | 242.15   |                                 | (ML) Silt; (GP-GM) Sandy Silty Gravel Till                          | Rising Head  | 2.E-07   |
| BH23-11              | 11-Apr-23    | 245.98                         | 4.57             | 6.10                | 241.41   |                                 | (GP-GM) Sandy Silty Gravel Till                                     | Rising Head  | 1.E-07   |
| BH23-12              | 12-Apr-23    | 245.78                         | 7.92             | 9.75                | 237.86   |                                 | Limestone   | Rising Head  | 2.E-08   |
| BH23-15              |              | 253.31                         | 6.10             | 7.62                | 247.21   |                                 | (SM) Gravelly Silty Sand Till; (ML) Silt                            |              |  |
| BH23-17S             |              | 253.04                         | 10.97            | 12.50               | 242.07   | 240.54                          | (GM/GP) Sandy Silty Gravel Till                                     |              |  |
| BH23-17D             |              | 253.03                         | 13.87            | 16.00               | 239.16   | 237.03                          | Limestone   |              |  |
| BH23-18              |              | 254.41                         | 15.24            | 16.76               | 239.17   | 237.65                          | (SM/ML) Gravelly Silty Sand Till; (SM/ML) Silt and Sand Till; Shale |              |  |
| BH23-19              |              | 250.43                         | 9.14             | 10.67               | 241.29   |                                 | (SM) Gravelly Silty Sand  |              |  |
| BH23-21S             | 12-Apr-23    | 249.28                         | 3.05             | 4.57                | 246.23   | 244.71                          | (CL) Sandy Silty Clay Till  | Rising Head  | 1.E-08   |
| BH23-21D             | 12-Apr-23    | 249.24                         | 9.14             | 10.67               | 240.10   | 238.57                          | (SM) Silty Sand Till  | Rising Head  | 3.E-06   |
| BH23-22              |              | 252.9                          | 6.10             | 7.62                | 246.82   | 245.30                          | (CL) Sandy Silty Clay   |              |  |
| BH23-23S             | 13-Apr-23    | 249.89                         | 5.18             | 6.71                | 244.71   | 243.18                          | (CL) Sandy Silty Clay Till  | Rising Head  | 1.E-08   |
| BH23-23D             | 13-Apr-23    | 249.95                         | 13.72            | 15.24               | 236.23   | 234.71                          | (SM/ML) Gravelly Sand and Silt Till; Shale                          | Rising Head  | 1.E-07   |
| BH23-24              |              | 249.09                         | 3.05             | 6.10                | 246.04   | 242.99                          | (CL) Silty Clay; (CL) Sandy Silty Clay Till                         |              |  |
| BH23-26              | 13-Apr-23    | 248.75                         | 13.11            | 14.63               | 235.64   |                                 | (SM/ML) Sand and Silt   | Rising Head  | 9.E-08   |
| BH23-28S             |              | 255.32                         | 7.62             | 9.14                | 247.70   | 246.18                          | (ML) Sandy Silt   |              |  |
| BH23-28D             |              | 255.21                         | 15.24            | 16.76               | 239.97   |                                 | (SM/GM) Silty Sand and Gravel                                       |              |  |
| BH23-E1              |              | 254.51                         | 4.57             | 7.62                | 249.94   | 246.89                          | (CL) Sandy Silty Clay; (CL) Silty Clay; (ML) Sandy Silt Till        |              |  |
| BH23-E2              |              | 254.01                         | 4.57             | 7.62                | 249.44   | 246.39                          | (CL) Silty Clay; (ML) Silt  |              |  |
| BH23-E3              |              | 254.11                         | 4.57             | 7.62                | 249.54   | 246.49                          | (CL) Silty Clay; (SM) Silty Sand Till                               |              |  |
| 2022 Monitoring Well | Is (GEMTEC)  |                                |                  |                     |          |                                 |   |              |  |
| BH22-02              |              | 256.3                          | 6.10             | 7.62                | 250.20   |                                 | (SM) Silty Sand Till  | Rising Head  | 5.E-08   |
| BH22-05              |              | 251.2                          | 6.10             | 7.62                | 245.10   |                                 | (ML) Silt   | Rising Head  | 3.E-08   |
| BH22-06              |              | 253.5                          | 6.10             | 7.62                | 247.40   | 245.88                          | (CL) Silty Clay; (CL) Silty Clay Till                               | Rising Head  | 7.E-09   |

#### Notes:

All test were analysed using Hvorslev (1951)

-- Not Tested

m amsl - meters above mean sea level

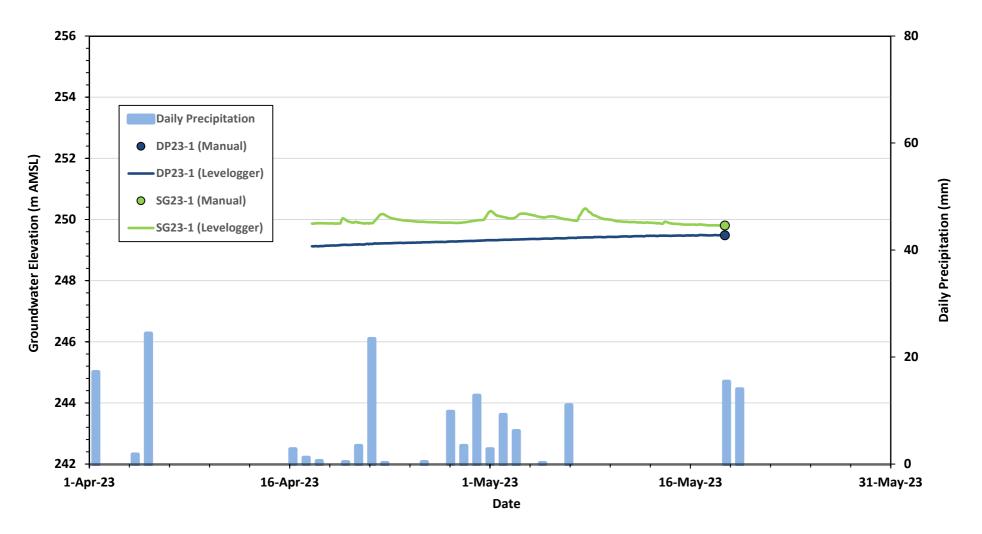
m bgs - meters below groundsurface

m/s - meters per second

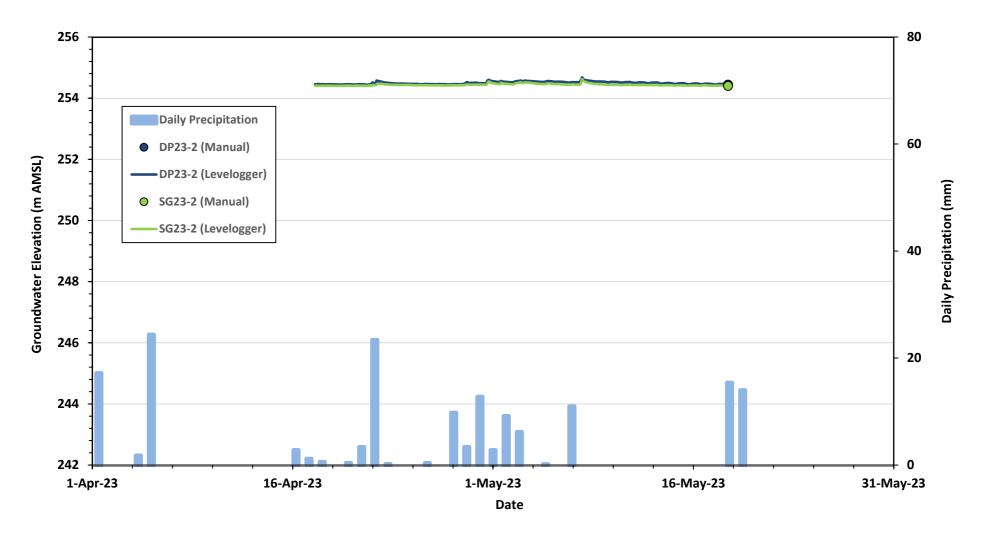
Hvorslev, M.J., 1951. Time Lag and Soil Permeability in Ground-Water Observations, Bull. No. 36, Waterways Exper. Sta. Corps of Engrs, U.S. Army, Vicksburg, Mississippi, pp. 1-50

# **APPENDIX G**

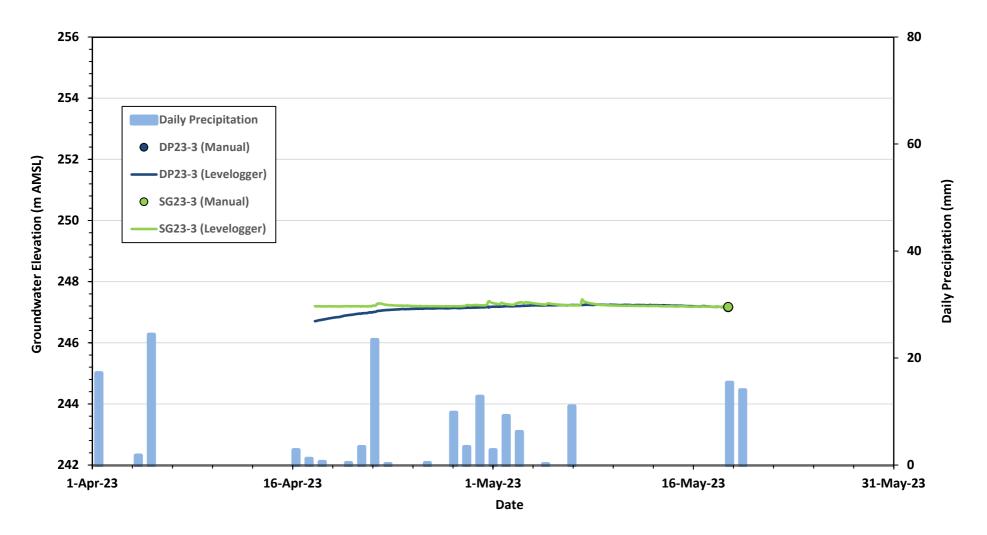
Hydrographs Figures G-1 to G-4



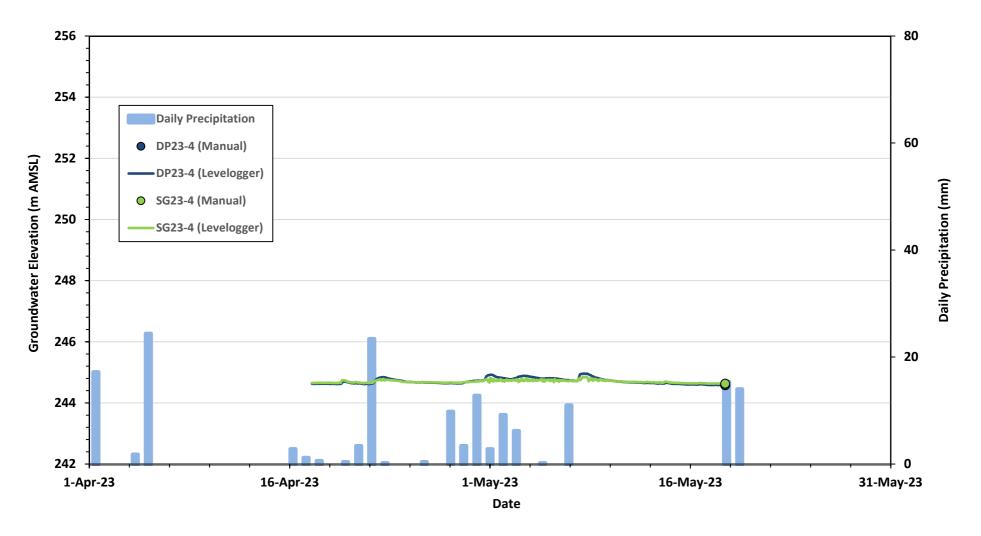
Precipitation data has been obtained from the Environment Canada Toronto Intl A climate station Project No.: 101987.001 (ID 6158731), accessed on May 29, 2023. Client: Mayfield Golf Course Inc. Residential Development - 12580 and 12552 Torbram Road DP - Drive-Point Piezometer SG - Staff Gauge Hydrogeological Assessment AMSL - Above Mean Sea Level Figure No. G-1 GEMTEC Title DRIVE-POINT PIEZOMETER / STAFF GAUGE HYDROGRAPH -CONSULTING ENGINEERS AND SCIENTISTS DP23-1 / SG23-1



Precipitation data has been obtained from the Environment Canada Toronto Intl A climate station Project No.: 101987.001 (ID 6158731), accessed on May 29, 2023. Client: Mayfield Golf Course Inc. Residential Development - 12580 and 12552 Torbram Road DP - Drive-Point Piezometer SG - Staff Gauge Hydrogeological Assessment AMSL - Above Mean Sea Level Figure No. G-2 GEMTEC Title DRIVE-POINT PIEZOMETER / STAFF GAUGE HYDROGRAPH -CONSULTING ENGINEERS AND SCIENTISTS DP23-2 / SG23-2



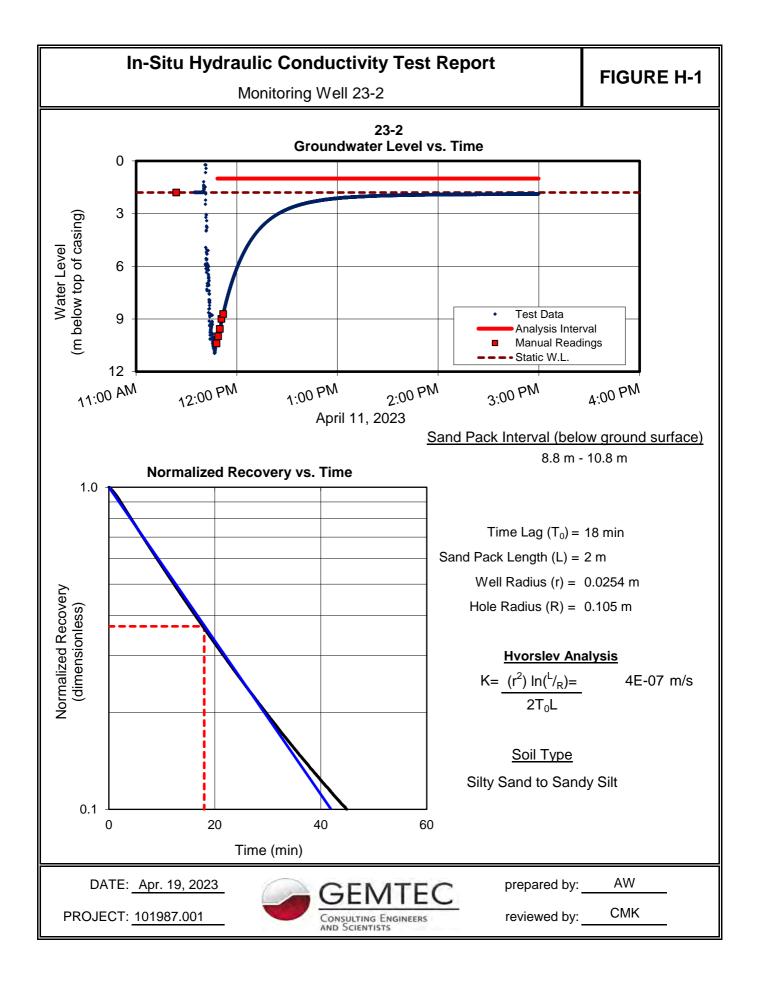
Precipitation data has been obtained from the Environment Canada Toronto Intl A climate station Project No.: 101987.001 (ID 6158731), accessed on May 29, 2023. Client: Mayfield Golf Course Inc. Residential Development - 12580 and 12552 Torbram Road **DP** - Drive-Point Piezometer SG - Staff Gauge Hydrogeological Assessment AMSL - Above Mean Sea Level Figure No. G-3 -Title DRIVE-POINT PIEZOMETER / STAFF GAUGE HYDROGRAPH -CONSULTING ENGINEERS AND SCIENTISTS DP23-3 / SG23-3

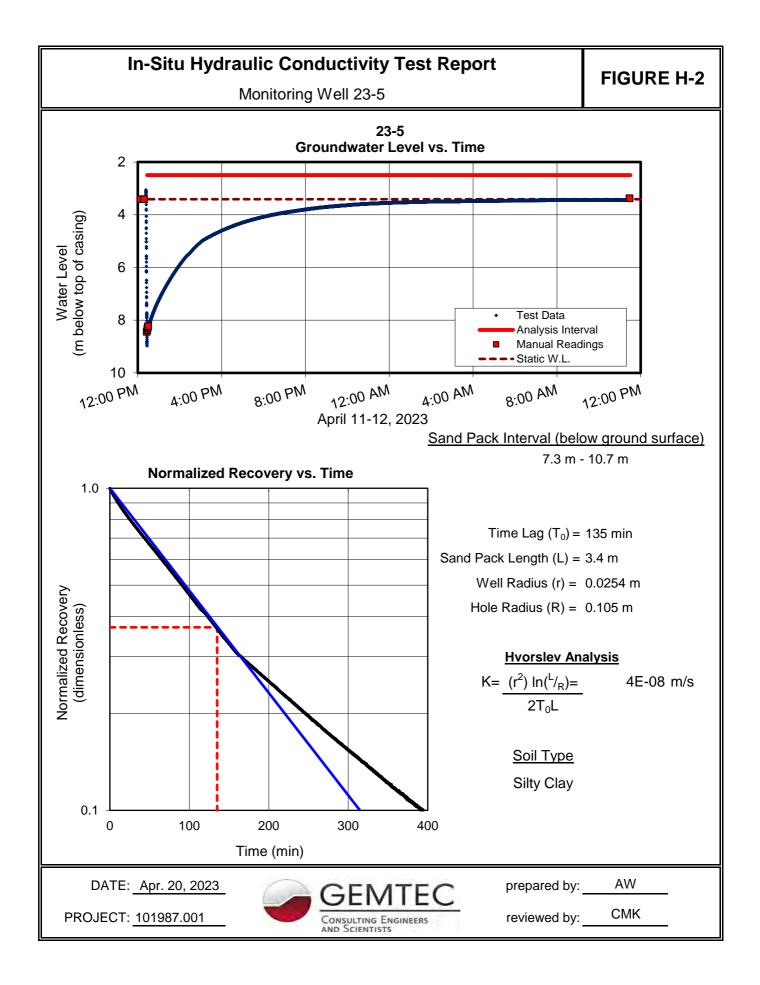


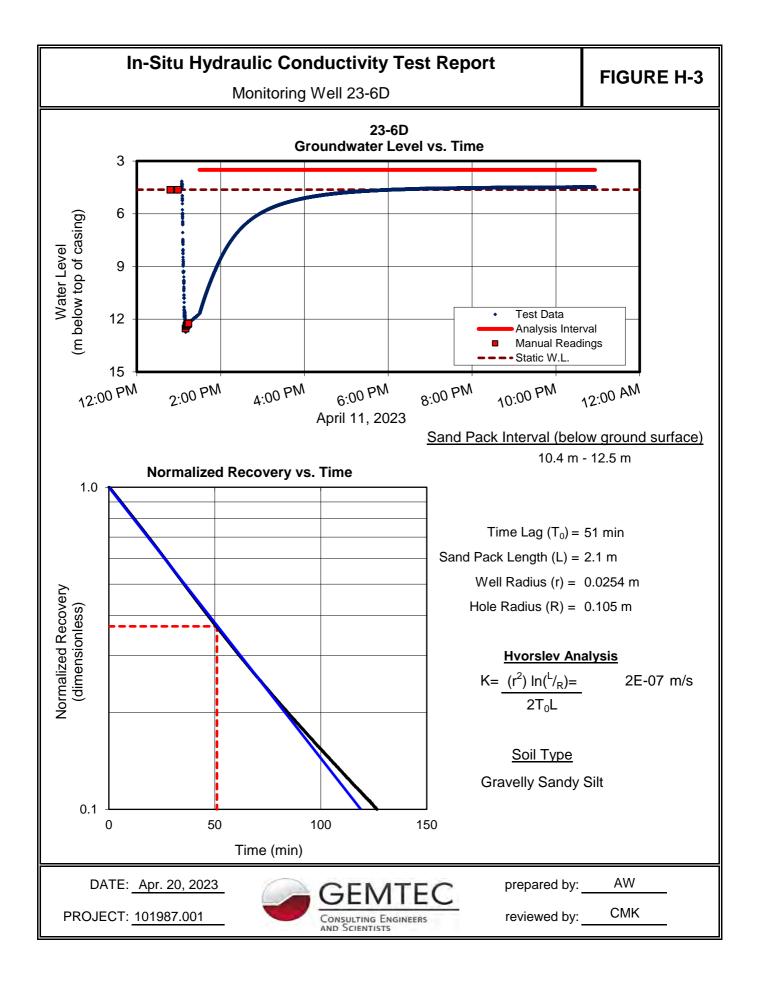
Precipitation data has been obtained from the Environment Canada Toronto Intl A climate station Project No.: 101987.001 (ID 6158731), accessed on May 29, 2023. Client: Mayfield Golf Course Inc. Residential Development - 12580 and 12552 Torbram Road **DP** - Drive-Point Piezometer SG - Staff Gauge Hydrogeological Assessment AMSL - Above Mean Sea Level Figure No. G-4 GEMTEC Title DRIVE-POINT PIEZOMETER / STAFF GAUGE HYDROGRAPH -CONSULTING ENGINEERS AND SCIENTISTS DP23-4 / SG23-4

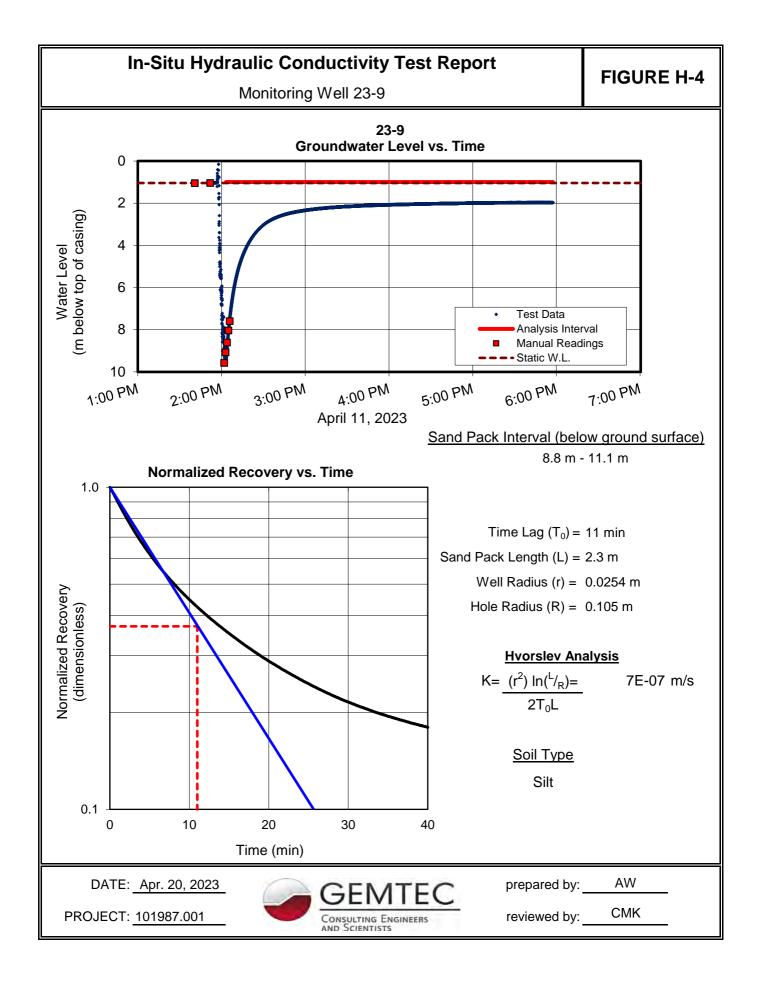
## **APPENDIX H**

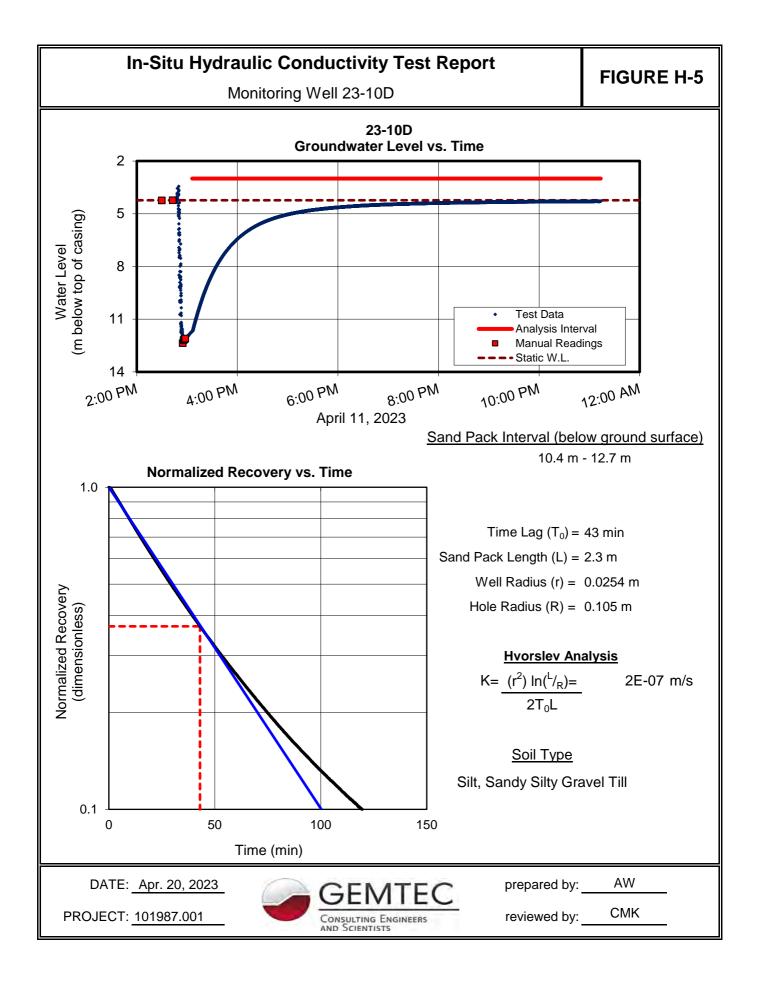
Hydraulic Response Testing Results Figures H-1 to H-12

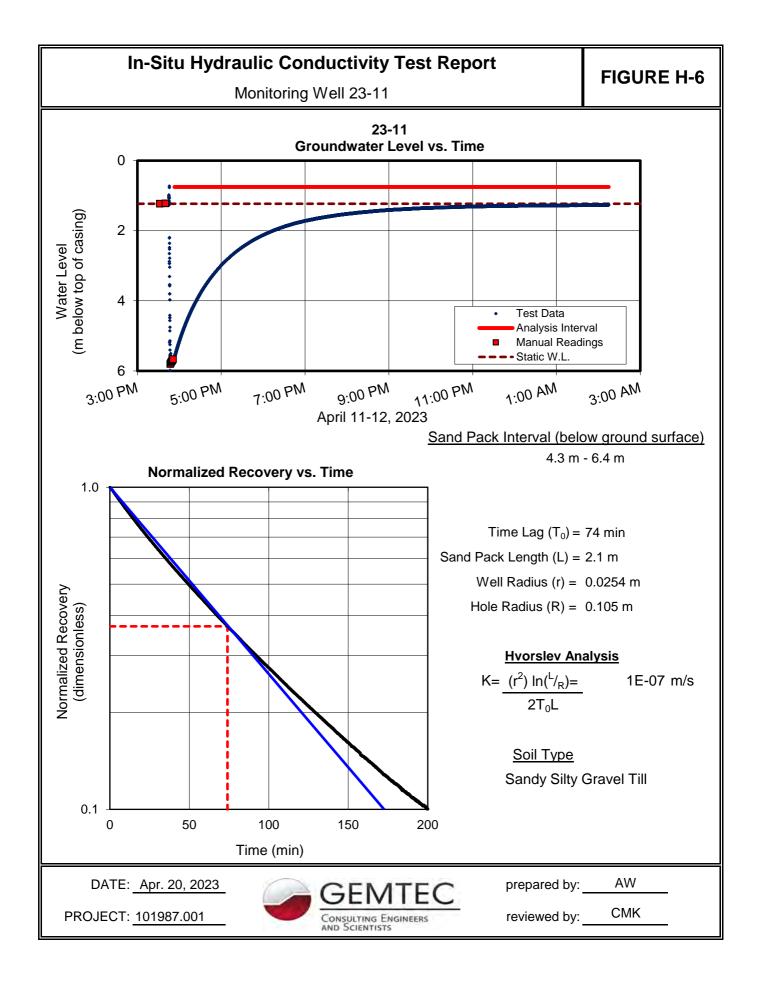


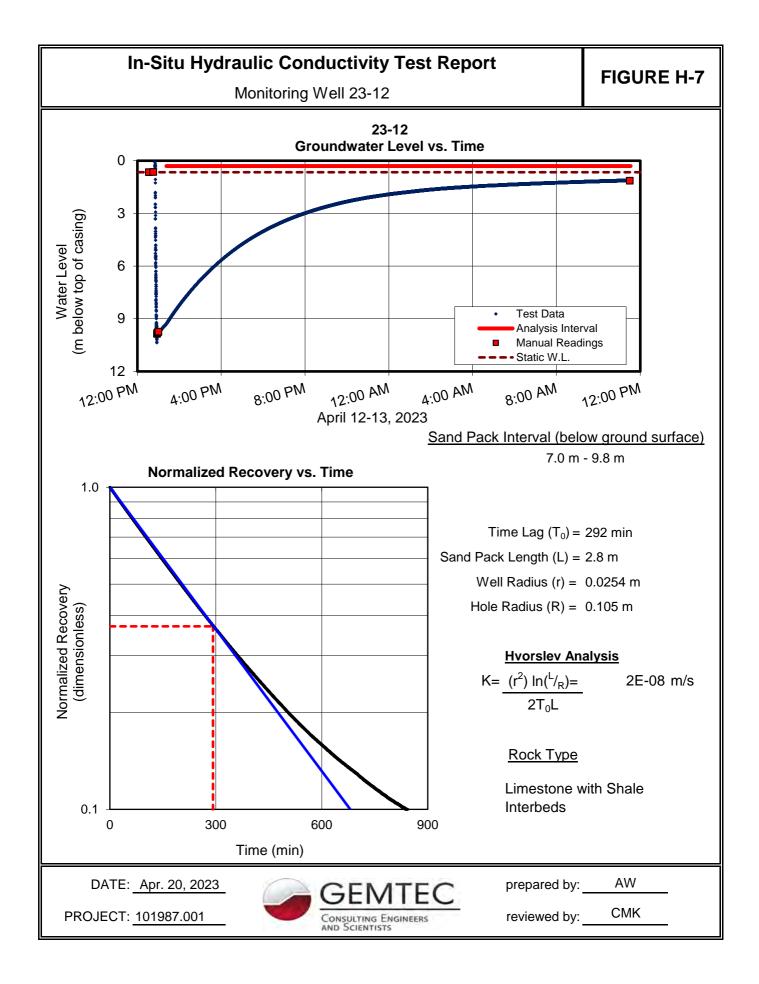


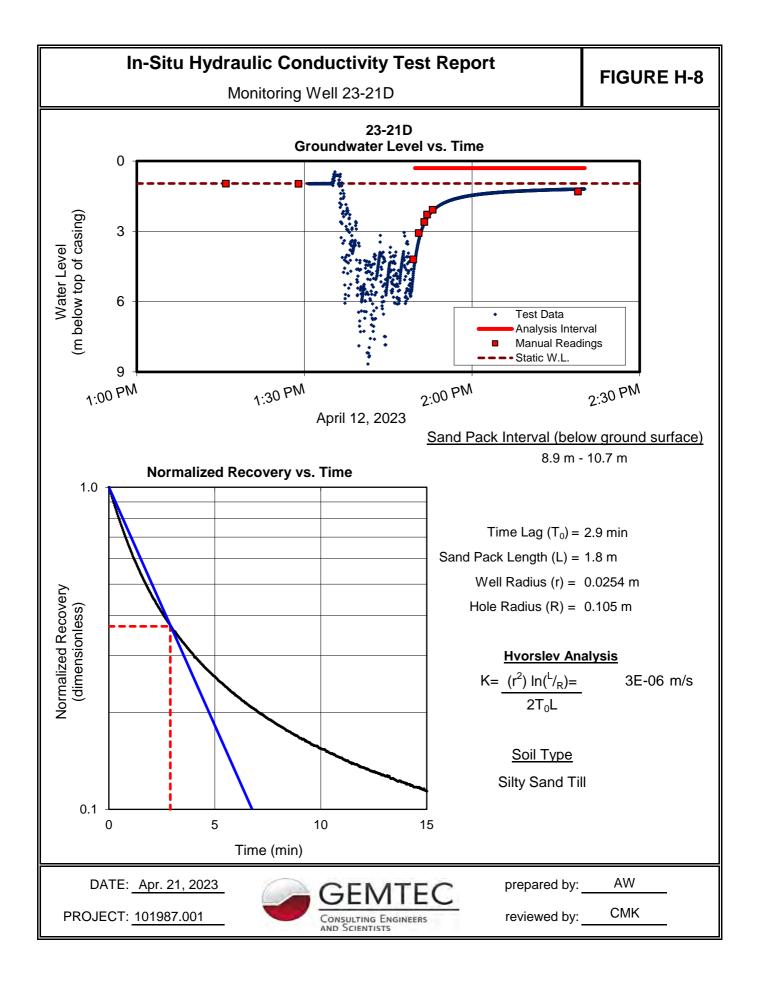


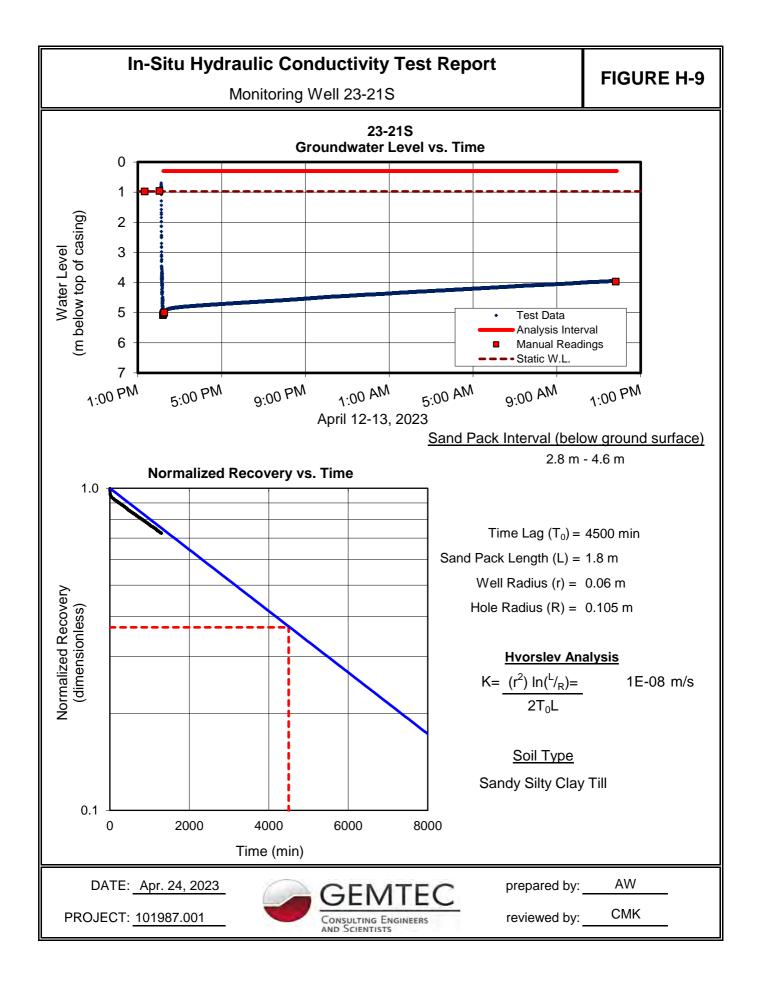


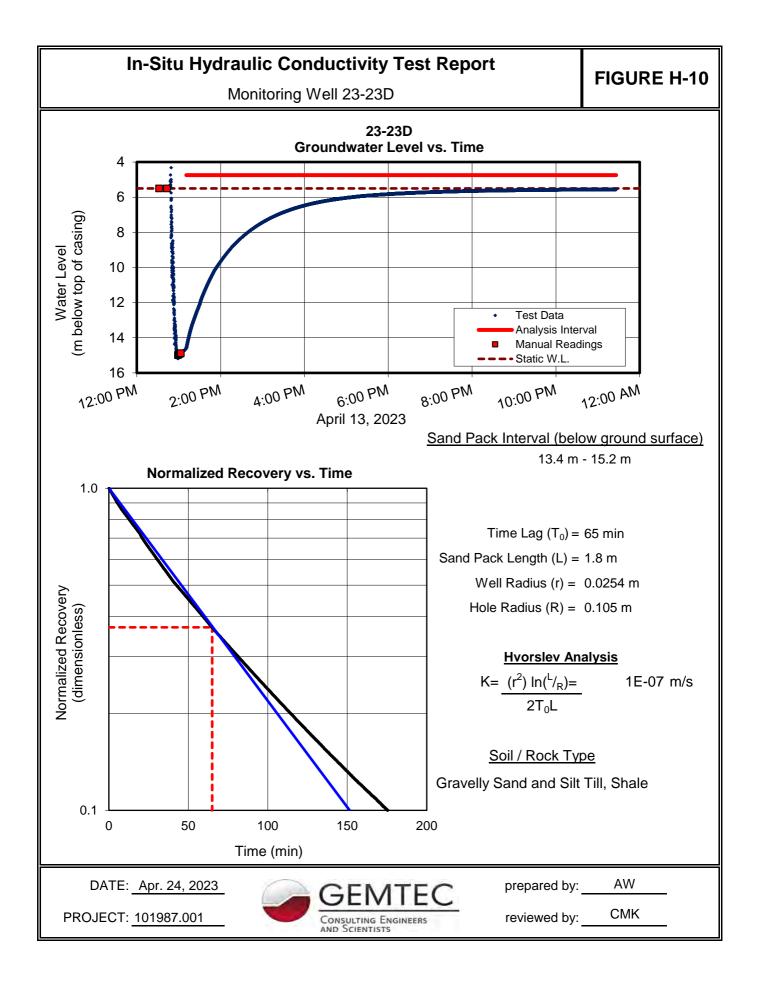


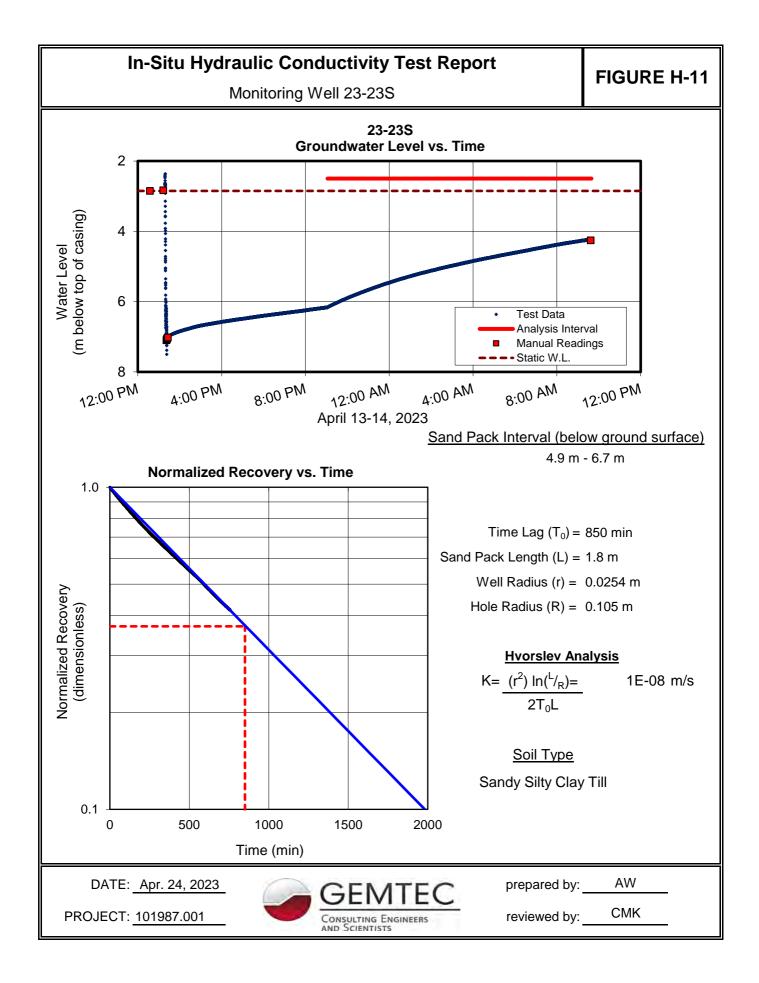


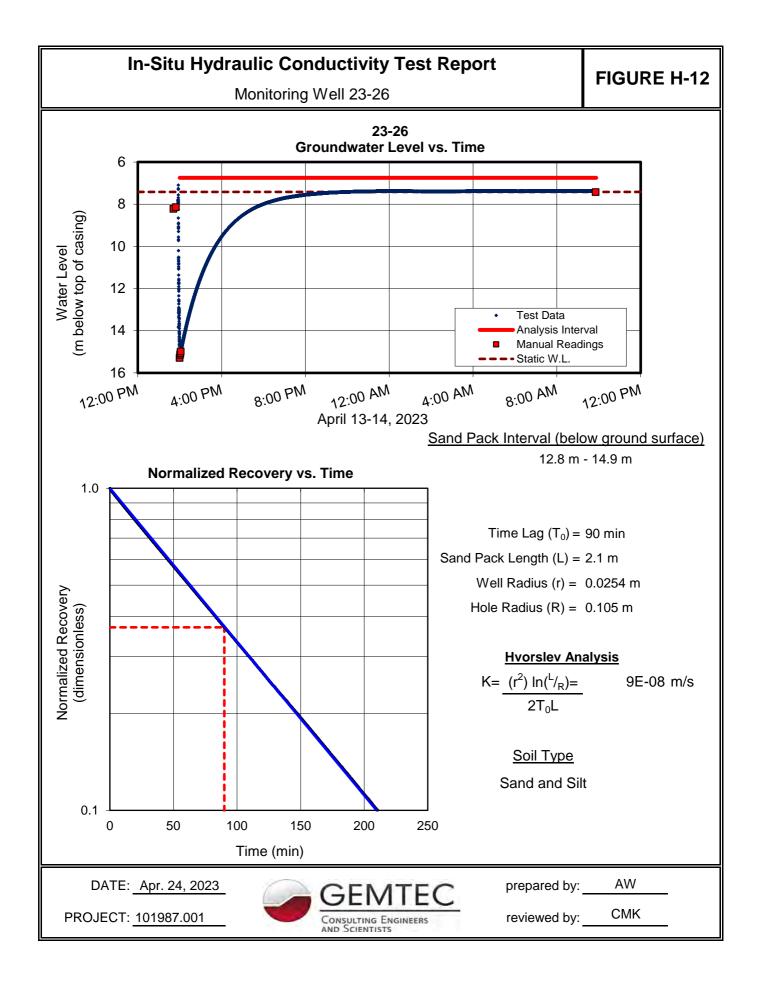














civil geotechnical environmental structural field services materials testing

civil géotechnique environnement structures surveillance de chantier service de laboratoire des matériaux