

# **PLANNING AND DEVELOPMENT SERVICES**

TO: Municipal Planning Commission

**DATE:** January 13, 2021

DIVISION: 7

FILE: 06415058

APPLICATION: PRDP20200261

**SUBJECT:** Dwelling, Single Detached and Single-lot Regrading / Permitted & Discretionary Use, with Variances

**APPLICATION:** Application is for construction of a dwelling, single detached, relaxation of the minimum front yard setback requirement and single-lot regrading and placement of clean fill.

**GENERAL LOCATION:** Located at the northwest junction of Twp. Rd 262A and Rge. Rd 293.

**LAND USE DESIGNATION:** Residential, Country Residential District (R-CRD) under Land Use Bylaw C-8000-2020.

**ADMINISTRATION RECOMMENDATION:** Administration recommends Approval in accordance with Option #1.

**EXECUTIVE SUMMARY:** The Application drawings for construction of the dwelling, single detached, submitted October 30, 2020, prepared by Design House Calgary, confirms the placement of approximately 3.30 m (10.83 ft.) of fill is required for the construction of a dwelling, single detached. The site plan confirms that the proposed front yard setback is 25.71 m (84.35 ft.) and this requires a variance. As per written request, this application was assessed under Land Use Bylaw C-8000-2020.

# **OPTIONS:**

- Option #1: THAT Development Permit Application PRDP20200261 be approved with the conditions noted in Attachment 'A'.
- Option #2: THAT Development Permit Application PRDP20200261 be refused for the following reasons:
  - 1. That in the opinion of the Municipal Planning Commission, the development unduly interferes with the amenities of the neighbourhood and materially interferes with and affects the use, enjoyment, and value of neighbouring parcels of land.

# AIR PHOTO & DEVELOPMENT CONTEXT:



Administration Resources Wayne Van Dijk, Planning and Development

ROCKY VIEW COUNTY

# VARIANCE SUMMARY:

Variance	Variance Requirement		Percentage (%)
Front yard setback	45.00 m (147.64 ft.)	25.71 m (84.35 ft.)	42.86%

# **APPLICATION EVALUATION:**

The application was evaluated based on the information submitted with the application and the applicable policies and regulations.

<ul> <li>APPLICABLE POLICY AND REGULATIONS:</li> <li>Land Use Bylaw C-8000-2020</li> <li>Balzac East Area Structure Plan</li> </ul>	<ul> <li>TECHNICAL REPORTS SUBMITTED:</li> <li>Slope Stability Report</li> <li>Site Plan and Elevation drawings</li> </ul>	
PERMITTED & DISCRETIONARY USE:	DEVELOPMENT VARIANCE AUTHORITY:	
Dwelling, Single Detached is listed as a Permitted Use	Municipal Planning Commission	
<ul> <li>Stripping, Grading and Excavation is listed as a Discretionary use</li> </ul>		

# Additional Review Considerations

The Applicant has submitted a Slope Stability Report, prepared by McIntosh and Lalani Engineering Ltd, in support of the stripping, grading and placement of clean fill. The report, currently being reviewed by Engineering, shows no major concerns with sloping and or grading. Engineering comments are incorporated in the attached condition set.

# CONCLUSION:

Subject to the proposed conditions of approval, the application is recommended for approval.

Respectfully submitted,

Concurrence,

"Theresa Cochran"

"Al Hoggan"

Executive Director Community Development Services Chief Administrative Officer

WV/IIt

# ATTACHMENTS:

ATTACHMENT 'A': Development Permit Conditions ATTACHMENT 'B': Maps and Other Information



# ATTACHMENT 'A': DEVELOPMENT PERMIT CONDITIONS

Option #1:

Approval, for the following reasons:

# **Description:**

- 1. That the construction of a dwelling, single detached, may commence on the subject parcel, in general accordance with the drawings prepared by Design House Calgary and submitted with the application.
  - i. That the single-lot regrading and the placement of clean fill, to a depth of approximately **3.30 m (10.83 ft.)**, may take place on the subject lands.
  - ii. That the minimum front yard setback requirement **shall be relaxed from 45.00 m** (147.64 ft.) to 25.70 m (84.35 ft.).

## Prior to Issuance:

- 2. That prior to issuance of this permit, the Applicant/Owner shall submit a Geotechnical Report, conducted and stamped by a professional geotechnical engineer that provides recommendations on the placement of fill for areas where the fill is greater than 1.20 m (3.93 ft.) in depth, in accordance with County Servicing Standards.
- 3. That prior to issuance of this permit, the Applicant/Owner shall submit a Grading Analysis Report, prepared and stamped by a qualified professional that analyzes the pre and post fill grades to determine if there are any drainage impacts to adjacent properties or the public road network. Conditions associated with site stormwater storage, site releases and offsite drainage conditions shall be confirmed by the engineer in both pre and post grading. The analysis shall also include recommendations for mitigating measures for Erosion & Sediment Control as a result of the activity, as per County Servicing Standards.
- 4. That prior to issuance of this permit, the Applicant shall confirm acceptance of or refusal to participate in the Voluntary Recreation Contribution for Community Recreation Funding on the form provided by the County and that the contribution, if accepted, is \$800, calculated at \$800.00 for each new residential unit.
- 5. That prior to issuance of this permit, the Applicant/Owner shall contact County Road Operations with haul details for materials and equipment needed during construction/site development to confirm if Road Use Agreements will be required for any hauling along the County road system and to confirm the presence of County road ban restrictions.
  - i. Written confirmation shall be received from County Road Operations confirming the status of this condition. Any required agreement or permits shall be obtained unless otherwise noted by County Road Operations.

## Permanent:

- 6. That any plan, technical submission, agreement, matter or understanding submitted and approved as part of the application or in response to a Prior to Issuance or Occupancy condition shall be implemented and adhered to in perpetuity.
- 7. The Applicant/Owner shall submit to the County, compaction testing results, upon completion verifying the fill was placed in accordance with the Deep Fills report, accepted by the County.
- 8. That it is the Applicant/Owner's responsibility to obtain and display a distinct municipal address in accordance with the County Municipal Addressing Bylaw (Bylaw C-7562-2016), for the dwelling unit located on the subject site, to facilitate accurate emergency response.



# ROCKY VIEW COUNTY

- 9. That if any fill is to be imported onto the property, the Applicant/Owner shall contact Rocky View County Road Operations with haul details to determine if a Road Use Agreement is required for use of the County road system for hauling of fill material onto the property.
- 10. That it shall be the responsibility of the Applicant/Owners to ensure the fill has been placed in a safe manner that does not cause slope stability issues, slumping, or any other related safety issues.
- 11. That no topsoil shall be removed from the site.
- 12. That the Applicant/Owners shall ensure no organic material is buried and capped in a manner that will cause methane gas related issues.
- 13. That the fill shall not contain large concrete, rebar, asphalt, building materials, organic materials, or other metal.
- 14. That the Applicant/Owners shall take effective measures to control dust on the parcel so that dust originating therein shall not cause annoyance or become a nuisance to adjoining property owners and others in the vicinity.
- 15. That if no future development of the proposed graded area occurs, the proposed graded area shall have a minimum of six (6) inches of topsoil placed on top which shall then be spread and seeded to native vegetation, farm crop, or landscaped to the satisfaction of the County.
- 16. That the Applicant/Owners shall be responsible for rectifying any adverse effect on adjacent lands from drainage alteration.
- 17. That the subject land shall be maintained in a clean and tidy fashion at all times and all waste material shall be deposited and confined in an appropriate enclosure. All waste material shall be regularly removed from the property to prevent any debris from blowing onto adjacent property or roadways. That all garbage and waste shall be stored in weatherproof and animal proof containers and be in a location easily accessible to containerized garbage pickup.

## Advisory:

- 18. That the Applicant/Owner shall be responsible for all required payments of 3<sup>rd</sup> party reviews and/or inspections as per the Master Rates Bylaw.
  - Note: For any 3rd party review work completed Prior to Issuance of the Development Permit, the invoices shall be paid prior to the Development Permit being issued. For any work completed after Permit issuance but before Permit Occupancy, the invoices shall be paid prior to Development Occupancy.
- 19. That the site shall remain free of restricted and noxious weeds and maintained in accordance with the Alberta Weed Control Act [*Statutes of Alberta, 2008 Chapter W-5.1, December 2017*].
- 20. That during construction of the dwelling, all construction and building materials shall be maintained onsite, in a neat and orderly manner. Any debris or garbage shall be stored/placed in garbage bins and disposed of at an approved disposal facility.
- 21. That a Building Permit and sub-trade permits shall be obtained through Building Services, for construction of the dwelling, single detached, prior to any construction taking place.
- 22. That any over government permits, approvals, or compliances are the sole responsibility of the Applicant/Owner.
- 23. That if the development authorized by this Development Permit is not commenced with reasonable diligence within 12 months from the date of issue, and completed within 24 months of the issue, the permit is deemed to be null and void, unless an extension to this permit shall first have been granted by the Development Authority.



24. That if this Development Permit is not issued by **August 31, 2021** or the approved extension date, then this approval is null and void and the Development Permit shall not be issued.



# ATTACHMENT 'B': MAPS AND OTHER INFORMATION

<b>APPLICANT:</b>	OWNER:	
Rodney Jenkins (Design House Calgary)	Jaswinder and Sharanjit Sekhon	
<b>DATE APPLICATION RECEIVED:</b>	<b>DATE DEEMED COMPLETE:</b>	
February 5, 2020	February 19, 2020	
<b>GROSS AREA:</b> ± 0.84 hectares (± 2.10 acres)	LEGAL DESCRIPTION: Lot 5, Block 2, Plan 0815736, NE-23-23-28-W04M (29224 Twp. Rd. 262A)	

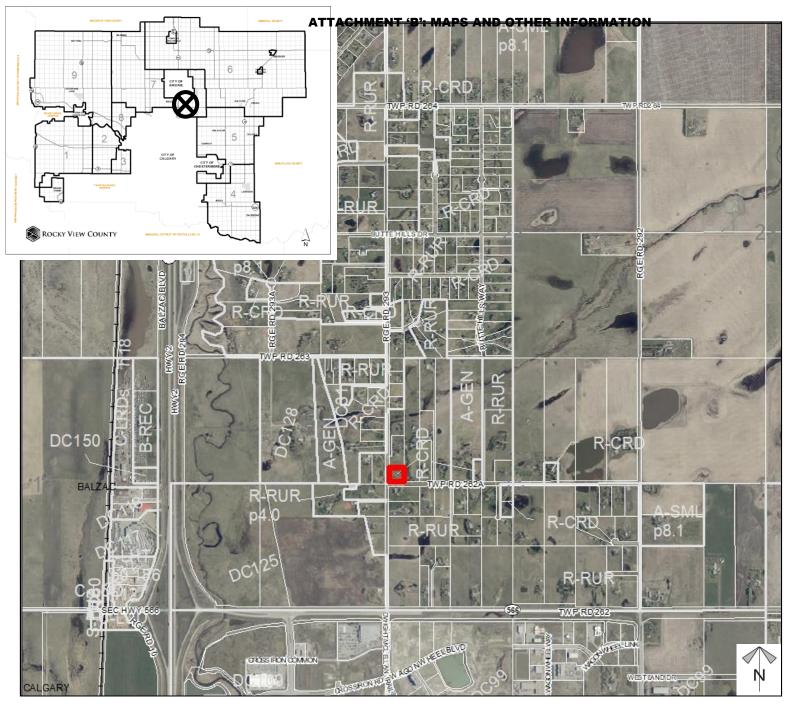
APPEAL BOARD: Subdivision, Development Appeal Board

# HISTORY:

• PRDP20171071: single lot regrading and placement of fill. Permit not issued, Prior to Issuance conditions never satisfied

# PUBLIC & AGENCY SUBMISSIONS:

The application was circulated to a number of internal and external agencies and, where appropriate, conditions of approval have been proposed based on these comments.



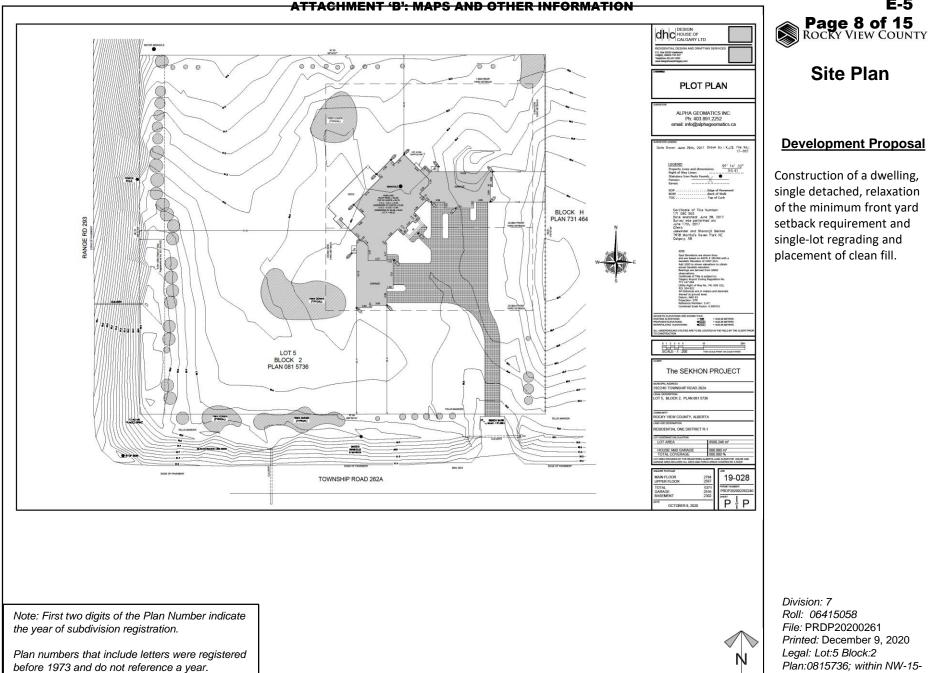


# Location & Context

## **Development Proposal**

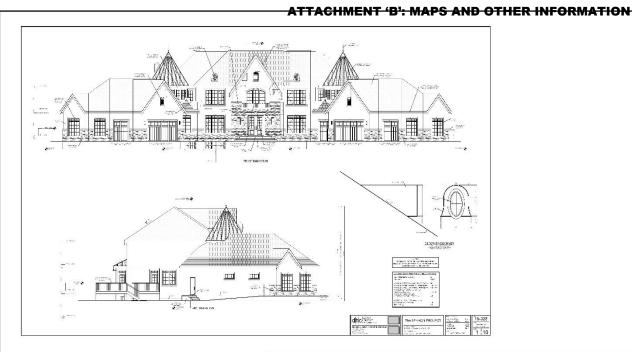
Construction of a dwelling, single detached, relaxation of the minimum front yard setback requirement and single-lot regrading and placement of clean fill.

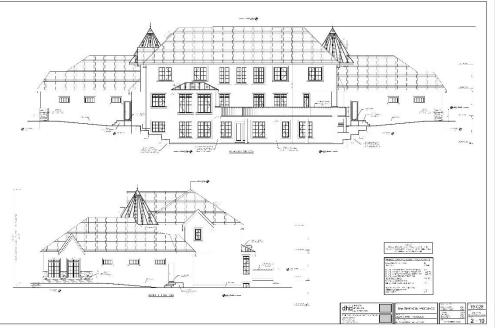
Division: 7 Roll: 06415058 File: PRDP20200261 Printed: December 9, 2020 Legal: Lot:5 Block:2 Plan:0815736; within NW-15-26-29-W04M



Roll: 06415058 File: PRDP20200261 Printed: December 9, 2020 Legal: Lot:5 Block:2 Plan:0815736; within NW-15-26-29-W04M

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Note: First two digits of the Plan Number indicate the year of subdivision registration.

Plan numbers that include letters were registered before 1973 and do not reference a year.

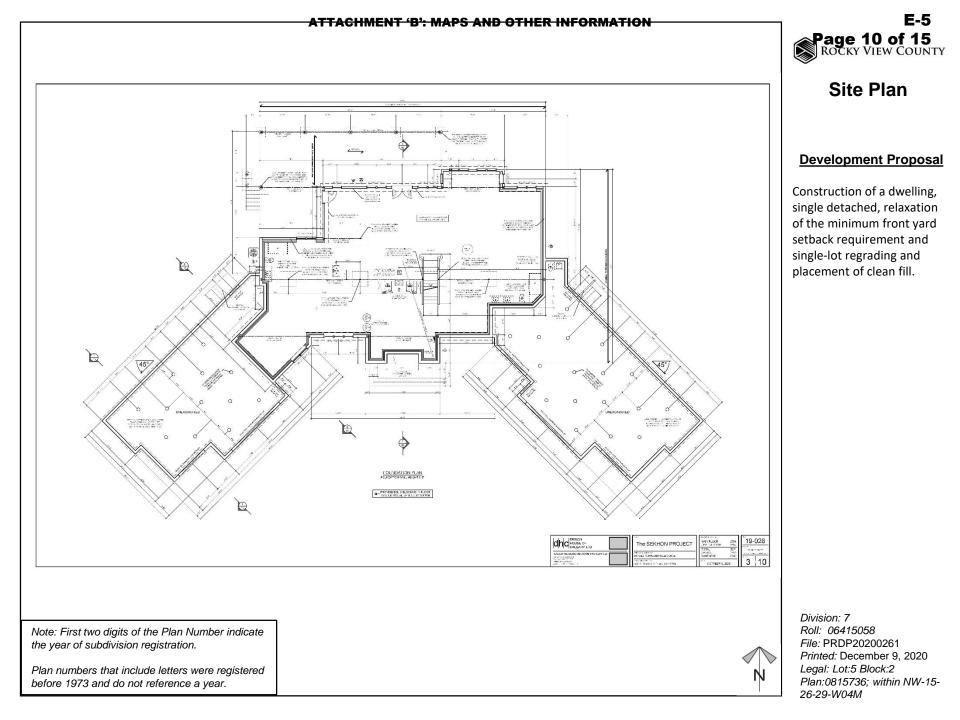
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Site Plan

# **Development Proposal**

Construction of a dwelling, single detached, relaxation of the minimum front yard setback requirement and single-lot regrading and placement of clean fill.

Division: 7 Roll: 06415058 File: PRDP20200261 Printed: December 9, 2020 Legal: Lot:5 Block:2 Plan:0815736; within NW-15-26-29-W04M



# McINTOSH•LALANI ENGINEERING LTD.

A Division of 🛻 Englobe

October 27, 2020

M•L 02003570.000

Jaswinder Sekhon

Attention: Mr. Jaswinder Sekhon

Subject: Slope Stability Analysis 292240 Township Road 262A Rocky View Country, Alberta

At the request of Jubilee Engineering Consultants Ltd., on behalf of Jaswinder Sekhon, McIntosh•Lalani Engineering Ltd. (M•L), has conducted a slope stability assessment of slopes within the Sekhon Residential development land. M•L has obtained and reviewed the Cut/Fill, and Final Grade plans provided to M•L dated October 6, 2020. The subject land development involves stripping, grading, and sloping land with minor fill placement within the site.

The objective of this evaluation is to assess the stability of the slopes that are more than 15% percent gradient. Rocky View County requires a minimum F.O.S. of 1.5 against slope instability affecting a building site situated upon a slope.

There are existing slopes to the west of the subject site, down from the Range Road 293 to the property line. These slopes are not any concern to the subject development as the subject site is on the toe of the slopes. However, based on the grading plan provided, it is understood that a backslopping maximum of 3H:1V is proposed from the subject site down to the east property line. A driveway will be on top of the slope.

M•L has selected and analyzed a slope cross-section. Cross-section A-A was selected transects a driveway within the subject site from west to east. The gradient of this section is 3H:1V with a slope height maximum of 3.7 metres in height. The location of the cross-sections is illustrated in Drawing Nos.: 02003570.000.G01.

M•L has analyzed the overall global stability using the Morgenstern Price limit equilibrium method modeled by the computer software program Slope/W. Other information required to analyze the global slope stability, was shear strength properties of the soils and the groundwater conditions. Based on M•L's experience with the subsurface soil profile near the subject site in association with the topography, geologic setting and local knowledge, it is understood that the soil in this area generally consists of lacustrine silt and/or silty clay till overlying siltstone or sandstone bedrock.

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October 27, 2020

The following table presents the shear strength properties of the soils which were used for the slope stability analysis.

Soil Type	Unit Weight y (kN/m3)	Cohesion c (kPa)	Effective Friction Angle $\Phi$
Silt and Silty Clay	20.0	0.0	28

Pizometric line was not utilized in the analysis. However, a soil saturation condition was considered in the analysis by applying a pore water ratio maximum of 0.12. Surcharge load of 12 kPa were utilized in the analysis to simulate traffic load.

The stability analysis of the slope produces a factor of safeties of 1.58 against global slope instability. A F.O.S of 1.50 and less were not identified in the slope stability analysis. Drawing No.: 02003570.000.G02 illustrates the geometry of the slope cross-section and calculated F.O.S.

With these relatively low slope gradients and assumed soil strength parameters, the Factor of Safety against slope instability meets and is well above the minimum required F.O.S by the City of Calgary of 1.5.

Based on the slope stability analysis, there are no slope stability concerns with respect to the proposed building location and driveway, proposed Cut/Fill, and backsloping grading plans. There is no development setback required for the subject development.

If the development plans are found to be inaccurate, and backsloping is different other than analysis in this report, M•L should be notified to review our analysis. The stability analysis and the results shown in this report comply with all the requirements of the Rocky View Country in accordance with the City of Calgary guidelines for slope stability".

It is understood that the site may be subject to some additional grading prior to development. Therefore, M•L recommends that the slope is re-surveyed and that the slope stability analysis is reviewed prior to the final design to ensure a F.O.S. of 1.50 is maintained. These results may change with cutting or filling at the top of the slope.

The following requirements are provided to ensure long term stability and maintain a F.O.S. of 1.50.

- No excavations on or at the toe of the slope.
- All vegetation should remain intact. Should a slope disturbance occur, the slope should be repaired and re-vegetated immediately.
- Overland drainage needs to be managed to avoid water ponding at the top of the slope or channelized flows directed over the crest of the slope.

#### ATTACHMENT 'B': MAPS AND OTHER INFORMATION

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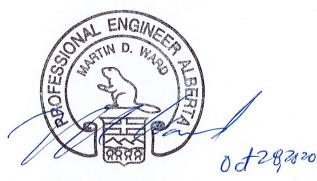
October 27, 2020

- There should be no surcharge loading at the top of slope, such as retaining walls, fills in excess of 0.5 metres or other permanent structures without a full slope/global stability review by a qualified geotechnical engineer.
- Any retaining wall proposed to be constructed near the slope should be designed by a qualified geotechnical engineer.
- Any proposed swimming pools onto the slope should be reviewed by a geotechnical engineer to evaluate the impact on the slope stability.

Any private retaining walls to be constructed on residential lots need to be designed by the site-specific residential lot owner.

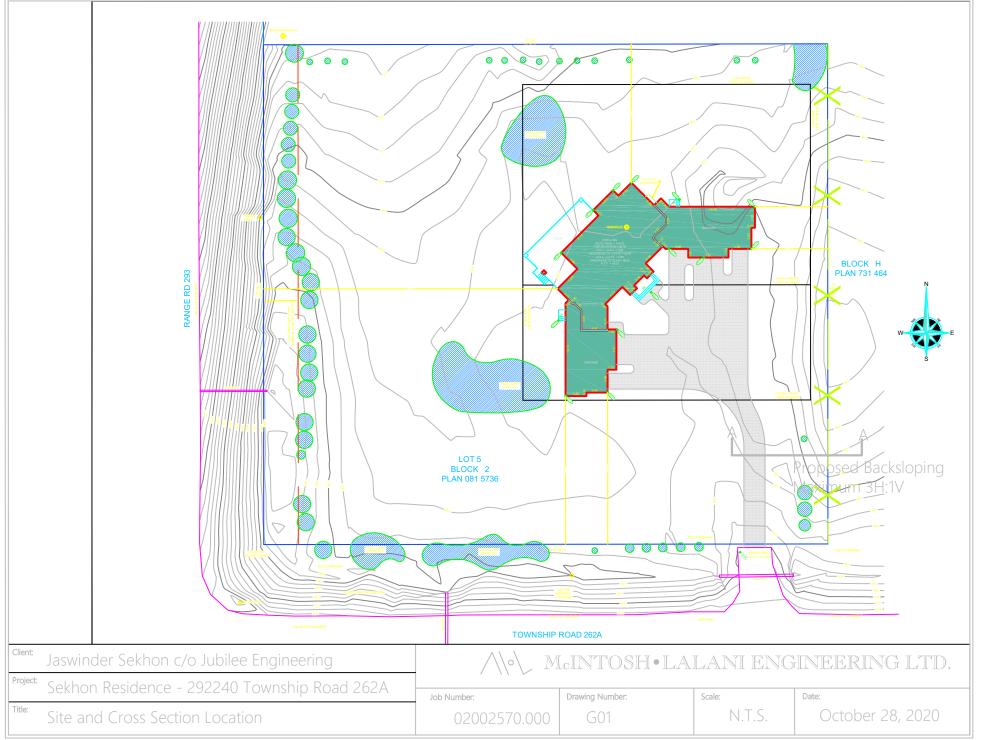
We trust the information presented meets with your present requirements. Should you have any questions, please contact our office.

Respectfully submitted, McIntosh•Lalani Engineering Ltd.



Noor Alam, P.Eng. Project Engineer

Marty D. Ward, P.Eng. Senior Project Engineer APEGA Permit No. 6482



Soil Parameters:					
Soi	I Туре	Unit Weight ( $\gamma$ ) $kN/m3$	Effective Cohesion (C) kPa	Effective Friction Angle $(\Phi)$	Pore Water Pressure
	Silt/Silty Clay	20.0	0.0	28°	Ru = 0.12

