HCS
HYDROGEOLOGY CONSULTING SERVICES INC

28-August-2025

2463-2469 Mimosa Row
Mississauga, ON
L5B 1P6

Attn: Mark Chodkiewicz

Re: Long Term Dewatering Assessment
2463-2469 Mimosa Row
Mississauga, ON
Project 10404-1

Hydrogeology Consulting Services Inc. (HCS) was retained by Formar Developments to prepare a long-term dewatering assessment for the above-referenced project.

Previous investigation of the site includes a groundwater monitoring summary (HCS Inc., July 2025), with two boreholes drilled to assess the subsurface stratigraphy and subsequently completed as monitoring wells to evaluate groundwater conditions. A copy of the groundwater monitoring summary is attached for reference.

Groundwater levels were collected on Jul 7, 2025, as summarized in Table 1 below.

Table 1: Measured Groundwater Levels by Haddad Geotechnical Inc.

Location	7-July-2025		
	Well Stickup (m)	**WL (mBTOP)**	**WL (mBGS)**
BH1-25	1.15	4.09	2.94
BH2-25	1.20	4.01	2.81

BGS – metres below ground surface

1. PROPOSED LONG-TERM DEWATERING

As part of the proposed townhouse block construction shown on the attached Site Grading Plan (Skira and Associates Ltd., March 2022) long term (perpetual) dewatering will be required for the building foundation.

It is understood the existing residential dwellings on the subject property have basements constructed below the shallow groundwater table encountered in the near-surface granular aquifer beneath the site; however, existing perimeter drainage systems connected to the municipal sewer maintain drawdown of the shallow groundwater table.

It is understood the proposed redevelopment of the property intends to apply the same perimeter drainage system strategy to maintain drawdown of the shallow groundwater table, with discharge continuing to be routed to the municipal sewer.

2. PERIMETER DRAINAGE DEWATERING CALCULATIONS

It is important to note that the dewatering contractor retained to perform temporary construction dewatering is solely responsible for achieving and maintaining dry working conditions at the site at all times. The calculations and dewatering rates/volumes provided below are not directives for a dewatering contractor, and do not constitute an assessment of temporary construction dewatering requirements or discharge disposal requirements. The dewatering contractor must review the available information as part of their own independent assessment of temporary dewatering requirements to determine appropriate rates, volumes, methodologies, and designs for their temporary construction dewatering project. In the event an EASR and/or a Sewer Discharge Permit are required to support temporary construction dewatering, the dewatering contractor is solely responsible for obtaining all required permits as well as for addressing all tasks associated with treatment and/or management of dewatering discharge.

Additionally, it is important to note the involvement in the project by HCS Inc. does not include any tasks associated with design of the perimeter drainage system for the project. The designers and installers of the perimeter drainage system are solely responsible for ensuring the system is adequate and sufficient to maintain dry conditions in the proposed basements.

2.1 Perimeter Drainage Dewatering Assumptions

Long term drawdown of the shallow aquifer water table is expected to take place twenty-four hours per day to maintain dry conditions in the proposed basements. Dewatering calculations include a number of variables such as the static groundwater level, soil hydraulic conductivity, aquifer thickness, confined aquifer conditions, etc. that can be adjusted to provide conservative buffers to account for conditions beyond those encountered in the available monitoring wells.

Based on the construction parameters provided by Skira and Associates Ltd. (August 2025) Table 2 below summarizes the anticipated dewatering requirements.

Additionally, Table 2 includes the following buffers as factors of safety:

- An assumed dewatering area of 39 m x 20 m to reflect the anticipated layout of perimeter drainage around the townhouse foundation;
- A buffer of 1.0 m for the footing invert depth to reflect the anticipated depth of perimeter drainage around the townhouse foundation. The footing invert for the townhouse foundation is taken as 2.0 mBGS.
- “Squared off” perimeter drainage shape.
- A buffer of 0.81 m for the depth to groundwater (the highest observed groundwater level from the on-site monitoring wells (2.81 mBGS), increased by 0.81 m to 2.0 mBGS) to account for seasonal fluctuations.

Table 2: Dewatering Requirements

Area	**Length (m)**	**Width (m)**	**Depth (mBGS) (-1 m)**	**GW Depth (mBGS) (+0.81m)**
Townhouse Foundation Perimeter Drainage	39	20	3.0	2.0

It is important to note the long term dewatering calculations included in this report are based on the information provided by Skira and Associates Ltd. (August, 2025) In the event design parameters (e.g. foundation footprint, foundation depth, etc.) are modified the dewatering calculations provided will also need to be updated.

2.1.1 Aquifer Dewatering Assumptions

Dewatering calculations have been prepared based on the following assumptions to account for variability in overburden and groundwater conditions:

- An average soil hydraulic conductivity of 7×10^{-5} m/sec based on the loose sandy saturated overburden deposits encountered beneath the subject property;
- An initial saturated aquifer thickness of 1.6 m.

2.2 Dewatering Calculations

To estimate the seasonally high steady-state drawdown flow rate needed to maintain dry conditions for the proposed townhouse foundations the following equation (for radial flow to an unconfined aquifer) from Powers (2007)[1] was used:

$$Q = \frac{\pi K\left(H^2 - {h_w}^2\right)}{\ln\left(\frac{R_o}{r_e}\right)}$$

Where:

Q = Flow Rate (m^3/sec)

H = Initial Saturated Thickness (Piezometric Head) of Aquifer (m)

h_w = Dewatered Saturated Thickness (Piezometric Head) of Aquifer (m)

K = Soil Hydraulic Conductivity (m/sec)

r_e = Effective radius, $r_e = \sqrt{(excavation\ area/\pi)}$ (m)

R_o = Radius of influence, $R_o = 3000*(H-h_w)*\sqrt{K}$ (m)

Where R_o is very close to r_e or less than r_e, to avoid $\ln\left(\frac{R_o}{r_e}\right)$ resulting in a very small or negative number R_o is replaced with ($R_o + r_e$) in the formula above, which gives a reasonable estimate of the dewatering requirements.

Using the assumptions listed above, the seasonally high perimeter drainage dewatering rate and radius of influence listed in Table 3 below were estimated.

Table 3: Steady-State Dewatering Requirements

Excavation	Daily Dewatering Rate (L/day)	Radius of Influence (m)
Townhouse Foundation Perimeter Drainage	43,870	25.1

---

[1] Powers, P.J. et al. 2007. Construction Dewatering and Groundwater Control: New Methods and Applications. Wiley.

2.2.1 Typical Annual Variation in Dewatering Requirements

It is important to consider the assumptions listed above reflect the seasonally high groundwater conditions that could be expected. During the majority of the year, lower groundwater levels would result in correspondingly lower dewatering volumes.

As an example, assuming a groundwater level 0.5 m lower (2.5 mBGS) the daily dewatering rate is estimated at approximately 27,000 L/day.

2.3 Dewatering Calculations - Discussion

The potential seasonally high perimeter drainage dewatering requirements outlined above are reasonable based on the information available; however, a less-conservative assumption of total dewatering requirements (e.g. using a less conservative hydraulic conductivity value, using a less conservative perimeter drainage system depth and/or seasonally high groundwater elevation, etc.) could reduce the estimated dewatering requirement significantly.

The purpose of applying multiple conservative assumptions to the calculation variables is to attempt to consider “worst case scenario” conditions. The calculations above are not intended to accurately predict actual dewatering volumes throughout the year, but rather to estimate potential seasonally high dewatering volumes based on the available information.

For reference it is noted a typical “municipal garden hose” flows at a rate of 5 US gallons per minute (5 GPM) or 18.9 Litres per minute (L/min), which over the course of a 24–hour day would yield 27,200 Litres.

As noted previously, in the event design parameters change beyond the assumptions included in these calculations, revised construction dewatering calculations will be necessary.

2.4 Geotechnical Issues and Settlement

The conservatively calculated radius of influence of dewatering is up to 25.1 m. As buildings and structures lie within the radius of influence, and roadways and services are located within the radius of influence, it is important to note a geotechnical engineer should be consulted to determine whether geotechnical issues or impacts due to settlement resulting from the proposed dewatering could be anticipated. A geotechnical engineer should provide any applicable monitoring and/or mitigation recommendations to address any potential geotechnical issues or impacts.

However, given the existing properties on site are understood to have perimeter drainage systems installed, which have been operating continuously for decades, it may be the existing drawdown (i.e. dewatered) condition will be similar to the proposed drawdown condition for the proposed redevelopment and that additional impacts beyond the existing condition (which is now “steady-state”) may not occur.

We trust this information is suitable for your present requirements. If you have any questions or comments, please contact the undersigned.

Respectfully submitted,

28-Aug-2025

PROFESSIONAL GEOSCIENTIST
CHRIS HELMER
PRACTISING MEMBER
2285
ONTARIO

Chris Helmer, B.Sc., P.Geo.
Senior Hydrogeologist
MECP Licensed Well Contractor
www.hydrog.ca

encl: Groundwater Monitoring Summary (HCS Inc., July 2025)
encl: Site Grading Plan (Skira and Associates Ltd., March 2022)

July 10, 2025

2463-2469 Mimosa Row
Mississauga, ON
L5B 1P6

Attn: Mark Chodkiewicz

Re: Monitoring Well Drilling and Groundwater Monitoring Summary
2463-2469 Mimosa Row
Mississauga, ON
Project 10404

Hydrogeology Consulting Services Inc. (HCS) was retained by Formar Developments to complete drilling and installation of monitoring wells and to conduct groundwater level monitoring at the above-referenced property to assess the seasonally high groundwater conditions and elevations at the property.

1.1.1 Borehole Drilling and Monitoring Well Installation

On July 4th, 2025 under the observation of HCS field staff two boreholes (Boreholes BH1-25 and BH2-25) were drilled to depths of 4.57 metres below ground surface (mBGS) by using a track-mounted GeoProbe 7822DT Direct Push drill rig.

Continuous core or split spoon samplers were advanced and soil samples were obtained.

All boreholes were completed as 38-mm diameter monitoring wells with 1.52 m slotted Schedule 40 PVC well screens and PVC riser pipe. Well sand was installed around the well screens, and the borehole annular space was sealed with bentonite. The wells were each constructed with a 10 cm square steel protective casings, and lockable vented protective caps were installed. Monitoring well construction followed Ontario Regulation 903 (as amended). Borehole logs are attached for reference. The attached Drawing 1 shows the approximate locations of the installed monitoring wells.

1.1.2 Groundwater Level Measurements

Water levels were manually measured using an electronic water level tape in all monitoring wells on July 7th, 2025. Table 1 below provides a summary of the groundwater level measurements.

Table 1: Measured Groundwater Levels:

Location	**7-July-2025**		
	Well Stickup (m)	**WL (mBTOP)**	**WL (mBGS)**
BH1-25	1.15	4.09	2.94
BH2-25	1.20	4.01	2.81

mBGS – metres below ground surface

1.1.3 Stratigraphy and Groundwater Discussion

As shown on the attached borehole logs, subsurface stratigraphy beneath the property generally consists of approximately 3.6 m of sand overlying a clay/silt till deposit to the termination depth of approximately 4.57 mBGS.

As shown in Table 1 above, measured groundwater levels varied between 2.81-2.94 mBGS on the property.

The presence of saturated sandy deposits beneath the property underlain by clay/silt till suggests a high-yielding “perched aquifer” condition, although the extents of the saturated sandy deposit cannot be accurately delineated based on existing information.

The potential exists for significant groundwater flux through the sandy deposits into any groundwater control system that may be installed to manage groundwater seepage temporarily during construction, or long-term should a permanent dewatering system be considered.

Alternately, if finished floor elevations below the groundwater table are proposed, the structure can be designed to be waterproof and to resist hydrostatic uplift. The City of Mississauga would need to approve construction below the groundwater table.

It is understood that groundwater level measurements collected in June reflect a snapshot in time, and that groundwater levels fluctuate seasonally due to changes in the frequency, duration, and amount of precipitation. During spring thaw conditions, it is expected that groundwater levels would rise to their highest seasonal levels, and based on HCS’ extensive experience with long term groundwater monitoring programs throughout Southern Ontario it is anticipated groundwater levels could rise between 0.50 and 0.75 m in a perched granular aquifer scenario between measured June levels and spring seasonally high levels, resulting in an estimated seasonally high groundwater table approximately 2 mBGS.

While HCS does not design groundwater control systems, and was not retained to provide recommendations pertaining to the design of groundwater control systems, as suggestions for consideration by the contractor(s) designing the groundwater control system for the property:

- Any groundwater control system designed for the property should contemplate high rates of ingress and high volumes of discharge, and should contemplate the elevated transmissivity/hydraulic conductivity of the saturated granular soils.
- Any groundwater control system designed for the property should contemplate the potential for “loss of ground” (i.e. the removal of soil particles along with groundwater) and the resulting potential for soil instability and settlement.
- Water takings (i.e. pumping) at rates below 50,000 L/day do not require a Permit to Take Water (PTTW) from the Ministry of the Environment, Conservation and Parks (MECP). However, discharge of water to the municipal storm/sanitary sewer system would require permission from the City of Mississauga, and may also require confirmation of discharge water chemistry to ensure compliance with applicable sewer use By-Laws.

We trust this report satisfies your present requirements, and we thank you for this opportunity to be of service. If you have any questions, or require further hydrogeological consulting services, please feel free to contact the undersigned directly.

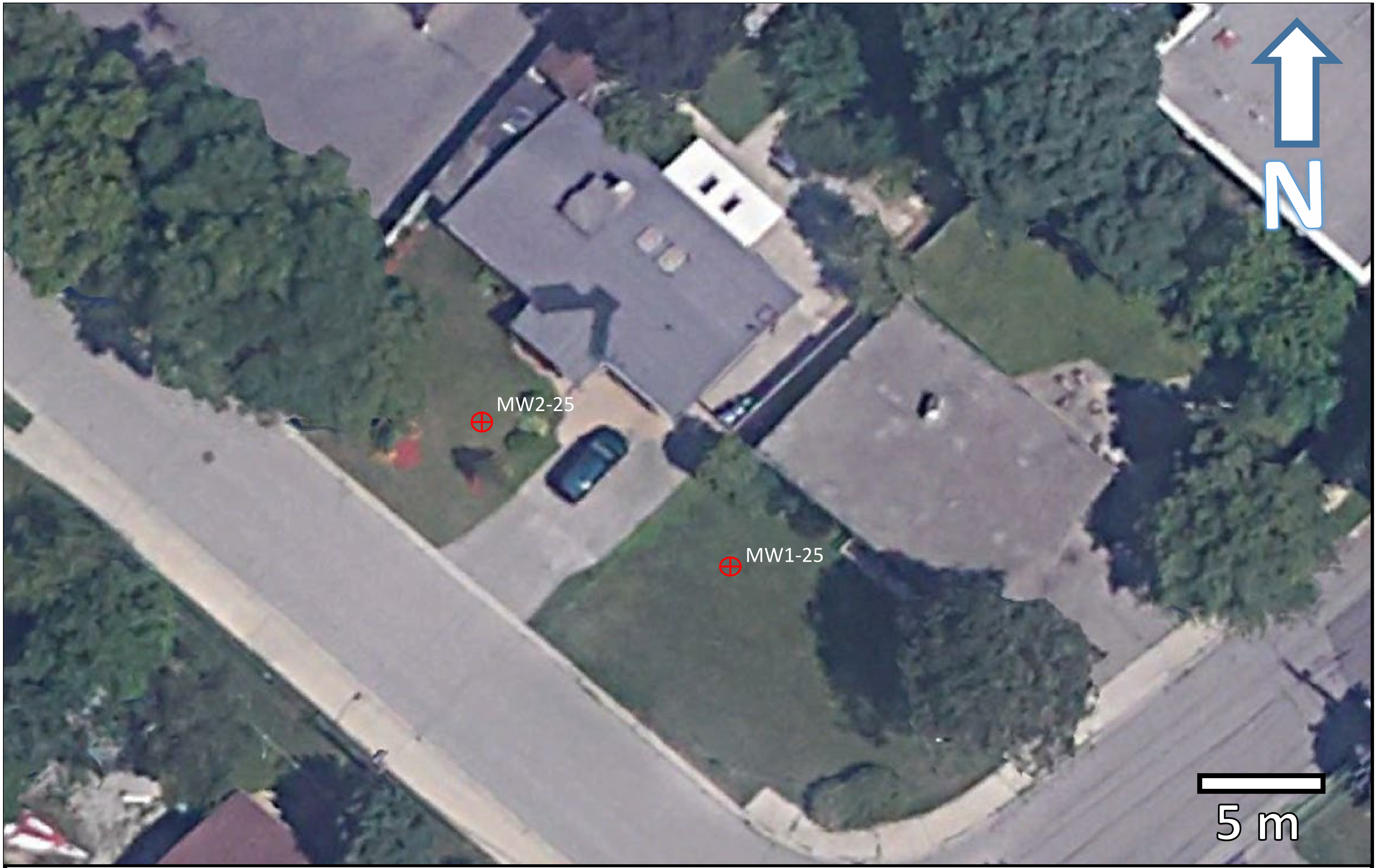
Respectfully submitted,

PROFESSIONAL GEOSCIENTIST
10-Jun-2025
CHRIS HELMER
PRACTISING MEMBER
2285
ONTARIO

Sara Khawja, M.Sc.
Groundwater Analyst

Chris Helmer, B.Sc., P.Geo.
Senior Hydrogeologist
MECP Licensed Well Contractor
www.hydrog.ca

encl. Drawing 1 – Site Plan
encl. Borehole Logs BH1-25 through BH1-25



imagery from Google Earth Pro © 2025

Drawing 1 - Site Plan
2463-2469 Mimosa Row, Mississauga

LEGEND

⊕ Well Location

HCS
HYDROGEOLOGY CONSULTING SERVICES INC

Drawn:	AR
Date:	4-Jul-25

HCS HYDROGEOLOGY CONSULTING SERVICES INC

MW1-25

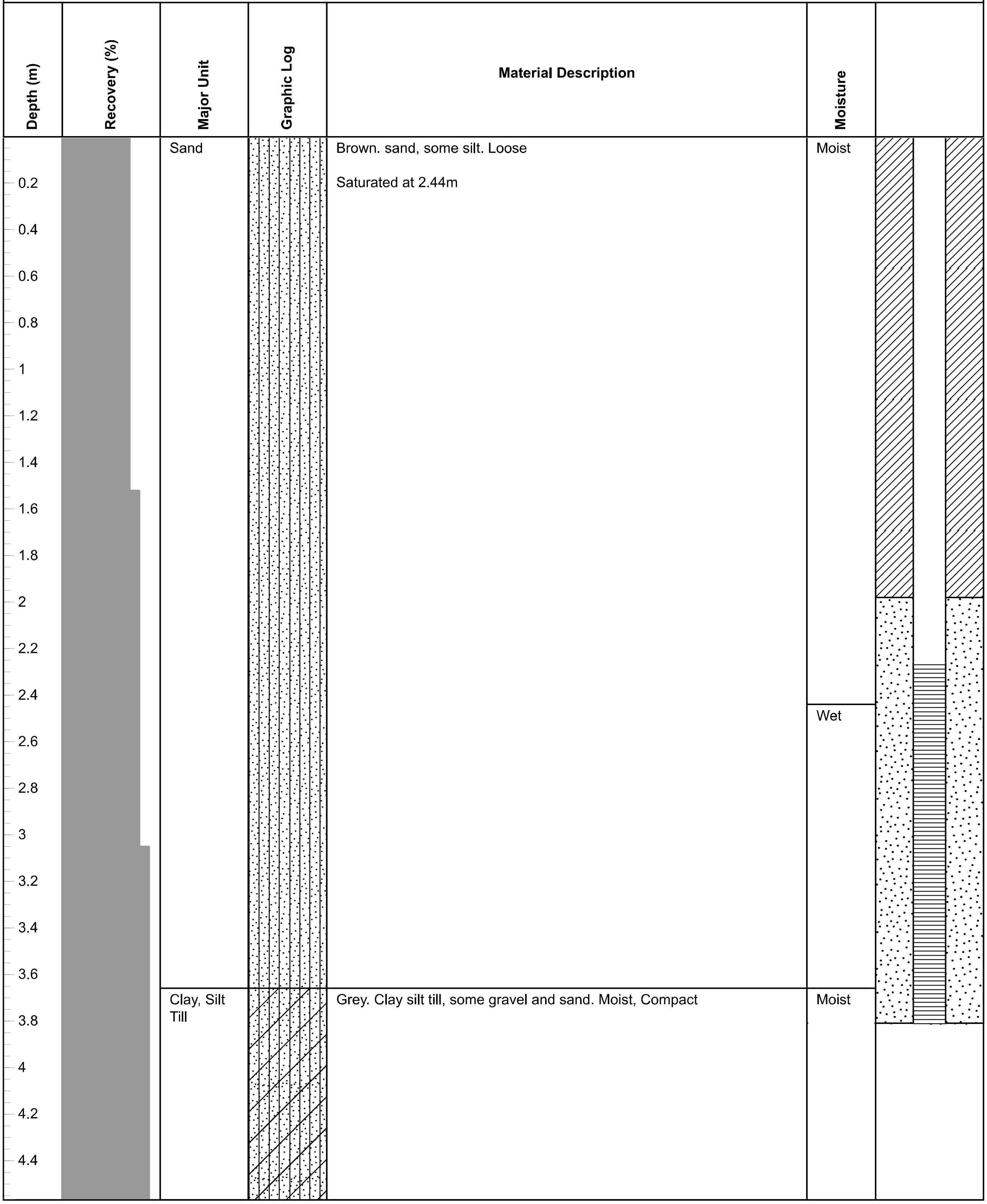
PROJECT NUMBER 10404
ADDRESS 2463-2469 Mimosa Row, Mississauga
DRILLER Altech
DRILL RIG Geoprobe 7822 DT, Hollow stem auger
WELL TAG N/A

CASING monument

DRILLING DATE July 4, 2025
TOTAL DEPTH 3.81m
SCREEN 2.29m 3.81m
SAND DEPTH 3.51m
GPS LOCATION 17N 611971 4825795

COMMENTSN/A

LOGGED BY Adrian Rudy
CHECKED BY Chris Helmer



Major Unit	Material Description	Moisture
Sand	Brown. sand, some silt. Loose Saturated at 2.44m	Moist
		Wet
Clay, Silt Till	Grey. Clay silt till, some gravel and sand. Moist, Compact	Moist

Disclaimer This bore log is intended for environmental not geotechnical purposes.

produced by ESlog.ESdat.net on 04 Jul 2025

HYDROGEOLOGY CONSULTING SERVICES INC

MW2-25

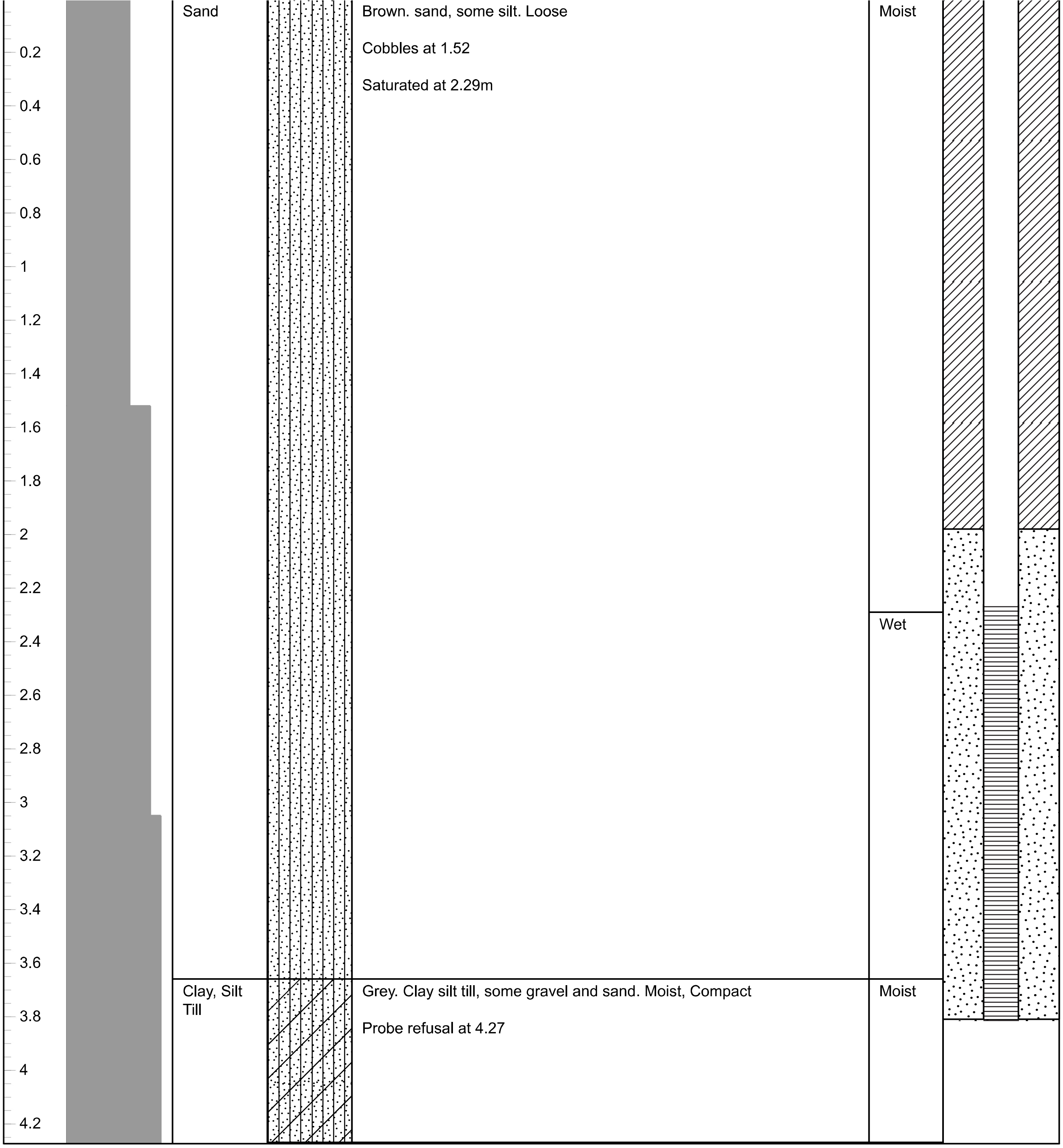
PROJECT NUMBER 10404
ADDRESS 2463-2469 Mimosa Row, Mississauga
DRILLER Altech
DRILL RIG Geoprobe 7822 DT, Hollow stem auger
WELL TAG N/A

CASING monument

DRILLING DATE July 4, 2025
TOTAL DEPTH 3.81m
SCREEN 2.29m 3.81m
SAND DEPTH 3.51m
GPS LOCATION 17N 611958 4825806

COMMENTSN/A

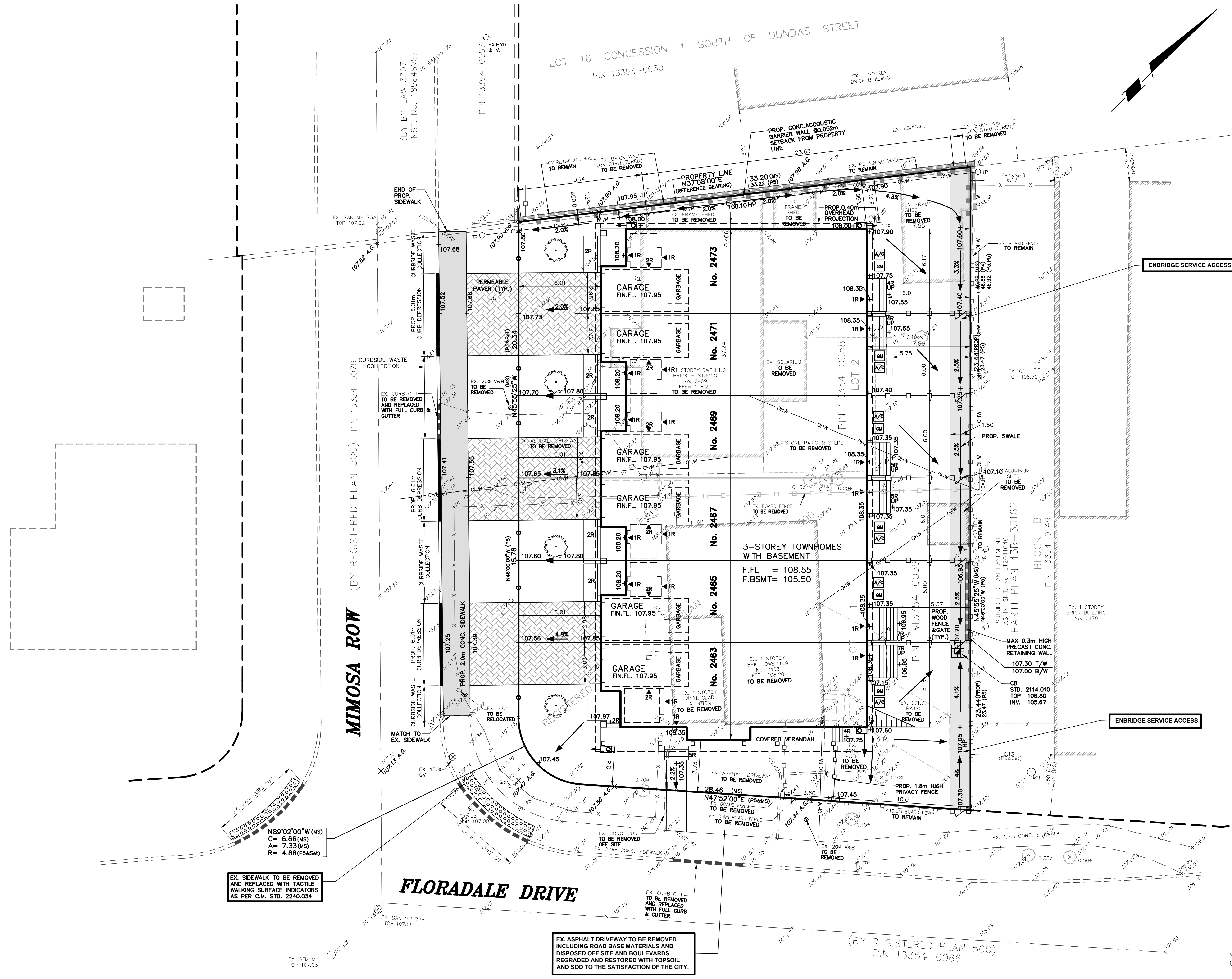
LOGGED BY Adrian Rudy
CHECKED BY Chris Helmer

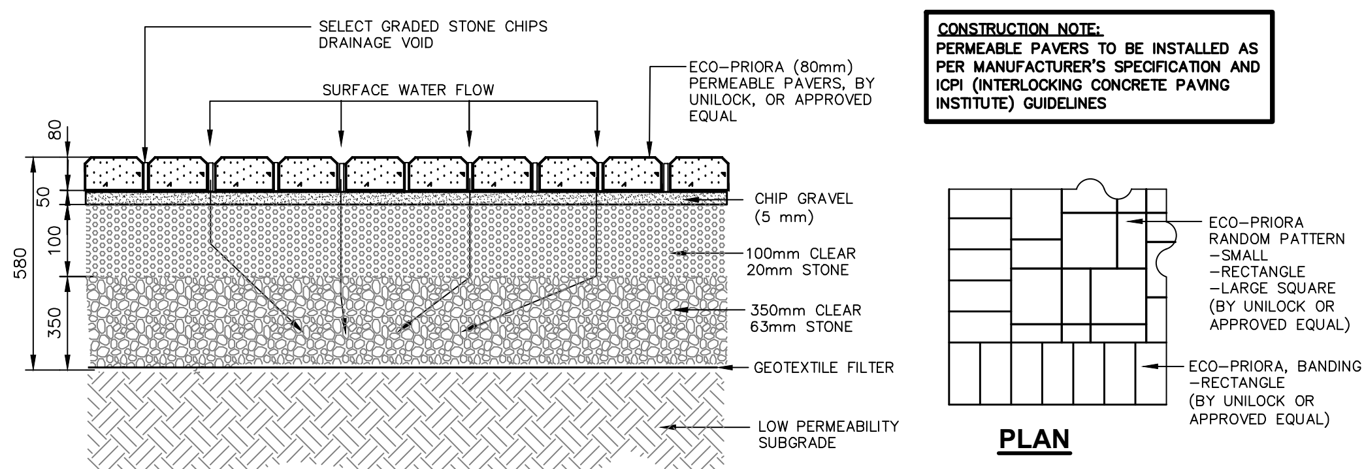


Depth (m)	Recovery (%)	Major Unit	Graphic Log	Material Description	Moisture	
		Sand		Brown. sand, some silt. Loose Cobbles at 1.52 Saturated at 2.29m	Moist Wet	
		Clay, Silt Till		Grey. Clay silt till, some gravel and sand. Moist, Compact Probe refusal at 4.27	Moist	

Disclaimer This bore log is intended for environmental not geotechnical purposes.

produced by ESlog.ESdat.net on 04 Jul 2025





CONSTRUCTION NOTE:
PERMEABLE PAVERS TO BE INSTALLED AS PER MANUFACTURER'S SPECIFICATION AND ICPI (INTERLOCKING CONCRETE PAVING INSTITUTE) GUIDELINES

PLAN

SECTION
DETAIL BY UNILOCK

PATTERN NOTES:
UNIT PAVERS BY UNILOCK OR APPROVED EQUAL.
-COLOURS TO BE SELECTED BY LANDSCAPE ARCHITECT ON SITE.

PERVIOUS STABLE SURFACE

N.T.S.

WORKS IN THE MUNICIPAL RIGHT - OF - WAY BEING PERFORMED BY THE CITY'S CONTRACTOR WILL REQUIRE 4 TO 6 WEEKS NOTICE PRIOR TO COMMENCEMENT OF CONSTRUCTION AFTER ALL DRAWINGS HAVE BEEN APPROVED AND SECURITIES HAVE BEEN RECEIVED.

PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR IS TO REFER TO THE TREE PRESERVATION PLAN PREPARED BY THE LANDSCAPE ARCHITECT.

PRIOR TO ANY CONSTRUCTION, THE BUILDER IS TO CONFIRM WITH ARCHITECT OR THE OWNER, THAT THE PROPOSED FINISHED FLOOR AND TOP OF WALL ELEVATIONS ARE IN CONFORMITY WITH THE ARCHITECTURAL DRAWINGS.

THE CONTRACTOR/BUILDER IS RESPONSIBLE FOR CONFIRMING ALL ABOVEGROUND AND UNDERGROUND UTILITY LOCATIONS AND IS TO IMMEDIATELY ADVISE THE ENGINEER OF ANY DISCREPANCIES.

THE APPLICANT WILL BE REQUIRED TO CONTACT ALL UTILITY COMPANIES TO OBTAIN ALL REQUIRED LOCATES PRIOR TO THE INSTALLATION OF HOARDING WITHIN MUNICIPAL RIGHT-OF-WAY.

ALL ROOF DOWNSPOUTS FROM EAVESTROUGH ARE TO DISCHARGE ONTO THE SURFACE VIA CONCRETE SPLASH PADS AND THE RUNOFF DIRECTED TOWARDS THE REAR WHERE POSSIBLE AND TO THE ROAD.

NOTE:
FOR ADDITIONAL INFORMATION, DETAILS, DIMENSIONS AND CONFORMITY TO THE SITE PLAN, THE CONTRACTOR MUST REFER TO THE ARCHITECTURAL SITE PLAN.

ALL INTERNAL EXISTING SERVICES AND APPURTENANCES NOT UTILIZED FOR SERVICING OF THIS PROJECT ARE TO BE REMOVED OFF SITE UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

INFORMATION SHOWN HEREON REGARDING THE SIZE AND LOCATION OF EXISTING SERVICES AND/OR UTILITIES IS FURNISHED AS THE BEST AVAILABLE INFORMATION AND SHALL BE INTERPRETED AS THE CONTRACTOR SEES FIT WITH THE UNDERSTANDING THAT THE OWNER DISCLAIMS ALL RESPONSIBILITY FOR ITS SUFFICIENCY AND/OR ACCURACY.

GENERAL NOTES

1. THE CONTRACTOR IS TO CHECK AND VERIFY ALL DIMENSIONS. IF ANY DISCREPANCIES, THEY MUST BE REPORTED TO THE ENGINEER IMMEDIATELY PRIOR TO CONSTRUCTION.
2. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL UTILITIES DURING CONSTRUCTION. GAS, HYDRO, TELEPHONE OR ANY OTHER UTILITIES THAT MAY EXIST ON THE SITE OR WITHIN THE STREETLINES MUST BE LOCATED BY ITS OWN UTILITIES AND VERIFIED PRIOR TO CONSTRUCTION.
3. ALL CONNECTIONS SHALL BE INSTALLED AS PER MUNICIPAL STANDARDS AND SPECIFICATIONS.
4. BUILDER IS TO VERIFY TO THE ENGINEER THAT THE FINAL FOOTING ELEVATION AND TOP OF FOUNDATION WALL ELEVATION ARE IN CONFORMITY WITH THE BUILDING CODE AND THE CERTIFIED GRADING PLAN PRIOR TO PROCEEDING.
5. THE ELEVATION OF THE SIDE SWALE AT THE BUILDING LINE SHALL BE A MINIMUM OF **150mm** BELOW THE BUILDING LINE AT THE CENTRE OF THE SWALE.
6. OUTSIDE FINISHED GRADE TO BE A MINIMUM OF **150mm** BELOW BRICK VENEER ELEVATION.
7. PRIOR TO ANY SODDING, THE BUILDER IS TO ENSURE TO THE SOILS CONSULTANT AND/OR THE ENGINEER THAT THE LOT HAS BEEN GRADED AND TOPSOILED AND SODDED COMPLETELY WITH A MINIMUM DEPTH OF **100mm** OF TOPSOIL AND **NO 1**. NURSERY SOD AND A MINIMUM DEPTH OF **150mm** OF CRUSHED STONE TO BE PROVIDED ON THE ENTIRE LENGTH OF EACH DRIVEWAY ON A FIRM SUBGRADE AND THE DRIVEWAY TO BE PAVED WITH A MINIMUM COMPACTED DEPTH OF **75mm** OF ASPHALT BETWEEN THE CURB AND THE GARAGE.
8. NO SODDING ON ANY LOTS IS PERMITTED UNTIL PRELIMINARY INSPECTION IS DONE BY THE ENGINEER AND THE BUILDER.
9. AT ALL ENTRANCES TO THE SITE THE ROAD CURB AND SIDEWALK WILL BE CONTINUOUS THROUGH THE DRIVEWAY, THE DRIVEWAY GRADE WILL BE COMPATIBLE WITH THE EXISTING OR FUTURE SIDEWALK AND CURB DEPRESSION WILL BE PROVIDED FOR EACH ENTRANCE.
10. DRIVEWAY GRADES SHOULD NOT BE LESS THAN **2.0%** AND NOT GREATER THAN **8%**.
11. LAWN AND SWALES SHALL HAVE A MINIMUM SLOPE OF **1.5%** (PREFERRED 2%) AND A MAXIMUM SLOPE OF **6%**.
12. WHERE GRADES IN EXCESS OF 6% ARE REQUIRED, THE MAXIMUM SLOPE SHALL BE 3:1. GRADE CHANGES IN EXCESS OF 1.0m ARE TO BE ACCOMPLISHED BY USE OF A RETAINING WALL. RETAINING WALLS HIGHER THAN 0.6m SHALL HAVE A FENCE INSTALLED ON THE HIGH SIDE.
13. THE SERVICE CONNECTION TRENCH WITHIN THE TRAVELLED PORTION OF THE ROAD ALLOWANCE SHALL BE BACKFILLED WITH UNSHRINKABLE BACKFILL MATERIAL AS PER **C.M. STDS. 2220.030, 2220.031 AND 2220.032** UNLESS OTHERWISE SPECIFIED PRIOR APPROVAL FOR OTHER BACKFILL MATERIAL HAS BEEN OBTAINED.
14. ALL WATERMAINS AND WATER SERVICE MATERIALS AND CONSTRUCTION METHODS MUST CORRESPOND TO CURRENT MUNICIPAL STANDARDS & SPECIFICATIONS.
15. WATERMAINS AND/OR WATER SERVICES ARE TO HAVE A MIN. DEPTH OF **1.7m** WITH A MIN. HORIZONTAL SPACING OF **1.2m** FROM THEMSELVES AND OTHER UTILITIES.
16. SEDIMENT CONTROL FENCE TO BE INSTALLED AS PER **C.M. STD. 2940.010**.
17. ALL DAMAGED AND DISTURBED AREAS TO BE REINSTATED WITH TOPSOIL AND SOD.

FIRE DEPARTMENT

1. FIRE ROUTE WILL BE DESIGNATED AS PER CITY OF MISSISSAUGA **BYLAW (1036-81)** AS AMENDED PRIOR TO OCCUPANCY OF THE BUILDINGS.
2. FIRE ROUTES TO BE DESIGNED TO WITH STAND A LOAD NOT LESS THAN **11,363Kg**. PER AXLE AND HAVE A CHANGE IN GRADIENT OF NOT MORE THAN **1 IN 12.5** OVER A DISTANCE **15.0m** AS PER **BY LAW 1036-81**.
3. ALL **12.0m** TURNING RADII HAVE MIN. CLEARANCE OF **3.0m** BETWEEN THE CENTRE LINE OF TURNING RADII AND ANY CURB OR PART OF BUILDING.
4. PRIVATE FIRE HYDRANTS SHALL BE FLOW TESTED AND COLOUR CODED IN CONFORMANCE WITH THE REGION OF PEEL "UNIFORM MARKING OF HYDRANTS".

ROADS

1. ALL FILL WITHIN ROAD ALLOWANCE AND EASEMENTS TO BE COMPACTED TO MIN **95%** STANDARD PROCTOR DENSITY. THE SUITABILITY AND COMPACTION OF ALL FILL MATERIALS TO BE CONFIRMED BY A RECOGNIZED SOIL CONSULTANT TO THE CITY ENGINEER AND THE SUBGRADE OF ALL ROADWAYS SHALL BE PROOF ROLLED UNDER THE SUPERVISION OF THE SOILS CONSULTANT PRIOR TO THE INSTALLATION OF ANY ROAD BASE MATERIALS.
2. THE DEVELOPER/CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL EXISTING UTILITIES PRIOR TO AND DURING CONSTRUCTION. LOCATION OF EXISTING UTILITIES, WATERMAINS, SEWERS AND OTHER UNDERGROUND OR ABOVEGROUND UTILITIES AND STRUCTURES ARE NOT NECESSARILY SHOWN ON THE DRAWINGS. PRIOR TO COMMENCEMENT OF WORK, CONTRACTOR MUST EXAMINE THE ACCURACY OF SUCH EXISTING UTILITIES AND STRUCTURES WHETHER SHOWN OR NOT AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM. ANY DISCREPANCIES TO LOCATION OF EXISTING WATERMAINS AND SEWERS TO BE RECTIFIED AT DEVELOPER/ CONTRACTOR'S EXPENSE.
3. THE DEVELOPER/CONTRACTOR MUST ENSURE THAT A SUBGRADE CERTIFICATE IS ISSUED BY THE GEOTECHNICAL SOILS CONSULTANT TO THE ENGINEER. ONLY UPON VERIFICATION AND APPROVAL OF THE SUBGRADE BY THE LOCAL AUTHORITY INSPECTION DEPARTMENT WILL COMMENCEMENT OF ANY ROAD BASE MATERIALS BE PLACED. FAILURE TO FOLLOW THIS PROCEDURE WILL MEAN THE REMOVAL OF ROAD BASE MATERIALS AND/OR ADDITIONAL TESTING THAT PROPER COMPACTION HAS BEEN ACHIEVED AT THE SUBGRADE AT DEVELOPER/CONTRACTOR'S EXPENSE.
4. TRENCH BACKFILLING ON PROPOSED ROADS SHALL COMPLY WITH CITY OF MISSISSAUGA **SECTION 4.02.06** - (TRENCH BACKFILLING ON ROADS) AS PROVIDED IN THE CITY'S DEVELOPMENT REQUIREMENT MANUAL.
   a) THE TOP **1000mm** OF THE SUBGRADE IS TO BE COMPACTED TO A MINIMUM **98%** OF SPD WITHIN **2%** OF THE OPTIMUM MOISTURE CONTENT.
5. ALL CONNECTIONS WITHIN PAVED PORTION OF ANY EXISTING ROAD TO BE BACKFILLED WITH UNSHRINKABLE BACKFILL MATERIAL AS PER **C.M. STDS. 2220.030, 2220.031 AND 2220.032**, UNLESS OTHERWISE SPECIFIED PRIOR APPROVAL FOR OTHER BACKFILL MATERIAL HAS BEEN OBTAINED.
6. ALL OTHER EXCAVATIONS WITHIN EXISTING ROAD ALLOWANCE SHALL BE BACKFILLED TO SUBGRADE ELEVATION WITH GRANULAR 'C' MATERIAL AND COMPACTED TO A MINIMUM OF **95%** STANDARD PROCTOR DENSITY. SURFACE RESTORATION SHALL BE EQUAL TO OR BETTER THAN EXISTING CONDITION IN ACCORDANCE WITH **O.P.S.S. 507**
7. CURB TO BE AS PER **O.P.S.D. 600.110** UNLESS OTHERWISE NOTED.
8. SUBDRAIN UNDERNEATH ALL CURBS TO BE MINIMUM **100dia.** AS PER **C.M. STDS**. **2220.040 AND 2220.05** AND ON EXISTING ROADS.
9. ALL DISTURBED AREAS WITHIN EXISTING ROAD ALLOWANCE TO BE REINSTATED WITH TOPSOIL AND SOD TO THE SATISFACTION OF CITY OF MISSISSAUGA.
10. SIDEWALKS TO BE AS PER **C.M. STD. 2240.010** AND PEDESTRIAN RAMPS TO BE PROVIDED AT ALL INTERSECTIONS AS PER **C.M. STDS. 2240.020 AND 2240.030.**

I /WE HAVE REVIEWED THE PLANS FOR THE CONSTRUCTION OF A NEW SINGLE FAMILY DWELLING AT **2463-2469 MIMOSA ROW** AND HAVE PREPARED THIS PLAN TO INDICATE THE COMPATIBILITY OF THE PROPOSAL TO EXISTING ADJACENT PROPERTIES AND MUNICIPAL SERVICES. IT IS MY BELIEF THAT ADHERENCE TO THE PROPOSED GRADES AS SHOWN WILL PRODUCE ADEQUATE SURFACE DRAINAGE AND PROPER FACILITY OF THE MUNICIPAL SERVICES WITHOUT ANY DETRIMENTAL EFFECT TO THE EXISTING DRAINAGE PATTERNS OR ADJACENT PROPERTIES.

SIGNATURE
APRIL 03,2025
DATE

ROMAN T. KERKUSZ
APR 03/25

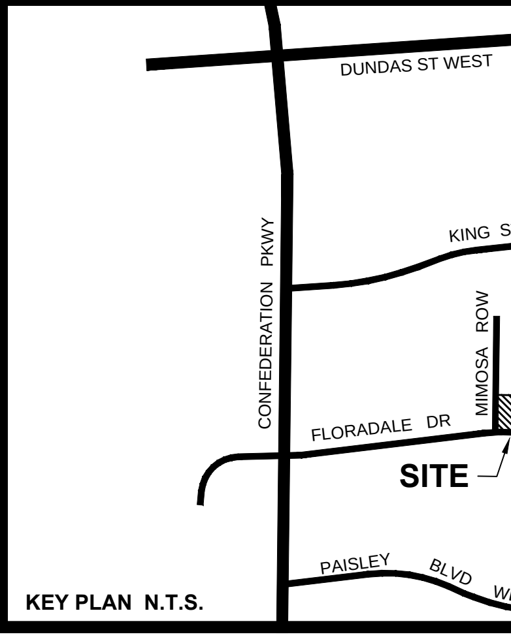
C.M. BENCHMARK No. 337 **ELEVATION: 108.73m**

DESCRIPTION: ON THE SOUTH FACE JUST EAST OF THE GARAGE DOOR OF A GREY AND YELLOW BRICK BUNGALOW NO. 111 AT THE NORTHEAST CORNER OF FLORADALE DRIVE AND CONFEDERATION PARKWAY.

LEGEND

×(000.00)	-EXISTING ELEVATION TO REMAIN
× 000.00	-EXISTING ELEVATION
→	-DIRECTION OF SURFACE FLOW
+	-PROPOSED ELEVATION
▦	-CATCHBASIN WITH TEMPORARY SEDIMENT CONTROL
✿	-EX.TREE TO REMAIN
⊗	-EX.TREE TO BE REMOVED
▪▪▪▪▪▪▪▪▪▪	-EASEMENT
⌖	-FIRE HYDRANT
Ⓢ	-SUMP PUMP
Ⓗ	-HYDRO METER
Ⓖ	-GAS METER
Ⓜ	-METER ROOM
RD.	-ROOF DOWNSPOUTS
━━━	-PROPERTY LINE

No.	DATE	REVISION	INIT.
6.	MAR 31,2025	ADRESSED COMMENTS BY ARCHITECT	S.S.
4.	MAR 27,2025	REVISED BACK YARD STEPS,ADDED NEW ACCOUSTIC WALL ,ADDED ENBRIDGE	S.S.
		EASEMENT ,ADDED OVERHEAD PROJECTION ,AC AND GM,ADJUSTED SITE PLAN ACCORDINGLY	S.S.
3.	AUG 26,2024	REVISED SITE GRADING PLAN	S.S.
2.	AUG 22,2024	REVISED SITE GRADING PLAN & ADDED AVERAGE GRADES & TABLE	S.S.
1.	DEC. 01, 2023	REVISED SITE GRADING PLAN.	D.W.



KEY PLAN N.T.S.

SKIRA & ASSOCIATES LTD.
CONSULTING ENGINEERS
3464 Semenyk Court, Suite 100, Mississauga, Ontario L5C 4P8
Tel. (905) 276-5100 Fax. (905) 270-1936 Email - info@skiraconsult.ca

PROPOSED RESIDENTIAL TOWNHOUSES

LOTS 1 AND 2, REGISTERED PLAN 500

2463-2469 MIMOSA ROW

FOXMAR DEVELOPMENT LTD.
2533 BURSLEM ROAD MISSISSAUGA ON L5A 2R5

MISSISSAUGA

SITE GRADING PLAN
0Z/OPA 24-14(W7)

DATE: MAR. 2022	AREA: Z-15	DWG.No. C102
SCALE: 1:200	DRAWN BY: DM	
CITY FILE:	REGION FILE:	PROJECT No. 220-M130-2

REZONING TO RM5 ZONE – FREE HOLD UNITS

REZONING TO RM5 ZONE	LOT No. LOT 1 + 2	REG. PLAN No. 500	LOT AREA 1,438.343 m2	LOT FRONTAGE 36.12 (118.5')	LOT DEPTH 33.20 (108.92')

DESCRIPTION	PERMITED	%	PROPOSED	%
MAX. GFA RESIDENTIAL	1,078.75m2	0.75 X LOT AREA	1,793.30m2 (INCLUDING GARAGE)	1.25 X LOT AREA
UNIT #1 = 4 bedroom G.F.A.			301.63m2	
UNIT #2 = 4 bedroom G.F.A.			295.60m2	
UNIT #3 = 4 bedroom G.F.A.			295.60m2	
UNIT #4 = 4 bedroom G.F.A.			295.60m2	
UNIT #5 = 4 bedroom G.F.A.			295.60m2	
UNIT #6 = 4 bedroom G.F.A.			295.60m2	
TOTAL G.F.A.			1,793.30m2 (INCLUDING GARAGE)	130 m2 GFA for 6 Garages
COVERAGE AREA			726.38 m2	50.63 %
SOFT LANDSCAPE of total 646.23 m2			472.59 m2 = 32.85 % of lot area	
PAVED AREA			108.10 m2	7.5 %
No. OF STORIES HEIGHT	10.7m(35')		3 STOREY 10.7m(35')	
WIDTH			14.80 m	
DEPTH	20 m		16.65 m	
GARBAGE	STORAGE FOR WASTE CARTS WILL BE INSIDE OF THE GARAGE			

SETBACKS	PERMITED	PROPOSED
FRONT YARD	6.0m	6.0m (GARAGE FACE)
REAR YARD	7.5m	7.5m
REAR YARD (WOOD STEPS)		5.37m
INTERIOR SIDE (north)	1.2m	1.2m
EXTERIOR SIDE (south)	4.5m	3.75m 2.8m (VERANDAH)
ONE GARAGE PER UNIT GFA: 21.65 m2	ONE ADDITIONAL PARKING SPACE ON EACH UNIT DRIVEWAY	
TOTAL GARAGES		6 CARS
TOTAL PARKING SPACES		12 SPACES

FRONT YARD (MIMOSA): LANDSCAPE CALCULATIONS

LANDSCAPED SOFT AREA:	1 – Front Yard area: 179.67 m2
Total Soft Landscaped Area: 41.59 m2 (23.15 %)	2 – Porch areas (incl. steps): 0 m2
Total hard Landscaped Area: 138.08 m2 (76.85 %)	3 – Walkway (incl. steps) : 29.98 m2
	4 – Driveway : 108.10 m2
	5 – Other hard surfaces : 0 m2

FRONT YARD (FLORADALE DRIVE):

LANDSCAPED SOFT AREA:	1 – Front Yard area: 71.45 m2
Total Soft Landscaped Area: 65.84 m2 (92.15 %)	2 – Porch areas (incl. steps): 0 m2
Total hard Landscaped Area: 5.61 m2 (7.85 %)	3 – Walkway (incl. steps) : 5.61 m2
	4 – Driveway : 0 m2
	5 – Other hard surfaces : 0 m2

SIDE YARD:

LANDSCAPED SOFT AREA:	1 – Side Yard area: 46.79 m2
Total Soft Landscaped Area: 46.79 m2 (100 %)	2 – Porch areas (incl. steps): 0 m2
Total hard Landscaped Area: 138.08 m2 (0.00 %)	3 – Walkway (incl. steps) : 0 m2
	4 – Driveway : 0 m2
	5 – Other hard surfaces : 0 m2

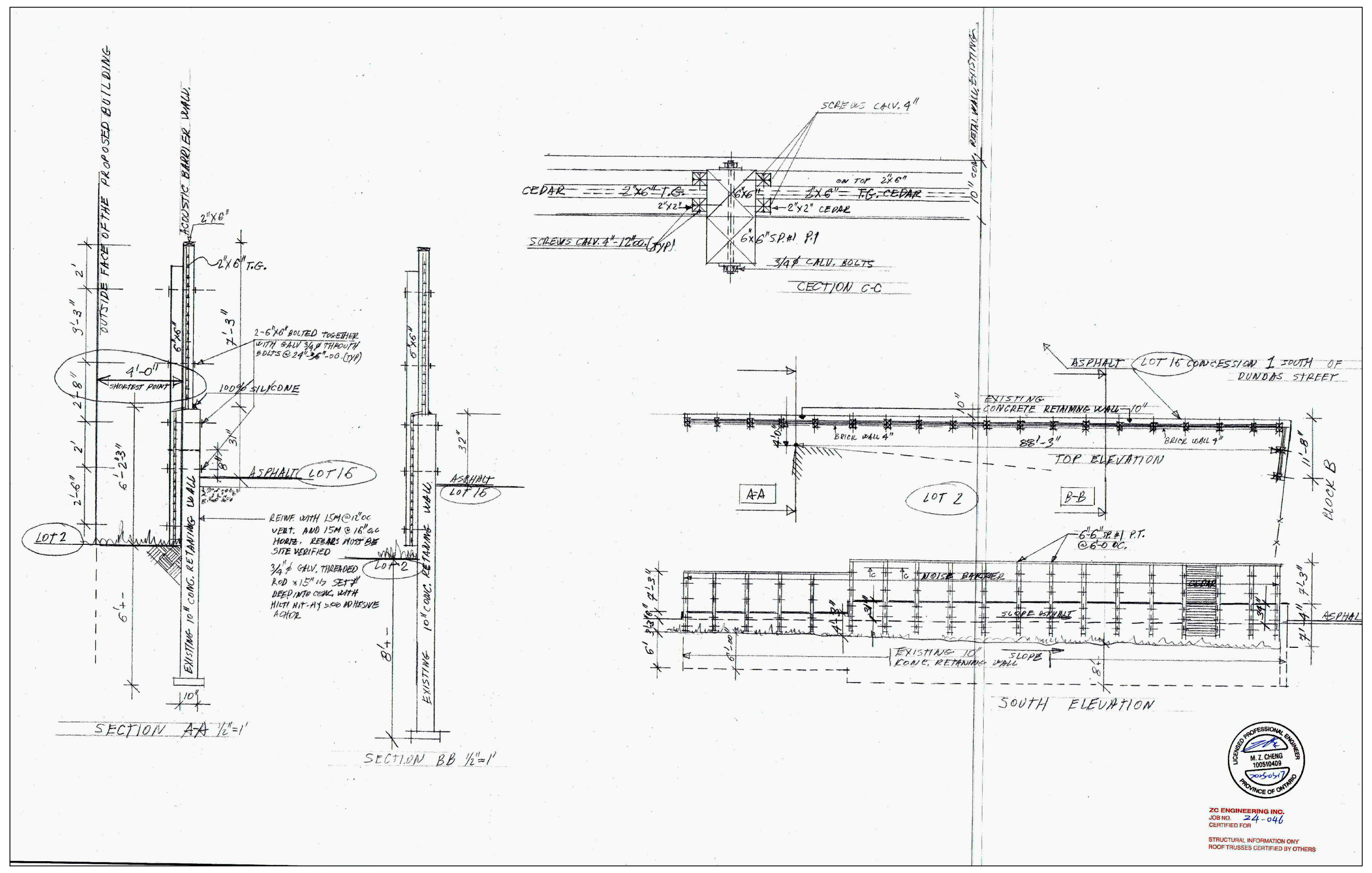
REAR YARD:

LANDSCAPED SOFT AREA:	1 – Rear Yard area: 348.32 m2
Total Soft Landscaped Area: 318.37 m2 (91.40 %)	2 – Porch areas (incl. steps): 29.95 m2
Total hard Landscaped Area: 29.95 m2 (8.60 %)	3 – Walkway (incl. steps) : 0 m2
	4 – Driveway : 0 m2
	5 – Other hard surfaces : 0 m2

It is not the intent of the applicant to register an easement for the 1.5m pathway at the rear of the property.

AVERAGE GRADE CALCULATION	ELEVATION		
LOCATION	L - LEFT SIDE OF HOUSE	R - RIGHT SIDE OF HOUSE	AVERAGE
C/L OF ROAD (along the side lot lines)	107.62	107.13	107.38
STREET LINE	107.90	107.47	107.68
6.0m OFFSET FROM STREET LINE	107.90	107.56	107.73
15.0m OFFSET FROM 6.0m FRONTAGE	107.92	107.44	107.68
AVERAGE GRADE ELEVATION			**107.62**

AVERAGE GRADE ELEVATION = 136.56



ACCOUSTIC BARRIER WALL DETAIL