CITY OF Vernon

City of Vernon
3400 30th Street
Vernon, BC V1T 5E6

P: 250.545.1361
F: 250.545.7876

DEVELOPMENT VARIANCE PERMIT

NO. DVP00614

TO: REICHELT, DANIEL R (Email: dan@reicoconstruction.com)
136 SUNSET BLVD
VERNON BC, V1H 1T7

STUIVENBERG, RICHARD & KAREN (Email: rick.stuivenberg@me.com)
132 SUNSET BLVD
VERNON BC, V1H 1T7

1. This DEVELOPMENT VARIANCE PERMIT 00614 (DVP00614) is issued subject to compliance with all of the bylaws of the Municipality applicable thereto, except as specifically varied or supplemented by this Permit.

2. DVP00614 applies to and only to those lands within the Municipality described below and a retaining wall thereon:

   for: **LOT 33 PLAN KAS1975 DISTRICT LOT 6 OSOYOOS DIVISION YALE DISTRICT TOGETHER WITH AN INTEREST IN THE COMMON PROPERTY IN PROPORTION TO THE UNIT ENTITLEMENT OF THE STRATA LOT AS SHOWN ON FORM 1 OR V, AS APPROPRIATE.**

   PID – 02[illegible]

   LOT 32 PLAN KAS1975 DISTRICT LOT 6 OSOYOOS DIVISION YALE DISTRICT TOGETHER WITH AN INTEREST IN THE COMMON PROPERTY IN PROPORTION TO THE UNIT ENTITLEMENT OF THE STRATA LOT AS SHOWN ON FORM 1 OR V, AS APPROPRIATE.

   PID - 024-799-394

   and having a civic address at 132 and 136 SUNSET BLVD.

3. Daniel Reichelt and Richard and Karen Stuivenberg (hereinafter referred to as the "Owner") has requested the Development Variance Permit and has agreed to the terms of same.

4. Pursuant to Section 498 of the Local Government Act – City of Vernon Zoning Bylaw 5000 is hereby varied as follows:

CITY OF Vernon

City of Vernon
3400 30th Street
Vernon, BC V1T 5E6

P: 250.545.1361
F: 250.545.7876

a) Section 4.15.1 to allow the construction of a retaining wall on slopes of 30% or greater;

b) Section 6.5.1.i to increase the height of a retaining wall, from 1.2m to 3.66m within the front yard setback; and

c) Section 6.5.11 to increase the maximum height of retaining walls on a residential lot measured from grade on the lower side, from 1.2m to 3.66m.

5. The variances granted are subject to the following conditions:

   a) The development shall be constructed in general conformance with the plans set out in the following Schedules, attached hereto:

      i. Schedule A: Site Plan and Elevations
      ii. Schedule B: Geotechnical Report

   b) Insert other conditions as per Council's resolution

6. If the development authorized by this Permit (DVP00614) does not commence within 24 months of the date of Permit issuance, this Permit shall lapse.

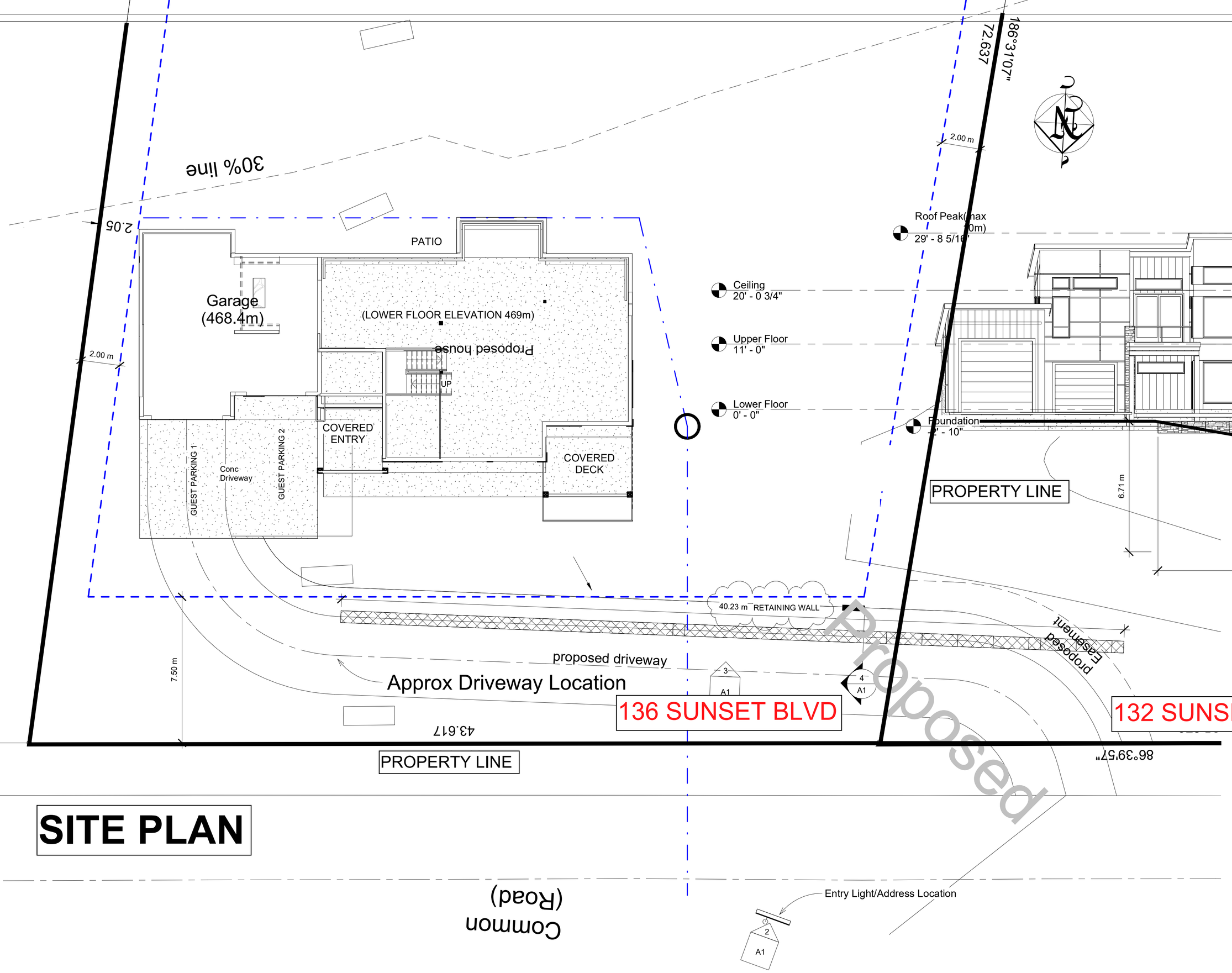
******* THIS IS NOT A BUILDING PERMIT *******

AUTHORIZING RESOLUTION PASSED BY COUNCIL THE XXth DAY OF MONTH, YEAR AND ISSUED THIS XXth DAY OF MONTH, YEAR.

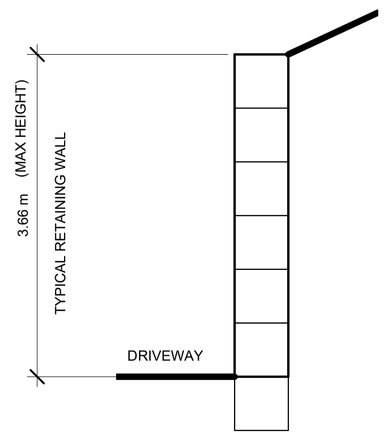
_____
Janice Nicol, Manager, Legislative Services
City of Vernon

I ACKNOWLEDGE THAT I HAVE READ, UNDERSTAND AND AGREE TO THE TERMS AND CONDITIONS UPON WHICH THIS PERMIT IS ISSUED:

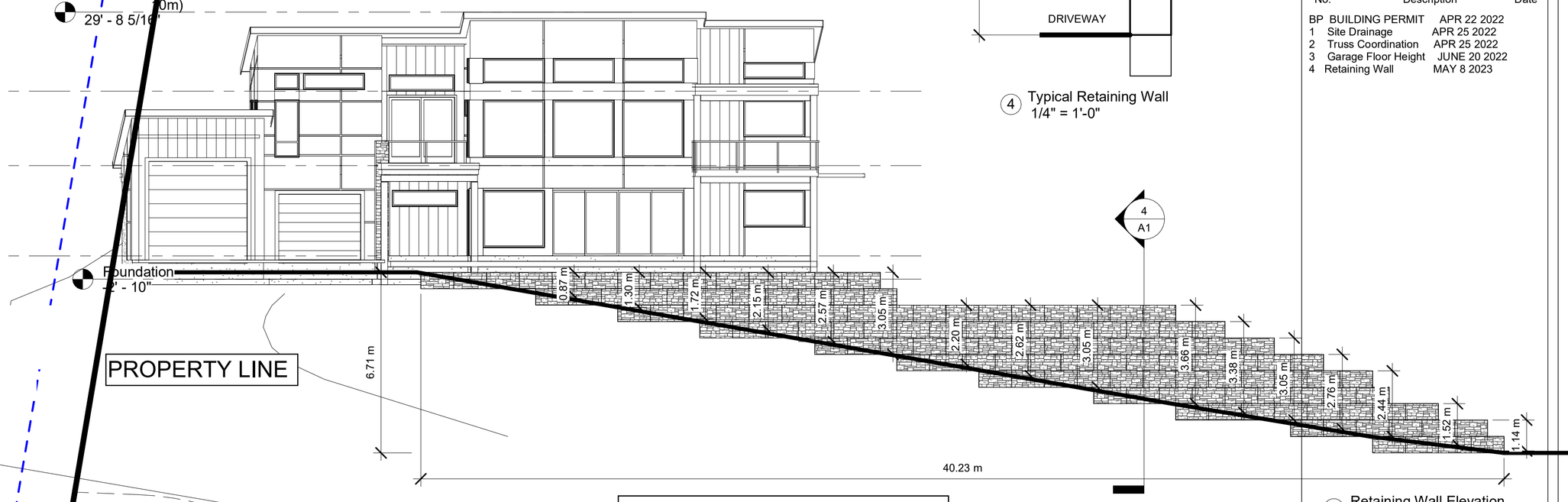
_____
Applicant (or Authorized Agent or Representative of Applicant)



SITE PLAN

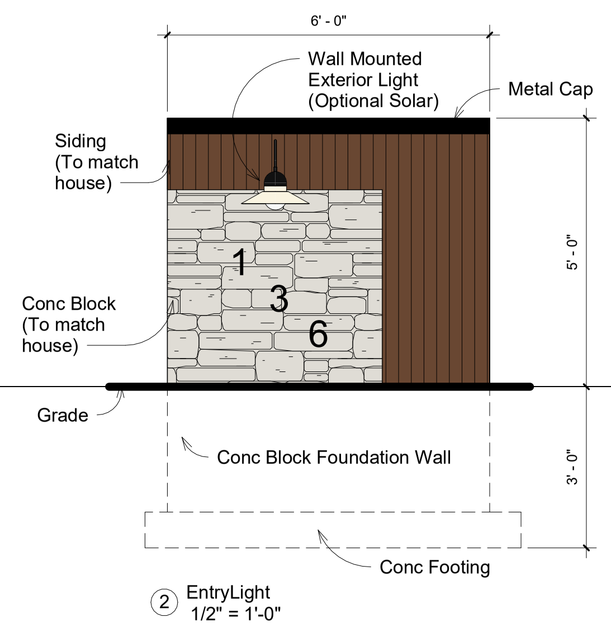


4 Typical Retaining Wall
1/4" = 1'-0"



3 Retaining Wall Elevation
1" = 10'-0"

NORTH ELEVATION



2 EntryLight
1/2" = 1'-0"

ZONING: RR - VERNON

925R Design Inc.

250.307.6818 - 925RDesign.com

No.	Description	Date
BP	BUILDING PERMIT	APR 22 2022
1	Site Drainage	APR 25 2022
2	Truss Coordination	APR 25 2022
3	Garage Floor Height	JUNE 20 2022
4	Retaining Wall	MAY 8 2023

SCHEDULE A

SL32 - 13(
Sunset Blv
Vernon BC

Site

Date	Ma
Drawn by	
Project No.	925
Scale	As

A1

SCHEDULE B

APPLEBRUIN ENGINEERING

(250) 899-9060
AppleBruin Engineering Inc.
Suite 203 – 1962 Enterprise Way
Kelowna, BC V1Y 9S6

March 17, 2023

Project 22-60W

Reico Construction Ltd.
618 Pottery Road
Vernon, BC V1B 3A6

Attention: Mr. Dan Reichelt
Email: reico-construction@hotmail.com

Dear Sir:

RE: GEOTECHNICAL DESIGN AND COMMENTS, PROPOSED DRIVEWAY WALL, 136 SUNSET BOULEVARD, VERNON, BC

INTRODUCTION

As requested by Mr. Dan Reichelt of Reico Construction Ltd. (Reico), AppleBruin Engineering Inc. (AppleBruin) has carried out a site review and design for the proposed driveway wall at the above noted location. Several field reviews of the site have taken place over the past months.

The City of Vernon has requested comments regarding the necessity of the proposed wall noted. A BC Building Code Schedule B dated March 14, 2023 has been submitted for this project pertaining to geotechnical aspects. The Name of Project according to the Schedule B is: Proposed Slope Facing Verti-Block Wall for Driveway = max. exposed height of 11 ft.

Attached to this letter is a copy of a Site Plan (original by Russell Shortt, Land Surveyors). The revised handwritten Typical Section Design Sketch of March 6, 2023 is attached, and now includes the writer's seal (approval) for a maximum exposed height of 11 ft., based on stability analyses, the site soil profile and geometry. The 36" Standard Verti-Block and Gravel Infill drawing is attached. For reference, several Site Photographs have been included.

SITE DESCRIPTION AND BACKGROUND

The lot is located at 136 Sunset Boulevard on a north-facing hillside in Vernon, BC. A new residential house (Reichelt's) is under construction at an approximate floor elevation of 6 to 7 meters above Sunset Boulevard and the Driveway intersection.

It is understood that the lower part of the driveway access has been provided as an easement through the neighbouring property owner's land at 132 Sunset Boulevard. The owners of the property, Richard and Karen Stuivenberg, also requested a wall facing to support the cut made into the native material for Reichelt's driveway.

FIELD REVIEW OBSERVATIONS AND MEASUREMENTS

The length of the driveway is roughly 57 meters, ranging in grade from 2 to 15%, according to the information on the Site Plan. The driveway has been cut into the slope exposing native glacial TILL soil comprised of hard Silt with trace clay, containing variable sand, gravel and cobble particle sizes. In elevation the cut is approximately 4 meters to nearly 5 meters (13 to 15 ft) below the existing asphalt driveway of 132 Sunset Boulevard. The slope stands steeply at about 0.5H:1.0V (horizontal to vertical), then flattens at closer to 2.0H:1.0V in the last 1.0 to 1.5 m (3 to 5 ft) of vertical height.

For reference, see the attached Site Plan, Typical Section and Photographs.

COMMENTS, CONCLUSIONS AND RECOMMENDATIONS

The site glacial TILL material stands intact even after being cut steeply due to its inherent strength; however, it is prone to erode at the surface due to the effects of rainfall and freeze-thaw processes. A wall facing consisting of the Verti-Block system, as described, is considered necessary to face and protect the slope from surface erosion and sloughing over time.

The Standard Verti-Block is 36" deep (into the slope), 24" high and 48" wide, to be filled with Drainage Rock. The design calls for non-woven geotextile to be placed on the native glacial TILL slope, then to set the blocks as per manufacturer's instructions on a prepared base of compacted Crushed Gravel, then backfill inside and behind the wall with Drain Rock. The design is for the blocks to be set at an additional tilt (batter) of 5% for increased stability. The base block is to be embedded a minimum 1 ft into the grade. The finished upper surface should be covered with the non-woven geotextile and a minimum 6" Topsoil layer, then seeded to promote growth of vegetation. A swale for drainage purposes directed to the toe of the driveway is to be constructed behind the top of the wall.

As per AppleBruin's BC Building Code Schedule B for this project dated and delivered March 14, 2023 to Reico, periodic field reviews of the installation of the Driveway Wall system have been conducted and will continue until construction is complete and satisfactory.

CLOSURE

This letter has been prepared by AppleBruin Engineering Inc. for the site and proposed construction noted herein, and for the intended client noted above, Mr. Dave Reiche[illegible] Reico Construction Ltd., and his agents and clients for this work. It is further intended that the authority having jurisdiction, the City of Vernon, may also rely on the findings and recommendations contained in this report, as it relates to the proposed development described herein. Any use which a third party makes of the information contained herein, or any reliance or decisions made based on it, are the responsibility of such third parties. AppleBruin Engineering Inc. accepts no responsibility for damage, if any, suffered by any third party as a result of decisions made or actions taken based on information contained in this report.

We trust this meets your present requirements. Please do not hesitate to contact the undersigned if you have questions or require further information.

Yours very truly,

AppleBruin Engineering Inc.
Permit to Practice # 1002003

David Neitsch, P. Eng.
Geotechnical Engineer

Attachments:
Site Plan (by Russell Shortt, File 30247, April 14, 2022)
Design Sketch Typical Section, For Construction dated 17 March 2023
Verti-Block – 36" Standard Block and Gravel Infill
Site Photographs (6 Pages)