



**TECHNICAL REVIEW COMMITTEE**

**A TECHNICAL REVIEW REPORT**

**PREPARED FOR**

**THE RURAL MUNICIPALITY  
OF ALONSA**

**Eddystone Farm Joint Venture**

**SE 1/4 5-26-12 WPM**

**TRC 12-085**

**July 22, 2021**

## **A. INTRODUCTION – THE TEAM**

The Technical Review Committee (TRC) is supported by the following department personnel:

### Agriculture and Resource Development (ARD)

- Aggregate Resource Planner
- Agricultural Engineer
- Business Development Specialist
- Crown Lands Manager
- Fish Habitat Specialist
- Groundwater Specialist
- Habitat Mitigation and Wildlife Land Specialist
- Land-Water Specialist
- Livestock Environment Specialist
- Nutrient Management Specialist
- Veterinarians

### Conservation and Climate (CC)

- Environmental Engineer
- Environment Officer
- Water Rights Licensing Technologist

### Infrastructure (MI)

- Senior Development Review Technologist
- Senior Flood Protection Planning Officer

### Municipal Relations (MR)

- Community Planners

And any other specialist or department that may have an interest, which may be consulted during the process.

## **THE TECHNICAL REVIEW COMMITTEE (TRC) REPORT**

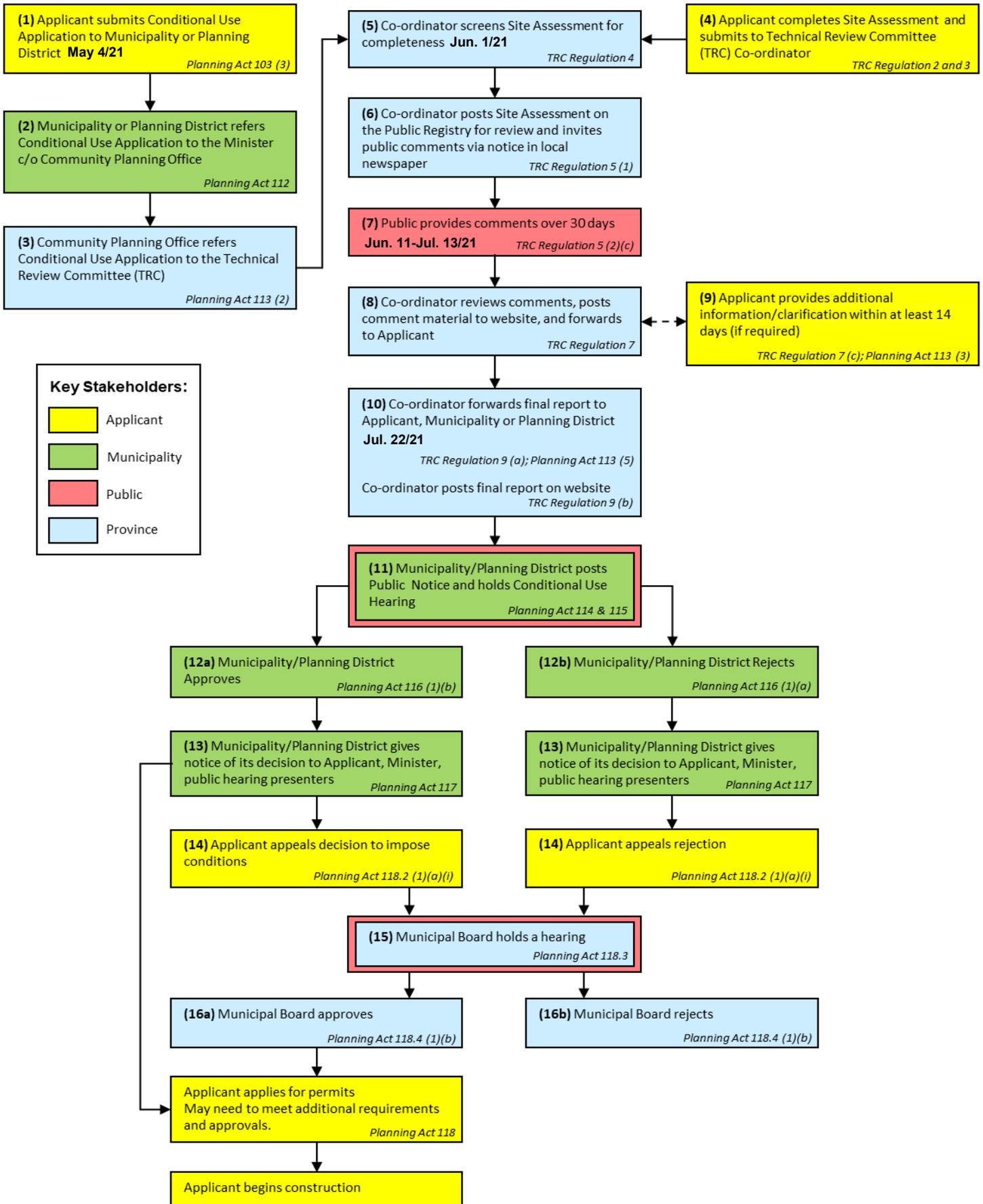
### Purpose of TRC Reports

To provide objective, credible, technically-based assessments that:

- a) Enable municipal councils or planning districts to make informed Conditional Use Permit decisions;
- b) Create a common stakeholder understanding of a livestock proposal, potential impacts and related regulatory requirements and safeguards;
- c) Provide a vehicle/forum that enables the sharing of public concerns and proponent responses;
- d) Offer recommendations to both municipal councils, planning districts and proponents; and
- e) Represents the fulfillment of the TRC's role as per 116(1)(b)(i) of *The Planning Act* – to determine, based on available information, that the proposed operation will not create a risk to health, safety or the environment, or that any risk can be minimized through the use of appropriate practices, measure and safeguards.

Should the municipal council provide conditional approval of the proposal, the project proponent may be required to obtain various permits and licenses from the province to address in greater detail environmental aspects of the proposal. As of November 1, 2019, a proponent may appeal a municipal council's rejection of their application or appeal a condition imposed related to municipal council's approval. Appeals are made to the Municipal Board.

# Livestock Technical Review Process (November 1, 2019)



## **B. DESCRIPTION OF PROPOSED LIVESTOCK OPERATION**

Further information can be found at [https://www.gov.mb.ca/mr/livestock/public\\_registries.html](https://www.gov.mb.ca/mr/livestock/public_registries.html)

**Applicant:** 6952446 Manitoba Ltd.

**Site Location:** SE ¼ 5-26-12 WPM

**Proposal:** To establish a pig operation of 31,500 weanlings nursery (1,040 animal units)

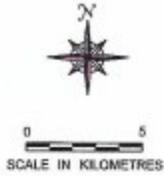
This will involve the following:

- Constructing new barns.
- Constructing an earthen manure storage.
- Consuming a maximum of 34,650 imperial gallons of water per day from a proposed well.
- Rendering mortalities.
- Using truck haul routes as shown in map below.

# R.M. OF ALONSA

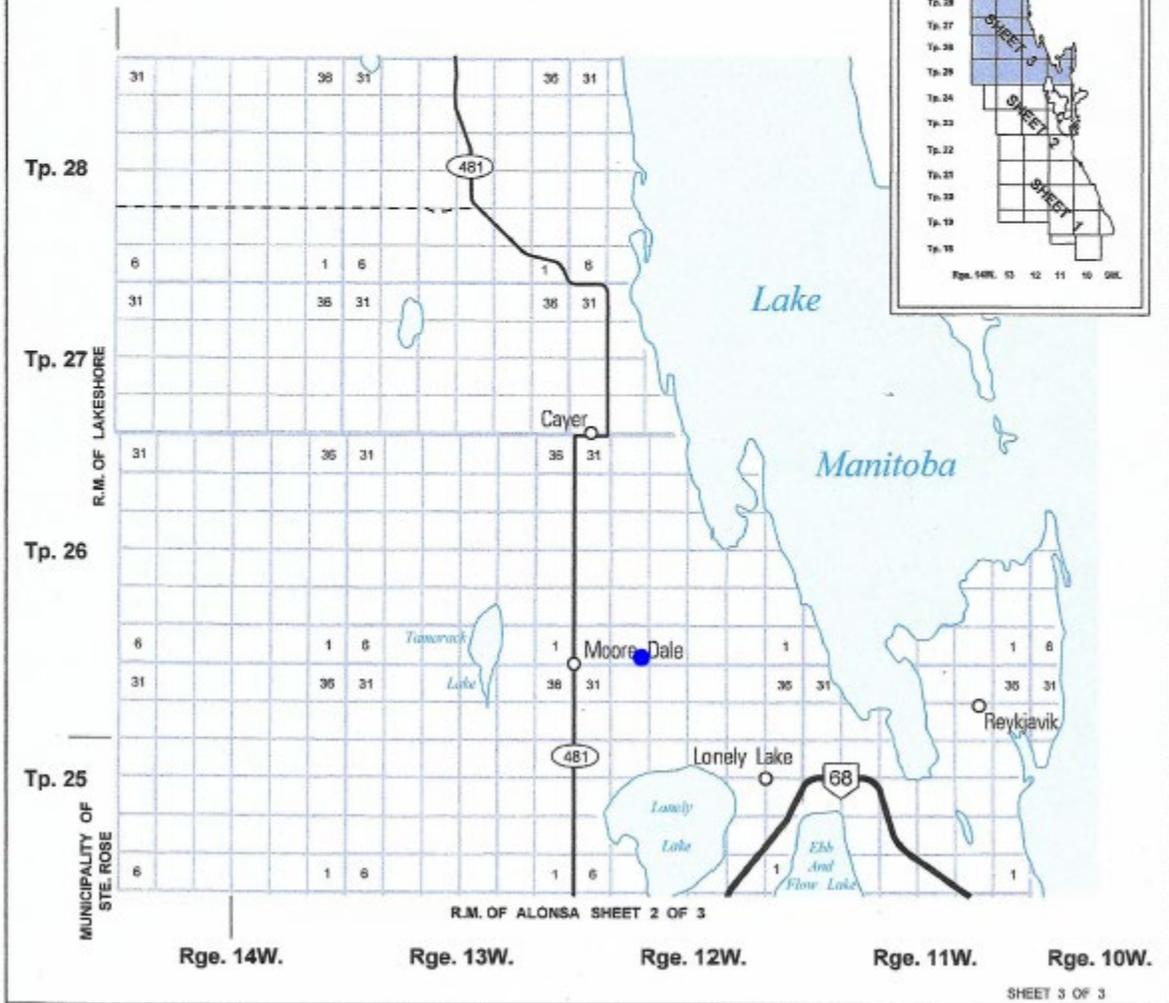
PROVINCE OF MANITOBA  
 INFRASTRUCTURE  
 HIGHWAY PLANNING AND DESIGN BRANCH  
 GEOGRAPHIC & RECORDS MANAGEMENT SECTION  
 WINNIPEG  
 JANUARY 1, 2015

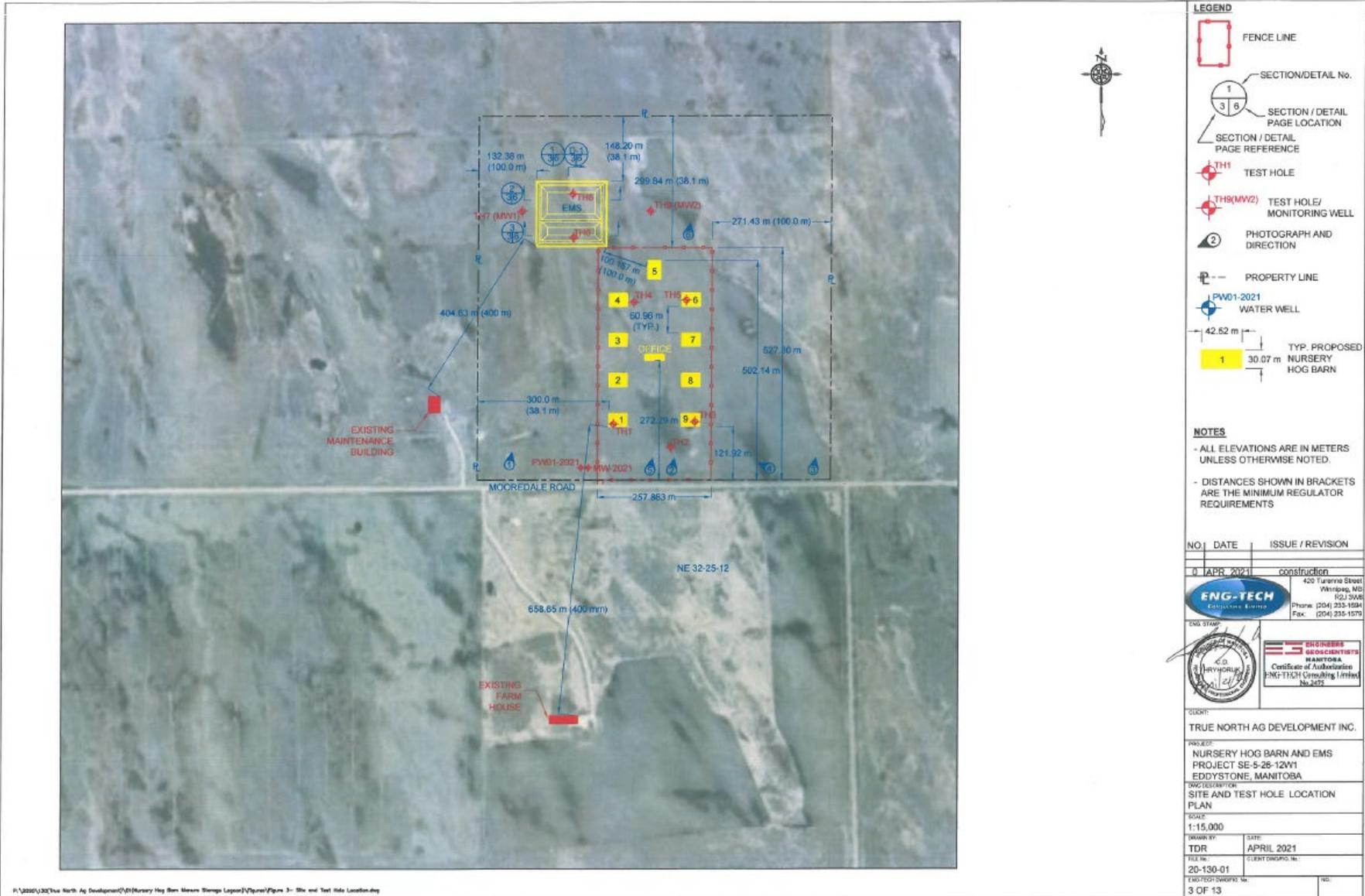
## SITE LOCATION



### LEGEND

- PROVINCIAL TRUNK HIGHWAYS .....
- PROVINCIAL ROADS .....
- MAIN MARKET ROADS .....
- Proposed Site .....







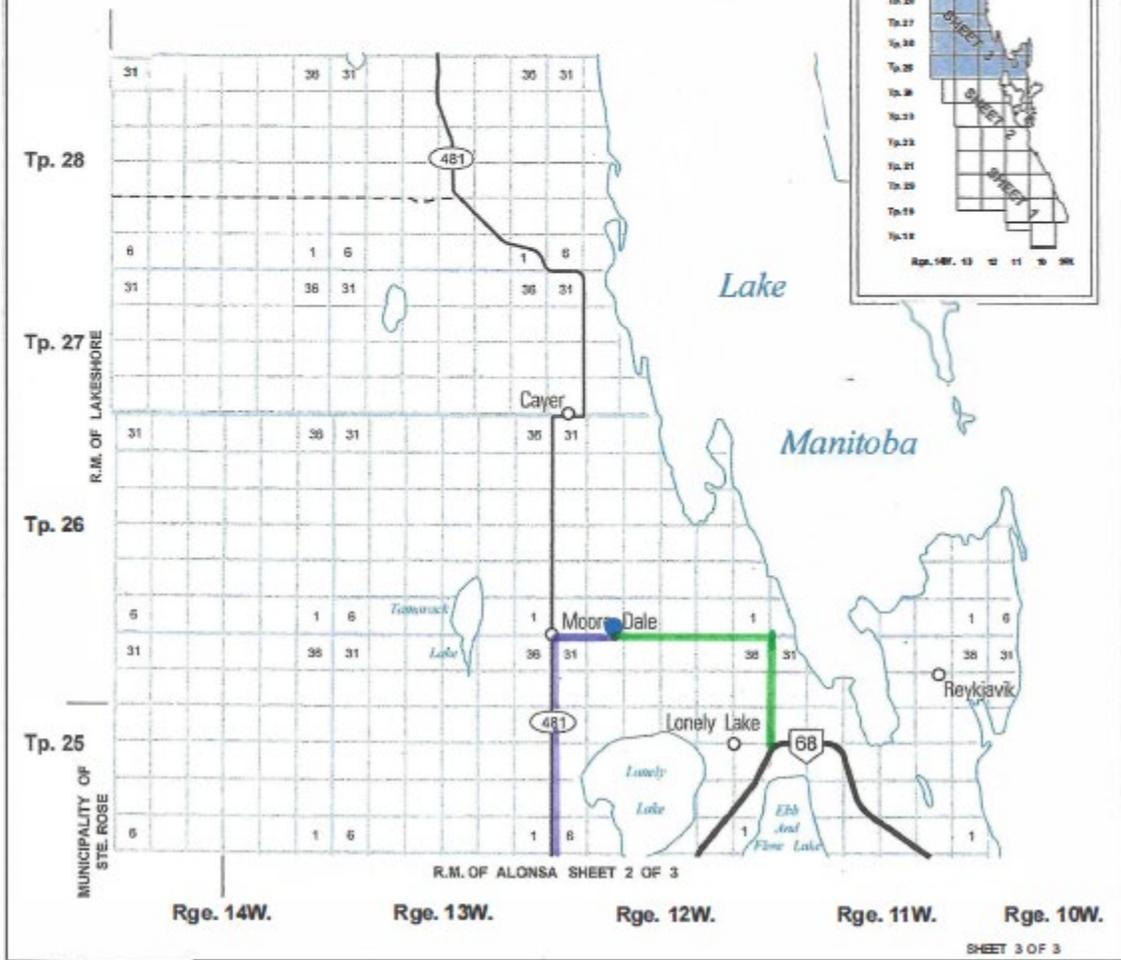
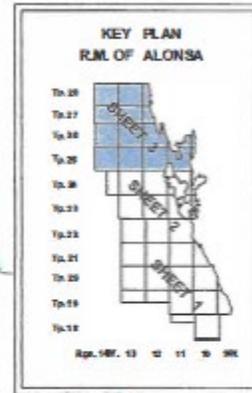
# R.M. OF ALONSA

## TRUCK HAUL ROUTE & ACCESS MAP

PROVINCE OF MANITOBA  
 INFRASTRUCTURE  
 HIGHWAY PLANNING AND DESIGN BRANCH  
 GEOGRAPHIC & RECORDS MANAGEMENT SECTION  
 WINNIPEG  
 JANUARY 1, 2015

### LEGEND

- PROVINCIAL TRUNK HIGHWAYS ..... 
- PROVINCIAL ROADS ..... 
- MAIN MARKET ROADS ..... 
- PRIMARY TRUCK HAUL & ACCESS 
- SECONDARY VEHICLE ACCESS 



## C. SITE ASSESSMENT OVERVIEW

Provincial Technical Overview of TRC 12-085 – Eddystone Farm Joint Venture				
Item No.	Provincial Requirements	Confirmed	Related Provincial Safeguards	Dept.
1	Submitted complete site assessment	X	Technical Review Committee Regulation 119/2011 requires an applicant to submit a completed site assessment.	MR
2	Clearly identified the current and proposed type and number of animals and animal units	X	Eddystone Farm Joint Venture is currently seeking Conditional Use approval to build a 31,500 space nursery pig operation. This is equivalent to 1,040 animal units (AU).	ARD <sup>1</sup>
3	Project clearly defined as:	X	A proposed 31,500 Space weanling nursery operation comprising 1,040 AU (rounded).	CC
	<u>animal confinement facility</u>	X	Each of the proposed nine detached nursery barns is in excess of 6,458 sq. ft. (600 sq.m). Therefore, a building permit will be required from the Inspection and Technical Services Branch (Municipal Relations) under <i>The Building and Mobile Home Act</i> and the Manitoba Building Code. <a href="https://firecomm.gov.mb.ca/itsm_main.html">https://firecomm.gov.mb.ca/itsm_main.html</a> .	MR
4	Identified all existing and proposed buildings and structures and related separation distances	X	No variances are needed.	MR
5	Demonstrated project site is not located within Nutrient Management Zone N4 or any Nutrient Buffer Zone	X	The project site is not located within Nutrient Management Zone N4 or any Nutrient Buffer Zone.	ARD <sup>2</sup>

<sup>1</sup> Agri-Resource Branch

<sup>2</sup> Water Branch

## Provincial Technical Overview of TRC 12-085 – Eddystone Farm Joint Venture

Item No.	Provincial Requirements	Confirmed	Related Provincial Safeguards	Dept.
6	Identified suitable water source: Production and monitoring wells about 300 m from west boundary SE 5-26-12 W and a water consumption rate of <b>34,650</b> imperial gallons per day	X	The proponent has submitted an application for a Water Rights Licence and has been issued a Groundwater Exploration Permit. The project is considered in good standing with the Water Use Licensing Section.	CC
7	Proposed project site meets development plan, zoning by-law	X	<p><i>The Planning Act</i> requires that development plans must include a livestock operation policy that guides zoning by-laws dealing with livestock operations.</p> <p><i>The Planning Act</i> requires municipalities to issue development permits for any development on a site. All development must comply with the Zoning By-law and Development Plan. Any proposed development that does not meet the separation distances or setbacks requires Council approval and a public process to vary those requirements.</p> <p><b>Designation</b> The proposed livestock operation, located in the SE ¼ 5-26-12 WPM in the RM of Alonsa, is designated AG (AG80) (RM of Alonsa Development Plan By-law No. 15-01) and the proposal complies with Development Policies 4.5 (Livestock Policies).</p> <p><b>Note:</b> Development Plan Amendment By-law No. 15-01 was approved on March 9, 2016 to allow existing operations to expand beyond 300 AU within the 4.5.9 Policy Area as a Conditional Use.</p> <p><b>Zoning</b> The proposed site is zoned “AG-80” Agricultural General Zone (RM of Alonsa Zoning By-law No. 15-02) and has a minimum site area requirement of 80 acres with a minimum site width requirement of 600 feet. The proposed project complies with the AG80 Zoning By-law.</p> <p><b>Note:</b> Zoning By-law No. 15-02 was approved on March 9, 2016 to allow existing operations with more than 300 AU to expand as a Conditional Use in the “AG80” Zone.</p>	MR

## Provincial Technical Overview of TRC 12-085 – Eddystone Farm Joint Venture

Item No.	Provincial Requirements	Confirmed	Related Provincial Safeguards	Dept.
8	Identified any unsealed abandoned wells on the project site or spread fields	X	<p>The proposal identifies that the water use for the livestock operation is from a proposed new well at SE 5-26-12W. The provincial water well database contains information for one existing well on the proposed property. This information was conveyed to the proponent during the pre-screening process. The proponent identified the well and committed to have it sealed in accordance with provincial regulations and including submitting a well sealing report to the Agriculture and Resource Development, Groundwater Management Section. The concern regarding any wells present on spread fields was also addressed during the pre-screening process. The proponent confirmed either no wells are present or will comply with the setback distances to wells as prescribed under <i>The Environment Act</i> Livestock Manure and Mortalities Management Regulation.</p> <p>If unused water wells (other than those identified during the pre-screening) are later located on the site or spread fields these shall be properly sealed and a sealed well report filed with the Groundwater Management Section of Agriculture and Resource Development for each well sealed. Information on well sealing and well sealing reports are available from Agriculture and Resource Development (204-945-6959) or:  <a href="https://www.gov.mb.ca/water/groundwater/wells_groundwater/index.html">https://www.gov.mb.ca/water/groundwater/wells_groundwater/index.html</a>. All but the most basic wells should be sealed by a well drilling professional. A list of currently licensed well drilling professionals can also be accessed from the above web page.</p> <p>For a proposed new well, The Well Standards Regulation under the <i>Groundwater and Water Well Act</i> (<a href="https://web2.gov.mb.ca/laws/statutes/ccsm/g110e.php">https://web2.gov.mb.ca/laws/statutes/ccsm/g110e.php</a>) should be consulted. The regulation requires a minimum 100 metre separation distance between a well and a confined livestock areas or manure storage facilities.</p> <p>During manure spreading the set back distances to all groundwater features as prescribed under <i>The Environment Act</i> Livestock Manure and Mortalities Management Regulation should be considered as a minimum distance.</p>	ARD <sup>3</sup>

<sup>3</sup> Water Branch

## Provincial Technical Overview of TRC 12-085 – Eddystone Farm Joint Venture

Item No.	Provincial Requirements	Confirmed	Related Provincial Safeguards	Dept.
9	Identified suitable manure storage methods	X	A permit to construct the proposed manure storage facility must be obtained, prior to initiating any of the construction work, in accordance with the Livestock Manure and Mortalities Management Regulation. An application for a permit to construct the manure storage facility must be submitted to Environmental Approval Branch of Conservation and Climate ( <a href="mailto:EABDirector@gov.mb.ca">EABDirector@gov.mb.ca</a> ). Design guidelines and application forms are available at: <a href="https://www.gov.mb.ca/sd/waste_management/livestock_program/index.html">https://www.gov.mb.ca/sd/waste_management/livestock_program/index.html</a> .	CC
10	Identified acceptable manure application methods	X	The proponent must submit and adhere to a manure management plan approved for the facility per the Livestock Manure and Mortalities Management Regulation.	CC
11	Mortalities disposal methods identified (rendering )	X	The proponent has indicated that mortalities will be rendered. This is considered acceptable under the Livestock Manure and Mortalities Management Regulation. More specific information is included in the Livestock Manure and Mortalities Management Regulation and at: <a href="https://www.gov.mb.ca/sd/waste_management/livestock_program/index.html">https://www.gov.mb.ca/sd/waste_management/livestock_program/index.html</a>	CC
12	Proposed suitable setback distances from water and property lines for manure, livestock and mortalities	X	The proponent indicated all setback distances meet minimum requirements set out in the Livestock Manure and Mortalities Management Regulation.	CC
13	Indicated if proposed project site is within designated flood area or is otherwise at risk of flooding	X	The proposed project site may be at risk of flooding from Lake Manitoba during the design flood event. The Flood Protection Level for this location is 249.40 metres (818.25 feet) CGVD28. However, Manitoba Infrastructure does not have any site specific elevation information available to assess the flood hazard. If the project location is above an elevation of 249.40 metres (818.25 feet) CGVD28 then it is not at risk. If the project location is at an elevation below 249.40 metres (818.25 feet) CGVD28 then it may be at risk of flooding and any structures or dikes should be raised to an elevation of at least 249.40 metres (818.25 feet) CGVD28.	MI

## Provincial Technical Overview of TRC 12-085 – Eddystone Farm Joint Venture

Item No.	Provincial Requirements	Confirmed	Related Provincial Safeguards	Dept.
<b>14</b>	Proposed acceptable odour control measures	X	The proponent has indicated that a 3-tier shelterbelt will be established. Should odour become a problem for neighbouring residents, there is a complaints process under <i>The Farm Practices Protection Act</i> . A person who is disturbed by any odour, noise, dust, smoke or other disturbance resulting from an agricultural operation may make a complaint, in writing, to the Manitoba Farm Industry Board. The Act is intended to provide for a quicker, less expensive and more effective way than lawsuits to resolve nuisance complaints about farm practices. It may create an understanding of the nature and circumstances of an agricultural operation, as well as bring about changes to the mutual benefit of all concerned, without the confrontation and the expense of the courts.	<b>ARD<sup>4</sup></b>
		X	The proponent has proposed a 3-tier shelterbelt system of poplar, spruce and silver willow tree species to be planted on all sides of the developed building site.  Section 116(1) of <i>The Planning Act</i> allows municipal councils to require a manure storage cover and the planting of a shelter belt as a condition of approval.	<b>MR</b>
<b>15</b>	Proposed sufficient and suitable land for manure spreading with minimum setbacks from water sources	X	The required land base for Eddystone Farm Joint Venture – Nursery Operation is 1,737 acres. Eddystone Farm Joint Venture – Nursery Operation has met the land requirement by demonstrating that they have access to 1,930 suitable acres. Additional details are provided in Appendix A.	<b>ARD<sup>5</sup></b>
		X	During manure spreading, setback distances to all groundwater and surface water features as prescribed under the Livestock Manure and Mortalities Management Regulation should be considered as a minimum distance.	<b>CC</b>
<b>16</b>	Indicated if spread fields are located in the Red River Valley Special Management Area or any other regularly inundated area	X	The proponent has indicated that no spread fields are located within the Red River Valley Special Management Area or any other regularly inundated area.	<b>CC</b>

<sup>4</sup> Agri-Resource Branch

<sup>5</sup> Agri-Resource Branch

## Provincial Technical Overview of TRC 12-085 – Eddystone Farm Joint Venture

Item No.	Provincial Requirements	Confirmed	Related Provincial Safeguards	Dept.
17	Proposed spread fields that meet development plan and zoning by-law requirements	X	<p>All the proposed spread fields are located in the RM of Alonsa, and are on lands designated Agriculture. They meet the intent of the RM of Alonsa Development Plan By-Law 15-01 Agriculture Policies.</p> <p>All the proposed spread fields are on lands zoned Agriculture, and complies with the RM of Alonsa Zoning By-Law 15-02.</p>	MR
18	Proposed acceptable manure transportation methods	X	The transport of livestock manure is subject to Section 9 of the Livestock Manure and Mortalities Management Regulation. The proponent has indicated a dragline will be used as means of manure transportation. This is considered acceptable under the Livestock Manure and Mortalities Management Regulation.	CC
		X	Please be advised that any structures placed within the controlled area of PR 481, and PTH 68 (125 feet from the edge of the right-of-way) requires a permit from our office. The contact is Sheena del Rosario at (204) 583-2433 or <a href="mailto:Sheena.Delrosario@gov.mb.ca">Sheena.Delrosario@gov.mb.ca</a> . The placements of temporary drag lines or any other temporary machinery/equipment for manure application within the right-of-way of PR 481, and PTH 68 requires permission from our regional office in Dauphin. Please contact the Regional Planning Technologist, Warren Radbourne at (204) 648-4648 or <a href="mailto:Warren.Radbourne@gov.mb.ca">Warren.Radbourne@gov.mb.ca</a> . In addition, please notify the Regional Planning Technologist for the placement of temporary draglines or other temporary equipment for manure application within the controlled area of PR 481, and PTH 68 (125 feet from the edge of the right-of-way).	MI
19	Identified suitable trucking routes and access points	X	The primary proposed truck haul route will utilize an existing municipal road connecting onto PR 481 and PTH 68. A significant increase in use is not anticipated.	MI
20	Identified proposed trucking routes – local roads		<p>The proposed site is accessed by an existing municipal road 150N which connects approximately 4 miles to the east to municipal road 66W which connects approximately 3 miles south to PTH 68.</p> <p>As per Section 116(2) of <i>The Planning Act</i>, municipalities as a condition of approval may require proponent to enter into a development agreement regarding the condition and upkeep of local roads used as truck haul routes.</p>	MR

## Provincial Technical Overview of TRC 12-085 – Eddystone Farm Joint Venture

Item No.	Provincial Requirements	Confirmed	Related Provincial Safeguards	Dept.
21	Known rare species will not be impacted on new sites/lands	X	The information provided in the assessment suggest that there will not be any conflicts with species protected under the <i>Endangered Species and Ecosystems Act</i> and/or <i>Species at Risk Act</i> , or designated as rare or uncommon by the Manitoba Conservation Data Centre (MBCDC). This review is based on existing data known to the MBCDC of the Wildlife and Fisheries Branch at the time of the review. These data are dependent on the research and observations of our scientists and reflects our current state of knowledge. An absence of data does not confirm the absence of any rare or endangered species. Many areas of the province have never been thoroughly surveyed, however, and the absence of data in any particular geographic area does not necessarily mean that species or ecological communities of concern are not present. The information should, therefore, not be regarded as a final statement on the occurrence of any species of concern. All future observations of rare or endangered species made by the proponent should be reported to the MBCDC for further review.	ARD <sup>6</sup>

**Provincial Departments:** Agriculture and Resource Development (ARD), Conservation and Climate (CC), Infrastructure (MI), Municipal Relations (MR)

---

<sup>6</sup> Wildlife and Fisheries Branch

## **D. PUBLIC COMMENTS AND DISPOSITIONS**

No public comments were received regarding this application.

## E. CONCLUSIONS AND RECOMMENDATIONS

### Conclusion

The information contained in the Site Assessment submitted by the proponent generally meets provincial requirements. In addition, based on available information it has been determined that the proposed operation will not create a risk to health, safety or the environment, or that any risk can be minimized through the use of appropriate practices, measures and safeguards.

### Recommended Actions to Council

1. As per Section 114(1) of *The Planning Act*, at least 14 days before the date of the hearing, Council must:
  - a) send notice of the hearing to
    - i. the applicant,
    - ii. the Minister (c/o the Dauphin Community Planning Office),
    - iii. all adjacent planning districts and municipalities, and
    - iv. every owner of property located within three kilometres of the site of the proposed livestock operation, even if the property is located outside the boundaries of the planning district or municipality;and
  - b) post a copy of the notice of hearing on the affected property in accordance with Section 170 of *The Planning Act*.
2. Council should specify the type(s) of operation, legal land location, number of animals in each livestock category and total animal units in its Conditional Use Order.
3. As per Section 117 of *The Planning Act*, Council must send a copy of its Conditional Use Order to
  - a) the applicant,
  - b) the Minister (c/o the Dauphin Community Planning Office), and
  - c) every person who made representation at the hearing.
4. Councils are requested to include in their resolution and/or Conditional Use Order, notification that the applicant may appeal council's decision to reject the application or appeal a condition imposed by council related to its approval as per Section 118.2 of *The Planning Act*.
  - As per Section 118.2(2)(b), an applicant may appeal the following decisions of a board or council to the Municipal Board:

for an application for approval of a conditional use made in respect of a large-scale livestock operation,

(i) a decision to reject the application,

(ii) a decision to impose conditions.

5. As per Section 118, no development or expansion of a livestock operation that is the subject of an application under this Division may take place until
  - (a) the application is approved and the applicant complies, or agrees to comply, with any condition imposed on the approval under this Division; and

- (b) the applicant obtains every approval, including any permit or licence, required under an Act, regulation or by-law in respect of the proposed operation or expansion, and complies with, or agrees to comply with, any condition attached to the approval.
6. Council is welcome to contact Manitoba Conservation and Climate, Environmental Approvals Branch or Regional Environmental Compliance and Enforcement staff with respect to the Livestock Manure and Mortalities Management Regulation (M.R. 42/98) including compliance and enforcement issues.

**Recommended Actions to Proponent**

- 1. That any additional measures identified through subsequent provincial licencing or permitting in order to minimize any identified risks to health, safety and the environment be undertaken.
- 2. That as per Section 118.2(2)(b), an applicant may appeal the following decisions of a board or council to the Municipal Board:
  - (i) a decision to reject the application,
  - (ii) a decision to impose any condition on the approval.

## F. TECHNICAL REVIEW COMMITTEE MEMBERS

<b>Name</b>	<b>Department</b>	<b>Title Branch</b>	<b>Contact</b>
Erin McCleery	Municipal Relations	Winnipeg Manager <i>Community Planning Branch</i>	204-945-1143
Petra Loro	Agriculture and Resource Development	Agri-Ecosystems Specialist - Livestock Environment <i>Lands Branch</i>	204-918-0325
Barsha Sagan	Conservation and Climate	Environmental Engineer <i>Environmental Approvals</i>	204-795-7175
Jeff DiNella	Infrastructure	Senior Development Review Technologist <i>Highway Planning and Design Branch</i>	204-945-2664

## Appendix A

### Land Assessment – Lands Branch, ARD

The Eddystone Farm Joint Venture – Sow Operation (NE 33-25-12W) shares its land base with Eddystone Farm Joint Venture – Nursery Operation (SE 5-26-12W). ARD assessed the total land base for both operations to ensure there is sufficient suitable land for all of the pig manure. Both Eddystone Farm Joint Venture operations together require 4,353 acres. They have access to 4,594 acres, in total.

The land assessment for Eddystone Farm Joint Venture – Nursery Operation (SE 5-26-12W) considered the following:

In areas of lower livestock intensity such as the RM of Alonsa, it is currently the Province of Manitoba's policy to require sufficient suitable land for all of the nitrogen and half of the phosphorus generated by the livestock. This policy assumes that more land is available in the region to balance manure phosphorus with crop phosphorus removal, should it be necessary in the future.

Typical, modern feeding practices for pig production were used to estimate nutrient excretion for the Eddystone Farm Joint Venture operations. Realistic, long-term 10-year crop yields from the Manitoba Agricultural Services Corporation (MASC) for the RM of Alonsa were used to estimate crop nitrogen uptake and phosphorus removal rates for the crop rotation specified in the proposal.

Land suitability is determined using soil testing for phosphorus and soil survey to establish the agriculture capability. All of the lands with soil tests were below 60 ppm Olsen P, as required to be considered suitable. Reconnaissance soil survey is available to determine the agriculture capability of the land. The agriculture capability of the land included in the proposal is primarily Class 4 and 5 with some areas of Class 6 that the proponent has indicated will be excluded from manure application. The main limitations are density (D), Stoniness (P) and wetness (W).

The required land base for Eddystone Farm Joint Venture – Nursery Operation is 1,737 acres. Eddystone Farm Joint Venture – Nursery Operation has met the land requirement by demonstrating that they have access to 1,930 suitable acres.

### Water Branch – Agriculture and Resource Development

Proper nutrient management applications that avoid excess loss of nutrients to surface waters are needed on lands receiving manure in southern Manitoba because long-term trend analysis of total phosphorus and total nitrogen has shown significant increases in these nutrients in the Assiniboine and Red rivers (Jones and Armstrong 2001).

The proponent is planning to apply manure in fall. Manure will be applied by partial injection and/or incorporated within 48 hours. Injection and incorporation are both practices which reduce the risk to surface water when compared to surface broadcast alone.

For most crops, manure contains an excess of phosphorus (P) compared to nitrogen (N) and as a result, application at N-based rates causes a buildup of soil P. Practices which reduce N losses from the manure improve the N:P ratio in the manure and help slow P buildup when manure is applied at N-based rates. The proponent is planning to apply liquid manure with partial injection or broadcast with incorporation within 48 hours which will reduce N losses compared to methods without incorporation.

The proponent has acknowledged the setback areas for all water features have been observed and excluded from land base calculations. Setbacks should be clearly communicated to and observed by those involved in manure application to minimize the risk of nutrients entering surface and groundwater.

Manitoba has included phosphorus as a nutrient by which fertilizer application through manure, synthetic fertilizer, and municipal waste sludge to agricultural lands may be limited. Many agricultural soils in Manitoba, especially areas with low livestock intensity (such as the RM of Alonsa), are considered phosphorus deficient and therefore, manure is an ideal fertilizer to support crop production. However, manure application can increase soil phosphorus over time and other spread fields may need to be added to prevent excessive soil phosphorus build up. As excess phosphorus levels build up in soils, greater losses occur to surface and ground water. It should be noted that Olsen soil-test phosphorus levels of 60 ppm are well above phosphorus needs for most crops (over 20 ppm is usually considered agronomically very high). In areas of lower livestock intensity such as the RM of Alonsa, it is currently the Province of Manitoba's policy to require sufficient suitable land for all of the nitrogen and half of the phosphorus generated by the livestock. This policy assumes that more land is available in the region to balance manure phosphorus with crop phosphorus removal, should it be necessary in the future for long-term sustainability. To remain environmentally sustainable over a long-term planning horizon of 25 years or more the proponent acknowledges that 3,473 acres may be required for the operation. The proponent has identified 1,930 acres for manure application at this time. Application to meet crop N requirements is estimated to use 1,720 acres. Application at 2 times the crop removal of P is estimated to use 1,737 acres (3,473 acres is estimated to achieve P balance [phosphorus removal equal to phosphorus application] with current crop choices and yield potential).

As phosphorus levels build up in soils, the concentration of phosphorus in runoff to surface waters increases. It is important to rotate manure application across all spread fields and whenever possible focus manure applications on fields with low Olsen-P soil test levels so as to prevent excessive P buildup when applying manure at rates above P balance (P removal by harvested crops).

During manure spreading, setback distances to all groundwater features as prescribed under the Livestock Manure and Mortalities Management Regulation should be considered as a minimum distance.

# Appendix B

## Environment Compliance & Enforcement (ECE) - Conservation and Climate

---



Fri 2021-06-25 10:48 AM

Hagenson, Kayla (CC)

RE: Eddystone Farm Joint Venture (TRC 12-085) - Comments are due to me by Friday, July 2, 2021 for inputting into the report

To Laapah, Isaac (MR); Sagan, Barsha (CC)

---

Environmental Compliance and Enforcement branch has no comments or concerns.

Kayla Hagenson, *B.Env.Sc.*

Environment Officer

Manitoba Conservation and Climate

Environmental Compliance and Enforcement, Western Region

27-2nd Ave SW

Dauphin, MB R7N 3E5

(204) 648-4794

[www.manitoba.ca](http://www.manitoba.ca)