Minimum Distance Separation (MDS) Report David Brown, Douro-Dummer<br>Location:<br>CCS Project No.:<br>Date:<br>Roll No.:<br>County of Peterborough OP:<br>Township of Douro-Dummer OP:<br>Township of Douro-Dummer ZB:<br>Subject Land Size:<br>Prepared for:<br>Prepared by:<br>400 First Line, Douro-Dummer<br>Part Lot 5, Concession 2, Douro<br>Township of Douro-Dummer, County of Peterborough<br>5034<br>June 2, 2022<br>152201000205800<br>Township OP Schedule<br>Rural<br>Rural Zone<br>41.4 ha, 102 ac<br>David Brown<br>Clark Consulting Services



Figure 1 - Location Map

## 1. Introduction

Clark Consulting Services (CCS) was retained by David Brown to prepare a Minimum Distance Separation (MDS) Report, as required for an application for a residential severance in the Rural Area of the Township of Douro-Dummer, County of Peterborough. The location of the subject lands is illustrated on Figure 1 - Location Map.

The subject lands are approximately 41.4 ha . The result of the application will be a residential parcel of up to 1 ha leaving an agricultural parcel (retained) of about 40.4 ha. An MDS Report is required for a Severance Application outside a Settlement Area. The retained parcel with a residence is exempt from MDS, as per MDS Guideline 8. The MDS review for the vacant severed parcel will make comments to cover both the severance and a future building permit, if such a future application is made.

A site visit was carried out on May 26, 2022 and included an interview with the property owner and discussions on local agriculture and livestock uses. The proposal is illustrated on Figure 2 - Proposal.


Figure 2 - Proposal

A preliminary MDS review was made by Staff at the County of Peterborough. Following that review, a detailed MDS review was requested. Comments from the Otonabee Region Conservation Authority are also requested regarding the siting of the severance in proximity to regulated areas.

This report will examine if, and to what extent, approval of the severance application will impact neighbouring livestock barns. A site visit has been completed, neighbouring barns have been identified, MDS calculations have been made using OMAFRA AgriSuite Program, and an MDS Sketch has been prepared showing the subject lands, the 750 m review area, identified neighbouring barns, and the MDS setbacks from each livestock facility where required.

## 2. Site Visit During COVID-19 Restrictions

Clark Consulting Services has reviewed how the gathering of information for an MDS Study can be done safely and respectfully during the time of COVID-19 cautionary measures. MDS Guideline 16 says, "The preferred method for obtaining information (e.g., livestock and manure type as well as design capacity) to be used in MDS I calculations for a complete planning application is visiting the site and getting information directly from the farm operator(s) or owner(s) of the property where the livestock facilities or anaerobic digesters are located."

CCS Staff have considered how to gather information without physically approaching barn owners. If the barns generate an MDS setback critical to the application, CCS Staff will contact the owners by telephone or personal visit only where absolutely required.

## 3. Study Area

The Study Area is an area extending 750 m from the subject lands and covers an area of approximately 247 ha. The Review Area is shown in Figure 3 - Review Area.


Figure 3 - Review Area

## 4. Application of Minimum Distance Separation

The introduction of non-farm uses into a rural area requires consideration of compatibility with existing farming activities, specifically livestock operations. One of the most controversial is the proximity to livestock facilities, which can cause concerns with adjacent land uses, principally due to odour. The Ministry of Agricultural Food and Rural Affairs has established a process for determining appropriate separation distances for new non-farm uses in relation to existing livestock operations. This process is referred to as an MDS I Calculation and requires the determination of the type and size of local livestock operations. The calculation generates a recommended separation distance. This process is described in the Ministry's Publication 853. The calculation can be prepared manually or with the use of the Ministry's calculator within the AgriSuite Program.

Publication 853 contains 43 guidelines to assist in addressing the unique situations that do not lend themselves to a simple calculation.

OMAFRA Publication 853 provides guidance on barns to review and the extent of the review area. In this case, the application is for Lot Creation for one dwelling.

## Review of Applicable MDS Guidelines

The following is an edited review of MDS guidelines that apply to the current Consent Application.
Guideline 2 says, "The MDS I setback distances shall be met prior to the approval of proposed lot creation in accordance with Implementation Guideline 8. The information used to carry out an MDS I calculation must reflect the circumstances at the time that the municipality deems the planning application to be complete."

## Guideline 3

Certain proposed uses are not reasonably expected to be impacted by existing livestock facilities or anaerobic digesters and as a result, do NOT require an MDS I setback:

- livestock barns occupying an area less than $10 \mathrm{~m}^{2}$;
- certain unoccupied livestock barns in accordance with Implementation Guideline 20;
- field shade shelters;
- pastures.


## Guideline 6

This discusses the investigation distances for the review of livestock facilities from the subject lands. Type A land uses require a review distance of 750 m . It says, "A separate MDS I setback shall be required to be measured from all existing livestock facilities and anaerobic digesters on lots in the surrounding area that are reasonably expected by an approval authority to be impacted by the proposed application." The Guideline is clear that all livestock facilities within the investigation distance to determine those barns that are "reasonably expected" to be impacted by the application.

## Guideline 8 -Setbacks for Lot Creation

Where lot creation is proposed, including new lots for agricultural uses, an MDS I setback is required for both the severed and retained lot. However, an MDS I setback is NOT required:

- for a severed or retained lot for an agricultural use when that lot already has an existing dwelling on it;
- for a severed or retained lot for an existing non-agricultural use.

NOTE: The lot creation policies contained in the PPS, provincial plans and other local lot creation policies continue to apply, despite any exemptions from MDS I setbacks.

## Guideline 20

Design capacity for an MDS I calculation shall include all unoccupied livestock barns on a lot. The number of livestock or the area of livestock housing of unoccupied livestock barns should be based on information supplied by the farm operator or owner.

## Guideline 33

For the purposes of MDS I, proposed Type A land uses are characterized by a lower density of human occupancy, habitation or activity including the creation of one or more lots for development on land outside of a Settlement Area that would NOT result in four or more lots for development in
immediate proximity to one another (e.g., sharing a common contiguous boundary, across the road from one another, etc.), regardless of whether any of the lots are vacant.

## Guideline 41 - Measurement of MDS I Setbacks for the Creation of Lots

Where an MDS I setback is required for the creation of a lot, in accordance with Implementation Guideline 8, measurement of the MDS I setback should be undertaken as follows:

- for proposed lots without an existing dwelling that are $\leq 1$ ha, MDS I setbacks are measured as the shortest distance between the proposed lot line and either the surrounding livestock occupied portions of the livestock barns, manure storages or anaerobic digesters.
- for proposed lots without an existing dwelling that are >1 ha, MDS I setbacks are measured as the shortest distance between a 0.5 ha or larger building envelope (for a potential dwelling) and either the surrounding livestock occupied portions of the livestock barns, manure storages or anaerobic digesters;
- for lots created after March 1, 2017, MDS I setbacks shall be required for all building permit applications for non-agricultural uses and dwellings in accordance with Implementation Guideline 7.


## Summary of MDS Guidelines for this Review

MDS directs that, certain applications for lot creation comply with MDS. In this case, the creation of the single residential lot, with a lot area of approximately 0.4 ha as proposed, requires compliance with MDS Guideline 41, that the lot will be outside any MDS setback generated from neighbouring barns or if the lot is 1 ha or more, a building envelope of 0.5 ha must be available outside the MDS setback. The application is considered a Type A application, so the investigation distance is 750 m from the boundaries of the new lot. Since the retained lot already has a dwelling, an MDS setback is not required for the retained lot in accordance with the provisions of Guideline 8 (for a severed or retained lot for an existing non-agricultural use).

## Livestock Facilities that Require Examination

A review of aerial imagery and information gathered from the site visit, shows that there may be six (6) livestock facilities (Barns A to F), located within the 750 m review area. These livestock facilities are shown on Figure 4 - MDS - Barns for Review.


Figure 4 - MDS - Barns for Review

## Barn A - 369 Douro First Line

This 41.5 ha farm includes a single storey open sided barn, lying east of the house, used as part of a small beef operation which includes a few recreational horses. The owner runs up to 6 cows which are bred and produce calves periodically. The red single storey barn is used for storage and shelter. Livestock are kept on pasture (MDS Guideline 3 says that MDS setbacks are not required from pastures). The owner said the barn may be used for calving cows. The owner provided information to the applicant prior to the site visit.

An open-ended coverall shelter lies south of the house. This is used as a storage space and can be used as a field shelter. For the purposes of MDS, this is not considered a Livestock Barn.

The presence of an active livestock barn in proximity to a proposed residential severance must be considered a critical review barn. This review will look at the farm, the structures, the actual livestock use of the farm, the capacities of the structures, and MDS setbacks from livestock barns and manure storage facilities. Where assumptions must be made, CCS will provide a number of
calculations and sketches showing how the calculated MDS setbacks may affect the location of the new lot.
The County of Peterborough prepared a preliminary MDS review based on information from the owner, Jordan Brown. For that review, the Coverall Building was said to be a Livestock Barn. Livestock capacity was attributed to this storage/shelter and an MDS setback calculated based upon the assumption that there are two livestock facilities on this farm. The site visit revealed this Coverall is an open-ended building that does not meet the definition of a Livestock Barn as described in Section 3 of the MDS Guidelines:

- Livestock barns: One or more permanent buildings located on a lot which are intended for housing livestock, and are structurally sound and reasonably capable of housing livestock.

It goes on to define a Livestock Facility as:

- Livestock facilities: All livestock barns and manure storages on a lot, as well as all unoccupied livestock barns and unused manure storages on a lot.

OMAFRA also provides guidelines and information for farmers planning to construct a livestock facility (Planning to Build or Renovate Your Livestock Facility (Housing) including Feed Storage/Milkhouse if Attached to Barn, which is available through the OMAFRA website. If the Coverall building is considered a Livestock Barn, information will be available at the Building Department of the Township, including an MDS II Study, building permit(s), zoning verification, and a review of Nutrient Management to determine if a Nutrient Management Plan is required to establish the new livestock barn.

During the site visit, CCS Staff observed that the Coverall is used for, and appears to be intended to be used as, a storage building similar to a drive shed. The required amenities for a livestock barn do not appear to exist. The development of a new livestock barn requires an MDS II Study to ensure proper placement of the new barn (MDS Guideline 7 MDS II). The conversion of a storage building to a livestock barn requires an MDS II Study (MDS Guideline 8 MDS II). The repair or upgrade of a building to make it suitable as a livestock barn may require building permits if water or electricity is added to the building to provide basic amenities to the housed animals. The review of the Coverall structure from the roadside does not suggest that this building is anything other than that what it appears to be, and that is a storage facility. The positioning of the structure is such that livestock may use the Coverall for shelter (MDS Guideline 3 says that MDS setbacks are not required from field shade shelters). It is the opinion of Clark Consulting Services, that this Coverall structure is not a Livestock Barn, is not part of the Livestock Facilities on this property, and does not generate an MDS setback.

There is a single storey red barn to the east of the house. This barn appears to be a well-maintained building suitable for housing livestock. The barn is not currently being used to capacity. An estimate of housing may be made to confirm capacity, by calculating the floor area of those portions of a barn capable or suitable for housing livestock.

The barn is an open-sided structure with penning suitable for beef cattle or other large livestock. A portion of the building is fully enclosed and does not appear to be part of the housing environment, so is not included in the area calculation. MDS Guideline Section 3, Definitions, provides guidance on determining the appropriate floor area for calculation:

- Livestock occupied portion: Areas of a livestock barn where livestock spend the majority of their time, allowing substantial amounts of manure to accumulate. This DOES NOT include areas such as: alleys, equipment storages, feed bins, feed storage/preparation areas, field shade shelters, assembly areas, loading chutes, machinery sheds, milking centres, milking parlour holding areas, offices, pastures, riding arenas, silos, tack rooms, utility rooms and washrooms.

This definition clearly states that calculations are made from 'areas of a livestock barn where livestock spend the majority of their time'. The livestock on this farm spend the majority of their time outdoors, not within the barn. Manure from these animals is spread throughout pasture, in areas that are not part of an MDS review.

In preparing this review, CCS have considered these factors and have prepared a calculation based on a portion of the floor area of this barn as follows:

## Determination of Appropriate Floor Area

In determining the appropriate floor area for housing as defined in Section 3 of the Guidelines, we have considered the following:

- Total floor area of structure is $250 \mathrm{~m}^{2}$
- Estimated closed-in area on west end of barn is $50 \mathrm{~m}^{2}$
- Area where penning is exposed to open weather is approximately $100 \mathrm{~m}^{2}$
- Area which may be considered sheltered and appropriate for housing livestock for a majority of their life is estimated at $100 \mathrm{~m}^{2}$.

Three MDS setbacks have been calculated. The first is based on the actual livestock use of the property, and based on an estimate of capacity of the single storey red barn. The second is based upon the estimated housing capacity area of the livestock barn ( $100 \mathrm{~m}^{2}$ ), and this barn being used only to house beef cattle to its capacity. The third is a review of the barn housing only horses.

Each of the three scenarios are presented with reasons for the estimates, and a sketch showing how the various MDS setbacks relate to the proposed severance.

## MDS I Calculation - Actual and Estimated use of Property

The farm is approximately 41.5 ha. The manure from livestock handling is largely spread on the pasture. No constructed manure storage facility was seen. Manure generated within the barn will generally be spread on the land. There does not appear to be an area for a manure storage approved under Nutrient Management Plan. We have considered manure to be temporarily stored behind the barn and to be V3. Solid, outside, no cover, >=30\% DM.

## First MDS Calculation

The actual livestock use of the farm is for 3 to 4 beef cattle (cow/calf) and 6 recreational horses. The calculation for Barn A -Actual is 108 m from the barn and 108 m from the manure pile. The measured distance from the closest part of the barn structure (not from the livestock occupied portion of the barn) to lot line is 136 m and from the manure pile is 160 m . These two MDS setbacks do not encroach into the proposed 0.4 ha severance, and so the application meets the MDS setbacks from 369 Douro First Line.

The following (Figure 5 - MDS Setbacks First MDS Calculation), is a graphic description of how the MDS setbacks relate to the proposed new severance.


Figure 5 - MDS Setbacks First MDS Calculation


MDS Calculation Sheet, AgriSuite

## Second MDS Calculation

## Estimated Livestock Use - Beef Cattle Only

If the barn capacity for the purpose of housing beef cattle as part of a cow/calf operation is $100 \mathrm{~m}^{2}$, then housing capacity is 22 cattle. If this is the capacity of the barn for beef, there is no additional space for housing the horses. The MDS setback for use only by beef cattle is 133 m MDS setback from the barn, and 133 m setback from the manure pile. The measured distance is 136 m from the barn, and 160 m from the manure pile to the new lot line. The application meets the MDS requirements from the barn if the barn is used to capacity for beef cattle.

The following (Figure 6-MDS Setbacks Second MDS Calculation), is a graphic description of how the MDS setbacks relate to the proposed new severance.


Figure 6 - MDS Setbacks Second MDS Calculation


MDS Calculation Sheet, AgriSuite

## Third MDS Calculation

## Using the Barn for Horses

We have prepared an MDS Calculation if the barn is only used for horses, and the beef cattle are only kept on pasture.

We have determined the appropriate floor area for housing is $100 \mathrm{~m}^{2}$. A calculation of housing area required for 6 medium horses is $150 \mathrm{~m}^{2}$. If the 6 horses are housed within the barn, then there is no additional space available for beef cattle. The MDS setback for 6 medium horses within this barn is 96 m and from the manure pile is 96 m . The actual setbacks are 136 m and 160 m , so the application complies with MDS from this barn if it is used for horses.

The following (Figure 7-MDS Setbacks Third MDS Calculation), is a graphic description of how the MDS setbacks relate to the proposed new severance.


Figure 7 - MDS Setbacks Third MDS Calculation


MDS Calculation Sheet, AgriSuite

CCS understands that the owner's intention that the Coverall will be used for housing livestock. Part of the process involved in establishing a livestock barn is an MDS II review. We have prepared a test MDS II calculation to determine if approval of the severance application, and if a new house on the new proposed lot will restrict the conversion of the Coverall from a Storage/Shelter to Livestock Barn. The total floor area of the Coverall is approximately $250 \mathrm{~m}^{2}$. The entire floor area of a Coverall Building without substantial concrete walls cannot be used to house large livestock. Therefore, we have based housing estimates on a penned area of $200 \mathrm{~m}^{2}$.

A penned area of $200 \mathrm{~m}^{2}$ permits housing of up to 43 beef cattle within a Cow/Calf operation. This is shown graphically on Figure 8 - MDS II Test Setbacks Beef Cattle in Coverall. A penned area of 200 $\mathrm{m}^{2}$ permits housing of up to or up to 9 medium horses. The MDS II setback for use as housing for cow/calf operation is 138 m . The MDS II setback for use as housing for horses is 91 m The distance from the coverall to the closest part of the severed lot is 113 m .


Figure 8-MDS II Test Setbacks Beef Cattle in Coverall



Figure 9 - MDS II Test Setbacks Horses in Coverall


An MDS II measurement is measured to the nearest dwelling. Approval of the proposed lot does not affect a future application to convert the Coverall to housing for horses. If the owner wishes to convert the Coverall for use for housing beef cattle, the MDS II setback may encroach into the new lot. If such an application is for the housing of the maximum number of cattle (43), the setback to the house will be 138 m . If the application was for 21 or fewer cattle, the setback would not encroach into the new lot. Since the setbacks are measured to the dwelling, not to the lot line, CCS suggests the location of the dwelling could be 138 m or more from the nearest corner of the Coverall structure. With that, there will be no concerns to the approval of the severance application based on any perceived MDS issues.

Based on this test review of an MDS II setback measured between the Coverall building to the location of a new home on the newly created lot as proposed, assuming the new house meets all the usual setbacks, and that the house was built back from the frontage, the house should be outside a future MDS II setback if the owner of the Coverall wished to submit an application for conversion to livestock housing.

Based on this test, the severance of the new lot does not compromise the ability of the neighbouring farmer to increase the housing capacity on his farm. MDS rules still apply, and so if the farmer wishes to increase livestock housing capacity using the Coverall, an MDS II Study is required.


Barn A - 369 Douro First Line


Coverall Structure - 369 Douro First Line

## Barn B-400 Douro First Line

The subject farm is a working livestock farm. The applicant runs up to 30 beef cattle as part of a cow/calf operation. The cattle are outdoor cattle, kept on pasture. The barn may be used for shelter, but is not generally used for housing. MDS Guideline 3 exempts 'pasture' land from MDS. However, if the owner was to use the barn to house livestock, it would most likely house 15 to 20 cattle as part of a cow calf operation. For the purposes of this calculation, we have considered the 30 cattle currently pastured on this farm as fitting within the barn.

MDS Guideline 6 says that when a barn is located on the same lot as the severance, then after the severance, the barn is now on a separate lot, an MDS I review should be made to ensure the barn and lot are an appropriate distance apart.

400 Douro First Line is approximately 41.5 ha. The horizontal distance measured between the barn and severance is 252 m , however the new lot is higher than the barn and so the actual distance is greater than 252 m .

The calculated setback using 30 beef cattle is 123 m , therefore this barn does not impact the application as proposed.


Barn B-400 Douro First Line

## Barn C-429 Douro First Line

An old Pioneer Barn was noted on the farm at 429 Douro First Line, at a distance of just under 500 m from the proposed severance. No livestock was seen on this property and two new houses appear to be in the construction phase at the front of the farm. No MDS calculation has been made.

## Barn D-341 Douro Second Line

The farm at 341 Douro Second Line includes a wooden barn with a tin roof, and appears in good condition. If this barn is capable of housing livestock, then an MDS setback should be calculated.

However, the barn, although only 536 m from the closest part of the subject farm lot, is more than $1,400 \mathrm{~m}$ from the proposed severance. MDS Guideline 6 says that MDS I setbacks shall be required from barns that area reasonably expected to be impacted by the proposal. At a distance of over $1,400 \mathrm{~m}$, it is not likely this barn could impact the proposal. No further review has been made of this barn.


Barn D - 341 Douro Second Line

## Barn E-Douro First Line

A Coverall storage structure is south of the subject lands. This is an open Coverall used for storage and is not a livestock barn. No MDS is generated from this structure.

## Barn F-309 Douro First Line

From a review of aerial mapping, it appears there may be a barn on the property at 309 Douro First Line. Although the structures are 600 m from the subject farm, the structures are approximately 720 m from the proposed severance and so could not be affected by the application. No further review has been made.

## 5. MDS Calculation Sheets

MDS setbacks are calculated using the AgriSuite online calculator. The sheets generated are included with this report as Attachment B.

## 6. MDS Sketch

CCS has prepared an MDS Sketch to show the retained and severed parcels comprising the subject lands on 400 Douro First Line, the location of the neighbouring farms, dwellings and livestock
facilities, and the calculated MDS arcs. The MDS Sketch shows graphically any MDS setback generated from the barns, and shows the actual distance from a barn to the subject lands.


Figure 10 - MDS Detail

## 7. MDS Conclusions and Recommendations

Clark Consulting Services (CCS) was asked to prepare a Minimum Distance Separation (MDS) review for an application for a residential severance at 400 Douro First Line. A site visit was made on May 26,2022 . A review of the area around the subject lands to a distance of 750 m was made to identify and assess all barns within that review area.

The application of MDS is guided by the OMAFRA document, The Minimum Distance Separation (MDS) Document, Publication 853, which provides 43 Guidelines and other information to assist with the appropriate application of MDS. Guideline 6 says, "A separate MDS I setback shall be required to be measured from all existing livestock facilities and anaerobic digesters on lots in the surrounding area that are reasonably expected by an approval authority to be impacted by the proposed application."

The application for severance will result in a new residential parcel. An MDS review showing how the application can comply with the requirements of MDS is required for the planning application, and may be required for a building permit on the new lot. If this is the case, this study can be used for both applications.

The process to date has indicated that there may be an MDS issue with the livestock facilities at 369 Douro First Line. This farm includes a red single-storey barn and a Coverall hoop drive-through storage structure. A previous conversation with the owner appeared to indicate a desire that the Coverall structure be considered a livestock barn. This structure is not a livestock barn. It is a storage structure and could be used as a shelter for livestock when needed. However, the structure does not meet the definition of a livestock barn for the purpose of MDS (MDS Guideline Section 3, Definitions). This structure does not generate an MDS setback.

The subject lands are within a Rural area with a mix of residential, recreational and agricultural uses. During the site visit, six barns of interest were noted including the barn on the subject farm, 369 Douro First Line, 429 Douro First Line, 341 Douro Second Line, Douro First Line and 309 First Line. The barn on the subject lands is set much further from the severance than the MDS Arc setback. The barn at 429 Douro First Line is an old Pioneer barn and no setbacks were calculated. The barn at 341 Douro Second Line is more than $1,400 \mathrm{~m}$ from the severance, so no calculations were made. The Coverall storage structure at First Line is not a livestock barn, and the structures at 309 Douro First Line is set farther from the severance than any MDS setback that will be generated.

The barn at 369 Douro First Line is located 136 m from the closest part of the proposed severance. The barn is not used as housing, as part of the current farm operation of 4 beef cattle (cow/calf) and 6 recreational horses. The MDS setback generated from this barn based on the actual usage of the property, is less than the 136 m distance to the severance. However, a capacity calculation has been made based on an estimate of floor area of the barn where housing, as defined by MDS, can reasonably be considered. The capacity of this open sided building is 22 beef cattle or 9 medium horses. This generates setbacks less than the actual setback of 136 m . A review of the proposed lot shows there is the ability to build a new house based on a lot of 1 ac ( 0.4 ha ).

Concern may be raised that if the Coverall structure was intended to be converted to a livestock barn, would the new lot impact the farmer's ability to convert that structure? If a new barn, or an altered barn is proposed, an MDS II Study is required. A test calculation of an MDS II setback, based on maximum capacity of that structure once converted, was made and is attached as Attachment $C$ to this report. This shows the Coverall could be converted in future even if the new lot is created and a new house built. The setback distance from the closest part of the coverall to the new lot plus a 15 m front yard setback, is 128 . CCS is of the opinion that the conversion of the Coverall to livestock housing would not be affected by the approval of the severance application.

Based on the information gathered, a review of Provincial and Local planning documents, and a review of the MDS Implementation Guidelines, it is the opinion of Clark Consulting Services that the application for a residential lot of 0.4 ha or greater does comply with the requirements of the Minimum Distance Separation formulae. Further to that, it is our opinion that if the owner of the

Coverall structure wishes to convert that structure to be a livestock barn, the approval of the application will not hinder the owner's ability to make that change.

This review has been prepared under the direction of a 'Qualified Person', Robert K. Clark, with appropriate qualifications and experience in the Province of Ontario. Mr. Clark has no perceived or actual conflicts of interest in preparing this report. Mr. Clark maintains membership in good standing with the Ontario Institute of Agrologists (P.Ag.), and is available for further comment where appropriate.

Sincerely,


Bob Clark, P.Eng., P.Ag., MCIP, RPP, OLE
Principal Planner

## ATTACHMENTS

Attachment A - Curriculum Vitae of Robert K. Clark
Attachment B - MDS I Calculation Sheets
Attachment C - MDS II Test Calculation Sheet

## ATTACHMENT A

## Curriculum Vitae - Robert K. (Bob) Clark

Mr. Clark has no perceived or actual conflicts of interest in preparing this Report.
Mr. Clark maintains membership in good standing with the Ontario Institute of Agrologists (P.Ag.).

## ATTACHMENT B

## MDS I Calculation Sheets

## ATTACHMENT C

## MDS II Test Calculation Sheets

