



TECHNICAL REVIEW COMMITTEE

A TECHNICAL REVIEW REPORT

PREPARED FOR

**THE RURAL MUNICIPALITY
OF DE SALABERRY**

BLUE CLAY FARMS 98 Ltd.

N 1/2 09-04-03 EPM

TRC 12-092

May 6, 2022

A. INTRODUCTION – THE TEAM

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

Agriculture (AGR)

- Agricultural Engineer
- Business Development Specialist
- Veterinarians
- Livestock Environment Specialist
- Nutrient Management Specialist

Natural Resources and Northern Development (NRND)

- Crown Lands Manager
- Fish Habitat Specialist
- Habitat Mitigation Biologist

Environment, Climate and Parks (ECP)

- Environmental Engineer
- Environment Officer
- Water Rights Licensing Technologist
- Land-Water Specialist
- Groundwater Specialist

Manitoba Transportation and Infrastructure (MTI)

- 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

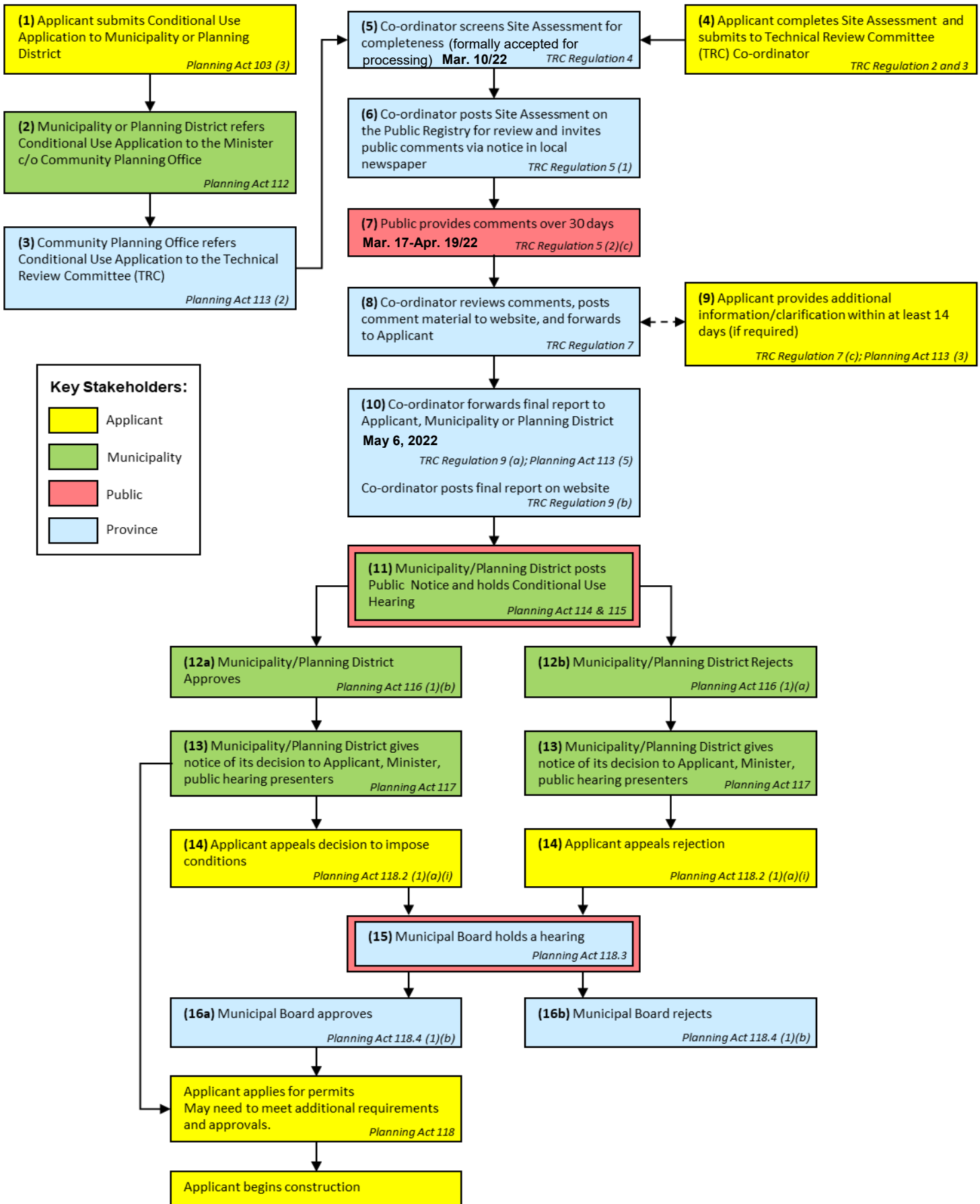
Purpose of TRC Reports

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: Blue Clay Colony

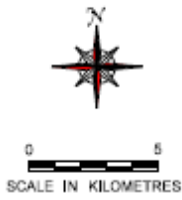
Site Location: N ½ 09-04-03 EPM. Refer to map below.

Proposal: To expand farrow to finish sows from 770 to 1,100 (963 to 1,375 Animal Units) in a mixed livestock operation. Total Animal Units will increase from 2,363 to 2,775.

This will involve the following:

- Modernize and retrofit existing 700 sow farrow to finish to extend swine barn by 75 feet, incorporate loose sow housing and increase floor space and construct one new barn.
- Using existing earthen manure storage.
- Estimated annual water use of 73 dam³ from an existing well at NE ¼ 29-04-04 EPM.
- Rendering mortalities.
- Truck haul routes as shown in map below.

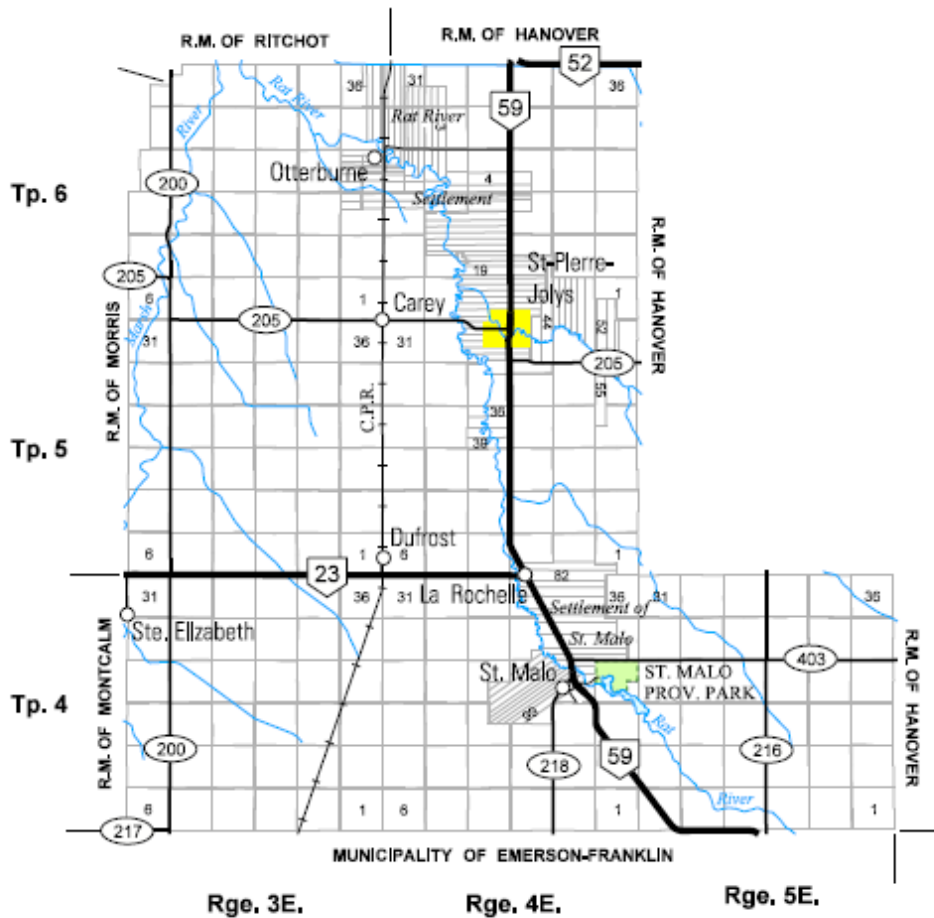
R.M. OF DE SALABERRY



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

LEGEND

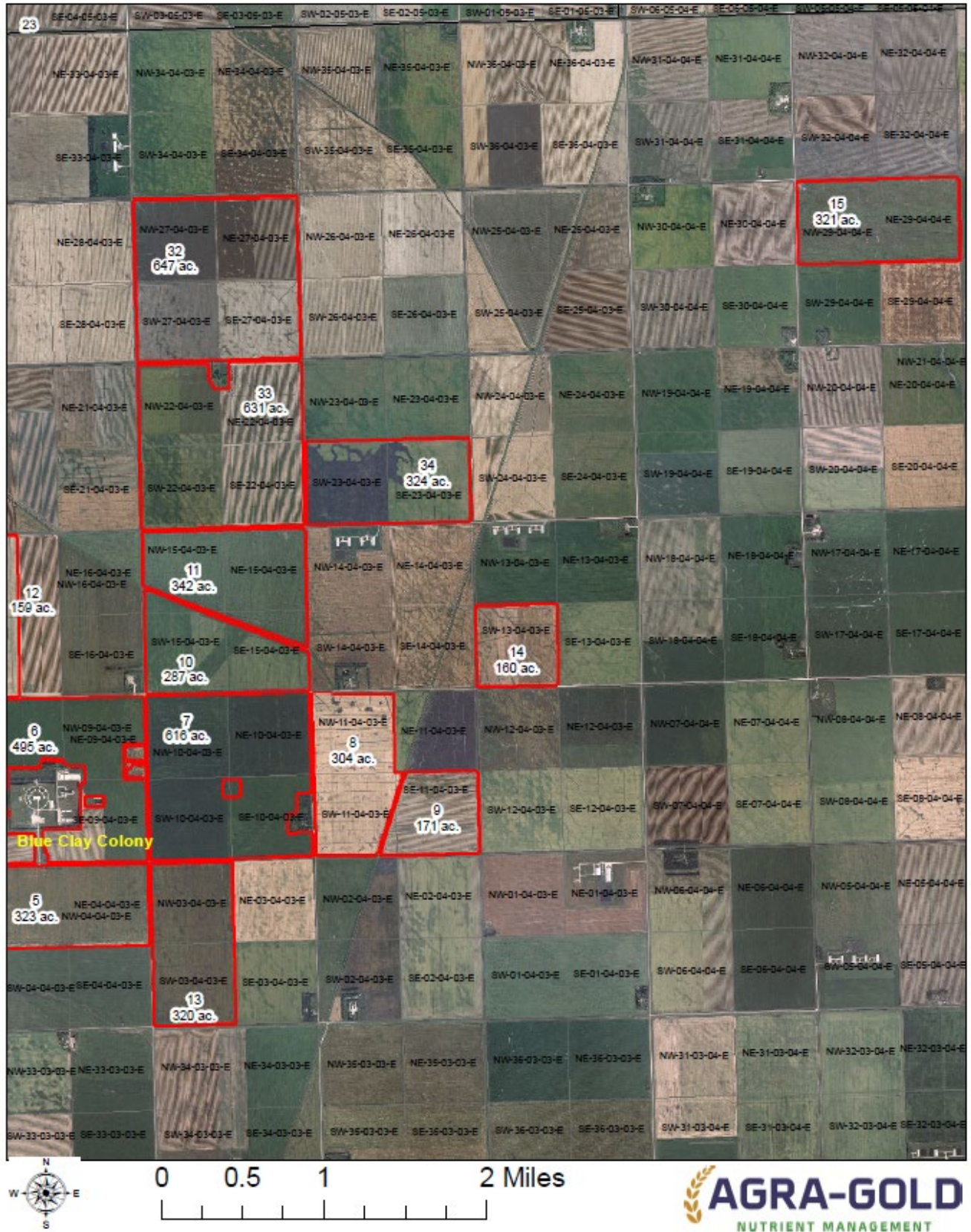
PROVINCIAL TRUNK HIGHWAYS		ACCESS ROADS	
PROVINCIAL ROADS		RAILWAYS	







Blue Clay Colony Fields East



C. SITE ASSESSMENT OVERVIEW

Provincial Technical Overview of TRC 12-09x – Blue Clay Farms 98 Ltd.				
Item No.	Provincial Requirements	Confirmed	Related Provincial Safeguards	Dept.
1	Submitted complete site assessment	X	<p>Technical Review Committee Regulation 119/2011 requires an applicant to submit a completed site assessment.</p> <p>The proposal is consistent with the Provincial requirements for a livestock operation.</p>	MR
2	Clearly identified the current and proposed type and number of animals and animal units	X	Blue Clay Farms 98 Ltd. is currently seeking Conditional Use approval to expand their pig operation to 1100 sows, farrow to finish (1375 Animal Units). The total size of the livestock operation, including the pig, chicken and turkey facilities, will be 2775 AU.	AGR
3	Project clearly defined as:	X	After expansion it will be 2775 AU.	ECP
	<u>animal confinement facility</u>	X	The site assessment indicates the operation will establish a new barn (152 ft x 557 ft = 84,664 sq.ft) and expand an existing swine barn by 75 ft x 129 ft (= 9,675 sq.ft). As the proposed buildings are over 6,458 sq. ft. (600 sq.m), 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 be required.	MR
4	Identified all existing and proposed buildings and structures and related separation distances	X	<p>Variances not required.</p> <p>Any proposed development that does not meet the required setbacks or livestock separation distances as established in the RM of De Salaberry zoning by-law requires Council's approval and a public hearing to vary those requirements. Given the size of the proposed livestock operation (2,775 AU) and its proximity to the nearest rural residential dwelling in SE ¼ 6-4-3E, the operation meets the minimum separation distance requirements of the zoning by-law. Therefore, variance orders will not be required.</p>	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.	ECP

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6	Identified suitable water source: Existing well and an estimated water consumption rate of 73 dam³ annually	X	Blue Clay Farms 98 Ltd. currently holds a valid Water Rights Licence with the Water Use Licensing Section; however, they need to submit an application to amend the existing licence in order to include the change in animals.	ECP
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>Designation The proposed livestock operation, located in the N ½ 9-4-3 EPM, is designated “General Agriculture” pursuant to the RM of De Salaberry Development Plan By-Law No. 2362-18. The proposed expansion appears consistent with Policies 3.1.18.2 and 3.1.20.</p> <p>Policy 3.1.18.2: “new or expanding operations of 300 animal units or greater shall be a Conditional Use”.</p> <p>Policy 3.1.20: “The Zoning By-law shall establish minimum mutual separation distance(s) between new or expanding livestock operations, including confinement facilities and manure storage facilities, and non-farm land uses and designations. Council may, as per The Planning Act, vary the mutual separation distance(s) as provided for in the Zoning By-law.</p> <p>In accordance with Policy 3.1.23, all new or expanding livestock operations must 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, including establishing appropriate buffers such as a treed shelterbelt surrounding the entire livestock operation facility and the manure storage facility.</p> <p>Zoning The land is zoned “AG” Agriculture General pursuant to the RM of De Salaberry Zoning By-law No. 2369-18. The “AG” zone requires a minimum site area of 80 acres with a minimum site width of 600 feet for livestock operations. As such, the proposal complies with the minimum zoning site requirements.</p>	MR

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8	Identified any unsealed abandoned wells on the project site or spread fields	X	<p>The proposal identifies that the water use for the proposed livestock operation is from the existing well located on the NE 29-4-4E. The provincial water well database contains information for a well associated with the proposed livestock operation. The proposal indicates no abandoned wells present on the site or spread fields, however the provincial water well database indicates a well present within the proposed spread field locations at 7-4-3E. The accuracy of the well location and its status is not known.</p> <p>If a well is in use then a minimum buffer, as outlined in regulations, must be maintained during spreading. The well should be located and properly sealed if still present and not in use and a sealed well report must be filed with the Groundwater Management Section of MB Environment, Climate and Parks. Information on well sealing and well sealing reports are available from MB Environment, Climate and Parks (204-945-6959) or: https://www.gov.mb.ca/water/groundwater/wells_groundwater/index.html. A well drilling professional should seal all but the most basic wells. A list of currently licensed well drilling professionals can also be accessed from the above web page.</p> <p>During manure spreading, the set back distances to all groundwater features as prescribed under the Environment Act Livestock Manure and Mortalities Management Regulation should be considered as a minimum distance.</p>	ECP
9	Identified suitable manure storage methods	X	<p>A permit to construct pipelines from the proposed new barn to existing earthen manure storage facility must be obtained in accordance with the Livestock Manure and Mortalities Management Regulation. A permit application can be submitted to Environmental Approvals Branch of Environment, Climate and Parks (EABDirector@gov.mb.ca).</p> <p>Design guidelines and application forms are available at: https://www.gov.mb.ca/sd/waste_management/livestock_program/index.html.</p>	ECP
10	Identified acceptable manure application methods	X	<p>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).</p>	ECP
11	Mortalities disposal methods identified: rendering	X	<p>The proponent has indicated that mortalities for hog operation is rendered. This is considered acceptable under the Livestock Manure and Mortalities Management Regulation.</p>	ECP

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12	Proposed suitable setback distances from water and property lines for manure, livestock and mortalities	X	The proponent indicated all setback distances for proposed expansion will meet minimum requirements set out in the Livestock Manure and Mortalities Management Regulation MR 42/98. The existing earthen manure storage facility was constructed with setback variances on the north side property line.	ECP
13	Indicated if proposed project site is within designated flood area or is otherwise at risk of flooding	X	The proposed project site is not within a designated flood area or otherwise at a known risk of flooding.	MTI
14	Proposed acceptable odour control measures	X	<p>The proponent has indicated that existing shelterbelts extend around the perimeter of the yard site. A small portion of the existing shelterbelt will be removed to construct the new livestock facility.</p> <p>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.</p>	AGR
		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. This can be addressed through a development agreement.	MR
15	Proposed sufficient and suitable land for manure spreading with minimum setbacks from water sources	X	The required land base for Blue Clay Farms 98 Ltd. is 3552 acres. Blue Clay Farms 98 Ltd. has exceeded the land requirement by demonstrating that they have access to 9629 suitable acres. Additional detail can be found in the appendix.	AGR
		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.	ECP

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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 some spread fields are located within the Red River Valley Special Management Area or other regularly inundated area. The Livestock Manure and Mortalities Management Regulation requires that manure applied to such land between September 10 and November 10 of any year must be injected or incorporated within 48 hours, unless perennial forages are established on the land, or if the soil is not disturbed and has adequate crop residue to control erosion.	ECP
17	Proposed spread fields that meet development plan and zoning by-law requirements	X	<p>Spread fields located in the RM of De Salaberry are designated 'General Agriculture Area' and zoned 'AG' Agriculture General. These fields are large parcels of farmland, and manure application on farmland is considered agriculture-related activity.</p> <p>Spread fields located in the Municipality of Emerson-Franklin are designated 'Agricultural Policy Area' and zoned 'AG1' Agriculture General 1 Zone. Agricultural activities are the dominant land use in this designation. The land is currently in agricultural use and appears suitable as spread fields.</p> <p>Spread fields located in the RM of Montcalm are designated "General Agriculture Area" and zoned 'AG' Agriculture General. These fields are open cultivated land.</p> <p>It is noted that the applicable Zoning By-laws do not provide specific setback distance requirements from a spread field to a residence or a designated area. The proposed fields, therefore, complies with the zoning by-law requirements.</p> <p>There are existing dwellings located in close proximity to the proposed spread fields in all three municipalities. It is recommended that the proponent must take appropriate measures to reduce potential negative impacts, i.e. odour on the nearby residences.</p>	MR

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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 for liquid manure from existing hog operation. This is considered acceptable under the Livestock Manure and Mortalities Management Regulation.	ECP
		X	<p>Any transportation of manure across a Provincial Waterway using a hose or other similar method will require a Provincial Waterway Authorization. There are several Provincial Waterways in the immediate area; they can be located by using our online map at https://arcg.is/0Cmb4S; Provincial Waterway Authorization can be applied for at https://forms.gov.mb.ca/pww/.</p> <p>Please be advised that any structures placed within the controlled area of PR 200 or any Provincial Road (PR) (125 feet from the edge of the highway right-of-way) requires a permit from our office. The contact is Sheena del Rosario at (204) 583-2433 or Sheena.Delrosario@gov.mb.ca.</p> <p>The placements of temporary drag lines or any other temporary machinery/equipment for manure application within the right-of-way of PR 200 or any PTH or PR requires permission from our regional office in Steinbach. Please contact the Regional Planning Technologist, Robert Fender at (204) 371-6858 or Robert.Fender@gov.mb.ca. 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 200 or any PR (125 feet from the edge of the right-of-way).</p>	MTI
19	Identified suitable trucking routes and access points	X	The primary proposed truck haul route will utilize an existing municipal road connecting onto PR 200. We don't anticipate a significant increase in use.	MTI
20	Identified proposed trucking routes – local roads	X	<p>The proposed site has access to municipal Road 19N. The proposal identifies PR 200 as its potential truck hauling route, located approximately half a mile west of the livestock operation. Muni Road 19N will be utilized to access PR 200. We do not identify any concerns regarding access.</p> <p>As per Section 116(2) of <i>The Planning Act</i>, municipalities, as a condition of approval, may require the proponent to enter into a development agreement regarding the condition and upkeep of local roads used as truck haul routes.</p>	MR

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21	Known rare species will not be 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).</p> <p>This review is based on existing data known to the MBCDC of the Fish and Wildlife 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.</p> <p>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>	NRND

Provincial Departments: Agriculture (AGR); Environment, Climate and Parks (ECP); Transportation and Infrastructure (MTI); Municipal Relations (MR)

D. PUBLIC COMMENTS AND DISPOSITIONS

No public comments received for 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 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. 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

Name	Department	Title <i>Branch</i>	Contact
Erin McCleery	Municipal Relations	Manager, Winnipeg Office <i>Community Planning and Development Branch</i>	204-945-1143
Petra Loro	Agriculture	Livestock Environment Specialist <i>Land Use and Ecosystem Resilience Branch</i>	204-918-0325
Barsha Sagan	Environment, Climate and Parks	Environmental Engineer <i>Environmental Approvals Branch</i>	204-795-7175
Jeff DiNella	Infrastructure	Senior Development Review Technologist <i>Highway Planning and Design Branch</i>	204-945-2664

Appendix

Agriculture – Land Use and Ecosystem Resilience Branch

In areas of lower livestock intensity such as the RM of De Salaberry, 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 poultry and pig production were used to estimate nutrient excretion for Blue Clay Farms 98 Ltd. Realistic, 10-year average crop yields from the Manitoba Agricultural Services Corporation (MASC) for the RMs of De Salaberry, Emerson-Franklin and Montcalm 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. Soils must be below 60 ppm Olsen P to be considered suitable. Detailed and reconnaissance soil surveys are available to determine the agriculture capability of the land. The agriculture capability of the land included in the proposal is primarily Class 2 and 3 with some areas of Class 5. The primary limitation in the area is wetness (W) with small areas of salinity (N).

The required land base for Blue Clay Farms 98 Ltd. is 3552 acres. Blue Clay Farms 98 Ltd. has exceeded the land requirement by demonstrating that they have access to 9629 suitable acres.

Water Science and Watershed Management Branch – Environment, Climate and Parks (ECP)

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 and manure will be injected. Full injection will reduce the risk to surface water when compared to other application methods.

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 manure by 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. Many agricultural soils in Manitoba, especially areas with low livestock intensity, 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 De Salaberry, 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 7104 acres may be required for the operation. The proponent has identified 9629 acres for manure application at this time. Application to meet crop N requirements is estimated to use 3148 acres. Application at 2 times the crop removal of P is estimated to use 3552 acres (7104 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.