



Unit 15 - 20279 97th Avenue Langley, BC, V1M 4B9

May 29, 2020

Heros of the Golden Mask Films Inc. #101 – 2544 Douglas Road, Burnaby, BC V5C 5W7

Attention: Se

Sean O'Reilly

Regarding:

Preliminary Geo-Hazard Feasibility Review of 44390 Bayview Road, Agassiz

Project: 44899-01

1.0 INTRODUCTION

Valley Geotechnical Engineering Services Ltd. (Valley Geo) has been retained by Heros of the Golden Mask Films Inc. to conduct a qualitative Geo-Hazard Feasibility Review of the subject site. This review summarizes our work to date and presents our observations and findings.

2.0 SCOPE OF WORK

Our scope of work consists of providing a desktop and visual geohazard summary of the property and provide our findings and observations to the client for the purpose of a real estate transaction. Environmental related considerations are outside of our scope of work.

3.0 INFORMATION REVIEWED

Valley Geo has reviewed the following documents in preparation of this report;

- Fraser Valley Regional District Online Mapping System
- Land Title Search
- Map 1487A Surficial Geology
- Google Earth Pro Historical Aerial Imagery
- Fraser Valley Engineering (2018-Oct-17) Geohazard Assessment of 44276 Bayview Road, Lake Errock, BC
- Fraser Valley Engineering (2016-Oct-21) Geohazard Assessment of 44256 Bayview Road, Lake Errock, BC
- Golder Associates (2010-Oct-01) Geotechnical Hazard Assessment of 44296 and 44304 Bayview Road, Lake Errock, BC
- Golder Associates (2008-Feb-28) Geotechnical Hazard Assessment of 44386 Bayview Road, Lake Errock, BC
- Golder Associates (2004-July-23) Geotechnical Hazard Assessment of 44272 and 44280 Bayview Road, Lake Errock, BC



4.0 SITE DESCRIPTION

The subject site is located at 44390 Bayview Road, Agassiz, BC. The property is irregular in shape with a total approximate plan area of 5.4Ha. The property is bound by Canadian Pacific Railway to the east, forested lands to the south, and rural residential properties to the north and west. The property is currently zoned as R-3 – Rural.

The site slopes from the south down towards the north at an overall slope of approximately 2.5H:1V with several steeper sections (1H:1V). Two watercourses have been identified on the property and are both located in the east corner of the property. Both watercourses are well incised and contain large boulders, trees, and other debris from previous debris flow events.

The property is mostly forested with coniferous and deciduous trees with a cleared area for the existing dwelling and a small driveway leading to the middle portion of the property. An old logging road appears to have been cut along the southern property line. A large boulder est. 4m in diameter was observed on the slopes directly above the existing dwelling.

5.0 PROPOSED DEVELOPMENT

It is our understanding that you are proposing to construct a large studio (approximately 40mx40m) and several smaller structures to accommodate staff, training, and film production. Based on our conversations, the studio is proposed to be constructed in the location of the existing dwelling and the smaller structures are proposed along the existing gravel driveway leading the middle portion of the property.

6.0 DESKTOP REVIEW

According to the published Geological Survey of Canada Map 1487A, the subject site is underlain by Mesozoic and upper Paleozoic bedrock (PT). In areas where bedrock is not exposed at the surface, it is generally overlain by a thin deposit, normally less than 2m thick, of glacial, colluvial, and eolian sediments.

Historical Aerial Photography from Google Earth Pro dating back to 2003 was reviewed. No major changes were observed on the property other than the existing owner filling and levelling the area around the dwelling and the area directly north of the building where the septic field is located.

At the time of preparing this report, the UBC Geographic Information Centre which supplies historical aerial photography was closed due to COVID-19. Based on Golder's 2008 report for the neighbouring property, the slopes to the south of the property were logged in the early 1960s followed by a fire late in the same decade. No major indications of slope instability were noted by Golder during their review.

7.0 FIELD REVIEW

Valley Geotechnical carried out a site reconnaissance and test pit investigation on May 25, 2020. Five test pits (TP-01 to TP-05) were on the property with a small track-mounted excavator. Generally, bedrock was encountered approximately 0.9m below grade with the exemption of TP-01 located near the existing boulder headwall where approximately 2.4m of random fill was encountered above the bedrock.

The site reconnaissance consisted of a visual inspection of the slopes and proposed building areas. The following summarizes our site reconnaissance observations:

- 1. A large boulder, est. 4m in diameter was observed on the slopes directly above the existing dwelling. No other signs of rockfall hazards were observed.
- The old logging road on the southern slopes is acting as an interception swale and directs water to the west and drains onto the cut slopes directly east of the existing dwelling.
- 3. Several small drainage channels exist throughout the slopes.
- 4. The creeks in the most eastern portion of the property show evidence of past debris flood events.

8.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the work completed above, we conclude the following:

- The proposed locations of the structures are feasible from a geo-hazard standpoint.
- Cut and fill will be required to achieve the desired grades.
- Special foundation detailing may be required for the smaller structures and will need to be reviewed at the time of detailed design.
- The large boulder observed on the southern slopes will need to be either removed or secured to the slope.
- Runoff from the slopes will need to be considered, both from the logging road and observed channels, and incorporated into the Civil Engineers Stormwater Management design.
- Existing on-site ditches/ swales will likely need to be upgraded.
- No work will likely be permitted within the eastern portion of the site where the watercourses have been identified.
- A comprehensive topographic survey will be required for development planning.

9.0 REPORT USE AND LIMITATIONS

This qualitative site assessment report has been prepared for use by Heros of the Golden Mask Films Inc. and their representative and can be used by them as they see fit in pursuing the acquisition of this property. The scope of services performed may not be appropriate to satisfy the needs of other users and any use or re-use of this document or the findings, conclusions, or recommendations presented herein are at the sole risk of said user.

In assessing the subject site, Valley Geo has also relied upon information noted in the report and aerial photos. Accordingly, Valley Geo accepts no responsibility for any deficiency, misstatements or inaccuracy contained in this report as a result of misstatements, omissions, misrepresentations or fraudulent information provided by the persons interviewed or other sources.

This study was not intended to be definitive. Given that the scope of services for this assessment did not include a soil investigation, it is possible that unknown geotechnically related conditions still exist. Conclusions presented herein apply to site conditions existing at the time of our assessment and those reasonably foreseeable.

It is important to note that even the most comprehensive scope of services may fail to detect geohazard related issues on the particular site. Therefore, Valley Geotechnical cannot act as insurers and cannot certify or underwrite that a site is free of geo-hazard related issues, and no expressed or implied representation or warranty is included or intended in our reports, except that our work was performed, within the limits prescribed by our client, with the customary thoroughness and competence of our profession. We thank you for this opportunity to be of assistance. If you have any questions or require additional information please contact the undersigned.

Yours very truly;

Brad VanDelft, A.Sc.T., Eng.L.

Geotechnical Engineering Licensee - Principal

SAlhya

L. R. BROWN

49864

OUNGER TO THE TOTAL TO

Logan Brown, P.Eng. Geotechnical Engineer

Narayan Abhyankar, FEC, P.Eng. Senior Geotechnical Engineer

S:\VGES-PROJECTS\44800\44899-01\REPORTS\(44899-01) 2020-05-27 - Feasability Study.docx



Unit 15 - 20279 97th Avenue Langley, BC, V1M 4B9







