



April 8, 2021

OEC 21-013

Cortel Group
2800 Highway #7 West
Suite 301
Concord, Ontario L4K 1W8

Attention: Stefano Cortellucci

**Re: Minimum Distance Separation Calculation for
Tower Hill North Official Plan Amendment
Township of Cavan-Millbrook- North Monaghan**

Dear Mr. Cortellucci:

The purpose of the letter is to assess the Minimum Distance Separation (MDS) requirements for the lands located within Lots 11 and 12 Concession 6 in the Township of Cavan-Millbrook- North Monaghan. The MDS calculations are required to assess if the proposed expansion of the settlement area will adversely impact the adjacent livestock operations. The MDS assessment was done in accordance with the Ontario Ministry of Agriculture, Food and Rural Affairs Minimum Distance Separation Document Publication 853.

The proposed settlement expansion lands, as shown in red on Figure 1, have no structurally sound livestock housing facilities. Review of the adjacent lands within 1500m of the proposed Official Plan Amendment (OPA) identified nine potential livestock housing facilities. One beef barn had been removed post 2018. Figure 1 shows all the barn locations. Two barns had livestock present, Farm 3 and a barn located on the north west corner of the intersection of Highway 115 and Larmer Line. The barn at Highway 115 and Larmer Line was not assessed for MDS because the barn was smaller than the barn at Farm 1 and was too far away to be a concern. Two barns on and adjacent to the subject property along County Road 10 were not structurally sound and therefore were not assessed.

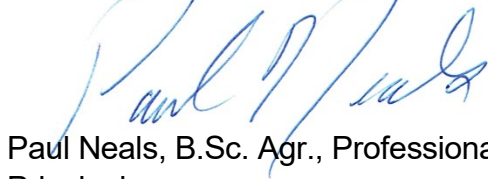
The MDS assessment was done for the three farms that are closest to the proposed development areas. The remaining farms were not assessed because

they were either had smaller or comparable size barns. The rationale being if the closet barns are in compliance comparable barns further away would also be unaffected. No swine or poultry operations which require larger setbacks were present in the study area. The majority of the livestock barns have been inactive for a number of years based on no evidence of any activity around the barns, barnyard fences removed and vegetative growth around the barns in areas that typically would have regular equipment movement associated livestock feeding and manure handling. This inactivity around the barns in the area is not unexpected because livestock production on 100-acre farms typically found in southern Ontario has significantly decreased due to the increasing operation costs have adversely impacted the economic viability of the agricultural production from 100 acres.

Figure 1 shows all the farm locations and presents the MDS arcs for the three closest farms relative to the OPA area. None of the three farms are impacted by the proposed OPA. The proposed development limit for the settlement area expansion is in compliance with the MDS requirements. The MDS calculations are appended for the three farms.

Please contact me if you have any questions.

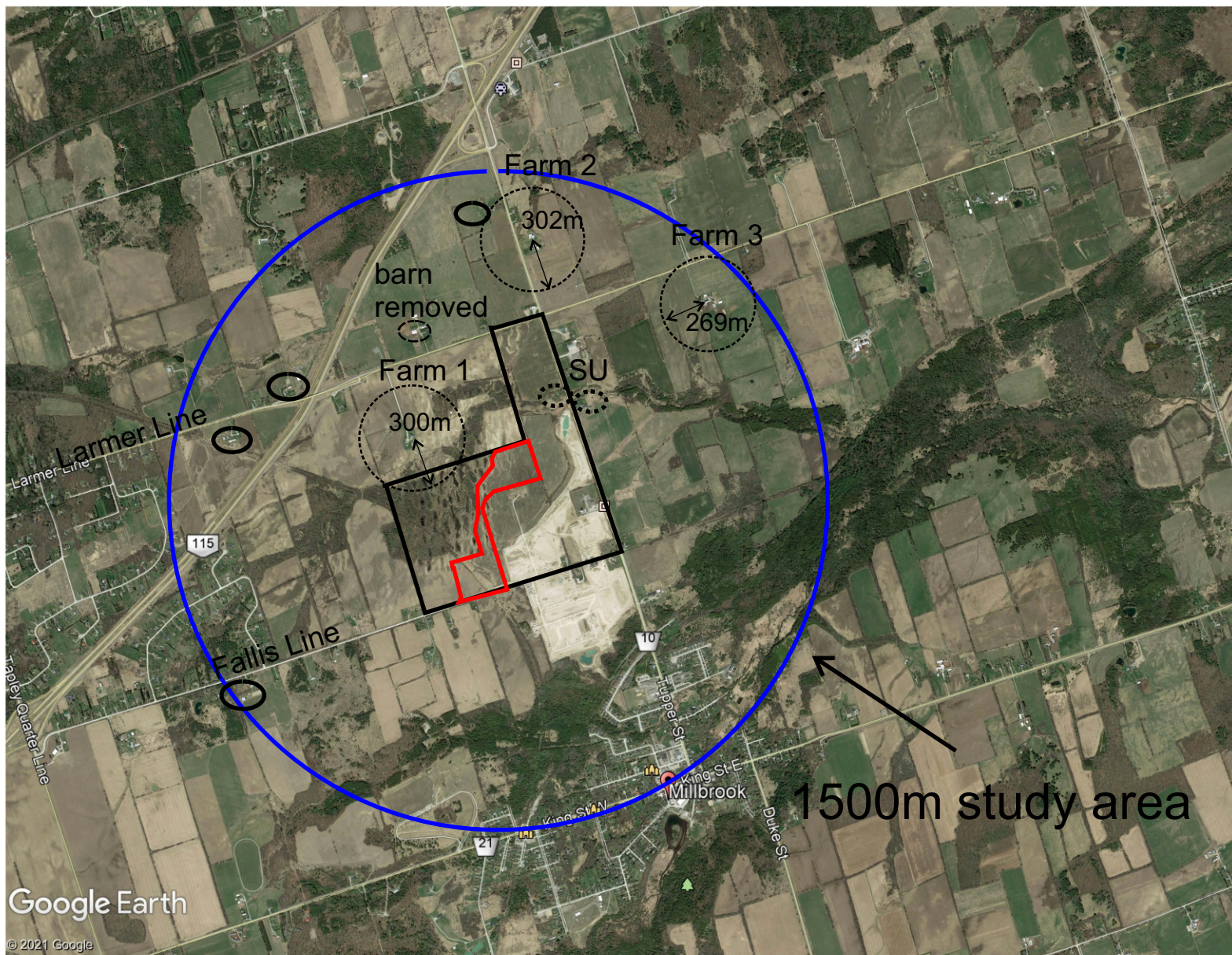
Yours truly,
ORION ENVIRONMENTAL CONSULTING, INC.



Paul Neals, B.Sc. Agr., Professional Agrologist
Principal

PCN:

Attach:



LEGEND

- Subject Property
- OPA - Agriculture to Residential

- Inactive, smaller or comparable to Farms 1-3
- SU - Structurally Unsound

Note: Google Maps aerial

ORION ENVIRONMENTAL SOLUTIONS

DATE ISSUED: MAR 2021

CREATED BY: PCN

PROJECT NO. - 21-013

Not To Scale

Figure 1
MDS 1500m
Study Area

Description:
Application Date: Wednesday, March 24, 2021

Municipal File Number:
Proposed Application: New or expanding settlement area boundary
Type B Land Use

Applicant Contact Information

 Mario Cortellucci
Towerhill Developments Inc.

Location of Subject Lands

County of Peterborough, Township of Cavan-Millbrook-North Monaghan

CAVAN, Concession: 6, Lot: 11 & 12

Roll Number: 150901003005590


Calculation Name: *Farm 1*
Description: Inactive beef barn

Farm Contact Information

 unknown unknown
809 Larmer Line
, ON, Canada

Location of existing livestock facility or anaerobic digester

County of Peterborough, Township of Cavan-Millbrook-North Monaghan

CAVAN, Concession: 8, Lot: 11

Roll Number: 150901003009405

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Beef, Cows, including calves to weaning (all breeds), Confinement	59	59.0	548 m ²



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

Existing Manure Storage: V3. Solid, outside, no cover, >= 30% DM

Design Capacity (NU): 59.0

Potential Design Capacity (NU): 59.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance 'F' (minimum distance from livestock barn)	Storage Base Distance 'S' (minimum distance from manure storage)
0.7	X	278	X	0.7	X
				2.2	
				=	
				300 m (983 ft)	495 m (1624 ft)
					300 m (983 ft)
					480 m (1575 ft)

Calculation Name: *Farm 2*
Description: inactive dairy barn

Farm Contact Information

 unknown unknown
1187 County Road 10
, ON, Canada

Location of existing livestock facility or anaerobic digester

County of Peterborough, Township of Cavan-Millbrook-North Monaghan

CAVAN, Concession: 7, Lot: 13

Roll Number: 150901003012400

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Dairy, Milking-age Cows (dry or milking) Large Frame (545 - 658 kg) (eg. Holsteins), Tie Stall [Livestock barn is currently unoccupied]	42	60.0	429 m ²

Minimum Distance Separation I

Worksheet 1

Prepared By: Paul Neals, B.Sc.Agr, P.Ag., Orion Environmental Solutions Inc.

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

Existing Manure Storage: V3. Solid, outside, no cover, $\geq 30\%$ DM

Design Capacity (NU): 60.0

Potential Design Capacity (NU): 60.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance F' (minimum distance from livestock barn)	(actual distance from livestock barn)
0.7	X	280	X	0.7	X
				2.2	=
				302 m (990 ft)	459 m (1506 ft)
Storage Base Distance 'S'					
(minimum distance from manure storage) (actual distance from manure storage)					
				302 m (990 ft)	463 m (1519 ft)

Calculation Name: *Farm 3*

Description: beef - active barn with yard

Farm Contact Information

unknown unknown
1085 Larmer Line
, ON, Canada

Location of existing livestock facility or anaerobic digester

County of Peterborough, Township of Cavan-Millbrook-North
Monaghan

CAVAN, Concession: 6, Lot: 14

Roll Number: 150901003009401

The barn area is an estimate only and is intended to provide users with an indication of whether the number of livestock entered is reasonable.

Manure Type	Type of Livestock/Manure	Existing Maximum Number	Existing Maximum Number (NU)	Estimated Livestock Barn Area
Solid	Beef, Backgrounders (7 - 12.5 months), Yard/Barn	87	29.0	323 m ²

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

Existing Manure Storage: V3. Solid, outside, no cover, $\geq 30\%$ DM

Design Capacity (NU): 29.0

Potential Design Capacity (NU): 29.0

Factor A (Odour Potential)	Factor B (Size)	Factor D (Manure Type)	Factor E (Encroaching Land Use)	Building Base Distance F' (minimum distance from livestock barn)	(actual distance from livestock barn)
0.8	X	218	X	0.7	X
				2.2	=
				269 m (881 ft)	921 m (3022 ft)
Storage Base Distance 'S'					
(minimum distance from manure storage) (actual distance from manure storage)					
				269 m (881 ft)	946 m (3104 ft)

Preparer Information

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Signature of Preparer:

Paul Neals, B.Sc.Agr, P.Ag.

Date:

Apr 8/2021

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.