

# THE CORPORATION OF THE MUNICIPALITY OF MISSISSIPPI MILLS

## STAFF REPORT

**DATE:** March 25, 2021  
**TO:** Committee of the Whole  
**FROM:** Marc Rivet, Planning Consultant  
**SUBJECT:** Official Plan Amendment (OPA) No. 29 – Agricultural Lands LEAR

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### RECOMMENDATION:

**THAT Committee of the Whole recommend to Council to direct Staff to proceed with an Open House and Public Meeting for Official Plan Amendment (OPA) No. 29 in accordance with Planning Act notification procedures.**

### BACKGROUND:

This Background Report is an “Information Item” that relates to Official Plan Amendment (OPA) No. 29, which stems from the work that was conducted for OPA 21; Five-Year Review. OPA 21 was approved with modifications by Lanark County on December 4, 2019 and was deemed to be consistent with the Lanark County Sustainable Community Official Plan and the Provincial Policy Statements which came into effect on April 30, 2014.

The Municipality of Mississippi Mills had retained the planning services of J.L. Richards & Associates Limited to undertake the Five-Year review of its Community Official Plan (COP) under Section 26(1) of the Planning Act (OPA 21).

The purpose of updating the Community Official Plan was to:

- a) revise the Official Plan as required to ensure that it,
  - ii. has regard to the matters of provincial interest listed in Section 2 of the *Planning Act*; and
  - iii. is consistent with policy statements issued under subsection 3 (1) of the *Planning Act*.
- b) revise the Official Plan, if it contains policies dealing with areas of employment, including, without limitation, the designation of areas of employment in the Official Plan and policies dealing with the removal of land from areas of employment, to ensure that those policies are confirmed or amended.

The County’s Notice of Decision on OPA 21 had deferred the delineation of a Prime Agriculture designation on Schedule “A” – Rural Land Use pending the completion of an Agricultural Land Evaluation Area Review (LEAR).

The purpose of OPA 29 is to complete the Land Evaluation Area Review (LEAR) to delineate Prime Agriculture designation on Schedule "A" – Rural Land Use plan.

Staff is seeking Council's direction to move forward with the consultation process that will help inform the Rural / Village Comprehensive Review.

## **DISCUSSION:**

### **I. What is a LEAR?**

Land Evaluation and Area Review (LEAR) is a tool used by Ontario Municipalities to identify lands that may be suitable for designation as Prime Agricultural Areas in their Official Plans. Developed by OMAFRA, LEAR uses quantitative datasets to evaluate the agricultural suitability of lands based on soil capability as well as other factors that affect agricultural potential, within the context of a given Municipality. LEARs score individual land parcels based on their agricultural potential whereby high-scoring parcels have the greatest agricultural potential. LEARs also establish a score threshold. Parcels that score below the selected score threshold are typically considered as poor candidates for Prime Agricultural Areas designation while those scoring above the score threshold are typically considered as good or excellent candidates for designation.

LEARs are intended to provide municipalities with a starting point for designating Prime Agricultural Areas. A parcel can receive a high LEAR score but may not be designated as a Prime Agricultural Area. A number of other factors play a role in the identification of Prime Agricultural Areas including field verification, property owner/community feedback, additional reports and analysis and other planning priorities.

Each LEAR evaluation has two key components:

- Land Evaluation (LE): This component evaluates soil capability as it relates to agriculture. The Canada Land Inventory (CLI) Soil Capacity Classification dataset is used for this component of the tool; providing 7 soil classifications as well as an organic soil classification to establish soil capacity.
- Area Review (AR): This component allows Municipalities to consider other factors that impact agricultural potential. This may include onsite factors such as parcel size or current land use or may include offsite factors such as conflicting land uses.

## II. Background Research

Background research was conducted to achieve three objectives that are necessary for building a LEAR:

- Understand the formal LEAR requirements as per OMAFRA guidelines;
- Understand how Ontario Municipalities have interpreted OMAFRA guidelines to create LEARs that utilize available data, manage LEAR model limitations and consider community input and local conditions and priorities; and,
- To obtain local context and priorities as it relates to agriculture by reviewing existing work prepared for the Mississippi Mills.

Review of the OMAFRA guidelines was conducted prior to reviewing the LEAR models developed by Ontario Municipalities.

Though a number of LEARs were reviewed, a total of three LEAR models developed by Ontario Municipalities were selected for review as precedents: Prince Edward County, Halton Region, Peel Region and Town of Caledon. Findings from this research is summarized in the table below:

<b>LEAR APPROACH SUMMARY</b>					
<b>Region</b>	<b>Year Conducted</b>	<b>LE factors</b>	<b>AR Factors</b>	<b>Weighting</b>	<b>Threshold</b>
Prince Edward County	2018	CLI s classifications	>Agricultural as existing use >% of property being farmed >Conflicting land uses Parcel Size	Total possible score of 200  LE 50%, AR 50%	140/200
Halton Region	2009	CLI classifications, Greenbelt LEAR Halton soil maps/reports	>Property fabric >Farm infrastructure >Conflicting land uses	Total possible score of 10  LE 65%, AR 35%	6/10
Peel Region and Town of Caledon	2015	CLI classifications with consideration for topography (OMAFRA soils data and slope data)	>Fragmentation >% land used for agriculture >% of Land in Agricultural Production Within 1km Evaluation Unit >Conflicting land uses	LE 50%, AR 50%	535/800

### **III. Methodology**

The Mississippi Mills LEAR was developed according to the following respective tasks: a) Background research, b) Review of existing data, c) Creation of draft approach, d) Review of Draft Approach, e) Model creation and validation, and, f) LEAR model finalization.

#### ***A) Background Research***

Research was conducted to obtain additional information about the OMAFRA LEAR guidelines as well as how these guidelines were implemented in a number of Ontario municipalities. Specifically, the OMAFRA LEAR guidelines were reviewed to obtain LEAR requirements. Examples of LEAR requirements include:

- The Land Evaluation factor must account for a minimum of 50% of the total LEAR score;
- Organic soils must now be included in the Land Evaluation score as a CLI soil class;
- Settlement areas shall not be evaluated under the LEAR;
- Area Review factors should be mutually exclusive and selected so as to avoid 'double counting' (i.e. Conflicting land uses and parcel fragmentation represent a similar consideration and therefore should not both be included in a given LEAR model).

Meanwhile, review of LEAR precedents provided insight into how said models were developed and adjusted to satisfy municipal conditions and priorities.

To gain context about agricultural land in Mississippi Mills, the 2018 document prepared by JL Richards, "Agricultural Lands Review", was reviewed. The review of this document provided valuable information on agricultural land conditions and typologies which was foundational in the selection and justification of criteria for the Mississippi Mills LEAR model.

#### ***B) Review of Existing Data***

Prior to selecting criteria for the Mississippi Mills LEAR, several meetings were held with GIS experts at JL Richards to determine data availability. Given the project timeframe, possible criteria were limited to pre-existing, available data. Available data included but was not limited to:

- Canada Land Inventory (CLI) Soil Capacity Classification dataset;
- Municipal Property Assessment Corporation (MPAC) property ownership and land use dataset;
- Municipal infrastructure datasets (i.e. servicing, roads);
- Existing Official Plan Designation datasets (i.e. Village Boundaries, Agriculture, Rural-Agricultural Overlay); And,
- Land cover, topography and drainage datasets.

### ***C) Creation of Draft Approach***

Considering both research insights and data availability, Land Evaluation (LE) and Area Review (AR) criteria and criteria weighting and scoring breakdown were selected, constituting the draft approach. Components of this approach were organized into a PowerPoint presentation.

### ***D) Review of Draft LEAR Approach***

A total of three meetings were held to review the draft LEAR approach. The intent of these meetings was to get key feedback and comments to guide revisions to the draft approach. Respectively, these meetings included:

- An internal meeting for JL Richards consultants involved in the project to discuss and provide feedback on the draft LEAR approach. Revisions to the draft approach were made following the meeting.
- A second meeting with John O'Neil from OMAFRA to discuss conformity of the draft LEAR approach with OMAFRA requirements and to get additional comments and recommendations.
- A third meeting with the JL Richards team, John O'Neil, Julie Stewart of Lanark County and Mississippi Mills staff.

Following the meetings, the draft model was revised according to comments and feedback.

### ***E) Model creation and validation***

Once the LEAR approach was finalized in terms of the selection of criteria and criteria weighting and scoring, the framework was developed into a GIS model using the appropriate datasets. Several internal meetings were held to verify the accuracy of the GIS model in scoring parcels.

### ***F) LEAR model finalization***

Following the development of the LEAR model in GIS, analyses were performed to determine the appropriate LEAR score threshold. The score threshold would serve as the cutoff value for recommending evaluated parcels for Prime Agricultural Area designation under the LEAR model.

## **IV. LEAR Approach**

The LEAR approach for Mississippi Mills can be summarized by the selected LE and AR score weighting and criteria and the selection of a threshold value. These aspects of the approach will be reviewed in the following sections.

### **A) Score Weighting**

OMAFRA guidelines require that a minimum of 50 percent of the overall score be reserved to the Land Evaluation (LE) component of the overall LEAR score. No maximum percent was established by OMAFRA. For the Mississippi Mills LEAR, we decided to attribute 70 percent of the overall score to the Land Evaluation component. The remaining 30 percent of the score was attributed to Area Review (AR) factors. This weighting breakdown was selected as soil capability is a significant determinant of agricultural potential and we wanted the weighting scheme to be reflective of this. Additionally, we believed that AR factors are secondary to soil capability in determining agricultural potential and therefore, a total weight of 30 percent would be appropriate to attribute to these factors.

### **B) Selected LE Criteria**

As mandated by OMAFRA, the Canada Land Inventory (CLI) Soil Capacity Classification dataset was used to evaluate soils in Mississippi Mills (see Figure 1). Consistent with OMAFRA requirements, the following scoring scheme was used:

<b>Soil Capability Class</b>	<b>CLI score (field crop points) FCP</b>	<b>Total Score (/70 points)</b>
1	1	70
Organics	0.9	63
2	0.9	63
3	0.8	56
4	0.6	42
5	0.4	28
6	0.2	14
7	0	0

### **C) Selected AR Criteria**

After careful review of OMAFRA recommendations and the selected LEAR precedents, the following AR criteria were selected:

- Parcel Size;
- Conflicting Land Uses; and,
- Active Farming (Parcel Currently Used for Agriculture)

Each of these three criteria had a maximum of 10 points, for a total of 30 percent of the overall LEAR score. The scoring schemes for the AR factors are explained in more detail below:

## **Parcel Size**

<b>Parcel Size</b>	<b>Score</b>
<81 Acres	10
51-80 Acres	8
26-50 Acres	6
11-25 Acres	4
6-10 Acres	2
1-5 Acres	1
>1 Acre	0

Parcel sizes were determined using MPAC data. Larger parcels were scored higher than smaller parcels as shown in the table above. Figure 2 shows a map of evaluated parcels scored by size.

## **Conflicting Land Uses**

The Conflicting Land Uses scoring scheme reflects the approach used to calculate Minimum Distance Separations (MDS). Conflicting land uses were divided into 2 categories for analysis: Type A and Type B. Type A land uses are defined as individual parcels with one of the following land uses: open space, industrial, or residential dwelling. A 750-meter radius was created for each evaluated parcel to determine the number of Type A land uses that were in proximity to said parcel. Type B land uses are defined as settlement clusters (i.e. residential subdivisions) and settlement areas (i.e. villages, urban areas). A 1500-meter radius was created for each evaluated parcel to determine if a Type B land use was in proximity to said parcel. MPAC data and municipal data (i.e. village boundaries) was used to identify conflicting land uses. For Type A and B conflicting land uses, the following scoring breakdown was used:

<b>Number of Conflicting Type A Land Uses within 750m</b>	<b>0-5</b>	<b>6-10</b>	<b>11-15</b>	<b>16-20</b>	<b>21-25</b>	<b>&gt;26</b>
Score	5	4	3	2	1	0

<b>Is there 1+ Type B Land Uses Conflicting within 1,500m of the evaluated parcel?</b>	<b>No</b>	<b>Yes</b>
Score	5	0

Figure 3 shows a map of conflicting land use scores for evaluated parcels.

## **Active Farming**

A binary scoring scheme was used for this criterion. If 50 percent or more of an evaluated parcel was used for farming, as indicating by MPAC parcel codes, the parcel was given the full 10 points. Otherwise, evaluated parcels were not given any points

under this criterion. Figure 4 shows a map of active farming scores for evaluated parcels.

We believe that the selection of these criteria were appropriate given that they are commonly-used and widely-accepted criteria used for LEARs, reflect local conditions and priorities, can be analyzed using available data and all represent distinct and mutually-exclusive considerations for agriculture; mitigating the risk of ‘double counting’.

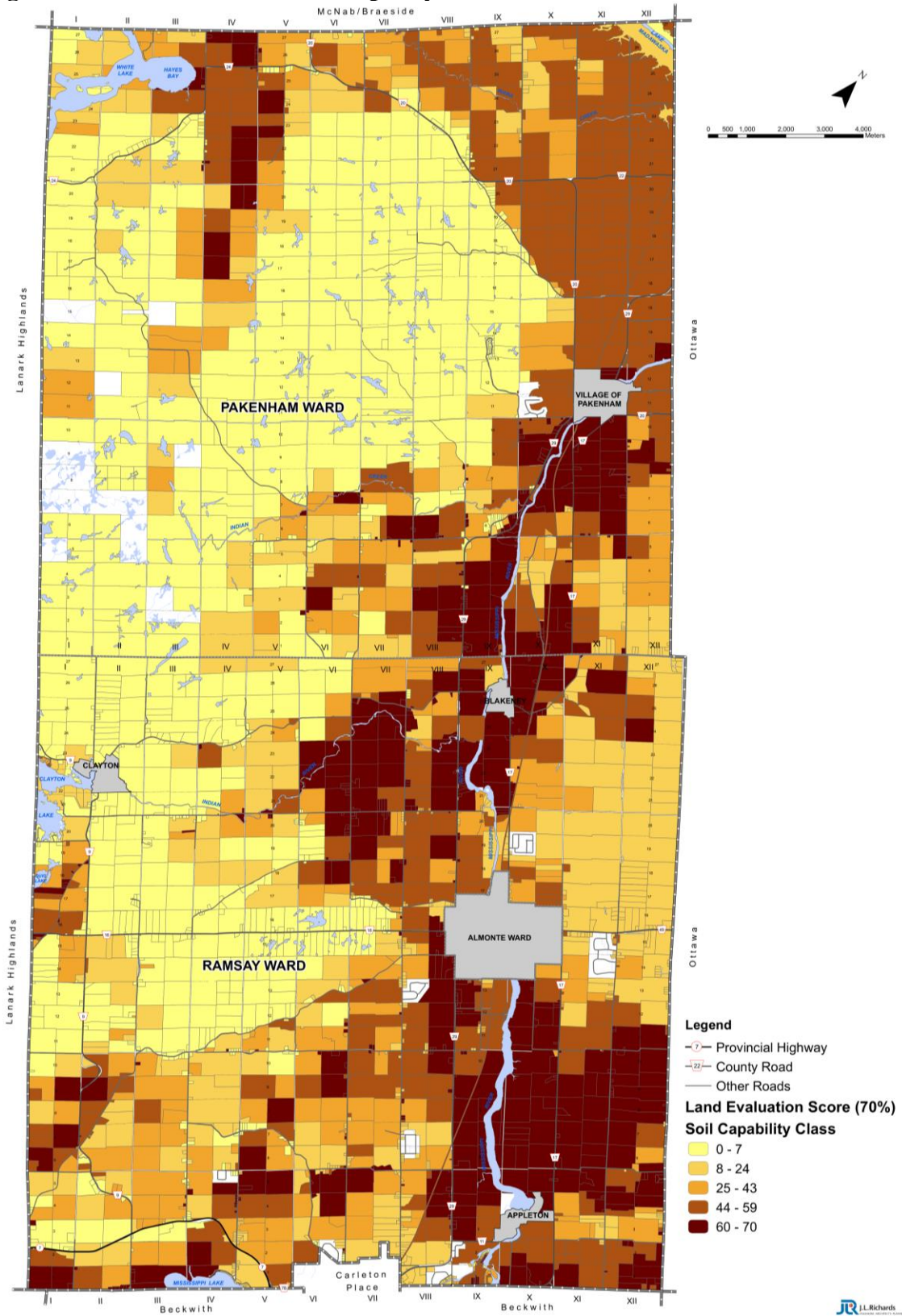
***Selected Threshold Value***

Possible scores for evaluated parcels ranged from 0 to 100. After the GIS model was adjusted and reviewed for accuracy, the team decided on a threshold score of 65. This threshold was selected as it resulted in the identification of a comparable total area as was previously designated as Prime Agricultural in Mississippi Mills. This corresponds with the OMAFRA recommendation that LEARs should not result in a decreased total area recommended for designation as Prime Agriculture but instead should result in the designation of a similar or increased total land area. OMAFRA also requires that, in addition to scoring above the selected threshold, parcels recommended for designation should also be located within blocks of agricultural land that are 250 ha or larger. The table below summarizes existing total areas designated as Prime Agriculture and Rural-Agriculture as well as total area scoring 66+ in the LEAR and total area proposed for Prime Agricultural Areas as per the 66+ threshold and 250 ha block requirement. Figure 5 shows a map of total LEAR scores for evaluated parcels. Figures 6 and 7 respectively show all parcels with total LEAR scores of 66+ and all parcels that are within 250 ha blocks in addition to having a total LEAR score of 66+.

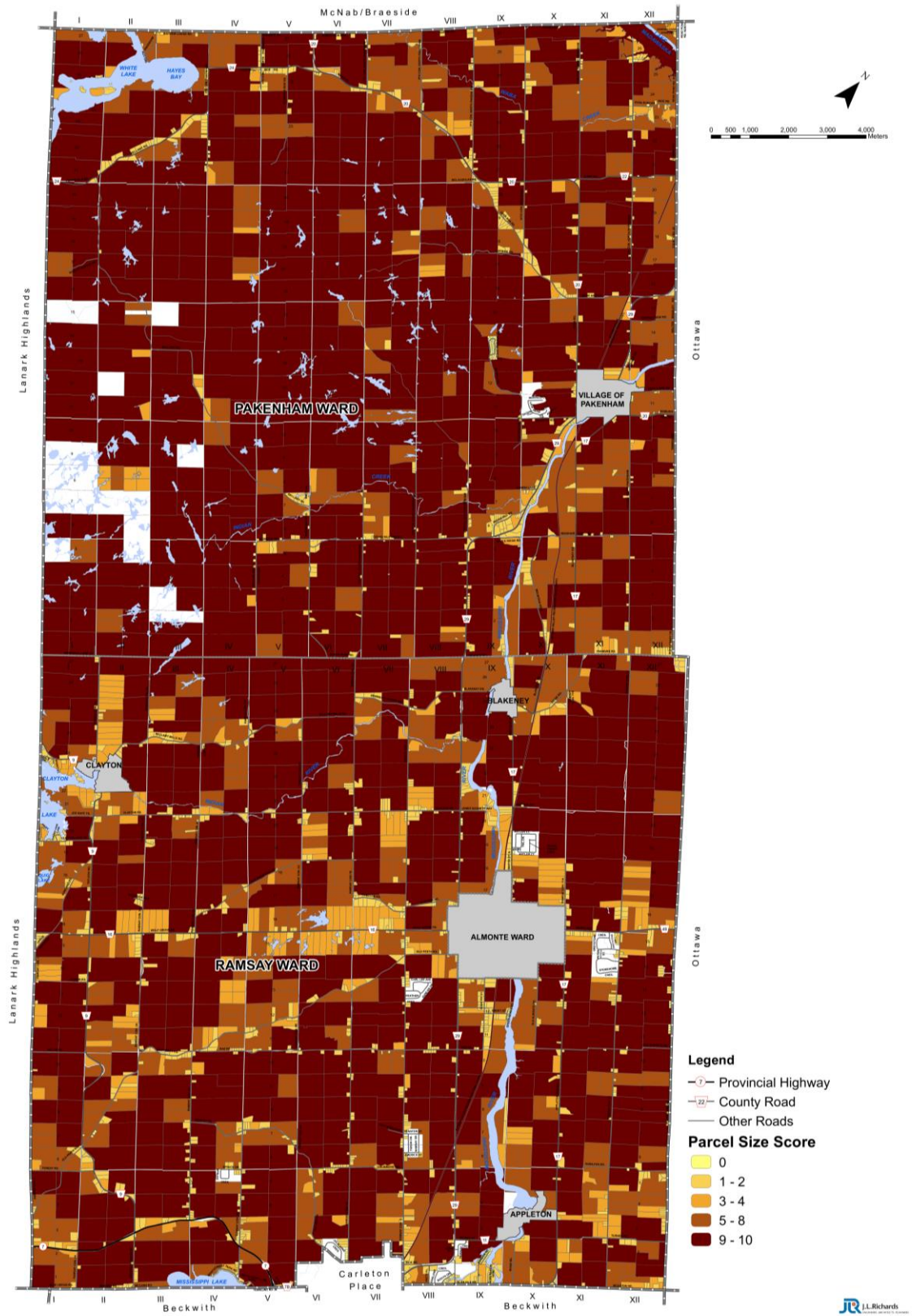
<b>Designation</b>	<b>Total Area (ha)</b>
Existing Agricultural Designation	11,705.55
Existing Rural-Agricultural Designation	5,558.11
Area scoring 66+ in the LEAR Model	15,810.94
Proposed for Prime Agricultural Designation (considering 250ha blocks)	14,410.00



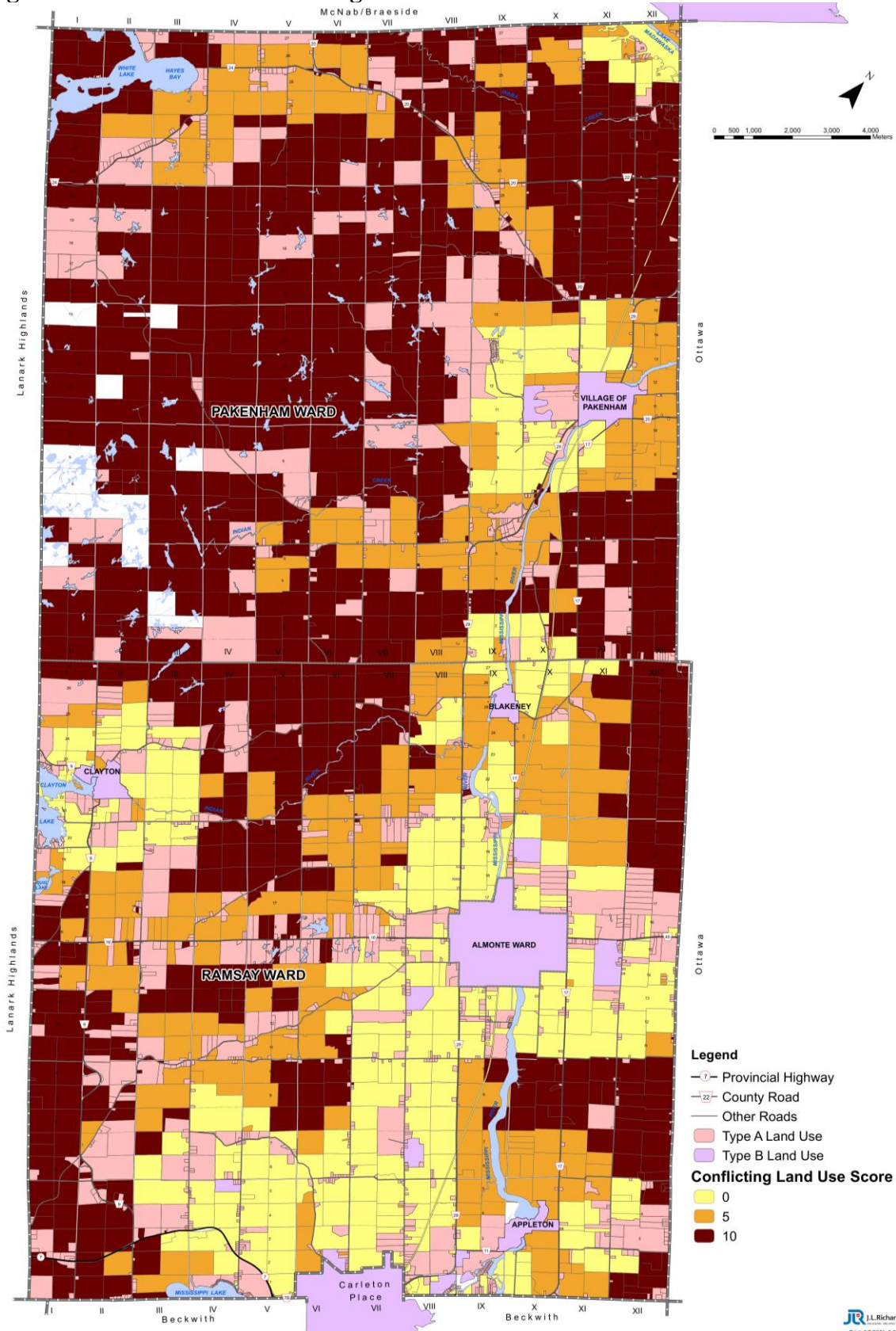
**Figure 1. Land Evaluation: Soil Capacity Score**



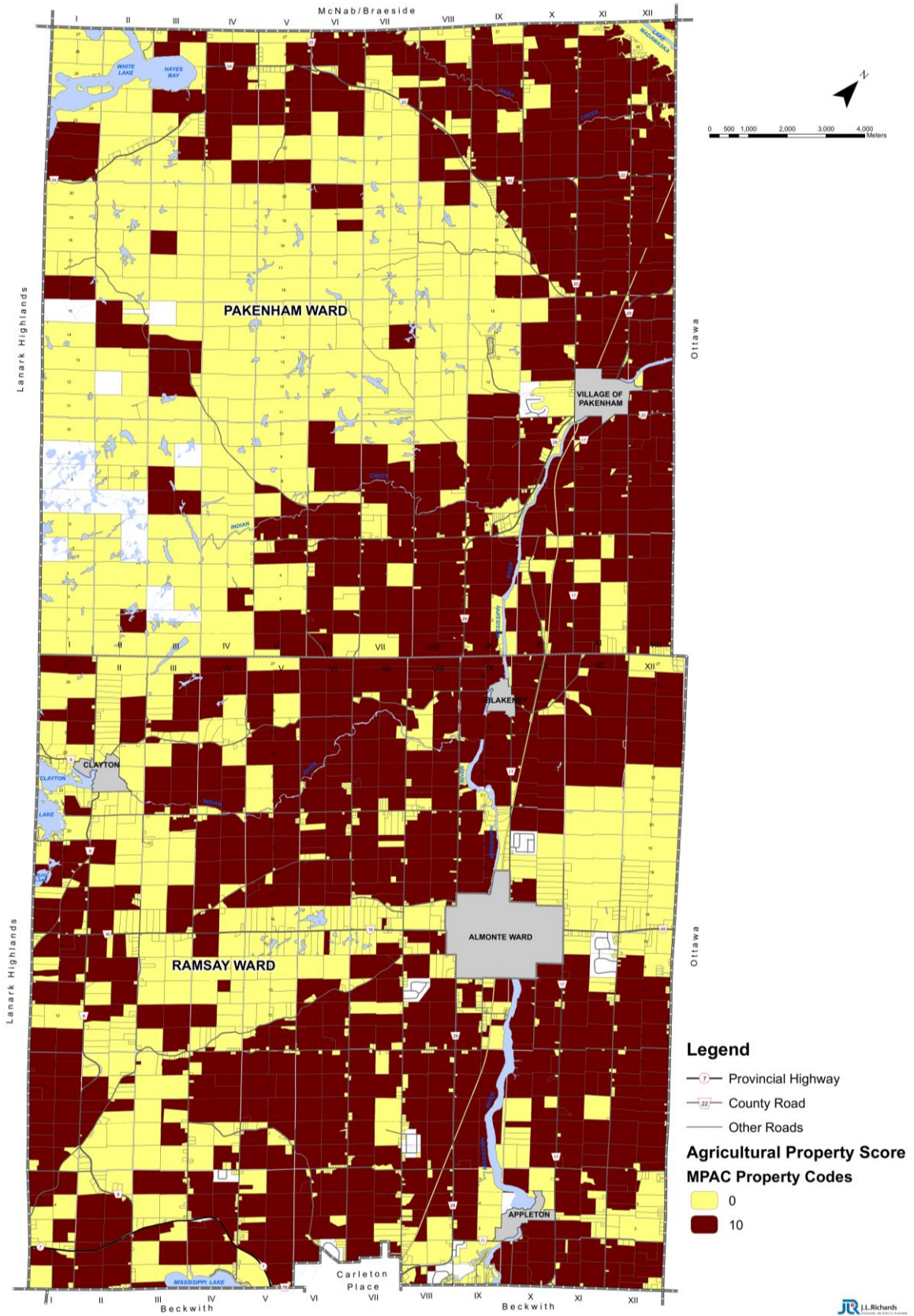
**Figure 2. Area Review: Parcel Size**



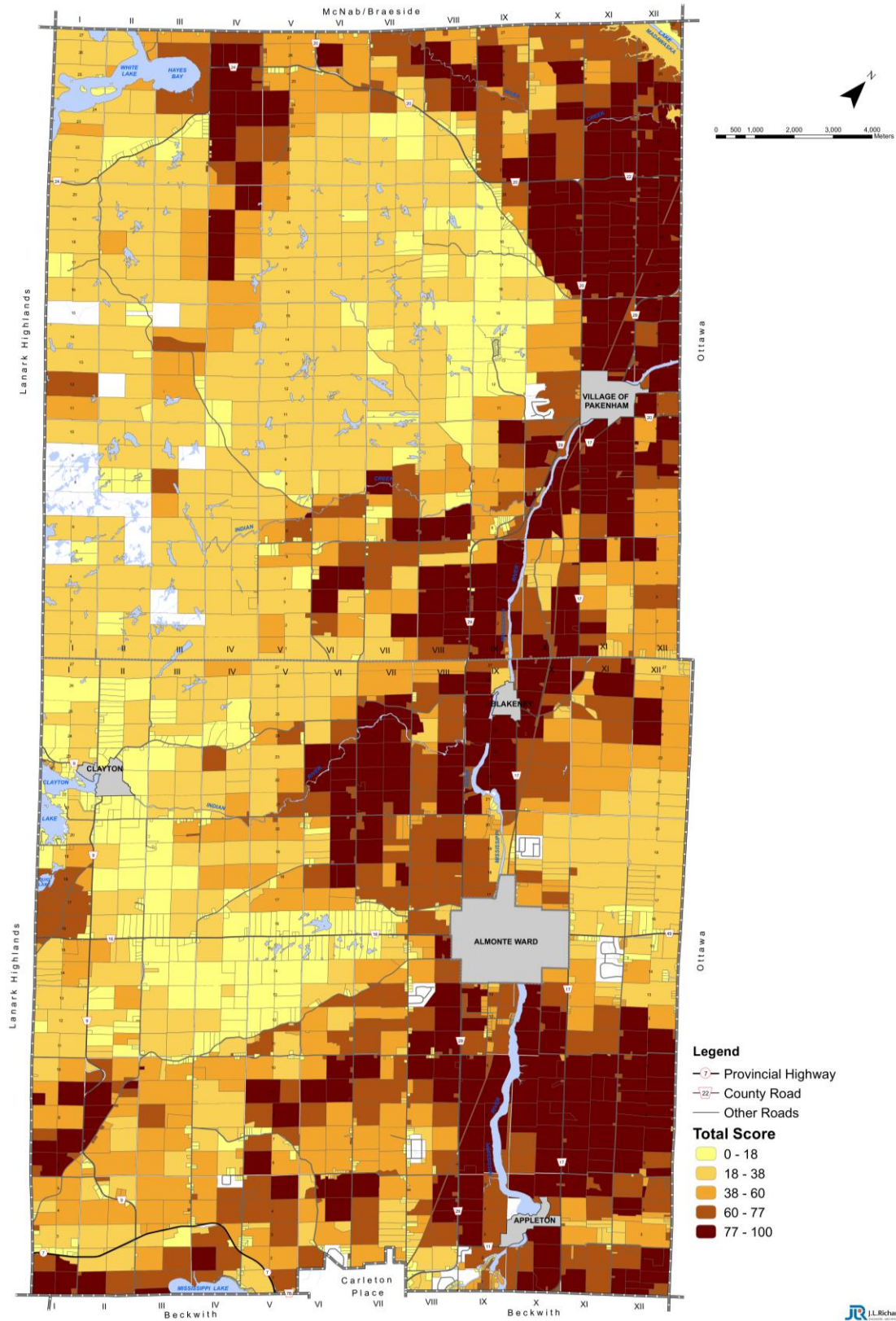
**Figure 3. Area Review: Conflicting Land Uses Score**



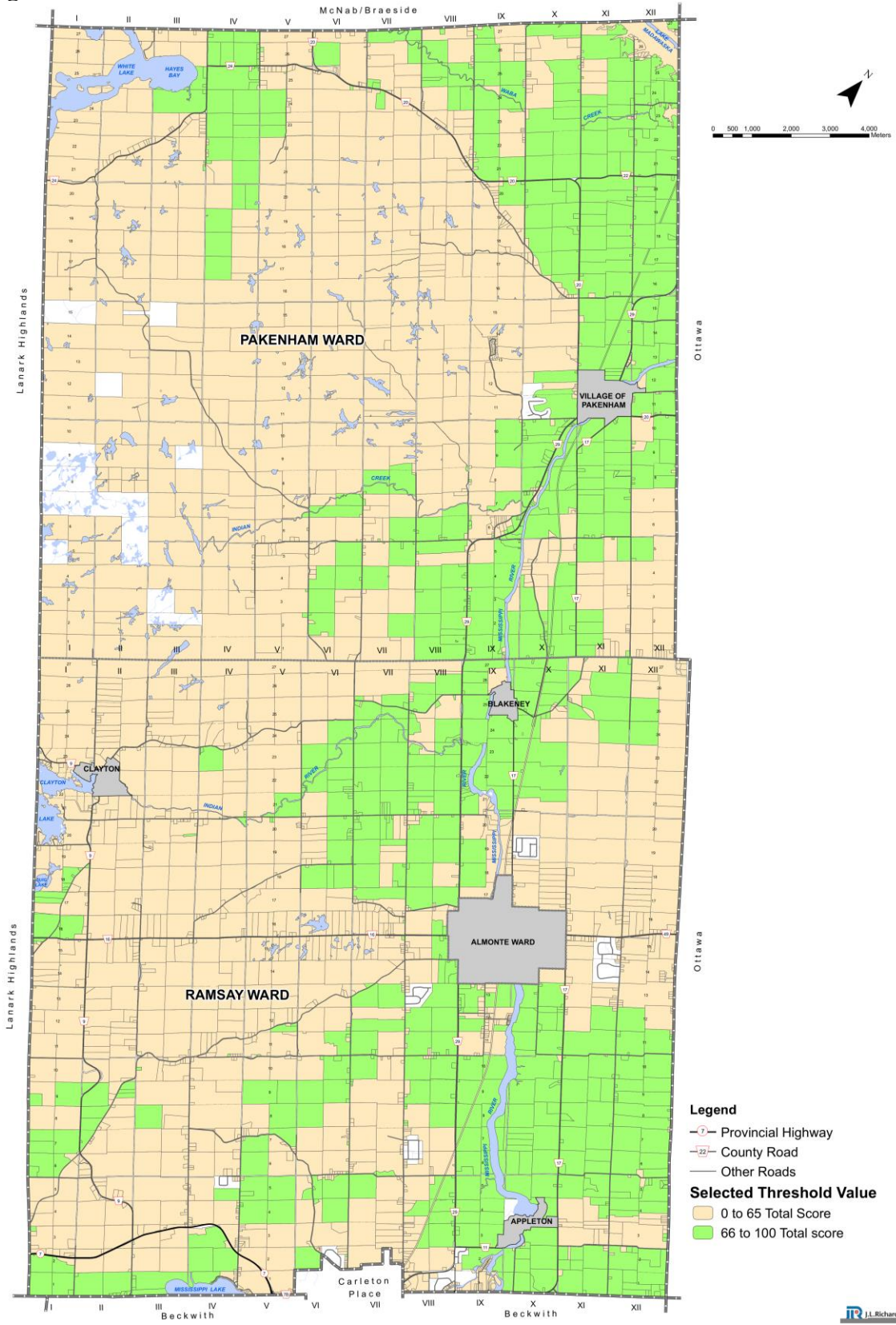
**Figure 4. Area Review: Active Farming Score**



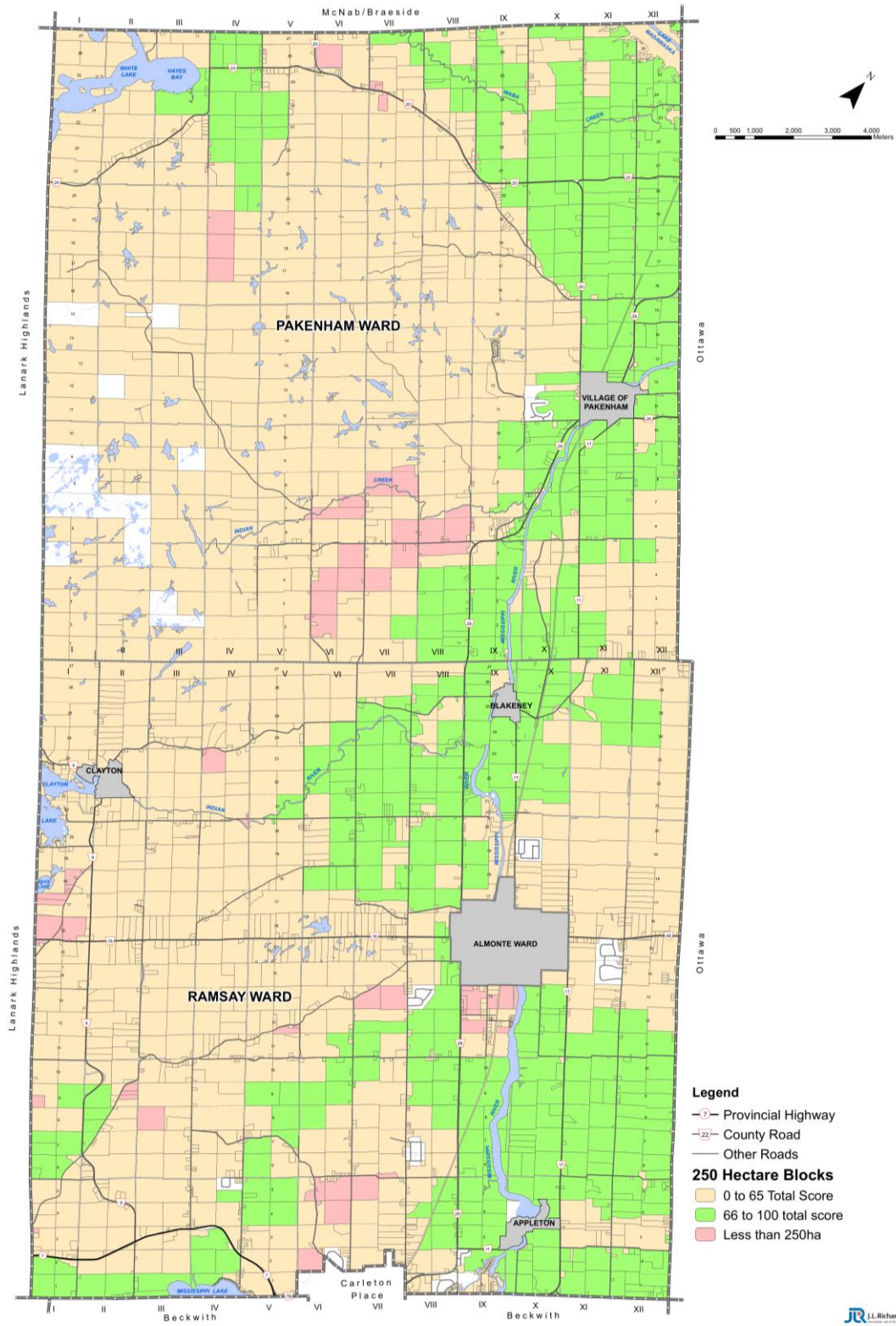
**Figure 5. Total LEAR Score per Evaluated Parcel**



**Figure 6. Parcels with LEAR Scores of 66+**



**Figure 7. Parcels with LEAR Scores of 66+ with 250 ha Requirement**



**FINANCIAL IMPLICATIONS:**

None identified.

**SUMMARY AND RECOMMENDATION**

This Background Report is for informational purposes only. However, staff are requesting Council's approval to move forward with public consultation which would consist of an Open House and Public Meeting.

With that, our recommendation is that Council direct Staff to proceed with an Open House and Public Meeting for Official Plan Amendment (OPA) No. 29 in accordance with the Planning Act Notification Procedures.

However, should Council wish to take more time to review the LEAR Background to be used as part of the Prime Agricultural Area recommendation in support of OPA 29, they could pass a motion to delay the Public Consultation at this time.

All of which is respectfully submitted,



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Planning Consultant



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Ken Kelly  
Chief Administrative Officer