



Planning Report

To: Mayor and Council, Municipality of Magnetawan

From: Kent Randall & Chris Conti (EcoVue Consulting),
Township Planning Consultants

Subject: Application for Zoning By-law Amendment (Lorusso)

Property Location: 754 Nippising Road South
Lots 1 to 8 inclusive, and Block E Plan 253, Magnetawan

EcoVue File No.: 24-2125-02

Date: June 13, 2024

Recommendation

We recommend:

THAT Council receive the report dated June 13, 2024 from EcoVue Consulting Services regarding Zoning By-law Amendment (Lorusso); and

THAT Council defer the application pending the Applicant providing the following information:

1. The Applicant shall submit to the satisfaction of the Municipality of Magnetawan, a topographic survey of the property which identifies existing ground elevations and the flood elevation for Ahmic Lake of 281.97 metres C.G.D.
2. The Applicant shall submit to the satisfaction of the Municipality a grading plan for the property which identifies existing and proposed grades and locations where filling is proposed.
3. The Applicant shall submit a site plan acceptable to the Municipality which locates all buildings and structures, the septic system and areas of filling and grading outside of the floodplain area, and locates openings to all habitable buildings above 283.16 metres C.G.D.

Alternatively, if, contrary to item # 3 above, portions of the proposed development are to be located within the floodplain and the application for the Zoning By-law Amendment is approved by Council, the Applicant shall submit the following information prior to approval:



1. If filling and/or construction is proposed below the flood elevation of 281.97 metres C.G.D. the Applicant shall provide engineering drawings and calculations acceptable to the Municipality to raise the proposed location of the dwelling above the flood elevation and demonstrating that the flood storage removed by filling and construction in the floodplain will be balanced through the creation of an equal amount of flood storage through the removal of material at the same elevations.
2. The Applicant shall provide to the satisfaction of the Municipality a report from a hydrological engineer identifying the effect of the proposal on flood elevations and velocities and demonstrating that there will not be significant impacts on other properties. The engineer's report shall also determine the appropriate degree of floodproofing proposed for buildings on the property.
3. All openings to the dwelling and any other habitable buildings on the property will be located according to the floodproofing recommendations of the engineer's report and as a minimum they shall be above an elevation of 281.97 metres C.G.D.
4. The Applicant shall submit a site plan acceptable to the Municipality identifying the approved location of all buildings on the property, the location of fill and cut areas, the septic system and other facilities based upon the above calculations and drawings, the approved cut and fill proposal, the approved location of the septic system, and the report from the hydrological engineer. The development of the property shall be carried out according to the approved site plan.

1.0 Introduction

Council will recall an application for consent affecting the subject property that was subject of a report at the May 1, 2024 meeting. We recommended approval of the consent subject to a number of conditions, including that Mr. Lorusso (Applicant) provide a site plan for the proposed development of the benefitting lot combined with the severed parcel, to demonstrate that the proposal would comply with all setback requirements from Ahmic Lake, would avoid construction and the placement of fill below the flood elevation and would comply with other Official Plan and zoning requirements to the satisfaction of the Municipality.

The Applicant has submitted a plan for the site which appears to locate the proposed dwelling within the floodplain of Ahmic Lake. In addition, the plan proposes that openings to the dwelling will be located



below the elevation of 283.16 metres C.G.D. which does not comply with Section 3.14 of the Municipality of Magnetawan Zoning By-law. The Applicant has submitted an application for a Zoning By-law amendment (ZBA) seeking relief from this requirement and proposing to locate openings to the dwelling below the flood elevation.

The proposed placement of fill and the construction of buildings within the floodplain raises a number of planning policy issues including concerns about consistency with the Provincial Policy Statement (PPS). Furthermore provisions of the Magnetawan Official Plan and Zoning By-law include restrictions for development in the floodplain. These issues are discussed in the remainder of this report.

2.0 Subject Property

The subject property is located at 754 Nipissing Road South and consisted of eight lots and one block (Block E) that were part of a former plan of subdivision located on the eastern shoreline of Ahmic Lake. The former lots 1, 2 and 3 (benefitting parcel) were the subject of a deeming by-law passed in 2022 which deemed them to no longer be part of a plan of subdivision.

The previous consent application severed a portion of the southern part of the former Block E to be added to the former Lots 1, 2 and 3 that abut former Block E to the south. With the lot addition of the severed parcel, the subject parcel now has an area of approximately 0.61 hectares and straight line water frontage of 38.64 metres.

Currently a cottage and boat house are located on the former Block E and a drive shed is located on the combined severed and benefitting parcel.

The subject lands are designated Shoreline in the Municipality of Magnetawan Official Plan (MMOP) which permits a detached residential use and zoned Shoreline Residential (RS) in Magnetawan Zoning By-law 2001-26 (MZB). Residential use of the property is one of the permitted uses in this zoning category.

Broad scale topographic mapping available for the area indicates that a portion of the combined severed and benefitting parcel is within the floodplain elevation of 281.97 metres above sea level C.G.D. It appears that there is sufficient area on the parcel to locate the dwelling and associated facilities outside of the floodplain. However, the plans provided by the Applicant appear to locate the dwelling within the floodplain and we understand that this is the preferred location.



While this may be the case, we are not aware of any detailed topographic mapping of the area that has been undertaken. The plans submitted by the Applicant appear to be based upon the broad scale mapping. The amount of the property that is within the floodplain cannot be accurately determined unless it is based upon a topographic survey.

3.0 Planning Analysis

3.1 Provincial Policy Statement (2020)

According to Section 3(5) (a) of the *Planning Act*, R.S.O., 1990, c.P.13 (Act) decisions of planning authorities must be consistent with the 2020 Provincial Policy Statement (PPS) which provides planning policy direction for all areas of the province, which is intended to be implemented through municipal Official Plans.

Section 3.1 of the PPS provides policy direction regarding development in areas with natural hazards. Development in flood prone areas is restricted by the policies in Section 3.1.1 and 3.1.2 which state:

3.1.1 Development shall generally be directed, in accordance with guidance developed by the Province (as amended from time to time), to areas outside of:

- a) *hazardous lands* adjacent to the shorelines of the *Great Lakes - St. Lawrence River System* and *large inland lakes* which are impacted by *flooding hazards, erosion hazards* and/or *dynamic beach hazards*;
- b) *hazardous lands* adjacent to *river, stream and small inland lake systems* which are impacted by *flooding hazards* and/or *erosion hazards*; and
- c) *hazardous sites*.

3.1.2 *Development* and *site alteration* shall not be permitted within:

- a) the *dynamic beach hazard*;
- b) *defined portions of the flooding hazard along connecting channels* (the St. Marys, St. Clair, Detroit, Niagara and St. Lawrence Rivers);
- c) areas that would be rendered inaccessible to people and vehicles during times of *flooding hazards, erosion hazards* and/or *dynamic beach hazards*, unless it has been demonstrated That the site has safe access appropriate for the nature of the *development* and the natural hazard; and
- d) a *floodway* regardless of whether the area of inundation contains high points of land not subject to flooding.



Ahmic Lake is considered a small inland lake and falls under the provisions of Section 3.1.1 (b). According to this policy, development and site alteration should generally be directed to areas outside of hazardous lands adjacent to inland lakes which are impacted by flooding and/or erosion hazards.

Section 3.1.2 sets out prohibitions against development within certain hazardous areas. They include in section c), areas that would be rendered inaccessible during a flood and in section d) areas within a floodway. The term “floodway” is defined in the PPS as follows:

Floodway: for *river, stream and small inland lake systems*, means the portion of the *flood plain where development and site alteration would cause a danger to public health and safety or property damage.*

Where the one zone concept is applied, the floodway is the entire contiguous flood plain.

Where the two zone concept is applied, the floodway is the contiguous inner portion of the flood plain, representing that area required for the safe passage of flood flow and/or that area where flood depths and/or velocities are considered to be such that they pose a potential threat to life and/or property damage. Where the two zone concept applies, the outer portion of the flood plain is called the flood fringe.

The flood elevation for Ahmic Lake is identified as 281.97 m.a.s.l. C.G.D. in Section 4.2.2 of the Magnetawan Official Plan. Our understanding is that no studies have been completed which would delineate a flood fringe area which is defined as the outer portion of the flood plain where flood depths and velocities are less severe. Therefore, we conclude that for Ahmic Lake all of the lands within the 281.97 metre C.G.D. contour are considered to be within the floodway.

The policies in Section 3.1.4 to 3.1.7 include two (2) main policy directions which could provide relief from the prohibition against development within the floodplain. The first is adoption of a Special Policy Area (SPA) which generally applies to areas of existing development that are in the floodplain. Special Policy Areas are generally based upon engineering studies and require provincial approval.

The second way is through adoption of a two-zone policy where the floodway and flood fringe are identified for an area through an engineering study. The floodway identifies the area where flooding is more severe and represents a significant hazard. The flood fringe is the area on the outer edges of the floodplain where the flood hazard is minor and can be mitigated through appropriate floodproofing and provided hazards in the area are not aggravated.

The two-zone policy must be based upon an engineering study and applied to an area rather than an individual property. In addition, a two-zone concept must be adopted by the relevant municipality.



Neither of these options for providing relief from the prohibition against development in the floodplain apply to the subject property.

Based upon these policies as they apply to the proposal, the development of the dwelling in the proposed location, if it is within the 281.97 metre C.G.D. floodplain area, will not be consistent with the PPS.

4.0 Municipality of Magnetawan Official Plan

As noted earlier, the subject property is designated as Shoreline in the Municipality of Magnetawan Official Plan (MMOP). The proposed single detached use of the parcel is permitted in the Shoreline designation.

The provisions of the Official Plan that are particularly relevant to the proposed location of the dwelling are contained in Section 4.2 which sets out requirements for hazardous lands.

Section 4.2 of the MMOP states the following:

4.2 Hazardous Lands

Hazardous lands shall not be developed unless it can be demonstrated to the satisfaction of the Municipality and/or the approval authority, and in accordance with the Provincial guidelines, that the hazard or contamination no longer exists or that development can occur without potential threat to life, property or the environment. Studies may be required to be completed by qualified professionals to ensure the appropriateness for development.

Section 4.2.2 of the MMOP provides requirements when development in the floodplain areas is proposed. It states the following:

4.2.2 Flood Hazards

In the case of flood plains, a study by a qualified hydrological engineer to determine potential impact of new development on the flood elevation and flow velocities shall be required. Specifically for lakes like Ahmic and Cecebe the floodplain is defined by the following elevations:

Lake Cecebe 284.67 CGD

Ahmic Lake 281.97 CGD



The Municipality will not support the placement or removal of fill below such elevations unless a site-specific report by a qualified engineer has demonstrated to Council's satisfaction that there will not be significant impacts on up-stream or down-stream lands.

The implementing Zoning By-law will identify specific floodplain elevations in the Municipality through comprehensive mapping where this information is available. In addition, conditions may be placed on the creation of new lots requiring site-specific zones to provide elevations and setbacks to ensure adequate flood protection utilizing a one-zone floodway in which no new development shall be permitted.

As stated earlier, Section 4.2.2 identifies the flood elevation for Ahmic Lake as 281.97 m.a.s.l. C.G.D. The above Official Plan policies do not prohibit development in the floodplain. However, through Section 4.2, the Municipality must be satisfied in accordance with provincial guidelines that the “*development can occur without potential threat to life, property or the environment*”. The mechanism for determining if there will be threat to life, property or the environment is set out in Section 4.2.2 which is the study by a qualified hydrological engineer to determine the impact of the development on the flood elevation and flow velocities. The report must demonstrate to Council's satisfaction that there will not be significant impact on upstream and downstream lands.

The above policies, if used in conjunction with a designated SPA or a two-zone policy, would be fully consistent with the PPS. Provincial guidelines require that one of these mechanisms be used when developing within the floodplain. Since neither an SPA nor two-zone have been adopted for the area, approving the proposal based upon an engineering study will not be consistent with the PPS.

The Official Plan policies include the direction for assessing the extent of impact of the proposal on flood levels and velocities and whether other properties may be significantly impacted. They do not provide a comprehensive approach to floodplain management unless the engineering studies are completed for a broader area and policies are implemented to control floodplain development in the broader area. SPAs and two-zone policies represent comprehensive approaches to floodplain management.

The lot proposed for the development is already designated and zoned to permit residential use. While it is our recommendation that the dwelling be located on the portion of the property that is outside of the floodplain, if the proposed dwelling and any proposed filling are to be located within the floodplain, the policies Section 4.2.2 provide a method to assess the impact of the proposal.



If the above policies are implemented for the subject property they will not ensure full consistency with the PPS, but they will provide some assurance that the impact of the proposal on the flood elevation and on other properties will be minor.

The first step in assessing the suitability of the proposal is to obtain a topographic survey of the property and accurately identify the location of the floodplain on the site. The information provided by the Applicant appears to be based only on general topographic information. Once a topographic survey is available, then an accurate assessment of the amount of proposed encroachment into the floodplain can be determined. It is possible that the topographic survey will determine that the proposed location of the dwelling will not be as flood prone as is anticipated, or that there is an area on the property where the dwelling can be located that is not flood prone and that would be acceptable to the Applicant.

If, after the topographic survey is provided, it is determined that the proposal involves construction and/or filling within the floodplain, then the engineering study noted in Section 4.2.2 should be undertaken to ensure that there is minimal impact. Any flood plain storage that is consumed by the location of the building and filling in the floodplain should be compensated by removing the same amount of material from the same elevations of the floodplain. The flood storage that is removed by the construction and filling should be compensated by creating the same amount of flood storage elsewhere.

The engineering study required in Section 4.2.2 should identify the appropriate locations for cutting material and the placement of fill and it should assess the impacts of the development including the cut and fill proposal on flood depths and velocities. If Council approves the proposal we recommend that this type of study should be undertaken in conjunction with an appropriate cut and fill operation that balances flood storage.

Since provincial guidelines require adoption of an SPA or two-zone concept when permitting development in the floodplain, completing the above-noted study will not ensure compliance with these guidelines. However, obtaining the topographic survey and completing the hydrological study will ensure general compliance with policies of the MMOP.



5.0 Municipality of Magnetawan Zoning By-law No. 2001-26

The Municipality of Magnetawan Zoning By-law No. 2001-26 (MZB) includes specific provisions that relate to development in or adjacent to the flood plain. Section 3.14 provides requirements for the elevation of openings to buildings. It states:

3.14 Minimum Opening Elevations

Where lands abut Lake Cecebe or Ahmic Lake no opening to a habitable building shall be located below the following elevations.

Abutting Lake Cecebe 285.60 m CGD

Abutting Ahmic Lake 283.16 m CGD

The above requirement for Ahmic Lake appears to provide a substantial amount of freeboard for openings to habitable buildings from the flood elevation of 281.97 m. C.G.D. Provincial guidelines require that appropriate floodproofing be incorporated into developments in the floodplain, but it is not clear why openings should be 1.19 metres above the flood elevation.

If the development is to be approved, the appropriate level of flood proofing is a matter that should be determined through the engineering study. In addition, flood proofing measures for the property should comply with requirements in the *Ontario Building Code*.

The requirement for the elevation of openings to habitable buildings determined through the engineering study, if different from Section 3.14, should be incorporated into the By-law for the site through a special provision.

In addition to the above, Section 3.26 of the MZB requires 20 metre minimum setbacks for most buildings and structures from the high water mark of watercourses and Section 3.36 requires a 20 metre setback from the high water mark for septic systems and leaching beds and requires that they be located above the Regulatory Flood Elevation. These setback requirements should be incorporated into the site plan.

The subject lot where the development is proposed is zoned Shoreline Residential (RS) in the MZB.

Section 4.2.2 provides the property standards for the RS zone which include the following:



Minimum Lot Area - 1.0 ha

Minimum Lot Frontage - 90 m

Minimum Front Yard - 15 m

Minimum Interior Side Yard - 3.5 m

Minimum Exterior Side Yard - 7.5 m

Minimum Rear Yard - 10.0 m

Maximum Lot Coverage - 15%

Maximum Building Height - 10.7 m

*Minimum Ground Floor Area - 65.0 mx) Minimum Natural Vegetation Area or
Landscaped Open Space - 70% of front yard.*

The subject lot will be undersized based upon the requirements of the RS Zone, but through the consent process the lot size and frontage have been increased. Also, through Section 3.18 (b) of the MZB existing undersized lots which are increased in lot area or frontage are deemed to comply with the By-law.

However, since the area of the lot and frontage of the lot are undersized, special provisions should be incorporated into the By-law for the site to reflect the reduced standards,

Furthermore, the topographic survey will accurately identify the location of the floodplain on the property. The floodplain area should be placed in an Environmental Protection zone in the By-law for the site to ensure that no buildings or structures are permitted in this portion of the lot.

If development is to be approved within the floodplain portion of the property, undertaking the above-noted actions and adopting Zoning By-law for the property with the provisions noted above will provide general compliance with the MZB.

Summary of Planning Considerations

As stated in this report, development within the flood prone portion of the subject lot is not consistent with the PPS unless a SPA or Two-zone concept can be applied to the property. Without a topographic survey



the amount of the property that is within the floodplain and the way that the potential development may be affected cannot be accurately determined. Based upon detailed topographic information, the Applicant may be able to find an acceptable location for the dwelling and associated structures outside of the floodplain.

If it is determined that the proposal is to be approved with the dwelling located within the floodplain, the requirements in the Official Plan for a study by a hydrological engineer should be applied in conjunction with a cut and fill proposal which balances flood storage. This should ensure that any impacts on the floodplain are minor. Appropriate floodproofing of the openings to habitable dwelling should also be applied to the proposal.

A site specific By-law should also be adopted which includes provisions for the elevation of openings to habitable buildings, if different from Section 3.14, and for lot size and frontage. The By-law should also rezone the flood prone portion of the lot as Environmental Protection.

If proposed development within the floodplain is approved without the adoption of an SPA or two-zone concept it will not be fully consistent with the PPS.

6.0 Recommendations

That the recommendations included in this report be applied to the application for an amendment to Zoning By-law 2001-26 for the combined parcel created through the consent for the property at 754 Nipissing Road South.



Respectfully Submitted,
ECOVUE CONSULTING SERVICES INC.

A handwritten signature in blue ink that reads "J. Kent Randall".

J. Kent Randall B.E.S. MCIP RPP
Township Planning Consultant



A handwritten signature in blue ink that reads "Christopher L. Conti".

Chris Conti, M. E.S.
Senior Planner