



TECHNICAL REVIEW COMMITTEE

A TECHNICAL REVIEW REPORT

PREPARED FOR

**THE RURAL MUNICIPALITY
OF TACHE**

7044349 Manitoba Ltd.

S 1/2 of SE 1/4 of 14-8-5 EPM

TRC 12-074

February 11, 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

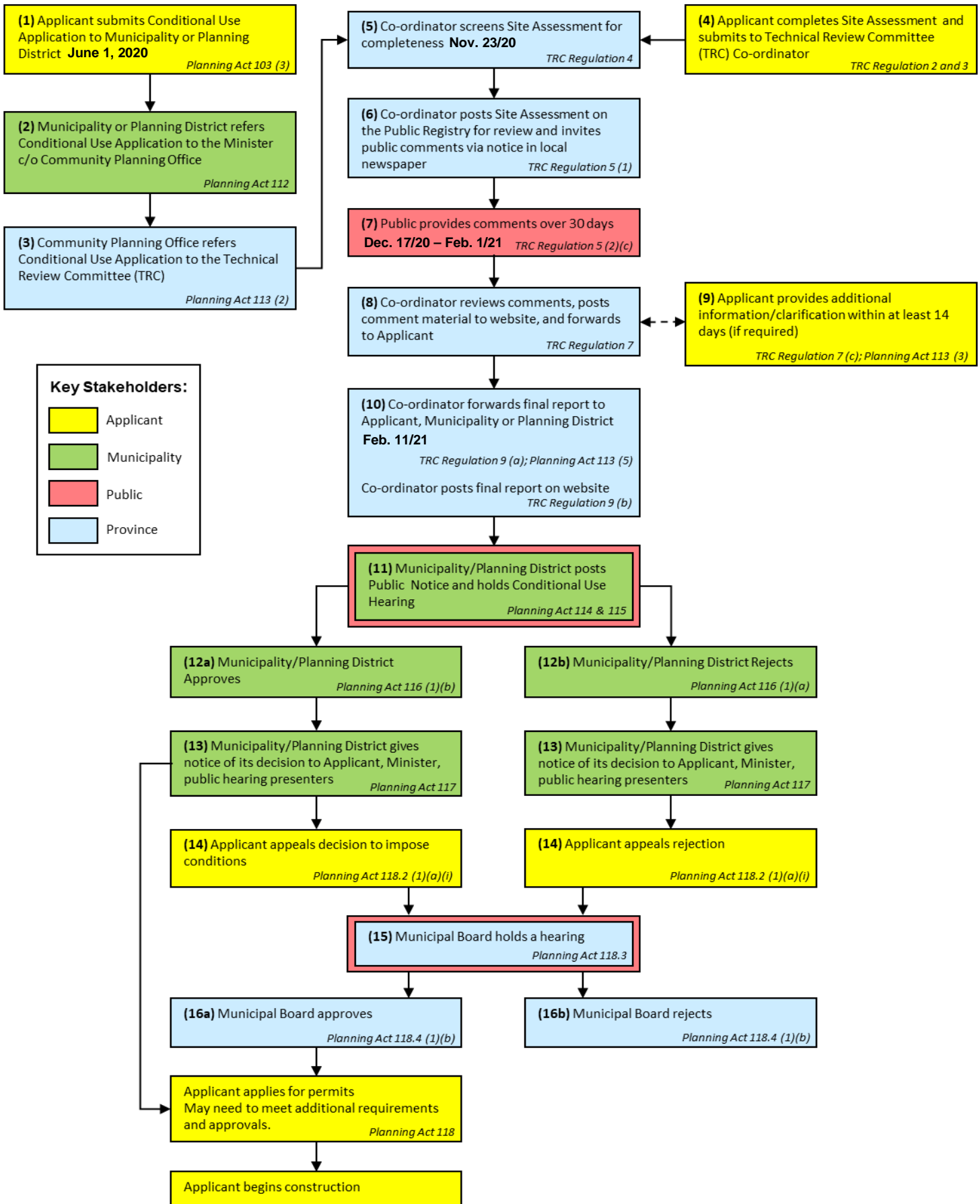
Purpose of TRC Reports

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

Applicant: 7044349 Manitoba Ltd.

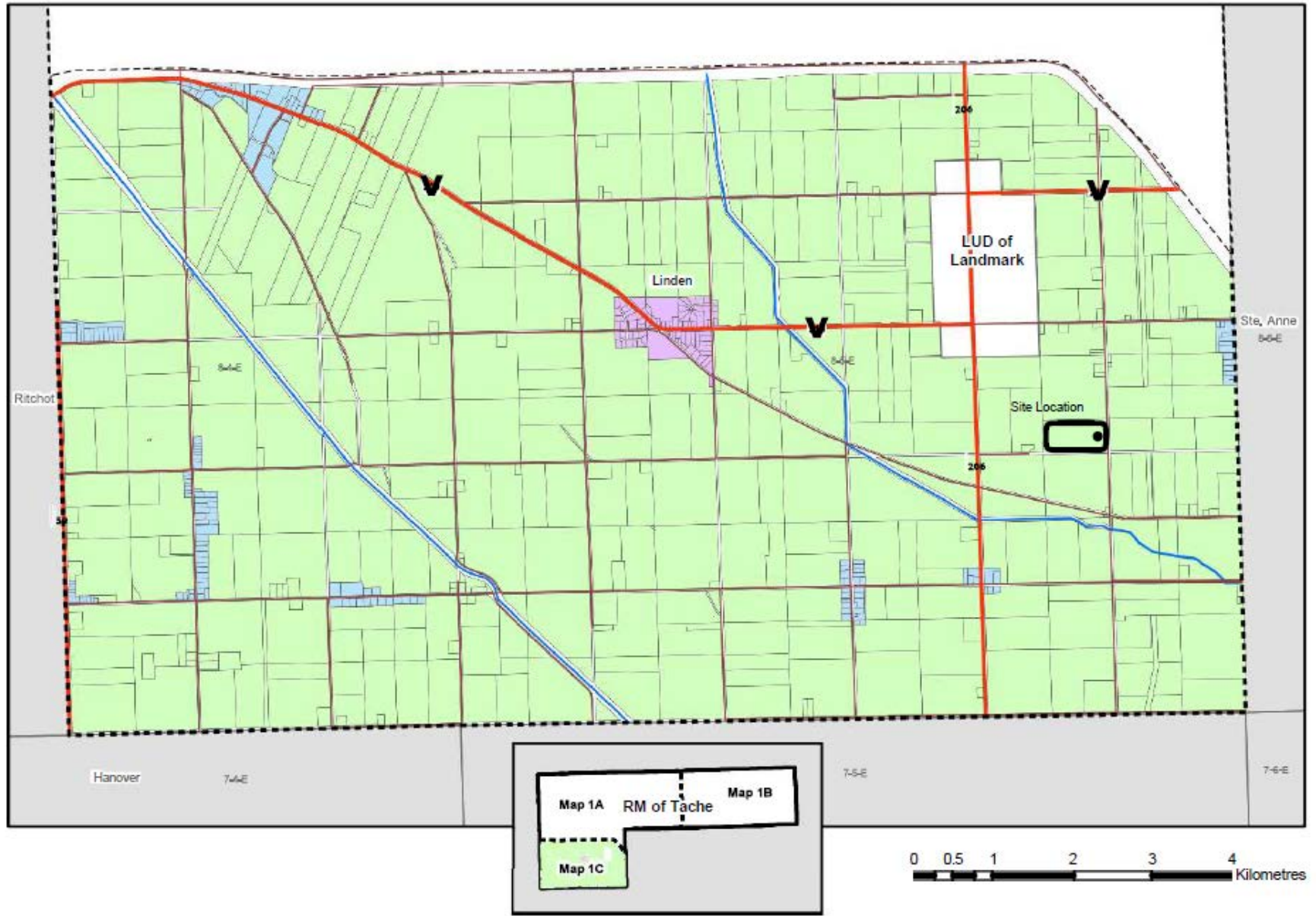
Site Location: S ½ of SE ¼ of 14-8-5 EPM. Refer to map below.

Proposal: To re-establish and increase the number of livestock on an existing pig operation site from 600 sow (farrow to weaning) (150 Animal Units) to 3720 grower/finishers (532 Animal Units).

This will involve the following:

- Reusing existing buildings
- Earthen manure storage
- Consuming a maximum of 33,822 imperial gallons of water per day from an existing well
- Transporting mortalities off site for disposal
- Truck haul routes as shown in map below

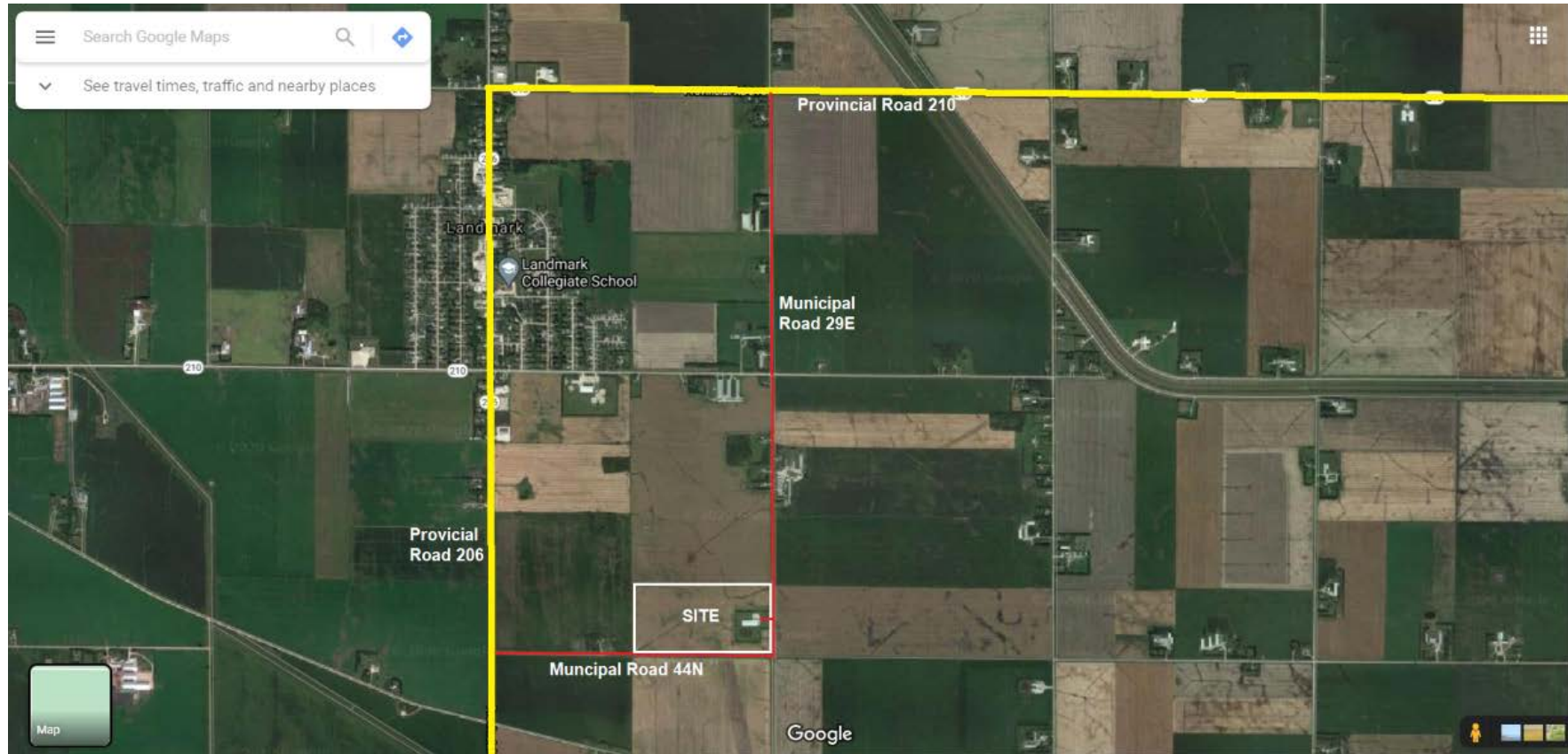
Location Map



Site Map



Truck Hall Routes



C. SITE ASSESSMENT OVERVIEW

Provincial Technical Overview of TRC 12-074 – 7044349 Manitoba Ltd.				
Item No.	Provincial Requirements	Confirmed	Related Provincial Safeguards	Dept.
1	Submitted complete site assessment	X	The proposal is consistent with the Provincial requirements for a livestock operation.	MR
2	Clearly identified the current and proposed type and number of animals and animal units	X	7044349 Manitoba Ltd is seeking Conditional Use approval to expand the existing pig operation to 3,720 grower-finisher pigs, which is equivalent to 523 animal units (AU).	ARD ¹
3	Project clearly defined as:	X	The project is clearly defined as an animal confinement facility.	CC
	<u>animal confinement facility</u>	X	No new building is proposed. The existing animal confinement facility on the property will be used for the proposed 3,720 grower-finisher pigs. Therefore, a building permit from the Office of the Fire Commissioner under <i>The Building and Mobile Home Act</i> and the Manitoba Building Code will not be required.	MR
4	Identified all existing and proposed buildings and structures and related separation distances	X	Any proposed development that does not meet the required setbacks or livestock separation distances established in the RM of Taché Zoning By-Law requires Council's approval and a public hearing to vary those requirements. For an operation between 401-800 animal units (AUs), the Zoning By-law requires a minimum setback distance of 4,364 feet from a designated area to an animal confinement facility and 6,561 feet to an earthen manure storage facility or feedlot. The proposed operation does not meet the minimum setback distance requirements from the designated areas in the LUD of Landmark. Therefore, a variance order will be required.	MR
5	Demonstrated project site is not located within Nutrient Management Zone N4 or any Nutrient Buffer Zone	X	According to detailed soil survey, 7044349 Manitoba Ltd is located on agriculture capability Class 2 and 3 soil, which is considered prime agricultural land.	ARD ²

¹ Agri-Resource Branch

² Agri-Resource Branch, Water Science and Watershed Management Branch

Provincial Technical Overview of TRC 12-074 – 7044349 Manitoba Ltd.

Item No.	Provincial Requirements	Confirmed	Related Provincial Safeguards	Dept.
6	Identified suitable water source: <u>existing groundwater well</u> and a water consumption rate of <u>33,822</u> imperial gallons per day	X	Under The Water Rights Act, all operations using more than 25 000 litres (5,499 Imperial gallons) of water per day must hold a Water Rights Licence. Based on our understanding of the proposed project, a Water Rights Licence will be required. The applicant will need to submit an Application to Construct a Well and Divert Groundwater.	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 the 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>Designation The proposed livestock operation, located in the SE ¼ 14-8-5E in the RM of Taché, is designated “A” Agriculture pursuant to the RM of Taché Development Plan By-law No. 5-2016. The proposal complies with Policies 4.3.12(a), 4.3.14, and 4.3.16 of the Development Plan. Livestock operations containing more than 300 AUs within the designated “Agriculture” area is a Conditional Use as per policy 4.3.12 (a). It is noted that Policy 4.3.13 of the Development Plan requires all new or expanding livestock operations to be developed and managed in an environmentally responsible manner that minimizes offensive odours and the potential for the pollution of soils, groundwater, and surface water. It also advises incorporating buffers such as a treed shelterbelt surrounding the entire livestock operation facility, including the manure storage facility.</p> <p>Zoning The proposed site is zoned “AG” Agriculture General pursuant to the RM of Taché Zoning By-law No. 10-2017 and has a minimum site area requirement of 80 acres with a minimum site width requirement of 600 feet. The proposed development complies with the minimum site area and site width requirements of the Zoning By-law.</p>	MR
8	Identified any unsealed abandoned wells on the project site or spread fields	X	Refer to Appendix B.	ARD ³

³ Water Science and Watershed Management Branch

Provincial Technical Overview of TRC 12-074 – 7044349 Manitoba Ltd.

Item No.	Provincial Requirements	Confirmed	Related Provincial Safeguards	Dept.
9	Identified suitable manure storage methods	X	According to the site assessment, the operation intends to use an existing manure storage facility. Should the need arise to construct a new manure storage facility or expand/modify the existing manure storage facility, a permit must be obtained, prior to initiating any of the construction, expansion or modification work, in accordance with the Livestock Manure and Mortalities Management Regulation. An application for a permit to construct, expand or modify a manure storage facility must be submitted to Environmental Approval Branch of Conservation and Climate (EABDirector@gov.mb.ca). Design guidelines and application forms are available at: https://www.gov.mb.ca/sd/waste_management/livestock_program/index.html .	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 (MR 42/98).	CC
11	Mortalities disposal methods identified	X	The proponent has indicated that mortalities will be picked up by Hylife for disposal. More specific information is included in the Livestock Manure and Mortalities Management Regulation and at: https://www.gov.mb.ca/sd/waste_management/livestock_program/index.html .	CC
12	Proposed suitable setback distances from water and property lines for manure, livestock and mortalities	X	Refer to Appendix B.	ARD⁴
		X	The proponent indicates that the setback distance from the manure storage facility to the well is 64.0 m. The manure storage facility (lagoon) and the well on site are existing on the property and are intended to be used at the locations where they presently exist.	CC
13	Indicated if proposed project site is within designated flood area or is otherwise at risk of flooding	X	The site is not within a Designated Flood Area.	MI

⁴ Water Science and Watershed Management Branch

Provincial Technical Overview of TRC 12-074 – 7044349 Manitoba Ltd.

Item No.	Provincial Requirements	Confirmed	Related Provincial Safeguards	Dept.
14	Proposed acceptable odour control measures	X	The proponent has indicated there is an existing shelterbelt. Should odour become a problem for neighbouring residents, there is a complaints process under The Farm Practices Protection Act. 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.	ARD⁵
		X	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. Policy 4.3.13 of the Development Plan also requires that all new or expanding livestock operations be developed and managed in an environmentally responsible manner that minimizes offensive odours and the potential for the pollution of soils, groundwater, and surface water. It also advises incorporating buffers such as a treed shelterbelt surrounding the entire livestock operation facility, including the manure storage facility.	MR
15	Proposed sufficient and suitable land for manure spreading with minimum setbacks from water sources	X	The required land base for 7044349 Manitoba Ltd is 642 acres. 7044349 Manitoba Ltd has satisfied the land requirement by demonstrating that they have access to 717 suitable acres. See Appendix A for additional details.	ARD⁶
		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.	CC
16	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 spread fields are located within the Red River Valley Special Management Area and as such fall manure applications (September 10 – November 10) to tilled land must be injected or incorporated within 48 hours.	CC

⁵ Agri-Resource Branch

⁶ Agri-Resource Branch

Provincial Technical Overview of TRC 12-074 – 7044349 Manitoba Ltd.

Item No.	Provincial Requirements	Confirmed	Related Provincial Safeguards	Dept.
17	Proposed spread fields that meet development plan and zoning by-law requirements	X	<p>Development Plan The spread fields located in the RM of Taché are designated “Agriculture”. Agricultural activities are the dominant land use in this designation. The fields are cultivated agricultural lands and meet the intent of the Development Plan By-law 5-2016.</p> <p>The spread field located in the RM of Ste. Anne (NW 7-8-6E) is designated “Rural Agriculture Area”. The subject land is open agricultural land and meets the intent of the RM of Ste. Anne Development Plan By-law 13-2007.</p> <p>Zoning By-law The spread fields located in the RM of Taché are zoned “AG” Agriculture General. The RM of Taché Zoning By-law does not provide specific setback distance requirements from a spread field to a residence or a designated area. The lands proposed for spread fields are in agricultural use and most of them are large tracks of open agricultural land. The application of manure on farmland is considered agriculture-related activities.</p> <p>The spread field located in the RM of Ste. Anne (NW 7-8-6E) is zoned “A” Agriculture. The land is currently in agricultural use and suitable to be used as a manure spreading filed.</p> <p>We would like to note that there are 6 dwellings present between the proposed fields located in the NW 12-8-5E and NW 7-8-6E. The operator of the proposed livestock operation should consider taking appropriate measures to reduce potential negative impacts i.e. odour on the nearby residences.</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 as means of manure transportation. This is considered acceptable under the Livestock Manure and Mortalities Management Regulation.	CC

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Item No.	Provincial Requirements	Confirmed	Related Provincial Safeguards	Dept.
			<p>Any manure lines placed on or over a Provincial Waterway such as the Youville Drain or Seine River Diversion will require authorization from Manitoba Infrastructure. Authorization can be applied for at https://forms.gov.mb.ca/pwww/</p> <p>Please be advised that any structures placed within the controlled area of PR 206 and PR 210 or any Provincial Road (125 feet from the edge of the right-of-way) requires a permit from our office. The contact is Sheena del Rosario at (204) 945-3457 or Sheena.DelRosario@gov.mb.ca. The placements of temporary drag lines or any other temporary machinery/equipment for manure application within the right-of-way of PR 206 and PR 210 requires permission from our regional office in Steinbach. Please contact the Acting Regional Planning Technologist (Robert Fender) at (204) 371-6858 or Robert.Fender@gov.mb.ca. In addition, please notify the Acting Regional Planning Technologist for the placement of temporary draglines or other temporary equipment for manure application within the controlled area of PR 206 and PR 210 (125 feet from the edge of the right-of-way).</p>	MI
19	Identified suitable trucking routes and access points	X	The subject property has frontage along a municipal road and the proposed truck haul route utilizes existing Government Road Allowances which connect onto PR 206 and PR 210. We do not anticipate a significant increase in traffic. We have no concerns.	MI
20	Identified proposed trucking routes – local roads	X	<p>The proposed site is situated at the intersection of Muni Roads 44N and 29E and has existing access onto both roads. The proposal identifies PR 206 and PR 210 as its potential truck hauling routes, which are approximately half a mile west and 2 miles north of the proposed site, respectively. Muni Road 44N will be utilized to access PR 206, and Muni Road 29E will be used to access PR 210 from the proposed site.</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 12-074 – 7044349 Manitoba Ltd.

Item No.	Provincial Requirements	Confirmed	Related Provincial Safeguards	Dept.
21	Confirmed that no rare species are impacted on new sites/lands	X	<p>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.</p> <p>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.</p>	ARD ⁷

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

⁷ Wildlife and Fisheries Branch

D. PUBLIC COMMENTS AND DISPOSITIONS

Public Comment Summary	
Chantille Papko	Writing to express absolute disagreement with the proposed expansion due to increasing population growth in the RM which is already causing a strain on land use and water in particular. Increasing the production of this operation will further exacerbate this issue. Commenter has lived in area for almost 10 years and is concerned about the smell and water pollution caused by hog barns. Commenter is against any more hog barns in the area.
Bella Kraska Lorette West, MB.	Commenter is against any building and/or expansion of hog barns in the RM of Tache.
Hollie Couture	Does not support expansion. Concerned it would make Landmark and undesirable place to live. With new residential development gaining momentum, commenter feels expanding the operation would be a mistake.
Paul and Jessica Martens Landmark, MB. R0A 0X0	Commenters oppose proposed expansion. They are concerned about the size of the proposed operation in close proximity to a community and the environmental impact and smell.
Arlene, Jim and Kevin Abel Landmark, MB. R0A 0X0	<p>Family is opposed to the proposed expansion. Have been residents of south east Landmark since 2002. Commenters are not opposed to farming with good practices and respect to the neighbourhood but have concerns about operator's manure management practices. They have seen:</p> <ul style="list-style-type: none"> - transporting sewage in substandard vehicles, leaving a trail of sewage on public roadways - spreading sewage over 12 inches high on farm property that is adjacent to residential property and along the ditches - Leaving the sewage sit on the land - Sewage running into the ditches during rainfall <p>State that issues with flies and stench do not appear to be caused by farm animals, rather they are a direct outcome of the farmer's manure management practices.</p> <p>These farms are lowering our house values, our quality of lifestyle, our mental health and limiting the use of our homes. Our homes are designated residential and taxed accordingly, and therefore should be treated and respected as residential.</p> <p>The RM of Tache has to protect the town of Landmark, including the value of residential homes, properties, people, water quality, land use, and our environment, from the substandard practices of farmers.</p>
Brent Beltz L.U.D. Member of Landmark, MB.	Commenter is formally against the operation of this hog factory in the RM of Tache. This factory and the manure smells will impact the entire community of Landmark and our way of life will change. The factory will be less than a mile from our recreation building, our arena, ball diamonds and soccer pitch. Not to mention the dangers of polluting our aquifer, decreased resale value of home.
Michael Bosshart	Commenter feels this expansion will not be good for the town as it is trying to attract more citizens. Concerned about potential damage to the water systems/drainage systems and the ecosystem. Recognizes that the area is a farming community but will attract less people for residential living in the area by allowing this pig barn to pass.

Joan Bernardin First Street West Landmark, MB. R0A 0X0	Concerned about the impact of the proposed expansion on the town of Landmark. Worried about the smell as the family spends a lot of time outside on their property. Commenter supports family farms but feels that expansion should not be permitted when residents have lived in area for so many years before the expansion.
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A full copy of the public comments as well as the proponent's response may be viewed on the public registry at: https://www.gov.mb.ca/mr/livestock/public_registries.html

See Appendix C for the proponent's response to the public comments.

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 Steinbach 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 Steinbach Community Planning Office), and
 - c) every person who made representation at the hearing.
4. According to the RM of Taché Zoning By-Law, the required minimum separation distance between a designated area and an animal confinement facility is 4,364 ft. and 6,561 ft. to an earthen manure storage facility. As a result, Council will require the proponent to apply for a variance.
5. As per Section 169(4)(b) of *The Planning Act*, a copy of the notice of hearing to vary the separation distance involving a livestock operation must be sent to every owner of property located within the separation distance that is proposed to be varied.
6. As per Section 174(1) of *The Planning Act*, Council can hold all required hearings together in a single combined hearing. It is recommended that during the course of this public hearing, Council first deal with the conditional use order followed by the variance order.
7. As per Section 174(2) of *The Planning Act* the notice of hearing for each matter to be considered at a combined hearing may be combined into a single notice of hearing.

8. 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.
9. 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.
10. 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 a variance be applied for prior to the Conditional Use Hearing to vary the separation distance between the designated area and earthen manure storage facility and animal confinement facility. This will provide council with the option of holding a combined Conditional Use and Variance Hearing.
2. That the proponent request the municipality hold a combined hearing.
3. 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.
4. 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

Name	Department	Title <i>Branch</i>	Contact
Don Malinowski	Municipal Relations	Senior Planner <i>Community Planning Branch</i>	204-945-8353
Petra Loro	Agriculture and Resource Development	Livestock Environment Specialist <i>Agri-Resource Branch</i>	204-918-0325
Shannon Beattie	Conservation and Climate	Policy Analyst <i>Legislation, Policy and Coordination Branch</i>	204-792-6269
Jeff DiNella	Infrastructure	Senior Development Review Technologist <i>Highway Planning and Design Branch</i>	204-945-2664

Appendix A

Agri-Resource Branch (ARD)

7044349 Manitoba Ltd has met the land requirements for 3,720 grower-finisher pigs as follows:

In areas of lower livestock intensity such as the RM of Tache, 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 phosphorus with crop removal, should it be necessary in the future.

Typical, modern feeding practices for pig production were used to estimate nutrient excretion for 7044349 Manitoba Ltd. Realistic, long-term 10-year crop yields from the Manitoba Agricultural Services Corporation (MASC) for the RMs of Ste. Anne and Tache 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 and detailed soil surveys are available to determine the agriculture capability of the land. The agriculture capability of the land included in the proposal is predominantly Class 2 and 3 (prime agricultural land). The main limitation is wetness (W).

The required land base for 7044349 Manitoba Ltd is 642 acres. 7044349 Manitoba Ltd has satisfied the land requirement by demonstrating that they have access to 717 suitable acres.

Appendix B

Staff in the Water Branch have reviewed the site assessment for the 7044349 Manitoba Ltd. proposal in the RM of Tache and have the following comments.

The project site is not located within Nutrient Management Zone N4 or any Nutrient Buffer Zone.

Most spread fields are within the Red River Valley Special Management Area and as such fall manure applications (September 10 – November 10) to tilled land must be either injected or incorporated within 48 hours.

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 2002).

The proponent plans to inject all liquid manure. Injection of manure at appropriate rates poses lower environmental risk than other manure application methods and conserves nitrogen increasing the fertilizer value of the manure.

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 full injection which will reduce N losses compared to other application methods.

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. To remain environmentally sustainable over a long-term planning horizon of 25 years or more, the proponent must be able to balance phosphorus inputs from applied manure and other nutrient sources such as commercial fertilizers with crop removal rates to avoid further build-up in soils. Consequently, sufficient land base must be available such that manure can be applied at no more than 1 times crop P removal rates (P balance). For long-term planning purposes, the proponent needs to have sufficient land available to ensure that manure can be applied at 1 times crop P removal. The proponent acknowledges that 1,284 acres may be required for the long-term environmental sustainability of the operation. The proponent has identified 717 acres for manure application. Application to meet crop N requirements is estimated to use 598 acres. Application at 2 times the crop removal of P is estimated to use 642 acres (1,284 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).

The proposal identifies that the water use for the proposed livestock operation is from the existing well located on the SE 14-8-5E. The provincial water well database contains information for a well

associated with the proposed livestock operation. The database indicates that there are wells present within the spread field locations. If any of these wells are in use then a minimum buffer as outlined in regulations must be maintained during spreading. These wells should be located and properly sealed if they are still present and not in use and a sealed well report must be 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: https://gov.mb.ca/water/groundwater/wells_groundwater/index.html. 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.

Based on the information in the proposal the existing well is within the 100 metre separation from the manure storage and animal storage facility. The well was installed in 1995 prior to the implementation of The Groundwater Water and Water Well Act. If the operation requires a new well in the future, it will need to be constructed more than 100 metres from the manure storage and animal storage facility.

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 C – Applicant Response

Date: February 5, 2021

Re: TRC-12-074

Name: Ernest Hiebert (7044349 MB Ltd.)

Topic: Applicants Response to Public Comments

I (we) certainly want to take the opportunity to personally respond to the public comments that we received in response to TRC-12-074 (proposed expansion of an existing livestock operation).

It is important to note that we live in close proximity to the site in this proposal. We live approximately 1 km from the site and see ourselves as a family farm operation. We have raised our family here for the last 17 years and very much consider ourselves as part of the community. We desire to provide a farming future for our family and what we are attempting is to make an older existing site more economically viable and sustainable for the future. We too will live with the consequences of how this site would be operated and managed. It is in our own personal best interest to farm in such a way as to reduce odor, nuisance of flies, noise and the negative impact of manure management.

Having read the public response comments, I want to respond to the concerns in the following categories.

1. **Manure Management:** This site would be managed in such a way as to comply with all environmental and agronomic regulations. We would ensure that a site such as this (>300 au's) would file an annual Manure Management Plan with Manitoba Sustainable Development. This would include soil samples to ensure that residual soil nutrient levels do not exceed Nitrogen and Phosphorus limits. Liquid manure would be applied to the spread fields using drag hose technology. With this technology manure is pumped to the fields via supply hose, and a tractor with an attachment on the field injects the manure into the soil. This not only reduces traffic and dust on the road, but greatly helps reducing odor during the manure application process. Manure nutrients would be applied in such a way as to meet the agronomic nutrient requirements of the proposed crops on the fields (eg.N) or to ensure certain nutrients (eg. P) do not exceed regulatory limits. Injection of liquid manure also significantly reduces the environmental risk of run-off. The annual manure application process would generally take 24-48 hours, thus also reducing the nuisance of a prolonged tanker or truck method of hauling and applying manure.
2. **Odor (flies):** Since we too live in such close proximity to the proposed site, we would manage the site in such a way as to reduce the negative impact of odor and flies. The production facility itself would be renovated to modern and industry standards, deadstock would be managed according to regulation standards, garbage cleaned up and maintenance and upkeep of the shelterbelt around the site. A portion of the odor comes from the ventilation system of the barn itself, and some comes from the liquid manure storage. If the RM would request it, we would be willing to apply straw as a cover to the storage during late spring and summer months. This would also assist in the reduction of odor.

3. Noise: We do not see how this proposed expansion of a livestock operation would increase the nuisance of noise in the area. The LUD of Landmark is surrounded by numerous livestock and grain farming operations and this in no way would noticeably add noise to what already exists.
4. Water: As far as water supply and needs is concerned, this site has its own well and already has a "Water Rights" license. Livestock operations like this are required to attain these in order to operate in a sustainable way.

Thanks for allowing me (us) to respond to the public comments. We trust they answer some of the concerns that were raised.