



Environmental Assessments & Approvals

July 19, 2022

AEC21-158

Nottawasaga Valley Conservation Authority
c/o Amy Knapp, Supervisor, Planning Services
8195 8th Line
Utopia, ON L0M 1T0

Re: **Response #1 to NVCA Review of Environmental Impact Study Submission,
Armstrong Estates (Part of Lot 11 Concession 7 East of Hurontario,
Mansfield), Township of Mulmur**

Dear Ms. Knapp:

Azimuth Environmental Consulting, Inc. (Azimuth) has reviewed Natural Heritage and Ecology Comments prepared by the Nottawasaga Valley Conservation Authority (NVCA) with respect to the Environmental Impact Study (EIS) issued for the proposed Armstrong Estates residential subdivision located on Part of Lot 11 Concession 7 East of Hurontario (Mansfield), Township of Mulmur (the "Township").

The responses below are prepared with regard for NVCA comments received by the Township on May 27, 2022 (attached). Responses are prepared below for all received NVCA comments, however it is our understanding that Review Comments - Advisory (Comment #14 through Comment #16) can be addressed at the detailed design stage as they relate to Restoration and Planting Plans, and approvals with Fisheries and Oceans Canada (DFO).

Azimuth Response to NVCA Comment #1

Acknowledged.

Azimuth Response to NVCA Comment #2

Acknowledged.

Azimuth Response to NVCA Comment #3

A top of bank (TOB) development setback of 6 metres (m) has been established in accordance with a TOB staking exercise undertaken by Peto MacCallum Ltd. (PML).



Azimuth understands that although lot lines occur within the 6m TOB setback limit, no grading, structures, or other disturbance will occur within the TOB setback.

Based on preliminary consultation between the proponent and NVCA, it is Azimuth's understanding that although NVCA's Planning and Regulations Guidelines typically require a 15m setback from natural hazard limits and valleyland top of bank, provincial standards require a TOB setback of 6m. NVCA Comment #9 in Pre-consultation Comments issued April 1, 2021 (attached), clarifies that NVCA may consider a reduced TOB allowance to the minimum 6m subject to technical review and justification.

In combination with Azimuth's EIS submission, additional discussion related to watercourse, wetland, and valleyland setbacks and proposed Ecological Offsetting are detailed in Comment #4 through Comment #6 below. It is our opinion that with regard for these considerations in an anthropogenic landscape context, a 6m TOB setback is justified from a natural heritage and ecology perspective.

Azimuth Response to NVCA Comment #4

An updated graphic "constraints map" is attached to this response letter, illustrating the following as requested by NVCA.

- a) The delineated extent of direct wetland removals within the MAMM3-1 wetland feature;

As discussed in Azimuth's EIS report, direct wetland removals of 0.046 hectares (ha) are proposed to accommodate the Street "C" crossing through the central portion of the riparian system.

- b) Watercourse limits;

The watercourse limits are illustrated on the constraints map as shown in the EIS report. The watercourse bankful (or, watercourse TOB) is not shown on the constraints map, as the riparian wetland should be understood to be at least as wide as the watercourse bankful and therefore the more constraining feature. As both the watercourse bankful and riparian wetland are subject to a 30m buffer, the maximum constraint area shown from the wetland limits should be considered sufficient for development planning purposes.

- c) Riparian wetland feature and 30m wetland buffer; and,



The riparian wetland feature and 30m wetland buffer is illustrated on the constraints map.

d) Proposed setback from the wetland.

The 30m wetland buffer and proposed encroachment areas within 30m of the wetland limits are illustrated on the constraints map. See additional discussion in Comment#5 below as it relates to Ecological Offsetting where area reduced setback is proposed.

Azimuth Response to NVCA Comment #5

The proponent is proposing to proceed with a reduction to the 30m wetland setback in a manner consistent with NVCA's Net Gains for Ecological Offsetting guidelines. In accordance with the guidelines, it is Azimuth's understanding that the proponent has explored options to revise the development plan in an approach that minimizes potential impacts to wetlands, however minor encroachments into naturalized lands within the 30m wetland buffer will be necessary for the project to remain feasible. As discussed in Azimuth's EIS, it is our opinion that the proposed development would not be expected to negatively impact the overall feature or its ecological function providing an appropriate mitigation program (as outlined in the EIS) is followed by the proponent. With consideration for the above, it is our opinion that the proposed development is consistent with the Mitigation Hierarchy outlined in the guidelines such that the project is a suitable candidate for Ecological Offsetting.

As discussed in the EIS, natural vegetation communities on the property demonstrate substantial influence from adjacent agricultural activities. Row Crop Agriculture (OAGM1(Soy)) areas that comprise the majority of the 30m wetland buffer are of highly limited ecological value due to a lack of natural vegetative cover and routine human disturbance. Section 3.3 of the guidelines states: "*Ratios for replacement of wetlands with a predominant cover of exotic species... may be subject to reduction as determined through consultation... In general, any permitted encroachment into naturally-occurring upland vegetation communities within 30m of a wetland shall be offset at a ratio of 1:1. Other areas, such as 'cultural' settings, within the 30m minimum setback may be subject to same, as determined through consultation.*" Given the heavily anthropogenic ("cultural") character of agricultural lands (OAGM1(Soy)) on the property, it is Azimuth's opinion that it would be inappropriate to include such lands for wetland offsetting consideration within the 30m wetland setback. As such, the attached constraints map shows where proposed lot lines overlap with naturalized upland vegetation communities only within 30m of the wetland limits, labeled as "Development Encroachment into the 30m Wetland Buffer".



The total area of Development Encroachment into the 30m Wetland Buffer is calculated as **0.2977ha**. In accordance with Section 3.3 of the guidelines, areas within 30m of the wetland setback are to be offset at a ratio of 1:1. As such, the proponent proposes that compensation of **0.2977ha** of ecological offsetting by way of cash-in-lieu be considered to sufficiently offset proposed development within 30m of the wetland feature. In accordance with Section 4.2.1 of the guidelines, at a rate of \$120,000/ha, the proposed replacement value for works within the 30m wetland buffer is proposed at **\$35,724.00**.

Azimuth Response to NVCA Comment #6

The proponent is proposing to proceed with direct removal of 0.046ha of wetland to accommodate a watercourse crossing that will connect two nodes of the proposed residential subdivision. In accordance with the guidelines, it is Azimuth's understanding that the proponent has explored options to revise the development plan in an approach that minimizes potential impacts to wetlands, however maintaining and improving the watercourse crossing will be required for the project to remain feasible (including consideration of emergency service response). As discussed in Azimuth's EIS, it is our opinion that the proposed development would not be expected to negatively impact the overall feature or its ecological function providing an appropriate mitigation program (as outlined in the EIS) is followed by the proponent. With consideration for the above, it is our opinion that the proposed development is consistent with the Mitigation Hierarchy outlined in the guidelines such that the project is a suitable candidate for Ecological Offsetting.

The total area comprising direct wetland removals is calculated as **0.046ha**. In accordance with Section 3.3 of the guidelines, direct wetland removals are to be offset at a ratio of 2:1. As such, the proponent proposes that compensation of **0.092ha** of ecological offsetting by way of cash-in-lieu be considered to sufficiently offset proposed vegetation removals within the wetland feature. In accordance with Section 4.2.1 of the guidelines, at a rate of \$120,000/ha, the proposed replacement value for works within the wetland limits is proposed at **\$11,040.00**.

Azimuth Response to NVCA Comment #7

Acknowledged. It is Azimuth's understanding that a Sediment and Erosion Control Plan will be prepared by the proponent at the detailed design stage, and that the proponent acknowledges this will be required as a condition of Draft Plan Approval.



Azimuth Response to NVCA Comment #8

Acknowledged. It is Azimuth's understanding that a Construction Staging Plan will be prepared by the proponent at the detailed design stage, and that the proponent acknowledges this will be required as a condition of Draft Plan Approval.

Azimuth Response to NVCA Comment #9

Acknowledged.

Azimuth Response to NVCA Comment #10

Acknowledged. It is Azimuth's understanding that a Restoration and Planting Plan will be prepared by the proponent at the detailed design stage, and that the proponent acknowledges this will be required as a condition of Draft Plan Approval.

Where feasible, natural vegetation blocks will be incorporated into Open Space, Septic System and Stormwater Management blocks, including plant species native to the region and appropriate to the landscape context.

Azimuth Response to NVCA Comment #11

Acknowledged.

Azimuth Response to NVCA Comment #12

Acknowledged. It is Azimuth's understanding that the proponent will engage the Township regarding the width of the crossing.

Azimuth Response to NVCA Comment #13

Acknowledged. It is Azimuth's understanding that a Fencing Plan will be prepared by the proponent at the detailed design stage, and that the proponent acknowledges this will be required as a condition of Draft Plan Approval.

Azimuth Response to NVCA Comment #14

Acknowledged.

Azimuth Response to NVCA Comment #15

Acknowledged, to be considered by the proponent at the detailed design stage.

Azimuth Response to NVCA Comment #16

It is Azimuth's understanding based on discussions with the proponent and engineering consultant PML, that Stormwater (SWM) outlets will occur above the Regional Floodline such that direct encroachment into the drainage feature or associated floodplain will not



occur. Erosion and sediment controls will be established between the outlet locations and drainage feature limit, to be developed at the detailed design stage and subject to review by a Fisheries Ecologist and (if necessary) DFO, to confirm conformity with *Fisheries Act* requirements.

CONCLUSION

Azimuth is of the opinion that the above responses and attachments adequately address NVCA's review comments regarding Azimuth's EIS submission for the proposed development.

With regard for Comment #4 through Comment #6, it is Azimuth's opinion that the proposed development is a suitable candidate for Ecological Offsetting as directed by NVCA's Net Gains for Ecological Offsetting guidelines. As discussed above, a cash-in-lieu payment of \$11,040.00 is proposed to offset direct wetland removals on the property, and a cash-in-lieu payment of \$35,724.00 is proposed to offset removals of upland vegetation communities within 30m of wetlands on the property. A total cash-in-lieu payment of **\$46,764.00** is therefore proposed to achieve net gains through ecological offsetting with regard to wetland impacts as a result of the proposed development.

Certainly should you have any additional questions or concerns, or wish to discuss further please do not hesitate to contact the undersigned.

Yours truly,
AZIMUTH ENVIRONMENTAL CONSULTING, INC.

Dan Stuart, M.Env.Sc.
Ecology Lead

Attached:

NVCA Comments for Armstrong Estates (Natural Heritage/Ecology ONLY)(April 29, 2022)
NVCA Comments (Pre-consultation)(April 1, 2021)
Proposed Development & Constraints Map

To: 'Tracey Atkinson' <tatkinson@mulmur.ca>
Cc: 'D.seaman' <d.seaman1@rogers.com>; 'Gregory Barker' <gbarker@ipsconsultinginc.com>; 'Karla Tamayo' <ktamayo@ipsconsultinginc.com>
Sent: Friday, April 29, 2022, 09:20:20 a.m. EDT
Subject: RE: NVCA Comments for Armstrong Estates (Natural Heritage/Ecology ONLY)

Good Morning Tracey,

Nottawasaga Valley Conservation Authority [NVCA] staff has received an application submission in support of the above noted draft approved plan of subdivision and accompanying zoning amendment. The applications propose to develop the subject lands into a residential subdivision including 67 residential units with a mix of single detached, semi-detached and townhouse dwellings, new municipal road networks, parkland, walkways, environmental protection and storm water management blocks.

In preparing these comments the following documents were received and reviewed:

- “Environmental Impact Study Lot 11 Concession 7, Mansfield” by Azimuth Environmental Consulting dated November 2021.
- Draft Plan of Subdivision Armstrong Estates of Mansfield. Rev. September 27, 2021. Innovative Planning Solutions.

NVCA staff have reviewed this submission as per our delegated responsibility from the Province to represent provincial interests regarding natural hazards identified in Section 3.1 of the Provincial Policy Statement (PPS, 2020) and as a regulatory authority under Ontario Regulation 172/06. The submission has also been reviewed through our role as a public body under the *Planning Act* as per our CA Board approved policies and per our Municipal Partnership and Service Agreement with the Township.

Ontario Regulation 172/06

1. The property falls partially within an area affected by Ontario Regulation 172/06 (the Authority's Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation) where a permit is required from the NVCA under the Conservation Authorities Act prior to any development or site alteration.

Natural Heritage and Ecology Comments

Review Comments – Regulatory

2. The EIS has identified an unevaluated wetland, watercourse, Significant Wildlife Habitat and Habitat of species of conservation concern on and adjacent to the subject site of development. NVCA staff accepts the delineation and classification of these natural features as presented in the report.
3. The EIS proposes a 6m setback from the top of bank of the watercourse and wetland for lots 7, 8 and 55. Blocks 50 and 51 also appear to have setbacks calculated from the top of bank and reduced. The applicant is advised that NVCA Planning and Regulations guidelines state in Section 5.3: “In general, lots created through plan of subdivision or consent and/or development and site alteration, is to be set back a minimum of the following:
 - a. 30 metres from the bankfull flow location of watercourses;
 - b. 6 metres access allowance from natural hazards and valleylands top of bank;
 - c. 30 metres from a wetland;
 - d. 30 metres from a seepage area and springs;
 - e. 30 metres from a significant woodland”

The lot fabric on the proposed draft plan of subdivision, as well as the proposed zoning schedule should be revised to reflect the minimum required lot setbacks.

4. An updated graphic “constraints map” is required in order to set the appropriate limits of development with regards to natural heritage features. The updated graphic should depict the following along with the lot fabric on high-quality, recent air photo imagery:

- a. Delineated extent of MAMM3-1 wetland; area of proposed removal and calculation of the area of wetland loss for Street C crossing;
 - b. Watercourse top-of-bank, plus the 30m setback;
 - c. Required 30m setback from the wetland;
 - d. Proposed setback from the wetland, plus a calculation of the area of required wetland setback loss.
5. With respect to the minimum 30m required setback to the MAMM3-1 wetland feature, NVCA staff may support a reduction in the required setback for this feature in accordance with the NVCA's Net Gains for Ecological Offsetting guidelines. If the required setback is not provided, a Wetland Offsetting Plan must be submitted for NVCA review prior to setting the limits of development and issuance of Draft Plan Conditions.
6. Removal of 0.046ha of the MAMM3-1 wetland feature is proposed in order to accommodate the proposed watercourse crossing along Street C. in accordance with the NVCA's Net Gains for Ecological Offsetting guideline, offsetting for the loss of a portion of this wetland feature must be demonstrated. A Wetland Offsetting Plan which addresses the proposed wetland removal must be submitted for NVCA review prior to setting the limits of development and issuance of Draft Plan Conditions.
7. The report recommends a detailed Sediment and Erosion Control Plan identifying natural heritage protection measures for all stages of construction will be required in future design stages. A condition of Draft Plan Approval to the satisfaction of the NVCA is requested for detailed Sediment and Erosion Control Plans.
8. Timing of site build-out and installation of the watercourse crossing was not addressed in the EIS. Based on previous experience with similar sites, NVCA staff note that the installation of the road crossing will be necessary prior to accessing the north portion of the site. As such, a phasing plan for construction of the watercourse and site alteration of the larger development sites will be required to address erosion and sediment controls during pre-construction (including watercourse crossing installation), earthworks, servicing, construction and final stabilization. This item may be addressed through detailed design review; a condition of Draft Plan approval is requested for a Construction Phasing Plan to the satisfaction of the NVCA.
9. An NVCA permit will be required to be obtained by the applicant for the watercourse crossing and final design of the crossing and erosion and sediment control plans will be required as part of a complete permit application should the applicant seek an NVCA permit prior to Draft Plan Approval. Should the applicant choose to install the watercourse crossing following Draft Plan Approval, a condition will be requested for an NVCA permit.
10. The EIS recommends use of appropriate wetland and riparian woodland plantings (i.e., native plants and trees, respectively, known to occur in the MAMM3-1 and WODM5-3 polygons) proximal to post-construction wetland and woodland edges. NVCA staff concur with this recommendation. A detailed Restoration and Planting Plan for disturbed areas within the Open Space, Septic System and SWM blocks will be required as a condition of Draft Plan Approval to the satisfaction of the NVCA.
11. The EIS recommends integration of a wildlife passage into the new Street 'C' culvert crossing designs to help restore and maintain habitat connectivity in the wetland/woodland corridor post-development. NVCA staff concur with this recommendation and advise that future plans for the watercourse crossing should incorporate appropriate BMPs for wildlife passage (e.g., openness ratio, dry ledges for passage) as recommended in the EIS. Due to the presence of fish habitat within the watercourse, NVCA staff will require an open bottom culvert to minimize impact on the aquatic substrate.
12. NVCA staff note concerns with the width of the crossing, and recommend that the applicant explore options with the Township of Mulmur Transportation staff to reduce the width of the crossing, via reducing required pedestrian sidewalks and increasing slope grades on the sides of the crossing.
13. The use of fencing to deter encroachment from residential lots is noted and supported. Locations and materials for fencing should be submitted for review as part of the Landscape Plans at detailed design, demonstrating exclusion of pedestrian and residential lot access to natural heritage features within the larger plan of subdivision. A condition of Draft Plan Approval for a Fencing Plan is requested to the satisfaction of the NVCA.

Review Comments – Advisory

14. Habitat for Species of Conservation Concern was identified on the subject site for the following species: Eastern Wood-Pewee, Grasshopper Sparrow, Snapping Turtle. Habitat for Grasshopper Sparrow was noted to be outside the development envelope. Habitat for Species at Risk birds (Eastern Meadowlark and Least Bittern) was found within the study area but not within the subject site. No impacts to Grasshopper Sparrow, Snapping Turtle, Eastern Meadowlark or Least Bittern are anticipated as a result of the proposed development. NVCA staff concur with this evaluation.

15. The woodlands on the subject site (ELC ecosite vegetation types WODM5-3 and WOMM3 polygons) provide habitat for the Eastern Wood-Pewee, a bird species of conservation concern. Removal of 0.15ha of the woodland feature habitat on the subject site was assessed to have a negligible impact on the species. NVCA staff concur with the assessment that the remaining 1.35ha of woodland on the property will continue to provide habitat functionality for the species, given that the Eastern Wood-Pewee uses a range of forest habitats and patch sizes for breeding, migration and wintering (COSEWIC 2012; NatureServe 2012). However, the proposed retained woodland area is smaller than the average territory patch size for Eastern Wood-Pewee, which is generally 1.76 ± 0.24 ha (COSEWIC 2012). As such, opportunities for re-planting woodland areas should be explored within the Open Space and SWM Blocks (blocks 51, 53, 54, 55, 56) to enhance the remaining woodland habitat for Eastern Wood-Pewee. Enhancement plantings should be provided through Restoration and Planting Plans at detailed design.

16. The location of SWM outlets is noted in the EIS to be determined at detailed design. The EIS recommends that all proposed stormwater elements within or next to the two-year flood elevation of the watercourse are reviewed by a fisheries ecologist in future design stages in accordance with DFO's projects near water review process. NVCA staff recommend that the location of SWM outlets are determined and reviewed by a fisheries ecologist prior to Draft Plan Approval in order to ensure PPS consistency through no negative impact to fish habitat. The applicant should provide a record of consultation with DFO or completed checklist determining no consultation is required.

Conclusion

We note that these comments are related to this submission and the information provided within this submission. NVCA requires additional information in order to complete our review and additional comments may be provided in the future.

Please feel free to contact the undersigned should you require any further information or clarification with regards to any matters contained herein.



Amy Knapp | Supervisor, Planning Services

Nottawasaga Valley Conservation Authority

8195 8th Line, Utopia, ON L0M 1T0

T 705-424-1479 ext.233 | F 705-424-2115

aknapp@nvca.on.ca | nvca.on.ca

I am currently working remotely as the Nottawasaga Valley Conservation Authority is taking preventative measures to limit the spread of COVID-19. You may experience some delays or disruptions as we follow recommendations of health professionals to slow the virus from spreading.

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Nottawasaga Valley
Conservation Authority

April 1st, 2021

SENT BY EMAIL

Township of Mulmur
758070 2nd Line East
Mulmur, ON
L9V 0G8

Attn: Tracey Atkinson, BES MCIP RPP,
C.A.O. / Planner
tatkinson@mulmur.ca

Dear Ms. Atkinson,

**RE: Pre-consultation Comments for a proposed Draft Plan of Subdivision
Town File No. P1-2021
Vacant Lands on Part of Lot 11, Concession 7
Township of Mulmur, Dufferin County
NVCA ID #38983**

Nottawasaga Valley Conservation Authority [NVCA] staff has reviewed the above noted pre-consultation application for a proposed Draft Plan of Subdivision

NVCA staff have received and reviewed the following documents submitted with this application:

- Innovative Planning Solution's "Concept Plan #2 - For Discussion Purposes " September 30, 2020

Staff has reviewed this application as per our delegated responsibility from the Province to represent provincial interests regarding natural hazards identified in Section 3.1 of the Provincial Policy Statement (PPS, 2020) and as a regulatory authority under Ontario Regulation 172/06. The application has also been reviewed through our role as a public body under the Planning Act as per our CA Board approved policies. Finally, NVCA has provided comments as per our Municipal Partnership and Service Agreement with the Township and with advisory comments related to policy applicability and to assist with implementation of the Lake Simcoe Protection Plan under the Clean Water Act.

Ontario Regulation 172/06

1. The property falls partially within an area affected by Ontario Regulation 172/06 (the Authority's Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation) where a permit is required from the NVCA under the Conservation Authorities Act prior to development.

The area is affected by the regulation due to (the Pine River, its valley system, floodplain and slope erosion hazard areas.

Natural Hazard - Regulatory Comments

2. Policies contained within the PPS restrict development to areas outside of hazardous lands adjacent to shorelines and large inland lakes as well as river, stream and small inland lake systems which are impacted by flooding hazards and/or erosion hazards.
3. The concept plan proposes a substantial watercourse crossing and will require a culvert or bridge crossing. NVCA recommends exploring opportunities in utilizing the existing 'agricultural' crossing.
4. Should a new crossing be proposed, NVCA staff recommends looking at locations with the least impact to Natural Heritage and Natural Hazard features. Further, the location shall be with the least disruption of to the watercourse in terms of form and function.
5. A flood hazard study should be completed in support of the proposed development.
6. An erosion hazard study should be completed in support of the proposed development.
7. An fluvial geomorphology study should be completed in support of the proposed development.
8. A geotechnical study will be required in support of the development application which outlines the following;
 - a. On-Site Soils;
 - b. The feasibility of the use of low impact development measures;
 - c. The feasibility of the stormwater detention design as per Section 2.3 of the NVCA SWM standards;
 - d. Confirmation as to whether there are any hazardous soils on site and any mitigation measures that may be required;
 - e. Identify the stable top-of-bank and confirmation of stable slopes.
9. In general, NVCA's Planning and Regulations Guidelines requires a 15 metre access allowance from natural hazard limits and valleylands top of bank. Provincial guidelines recommend that development should generally be setback a minimum of 6 metres adjacent to erosion and flooding hazards (Sections 3.0 and 3.4, Erosion Access Allowance, Technical Guide – River and Stream Systems: Erosion Hazard Limit, MNR, 2002b). However we note that this is minimum standard from the MNR and it is NVCA's position that the initial design should provide for the 15 metres. Should a 15 metre buffer cannot be achieved, we may consider a reduced allowance down to a minimum of 6 metres subject to a review of the technical justification.
10. NVCA notes that current proposed SWM pond does not comply with some of the above noted requirements.
11. For further information related to the technical aspects and scope of the above noted studies, please contact Senior Engineer Mark Hartley at mhartley@nvca.on.ca .

Natural Heritage and Ecology - Advisory Comments

12. Due to the presence of confirmed and candidate significant natural heritage features within proximity to the proposed development, an EIS will be required to assess the potential impacts of development on such features, and evaluate conformity of the proposal with relevant natural heritage-related policies. The applicant will be required to retain a qualified ecologist to prepare this submission, at which point the consultant shall contact NVCA planning staff to discuss the appropriate scope of required studies.
13. Please note NVCA's Planning and Regulations Guidelines stipulate a 30m setback to woodlots from development activities.

Additional Advisory Comments

Stormwater Management:

14. A stormwater management report and associated plans will be required to current standards. More information can be found in the NVCA engineering guidelines available on our website at nvca.on.ca.

Hydrogeology

15. The applicant is encouraged to complete the Hydrogeological Assessment check List intended to support development applications, Found on Table 1 (page 6 and 7) of the document entitled "Hydrogeological Assessment Submissions, Conservation Authority Guidelines for Development Applications" June 2013 at the following link: <https://www.lsrca.on.ca/Shared%20Documents/permits/hydrogeological%20guidelines.pdf>
16. Staff encourages a water balance from a storm water management point of view, depth to watertable, seasonal variation, background GW chem, etc.

Setting Limits of Development

17. In order to accurately determine the appropriate limits to development, NVCA staff request that a *scaleable* drawing be provided which illustrates the following items (as applicable):
 - i. The woodlot boundaries and width of buffers
 - ii. All applicable hazard limits (slope and/or meander erosion etc.) plus the 6 metre access allowance);
 - iii. The floodplain limit plus the plus 15m from the flood line.
 - iv. Top of bank plus 6 metres;
 - v. The Pine River plus 30 metre setback from the bankfull flow location
 - vi. The proposed lot fabric

This information should be accompanied by an appropriate and complete legend. Constraint lines, access allowances, and buffer setbacks should be labelled. Please confirm that all works are outside of the limits of development. (i.e. all natural hazards, access allowances, natural heritage features and associated buffers and setbacks).

The limits to development will be determined by the furthest extent of the hazard plus the required access allowance or the natural heritage feature and appropriate buffer; whichever is the greatest constraint.

Land Use Planning

18. [OPA/ZBA] Please provide copies of all draft by-law documents, including schedules for NVCA to review and provide comment.

Submission Requirements

19. NVCA staff request that all submissions materials be provided in digital format only. Please ensure that any modelling data files are in .zip folder.

Fees

20. Effective March 2016, the NVCA has a new fee schedule. A copy of the policy and associated fee schedule can be found online using the following link:
[https://www.nvca.on.ca/Shared%20Documents/NVCA Planning Fees Mar 2016.pdf](https://www.nvca.on.ca/Shared%20Documents/NVCA%20Planning%20Fees%20Mar%202016.pdf)

The fee for residential draft plans of subdivision is \$3,300 per net hectare, with a minimum fee of \$12,500 and a maximum fee of \$100,000. This fee is payable in four phases with the first 25% being due upon receipt of formal application.

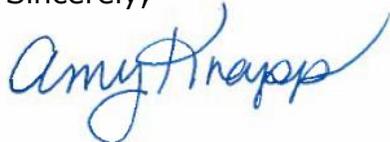
NVCA will provide a formal request for fees upon submission and circulation of a Planning Act application.

Conclusion

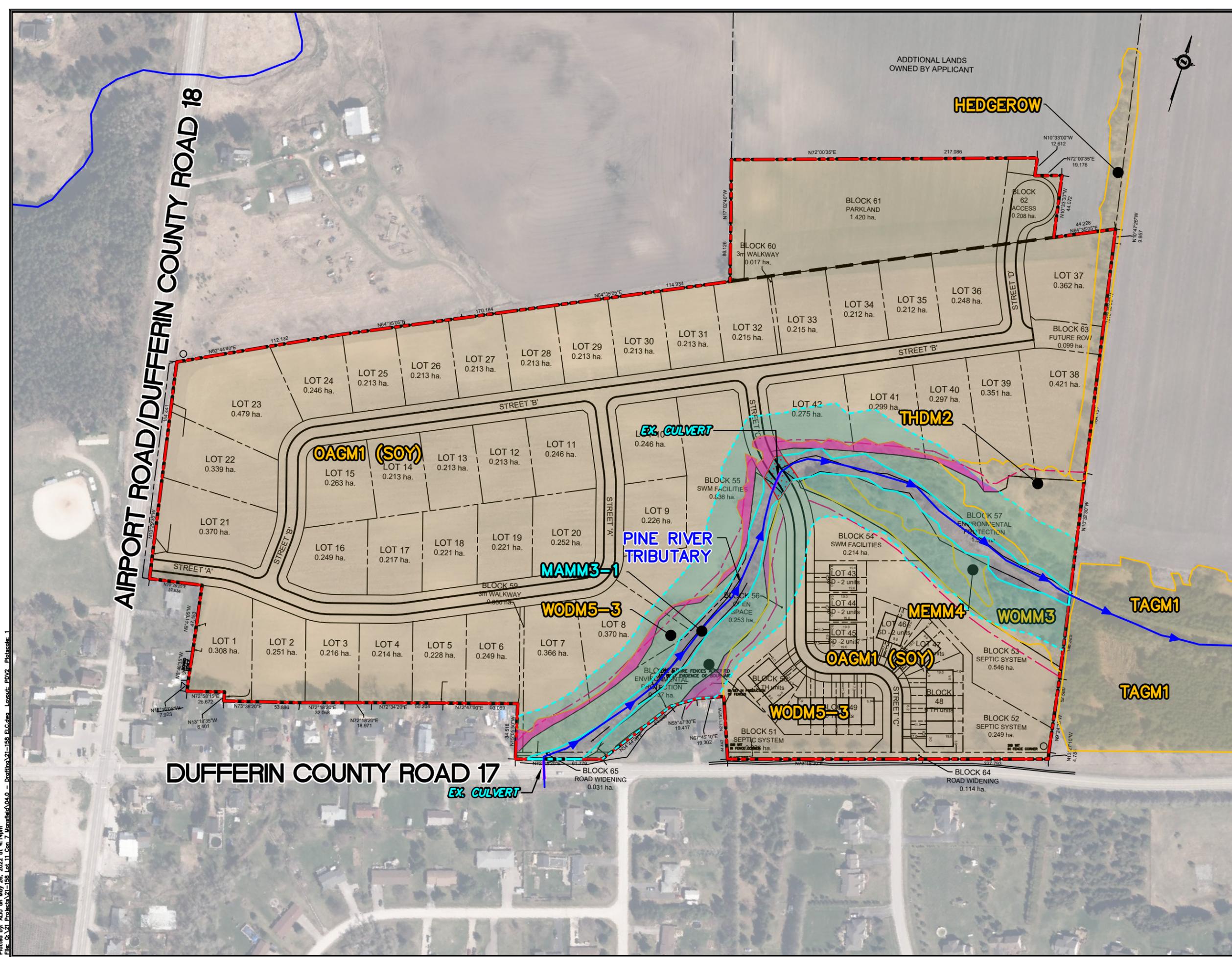
NVCA staff appreciates the opportunity to comment at this stage in the process. These comments should be considered valid at the time of issuance and preliminary in nature. The information presented herein is based on a preliminary concept plan and should not be considered NVCA final comments at this time. We will require additional information (full application submission) in order to complete our review and additional comments may be provided in the future. The NVCA may at any point change our comments should new information become available which raises concerns pertaining to the NVCA core mandate.

Should you require any further information, please feel free to contact the undersigned.

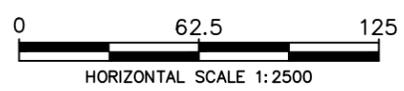
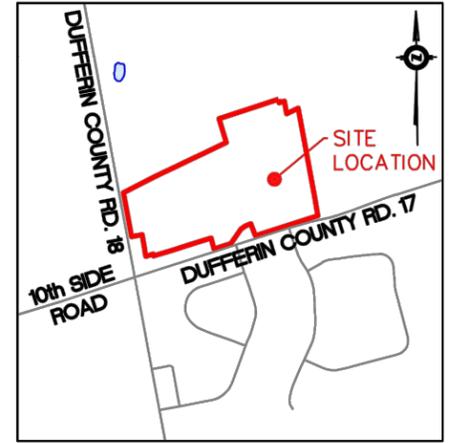
Sincerely,



Amy Knapp
Planner III



- LEGEND:**
- APPROX. PROPERTY BOUNDARY
 - EXISTING WATERCOURSE (ONTARIO MNR, 2020)
 - WETLAND BOUNDARY (DELINEATED IN FIELD)
 - DIRECT WETLAND REMOVALS
 - 30m WETLAND BUFFER
 - 30m WETLAND BUFFER
 - DEVELOPMENT ENCROACHMENT INTO 30m WETLAND BUFFER
 - 6m Top-of-Bank Setback (PML)
- ELC VEGETATION COMMUNITIES:**
- | | |
|------------|---|
| MAMM3-1 | MIXED MINERAL MEADOW MARSH |
| MEMM4 | FRESH-MOIST MIXED MEADOW |
| OAGM1(SOY) | ANNUAL ROW CROP |
| TAGM1 | CONIFEROUS PLANTATION |
| THDM2 | DRY-FRESH DECIDUOUS SHRUB THicket |
| WODM5-3 | FRESH-MOIST MANITOBA MAPLE DECIDUOUS WOODLAND |
| WOMM3 | DRY-FRESH MIXED WOODLAND |



AZIMUTH ENVIRONMENTAL CONSULTING, INC.

PROPOSED DEVELOPMENT & CONSTRAINTS - OPTION B

ARMSTRONG ESTATES OF MANSFIELD MULMUR, ON

DATE ISSUED:	MAY 2022	Figure No.
CREATED BY:	A.L.	3B
PROJECT NO.:	21-158	
REFERENCE:	DUFFERIN COUNTY	

Printed by: ALU on May 26, 2022 at 4:14pm
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