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SOLUTIONS

Valecraft Homes Ltd.
1455 Youville Drive, Suite 210
Orleans, Ontario, K1C 6Z7

June 9th, 2020

Attn: Danny Page, Manager of Planning and Land Development – Valecraft Homes

RE: Valecraft Kanata North Development (1020 and 1070 March Road)
Combined Environmental Impact Statement & Tree Conservation Report – Addendum #2

1.0 BACKGROUND AND PURPOSE

McKinley Environmental Solutions (MES) was previously retained by Valecraft Homes (Valecraft) to prepare the *Combined Environmental Impact Statement and Tree Conservation Report – Valecraft Kanata North Development (1020 & 1070 March Road)* (dated April 2019) (MES 2019a). MES also prepared the *Combined Environmental Impact Statement and Tree Conservation Report – Valecraft Kanata North Development (1020 & 1070 March Road) Addendum #1* (dated July 2019) (MES 2019b). MES (2019a) and MES (2019b) were prepared to support the proposed development of the Northeast Quadrant of the Kanata North Urban Expansion Area (KNUEA), which includes the properties at 1020 and 1070 March Road, Ottawa, Ontario (the Site) (Figure 1). The Site is approximately 47.8 ha in size. The Site and the proposed development are described in further detail in MES (2019a) and MES (2019b).

Since completion of MES (2019a) and MES (2019b), additional design details have been developed. The additional design details, which are described below, have been developed in response to comments received from the City of Ottawa and the Mississippi Valley Conservation Authority (MVCA). As noted below, design elements have also been refined through the Ontario Endangered Species Act (ESA) review process, in consultation with the Ministry of Environment, Conservation, and Parks (MECP). The purpose of this letter is to provide an update to the previously completed Combined EIS and TCR (MES 2019a) and the Combined EIS and TCR Addendum #1 (MES 2019b). This letter serves as Addendum #2 to the Combined EIS and TCR. This letter report is intended to be read in conjunction with MES (2019a) and MES (2019b). Refer to MES (2019a) and MES (2019b) for further details regarding the proposed development, the presence of natural heritage features, potential impacts on natural heritage features, and recommended mitigation measures. For brevity, all methods, results, natural

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mckinleyenvironmental@gmail.com

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heritage features, mitigation requirements, and recommendations which were previously addressed in MES (2019a) and MES (2019b) are not discussed in this letter. Refer to MES (2019a) and MES (2019b) for any additional information not discussed in this Addendum #2.



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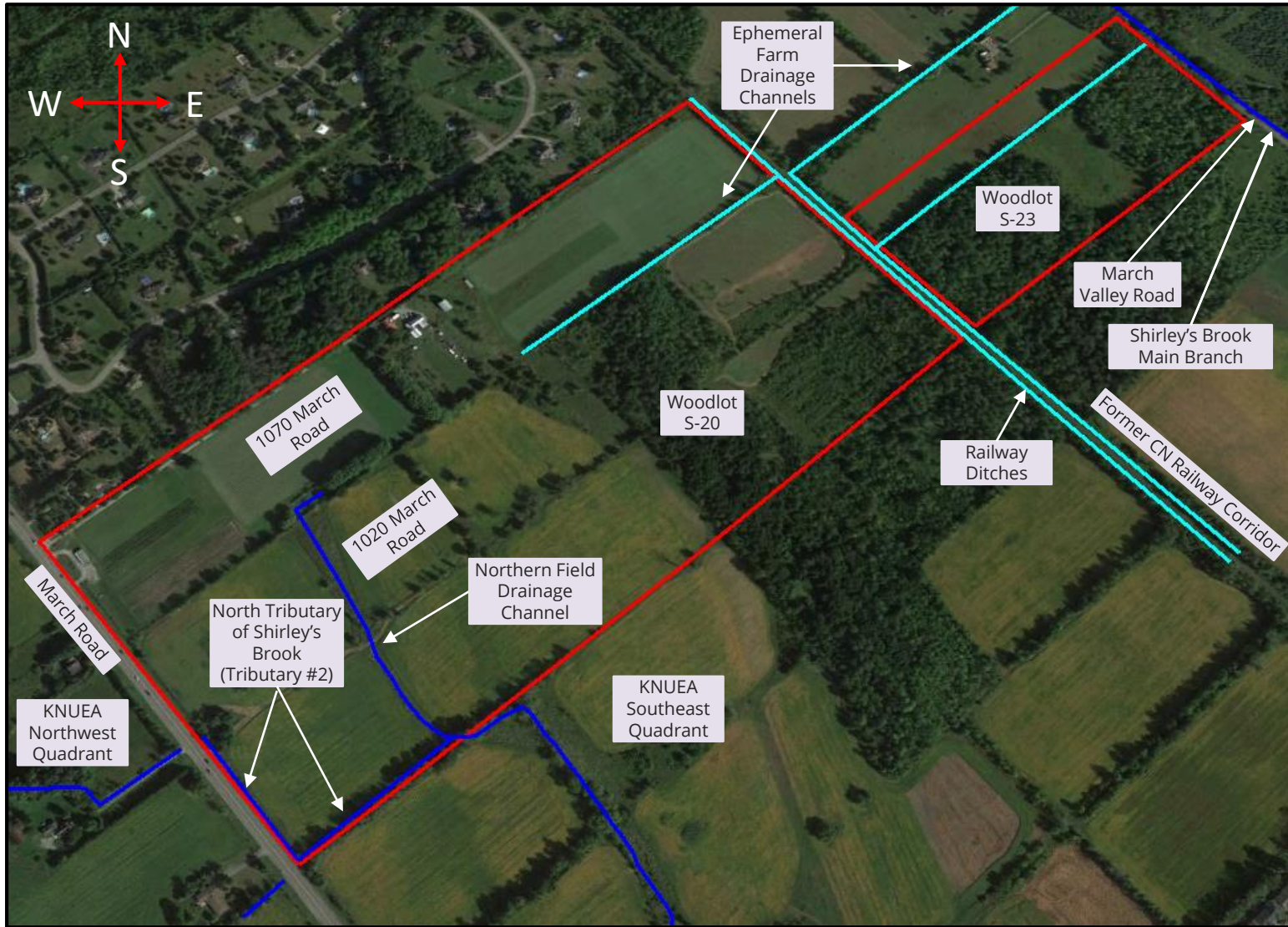
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FIGURE 1: SITE OVERVIEW

Valecraft Kanata North Development (1020 & 1070 March Road)
Combined EIS and TCR Addendum #2



 - Site Boundary

Please Note: This is not a legal land survey. All dimensions and locations are shown as approximate.

2.0 DRAFT PLAN OF SUBDIVISION

The updated Draft Plan of Subdivision is included below. There have been no significant changes to the development limits shown in the Draft Plan of Subdivision, compared to the earlier versions of the plan that were presented and discussed in MES (2019a) and MES (2019b). Although the revised Draft Plan of Subdivision includes minor changes to the development layout and development features, none of these changes substantially impact the limits of the retained natural areas. Notably, the limits of the minimum 40 m wide North Tributary corridor, and the retained portion of Woodlot S-23, remain unchanged. As such, the changes made to the Draft Plan of Subdivision do not substantially affect the analysis of potential natural heritage impacts, mitigation measures, and/or regulatory requirements, as presented in MES (2019a) and MES (2019b). Changes associated with the Stormwater Management Pond design are discussed below.



3.0 STORMWATER MANAGEMENT POND SHAPE AND WOODLOT S-23

The Combined Environmental Impact Statement (EIS) and Tree Conservation Report (TCR) (MES 2019a) and the Combined EIS and TCR Addendum #1 (MES 2019b) were supported by the submission of the *Woodlot S-23 Large Tree Inventory – Minto Communities and Valecraft Homes Kanata North Developments* (the Large Tree Inventory). The Large Tree Inventory was prepared in June 2019 and was submitted to the City of Ottawa under separate cover (e.g. separate from the Combined EIS and TCR). The Large Tree Inventory was prepared and submitted under separate cover from the Combined EIS and TCR, due to the fact that the memo was prepared to evaluate the entirety of Woodlot S-23, including the lands owned by both Minto Communities and Valecraft Homes (e.g. addressing both developments).

The Kanata North Urban Expansion Area (KNUEA) Community Design Plan (CDP) and Environmental Management Plan (EMP) identified that a new Stormwater Management (SWM) Pond would be constructed east of the Former CN Railway Corridor in order to provide SWM servicing for both the KNUEA Northeast and Southeast Quadrants (this includes the developments proposed by Minto Communities, 2559688 Ontario Inc., and Valecraft Homes) (Novatech 2016a; Novatech 2016b). The KNUEA CDP and EMP stated that *“The eastern portion of Woodlot S-23 (referred to in the KNUEA EMP as the ‘northeast forest’) is the recommended location of the SWM Pond that will service the lands east of March Road. The remaining areas of Woodlot S-23 will be retained and conveyed to the City once the detailed design of the SWM Pond has been confirmed.”*

Since completion of the June 2019 version of the Large Tree Inventory, the design of the SWM Pond has been refined, and the area of tree retention has been expanded. As a result, the Large Tree Inventory was updated in April 2020 (MES 2020). The updated Large Tree Inventory has been submitted to the City of Ottawa concurrently with this Addendum #2 letter. The June 2019 version of the Large Tree Inventory previously noted that approximately 58% of the healthy large trees within Woodlot S-23 would be retained. The revised limits of the SWM Pond have resulted in an expansion of the area of tree retention. As discussed in MES (2020), the revised SWM Pond shape is such that it is anticipated that approximately 85% of the healthy large trees will be retained. The revised limits of the SWM Pond will result in the retention of approximately forty four (44) healthy large trees within the retained area of Woodlot S-23. The total size of the retained area of Woodlot S-23 is approximately 6.1 hectares, including the lands owned by both Minto Communities and Valecraft Homes. Therefore, the post-development density of healthy large trees within the retained portion of Woodlot S-23 will be approximately 7.2 healthy large trees per hectare. Further detail is provided in the revised Large Tree Inventory (Refer to MES 2020).

In addition to providing a survey of the large trees within Woodlot S-23, the Large Tree Inventory also included tree retention and mitigation measures which have been updated specifically to address Woodlot S-23. With regards to potential hydrological impacts on the retained portion of Woodlot S-23, it should be noted that the 100 year water level of the new SWM Pond is lower than the existing grade within Woodlot S-23. This will allow surface drainage from the woodlot to be maintained, with surface runoff draining into the new SWM Pond. As such, future ponding within the retained portion of Woodlot S-23 is unlikely to be a significant concern.



4.0 WOODLOT S-23 PATHWAY

The Kanata North Urban Expansion Area (KNUEA) Community Design Plan (CDP) and Environmental Management Plan (EMP) showed a conceptual layout for the pathway surrounding Woodlot S-23 (Novatech 2016a; Novatech 2016b). Conceptually, the pathway was shown to be aligned primarily around the outside edges of the retained portion of Woodlot S-23 (e.g. adjacent to the northern and eastern sides of the retained forest). However, a portion of the pathway was also shown to pass through the northwest corner of the retained area. The conceptual pathway alignment shown in the KNUEA CDP and EMP was developed before completion of the Butternut Health Assessment, and hence did not take into consideration the presence of Butternut Trees. In order to minimize potential impacts to Butternut Trees and the potential need for tree removal, it is recommended that the pathway alignment should be modified so that the portion that was shown to pass through the retained area of Woodlot S-23 will instead pass around its perimeter (e.g. adjacent to the northern and eastern sides of the retained forest). This is a minor change to the pathway alignment, as the majority of the pathway's length was already shown to be outside of the retained area of Woodlot S-23. Installation of the pathway around the edges of the retained area of Woodlot S-23 will avoid any significant impacts to the Butternut Trees and will also avoid the need for any additional tree removal.

5.0 ENDANGERED SPECIES ACT PERMITTING PROCESS UPDATE

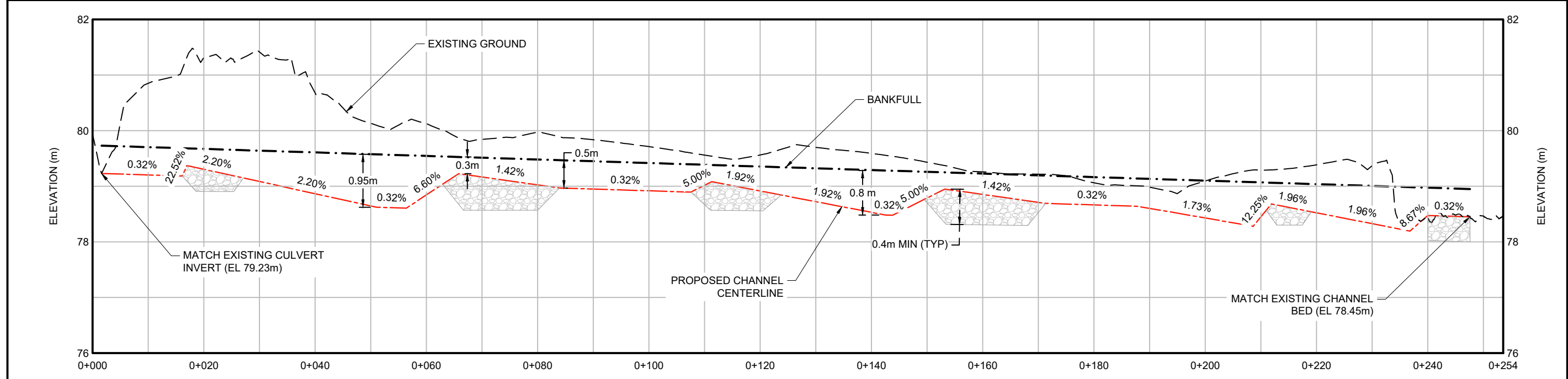
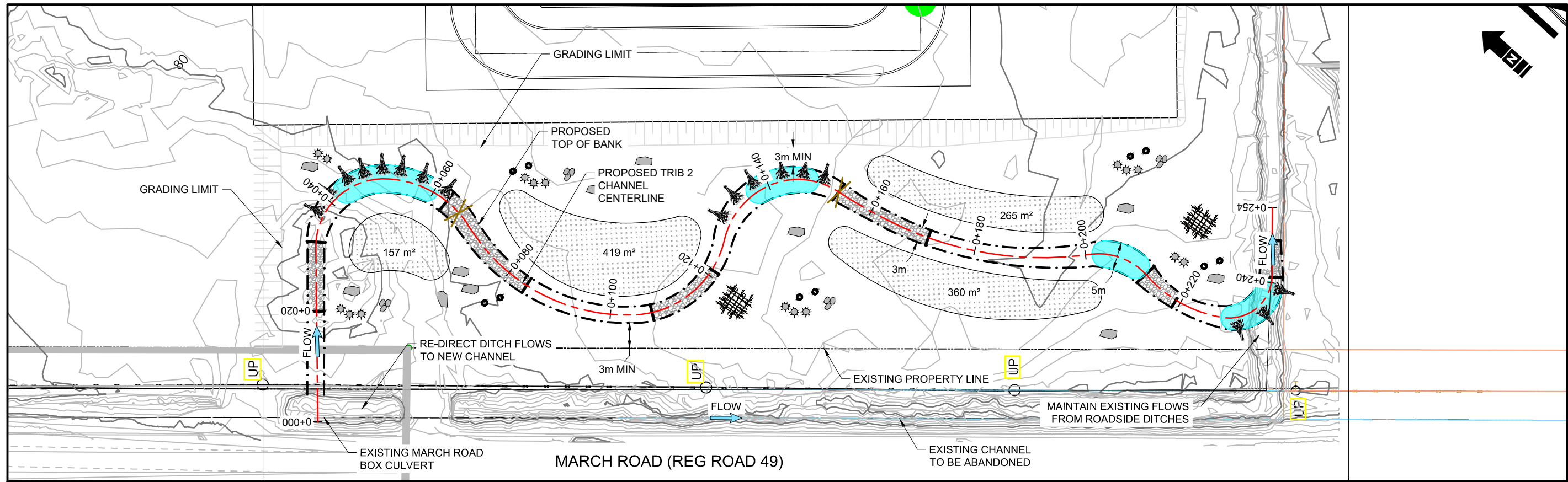
MES (2019a) and MES (2019b) noted that an Overall Benefit Permit under the Ontario Endangered Species Act (ESA) would be required in order to support the development of the Site. The Overall Benefit Permit is required due to the presence of Blanding’s Turtle (threatened) habitat, Butternut Trees (endangered), and Butternut habitat. The application for an Overall Benefit Permit under the Ontario ESA was underway at the time of writing. At the time of writing, the Ministry of Environment, Conservation, and Parks (MECP) had reviewed and accepted the Information Gathering Form, the Alternatives Assessment Form, and the CPAF form (the CPAF form review was concluded in May 2020). The acceptance of the CPAF form concludes the technical review phase of the Overall Benefit Permit application. At the time of writing, the Overall Benefit Permit application was proceeding towards the public posting stage. As discussed below, the North Tributary Realignment Concept Plan, and the sketch of the proposed Blanding’s Turtle exclusion fencing, have been developed/refined in consultation with the MECP.



6.0 NORTH TRIBUTARY REALIGNMENT CONCEPT PLAN UPDATE

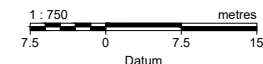
As discussed in the Combined Environmental Impact Statement (EIS) and Tree Conservation Report (TCR) (MES 2019a), the Kanata North Urban Expansion Area (KNUEA) Environmental Management Plan (EMP) establishes a minimum 40 m wide corridor of retained and/or enhanced habitat around the tributaries of Shirley's Brook (Novatech 2016b). Within the Site, the 40 m wide corridor was identified to retain the North Tributary (Tributary #2) in the southwest corner of the Site. Block 311 has been designated in order to accommodate the minimum 40 m wide corridor surrounding the North Tributary. The KNUEA EMP also identifies that during development of the Site, the section of the North Tributary which flows within the roadside ditch of March Road is to be realigned approximately 20 m east of March Road (Novatech 2016b). As discussed in the Combined EIS and TCR, realignment of the North Tributary away from March Road is anticipated to help restore the habitat functionality of that section of the watercourse by reducing the impacts of siltation, salt, noise, and other disturbance associated with the road. During the realignment process, habitat enhancement and restoration works will also be undertaken to provide additional ecological benefit (MES 2019a). The realignment of the North Tributary and the planned habitat enhancement activities are anticipated to result in a net improvement in the quality and size of Category 2 Blanding's Turtle habitat. In addition, the habitat enhancement/restoration features will also improve the quality of aquatic habitat for other organisms, including amphibians and fish (Refer to MES 2019a for additional detail).

Since completion of MES (2019a) and MES (2019b), the North Tributary Realignment Concept Plan has been developed in order to support the Ontario Endangered Species Act Overall Benefit Permit approval process. The North Tributary Realignment Concept Plan shows the anticipated size and location of the realigned channel and the habitat enhancement features (see below). As described in MES (2019a), the habitat enhancement features that were proposed to be installed within the 40 m wide North Tributary watercourse corridor included two (2) Shallow Pans/Shallow Pools and four (4) Deep Channel Pockets. The total size of the Shallow Pans / Shallow Pools will be approximately 1200 m². The total size of the Deep Channel Pockets will be approximately 230 m². Refer to MES (2019a) for a more detailed description of the proposed habitat enhancement features. Following obtainment of the Overall Benefit Permit, the proponent will provide a detailed design for the realignment of the North Tributary, which will include the habitat enhancement features outlined above. The detailed design will add additional detail to the North Tributary Realignment Concept Plan. This will include grading details, elevations, landscaping features, and vegetation species to be planted. The detailed design plan will be submitted to the Ministry of Environment, Conservation, and Parks (MECP) for review and approval prior to the realignment of the North Tributary and the installation of the habitat enhancement features.



- LEGEND**
- RIFFLE
 - SHALLOW PAN
 - BRUSH PILE
 - WOOD DEBRIS TREATMENT
 - POOL/DEEP CHANNEL POCKETS
 - NATURAL HABITAT FEATURES (LOGS, STUMPS, BOULDERS)
 - BANKFULL CHANNEL
 - CHANNEL CENTERLINE

FOR REVIEW



Note: Figure(s) must be used in conjunction with the attached report and is subject to the limitations and conditions stated in the report.



JG RIVARD
1020 MARCH ROAD TRIB 2

PLAN AND PROFILE

Date:	APRIL 2020	Project:	30893	Submitter:	M.WOJDA	Reviewer:	P.CAMPBELL
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Disclaimer: The information contained herein may be compiled from numerous third party materials that are subject to periodic change without prior notification. While every effort has been made by Matrix Solutions Inc. to ensure the accuracy of the information presented at the time of publication, Matrix Solutions Inc. assumes no liability for any errors, omissions, or inaccuracies in the third party material.

7.0 BLANDING’S TURTLE EXCLUSION FENCING UPDATE

Section 4.4.4 of the Combined Environmental Impact Statement (EIS) and Tree Conservation Report (TCR) included a Fence Sketch showing the anticipated Blanding’s Turtle exclusion fencing locations (MES 2019a). The Fence Sketch has since been refined as a result of comments received from the Ministry of Environment, Conservation, and Parks (MECP) during the Ontario Endangered Species Act (ESA) review process. The revised Fence Sketch is included below. As shown in the revised Fence Sketch, the arrangement of the Blanding’s Turtle exclusion fencing has been revised so that the fencing will now be located between the edge of the 40 m wide watercourse corridor and the 6 m wide recreational pathway (e.g. not enclosing the pathway). This revision will allow access to the pathway without requiring openings in the Blanding’s Turtle exclusion fence.

As previously described in MES (2019a), it should be noted that the detailed configuration of the fencing, including the materials to be used, will be determined at the detailed design stage. It is anticipated that the Overall Benefit Permit will identify the need for the fencing, its general location (as shown in the Fence Sketch), and also a list of potential fencing materials that can be used. The Overall Benefit Permit is anticipated to include a clause requiring a detailed design to be submitted prior to the construction of the permanent fence. Conceptually, Valecraft Homes has proposed that the permanent fencing that will separate the 40 m wide North Tributary corridor from the adjacent 6 m wide recreational pathway will consist of a post and rail fence with an ultra-fine mesh. This fence will be required to be 60 cm tall, in order to meet MECP requirements. It is anticipated that a fence that is approximately 60 cm tall will not represent a safety issue for residents, as residents could step over the fencing in an emergency. However, the specific configuration and fencing materials will be confirmed at the detailed design stage, and will take into consideration any grading and/or drainage constraints, including the need to accommodate overland stormwater flow. The final fencing configuration will be consistent with the MECP’s fencing guidance documents, which include a list of materials/fence configurations that minimize the risks of wildlife entanglement and entrapment. In terms of maintenance, it is anticipated that the Overall Benefit Permit will require the proponent to maintain the fence for a minimum of fifteen (15) years.

**DRAFT PLAN OF SUBDIVISION OF
PART OF LOT 13
CONCESSION 4**
Geographic Township of March
CITY OF OTTAWA

Prepared by Annis, O'Sullivan, Vollebek Ltd.

Scale 1 : 1000

Metric
DISTANCES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048

SURVEYOR'S CERTIFICATE

I CERTIFY THAT:
The boundaries of the lands to be subdivided and their relationship to adjoining lands have been accurately and correctly shown.

Date _____
André Roy
ONTARIO LAND SURVEYOR

LEGEND

- NUMBER OF 10.70 (35 FOOT) UNITS = 194
- NUMBER OF 15.45 (44 FOOT) UNITS = 103
- NUMBER OF TOWNHOUSE UNITS = 319
- HIGH DENSITY
- COMMERCIAL / MIXED USE
- INSTITUTIONAL
- PARK / OPEN SPACE

OWNER'S CERTIFICATE

This is to certify that we are the owners of the lands to be subdivided and that this plan was prepared in accordance with our instructions.

Date _____
Darryl Page, Manager of Planning
Valcraft Homes Ltd.
I have the authority to bind the corporation.

ADDITIONAL INFORMATION REQUIRED UNDER SECTION 51-17 OF THE PLANNING ACT

- (a) see plan
- (b) see plan
- (c) see plan
- (d) single, multi-family residential housing, institutional, commercial / mixed use, park and open space
- (e) see plan
- (f) see plan
- (g) see plan
- (h) City of Ottawa
- (i) see soils report
- (j) see plan
- (k) sanitary, storm sewers, municipal water, bell, hydro, cable and gas to be available
- (l) see plan

NO.	REVISION	SCHEDULE	DATE	BY
10	REVISED COLOR PLAN		MAY, 20, 2020	N
9	REVISED SITE BLOCK 338		MAY, 5, 2020	N
8	REVISIONS		APRIL 28, 2020	N
7	MOVED BLOCK 305		JULY 23, 2019	N
6	REVISIONS		JULY 18, 2019	N
5	REMOVED ST. 8 WITH LOT 16		APRIL 1, 2019	N
4	NEW STREET 8 WITH LOT 16		MAR. 19, 2019	DO
3	REVISIONS FOR ENVIRONMENTAL REVIEW		MAR. 15, 2019	N
2	REVISIONS		MAR. 5, 2019	N
1	PLAN PREPARED		2019	N



Sketch of Temporary and Permanent Blanding's Turtles Fencing Locations (Blue Lines)

8.0 ADDITIONAL MITIGATION MEASURES

In addition to the mitigation measures previously described in MES (2019a) and MES (2019b), the following additional mitigation measures will be implemented during the development of the Site:

- In order to ensure their retention, during construction the retained natural areas will be isolated by sturdy construction fencing or similar barriers at least 1 m in height; and
- Any portions of the retained natural features which are disturbed during construction will be restored by planting locally grown native species.



9.0 OVERALL BENEFIT PERMIT MONITORING PROGRAM SUMMARY

A monitoring program has been proposed as part of the Ontario Endangered Species Act Overall Benefit Permit submission. The monitoring program will consist of five (5) years of post-construction monitoring, which will include monitoring of the new habitat enhancement features within the 40 m wide North Tributary corridor, the realigned North Tributary, and the temporary and permanent Blanding's Turtle exclusion fencing. The monitoring of the temporary and permanent Blanding's Turtle exclusion fencing will consist of road mortality surveys that will be completed on foot and will include surveys of the perimeter of the minimum 40 m wide watercourse corridor, so that the surveys include the entire length of exclusion fencing. Once roads are installed within the subdivision, the surveys will also include any roads that occur adjacent to the exclusion fencing. During each survey, the road surfaces will be searched, as will areas within 50 m of the roads' right of way (on both sides). The survey schedule and frequency of visits will be mandated by the Overall Benefit Permit.

During each survey, any signs of wildlife road mortality will be recorded. During the surveys, the temporary and permanent exclusion fencing will also be inspected to ensure no defects exist in the fencing. Any deficiencies will be reported to the proponent's contractor and repaired promptly. Following each monitoring year, a brief annual report will be produced documenting the monitoring results. The annual reports will include the results of the construction stage monitoring and the post construction monitoring program. The reports will include monitoring dates and methodology, results, Species at Risk sightings, GPS coordinates, and photographs. The reporting requirements for the habitat enhancement and restoration features within the 40 m wide watercourse corridor and the road mortality/Blanding's Turtle exclusion fencing monitoring will be combined to produce a single annual report each year. A full monitoring report will be produced at the end of the five (5) year monitoring period, summarizing the results of the entire monitoring program.

In addition to the monitoring program, it is anticipated that the Overall Benefit Permit will require the proponent to maintain the fence for a minimum of fifteen (15) years.

10.0 CLOSURE

As described above, since completion of the Combined Environmental Impact Statement (EIS) and Tree Conservation Report (TCR) (MES 2019a) and the Combined EIS and TCR Addendum #1 (MES 2019b), additional design details have been developed. The additional design details, which are described above, have been developed in response to comments received from the City of Ottawa and the Mississippi Valley Conservation Authority (MVCA). As noted above, design elements have also been refined through the Ontario Endangered Species Act (ESA) review process, in consultation with the Ministry of Environment, Conservation, and Parks (MECP). The purpose of this letter is to provide an update to the previously completed Combined EIS and TCR (MES 2019a) and the Combined EIS and TCR Addendum #1 (MES 2019b). This letter serves as Addendum #2 to the Combined EIS and TCR. This letter report is intended to be read in conjunction with MES (2019a) and MES (2019b).

Pending that the regulatory, mitigation, and avoidance measures outlined in this letter are implemented appropriately, in addition to those outlined in MES (2019a) and MES (2019b), the development of the Site is not anticipated to have a significant negative effect on the natural features and functions.

We trust that the above information is sufficient; should you have any questions or require further information, please do not hesitate to contact the undersigned, at your convenience.

Sincerely,



Dr. Andrew McKinley, EP, RP Bio.
Senior Biologist, McKinley Environmental Solutions

11.0 REFERENCES

DST Consulting Engineers (DST) (2015) Kanata North Community Design Plan – Blanding's Turtle Habitat Compensation Plan.

McKinley Environmental Solutions (MES) (2019a) Combined Environmental Impact Statement and Tree Conservation Report – Valecraft Kanata North Development (1020 & 1070 March Road).

McKinley Environmental Solutions (MES) (2019b) Combined Environmental Impact Statement and Tree Conservation Report – Valecraft Kanata North Development (1020 & 1070 March Road) – Addendum #1.

McKinley Environmental Solutions (MES) (2020) Woodlot S-23 Large Tree Inventory – Minto Communities and Valecraft Homes Kanata North Developments (Revised).

Novatech Engineering Consultants (Novatech) (2016a) Kanata North Community Design Plan.

Novatech Engineering Consultants (Novatech) (2016b) Kanata North Community Design Plan – Environmental Management Plan.



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