PATERSON GROUP

memorandum

Committee of Adjustment
Received | Reçu le
2026-01-16
City of Ottawa | Ville d'Ottawa
Comité de dérogation

re: **Preliminary Slope Stability Assessment**
Proposed Residential Development
Lots 1 to 4, Bonnie Lane / Linda Loop, Kinburn, ON

to: **Dale Capital Holdings Inc.**

to: Taska Construction Ltd. – **Chris Tyler** – Chris@taskacon.ca

date: November 19, 2025

file: PG7794-MEMO.01

Further to your request and authorization, Paterson Group (Paterson) completed a site visit on November 4, 2025, in the presence of the client's representative, and prepared the current memorandum to provide a slope stability assessment for the proposed residential development to be located at the aforementioned site.

1.0 Proposed Development

Based on preliminary information provided by the client and available site plan, it is understood that the proposed residential development will consist of residential dwellings with associated roadways, driveways, and landscaped areas. It is also anticipated that the proposed development will be privately serviced by septic systems.

2.0 Existing Site Conditions

Based on our site visit conducted on November 4, 2025, the site consists of undeveloped land predominantly covered with tall grass and several mature trees. A slope traverses the subject site in a north–south orientation, situated between the undeveloped portion of the property and several existing residential dwellings located between the site and the culvert crossing to the south. The slope was observed to be relatively flat from the western boundary to the center of the site, steepening toward a creek along the eastern boundary. The site is bordered by residential areas to the east and west, a farm field to the north, and Thomas A. Dolan Parkway to the south.

Following review of available LiDAR mapping, Paterson completed a topographic survey of the subject slope to better assess the existing conditions using a high-precision GPS (referenced to a geodetic datum). Reference should be made to Drawing PG7794-1 – Test Hole Location Plan for the topographic points of surveys and Photographs captured during the above noted site visits, attached to the current report.

The existing ground surface across the subject site slopes downward toward the creek, with geodetic elevations of approximately 96.3 m on both sides of the creek and a lowest elevation of about 91.4 m at the bottom of the creek. The site location is presented on the attached Figure 1 – Key Plan.

3.0 Field Investigation

The field program for the current slope stability assessment was carried out on November 4, 2025. At that time, a total of four (4) hand auger test holes were advanced to a maximum depth of 1.8 m below the existing ground surface using a stainless-steel hand auger. Where cohesive soils were encountered, a Geonor-style test pitting vane was used to measure the soils in-situ stiffness across the depth of the hand augered test hole. All fieldwork was conducted under the full-time supervision of Paterson personnel under the direction of a senior engineer.

The test hole locations and ground surface elevation at each test hole location were surveyed by Paterson using a high-precision GPS and referenced to a geodetic datum. The location of the test holes and ground surface elevation at each test hole location are presented on Drawing PG7794-1 – Test Hole Location Plan attached to this memo report.

Slope Face Observations

A walk along the top of the slope and a general assessment of the slope conditions were completed during the site visit conducted on November 4, 2025. The location of the slope is predominantly covered with tall grasses and a few mature trees. The slope was observed to be relatively flat from the western boundary to the center of the site, steepening toward a creek along the eastern boundary.

The slope face was observed to be covered with grass and shrubs, with one dead tree also noted along the slope. The slope appeared to be in stable condition with continuous vegetative cover. No evidence of erosion, instability, or surficial movement was observed along the slope face or at the toe of the slope. Reference should be made to photographs captured during our site visit, attached to the current report.

Subsurface Conditions

Overburden

Based on hand auger holes conducted along the slope by Paterson on November 4, 2025, the subsurface conditions at the site generally consist of a thin topsoil layer underlain by an undisturbed, stiff to firm, brown silty clay deposit. The silty clay layer was observed in all test holes, extending to a maximum depth of 1.8 m below the existing ground surface.

Based on the existing test hole information, available subsurface data from surrounding properties, and our knowledge of the area, it is anticipated that the brown silty clay extends to a depth of approximately 6 m below the existing ground surface, underlain by a grey silty clay layer. The overburden is expected to extend to an approximate depth of 25 m below the existing ground surface. Reference should be made to the Soil Profile and Test Data sheets attached to this report for details of the soil profile encountered at each test hole location.

Bedrock

Based on available geological mapping, bedrock depth ranges from 15 to 50 m below the existing ground surface and consists of interbedded limestone and shale of the Verulam Formation.

4.0 Slope Stability Assessment

The analysis of the stability of the slope was carried out using SLIDE2, a computer program which permits a two-dimensional slope stability analysis using several limit equilibrium methods that are widely used and accepted analysis methods and in accordance the City of Ottawa's *Slope Stability Guidelines for Development Application in the City of Ottawa* (2004) and the Ontario Ministry of Natural Resource *Technical Guide – River and Stream Systems: Erosion Hazard Limit* (2002).

The program calculates a factor of safety, which represents the ratio of the forces resisting failure to those favoring failure. Theoretically, a factor of safety of 1.0 represents a condition where the slope is stable. However, due to intrinsic limitations of the calculation methods and the variability of the subsoil and groundwater conditions, a factor of safety greater than one is usually required to ascertain that the risks of failure are acceptable. A minimum factor of safety of 1.5 is generally recommended for conditions where the failure of the slope would endanger permanent structures.

Subsoil conditions at the cross-sections were inferred based on the completed hand auger holes, nearby historical test holes, and our knowledge of the area. For a conservative review of the groundwater conditions, the silty clay deposit was noted to be fully saturated for our analysis and exiting at the toe of the slope and across the creek section.

Static Loading Analysis

The results for the existing static conditions are shown in Figures 2A, 2C, 3A, and 3C, attached to the current memorandum. The results indicate that the factor of safety for all the sections was found to be greater than 1.5.

Seismic Loading Analysis

An analysis considering seismic loading and the groundwater at the ground surface was also completed. A horizontal acceleration of 0.183g was considered for all slopes. A factor of safety of 1.1 is considered to be satisfactory for stability analyses, including seismic loading.

The results of the analyses, including seismic loading, are shown in Figures 2B, 2D, 3B, and 3D, attached to the current memorandum. The results indicate a slope with a factor of safety greater than 1.1 at all sections. Based on these results, the slopes are considered to be stable under seismic loading.

Stable Slope Setback

Given that the factor of safety of the existing slope under existing conditions is more than 1.5 and 1.1 for static and seismic loadings, respectively, a stable slope setback is not required for the limit of the hazard lands at the subject site. However, if the client is planning on constructing any future structures near the top of the slope, Paterson must be notified to review the impacts of any new structures on the stability of the slope.

Erosion and Access Allowances

Based on the anticipated soils and due to no evidence of active erosion at the toe of the existing slope, a toe erosion allowance of 1 m should be applied from the watercourse edge, and an access allowance of 6 m is required from the top of the slope or geotechnical setback (where applicable).

Limit of Hazard Lands Setbacks

Typically, the limit of hazard lands setback is comprised of a stable slope allowance, a toe erosion allowance, and an erosion access allowance, and would comprise a combination of an erosion access allowance (6 m) and a toe erosion setback (1 m) taken from the top of the stable slope. Since the observed slopes are considered stable based on analysis and visual review, there is no applicable stable setback to be considered for the subject slopes at this time, such that the setback may be taken from the top of slope alignment identified in the field by Paterson field personnel.

Based on our analysis and the above-noted results, the limit of hazard lands designation line for the subject site is indicated on Drawing PG7794-1 – Test Hole Location Plan attached to the end of this report.

Conclusion

In summary, based on available information and site-specific information attained by our field review, the subject slopes are considered stable such that the proposed development is considered feasible along the existing slopes beyond the recommended Limit of Hazard lands designation line from a slope stability perspective.

5.0 Statement of Limitations

The recommendations made in this memo report are in accordance with our present understanding of the project. Should any conditions at the site be encountered which differ from those detailed within our memo report, we request that we be notified immediately in order to permit reassessment of our recommendations.

The present report applies only to the site condition described in this document. Use of this report for purposes other than those described herein or by person(s) other than Dale Capital Holdings Inc. or their agents, is not authorized without review by this firm for the applicability of our recommendations to the altered use of the report.

We trust that this information is satisfactory for your immediate requirements.

Best Regards,

Paterson Group Inc.

LICENSED PROFESSIONAL ENGINEER
Nov.19, 2025
D. J. PETAHTEGOOSE
100568013
PROVINCE OF ONTARIO

Yashar Ziaeimehr, M.A.Sc., P.Eng.

Drew Petahtegoose, P.Eng.

Attachments:

- ❑ Photographs Captured During Site Visit on November 4, 2025.
- ❑ Soil Profile and Test Data Sheets.
- ❑ Symbols and Terms.
- ❑ Figure 1 – Key Plan.
- ❑ Figures 2A to 3D – Slope Stability Sections – Existing Conditions.
- ❑ Drawing PG7794-1 – Test Hole Location Plan.

Photo 1: Photograph of Creek, facing northwest, illustrating slopes covered with grass and shrubs.

Photo 2: Photograph of Creek at cross section B-B', facing northeast, illustrating slopes covered with grass and shrubs.

Photo 3: Photograph of sloped area, facing north, illustrating slopes covered with grass and shrubs.

Photo 4: Photograph from the central portion of the site, facing northeast, illustrating ground cover consisting of grass and shrubs.

Photo 5: Photograph of Creek, facing northwest illustrating slopes covered with grass and shrubs.

Photo 6: Photograph of Creek, facing northwest, illustrating slopes covered with grass and shrubs.

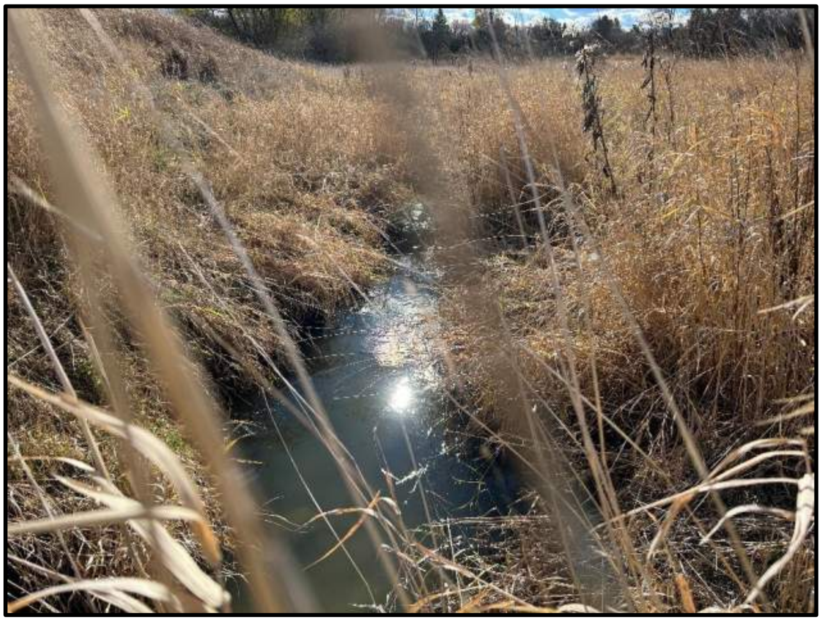


Photo 7: Photograph of Creek, facing southeast illustrating slopes covered with grass and shrubs.

Photo 8: Photograph of the creek near cross-section A–A’, facing northeast, illustrating slopes covered with grass, shrubs, and a dead tree.

Photo 9: Photograph of the creek to the south of cross-section A–A', facing northwest, illustrating slopes covered with grass, shrubs, and trees.

Photo 10: Photograph of the creek to the south of cross-section A–A', facing south, illustrating slopes covered with grass, and shrubs.

SOIL PROFILE AND TEST DATA

Preliminary Slope Stability Assessment

Lots 1 to 4, Bonnie Lane/Linda Loop, Kinburn, ON

PATERSON GROUP

COORD. SYS.: MTM ZONE 9 **EASTING:** 334768.09 **NORTHING:** 5024774.91 **ELEVATION:** 93.15

PROJECT: Proposed Residential Development

ADVANCED BY: Hand Auger

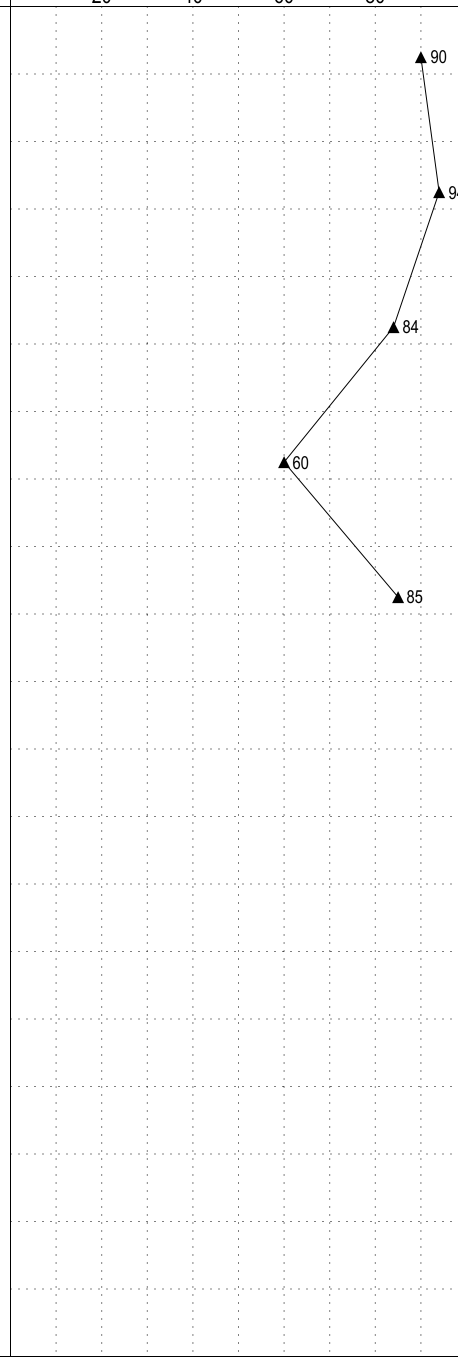
REMARKS:

DATE: November 4, 2025

FILE NO. : PG7794

HOLE NO. : HA 1-25

SAMPLE DESCRIPTION	STRATA PLOT	DEPTH (m)	SAMPLE: TYPE AND NO.	SAMPLE: RECOVERY (%)	SAMPLE: N OR RQD	SAMPLE: WATER CONTENT (%)	PEN. RESIST. (BLOWS/0.3m) DCPT (50mm DIA. CONE) / REMOULDED SHEAR STRENGTH (kPa) / UNDRAINED SHEAR STRENGTH (kPa) / PL (%) WATER CONTENT (%) LL (%)	PIEZOMETER CONSTRUCTION	ELEVATION (m)
GTOUND SURFACE									
TOPSOIL 0.10m [93.05m]									93
Brown **SILTY CLAY** 1.80m [91.35m]		1							92
End of Hand Auger Hole		2							91
		3							90
		4							



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SOIL PROFILE AND TEST DATA

Preliminary Slope Stability Assessment

Lots 1 to 4, Bonnie Lane/Linda Loop, Kinburn, ON

PATERSON GROUP

COORD. SYS.: MTM ZONE 9 **EASTING:** 334777.69 **NORTHING:** 5024777.99 **ELEVATION:** 92.38

PROJECT: Proposed Residential Development

ADVANCED BY: Hand Auger

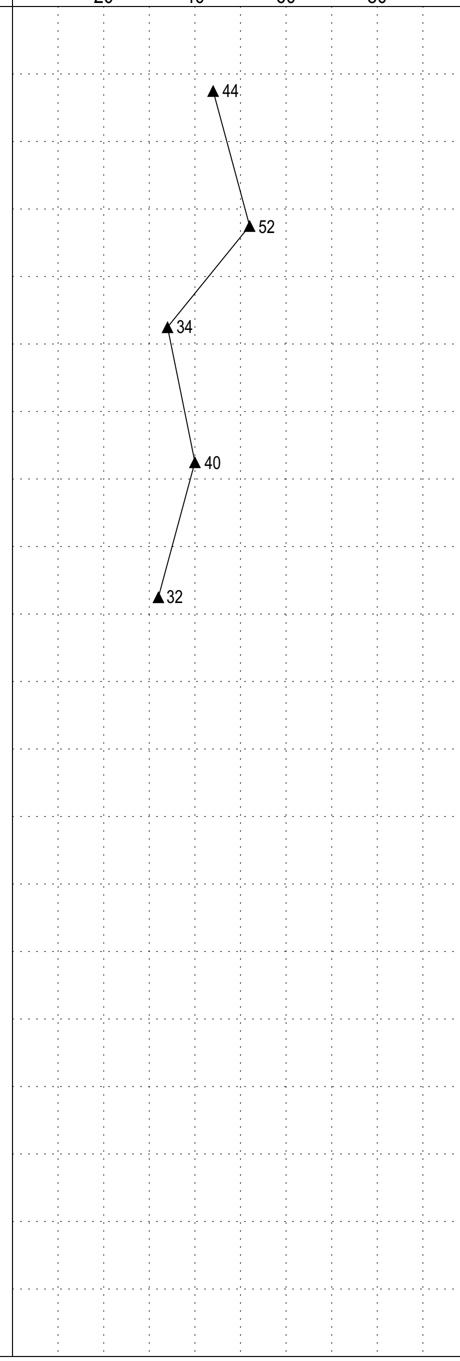
REMARKS:

DATE: November 4, 2025

FILE NO. : PG7794

HOLE NO. : HA 2-25

SAMPLE DESCRIPTION	STRATA PLOT	DEPTH (m)	SAMPLE: TYPE AND NO.	SAMPLE: RECOVERY (%)	SAMPLE: N OR RQD	SAMPLE: WATER CONTENT (%)	PEN. RESIST. (BLOWS/0.3m) DCPT (50mm DIA. CONE) / REMOULDED SHEAR STRENGTH (kPa) / UNDRAINED SHEAR STRENGTH (kPa) / PL (%) WATER CONTENT (%) LL (%)	PIEZOMETER CONSTRUCTION	ELEVATION (m)
GTOUND SURFACE									
Brown **SILTY CLAY** (1.80m [90.58m])		0–1.80					Undrained shear strength: 44, 52, 34, 40, 32		92.38–90.58
End of Hand Auger Hole		1.80							



Depth (m): 1, 2, 3, 4

Elevation (m): 92, 91, 90, 89

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SOIL PROFILE AND TEST DATA

Preliminary Slope Stability Assessment

Lots 1 to 4, Bonnie Lane/Linda Loop, Kinburn, ON

COORD. SYS.: MTM ZONE 9 **EASTING:** 334772.91 **NORTHING:** 5024836.11 **ELEVATION:** 92.75

PROJECT: Proposed Residential Development

ADVANCED BY: Hand Auger

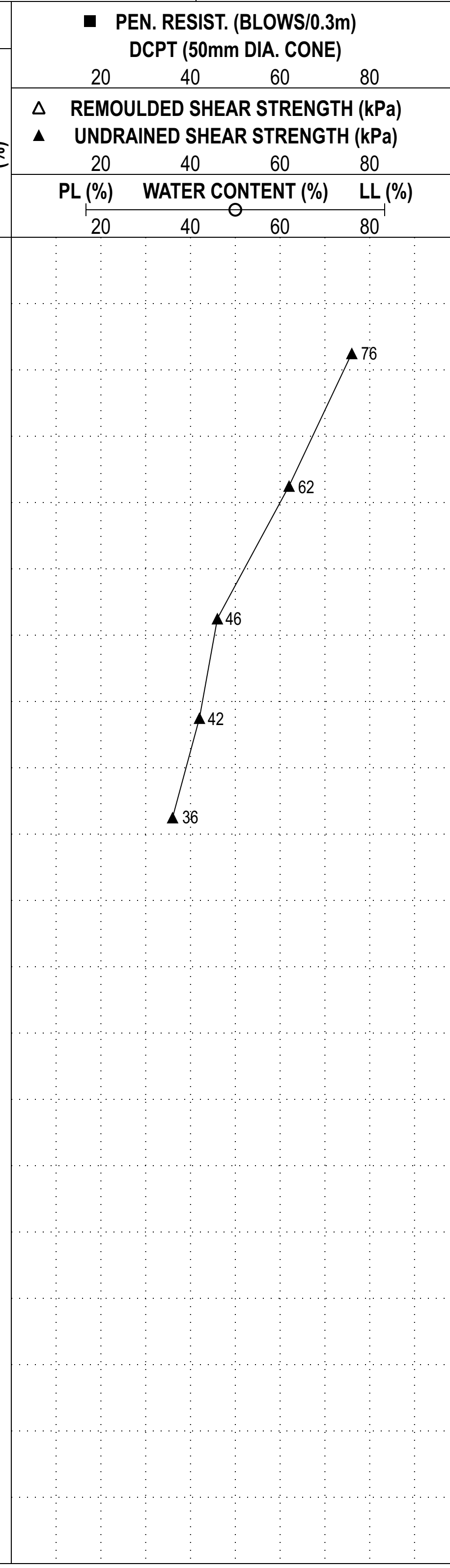
REMARKS:

DATE: November 4, 2025

FILE NO. : PG7794

HOLE NO. : HA 3-25

SAMPLE DESCRIPTION (GTOUND SURFACE)	STRATA PLOT	DEPTH (m)	SAMPLE: TYPE AND NO.	SAMPLE: RECOVERY (%)	SAMPLE: N OR RQD	SAMPLE: WATER CONTENT (%)	PIEZOMETER CONSTRUCTION	ELEVATION (m)
TOPSOIL 0.10m [92.65m]								
Brown **SILTY CLAY** 1.80m [90.95m]		1						92, 91
End of Hand Auger Hole		2, 3, 4						90, 89



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SOIL PROFILE AND TEST DATA

Preliminary Slope Stability Assessment

Lots 1 to 4, Bonnie Lane/Linda Loop, Kinburn, ON

PATERSON GROUP

COORD. SYS.: MTM ZONE 9 **EASTING:** 334771.36 **NORTHING:** 5024838.53 **ELEVATION:** 91.94

PROJECT: Proposed Residential Development

ADVANCED BY: Hand Auger

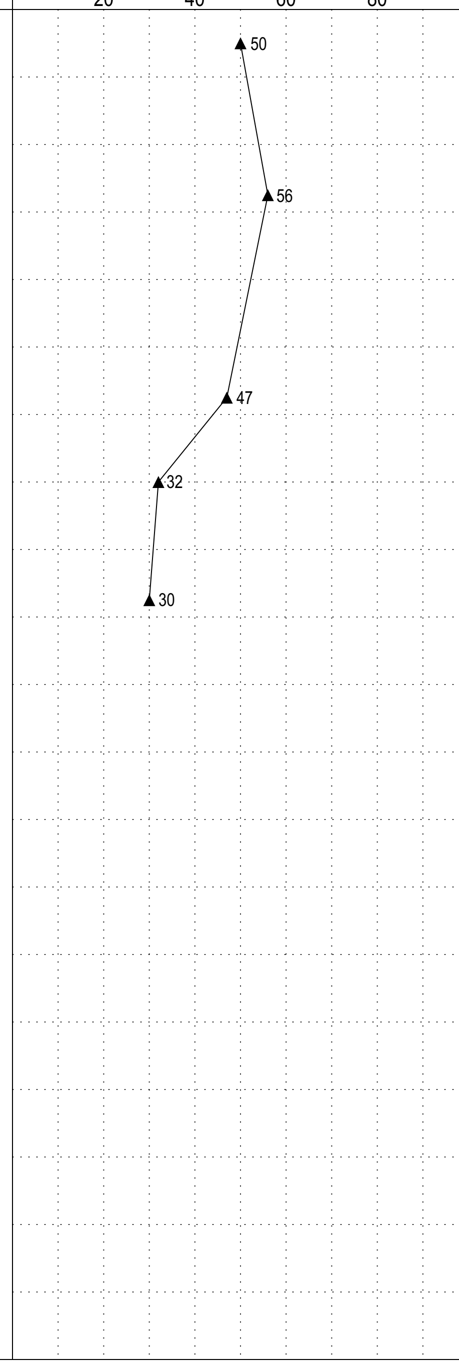
REMARKS:

DATE: November 4, 2025

FILE NO. : PG7794

HOLE NO. : HA 4-25

SAMPLE DESCRIPTION	STRATA PLOT	DEPTH (m)	SAMPLE: TYPE AND NO.	SAMPLE: RECOVERY (%)	SAMPLE: N OR RQD	WATER CONTENT (%)	■ PEN. RESIST. (BLOWS/0.3m) DCPT (50mm DIA. CONE); △ REMOULDED SHEAR STRENGTH (kPa); ▲ UNDRAINED SHEAR STRENGTH (kPa); PL (%) WATER CONTENT (%) LL (%)	PIEZOMETER CONSTRUCTION	ELEVATION (m)
GTOUND SURFACE									
Brown **SILTY CLAY**		1							91
1.80m [90.14m]									
End of Hand Auger Hole		2							90
		3							89
		4							88



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SYMBOLS AND TERMS

SOIL DESCRIPTION

Behavioural properties, such as structure and strength, take precedence over particle gradation in describing soils. Terminology describing soil structure are as follows:

Desiccated	-	having visible signs of weathering by oxidation of clay minerals, shrinkage cracks, etc.
Fissured	-	having cracks, and hence a blocky structure.
Varved	-	composed of regular alternating layers of silt and clay.
Stratified	-	composed of alternating layers of different soil types, e.g. silt and sand or silt and clay.
Well-Graded	-	Having wide range in grain sizes and substantial amounts of all intermediate particle sizes (see Grain Size Distribution).
Uniformly-Graded	-	Predominantly of one grain size (see Grain Size Distribution).

The standard terminology to describe the strength of cohesionless soils is the relative density, usually inferred from the results of the Standard Penetration Test (SPT) 'N' value. The SPT N value is the number of blows of a 63.5 kg hammer, falling 760 mm, required to drive a 51 mm O.D. split spoon sampler 300 mm into the soil after an initial penetration of 150 mm.

Relative Density	'N' Value	Relative Density %
Very Loose	<4	<15
Loose	4-10	15-35
Compact	10-30	35-65
Dense	30-50	65-85
Very Dense	>50	>85

The standard terminology to describe the strength of cohesive soils is the consistency, which is based on the undisturbed undrained shear strength as measured by the in situ or laboratory vane tests, penetrometer tests, unconfined compression tests, or occasionally by Standard Penetration Tests.

Consistency	Undrained Shear Strength (kPa)	'N' Value
Very Soft	<12	<2
Soft	12-25	2-4
Firm	25-50	4-8
Stiff	50-100	8-15
Very Stiff	100-200	15-30
Hard	>200	>30

SYMBOLS AND TERMS (continued)

SOIL DESCRIPTION (continued)

Cohesive soils can also be classified according to their “sensitivity”. The sensitivity is the ratio between the undisturbed undrained shear strength and the remoulded undrained shear strength of the soil.

Terminology used for describing soil strata based upon texture, or the proportion of individual particle sizes present is provided on the Textural Soil Classification Chart at the end of this information package.

ROCK DESCRIPTION

The structural description of the bedrock mass is based on the Rock Quality Designation (RQD).

The RQD classification is based on a modified core recovery percentage in which all pieces of sound core over 100 mm long are counted as recovery. The smaller pieces are considered to be a result of closely-spaced discontinuities (resulting from shearing, jointing, faulting, or weathering) in the rock mass and are not counted. RQD is ideally determined from NXL size core. However, it can be used on smaller core sizes, such as BX, if the bulk of the fractures caused by drilling stresses (called “mechanical breaks”) are easily distinguishable from the normal in situ fractures.

RQD %	**ROCK QUALITY**
90-100	Excellent, intact, very sound
75-90	Good, massive, moderately jointed or sound
50-75	Fair, blocky and seamy, fractured
25-50	Poor, shattered and very seamy or blocky, severely fractured
0-25	Very poor, crushed, very severely fractured

SAMPLE TYPES

SS	-	Split spoon sample (obtained in conjunction with the performing of the Standard Penetration Test (SPT))
TW	-	Thin wall tube or Shelby tube
PS	-	Piston sample
AU	-	Auger sample or bulk sample
WS	-	Wash sample
RC	-	Rock core sample (Core bit size AXT, BXL, etc.). Rock core samples are obtained with the use of standard diamond drilling bits.

SYMBOLS AND TERMS (continued)

GRAIN SIZE DISTRIBUTION

MC%	-	Natural moisture content or water content of sample, %
LL	-	Liquid Limit, % (water content above which soil behaves as a liquid)
PL	-	Plastic limit, % (water content above which soil behaves plastically)
PI	-	Plasticity index, % (difference between LL and PL)
Dxx	-	Grain size which xx% of the soil, by weight, is of finer grain sizes These grain size descriptions are not used below 0.075 mm grain size
D10	-	Grain size at which 10% of the soil is finer (effective grain size)
D60	-	Grain size at which 60% of the soil is finer
Cc	-	Concavity coefficient = $(D30)^2 / (D10 \times D60)$
Cu	-	Uniformity coefficient = $D60 / D10$

Cc and Cu are used to assess the grading of sands and gravels:
Well-graded gravels have: $1 < Cc < 3$ and $Cu > 4$
Well-graded sands have: $1 < Cc < 3$ and $Cu > 6$
Sands and gravels not meeting the above requirements are poorly-graded or uniformly-graded.
Cc and Cu are not applicable for the description of soils with more than 10% silt and clay (more than 10% finer than 0.075 mm or the #200 sieve)

CONSOLIDATION TEST

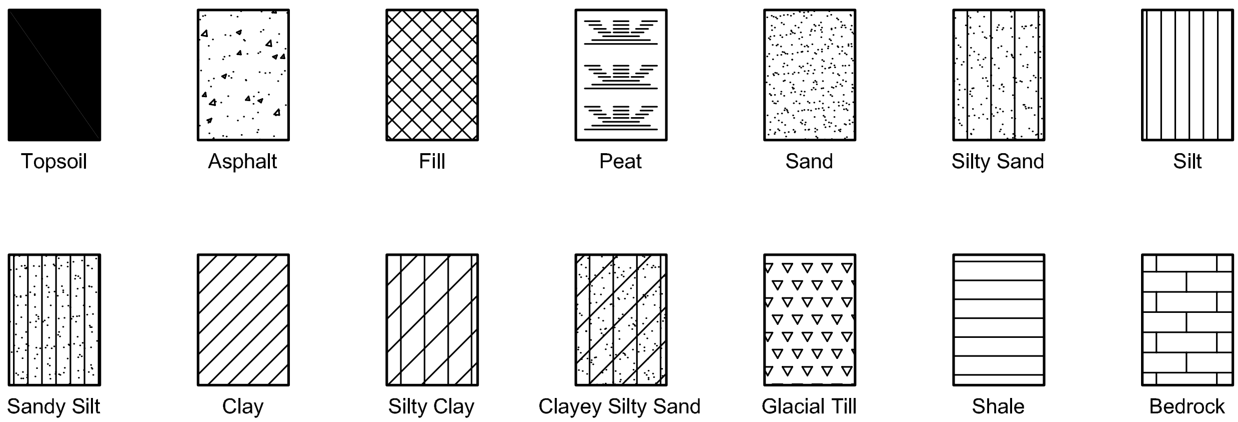
p'_o	-	Present effective overburden pressure at sample depth
p'_c	-	Preconsolidation pressure of (maximum past pressure on) sample
Ccr	-	Recompression index (in effect at pressures below p'_c)
Cc	-	Compression index (in effect at pressures above p'_c)
OC Ratio		Overconsolidaton ratio = p'_c / p'_o
Void Ratio		Initial sample void ratio = volume of voids / volume of solids
Wo	-	Initial water content (at start of consolidation test)

PERMEABILITY TEST

k	-	Coefficient of permeability or hydraulic conductivity is a measure of the ability of water to flow through the sample. The value of k is measured at a specified unit weight for (remoulded) cohesionless soil samples, because its value will vary with the unit weight or density of the sample during the test.

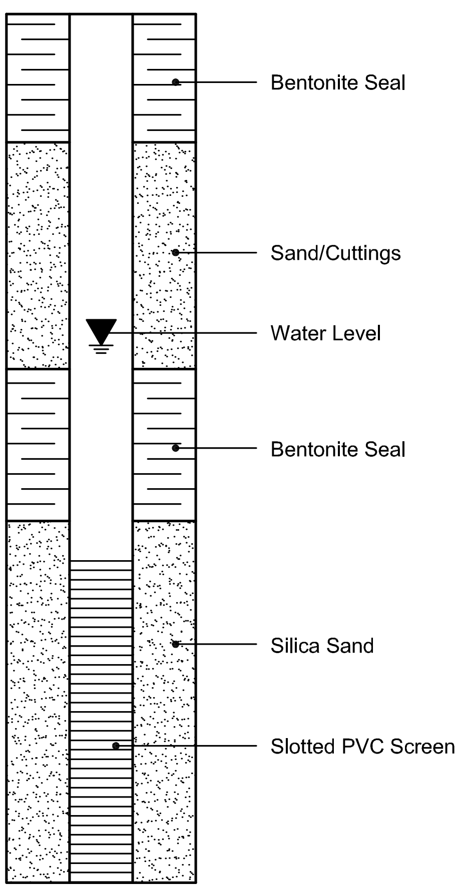
SYMBOLS AND TERMS (continued)

STRATA PLOT

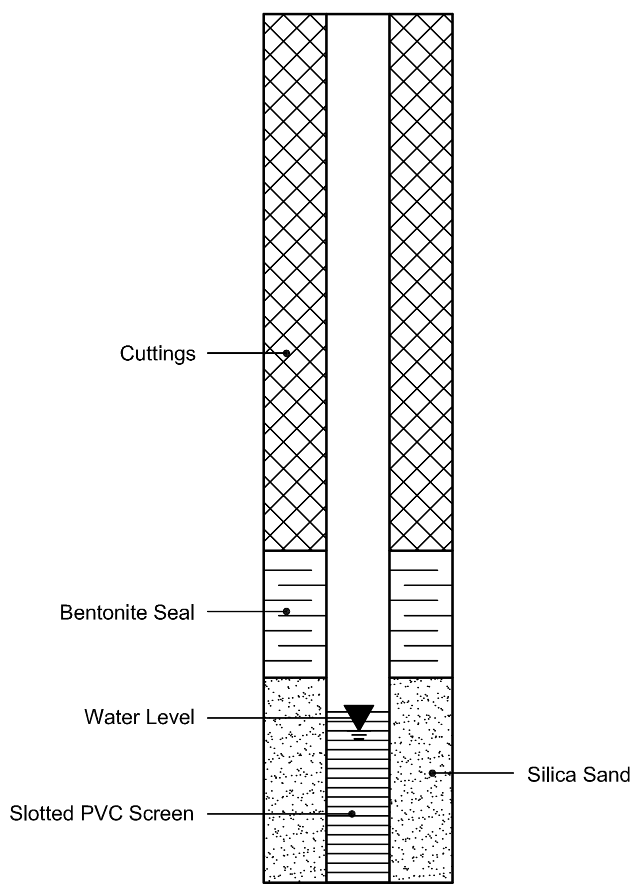


MONITORING WELL AND PIEZOMETER CONSTRUCTION

MONITORING WELL CONSTRUCTION



PIEZOMETER CONSTRUCTION



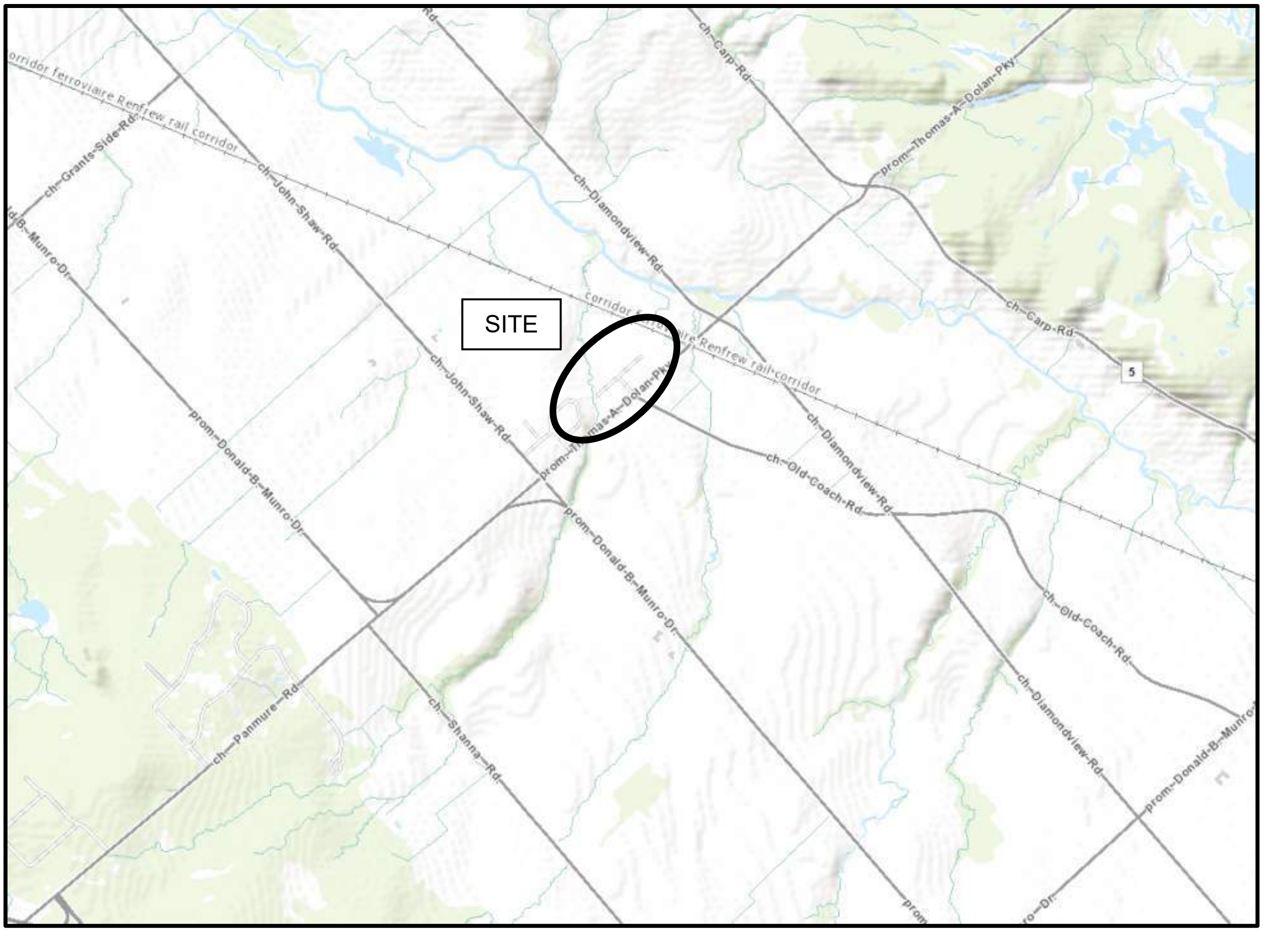
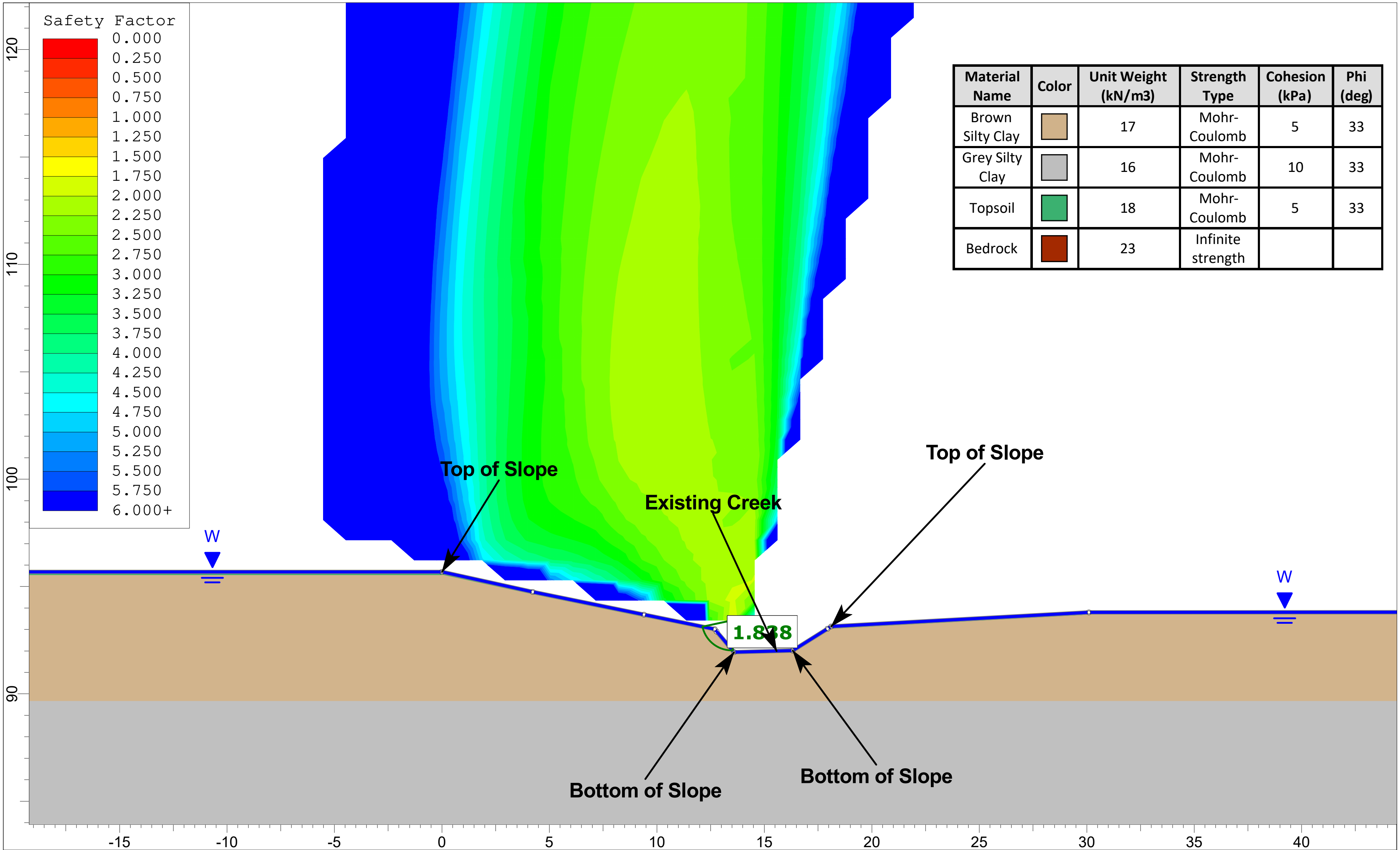


FIGURE 1

KEY PLAN

PATERSON GROUP



Material Name	Color	Unit Weight (kN/m3)	Strength Type	Cohesion (kPa)	Phi (deg)
Brown Silty Clay		17	Mohr-Coulomb	5	33
Grey Silty Clay		16	Mohr-Coulomb	10	33
Topsoil		18	Mohr-Coulomb	5	33
Bedrock		23	Infinite strength		

PATERSON GROUP

SLIDEINTERPRET 9.025

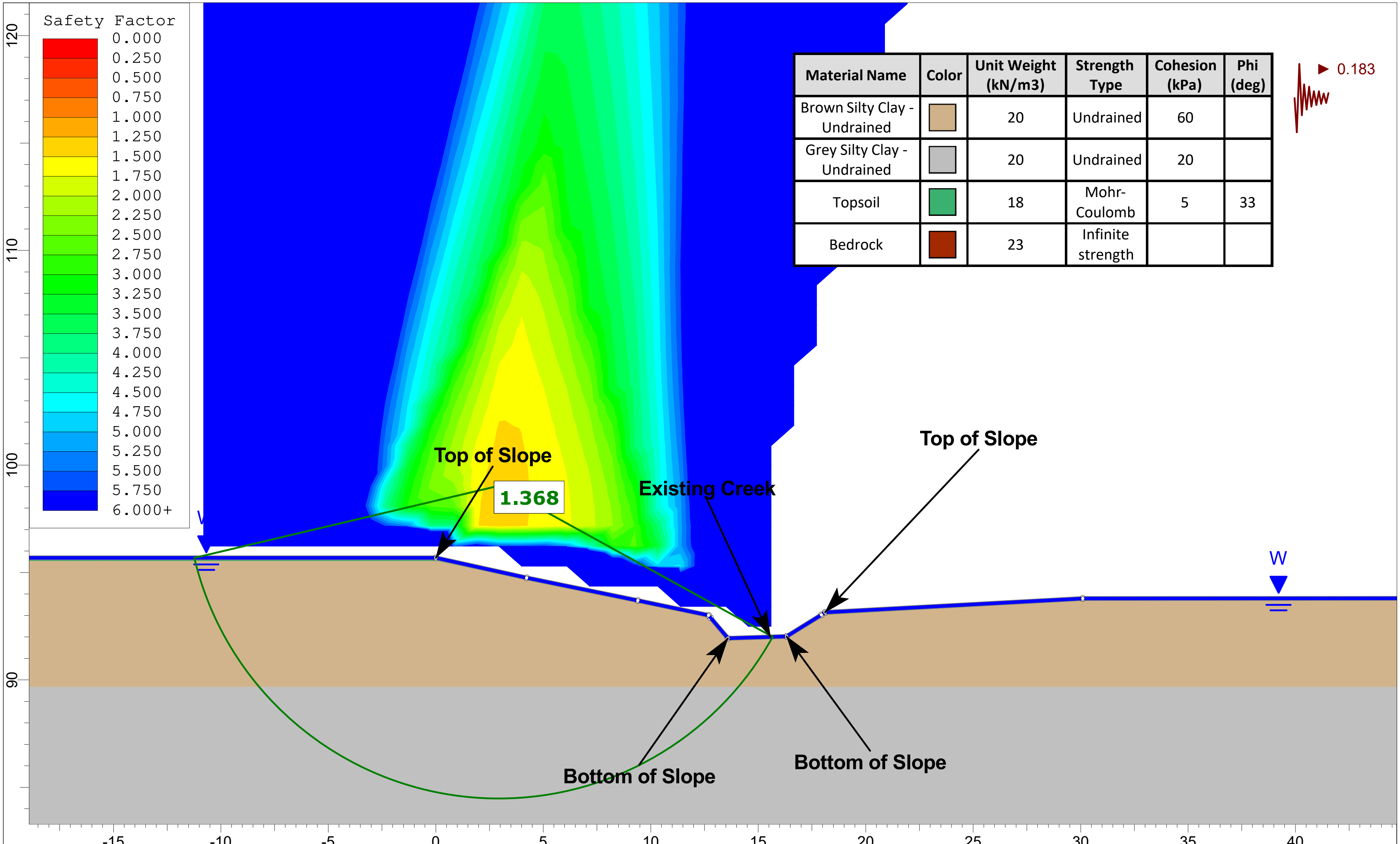
Project No.: **PG7794 - Lots 1 to 4, Bonnie Lane/Linda Loop, Kinburn, ON - Slope Stability - Existing Conditions**

Drawing No.: **Section A-A - Figure 2A - Left to right - Static Loading**

Prepared By: YZ

Approved By: DP

Date: 2025-11-13



Material Name	Color	Unit Weight (kN/m3)	Strength Type	Cohesion (kPa)	Phi (deg)
Brown Silty Clay - Undrained		20	Undrained	60	
Grey Silty Clay - Undrained		20	Undrained	20	
Topsoil		18	Mohr-Coulomb	5	33
Bedrock		23	Infinite strength		

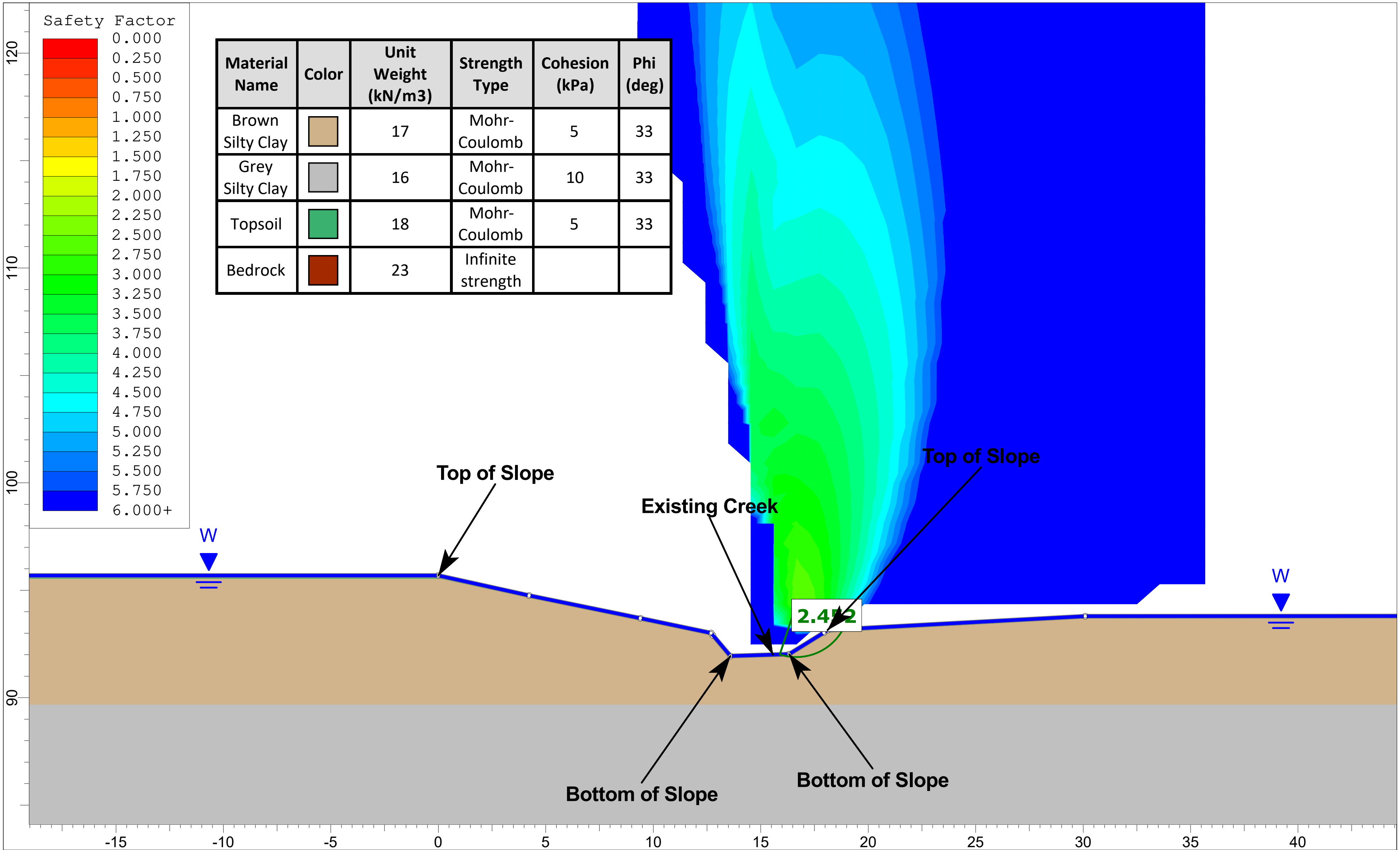
PATERSON GROUP

SLIDEINTERPRET 9.025

Project No.: **PG7794 - Lots 1 to 4, Bonnie Lane/Linda Loop, Kinburn, ON - Slope Stability - Existing Conditions**

Drawing No.: **Section A-A - Figure 2B - Left to right - Seismic Loading**

Prepared By: YZ	Approved By: DP	*Date:* 2025-11-13



Material Name	Color	Unit Weight (kN/m3)	Strength Type	Cohesion (kPa)	Phi (deg)
Brown Silty Clay		17	Mohr-Coulomb	5	33
Grey Silty Clay		16	Mohr-Coulomb	10	33
Topsoil		18	Mohr-Coulomb	5	33
Bedrock		23	Infinite strength		

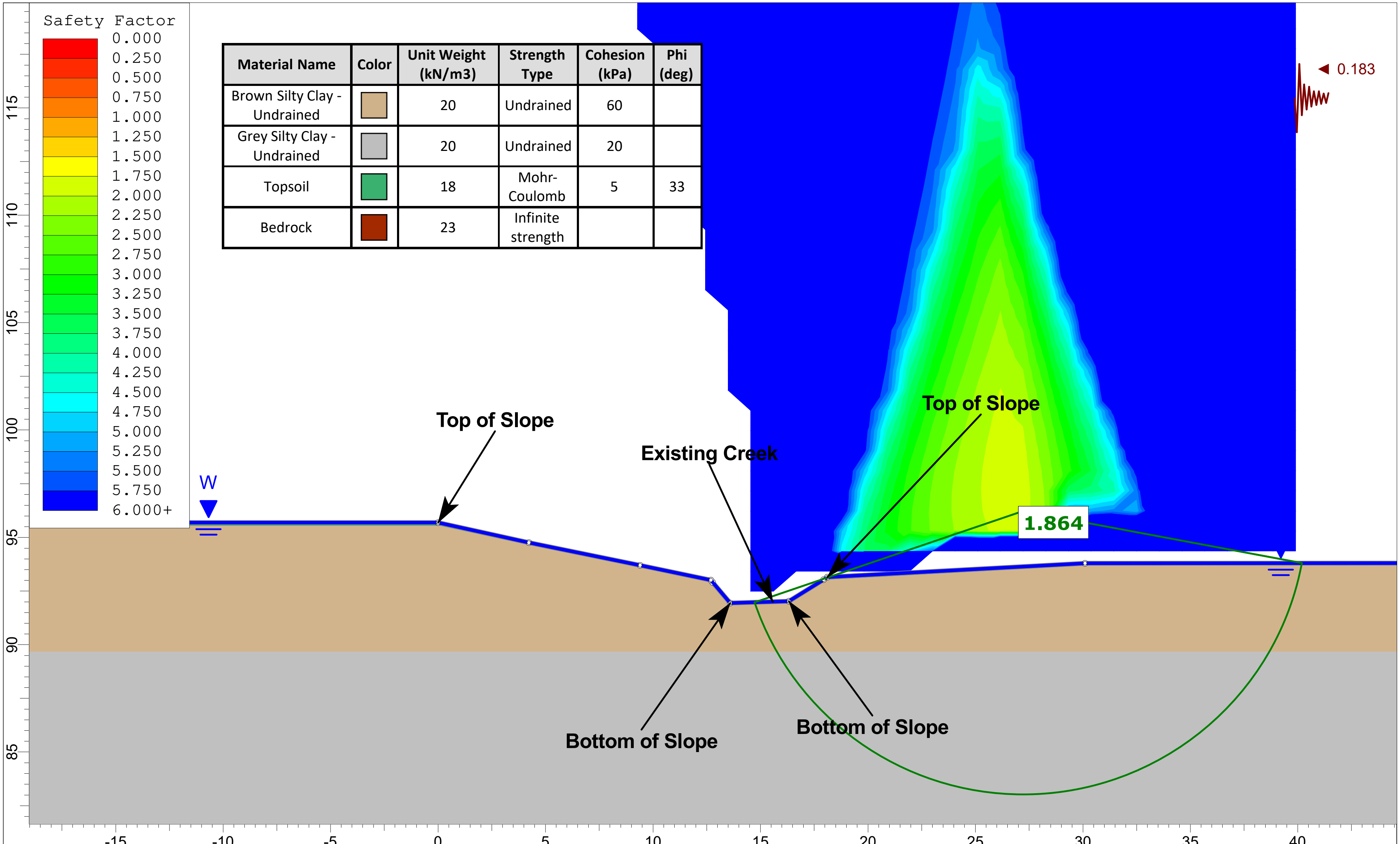
PATERSON GROUP

SLIDEINTERPRET 9.025

Project No.: **PG7794 - Lots 1 to 4, Bonnie Lane/Linda Loop, Kinburn, ON - Slope Stability - Existing Conditions**

Drawing No.: **Section A-A - Figure 2C - Right to left - Static Loading**

Prepared By: YZ	Approved By: DP	*Date:* 2025-11-13



Material Name	Color	Unit Weight (kN/m3)	Strength Type	Cohesion (kPa)	Phi (deg)
Brown Silty Clay - Undrained		20	Undrained	60	
Grey Silty Clay - Undrained		20	Undrained	20	
Topsoil		18	Mohr-Coulomb	5	33
Bedrock		23	Infinite strength		

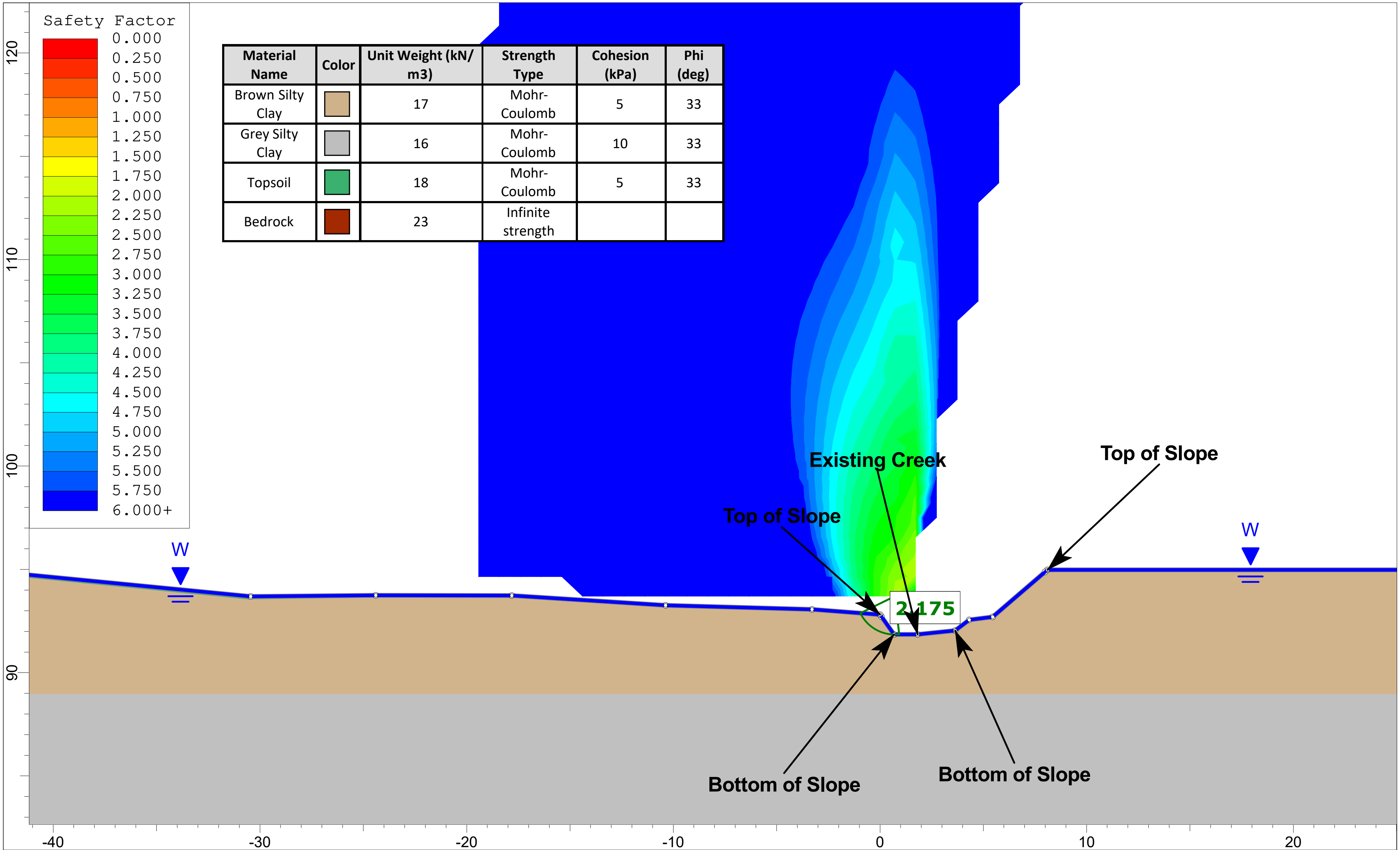
PATERSON GROUP

SLIDEINTERPRET 9.025

Project No.: **PG7794 - Lots 1 to 4, Bonnie Lane/Linda Loop, Kinburn, ON - Slope Stability - Existing Conditions**

Drawing No.: **Section A-A - Figure 2D - Right to left - Seismic Loading**

Prepared By: YZ | Approved By: DP | *Date:* 2025-11-13

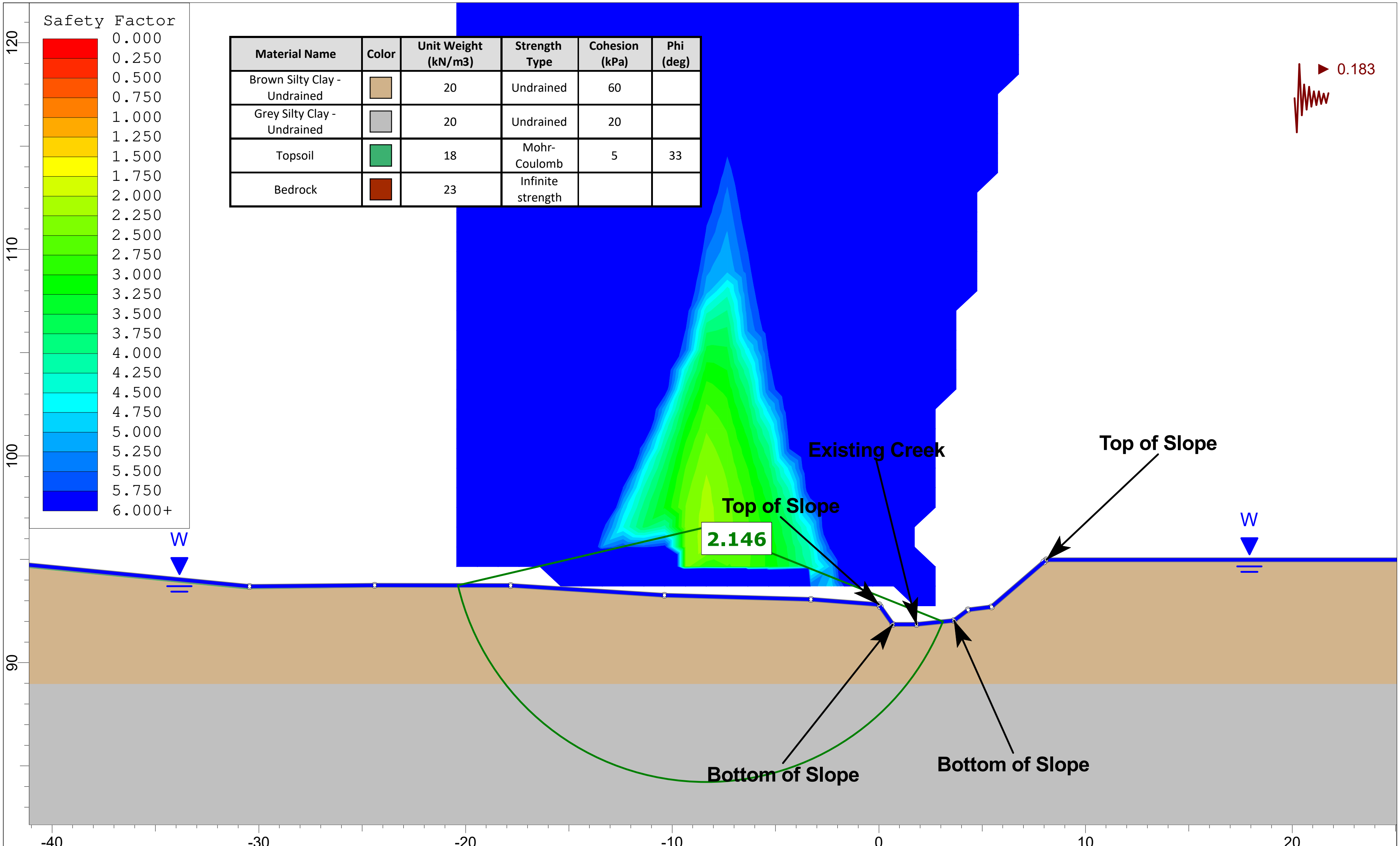


Material Name	Color	Unit Weight (kN/m3)	Strength Type	Cohesion (kPa)	Phi (deg)
Brown Silty Clay		17	Mohr-Coulomb	5	33
Grey Silty Clay		16	Mohr-Coulomb	10	33
Topsoil		18	Mohr-Coulomb	5	33
Bedrock		23	Infinite strength		

PATERSON GROUP

SLIDEINTERPRET 9.025

Project No.:	**PG7794 - Lots 1 to 4, Bonnie Lane/Linda Loop, Kinburn, ON - Slope Stability - Existing Conditions**
Drawing No.:	**Section B-B - Figure 3A - Left to right - Static Loading**
Prepared By: YZ	Approved By: DP
Date: 2025-11-13	



Material Name	Color	Unit Weight (kN/m3)	Strength Type	Cohesion (kPa)	Phi (deg)
Brown Silty Clay - Undrained		20	Undrained	60	
Grey Silty Clay - Undrained		20	Undrained	20	
Topsoil		18	Mohr-Coulomb	5	33
Bedrock		23	Infinite strength		

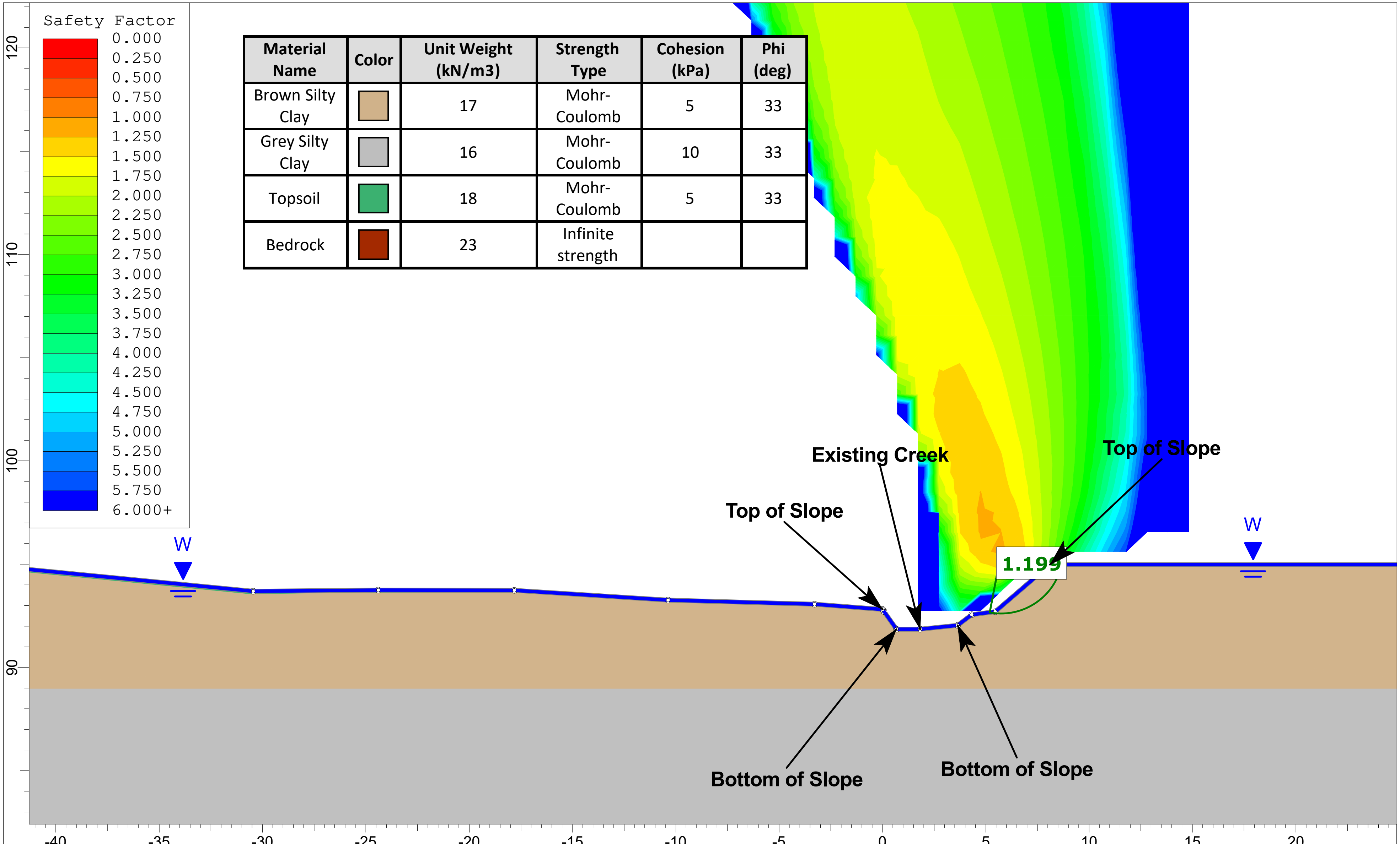
PATERSON GROUP

SLIDEINTERPRET 9.025

Project No.: **PG7794 - Lots 1 to 4, Bonnie Lane/Linda Loop, Kinburn, ON - Slope Stability - Existing Conditions**

Drawing No.: **Section B-B - Figure 3B - Left to right - Seismic Loading**

Prepared By: YZ	Approved By: DP	*Date:* 2025-11-13



Material Name	Color	Unit Weight (kN/m3)	Strength Type	Cohesion (kPa)	Phi (deg)
Brown Silty Clay		17	Mohr-Coulomb	5	33
Grey Silty Clay		16	Mohr-Coulomb	10	33
Topsoil		18	Mohr-Coulomb	5	33
Bedrock		23	Infinite strength		

PATERSON GROUP

SLIDEINTERPRET 9.025

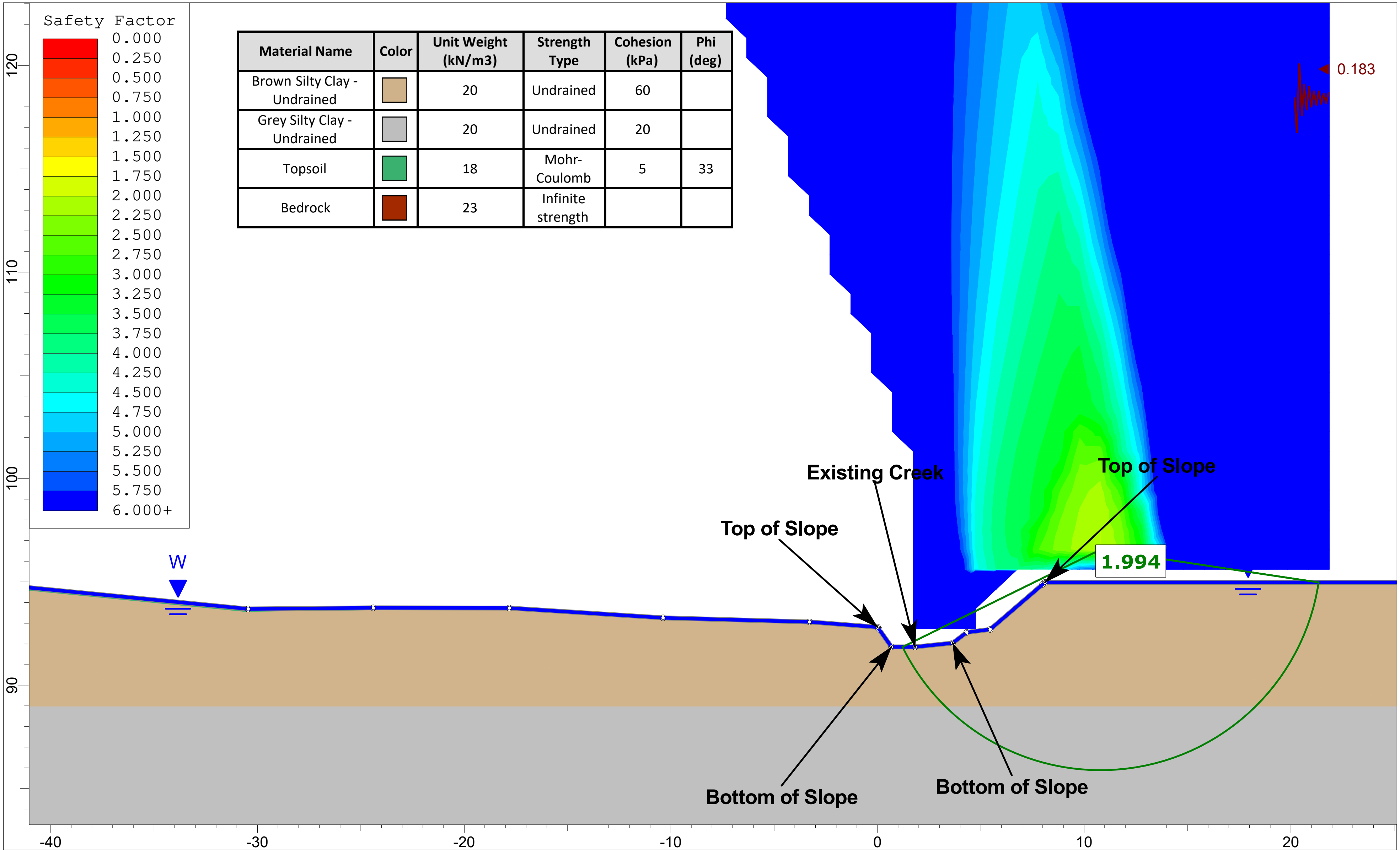
Project No.: **PG7794 - Lots 1 to 4, Bonnie Lane/Linda Loop, Kinburn, ON - Slope Stability - Existing Conditions**

Drawing No.: **Section B-B - Figure 3C - Right to left - Static Loading**

Prepared By: YZ

Approved By: DP

Date: 2025-11-13

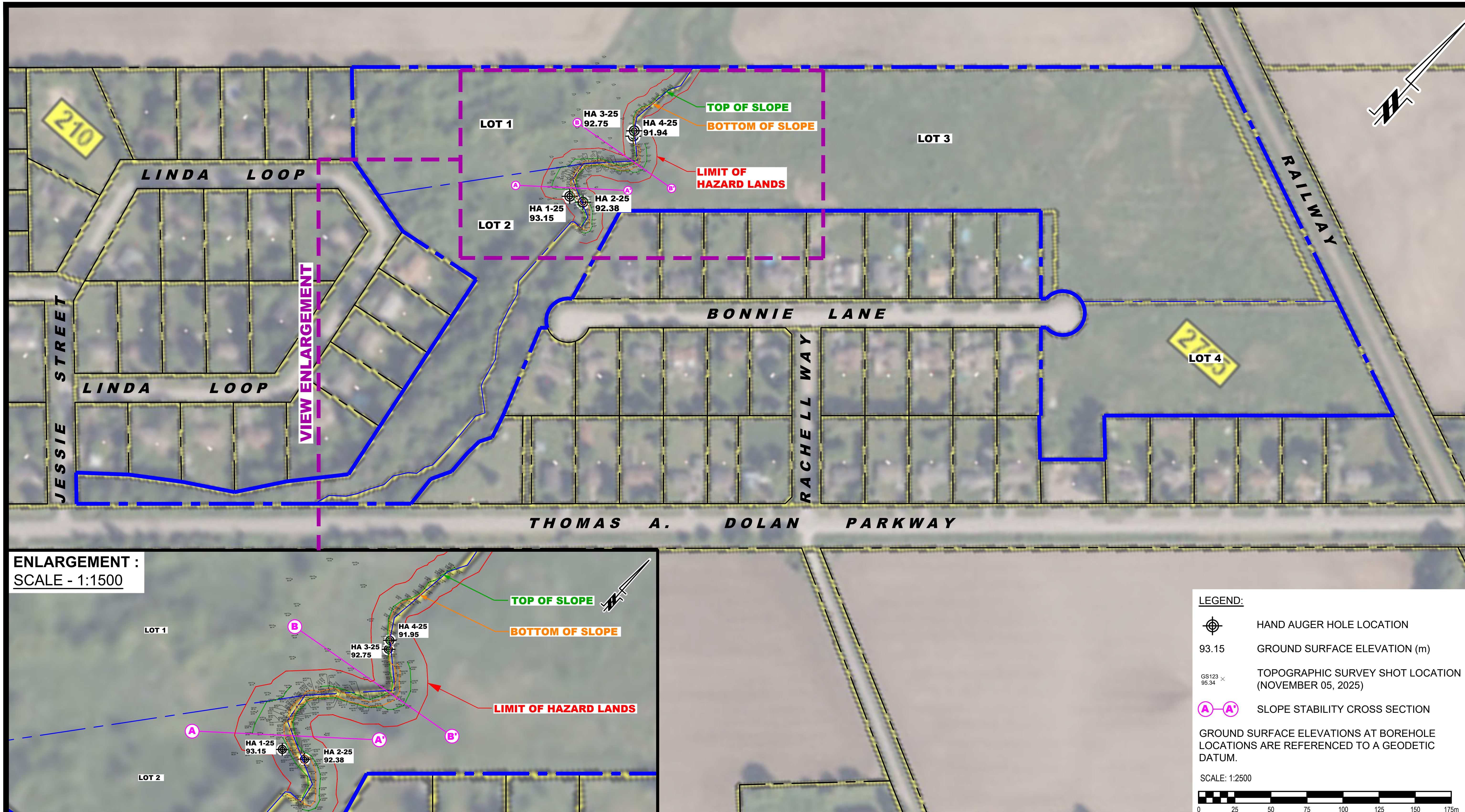


Material Name	Color	Unit Weight (kN/m3)	Strength Type	Cohesion (kPa)	Phi (deg)
Brown Silty Clay - Undrained		20	Undrained	60	
Grey Silty Clay - Undrained		20	Undrained	20	
Topsoil		18	Mohr-Coulomb	5	33
Bedrock		23	Infinite strength		

PATERSON GROUP

SLIDEINTERPRET 9.025

Project No.:	**PG7794 - Lots 1 to 4, Bonnie Lane/Linda Loop, Kinburn, ON - Slope Stability - Existing Conditions**
Drawing No.:	**Section B-B - Figure 3D - Right to left - Seismic Loading**
Prepared By:	YZ
Approved By:	DP
Date:	2025-11-13



LEGEND:

- HAND AUGER HOLE LOCATION
- 93.15 GROUND SURFACE ELEVATION (m)
- GS123 95.34 × TOPOGRAPHIC SURVEY SHOT LOCATION (NOVEMBER 05, 2025)
- A—A' SLOPE STABILITY CROSS SECTION

GROUND SURFACE ELEVATIONS AT BOREHOLE LOCATIONS ARE REFERENCED TO A GEODETIC DATUM.

SCALE: 1:2500

0 25 50 75 100 125 150 175m

PATERSON GROUP

9 AURIGA DRIVE
OTTAWA, ON
K2E 7T9
TEL: (613) 226-7381

NO.	REVISIONS	DATE	INITIAL

DALE CAPITAL HOLDINGS INC.

PRELIMINARY SLOPE STABILITY ASSESSMENT
PROPOSED RESIDENTIAL DEVELOPMENT
LOTS 1 TO 4, BONNIE LANE/LINDA LOOP

KINBURN, ONTARIO

Title:

TEST HOLE LOCATION PLAN

Scale: 1:2500	Date: 11/2025
Drawn by: GK	Report No.: PG7794-1
Checked by: YZ	Dwg. No.: PG7794-1
Approved by: DP	Revision No.:

11x17

p:\autocad drawings\geotechnical\pg77xx\pg7794\pg7794-1 test hole location plan.dwg