

Addendum 4

Request for Tender

RFTMA26-5334 - New School Construction Mayfield West No. 2 Public School

TO: ALL POTENTIAL BIDDERS

This Addendum 4 has been issued for the above-mentioned RFT.

Find enclosed Addendum No. 4 issued by Hossack Architecture.

Regards,

Mike Zekorn, Commodity Specialist for,

John Marinescu, Commodity Specialist
Peel District School Board
Tel. (905) 890.1010 x 2123
Fax. (905) 890-0660
E-mail: john.marinescu@peelsb.com

New School Construction – Mayfield West No. 2 Public School

Tender No. RFTMA26-5334

PROJECT NO. 24112

HOSSACK ARCHITECTURE

ADDENDUM NO. 4

July 28, 2026

The following additions, deletions, modifications and clarifications issued herein are hereby an integral part of the Tender and Contract Documents. Minor Typographic or spelling mistakes in the Contract Documents which do not significantly affect the meaning of the sentence or phrase in which they occur may not necessarily be corrected by Addenda.

GENERAL

1. Ensure that all parties submitting bids are aware of this addendum and its contents.
2. **Contents:**
 - .1 Eight (8) typed pages of instructions.
 - .2 Two (2) letter size 8.5" x 11" drawings, SKA A-200 and SKA A-201, dated July 27, 2026.
 - .3 Two (2) letter size 8.5" x 11" CDH Hardware Schedule page 31 and page 34.
 - .4 Report, Rev.2 Geotechnical Investigation dated July 27, 2026, by Forward Engineering & Associates Inc.
 - .5 STRUCTURAL ADDENDUM #1 – Two (2) typed pages of instructions and Two (2) pages of full size 30" x 42" drawings, S0-01 and S0-02 dated July 27, 2026. Attached.
 - .6 Mechanical Addendum No. M1 – One (1) typed page of instructions and Two (2) pages of full size 30" x 42" drawings, PD1 and PD4 dated July 28, 2026. Attached.
 - .7 Electrical Addendum No. E1 – One (1) typed page of instructions dated July 28, 2026. Attached.

QUESTIONS & ANSWERS

QUESTION 1: Please be advised that there is no section provided for 32 13 13 - Concrete Paving and Edges although it is listed in the table of contents.

ANSWER 1: [Please see addendum for Table of Contents below.](#)

QUESTION 2: Detail shown on 1/A11 for the parapet and Blown up detail 8/13 are not matching. Please confirm which one to be followed

ANSWER 2: [For parapet detail of drawing 1/A11, please refer to drawings 8/A10 \(mirrored\) and 9/A10](#)

QUESTION 3: Please confirm what size Axiom required for the floating ceiling pods in the learning commons room, there's a note on the RCP stating 100mm (4") and the spec states 2" or 6" axiom listed

ANSWER 3: [Please see addendum below.](#)

QUESTION 4: 13/A17 Detail stating to supply diffuser in Architectural drawings. Please confirm mechanical contractor to supply diffusers stated in this detail.

ANSWER 4: [The supply diffusers shown on elevation 13/A17 are to be coordinated with the suspended metal blades. Refer to mechanical drawings for specification / type of diffuser. All diffusers are to be supplied and installed by the Mechanical Contractor.](#)

QUESTION 5: Can you provide a detailed Acoustic blade ceiling layout? It could be custom armstrong layout if the intent is to have different sizes than 8' lengths listed in the specifications.

New School Construction – Mayfield West No. 2 Public School

Tender No. RFTMA26-5334

PROJECT NO. 24112

HOSSACK ARCHITECTURE

ADDENDUM NO. 4

July 28, 2026

ANSWER 5: Please see addendum below for attached acoustic blade ceiling layouts. SKA A-200 and A-201.

QUESTION 6: Section 21 00 00 – Mechanical Supplementary Bid Form & Section 26 00 01 – Electrical Supplementary Form – please confirm that these forms are to be submitted via email. Please provide an email address for the consultant that we are required to submit the forms too. Please also confirm when these forms are to be submitted as one states 48 hours and the other states 24 hours.

ANSWER 6: The Mechanical and Electrical Supplementary Forms are to be submitted to the architect within **24 hours** of the tender close by email to admin@hossackarch.com. Refer to the enclosed mechanical addendum for clarification.

QUESTION 7: Section 07 27 10 – please consider Naturalseal NS A250 HP as an alternate for the air barrier as specified in 2.1.2.1.

ANSWER 7: This liquid applied product is not an approved alternate for the peel and stick membrane specified in 2.1.2.1 of Section 07 27 10 Air Barriers. It is also not an approved air barrier membrane or the transition membrane adhesive.

QUESTION 8: Section 31 23 10 – 1.10 – Please confirm these unit prices are not required as they cannot be found anywhere in the submission form or on the submission portal on bonfire.

ANSWER 8: Please refer to addendum below.

QUESTION 9: Section 31 23 10 – 3.9 – Please confirm what material is to be used for backfilling against the foundation walls as none is specified.

ANSWER 9: Backfill to be Fill “B”. Refer to addendum below.

QUESTION 10: Section 32 91 19 – 3.2.4.1 – Please confirm that regular sodded areas are to receive 300mm thick topsoil. This is unusual as it is typically 150mm. Please clarify.

ANSWER 10: 300mm topsoil depth for general areas and the playfield is correct. Topsoil at this depth complies with the Town of Caledon Standard No. 805 *Topsoil / Subgrade Preparation Detail* and was required as part of Green Compliance calculations. If existing topsoil is available for general use, it must be amended to fall within typical range guidelines for a loam/sandy loam soil and be suitable for the anticipated use as per SGS Agrifood Laboratories report recommendations. If imported, topsoil for general areas shall be a loam soil texture and the play field shall have a sandy loam texture, per specification. All imported topsoil must be tested by SGS Agrifood Laboratories and incorporate recommended amendments as required to suit intended use.

QUESTION 11: Section 31 23 10 – 2.1 – states that Fill B – Gran B Type 2 is to be used to raise the grade under paving areas. 3.1.4.4 – states that we are to upfill to u/s of subbase with native fill C or imported fill E. Please clarify what material is to be used to raise grades underneath the paved areas.

New School Construction – Mayfield West No. 2 Public School

Tender No. RFTMA26-5334

PROJECT NO. 24112

HOSSACK ARCHITECTURE

ADDENDUM NO. 4

July 28, 2026

ANSWER 11: Please refer to addendum below.

QUESTION 12: Geotechnical report - Borehole investigation states that ground level elevations at borehole locations were interpolated from the plan of survey dated December 10, 2024. The survey that is provided in the drawing set is dated December 18, 2024. Please confirm that the existing grades from the survey match the existing grades in the geotechnical report.

ANSWER 12: Please find updated Geotechnical Investigation Report, dated July 27, 2026, included in this addendum referencing final OLS survey.

QUESTION 13: Geotechnical report - Foundations –Please clarify the missing topographic survey drawing. Please clarify that the topographic survey dated December 18, 2024, has accurate existing grades. Further to this please confirm that option 2 is to be used as the missing topographic survey of the engineered fill report cannot be found and therefore this option is not valid.

ANSWER 13: Please find updated Geotechnical Investigation Report, dated July 27, 2026, included in this addendum referencing final OLS survey.

QUESTION 14: Geotechnical report - Foundations – please confirm that option 2 – conventional footings founded on new engineered fill has been chosen as the engineered fill certificate and survey are not provided.

ANSWER 14: Please find updated Geotechnical Investigation Report, dated July 27, 2026, included in this addendum referencing final OLS survey.

QUESTION 15: Please confirm interior non-load bearing stud walls to be framed with 16 gauge material and not standard gauge material as per 2.1 Materials.

ANSWER 15: Non-load bearing stud walls are to be constructed as described in specification section 09 22 16 Non-Structural Metal Framing.

QUESTION 16: Detail (F10/S3-01) shows the underside of sump pits level with the footings. Drawing PD1 – tag 31 & 32 indicate that the underside of sump pits are to be 3 m below finished floor elevation. The footings at the elevator pit have only been dropped 2.3m. Please clarify if the footings are to be dropped lower in this location to accommodate the sump pits.

ANSWER 16: Refer to attached Structural Addendum No. 1 dated July 27, 2026 and Mechanical Addendum No. M1 dated July 28, 2026 below.

QUESTION 17: Drawing PD1 – notes the storm invert at gridlines (E/5) to be 250.90. Please confirm this invert as the invert at gridlines (Y/2) is 259.25. Please clarify the storm is not to be 8.9m below FFE.

ANSWER 17: Refer to attached Mechanical Addendum No. M1 dated July 28, 2026 below.

QUESTION 18: Please advised that the specified Easy Up 5000 series shelving has been discontinued. Only series 200 is available.

New School Construction – Mayfield West No. 2 Public School

Tender No. RFTMA26-5334

PROJECT NO. 24112

HOSSACK ARCHITECTURE

ADDENDUM NO. 4

July 28, 2026

ANSWER 18: Refer to addendum below.

QUESTION 19: Can you confirm the vertical and the sloped fascia are cementitious or metal siding???

ANSWER 19: The vertical and sloped fascia at the childcare is to be extruded aluminum siding per elevations. Refer to addendum below.

QUESTION 20: Section 26 00 10 – 4.1 – please confirm when the electrical bonding consent is to be submitted and the acceptance period.

ANSWER 20: Refer to attached Electrical Addendum No. E1 dated July, 28, 2026 below.

QUESTION 21: Please confirm there are no pre-qualified mechanical & electrical contractors for this project.

ANSWER 21: There are no pre-qualified mechanical & electrical contractors for this project.

QUESTION 22: Section 01 11 00 – 1.5.6 – states that inspection of the site during the tender period is mandatory for all contractors, refer to Section 00 21 13 – for the time of a conducted contractors' site tour. Please confirm this is not a requirement as there is no Section 00 21 13 provided.

ANSWER 22: Please refer to addendum below.

QUESTION 23: Section 01 11 00 – 1.36 – cash allowance states that we are to include in the contract price a cash allowance as described in the PDSB Invitation to Tender ITT document herein. Cash allowance and contingency have been provided in section 00 22 00 – supplementary bid form but not in an Invitation to tender document. Please clarify the cash allowance and contingency.

ANSWER 23: Cash Allowance Amounts to be included in the base bid price are listed in the online bidding system bid table 'Appendix C – Base Bid'.

QUESTION 24: Section 01 11 00 – 1.36.9.15 – Please confirm that the gym sound system is included in the PA / Telephone System Components cash allowance.

ANSWER 24: No, the gym sound system is NOT included in the PA/Telephone System Components under Cash Allowance. The gym sound system is in base contract.

QUESTION 25: Section 03 30 53 – 2.1.5.9 – please confirm vapour retarder membrane for the slab on grade is not required on this project as there is no specification section provided.

ANSWER 25: The underslab vapour barrier is the 200mm layer of 19mm clear stone described in the documents.

QUESTION 26: Section 08 36 13 – Sectional Overhead Doors – please confirm whether this specification section is relevant to the project as no overhead doors can be found.

ANSWER 26: Please refer to addendum below.

QUESTION 27: Section 10 11 25 – 2.1.18 & 19 – Please clarify whether the vinyl wall mural and vinyl adhesive decals are covered under cash allowance 01 11 00 – 1.36.9.11 – detailed school logo and wall mural.

New School Construction – Mayfield West No. 2 Public School

Tender No. RFTMA26-5334

PROJECT NO. 24112

HOSSACK ARCHITECTURE

ADDENDUM NO. 4

July 28, 2026

ANSWER 27: Please refer to addendum below. The Cash Allowance logo and mural reference is intended for Gym, not Learning Commons. Section 10 11 25 items are to be included in base bid.

AMENDMENTS TO SPECIFICATION BINDER A

Item 1: General:

- .1 REVISE all references to “~~Section 00 21 13~~” to be “**School Board’s Request for Tender documents**”.

Item 2: Section 00 00 10 Table of Contents:

- .1 DELETE the following:
“~~08 36 13~~ ~~Sectional Overhead Doors~~ ~~6~~”
- .2 DELETE the following:
“~~32 13 13~~ ~~Concrete Paving and Edges~~ ~~2~~”

Item 3: Section 01 11 00 Summary of Work:

- .1 REVISE item 1.5.6 to read as follows:
“.6 Inspection of the site during the tender period is mandatory for all General Contractors, **to understand the site for construction purposes. There is no organized site meeting to attend, as this is an open field.**”

Item 4: Section 08 36 13 Sectional Overhead Doors:

- .1 DELETE this section in its entirety.

Item 5: Section 08 71 15 Finishing Hardware Schedule:

- .1 REPLACE Part 2 – Finishing Hardware Schedule page 31 and page 34 with enclosed page 31 with revisions to Heading #33 (Group: VEST SGL OP BEST) and page 34 with revisions to Heading #36 (Group: WR KINDER OP)

Item 6: Section 09 51 13 Acoustical Panel Ceilings:

- .1 REVISE item 2.1.6 to read as follows:
“.6 Perimeter Trim: 2” (50mm), **4” (100mm) or 6” (150mm)** ‘Axiom’ class trim or CGC ‘Compasso’ for edging...”

Item 7: Section 10 11 25 Manufactured Specialties:

- .1 REVISE item 2.1.18 to read as follows:
“.18 Vinyl Adhesive Film Pattern (on Learning Commons 115 Glazing on Sliding Glass Doors):
 - .1 Self-adhering 4 mils (0.10mm) thick vinyl film with pattern, luster finish.
 - .2 Image/pattern to be confirmed by Architect prior to supply.
 - .3 Adhere to glazing as recommended by supplier.

New School Construction – Mayfield West No. 2 Public School

Tender No. RFTMA26-5334

PROJECT NO. 24112

HOSSACK ARCHITECTURE

ADDENDUM NO. 4July 28, 2026

- .4 Size: refer to drawing for approximate sizing. Final size to be confirmed during shop drawing stage.
- .5 Locations: Refer to drawing 6/A16.”
- .2 Item 2.1.19 to remain as is.

Item 8: Section 12 00 10 Metal Storage Shelving:

- .1 REVISE item 2.1.1 to read as follows:
 - “.1 Product: boltless, clipless system: **‘Dexion’ Shelving by Redirack, similar system by E-Z-Rect, North American Steel, Triple-A** or equivalent system by other manufacturer approved by Consultant.”

Item 9: Section 31 23 10 Excavating, Trenching and Backfilling:

- .1 ~~DELETE~~ item 1.10 ~~“Unit Prices Requested...”~~
- .2 REVISE item 2.1.3 to read as follows:
 - “.3 Fill "B": Granular material meeting OPSS Material Specification for Aggregates, Form 1010, Granular "B"-Type 2. Minimum compaction density 100% Standard Proctor. For use primarily as **foundation backfill**, fill under building slab on grade and paving areas up to underside of sub-base elevation.”
- .3 REVISE item 3.1.4 to read as follows:
 - “.4 The following is to be followed for the site preparation and upfill requirements:
 - 1. Remove all vegetation in area of proposed building and asphalt, and dispose. Remaining fill to be proof-rolled.
 - 2. Building area to be upfilled as required with ‘Fill B’ (Granular B, Type 2).
 - 3. **200mm** depth of 19mm clear stone is to be placed under the building area floor slab, as a drainage vapour barrier.
 - 4. Asphalt area to be upfilled to underside of sub-base as required with **‘Fill B’ (Granular B, Type 2).**”

AMENDMENTS TO SPECIFICATION BINDER C**Item 10: Section 31 09 15 Geotechnical Information**

- .1 REPLACE Geotechnical Investigation Report R1, dated August 8, 2025 with enclosed Geotechnical Investigation Report R2 dated July 27, 2026.
- .2 REVISE item 1.1.1.1 to read:
 - “.1 Geotechnical Investigation
Proposed Mayfield West #2 Public School, Caledon, Ontario
Prepared by: Forward Engineering & Associates Inc.
Date: ~~August 8, 2025~~ **July 27, 2026**
Proj. Ref. No. 7460, ~~R1~~ **R2**”

New School Construction – Mayfield West No. 2 Public School

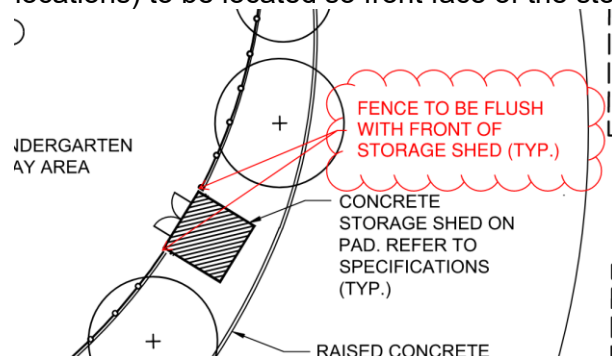
Tender No. RFTMA26-5334

PROJECT NO. 24112

HOSSACK ARCHITECTURE

ADDENDUM NO. 4**July 28, 2026****AMENDMENTS TO DRAWINGS****Item 11: SP1 SITE:**

- .1 REVISE the location of the storage bunkers within childcare and kindergarten play areas (three locations) to be located so front face of the storage bunker is flush with adjacent fencing.

**Item 12: A05 GROUND FLOOR REFLECTED CEILING PLAN:**

- .1 REVISE layout of acoustic blades at FOYER 111 per enclosed SKA A-200 FOYER 111 - ACOUSTIC BLADES LAYOUT, dated July 27, 2026. Attached.

Item 13: A06 SECOND FLOOR REFLECTED CEILING PLAN:

- .1 REVISE layout of acoustic blades at CO-LAB 202 per enclosed SKA A-201 CO-LAB 202 - ACOUSTIC BLADES LAYOUT, dated July 27, 2026. Attached.

Item 14: 1/A13 WALL SECTION @ CHILDCARE CANOPY:

- .1 REVISE wall section annotation to read: "VERTICAL METAL **ALUMINUM** SIDING ON MULTIPLE LAYERS OF DIAGONAL GIRTS TO SUIT SLOPE AND FASCIA EXTENSION"

STRUCTURAL**Item 15: STRUCTURAL:**

- .1 STRUCTURAL ADDENDUM #1 – Two (2) typed pages of instructions and Two (2) pages of full size 30" x 42" drawings, S0-01 DESIGN CRITERIA NOTES and S0-02 PLAN NOTES, MISC SCHEDULES AND DETAILS, dated July 27, 2026. Attached.

MECHANICAL**Item 16: MECHANICAL:**

- .1 Mechanical Addendum No. M1 – One (1) typed page of instructions and Two (2) pages of full size 30" x 42" drawings, PD1 PLUMBING & DRAINAGE – GROUND FLOOR PLAN and PD4 PLUMBING & DRAINAGE – DETAILS AND LEGEND dated July 28, 2026. Attached.

New School Construction – Mayfield West No. 2 Public School
Tender No. RFTMA26-5334
PROJECT NO. 24112
HOSSACK ARCHITECTURE

ADDENDUM NO. 4

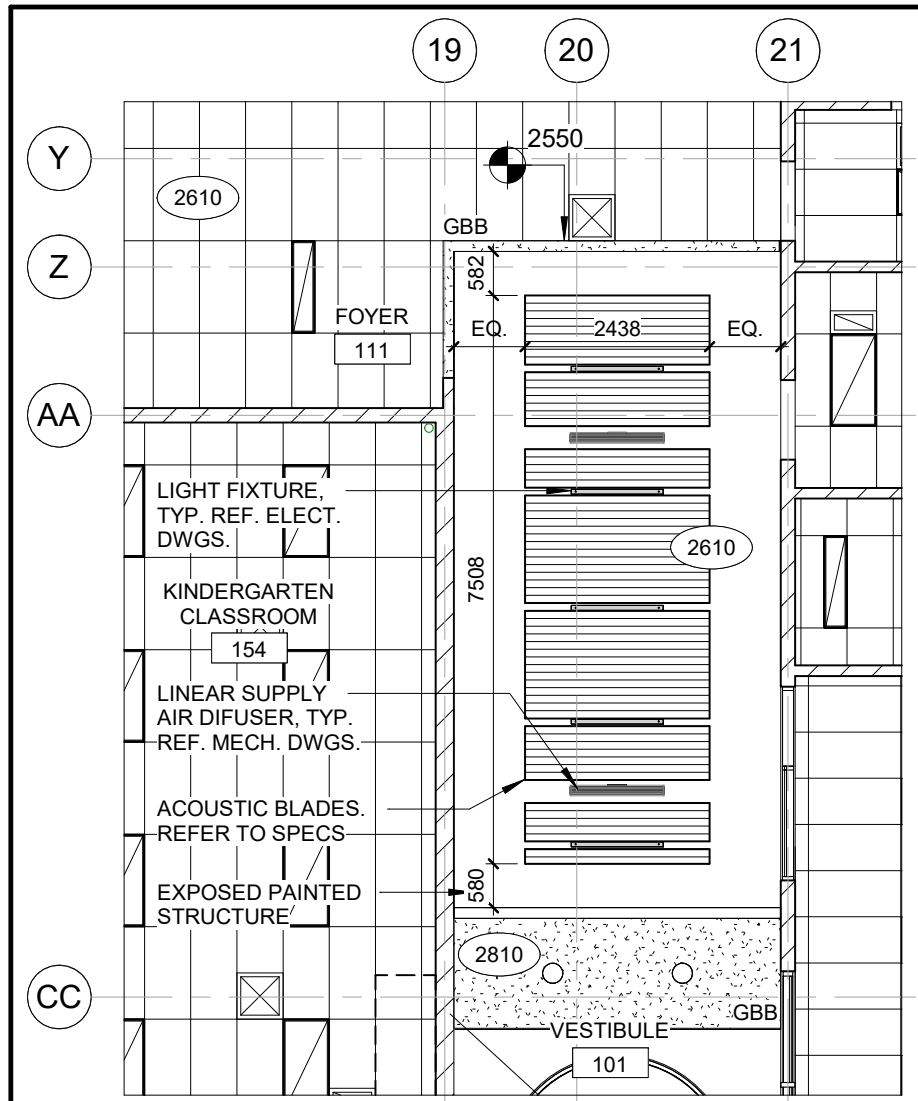
July 28, 2026

ELECTRICAL

Item 17: ELECTRICAL:

.1 Electrical Addendum No. E1 – One (1) typed page of instructions dated July 28, 2026. Attached.

End of Addendum No. 4



NOTES:

1. REFER TO SPECIFICATION SECTION 09 51 13 ACOUSTICAL PANEL CEILINGS FOR CEILING TYPE AB: ACOUSTIC LINEAR BLADES.
2. PROVIDE MATCHING COLOUR 150mm DEEP PERIMETER EDGE TRIM PER PANEL GROUPING.
3. ACOUSTIC LINEAR BLADES, LIGHT FIXTURE AND LINEAR SUPPLY AIR DIFFUSERS ARE TO BE COORDINATED. FINAL LAYOUT TO BE REVIEWED AND APPROVED BY ARCHITECT PRIOR TO INSTALLATION.
4. ALLOW FOR LAYOUT MODIFICATION TO BE REVIEWED AND APPROVED IN SHOP DRAWINGS.

FOYER 111 - ACOUSTIC BLADES LAYOUT

PROJ: 24112

SCALE: 1 : 100

DRAWN: KB

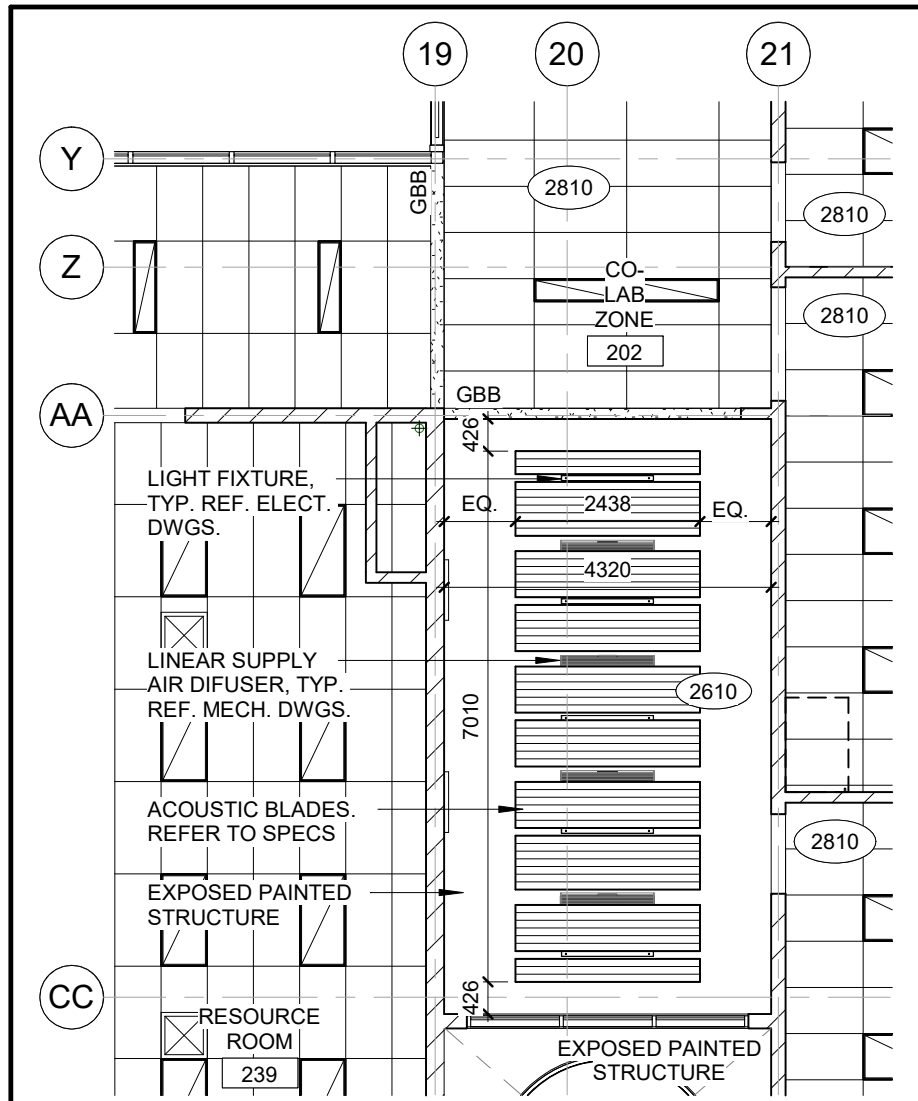
DATE: 26 07 27

HOSSACK
ARCHITECTURE



ISSUE/REV.

SKA
A-200



NOTES:

1. REFER TO SPECIFICATION SECTION 09 51 13 ACOUSTICAL PANEL CEILINGS FOR CEILING TYPE AB: ACOUSTIC LINEAR BLADES.
2. PROVIDE MATCHING COLOUR 150mm DEEP PERIMETER EDGE TRIM PER PANEL GROUPING.
3. ACOUSTIC LINEAR BLADES, LIGHT FIXTURE AND LINEAR SUPPLY AIR DIFFUSERS ARE TO BE COORDINATED. FINAL LAYOUT TO BE REVIEWED AND APPROVED BY ARCHITECT PRIOR TO INSTALLATION.
4. ALLOW FOR LAYOUT MODIFICATION TO BE REVIEWED AND APPROVED IN SHOP DRAWINGS.

CO-LAB 202 - ACOUSTIC BLADES LAYOUT

PROJ: 24112

SCALE: 1 : 100

DRAWN: KB

DATE: 26 07 27

HOSSACK
ARCHITECTURE



ISSUE/REV.

SKA
A-201

Heading #33 (Group: VEST SGL OP BEST)

Item #56	1 Single door 131B, VESTIBULE FROM BENCH & COAT	90° LHR
Item #57	1 Single door 137B, VESTIBULE FROM BENCH & COAT	90° LHR
Item #58	1 Single door 149B, VESTIBULE FROM BENCH & COAT	90° RHR
Item #59	1 Single door 154B, VESTIBULE FROM BENCH & COAT	90° RHR

1000 x 2150 x 45 - HM DR x HM FR

16	Standard Hinge	BEST FBB168 (4 1/2" x 4 1/2") US26D	US26D
2	Exit Device	Stanley 3RO2108 x V4908A x LHR x 630 x x 1000	
2	Exit Device	Stanley 3RO2108 x V4908A x RHR x 630 x x 1000	
4	Cylinder	Best 1E72S2RP 626	626
4	Cylinder	Best BEST PERMANENT CORE 1C7N1 GMK 3 Keys	626
4	Cylinder	Best CONSTRUCTION CORE 1CA Brass	
4	Electric Strike	HES 9500-630-LBM- 2005M3	630
4	Electronic Closer	GYRO-TECH OPERATOR 8710 X FW HEADER 628 NO ALTERNATE	628
4	Kick Plate	Gallery GSH 80A 200 X 950 C32D	US32D
4	Overhead Door Holder	Rixson 1-436 630	630
4	Accessory	HES 2005M3 MUST BE INSTALLED WITH ES	
8	Miscellaneous Item	Camden CM-331/42R-SGLR -ROUND-3 LOGO LIT RING FLUSH MTD (2 X 4BB)	630
4	Miscellaneous Hardware	Camden CM-160/22 MTD IN ADO HEADER	
4	Miscellaneous Hardware	Camden DEDICATED PS CX-PS13V3 INSTALL IN OP HEADER	
4	Miscellaneous Hardware	MISC DOOR CONTACT BY SECURITY CONTRACTOR	
4	Miscellaneous Hardware	Camden RELAY CX-33 Revision JULY 24/26	
4	Miscellaneous Hardware	MISC WIRING /RISER DIAGRAM BY HARDWARE SUPPLIER	

HARDWARE SUPPLIER SECTION O8710 TO SUPPLY AND INSTALL AUTO OPERATORS.

ELECTRICAL CONTRACTOR TO PROVIDE 120 VAC TO HEAD OF FRAME AND LOW VOLTAGE WIRE TO PUSH BUTTON & ELECTRIC STRIKE AND ALL ELECTRIFIED DEVICES LISTED .

ELECTRICAL CONTRCTOR REQUIRED TO PROVIDE ELECTRICAL BACK BOXES .

DR CONTACT FOR AUDIBLE BUZZER COORDINATE WITH ELECTRICAL.



Commercial Doors & Hardware Ltd.
2150 Winston Park Drive, Unit 16
Oakville, L6H 5V1

MAYFIELD WEST #2 PS 2026

Submittal Date: FEB 2/26

Heading #36 (Group: WR KINDER OP)

Item #68	1 Single door 133A, KINDERGARTEN TO WASHROOM	90° RH
Item #69	1 Single door 139A, KINDERGARTEN TO WASHROOM	90° RH
Item #70	1 Single door 147A, KINDERGARTEN TO WASHROOM	90° LH
Item #71	1 Single door 153A, KINDERGARTEN TO WASHROOM	90° LH

950 x 2150 x 45 - HM DR x HM FR

12	Standard Hinge	BEST FBB168 (4 1/2" x 4 1/2") US26D	US26D
2	Latchset	Best 45H0N (LC) 15 H 630 LH	630
2	Latchset	Best 45H0N (LC) 15 H 630 RH	630
4	Electric Strike	HES 1006CS-630- 2005M3	630
4	Electronic Closer	GYRO-TECH OPERATOR 8710 X FW HEADER 628 NO ALTERNATE	628
8	Kick Plate	Gallery GSH 80A 400 x 900 C32D	US32D
		MTD BOTH SIDES	
4	Wall Door Stop	Standard Metal S120 C26D	US26D
4	Accessory	HES 2005M3 MUST BE INSTALLED WITH ES	
8	Miscellaneous Item	Camden ACTUATOR CM-60/4 FOR EXTERIOR INSTALL	
4	Miscellaneous Item	Camden CM-450R/8	
		REVISION JULY 24/26	
8	Miscellaneous Item	Camden ESCUTCHEON CM-89S 630	630
4	Miscellaneous Hardware	Camden CM-160/22 MTD IN ADO HEADER	
		MOUNT IN OP HEADER	
4	Miscellaneous Hardware	Camden CONTACT CX-MDA	
4	Miscellaneous Hardware	Camden CX-TRX-4024 INSTALL IN OP HEADER	
4	Miscellaneous Hardware	Camden DEDICATED PS CX-PS13V3 INSTALL IN OP HEADER	
4	Miscellaneous Hardware	Camden RELAY CX-33	
4	Miscellaneous Hardware	MISC WIRING /RISER DIAGRAM BY HARDWARE SUPPLIER	

HARDWARE SUPPLIER TO SUPPLY AND INSTALL AUTO OPERATOR.

PDSB STD IS FOR ACTUATORS TO BE FLUSH MTD . GC MUST HAVE WALLS CUT TO SUITE .
GC TO OBTAIN WALL CUTOUT TEMPLATE FROM PDSB . REFER TO FIG1 AND FIG 2 FOR TYPICAL INSTALLATION .

ELECTRICAL CONTRACTOR TO PROVIDE 120 VAC TO HEAD OF FRAME AND RUN LOW VOLTAGE WIRE TO PUSH BUTTON LOCATIONS AND
ALL ELECTRICAL COMPONENTS LISTED . REFER TO WIRING DIAGRAM SUPPLIED BY HARDWARE SUPPLIER.



Commercial Doors & Hardware Ltd.
2150 Winston Park Drive, Unit 16
Oakville, L6H 5V1

MAYFIELD WEST #2 PS 2026

Submittal Date: FEB 2/26

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, REV. 2
GEOTECHNICAL INVESTIGATION

PROPOSED MAYFIELD WEST #2 PUBLIC SCHOOL
PETCH AVENUE AND TWEEDHILL AVENUE
CALEDON, ONTARIO

PEEL DISTRICT SCHOOL BOARD
c/o
HOSSACK & ASSOCIATES ARCHITECTS
105-1939 Ironoak Way
Oakville, Ontario
L6H 3V8

July 27, 2026
Ref. No. 7460, R2

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

List of Contents

INTRODUCTION	1
PURPOSE AND SCOPE	1
PROPOSED DEVELOPMENT	1
FIELD AND LABORATORY TESTING	2
Field Works	2
<i>Borehole Investigation:</i>	2
Laboratory Testing	2
SITE CONDITIONS	3
Surface Conditions	3
Subsurface Conditions	4
<i>Borehole Investigation Findings:</i>	4
GEOTECHNICAL DISCUSSION AND RECOMMENDATIONS	9
Foundations	9
1. <i>Conventional Strip/Spread Footings on the Existing Engineered Fill and/or Original Undisturbed Native Soils</i>	9
2. <i>Conventional Strip/Spread Footings Founded on the New 'Engineered fill' Upfill</i>	9
Earthquake Considerations	11
Underground and Retaining Walls	12
<i>Sliding Resistance</i>	12
Excavation and Backfill	12
Slab Construction and Permanent Drainage	13
Underground Utilities	14
Pavement Design	14
General Comments	15

LIST OF ENCLOSURES:

BOREHOLE LOCATION PLAN - DRAWING NO. 1

PERMENANT PERIMETER DRAINAGE – DRAWING NO. 3

LOG OF BOREHOLE SHEETS (Nos. 1 to 42) - APPENDIX A

ENGINEERED FILL REPORT – APPENDIX B

SHEAR WAVE REPORT – APPENDIX C

INTRODUCTION

This report presents the results of the geotechnical investigation carried out by Forward Engineering & Associates Inc. for the proposed Mayfield West #2 Public School at Petch and Tweedhill Avenues in the Town of Caledon, Ontario.

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

This investigation was authorized by Hossack & Associates Architects, on behalf of the Peel District School Board (PDSB).

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-two [42] boreholes drilled to a depth ranging from about 1.98 to 8.10 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 two-storey Public school building with no basement. The remainder of the site will be occupied with access roads, parking spaces, playing field and landscaping features.

FIELD AND LABORATORY TESTING

Field Works

Borehole Investigation:

The field work for the borehole investigation consisted of forty-two [42] boreholes (Nos. 1 to 42), drilled between January 13 to 17, 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 8.10 m below the EGSL.

Five [5] of the boreholes (BH/MW-1, BH/MW-4, BH/MW-11, BH/MW-13 and BH/MW-16) were equipped with Water Monitoring Wells (WMWs) to facilitate future measurements of the water levels.

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 attached in Appendix A.

Elevations referred to in this report are metric and geodetic. The ground level elevations at the borehole locations were interpolated from the *Plan of Survey with Topography* dated December 18, 2024, 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

At the time of this investigation the Site did not have a known civic address.

For this description it will be assumed that the north bearing is parallel to the nearest arterial, which is McLaughlin Road.

The school Site, which has an area of approximately 3.2 hectares, is located at the southeast corner of Tweedhill Avenue and Petch Avenue, in the Town of Caledon, Ontario.

It should be noted the during our Site visit, the Site was blanketed with a layer of snow cover.

The site condition, as observed during our site visit January 13, 2025, is presented in the following *Table No. 1*.

Table 1 - Site Surface Observations

East Boundaries:	Vacant lot with no visible development.
North Boundaries:	Tweedhill Avenue.
West Boundaries:	Petch Avenue.
South Boundaries:	Residential dwellings to the east and vacant land with paved walkway towards the west.
Surface Coverage:	The Site appears to be mostly bare earth at the surface. Some ponded water (in frozen state) was observed on the southwest portion of the site.
Ground Level:	The topography of the site is generally flat with an overall grade sloping downward from north to south.
Ditches:	A small ditch/swale was located on the southwest portion of the site. The ditch was covered in snow and frozen water.
Berms/Stockpiles:	None observed.
Existing Structures:	None observed.
Proposed/Intended Land Use:	Institutional.

Subsurface Conditions

Borehole Investigation Findings:

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 encountered at the surface of all the boreholes, extending to a depth ranging from about 0.15 to 2.29 m below the EGSL. This fill consisted mainly of brown and occasionally grey clayey silt. Some of the boreholes contained a layer of crushed granular at the surface with a thickness ranging between 50 to 150 mm. Additionally, some boreholes occasionally contained traces to some organics. In all the boreholes, this stratum was found in moist state and in predominantly compact state of packing. It should be noted that during our investigation the approximately upper 0.30 - 0.45 m below ground surface at the borehole locations was frozen resulting in higher Standard Penetration Test (SPT) blow counts 'N' values, and therefore, the recorded 'N' numbers within this zone appears to be misleading and do not truly reflect the actual state of packing. <u><i>We understand that this fill layer encountered within the school Block, has been certified as Engineered Fill in accordance with the confirmation letter depicting the Engineered Fill Certification and recommendations, issued by Soil Engineers Ltd. on November 11, 2024, and enclosed in Appendix B of this report. (It should be noted that the topographic survey Drawing of the engineered fill subgrade surface levels was missing from the Engineered Fill Certification letter despite of being an integral part of it. Request to obtain the Drawing still pending as of February 28, 2025.)</i></u>
----------------------------	--

Clayey Silt Till and/or Silt Till/Clayey Silt Till	Clayey Silt Till and/or Silt Till/Clayey Silt Till was encountered below the fill/disturbed soil layer in all the boreholes. In some of the boreholes this till extended to a depth ranging from about 3.05 to 6.10 m below the EGSL, however, in a large number of boreholes, this till extended to the maximum explored depth of this investigation. This fissured till contained occasional silt/sandy silt layers and inclusions, and was observed to be brown, greyish brown and reddish grey in colour. This till was observed in mainly moist state and in stiff to hard consistency. <i>It should be noted that the upper zone of this stratum, where shallow surficial fill, was observed to be in a frozen state at some of the borehole locations. Consequently, the recorded 'N' values within the frozen portion do not truly reflect the actual soil consistency (toughness).</i>
Silt Till	Silt Till was encountered below the clayey silt till layer in about half of the boreholes. In a few of these boreholes this till extended to a depth ranging from about 1.52 to 7.62 m below the EGSL, and in the remaining boreholes, this till extended to the maximum explored depth of the investigation. This layer was observed to contain occasional wet silt/sandy silt inclusions, clay lumps and shale/stone fragments. This till was found in mainly moist state and in compact to very dense state of packing.
Sandy Silt Till	Compact to very dense, brown and grey, and moist to wet Sandy Silt Till was encountered in boreholes BH/MW-1 and BH-40 and extended to a depth of about 2.29 to 7.76 m below EGSL.

Silt/Sandy Silt	Very dense, reddish grey, and wet Silt/Sandy Silt was encountered in borehole BH/MW-4 and extended to the maximum explored depth of investigation.
Weathered Shale	Hard, grey and reddish grey, and moist Weathered Shale was encountered in boreholes BH/MW-4, BH/MW-13 and BH/MW-16, extending to the maximum explored depth of investigation.
Groundwater	Groundwater level observations were made during and immediately upon the completion of the drilling investigation. The results are summarized in the following <i>Table 2a</i> , 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	7.72	Open	Dry
BH-2	5.03	Open	Dry
BH-3	5.03	Open	Dry
BH/MW-4	8.08	Open	7.5
BH-5	5.03	Open	Dry
BH-6	5.03	Open	Dry
BH-7	5.03	Open	Dry
BH-8	5.03	Open	Dry
BH-9	5.03	Open	Dry
BH-10	5.03	Open	Dry
BH/MW-11	8.08	Open	7.3
BH-12	5.03	Open	Dry
BH/MW -13	7.64	Open	7.3

Borehole No.	Borehole Depth (m)	Cave-in Depth Below EGSL (m)	Groundwater Depth Below EGSL (m)
BH-14	5.03	Open	Dry
BH-15	5.03	Open	Dry
BH/MW-16	7.24	Open	Dry
BH-17	3.51	Open	Dry
BH-18	3.51	Open	Dry
BH-19	3.51	Open	Dry
BH-20	3.51	Open	Dry
BH-21	1.98	Open	Dry
BH-22	3.51	Open	Dry
BH-23	3.51	Open	Dry
BH-24	3.51	Open	Dry
BH-25	1.98	Open	Dry
BH-26	3.51	Open	Dry
BH-27	3.51	Open	Dry
BH-28	1.98	Open	Dry
BH-29	3.51	Open	Dry
BH-30	1.98	Open	Dry
BH-31	1.98	Open	Dry
BH-32	3.51	Open	Dry
BH-33	3.51	Open	Dry
BH-34	1.98	Open	Dry
BH-35	3.51	Open	Dry
BH-36	3.51	Open	Dry

Borehole No.	Borehole Depth (m)	Cave-in Depth Below EGSL (m)	Groundwater Depth Below EGSL (m)
BH-37	1.98	Open	Dry
BH-38	1.98	Open	Dry
BH-39	2.74	Open	Dry
BH-40	3.51	Open	Dry
BH-41	3.51	Open	Dry
BH-42	1.98	Open	Dry

The water level in borehole BH/MW-1, BH/MW-4, BH/MW-11, BH/MW-13 and BH/MW-16, which were equipped with a stick up monitoring well, was measured after the completion of the drilling operation and our observations were recorded and presented in the following *Table 2b, as shown.*

Table2b: Groundwater Observation after Completion of Drilling

ID & Date of GWL Measurement	Groundwater Depth Below EGSL & (elevation)
BH/MW-1 <i>January 20, 2025</i>	3.21 m (255.39 m)
BH/MW-4 <i>January 20, 2025</i>	3.83m (255.40 m)
BH/MW-11 <i>January 20, 2025</i>	3.52 m (254.99 m)
BH/MW-13 <i>January 20, 2025</i>	2.75 m (255.06 m)
BH/MW-16 <i>January 20, 2025</i>	3.78 m (255.12 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 two-storey school building with no basement. Finished Floor Elevation (FFE) is anticipated to be 259.80 m. The design structural loads are not available at this stage.

Based on the encountered subsurface and conditions, selected FFE and existing Site grades within the school building area, two [2] foundation alternatives are selected for economic competitiveness evaluations.

(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 new upfill granular engineered fill

1. Conventional Strip/Spread Footings on the Existing Engineered Fill and/or Original Undisturbed Native Soils

The proposed school building can be supported on conventional strip/spread footings, to be established on the well compacted engineered fill [in accordance with confirmation outlined in the Engineered Fill Certificate letter for the school Block 261, that was issued by Soil Engineers Ltd. on November 11, 2024, and enclosed within Appendix B of this report, *with the assumption that the missing topographic survey drawing as integral part of the Certificate letter will be found in the near future, for this option/alternative to be valid*], and/or onto the undisturbed native soils, at or below a depth of 1.0 m below the Existing Ground Surface Level (EGSL) [or 0.30 m into the native soil] at the borehole locations.

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

2. Conventional Strip/Spread Footings Founded on the New ‘Engineered fill’ Upfill

Considering the existing low grades at the school building site area, in general, in comparison to selected FFE at 259.80 m, as much as 1.70 m of upfill is needed to reach the final subgrade level under the floor slab.

Consequently, as the established footing bases depths in Alternative #1 will be deeper than normal at some footing's locations, Alternative #2 is recommended.

In Alternative #2, the building footings are to be established at a normal design depth of 1.50 m below the Finished Floor Elevation FFE of 259.80 m and founded mainly on the new granular engineered fill at a founding elevation = 258.30 m.

Raising the grades in this alternative shall be achieved using ***clean inorganic mineral fill free of organics and any other deleterious materials*** compacted to 100 % of Standard Proctor Maximum Dry Density (SPMDD) as “engineered fill”.

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

The construction of the engineered fill should be carried out as follows:

1. The exposed native subgrade should be proof-rolled. All soft and heaving areas should be sub-excavated and replaced with competent fill. The exposed native subgrade should be examined and approved by this office prior to placement of fill.
2. Engineered fill, should consist of Granular A or Granular B materials with moisture content close to its optimum value (within $\pm 2\%$), as determined by Standard Proctor Maximum Dry Density (SPMDD) testing method.
3. The backfill should be placed in 200 mm lifts and compacted to 100 percent SPMDD. Fill placement and compaction monitoring on a full-time bases are required to verify that the compaction requirements are met.
4. The fill should be placed in such a manner so that the specified fill geometry as shown in Drawing No. 2 is achieved. The fill should extend at least to 0.5 m below the underside of the footings, and outward laterally 1.5 m from the edge of the footings, at the floor slab level. The fill slopes can be constructed at 1H to 1V.

5. Generally, when constructed on engineered fill, the strip foundations and the top section of the foundation wall must be continuously reinforced longitudinally with two overlapped No. 6 (20 mm) steel bars, or as directed by the Structural Engineer.

Foundation Notes:

Adjacent footings, founded at different elevations, should be stepped at 10 horizontal to 7 vertical, with a maximum step of up to 400 mm within the engineered fill.

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.-B of the National Building Code of Canada (NBC) 2020.

According to Table 4.1.8.4.-B of the NBC code, and the Shear Wave Velocity Test Results of the subject site, the **Site Designation** is **X₇₆₀**.

Underground and 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:

$$p = 0.45[\gamma h + q]$$

Where:

0.45 is the earth pressure coefficient considered applicable.

$\gamma = 21.0 \text{ kN/m}^3$ is the unit weight of backfill

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.

Sliding Resistance

Foundation resistance to sliding is directly proportional to the friction between the soil subgrade and the base of the footing. The factored geotechnical resistance to friction (R_f) at ULS can be obtained through the following equation:

$$R_f = \Phi N \tan \varphi$$

where:

R_f = Frictional Resistance to (sliding) in kN

Φ = Reduction factor per the Canadian Foundation Engineering Manual (CFEM) taken as 0.8

N = Normal load/force exerted at the base of the footings in kN

φ = Internal friction Angle of the soil subgrade (for engineered fill & upper zone Till subgrade $\varphi = 30^\circ$, Lower zone Till subgrade $\varphi = 32^\circ$)

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 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. The backfill material should be compacted to at least 98 percent of the 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 supported and constructed on the engineered fill subgrade following the standard slab-on-grade technique provided that all topsoil/organic soil and fill with organics should be removed and the base should be thoroughly proof rolled. Any soft spots revealed during proof-rolling should be sub-excavated, backfilled, and adequately compacted to 98 % of its Standard Proctor Maximum Dry Density (SPMDD)

Before the placement of any additional fill to raise the grades as required, the disturbed upper zone of the subgrade soils below ground surface (that was likely subjected to loosening due to exposure to freeze and thaw cycle(s), and other adverse environmental conditions such as wetting) within the school block shall be entirely proof rolled, thoroughly compacted, inspected and approved. Additional fill shall be achieved as engineered fill using suitable fill free of organics and any other deleterious materials, and to be placed in shallow lifts i.e., ± 200 mm thick and thoroughly compacted to 98 % SPMDD.

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. 3 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 any vegetation, topsoil/organic soil and/or fill with noticeable amount of organics should be removed, and 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, the anticipated use of the pavement and Town of Caledon requirements, typical flexible asphaltic pavement designs for this development are as shown in the following Table:

Table 3 - Typical Flexible Asphaltic Pavement Design

Pavement Components	Heavy Duty	Medium Duty
Asphaltic Concrete	40 mm HL3	40 mm HL3
	65 mm HL8	40 mm HL8
19 mm Crushed Limestone	150 mm	150 mm
Granular B Sub-base	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 consist of 50 mm Crusher-Run Limestone.

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,

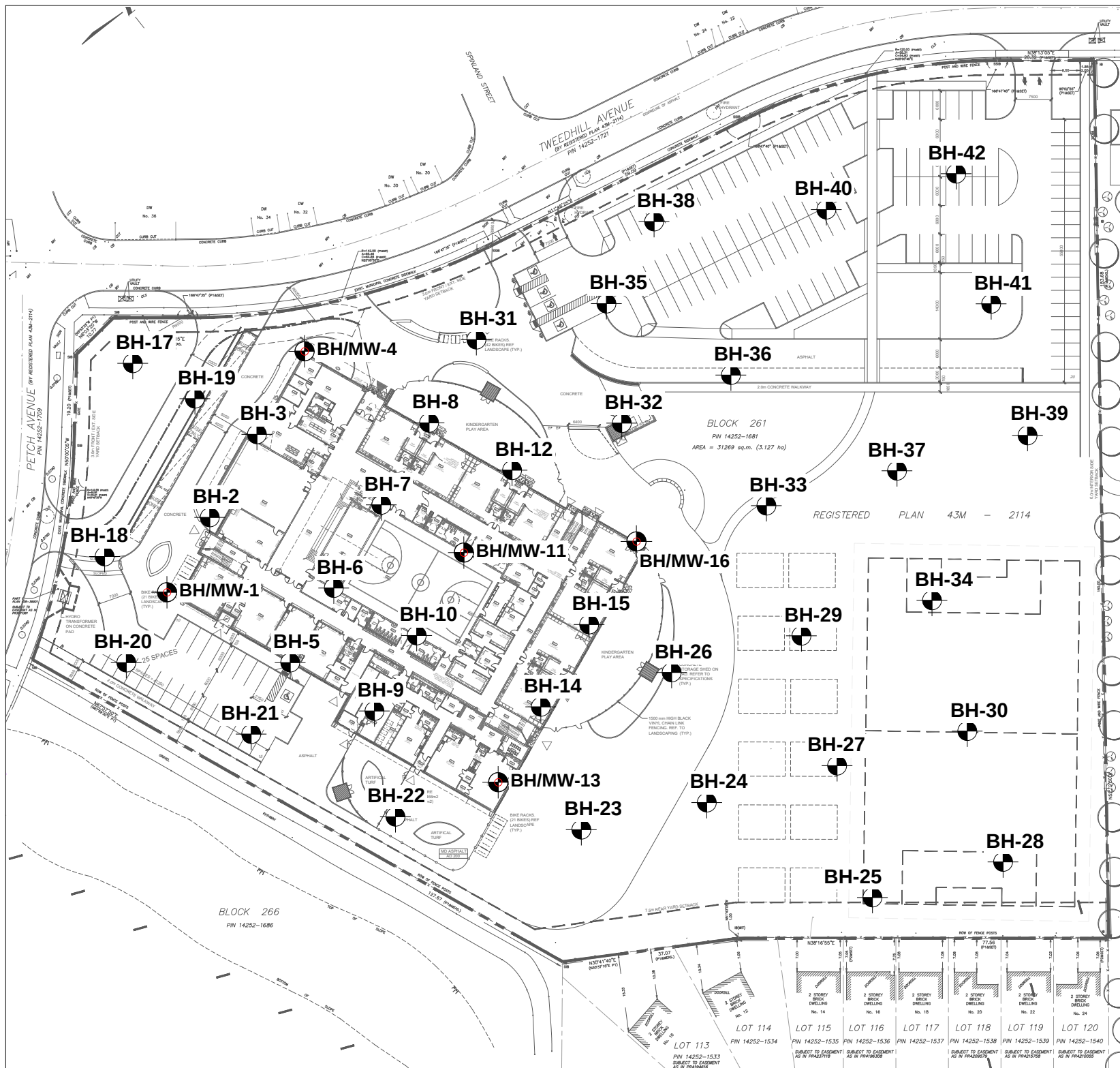
Forward Engineering & Associates Inc.



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

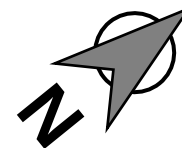


G. S. Semaan, M.Eng., P.Eng.
Principal



NOTES:

- BH**
-  = BOREHOLE LOCATION
- BH/MW**
-  = BOREHOLE/ MONITORING WELL LOCATION



DRAWING No. 1 BOREHOLE LOCATION PLAN

04	
03	
02	
01	
Rev.	DATE REVISION / ISSUE

Project Name: PROPOSED MAYFIELD WEST #2 PUBLIC SCHOOL

Address:
PETCH AVE. & TWEEDHILL AVE.,
CALEDON, ON.

PROJECT No.	:7460
DRAWING DATE	:FEB. 06, 2025
DRAWN BY:	P.R.
CHECKED BY:	G.S.

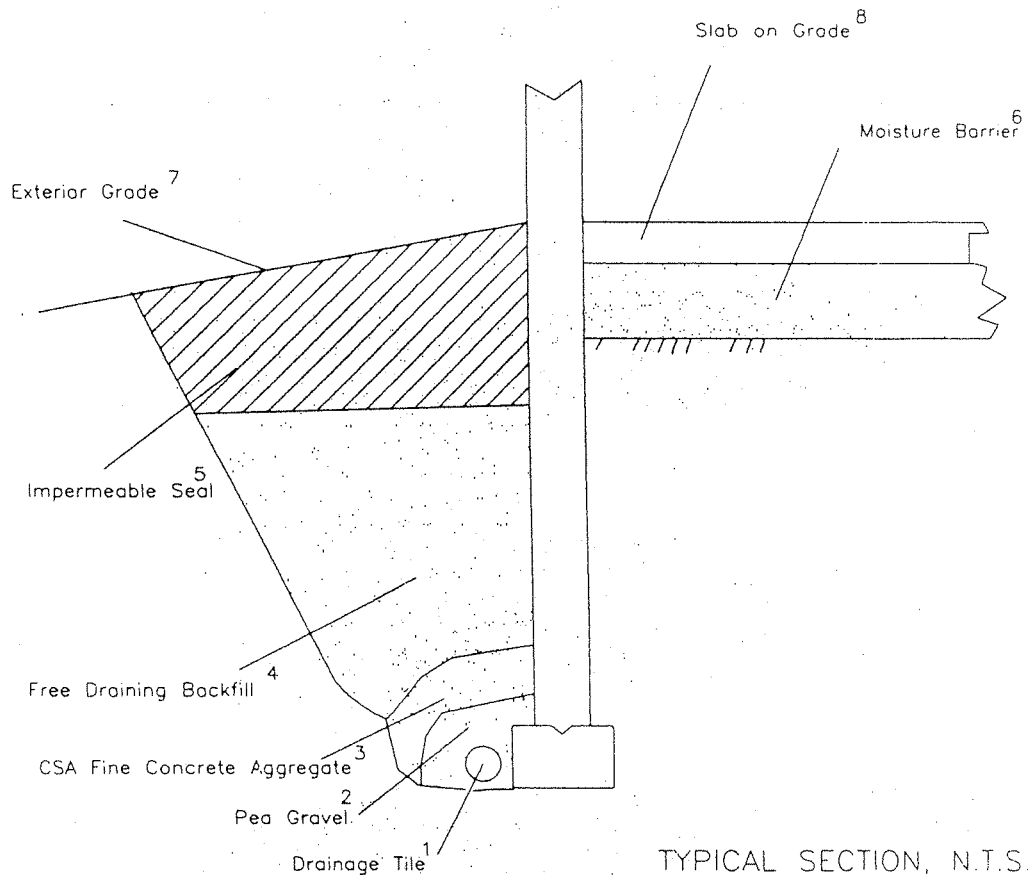


Forward Engineering & Associates Inc.
244 Brockport Drive, Unit 15
Toronto, Ontario M9W 6X9
Tel: 416-798-3500 Fax: 416-798-8481

www.forwardengineering.ca

DRAINAGE AND BACKFILL RECOMMENDATIONS

(Not to Scale)



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, day 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. 3

APPENDIX A

**BOREHOLE LOG SHEETS
(1 – 42)**

Project No: 7460

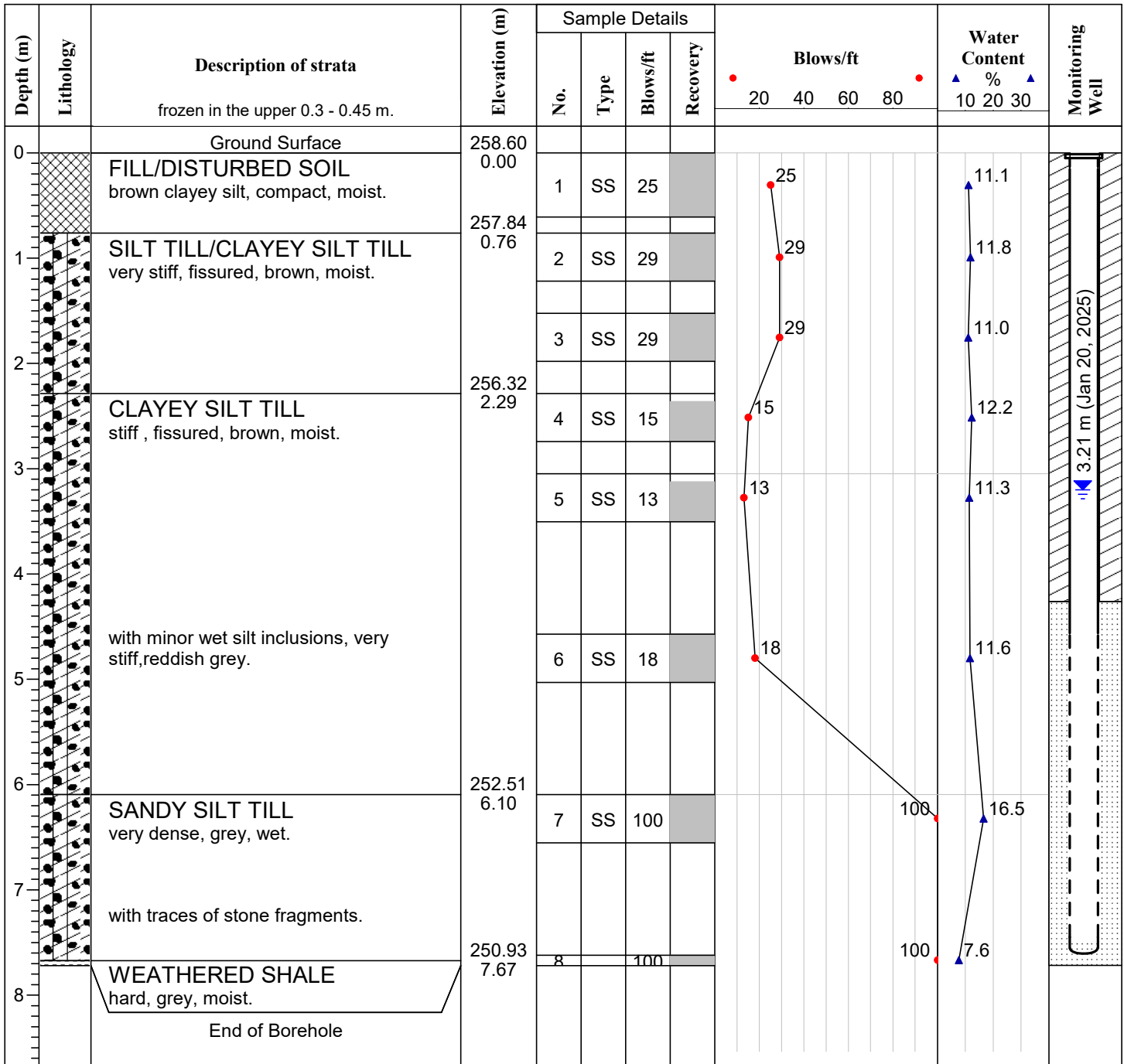
Log of Borehole BH/MW-1

Project: PROPOSED MAYFIELD WEST #2 PUBLIC SCHOOL

Client: PDSB c/o HOSSACK ARCHITECTURE

Enclosure: 2

Location: PETCH AVE. & TWEEDHILL AVE., CALEDON, ON.

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

-On Jan. 20, 2025, the water level in the installed well was measured at 3.21 m below EGSL.

Drill Method: CME 55 - SOLID

Drill Date: 13 JAN. 2025

Datum: GEODETIC

Engineer: P.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7460

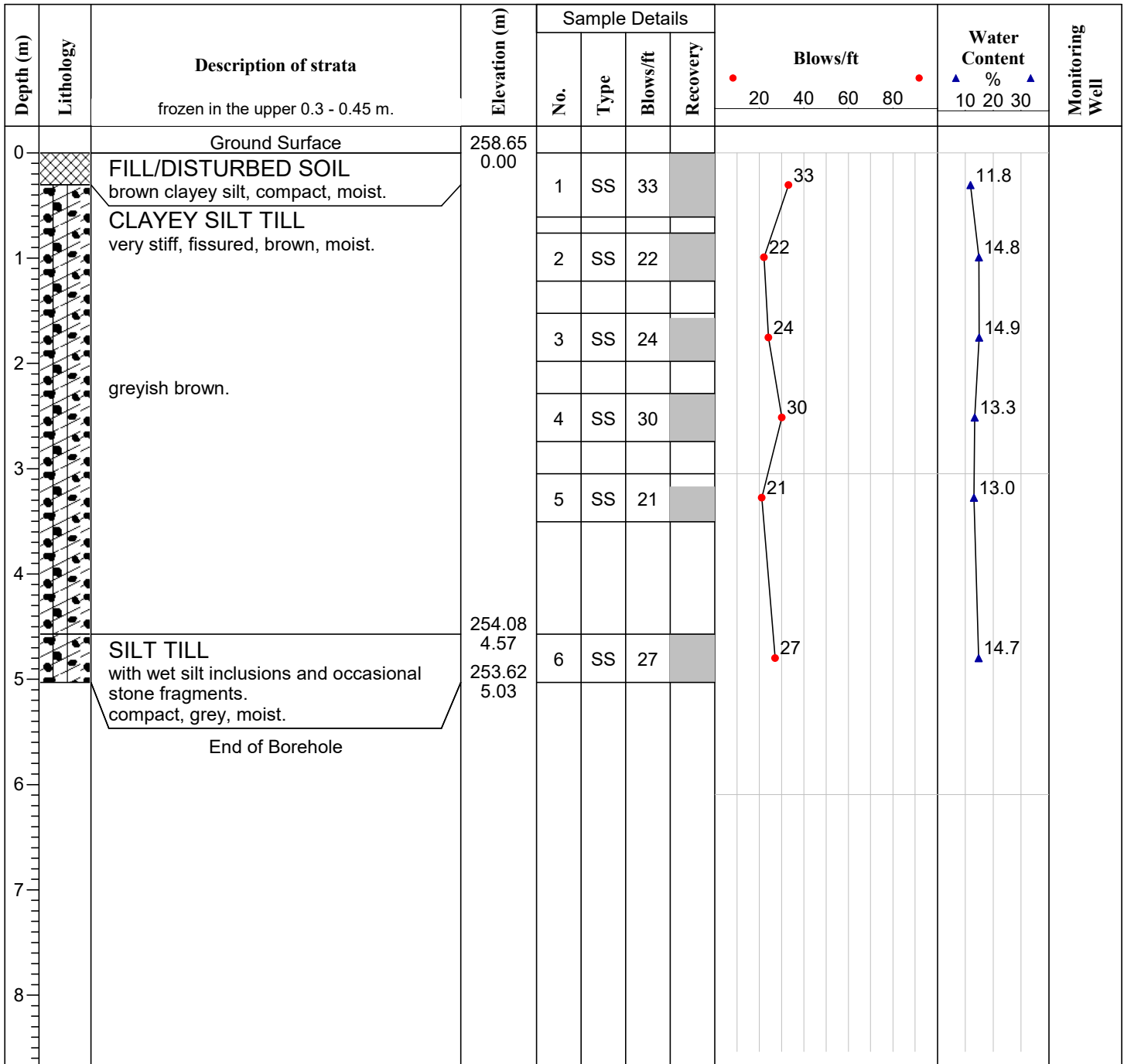
Log of Borehole BH-2

Project: PROPOSED MAYFIELD WEST #2 PUBLIC SCHOOL

Client: PDSB c/o HOSSACK ARCHITECTURE

Enclosure: 3

Location: PETCH AVE. & TWEEDHILL AVE., CALEDON, ON.

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

Drill Method: CME 55 - SOLID

Drill Date: 13 JAN. 2025

Datum: GEODETIC

Engineer: P.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7460

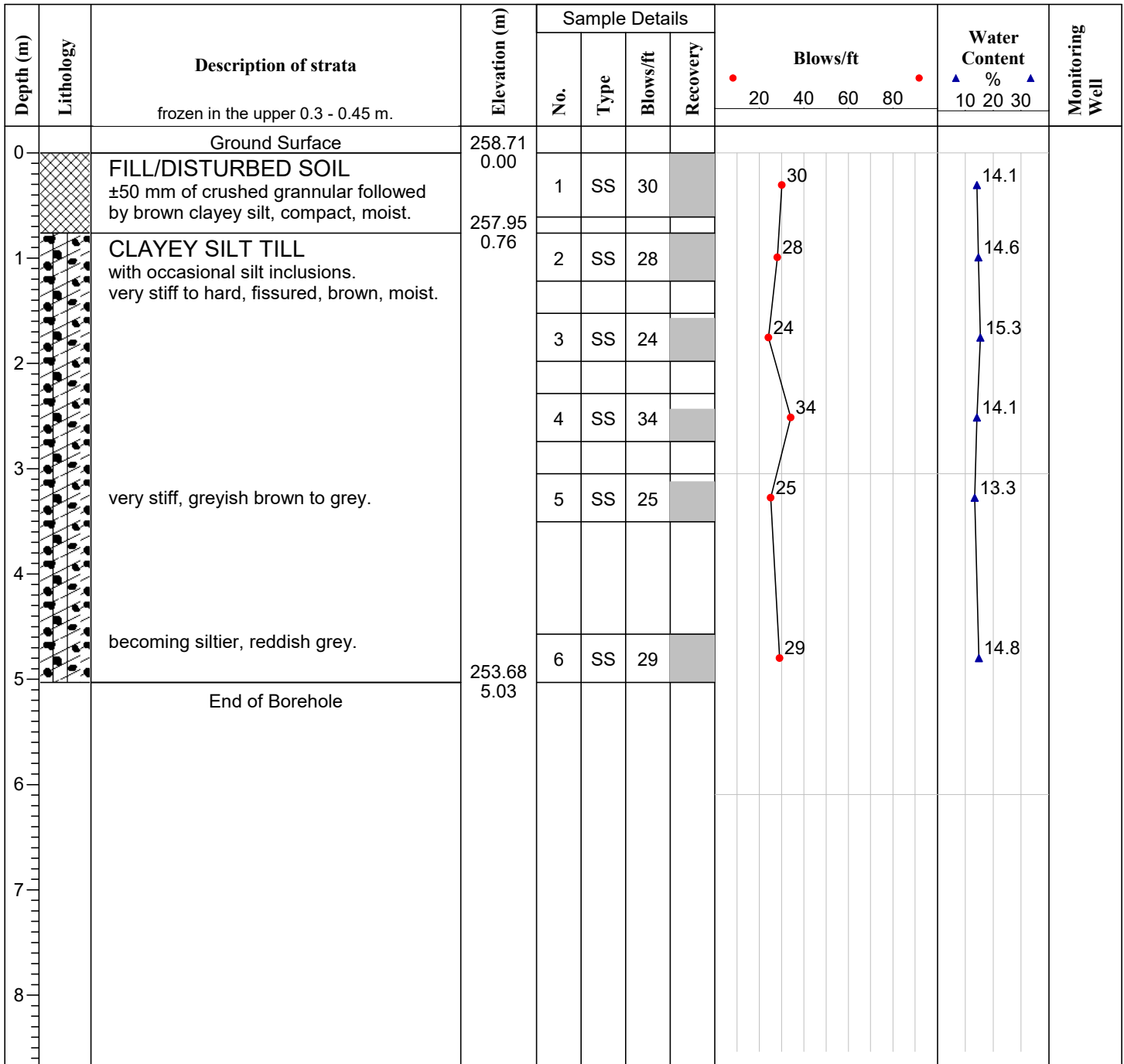
Log of Borehole BH-3

Project: PROPOSED MAYFIELD WEST #2 PUBLIC SCHOOL

Client: PDSB c/o HOSSACK ARCHITECTURE

Enclosure: 4

Location: PETCH AVE. & TWEEDHILL AVE., CALEDON, ON.

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

Drill Method: CME 55 - SOLID

Drill Date: 15 JAN. 2025

Datum: GEODETIC

Engineer: P.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7460

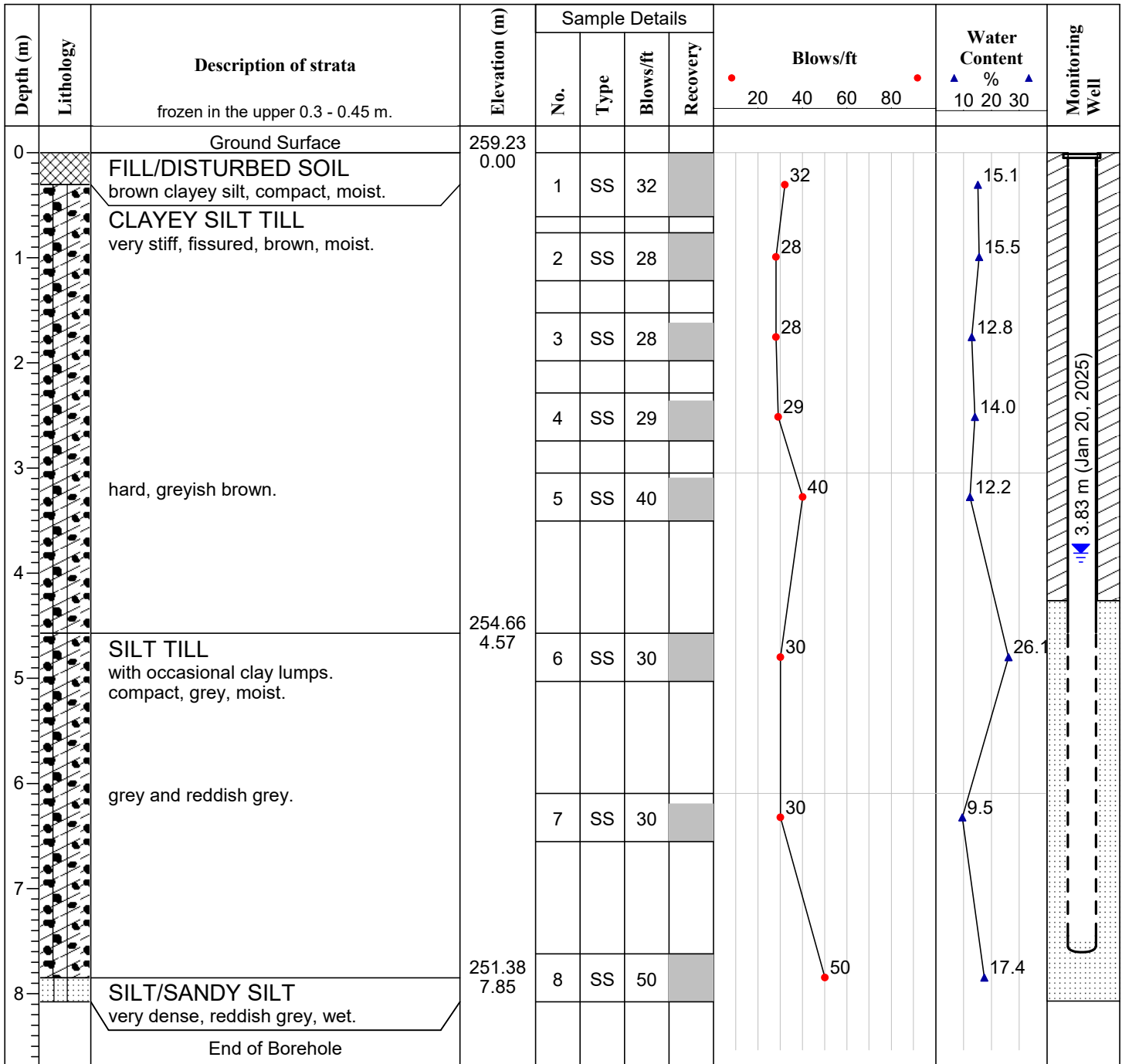
Log of Borehole BH/MW-4

Project: PROPOSED MAYFIELD WEST #2 PUBLIC SCHOOL

Client: PDSB c/o HOSSACK ARCHITECTURE

Enclosure: 5

Location: PETCH AVE. & TWEEDHILL AVE., CALEDON, ON.



Remarks: -Upon completion of drilling, the borehole was open and water level was measured at 7.5 m below EGSL.
 -On Jan. 20, 2025, the water level in the installed well was measured at 3.83 m below EGSL.

Drill Method: CME 55 - SOLID

Drill Date: 14 JAN. 2025

Datum: GEODETIC

Engineer: P.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7460

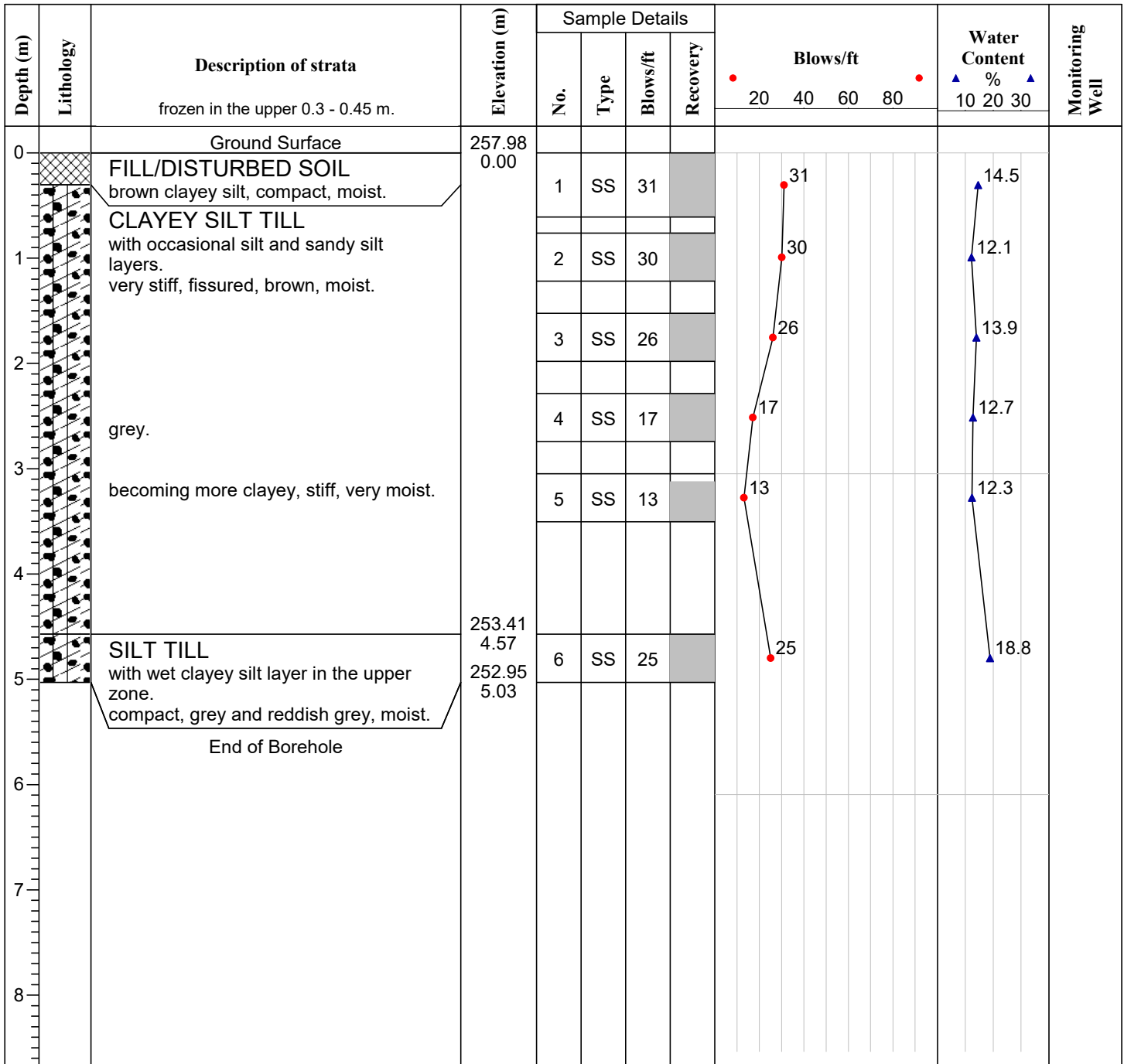
Log of Borehole BH-5

Project: PROPOSED MAYFIELD WEST #2 PUBLIC SCHOOL

Client: PDSB c/o HOSSACK ARCHITECTURE

Enclosure: 6

Location: PETCH AVE. & TWEEDHILL AVE., CALEDON, ON.

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

Drill Method: CME 55 - SOLID

Drill Date: 13 JAN. 2025

Datum: GEODETIC

Engineer: P.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7460

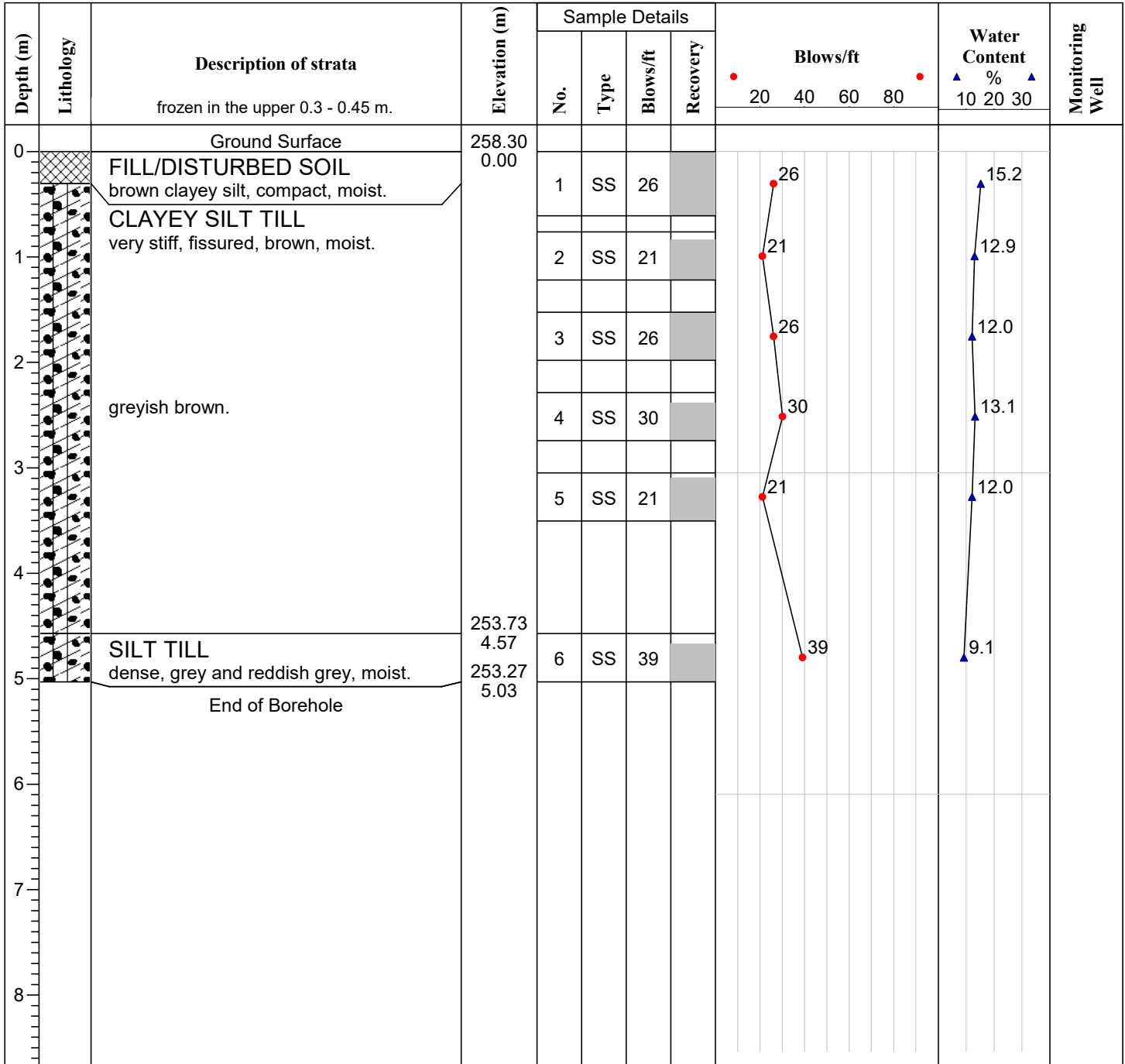
Log of Borehole BH-6

Project: PROPOSED MAYFIELD WEST #2 PUBLIC SCHOOL

Client: PDSB c/o HOSSACK ARCHITECTURE

Enclosure: 7

Location: PETCH AVE. & TWEEDHILL AVE., CALEDON, ON.

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

Drill Method: CME 55 - SOLID

Drill Date: 13 JAN. 2025

Datum: GEODETIC

Engineer: P.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7460

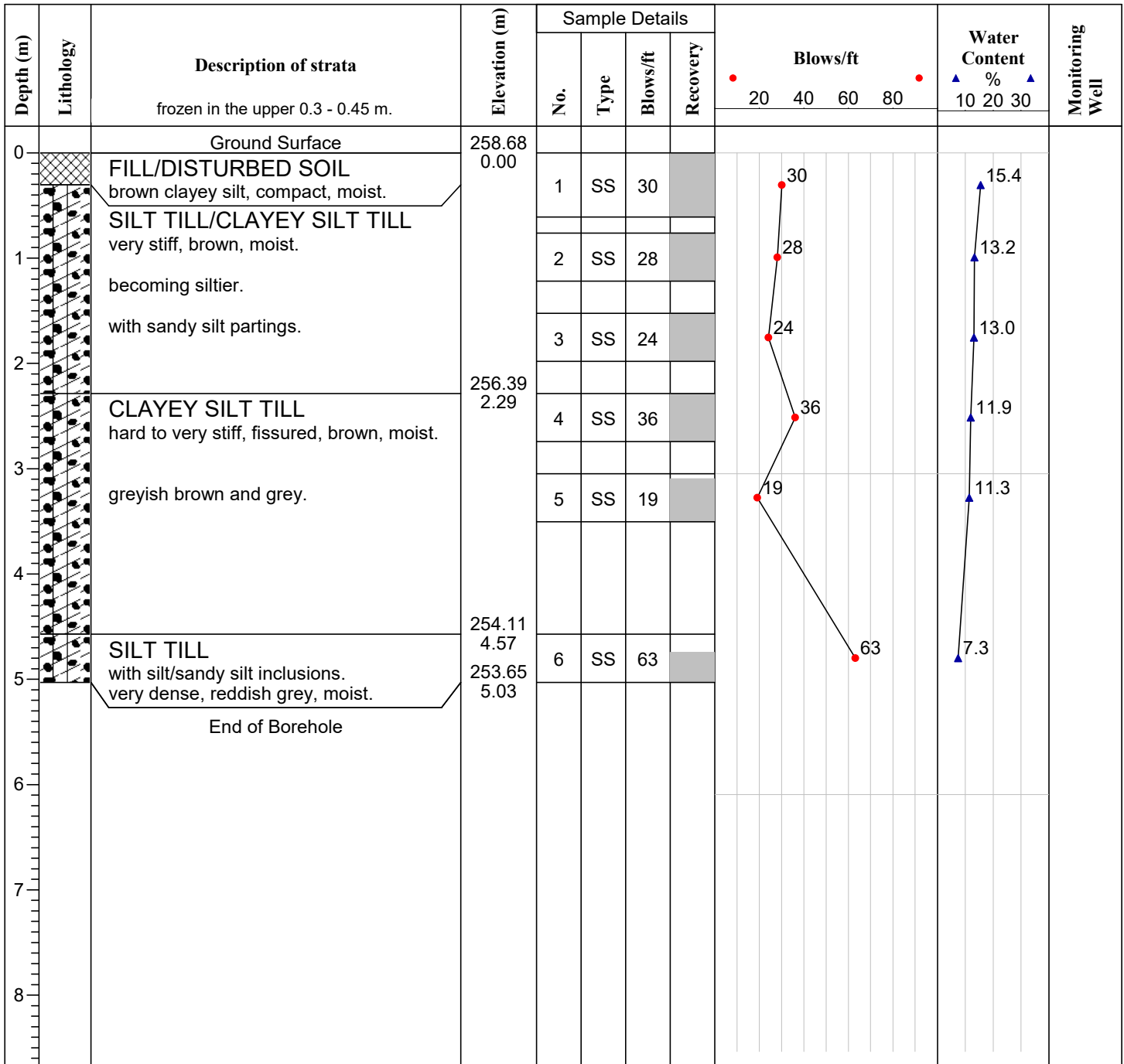
Log of Borehole BH-7

Project: PROPOSED MAYFIELD WEST #2 PUBLIC SCHOOL

Client: PDSB c/o HOSSACK ARCHITECTURE

Enclosure: 8

Location: PETCH AVE. & TWEEDHILL AVE., CALEDON, ON.

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

Drill Method: CME 55 - SOLID

Drill Date: 14 JAN. 2025

Datum: GEODETIC

Engineer: P.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7460

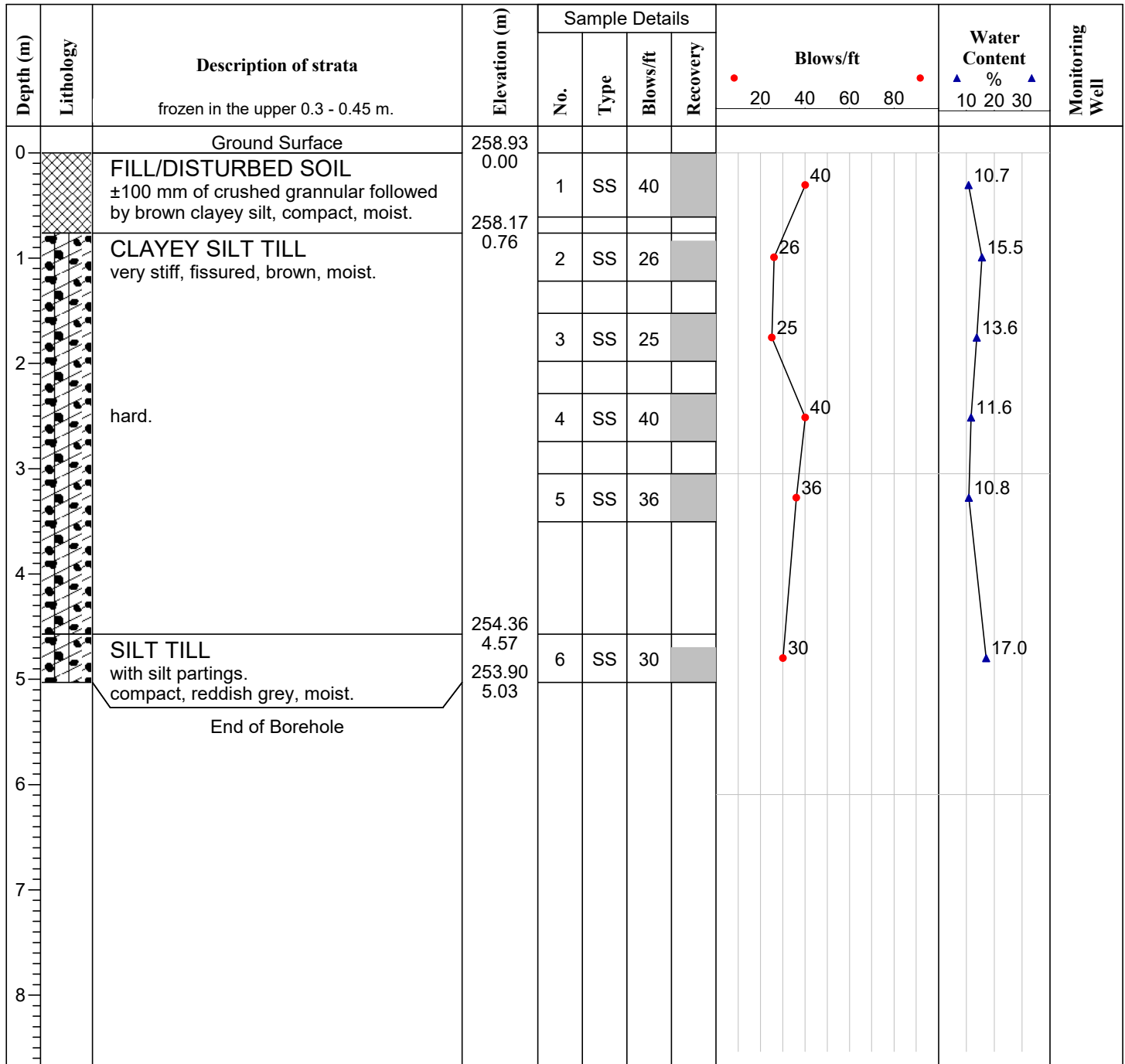
Log of Borehole BH-8

Project: PROPOSED MAYFIELD WEST #2 PUBLIC SCHOOL

Client: PDSB c/o HOSSACK ARCHITECTURE

Enclosure: 9

Location: PETCH AVE. & TWEEDHILL AVE., CALEDON, ON.



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

Drill Method: CME 55 - SOLID

Drill Date: 14 JAN. 2025

Datum: GEODETIC

Engineer: P.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7460

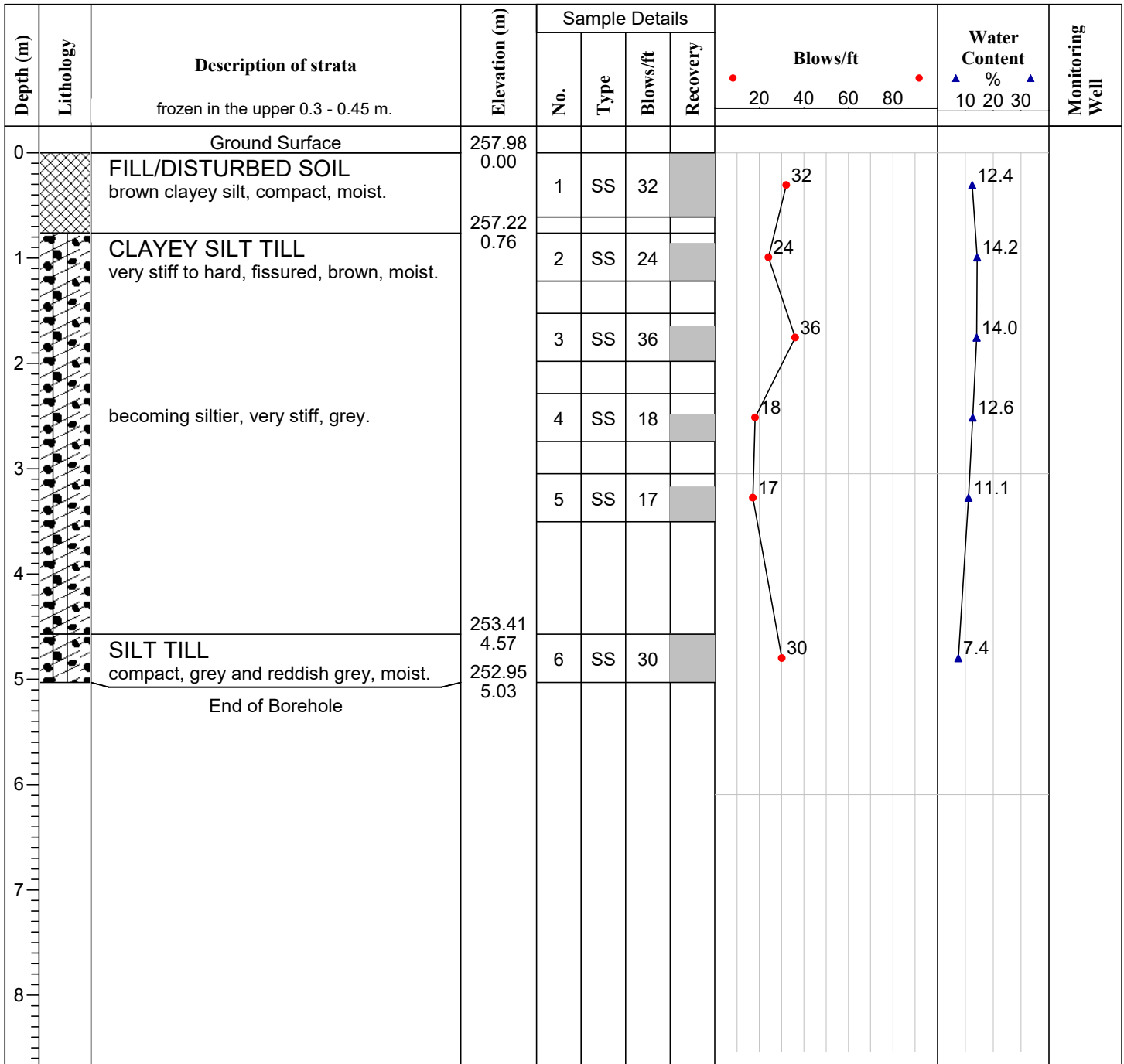
Log of Borehole BH-9

Project: PROPOSED MAYFIELD WEST #2 PUBLIC SCHOOL

Client: PDSB c/o HOSSACK ARCHITECTURE

Enclosure: 10

Location: PETCH AVE. & TWEEDHILL AVE., CALEDON, ON.

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

Drill Method: CME 55 - SOLID

Drill Date: 13 JAN. 2025

Datum: GEODETIC

Engineer: P.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7460

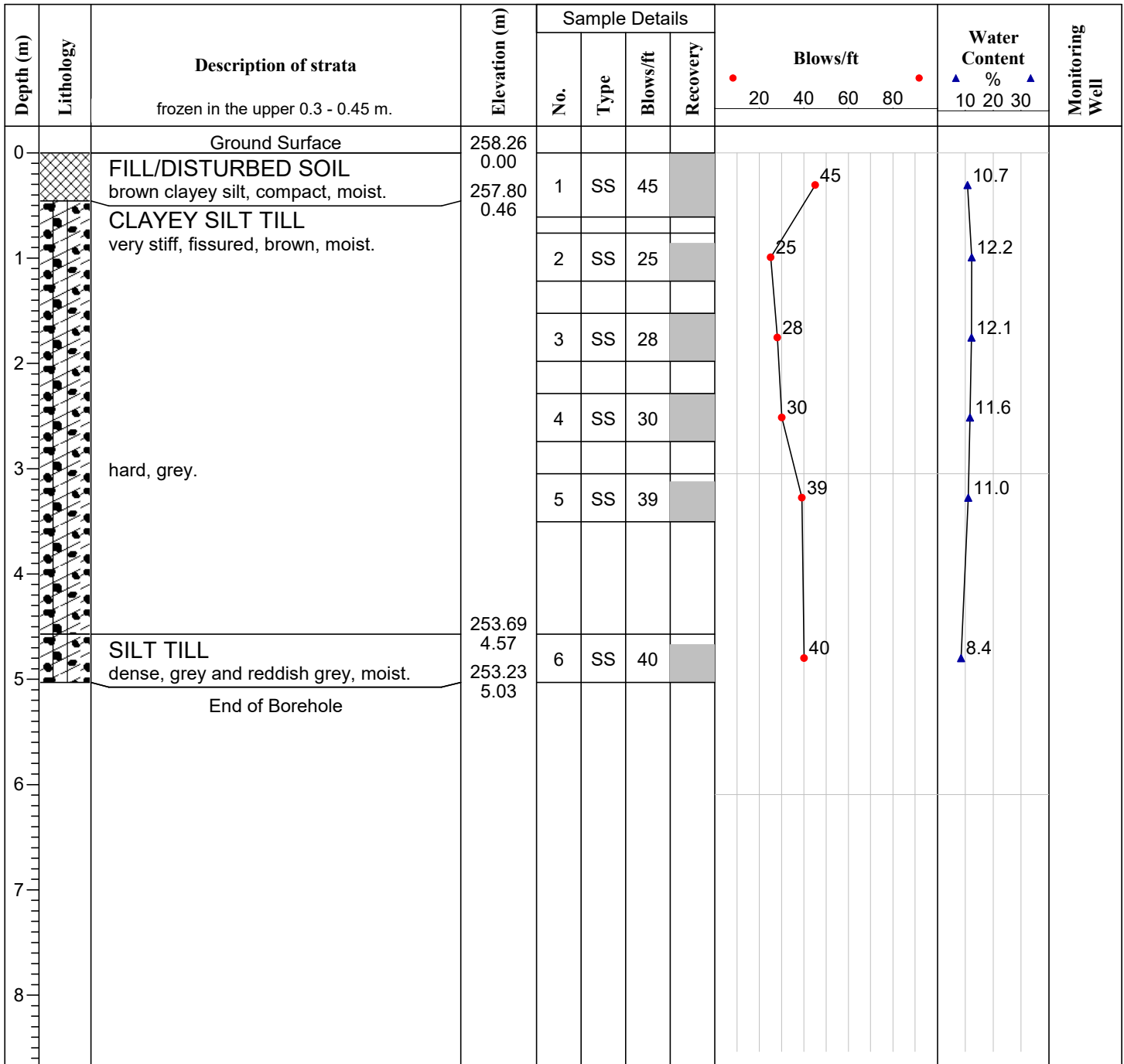
Log of Borehole BH-10

Project: PROPOSED MAYFIELD WEST #2 PUBLIC SCHOOL

Client: PDSB c/o HOSSACK ARCHITECTURE

Enclosure: 11

Location: PETCH AVE. & TWEEDHILL AVE., CALEDON, ON.

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

Drill Method: CME 55 - SOLID

Drill Date: 13 JAN. 2025

Datum: GEODETIC

Engineer: P.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7460

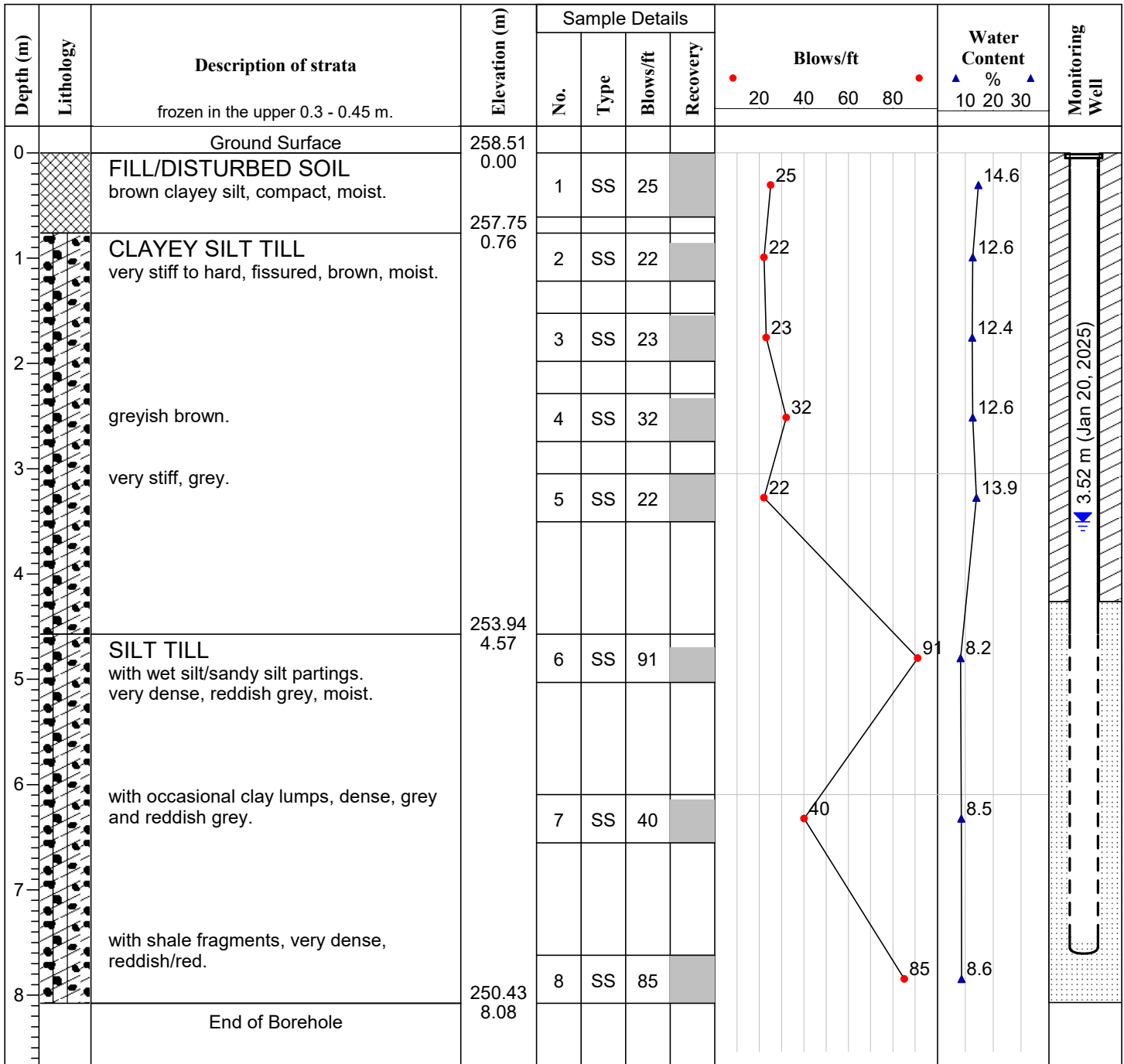
Log of Borehole BH/MW-11

Project: PROPOSED MAYFIELD WEST #2 PUBLIC SCHOOL

Client: PDSB c/o HOSSACK ARCHITECTURE

Enclosure: 12

Location: PETCH AVE. & TWEEDHILL AVE., CALEDON, ON.



Remarks: -Upon completion of drilling, the borehole was open and water level was measured at 7.3 m below EGSL.
 -On Jan. 20, 2025, the water level in the installed well was measured at 3.52 m below EGSL.

Drill Method: CME 55 - SOLID

Drill Date: 15 JAN. 2025

Datum: GEODETIC

Engineer: P.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7460

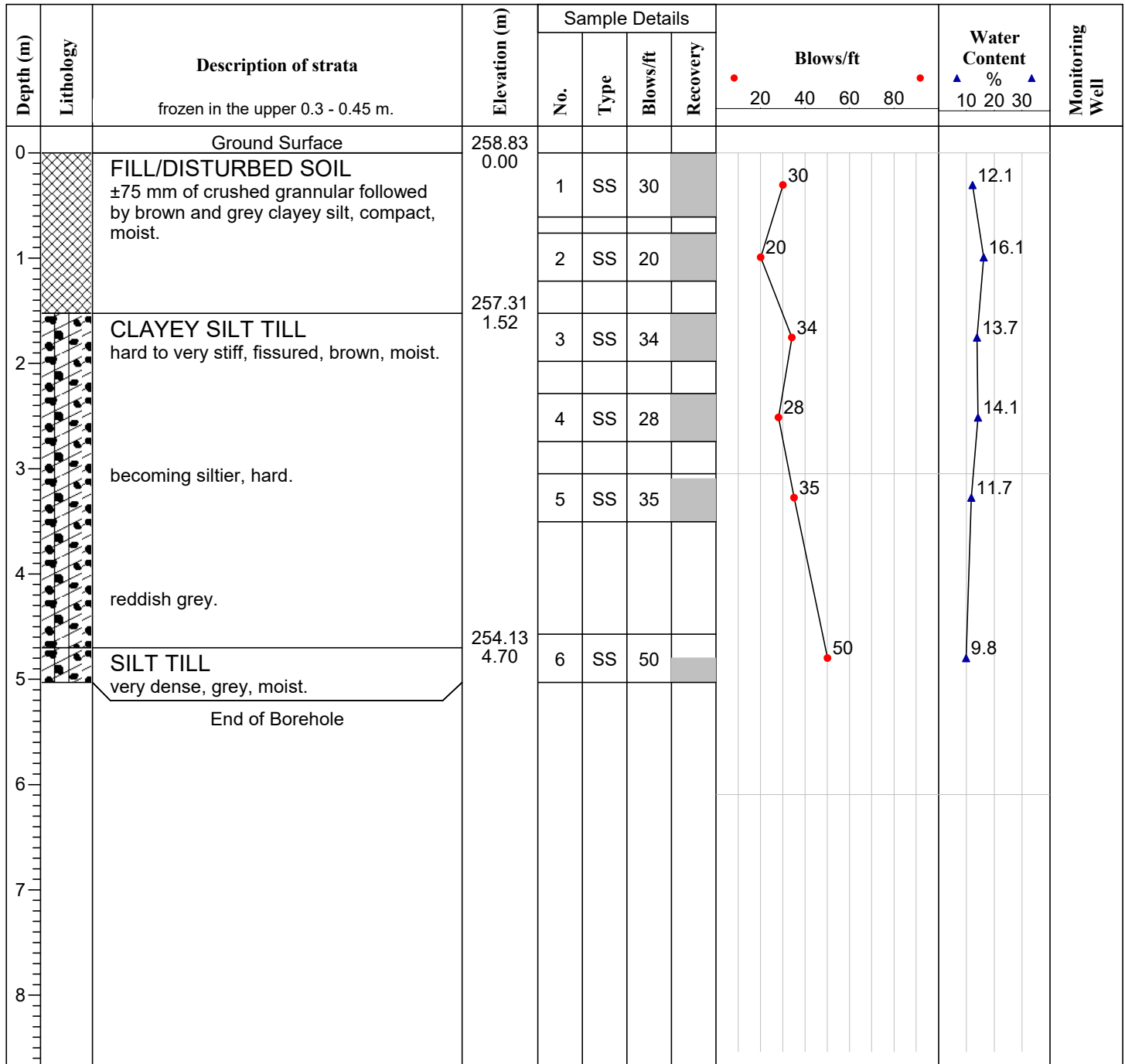
Log of Borehole BH-12

Project: PROPOSED MAYFIELD WEST #2 PUBLIC SCHOOL

Client: PDSB c/o HOSSACK ARCHITECTURE

Enclosure: 13

Location: PETCH AVE. & TWEEDHILL AVE., CALEDON, ON.

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

Drill Method: CME 55 - SOLID

Drill Date: 14 JAN. 2025

Datum: GEODETIC

Engineer: P.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7460

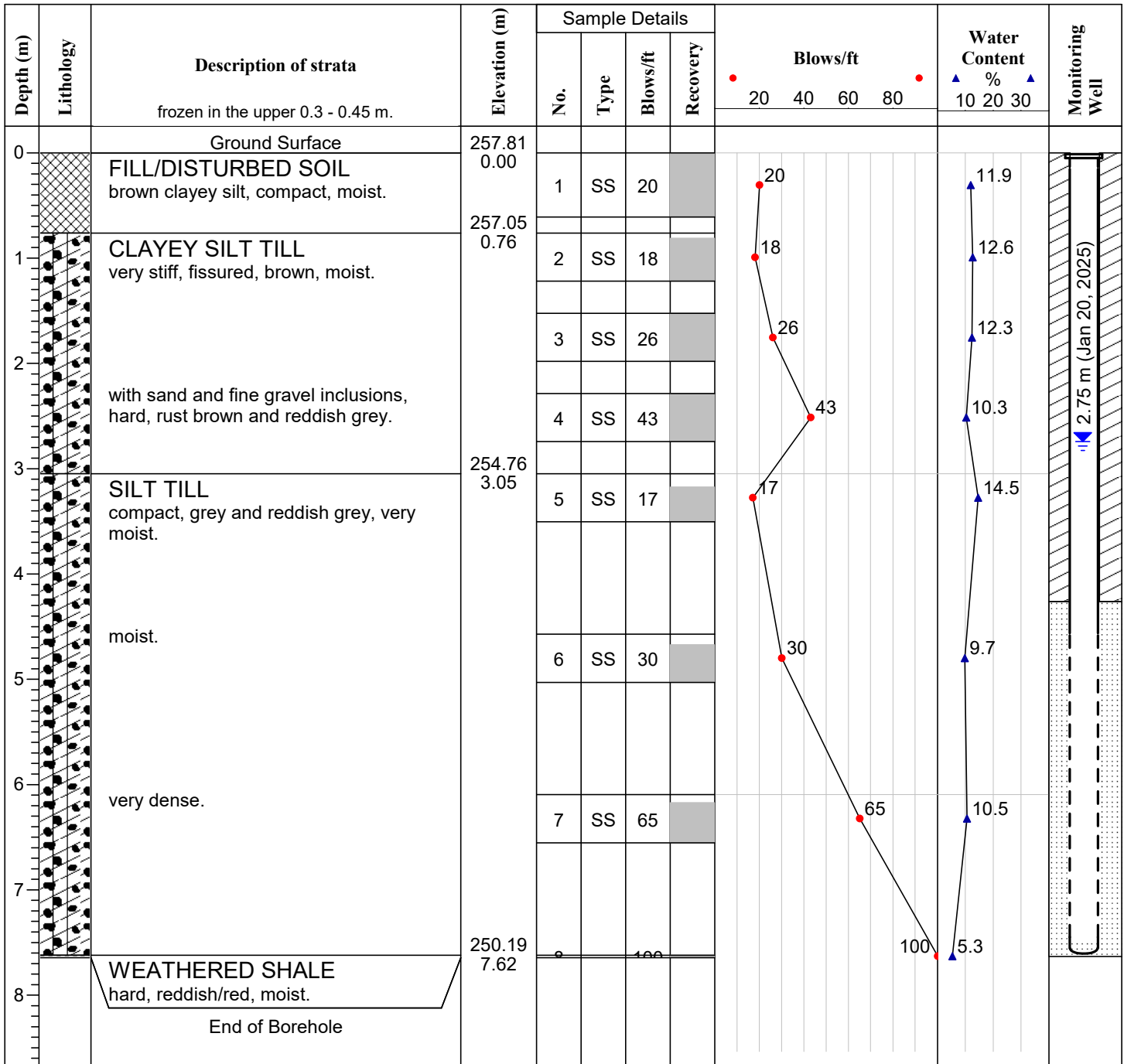
Log of Borehole BH/MW-13

Project: PROPOSED MAYFIELD WEST #2 PUBLIC SCHOOL

Client: PDSB c/o HOSSACK ARCHITECTURE

Enclosure: 14

Location: PETCH AVE. & TWEEDHILL AVE., CALEDON, ON.



Remarks: -Upon completion of drilling, the borehole was open and water level was measured at 7.3 m below EGSL.
 -On Jan. 20, 2025, the water level in the installed well was measured at 2.75 m below EGSL.

Drill Method: CME 55 - SOLID

Drill Date: 13 JAN. 2025

Datum: GEODETIC

Engineer: P.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7460

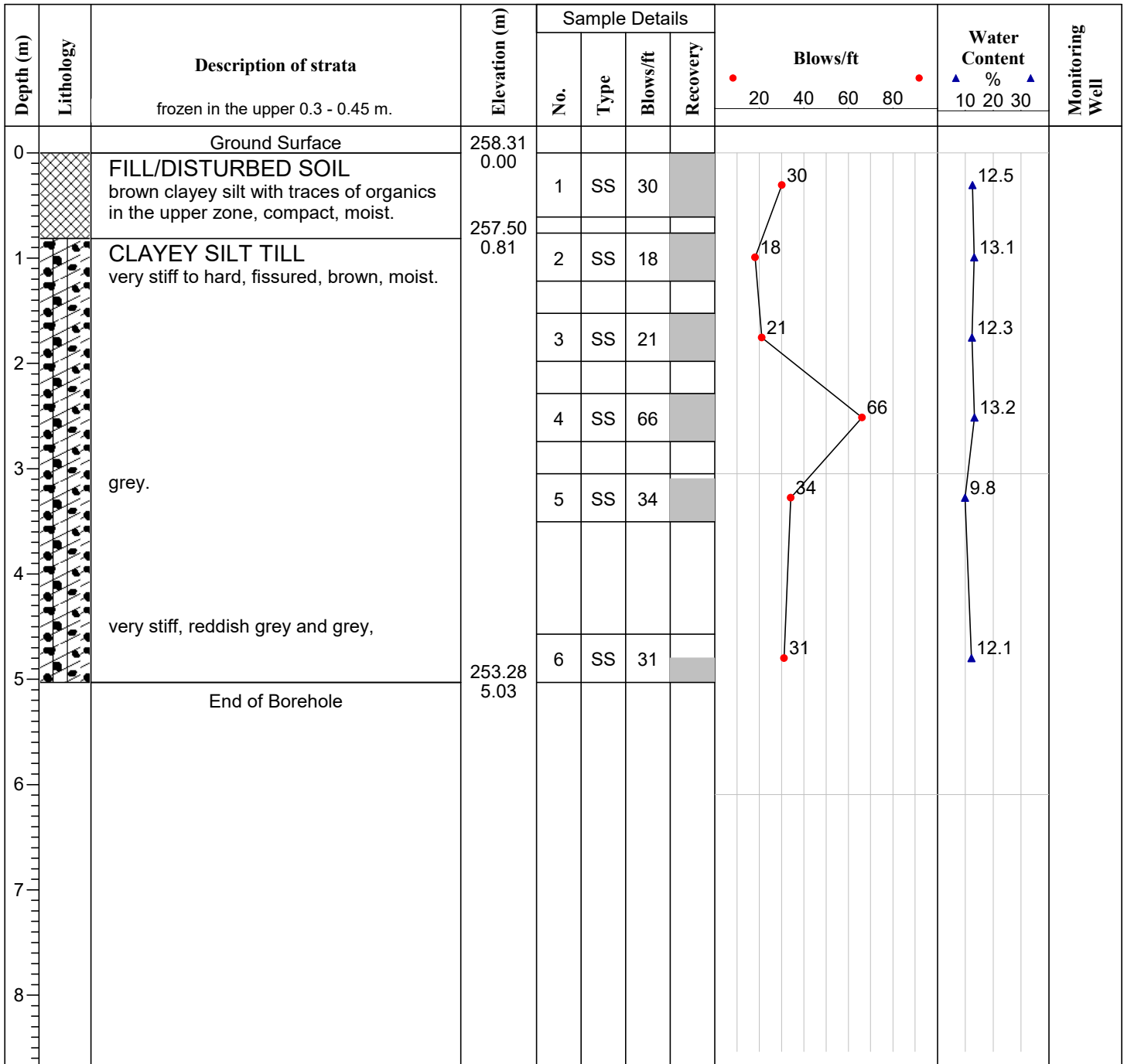
Log of Borehole BH-14

Project: PROPOSED MAYFIELD WEST #2 PUBLIC SCHOOL

Client: PDSB c/o HOSSACK ARCHITECTURE

Enclosure: 15

Location: PETCH AVE. & TWEEDHILL AVE., CALEDON, ON.

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

Drill Method: CME 55 - SOLID

Drill Date: 13 JAN. 2025

Datum: GEODETIC

Engineer: P.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7460

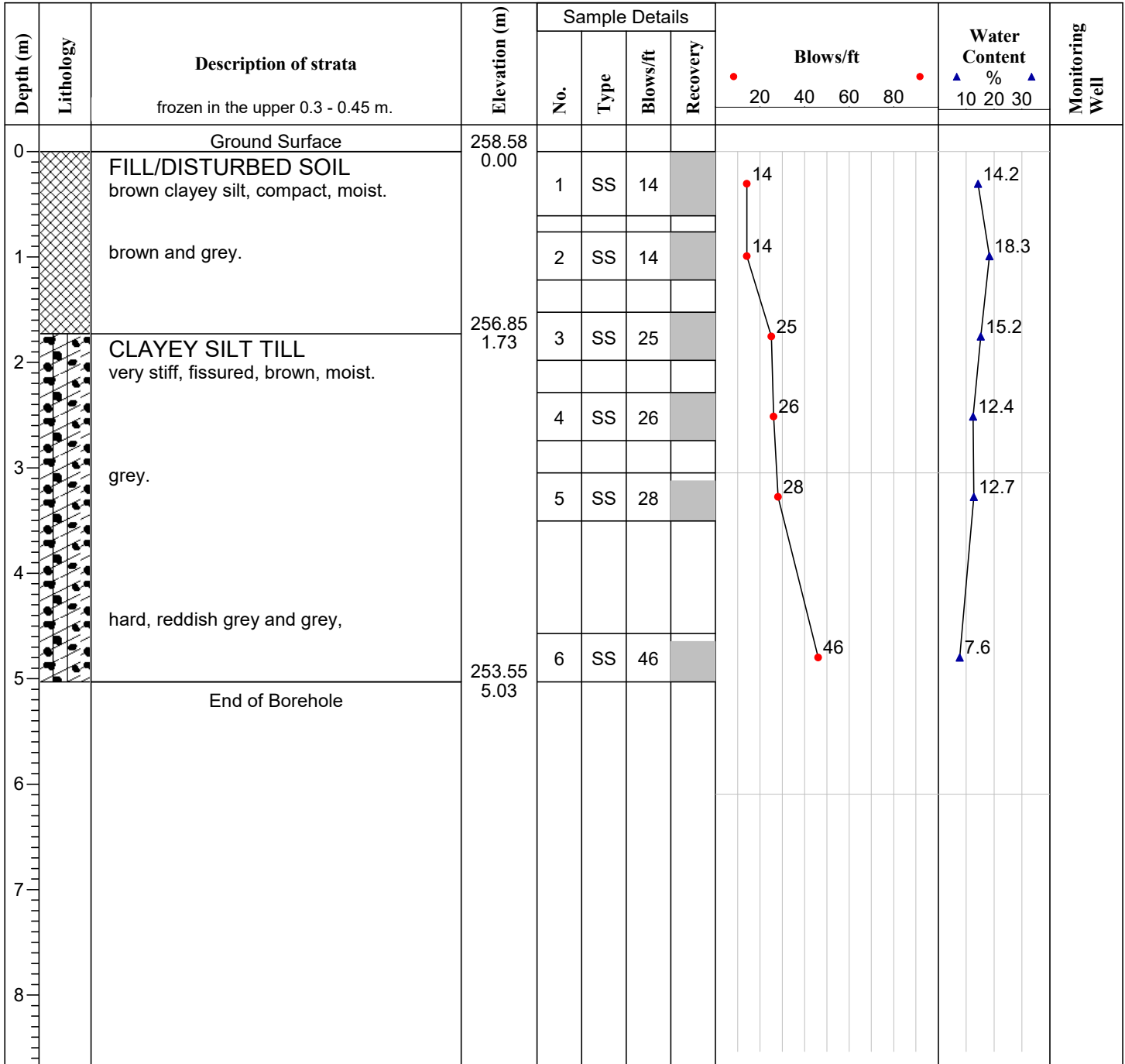
Log of Borehole BH-15

Project: PROPOSED MAYFIELD WEST #2 PUBLIC SCHOOL

Client: PDSB c/o HOSSACK ARCHITECTURE

Enclosure: 16

Location: PETCH AVE. & TWEEDHILL AVE., CALEDON, ON.

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

Drill Method: CME 55 - SOLID

Drill Date: 14 JAN. 2025

Datum: GEODETIC

Engineer: P.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7460

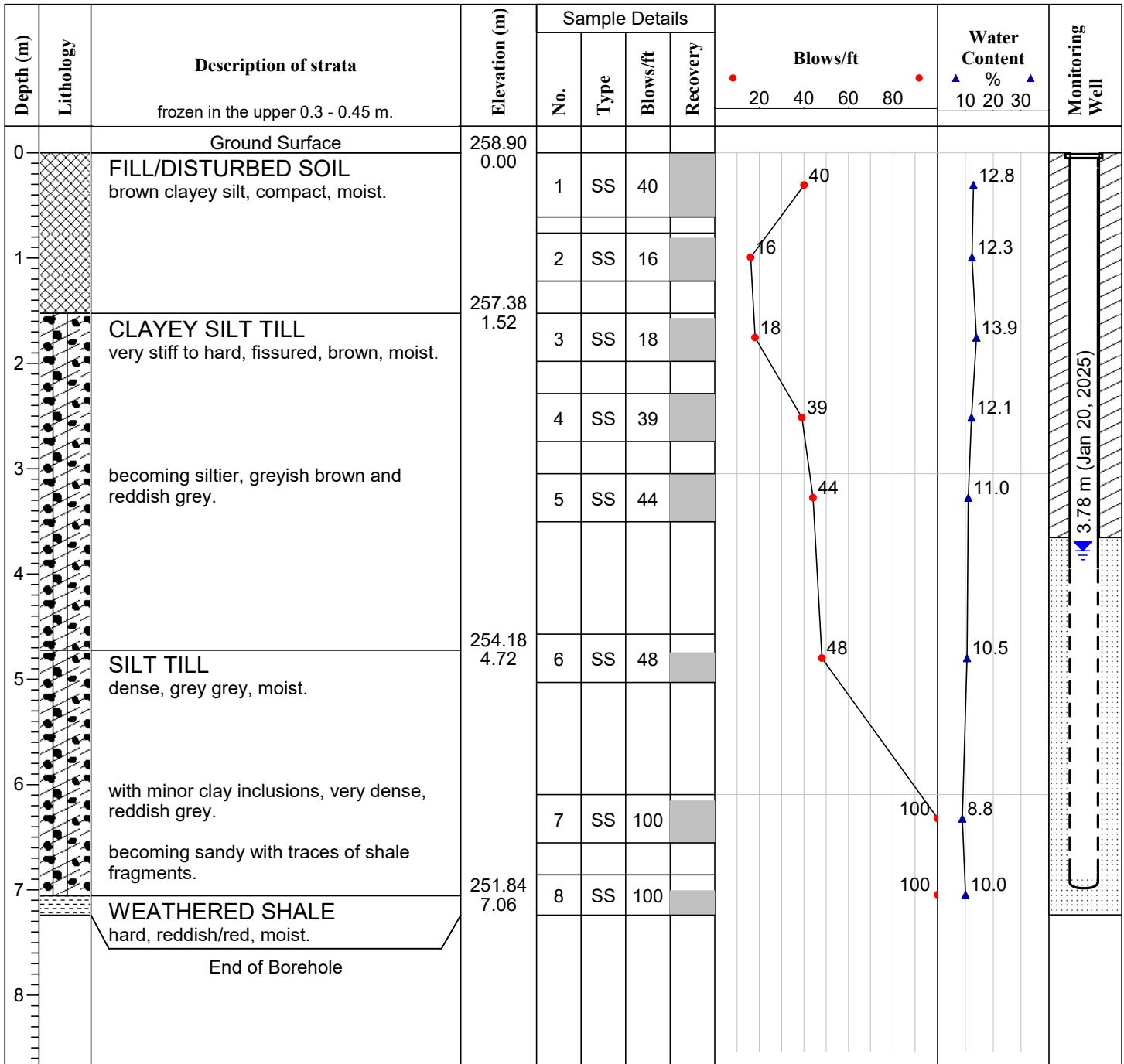
Log of Borehole BH/MW-16

Project: PROPOSED MAYFIELD WEST #2 PUBLIC SCHOOL

Client: PDSB c/o HOSSACK ARCHITECTURE

Enclosure: 17

Location: PETCH AVE. & TWEEDHILL AVE., CALEDON, ON.

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

-On Jan. 20, 2025, the water level in the installed well was measured at 3.78 m below EGSL.

Drill Method: CME 55 - SOLID

Drill Date: 14 JAN. 2025

Datum: GEODETIC

Engineer: P.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7460

Log of Borehole BH-17

Project: PROPOSED MAYFIELD WEST #2 PUBLIC SCHOOL

Client: PDSB c/o HOSSACK ARCHITECTURE

Enclosure: 18

Location: PETCH AVE. & TWEEDHILL AVE., CALEDON, ON.

Depth (m)	Lithology	Description of strata	Elevation (m)	Sample Details				Blows/ft	Water Content %	Monitoring Well
				No.	Type	Blows/ft	Recovery			
		frozen in the upper 0.3 - 0.45 m.								
0		Ground Surface	259.13							
		FILL/DISTURBED SOIL	0.00	1	SS	28		28	13.1	
		brown and grey clayey silt, compact, moist.								
1			257.96	2	SS	23		23	16.8	
		CLAYEY SILT TILL	1.17							
		very stiff, fissured, brown, moist.								
2				3	SS	25		25	14.8	
3				4	SS	24		24	13.3	
		greyish brown,								
			255.62	5	SS	31		31	11.7	
		End of Borehole	3.51							
4										
5										
6										
7										
8										

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

Drill Method: CME 55 - SOLID

Drill Date: 15 JAN. 2025

Datum: GEODETIC

Engineer: P.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7460

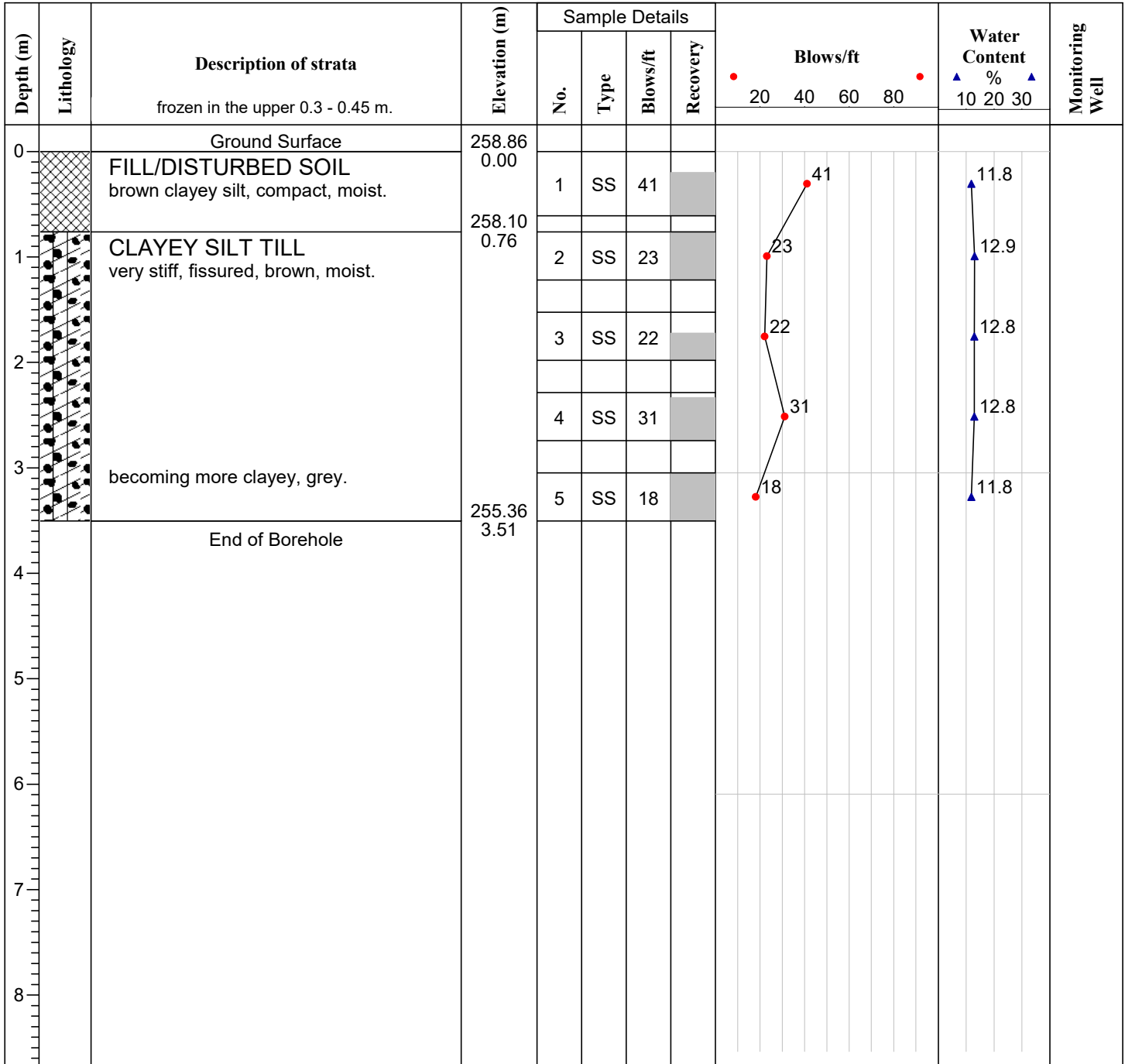
Log of Borehole BH-18

Project: PROPOSED MAYFIELD WEST #2 PUBLIC SCHOOL

Client: PDSB c/o HOSSACK ARCHITECTURE

Enclosure: 19

Location: PETCH AVE. & TWEEDHILL AVE., CALEDON, ON.

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

Drill Method: CME 55 - SOLID

Drill Date: 15 JAN. 2025

Datum: GEODETIC

Engineer: P.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7460

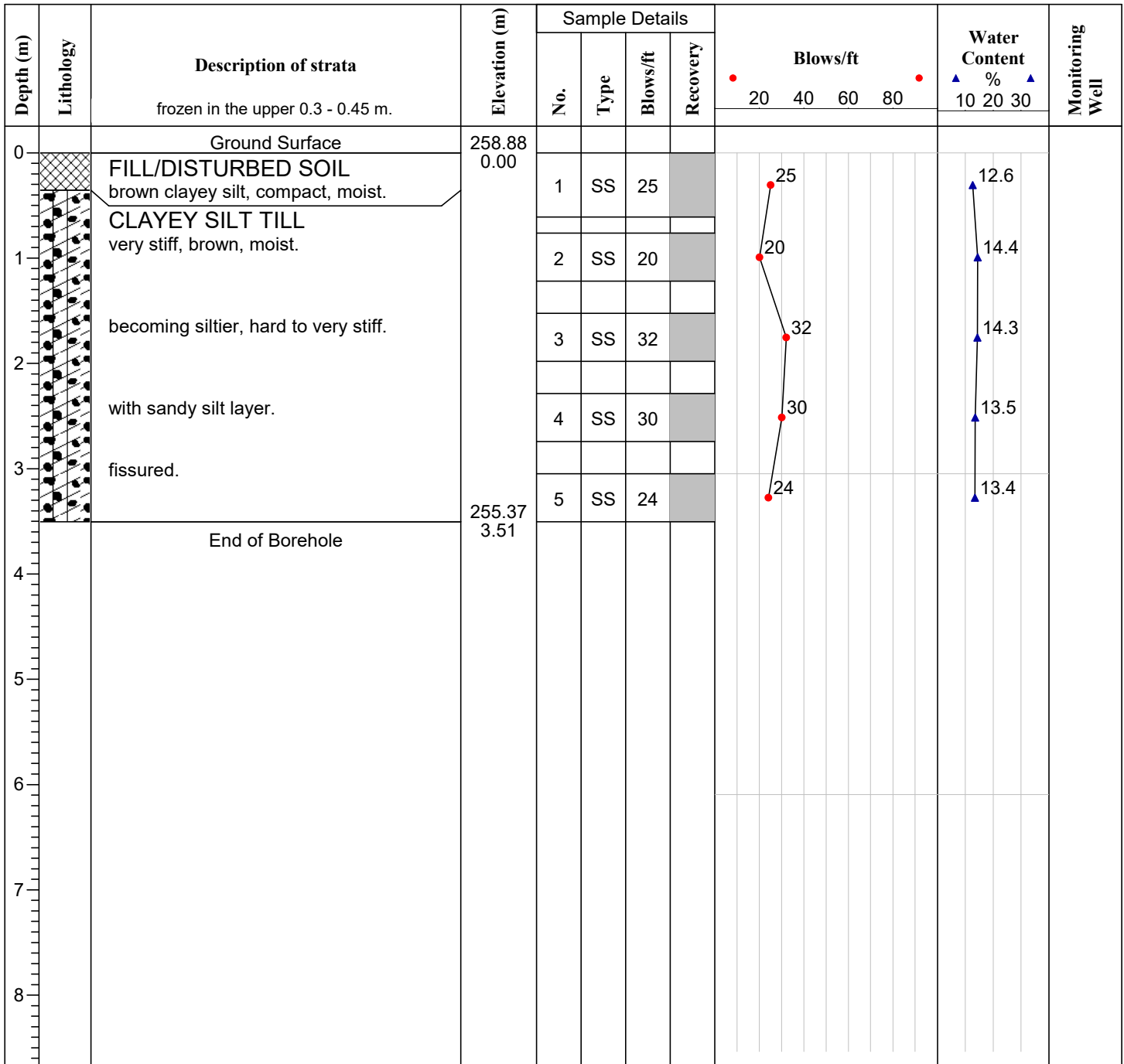
Log of Borehole BH-19

Project: PROPOSED MAYFIELD WEST #2 PUBLIC SCHOOL

Client: PDSB c/o HOSSACK ARCHITECTURE

Enclosure: 20

Location: PETCH AVE. & TWEEDHILL AVE., CALEDON, ON.

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

Drill Method: CME 55 - SOLID

Drill Date: 14 JAN. 2025

Datum: GEODETIC

Engineer: P.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7460

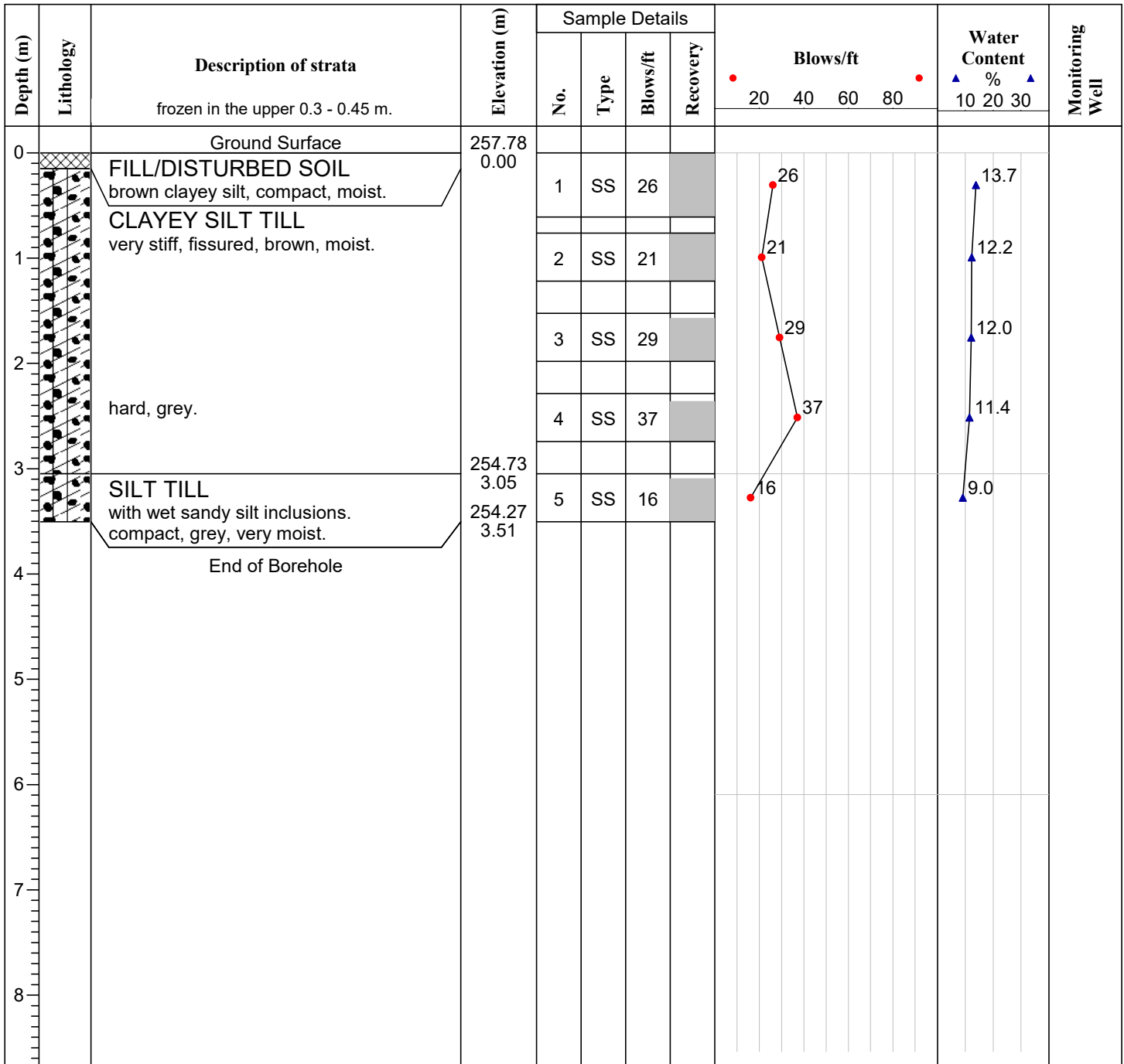
Log of Borehole BH-20

Project: PROPOSED MAYFIELD WEST #2 PUBLIC SCHOOL

Client: PDSB c/o HOSSACK ARCHITECTURE

Enclosure: 21

Location: PETCH AVE. & TWEEDHILL AVE., CALEDON, ON.

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

Drill Method: CME 55 - SOLID

Drill Date: 15 JAN. 2025

Datum: GEODETIC

Engineer: P.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7460

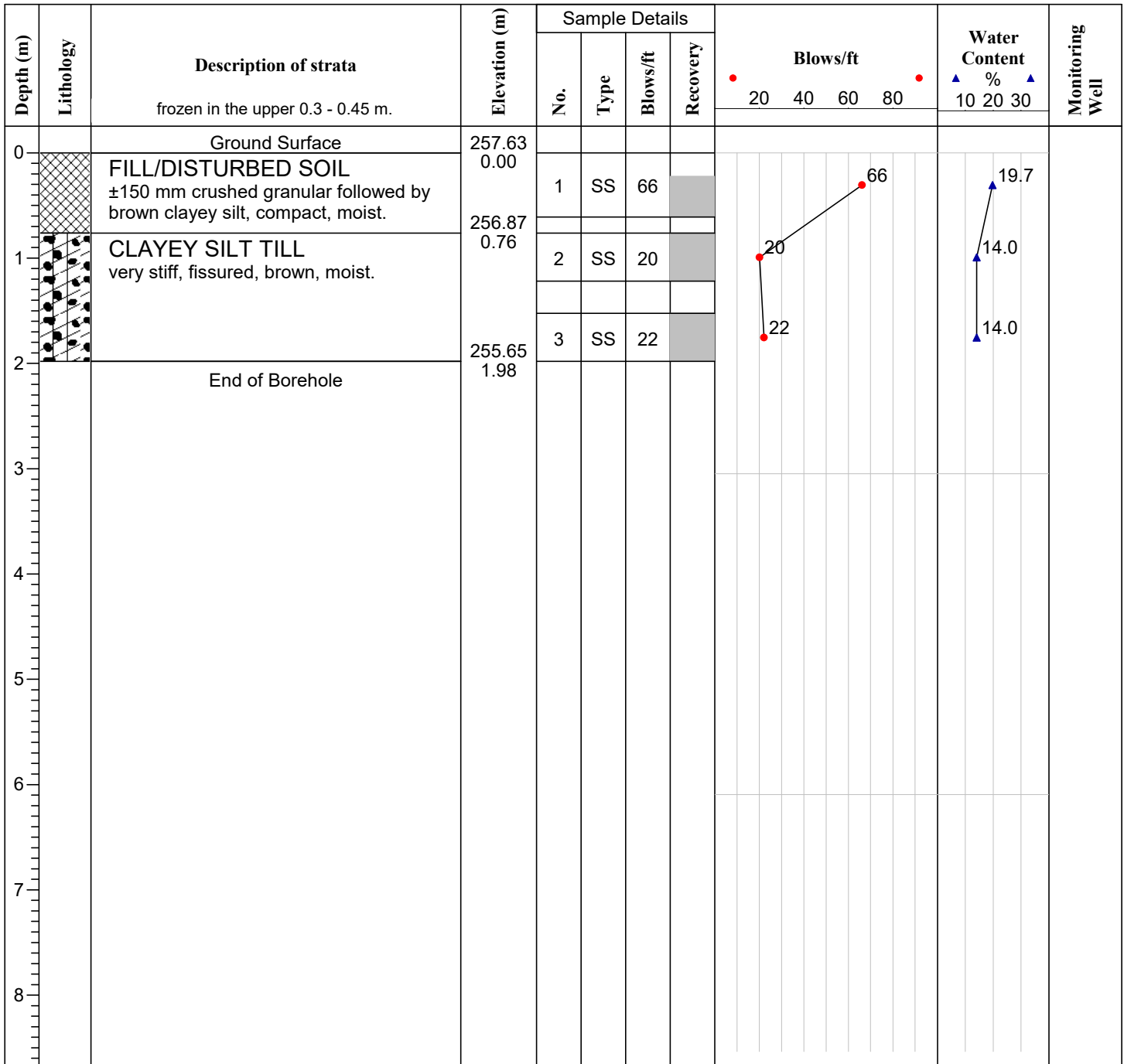
Log of Borehole BH-21

Project: PROPOSED MAYFIELD WEST #2 PUBLIC SCHOOL

Client: PDSB c/o HOSSACK ARCHITECTURE

Enclosure: 22

Location: PETCH AVE. & TWEEDHILL AVE., CALEDON, ON.

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

Drill Method: CME 55 - SOLID

Drill Date: 15 JAN. 2025

Datum: GEODETIC

Engineer: P.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7460

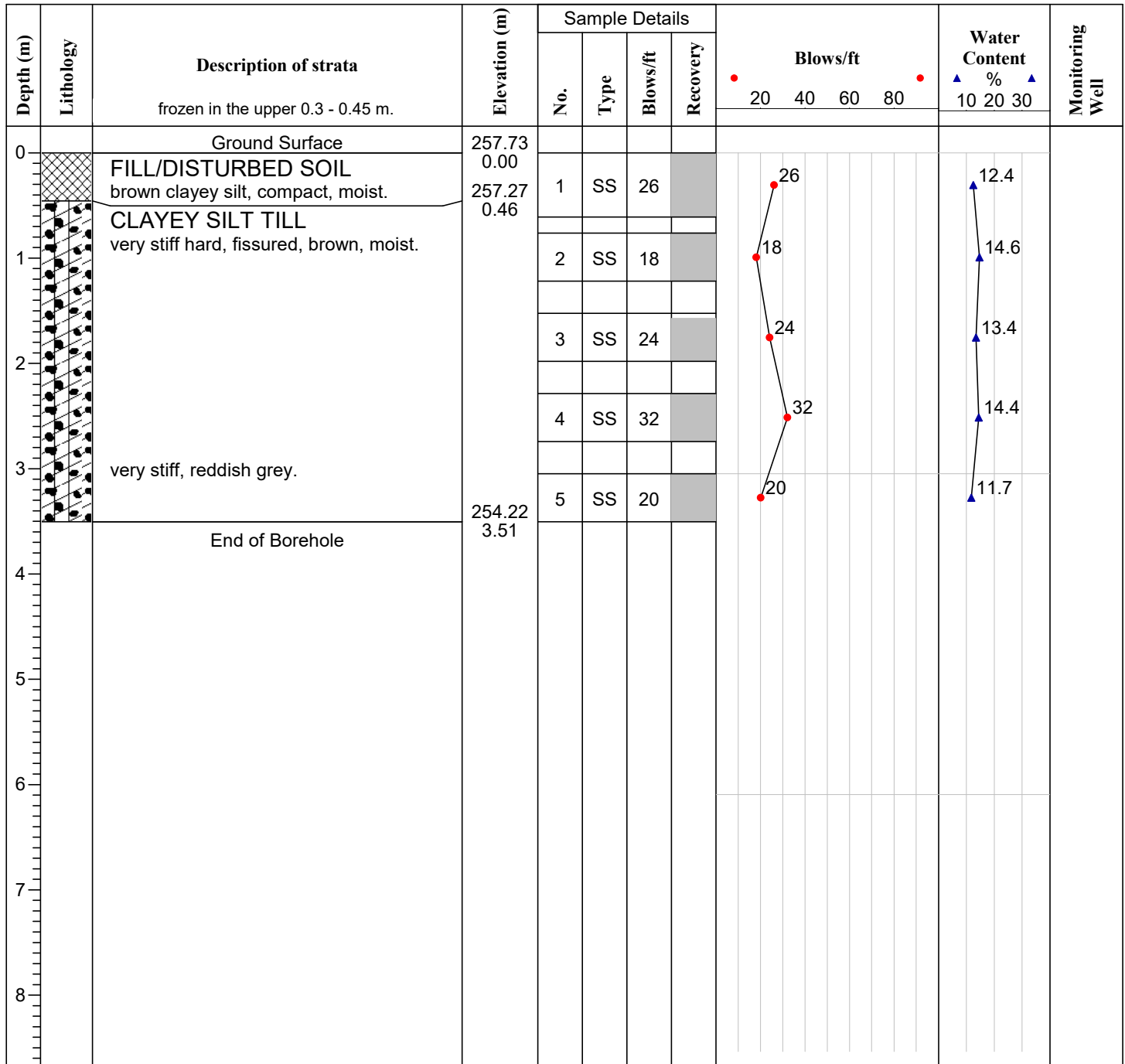
Log of Borehole BH-22

Project: PROPOSED MAYFIELD WEST #2 PUBLIC SCHOOL

Client: PDSB c/o HOSSACK ARCHITECTURE

Enclosure: 23

Location: PETCH AVE. & TWEEDHILL AVE., CALEDON, ON.

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

Drill Method: CME 55 - SOLID

Drill Date: 15 JAN. 2025

Datum: GEODETIC

Engineer: P.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7460

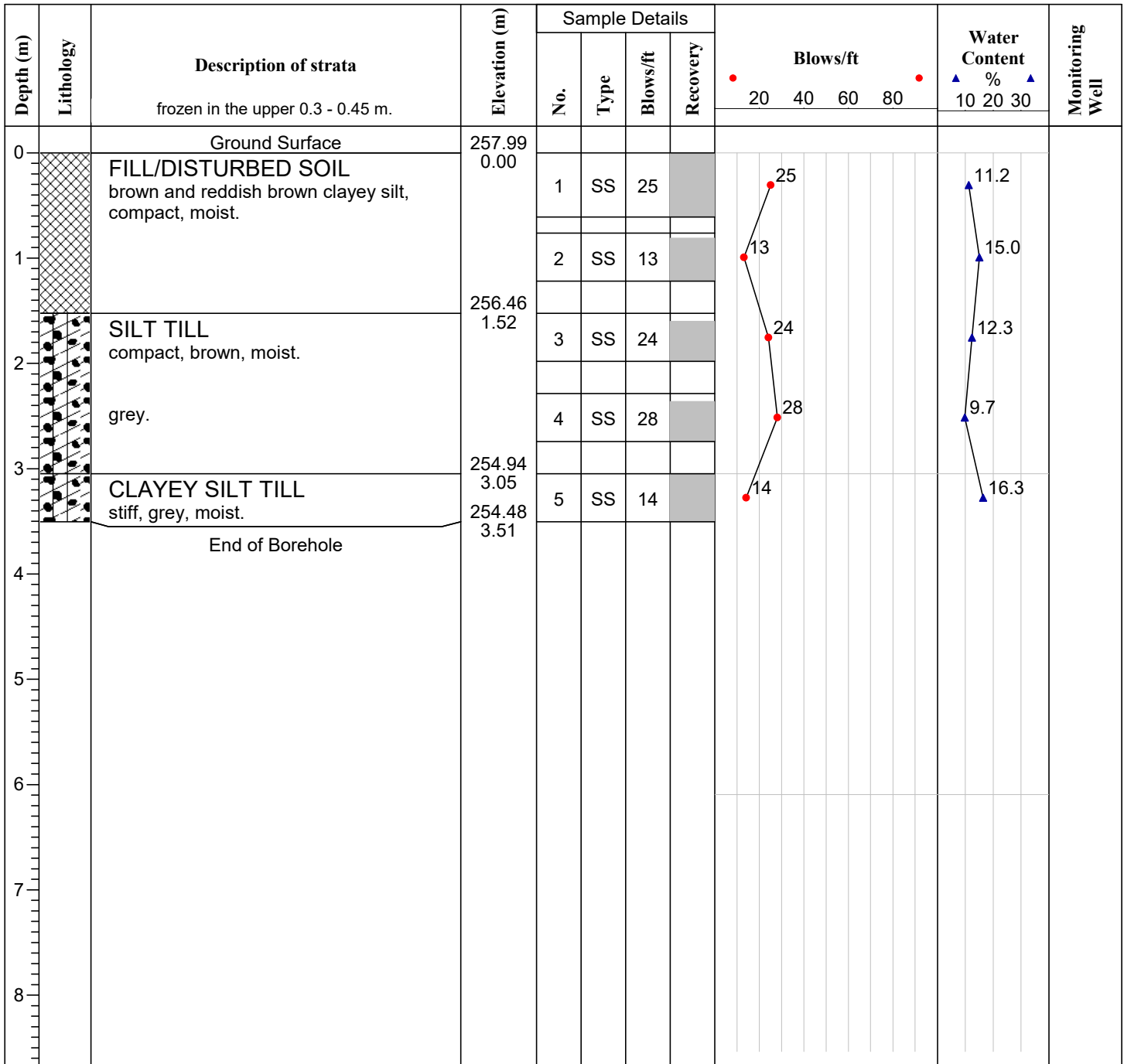
Log of Borehole BH-23

Project: PROPOSED MAYFIELD WEST #2 PUBLIC SCHOOL

Client: PDSB c/o HOSSACK ARCHITECTURE

Enclosure: 24

Location: PETCH AVE. & TWEEDHILL AVE., CALEDON, ON.

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

Drill Method: CME 55 - SOLID

Drill Date: 16 JAN. 2025

Datum: GEODETIC

Engineer: P.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7460

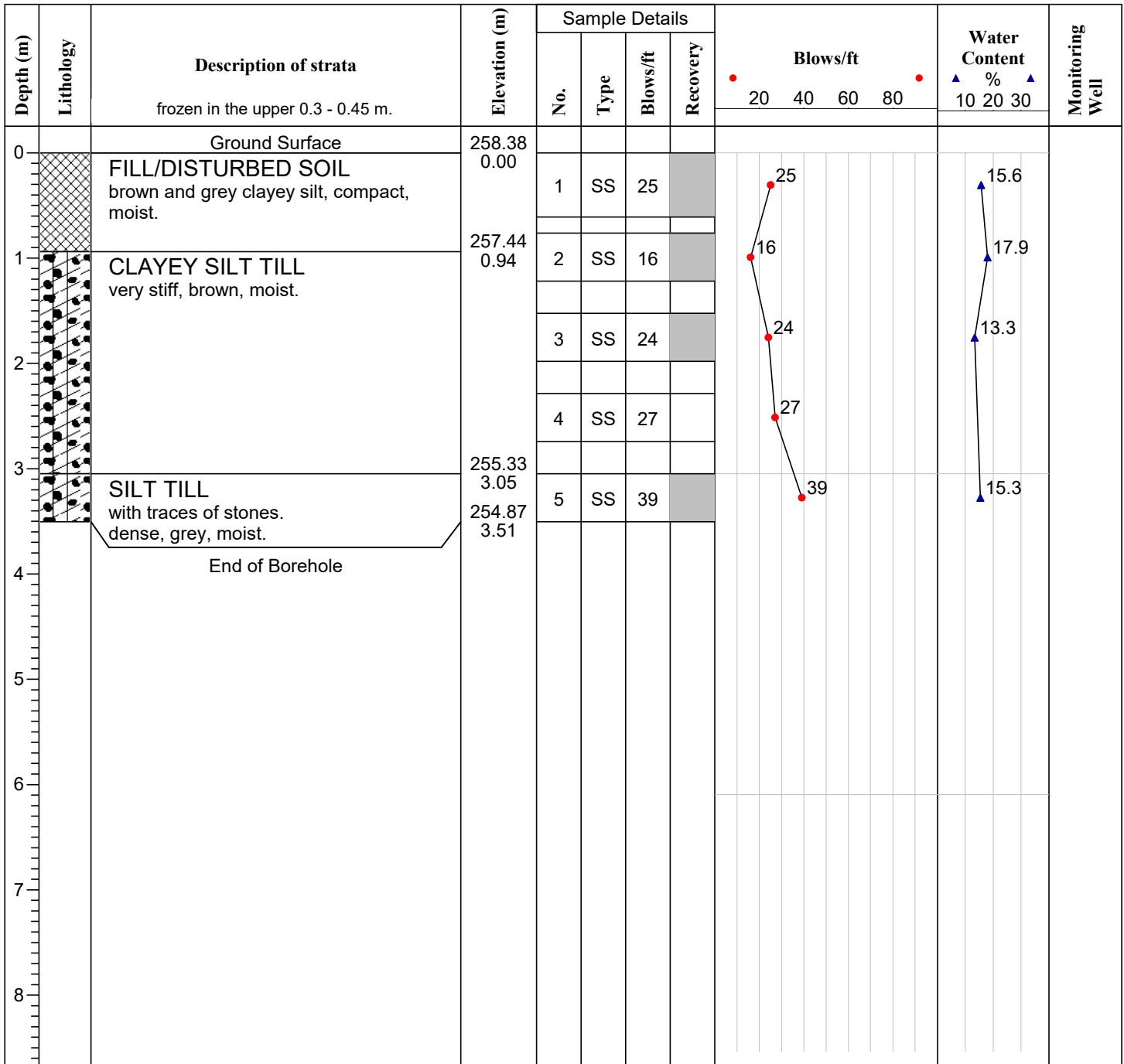
Log of Borehole BH-24

Project: PROPOSED MAYFIELD WEST #2 PUBLIC SCHOOL

Client: PDSB c/o HOSSACK ARCHITECTURE

Enclosure: 25

Location: PETCH AVE. & TWEEDHILL AVE., CALEDON, ON.

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

Drill Method: CME 55 - SOLID

Drill Date: 16 JAN. 2025

Datum: GEODETIC

Engineer: P.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7460

Log of Borehole BH-25

Project: PROPOSED MAYFIELD WEST #2 PUBLIC SCHOOL

Client: PDSB c/o HOSSACK ARCHITECTURE

Enclosure: 26

Location: PETCH AVE. & TWEEDHILL AVE., CALEDON, ON.

Depth (m)	Lithology	Description of strata frozen in the upper 0.3 - 0.45 m.	Elevation (m)	Sample Details				Blows/ft 20 40 60 80	Water Content % ▲ 10 20 30 ▲	Monitoring Well
				No.	Type	Blows/ft	Recovery			
0		Ground Surface	258.44 0.00							
		FILL/DISTURBED SOIL brown clayey silt with traces to some organics in the upper ±150 mm, loose, moist.		1	SS	8		8	15.0	
1		CLAYEY SILT TILL very stiff, brown, moist. fissured.	257.68 0.76	2	SS	22		22	14.0	
2		End of Borehole	256.46 1.98	3	SS	23		23	13.1	
3										
4										
5										
6										
7										
8										

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

Drill Method: CME 55 - SOLID

Drill Date: 16 JAN. 2025

Datum: GEODETIC

Engineer: P.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7460

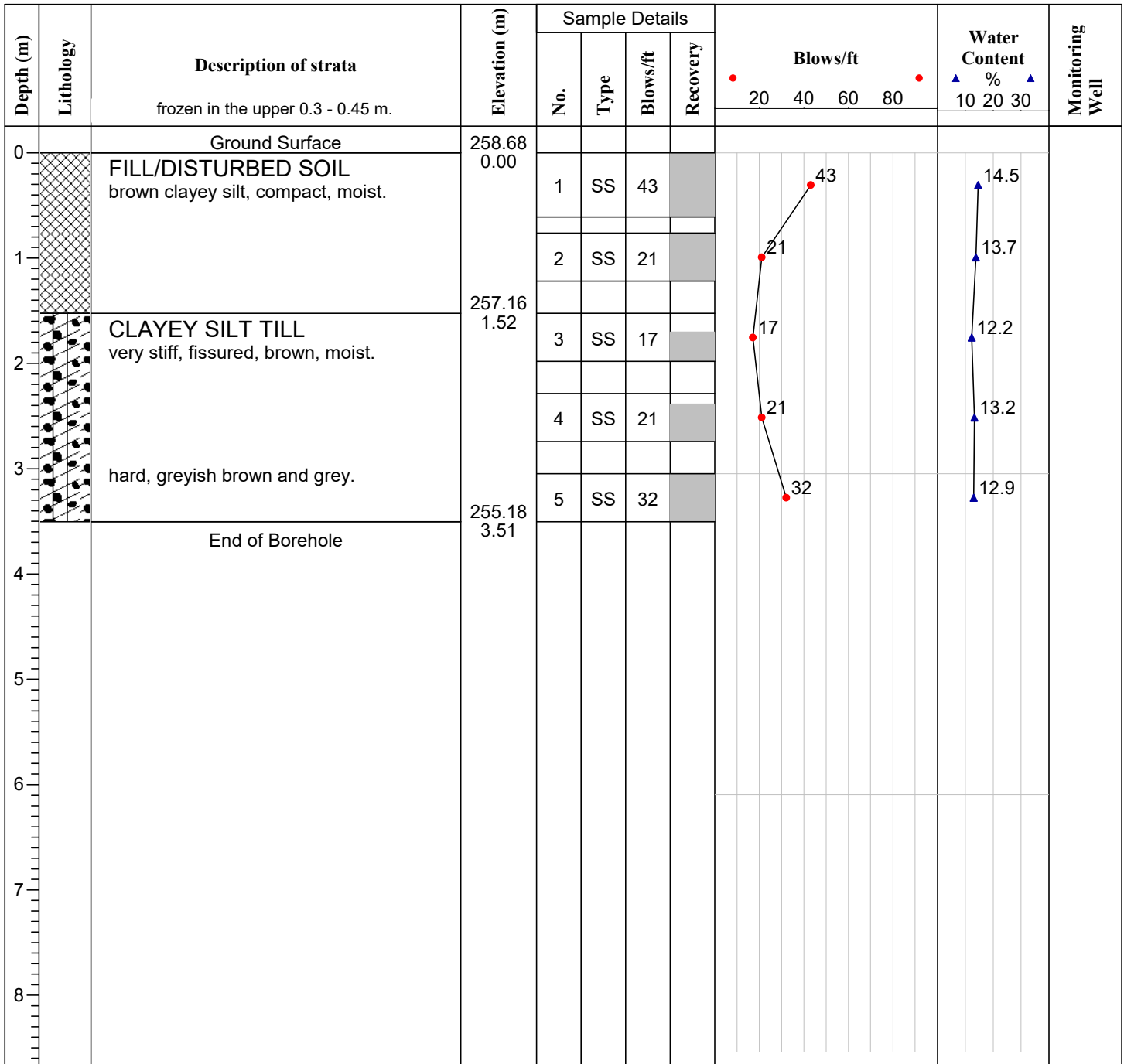
Log of Borehole BH-26

Project: PROPOSED MAYFIELD WEST #2 PUBLIC SCHOOL

Client: PDSB c/o HOSSACK ARCHITECTURE

Enclosure: 27

Location: PETCH AVE. & TWEEDHILL AVE., CALEDON, ON.

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

Drill Method: CME 55 - SOLID

Drill Date: 16 JAN. 2025

Datum: GEODETIC

Engineer: P.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7460

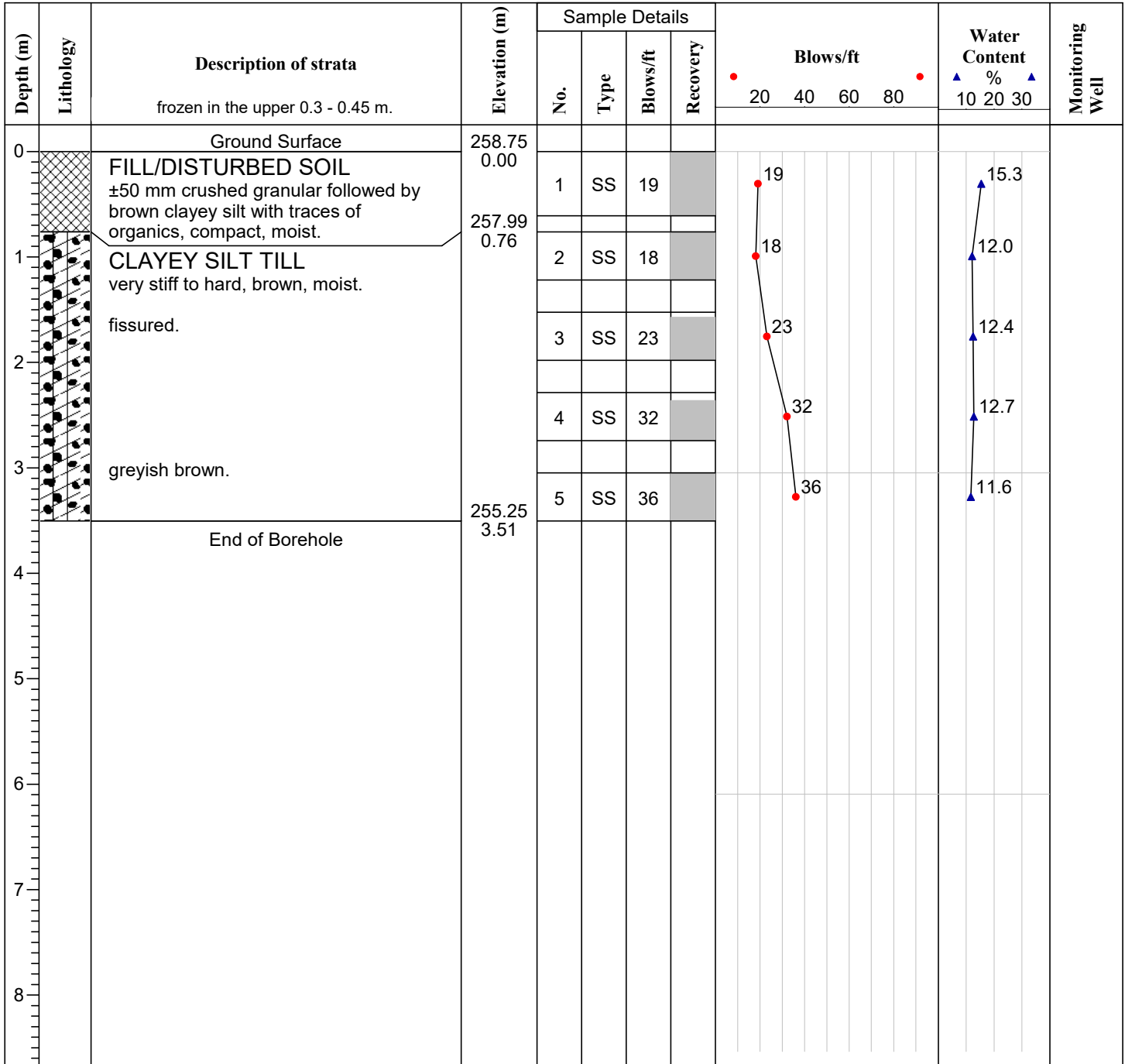
Log of Borehole BH-27

Project: PROPOSED MAYFIELD WEST #2 PUBLIC SCHOOL

Client: PDSB c/o HOSSACK ARCHITECTURE

Enclosure: 28

Location: PETCH AVE. & TWEEDHILL AVE., CALEDON, ON.

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

Drill Method: CME 55 - SOLID

Drill Date: 16 JAN. 2025

Datum: GEODETIC

Engineer: P.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7460

Log of Borehole BH-28

Project: PROPOSED MAYFIELD WEST #2 PUBLIC SCHOOL

Client: PDSB c/o HOSSACK ARCHITECTURE

Enclosure: 29

Location: PETCH AVE. & TWEEDHILL AVE., CALEDON, ON.

Depth (m)	Lithology	Description of strata frozen in the upper 0.3 - 0.45 m.	Elevation (m)	Sample Details				Blows/ft 20 40 60 80	Water Content % 10 20 30	Monitoring Well
				No.	Type	Blows/ft	Recovery			
0		Ground Surface	258.81							
		FILL/DISTURBED SOIL brown clayey silt with traces of organics, compact, moist.	0.00	1	SS	11		11	14.6	
		CLAYEY SILT TILL stiff, fissured, brown, moist.	258.35	2	SS	14		14	15.1	
		SILT TILL with wet sandy silt seams. compact, brown, moist.	0.46							
2		End of Borehole	256.83	3	SS	20		20	13.4	
			1.98							
3										
4										
5										
6										
7										
8										

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

Drill Method: CME 55 - SOLID

Drill Date: 16 JAN. 2025

Datum: GEODETIC

Engineer: P.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7460

Log of Borehole BH-29

Project: PROPOSED MAYFIELD WEST #2 PUBLIC SCHOOL

Client: PDSB c/o HOSSACK ARCHITECTURE

Enclosure: 30

Location: PETCH AVE. & TWEEDHILL AVE., CALEDON, ON.

Depth (m)	Lithology	Description of strata	Elevation (m)	Sample Details				Blows/ft	Water Content %	Monitoring Well
				No.	Type	Blows/ft	Recovery			
		frozen in the upper 0.3 - 0.45 m.								
0		Ground Surface	258.96							
		FILL/DISTURBED SOIL	0.00	1	SS	18		18	15.1	
		brown clayey silt, compact, moist.								
1		CLAYEY SILT TILL	258.20	2	SS	20		20	13.5	
		very stiff, brown, moist.	0.76							
		fissured.		3	SS	20		20	13.5	
2										
				4	SS	26		26	13.3	
3		becoming siltier, stiff, greyish brown.								
				5	SS	15		15	10.1	
		End of Borehole	255.46							
			3.51							
4										
5										
6										
7										
8										

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

Drill Method: CME 55 - SOLID

Drill Date: 16 JAN. 2025

Datum: GEODETIC

Engineer: P.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7460

Log of Borehole BH-30

Project: PROPOSED MAYFIELD WEST #2 PUBLIC SCHOOL

Client: PDSB c/o HOSSACK ARCHITECTURE

Enclosure: 31

Location: PETCH AVE. & TWEEDHILL AVE., CALEDON, ON.

Depth (m)	Lithology	Description of strata frozen in the upper 0.3 - 0.45 m.	Elevation (m)	Sample Details				Blows/ft 20 40 60 80	Water Content % ▲ 10 20 30 ▲	Monitoring Well
				No.	Type	Blows/ft	Recovery			
0		Ground Surface	259.16							
		FILL/DISTURBED SOIL brown clayey silt, compact, moist.	0.00	1	SS	19		19	16.3	
1		CLAYEY SILT TILL very stiff, brown, moist.	258.40	2	SS	19		19	11.1	
			0.76							
2		End of Borehole	257.18	3	SS	17		17	14.5	
			1.98							
3										
4										
5										
6										
7										
8										

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

Drill Method: CME 55 - SOLID

Drill Date: 16 JAN. 2025

Datum: GEODETIC

Engineer: P.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7460

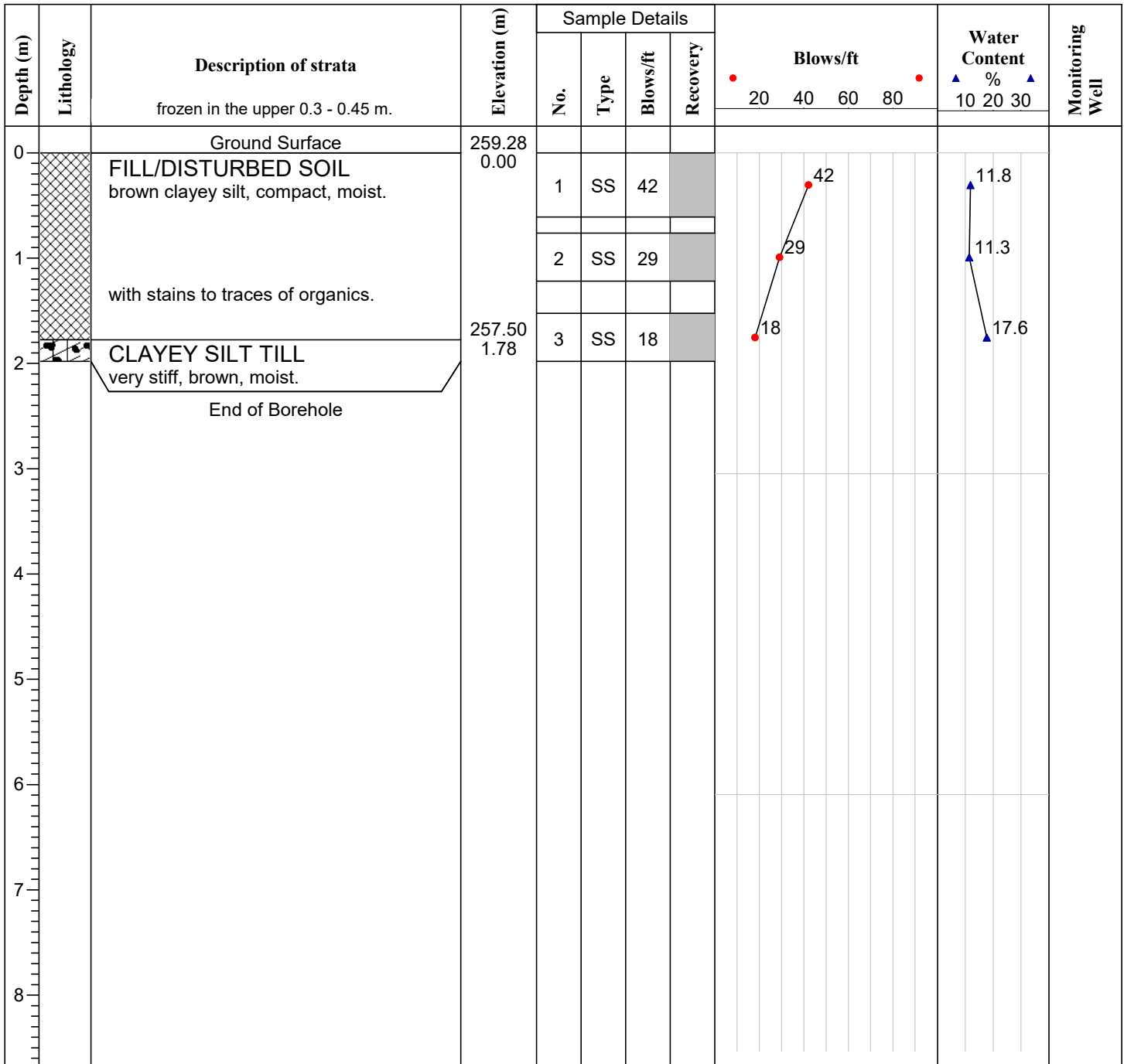
Log of Borehole BH-31

Project: PROPOSED MAYFIELD WEST #2 PUBLIC SCHOOL

Client: PDSB c/o HOSSACK ARCHITECTURE

Enclosure: 32

Location: PETCH AVE. & TWEEDHILL AVE., CALEDON, ON.

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

Drill Method: CME 55 - SOLID

Drill Date: 17 JAN. 2025

Datum: GEODETIC

Engineer: P.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7460

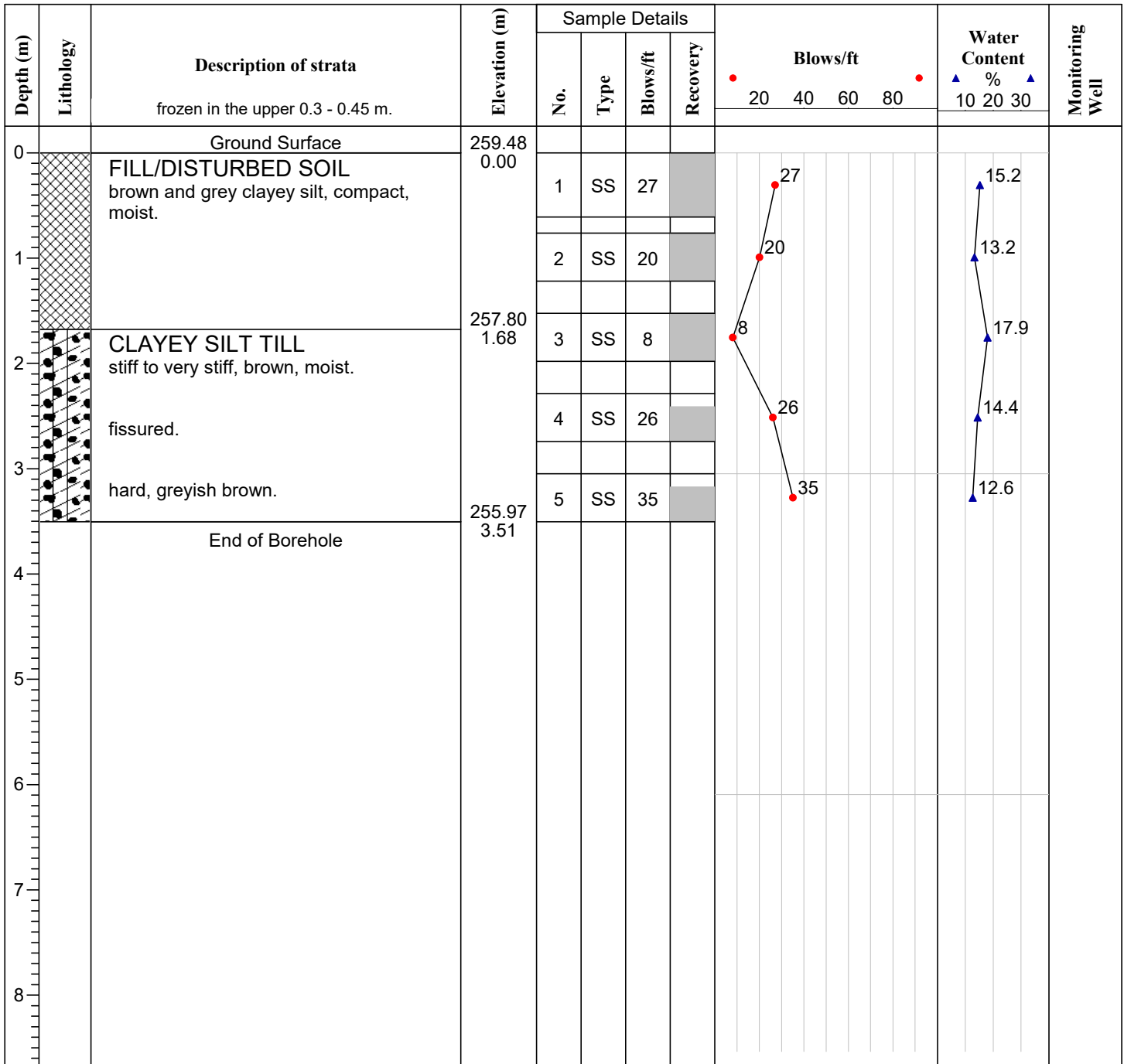
Log of Borehole BH-32

Project: PROPOSED MAYFIELD WEST #2 PUBLIC SCHOOL

Client: PDSB c/o HOSSACK ARCHITECTURE

Enclosure: 33

Location: PETCH AVE. & TWEEDHILL AVE., CALEDON, ON.

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

Drill Method: CME 55 - SOLID

Drill Date: 16 JAN. 2025

Datum: GEODETIC

Engineer: P.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7460

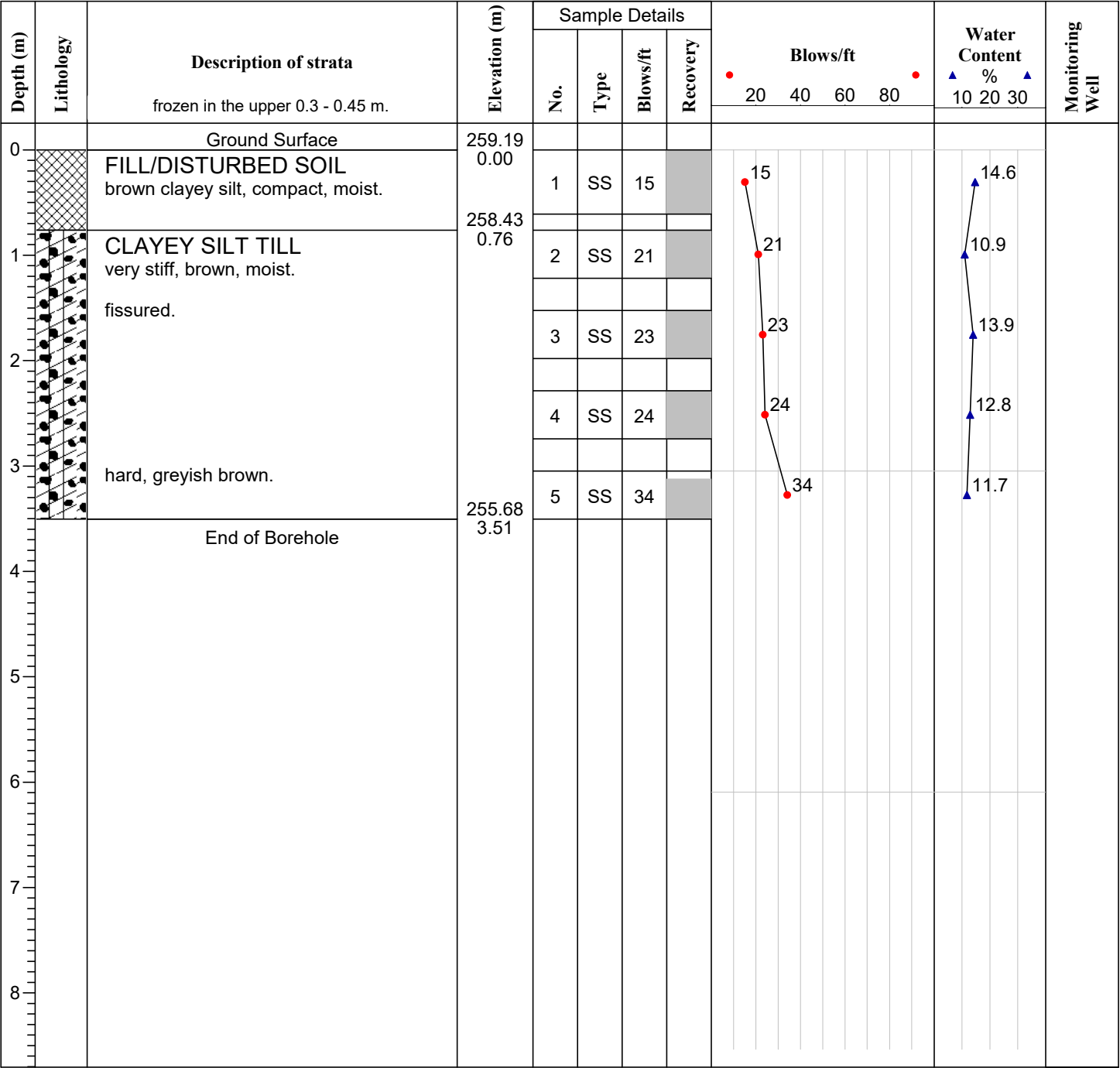
Log of Borehole BH-33

Project: PROPOSED MAYFIELD WEST #2 PUBLIC SCHOOL

Client: PDSB c/o HOSSACK ARCHITECTURE

Enclosure: 34

Location: PETCH AVE. & TWEEDHILL AVE., CALEDON, ON.



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

Drill Method: CME 55 - SOLID

Drill Date: 16 JAN. 2025

Datum: GEODETIC

Engineer: P.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7460

Log of Borehole BH-34

Project: PROPOSED MAYFIELD WEST #2 PUBLIC SCHOOL

Client: PDSB c/o HOSSACK ARCHITECTURE

Enclosure: 35

Location: PETCH AVE. & TWEEDHILL AVE., CALEDON, ON.

Depth (m)	Lithology	Description of strata frozen in the upper 0.3 - 0.45 m.	Elevation (m)	Sample Details				Blows/ft 20 40 60 80	Water Content % ▲ 10 20 30 ▲	Monitoring Well
				No.	Type	Blows/ft	Recovery			
0		Ground Surface	259.28 0.00							
		FILL/DISTURBED SOIL brown clayey silt, compact, moist.		1	SS	12		12	15.3	
1		CLAYEY SILT TILL very stiff, brown, moist. with sandy silt inclusions.	258.52 0.76	2	SS	16		16	13.7	
2		End of Borehole	257.30 1.98	3	SS	23		23	14.0	
3										
4										
5										
6										
7										
8										

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

Drill Method: CME 55 - SOLID

Drill Date: 16 JAN. 2025

Datum: GEODETIC

Engineer: P.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7460

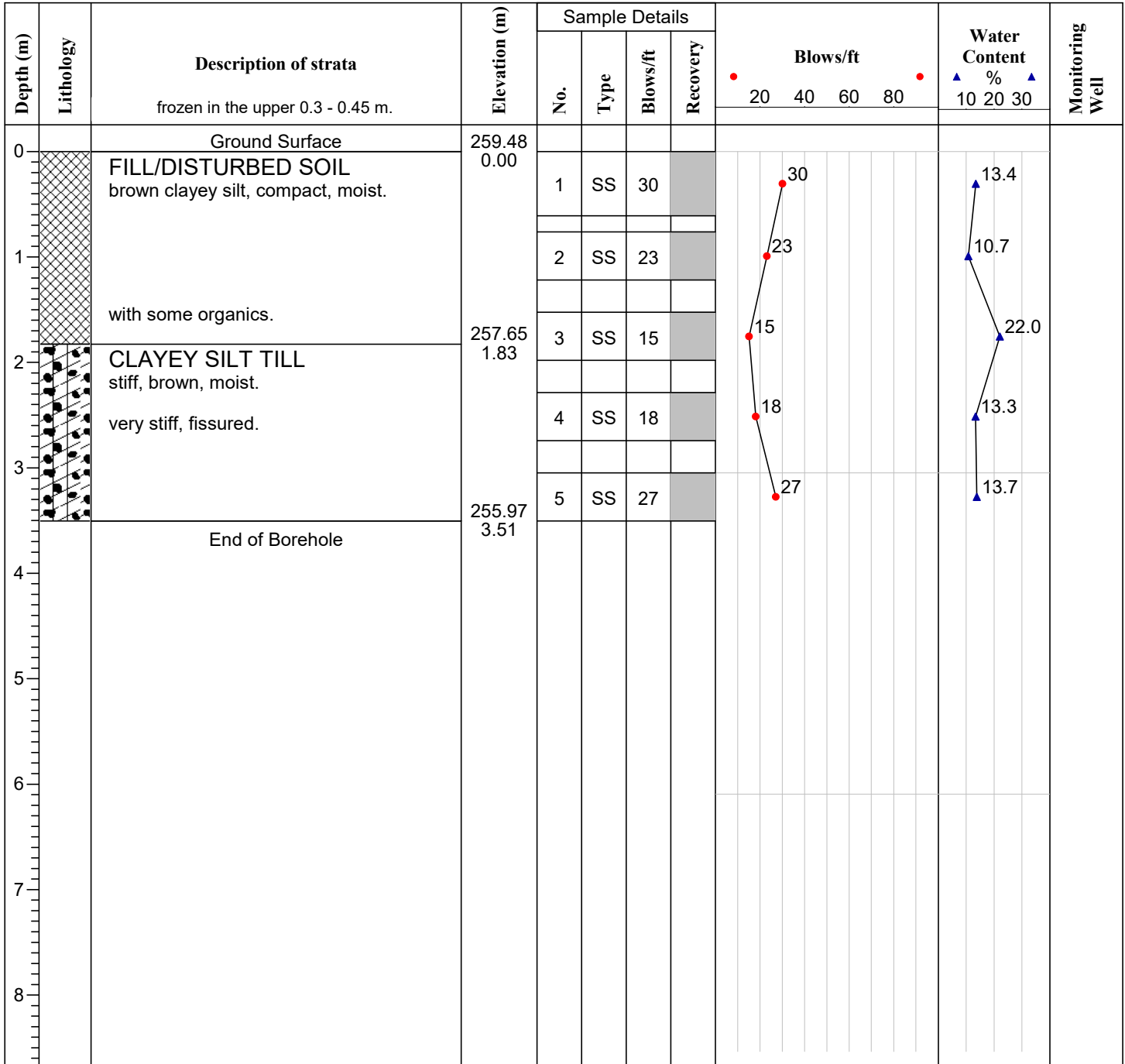
Log of Borehole BH-35

Project: PROPOSED MAYFIELD WEST #2 PUBLIC SCHOOL

Client: PDSB c/o HOSSACK ARCHITECTURE

Enclosure: 36

Location: PETCH AVE. & TWEEDHILL AVE., CALEDON, ON.

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

Drill Method: CME 55 - SOLID

Drill Date: 17 JAN. 2025

Datum: GEODETIC

Engineer: P.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7460

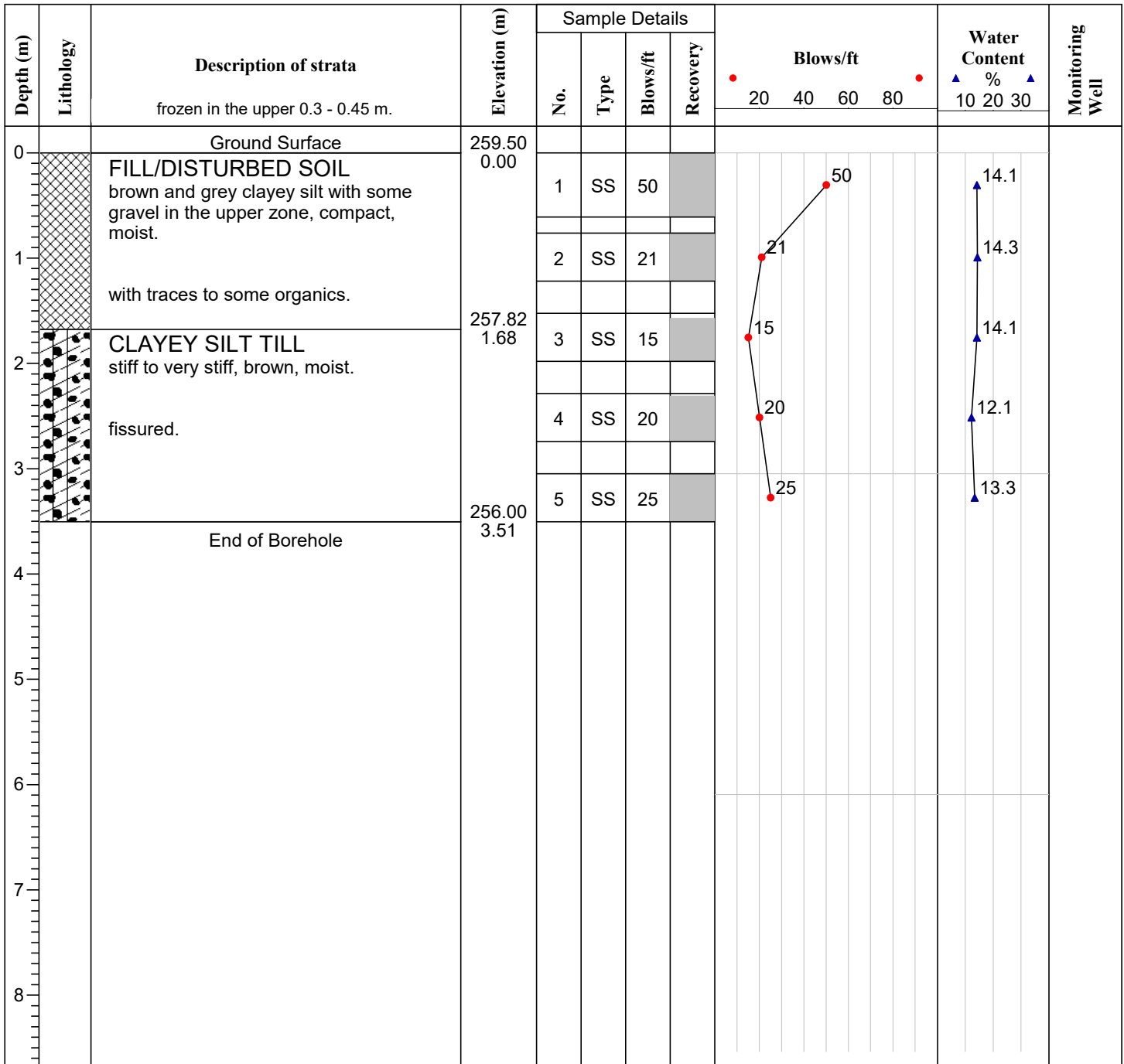
Log of Borehole BH-36

Project: PROPOSED MAYFIELD WEST #2 PUBLIC SCHOOL

Client: PDSB c/o HOSSACK ARCHITECTURE

Enclosure: 37

Location: PETCH AVE. & TWEEDHILL AVE., CALEDON, ON.

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

Drill Method: CME 55 - SOLID

Drill Date: 17 JAN. 2025

Datum: GEODETIC

Engineer: P.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7460

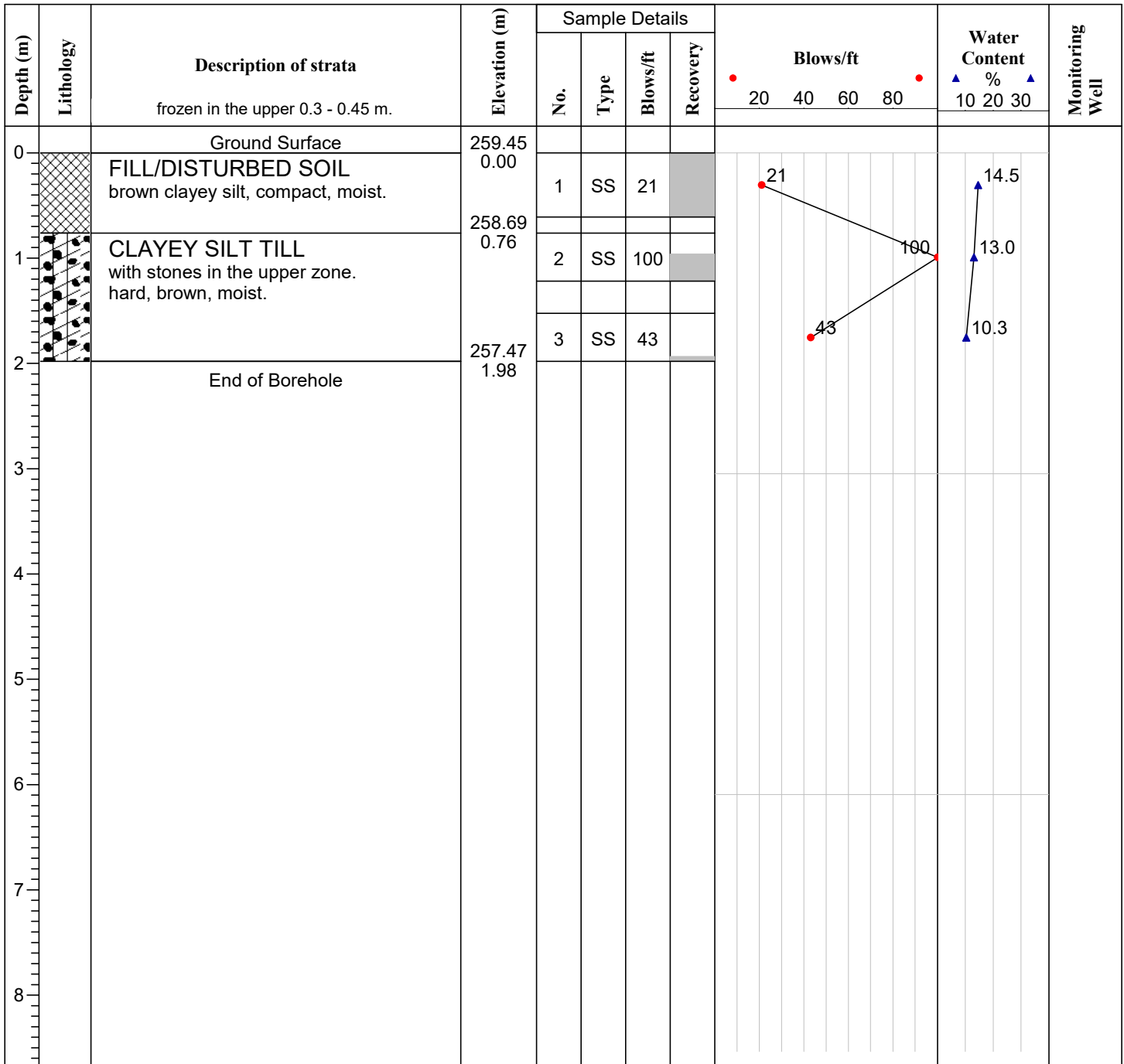
Log of Borehole BH-37

Project: PROPOSED MAYFIELD WEST #2 PUBLIC SCHOOL

Client: PDSB c/o HOSSACK ARCHITECTURE

Enclosure: 38

Location: PETCH AVE. & TWEEDHILL AVE., CALEDON, ON.

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

Drill Method: CME 55 - SOLID

Drill Date: 17 JAN. 2025

Datum: GEODETIC

Engineer: P.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7460

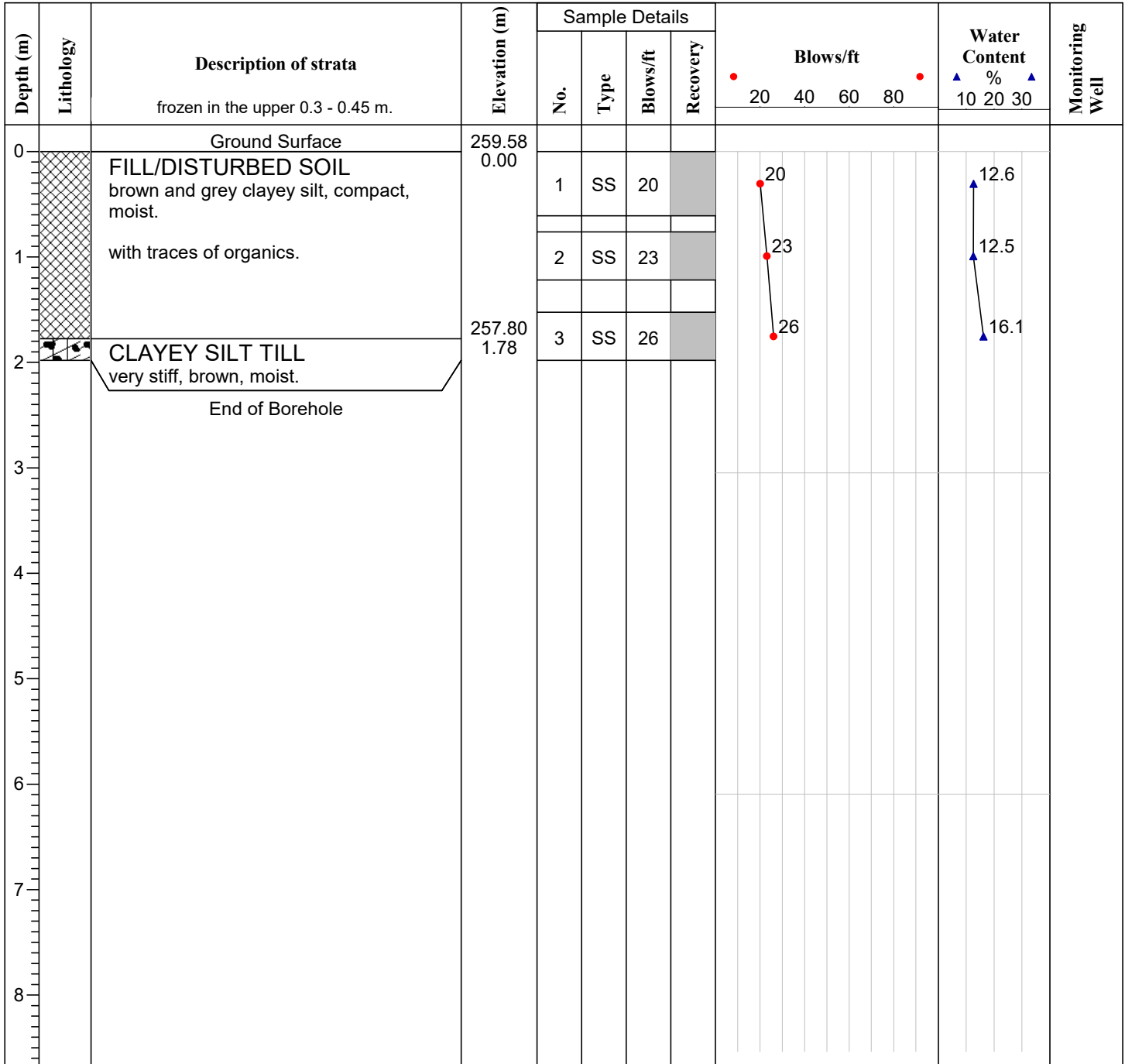
Log of Borehole BH-38

Project: PROPOSED MAYFIELD WEST #2 PUBLIC SCHOOL

Client: PDSB c/o HOSSACK ARCHITECTURE

Enclosure: 39

Location: PETCH AVE. & TWEEDHILL AVE., CALEDON, ON.

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

Drill Method: CME 55 - SOLID

Drill Date: 17 JAN. 2025

Datum: GEODETIC

Engineer: P.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7460

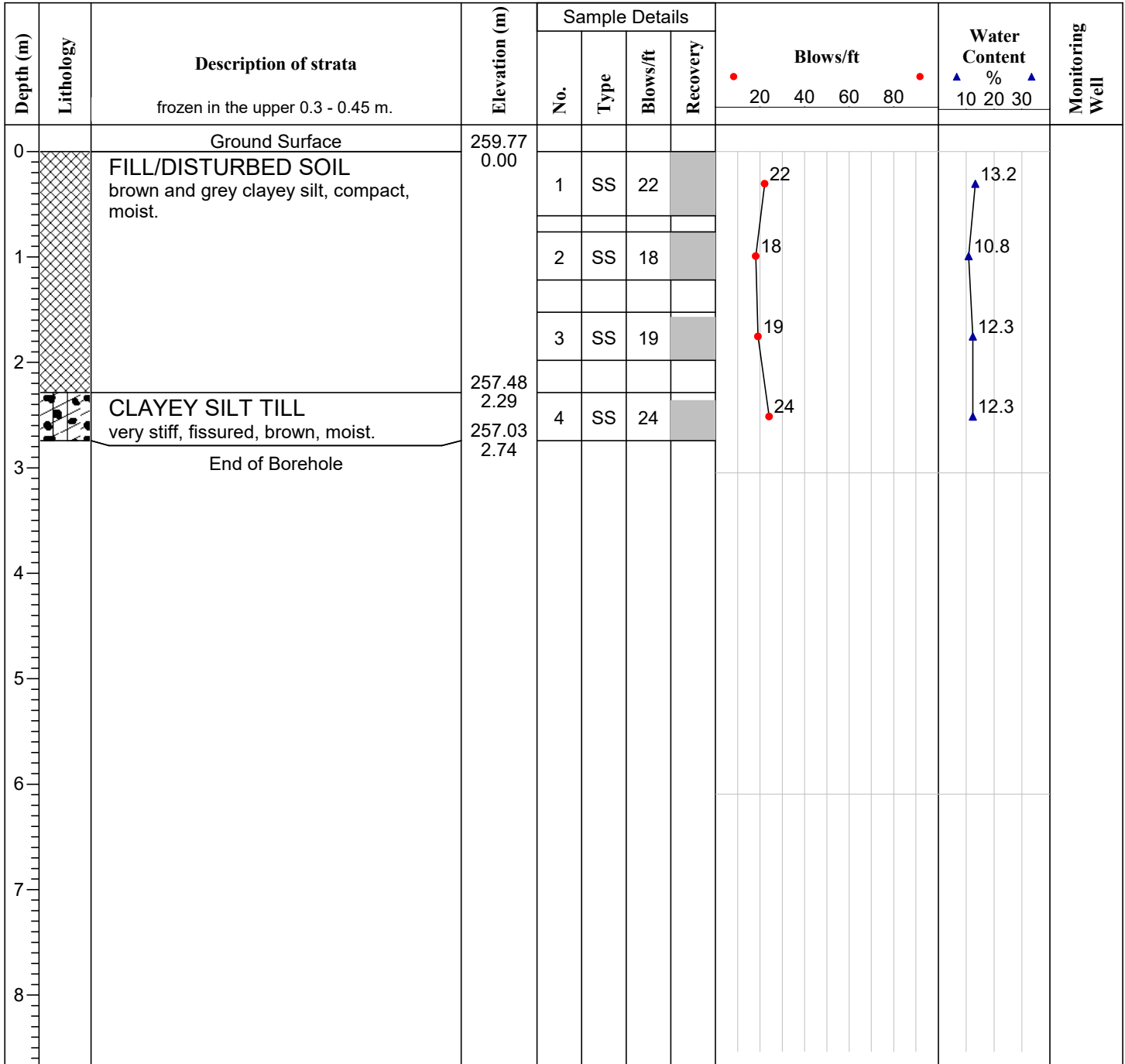
Log of Borehole BH-39

Project: PROPOSED MAYFIELD WEST #2 PUBLIC SCHOOL

Client: PDSB c/o HOSSACK ARCHITECTURE

Enclosure: 40

Location: PETCH AVE. & TWEEDHILL AVE., CALEDON, ON.

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

Drill Method: CME 55 - SOLID

Drill Date: 17 JAN. 2025

Datum: GEODETIC

Engineer: P.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7460

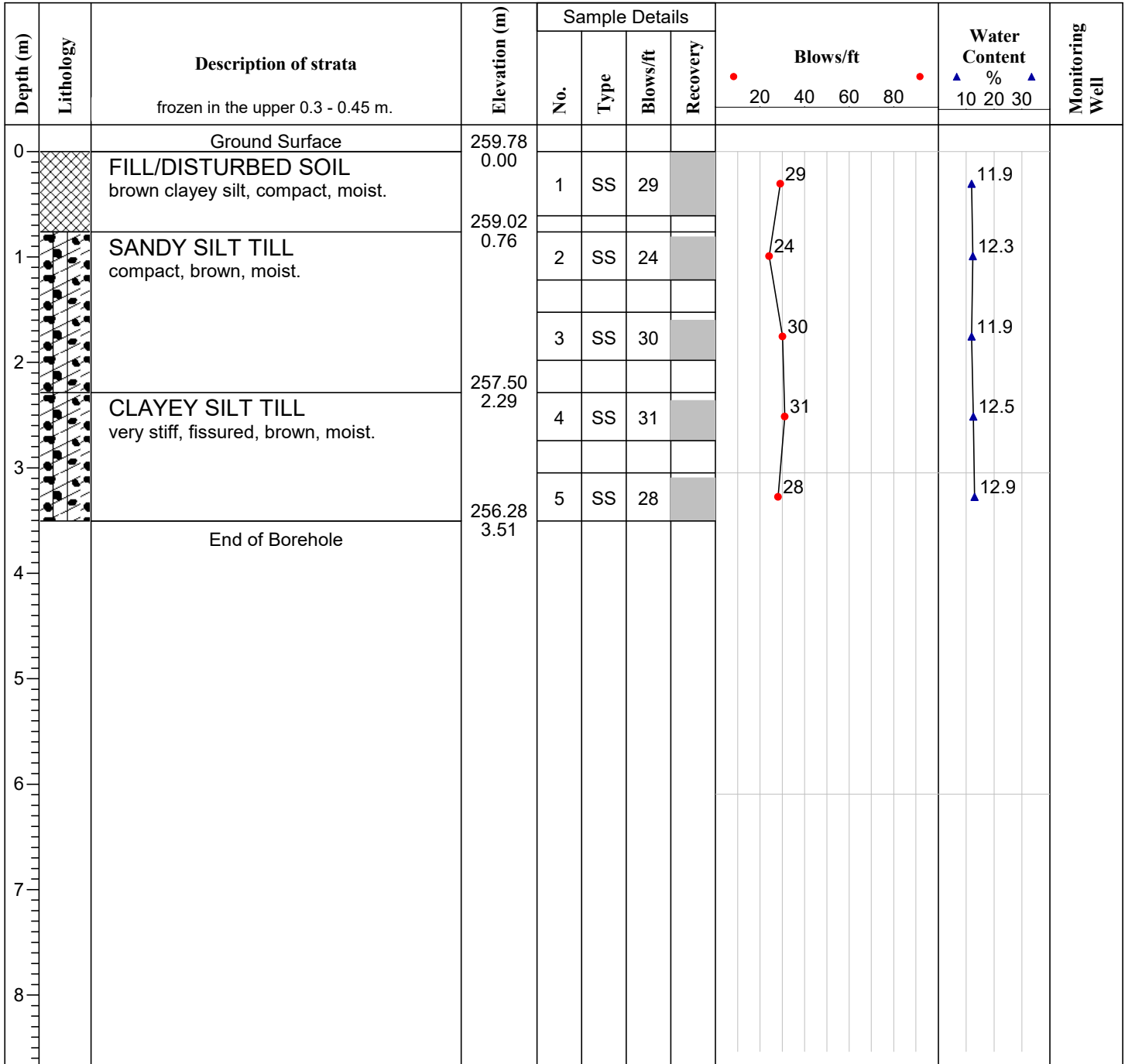
Log of Borehole BH-40

Project: PROPOSED MAYFIELD WEST #2 PUBLIC SCHOOL

Client: PDSB c/o HOSSACK ARCHITECTURE

Enclosure: 41

Location: PETCH AVE. & TWEEDHILL AVE., CALEDON, ON.

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

Drill Method: CME 55 - SOLID

Drill Date: 17 JAN. 2025

Datum: GEODETIC

Engineer: P.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7460

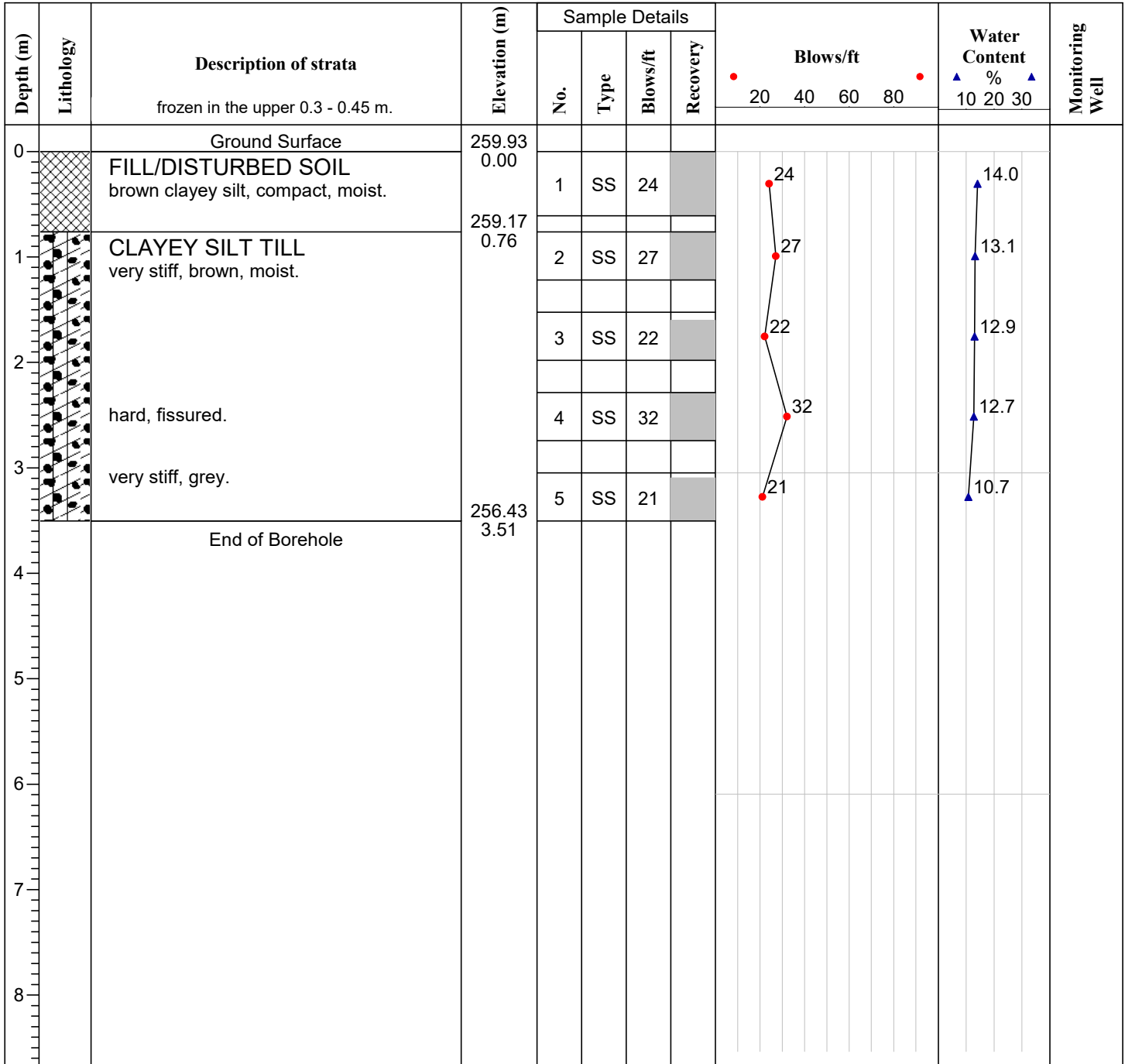
Log of Borehole BH-41

Project: PROPOSED MAYFIELD WEST #2 PUBLIC SCHOOL

Client: PDSB c/o HOSSACK ARCHITECTURE

Enclosure: 42

Location: PETCH AVE. & TWEEDHILL AVE., CALEDON, ON.

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

Drill Method: CME 55 - SOLID

Drill Date: 17 JAN. 2025

Datum: GEODETIC

Engineer: P.R.

Checked by: G.S.

Sheet No. 1 of 1

Project No: 7460

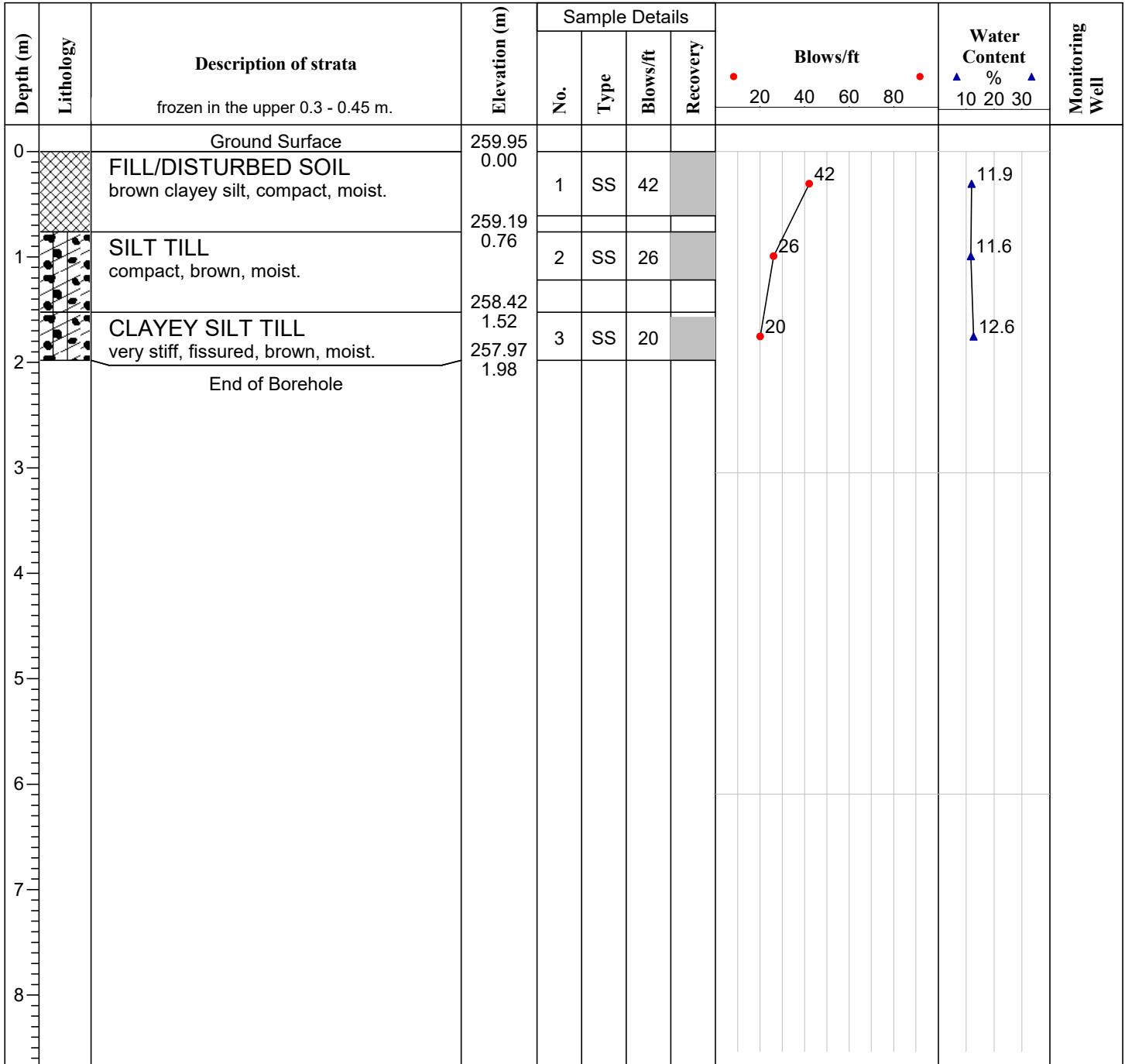
Log of Borehole BH-42

Project: PROPOSED MAYFIELD WEST #2 PUBLIC SCHOOL

Client: PDSB c/o HOSSACK ARCHITECTURE

Enclosure: 43

Location: PETCH AVE. & TWEEDHILL AVE., CALEDON, ON.

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

Drill Method: CME 55 - SOLID

Drill Date: 17 JAN. 2025

Datum: GEODETIC

Engineer: P.R.

Checked by: G.S.

Sheet No. 1 of 1

APPENDIX B

ENGINEERED FILL REPORT



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
TEL: (705) 721-7863
FAX: (705) 721-7864

MISSISSAUGA
TEL: (905) 542-7605
FAX: (905) 542-2769

OSHAWA
TEL: (905) 440-2040
FAX: (905) 725-1315

NEWMARKET
TEL: (905) 853-0647
FAX: (905) 881-8335

MUSKOKA
TEL: (705) 721-7863
FAX: (705) 721-7864

HAMILTON
TEL: (905) 777-7956
FAX: (905) 542-2769

November 11, 2024

Reference No.: 2411-M017.1

Page 1 of 2

Peel District School Board
5650 Hurontario Street
Mississauga, Ontario
L5R 1C6

Attention: Mr. Phillip Sousa, Planning and Accommodation Support Services

**Re: Engineered Fill Certification
Block 261 – School Block
Mayfield McLaughlin Developments Inc. Subdivision
Registered Plan No.: 43M-2114
Town of Caledon**

Dear Sir:

We inspected the earth fill placement at the captioned block and the placement meets our engineered fill requirements and the requirements set out in clause 7.04(b), (i), (ii), (ii), and (iv) of the Agreement of Purchase and Sale as per below:

- i. All of the fill deposited on the School Site is clean, engineered fill of the quality specified in Section 8.02 which has been deposited and compacted in accordance with sound engineering practices;
- ii. All of the requirements set out in Section 8.02 of the Agreement of Purchase and Sale have been fully complied with;
- iii. Compaction testing has been fully complied with;
- iv. The School Site will support the construction of a normal slab-on-grade two-storey school building foundation, without the use of piers, caissons, footings at a depth of more than 1.2 meters below grade, or any other extraordinary construction techniques.

It should be noted that the as-built engineered fill elevations which is to be recorded by others shall form part of this certification.

We hereby confirm that the earth fill had been compacted to its maximum Standard Proctor dry density (100% compaction) and is suitable for normal slab-on-grade school building construction without the need of piers, caissons or any other techniques, with a Maximum Allowable Soil Bearing Pressure of 150kPa, 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.

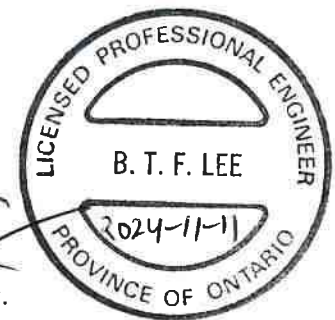
If any one of the above qualifications is not met, Soil Engineers Ltd. cannot warrant the condition of the engineered fill and explicitly accepts no liability for any damage resulting from placement of foundations or structures on the engineered fill.

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

Yours truly,
SOIL ENGINEERS LTD.

For 
Emmanuel Siapno, C.E.T.
BL/ES:ak


Benjamin Lee, P. Eng.



C: Mayfield McLaughlin Developments Inc.
Attn: Mr. Harrison Demone, P. Eng.

David Schaeffer Engineering Ltd.
Attn: Mr. Todd McNair
Mr. Vishal Reddy, P. Eng.
Mr. Elliott Burlon



APPENDIX C

**REPORT BY
FRONTWAVE GEOPHYSICS INC.**



**SHEAR WAVE VELOCITY TESTING
FOR SEISMIC SITE CLASSIFICATION
PROPOSED ELEMENTARY SCHOOL
TWEEDHILL AVENUE AND PETCH AVENUE, CALEDON, 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-25280

February 19, 2025

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

TABLE OF CONTENTS

1	INTRODUCTION	1
2	INVESTIGATION METHODOLOGY	1
2.1	Multichannel Analysis of Surface Waves (MASW)	1
2.2	Seismic Refraction	4
3	RESULTS	5
4	CLOSURE	9

LIST OF FIGURES

Figure 1.	Survey location plan	2
Figure 2.	The procedure of MASW data processing using the SeisImager SW software package	3
Figure 3.	Seismic model showing the basic principle of refraction method	4
Figure 4.	Data examples displaying a stacked S-wave refraction shot record, MASW shot record, and MASW dispersion image	6
Figure 5.	Interpreted depth to competent bedrock from S-wave refraction	7
Figure 6.	Shear wave velocity profile from MASW sounding and S-wave refraction	7

LIST OF TABLES

Table 1.	Shear wave velocities from MASW sounding and S-wave refraction	8
Table 2.	V_{s30} values from MASW sounding and S-wave refraction	8

1 INTRODUCTION

Frontwave Geophysics Inc. was retained by Forward Engineering & Associates Inc. to carry out a geophysical investigation for the proposed Mayfield West elementary school at the intersection of Tweedhill Avenue and Petch Avenue in Caledon, 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 February 14, 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)

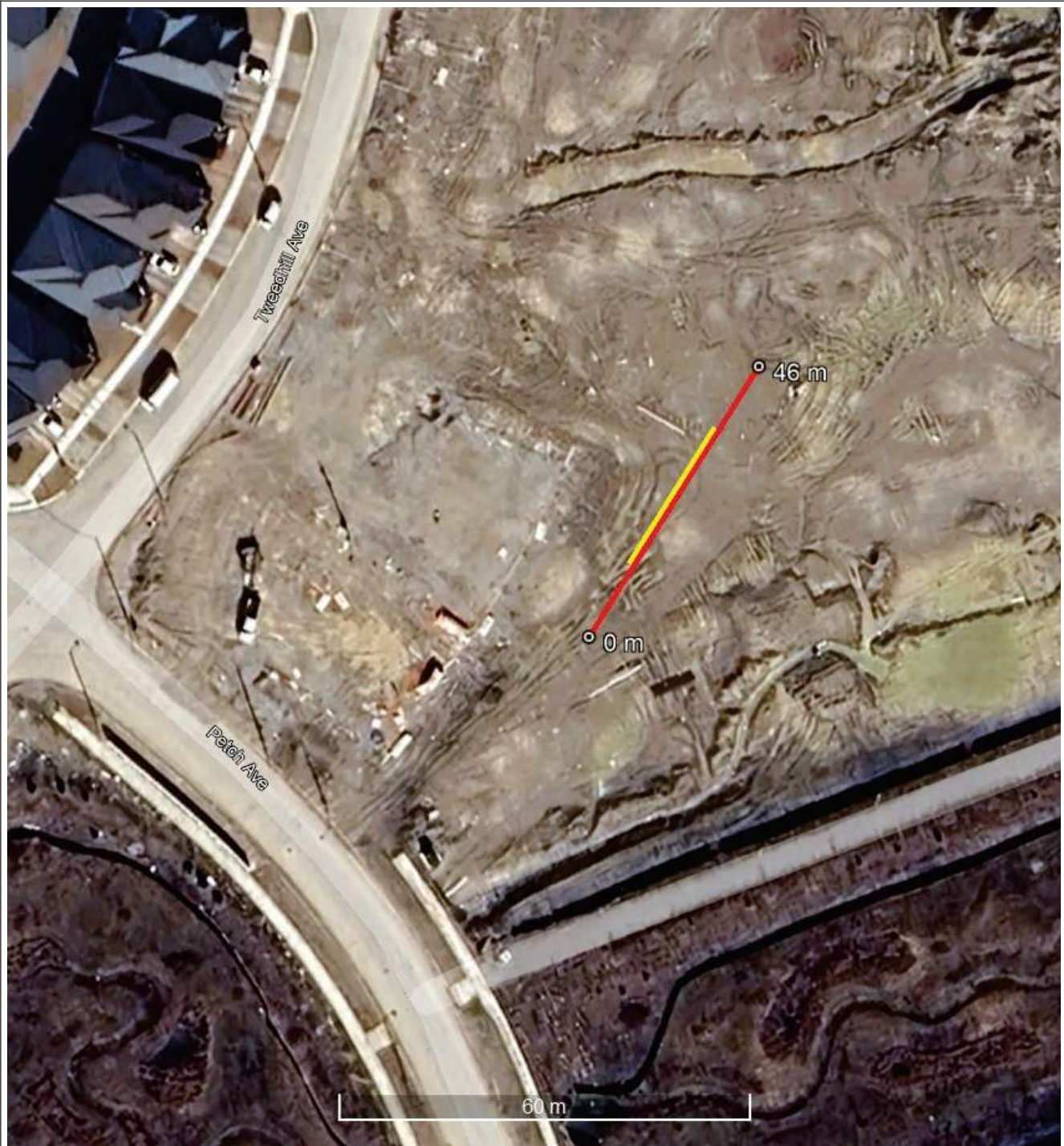
Overview

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 12 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 2024

Date: 2025-02-19

File No: F-25280

Title: Survey location plan

Location: Tweedhill Ave & Petch Ave
Caledon, ON

Figure:
1

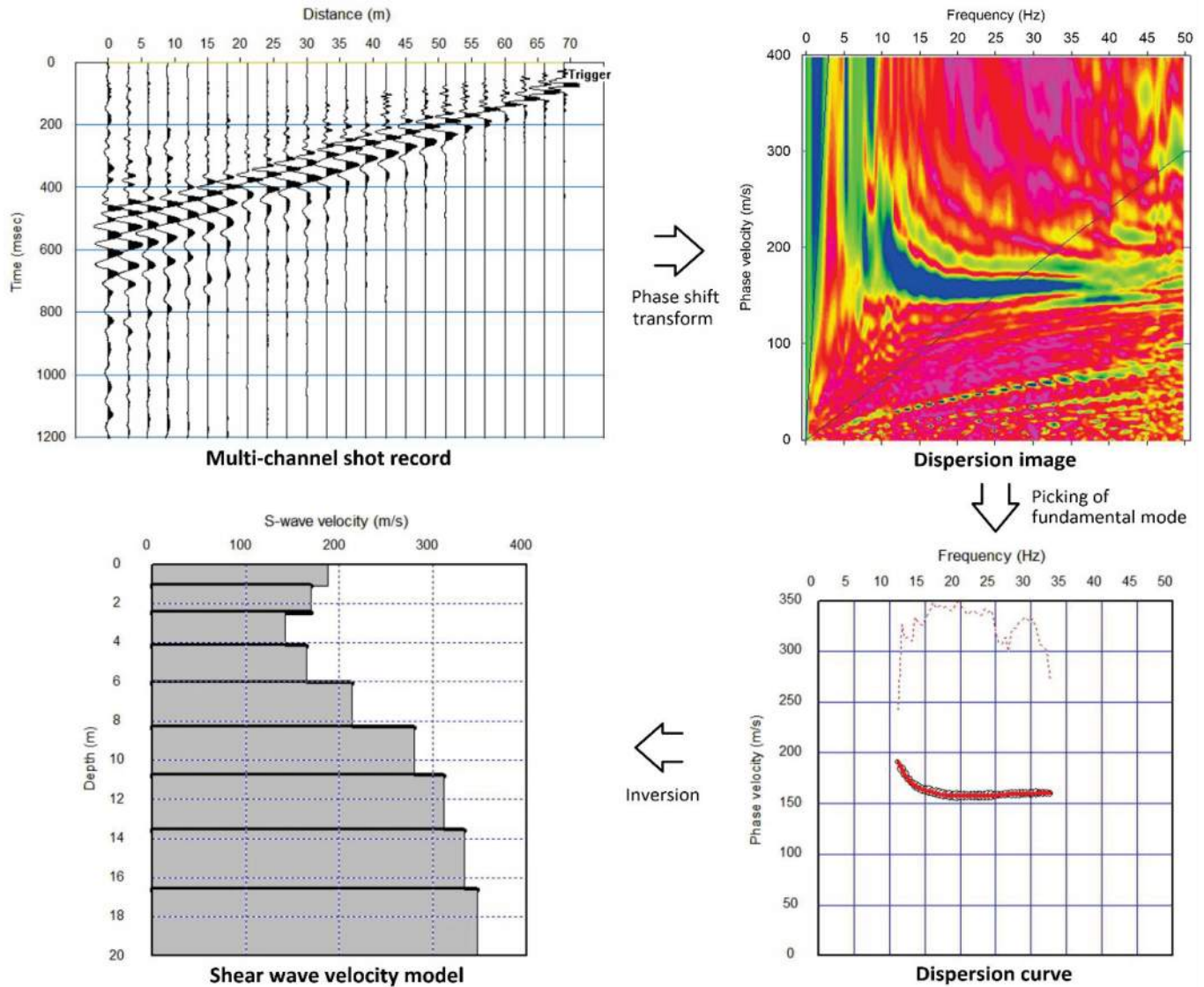


Figure 2 The procedure of MASW data processing using the SeisImager SW software package.

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-priori information to optimize model parameters for more accurate results. Hence, if the a-priori 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.

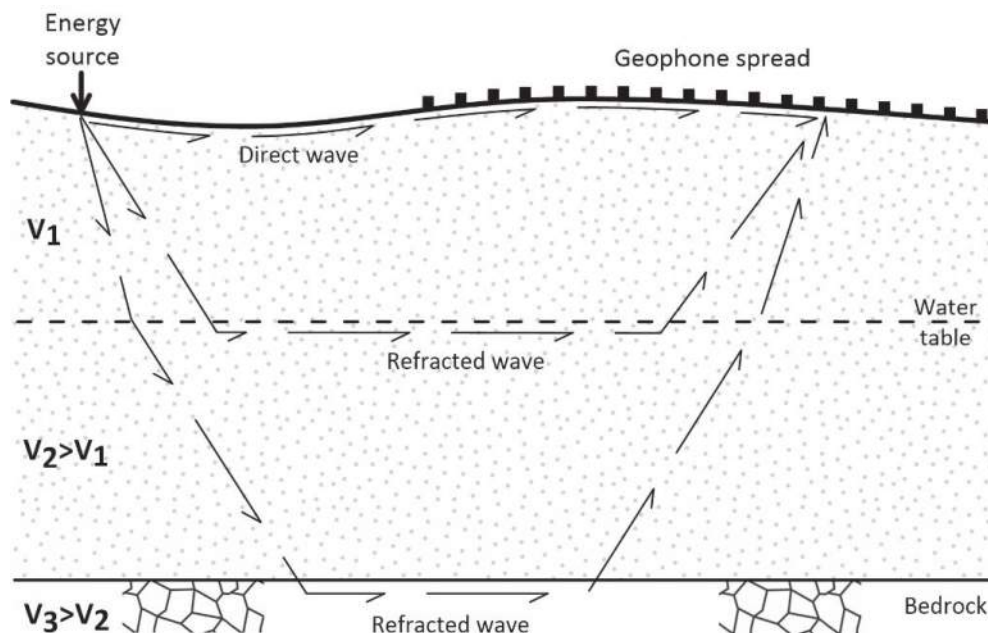


Figure 3 Seismic model showing the basic principle of refraction method.

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 25 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 shot records was very good; first arrivals of refracted waves and MASW dispersion curves were well defined. Example S-wave refraction shot record and an 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 7.8 to 9.4 m below the ground surface. The shear wave velocity in the bedrock measured using the refraction method was 1717 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 96) of the National Building Code of Canada 2015 (NBC), 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.

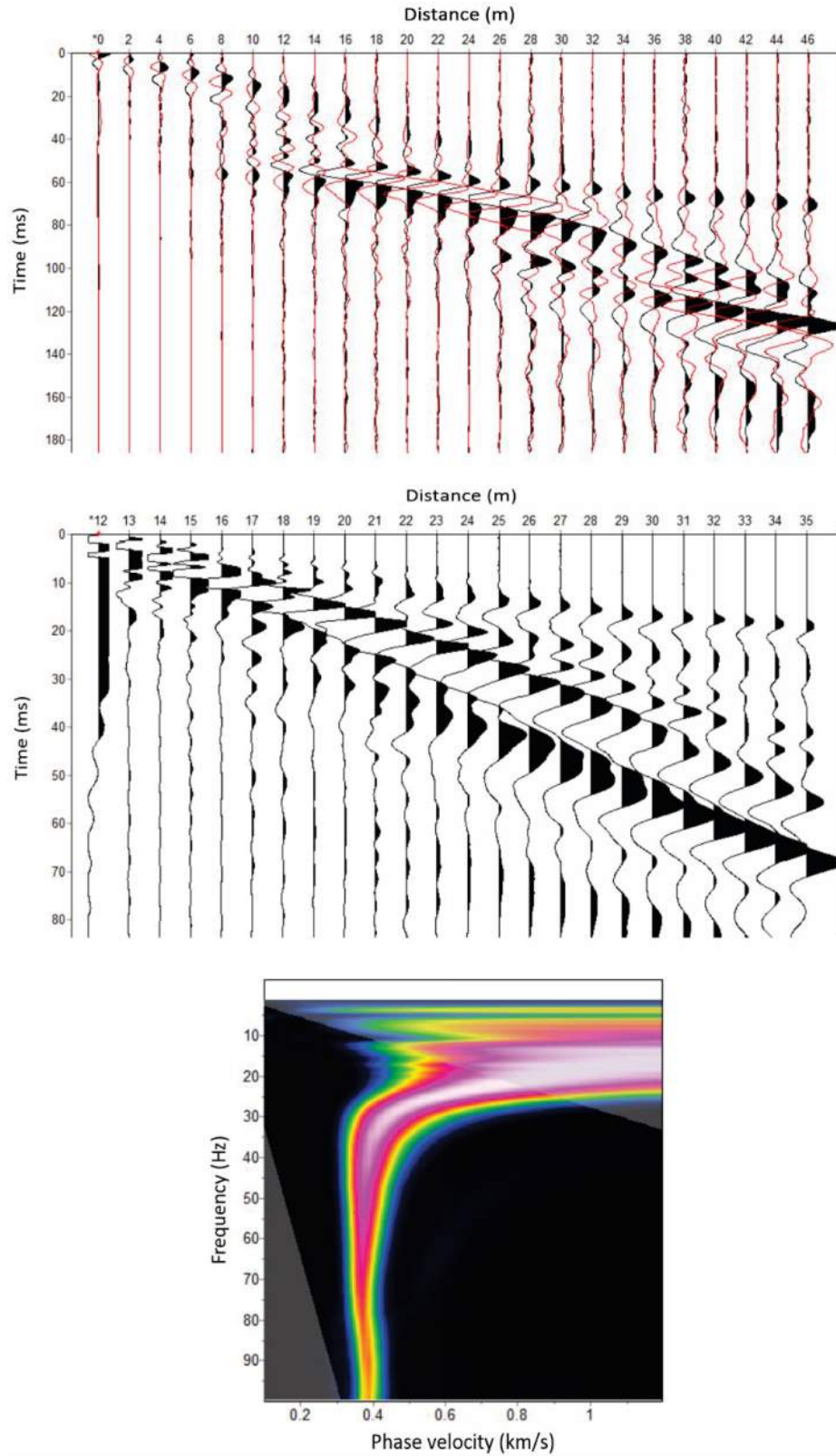


Figure 4 Data examples displaying a stacked S-wave refraction shot record (top), MASW shot record (middle), and MASW dispersion image (bottom).

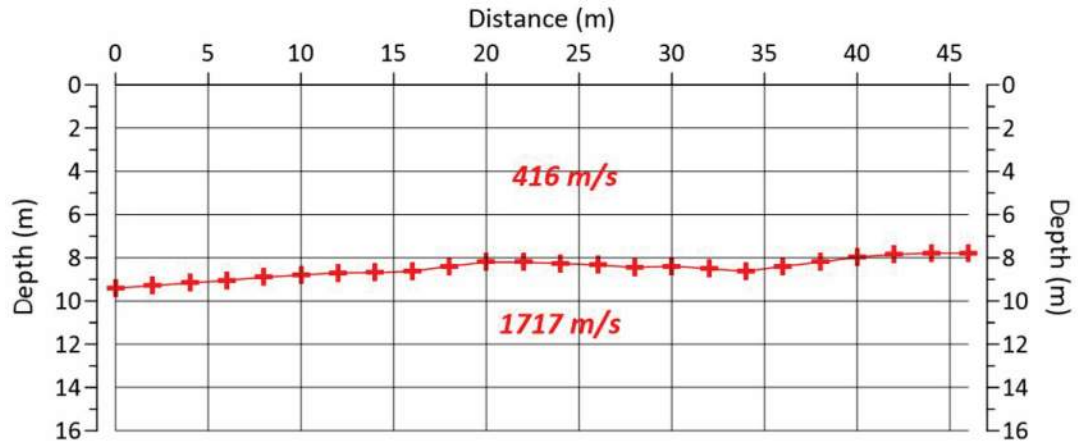


Figure 5 *Interpreted depth to competent bedrock from S-wave refraction.*

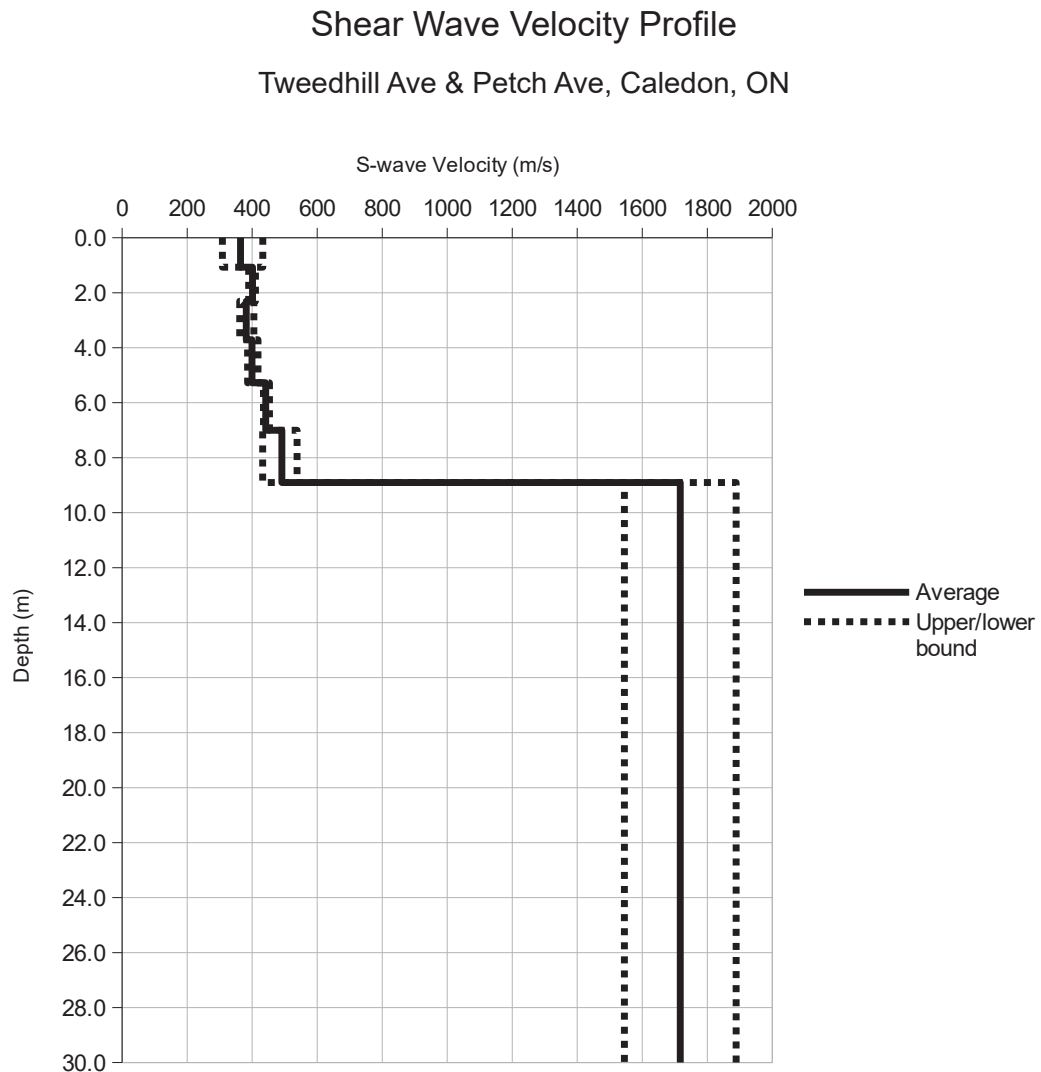


Figure 6 *Shear wave velocity profile from MASW sounding and S-wave refraction.*

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	1.1	364
1.1	2.3	401
2.3	3.7	382
3.7	5.3	400
5.3	7.0	442
7.0	8.9	491
8.9	30.0	1717

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:

$$V_{s30} = 30 / \sum (d/V_s),$$

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	820	891	961	X₇₆₀

The V_{s30} values obtained from the MASW sounding varied from 820 m/s to 961 m/s with an average of 891 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 at this site, the **Site Designation** is **X₇₆₀**.

4 CLOSURE

Shear wave velocity testing involving the multi-channel analysis of surface waves (MASW) method was carried out for the proposed Mayfield West elementary school at the intersection of Tweedhill Avenue and Petch Avenue in Caledon, Ontario.

The average shear wave velocity (V_{s30}) value calculated from in situ shear wave velocity measurements was **891 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), **the applicable Site Designation is X₇₆₀**.

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



STRUCTURAL ADDENDUM #1

Project Name: Mayfield West #2 PS - PDSB

Project Number: 20241729

July 27, 2026

Priscilla Ladouceur
Hossack Architecture
105-1939 Ironoak Way
Oakville, Ontario L6H 3V8

via email: pladouceur@hossackarch.com

Please find enclosed Structural Addendum #1 for the above referenced project.

If you have any questions regarding the above, please contact our office.

Regards,
Salas O'Brien Canada Inc.



Joseph Gasdia, P. Eng.
Senior Vice President
joseph.gasdia@salasobrien.com



Structural Addendum #1

1.0 REFERENCE STRUCTURAL DRAWING S0-01 AND S0-02 (RE-ISSUED)

- .1 Bulk excavation plan revised to suit revised gradings within the borehole loads of the revised geotechnical report. See clouded areas and notes.

END OF STRUCTURAL ADDENDUM #1

ENGINEERED FILL NOTES:

1. GENERAL

- 1.1. THE FOLLOWING ARE MINIMUM REQUIREMENTS FOR PLACING ENGINEERED FILL WITHIN THE BOUNDARIES OF THE BUILDING ENVELOPE AND EXTENDING BEYOND PERIMETER OF THE BUILDING FOUNDATIONS BY A MIN. OF 1500mm AND SLOPING DOWNWARD TO THE SUB-GRADE, IN ALL DIRECTIONS, AT 45°.
- 1.2. PRIOR TO THE START OF CONSTRUCTION THE CONTRACTOR SHALL CONVEENE A MEETING TO BE ATTENDED BY AT LEAST THE ARCHITECT, STEPHENSON ENGINEERING, THE SOIL CONSULTANT, THE GENERAL CONTRACTOR AND THE EXCAVATION AND BACKFILLING CONTRACTOR. THE PURPOSE OF THIS MEETING IS TO ENSURE THAT ALL PARTIES UNDERSTAND THE REQUIREMENTS OF THE CONTRACT DOCUMENTS AND TO DISCUSS PROCEDURES, TIMING, MATERIALS AND TESTING, ETC.
- 1.3. REFER ALSO TO THE SPECIFICATION, THE SOIL REPORT AND DIAGRAMMATIC SECTION.

2. MATERIALS

- 2.1. ALL MATERIAL TO BE USED AS FILL MUST BE IMPORTED GRANULAR 'B' MATERIAL AS APPROVED BY THE SOIL CONSULTANT.
- 2.2. THE LAYER IMMEDIATELY BELOW THE SUB-ON-GRADE SHALL BE A MIN. OF 200mm, 19mm CLEAR CRUSHED STONE.

3. EXECUTION

- 3.1. REMOVE AND DISPOSE OF ALL EXISTING ORGANIC MATERIAL, FILL AND CONTAMINATED MATERIAL DOWN TO NATURAL UNDISTURBED, UNCONTAMINATED SUB-GRADE. APPROXIMATE BASE OF NEW ENGINEERED FILL BASE WILL BE AS INDICATED IN THE BULK EXCAVATION PLAN (TO BE CONFIRMED ON SITE BY GEOTECHNICAL CONSULTANT).
- 3.2. THE SUB-GRADE SHALL BE PROOF ROLLED WITH HEAVY VIBRATORY EQUIPMENT TO MIN. 98% STANDARD PROCTOR MAXIMUM DRY DENSITY.
- 3.3. ANY LOOSE OR SOFT SPOT SHALL BE SUB-EXCAVATED AND BACKFILLED WITH APPROVED COMPACTED MATERIAL.
- 3.4. FILL REQUIRED TO RAISE THE GRADES SHALL COMPRISE OF APPROVED IMPORTED GRANULAR 'A' OR GRANULAR 'B' MATERIAL PLACED IN SUCCESSIVE 200mm LAYERS EACH COMPACTED TO AT LEAST 100% STANDARD PROCTOR MAXIMUM DRY DENSITY.
- 3.5. THE LAYER IMMEDIATELY BELOW THE SUB-ON-GRADE SHOULD BE A 200mm MIN. LAYER OF 19mm CLEAR STONE ROLLED, AND COMPACT.
- 3.6. ALL PROCEDURES, EQUIPMENT AND MATERIALS SHALL BE APPROVED BY THE SOIL CONSULTANT WHO SHALL BE ENGAGED FULL TIME TO SUPERVISE THIS WORK.
- 3.7. CONDITIONS AS OUTLINED IN THE CONTRACT DOCUMENTS ARE ASSUMED AND ARE BASED UPON INFORMATION AVAILABLE AT THE TIME THAT THE DOCUMENTS WERE PREPARED.
- 3.8. THE SOIL CONSULTANT SHALL ISSUE, VIA EMAIL, DAILY REPORTS OF THE WORK.
- 3.9. IF ANY ASPECT OF THE ACTUAL WORK IS NOT AS ASSUMED, THEN THE SOIL CONSULTANT SHALL ADVISE THE ARCHITECT IMMEDIATELY, BY TELEPHONE, BEFORE PROCEEDING.
- 3.10. NOTE THAT THE EXISTING ON-SITE MATERIAL IS NOT SUITABLE FOR BACKFILLING OF TRENCHES, ETC., OR AGAINST FOUNDATION WALLS.
- 3.11. FOR AREAS UNDER DRIVEWAYS AND PARKING ETC., OUTSIDE BUILDING ENVELOPE, REFER TO SPECIFICATION AND SOIL REPORT.

DESIGN CRITERIA NOTES:

1. GENERAL

- 1.1. THE STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE 2024 ONTARIO BUILDING CODE (OBC), ALL CODES, MANUALS, STANDARDS, AND SPECIFICATIONS REFERRED TO SHALL BE THE LATEST EDITIONS INCLUDING ALL REVISIONS AND ADDENDA AS REFERENCED IN THE OBC.
- 1.2. BUILDING IMPORTANCE CATEGORY (TABLE 4.1.2.1 OF OBC) IS: HIGH.
- 1.3. MISCELLANEOUS METAL, PRECAST AND STAIR FABRICATORS SHALL:
- 1.3.1. PROVIDE SHOP DRAWINGS TO THE ARCHITECT PRIOR TO FABRICATION, STAMPED, SIGNED AND DATED BY A PROFESSIONAL ENGINEER.
- 1.3.2. DESIGN ALL GUARDS TO MEET LATERAL LOADS DESCRIBED IN OBC CLAUSE 4.1.5.14.
- 1.3.3. DESIGN ALL HANDRAILS TO MEET LOADS DESCRIBED IN OBC CLAUSE 4.1.5.14(7).
- 1.3.4. DESIGN ALL STAIRS TO SUPPORT A MINIMUM LIVE LOAD OF 4.89kPa.
- 1.4. IT IS THE RESPONSIBILITY OF THE CONTRACTOR WHO IS SUPPLYING AND INSTALLING NON-STRUCTURAL COMPONENTS AND EQUIPMENT, THAT ALL NON-STRUCTURAL ELEMENTS AND EQUIPMENT (AND THEIR CONNECTIONS TO THE STRUCTURE) LISTED IN TABLE 4.1.8.10 OF THE OBC ARE DESIGNED IN ACCORDANCE WITH CLAUSE 4.1.8.10.

2. FIRE SAFETY

- 2.1. REFER TO ARCHITECTURAL DRAWINGS FOR ALL FIRE SAFETY RATING REQUIREMENTS FOR STRUCTURAL COMPONENTS.
- 2.1.1. HOLLOW CORE SLABS SHALL BE DESIGNED TO MEET THE FIRE RATING AS NOTED ON THE ARCHITECTURAL DRAWINGS.

3. LATERAL LOADS ON STRUCTURE

3.1. WIND LOADING

- 3.1.1. WIND PARAMETERS
- THE WIND LOADING PARAMETERS INDICATED BELOW HAVE BEEN CALCULATED IN ACCORDANCE TO CLAUSE 4.1.7 OF NBC 2020 AND COMMENTARY 1 - "WIND LOAD AND EFFECTS" OF USER'S GUIDE - NBC 2020 STRUCTURAL COMMENTARIES (PART 4 OF DIVISION B).
- C_d AND C_g HAVE BEEN COMPUTED ACCORDING TO THE STATIC PROCEDURE FOR OPEN TERRAIN.
- IMPORTANCE FACTOR FOR WIND LOADING, $I_w = 1.15$
- $q(100) = 1.44 \text{ kPa}$
- S_z VALUES PER CLAUSE 4.1.7.5 OR 4.1.7.6 OF NBC 2020 AND NBC 2020 USER'S GUIDE
- C_{pi} VALUES PER CLAUSE 4.1.7.7 IN NBC 2020 AND NBC 2020 USER'S GUIDE.

3.1.2. BASE SHEARS

- WIND BASE SHEAR = 368 kN (EAST-WEST DIRECTION)
- WIND BASE SHEAR = 467 kN (NORTH-SOUTH DIRECTION)

3.1.3. LATERAL FORCES

- IT IS THE RESPONSIBILITY OF THE SUBCONTRACTOR'S ENGINEER TO CALCULATE WIND PRESSURES ON NON-STRUCTURAL COMPONENTS (CLADDING, ROOFING, ETC.) BASED ON COMMENTARY 1 OF NBC 2020 USER'S GUIDE.

3.2. EARTHQUAKE LOADING

3.2.1. EARTHQUAKE PARAMETERS

- IMPORTANCE FACTOR FOR EARTHQUAKE LOAD $I_e = 1.3$
- SITE DESIGNATION FOR SITE RESPONSE γ AND REFER TO GEOTECHNICAL REPORT
- THE EARTHQUAKE SEISMIC CATEGORY AS PER OBC TABLE 4.1.8.5.8 + SC2 (LS(0.2) = 0.233)
- $S_{M2}(2) = 0.179$ $S_{M5}(0) = 0.0028$
- $S_{M2}(5) = 0.0973$ $S_{M1}(5) = 0.00236$
- $S_{M1}(2) = 0.0509$ $P_{GA} = 0.093$
- $S_{M2}(0) = 0.0028$
- SFRS CONSISTS OF: MASONRY - CONVENTIONAL CONSTRUCTION; SHEAR WALLS AND CORRESPONDING DUCTILITY-RELATED MODIFICATION FACTORS ARE:
- $R_d = 1.5$ $R_o = 1.5$
- STRUCTURAL IRREGULARITIES CONSIDERED IN THE DESIGN PER OBC CLAUSE 4.1.8.6. CONSIST OF TYPES: NONE
- METHOD OF LATERAL ANALYSIS: STATIC

3.2.2. BASE SHEARS

- EARTHQUAKE BASE SHEAR = 2024 kN (EAST-WEST DIRECTION)
- EARTHQUAKE BASE SHEAR = 2571 kN (NORTH-SOUTH DIRECTION)

3.2.3. STIFF ELEMENTS

- STIFF ELEMENTS NOT PART OF SFRS SHALL BE SEPARATED FROM THE STRUCTURE AS PER OBC CLAUSE 4.1.8.3 (6a). EXAMPLES INCLUDE, BUT NOT LIMITED TO MASONRY PARTITIONS, BRICK VENEER, PRECAST CLADDING ETC. IT IS THE RESPONSIBILITY OF THE SUBCONTRACTOR TO PROVIDE SHOP DRAWINGS, STAMPED, SIGNED AND DATED BY A LICENSED PROFESSIONAL ENGINEER DEMONSTRATING COMPLIANCE. PROVIDE MINIMUM 25mm SEPARATION UNLESS NOTED OTHERWISE.

3.3. LATERAL FORCES ON FOUNDATION / RETAINING WALLS

- 3.3.1. WALLS RETAINING EARTH ARE DESIGNED TO SAFELY WITHSTAND HORIZONTAL EARTH PRESSURE (P IN kPa) AT A DEPTH (h IN m) GIVEN BY THE EQUATION BELOW.

$P = K \times V(h) \times q$

Where: $K = 0.45$

$W1 = 21.0 \text{ kN/m}^3$

$q = 12 \text{ kPa}$ (SURFACE PRESSURE SURCHARGE)

$h = \text{DEPTH (m)}$

3.3.2. THE WALLS HAVE BEEN DESIGNED ASSUMING FREE DRAINING BACKFILL OR THE USE OF A DRAINAGE CORE TO PREVENT

- THE BUILDUP OF HYDROSTATIC PRESSURE. (SEE TYPICAL DETAILS)

4. SUPERIMPOSED DEAD AND LIVE LOADS

- 4.1. SEE FLOOR/ROOF PLANS, NOTES, AND/OR LOADING SCHEDULES FOR DESIGN SUPERIMPOSED DEAD AND LIVE LOADING ASSUMPTIONS.

5. OTHER LOADS ON ROOFS

5.1. SNOW LOADS

- 5.1.1. THE SPECIFIED SNOW LOADING HAS BEEN CALCULATED BASED ON THE FOLLOWING PARAMETERS, MODIFIED TAKING INTO ACCOUNT FACTORS SUCH AS ROOF SIZE, WIND EXPOSURE, SLOPE AND SNOW DRIFTS.
- IMPORTANCE FACTOR FOR SNOW LOAD $I_s = 1.15$
- GROUND SNOW LOAD, $S_g = 2.2 \text{ kPa}$
- ASSOCIATED RAIN LOAD, $S_r = 0.4 \text{ kPa}$
- 5.1.2. SEE ROOF PLANS AND ACCUMULATED SNOW LOADING PLANS FOR LOCALIZED INCREASES AND DRIFTS CALCULATED IN ACCORDANCE WITH PART 4.1.6 OF NBC 2020 AND NBC 2020 STRUCTURAL COMMENTARIES.

5.2. RAIN LOADING

- 5.2.1. THE BUILDING ROOF STRUCTURE HAS BEEN DESIGNED ON THE ASSUMPTION THAT FLOW CONTROL ROOF DRAINS SATISFY ALL REQUIREMENTS OF THE 2020 NATIONAL PLUMBING CODE OF CANADA.
- 5.2.2. THE TOTAL RAIN LOAD ASSOCIATED WITH THE ONE DAY (24 HR) RAINFALL, IN ACCORDANCE WITH CLAUSE 4.1.6.4 (1) OF NBC 2020 AND COMMENTARY 1 IN USER'S GUIDE - NBC 2020 STRUCTURAL COMMENTARIES (PART 4 OF DIVISION B) IS: ONE DAY RAIN (150) = 119 mm

5.3. WIND UPLIFT

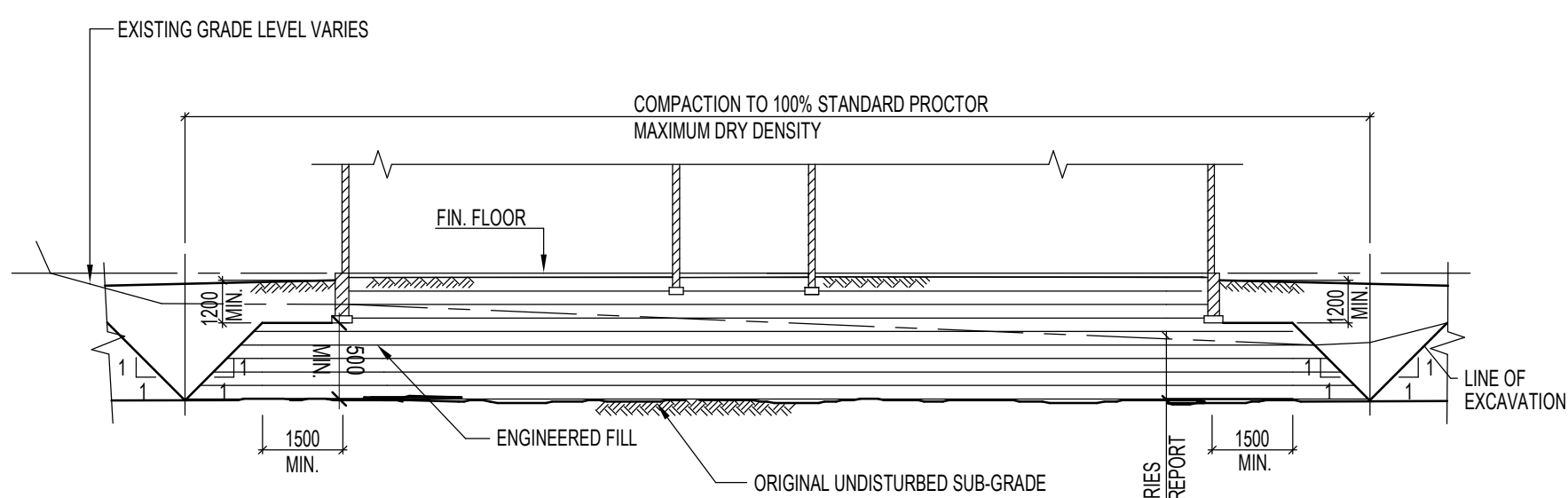
- 5.3.1. SEE ROOF PLANS, NOTES OR ROOF UPLIFT LOADING SCHEDULE FOR DESIGN LOAD VALUES FOR WIND UPLIFT. THE VALUES PRESENTED ON THESE DRAWINGS ARE UNFACTORED LOADS.
- 5.3.2. UPLIFT PRESSURES HAVE BEEN CALCULATED IN ACCORDANCE WITH CLAUSE 4.1.7.5 OR 4.1.7.6 OF NBC 2020.
- 5.3.3. FOR WIND PARAMETERS REFER TO SECTION 3.1 - WIND LOADING.

6. SERVICEABILITY

- 6.1. TYPICAL HORIZONTAL ELEMENTS (NOT SUPPORTING CLADDING) HAVE BEEN DESIGNED SO THAT THE CALCULATED DEFLECTIONS DO NOT EXCEED THE FOLLOWING LIMITS.

MEMBER TYPE	DEFLECTION COMPONENT	DEFLECTION LIMIT
REINFORCED CONCRETE MEMBERS		
FLAT ROOFS NOT SUPPORTING OR ATTACHED TO NON-STRUCTURAL ELEMENTS LIKELY TO BE DAMAGED BY LARGE DEFLECTIONS	IMMEDIATE DEFLECTION DUE TO SPECIFIED LIVE LOAD OR SNOW LOAD	L/180
FLOORS NOT SUPPORTING OR ATTACHED TO NON-STRUCTURAL ELEMENTS LIKELY TO BE DAMAGED BY LARGE DEFLECTIONS	IMMEDIATE DEFLECTION DUE TO SPECIFIED LIVE LOAD	L/360
ROOF OR FLOOR CONSTRUCTION SUPPORTING OR ATTACHED TO NON-STRUCTURAL ELEMENTS LIKELY TO BE DAMAGED BY LARGE DEFLECTIONS	PORTION OF TOTAL DEFLECTION OCCURRING AFTER ATTACHMENT OF NON-STRUCTURAL ELEMENTS	L/480
ROOF OR FLOOR CONSTRUCTION NOT SUPPORTING OR ATTACHED TO NON-STRUCTURAL ELEMENTS LIKELY TO BE DAMAGED BY LARGE DEFLECTIONS	PORTION OF TOTAL DEFLECTION OCCURRING AFTER ATTACHMENT OF NON-STRUCTURAL ELEMENTS	L/240
STRUCTURAL STEEL MEMBERS		
FLOOR MEMBERS	LIVE	L/360
FLOOR MEMBERS	TOTAL = DEAD + LIVE (MINUS CAMBER)	L/300
ROOF MEMBERS SUPPORTING CONSTRUCTION AND FINISHES SUSCEPTIBLE TO CRACKING	LIVE OR SNOW LOAD	L/360
ROOF MEMBERS SUPPORTING CONSTRUCTION AND FINISHES NOT SUSCEPTIBLE TO CRACKING	LIVE OR SNOW LOAD	L/300
ROOF MEMBERS	TOTAL = DEAD + LIVE (MINUS CAMBER)	L/240

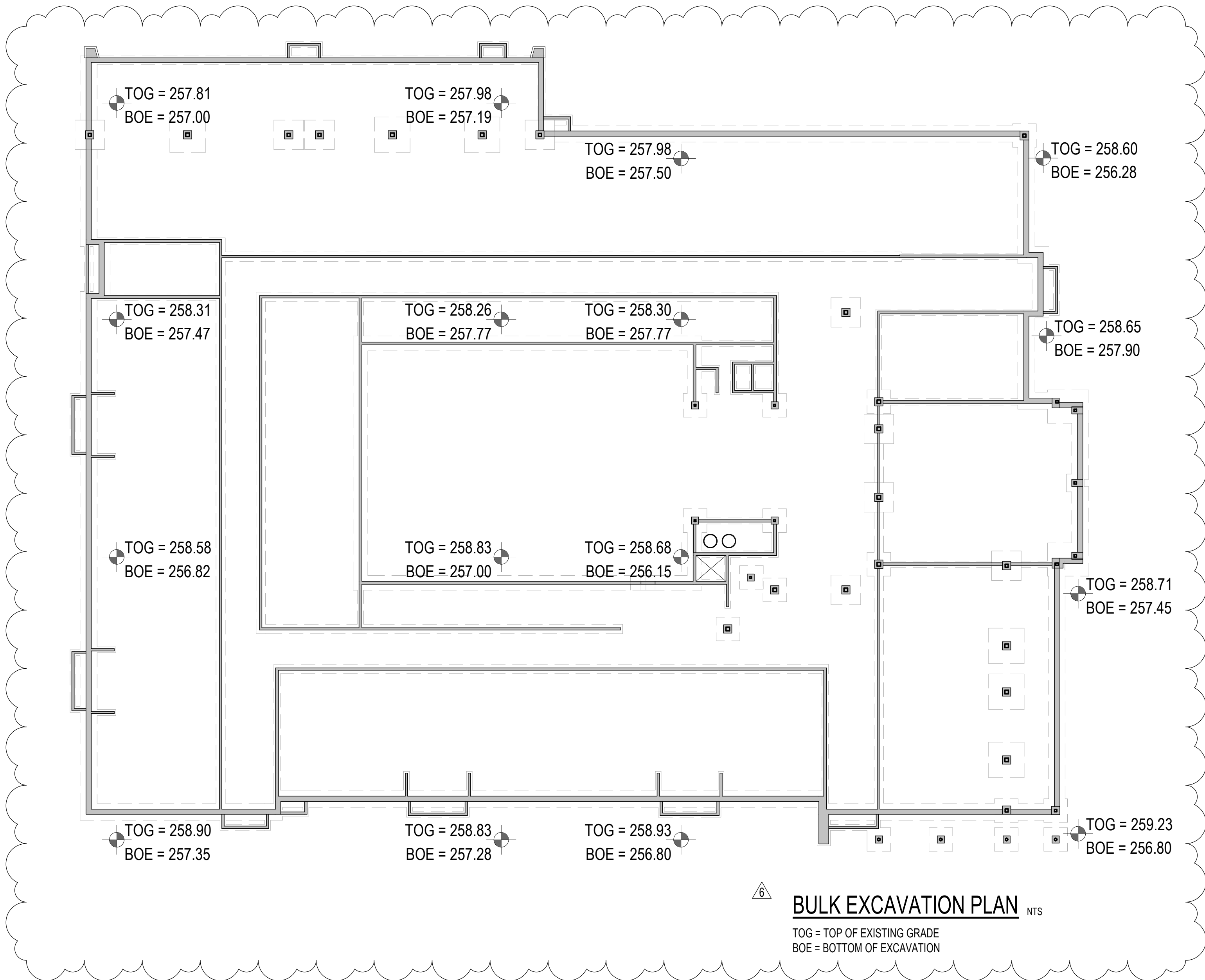
- 6.2. PERIMETER OR SPANDREL ELEMENTS SUPPORTING CLADDING HAVE BEEN DESIGNED FOR AN ALLOWABLE DEFLECTION OF 1/480, OR 1 mm, WHICHEVER IS LESS.
- 6.3. THE BUILDING STRUCTURE HAS BEEN DESIGNED SUCH THAT THE TOTAL DRIFT PER STOREY UNDER SERVICE WIND AND GRAVITY LOADS DOES NOT EXCEED 1/500 OF THE STOREY HEIGHT.
- 6.4. THE BUILDING STRUCTURE HAS BEEN DESIGNED SUCH THAT THE CALCULATED INTERSTOREY DEFLECTIONS DUE TO SEISMIC LOADS PER OBC 4.1.8.15 DO NOT EXCEED 1/302 OF THE STOREY HEIGHT.



DIAGRAMMATIC SECTION THROUGH THE BUILDING
SHOWING PROPOSED ENGINEERED FILL

N.T.S.

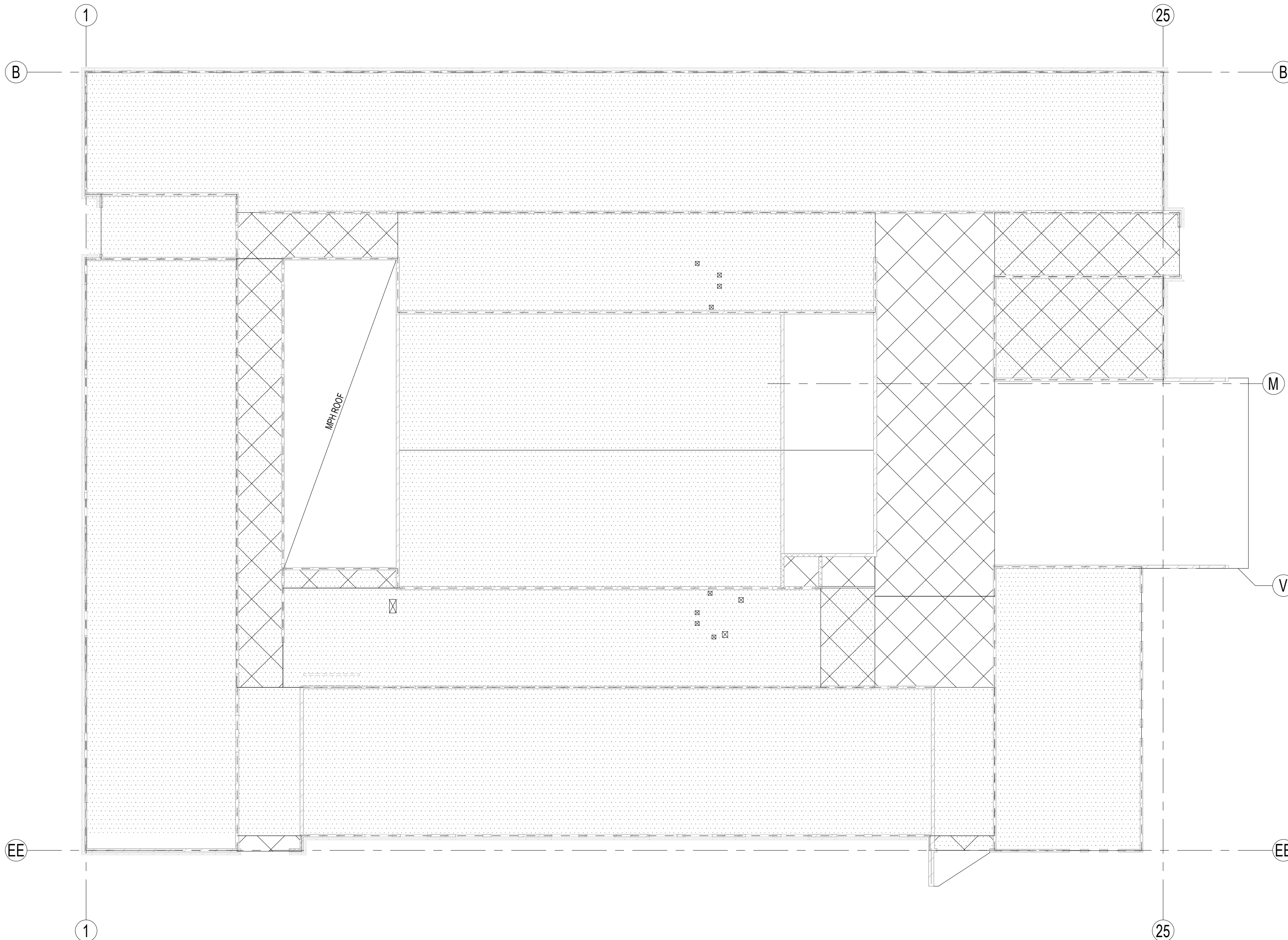
(REFER TO ENGINEERED FILL NOTES ON THIS DRAWING)



BULK EXCAVATION PLAN

TOG = TOP OF EXISTING GRADE
BOE = BOTTOM OF EXCAVATION

N.T.S.



FUTURE LOADING PLAN
1: 200

1. SEE DRAWING S0-02 FOR NOTES AND SCHEDULES.

6	ISSUED FOR ADD#1	JULY/27/26
5	ISSUED FOR TENDER	JUNE/17/26
4	ISSUED FOR FINAL COORDINATION	FEB/09/26
3	ISSUED FOR PERMIT	OCT/14/25
2	ISSUED FOR PROGRESS REVIEW	JULY/31/25
1	ISSUED FOR 85% CD	JUNE/24/25
NO	ISSUED / REVISION	DATE

DRAWINGS ARE NOT TO BE SCALED. CONTRACTOR MUST CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS ON THE PROJECT, AND MUST REPORT ANY DISCREPANCIES TO THE CONSULTANTS BEFORE PROCEEDING WITH THE WORK. THE USE OF THIS DRAWING ON ANY PROJECT IS FORBIDDEN WITHOUT THE WRITTEN APPROVAL OF THE CONSULTANTS.



MAYFIELD WEST #2
PUBLIC SCHOOL

29 TWEEDEHILL AVE.
CALEDON, ONTARIO

LEGAL DESCRIPTION
BLOCK 201,
REGISTERED PLAN 43M-2114
TOWN OF CALEDON,
REGIONAL MUNICIPALITY OF PEEL

peel District School Board
5650 HURONTARIO STREET
MISSISSAUGA, ON, L5R 1C6
Tel: (905) 890-1099 Fax: (905) 890-9463

DESIGN CRITERIA
NOTES

Salas O'Brien
2235 Sheppard Ave. E.
Suite No. 1100
Toronto, ON M2J 5B5
Stephenson Engineering, a company of Salas O'Brien

SCALE	PROJECT
As indicated	20241729
DATE	DRAWING
JULY 2026	S0-01
DRAWN	AE
CHECKED	JG
PRINT DATE	2026-07-27 1:58:49 PM
REVIT FILE	

FOUNDATION PLAN NOTES

- ALL FOOTINGS SHALL BE FOUND ON NEW ENGINEERED FILL CAPABLE OF SUSTAINING 150 kPa (SL) AND 225 kPa (UL).
- REFER TO SOILS REPORT NO. 146/20 DATED JULY 27, 2020 PREPARED BY FOR FORWARD ENGINEERS & ASSOCIATES INC.
- SOIL AT THE UNDERSIDE OF THE FOOTINGS IS TO BE INSPECTED AND APPROVED BY A REPRESENTATIVE OF A SOILS CONSULTANT BEFORE PLACING CONCRETE.
- UNDERSIDE OF WALL FOOTINGS TO BE AT ELEVATIONS AS NOTED.
- SLAB - ON - GRADE TO BE 100 mm THICK REINFORCED SYNTHETIC FIBRES, (SEE SPECIFICATION).
- TOP OF SLAB - ON - GRADE TO BE AT FINISHED FLOOR DATUM ELEVATION, 250.80m EXCEPT AS CROSSED AND NOTED. TOS = TOP OF SLAB.
- CENTRELINES OF COLUMNS, CAPS AND FOOTINGS ARE COINCIDENT UNLESS OTHERWISE NOTED.
- PROVIDE SLAB DEPRESSIONS, OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS, AS REQUIRED BY THE ARCHITECTURAL AND MECHANICAL DRAWINGS AND SPECIFICATIONS.
- SOP = STEP DOWN FOOTING.
- UNLESS OTHERWISE NOTED, ALL WALL FOOTINGS TO BE 300 mm DEEP WITH 150 mm PROJECTIONS EACH SIDE.
- FILL REQUIRED ON BOTH SIDES OF FOUNDATION WALLS SHALL BE PLACED AND COMPACTED SIMULTANEOUSLY ON BOTH SIDES TO EQUALIZE SOIL PRESSURE.
- THE PROJECT SUPERINTENDENT MUST NOTIFY THIS OFFICE 24 HOURS PRIOR TO PLACING STRUCTURAL CONCRETE, INCLUDING STRIP FOOTINGS.
- SEE ALSO TYPICAL NOTES AND DETAILS.
- SEE COLUMN SCHEDULE FOR COLUMNS AND COLUMN FOOTINGS.
- CONCRETE STRENGTHS - SEE CONCRETE MIX SCHEDULE.
- REFER TO ENGINEERED FILL NOTES ON DRAWING S0-01.

PRECAST FLOOR / LOW ROOF PLAN NOTES

- TOP OF PRECAST SLAB TO BE 50mm FINISHED FLOOR DATUM, ELEVATION 380mm, EXCEPT AS CROSSED AND NOTED. T.O.S. = TOP OF SLAB.
- TOPS OF STEEL BEAMS TO BE AT UNDERSIDE OF PRECAST SLABS (304mm), EXCEPT AS SHOWN THUS ON PLAN.
- REFER TO FLOOR LOADING SCHEDULES ON THIS DRAWING.
- HOLLOWCORE SLABS SHALL BE DESIGNED TO SUPPORT THE SPECIFIED DEAD AND LIVE LOADS AND IN ADDITION SHALL SUPPORT MASONRY PARTITION LOADS (CO-ORDINATE WITH ARCHITECTURAL DRAWINGS AND LOADING SCHEDULES).
- HOLLOWCORE SLABS SHALL HAVE A FIRE RATING OF 2 HOURS.
- SUBMIT DETAILS FOR ALL OPENINGS OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS, TO THE STRUCTURAL CONSULTANT FOR REVIEW.
- LOCATIONS OF MECHANICAL EQUIPMENT AND MECHANICAL EQUIPMENT LOADS ARE TO BE CONFIRMED BY THE MECHANICAL CONTRACTOR BEFORE PROCEEDING.
- AN INDEPENDENT INSPECTION AND TESTING COMPANY IS TO INSPECT STRUCTURAL STEEL IN THE SHOP AND IN THE FIELD FOR WELDING, CONNECTIONS, BOLT TORQUES, AND GENERAL CONFORMANCE WITH THE STRUCTURAL DRAWINGS AND SPECIFICATIONS.
- NON-LOAD BEARING PARTITIONS SHALL BE A MINIMUM OF 25 mm CLEAR OF STRUCTURE.
- WALL PLATES (WP) SHALL HAVE LAST DIMENSION PARALLEL TO BEAM OR JOIST WEB. SEE WALL PLATE SCHEDULE.
- SEE LINTEL SCHEDULE ON THIS DRAWING.
- THE PROJECT SUPERINTENDENT MUST CONTACT THIS OFFICE 24 HOURS PRIOR TO PLACING STRUCTURAL CONCRETE FOR A REVIEW OF PREPARATIONS.
- SEE TYPICAL NOTES, TYPICAL DETAILS, COLUMN SCHEDULE AND ALL OTHER DRAWINGS.
- PROVIDE A MAXIMUM 25mm BONDED, NON-COMPOSITE TOPPING SLAB ON PRECAST HOLLOWCORE SLABS, UNLESS OTHERWISE NOTED. TOP SURFACE IS TO BE FLAT (SEE SPECIFICATION FOR PREPARATION).
- PARTITIONS ABOVE PRECAST HOLLOWCORE SLABS ARE TO BE CONSTRUCTED BEFORE TOPPING IS PLACED.
- FOR CONCRETE BASE AT LOCKERS, SEE ARCHITECTURAL DRAWINGS.
- PROVIDE 100 mm HOUSE KEEPING PADS IN MECHANICAL ROOM (SEE MECHANICAL DRAWINGS FOR SIZE AND LOCATION) REINF: 10M@300 EACH WAY.
- PROVIDE MIN 100x100 CURBS AROUND ALL OPENINGS AND AT DOORS IN MECHANICAL ROOM. REINF: 10M@300 DOWELS FROM BASE SLAB + 1-10M CONT. (REFER TO MECHANICAL AND ARCHITECTURAL DRAWINGS).
- REFER TO ARCHITECTURAL DRAWINGS FOR FIRE PROOFING OF BEAMS AND COLUMNS.
- REFER TO CONCRETE MIX SCHEDULE ON THIS DRAWING.
- IF ANY ASPECT OF THE PRECAST HOLLOWCORE SLAB CONSTRUCTION, PROPOSED BY THE CONTRACTOR FOR USE ON THIS PROJECT, VARIES FROM THAT SHOWN ON THE TENDER DRAWINGS AND THE VARIATION REQUIRES THE RE-DESIGN OF THE BASE BUILDING ELEMENTS AND/OR THE REVISION TO OR ADDITION OF MATERIALS TO ACCOMMODATE SUCH VARIANCE AND THE OWNER, THE ARCHITECT AND THE STRUCTURAL CONSULTANT ARE IN AGREEMENT WITH THE PROPOSED VARIATION, THEN THE CONTRACTOR REQUESTING THE VARIATION SHALL PAY FOR ALL EXTRA COSTS, INCLUDING RE-DESIGN, ASSOCIATED WITH THE CHANGE.

PRECAST ROOF PLAN NOTES

- TOP OF CONCRETE SLABS AND STEEL DECK IS TO BE SLOPED TO DRAIN AS SHOWN ON ARCHITECTURAL DRAWINGS.
- TOPS OF STEEL BEAMS TO BE AT UNDERSIDE OF PRECAST SLABS EXCEPT AS NOTED (SLOPE AS REQUIRED).
- DEAD LOAD - SEE ROOF LOADING SCHEDULE.
- SNOW LOAD IS AS INDICATED IN ROOF LOADING SCHEDULE. IN ADDITION THE ROOF HAS BEEN DESIGNED FOR ACCUMULATED SNOW LOAD (ASL) AND LOADS DUE TO WATER RETENTION IN ACCORDANCE WITH THE REQUIREMENTS OF THE ONTARIO BUILDING CODE.
- PRECAST SLABS TO BE DESIGNED TO SUPPORT SPECIFIED DEAD AND SNOW LOADS.
- PRECAST SLABS SHALL HAVE A FIRE RATING OF 2 HOURS.
- LOCATION OF MECHANICAL EQUIPMENT AND MECHANICAL EQUIPMENT LOADS ARE TO BE CONFIRMED BY MECHANICAL CONTRACTOR, REFER TO MECHANICAL DRAWINGS. MECHANICAL EQUIPMENT AND PIPING MUST BE HUNG FROM OWIS PANEL POINTS AND HANGERS SPACING SHALL NOT EXCEED 3.0 m.
- SUBMIT DETAILS FOR ALL OPENINGS OTHER THAN THOSE SHOWN ON STRUCTURAL DRAWINGS TO STRUCTURAL CONSULTANT FOR REVIEW.
- AN INDEPENDENT INSPECTION AND TESTING COMPANY IS TO INSPECT STRUCTURAL STEEL AND STEEL DECK IN THE SHOP AND IN THE FIELD FOR WELDING, CONNECTIONS, BOLT TORQUES AND GENERAL CONFORMANCE WITH THE STRUCTURAL DRAWINGS AND SPECIFICATIONS.
- NON-LOAD BEARING PARTITIONS SHALL BE A MINIMUM OF 25 mm CLEAR OF STRUCTURE.
- WALL PLATES (WP) SHALL HAVE LAST DIMENSION PARALLEL TO BEAM OR JOIST WEB. SEE SCHEDULE ON DRAWINGS.
- SEE ROOF LINTEL SCHEDULE AND WALL PLATE SCHEDULE ON S0-02.
- SEE TYPICAL NOTES, TYPICAL DETAILS, COLUMN AND FOOTING SCHEDULE AND ALL OTHER DRAWINGS.
- SEE SPECIFICATION FOR GRADE OF STRUCTURAL STEEL AND STEEL DECK.

STEEL ROOF PLAN NOTES

- UNDERSIDE OF ROOF DECK AT PERIMETER AND HIGH POINTS TO BE 0.6mm BELOW ROOF DATUM ELEVATION +785mm AT LOW POINTS, EXCEPT AS NOTED ON PLAN U.O.D. = UNDERSIDE OF DECK.
- ROOF DECK TO SLOPE TO DRAINS AS SHOWN ON ARCHITECTURAL DRAWINGS.
- TOP OF STEEL BEAMS SUPPORTING STEEL DECK ARE 0.6mm BELOW U.O.D. TOP OF STEEL BEAM SUPPORTING JOISTS ARE 150mm BELOW U.O.D. EXCEPT AS SHOWN THUS ON PLAN.
- OWIS SHOES TO BE 150mm DEEP UNLESS NOTED.
- FOR LOADING SEE ROOF LOADING SCHEDULE ON THIS DRAWING.
- OPEN WEB STEEL JOISTS SHALL BE DESIGNED TO SUPPORT TOTAL DEAD, SNOW AND SPACING AS SHOWN ON PLAN. LOADS, IN ADDITION, OWIS SHALL BE DESIGNED FOR ADDITIONAL LOADS SHOWN ON PLAN, ACCUMULATED SNOW DRIFT LOADS (ASL) AND FOR POINT LOADS OF BRACKING AND MECHANICAL EQUIPMENT IN EXCESS OF 2.0m PER JOIST.
- JOISTS AND BEARING ANCHORAGES SHALL BE DESIGNED TO RESIST UPLIFT DUE TO WIND AS REQUIRED BY THE ONTARIO BUILDING CODE AND IN NO CASE LESS THAN THE GREATER OF THOSE INDICATED ON THE WIND UPLIFT KEY PLAN.
- OWIS SHALL BE DESIGNED BY A LICENSED PROFESSIONAL ENGINEER, SHOP DRAWINGS AND CALCULATIONS BEARING THE STAMP AND SIGNATURE OF THE PROFESSIONAL ENGINEER RESPONSIBLE FOR THE DESIGN SHALL BE SUBMITTED FOR REVIEW PRIOR TO FABRICATION AND ERECTION.
- PROVIDE CONTINUOUS TOP AND BOTTOM CHORD BRIDGING FOR OWIS IN ACCORDANCE WITH CSA S16.1 IN NO CASE LESS THAN AS SHOWN ON PLAN.
- PROVIDE BOTTOM CHORD BRACING FOR ALL JOISTS NEAR THE FIRST BOTTOM CHORD PANEL POINT. BRIDGING CANNOT BE CONSIDERED AS BRACING.
- "JT" NOTED AGAINST JOIST DENOTES "THE JOIST" I.E. EXTEND BOTTOM CHORD AND CONNECT TO SUPPORT. THE JOIST TO BE DESIGNED FOR 1% OF THE COLUMN AXIAL LOAD. SEE COLUMN SCHEDULE.
- LIVE LOAD DEFLECTION OF ROOF JOISTS SHALL NOT EXCEED 1/240 OF SPAN UNLESS OTHERWISE NOTED.
- STEEL ROOF DECK SHALL BE DESIGNED TO SUPPORT SPECIFIED TOTAL DEAD AND LIVE LOADS, MINIMUM BASE NOMINAL THICKNESS (BMT) OF STEEL DECK SHALL BE 0.75 MM.
- NO HANGERS OR BRACKETS SUPPORTING MECHANICAL EQUIPMENT OR PIPING SHALL BE HUNG FROM ROOF DECK.
- STEEL ROOF DECK SHALL BE INSTALLED FOR DIAPHRAGM ACTION IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE CANADIAN SHEET STEEL BUILDING INSTITUTE AND TYPICAL NOTES.
- LOCATION OF MECHANICAL EQUIPMENT AND MECHANICAL EQUIPMENT LOADS ARE TO BE CONFIRMED BY MECHANICAL CONTRACTOR BEFORE STRUCTURAL STEEL IS FABRICATED. REFER TO MECHANICAL DRAWINGS, UNLESS OTHERWISE APPROVED. MECHANICAL EQUIPMENT AND PIPING MUST BE HUNG FROM OWIS PANEL POINTS AND HANGER SPACING SHALL NOT EXCEED 3.0 m.
- FRAME ALL ROOF OPENINGS AND MECHANICAL UNITS AS SHOWN ON TYPICAL DETAILS UNLESS NOTED.
- SUBMIT DETAILS TO STRUCTURAL CONSULTANT FOR REVIEW FOR ALL OPENINGS OTHER THAN THOSE SHOWN ON STRUCTURAL DRAWINGS.
- "Y" DENOTES MOMENT CONNECTION. FACTORED MOMENT AS SPECIFIED ON DRAWINGS IS IN kN METRES.
- MOMENT CONNECTIONS SHALL BE DESIGNED BY A LICENSED PROFESSIONAL ENGINEER, SHOP DRAWINGS AND CALCULATIONS BEARING THE STAMP AND SIGNATURE OF THE LICENSED PROFESSIONAL ENGINEER RESPONSIBLE FOR THE DESIGN SHALL BE SUBMITTED FOR REVIEW PRIOR TO FABRICATION AND ERECTION.
- AN INDEPENDENT INSPECTION AND TESTING COMPANY (S) TO INSPECT STRUCTURAL STEEL AND STEEL DECK IN THE SHOP AND IN THE FIELD FOR WELDING, CONNECTIONS, BOLT TORQUES, AND GENERAL CONFORMANCE WITH THE STRUCTURAL DRAWINGS AND SPECIFICATIONS.
- NON-LOAD BEARING PARTITIONS SHALL BE A MINIMUM OF 25 mm CLEAR OF STRUCTURE.
- WALL PLATES (WP) SHALL HAVE LAST DIMENSION PARALLEL TO BEAM OR JOIST WEB. SEE SCHEDULE ON DRAWINGS.
- SEE ROOF LINTEL SCHEDULE ON THIS DRAWING.
- REFER TO GENERAL NOTES AND SPECIFICATION FOR GRADES OF STRUCTURAL STEEL AND STEEL DECK.
- SEE TYPICAL NOTES, TYPICAL DETAILS, COLUMN AND FOOTING SCHEDULES AND ALL OTHER DRAWINGS.
- FOR LOCATION OF ROOF ANCHORS AND DAVIT SUPPORTS, REFER TO ARCHITECTURAL DRAWINGS. REFER TO TYPICAL DETAILS FOR CONNECTION DETAILS. SUBMIT SHOP DRAWINGS FOR REVIEW AND COORDINATION.

MASONRY CORE FILL SCHEDULE

M20

MASONRY CORE FILL SCHEDULE			
TYPE	SIZE	REINF	REMARKS
C1	1 x 400	2-15 VERT. CONT.	
C2	1 x 600	3-15 VERT. CONT.	
C3	1 x 800	4-15 VERT. CONT.	
C4	1 x 400 x 400	4-15 VERT. CONT.	
C5	1 x 1200	6-15 VERT. CONT.	
1 DENOTES THE WALL THICKNESS			

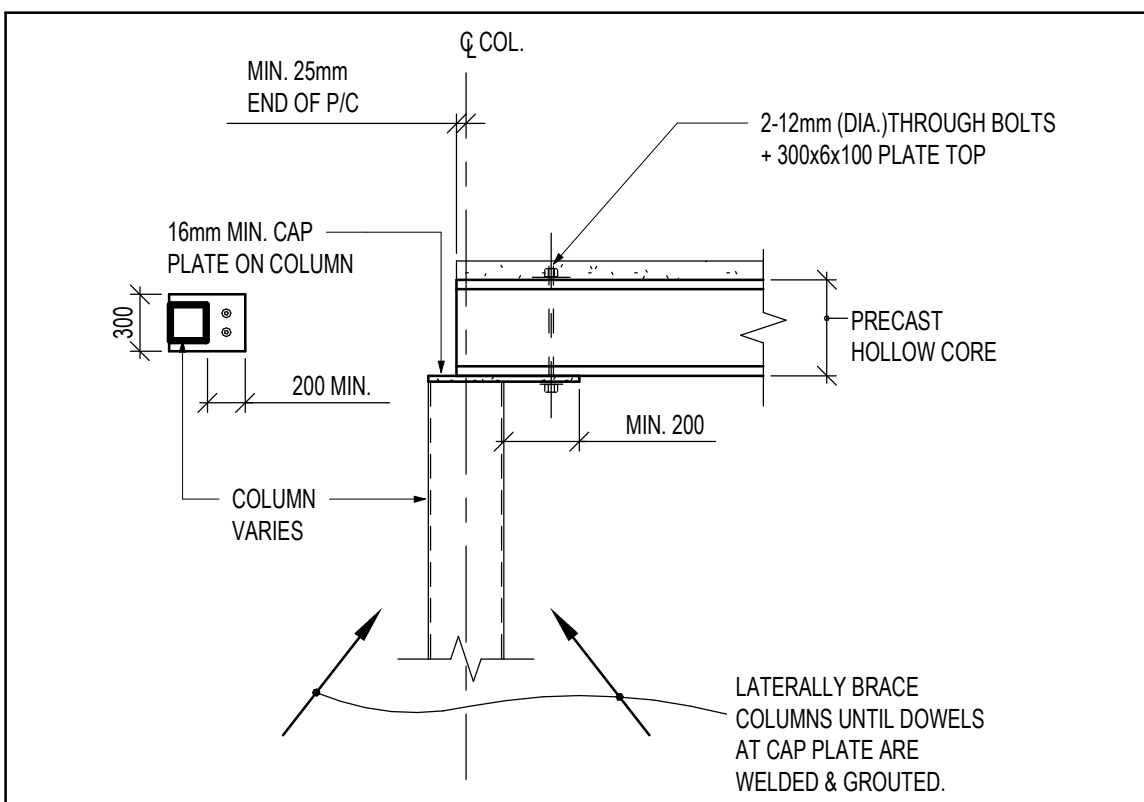
MASONRY CORE FILLS NOTES:

- PROVIDE CORE FILLS AS NOTED ON PLAN AND PROVIDE REINFORCEMENT AS SHOWN IN SCHEDULE.
- CORE FILLS EXTEND FULL HEIGHT OF WALL FLOOR TO FLOOR UNLESS NOTED.
- INSTALL ALL REINFORCEMENT FULL HEIGHT BETWEEN FLOORS AND GROUT CORE SOLID FULL HEIGHT BETWEEN FLOORS UNLESS NOTED.
- WHERE CORE FILL CONTINUES TO NEXT FLOOR ABOVE, EXTEND INDICATED VERTICAL REINFORCEMENT TO PROVIDE SPECIFIED CLASS "B" TENSION LAP SPlice WITH REINFORCEMENT OF CORE ABOVE. WHERE MASONRY WALLS START ON TOP OF STEEL BEAMS, PROVIDE VERTICAL REINFORCEMENT DOWELS TO MATCH REINFORCEMENT NOTED IN THIS SCHEDULE, OR EQUIVALENT CO. DEFORMED BAR ANCHORS.
- PROVIDE 15M DOWELS IN FOUNDATION WALLS FOR ALL WALL REINFORCEMENT UNLESS NOTED OTHERWISE.
- REFER TO MOM FOR LAP LENGTHS FOR VERTICAL BARS AND DOWELS.
- REFER TO CORE FILLS SCHEDULE FOR DETAILS AND REINFORCEMENT.
- PROVIDE CORE FILL C1 AT EACH SIDE OF OPENINGS UN OTHERWISE NOTED ON PLANS AND/OR SECTIONS.
 - PROVIDE C1 AT UNSUPPORTED ENDS OF WALLS UN
 - PROVIDE C1 AT EACH SIDE OF CONTROL JOINTS UN
- PROVIDE CORE FILL C4 AT ALL WALL CORNERS UN OTHERWISE NOTED IN PLANS AND/OR SECTIONS.
- IN EXTERIOR MASONRY WALLS EXCEEDING 4m IN HEIGHT,
 - PROVIDE IT WALL BLA CONTROL JOINT BY BLOK-LOK OR EQUIVALENT FOR ALL VERTICAL CONTROL JOINTS
 - 150mm MASONRY WALL REINFORCING - 15M@800 O.C.
 - 240mm MASONRY WALL REINFORCING - 15M@800 O.C.
- REINFORCE ALL MASONRY SILLS, INTERIOR AND EXTERIOR, AS PER THE REINFORCING INDICATED IN THIS SCHEDULE. GROUT TOP TWO COURSES OF ALL SILLS SOLID. FULLY GROUT ALL EXTERIOR SILLS.

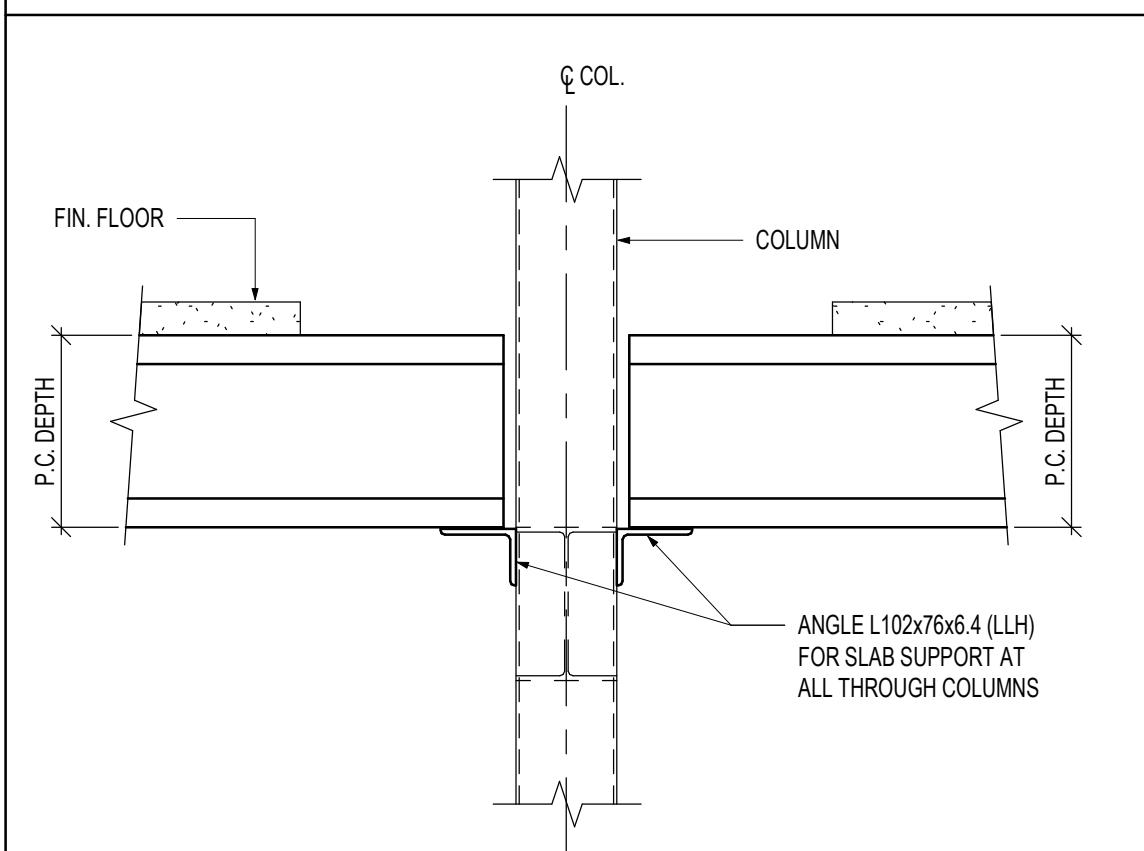
CONCRETE MIX SCHEDULE

EXPOSURE	ELEMENT	MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS (MPa)	EXPOSURE CLASSIFICATION	NOTES
GENERAL NON-EXPOSED CONCRETE (i.e. NOT EXPOSED TO CHLORIDES NOR FREEZE AND THAW)	FOOTINGS	25	N	
	COLUMNS	25	N	
	SLAB ON GRADE 2	25	N	
	SLAB ON METAL DECK	25	N	
	LEAN MIX	5	N	
	FLOATING SLABS	25	N	
EXTERIOR EXPOSED CONCRETE EXCLUDING PARKING (i.e. EXPOSED TO FREEZE AND THAW BUT NOT CHLORIDES)	FOUNDATION/RETAINING WALLS	25	F-2	
	SLAB ON GRADE 2 SIDEWALKS	32	C-2	
GROUT	MASONRY FILL/BOND BEAMS	15 (FINE GROUT)		CONFORM TO REQUIREMENTS OF CSA A179

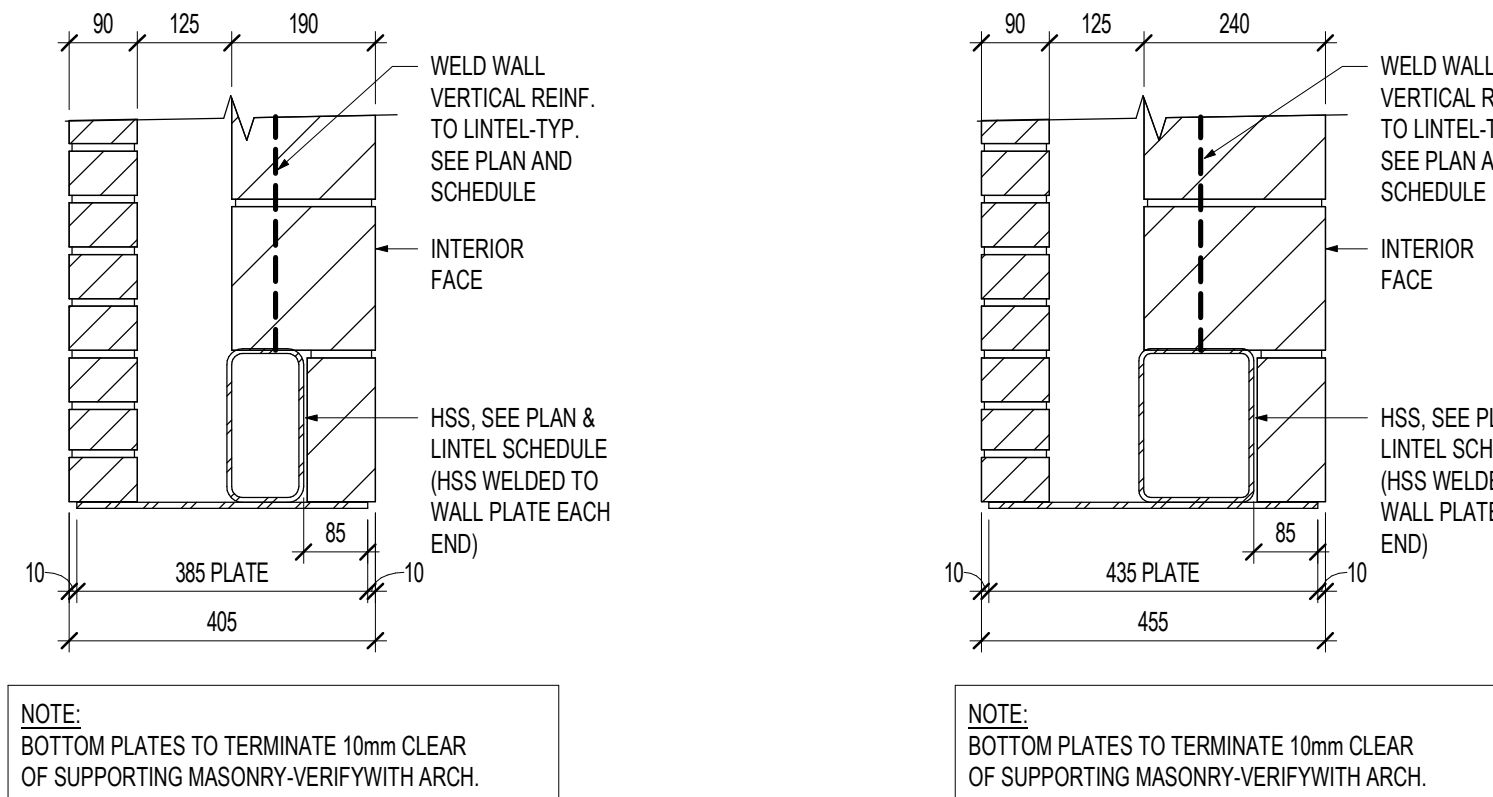
- STRENGTH SPECIFIED AT 28 DAYS UN O IN DRAWINGS AND SCHEDULES.
- REINFORCED WITH SYNTHETIC FIBERS ADDED AT BATCHING PLANT - SEE SPECIFICATIONS.



TYPICAL AT TOPS OF ALL EXTERIOR COLUMNS SUPPORTING PRECAST



FOR PRECAST SLAB SUPPORT AT ALL "THROUGH COLUMNS"

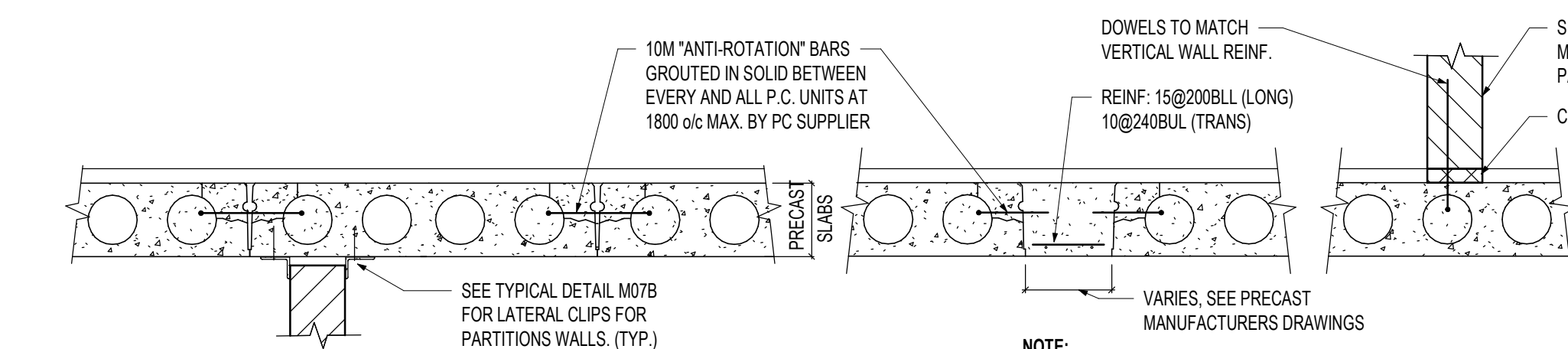


DL1 DETAIL

S0-02 1:10

DL2 DETAIL

S0-02 1:10



TYPICAL DETAIL OF INFILL SLAB

- SEE P.C. MANUFACTURERS DRAWINGS FOR LOCATION AND QUANTITY (SEE ALSO SPECIFICATION P.C. MANUFACTURER TO SUPPLY REINFORCING BARS AND CONCRETE).
- IF BLOCK PARTITIONS ARE INSTALLED AFTER TOPPING IS POURED, GENERAL CONTRACTOR TO NOTE AND COORDINATE THE AFFECT OF POST PARTITION ERECTION ON THE CAMBER OF THE PRECAST SLABS. IN ADDITION, DOWELS MUST BE PROVIDED FROM PRECAST SLAB INTO WALL ABOVE MIN. 10M@1200 U.N.O. IN NOTES SCHEDULES, TYPICAL DETAILS, ETC.

GENERAL CONTRACTOR TO COORDINATE ALL EXTENTS AND DIMENSIONS OF NON-LOAD BEARING MASONRY WALLS WITH THE ARCHITECTURAL DRAWINGS AND RESPECTIVE SUB-TRADES. STRUCTURAL DRAWINGS DO NOT SHOW/ILLUSTRATE THE FULL EXTENT OF NON-LOAD BEARING MASONRY WALLS.

PRECAST FLOOR LOADING SCHEDULE			
ROOF USE	LOADING	SUPERIMPOSED DEAD LOAD (kPa)	LIVE LOAD (kPa)
CLASSROOM *		1.54	2.4
CORRIDOR / STAIRS *		1.8	4.8
MECHANICAL ROOM *		3.6	6.0
STORAGE ROOMS / KITCHENETTE /		1.54	4.8
LOW ROOF AREA		1.06	2.55 + ASL

- * - AS NOTED ON SCHEDULE
- HOLLOWCORE SLABS SHALL BE DESIGNED TO RESIST THE UNIFORM LOADING ABOVE AND IN ADDITION SHALL SUPPORT MASONRY PARTITION LOADS (CO-ORDINATE WITH ARCHITECTURAL DRAWINGS)
- 140 PARTITION, 5.0mm AND 180 PARTITIONS, 7.3mm

STEEL ROOF LOADING SCHEDULE			
ROOF USE	LOADING	SUPERIMPOSED DEAD LOAD (kPa)	FUTURE LIVE LOAD ALLOWANCE (kPa)
GENERAL/GYM ROOF		1.21	2.55 + ASL
CORRIDOR ROOF		1.26	2.55 + ASL
MECHANICAL ROOF		1.76	2.55 + ASL

IN ADDITION TO UNIFORM LOADING SHOWN, REFER TO ROOF PLAN FOR ADDITIONAL LOADING FOR ACCUMULATED SNOW LOADS (ASL) AS SHOWN, AND FOR POINT LOADS OF BRACKING AND MECHANICAL EQUIPMENT.

IN ADDITION TO UNIFORM LOADING SHOWN, DESIGN JOISTS FOR ANY CONCENTRATED LOADS RESULTING FROM MECHANICAL EQUIPMENT, PIPING OR AS A MINIMUM DESIGN FOR POINT LOAD OF 20kN AT ANY LOCATION.

NOTE: ROOFING SINGLE PLY = 0.72 kPa HAS BEEN INCLUDED IN THE ABOVE TABLE

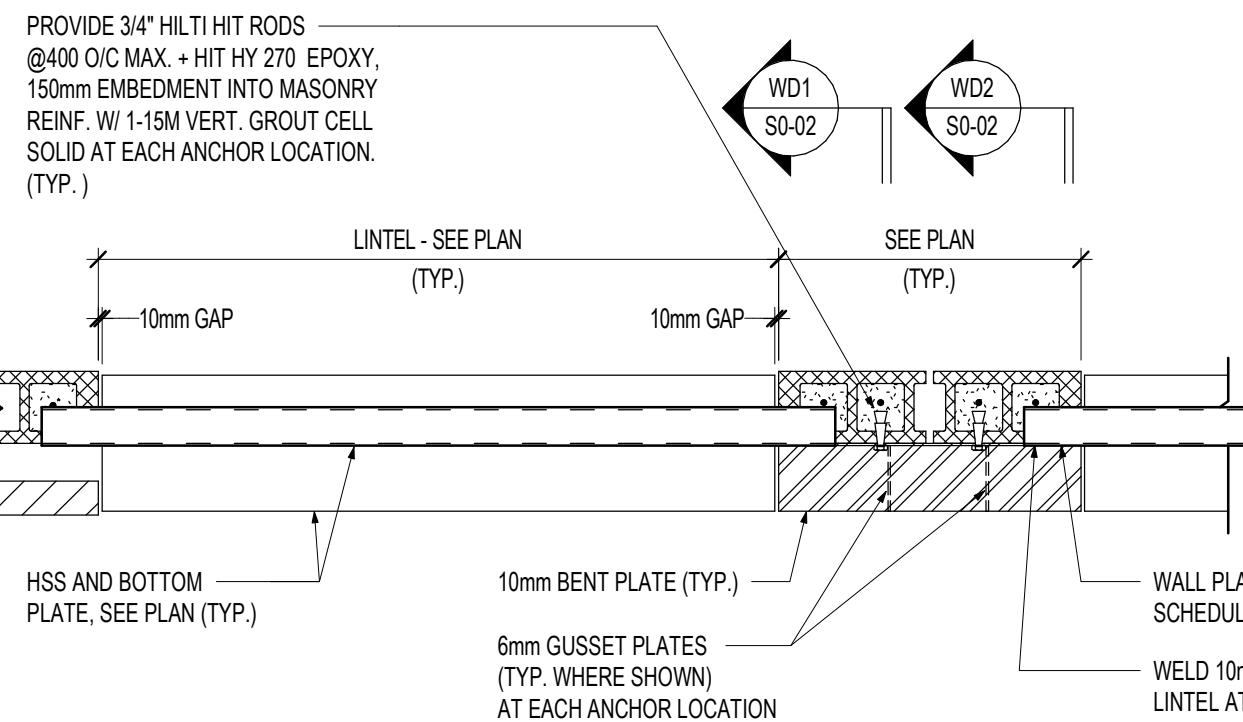
= FUTURE LOADING (SEE DRAWING S0-01 PLAN FOR LOCATIONS)

PRECAST ROOF LOADING SCHEDULE			
ROOF USE	LOADING	SUPERIMPOSED DEAD LOAD (kPa)	SNOW LOAD (kPa)
GENERAL ROOF		1.10	2.55 + ASL
FUTURE LOADING ALLOWANCE ROOF		1.10	2.55 + ASL

IN ADDITION TO UNIFORM LOADING SHOWN, REFER TO ROOF PLAN FOR ADDITIONAL LOADING FOR ACCUMULATED SNOW LOADS (ASL) AS SHOWN, AND FOR POINT LOADS OF BRACKING AND MECHANICAL EQUIPMENT.

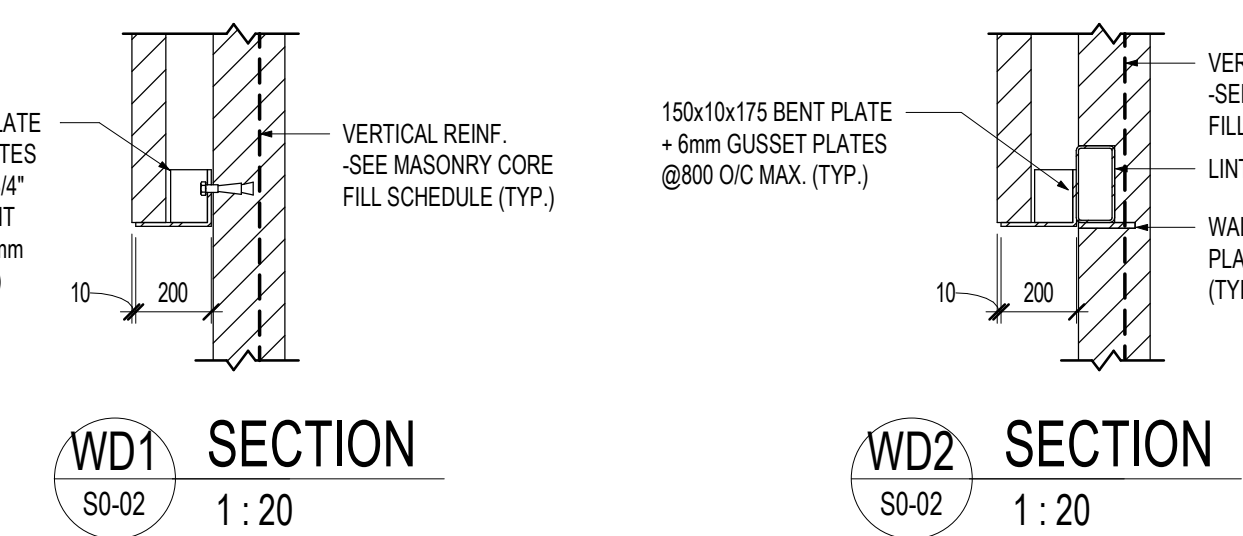
NOTES:

- ROOFING SINGLE PLY = 0.72 kPa HAS BEEN INCLUDED IN THE ABOVE TABLE
- PAVER LOADING, IF APPLICABLE, SHALL BE COORDINATED WITH THE EXTENTS SHOWN IN THE ARCHITECTURAL DRAWINGS. WEIGHTS SHALL BE COORDINATED WITH THE SPECIFICATIONS AND MAIN PRODUCT SHOP DRAWINGS.
- = FUTURE LOADING (SEE DRAWING S0-01 PLAN FOR LOCATIONS)



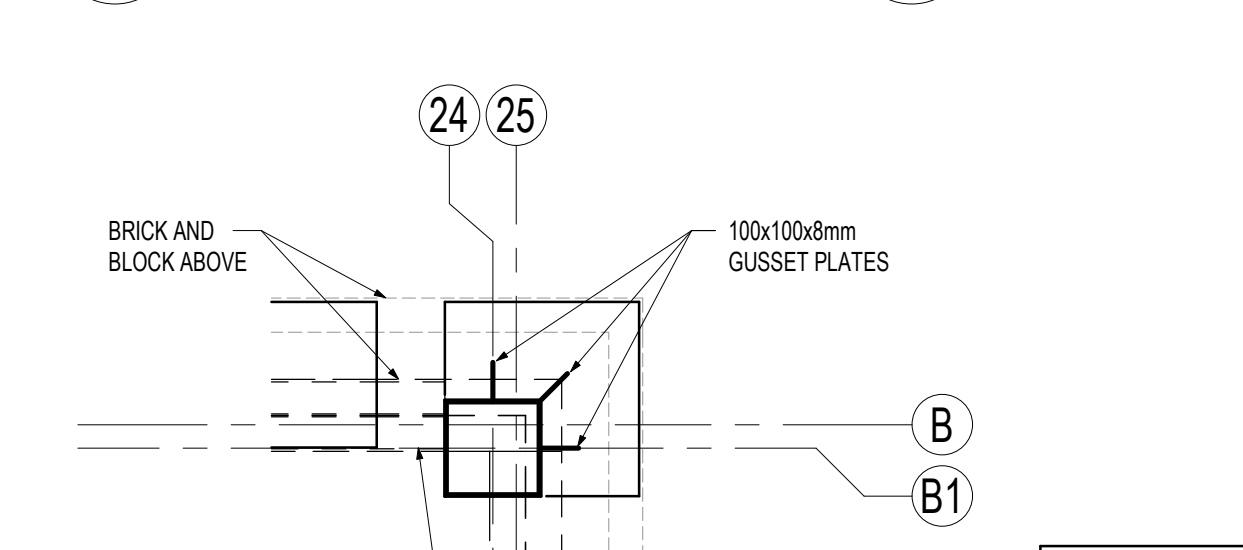
DP1 PLAN DETAIL

S0-02 1:20



WD2 SECTION

S0-02 1:20



DP2 PLAN DETAIL

S0-02 1:20

HANGER/BRACING SCHEDULE:
DB1 = C100x8 DIA. BRACING
H1 = C100x8 HANGER
H2 = HSS 178x127x6.4 HANGER (Tf = 40 kN)
NOTE: SEE PLAN FOR LOCATIONS

MECHANICAL LINTEL SCHEDULE					
LINTELS IN LOAD BEARING WALLS OVER MECHANICAL DUCTS ETC.					
MARK	WALL THICKNESS	CLEAR SPAN	MATERIAL	TYPE	NOTES
ML1	190	200-550	175x8 PLATE	---	
ML2	190	550-1220	24.90x90x6	---	
ML3	240	200-550	225x8 PLATE	---	
ML4	240	550-1220	24.100x100x8	---	
ML5	290	200-550	275x8 PLATE	---	
ML6	290	550-1220	34.90x90x6	---	
ML7	190 x 90	200-550	175x8 PLATE + 80x8 PLATE	---	
ML8	190 x 90	550-1220	24.90x90x6 + 14.90x90x6	---	
ML9	240 x 90	200-550	225x8 PLATE + 80x8 PLATE	---	
ML10	240 x 90	550-1220	24.100x100x8 + 14.90x90x6	---	
ML11	290 x 90	200-550	275x8 PLATE + 80x8 PLATE	---	
ML12	290 x 90	550-1220	34.90x90x6 + 14.90x90x6	---	

IN ADDITION TO UNIFORM LOADING SHOWN, REFER TO ROOF PLAN FOR ADDITIONAL LOADING FOR ACCUMULATED SNOW LOADS (ASL) AS SHOWN, AND FOR POINT LOADS OF BRACKING AND MECHANICAL EQUIPMENT.

NOTES:

- FOR LINTELS MARKED ML ON DRAWINGS
- FOR SPANS LESS THAN 200mm - NO LINTEL REQUIRED.
- FOR SPANS GREATER THAN 1200mm, SEE PLANS AND MAIN LINTEL SCHEDULE.

WHILE EVERY EFFORT HAS BEEN MADE TO SHOW ALL LINTELS WHICH OCCUR IN LOAD BEARING MASONRY WALLS, IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE CORRECT SIZES AND QUANTITY OF LINTELS ARE PROVIDED.

LINTELS IN NON-LOAD BEARING WALLS AND PARTITIONS ARE GENERALLY NOT SHOWN ON THE DRAWINGS. ALL SUCH LINTELS SHALL BE PROVIDED AS REQUIRED AND SHALL CONFORM TO THE NOTES & TYPICAL DETAILS ON THE STRUCTURAL DRAWINGS.

PROVIDE MECHANICAL LINTELS IN ACCORDANCE WITH TYPICAL DETAILS AND NOTES FOR ALL DUCTS AND PIPES PASSING THROUGH MASONRY WALLS

FLOOR LINTEL SCHEDULE

REFER TO LINTEL NOTES A07 ON TYPICAL DETAIL DRAWINGS SEE ALSO SPECIFICATION

MARK	MATERIAL	TYPE	REMARKS
DL1	HSS 203x152x6.4 + 435x8mm BOTTOM PLATE	---	WP5 E.E. ** SEE DL2/S1-01
DL2	HSS 203x102x6.4 + 385x8mm BOTTOM PLATE	---	WP1 E.E. ** SEE DL1/S1-01
DL3	(2)x127x89x7.9 (LLV)	---	
DL4	(2)x110x102x7.9	---	
DL5	W200x27 + 170x8mm BOTTOM PLATE	---	WP1 E.E. ** LINTEL CENTRED ON WALL
DL6	W200x27 + 220x8mm BOTTOM PLATE	---	WP5 E.E. ** LINTEL CENTRED ON WALL
DL7	W410x39 + 220x8mm BOTTOM PLATE	---	WP4 E.E. ** LINTEL CENTRED ON WALL
DL8	W410x47 + 385x8mm BOTTOM PLATE	---	WP2 E.E. **
DL9	W410x39 + 170x8mm BOTTOM PLATE	---	WP2 E.E. ** LINTEL CENTRED ON WALL

Tf = 10kN M TORSION CONNECTION
ALL EXTERIOR LINTELS SUPPORTING FACE BRICK TO BE GALVANIZED
** WELDED TO HSS EACH END.

ROOF LINTEL SCHEDULE

REFER TO LINTEL NOTES A07 ON TYPICAL DETAIL DRAWINGS SEE ALSO SPECIFICATION

MARK	MATERIAL	TYPE	REMARKS
RL1	HSS 203x102x6.4 + 385x8mm BOTTOM PLATE	---	WP1 E.E. ** SEE DL1/S1-01
RL2	(2)x127x89x7.9 (LLV)	---	
RL3	(2)x110x102x7.9	---	
RL4	W200x27 + 220x8mm BOTTOM PLATE	---	WP5 E.E. ** LINTEL CENTRED ON WALL
RL5	HSS 127x127x6.4	---	
RL6	W410x39 + 280x8mm BOTTOM PLATE	---	BEAM CENTRED ON WALL
RL7	W410x39 + 330x8mm BOTTOM PLATE	---	BEAM CENTRED ON WALL

Tf = 10kN M TORSION CONNECTION
ALL EXTERIOR LINTELS SUPPORTING FACE BRICK TO BE GALVANIZED
** WELDED TO HSS EACH END.

6	ISSUED FOR ADD#1	JULY/27/26
5	ISSUED FOR TENDER	JUNE/17/26
4	ISSUED FOR FINAL COORDINATION	FEB/09/26
3	ISSUED FOR PERMIT	OCT/14/25
2	ISSUED FOR PROGRESS REVIEW	JULY/31/25
1	ISSUED FOR 85% CD	JUNE/24/25
NO	ISSUED / REVISION	DATE



MAYFIELD WEST #2 PUBLIC SCHOOL

29 TWEEDEHILL AVE. CALEDON, ONTARIO

LEGAL DESCRIPTION
BLOCK 201,
REGISTERED PLAN 43M-2114
TOWN OF CALEDON,
REGIONAL MUNICIPALITY OF PEELE



PLAN NOTES, MISC SCHEDULES AND DETAILS

SCALE: As indicated	PROJECT: 20241729
DATE: JULY 2026	DRAWING: S0-02
DRAWN: AE	CHECKED: JG
PRINT DATE: 2026-07-27 1:58:49 PM	REVISIT FILE:

The following additions, deletions, amendments and/or items of clarification are hereby made an integral part of the Tender Documents. All revisions shall be made to the drawings and/or specifications and all costs for same shall be included in the Stipulated Price.

CHANGES TO SPECIFICATIONS

1. **Section 21 00 00 MECHANICAL SUPPLEMENTARY BID FORM**

.1 On page 21 00 00-1, revise Instructions To Bidders to read as follows:

INSTRUCTIONS TO BIDDERS

Complete the Mechanical Supplementary Bid Form in its entirety for perusal and acceptance by the Owner. Submit completed form to the Architect within twenty-four (24) hours of Mechanical Tender closing by email to admin@hossackarch.com. Do not submit to Bid Depository.

CHANGES TO DRAWINGS

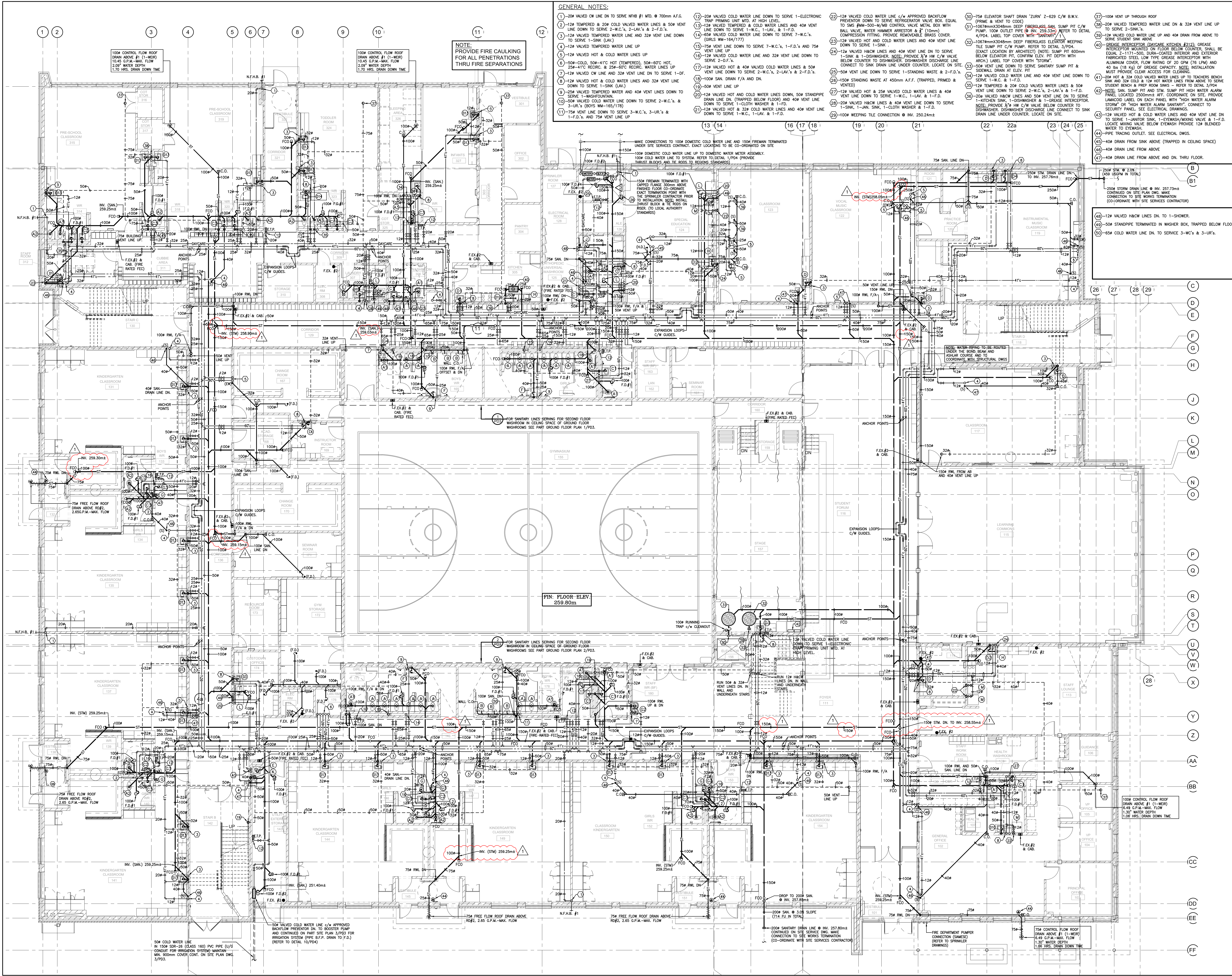
1. **Drawing PD1, Rev. #1 (Drawing Issued)**

- 1 Revise and add storm drain, sanitary drain inverts, and change storm drain pipe sizes as shown on drawing.

2. **Drawing PD4, Rev. #1 (Drawing Issued)**

- 1 Revise storm drain and sanitary drain inverts on detail 3/PD4 and 4/PD4 as shown on drawing.

END OF MECHANICAL ADDENDUM M1



GENERAL NOTES:

- 1-200 VALVED C/W LINE DN TO SERVE NFHB #1 MTD. @ 700mm A.F.G.
- 2-120 VALVED C/W LINE DN TO SERVE 2-W.C.'s, 2-LAV.'s & 2-F.D.'s.
- 3-120 VALVED TEMPERED WATER LINE AND 320 VENT LINE DOWN TO SERVE 1-SINK (LAV).
- 4-120 VALVED TEMPERED WATER LINE AND 320 VENT LINE DOWN TO SERVE 1-SINK (LAV).
- 5-120 VALVED TEMPERED WATER LINE UP.
- 6-500 COLD, 500-410° HOT (TEMPERED), 500-60° HOT, 250-410° RECIRC. & 250-60° RECIRC. WATER LINES UP.
- 7-120 VALVED C/W LINE AND 320 VENT LINE DN TO SERVE 1-F.D.
- 8-120 VALVED HOT & COLD WATER LINES AND 320 VENT LINE DOWN TO SERVE 1-SINK (LAV).
- 9-250 VALVED TEMPERED WATER AND 400 VENT LINES DOWN TO SERVE 1-WASHFOUNTAIN.
- 10-500 VALVED COLD WATER LINE DOWN TO SERVE 2-W.C.'s & 3-UR.'s (BOYS WM-165/178)
- 11-750 VENT LINE DOWN TO SERVE 3-W.C.'s, 3-UR.'s & 1-F.D.'s. AND 750 VENT LINE UP.
- 12-200 VALVED COLD WATER LINE DOWN TO SERVE 1-ELECTRONIC TRAP PRIMING UNIT MTD. AT HIGH LEVEL.
- 13-120 VALVED TEMPERED & COLD WATER LINES AND 400 VENT LINE DOWN TO SERVE 1-W.C., 1-LAV., & 1-F.D.
- 14-650 VALVED COLD WATER LINE DOWN TO SERVE 7-W.C.'s. (GIRLS WM-164/177)
- 15-750 VENT LINE DOWN TO SERVE 7-W.C.'s, 1-F.D.'s AND 750 VENT LINE UP.
- 16-120 VALVED COLD WATER LINE AND 320 VENT LINE DOWN TO SERVE 2-F.D.'s.
- 17-120 VALVED HOT & 400 VALVED COLD WATER LINES & 500 VENT LINE DOWN TO SERVE 2-W.C.'s, 2-LAV.'s & 2-F.D.'s.
- 18-1000 SAN. DRAIN F/A AND DN.
- 19-500 VENT LINE UP.
- 20-120 VALVED HOT & COLD WATER LINES DOWN, 500 STANDPIPE DRAIN LINE DN, (TRAPPED BELOW FLOOR) AND 400 VENT LINE DOWN TO SERVE 1-CLOTH WASHER & 1-F.D.
- 21-120 VALVED HOT & 320 COLD WATER LINES AND 400 VENT LINE DOWN TO SERVE 1-W.C., 1-LAV. & 1-F.D.
- 22-120 VALVED COLD WATER LINE C/W APPROVED BACKFLOW PREVENTOR DOWN TO SERVE REFRIGERATOR VALVE BOX. EQUAL TO SWS RM-500-M/MS CONTROL VALVE METAL BOX WITH BALL VALVE, WATER HAMMER ARRESTOR & 1" (10mm) COMPRESSION FITTING. PROVIDE REMOVABLE BRASS COVER. (GIRLS WM-164/177)
- 23-120 VALVED HOT & COLD WATER LINES AND 400 VENT LINE DOWN TO SERVE 1-SINK.
- 24-120 VALVED H2O/W LINES AND 400 VENT LINE DN TO SERVE 1-SINK & 1-DISHWASHER. NOTE: PROVIDE 3/4" H2O/W VALVE BELOW COUNTER TO DISHWASHER DISCHARGE LINE. LOCATE ON SITE. SINKWALL DRAIN AT ELV. PIT.
- 25-500 VENT LINE DOWN TO SERVE 1-STANDING WASTE & 2-F.D.'s.
- 26-1500 STANDING WASTE AT 450mm A.F.F. (TRAPPED, PRIMED & VENTED).
- 27-120 VALVED HOT & 250 VALVED COLD WATER LINES & 400 VENT LINE DOWN TO SERVE 1-W.C., 1-LAV. & 1-F.D.
- 28-200 VALVED H2O/W LINES & 400 VENT LINE DOWN TO SERVE 1-SINK, 1-LAV. SINK, 1-CLOTH WASHER & 1-F.D.
- 29-1000 WEEPING TILE CONNECTION @ INV. 250.24m±
- 30-750 ELEVATOR SHAFT DRAIN 'ZURN' Z-629 C/W B.W.V. (PRIME & VENT TO CODE)
- 31-1007mmx300mm DEEP FIBERGLASS ELIMINATOR WEEPING TILE SUMP PIT C/W PUMP. REFER TO DETAIL 3/P04. (EXACT LOCATION BY ARCHITECT) (NOTE: SUMP PIT 600mm BELOW ELEVATOR PIT. CONFIRM ELEV. PIT DEPTH WITH ARCH.) LABEL TOP COVER WITH "STORM".
- 32-120 VALVED COLD WATER LINE AND 400 VENT LINE DOWN TO SERVE 1-W.C. & 1-F.D.
- 33-500 VENT LINE DOWN TO SERVE SANITARY SUMP PIT & SINKWALL DRAIN AT ELV. PIT.
- 34-120 VALVED COLD WATER LINE & 500 VENT LINE DOWN TO SERVE 2-W.C.'s, 2-LAV.'s & 1-F.D.
- 35-200 VALVED H2O/W LINES AND 500 VENT LINE DN TO SERVE 1-KITCHEN SINK, 1-DISHWASHER & 1-GREASE INTERCEPTOR. NOTE: PROVIDE 3/4" H2O/W VALVE BELOW COUNTER TO DISHWASHER DISCHARGE LINE. LOCATE ON SITE. SINKWALL DRAIN UNDER COUNTER. LOCATE ON SITE.
- 36-1000 WEEPING TILE CONNECTION @ INV. 250.24m±
- 37-1000 VENT UP THROUGH ROOF
- 38-200 VALVED TEMPERED WATER LINE DN & 320 VENT LINE UP TO SERVE 2-SINK.'s.
- 39-120 VALVED COLD WATER LINE UP AND 400 VENT LINE ABOVE TO SERVE STUDENT SINK ABOVE.
- 40-GREASE INTERCEPTOR (OVCARE KITCHEN #312). GREASE INTERCEPTOR MOUNTED ON FLOOR BELOW COUNTER. SHALL BE EQUAL 2-1171-500, DURA-COATED INTERIOR AND EXTERIOR FABRICATED STEEL. LOW TYPE GREASE INTERCEPTOR WITH ALUMINUM COVER. FLOW RATING OF 40 GPM (76 LPM) AND 40 IN. (1016 mm) OF GREASE CAPACITY. NOTE: INSTALLATION MUST PROVIDE CLEAR ACCESS FOR CLEANING. REFER TO DETAIL 3/P04.
- 41-200 HOT & 320 COLD VALVED WATER LINES UP TO TEACHERS BENCH SINK AND 320 COLD & 120 HOT WATER LINE ABOVE TO SERVE STUDENT BENCH & PREP ROOM SINKS - REFER TO DETAIL 3/P04.
- 42-NOTE: SAN. SUMP PIT AND SIM. SUMP PIT HIGH WATER ALARM PANEL LOCATED 2500mm± AFF. COORDINATE ON SITE. PROVIDE LAMINATED LABEL ON EACH PANEL WITH "HIGH WATER ALARM STORM" OR "HIGH WATER ALARM SANITARY" CONNECT TO SECURITY PANEL. SEE ELECTRICAL DRAWINGS.
- 43-120 VALVED HOT & COLD WATER LINES AND 400 VENT LINE DN TO SERVE 1-JANITOR SINK, 1-EYEWASH/MIXING VALVE & 1-F.D. LOCATE MIXING VALVE BELOW EYEWASH PROVIDE 120 BLENDING WATER TO EYEWASH.
- 44-PIPE TRACING OUTLET. SEE ELECTRICAL DWGS.
- 45-400 DRAIN FROM SINK ABOVE (TRAPPED IN CEILING SPACE)
- 46-400 DRAIN LINE FROM ABOVE
- 47-400 DRAIN LINE FROM ABOVE AND DN. THRU FLOOR.
- 48-2500 STIM. @ 2.00% (450 USGPM IN TOTAL)
- 49-2500 STIM. @ 2.00% (450 USGPM IN TOTAL)
- 50-120 VALVED H2O/W LINES DN TO 1-SHOWER.
- 51-500 STANDPIPE TERMINATED IN WASHER BOX, TRAPPED BELOW FLOOR
- 52-650 COLD WATER LINE DN TO SERVE 3-W.C.'s & 3-UR.'s.

TRUE NORTH
PROJECT NORTH

1	ISSUED AS PER MECH. ADD. MM-1	07/28/28
2	ISSUED FOR TENDER	06/17/28
3	ISSUED FOR BUILDING PERMIT	10/12/25
4	ISSUED FOR 90%	02/27/25
5	ISSUED FOR SPA	3/17/25

DRAWINGS ARE NOT TO BE SCALED. CONTRACTOR MUST CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS ON THE PROJECT AND REPORT ANY DISCREPANCIES TO THE CONSULTANTS BEFORE PROCEEDING WITH THE WORK. THE USE OF THIS DRAWING OR PART THEREOF IS FORBIDDEN WITHOUT THE WRITTEN APPROVAL OF THE CONSULTANTS.

MAYFIELD WEST #2 PUBLIC SCHOOL

29 TWEEDEHILL AVE., CALEDON, ONTARIO

LEGAL DESCRIPTION
Block 261
REGISTERED PLAN 43M-2114
TOWN OF CALEDON
REGIONAL MUNICIPALITY OF PEEI

City File # SPA XXXXX

peel District School Board
5650 HURONTARIO STREET
MISSISSAUGA, ON L5R 1G6
Tel (905) 850-1099 Fax (905) 890-9453

PLUMBING & DRAINAGE - GROUND FLOOR PLAN

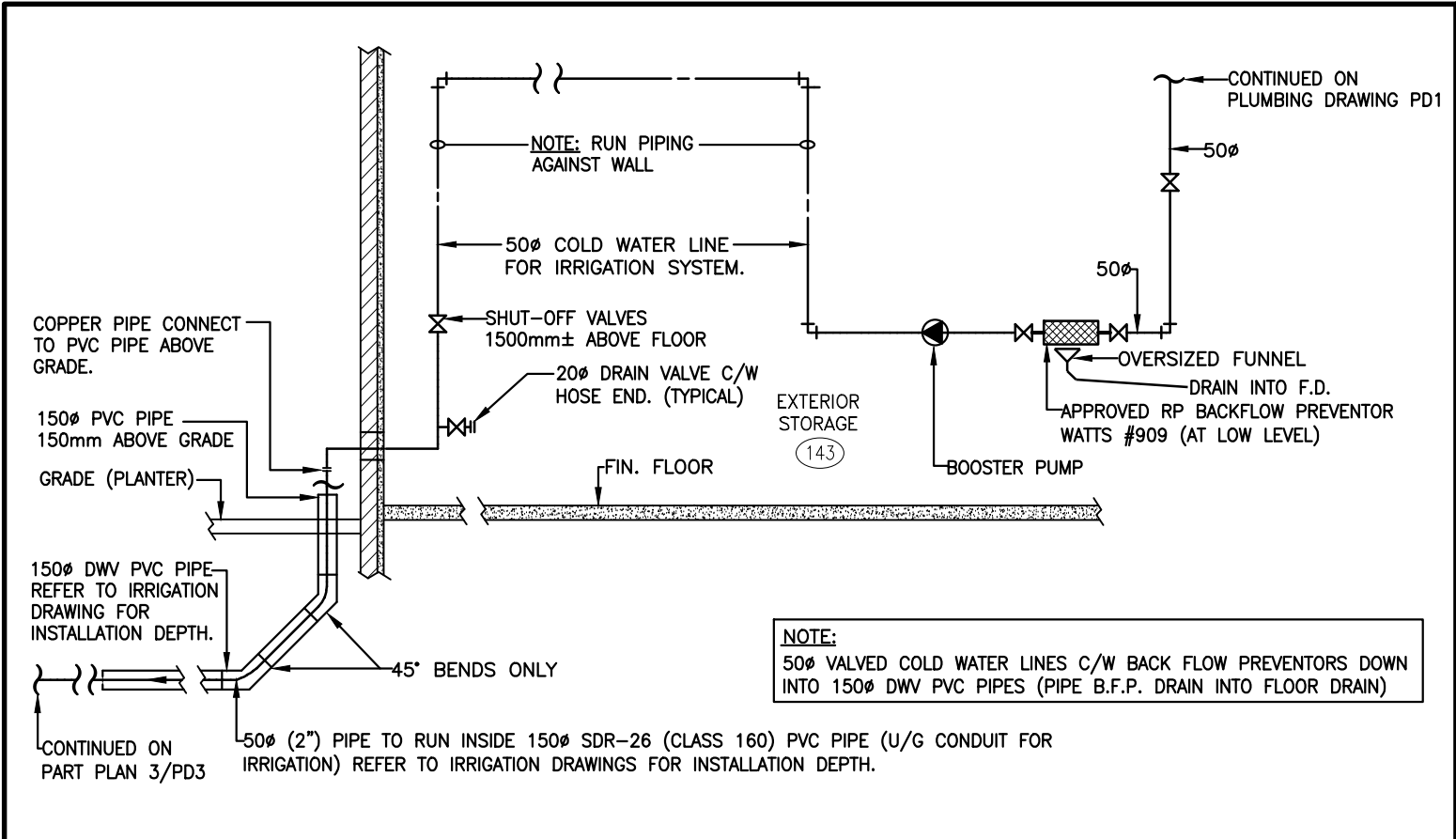
rybka Ellard Willson

SCALE	PROJECT
DATE OCT. 2025	24112
DRAWN G.G.	DRAWING
CHECKED S.G.	PD1
PRINT DATE	
REVIT FILE	

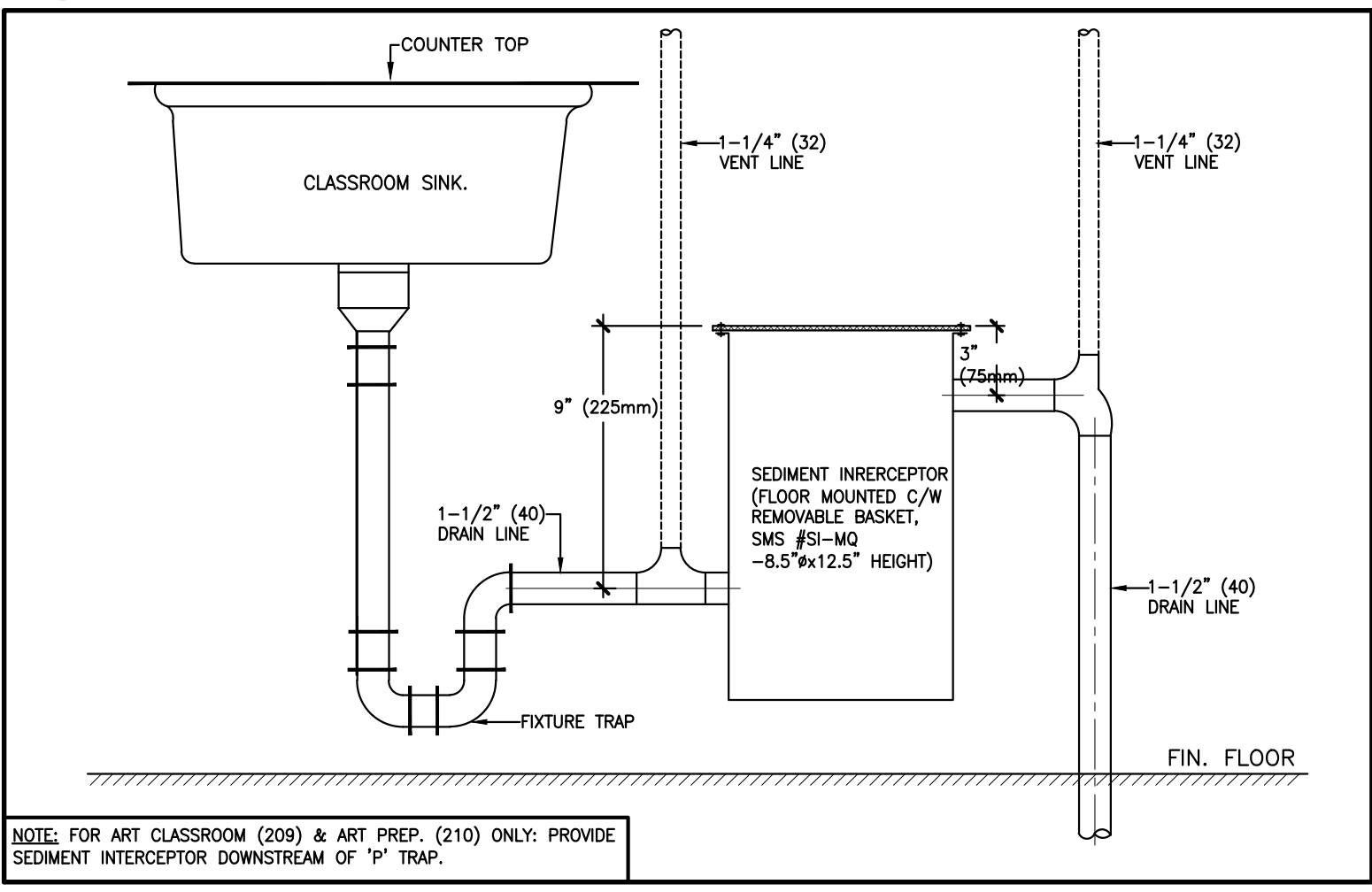
24038

PLUMBING FIXTURE LEGEND							
FIX. REF.	FIXTURE	HOT WATER (60°C)	HOT WATER (61°C)	COLD WATER	DR. DRAIN	VENT	REMARKS
A	WATER CLOSET F.M. (F.V.)	---	---	25ø	100ø	40ø	PUBLIC
A1	WATER CLOSET F.M. (F.V.)	---	---	25ø	100ø	40ø	BARRIER FREE PUBLIC
A2	WATER CLOSET F.M. (F.T.)	---	---	12ø	75ø	40ø	KINDERGARTEN/DAYCARE
A3	WATER CLOSET F.M. (F.T.)	---	---	12ø	75ø	40ø	DAYCARE-BABY BOWL
B	URINAL (AUTOMATIC FLUSH)	---	---	20ø	50ø	40ø	PUBLIC
C	LAVATORY (WALL HUNG)	12ø	---	12ø	32ø	32ø	ELECTRONIC (STAFF)
C1	LAVATORY (WALL HUNG)	12ø	---	12ø	32ø	32ø	BARRIER FREE-ELECTRONIC (STAFF)
C2	LAVATORY (WALL HUNG)	---	12ø	---	32ø	32ø	KINDERGARTEN/DAYCARE-BF
C3	LAVATORY (WALL HUNG)	---	12ø	---	32ø	32ø	KINDERGARTEN/DAYCARE
C4	LAVATORY (WALL HUNG)	12ø	---	12ø	32ø	32ø	STAFF
D	COUNTER SINK	---	12ø	---	40ø	32ø	CLASS ROOM SINGLE COMPARTMENT
D1	COUNTER SINK	12ø	---	12ø	40ø	32ø	SINGLE COMPARTMENT KITCHEN
D2	COUNTER SINK	12ø	---	12ø	40ø	32ø	DOUBLE COMPARTMENT/BF
D3	COUNTER SINK	12ø	---	12ø	40ø	32ø	SINGLE BOWL, INSTALL MIXING VALVE ON THE HW SUPPLY
D4	S.S. SINK	12ø	---	12ø	40ø	32ø	MIXING VALVE ON HW SUPPLY, MUSIC ROOM/SCIENCE & TECH. ROOM
D5	COUNTER SINK	---	12ø	---	40ø	32ø	ART ROOM SINK WITH SEDIMENT TRAP
D6	COUNTER SINK (316 SS)	12ø	---	12ø	40ø	32ø	SCIENCE ROOM TEACHER/PREP. ROOM
D7	COUNTER SINK (316 SS)	---	12ø	---	40ø	32ø	SCIENCE ROOM STUDENT
D8	COUNTER SINK (316 SS)	---	12ø	---	40ø	32ø	SCIENCE ROOM STUDENT - BARRIER FREE
D9	ART ROOM SINK	12ø	---	12ø	40ø	32ø	c/w SEDIMENT TRAP AND MIXING VALVE
D10	COUNTER SINK	12ø	---	12ø	40ø	32ø	HEALTH-SINGLE
D11	COUNTER SINK	12ø	---	12ø	40ø	32ø	SINGLE - BARRIER FREE
D12	COUNTER SINK	12ø	---	12ø	40ø	32ø	3-COMP. DAYCARE
D13	COUNTER SINK	---	12ø	---	40ø	32ø	SINGLE - DAYCARE
D14	COUNTER SINK	12ø	---	12ø	40ø	32ø	DAYCARE WASHROOM (BESIDE CHANGE TABLE)
D15	COUNTER SINK	12ø	---	12ø	40ø	32ø	DAYCARE (LAUNDRY)
E	JANITORS SINK	12ø	---	12ø	75ø	40ø	---
F	WASHFOUNTAIN	---	25ø	---	50ø	40ø	3-STATION BARRIER FREE
F1	WASHFOUNTAIN	---	25ø	---	50ø	40ø	4-STATION BARRIER FREE
G	DRINKING FOUNTAIN	---	---	12ø	32ø	32ø	KINDERGARTEN
G1	DRINKING FOUNTAIN	---	---	12ø	32ø	32ø	HI-LO BARRIER FREE
G2	DRINKING FOUNTAIN	---	---	12ø	32ø	32ø	HI-LO BARRIER FREE WITH BOTTLE FILLER
G3	DRINKING FOUNTAIN	---	---	12ø	32ø	32ø	KINDERGARTEN BARRIER FREE
G4	BOTTLE FILLER	---	---	12ø	32ø	32ø	---
H	DISHWASHER	12ø	---	---	40ø	32ø	---
J	SHOWER	12ø	---	12ø	75 F.D.	40ø	BARRIER FREE
K	EYE WASH	12ø	---	12ø	32ø	32ø	WALL MOUNTED WITH MIXING VALVE
K1	EYE WASH	12ø	---	12ø	---	---	WALL MOUNTED, HAND HELD WITH MIXING VALVE
K2	EYE WASH	12ø	---	12ø	---	---	COUNTER MOUNTED, HAND HELD WITH MIXING VALVE
L	AUTOMATIC WASHER	12ø	---	12ø	50ø	40ø	---
M	FRIDGE BOX	---	---	12ø	---	---	c/w B.F.P. ON COLD WATER SUPPLY

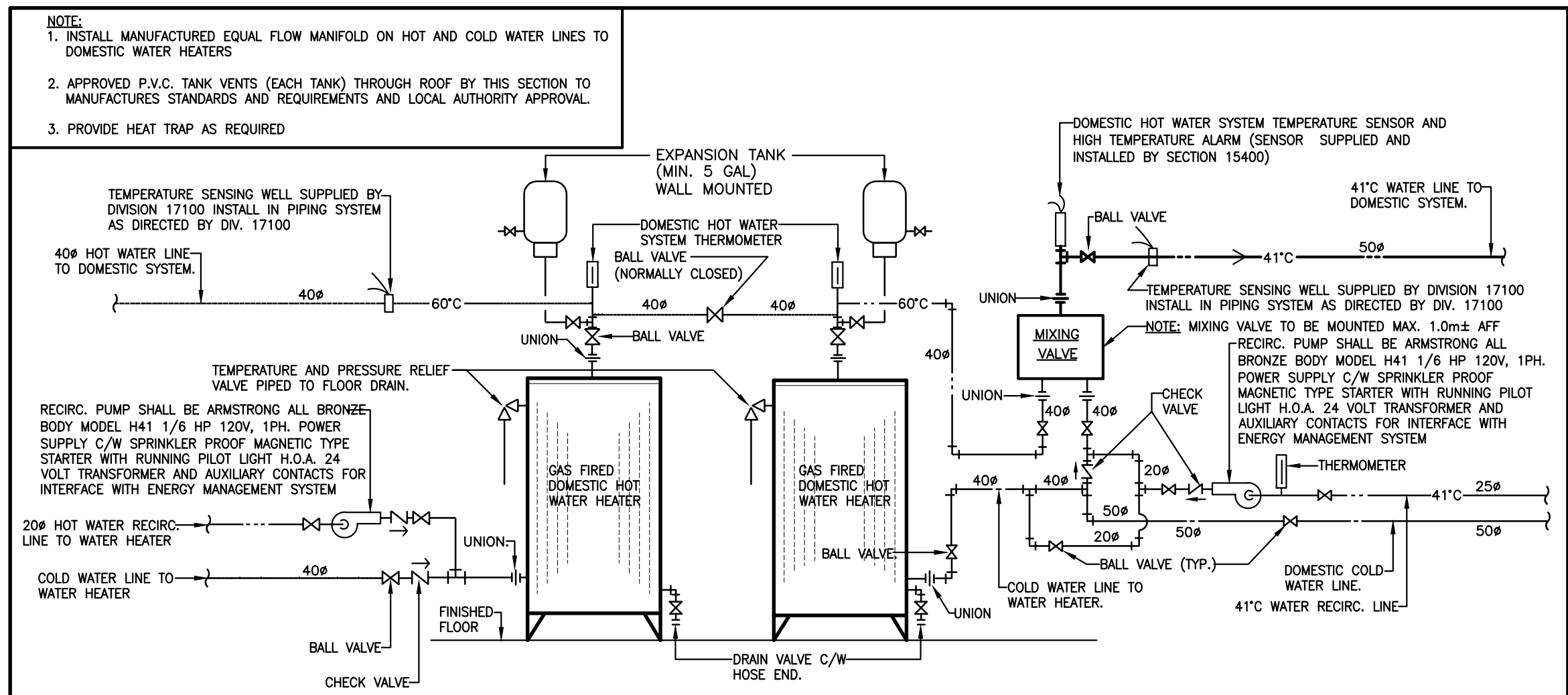
PLUMBING PIPING LEGEND	
-----	SANITARY DRAIN LINE ABOVE FINISHED GRADE / FINISHED FLOOR
-----	SANITARY DRAIN LINE BELOW FINISHED GRADE / FINISHED FLOOR
-----ST-----	STORM DRAIN LINE ABOVE FINISHED GRADE / FINISHED FLOOR
-----ST-----	STORM DRAIN LINE BELOW FINISHED GRADE / FINISHED FLOOR
-----	DOMESTIC COLD WATER LINE
-----	DOMESTIC HOT WATER LINE
-----	HOT WATER RECIRCULATION LINE
-----	SANITARY VENT LINE
-----	ELECTRICALLY TRACED LINE
-----HC-----	CLEANOUT
● F.E.X.	FIRE EXTINGUISHER
■ F.E.X.#2 & CAB.	FIRE EXTINGUISHER IN CABINET



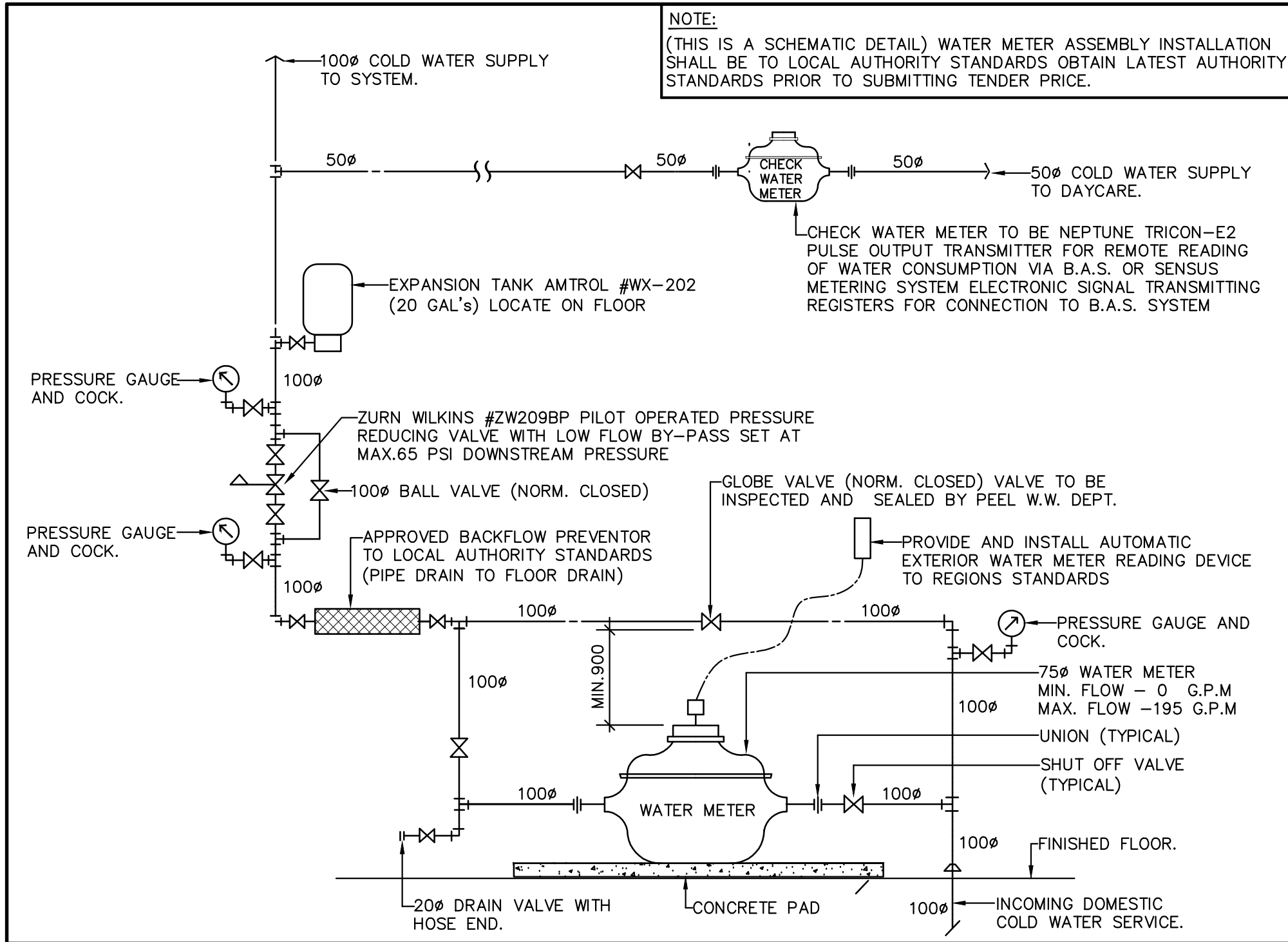
10 SCHEMATIC DETAIL OF IRRIGATION SYSTEM CONNECTION N.T.S.



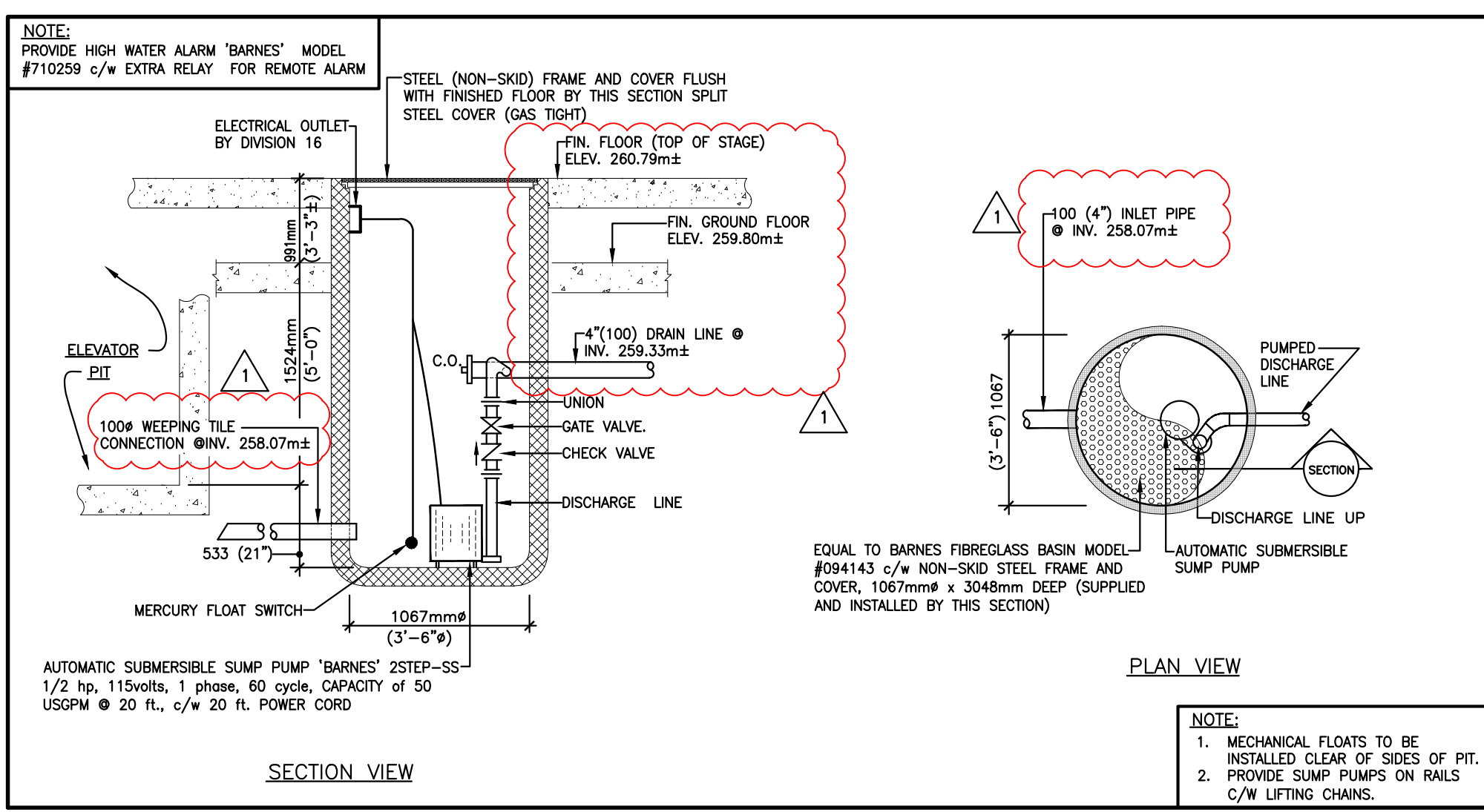
11 DETAIL OF CLASSROOM SINK WITH SEDIMENT INTERCEPTOR N.T.S.



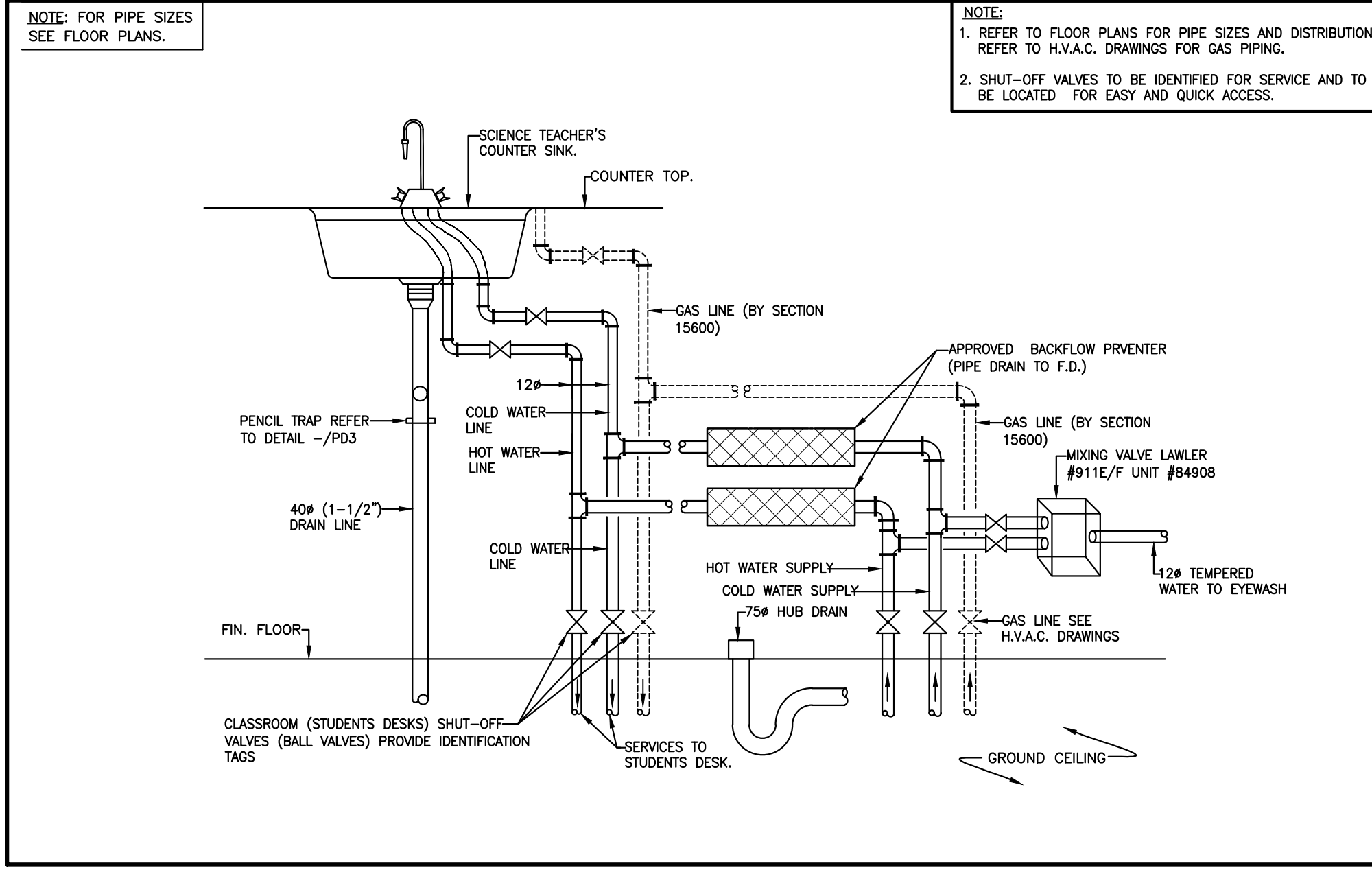
7 SCHEMATIC DETAIL OF DOMESTIC GAS FIRED HOT WATER HEATERS MOUNTED ON FLOOR (60°C HOT WATER AND 41°C TEMPERED WATER) N.T.S.



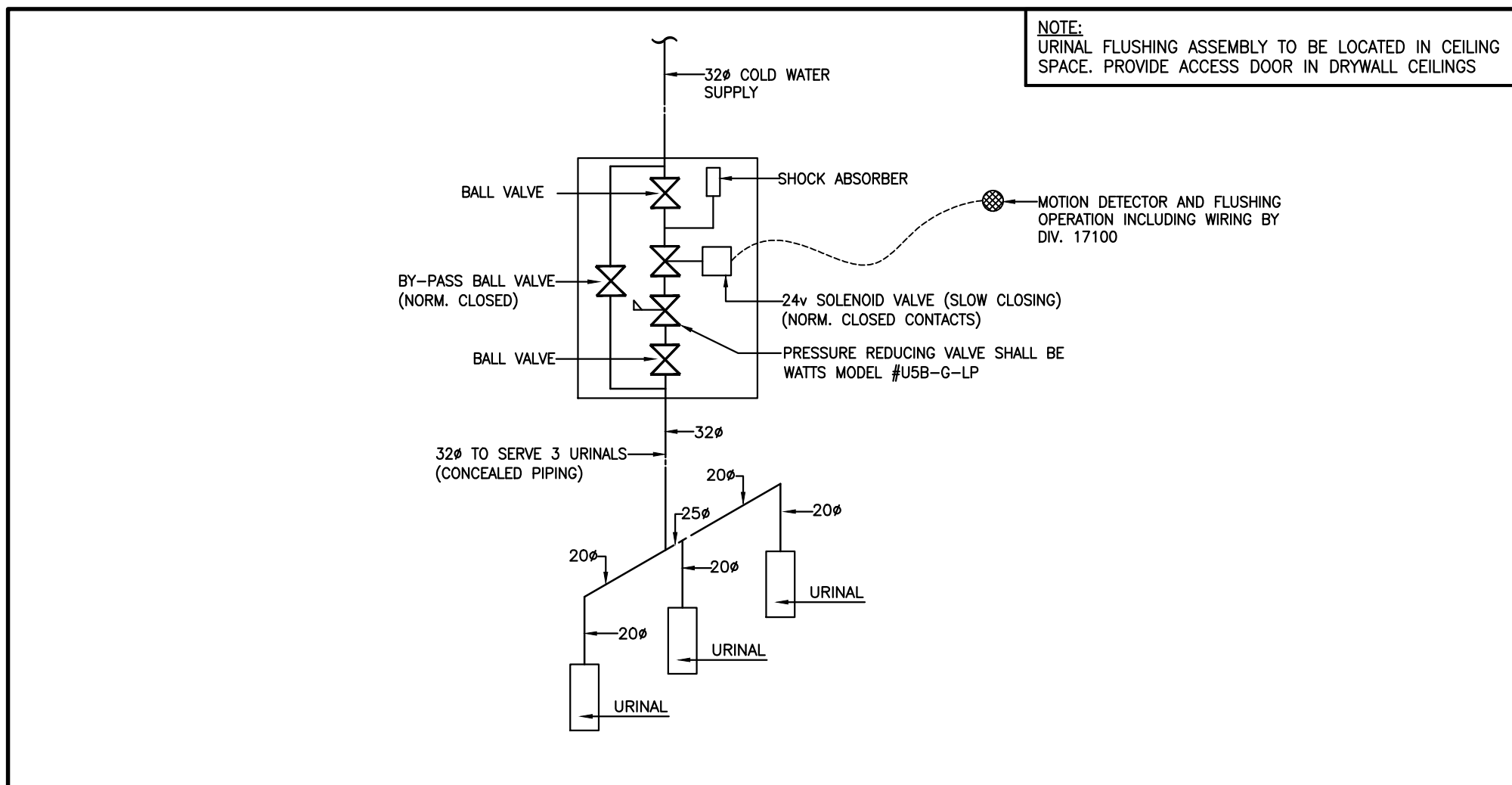
1 SCHEMATIC DETAIL OF DOMESTIC WATER METER ASSEMBLY N.T.S.



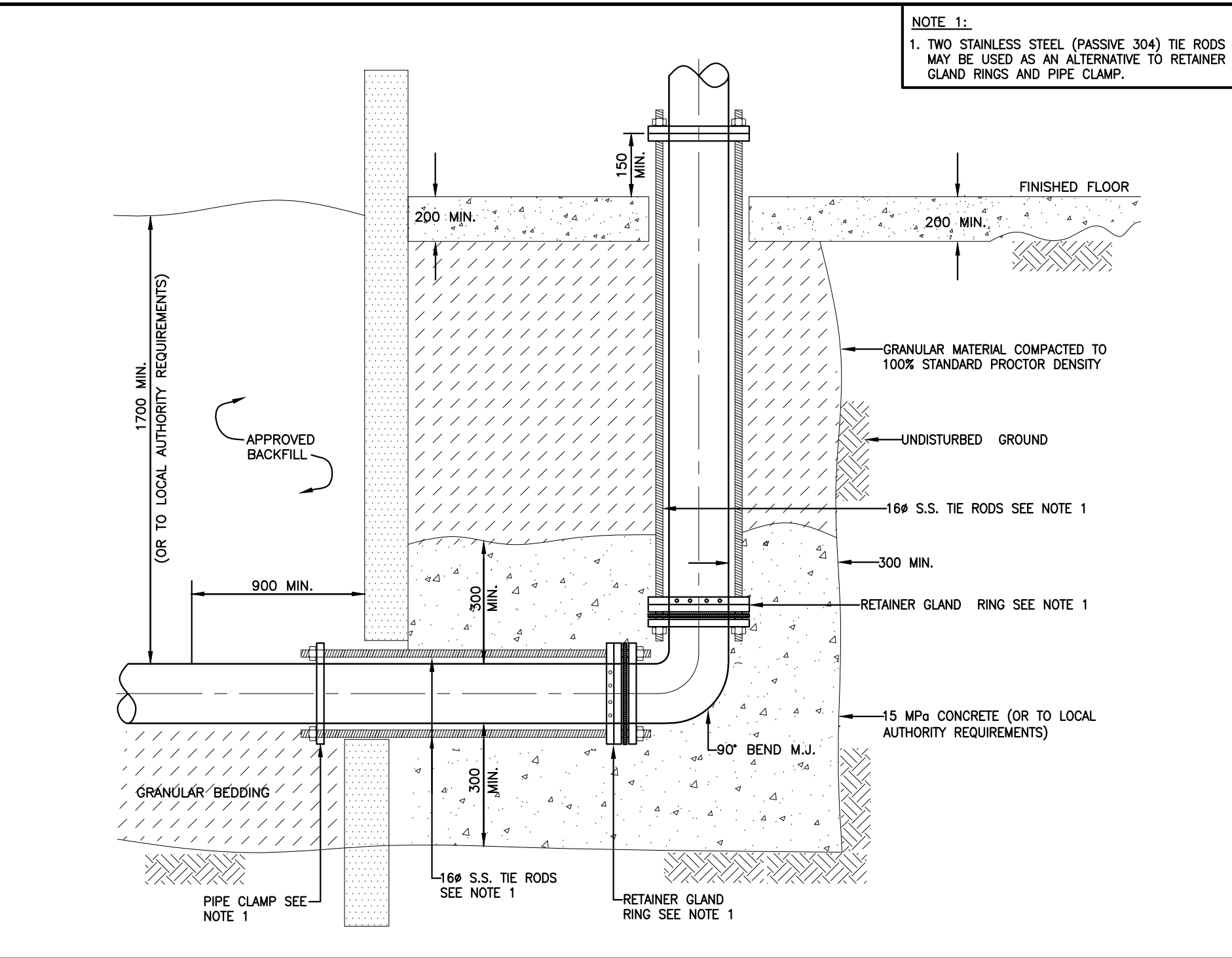
3 SCHEMATIC DETAIL OF ELEVATOR WEEPING TILE SUMP PIT AND PUMP N.T.S.



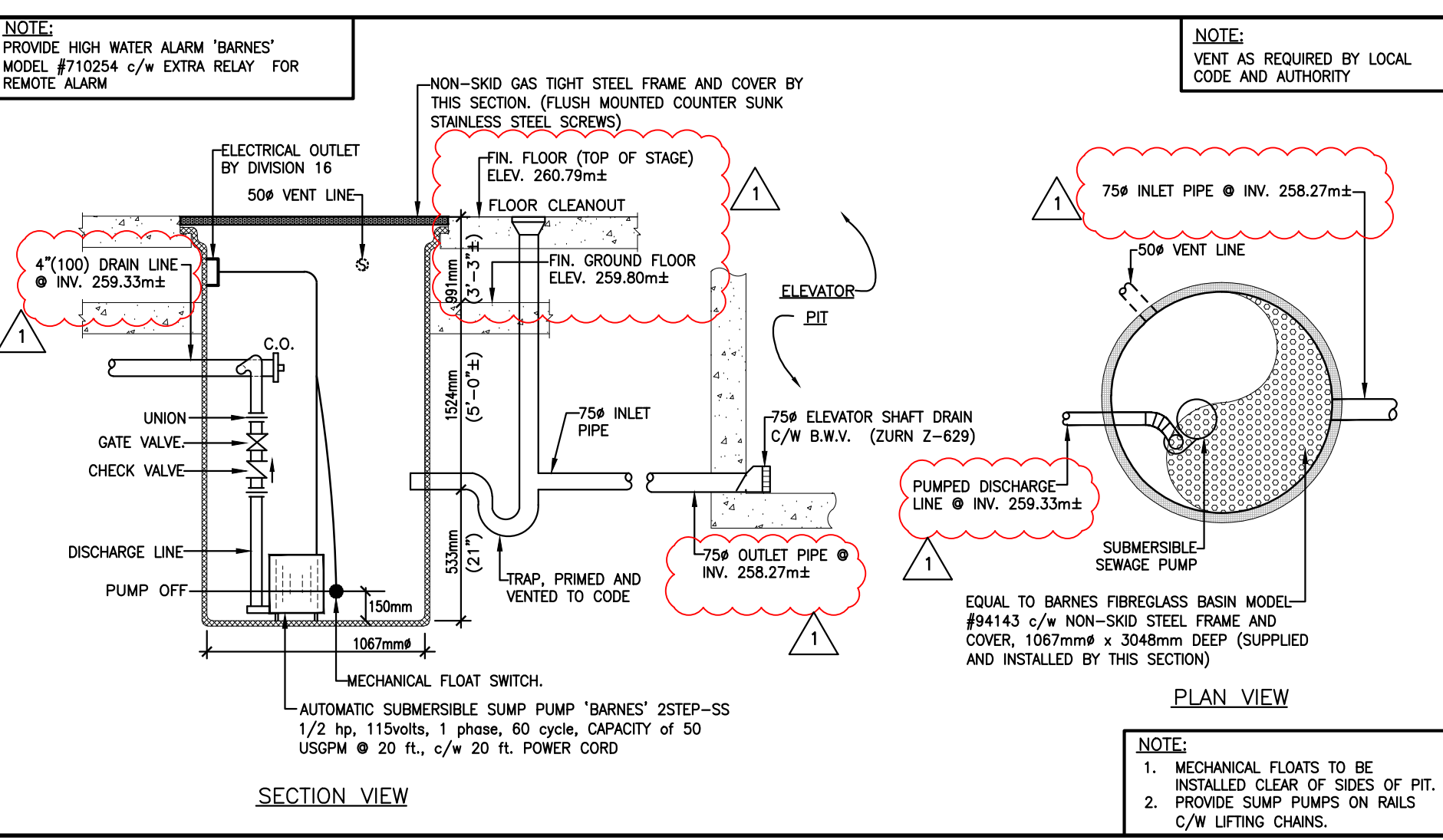
5 DETAIL OF SCIENCE CLASSROOM SHUT-OFF VALVES AT INSTRUCTOR'S DESK N.T.S.



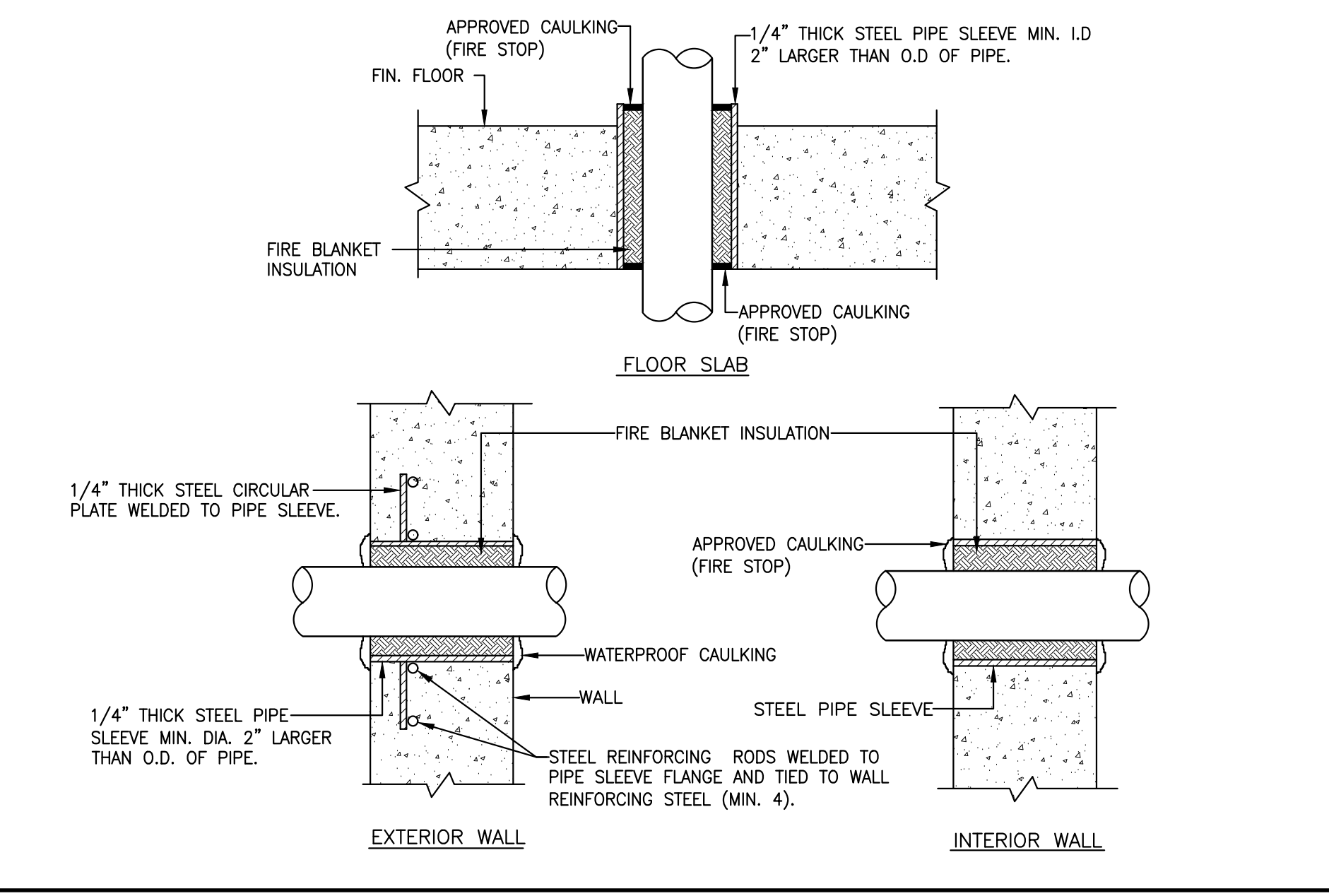
8 SCHEMATIC DETAIL OF SOLENOID OPERATED URINAL FLUSHING ASSEMBLY N.T.S.



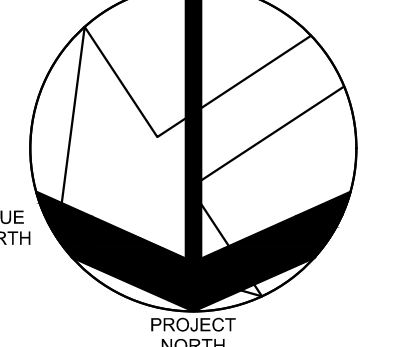
2 BUILDING RISER DETAIL (DOMESTIC WATER LINE AND FIRE LINE) N.T.S.



4 SCHEMATIC DETAIL OF ELEVATOR SUMP PIT AND PUMP N.T.S.



6 DETAIL OF PIPE SLEEVE THROUGH FLOOR SLAB INTERIOR AND EXTERIOR WALLS N.T.S.



TRUE NORTH
PROJECT NORTH

ISSUED AS PER MECH. ADD. MM-1 07/28/26 ISSUED FOR TENDER 08/17/26 ISSUED FOR BUILDING PERMIT 10/14/26 ISSUED FOR 80% 02/27/26 ISSUED FOR SPA 3/17/26	DRAWINGS ARE NOT TO BE SCALED. CONTRACTOR MUST CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS ON THE PROJECT AND MUST REPORT ANY DISCREPANCIES TO THE CONSULTANTS BEFORE PROCEEDING WITH THE WORK. THE USE OF THIS DRAWING OR PART THEREOF IS FORBIDDEN WITHOUT THE WRITTEN APPROVAL OF THE CONSULTANTS.
---	---

MAYFIELD WEST #2 PUBLIC SCHOOL

29 TWEEDHILL AVE.
CALEDON, ONTARIO

LEGAL DESCRIPTION
Block 261
REGISTERED PLAN 43M-2114
TOWN OF CALEDON
REGIONAL MUNICIPALITY OF PEELE

City File # SPA XXXXX

peel District School Board

5650 HURONTARIO STREET
MISSISSAUGA, ON L5R 1C8
Tel: (905) 890-1099 Fax: (905) 890-9453

PLUMBING & DRAINAGE - DETAILS AND LEGEND

SCALE

DATE OCT. 2025

DRAWN G.G.

CHECKED S.G.

PRINT DATE

REVIT FILE

PROJECT

24112

DRAWING

PD4

24036

The following additions, deletions, amendments and/or items of clarification are hereby made an integral part of the Tender Documents. All revisions shall be made to the drawings and/or specifications and all costs for same shall be included in the Stipulated Price.

CHANGES TO SPECIFICATIONS

1. Section 26 00 10, General Electrical Provisions

- 1.1 Item 4.1.1 shall read "No Bid Bond is required. An agreement to furnish 50% Performance and 50% Labour and Materials Bonds from a surety firm who is licensed to do business in the Province of Ontario is required. These bonds shall be issued in favour of "The Successful General Contractor" and the Peel District School Board jointly. The period of acceptance for these consents shall be 90 days from the closing date of the General Contract tenders. Copies of these consents must be submitted with the Supplementary Bid Form."

2. Section 26 01 72, Contactors

- 2.1 Minimum rating of contactors for lightings and receptacles control shall be 30A.

CHANGES TO DRAWINGS

1. Coordinate the exact location of Hand Dryers with Architectural drawings before rough-ins.
2. Coordinate exact location of outlet boxes for Handicapped pushbuttons, light, etc. with Consultant and Architectural drawings before rough-ins.
3. All receptacles shall be Child proof/Tamper resistant.
4. Exact location of outlet boxes for Temperature sensors, outlets for Air Sanitization units, electronic primers, fans, duct smoke detectors, etc. shall be by Mechanical drawings. Coordinate before rough-ins.

END OF ELECTRICAL ADDENDUM E1