BME Engineering Ltd.
61 Bluewater Road
Bedford, NS B4B 1G8
902-430-2830

August 14, 2024

Tyler Chapman, P.Eng.
Dillon Consulting Limited
Via email

Dear Tyler,

Re: Geotechnical Investigation, Rev1 – Proposed Fire Station
4070 Lighthouse Route, Chester, NS

This provides the findings of our geotechnical investigation for the proposed fire station in Chester, NS. Based on the geotechnical investigation, the site is generally favourable for the proposed development. Conventional spread footings and grade slabs will be practical. This report was updated to add design parameters for retaining wall design.

The site is located at 4070 Highway 3 in Chester. The ground surface is quite flat along the road, but at the rear side of the site is steeply sloping downward to the east side towards Stanford Lake.

There was a motel that was demolished and the site has been cleared. Some old foundations and services may still be present. The rear-center portion of the demolished building appears to have an underground floor level.

Recommendations are provided herein for foundation design, earthworks and pavement areas for the proposed development.

MAIN FINDINGS

The subsurface conditions include asphalt and/or topsoil/rootmat underlain by existing fill and then competent glacial till. The existing fill consists of a similar material as the glacial till with thickness from generally 0.3 m up to around 1.2 m, however, one test pit (TP6) had a thick fill layer (3.4 m) at the location of an underground floor of the demolished building. Bedrock was encountered in all test pits at depths of 3.6 m to 5.4 m below ground surface. Groundwater seepage was observed in only two test pits (TP1 and TP4) at an average depth around 3.4 m. Some work will be required to prepare the site, as outlined below and in this report.

Based on the investigation, our recommendations are as follows:

- A foundation system consisting of spread footings and a grade slab founded on approved, undisturbed glacial till or structural fill is favourable for the proposed development after completion of earthworks described herein. Fills will have to be removed in proposed building areas. A minimum thickness of 200 mm layer of Type 1 Gravel or clear stone is recommended at the base of footing excavations as a working pad.

- In the proposed paved areas, the rootmat/topsoil and any organic fills should be removed. The proposed paved areas should be cut to the design subgrade elevation and proof-rolled, or fill placed in lifts to design subgrade elevation. Any weak or soft zones should be replaced with approved structural fill or selected native till. Some allowance for over-excavation below subgrade elevation should be include because some of the existing fill included organic materials.

- The existing sewer line, crossing the south side of the site, should be removed and re-located away from the proposed building area. The sewer trench will need to be excavated and refilled with approved structural fill.

- Geotechnical inspection and testing will be necessary during earthworks.

FIELD INVESTIGATION

The field program consisted of six test pits (TP1 to TP6) completed on July 19, 2024. The test pit locations are shown in Figure A and on the appended Drawing 1.

The test pits were conducted using an excavator. Representative samples were taken during the field work and the conditions at the test pits were logged in detail. The soil conditions encountered at the site are summarized in the following paragraph and Table A.

Figure A: Test Pit Locations

The subsurface conditions include asphalt and/or topsoil/rootmat underlain by existing fill and then competent glacial till. The existing fill consists of the same material as the glacial till with variable thickness from 0.3 m up to around 1.2 m, however, only one test pit (TP6) had a deep fill up to 3.4 m at the location of an underground floor of the previous demolished building. The glacial till was found in all test pits and was described as compact to dense silty sand with gravel, frequent cobbles and trace boulders. Bedrock was encountered in all test pits at relatively deep depths from 3.6 m to 5.4 m. Groundwater seepage was observed in only two test pits (TP1 and TP4) at an average depth around 3.35 m. The test pits were excavated to refusal at depths up to 5.4 m.

Grain size testing was conducted on three samples from the investigation. The results from the samples show 21 to 30% gravel, 54 to 61% sand, and 16 to 18% fines (silt and clay sizes). The moisture contents of the samples ranged from 6.2 to 8.4. The grainsize distribution curves are shown on Figure 1 in the appendix.

Table A: Summary of Findings

Location	Elevation*, m	Thickness of Asphalt and/or Existing Fill and/or Topsoil/Rootmat, m	Thickness of Native Till, m	Depth to Bedrock/Large Boulders, m	Depth of Test Pit, m
TP1	19.9	0.4	3.8	4.1	4.1
TP2**	18.9	0.7	4.7	5.4	5.4
TP3	19.9	1.3	3.2	4.5	4.5
TP4**	20.0	0.3	3.3	3.6	3.6
TP5	18.3	1.0	3.6	4.6	4.6
TP6	19.5	3.4	1.0	4.4	4.4

*Elevations based on Geodetic Datum

**Groundwater seepage was observed at an average depth of 3.4 m

DISCUSSION AND RECOMMENDATIONS

Earthworks

Earthworks for this project will involve grubbing of the topsoil/rootmat and excavating the existing fill as specified in the building and parking/driveway areas, and cutting to design pavement subgrade and proof-rolling, or filling to design grades.

Surface Water Control and Erosion Control

Prior to excavations, surface water drainage controls should be provided on the upper gradient side of the site to minimize run-off onto exposed soils. Suitable erosion and sedimentation control measures should be employed. These may include silt fences, check dams in ditches, and granular working pads.

Excavation

Excavation into the site soils will be practical with conventional earth-moving equipment. All topsoil/rootmat and existing fill must be removed from the buildings and any proposed paved areas. Temporary excavation side slopes in soil should be stable at one horizontal to one vertical (1H:1V).

Material that is planned for re-use should be placed directly in the intended areas or compacted in stockpiles for later use. Unsuitable materials should be used in landscaped areas or wasted off-site. Excavated material containing organics, if found during excavation, will not be suitable for reuse.

Dewatering of Excavations

With proper surface water controls, dewatering of excavations through the use of ditches and swales draining to sumps should be practical.

Fill Placement and Compaction

The backfill required for the proposed building and driveway/parking areas should consist of the following materials:

- Approved selected on-site excavated soils, but suitable material will be very limited or;
- Imported, quarried rockfill or gravel.

Excavated soil containing organics and/or debris will not be suitable for re-use. Selected portions of excavated till can be considered for reuse. This should be reviewed at the time of construction. Excavated material will be difficult to reuse during wet or freezing weather.

Imported fill material should consist of well-graded material with a maximum particle size of 200 mm and less than 15% fines based on the minus 80 mm portion. The maximum particle size should be reduced to 100 mm for foundation backfill. Excavated material may be considered for re-use but may be difficult to control moisture content and achieve compaction.

The lift thickness used during placement of fills must be compatible with the compaction equipment and the material type to ensure the specified density throughout. The lift thickness should not exceed approximately 450 mm for mass filling and 200 mm for backfilling of foundations and services. The maximum particle size should be no larger than ⅔ of the lift thickness.

Fill materials should be compacted to the following percentage of maximum Standard Proctor dry density:

- Fill in buildings areas 100%
- Fill within 300 mm of driveway/parking subgrade 98%
- Fill below 300 mm of driveway/parking subgrade 95%
- Landscaped areas 93%

Any fill below the footings must be extended laterally beyond the edges of the footings to include a 300 mm bench and the conventional 1H:1V splay down to glacial till.

Slopes and Toe Drainage

Permanent fill slopes should be 2H:1V, or lower. Permanent cut slopes should be stable at 3H:1V for slope heights of less than 2 m. Cut slopes of greater heights should be at 3H:1V and will require a 300 mm thick granular blanket or deep rooting vegetation to reinforce the slope. A toe drain or swale should be provided for drainage at the base of cut slopes.

Building and Parking Area Subgrade

The contractor must take precautions to avoid disturbance of the site soils or reinstate the material to the required condition. The condition of the subgrade should be reviewed prior to placement of base gravel.

Inspection and Testing

It is recommended that inspection of all footing bearing surfaces be conducted by experienced geotechnical personnel prior to placement of concrete. Inspection and testing are also recommended during site grading and backfilling operations.

Foundations

A foundation system consisting of spread footings and a grade slab founded on approved structural fill or undisturbed glacial till is favourable for the proposed building. A minimum 200 mm layer of gravel or clear stone is recommended below the footings to protect the bearing surface.

Shallow Foundations

For analysis using Limit States Design, we calculated bearing capacities for square and strip footings up to 2.5 m for a settlement tolerance of 25 mm. Other bearing capacities for other footing sizes (or settlement tolerances) can be provided at your request. Bearing resistance values for square and strip footings, founded on approved structural fill or glacial till, are plotted on Figures 2 and 3 in the Appendix. For typical footing sizes, a factored bearing resistance of 400 kPa at Ultimate Limit States (ULS) is recommended, and a bearing resistance of 200 kPa at Serviceability Limit States (SLS) is recommended.

Exterior footings should be founded ay a minimum of 1.2 m below grade for frost protection, or equivalent insulation provided.

The site classification for seismic site response was based on our local experience in the area and our geotechnical investigation. The recommended site classification for seismic site response is Site Class C.

Slab on Grade and Exterior Slabs

A conventional grade slab founded on approved structural fill or undisturbed glacial till is practical for this site. A 200 mm layer of NSPW Type 1 Gravel or clear stone is recommended below the floor slab for levelling and support purposes. The gravel should be compacted to 100% Standard Proctor. The subgrade will have to consist of well-graded material to allow for placement of base gravel over it.

A perimeter foundation drainage system would not be necessary if the finished floor elevation is above exterior finished grades and the exterior grades slope away from the building.

Retaining Walls

Retaining wall will have to be designed to resist lateral pressures from the backfill, any backfill slope, and any surcharge loads from buildings, roadways, etc. Drainage from the backfill zone is another critical consideration.

The following Table B provides design parameters for preliminary design purposes for gravity walls. These values assume no slope on the backfill.

Table B: Design Parameters for Gravity Retaining Walls

Material	Imported Granular Backfill	Excavated Site Material*
Total Unit Weight, γ	22.0 kN/m^3	21.5 kN/m^3
Cohesion, c'	0 kPa	0 kPa
Angle of Internal Friction, φ	36 deg.	32 deg.
Active Earth Pressure, k_a	0.26	0.31
At-rest Earth Pressure, k_o	0.41	0.47
Passive Earth Pressure, k_p	2.44	2.13
Ultimate Sliding Friction Factor to Concrete, μ	0.45	0.4

Pavement

Any proposed pavement areas should be cut to subgrade elevation and proof-rolled. Any weak zones (e.g., topsoil/rootmat, organics, debris) should be replaced with approved, granular material. The following pavement structure is recommended for preliminary design and planning. This should be reviewed as your plans advanced.

Table C: Asphalt Pavement Thicknesses

Material	Light Duty	Heavy Duty (if necessary)
Asphalt, Mix Type C-HF	75 mm	40 mm 60 mm
NSPW Type 1 Gravel NSPW Type 2 Gravel	150 mm 200 mm	150 mm 300 mm
Geotextile	Could be considered	Could be considered
Subgrade	As approved by BME Engineering during construction	As approved by BME Engineering during construction

All aggregate should meet the NSPW Standard Specifications. The gravels should be compacted to 100% of Standard Proctor maximum dry density. Asphalt should be compacted to 92% Marshall maximum theoretical density.

Please contact us if you have any questions.

Regards,

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APPENDIX A

Bruce MacNeil Engineering Ltd.

SYMBOLS AND TERMS USED ON BOREHOLE AND TEST PIT RECORDS

SOIL DESCRIPTION

Terminology describing common soil genesis:

Topsoil - mixture of soil and humus capable of supporting good vegetative growth
Peat - fibrous aggregate of visible and invisible fragments of decayed organic matter
Till - unstratified glacial deposit which may range from clay to boulders
Fill - any materials below the surface identified as placed by humans (excluding buried services)

Terminology describing soil structure:

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 successions of different soil types, e.g. silt and sand
Layer - >75 mm
Seam - 2 mm to 75 mm
Parting - < 2 mm
Well Graded - having wide range in grain sizes and substantial amounts of all intermediate particle sizes
Uniformly Graded - predominantly of one grain size

Terminology describing soils on the basis of grain size and plasticity is based on the Unified Soil Classification System (USCS) (ASTM D-2488). The classification excludes particles larger than 76 mm (3 inches). This system provides a group symbol (e.g. SM) and group name (e.g. silty sand) for identification.

Terminology describing materials outside the USCS, (e.g. particles larger than 76 mm, visible organic matter, construction debris) is based upon the proportion of these materials present:

Trace, or occasional	Less than 10%
Some	10-20%
Frequent	Greater than 20%

The standard terminology to describe cohesionless soils includes the compactness (formerly “relative density”), as determined by laboratory test or by the Standard Penetration Test ‘N’ – value.

Relative Density	‘N’ Value	Compactness %
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 cohesive soils includes the consistency, which is based on undrained shear strength as measured by insitu vane tests, penetrometer tests, unconfined compression tests, or occasionally by standard penetration tests.

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Consistency	Undrained Shear Strength (Su)		'N' Value
	Kips/sq.ft.	KPa	
Very Soft	< 0.25	< 12.5	< 2
Soft	0.25 – 0.5	12.5 – 25	2 – 4
Firm	0.5 – 1.0	25 – 50	4 – 8
Stiff	1.0 – 2.0	50 – 100	8 – 15
Very Stiff	2.0 – 4.0	100 – 200	15 – 30
Hard	> 4.0	> 200	> 30

ROCK DESCRIPTION

Rock Quality Designation (RQD)

The 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 due to close shearing, jointing, faulting, or weathering in the rock mass and are not counted. RQD was originally intended to be done on N-size (45 mm) core; however, it can be used on different core sizes if the bulk of the fractures caused by drilling stresses are easily distinguishable from 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

Terminology describing rock mass:

Spacing (mm)	Bedding, Laminations, Bands	Discontinuities
2000 – 6000	*Very Thick*	*Very Wide*
600 – 2000	*Thick*	*Wide*
200 – 600	*Medium*	*Moderate*
60 – 200	*Thin*	*Close*
20 – 60	*Very Thin*	*Very Close*
< 20	*Laminated*	*Extremely Close*
< 6	*Thinly Laminated*	

Strength Classification	Uniaxial Compressive Strength (MPa)
Very Weak	1 – 5
Weak	5 – 25
Medium Strong	25 – 50
Strong	50 – 100
Very Strong	100 – 250
Extremely Strong	> 250

Terminology describing weathering:

Slight - Weathering limited to the surface of major discontinuities. Typically iron stained.
Moderate - Weathering extends throughout rock mass. Rock is not friable.
High - Weathering extends throughout rock mass. Rock is friable.

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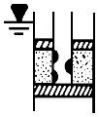
STRATA PLOT

Strata plots symbolize the soil or bedrock description. They are combinations of the following basic symbols:

Boulders, Cobbles, Gravel | Sand | Silt | Clay | Organics | Asphalt | Concrete | Fill | Igneous Bedrock | Metamorphic Bedrock | Sedimentary

WATER LEVEL MEASUREMENT

Borehole or Standpipe



Piezometer

SAMPLE TYPE AND/OR FIELD TESTS

SS	Split Spoon Sample (obtained by performing the Standard Penetration Test)	AS	Auger Sample
		BS	Bulk Sample
		WS	Wash Sample
ST	Shelby Tube or Thin Wall Tube	HQ, NQ, BQ, etc. Rock Core Samples (obtained with the use of standard size diamond drilling bits)	
PS	Piston sample		
DC	Dynamic Cone Penetration		
FSV	Field Shear Vane		

N- VALUE

Numbers in this column are the results of the SPT (Standard Penetration Test): the number of blows of a 140 pound (64kg) hammer falling 30 inches (760 mm), required to drive a 2 inch (50.8 mm) O.D. split spoon sampler one foot (305 mm) into the soil. For split spoon samples where insufficient penetration was achieved and 'N' values cannot be presented, the abbreviation SSR (Split Spoon Refusal) will appear in place of a numerical value.

OTHER TESTS

Symbols in this column indicate that the following laboratory tests have been carried out and the results are presented separately.

S	Sieve analysis	H	Hydrometer analysis
G_s	Specific gravity of soil particles	□	Unit weight
k	Permeability	C	Consolidation
	Single packer permeability test; test interval from depth shown to bottom of borehole	CD	Consolidated drained triaxial
		CU	Consolidated undrained triaxial with pore pressure measurements
	Double packer permeability test; Test interval as indicated	UU	Unconsolidated undrained triaxial
		DS	Direct shear
	Falling head permeability; using casing	Q_u	Unconfined compression
		I_p	Point Load Index (I_p on Borehole Records equals I_p (50); the index corrected to a reference diameter of 50 mm)
	Falling head permeability test using well point or piezometer	MSV	Laboratory Miniature Shear Vane

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TEST PIT RECORD

Project Name: Fire Station

Project No.: 106-023 | **Test Pit:** 1

Client: Dillon | **Sheet:** 1 of 1

Location: Chester, NS | **Date Drilled:** July 19, 2024

Water Level Date: *July 19, 2024 | **Datum:** Geodetic

SUBSURFACE PROFILE				SAMPLE			
Depth (m)	Symbols	SOIL AND/OR ROCK DESCRIPTION	Elevation (m)	Water Level (m)	Type	Number	Comments
0		**Ground Surface**	**19.9**				
		ASPHALT and TOPSOIL/ROOTMAT	**19.8**				
		FILL: Loose to compact greyish brown silty sand with gravel - Some cobbles	**19.5**				
1		TILL: Compact to dense yellowish brown to greyish brown silty sand with gravel - Frequent cobbles and trace boulders					
2							
3				▼			
4			**15.8**				
		End of Test Pit at depth of 4.1 m - refusal on INFERRED BEDROCK or large BOULDER *Some groundwater seepage observed at depth of 3.4 m					
5							

BME Engineering Ltd.

TEST PIT RECORD

Project Name: Fire Station

Project No.: 106-023 | **Test Pit:** 2

Client: Dillon | **Sheet:** 1 of 1

Location: Chester, NS | **Date Drilled:** July 19, 2024

Water Level Date: *July 19, 2024 | **Datum:** Geodetic

SUBSURFACE PROFILE				SAMPLE			
Depth (m)	Symbols	SOIL AND/OR ROCK DESCRIPTION	Elevation (m)	Water Level (m)	Type	Number	Comments
0		**Ground Surface**	**18.9**				
		TOPSOIL/ROOTMAT	**18.7**				
		FILL: Loose to compact greyish brown silty sand with gravel - Some cobbles - Some vegetation roots at 0.6 m	**18.2**				
1		TILL: Compact to dense yellowish brown to dark greyish brown silty sand with gravel - Frequent cobbles and trace boulders					
2							
3							
					BS	**1**	
4							
5			**13.5**				
		End of Test Pit at depth of 5.4 m - refusal on INFERRED BEDROCK or large BOULDER *No groundwater seepage observed					
6							
7							
8							

BME Engineering Ltd.

TEST PIT RECORD

Project Name: Fire Station
Project No.: 106-023 | **Test Pit:** 3
Client: Dillon | **Sheet:** 1 of 1
Location: Chester, NS | **Date Drilled:** July 19, 2024
Water Level Date: *July 19, 2024 | **Datum:** Geodetic

SUBSURFACE PROFILE				SAMPLE			
Depth (m)	Symbols	SOIL AND/OR ROCK DESCRIPTION	Elevation (m)	Water Level (m)	Type	Number	Comments
0		**Ground Surface**	19.9				
		ASPHALT and grey gravel					
		FILL: Loose to compact greyish brown silty sand with gravel - Some cobbles - Some vegetation roots at 1.2 m					
1			18.6				
		TILL: Compact to dense yellowish brown to dark greyish brown silty sand with gravel - Frequent cobbles and trace boulders					
2							
3							
4			15.4				
		End of Test Pit at depth of 4.5 m - refusal on INFERRED BEDROCK or large BOULDER *No groundwater seepage observed					
5							
6							
7							
8							

BME Engineering Ltd.

TEST PIT RECORD

Project Name: Fire Station

Project No.: 106-023 | **Test Pit:** 4

Client: Dillon | **Sheet:** 1 of 1

Location: Chester, NS | **Date Drilled:** July 19, 2024

Water Level Date: *July 19, 2024 | **Datum:** Geodetic

SUBSURFACE PROFILE				SAMPLE			
Depth (m)	Symbols	SOIL AND/OR ROCK DESCRIPTION	Elevation (m)	Water Level (m)	Type	Number	Comments
0		**Ground Surface**	**20.0**				
		ASPHALT	**19.9**				
		FILL: Loose to compact greyish brown silty sand with gravel - Some cobbles	**19.7**				
		TILL: Compact to dense yellowish brown to greyish brown silty sand with gravel - Frequent cobbles and trace boulders					
1							
					BS	**1**	
2							
					BS	**2**	
3				▼			
			16.4				
		End of Test Pit at depth of 3.6 m - refusal on INFERRED BEDROCK or large BOULDER *Some groundwater seepage observed at depth of 3.3 m					
4							
5							

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TEST PIT RECORD

Project Name: Fire Station

Project No.: 106-023 | **Test Pit:** 5

Client: Dillon | **Sheet:** 1 of 1

Location: Chester, NS | **Date Drilled:** July 19, 2024

Water Level Date: *July 19, 2024 | **Datum:** Geodetic

SUBSURFACE PROFILE				SAMPLE			
Depth (m)	Symbols	SOIL AND/OR ROCK DESCRIPTION	Elevation (m)	Water Level (m)	Type	Number	Comments
0		**Ground Surface**	**18.3**				
		TOPSOIL/ROOTMAT	**18.1**				
		FILL: Loose to compact brown silty sand with gravel - Some cobbles - Some vegetation roots at 0.9 m	**17.3**				
1		TILL: Compact to dense yellowish brown to dark greyish brown silty sand with gravel - Frequent cobbles and trace boulders					
2							
3							
4			**13.7**				
		End of Test Pit at depth of 4.6 m - refusal on INFERRED BEDROCK or large BOULDER *No groundwater seepage observed					
5							
6							
7							
8							

BME Engineering Ltd.

TEST PIT RECORD

Project Name: Fire Station

Project No.: 106-023 | **Test Pit:** 6

Client: Dillon | **Sheet:** 1 of 1

Location: Chester, NS | **Date Drilled:** July 19, 2024

Water Level Date: *July 19, 2024 | **Datum:** Geodetic

SUBSURFACE PROFILE				SAMPLE			
Depth (m)	Symbols	SOIL AND/OR ROCK DESCRIPTION	Elevation (m)	Water Level (m)	Type	Number	Comments
0		**Ground Surface**	**19.5**				
		FILL: Loose grey gravel					
		FILL: Loose to compact greyish brown silty sand with gravel - Frequent cobbles and trace boulders - Some vegetation roots at 3.0 m to 3.2 m - Trace debris					
1							
2							
3			**16.1**				
		TILL: Compact to dense dark greyish brown silty sand with gravel - Frequent cobbles and trace boulders					
4					**BS**	**1**	
			15.1				
		End of Test Pit at depth of 4.4 m - refusal on INFERRED BEDROCK or large BOULDER *No groundwater seepage observed					
5							
6							
7							
8							

Photograph 1: Test Pit 1. July 19, 2024.

Photograph 2: Test Pit 2. July 19, 2024.

Photograph 3: Test Pit 3. July 19, 2024.

Photograph 4: Test Pit 4. July 19, 2024.

Photograph 5: Test Pit 5. July 19, 2024.

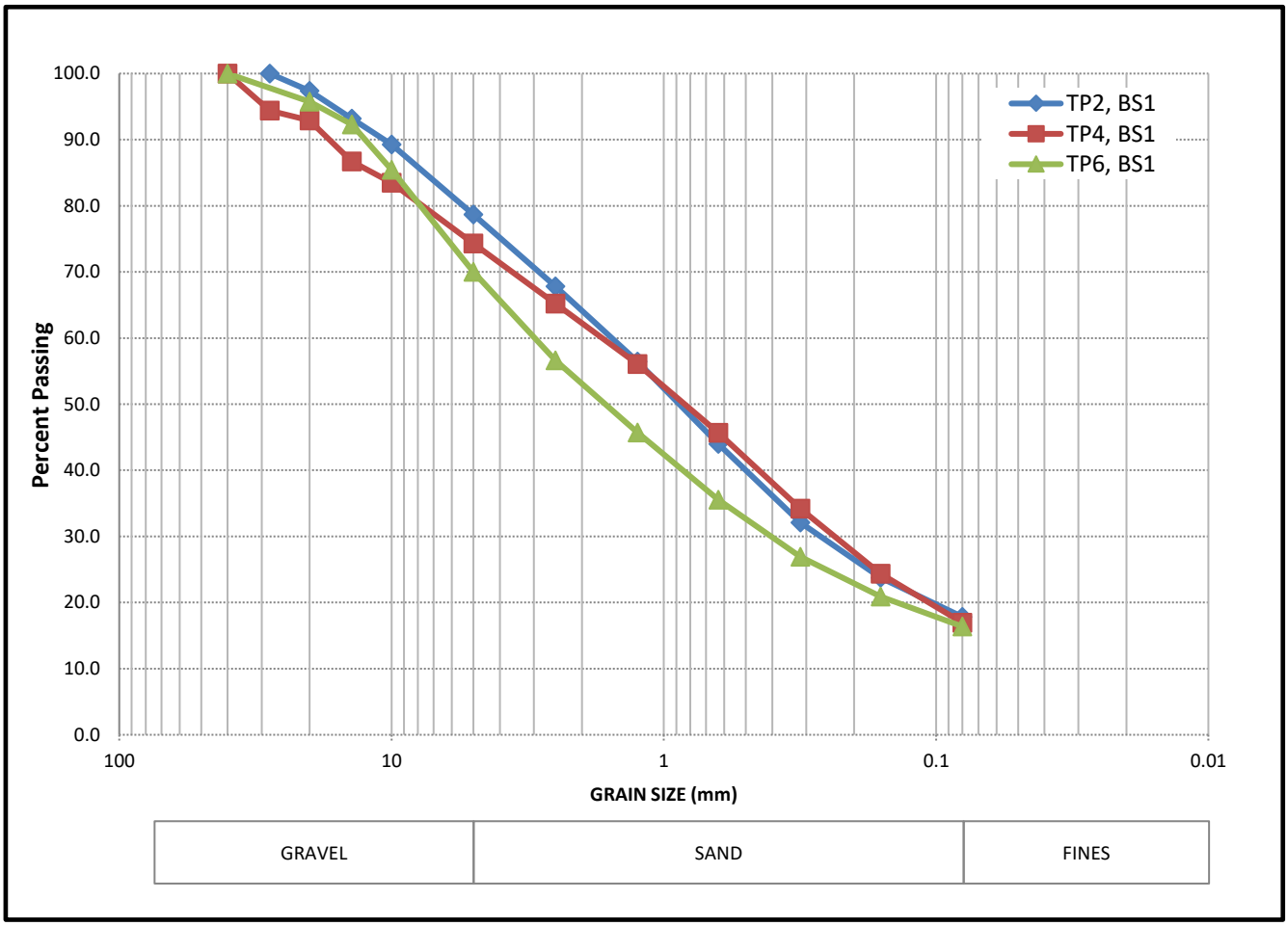
Photograph 6: Test Pit 6. July 19, 2024.

BME Engineering Ltd.

GRAIN SIZE REPORT

Project: Fire Station
Client: Dillon
Project No: 106-023

GRAIN SIZE DISTRIBUTION PLOT



SOIL CLASSIFICATION

Sample No	Depth (m)	Classification	Moisture Content (%)	Gravel (%)	Sand (%)	Silt and Clay (%)
TP2, BS1	3.3	Silty sand with gravel	7.7	21	61	18
TP4, BS1	1.5	Silty sand with gravel	6.2	26	57	17
TP6, BS1	4	Silty sand with gravel	8.4	30	54	16

BME Engineering Ltd.
61 Bluewater Road, Bedford, NS B4B 1G8
Phone (902) 430-2830

Comments: Samples were taken from test pits on July 19, 2024

Figure 1

FACTORED ULS BEARING RESISTANCE (Glacial Till or Approved Fill)

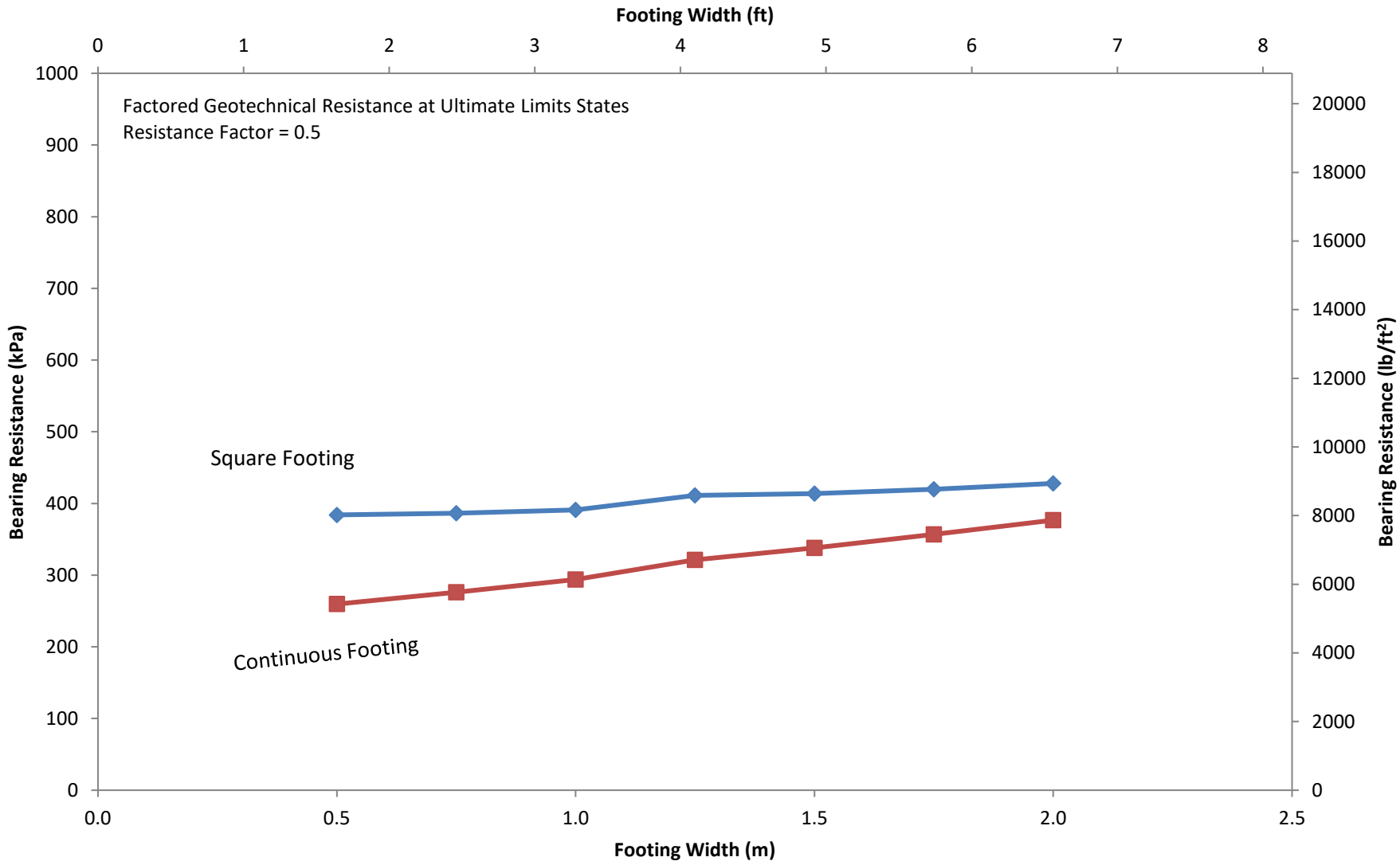


Figure 2

Project # 106-023

SLS BEARING RESISTANCE (Glacial Till or Approved Fill)

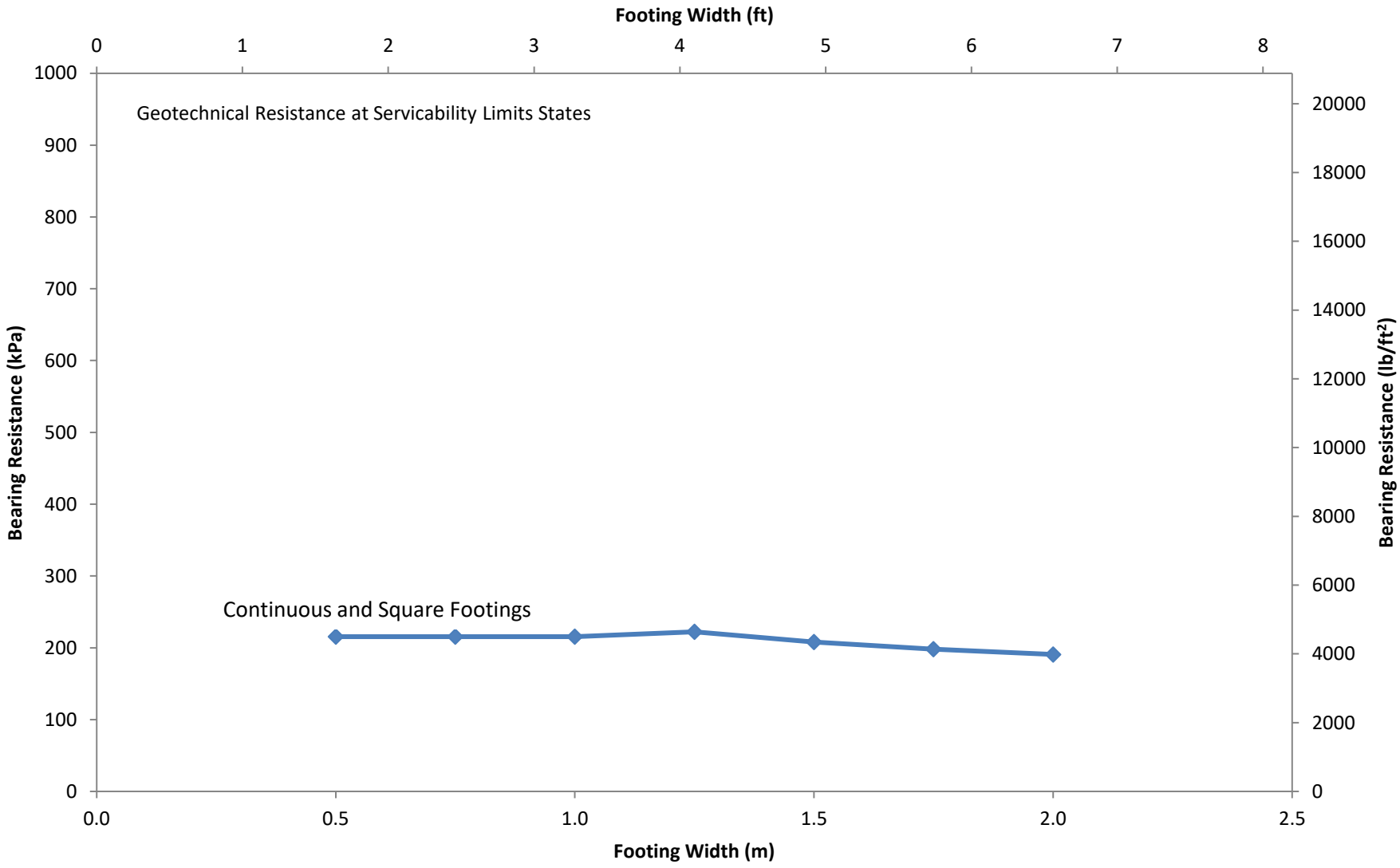


Figure 3

Project # 106-023

TP 1-6 BME Test Pits (July, 2024)

BME Engineering Ltd.
61 Bluewater Road
Bedford, NS
B4B 1G8

Proposed Development

Test Pits Location
Dillon
4070 Lighthouse Rte
Chester, NS

JOB #:	106-023
SCALE:	NTS
DATE:	July 19, 2024
DRAWN BY:	IA
CHECKED BY:	RBM

Drawing No.: 1

REV: 0