



MEMO

To:	County of Wellington, Township of Puslinch
From:	Danial Salari, MHBC
Date:	August 5, 2025
File:	22451A
Subject:	Minimum Distance Separation (MDS) I Type A - 4631 Sideroad 20 North, Puslinch, ON

This memo evaluates the appropriate Minimum Distance Separation (MDS) I analysis type for the proposed industrial use on the land at 4631 Sideroad 20 North. MDS I is required to ensure adequate separation between new non-agricultural developments and existing livestock facilities, in accordance with provincial policies. Based on the proposed application, land use characteristics, and policy context, we conclude that a Type A MDS I analysis is appropriate for this application to prevent land use conflicts. The proposed industrial use in a rural area outside a designated settlement area necessitates an MDS I setback calculation from nearby farm operations, as per the Ontario Ministry of Agriculture Food and Rural Affairs (OMAFRA)'s MDS Document.

OMAFRA's MDS Implementation Guidelines differentiate between two categories of non-agricultural land uses for MDS I purposes: Type A and Type B. According to Guideline #33, Type A land uses are characterized by lower densities of human occupancy or activity. Notably, industrial uses located outside a settlement area are explicitly classified as Type A. In contrast, Guideline #34 defines Type B land uses as those with higher human occupancy or sensitivity, such as new or expanding settlement areas and other intensive land uses. Simply put, a single industrial use on a rural lot qualifies as a Type A scenario, whereas a cluster of new homes, office buildings, or a settlement expansion would fall under Type B. Given that the proposed development is an industrial land use situated in a rural area, it aligns with the Type A classification.

Furthermore, OMAFRA's AgriSuite MDS tool parameters support this classification. When using AgriSuite to calculate the MDS I setback, the user selects the land use type. In this case, the appropriate selection is "Type A – industrial use outside a settlement area," consistent with Guideline #33. This ensures the software applies the correct formula factors.

Based on these considerations, the proposed industrial use qualifies as a Type A MDS I land use. It is a low-density, rural industrial development located outside a settlement area, meeting the criteria outlined in Guideline #33 and not triggering any of the high-density conditions specified in Guideline

#34. This classification aligns with the 2024 Provincial Policy Statement (PPS), which supports appropriate rural economic activities while ensuring agricultural protection through MDS compliance.

Accordingly, a Type A MDS I setback analysis has been conducted. A roadside site visit was carried out on March 20th, 2025, to identify three livestock operations highlighted in the above-mentioned study. During this site visit, two hobby farms were identified. Additionally, a poultry operation (chicken-broiler) was detected through satellite imagery; however, it was not visible from either Sideroad 20 or Forestell Road. Appendix A includes the MDS I Type A assessment for these livestock operations. Table 1 outlines these three livestock operations.

Table 1. MDS I Type A Summary Table

Address	Livestock Operation Type	MDS	MDS met
4668 Sideroad 20 North (Farm 2**)	Hobby Farm	142 meters*	No
4638 Sideroad 20 North (Farm 3**)	Poultry Operation (Chicken-Broiler)	211 meters	Yes
4599 Sideroad 20 North (Farm 5**)	Hobby Farm (Rescued Animals)	138 meters	Yes
*Where only one MDS measurement is listed, that measurement applies to both the barn and manure storage (or barn only where there is no manure storage). **Farm numbers are based on Section 3.6 of the Background Paper: Agriculture, from <i>Puslinch by Design: Employment Land Study</i> .			

A small portion in northern side of the subject land, approximately 1.34 acre, lies within the barns at 4668 Sideroad 20 North setback area calculated by the minimum Distance Separation (MDS) I Formula. This minor overlap constitutes a small portion of the subject land and is situated at a higher elevation compared to the barns, which are located at a lower elevation. Table 1 outlines this livestock operation.

To confirm the setback requirements for Farm 5, located on the southern side of the field, and the proposed daycare facility, which requires an MDS I Type B analysis, an additional MDS assessment was conducted using AgriSuite. The results, provided in Appendix B, indicate that there are no conflicting setback requirements, even when selecting MDS I Type B for Farm 5.

Table 2. MDS I Type B Summary Table

Address	Livestock Operation Type	MDS	MDS met
4599 Sideroad 20 North (Farm 5)	Hobby Farm (Rescued Animals)	224 meters	Yes
*Where only one MDS measurement is listed, that measurement applies to both the barn and manure storage (or barn only where there is no manure storage)			

The enclosed MDS I calculation reports and supporting figures (generated via OMAFRA's AgriSuite) are provided in the appendix A and appendix B.

Yours truly,

MHBC



Danial Salari, MSc(Agr), MSc(PI), A.Ag.
Planner

A



Appendix A: Type A Land Use – MDS I Setbacks

4631 Sideroad 20 N, Puslinch

General information

Application date

Mar 18, 2025

Municipal file number

Proposed application

New or expanding zone or designation for an industrial use outside of a settlement area

Applicant contact information

Puslinch MDS
ON

Location of subject lands

County of Wellington
Township of Puslinch
PUSLINCH
Concession 4 , Lot 21

Calculations

Farm 2 (Hobby Farm)

Farm contact information

Christine Rose Mason Gray Allan Mason
4668 Sideroad 20 North
Puslinch, ON

Location of existing livestock facility or anaerobic digester

County of Wellington
Township of Puslinch
PUSLINCH
Concession 4 , Lot 20
Roll number: 2301

Total lot size

17.8 ac

Livestock/manure summary

Manure Form	Type of livestock/manure	Existing maximum number	Existing maximum number (NU)	Estimated livestock barn area
Solid	Horses, Large-framed, mature; > 680 kg (including unweaned offspring)	18	25.7 NU	5850 ft ²



Confirm Livestock/Manure Information (Farm 2 (Hobby Farm))

The livestock/manure information has not been confirmed with the property owner and/or farm operator.

Setback summary

Existing manure storage	V3. Solid, outside, no cover, >= 30% DM		
Design capacity	25.7 NU		
Potential design capacity	51.4 NU		
Factor A (odour potential)	0.7	Factor B (design capacity)	262.84
Factor D (manure type)	0.7	Factor E (encroaching land use)	1.1
Building base distance 'F' (A x B x D x E) (minimum distance from livestock barn)			142 m (466 ft)
Actual distance from livestock barn			NA
Storage base distance 'S' (minimum distance from manure storage)			142 m (466 ft)
Actual distance from manure storage			NA

Farm 3 (Poultry Operation)

Farm contact information

Elaine Weber
L E L Farms Limited
4638 Sideroad 20 North
Puslinch, ON

Location of existing livestock facility or
anaerobic digester
County of Wellington
Township of Puslinch
PUSLINCH
Concession 4 , Lot 20
Roll number: 2301

Total lot size
16.21 ac

Livestock/manure summary

Manure Form	Type of livestock/manure	Existing maximum number	Existing maximum number (NU)	Estimated livestock barn area
Solid	Chickens, Broilers	24596 ft ²	92.1 NU	24596 ft ²



Confirm Livestock/Manure Information (Farm 3 (Poultry Operation))

The livestock/manure information has not been confirmed with the property owner and/or farm operator.

Setback summary

Existing manure storage	V3. Solid, outside, no cover, >= 30% DM		
Design capacity	92.1 NU		
Potential design capacity	184.3 NU		
Factor A (odour potential)	0.7	Factor B (design capacity)	391.07
Factor D (manure type)	0.7	Factor E (encroaching land use)	1.1
Building base distance 'F' (A x B x D x E) (minimum distance from livestock barn)			211 m (692 ft)
Actual distance from livestock barn			NA
Storage base distance 'S' (minimum distance from manure storage)			211 m (692 ft)
Actual distance from manure storage			NA

Farm 5 (Hobby Farm)


Farm contact information
 4599 Sideroad 20 N
 Puslinch, ON

Location of existing livestock facility or anaerobic digester
 County of Wellington
 Township of Puslinch
 PUSLINCH
 Concession 3 , Lot 21
 Roll number: 2301

Total lot size
 101.4 ac

Livestock/manure summary

Manure Form	Type of livestock/manure	Existing maximum number	Existing maximum number (NU)	Estimated livestock barn area
Solid	Horses, Large-framed, mature; > 680 kg (including unweaned offspring)	16	22.9 NU	5200 ft ²
Solid	Bison, Adults (includes unweaned calves & replacements)	1	0.8 NU	NA
Liquid	Ducks, Peking, Growers	4	0 NU	7 ft ²

 **Confirm Livestock/Manure Information (Farm 5 (Hobby Farm))**
 The livestock/manure information has not been confirmed with the property owner and/or farm operator.

Setback summary

Existing manure storage	V3. Solid, outside, no cover, >= 30% DM		
Design capacity	23.7 NU		
Potential design capacity	47.3 NU		
Factor A (odour potential)	0.7	Factor B (design capacity)	254.64
Factor D (manure type)	0.7	Factor E (encroaching land use)	1.1
Building base distance 'F' (A x B x D x E) (minimum distance from livestock barn)			138 m (453 ft)
Actual distance from livestock barn			NA
Storage base distance 'S' (minimum distance from manure storage)			138 m (453 ft)
Actual distance from manure storage			NA

Preparer signoff & disclaimer

Preparer contact information
 Danial Salari
 MHBC Planning
 ON
 dsalari@mhbcplan.com

Signature of preparer



Danial Salari , Rural Planner

03-20-2025

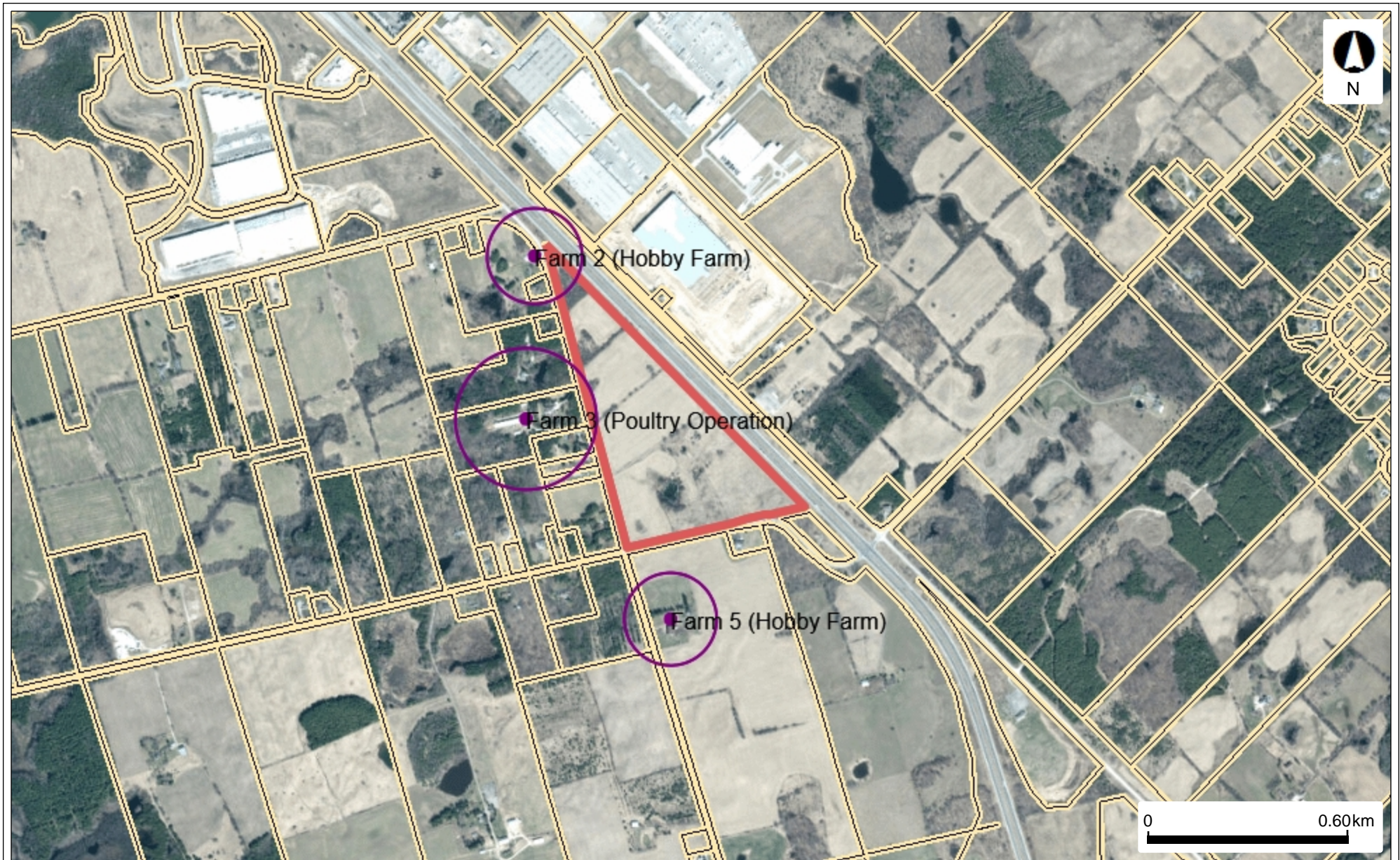
Date (mmm-dd-yyyy)

Note to the user

The Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) has developed this software program for distribution and use with the Minimum Distance Separation (MDS) Formulae as a public service to assist farmers, consultants, and the general public. This version of the software distributed by OMAFRA will be considered to be the official version for purposes of calculating MDS. OMAFRA is not responsible for errors due to inaccurate or incorrect data or information; mistakes in calculation; errors arising out of modification of the software, or errors arising out of incorrect inputting of data. All data and calculations should be verified before acting on them.

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Type A Land Use - MDS I Setbacks



Prepared By:
MHBC Planning

Notes:

B

Appendix B: Type B Land Use – MDS I Setbacks



MDS I Type B - 4631 Sideroad

General information

Application date

Mar 20, 2025

Municipal file number

Proposed application

New or expanding settlement area boundary

Applicant contact information

4631 Sideroad 20 N
ON

Location of subject lands

County of Wellington
Township of Puslinch
PUSLINCH
Concession 4 , Lot 21
Roll number: 2301

Calculations

Farm 5 (Hobby Farm)

Farm contact information
4599 Sideroad 20 N
ON

Location of existing livestock facility or anaerobic digester
County of Wellington
Township of Puslinch
PUSLINCH
Concession 3 , Lot 21
Roll number: 2301

Total lot size
101.4 ac

Livestock/manure summary

Manure Form	Type of livestock/manure	Existing maximum number	Existing maximum number (NU)	Estimated livestock barn area
Solid	Horses, Large-framed, mature; > 680 kg (including unweaned offspring)	16	22.9 NU	5200 ft ²
Solid	Bison, Adults (includes unweaned calves & replacements)	1	0.8 NU	NA
Liquid	Ducks, Peking, Growers	4	0 NU	7 ft ²

**Confirm Livestock/Manure Information (Farm 5 (Hobby Farm))**

The livestock/manure information has not been confirmed with the property owner and/or farm operator.

Setback summary

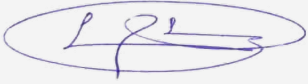
Existing manure storage	V3. Solid, outside, no cover, >= 30% DM		
Design capacity	23.7 NU		
Potential design capacity	23.7 NU		
Factor A (odour potential)	0.7	Factor B (design capacity)	207.32
Factor D (manure type)	0.7	Factor E (encroaching land use)	2.2
Building base distance 'F' (A x B x D x E) (minimum distance from livestock barn)			224 m (735 ft)
Actual distance from livestock barn			NA
Storage base distance 'S' (minimum distance from manure storage)			224 m (735 ft)
Actual distance from manure storage			NA

Preparer signoff & disclaimer

Preparer contact information

Danial Salari
MHBC Planning
ON
dsalari@mhbcplan.com

Signature of preparer



03-20-2025

Danial Salari , Rural Planner

Date (mmm-dd-yyyy)

Note to the user

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Type B Land Use - MDS I Setbacks



Prepared By:
MHBC Planning

Notes:
This MDS I Type B analysis was conducted to demonstrate that there is no overlap or conflicting setback restrictions between Farm 5 and proposed daycare, which requires more sensitive MDS I Type B analysis.



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THIS IS NOT A PLAN OF SURVEY.

Map Created: 3/20/2025
Map Center: 43.47549 N, -80.19628 W

C



Appendix C: Justification for MDS Methodology

During the growing season, most livestock operators are occupied with time-sensitive fieldwork and are understandably disinclined to respond to detailed inquiries about barn dimensions or animal numbers. Attempting to contact each producer by phone or email can significantly delay the project timeline, and in many cases, the necessary contact information is not publicly available. Further, in the case of the development applications for these lands, there is significant sensitivity and discussions with producers was not considered to be appropriate.

Guideline # 16 of OMAFRA Publication 853: Minimum Distance Separation (MDS) Document) regarding obtaining required information states that “*If cooperation is not forthcoming, or there is concern about the accuracy of the information available, it may be helpful to obtain independent information by consulting other sources*”. In this case, calculations are based on maximum design capacities.

On-Site and Remote Data Collection

To begin, we used aerial and satellite imagery to identify livestock facilities with potential overlap between their required setbacks and the subject property. A follow-up roadside site visit was conducted to assess three identified locations. While one livestock operation was not visible from the road, the other two were, allowing for detailed visual assessment.

Street-level observations and imagery confirmed barn style, livestock type, manure storage structures, and the layout of yards and paddocks. This dual-source method—remote sensing combined with site inspection—ensures the livestock inventory reflects real, observed conditions rather than anecdotal or assumed data.

Further, we reviewed the Puslinch By Design Background Study, dated September 2024 which included a Background Paper related to Agriculture at Appendix 3.6. The MDS evaluation memorandum is consistent with the findings of the Puslinch by Design Background Study in terms of the livestock operation types.



Figure 1. Sign at the entrance of Farm 5 (Hobby Farm)



Figure 2. Barn style and existing animals at farm 5 (Hobby Farm)



Figure 3. Existing animals and paddock at farm 2 (Hobby Farm)

Determining a Conservative Capacity

Using OMAFRA's Publication 853 and AgriSuite software, we followed a systematic process to establish conservative values for each facility:

1. Measured and calculated the exterior dimensions of each barn;
2. Converted barn floor area into "maximum Nutrient Units" using AgriSuite's guidelines;
3. Applied the maximum design capacity, even where fewer animals were observed, to comply with Implementation Guidelines and ensure a safety margin.

To further ensure a conservative result, we selected the livestock sub-type that generates the longest setback. For example, using the same barn area (5,750 ft²), we selected the category "Large-framed, mature; > 680 kg" with a setback of 142 m, instead of "Medium-framed, mature; 227–680 kg", which would have resulted in a setback of only 136 m.

This approach produces a higher "F-value" in the MDS formula, resulting in a longer setback distance. By applying the maximum capacity and selecting the highest-impact animal categories, the resulting setbacks err on the side of caution and provide added protection for surrounding land uses. Even in the event of future full-capacity use, the setbacks remain valid and protective, mitigating potential concerns such as odour, nutrient impacts, and land use conflicts.

Calculating and Mapping the MDS Envelope

Using AgriSuite and AgMaps, we generated setback arcs around each livestock barn and manure storage structure. The largest overlapping setback became the buffer for the subject land. These setback areas were then clearly illustrated on the MDS map included in the report, allowing reviewers to easily understand how each buffer zone relates to the proposed development.