



May 2, 2024  
Ref. No. CO947.01

Rohit Communities Ontario Inc.  
C/O Adil Kodian  
15 Fitzgerald Road  
Ottawa, ON, Canada  
K2H 9G1

**Subject:**

**Slope Stability Assessment Report  
Wateridge Village, Blocks 5 and 6, Ottawa, Ontario**

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Terrapex Environmental Ltd. (**Terrapex**) was retained by Rohit Communities Ontario Inc. (Rohit) to conduct a visual slope stability assessment for Blocks 5 and 6, located within the northern portion of 1255 Hemlock Rd. to satisfy City of Ottawa's Minimum Requirements for Slope Stability Assessment.

The term of reference for this study was documented in the **Terrapex** Geotechnical Investigation Report – Proposed Mixed-Use Development Phase 4 referencing Report No.CO682.00 dated February 5, 2019, and revised October 14, 2020. An agreement and executed Purchase Order dated April 11, 2024, was received from Mr. Sathishkumar Ponnusamy on behalf of Rohit to proceed with this assessment.

It is understood that a slope stability assessment is required as a part of the proposed development submission to provide an assessment of the long-term stability of the slope along the northern portion of the Block 6 area.

To assist in our evaluation of the stability of the slope, Rohit provided a topographic survey plan, attached in this report. The drawings show the location of Block 5 and Block 6 boundaries of the Phase 4 Development as well as the elevation contour lines for the slope crossing Block 5 to Block 6.

The scope of the visual inspection undertaken by **Terrapex** was to identify the extend of vegetation including identification of nay bare or eroded areas; examine the evidence of any slope movements, such as soil creep, sloughing, subsidence, soil cracking at the slope crest, bulging, or soil heave at the toe of the slope, inspect for erosion of the slope crest, bank, or toe, including evidence of toe erosion due to any natural features at the toe of the slope and to observe potential trace of channelized stormwater flow and evidence of groundwater seeps/springs.

This report presents the results of the visual investigation performed in accordance with the

general terms of reference outline above.

## 1. Brief Site Description

The subject site is located at the former CFB Rockcliffe property in the City of Ottawa. The former CFB Rockcliffe property is approximately 310 acres; bounded by Aviation Parkway to the west, Sir George Etienne Cartier Parkway to the North, the National Research Council of Canada campus to the east, and existing residential communities and Montfort Hospital to the south. It is bounded by two bedrock escarpments situated at the south and north boundaries. The Rockcliffe Airport is also located in the vicinity of the site, just north of Sir George Etienne Cartier Parkway.

The Phase 4, Block 5 and Block 6 lands are situated north of Hemlock Road, west of Oshedinaa Street. The two blocks have been divided by a proposed Street No.1 ending with a Cul-De-Sac and located at west of Oshedinaa Street between block 5 and block 6 (refer grading plan, sheet number C-200, issue 1 and issue 3, respectively dated 2024/03/22 and 2024/03/04).

Given the topography features across the property, **Terrapex** assumes that significant regrading and earthworks will likely be required and/or have been previously completed during construction.

## 2. Visual Slope Inspection

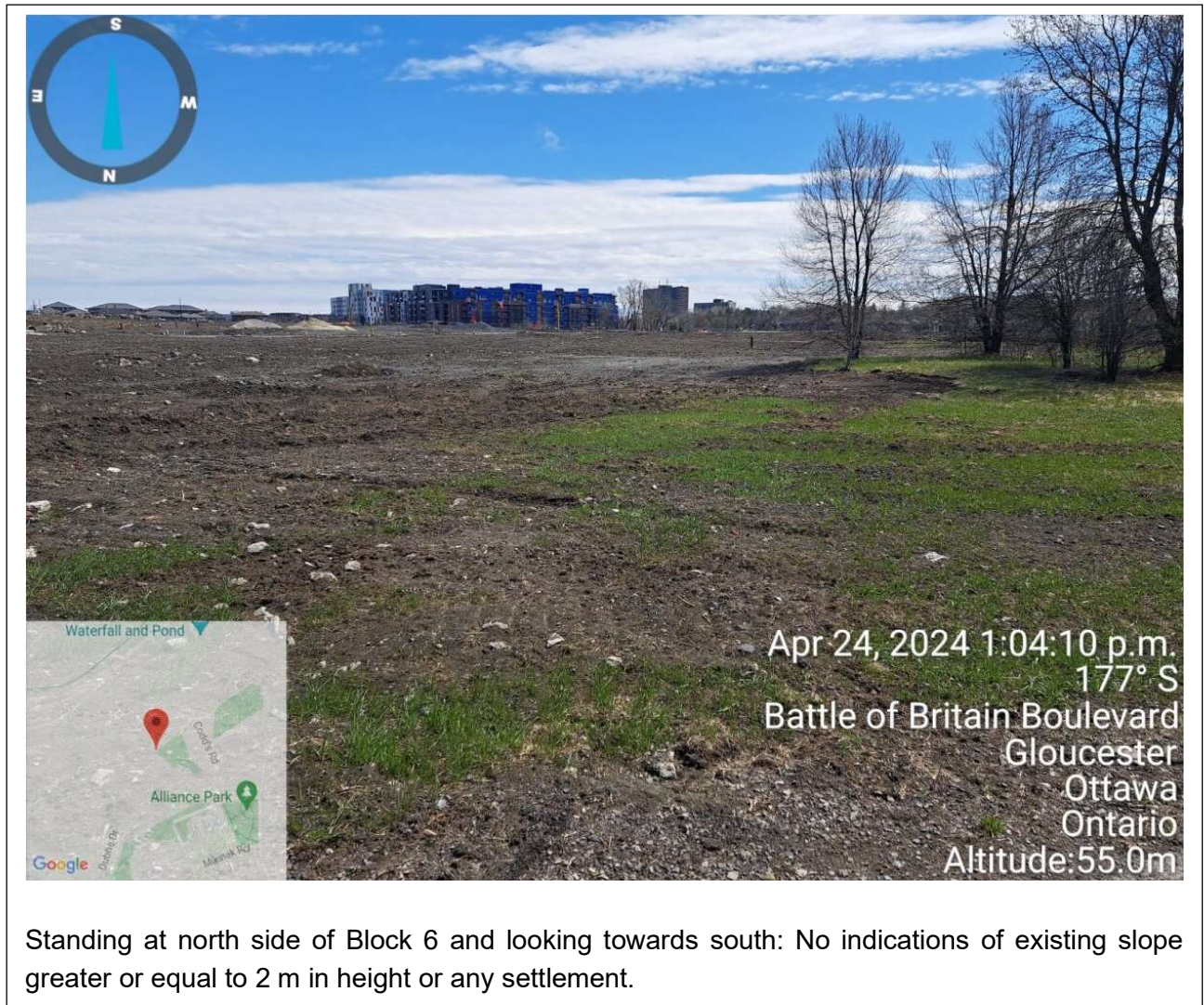
A visual slope inspection of the subject northern portion of Hemlock Rd between block 5 and block 6 was conducted by a Senior Geotechnical Engineer from this office on April 24, 2024. General information pertinent to the existing slope features such as wherever a site has slopes (existing or proposed) steeper than 5 horizontal to 1 vertical (1.e., 11-degree inclination from horizontal) and/or more than 2 meters in height was observed to be insignificant. Comparing the proposed grading plan with the existing grade, the difference of grade surrounding block 5 towards block 6 varies between 0.05 m and 1.05 m in elevation. Grading plans for the two blocks are shown on drawings attached in Appendix A.

Given the subsurface conditions at site, we observed the followings:

- Hemlock Rd, Oshedinaa Street and Proposed "Street No.1" were already paved.
- The proposed development service lines were already installed such as municipal water supply, storm, and sanitary sewers.
- The proposed grading plans for Block 5 and Block 6 includes limited slopes with steepness of 3H:1V, or milder.
- Block 5 and Block 6 were identified to have some clearing and grubbing completed.
- No evidence of channelized stormwater flow and/or evidence of groundwater seeps/springs were observed.
- No signs of erosion or evidence of existing slope was observed during the site visit within block 5 and Block 6.

- Stockpiles of mixed vegetation, topsoil, rootlets, debris, and ponding water were observed at southwest area of Block 5.
- A pile of concrete block pieces was observed at southeast of Block 5.

The photographs below depict the general conditions of the site.

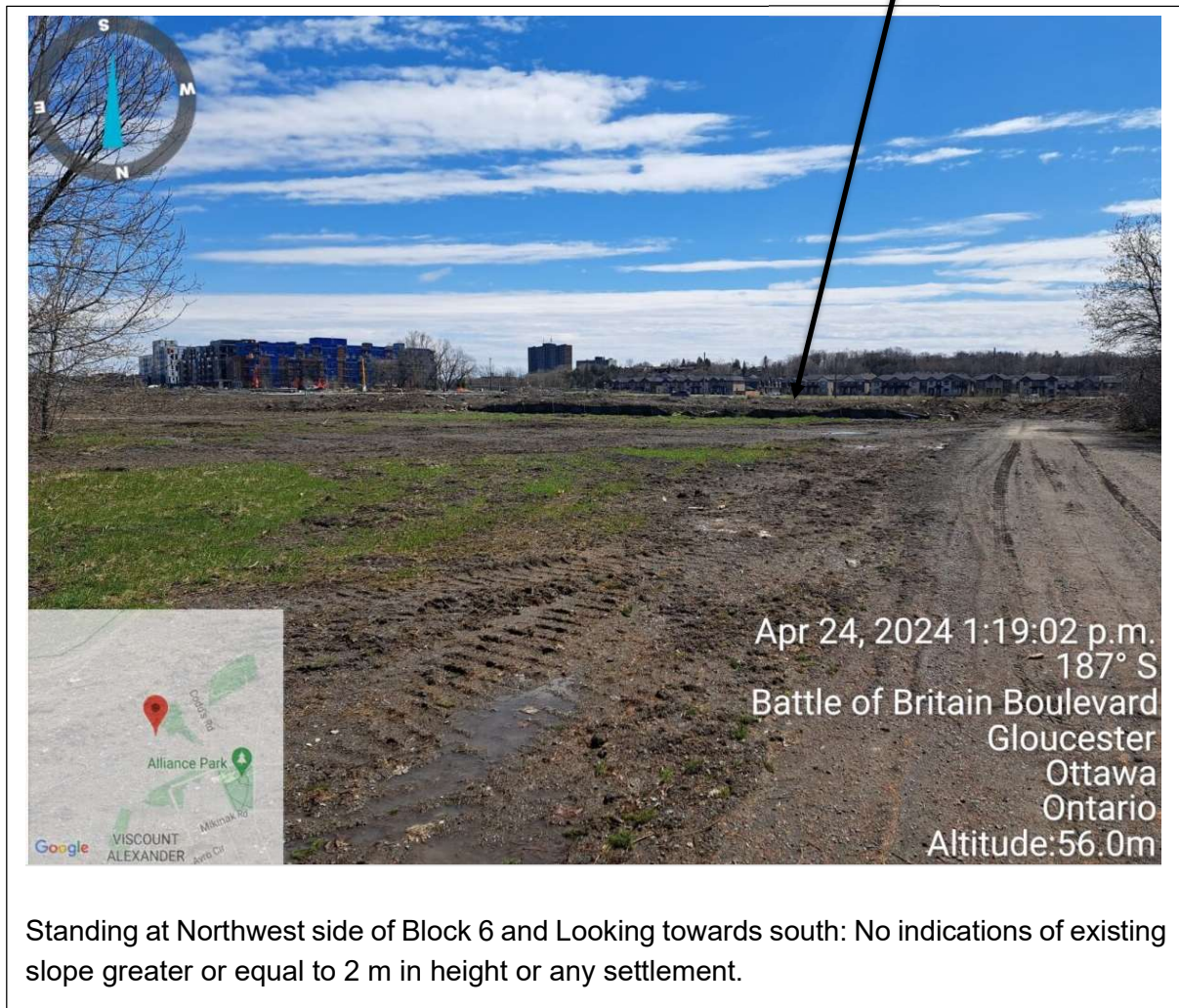


Standing at north side of Block 6 and looking towards south: No indications of existing slope greater or equal to 2 m in height or any settlement.



Standing at west side of Block 6 and looking towards East: No indications of existing slope greater or equal to 2 m in height or any settlement.

Proposed **Street No.1**  
Ref. Sheet number C-200, issue 1.

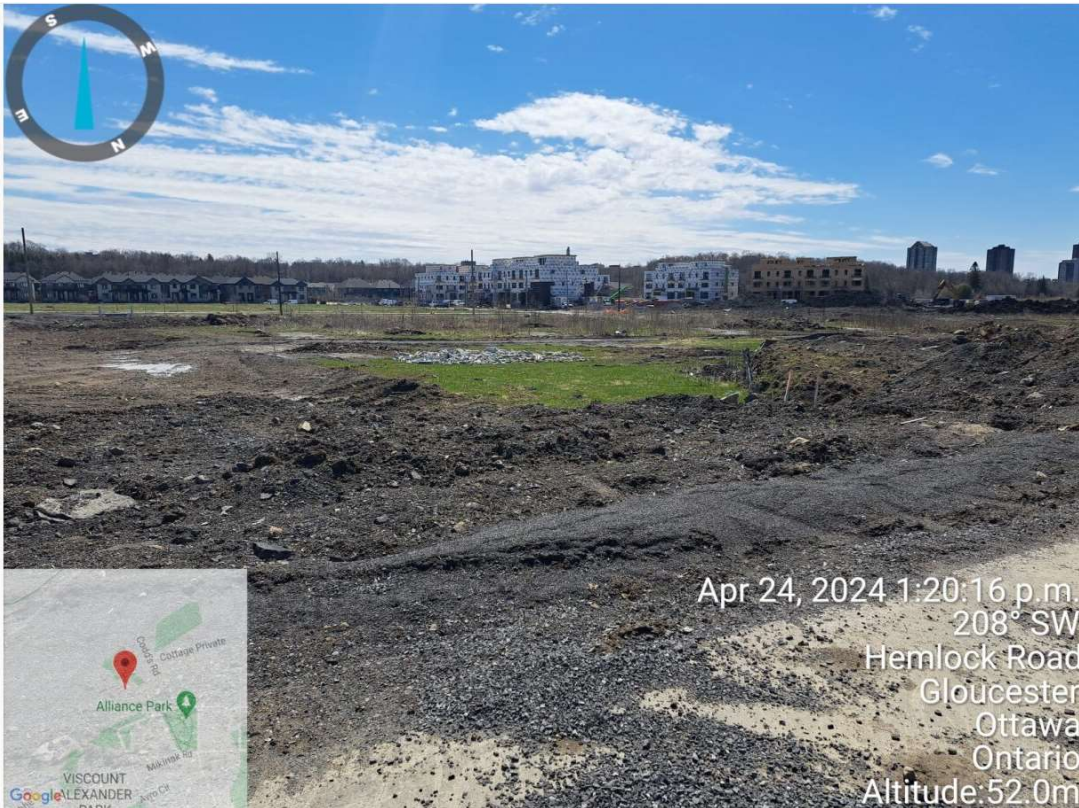




Standing at southeast side of **Street No.1** and Looking towards northwest of **Block 6**: No indications of existing slope greater or equal to 2 m in height or any settlement.



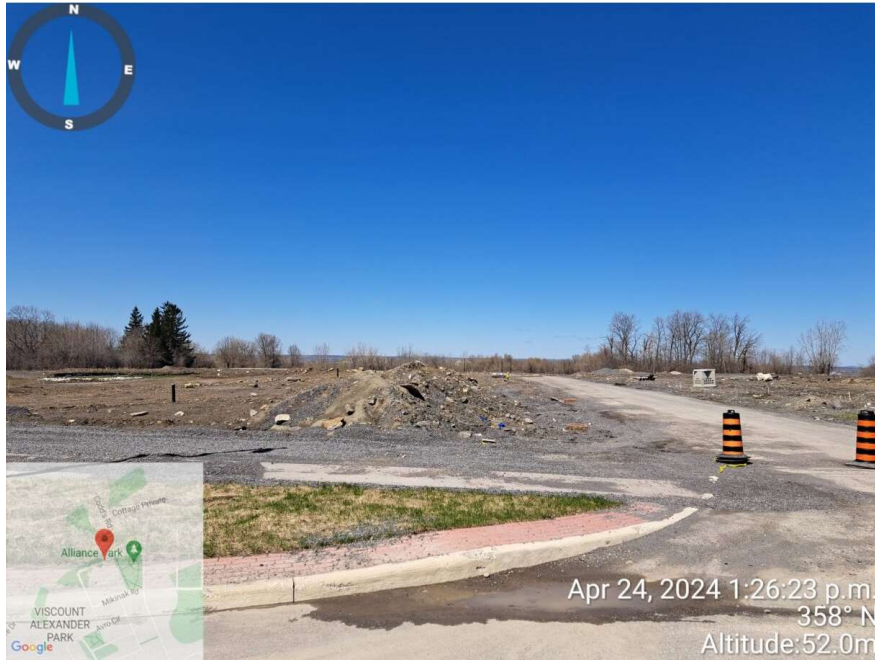
Standing at northside of **Street No.1** and looking towards south of **Block 5**: No indications of existing slope greater or equal to 2 m in height or any settlement.



Standing at northeast side of **Street No.1** and looking towards southwest of **Block 5**: No indications of existing slope greater or equal to 2 m in height or any settlement. Presence of vegetation such as grasses and small trees.



Standing at northwest side of **Street No.1** and looking towards southeast of **Block 5**: No indications of existing slope greater or equal to 2 m in height or any settlement. Presence of a pile of concrete block pieces.



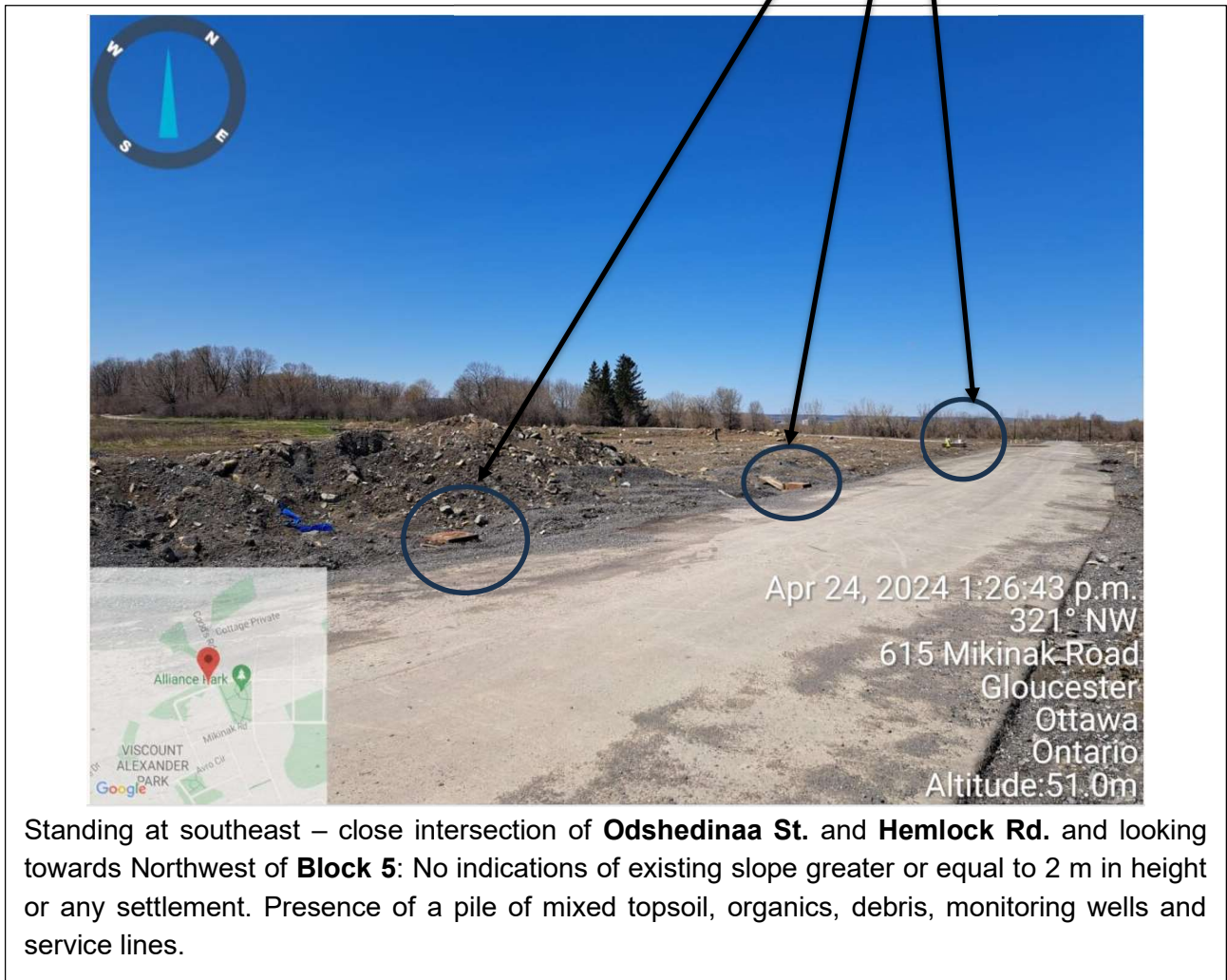
Standing at southside of **Hemlock Rd.** and looking towards North of **Block 5**: No indications of existing slope greater or equal to 2 m in height or any settlement. Presence of a pile of mixed topsoil, organics, debris, monitoring wells and service lines.



Standing at northeast side of **Oshedinaa St.** and looking towards southwest of **Block 6 and Block 5**: No indications of existing slope greater or equal to 2 m in height or any settlement. Presence of service lines, monitoring wells, etc.



Service lines along **Oshedinaa Street**



Our inspection of the existing slope did not reveal any signs of existing slope at the northern portion of Block 6 and within Block 5 and Block 6. Beyond the roads, Hemlock Rd, Oshedinaa St. and “Street No.1” the clearing and grubbing of the two block areas appeared to be relatively flat based on earthworks previously completed. The grading plan for this area is shown on the grading plan, sheet number C200 -Issue 1 attached in Appendix B. Limited grading is proposed for both Block 5 and Block 6, with a steepness of 3H:1V.

Based on the observations made at the site, as well as the review of the proposed grading plan, it is our opinion that slope stability is not a concern for the site topography and the grading plans within Block 5 and Block 6.

**Terrapex** hereby authorizes Rohit Communities Ontario Inc. to rely on the report listed above, to the same extent and with such effect, and subject to the same limitations as the party for whom the report was prepared. Please be advised that the findings and conclusions presented in the report pertain strictly to conditions at the time at which the work was completed by **Terrapex**. Please also note that the report is intended to be used in its entirety and no excerpts may be taken as representative of the findings.

Should you have any questions regarding this letter, please do not hesitate to contact our office.

Yours very truly,

**TERRAPEX ENVIRONMENTAL LTD.**



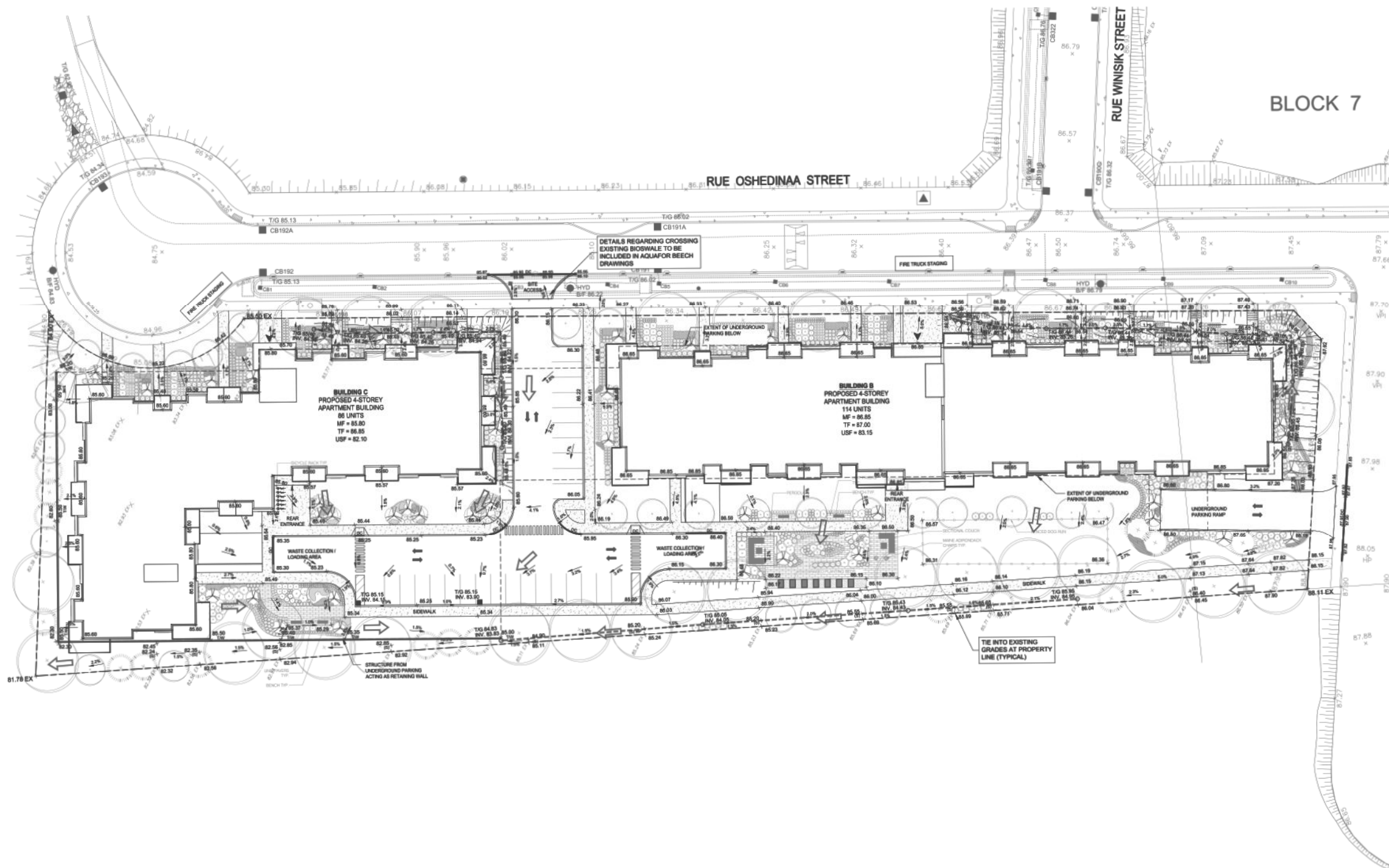
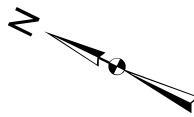
Yacouba Doro, MBA, PMP®, P.Eng.  
Senior Geotechnical Project Manager

A handwritten signature in black ink that reads "Meysam Najari".

Meysam Najari, Ph.D. P.Eng.  
Vice President, Geotechnical Services

cc : Appendix-A  
Appendix-B

# APPENDIX A



**LEGEND**

0 10 20 30  
Metres

DATA SOURCE: SITE PLAN PROVIDED BY CLIENT  
MAP PROJECTION: NAD 1983 UTM ZONE 18N

CLIENT:  
**ROHIT**

SITE LOCATION:  
NORTH OF HEMLOCK ROAD AND WEST OF CODD'S ROAD  
OTTAWA, ONTARIO

**TERRAPEX**

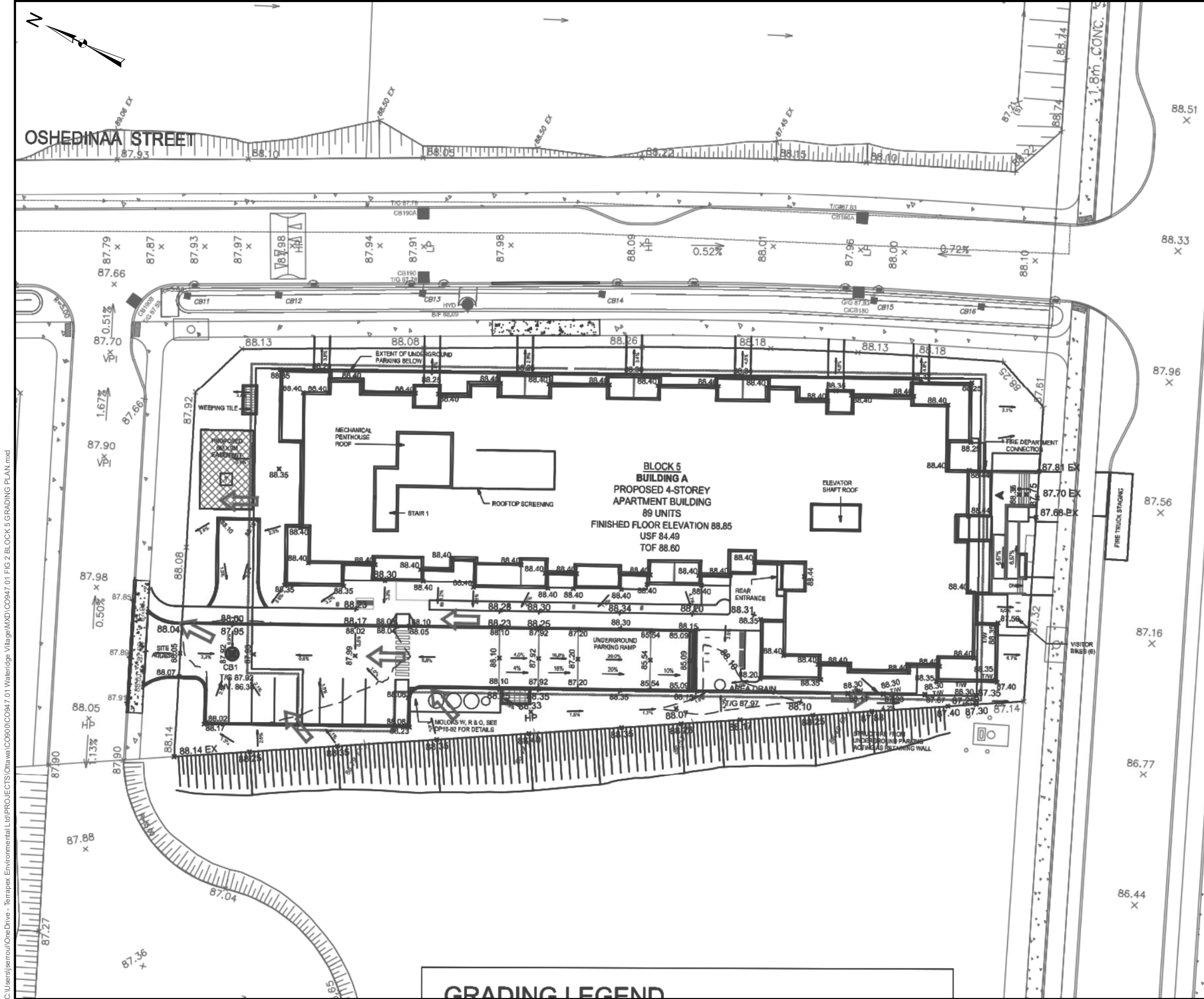
TITLE:  
**BLOCK 6 - GRADING PLAN**

DRAWN BY: JS	PROJECT NO.: CO947.01	CHECKED BY: YD
REVISION: 00	DATE: APRIL 2024	FIGURE: <b>1</b>

**GRADING LEGEND**

- $\times$  104.62 PROPOSED SPOT GRADE
- 104.60  $\times$  103.58  $\times$  LOT CORNER GRADE C/W EXISTING GRADE
- 1.2% SLOPE C/W FLOW DIRECTION
- $\leftarrow$  MAJOR OVERLAND FLOW ROUTE

C:\Users\jseirrou\OneDrive - Terrapex Environmental Ltd\PROJECTS\Ottawa\CO900\CO947.01 FIG 1 BLOCK 6.mxd



**LEGEND**

0 5 10 15 20  
Metres

DATA SOURCE: SITE PLAN PROVIDED BY CLIENT  
 MAP PROJECTION: NAD 1983 UTM ZONE 18N

CLIENT: ROHIT

SITE LOCATION: NORTH OF HEMLOCK ROAD AND WEST OF CODD'S ROAD  
 OTTAWA, ONTARIO

**TERRAPEX**

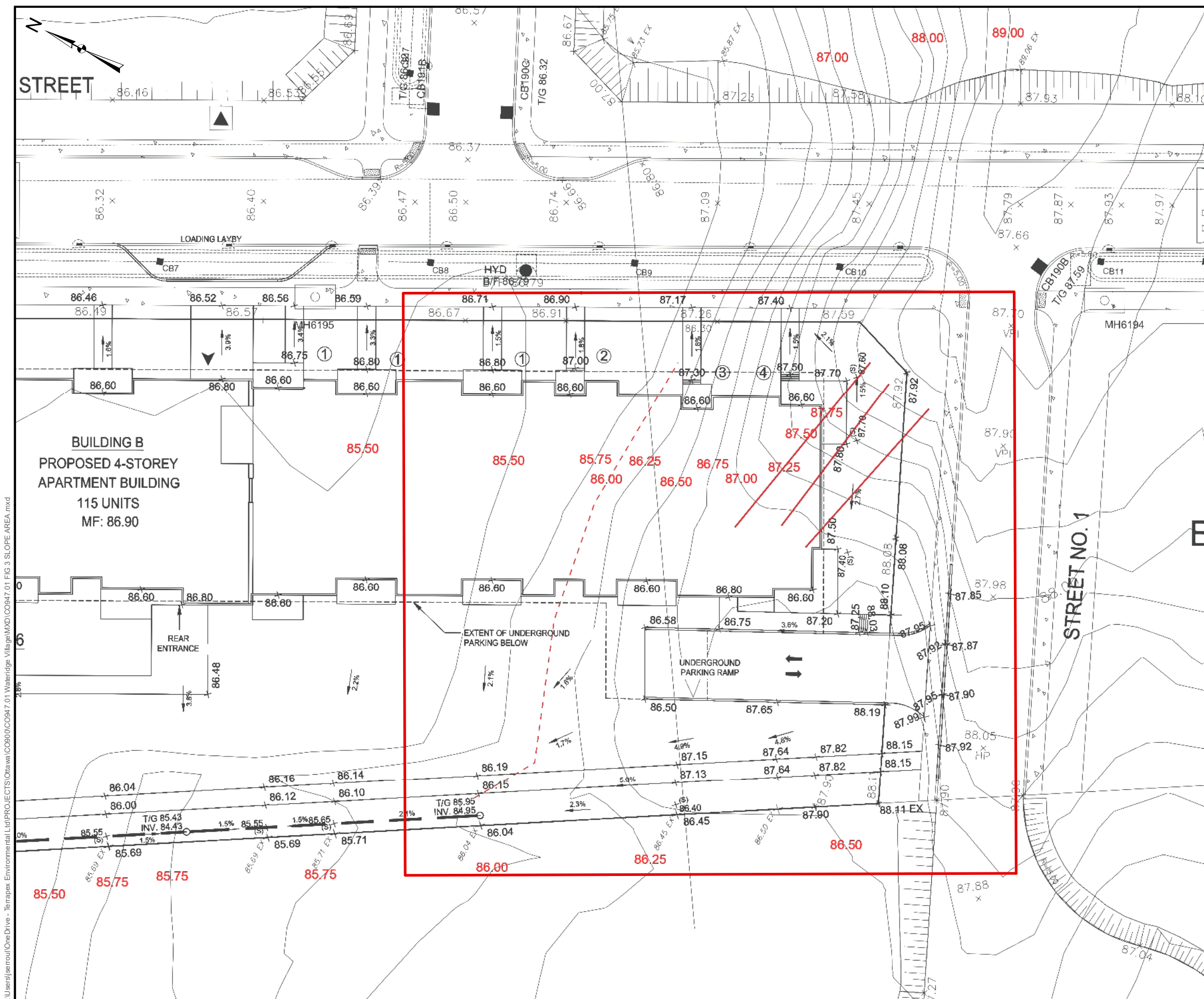
TITLE: **BLOCK 5 - GRADING PLAN**

DRAWN BY: JS	PROJECT NO.: CO947.01	CHECKED BY: YD
REVISION: 00	DATE: APRIL 2024	FIGURE: <b>2</b>

C:\Users\jseirrou\OneDrive - Terrapex Environmental Ltd\PROJECTS\Ottawa\CO947.01\Wateridge Village\MXD\CO947.01 FIG 2 BLOCK 5 GRADING PLAN.mxd

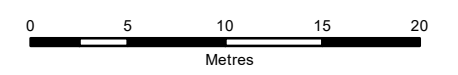
**GRADING LEGEND**

# APPENDIX B



**LEGEND**

STUDY AREA



DATA SOURCE: SITE PLAN PROVIDED BY CLIENT  
 MAP PROJECTION: NAD 1983 UTM ZONE 18N

CLIENT:  
**ROHIT**

SITE LOCATION:  
 NORTH OF HEMLOCK ROAD AND WEST OF CODD'S ROAD  
 OTTAWA, ONTARIO



TITLE:  
**BLOCK 6 - GRADING PLAN**

DRAWN BY: JS	PROJECT NO.: CO947.01	CHECKED BY: YD
REVISION: 00	DATE: MAY 2024	FIGURE: <b>3</b>

C:\Users\jennrou\OneDrive - Terrapex Environmental Ltd\PROJECTS\Ottawa\CO900\CO947.01 Wateridge Village\MXD\CO947.01 FIG 3 SLOPE AREA.mxd