Part 1 General

1.1 A copy of the following investigations are enclosed in Binder C.

1.2 GEOTECHNICAL INVESTIGATIONS

.1 **Geotechnical Investigation**

Proposed Oakville No. 5 Public School
Settlers Road West & Preserve Drive
Oakville, Ontario
Prepared by: Forward Engineering
Project No. : G7507, Rev. 2
Date: November 26, 2025

.2 **Soil Chemical Testing Report**

Oakville # 5 Public School
Settlers Road West & Preserve Drive
Oakville, Ontario
Prepared by: Forward Engineering
Project No. : 7507
Date: September 30, 2024

.3 **Field Percolation Rate Assessment Report**

Oakville # 5 Public School
Settlers Road West & Preserve Drive
Oakville, Ontario
Prepared by: Forward Engineering
Project No. : 7507
Date: October 01, 2025

1.3 DISCLAIMER

.1 The Geotechnical Report is not part of the Contract Documents prepared by the Architect or his sub consultants. It is bound into the Specifications set for convenient reference only. The Geotechnical report was not prepared by or under the supervision of the Architect. While every effort has been made to attempt to provide comprehensive geotechnical information for the purposes of design and tendering, the Architect claims no responsibility for the accuracy of the information contained in the report.

.2 Refer to Section 00 21 13 – 'Instruction to Bidders', article 1.24-Examination of the Site.

1.4 CAUTIONARY NOTE REGARDING SITE FILL

.1 The investigation referenced above took place after the site was filled by the subdivision developer.

.2 Report of the analysis for chemical testing of soil is included in Binder C.

Part 2 **Products**

2.1 **NOT USED**

.1 Not used.

.2

Part 3 **Execution**

3.1 **NOT USED**

.1 Not used.

.2

END OF SECTION

FORWARD ENGINEERING
& ASSOCIATES INC.
Geotechnical, Environmental, Inspection & Material Testing Services
244 Brockport Drive, Unit 15, Toronto, Ontario, M9W 6X9, Tel: (416)798-3500, Fax:(416)798-8481

REPORT
GEOTECHNICAL INVESTIGATION, Rev. 2

PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

SETTLERS ROAD WEST & PRESERVE DRIVE
OAKVILLE, ONTARIO

PREPARED FOR:
HALTON DISTRICT SCHOOL BOARD
c/o
HOSSACK & ASSOCIATES ARCHITECTS
4-2150 Dunwin Drive
Mississauga, Ontario
L5L 5M8

November 26, 2025
Ref. No. G7507, Rev. 2

Distribution: 1 PDF Copy–HOSSACK & ASSOCIATES ARCHITECTS
1 PDF Copy–FORWARD ENGINEERING & ASSOCIATES INC.

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PERMANENT DRAINAGE - DRAWING NO. 2
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INTRODUCTION

This report presents the results of the geotechnical investigation carried out by Forward Engineering & Associates Inc. for the proposed new Oakville #5 Public School located at the southwest corner of Settlers Road West & Preserve Drive, in the Town of Oakville, Ontario.

The location of the proposed new building structure in relation to the existing building, site boundaries and adjacent roads are shown on Drawing No. 1. The approximate locations of the boreholes drilled during this investigation are also presented on Drawing No. 1.

This investigation was authorized by Ms. Priscilla Ladouceur of Hossack & Associates Architects Inc., on behalf of the Halton District School Board.

PURPOSE AND SCOPE

The objectives (purpose) of this investigation were to determine the following:

- The extent, depth, and properties of the predominant fill/soil strata as they affect the design and construction of the proposed new school.
- The short-term groundwater levels, if encountered.
- The appropriate geotechnical design criteria for building foundations, excavations, backfill, slab construction, drainage, utilities, and pavement.

To achieve the above noted objectives, the field program of this investigation consisted of forty-four [44] boreholes drilled to a depth ranging from about 1.98 to 6.20 m below the Existing Ground Surface Level (EGSL).

On completion of the field and laboratory work, an engineering analysis was carried out, and this summary report was prepared.

PROPOSED DEVELOPMENT

We understand that the proposed development will consist of a new three-storey school building and childcare space, with no basement.

The remainder of the site will be occupied with access roads, parking areas reserved for the school as well as for childcare, and landscaping spaces. The Site Plan also shows designated areas which are reserved for future portables.

FIELD AND LABORATORY TESTING

Field Works:

Borehole Investigation:

The field work for the borehole investigation consisted of forty-four [44] boreholes (Nos. 1 to 44), drilled during the period between August 05 to 08, 2025, under the supervision of a member of our staff.

The drilled boreholes were located at the approximate locations shown on Drawing No. 1 and extended to a depth ranging from about 1.98 to 6.20 m below the EGSL. Multiple boreholes were relocated in the field from originally planned/intended location to the approximate locations shown on Drawing No. 1 to meet the recommended locations chosen by the Client. The rationale behind relocating was to satisfy preferred locations for future percolation testing and to avoid well installation in areas of anticipated excavations. In addition, existing stockpiles on site forced the relocation of some of the boreholes.

Five [5] of the boreholes (BH/MW-1, BH/MW-3, BH/MW-9, BH/MW-12, and BH/MW-18) were equipped with Water Monitoring Wells (WMW's) to facilitate future measurements of the water levels. Three [3] of the boreholes (BH/MW-24, BH/MW-25 and BH/MW-29) were equipped with piezometers to facilitate future testing of the soil permeability.

Soils were sampled in the boreholes following the Standard Penetration Test (SPT) method using a CME-55 Track Mounted Auger Drill Rig using Rotary Drilling with Split Spoon Samplers. The samples were logged in the field and appropriately stored in plastic bags and re-examined in more detail in the laboratory. The samples will be stored for a period of three months and then discarded, unless we are instructed differently.

Groundwater observations were made in the open boreholes, during and upon completion of the drilling operation. The results are recorded on the Log of Borehole sheets.

Elevations referred to in this report are metric and geodetic. The ground level elevations at the borehole locations were interpolated from the *Plan of Topography* drawing dated July 23, 2025, prepared by Tarasick McMillan Kubicki Ltd., and provided to us by the Client.

Laboratory Testing:

Laboratory testing consisted of determination of the in-situ moisture content of the retrieved and representative soil samples.

SITE CONDITIONS

Surface Conditions

Proposed Oakville No. 5 Public School site is located south-west of the junction of Settlers Road West & Preserve Drive, Oakville, Ontario.

At the time of our investigation the site was partially graded. Removal of existing stockpiles, final grading of site to be completed following our departure of the site.

The site conditions, as observed during our site visit on August 5, 2025, are presented in the following *Table No. 1*.

Table 1 - Site Surface Observations/Conditions

East Boundaries:	Preserve Drive.
North Boundaries:	Settlers Road West.
West Boundaries:	Vacant undeveloped land.
South Boundaries:	Vacant land with evidence of some development.
Surface Coverage:	The surface of the site consists mostly of bare earth.
Ground Level:	At the time of our investigation much of the site was somewhat flat, but the southern portion of the site was not yet graded and was uneven. *It should be noted that following our departure from the Site, the grade was changed by the developer.*
Ditches:	None observed.
Berms/Stockpiles:	Three large stockpiles were located on site at the north-east, north-west, and east portions of the site. Several smaller stockpiles were located throughout the site.
Existing Structures:	None observed.

Proposed/Intended Land Use:	Institutional/recreational.

Subsurface Conditions

The subsurface conditions encountered at the borehole locations are shown on the Log of Borehole sheets, presented in Appendix A, and can be summarized as follows:

Fill/Disturbed Soil	A layer of Fill/Disturbed soil was found at the surface of all the boreholes and extended to a depth ranging from about 0.76 to 1.83 m below the EGSL. This layer consisted of reddish-brown clayey silt with traces of stone fragments, and it was observed in moist state, generally in compact state of packing. *The fill described above has been certified as engineered fill, as per Engineered Fill Certification by Soil Engineered Ltd., dated October 29, 2025, and attached in Appendix 'B'.*
Silt Till	Silt Till is the predominant native glacial deposit that was encountered below the fill/disturbed soil in all the boreholes and extended to a depth ranging from about 2.29 to 4.72 m below the EGSL. Borehole Nos. 24 to 29 and 31 to 44 were terminated within this stratum at a depth ranging from about 1.98 to 3.51 m below the EGSL. Occasionally in some of the boreholes this till encountered shale fragments, silty sand layers with traces of gravel, and some silt/sandy silt inclusions. This reddish brown till was observed in moist state and found in compact to very dense state of packing.
Highly Weathered Shale	Hard, red, and moist Highly Weathered Shale was encountered below the Silt Till layer in borehole Nos. 1 to 23 and 30, and it extended to the maximum explored depth of this investigation.

Groundwater	Groundwater level observations were made during and immediately upon the completion of the drilling investigation. The results are summarized in the following *Table 2a*, as shown:

Table 2a - Groundwater &Cave-in Observations Upon Completion of drilling

Borehole No.	Borehole Depth (m)	Cave-in Depth Below EGSL (m)	Groundwater Depth Below EGSL (m)
BH/MW-1	4.65	Open	Dry
BH-2	4.65	Open	Dry
BH/MW-3	6.02	Open	Dry
BH-4	3.91	Open	Dry
BH-5	2.39	Open	Dry
BH-6	2.41	Open	Dry
BH-7	4.70	Open	Dry
BH-8	5.51	Open	Dry
BH/MW-9	3.33	Open	Dry
BH-10	3.33	Open	Dry
BH-11	3.33	Open	Dry
BH/MW-12	4.70	Open	Dry
BH-13	4.67	Open	Dry
BH-14	4.65	Open	Dry
BH-15	2.72	Open	Dry
BH-16	4.65	Open	Dry
BH-17	4.67	Open	Dry
BH/MW-18	3.30	Open	Dry
BH-19	6.20	Open	Dry
BH-20	4.78	Open	Dry
BH-21	4.75	Open	Dry
BH-22	4.70	Open	Dry
BH-23	4.80	Open	Dry
BH/MW-24	2.29	Open	Dry
BH/MW -25	1.98	Open	Dry
BH-26	1.98	Open	Dry

Borehole No.	Borehole Depth (m)	Cave-in Depth Below EGSL (m)	Groundwater Depth Below EGSL (m)
BH-27	1.98	Open	Dry
BH-28	1.98	Open	Dry
BH/MW-29	2.29	Open	Dry
BH-30	4.70	Open	Dry
BH-31	1.98	Open	Dry
BH-32	1.98	Open	Dry
BH-33	1.98	Open	Dry
BH-34	1.98	Open	Dry
BH-35	1.98	Open	Dry
BH-36	3.94	Open	Dry
BH-37	1.98	Open	Dry
BH-38	1.98	Open	Dry
BH-39	3.50	Open	Dry
BH-40	1.98	Open	Dry
BH-41	1.98	Open	Dry
BH-42	1.98	Open	Dry
BH-43	1.98	Open	Dry
BH-44	1.98	Open	Dry

The water level in boreholes/monitoring wells BH/MW-1, BH/MW-3, BH/MW-9, BH/MW-12, and BH/MW-18, which were equipped with a standpipe monitoring well, was measured several days after the completion of the drilling operation and our observations are recorded and presented in the following Table 2b, as shown.

Table2b - Groundwater Observation after Extended Period of Time

ID & Date of GWL Measurement	Groundwater Depth Below EGSL & (elevation)
BH/MW-1 *September 8, 2025*	4.05 m (174.61 m)
BH/MW-3 *September 8, 2025*	3.83m (174.81 m)
BH/MW-9 *September 8, 2025*	Dry

ID & Date of GWL Measurement	Groundwater Depth Below EGSL & (elevation)
	(lower than 175.31 m)
BH/MW-12 *September 8, 2025*	3.84 m (174.49 m)
BH/MW-18 *September 8, 2025*	2.70 m (175.86 m)

It should be noted, however, that the groundwater levels are subject to seasonal fluctuations. Consequently, definitive information on the long-term groundwater levels could not be obtained at the present time.

GEOTECHNICAL DISCUSSION AND RECOMMENDATIONS

Foundations

We understand that the proposed development consists of a new three-storey school building with no basement. The finished floor elevation (FFE) is set at 178.80 m; however, the design loads are still unknown at this stage.

Based on the encountered subsurface and conditions, two [2] foundation alternatives are selected as follows: (1) conventional spread/strip foundations founded on the existing engineered fill and/or the original native subgrade soils, or (2) conventional spread/strip foundations founded on the native undisturbed soils

1. Footings on the Existing Engineered Fill and/or Native Soils

The proposed school building can be supported on the Existing Engineered Fill and/or Original Undisturbed Native Soils.

The size of the strip/spread footings can be proportioned to the following bearing resistances:

Factored Bearing Resistance at Ultimate Limit State (ULS) = 225 kPa

Bearing Resistance at Serviceability Limit State (SLS) = 150 kPa

Due to expected exposure of the ground surface to freezing, the footings are not to be founded above 1.0 m depth below the surface of the engineered fill.

2. Footings on Native Undisturbed Soils

The proposed school building can be supported on conventional strip/spread footings established within the undisturbed, native very stiff clayey silt till, at or below a depth ranging from 1.05 to 2.05 m below Existing Ground Surface Level (EGSL), as presented in Table 3.

The size of the new strip/spread footings can be proportioned to the following net bearing resistances;

Factored Bearing Resistance at Ultimate Limit State (ULS) = 375 kPa

Bearing Resistance at Serviceability Limit State (SLS) = 250 kPa

Table 3–Founding Depth and Elevation (at or below) for Strip/Spread Footings Founded on Native Soils

Borehole No.	Surface Elelvation (m)	Founding Depth (at/or below EGSL) (m)	Founding Elevation (at/or below) (m)
1	178.66	1.50	177.16
2	178.14	1.05	177.09
3	178.55	1.75	176.80
4	178.46	2.00	176.46
5	178.33	2.00	176.33
6	178.34	1.05	177.29
7	178.35	1.75	176.60
8	177.66	1.05	176.61
9	178.64	1.75	176.89
10	178.49	1.75	176.74
11	179.39	2.05	177.34
12	178.33	1.75	176.58
13	177.99	1.05	176.94
14	177.65	1.75	175.90
15	178.44	2.05	176.39
16	178.23	2.00	176.23
17	178.00	1.75	176.25
18	178.56	1.05	177.51
19	178.80	2.05	176.75

In areas, where suitable founding soil is lower than typical depth of footings, sub-excavation/backfill below the design founding depth may be carried out following the "trench and pour" method, provided that a test pit is dug during the tender phase, to be coordinated with the bid documents, for the contractor to observe the behaviour of the lower subgrade material.

The following provisions should be observed during the "trench and pour" construction:

- The sides of the trench should be maintained vertical.
- The "trench and pour" will not protrude into the frost zone.

Foundation General Notes:

Adjacent footings, founded at different elevations, should be stepped at 10 horizontal to 7 vertical, with a maximum step of 600 mm. For frost protection requirements, all exterior footings, and footings in unheated areas, must have a minimum soil cover of 1.2 m.

Under no circumstances should the footings be constructed over loose, soft or frozen subgrade soil or within ponded water. During winter construction, the footings must be adequately protected against the effects of frost. Concrete should be placed without delay after excavation to avoid softening of the subgrade surface. Hand cleaning of footing bases should be carried out as directed by the field inspector.

Total settlements of the footings designed and constructed in accordance with the above recommended resistances at SLS should be less than the tolerable limits of 25mm. The differential settlements are expected to be less than 19mm.

Furthermore, the recommended bearing capacity and foundation elevations have been calculated from the limited borehole information and are intended for design purposes only.

More specific information, with respect to founding conditions between the boreholes will become available when the proposed construction is underway. Therefore, the encountered founding conditions must be verified in the field, and all footings must be inspected by this office, before placement of concrete.

Earthquake Considerations

For structural design seismic consideration, the seismic provisions of the Ontario Building Code (*OBC 2024*) outline the classification of sites for Seismic Site Response in Table 4.1.8.4.(2b) of the National Building Code of Canada (NBC) 2020.

According to Table 4.1.8.4.(2b). of the code, and the conducted Shear Wave Velocity Test report (attached in Appendix C), the subject site Class is **'X_{760}'**.

Underground/Retaining Walls

Underground/retaining walls should be designed to resist a pressure "p", at any depth, "h" below the surface, as given by the expression:

$$p = K[\gamma h + q]$$

Where:

1) Soil parameters are as presented in the following Table:

	On-site soil	Granular B
Active lateral earth pressure coefficient, ***Ka***	0.33	0.30
Passive lateral earth pressure coefficient, ***Kp***	3.00	3.33
Unit Weight, γ	20 kN/m^3	21 kN/m^3

2) ***q*** = an allowance for surcharge

The above equation assumes that perimeter drains will be provided, and that the backfill against the subsurface walls would be a free draining granular material, such as Granular B.

Excavation and Backfill

No major problems should be encountered for the anticipated depth of excavation. The excavation should be back-sloped at 45 degrees or flatter in accordance with the current Ontario Occupational Health and Safety Act.

The excavation in the till and weathered shale can be carried out with a heavy duty back-hoe. Some of the relatively harder limestone slabs or seams, interbedded in the weathered shale, may require the use of jack hammer or hoe ram.

In area of any borehole where the shale bedrock was not encountered for the entire depth of that borehole, the shale bedrock must be considered to exist immediately below the bottom of the borehole.

The anticipated water seepage, if any, into the excavations from the more permeable seams/lenses or surface run-off can be handled by conventional pumping methods.

The material to be used for backfilling under floor slab should be suitable for compaction, i.e. free of organics and with natural moisture content, which is within 2 percent of the optimum moisture content and no pieces larger than 150 mm in size. The backfill material should be compacted to at least 98 percent of the Standard Proctor Maximum Dry Density (SPMDD).

Selected on site excavated fill and native soils can be used as backfill under the floor slab or in-service trenches, provided the excavated materials are not allowed to become wet. However, the excavated materials will be very sensitive to moisture content, and the use of Granular B/C is preferred.

The backfill against the subsurface walls, and confined spaces, should be free draining granular fill, preferably conforming to the Ontario Provincial Standard Specification for granular base course, Granular B.

Slab Construction and Permanent Drainage

The floor slabs can be constructed following the standard slab-on-grade technique, provided that the base is thoroughly proof-rolled. Any soft spots revealed during proof-rolling should be sub-excavated, backfilled and adequately compacted.

In addition, the exposed ground surface should be adequately compacted to densify the near surface disturbed soil.

If upfill is required to raise the grades to accommodate for the placement of the floor slab on grade, the new fill should be placed in shallow lifts and thoroughly compacted to a minimum 98 % of its maximum dry density, as determined by the Standard Proctor compaction test method.

A vertical modulus of subgrade reaction (k_s) of 27 MPa/m (125 psi/in) can be utilized in the design of the concrete floor slab.

The floor slabs should rest on a well compacted layer of "19 mm clear stone" at least 200 mm thick when compacted. The stone bed would act as a barrier and prevent capillary rise of moisture from the subgrade to the floor slab.

No perimeter drainage will be required, if the floor slab is at least 150 mm above the exterior grade, which slopes away from the building at an inclination of 1 to 2 percent, to prevent surface ponding of water close to exterior walls. If this condition cannot be met or complied with, then perimeter drainage as shown on Drawing No. 2 should be provided.

Underground Utilities

The problem areas of pavement settlement largely occur adjacent to manholes, catch basins and service crossings. The on-site materials would generally be difficult to compact in these areas, and it is therefore recommended that a sand backfill be used in confined areas.

The upper 1.0 m of the trench backfill should be compacted to 98 % SPMDD. Below this zone, a 95 % SPMDD compaction is considered acceptable.

Pavement Design

In the proposed pavement areas, the base should be thoroughly proof-rolled. Any soft spots revealed during proof-rolling should be sub-excavated and backfilled with suitable materials, compacted to at least 98 % SPMDD.

The subgrade soil is frost susceptible. The design of pavement is therefore mainly influenced by the need to minimize the effects of freezing and thawing. Consequently, the ground must not be unnecessarily disturbed.

The subgrade should be sloped to facilitate drainage towards catch basins and the final subgrade should be compacted before pavement is constructed.

It should be noted that the subgrade should be dry and firm, not spongy, during compaction and during the construction of the [sub] base. Soft or spongy subgrade areas should also be sub-excavated and properly replaced with suitable approved backfill compacted to 98 % SPMDD.

The subgrade will suffer strength regression if water is allowed to infiltrate into the mantle. Therefore, sub-drains should be installed along the edge of all pavement areas to prevent surface water from infiltrating into the subgrade.

Within the parking lots, sub-drains radiating from the catch basins should also be installed. These sub-drains should be at least 3 m long in each direction and have inverts at least 0.75 m below the pavement surface.

All granular materials used in the construction of pavement should be compacted to 98 % of Standard Proctor maximum dry density.

Based on the engineering properties of the subgrade soil, climatic conditions and the anticipated use of the pavement, typical flexible asphaltic pavement designs for this development are as follows:

Table 3 -Typical Flexible Asphaltic Pavement Design

Pavement Components	Heavy Duty	Medium Duty
Asphaltic Concrete	40 mm HL3	40 mm HL3
	60 mm HL8	40 mm HL8
19 mm Crushed Limestone	150 mm	150 mm
Granular B Sub-base or 50 mm Crushed Limestone	300 mm	200 mm

If the proposed pavements are to be constructed during wet seasons, the moisture content in the subgrade will probably be above the optimum, and this will render its shear strength inadequate to support paving equipment traffic. In this case, the granular sub/base should be replaced by an equal thickness of compacted size 50 mm Crusher-Run Limestone, or recycled concrete.

General Comments

This geotechnical report is provided based on the terms of reference provided above and, on the assumption, that the design will be in accordance with the applicable codes and standards.

If there is any change in the design features relevant to the geotechnical analyses, or if any questions arise regarding the geotechnical aspects of the codes and standards, this office should be contacted to review the new data and design.

The comments given in this report are intended for the guidance of design engineers.

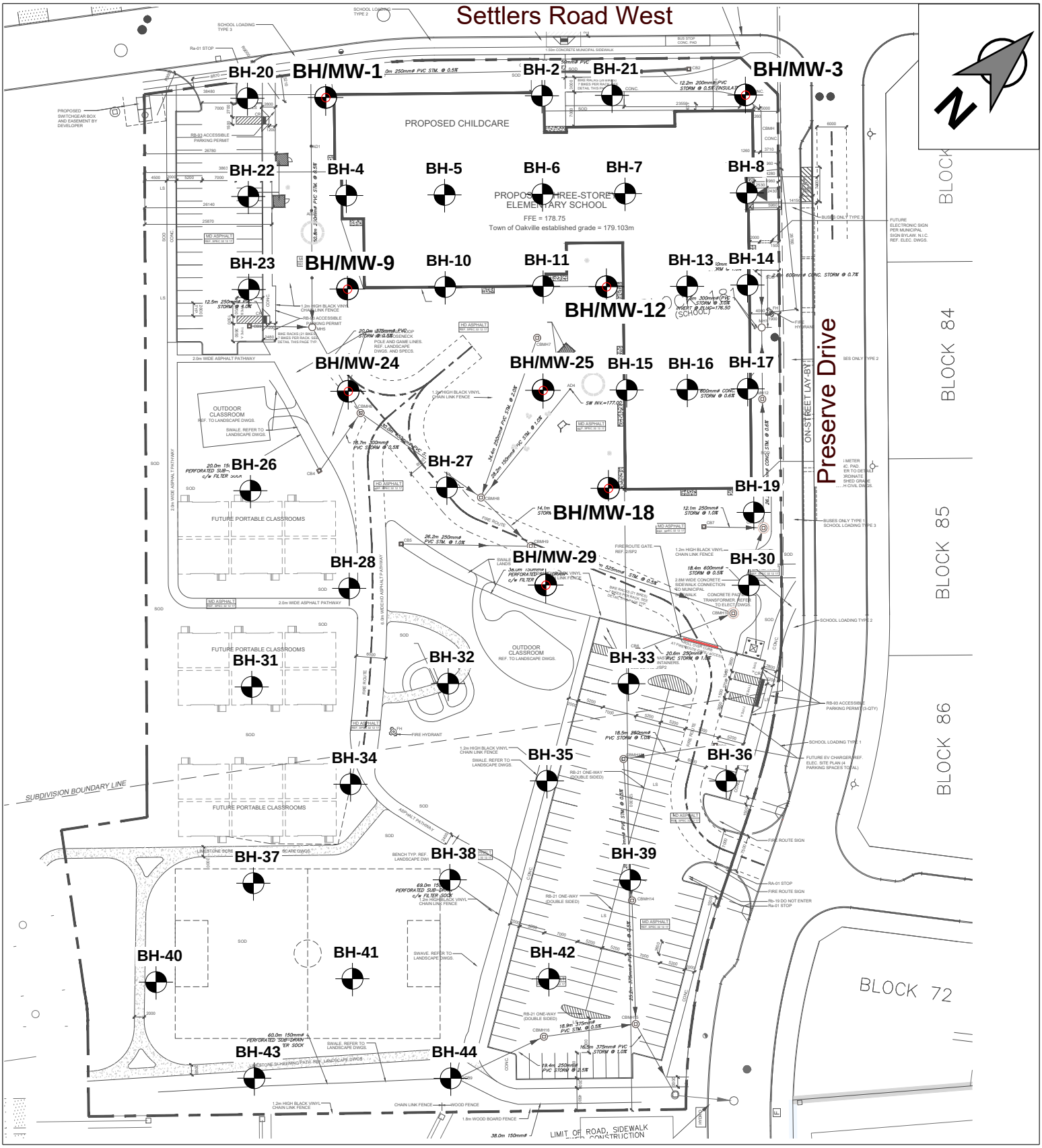
In addition, the purpose of the investigation was to reveal the subsurface conditions, and to determine the various soil properties that are relevant for the construction of the foundations of the school building, the associated site services, the pavements, and the play areas.

We trust this report contains information requested at this time. However, if any clarification is required, or if we can be of further assistance, please contact this office.

Yours truly,
Forward Engineering & Associates Inc.

Nasser Abdelghani, M.Sc., P.Eng.
Project Geotechnical Engineer

G. S. Semaan, M.Eng., P.Eng.
Principal



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Project Name:
PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

Address:
SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.

Title
DWG No.1 BOREHOLE LOCATION PLAN

PROJECT NO. : 7507

DRAWING DATE : SEPT. 19, 2025

LEGEND

BH = BOREHOLE LOCATION

BH/MW = BOREHOLE LOCATION

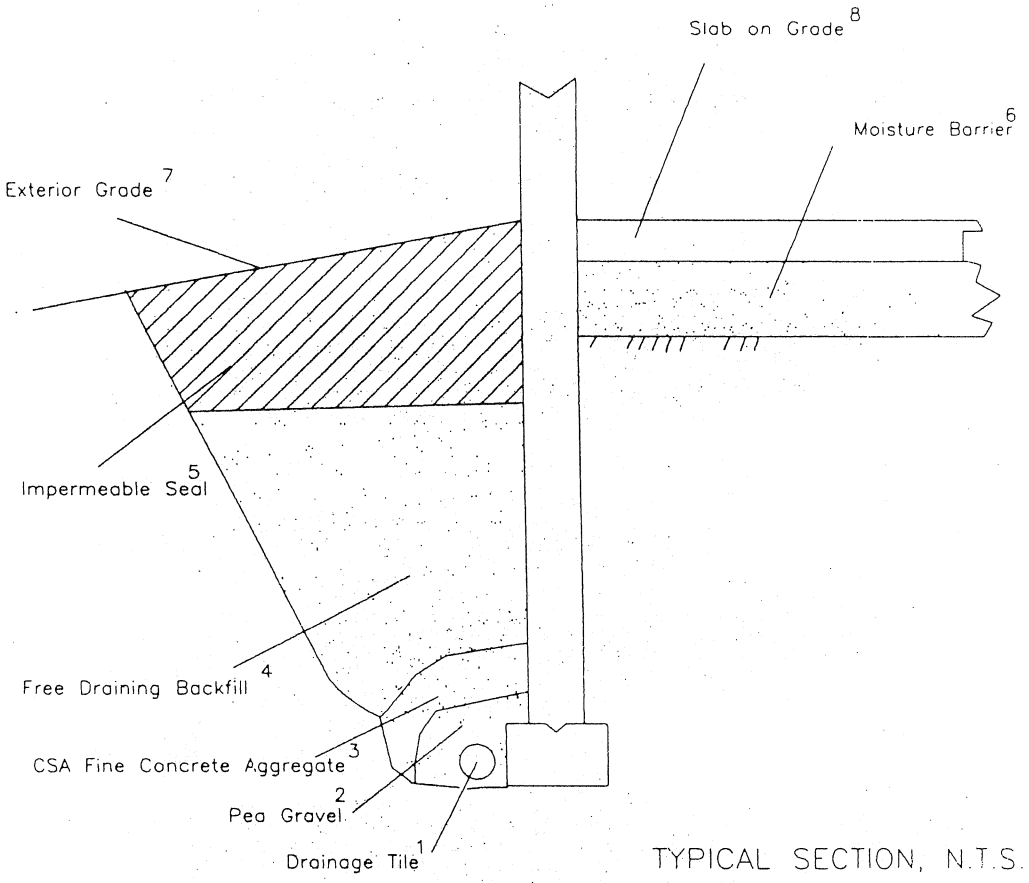
DRAWING BY : P.R.

CHECKED BY : G.S.

PAGE 1 of 1

DRAINAGE AND BACKFILL RECOMMENDATIONS

(Not to Scale)



TYPICAL SECTION, N.T.S.

NOTES:

1. Drainage tile to consist of 100 (4") diam. Weeping tile or equivalent perforated pipe leading to a positive sump or outlet. Invert to be minimum 150mm (6") below underside of floor slab.
2. Pea gravel 150mm (6") top and sides of drain. If drain is not on footing, 100 mm (4") of pea gravel below drain. Clear 20mm (3/4") crushed stone may be used provided it is covered by an approved porous membrane (Terrafix 270R or equivalent).
3. C.S.A. Fine aggregate to act as filter material. Minimum 300 mm (12") top and sides of tile drain. This may be replaced by an approved porous plastic membrane as indicated in 2.
4. Free draining backfill - Class B pit-run gravel or equivalent compacted to 93 – 95 % Standard Proctor Maximum Dry Density (SPMDD).
5. Impermeable backfill seal compacted clay, clay silt or equivalent. If original soil is free draining seal may be omitted.
6. Moisture barrier to consist of 20mm (3/4") compacted crushed stone. Layer to be 200mm (8") thick.
7. Exterior grade to slope away from wall.
8. Slab on grade should not be structurally connected to wall footing.
9. If the 20mm (3/4") stone requires surface blinding, use 6mm (1/4") stone chips.

DRAWING NO. 2

APPENDIX A

BOREHOLE LOG SHEETS

(1-44)

Project No: 7507

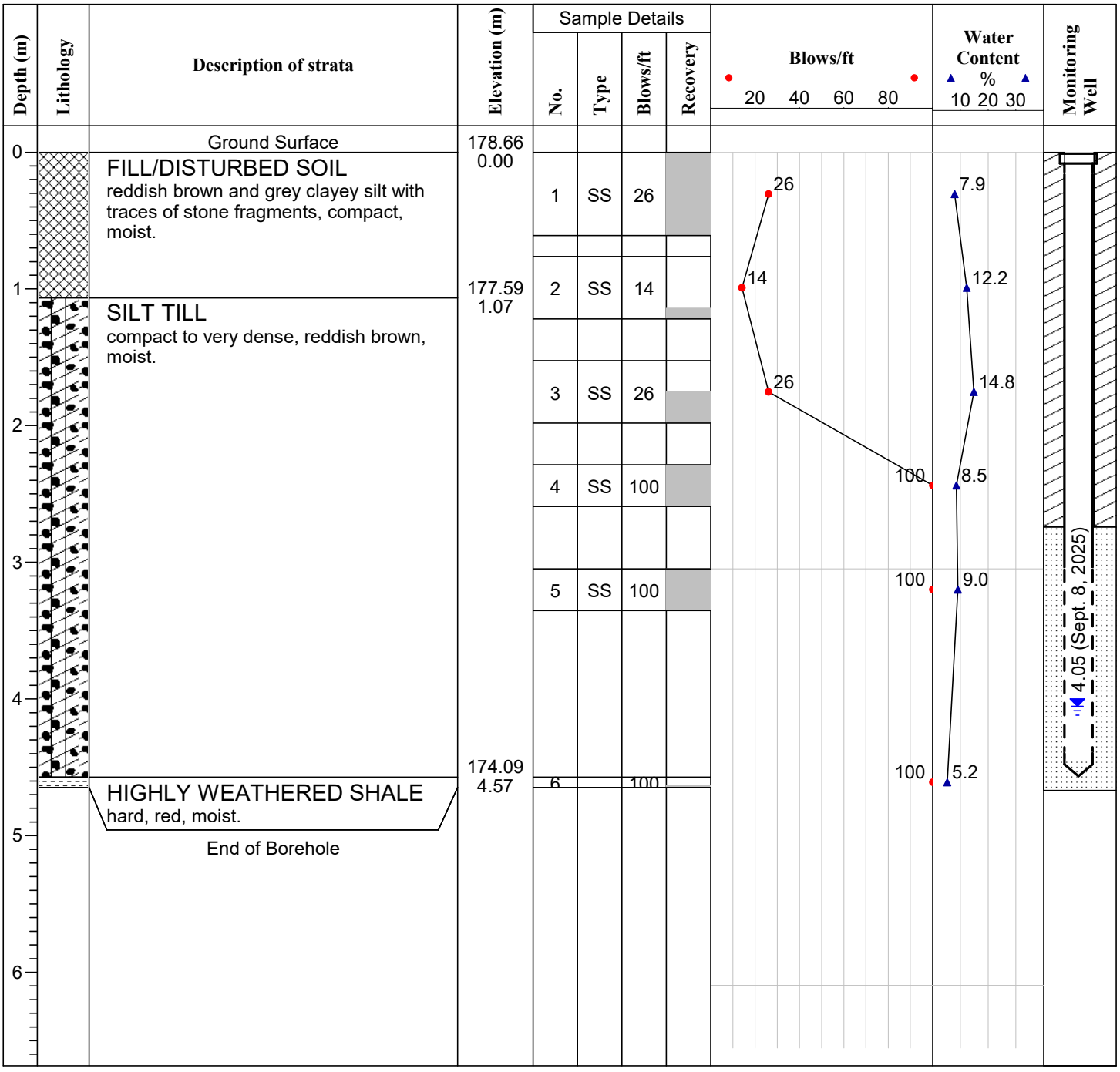
Log of Borehole BH/MW-1

Project: PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

Client: HDSB c/o HOSSACK ARCHITECTURE

Enclosure: 2

Location: SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.



Remarks: -Upon completion of drilling, the borehole was open and dry.
-On Sept. 8, 2025 the water level in the installed well was measured at 4.05 m below EGSL.

Drill Method: CME 55 - SOLID

Drill Date: 6 AUG. 2025

Datum: GEODETIC

FORWARD ENGINEERING & ASSOCIATES INC.
244 Brockport Drive, Unit 15, Toronto, Ontario, M9W 6X9

Engineer: G.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7507

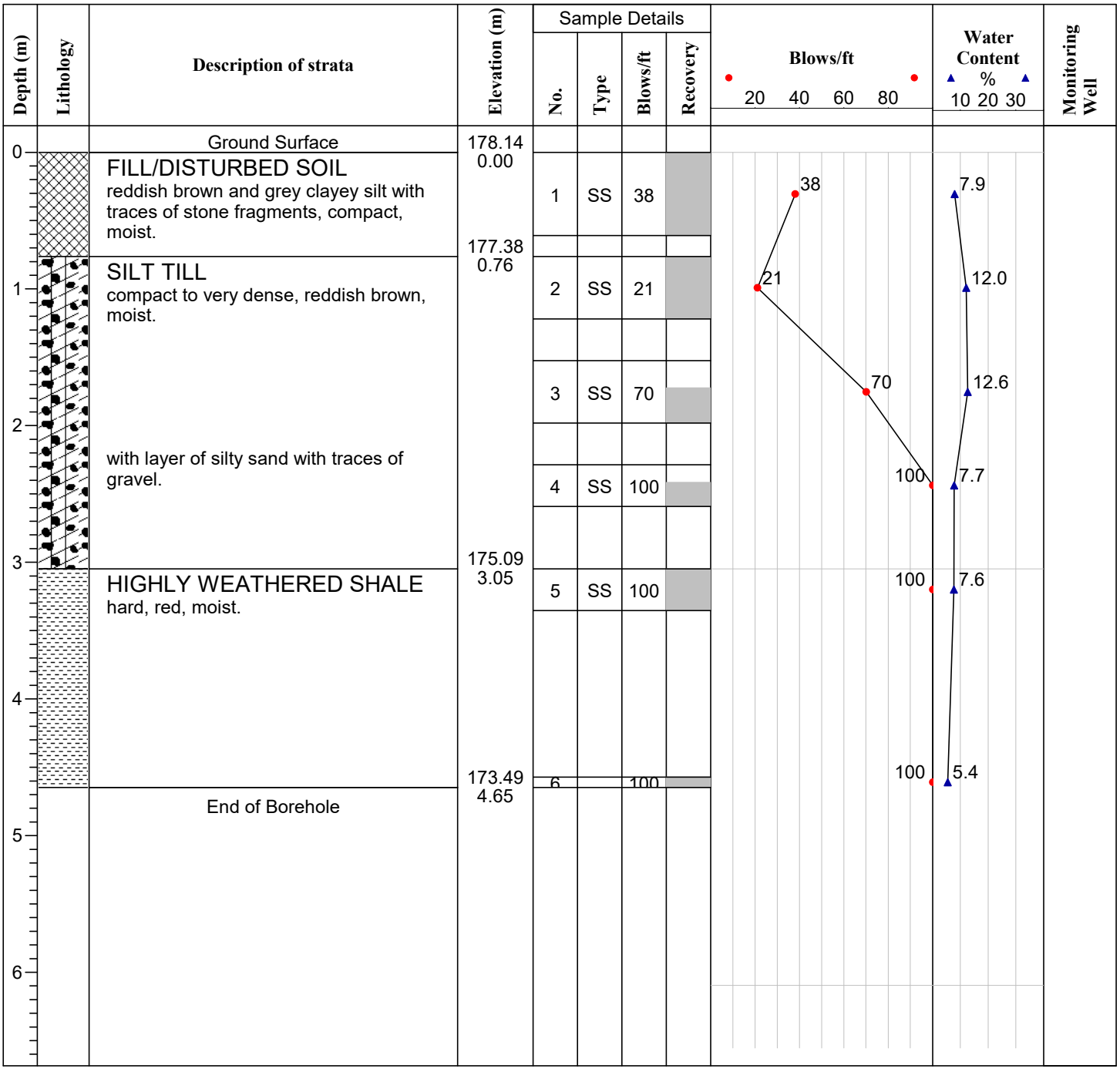
Log of Borehole BH-2

Project: PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

Client: HDSB c/o HOSSACK ARCHITECTURE

Enclosure: 3

Location: SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.



Remarks: -Upon completion of drilling, the borehole was open and dry.

Drill Method: CME 55 - SOLID

Drill Date: 6 AUG. 2025

Datum: GEODETIC

FORWARD ENGINEERING & ASSOCIATES INC.
244 Brockport Drive, Unit 15, Toronto, Ontario, M9W 6X9

Engineer: G.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7507

Log of Borehole BH/MW-3

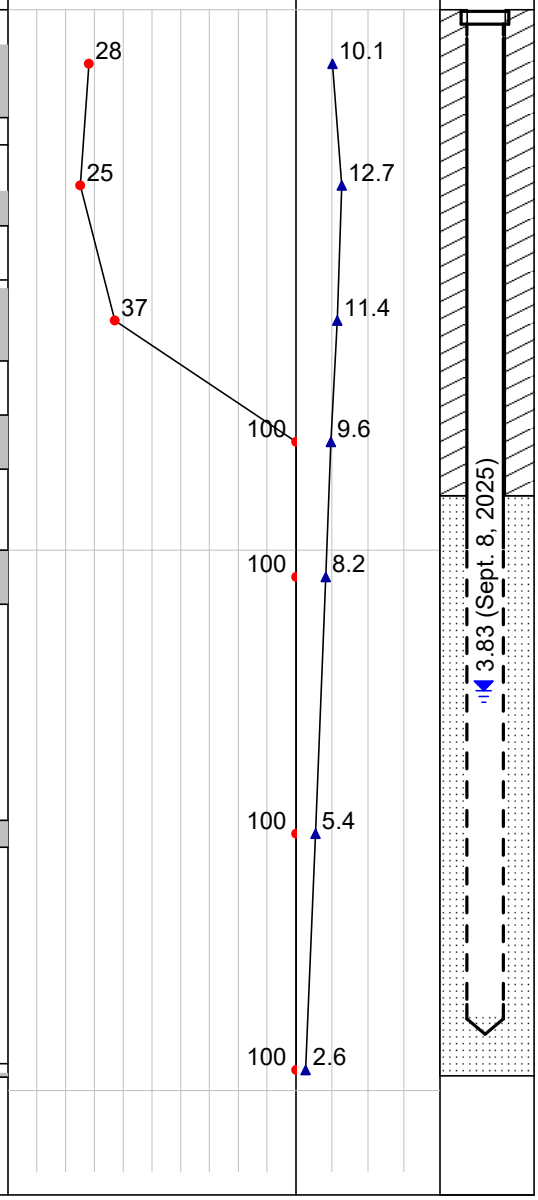
Project: PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

Client: HDSB c/o HOSSACK ARCHITECTURE

Enclosure: 4

Location: SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.

Depth (m)	Description of strata	Elevation (m)	No.	Type	Blows/ft	Recovery
0	Ground Surface	178.55				
	FILL/DISTURBED SOIL reddish brown and grey clayey silt with traces of stone fragments, compact, moist.	0.00	1	SS	28	
1			2	SS	25	
	SILT TILL dense to very dense, reddish brown, moist.	177.02 1.52	3	SS	37	
2	with layer of silt and sandy silt inclusions.		4	SS	100	
3			5	SS	100	
4		173.98				
	HIGHLY WEATHERED SHALE hard, red, moist to damp.	4.57	6	SS	100	
5						
6		172.53	7		100	
	End of Borehole	6.02				



Remarks: -Upon completion of drilling, the borehole was open and dry.
-On Sept. 8, 2025 the water level in the installed well was measured at 3.83 m below EGSL.

Drill Method: CME 55 - SOLID

Drill Date: 5 AUG. 2025

Datum: GEODETIC

Engineer: G.R.

Checked by: G.S.

Sheet No. 1 of 1

FORWARD ENGINEERING & ASSOCIATES INC.
244 Brockport Drive, Unit 15, Toronto, Ontario, M9W 6X9

Project No: 7507

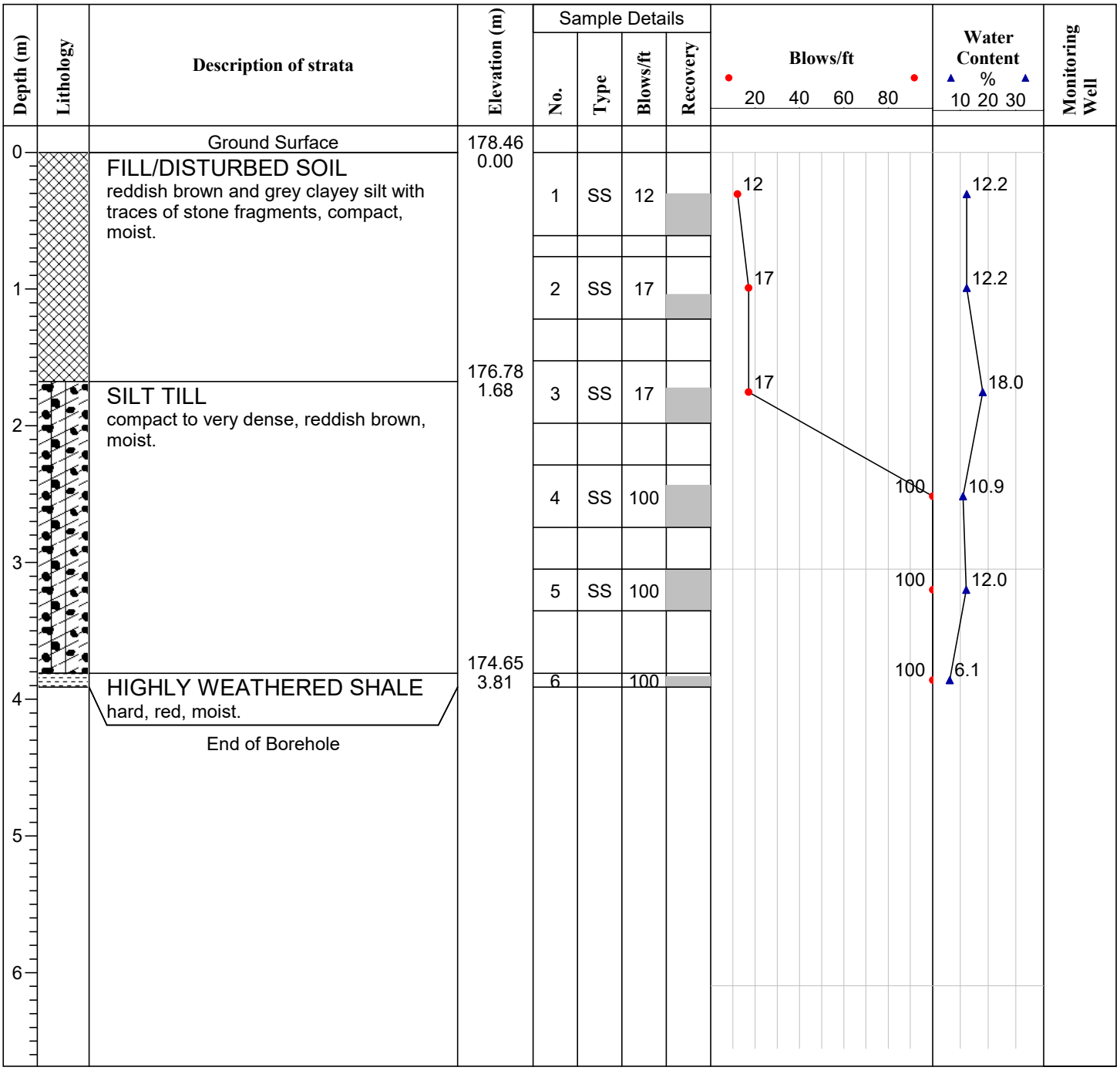
Log of Borehole BH-4

Project: PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

Client: HDSB c/o HOSSACK ARCHITECTURE

Enclosure: 5

Location: SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.



Remarks: -Upon completion of drilling, the borehole was open and dry.

Drill Method: CME 55 - SOLID

Drill Date: 7 AUG. 2025

Datum: GEODETIC

FORWARD ENGINEERING & ASSOCIATES INC.
244 Brockport Drive, Unit 15, Toronto, Ontario, M9W 6X9

Engineer: G.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7507

Log of Borehole BH-5

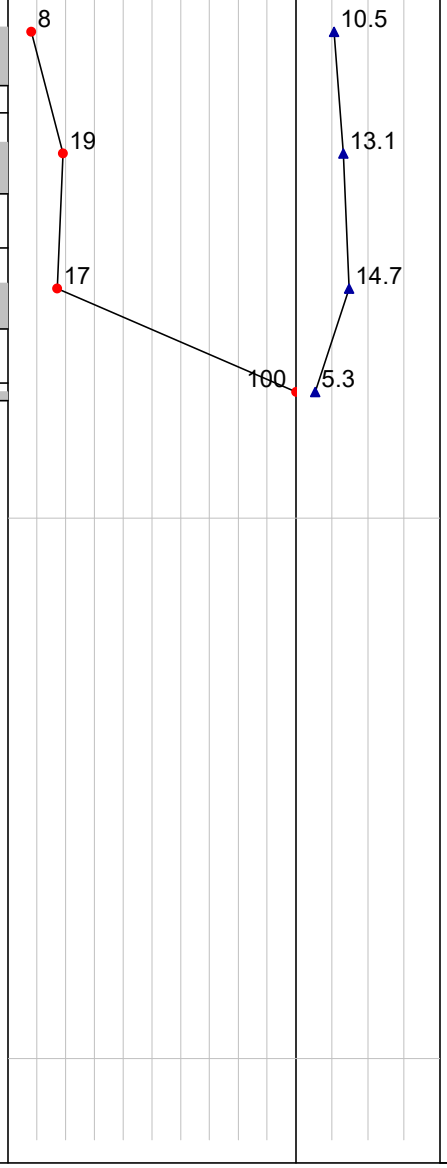
Project: PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

Client: HDSB c/o HOSSACK ARCHITECTURE

Enclosure: 6

Location: SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.

Depth (m)	Description of strata	Elevation (m)	Sample Details: No.	Type	Blows/ft	Recovery
0	Ground Surface	178.33				
	FILL/DISTURBED SOIL reddish brown and grey clayey silt with traces of stone fragments, loose, moist.	0.00	1	SS	8	
		177.57				
1	**SILT TILL** compact, reddish brown, moist.	0.76	2	SS	19	
			3	SS	17	
2		176.04	4		100	
	HIGHLY WEATHERED SHALE hard, red, moist.	2.29				
	End of Borehole					
3						
4						
5						
6						



Remarks: -Upon completion of drilling, the borehole was open and dry.

Drill Method: CME 55 - SOLID

Drill Date: 7 AUG. 2025

Datum: GEODETIC

FORWARD ENGINEERING & ASSOCIATES INC.
244 Brockport Drive, Unit 15, Toronto, Ontario, M9W 6X9

Engineer: G.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7507

Log of Borehole BH-6

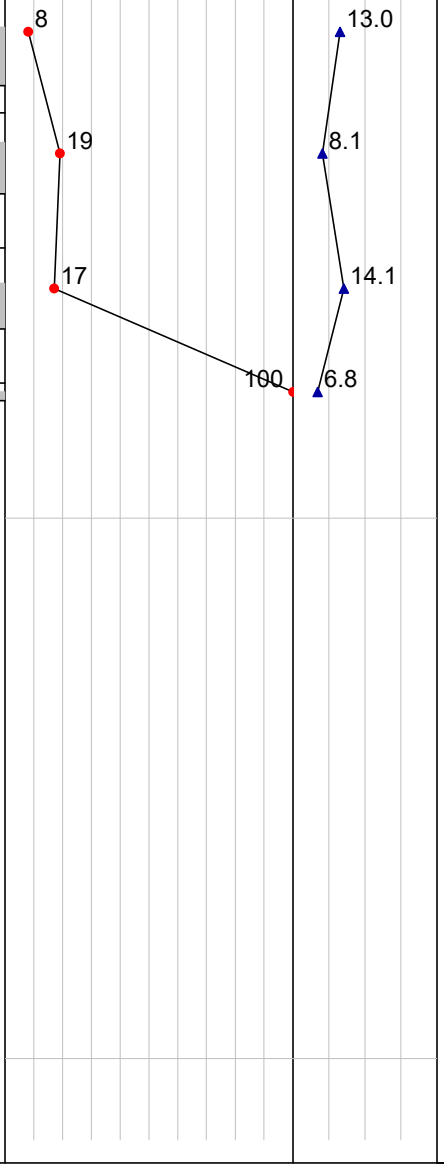
Project: PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

Client: HDSB c/o HOSSACK ARCHITECTURE

Enclosure: 7

Location: SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.

Depth (m)	Description of strata	Elevation (m)	Sample No.	Type	Blows/ft	Recovery
0	Ground Surface	178.34				
	FILL/DISTURBED SOIL reddish brown and grey clayey silt with traces of stone fragments, loose, moist.	0.00	1	SS	8	
		177.58				
1	**SILT TILL** compact, reddish brown, moist.	0.76	2	SS	19	
	with layer of sand and traces of gravel.		3	SS	17	
2		176.05				
	HIGHLY WEATHERED SHALE hard, red, moist.	2.29	4		100	
	End of Borehole					
3						
4						
5						
6						



Monitoring Well

Remarks: -Upon completion of drilling, the borehole was open and dry.

Drill Method: CME 55 - SOLID

Drill Date: 7 AUG. 2025

Datum: GEODETIC

FORWARD ENGINEERING & ASSOCIATES INC.
244 Brockport Drive, Unit 15, Toronto, Ontario, M9W 6X9

Engineer: G.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7507

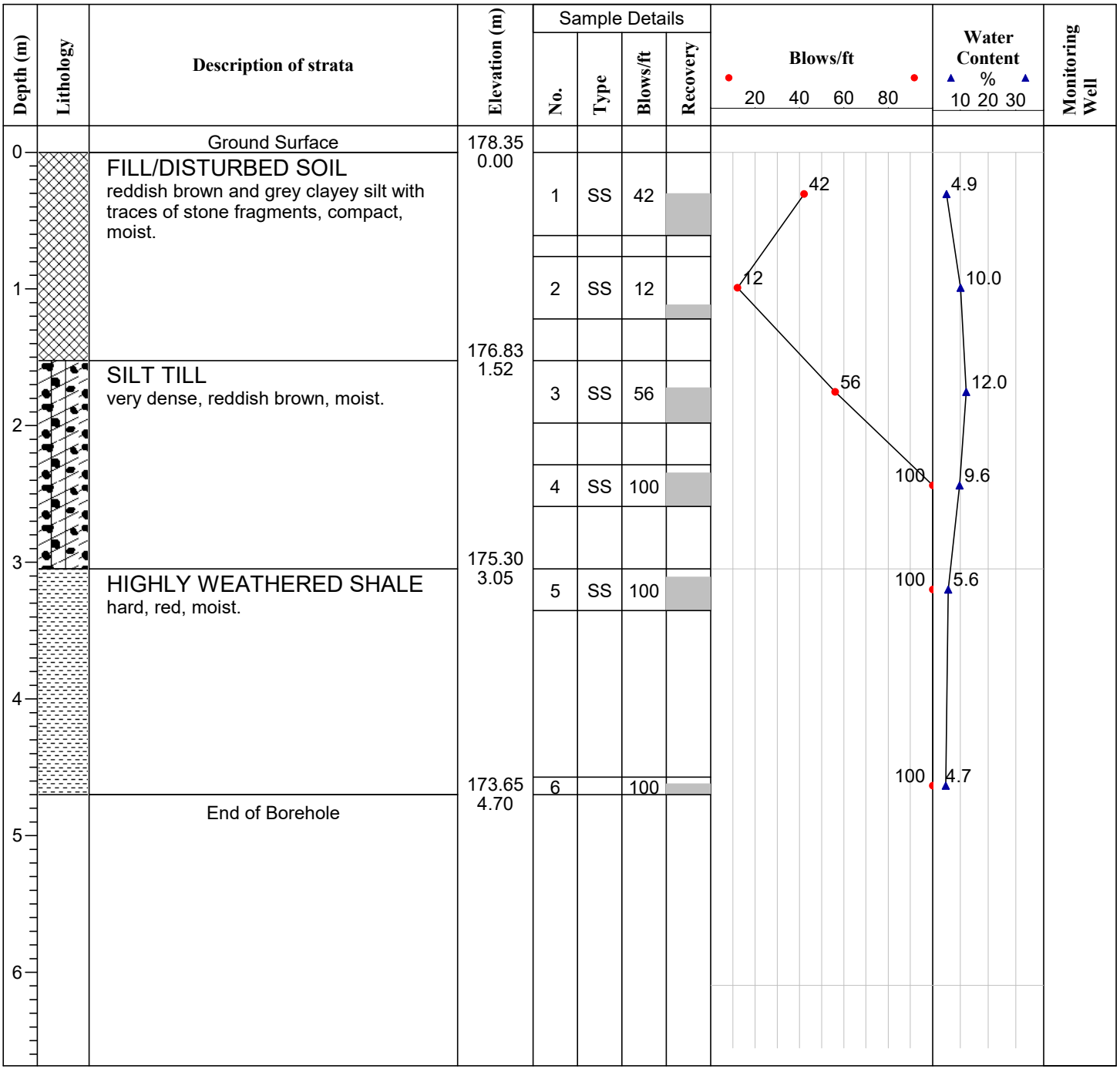
Log of Borehole BH-7

Project: PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

Client: HDSB c/o HOSSACK ARCHITECTURE

Enclosure: 8

Location: SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.



Remarks: -Upon completion of drilling, the borehole was open and dry.

Drill Method: CME 55 - SOLID

Drill Date: 6 AUG. 2025

Datum: GEODETIC

FORWARD ENGINEERING & ASSOCIATES INC.
244 Brockport Drive, Unit 15, Toronto, Ontario, M9W 6X9

Engineer: G.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7507

Log of Borehole BH-8

Project: PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

Client: HDSB c/o HOSSACK ARCHITECTURE

Enclosure: 9

Location: SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.

Depth (m)	Description of strata	Elevation (m)	Sample No.	Type	Blows/ft	Recovery	Blows/ft (20 40 60 80)	Water Content % (10 20 30)
0	Ground Surface	177.66						
	FILL/DISTURBED SOIL reddish brown and grey clayey silt with traces of stone fragments, compact, moist.	0.00	1	SS	25		25	7.6
		176.90						
1	**SILT TILL** compact to very dense, reddish brown, moist.	0.76	2	SS	26		26	12.3
			3	SS	100		100	7.7
2			4	SS	100		100	7.4
3			5	SS	100		100	7.1
	HIGHLY WEATHERED SHALE hard, red, moist.	173.09 4.57	6	SS	100		100	4.3
5		172.15	7	SS	100		100	5.1
	End of Borehole	5.51						
6								

Monitoring Well

Remarks: -Upon completion of drilling, the borehole was open and dry.

Drill Method: CME 55 - SOLID

Drill Date: 5 AUG. 2025

Datum: GEODETIC

FORWARD ENGINEERING & ASSOCIATES INC.
244 Brockport Drive, Unit 15, Toronto, Ontario, M9W 6X9

Engineer: G.R.

Checked by: G.S.

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Project No: 7507

Log of Borehole BH/MW-9

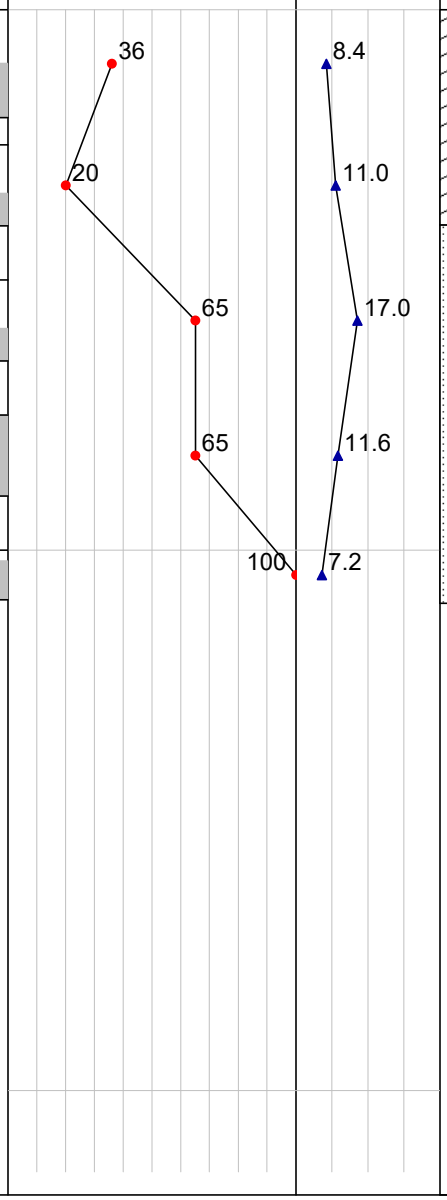
Project: PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

Client: HDSB c/o HOSSACK ARCHITECTURE

Enclosure: 10

Location: SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.

Depth (m)	Description of strata	Elevation (m)	No.	Type	Blows/ft	Recovery
	Ground Surface	178.64				
0	**FILL/DISTURBED SOIL** reddish brown and grey clayey silt with traces of stone fragments, compact, moist.	0.00	1	SS	36	
1			2	SS	20	
	SILT TILL very dense, reddish brown, moist.	177.12 1.52	3	SS	65	
2	with sandy silt layer with minor clay lumps.		4	SS	65	
3	**HIGHLY WEATHERED SHALE** hard, red, moist.	175.44 3.20	5	SS	100	
	End of Borehole					
4						
5						
6						



Remarks: -Upon completion of drilling, the borehole was open and dry.
-On Sept. 8, 2025 the water level in the installed well was measured and was dry.

Drill Method: CME 55 - SOLID

Drill Date: 7 AUG. 2025

Datum: GEODETIC

FORWARD ENGINEERING & ASSOCIATES INC.
244 Brockport Drive, Unit 15, Toronto, Ontario, M9W 6X9

Engineer: G.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7507

Log of Borehole BH-10

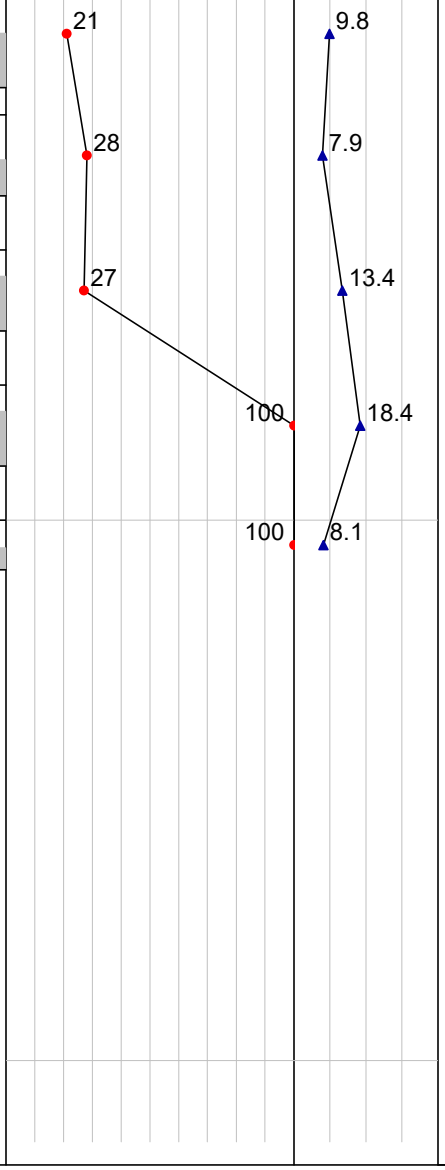
Project: PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

Client: HDSB c/o HOSSACK ARCHITECTURE

Enclosure: 11

Location: SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.

Depth (m)	Description of strata	Elevation (m)	Sample No.	Type	Blows/ft	Recovery
0	Ground Surface	178.49				
	FILL/DISTURBED SOIL reddish brown and grey clayey silt with traces of stone fragments, compact, moist.	0.00	1	SS	21	
1			2	SS	28	
	SILT TILL with occasional traces of shale fragments. compact to very dense, reddish brown, moist.	176.97 1.52	3	SS	27	
2			4	SS	100	
3	**HIGHLY WEATHERED SHALE** hard, red, moist.	175.19 3.30	5	SS	100	
	End of Borehole					
4						
5						
6						



Monitoring Well

Remarks: -Upon completion of drilling, the borehole was open and dry.

Drill Method: CME 55 - SOLID

Drill Date: 7 AUG. 2025

Datum: GEODETIC

FORWARD ENGINEERING & ASSOCIATES INC.
244 Brockport Drive, Unit 15, Toronto, Ontario, M9W 6X9

Engineer: G.R.

Checked by: G.S.

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Project No: 7507

Log of Borehole BH-11

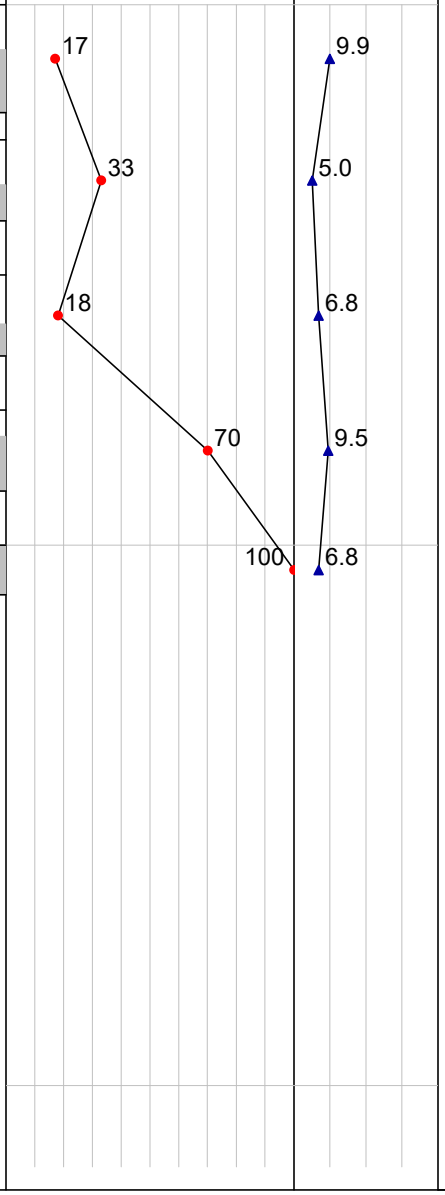
Project: PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

Client: HDSB c/o HOSSACK ARCHITECTURE

Enclosure: 12

Location: SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.

Depth (m)	Description of strata	Elevation (m)	Sample No.	Type	Blows/ft	Recovery
0	Ground Surface	179.39				
	FILL/DISTURBED SOIL reddish brown and grey clayey silt with traces of stone fragments, compact, moist.	0.00	1	SS	17	
1			2	SS	33	
2	**SILT TILL** with occasional traces of shale fragments. compact to very dense, reddish brown, moist.	177.56 1.83	3	SS	18	
			4	SS	70	
3			5	SS	100	
	HIGHLY WEATHERED SHALE hard, red, moist.	176.09 3.30				
	End of Borehole					
4						
5						
6						



Monitoring Well

Remarks: -Upon completion of drilling, the borehole was open and dry.

Drill Method: CME 55 - SOLID

Drill Date: 7 AUG. 2025

Datum: GEODETIC

FORWARD ENGINEERING & ASSOCIATES INC.
244 Brockport Drive, Unit 15, Toronto, Ontario, M9W 6X9

Engineer: G.R.

Checked by: G.S.

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Project No: 7507

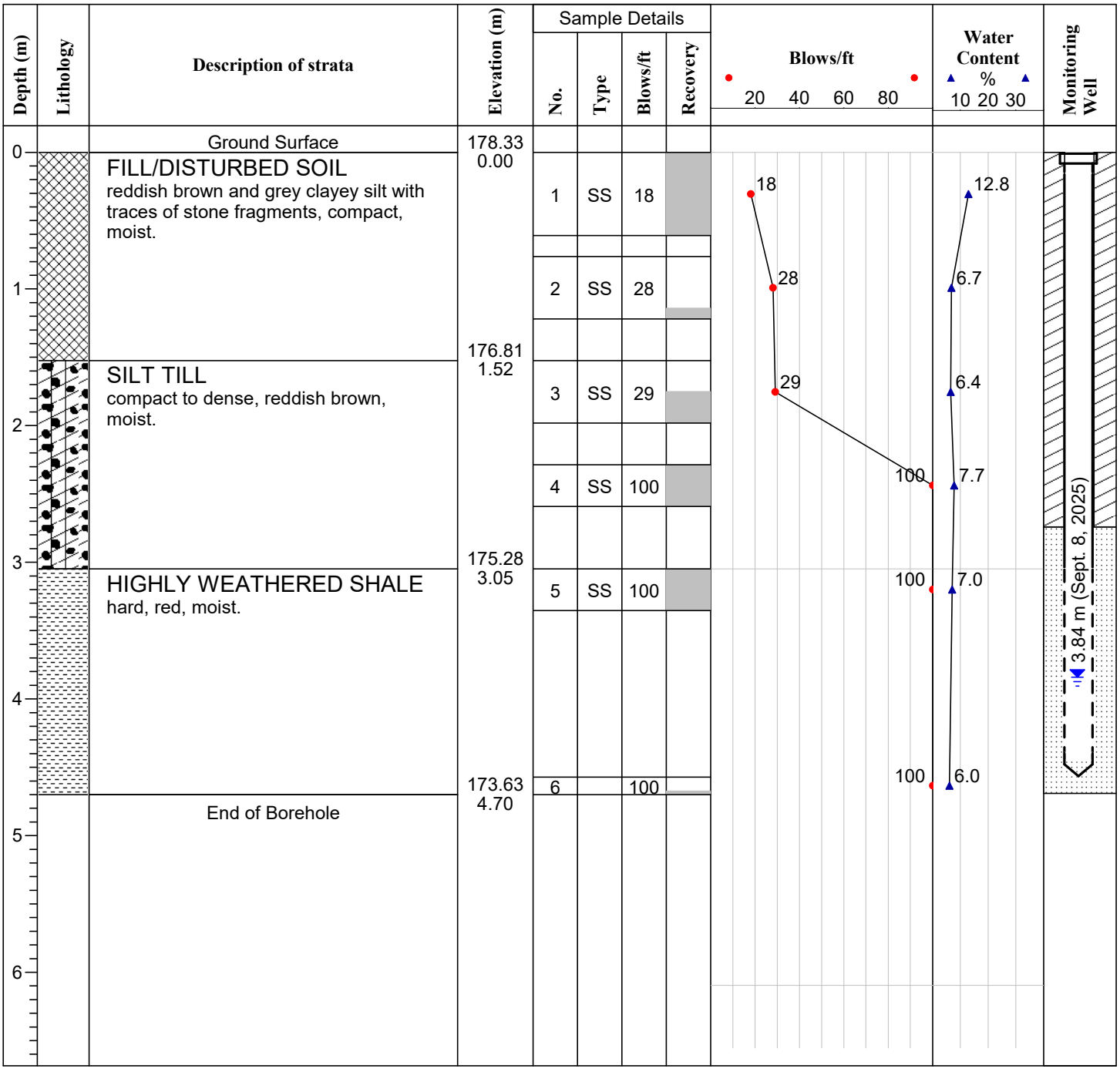
Log of Borehole BH/MW-12

Project: PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

Client: HDSB c/o HOSSACK ARCHITECTURE

Enclosure: 13

Location: SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.



Remarks: -Upon completion of drilling, the borehole was open and dry.
-On Sept. 8, 2025 the water level in the installed well was measured at 3.84 m below EGSL.

Drill Method: CME 55 - SOLID

Drill Date: 6 AUG. 2025

Datum: GEODETIC

FORWARD ENGINEERING & ASSOCIATES INC.
244 Brockport Drive, Unit 15, Toronto, Ontario, M9W 6X9

Engineer: G.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7507

Log of Borehole BH-13

Project: PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

Client: HDSB c/o HOSSACK ARCHITECTURE

Enclosure: 14

Location: SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.

Depth (m)	Description of strata	Elevation (m)	Sample No.	Type	Blows/ft	Recovery	Blows/ft (20 40 60 80)	Water Content % (10 20 30)
0	Ground Surface	177.99						
	FILL/DISTURBED SOIL reddish brown and grey clayey silt with traces of stone fragments, compact, moist.	0.00	1	SS	37		37	4.4
	SILT TILL dense to compact, reddish brown, moist.	177.23 0.76	2	SS	37		37	8.0
1			3	SS	23		23	6.3
2	very dense.		4	SS	100		100	7.0
3	**HIGHLY WEATHERED SHALE** hard, red, moist.	174.94 3.05	5	SS	100		100	4.7
4			6	SS	100		100	4.9
		173.32 4.67	7		100		100	6.0
	End of Borehole							
5								
6								

Monitoring Well

Remarks: -Upon completion of drilling, the borehole was open and dry.

Drill Method: CME 55 - SOLID

Drill Date: 6 AUG. 2025

Datum: GEODETIC

FORWARD ENGINEERING & ASSOCIATES INC.
244 Brockport Drive, Unit 15, Toronto, Ontario, M9W 6X9

Engineer: G.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7507

Log of Borehole BH-14

Project: PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

Client: HDSB c/o HOSSACK ARCHITECTURE

Enclosure: 15

Location: SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.

Depth (m)	Description of strata	Elevation (m)	Sample Details: No.	Type	Blows/ft	Recovery	Blows/ft (20 40 60 80)	Water Content % (10 20 30)	Monitoring Well
	Ground Surface	177.65							
0	**FILL/DISTURBED SOIL** reddish brown and grey clayey silt with traces of stone fragments, compact, moist.	0.00	1	SS	11		11	8.0	
1			2	SS	30		30	7.9	
	SILT TILL compact to very dense, reddish brown, moist.	176.13 1.52	3	SS	28		28	11.9	
2			4	SS	100		100	7.1	
3	**HIGHLY WEATHERED SHALE** hard, red, moist.	174.60 3.05	5	SS	100		100	8.0	
4		173.00	6		100		100	3.3	
	End of Borehole	4.65							
5									
6									

Remarks: -Upon completion of drilling, the borehole was open and dry.

Drill Method: CME 55 - SOLID

Drill Date: 5 AUG. 2025

Datum: GEODETIC

FORWARD ENGINEERING & ASSOCIATES INC.
244 Brockport Drive, Unit 15, Toronto, Ontario, M9W 6X9

Engineer: G.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7507

Log of Borehole BH-15

Project: PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

Client: HDSB c/o HOSSACK ARCHITECTURE

Enclosure: 16

Location: SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.

Depth (m)	Description of strata	Elevation (m)	Sample Details: No.	Type	Blows/ft	Recovery
0	Ground Surface	178.44				
	FILL/DISTURBED SOIL reddish brown and grey clayey silt with traces of stone fragments, compact, moist.	0.00	1	SS	27	
1	**SILT TILL** compact, reddish brown, moist.	177.37 1.07	2	SS	18	
			3	SS	12	
2	**HIGHLY WEATHERED SHALE** hard, red, moist.	175.85 2.59	4	SS	100	
3	End of Borehole					
4						
5						
6						

Blows/ft: 20 40 60 80 — 27, 18, 12, 100

Water Content % (▲ ▲): 10 20 30 — 11.7, 9.0, 12.3, 8.7

Monitoring Well

Remarks: -Upon completion of drilling, the borehole was open and dry.

Drill Method: CME 55 - SOLID

Drill Date: 7 AUG. 2025

Datum: GEODETIC

FORWARD ENGINEERING & ASSOCIATES INC.
244 Brockport Drive, Unit 15, Toronto, Ontario, M9W 6X9

Engineer: G.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7507

Log of Borehole BH-16

Project: PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

Client: HDSB c/o HOSSACK ARCHITECTURE

Enclosure: 17

Location: SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.

Depth (m)	Description of strata	Elevation (m)	Sample No.	Type	Blows/ft	Recovery	Water Content %
	Ground Surface	178.23					
0	**FILL/DISTURBED SOIL** reddish brown and grey clayey silt with traces of stone fragments, compact, moist.	0.00	1	SS	48		11.6
1			2	SS	21		8.9
	SILT TILL compact to very dense, reddish brown, moist.	176.70 1.52	3	SS	15		10.7
2			4	SS	100		9.0
3			5	SS	100		10.6
4	**HIGHLY WEATHERED SHALE** hard, red, moist.	173.66 4.57	6		100		5.9
5	End of Borehole						
6							

Blows/ft: 20 40 60 80

Water Content %: 10 20 30

Monitoring Well

Remarks: -Upon completion of drilling, the borehole was open and dry.

Drill Method: CME 55 - SOLID

Drill Date: 6 AUG. 2025

Datum: GEODETIC

FORWARD ENGINEERING & ASSOCIATES INC.
244 Brockport Drive, Unit 15, Toronto, Ontario, M9W 6X9

Engineer: G.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7507

Log of Borehole BH-17

Project: PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

Client: HDSB c/o HOSSACK ARCHITECTURE

Enclosure: 18

Location: SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.

Depth (m)	Description of strata	Elevation (m)	Sample No.	Type	Blows/ft	Recovery	Blows/ft (20 40 60 80)	Water Content % (10 20 30)	Monitoring Well
	Ground Surface	178.00							
0	**FILL/DISTURBED SOIL** reddish brown and grey clayey silt with traces of stone fragments, compact, moist.	0.00	1	SS	34		34	11.6	
1			2	SS	21		21	8.9	
	SILT TILL very dense, reddish brown, moist.	176.48 1.52	3	SS	44		44	10.7	
2			4	SS	100		100	9.0	
3			5	SS	100		100	10.6	
4									
	HIGHLY WEATHERED SHALE hard, red, moist.	173.43 4.57	6		100		100	5.9	
5	End of Borehole								
6									

Remarks: -Upon completion of drilling, the borehole was open and dry.

Drill Method: CME 55 - SOLID

Drill Date: 5 AUG. 2025

Datum: GEODETIC

FORWARD ENGINEERING & ASSOCIATES INC.
244 Brockport Drive, Unit 15, Toronto, Ontario, M9W 6X9

Engineer: G.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7507

Log of Borehole BH/MW-18

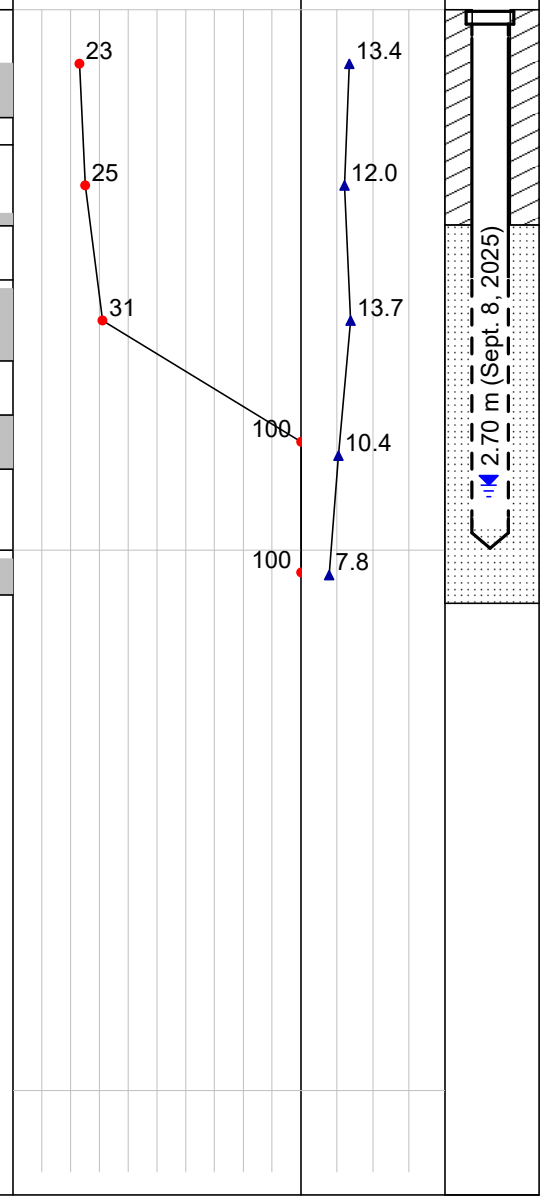
Project: PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

Client: HDSB c/o HOSSACK ARCHITECTURE

Enclosure: 19

Location: SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.

Depth (m)	Description of strata	Elevation (m)	Sample No.	Type	Blows/ft	Recovery
0	Ground Surface	178.56				
	FILL/DISTURBED SOIL reddish brown and grey clayey silt with traces of stone fragments, compact, moist.	0.00	1	SS	23	
1	**SILT TILL** compact to very dense, reddish brown, moist.	177.80 0.76	2	SS	25	
			3	SS	31	
2			4	SS	100	
	with sandy silt layer.					
3	**HIGHLY WEATHERED SHALE** hard, red, moist.	175.36 3.20	5	SS	100	
	End of Borehole					
4						
5						
6						



Remarks: -Upon completion of drilling, the borehole was open and dry.
-On Sept. 8, 2025 the water level in the installed well was measured at 2.70 m below EGSL.

Drill Method: CME 55 - SOLID

Drill Date: 7 AUG. 2025

Datum: GEODETIC

FORWARD ENGINEERING & ASSOCIATES INC.
244 Brockport Drive, Unit 15, Toronto, Ontario, M9W 6X9

Engineer: G.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7507

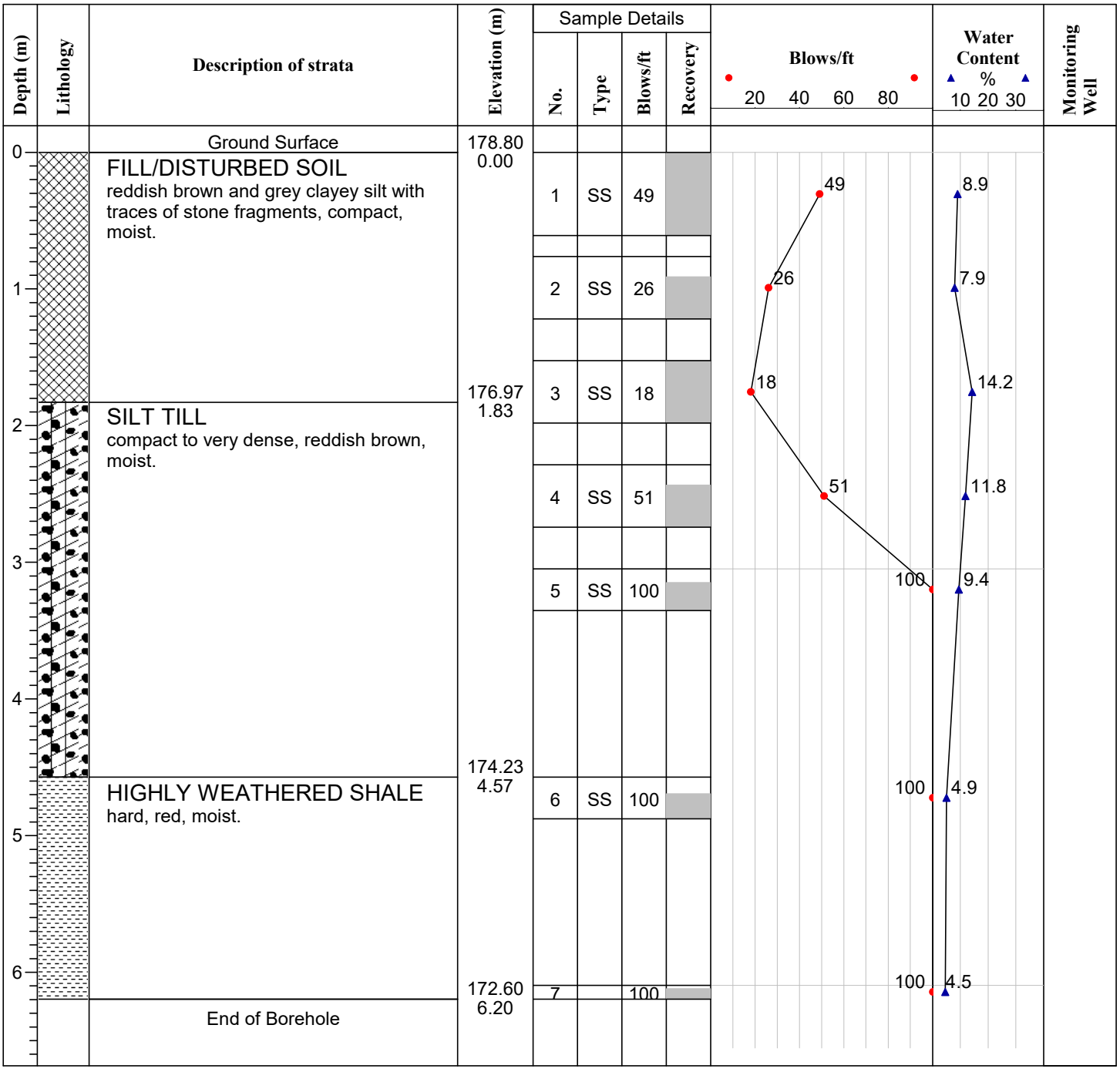
Log of Borehole BH-19

Project: PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

Client: HDSB c/o HOSSACK ARCHITECTURE

Enclosure: 20

Location: SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.



Remarks: -Upon completion of drilling, the borehole was open and dry.

Drill Method: CME 55 - SOLID

Drill Date: 5 AUG. 2025

Datum: GEODETIC

FORWARD ENGINEERING & ASSOCIATES INC.
244 Brockport Drive, Unit 15, Toronto, Ontario, M9W 6X9

Engineer: G.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7507

Log of Borehole BH-20

Project: PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

Client: HDSB c/o HOSSACK ARCHITECTURE

Enclosure: 21

Location: SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.

Depth (m)	Description of strata	Elevation (m)	Sample No.	Type	Blows/ft	Recovery	Water Content %
0	Ground Surface	178.35					
	FILL/DISTURBED SOIL reddish brown and grey clayey silt with traces of stone fragments, compact, moist.	0.00	1	SS	20		8.5
1			2	SS	27		11.4
	SILT TILL dense to very dense, reddish brown, moist.	176.83 1.52	3	SS	36		12.0
2	very moist seam.		4	SS	64		18.3
3			5	SS	100		10.0
4		173.63	6	SS	100		5.1
	HIGHLY WEATHERED SHALE hard, red, moist.	4.72					
5	End of Borehole						
6							

Blows/ft: 20 40 60 80

Water Content %: 10 20 30

Monitoring Well

Remarks: -Upon completion of drilling, the borehole was open and dry.

Drill Method: CME 55 - SOLID

Drill Date: 6 AUG. 2025

Datum: GEODETIC

FORWARD ENGINEERING & ASSOCIATES INC.
244 Brockport Drive, Unit 15, Toronto, Ontario, M9W 6X9

Engineer: G.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7507

Log of Borehole BH-21

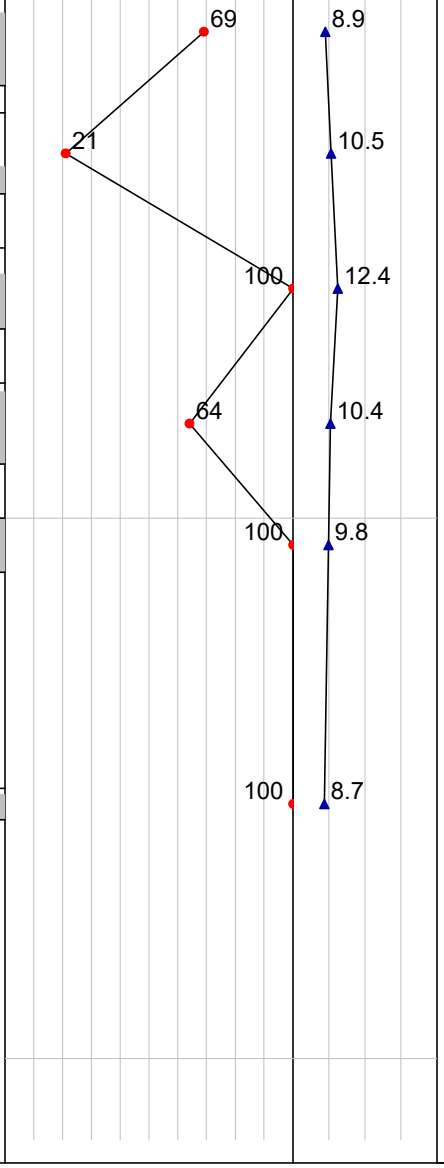
Project: PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

Client: HDSB c/o HOSSACK ARCHITECTURE

Enclosure: 22

Location: SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.

Depth (m)	Description of strata	Elevation (m)	Sample No.	Type	Blows/ft	Recovery
0	Ground Surface	178.15				
	FILL/DISTURBED SOIL reddish brown and grey clayey silt with traces of stone fragments, compact, moist.	0.00	1	SS	69	
1	**SILT TILL** compact to very dense, reddish brown, moist.	177.31 0.84	2	SS	21	
			3	SS	100	
2	with occasional sandy silt inclusions.		4	SS	64	
3			5	SS	100	
4	**HIGHLY WEATHERED SHALE** hard, red, moist.	173.58 4.57	6	SS	100	
5	End of Borehole					
6						



Remarks: -Upon completion of drilling, the borehole was open and dry.

Drill Method: CME 55 - SOLID

Drill Date: 5 AUG. 2025

Datum: GEODETIC

FORWARD ENGINEERING & ASSOCIATES INC.
244 Brockport Drive, Unit 15, Toronto, Ontario, M9W 6X9

Engineer: G.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7507

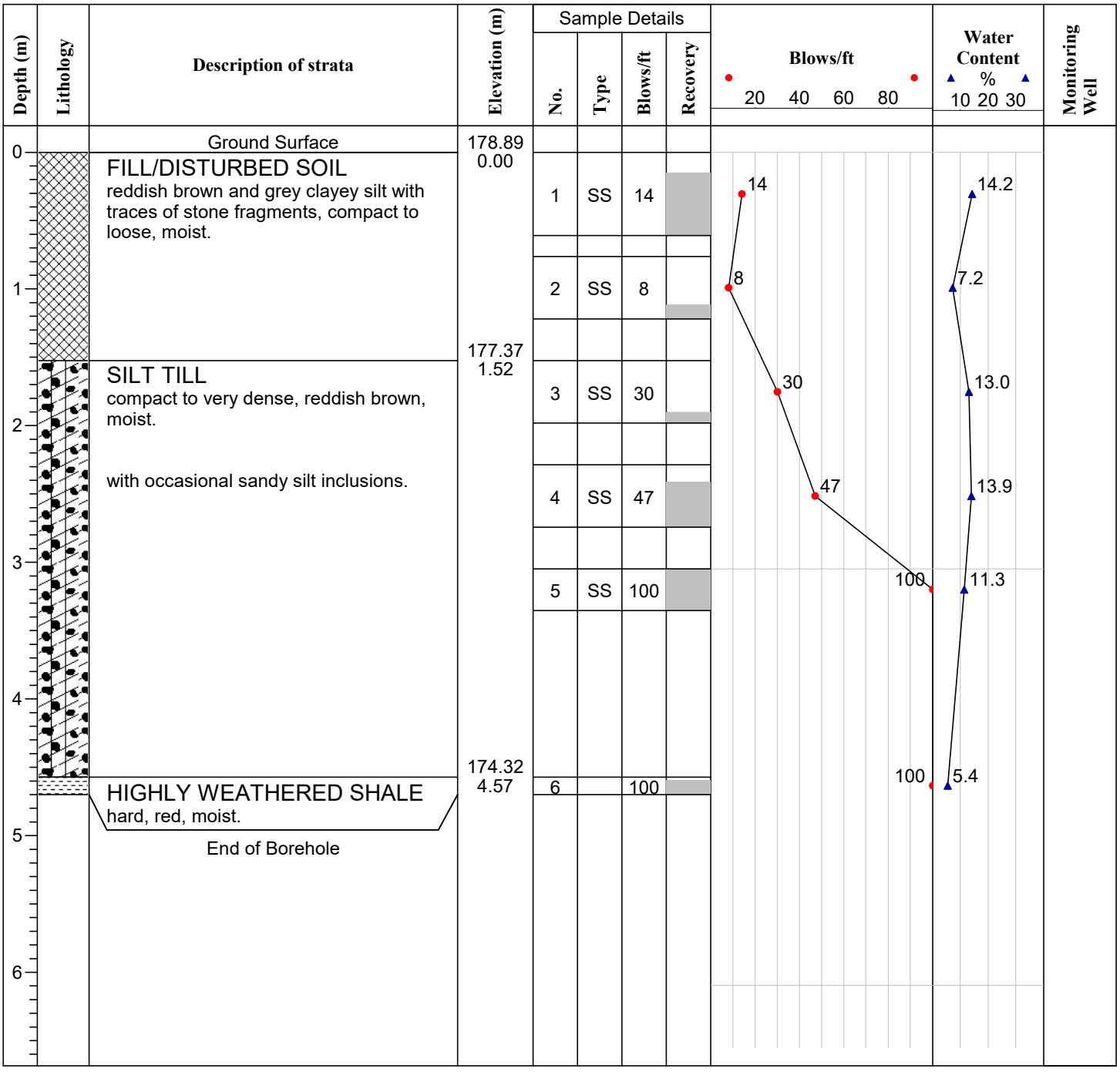
Log of Borehole BH-22

Project: PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

Client: HDSB c/o HOSSACK ARCHITECTURE

Enclosure: 23

Location: SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.



Remarks: -Upon completion of drilling, the borehole was open and dry.

Drill Method: CME 55 - SOLID

Drill Date: 6 AUG. 2025

Datum: GEODETIC

Engineer: G.R.

Checked by: G.S.

Sheet No. 1 of 1

FORWARD ENGINEERING & ASSOCIATES INC.
244 Brockport Drive, Unit 15, Toronto, Ontario, M9W 6X9

Project No: 7507

Log of Borehole BH-23

Project: PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

Client: HDSB c/o HOSSACK ARCHITECTURE

Enclosure: 24

Location: SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.

Depth (m)	Description of strata	Elevation (m)	Sample No.	Type	Blows/ft	Recovery	Blows/ft (20 40 60 80)	Water Content % (10 20 30)
	Ground Surface	178.87						
0	**FILL/DISTURBED SOIL** reddish brown and grey clayey silt with traces of stone fragments, compact to loose, moist.	0.00	1	SS	23		23	10.0
1			2	SS	14		14	9.2
	SILT TILL compact to very dense, reddish brown, moist.	177.34 1.52	3	SS	21		21	5.8
2	with occasional sandy silt inclusions.		4	SS	100		100	11.9
3			5	SS	83		83	9.5
4	**HIGHLY WEATHERED SHALE** hard, red, moist.	174.30 4.57	6	SS	100		100	5.2
5	End of Borehole							
6								

Monitoring Well

Remarks: -Upon completion of drilling, the borehole was open and dry.

Drill Method: CME 55 - SOLID

Drill Date: 6 AUG. 2025

Datum: GEODETIC

FORWARD ENGINEERING & ASSOCIATES INC.
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Engineer: G.R.

Checked by: G.S.

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Project No: 7507

Log of Borehole BH/MW-24

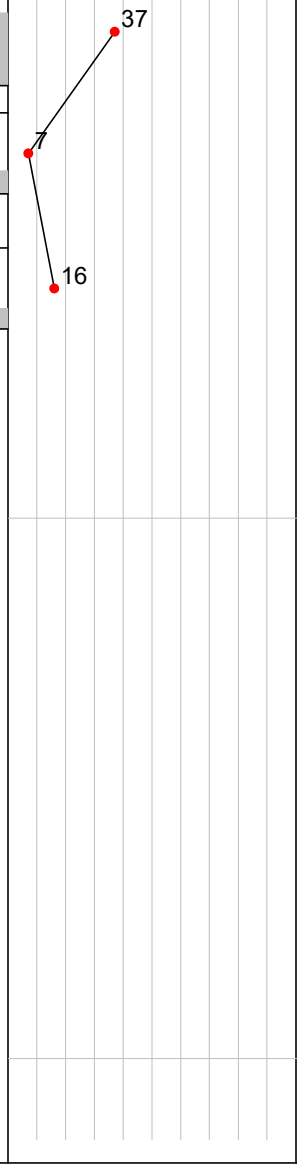
Project: PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

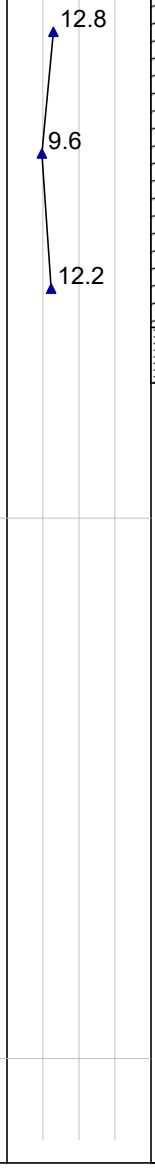
Client: HDSB c/o HOSSACK ARCHITECTURE

Enclosure: 25

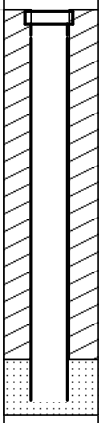
Location: SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.

Depth (m)	Description of strata	Elevation (m)	Sample Details: No.	Type	Blows/ft	Recovery
0	Ground Surface	178.92				
	FILL/DISTURBED SOIL reddish brown and grey clayey silt with traces of stone fragments, compact to loose, moist.	0.00	1	SS	37	
1			2	SS	7	
	SILT TILL compact, reddish brown, moist.	177.40 1.52	3	SS	16	
2	End of Borehole	176.63 2.29				
3						
4						
5						
6						





Monitoring Well



Remarks: -Upon completion of drilling, the borehole was open and dry.

Drill Method: CME 55 - SOLID

Drill Date: 6 AUG. 2025

Datum: GEODETIC

FORWARD ENGINEERING & ASSOCIATES INC.
244 Brockport Drive, Unit 15, Toronto, Ontario, M9W 6X9

Engineer: G.R.

Checked by: G.S.

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Project No: 7507

Log of Borehole BH/MW-25

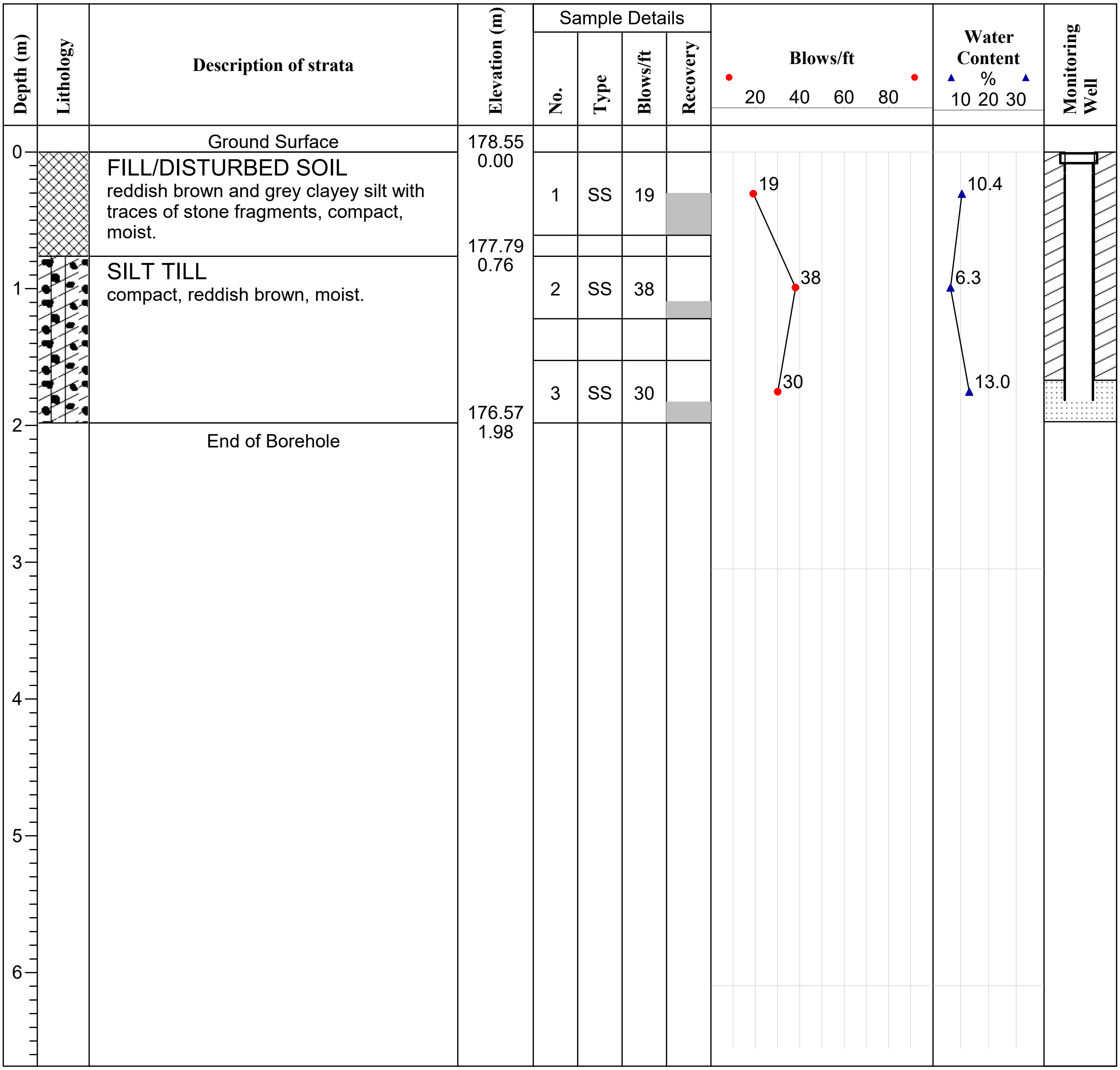
Project: PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

Client: HDSB c/o HOSSACK ARCHITECTURE

Enclosure: 26

Location: SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.

Depth (m)	Lithology	Description of strata	Elevation (m)	Sample No.	Type	Blows/ft	Recovery	Blows/ft (plot)	Water Content %	Monitoring Well
		Ground Surface	178.55							
0.00	Fill	**FILL/DISTURBED SOIL** reddish brown and grey clayey silt with traces of stone fragments, compact, moist.	178.55 / 0.00	1	SS	19		19	10.4	
0.76	Silt Till	**SILT TILL** compact, reddish brown, moist.	177.79 / 0.76	2	SS	38		38	6.3	
				3	SS	30		30	13.0	
1.98		End of Borehole	176.57 / 1.98							



Remarks: -Upon completion of drilling, the borehole was open and dry.

Drill Method: CME 55 - SOLID

Drill Date: 8 AUG. 2025

Datum: GEODETIC

FORWARD ENGINEERING & ASSOCIATES INC.
244 Brockport Drive, Unit 15, Toronto, Ontario, M9W 6X9

Engineer: G.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7507

Log of Borehole BH-26

Project: PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

Client: HDSB c/o HOSSACK ARCHITECTURE

Enclosure: 27

Location: SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.

Depth (m)	Description of strata	Elevation (m)	Sample No.	Type	Blows/ft	Recovery	Blows/ft (20 40 60 80)	Water Content % (10 20 30)	Monitoring Well
	Ground Surface	179.16							
0	FILL/DISTURBED SOIL reddish brown and grey clayey silt with traces of stone fragments, compact, moist.	0.00	1	SS	34		34	11.3	
1			2	SS	10		10	20.8	
2	SILT TILL compact, reddish brown, moist.	177.49 1.68	3	SS	26		26	16.0	
	End of Borehole	177.18 1.98							
3									
4									
5									
6									

Remarks: -Upon completion of drilling, the borehole was open and dry.

Drill Method: CME 55 - SOLID

Drill Date: 8 AUG. 2025

Datum: GEODETIC

FORWARD ENGINEERING & ASSOCIATES INC.
244 Brockport Drive, Unit 15, Toronto, Ontario, M9W 6X9

Engineer: G.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7507

Log of Borehole BH-27

Project: PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

Client: HDSB c/o HOSSACK ARCHITECTURE

Enclosure: 28

Location: SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.

Depth (m)	Description of strata	Elevation (m)	Sample No.	Type	Blows/ft	Recovery
0	Ground Surface	178.91				
	FILL/DISTURBED SOIL reddish brown and grey clayey silt with traces of stone fragments, compact, moist.	0.00	1	SS	43	
1			2	SS	11	
	SILT TILL dense, reddish brown, moist.	177.24 1.68	3	SS	32	
2	End of Borehole	176.93 1.98				
3						
4						
5						
6						

Blows/ft: 20 40 60 80

Water Content %: 10 20 30

Monitoring Well

Remarks: -Upon completion of drilling, the borehole was open and dry.

Drill Method: CME 55 - SOLID

Drill Date: 8 AUG. 2025

Datum: GEODETIC

FORWARD ENGINEERING & ASSOCIATES INC.
244 Brockport Drive, Unit 15, Toronto, Ontario, M9W 6X9

Engineer: G.R.

Checked by: G.S.

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Project No: 7507

Log of Borehole BH-28

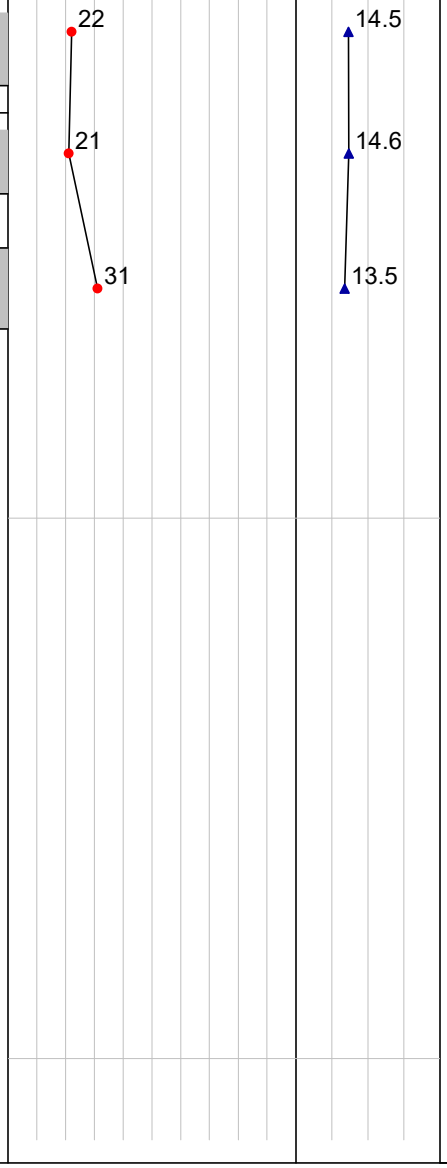
Project: PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

Client: HDSB c/o HOSSACK ARCHITECTURE

Enclosure: 29

Location: SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.

Depth (m)	Description of strata	Elevation (m)	Sample No.	Type	Blows/ft	Recovery
0	Ground Surface	179.10				
	FILL/DISTURBED SOIL reddish brown and grey clayey silt with traces of stone fragments, compact, moist.	0.00	1	SS	22	
1			2	SS	21	
	SILT TILL compact to dense, reddish brown, moist.	178.03 1.07	3	SS	31	
2	End of Borehole	177.12 1.98				
3						
4						
5						
6						



Monitoring Well

Remarks: -Upon completion of drilling, the borehole was open and dry.

Drill Method: CME 55 - SOLID

Drill Date: 8 AUG. 2025

Datum: GEODETIC

FORWARD ENGINEERING & ASSOCIATES INC.
244 Brockport Drive, Unit 15, Toronto, Ontario, M9W 6X9

Engineer: G.R.

Checked by: G.S.

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Project No: 7507

Log of Borehole BH/MW-29

Project: PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

Client: HDSB c/o HOSSACK ARCHITECTURE

Enclosure: 30

Location: SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.

Depth (m)	Description of strata	Elevation (m)	Sample Details: No.	Type	Blows/ft	Recovery
	Ground Surface	178.86				
0	**FILL/DISTURBED SOIL** reddish brown and grey clayey silt with traces of stone fragments, compact, moist.	0.00	1	SS	21	
		178.10				
1	**SILT TILL** compact, reddish brown, moist.	0.76	2	SS	13	
2			3	SS	28	
	End of Borehole	176.57 2.29				
3						
4						
5						
6						

Blows/ft: 20 40 60 80 — 21, 13, 28

Water Content % : 10 20 30 — 11.5, 12.5, 13.3

Monitoring Well

Remarks: -Upon completion of drilling, the borehole was open and dry.

Drill Method: CME 55 - SOLID

Drill Date: 8 AUG. 2025

Datum: GEODETIC

FORWARD ENGINEERING & ASSOCIATES INC.
244 Brockport Drive, Unit 15, Toronto, Ontario, M9W 6X9

Engineer: G.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7507

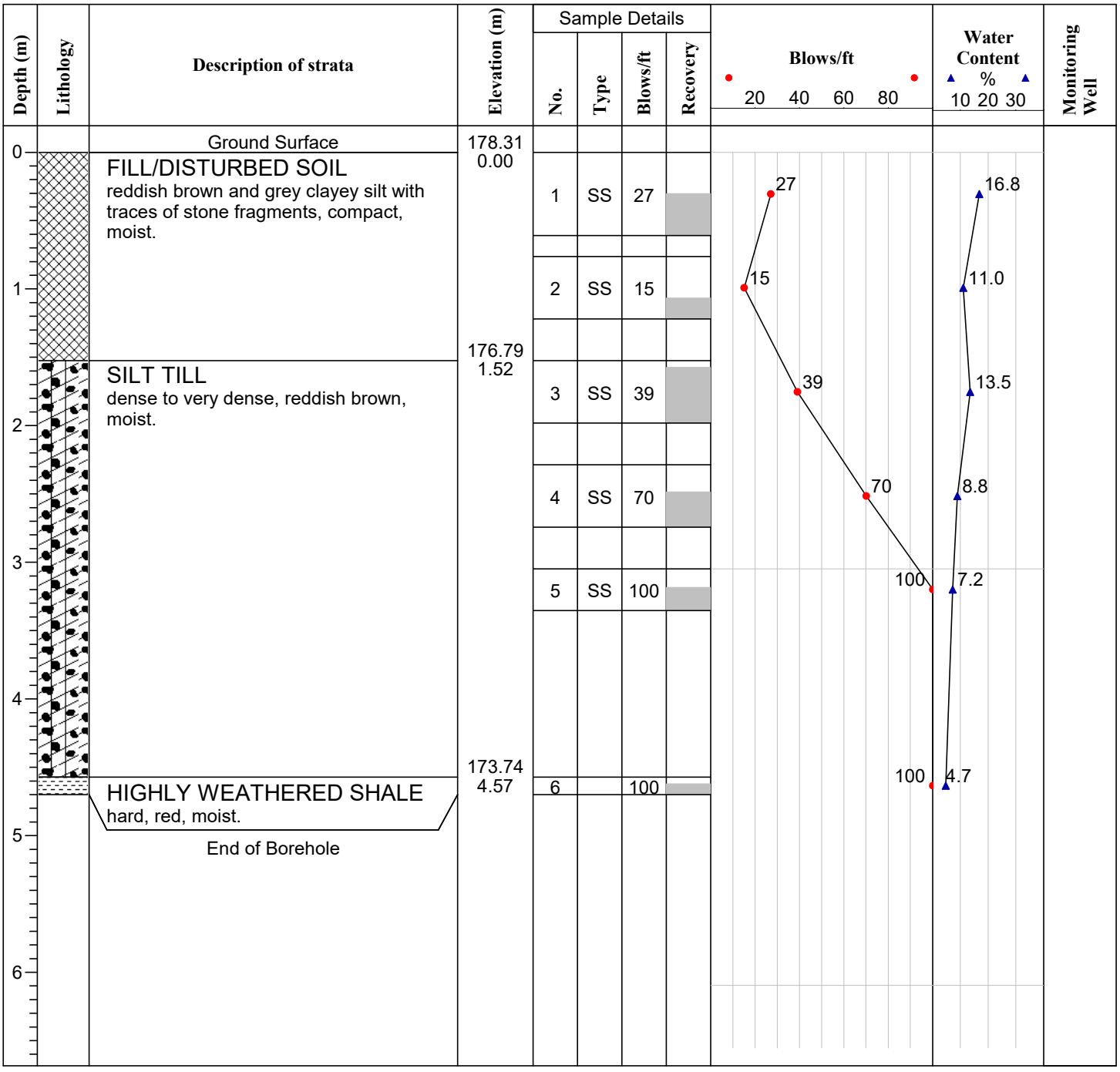
Log of Borehole BH-30

Project: PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

Client: HDSB c/o HOSSACK ARCHITECTURE

Enclosure: 31

Location: SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.



Remarks: -Upon completion of drilling, the borehole was open and dry.

Drill Method: CME 55 - SOLID

Drill Date: 5 AUG. 2025

Datum: GEODETIC

FORWARD ENGINEERING & ASSOCIATES INC.
244 Brockport Drive, Unit 15, Toronto, Ontario, M9W 6X9

Engineer: G.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7507

Log of Borehole BH-31

Project: PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

Client: HDSB c/o HOSSACK ARCHITECTURE

Enclosure: 32

Location: SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.

Depth (m)	Description of strata	Elevation (m)	Sample Details: No.	Type	Blows/ft	Recovery
0	Ground Surface	179.22				
	FILL/DISTURBED SOIL reddish brown and grey clayey silt with traces of stone fragments, compact, moist.	0.00	1	SS	27	
1	**SILT TILL** compact to dense, reddish brown, moist.	178.46 0.76	2	SS	17	
			3	SS	35	
2	End of Borehole	177.24 1.98				
3						
4						
5						
6						

Blows/ft: 20 40 60 80 — 27, 17, 35

Water Content % (▲ ▲): 10 20 30 — 7.9, 12.9, 12.3

Monitoring Well

Remarks: -Upon completion of drilling, the borehole was open and dry.

Drill Method: CME 55 - SOLID

Drill Date: 8 AUG. 2025

Datum: GEODETIC

FORWARD ENGINEERING & ASSOCIATES INC.
244 Brockport Drive, Unit 15, Toronto, Ontario, M9W 6X9

Engineer: G.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7507

Log of Borehole BH-32

Project: PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

Client: HDSB c/o HOSSACK ARCHITECTURE

Enclosure: 33

Location: SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.

Depth (m)	Description of strata	Elevation (m)	Sample Details: No.	Type	Blows/ft	Recovery
0	Ground Surface	179.08				
	FILL/DISTURBED SOIL reddish brown and grey clayey silt with traces of stone fragments, compact, moist.	0.00	1	SS	25	
1	**SILT TILL** compact, reddish brown, moist.	178.16 0.91	2	SS	16	
			3	SS	29	
2	End of Borehole	177.10 1.98				
3						
4						
5						
6						

Blows/ft: 20 40 60 80 — 25, 16, 29

Water Content % : 10 20 30 — 14.0, 13.1, 13.1

Monitoring Well

Remarks: -Upon completion of drilling, the borehole was open and dry.

Drill Method: CME 55 - SOLID

Drill Date: 8 AUG. 2025

Datum: GEODETIC

FORWARD ENGINEERING & ASSOCIATES INC.
244 Brockport Drive, Unit 15, Toronto, Ontario, M9W 6X9

Engineer: G.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7507

Log of Borehole BH-33

Project: PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

Client: HDSB c/o HOSSACK ARCHITECTURE

Enclosure: 34

Location: SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.

Depth (m)	Description of strata	Elevation (m)	Sample No.	Type	Blows/ft	Recovery
0	Ground Surface	178.87				
	FILL/DISTURBED SOIL reddish brown and grey clayey silt with traces of stone fragments, compact, moist.	0.00	1	SS	22	
1	**SILT TILL** dense to compact, reddish brown, moist.	177.95 0.91	2	SS	34	
			3	SS	27	
2	End of Borehole	176.89 1.98				
3						
4						
5						
6						

Blows/ft: 20 40 60 80 — 22, 34, 27

Water Content % : 10 20 30 — 15.4, 11.8, 13.4

Monitoring Well

Remarks: -Upon completion of drilling, the borehole was open and dry.

Drill Method: CME 55 - SOLID

Drill Date: 8 AUG. 2025

Datum: GEODETIC

FORWARD ENGINEERING & ASSOCIATES INC.
244 Brockport Drive, Unit 15, Toronto, Ontario, M9W 6X9

Engineer: G.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7507

Log of Borehole BH-34

Project: PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

Client: HDSB c/o HOSSACK ARCHITECTURE

Enclosure: 35

Location: SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.

Depth (m)	Description of strata	Elevation (m)	Sample Details: No.	Type	Blows/ft	Recovery	Blows/ft (20 40 60 80)	Water Content % (10 20 30)	Monitoring Well
0	Ground Surface	179.10							
	FILL/DISTURBED SOIL reddish brown and grey clayey silt with traces of stone fragments, compact, moist.	0.00	1	SS	25		25	10.6	
		178.34							
1	SILT TILL compact to dense, reddish brown, moist.	0.76	2	SS	18		18	11.9	
			3	SS	40		40	12.8	
2	End of Borehole	177.12 1.98							
3									
4									
5									
6									

Remarks: -Upon completion of drilling, the borehole was open and dry.

Drill Method: CME 55 - SOLID

Drill Date: 8 AUG. 2025

Datum: GEODETIC

FORWARD ENGINEERING & ASSOCIATES INC.
244 Brockport Drive, Unit 15, Toronto, Ontario, M9W 6X9

Engineer: G.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7507

Log of Borehole BH-35

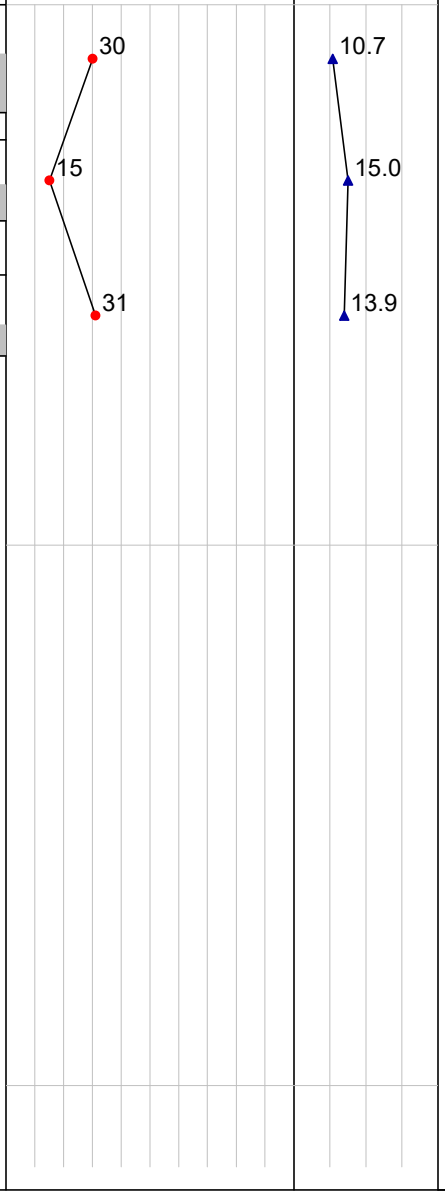
Project: PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

Client: HDSB c/o HOSSACK ARCHITECTURE

Enclosure: 36

Location: SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.

Depth (m)	Description of strata	Elevation (m)	Sample No.	Type	Blows/ft	Recovery
0	Ground Surface	179.02				
	FILL/DISTURBED SOIL reddish brown and grey clayey silt with traces of stone fragments, compact, moist.	0.00	1	SS	30	
1			2	SS	15	
	SILT TILL dense, reddish brown, moist.	177.50 1.52	3	SS	31	
2	End of Borehole	177.04 1.98				
3						
4						
5						
6						



Monitoring Well

Remarks: -Upon completion of drilling, the borehole was open and dry.

Drill Method: CME 55 - SOLID

Drill Date: 8 AUG. 2025

Datum: GEODETIC

FORWARD ENGINEERING & ASSOCIATES INC.
244 Brockport Drive, Unit 15, Toronto, Ontario, M9W 6X9

Engineer: G.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7507

Log of Borehole BH-36

Project: PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

Client: HDSB c/o HOSSACK ARCHITECTURE

Enclosure: 37

Location: SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.

Depth (m)	Description of strata	Elevation (m)	Sample No.	Type	Blows/ft	Recovery	Blows/ft (20 40 60 80)	Water Content % (10 20 30)	Monitoring Well
0	Ground Surface	178.93							
	FILL/DISTURBED SOIL reddish brown and grey clayey silt with traces of stone fragments, loose to compact, moist.	0.00	1	SS	6		6	10.2	
1			2	SS	26		26	11.5	
	SILT TILL compact to dense, reddish brown, moist.	177.41 1.52	3	SS	17		17	13.5	
2			4	SS	36		36	12.4	
3	very dense.		5	SS	43		43	11.6	
		174.99 3.94	6		100		100	9.0	
4	End of Borehole								
5									
6									

Remarks: -Upon completion of drilling, the borehole was open and dry.

Drill Method: CME 55 - SOLID

Drill Date: 8 AUG. 2025

Datum: GEODETIC

FORWARD ENGINEERING & ASSOCIATES INC.
244 Brockport Drive, Unit 15, Toronto, Ontario, M9W 6X9

Engineer: G.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7507

Log of Borehole BH-37

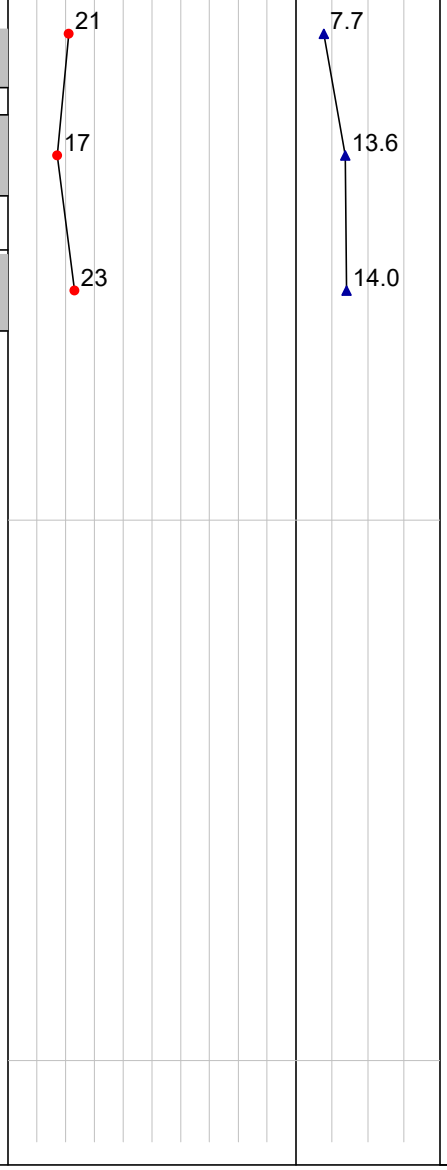
Project: PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

Client: HDSB c/o HOSSACK ARCHITECTURE

Enclosure: 38

Location: SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.

Depth (m)	Description of strata	Elevation (m)	Sample Details: No.	Type	Blows/ft	Recovery
0	Ground Surface	179.15				
	FILL/DISTURBED SOIL reddish brown and grey clayey silt with traces of stone fragments, compact, moist.	0.00	1	SS	21	
1			2	SS	17	
	SILT TILL compact, reddish brown, moist.	177.63 1.52	3	SS	23	
2	End of Borehole	177.17 1.98				
3						
4						
5						
6						



Remarks: -Upon completion of drilling, the borehole was open and dry.

Drill Method: CME 55 - SOLID

Drill Date: 8 AUG. 2025

Datum: GEODETIC

FORWARD ENGINEERING & ASSOCIATES INC.
244 Brockport Drive, Unit 15, Toronto, Ontario, M9W 6X9

Engineer: G.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7507

Log of Borehole BH-38

Project: PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

Client: HDSB c/o HOSSACK ARCHITECTURE

Enclosure: 39

Location: SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.

Depth (m)	Description of strata	Elevation (m)	Sample No.	Type	Blows/ft	Recovery
0	Ground Surface	178.74				
	FILL/DISTURBED SOIL reddish brown and grey clayey silt with traces of stone fragments, compact, moist.	0.00	1	SS	19	
1	**SILT TILL** compact to dense, reddish brown, moist.	177.98	2	SS	16	
		0.76	3	SS	31	
2	End of Borehole	176.76				
		1.98				

Blows/ft: 20 40 60 80 — 19, 16, 31

Water Content % : 10 20 30 — 10.6, 21.1, 12.5

Monitoring Well

Remarks: -Upon completion of drilling, the borehole was open and dry.

Drill Method: CME 55 - SOLID

Drill Date: 8 AUG. 2025

Datum: GEODETIC

FORWARD ENGINEERING & ASSOCIATES INC.
244 Brockport Drive, Unit 15, Toronto, Ontario, M9W 6X9

Engineer: G.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7507

Log of Borehole BH-39

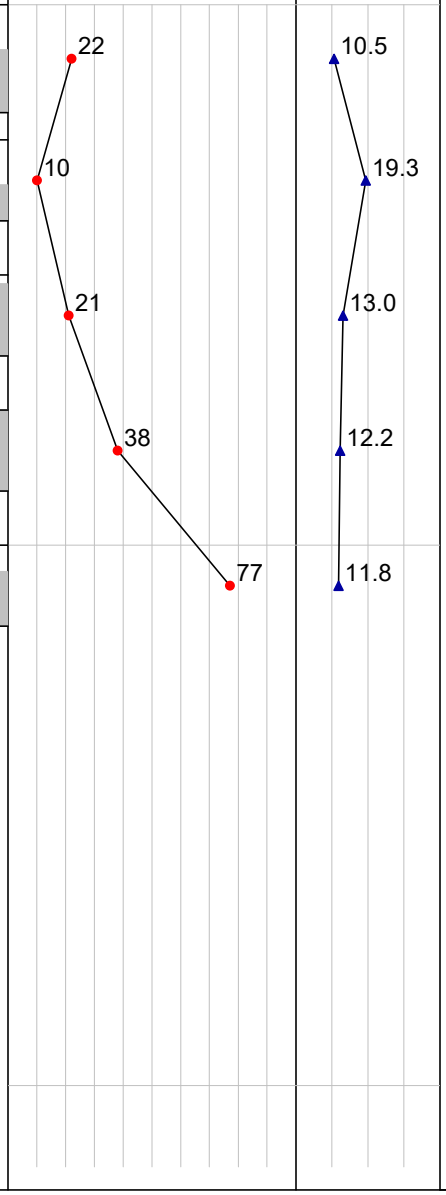
Project: PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

Client: HDSB c/o HOSSACK ARCHITECTURE

Enclosure: 40

Location: SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.

Depth (m)	Description of strata	Elevation (m)	Sample Details: No.	Type	Blows/ft	Recovery
0	Ground Surface	178.71				
	FILL/DISTURBED SOIL reddish brown and grey clayey silt with traces of stone fragments, compact, moist.	0.00	1	SS	22	
1			2	SS	10	
	SILT TILL compact to very dense, reddish brown, moist.	177.19 1.52	3	SS	21	
2			4	SS	38	
3			5	SS	77	
	End of Borehole	175.21 3.51				
4						
5						
6						



Monitoring Well

Remarks: -Upon completion of drilling, the borehole was open and dry.

Drill Method: CME 55 - SOLID

Drill Date: 6 AUG. 2025

Datum: GEODETIC

FORWARD ENGINEERING & ASSOCIATES INC.
244 Brockport Drive, Unit 15, Toronto, Ontario, M9W 6X9

Engineer: G.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7507

Log of Borehole BH-40

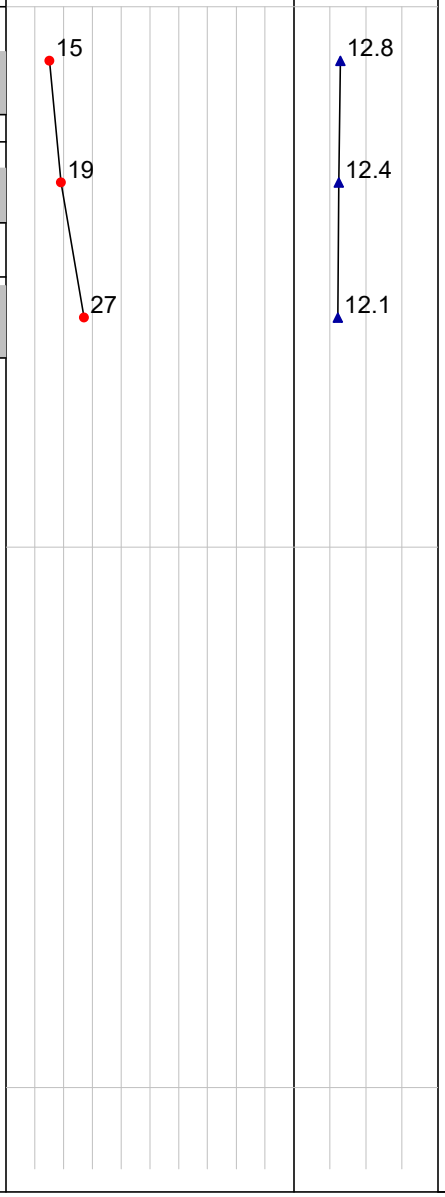
Project: PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

Client: HDSB c/o HOSSACK ARCHITECTURE

Enclosure: 41

Location: SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.

Depth (m)	Description of strata	Elevation (m)	Sample No.	Type	Blows/ft	Recovery
0	Ground Surface	178.90				
	FILL/DISTURBED SOIL reddish brown and grey clayey silt with traces of stone fragments, compact, moist.	0.00	1	SS	15	
1	**SILT TILL** compact, reddish brown, moist.	178.14 0.76	2	SS	19	
			3	SS	27	
2	End of Borehole	176.92 1.98				
3						
4						
5						
6						



Remarks: -Upon completion of drilling, the borehole was open and dry.

Drill Method: CME 55 - SOLID

Drill Date: 8 AUG. 2025

Datum: GEODETIC

FORWARD ENGINEERING & ASSOCIATES INC.
244 Brockport Drive, Unit 15, Toronto, Ontario, M9W 6X9

Engineer: G.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7507

Log of Borehole BH-41

Project: PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

Client: HDSB c/o HOSSACK ARCHITECTURE

Enclosure: 42

Location: SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.

Depth (m)	Description of strata	Elevation (m)	Sample Details: No.	Type	Blows/ft	Recovery
0	Ground Surface	178.55				
	FILL/DISTURBED SOIL reddish brown and grey clayey silt with traces of stone fragments, compact, moist.	0.00	1	SS	35	
1	**SILT TILL** compact to dense, reddish brown, moist.	177.79 0.76	2	SS	12	
			3	SS	38	
2	End of Borehole	176.57 1.98				

Blows/ft: 20 40 60 80 — 35, 12, 38

Water Content % (▲ ▲): 10 20 30 — 10.7, 23.0, 13.1

Monitoring Well

Remarks: -Upon completion of drilling, the borehole was open and dry.

Drill Method: CME 55 - SOLID

Drill Date: 8 AUG. 2025

Datum: GEODETIC

FORWARD ENGINEERING & ASSOCIATES INC.
244 Brockport Drive, Unit 15, Toronto, Ontario, M9W 6X9

Engineer: G.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7507

Log of Borehole BH-42

Project: PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

Client: HDSB c/o HOSSACK ARCHITECTURE

Enclosure: 43

Location: SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.

Depth (m)	Description of strata	Elevation (m)	Sample No.	Type	Blows/ft	Recovery
0	Ground Surface	178.55				
	FILL/DISTURBED SOIL reddish brown and grey clayey silt with traces of stone fragments, compact, moist.	0.00	1	SS	19	
1	**SILT TILL** compact to dense, reddish brown, moist.	177.79 0.76	2	SS	14	
			3	SS	31	
2	End of Borehole	176.57 1.98				
3						
4						
5						
6						

Blows/ft: 20 40 60 80

Water Content %: 10 20 30

Monitoring Well

Remarks: -Upon completion of drilling, the borehole was open and dry.

Drill Method: CME 55 - SOLID

Drill Date: 6 AUG. 2025

Datum: GEODETIC

FORWARD ENGINEERING & ASSOCIATES INC.
244 Brockport Drive, Unit 15, Toronto, Ontario, M9W 6X9

Engineer: G.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7507

Log of Borehole BH-43

Project: PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

Client: HDSB c/o HOSSACK ARCHITECTURE

Enclosure: 44

Location: SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.

Depth (m)	Description of strata	Elevation (m)	Sample No.	Type	Blows/ft	Recovery
0	Ground Surface	178.55				
	FILL/DISTURBED SOIL reddish brown and grey clayey silt with traces of stone fragments, compact, moist.	0.00	1	SS	13	
1	SILT TILL compact, reddish brown, moist.	177.79 0.76	2	SS	10	
			3	SS	20	
2	End of Borehole	176.57 1.98				

Blows/ft: 20 40 60 80 — 13, 10, 20

Water Content % (▲ 10 20 30): 7.2, 12.0, 12.9

Monitoring Well

Remarks: -Upon completion of drilling, the borehole was open and dry.

Drill Method: CME 55 - SOLID

Drill Date: 6 AUG. 2025

Datum: GEODETIC

FORWARD ENGINEERING & ASSOCIATES INC.
244 Brockport Drive, Unit 15, Toronto, Ontario, M9W 6X9

Engineer: G.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7507

Log of Borehole BH-44

Project: PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

Client: HDSB c/o HOSSACK ARCHITECTURE

Enclosure: 45

Location: SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.

Depth (m)	Description of strata	Elevation (m)	Sample No.	Type	Blows/ft	Recovery
0	Ground Surface	178.39				
	FILL/DISTURBED SOIL reddish brown and grey clayey silt with traces of stone fragments, loose, moist.	0.00	1	SS	7	
1	**SILT TILL** compact to dense, reddish brown, moist.	177.63 0.76	2	SS	13	
			3	SS	39	
2	End of Borehole	176.41 1.98				
3						
4						
5						
6						

Blows/ft: 20 40 60 80 — 7, 13, 39

Water Content % (▲ ▲): 10 20 30 — 13.3, 17.8, 12.6

Monitoring Well

Remarks: -Upon completion of drilling, the borehole was open and dry.

Drill Method: CME 55 - SOLID

Drill Date: 6 AUG. 2025

Datum: GEODETIC

FORWARD ENGINEERING & ASSOCIATES INC.
244 Brockport Drive, Unit 15, Toronto, Ontario, M9W 6X9

Engineer: G.R.

Checked by: G.S.

Sheet No. 1 of 1

APPENDIX B

CERTIFICATE OF ENGINEERED FILL

Soil Engineers Ltd.
CONSULTING ENGINEERS
GEOTECHNICAL • ENVIRONMENTAL • HYDROGEOLOGICAL • BUILDING SCIENCE
90 WEST BEAVER CREEK ROAD, SUITE 100, RICHMOND HILL, ONTARIO L4B 1E7 · TEL: (416) 754-8515 · FAX: (905) 881-8335

BARRIE	MISSISSAUGA	OSHAWA	NEWMARKET	MUSKOKA	HAMILTON
TEL: (705) 721-7863	TEL: (905) 542-7605	TEL: (905) 440-2040	TEL: (905) 853-0647	TEL: (705) 721-7863	TEL: (905) 777-7956
FAX: (705) 721-7864	FAX: (905) 542-2769	FAX: (905) 725-1315	FAX: (905) 881-8335	FAX: (705) 721-7864	FAX: (905) 542-2769

October 29, 2025

Reference No.: 2302-M032.15

Halton District School Board
2050 Guelph Line
Burlington, Ontario
L7P 5A8

Attention: Mr. Curtis Ennis / Ms. Roxana Negoi

Re: Engineered Fill Certification
Block 181 – School Block
Docasa Group Limited
Subdivision File No.: 24T-21004/1317
Town of Oakville

Dear Sir:

Soil Engineers Ltd. has supervised on a full-time basis the construction of engineered fill at the school block at the captioned development.

The fill used for engineered fill construction was generated from cut within the captioned development and it meets Table 3 of the Soil, Ground Water and Sediment Standards of the Ministry of the Environment as set out in Ontario Regulation 153/04, as amended, supplemented or replaced. The fill envelopes and the finished elevations were determined by the contractor on site and the as-built engineered fill elevations was recorded by R-PE Surveying Ltd. attached for your reference.

We hereby confirm that the earth fill had been placed in maximum of 0.3 metre depth lifts when loose and compacted to 100% of the material's Standard Proctor Maximum Dry Density, which can support a building with continuous strip or isolated square footings within the engineered fill designed for a factored geotechnical resistance at ULS (ultimate limit state) (with a geotechnical resistance factor of 0.5) and Recommended Geotechnical Reaction at SLS (serviceability limit state) of 225 kPa and 150 kPa, respectively; with the following qualifications:

1) Proper surface drainage must be maintained within the engineered fill areas. Soil Engineers Ltd. must be informed of any construction activities within the engineered fill envelope which may cause disturbance and loosening of the engineered fill mantle. If construction on the engineered fill does not commence within a period of two (2) years from the date of certification, the condition of the engineered fill must be assessed for re-certification.

2) If the engineered fill is to be left over the winter months, adequate earth cover, or equivalent, must be provided to protect it against frost action. Otherwise, the finished engineered fill will require inspection to assess the extent of the frost loosening, and to determine the measures for rectification before foundation construction.

3) Footings adjacent to easements for services within the engineered fill envelope must be placed on the undisturbed engineered fill or natural soil at or below the invert level of the pipe, or at a safe level as determined by our field inspection.

4) The footing subgrade must be founded on the engineered fill that has not been compromised by construction disturbance and/or environmental degradation and are a minimum of 3.0 m from the limits of the controlled engineered fill envelope.

5) Despite stringent control in the placement of engineered fill, variations in soil type and density may occur in the engineered fill. Therefore, the strip footings and the upper section of the foundation walls must be reinforced continuously (minimum of 1.0 m overlap) by two No. 5 (15 mm), or equivalent, steel bars.

If any one of the above qualifications is not met, Soil Engineers Ltd. cannot warrant the condition of the engineered fill and explicitly accepts no liability for any damage resulting from placement of foundations or structures on the engineered fill.

Should any queries arise, please feel free to contact this office.

Yours truly,
SOIL ENGINEERS LTD

LICENSED PROFESSIONAL ENGINEER
G. S. BAJWA
100576429
October 29, 2025
PROVINCE OF ONTARIO

Gagandeep Singh Bajwa, P. Eng

LICENSED PROFESSIONAL ENGINEER
2025-10-29
B. T. F. LEE
PROVINCE OF ONTARIO

Benjamin Lee, P. Eng

BL/CM/GB:ak
Encl.

C: Urbantech Consulting – Attn: Mr. Sudip Roy, C. Tech.
Docasa Group Limited - Attn: Ms. Ksenia Tenina / Mr. Sang Kim

SKETCH SHOWING ELEVATIONS FOR ENGINEER'S USE

SCALE 1:1000

20m 10m 0m 20m 40m 60m 80 metres

R-PE SURVEYING LTD., O.L.S.

METRIC

CAUTION

THIS IS NOT A PLAN OF SURVEY AND SHALL NOT TO BE USED EXCEPT FOR THE PURPOSE INDICATED IN THE TITLE BLOCK.

NOTES

BOUNDARY LINE-WORK TAKEN FROM R-PE CAD FILE No. 22181s01f.
PROPOSED LOTTING FABRIC SHOWN.

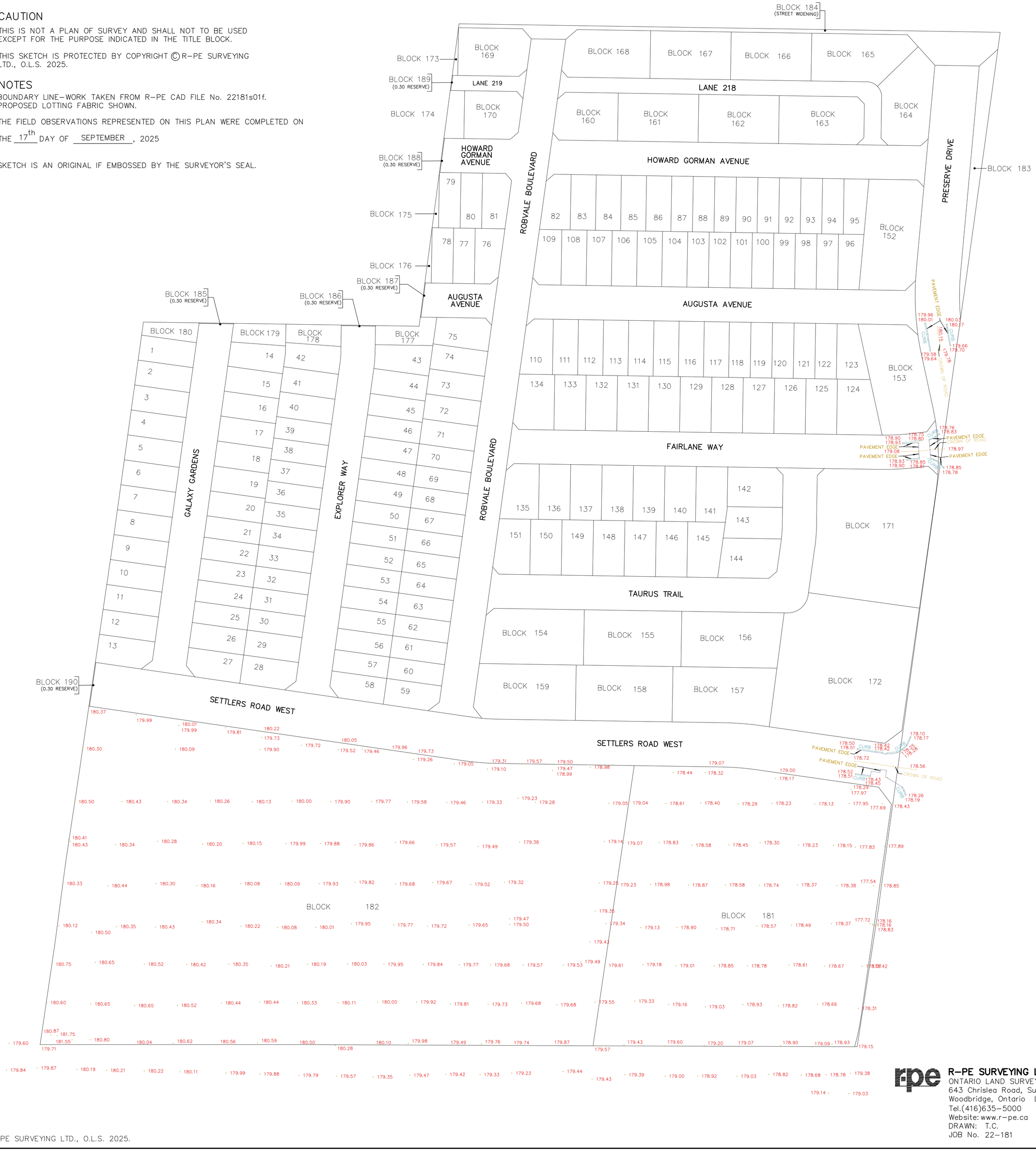
THE FIELD OBSERVATIONS REPRESENTED ON THIS PLAN WERE COMPLETED ON THE 17th DAY OF SEPTEMBER, 2025

SKETCH IS AN ORIGINAL IF EMBOSSED BY THE SURVEYOR'S SEAL.

BENCHMARK NOTE

ELEVATIONS ARE GEODETIC AND ARE REFERRED TO TOWN OF OAKVILLE VERTICAL BENCH MARK NUMBER 290 HAVING AN ORTHOMETRIC ELEVATION OF 174.861 METRES. ELEVATIONS ARE REFERENCED TO THE CANADIAN GEODETIC VERTICAL DATUM OF 1928, 1978 ADJUSTMENT (CGVD-1928:1978).

CUT CROSS LOCATED IN NORTH-WESTERLY CORNER OF CONCRETE BASE OF TRANSFORMER CABINET BETWEEN LOTS 152 AND 153, PLAN 20M-1143, 41 M EAST OF THE INTERSECTION OF PRESERVE DRIVE AND SAWMILL STREET.



R-PE SURVEYING LTD.
ONTARIO LAND SURVEYORS
643 Chrislea Road, Suite 7
Woodbridge, Ontario L4L 8A3
Tel.(416)635-5000
Website: www.r-pe.ca

DRAWN: T.C.
JOB No. 22-181 CAD FILE No.22181tp05

APPENDIX C

REPORT BY
FRONTWAVE GEOPHYSICS INC.

SHEAR WAVE VELOCITY TESTING
FOR SEISMIC SITE CLASSIFICATION
SETTLERS ROAD WEST AND PRESERVE DRIVE, OAKVILLE, ONTARIO

Submitted to:

Forward Engineering & Associates Inc.
244 Brockport Drive, Unit 15
Toronto, Ontario M9W 6X9

Attention:

Mr. Pablo Rios Email: pablo@forwardengineering.ca

File No. F-25413

October 7, 2025

Frontwave Geophysics Inc.
Brampton, ON
(647) 514-4724
www.frontwave.ca

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1 INTRODUCTION

Frontwave Geophysics Inc. was retained by Forward Engineering & Associates Inc. to carry out a geophysical investigation for the proposed Oakville NE #5 Public School to be constructed southwest of the intersection of Settlers Road West and Preserve Drive in Oakville, Ontario.

The objective of the survey was to determine site designation for seismic site response based on the average shear wave velocity value measured over the upper 30 m (V_S30). The multi-channel analysis of surface waves (MASW) and seismic refraction methods were employed for this investigation. The MASW aimed to obtain shear wave velocity depth profiles in the overburden; the purpose of the seismic refraction survey was to obtain shear wave velocity values for the top of bedrock.

The fieldwork was conducted on October 3, 2025. The location of the seismic survey line is shown in Figure 1.

This report describes the basic principles of the seismic refraction and MASW methods, survey design, interpretation method, and presents the results of the investigation in the chart and table format.

2 INVESTIGATION METHODOLOGY

2.1 Multichannel Analysis of Surface Waves (MASW)

Overview

The Multi-channel Analysis of Surface Waves (MASW) is a seismic method widely applied to produce shear wave velocity (V_S) profiles. It is based on the dispersive nature of Rayleigh or Love surface waves in layered media. Surface waves with longer wavelengths propagate deeper in the subsurface, hence, their phase velocity is more influenced by the elastic properties of deeper layers. The velocity of surface waves depends mainly on the shear wave velocity of the medium. The distribution of surface waves phase velocities as a function of wavelength (or frequency) can be visualized as a dispersion curve. The inverse problem is then solved by modelling the experimental data with a theoretical dispersion curve; the model parameters are typically limited to layer thickness and shear wave velocity with an assumption of horizontally layered strata. As a result of the inversion, a shear wave velocity depth profile is obtained. Figure 2 illustrates the overall procedure of the MASW method.

Survey Design

The acquisition layout consisted of 24 receivers in a linear array (spread), connected with a multicore cable to a DAQLink 4 seismograph. 4.5 Hz natural frequency vertical geophones were used for this survey. The measurements were conducted with a spread length of 23 m (1 m spacing between geophones).

An 8-kg sledgehammer was used as an energy source. Shots were executed at five locations per spread: one shot in the middle of the spread, two shots close to the ends of the spread, and two shots with an offset of 10 m from the ends of the spread. The record length was set to 1500 ms with a 0.05 ms sampling interval.

Legend

Location of 23 m, 24-geophone MASW spread

Location of 46 m, 24-geophone seismic refraction spread

Image: Google Earth 2025

Date:	2025-10-07
File No:	F-25413
Title:	Survey location plan
Location:	Settlers Rd W & Preserve Dr Oakville, ON

Figure: **1**

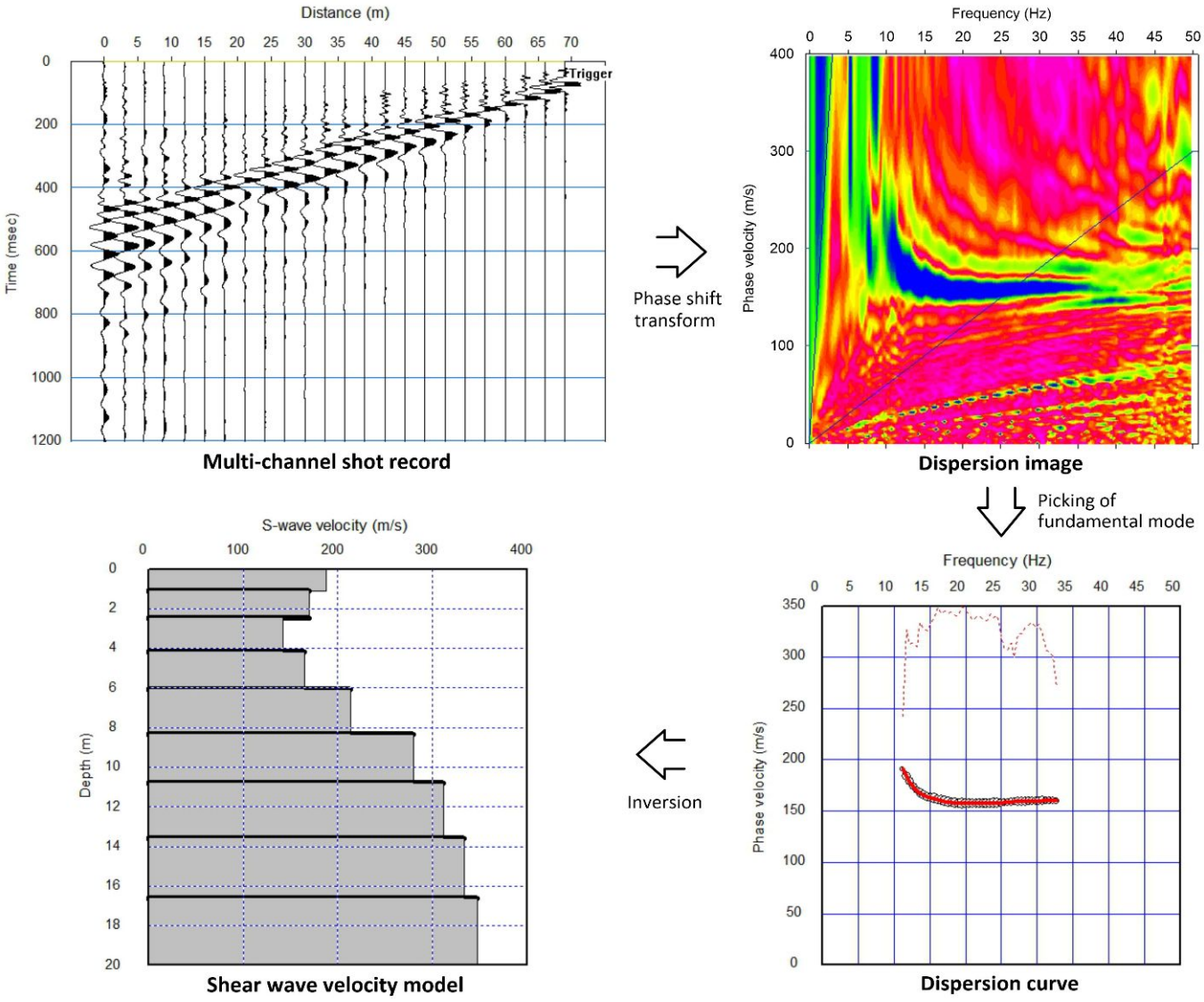

Figure 2 *The procedure of MASW data processing using the SeisImager SW software package.*

Interpretation

A dispersion curve is obtained from each field record by converting the shot gather into a dispersion image and then identifying and picking the fundamental mode. A shear wave velocity profile is obtained through inversion of the dispersion curve by modelling the subsurface as a horizontally layered medium with the model parameters limited to the number of layers, their thickness and shear-wave velocity.

ZondST2D software package was used for processing, picking and inversion of the MASW data.

Accuracy of the results

The accuracy of MASW generally depends on the complexity of the subsurface and specific site conditions (noise levels, topography, etc.). Lateral velocity variations and steeper bedrock topography increase the dispersion uncertainty. The presence of high-velocity contrast layers such as bedrock will require the use of a-priory information to optimize model parameters for more accurate results. Hence, if the a-priory information is not available (e.g. when the data are overly noisy to carry out refraction analysis), the accuracy decreases.

At bedrock sites and sites with very shallow overburden overlying bedrock, the MASW method performs poorly. Very strong velocity contrast between layers at shallow depths often results in a superposition of fundamental and higher Rayleigh wave modes which, when superimposed, cannot be distinguished. At sites where the thickness of the overburden is sufficient to obtain a coherent dispersion, the inversion would significantly underestimate the S-wave velocity within the rock. For this reason, it is preferred to supplement the MASW with shear wave refraction data which provide accurate shear wave velocity values for bedrock.

2.2 Seismic Refraction

Overview

The seismic refraction method is based on the measurement of arrival times of seismic waves refracted at interfaces between geological layers. The method is used to obtain velocity depth models and to map interfaces between layers with significant velocity contrast such as water table and bedrock surface. Compressional (P) wave or shear (S) wave refracted arrivals can be recorded using vertically or horizontally oriented sensors and sources, respectively. Figure 3 is a schematic of a simplified seismic model showing the basic principle of the refraction method.

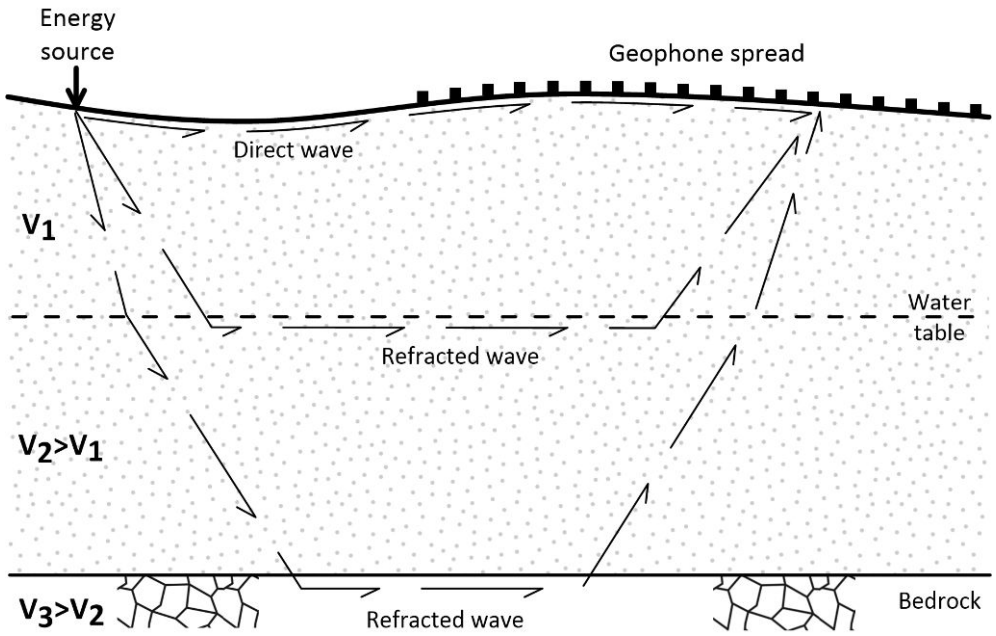

Figure 3 *Seismic model showing the basic principle of refraction method.*

Survey Design

The acquisition layout consisted of 24 receivers in a linear array (spread), connected with a multicore cable to a DAQLink 4 seismograph. 10 Hz natural frequency horizontal geophones were used for this survey. The measurements were conducted with a spread length of 46 m (2 m spacing between geophones).

An 8-kg sledgehammer was used as an energy source. Shots were executed at four locations per spread: two shots at the ends of the spread and two shots with an offset of 10 m from the ends of the spread. Preferential S-wave energy was generated by horizontally striking a metal bar in a direction perpendicular to the survey line. Shots in two opposite directions were recorded at each shot location to record S-wave arrivals of opposite polarity. The record length was set to 500 ms with a 0.1 ms sampling interval.

Interpretation

The reciprocal (plus-minus) method was used for the interpretation of the seismic refraction data. The method assumes the subsurface as a series of discrete layers (refractors) with simple velocity distributions. It allows calculating the depth and velocity of a continuous undulating refractor, providing the target layer is of sufficient thickness and the dip angles are moderate.

ZondST2D software package was used for processing of the refraction data. The processing involved stacking of shot records obtained with opposite source directions, identification and picking of S-wave first arrivals.

Accuracy of the results

The accuracy of bedrock velocity determination at this site was estimated to be within 10%.

3 RESULTS

The quality of seismic data was very good; first arrivals of refracted waves and MASW dispersion curves were well defined. Example shot record and MASW dispersion image obtained at this site are presented in Figure 4.

The results of the interpretation of S-wave refraction data are presented in Figure 5 in the form of a bedrock profile. The interpreted depth to competent bedrock ranged from 4.6 to 6.0 m below the ground surface. The shear wave velocity in the bedrock measured using the refraction method was 1559 m/s.

Refraction data were used for parameterization of the initial MASW inversion model. The measured shear wave velocity for the bedrock is representative of the top of the rock. According to Commentary J (Paragraph 145) of the National Building Code of Canada 2020 (NBC 2020), the measured value may be extrapolated if the rock conditions are known to be continuous to a depth of 30 m.

The resulting shear wave velocity depth profile is presented in Figure 6. The average S-wave velocity is plotted in the chart as a solid line. The dashed lines represent the upper and lower bound S-wave velocity profiles.

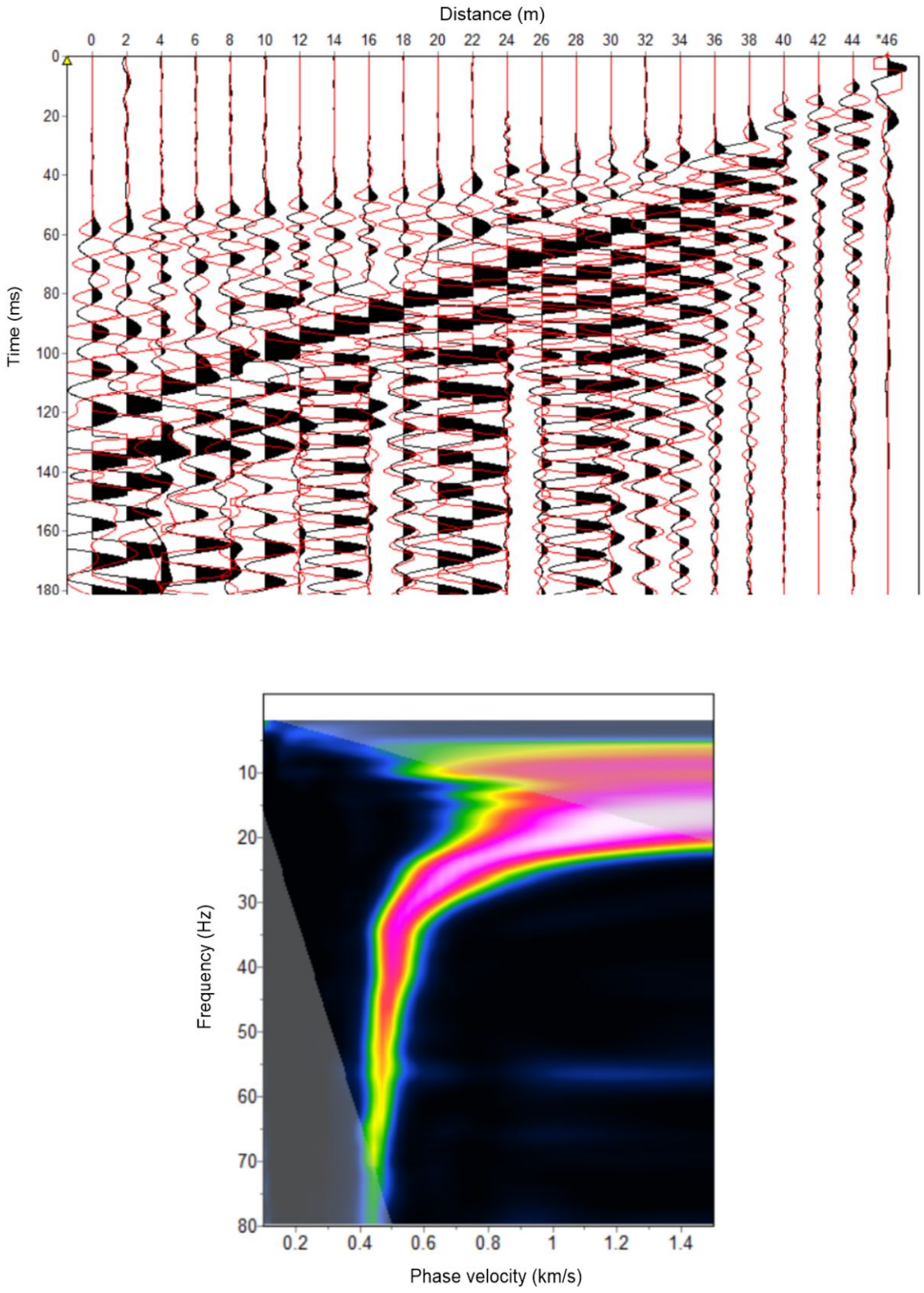

Figure 4 *Data examples displaying an S-wave refraction shot record (top), and MASW dispersion image (bottom).*

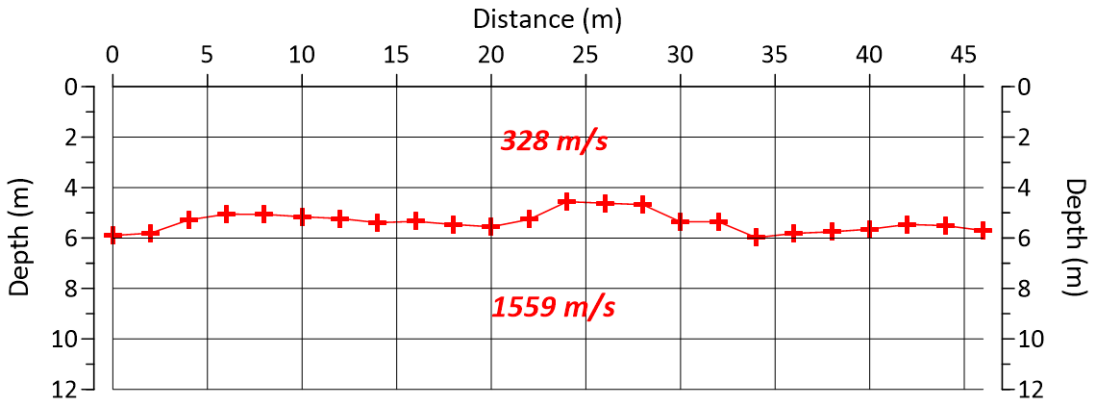

Figure 5 *Interpreted depth to competent bedrock from S-wave refraction.*

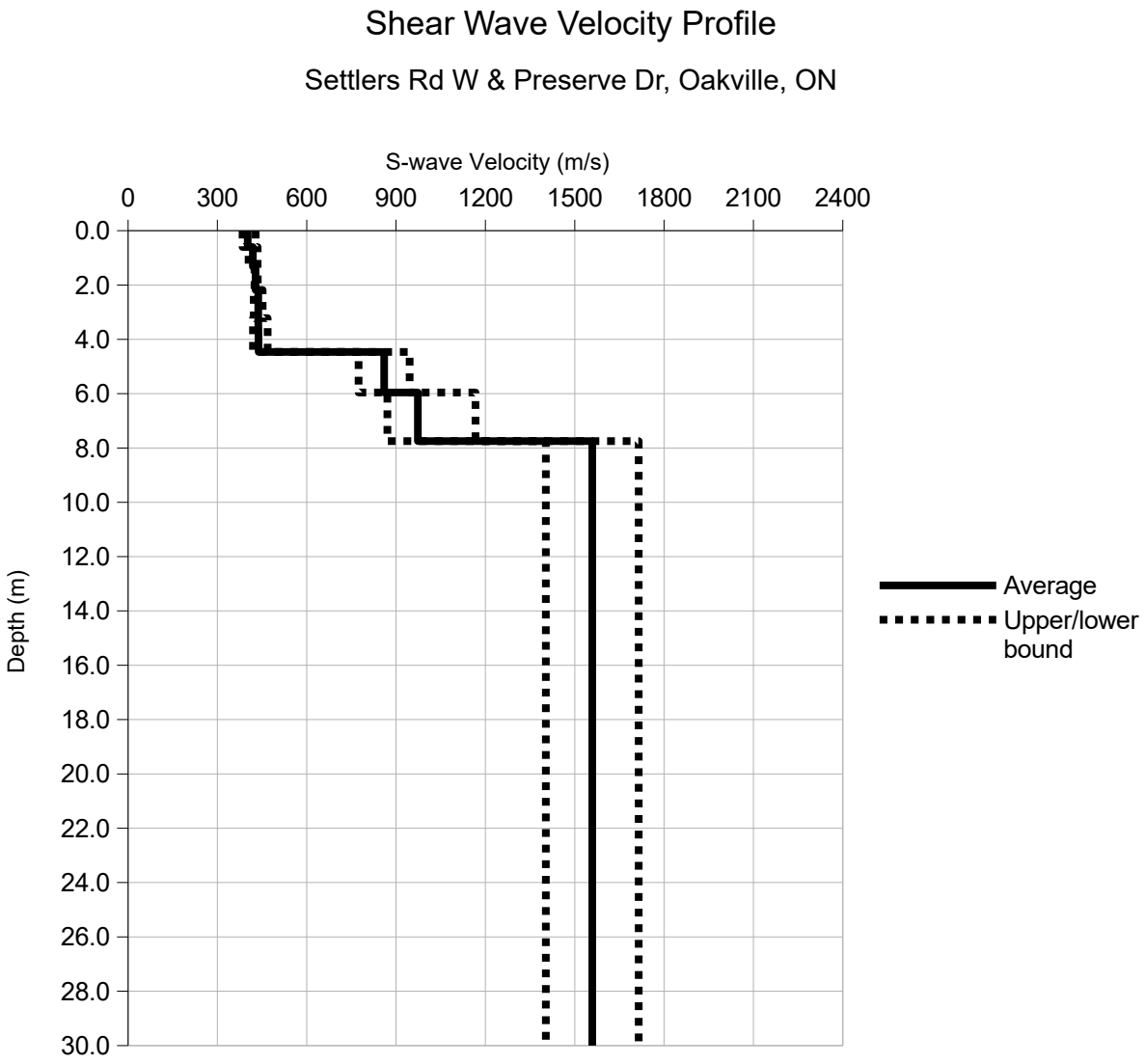

Figure 6 *Shear wave velocity profile from MASW sounding and S-wave refraction.*

The tabulated shear wave velocity model is presented in Table 1.

Table 1 *Shear wave velocities from MASW sounding and S-wave refraction.*

Depth Interval (m)		S-wave Velocity (m/s)
From	To	
0.0	0.6	402
0.6	1.3	419
1.3	2.2	429
2.2	3.2	437
3.2	4.5	439
4.5	6.0	860
6.0	7.8	973
7.8	30.0	1559

The average shear wave velocity within the upper 30 meters (V_S30) is defined as the travel-time weighted average velocity from surface to a depth of 30 m and calculated using the following formula:

$$V_S30 = 30 / \Sigma (d/V_S),$$

where d is the thickness of any layer and V_S is the layer S-wave velocity. In other words, V_S30 is calculated as 30 m divided by the sum of the S-wave travel times for each layer within the topmost 30 m.

The calculated V_S30 values are presented in Table 2.

Table 2 *V_S30 values from MASW sounding.*

Depth Range (m)	Minimum V_S30 (m/s)	Average V_S30 (m/s)	Maximum V_S30 (m/s)	NBC 2020 Site Designation
0 to 30	979	**1061**	1151	**X_{760}**

The V_S30 values obtained from the MASW sounding varied from 979 m/s to 1151 m/s with an average of 1061 m/s.

According to the National Building Code of Canada 2020 (NBC 2020), site designation for seismic hazard assessment is determined by a V_S30 value. Based on the requirements of Table 4.1.8.4.-A of NBC 2020, if the ground profile contains more than 3 m of soil between rock and the underside of footing or mat foundations, **the applicable Site Designation is X_{760}** even if the calculated V_S30 value is greater than 760 m/s.

4 CLOSURE

Shear wave velocity testing involving the MASW and seismic refraction methodologies was carried out for the proposed Oakville NE #5 Public School to be constructed southwest of the intersection of Settlers Road West and Preserve Drive in Oakville, Ontario.

The average shear wave velocity (V_S30) value calculated from in situ shear wave velocity measurements was **1061 m/s**. Based on Sentence 4.1.8.4.(2b) and Table 4.1.8.4.-A of the National Building Code of Canada 2020 (NBC 2020), taking into consideration the presence of more than 3 m of overburden, **the applicable Site Designation is X_{760}**.

We hope you find this report satisfactory. Should you have any questions or require additional information, please do not hesitate to contact the undersigned.

Frontwave Geophysics Inc.

Ilia Gusakov, P.Geo.
Geophysicist
(647) 514-4724
ilia.gusakov@frontwave.ca

PROFESSIONAL GEOSCIENTIST
ILIA GUSAKOV
PRACTISING MEMBER
3161
ONTARIO

7507

September 30, 2024

HOSSACK ARCHITECTURE
105-1939 Ironoak Way
Oakville, Ontario
L6H 3V8

Attention: Ms. Christine Stasevich
Dipl. Arch. Tech., C. Tech., OACETT

Dear Mdm:

Re: Soil Chemical Testing Report
Oakville # 5 Public School
Settlers Road West and Preserve Drive
Oakville, Ontario

1.0 INTRODUCTION

As requested, Forward Engineering & Associates Inc. (**Forward)** conducted a chemical testing program for the above project site.

The report of the chemical testing program is to be used for Characterization of the materials for disposal purposes only.

2.0 BACKGROUND

The purpose of this program is to test the materials to be excavated during the construction of the proposed school.

3.0 FIELD WORKS

3.1 Sampling

The field sampling was carried out from the boreholes drilled in August 2025.

Examination of the soil samples did not indicate visual and/or olfactory evidence of contamination.

Six [6] representative samples, obtained from the boreholes, were prepared for laboratory chemical testing.

4.0 ANALYTICAL TESTING PROGRAM

4.1 Soil Testing

The samples were prepared, and chemically tested, as presented in the following table:

Laboratory Sample ID	Field Sample ID	Tested Parameters
2539172-01	BH6 SS1	Metals and Inorganics
2539172-02	BH9 SS1	Metals and Inorganics
2539172-03	BH14 SS1	Metals and Inorganics
2539172-04	BH22 SS1	Metals and Inorganics
2539172-05	BH27 SS1	Metals and Inorganics
2539172-06	BH42 SS1+SS2	Metals and Inorganics

* SS1 stands for Split Spoon No. (1).

The soil samples were submitted to PARACEL Laboratories, Mississauga, Ontario, which are independent laboratories and are certified by the Canadian Association of Environmental Analytical Laboratories (CAEAL).

5.0 FINDINGS AND DISCUSSIONS

5.1 Soils Type and Condition

The tested materials consisted of fine texture materials (Clayey Silt).

5.2 Analytical Testing Results

5.2.1 Results Compared to Table 1 Residential/Parkland/ Industrial/Commercial Criteria

The results, enclosed in Appendix A, were compared to *Reg 406/19-Table1 Residential/Parkland/Industrial/Commercial/Community* Criteria.

The results met the above Table 1 Criteria with no exceptions.

For disposal purpose, it should be noted that the acceptance of fill materials depends on the discretion of the receiving site.

We trust this report meets our terms of reference. However, if any clarification is required, or if we can be of further assistance, please contact this office.

Sincerely yours,
FORWARD ENGINEERING & ASSOCIATES INC.

Juan Chahine, P. Eng.
Senior Project Manager

APPENDIX A

Laboratory Chemical Testing Results Compared to Table 1 Residential/Parkland/Industrial/Commercial /Community Criteria

TABLE 1		CLIENT: Forward Engineering & Associates Inc.						
PARACEL LABORATORIES LTD.		ATTENTION: George Semaan						
WORKORDER: 2539172		PROJECT: 7507						
REPORT DATE: 09/30/2025		REFERENCE: SO Forward Engineering & Associates Inc. - ENV						

Parameter	Units	MDL	Regulation	Sample					
				BH6 SS1 2539172-01	BH9 SS1 2539172-02	BH14 SS1 2539172-03	BH22 SS1 2539172-04	BH27 SS1 2539172-05	BH42 SS1+SS2 2539172-06
Sample Date (m/d/y)			Reg 406/19 -T1 Res/Park/Ind/Com	09/22/2025	09/22/2025	09/22/2025	09/22/2025	09/22/2025	09/22/2025
Physical Characteristics									
% Solids	% by Wt.	0.1		88.7	92.5	88.6	90.3	91.5	86.2
General Inorganics									
SAR	N/A	0.01	2.4	0.22	0.34	0.20	0.15	0.23	0.25
Conductivity	mS/cm	0.005	0.57	0.171	0.166	0.157	0.140	0.158	0.200
Cyanide, free	ug/g dry	0.03	0.051	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
pH	pH Units	0.05		7.73	7.66	7.84	7.78	7.77	7.62
Metals									
Antimony	ug/g dry	1.0	1.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Arsenic	ug/g dry	1.0	18	5.9	5.6	6.4	5.4	4.7	5.7
Barium	ug/g dry	1.0	220	104	184	123	111	128	104
Beryllium	ug/g dry	0.5	2.5	0.9	0.9	0.9	0.9	0.8	0.9
Boron, available	ug/g dry	0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Boron	ug/g dry	5.0	36	12.4	18.4	19.6	20.4	16.3	12.6
Cadmium	ug/g dry	0.5	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (VI)	ug/g dry	0.2	0.66	<0.2	<0.2	<0.2	<0.2	<0.2	0.2
Chromium	ug/g dry	5.0	70	22.7	21.6	24.8	24.6	21.1	23.7
Cobalt	ug/g dry	1.0	21	14.3	13.0	14.4	13.7	11.5	12.5
Copper	ug/g dry	5.0	92	28.8	16.5	22.1	18.4	10.9	21.6
Lead	ug/g dry	1.0	120	12.3	13.8	13.2	14.2	11.4	12.3
Mercury	ug/g dry	0.1	0.27	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Molybdenum	ug/g dry	1.0	2	<1.0	1.1	<1.0	<1.0	<1.0	<1.0
Nickel	ug/g dry	5.0	82	29.8	26.8	29.6	30.3	24.8	26.8
Selenium	ug/g dry	1.0	1.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Silver	ug/g dry	0.3	0.5	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Thallium	ug/g dry	1.0	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Uranium	ug/g dry	1.0	2.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Vanadium	ug/g dry	10.0	86	29.1	28.3	32.3	32.5	27.4	31.3
Zinc	ug/g dry	20.0	290	64.4	60.3	67.3	77.8	54.0	61.8

PARACEL LABORATORIES LTD.

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RESPONSIVE.
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300 - 2319 St. Laurent Blvd
Ottawa, ON, K1G 4J8
1-800-749-1947
www.paracellabs.com

Certificate of Analysis

Forward Engineering & Associates Inc.

244 Brockport Dr., Unit 15
Toronto, ON M9W 6X9
Attn: George Semaan

Client PO:
Project: 7507
Custody:

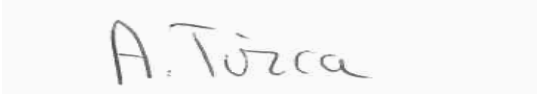
Report Date: 30-Sep-2025
Order Date: 23-Sep-2025

Order #: 2539172

This Certificate of Analysis contains analytical data applicable to the following samples as submitted :

Paracel ID	Client ID
2539172-01	BH6 SS1
2539172-02	BH9 SS1
2539172-03	BH14 SS1
2539172-04	BH22 SS1
2539172-05	BH27 SS1
2539172-06	BH42 SS1+SS2

Approved By:



Adriana Tirca, B.Eng (Chem)
Supervisor

Certificate of Analysis

Report Date: 30-Sep-2025

Client: Forward Engineering & Associates Inc.

Order Date: 23-Sep-2025

Client PO:

Project Description: 7507

Analysis Summary Table

Analysis	Method Reference/Description	Extraction Date	Analysis Date
Boron, available	MOE (HWE), EPA 200.8 - ICP-MS	26-Sep-25	26-Sep-25
Chromium, hexavalent - soil	MOE E3056 - Extraction, colourimetric	26-Sep-25	29-Sep-25
Conductivity	MOE E3138 - probe @25 °C, water ext	26-Sep-25	29-Sep-25
Cyanide, free	MOE E3015 - Auto Colour, water extraction	29-Sep-25	29-Sep-25
Mercury by CVAA	EPA 7471B - CVAA, digestion	26-Sep-25	26-Sep-25
pH, soil	MOE E3137 - probe @25 °C, CaCl2 ext	29-Sep-25	29-Sep-25
REG 153: Metals by ICP/MS, soil	EPA 6020 - Digestion - ICP-MS	26-Sep-25	26-Sep-25
SAR	Calculated	26-Sep-25	29-Sep-25
Solids, %	CWS Tier 1 - Gravimetric	26-Sep-25	29-Sep-25

Certificate of Analysis

Report Date: 30-Sep-2025

Client: **Forward Engineering & Associates Inc.**

Order Date: 23-Sep-2025

Client PO:

Project Description: 7507

	Client ID:	BH6 SS1	BH9 SS1	BH14 SS1	BH22 SS1
	Sample Date:	22-Sep-25 00:00	22-Sep-25 00:00	22-Sep-25 00:00	22-Sep-25 00:00
	Sample ID:	2539172-01	2539172-02	2539172-03	2539172-04
	MDL/Units	Soil	Soil	Soil	Soil
Physical Characteristics					
% Solids	0.1 % by Wt.	88.7	92.5	88.6	90.3
General Inorganics					
SAR	0.01 N/A	0.22	0.34	0.20	0.15
Conductivity	0.005 mS/cm	0.171	0.166	0.157	0.140
Cyanide, free	0.03 ug/g dry	<0.03	<0.03	<0.03	<0.03
pH	0.05 pH Units	7.73	7.66	7.84	7.78
Metals					
Antimony	1.0 ug/g dry	<1.0	<1.0	<1.0	<1.0
Arsenic	1.0 ug/g dry	5.9	5.6	6.4	5.4
Barium	1.0 ug/g dry	104	184	123	111
Beryllium	0.5 ug/g dry	0.9	0.9	0.9	0.9
Boron	5.0 ug/g dry	12.4	18.4	19.6	20.4
Boron, available	0.5 ug/g dry	<0.5	<0.5	<0.5	<0.5
Cadmium	0.5 ug/g dry	<0.5	<0.5	<0.5	<0.5
Chromium	5.0 ug/g dry	22.7	21.6	24.8	24.6
Chromium (VI)	0.2 ug/g dry	<0.2	<0.2	<0.2	<0.2
Cobalt	1.0 ug/g dry	14.3	13.0	14.4	13.7
Copper	5.0 ug/g dry	28.8	16.5	22.1	18.4
Lead	1.0 ug/g dry	12.3	13.8	13.2	14.2
Mercury	0.1 ug/g dry	<0.1	<0.1	<0.1	<0.1
Molybdenum	1.0 ug/g dry	<1.0	1.1	<1.0	<1.0
Nickel	5.0 ug/g dry	29.8	26.8	29.6	30.3
Selenium	1.0 ug/g dry	<1.0	<1.0	<1.0	<1.0
Silver	0.3 ug/g dry	<0.3	<0.3	<0.3	<0.3
Thallium	1.0 ug/g dry	<1.0	<1.0	<1.0	<1.0
Uranium	1.0 ug/g dry	<1.0	<1.0	<1.0	<1.0
Vanadium	10.0 ug/g dry	29.1	28.3	32.3	32.5
Zinc	20.0 ug/g dry	64.4	60.3	67.3	77.8

Certificate of Analysis

Client: **Forward Engineering & Associates Inc.**

Client PO:

Report Date: 30-Sep-2025

Order Date: 23-Sep-2025

Project Description: 7507

	Client ID:	BH27 SS1	BH42 SS1+SS2	-	-
	Sample Date:	22-Sep-25 00:00	22-Sep-25 00:00	-	-
	Sample ID:	2539172-05	2539172-06	-	-
	MDL/Units	Soil	Soil	-	-
Physical Characteristics					
% Solids	0.1 % by Wt.	91.5	86.2	-	-
General Inorganics					
SAR	0.01 N/A	0.23	0.25	-	-
Conductivity	0.005 mS/cm	0.158	0.200	-	-
Cyanide, free	0.03 ug/g dry	<0.03	<0.03	-	-
pH	0.05 pH Units	7.77	7.62	-	-
Metals					
Antimony	1.0 ug/g dry	<1.0	<1.0	-	-
Arsenic	1.0 ug/g dry	4.7	5.7	-	-
Barium	1.0 ug/g dry	128	104	-	-
Beryllium	0.5 ug/g dry	0.8	0.9	-	-
Boron	5.0 ug/g dry	16.3	12.6	-	-
Boron, available	0.5 ug/g dry	<0.5	<0.5	-	-
Cadmium	0.5 ug/g dry	<0.5	<0.5	-	-
Chromium	5.0 ug/g dry	21.1	23.7	-	-
Chromium (VI)	0.2 ug/g dry	<0.2	0.2	-	-
Cobalt	1.0 ug/g dry	11.5	12.5	-	-
Copper	5.0 ug/g dry	10.9	21.6	-	-
Lead	1.0 ug/g dry	11.4	12.3	-	-
Mercury	0.1 ug/g dry	<0.1	<0.1	-	-
Molybdenum	1.0 ug/g dry	<1.0	<1.0	-	-
Nickel	5.0 ug/g dry	24.8	26.8	-	-
Selenium	1.0 ug/g dry	<1.0	<1.0	-	-
Silver	0.3 ug/g dry	<0.3	<0.3	-	-
Thallium	1.0 ug/g dry	<1.0	<1.0	-	-
Uranium	1.0 ug/g dry	<1.0	<1.0	-	-
Vanadium	10.0 ug/g dry	27.4	31.3	-	-
Zinc	20.0 ug/g dry	54.0	61.8	-	-

Certificate of Analysis

Client: Forward Engineering & Associates Inc.

Client PO:

Report Date: 30-Sep-2025

Order Date: 23-Sep-2025

Project Description: 7507

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
General Inorganics									
Conductivity	ND	0.005	mS/cm						
Cyanide, free	ND	0.03	ug/g						
Metals									
Antimony	ND	1.0	ug/g						
Arsenic	ND	1.0	ug/g						
Barium	ND	1.0	ug/g						
Beryllium	ND	0.5	ug/g						
Boron, available	ND	0.5	ug/g						
Boron	ND	5.0	ug/g						
Cadmium	ND	0.5	ug/g						
Chromium (VI)	ND	0.2	ug/g						
Chromium	ND	5.0	ug/g						
Cobalt	ND	1.0	ug/g						
Copper	ND	5.0	ug/g						
Lead	ND	1.0	ug/g						
Mercury	ND	0.1	ug/g						
Molybdenum	ND	1.0	ug/g						
Nickel	ND	5.0	ug/g						
Selenium	ND	1.0	ug/g						
Silver	ND	0.3	ug/g						
Thallium	ND	1.0	ug/g						
Uranium	ND	1.0	ug/g						
Vanadium	ND	10.0	ug/g						
Zinc	ND	20.0	ug/g						

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
General Inorganics									
SAR	0.23	0.01	N/A	0.22			4.6	30	
Conductivity	0.172	0.005	mS/cm	0.171			0.8	5	
Cyanide, free	ND	0.03	ug/g	ND			NC	35	
pH	7.72	0.05	pH Units	7.73			0.1	2.3	
Metals									
Antimony	ND	1.0	ug/g	ND			NC	30	
Arsenic	6.0	1.0	ug/g	5.9			1.8	30	
Barium	94.6	1.0	ug/g	104			9.5	30	
Beryllium	0.8	0.5	ug/g	0.9			10.6	30	
Boron, available	ND	0.5	ug/g	ND			NC	35	
Boron	12.3	5.0	ug/g	12.4			1.0	30	
Cadmium	ND	0.5	ug/g	ND			NC	30	
Chromium (VI)	ND	0.2	ug/g	ND			NC	35	
Chromium	23.3	5.0	ug/g	22.7			2.4	30	
Cobalt	14.2	1.0	ug/g	14.3			0.3	30	
Copper	28.7	5.0	ug/g	28.8			0.4	30	
Lead	11.7	1.0	ug/g	12.3			4.8	30	
Mercury	ND	0.1	ug/g	ND			NC	30	
Molybdenum	ND	1.0	ug/g	ND			NC	30	
Nickel	29.2	5.0	ug/g	29.8			2.0	30	
Selenium	ND	1.0	ug/g	ND			NC	30	
Silver	ND	0.3	ug/g	ND			NC	30	
Thallium	ND	1.0	ug/g	ND			NC	30	
Uranium	ND	1.0	ug/g	ND			NC	30	
Vanadium	29.5	10.0	ug/g	29.1			1.4	30	
Zinc	66.0	20.0	ug/g	64.4			2.4	30	
Physical Characteristics									
% Solids	85.6	0.1	% by Wt.	86.0			0.5	25	

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
General Inorganics									
Cyanide, free	0.219	0.03	ug/g	ND	67.4	50-150			
Metals									
Antimony	41.9	1.0	ug/g	ND	83.7	70-130			
Arsenic	50.4	1.0	ug/g	2.4	96.1	70-130			
Barium	82.6	1.0	ug/g	41.6	82.1	70-130			
Beryllium	46.9	0.5	ug/g	ND	93.0	70-130			
Boron, available	3.76	0.5	ug/g	ND	75.1	60-140			
Boron	48.3	5.0	ug/g	5.0	86.7	70-130			
Cadmium	43.9	0.5	ug/g	ND	87.7	70-130			
Chromium (VI)	5.1	0.2	ug/g	ND	102	66-118			
Chromium	57.7	5.0	ug/g	9.1	97.2	70-130			
Cobalt	52.9	1.0	ug/g	5.7	94.4	70-130			
Copper	56.1	5.0	ug/g	11.5	89.2	70-130			
Lead	48.8	1.0	ug/g	4.9	87.7	70-130			
Mercury	1.48	0.1	ug/g	ND	98.7	70-130			
Molybdenum	47.4	1.0	ug/g	ND	94.3	70-130			
Nickel	57.6	5.0	ug/g	11.9	91.3	70-130			
Selenium	46.0	1.0	ug/g	ND	91.7	70-130			
Silver	41.0	0.3	ug/g	ND	82.0	70-130			
Thallium	43.4	1.0	ug/g	ND	86.7	70-130			
Uranium	45.3	1.0	ug/g	ND	90.1	70-130			
Vanadium	60.0	10.0	ug/g	11.6	96.6	70-130			
Zinc	68.0	20.0	ug/g	25.8	84.4	70-130			

Qualifier Notes:

None

Sample Data Revisions

None

Work Order Revisions / Comments:

None

Other Report Notes:

n/a: not applicable
ND: Not Detected
MDL: Method Detection Limit
Source Result: Data used as source for matrix and duplicate samples
%REC: Percent recovery.
RPD: Relative percent difference.
NC: Not Calculated

Soil results are reported on a dry weight basis when the units are denoted with 'dry'.
Where %Solids is reported, moisture loss includes the loss of volatile hydrocarbons.

PARACEL LABORATORIES LTD.

Paracel ID: 2539172

Paracel Order Number (Lab Use Only)	Chain Of Custody (Lab Use Only)
2539172	

Client Name: Forward Engineering & Associates Inc.	Project Ref: 7507
Contact Name: George Semaan	Quote #:
Address: 244 Brockport Dr., Unit 15, Toronto ON M9W 6X9	PO #:
Telephone: (416) 798-3500	E-mail: george@forwardengineering.ca

Page 1 of 1

Turnaround Time

☐ 1 day ☐ 3 day ☐ 2 day ☑ Regular

Date Required:

☐ REG 153/04 ☑ REG 406/19

☐ Table 1 ☐ Res/Park ☐ Med/Fine
☐ Table 2 ☐ Ind/Comm ☐ Coarse
☐ Table 3 ☐ Agri/Other
☐ Table

For RSC: ☐ Yes ☐ No

Other Regulation

☐ REG 558 ☐ PWQO
☐ CCME ☐ MISA
☐ SU - Sani ☐ SU - Storm
Mun:
☐ Other:

Matrix Type: S (Soil/Sed.) GW (Ground Water) SW (Surface Water) SS (Storm/Sanitary Sewer) P (Paint) A (Air) O (Other)

	Sample ID/Location Name	Matrix	Air Volume	# of Containers	Sample Taken: Date	Sample Taken: Time	PHCs F1-F4+BTEX	VOCs	PAHs	Metals by ICP	Hg	CrVI	B (HWS)	Metals&Inorganics
1	BH6 SS1	S		1	SEP. 22/25	PM								✓
2	BH9 SS1	↓		1	↓	↓								✓
3	BH14 SS1			1										✓
4	BH22 SS1			1										✓
5	BH27 SS1			1										✓
6	BH42 SS1+SS2	↓		1	↓	↓								✓
7														
8														
9														
10														

Comments:

Method of Delivery: Rabbex

Relinquished By (Sign):	Received By Driver/Depot:	Received at Lab: JM	Verified By: JM
Relinquished By (Print): JUAN CHAHINE	Date/Time: Sept 23/25 16:00	Date/Time: Sept 25 1040	Date/Time: Sept 25 1042
Date/Time: SEP. 23/25 10:30 AM	Temperature: 20.9 °C	Temperature: 19.5	pH Verified: ☐ By:

Chain of Custody (Blank).xlsx

Revision 4.0

7507

October 01, 2025

HOSSACK ARCHITECTURE
105-1939 Ironoak Way
Oakville, Ontario
L6H 3V8

Attention: Ms. Christine Stasevich
Dipl. Arch. Tech., C. Tech., OACETT

Dear Mdm:

Re: Field Percolation Rate Assessment Report
Oakville # 5 Public School
Settlers Road West and Preserve Drive
Oakville, Ontario

This report presents the results of the field percolation test that was carried out by our office on September 12, 2025, to assess the percolation rate in (mm per hr) at the above project site.

FIELD TEST PROGRAM

The field program was carried out as follows:

1) Advance three [3] boreholes of approximately 150 mm diameter to a maximum depth of 2.29 m below the **E**xisting **G**round **S**urface **L**evel (**EGSL) -** completed on August 6 and 8, 2025. The location of the test hole BH/MW-24, BH/MW-25 and BH/MW-29 is shown on Drawing No. 1, attached in Appendix A.

2) Install 25 mm diameter pipe in the boreholes, with solid lengths as needed - completed on August 6 and 8, 2025.

3) Measure the existing ground water level - completed on August 6 and 8, 2025.

4) Soak the borehole with water, completed on September 11, 2025.

5) Refill the borehole with water and determine the time it takes for the water filling to seep away - completed on September 12, 2025.

6) Using a fixed reference point, measure the water drop until a stable rate of drop is reached - completed on September 12, 2025.

FINDINGS AND OBSERVATIONS:

Subsurface Conditions:

The subsurface conditions encountered at BH/MW-24, BH/MW-25 and BH/MW-29 locations are shown on the Log of Borehole sheets, presented in Appendix A and can be summarized as follows:

Fill/Disturbed Soil	A layer of Fill/Disturbed Soil was encountered at the surface of all boreholes and extended to a depth ranging from about 0.76 m to 1.52 m below EGSL. This layer consisted mainly of reddish brown and grey clayey silt, with traces of stone fragments. It was moist and in compact state of packing.
Silt Till	Silt Till stratum was encountered below the Fill/Disturbed soil layer in all three boreholes. This Till stratum extended to the maximum explored depth of this investigation for the three boreholes. This reddish brown stratum was moist and in compact state of packing.
Groundwater	Upon completion of drilling, the boreholes remained open and dry.

The water level in the installed monitoring well was measured, and the results are presented in the following table:

Date of GWL Measurement	**BH/MW-24** Groundwater Depth Below EGSL	**BH/MW-25** Groundwater Depth Below EGSL	**BH/MW-29** Groundwater Depth Below EGSL
September 11, 2025	Dry	Dry	Dry

It should be noted, however, that the groundwater levels are subject to seasonal fluctuations.

Percolation Observation Records:

Observations for the field percolation test carried out on September 12, 2025 are summarized in the following Tables.

Borehole No. BH/MW-24

TIME ELAPSED (MINUTES)	TIME (INTERVAL)	WATER LEVEL READING (mm)	WATER LEVEL DROP (mm)
0	-	1300	-
30	30	1326	26
60	30	1343	17
90	30	1369	26
120	30	1402	33
150	30	1416	14
180	30	1433	17
210	30	1450	17
240	30	1482	32

CALCULATION OF PERCOLATION TIME & RATE

$$\text{Percolation Time T (mins / cm)} = \frac{\text{Time Interval (minutes)}}{\text{Average Drop of most representative readings(cm)}}$$

Time Interval (in mins) = 30

Average drop of most representative [steady rate readings (in cm)] = 2.2

$$\text{Percolation Time 'T' (mins / cm)} = \frac{30 \text{ mins}}{2.2 \text{ cm}} = 13.6 \text{ mins per cm}$$

$$\text{Percolation Rate in (mm / hr)} = 10 * 60 / 13.6 = 44.12 \text{ mm per hour}$$

Borehole No. BH/MW-25

TIME ELAPSED (MINUTES)	TIME (INTERVAL)	WATER LEVEL READING (mm)	WATER LEVEL DROP (mm)
0	-	477	-
30	30	478	1
60	30	479	1
90	30	489	10
120	30	490	1
150	30	492	2
180	30	496	4
210	30	498	2
240	30	499	1

CALCULATION OF PERCOLATION TIME & RATE

Percolation Time T (mins / cm) = $\frac{\text{Time Interval (minutes)}}{\text{Average Drop of most representative readings(cm)}}$

Time Interval (in mins) = 30

Average drop of most representative [steady rate readings (in cm)] = 0.23

Percolation Time 'T' (mins / cm) = $\frac{30 \text{ mins}}{0.23 \text{ cm}}$ = 130.4 mins per cm

Percolation Rate in (mm / hr) = 10 * 60 / 130.4 = 4.6 mm per hour

Borehole No. BH/MW-29

TIME ELAPSED (MINUTES)	TIME (INTERVAL)	WATER LEVEL READING (mm)	WATER LEVEL DROP (mm)
0	-	1317	-
30	30	1320	3
60	30	1326	6
90	30	1333	3
120	30	1341	8
150	30	1345	4
180	30	1353	8
210	30	1356	3
240	30	1357	1

CALCULATION OF PERCOLATION TIME & RATE

Percolation Time T (mins / cm) = $\frac{\text{Time Interval (minutes)}}{\text{Average Drop of most representative readings(cm)}}$

Time Interval (in mins) = 30

Average drop of most representative [steady rate readings (in cm)] = 0.4

Percolation Time 'T' (mins / cm) = $\frac{30 \text{ mins}}{0.4 \text{ cm}}$ = 75 mins per cm

Percolation Rate in (mm / hr) = 10 * 60 / 75 = 8 mm per hour

We trust this report contains information requested at this time. However, if any clarification is required, or if we can be of further assistance, please contact this office.

Yours truly,
Forward Engineering & Associates Inc.

J. Chahine

Juan Chahine, P. Eng.
Senior Project Manager

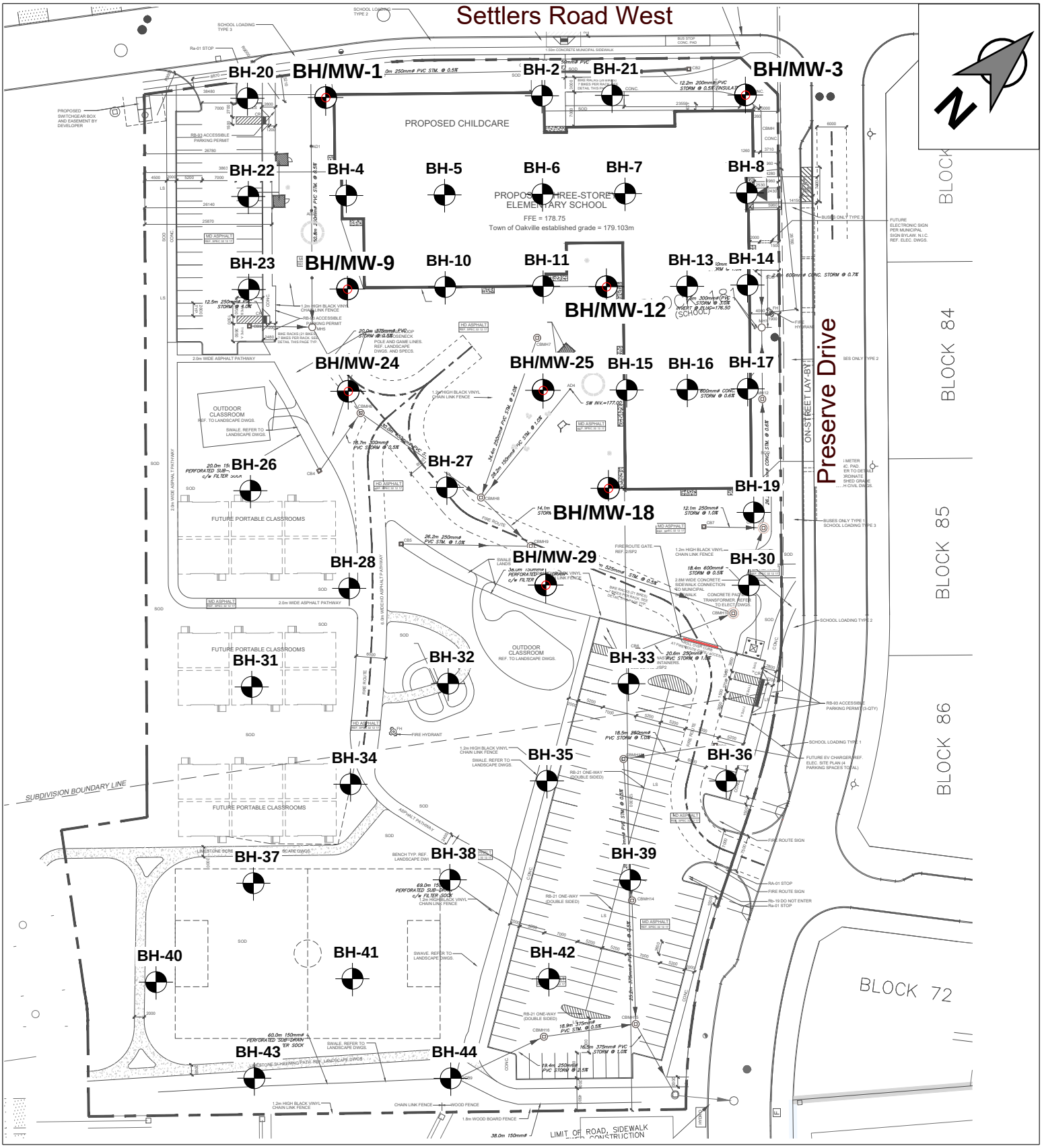
APPENDIX A

BOREHOLE LOCATION PLAN, DRAWING NO. 1

&

BOREHOLE LOG SHEET

(BH/MW-24, BH/MW-25 and BH/MW29)



FORWARD ENGINEERING & Associates Inc.

Forward Engineering & Associates Inc.
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Tel: 416-798-3500 Fax: 416-798-8481
www.**forward**engineering.ca

Project Name:
PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

Address:
SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.

Title
DWG No.1
BOREHOLE LOCATION PLAN

LEGEND
BH = BOREHOLE LOCATION
BH/MW = BOREHOLE LOCATION

PROJECT NO. : 7507

DRAWING DATE : SEPT. 19, 2025

DRAWING BY : P.R.

CHECKED BY : G.S.

Project No: 7507

Log of Borehole BH/MW-24

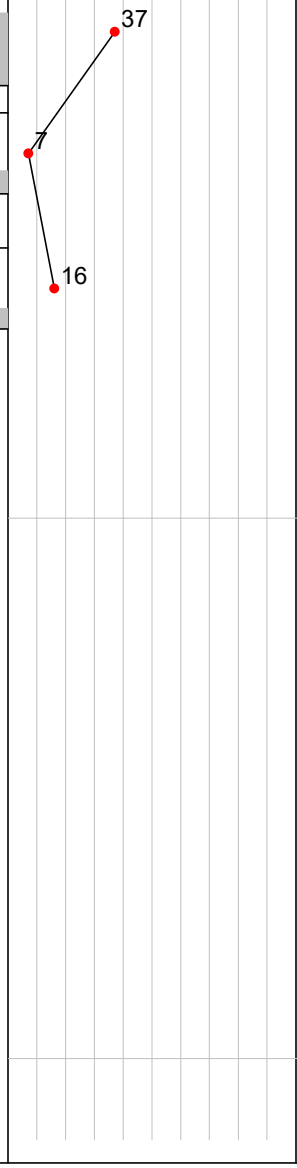
Project: PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

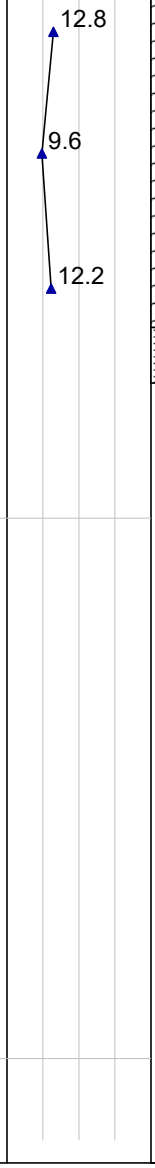
Client: HDSB c/o HOSSACK ARCHITECTURE

Enclosure: 25

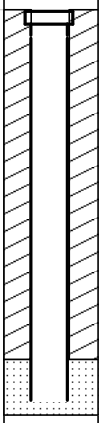
Location: SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.

Depth (m)	Description of strata	Elevation (m)	Sample Details: No.	Type	Blows/ft	Recovery
0	Ground Surface	178.92				
	FILL/DISTURBED SOIL reddish brown and grey clayey silt with traces of stone fragments, compact to loose, moist.	0.00	1	SS	37	
1			2	SS	7	
	SILT TILL compact, reddish brown, moist.	177.40 1.52	3	SS	16	
2	End of Borehole	176.63 2.29				
3						
4						
5						
6						





Monitoring Well



Remarks: -Upon completion of drilling, the borehole was open and dry.

Drill Method: CME 55 - SOLID

Drill Date: 6 AUG. 2025

Datum: GEODETIC

FORWARD ENGINEERING & ASSOCIATES INC.
244 Brockport Drive, Unit 15, Toronto, Ontario, M9W 6X9

Engineer: G.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7507

Log of Borehole BH/MW-25

Project: PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

Client: HDSB c/o HOSSACK ARCHITECTURE

Enclosure: 26

Location: SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.

Depth (m)	Description of strata	Elevation (m)	Sample No.	Type	Blows/ft	Blows/ft (plot)	Water Content %
	Ground Surface	178.55 / 0.00					
0	**FILL/DISTURBED SOIL** reddish brown and grey clayey silt with traces of stone fragments, compact, moist.		1	SS	19	19	10.4
0.76	**SILT TILL** compact, reddish brown, moist.	177.79 / 0.76	2	SS	38	38	6.3
			3	SS	30	30	13.0
1.98	End of Borehole	176.57 / 1.98					

Remarks: -Upon completion of drilling, the borehole was open and dry.

Drill Method: CME 55 - SOLID	Engineer: G.R.
Drill Date: 8 AUG. 2025	Checked by: G.S.
Datum: GEODETIC	Sheet No. 1 of 1

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Project No: 7507

Log of Borehole BH/MW-29

Project: PROPOSED OAKVILLE No. 5 PUBLIC SCHOOL

Client: HDSB c/o HOSSACK ARCHITECTURE

Enclosure: 30

Location: SETTLERS ROAD WEST & PRESERVE DRIVE, OAKVILLE, ON.

Depth (m)	Description of strata	Elevation (m)	Sample Details: No.	Type	Blows/ft	Recovery
	Ground Surface	178.86				
0	**FILL/DISTURBED SOIL** reddish brown and grey clayey silt with traces of stone fragments, compact, moist.	0.00	1	SS	21	
		178.10				
1	**SILT TILL** compact, reddish brown, moist.	0.76	2	SS	13	
2			3	SS	28	
	End of Borehole	176.57 2.29				
3						
4						
5						
6						

Blows/ft: 20 40 60 80 — 21, 13, 28

Water Content % : 10 20 30 — 11.5, 12.5, 13.3

Monitoring Well

Remarks: -Upon completion of drilling, the borehole was open and dry.

Drill Method: CME 55 - SOLID

Drill Date: 8 AUG. 2025

Datum: GEODETIC

FORWARD ENGINEERING & ASSOCIATES INC.
244 Brockport Drive, Unit 15, Toronto, Ontario, M9W 6X9

Engineer: G.R.

Checked by: G.S.

Sheet No. 1 of 1