



**TECHNICAL REVIEW COMMITTEE**

**A TECHNICAL REVIEW REPORT**

**PREPARED FOR**

**THE RURAL MUNICIPALITY  
OF CARTIER**

**WALDHEIM COLONY**

**N 1/2 20-10-3 WPM**

**TRC 12-063**

**March 26, 2020**

## **A. INTRODUCTION – THE TEAM**

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

### Agriculture and Resource Development (ARD)

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

### Conservation and Climate (CC)

- Environment Officer
- Environmental Engineer
- Water Rights Licensing Technologist

### Infrastructure (MI)

- Development Review Technologists
- Engineering and Operations Division
- Development Review Officers
- Water Management and Structures Division

### 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**

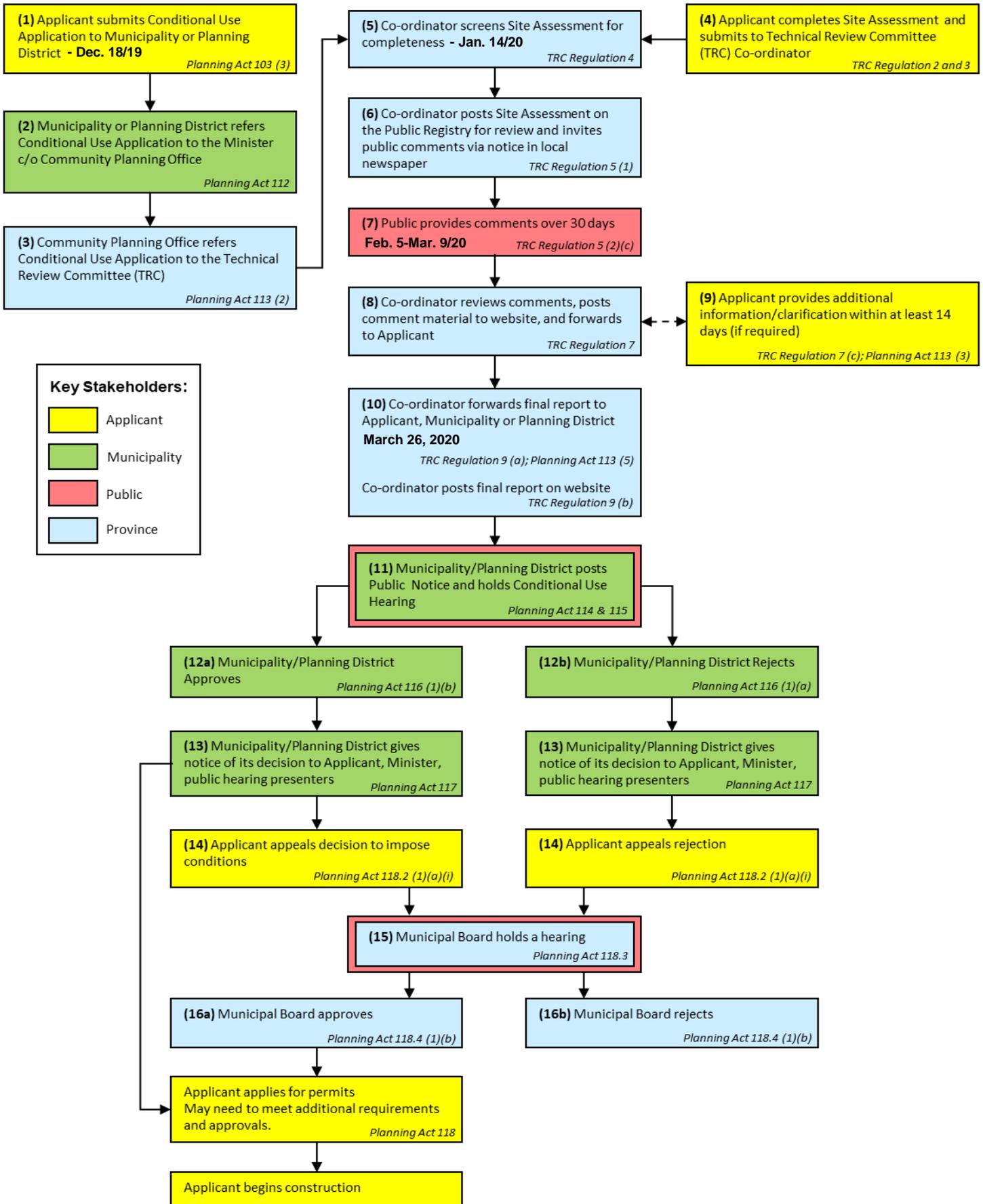
### Purpose of TRC Reports

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

- a) Enable municipal councils to make informed Conditional Use Order 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 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:** Waldheim Colony

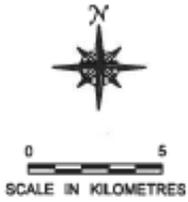
**Site Location:** N ½ 20-10-3 WPM, southwest of Elie. Refer to map below.

**Proposal:** To expand hog production in a mixed livestock operation from the current 600 to 1,500 sows: farrow to finish, increasing total animal units from 1,002 to 2,127.

This will involve the following:

- Demolition of one existing hog barn and construction of two additional hog barns. Other existing buildings will continue to be used.
- Earthen and field manure storage
- Consuming a maximum of 74,253 imperial gallons of water per day from an existing well.
- Composting mortalities
- Truck haul routes as shown in map below

# R.M. OF CARTIER

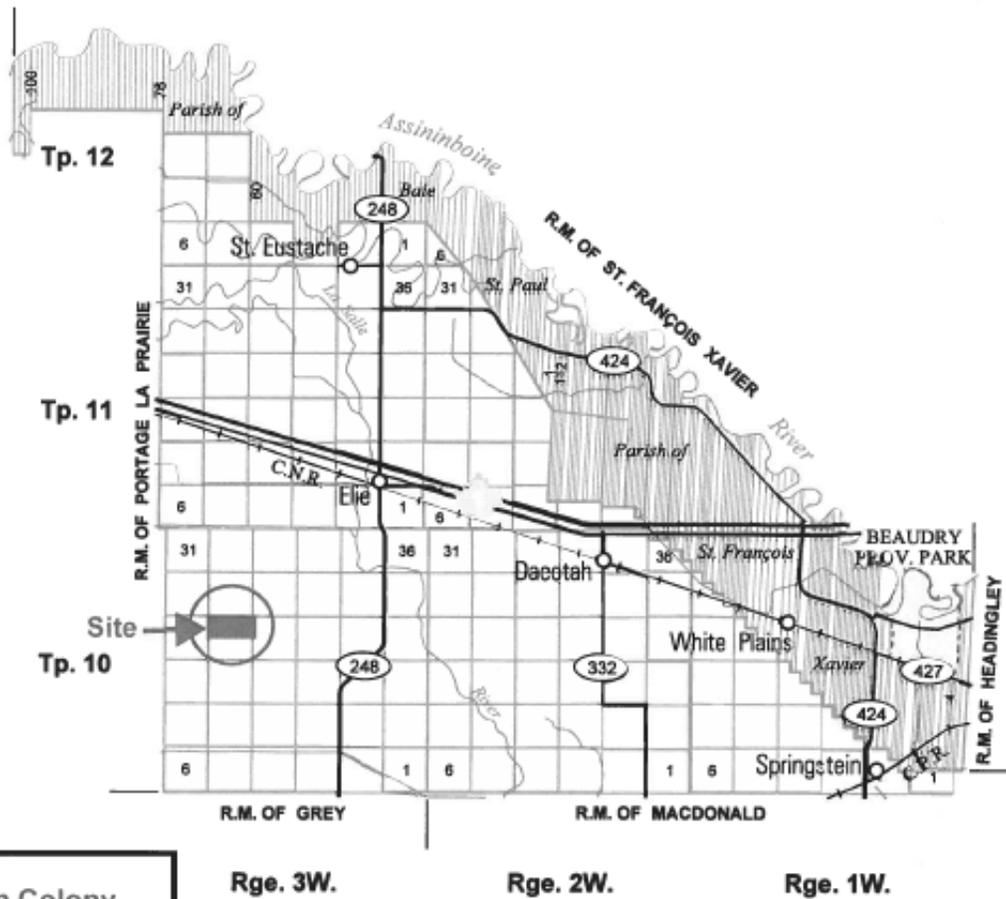


PROVINCE OF MANITOBA  
INFRASTRUCTURE  
HIGHWAY PLANNING AND DESIGN BRANCH  
GEOGRAPHIC & RECORDS MANAGEMENT SECTION  
WINNIPEG  
JANUARY 1, 2015

REVISED APRIL 2015

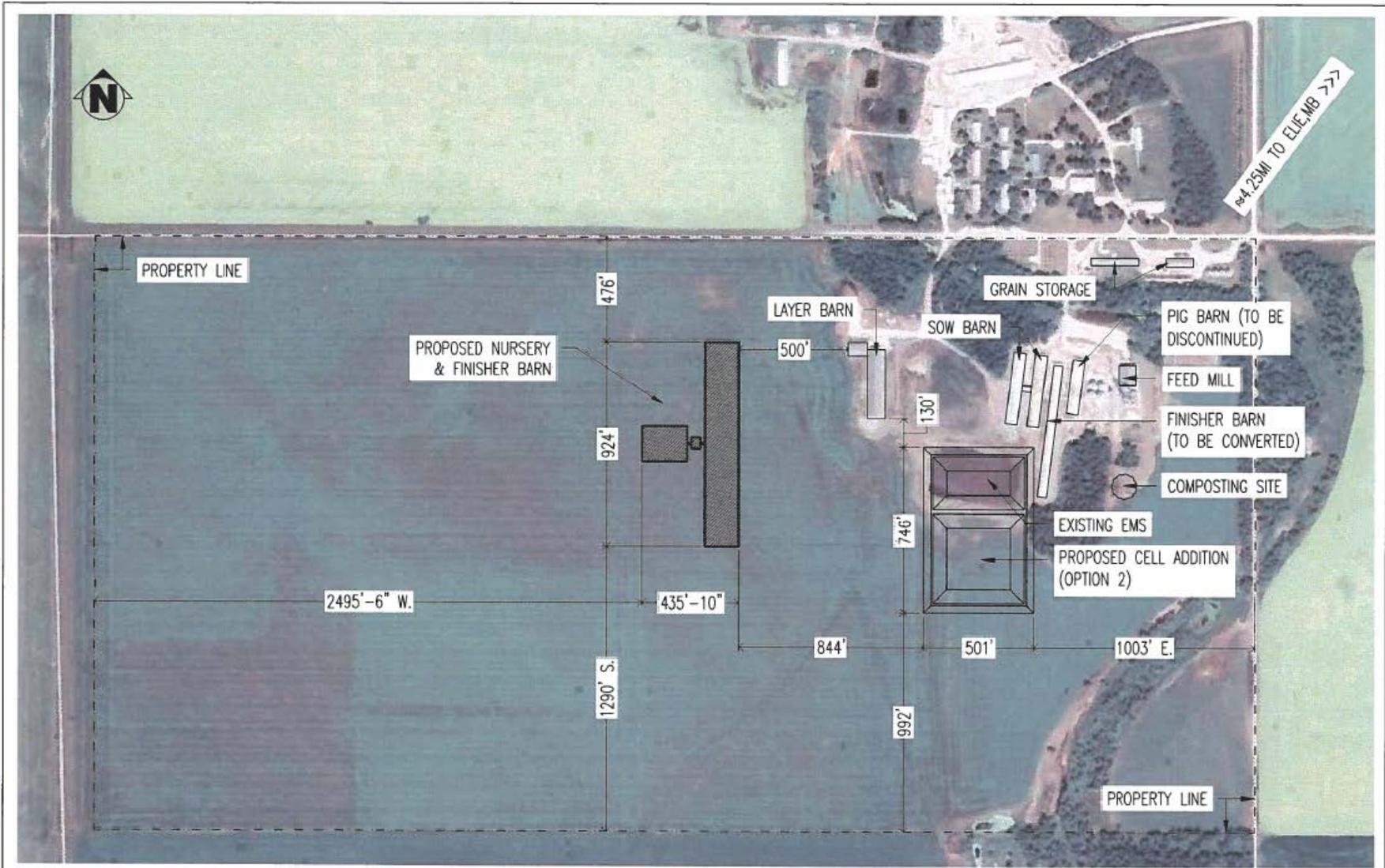
### LEGEND

TRANS-CANADA HIGHWAY		ACCESS ROADS	
PROVINCIAL ROADS		RAILWAYS	



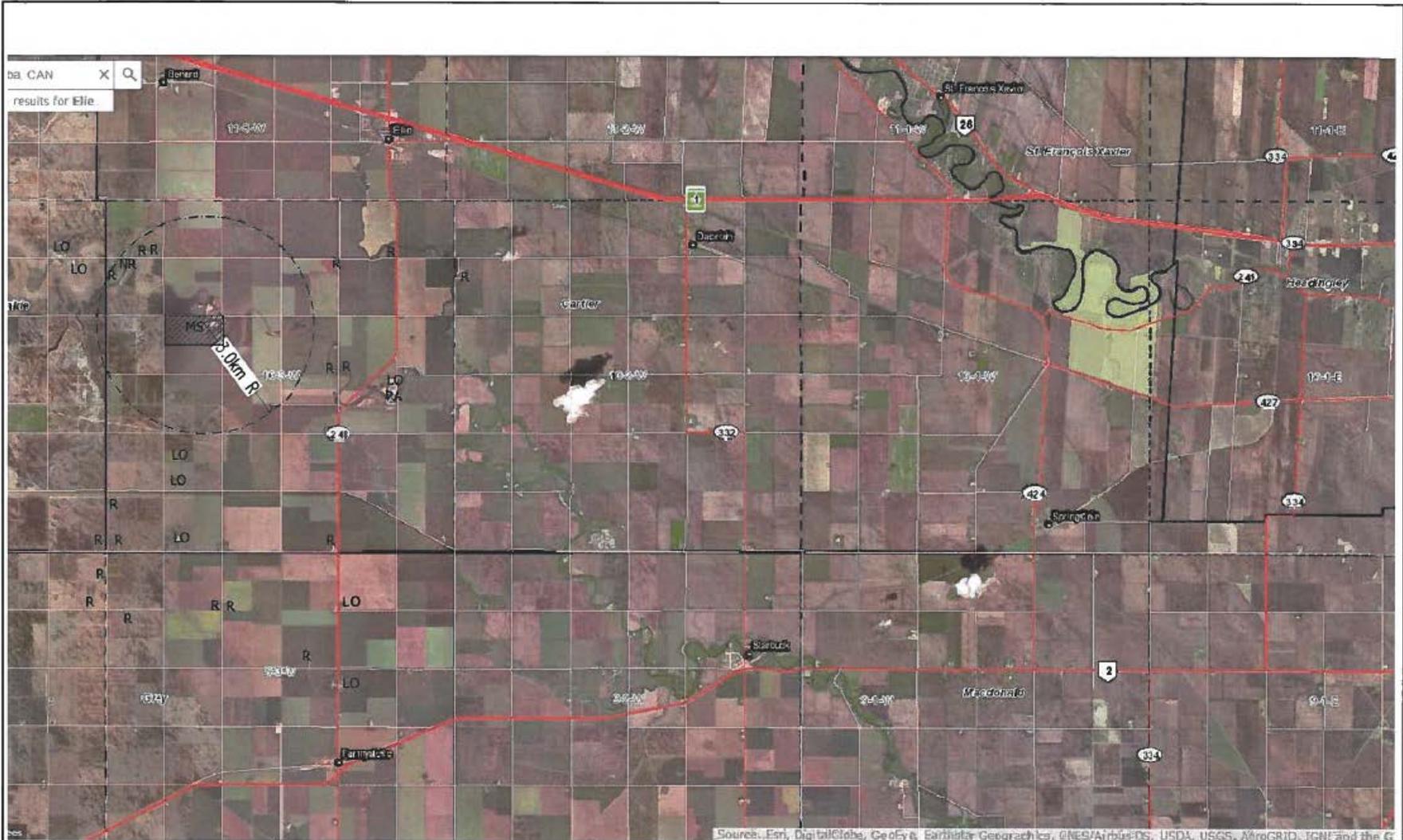
Waldheim Colony  
NW & NE 20-10-3W  
RM of Cartier

SHEET 1 of 1



PROJECT NAME <b>WALDHEIM COLONY</b>		BUILDING AREA <b>N/A</b>	
SHEET TITLE <b>SITE PLAN</b>		DRAWN BY <b>R. FLORES SOUTH-MAN ENGINEERING</b>	
DATE DRAWN <b>NOVEMBER 2019</b>		DRAWING SCALE <b>SCALED TO FIT</b>	SHEET NUMBER <b>SP-1B</b>
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Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the G

**LEGEND:**

-  - PROJECT SITE
- MS - MANURE STORAGE
- R - RESIDENCE
- RA - RESIDENTIAL AREA
- NR - NEAREST NEIGHBOR (APPROX. 8,800 FT)
- - 3km NOTIFICATION AREA FOR THE PUBLIC CONDITIONAL USE HEARING



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PH: (204) 666-9022 | FAX: (204) 666-9024

PROJECT NAME <b>WALDHEIM COLONY</b>		BUILDING AREA <b>N/A</b>	
SHEET TITLE <b>LAND USE MAP</b>		DRAWN BY <b>R. FLORES SOUTH-MAN ENGINEERING</b>	
DATE DRAWN <b>NOVEMBER 2019</b>		DRAWING SCALE <b>SCALED TO FIT</b>	SHEET NUMBER <b>SP-2A</b>
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PROJECT NAME <b>WALDHEIM COLONY</b>		BUILDING AREA <b>N/A</b>	
SHEET TITLE <b>TRUCK HAUL ROUTE</b>		DRAWN BY <b>R. FLORES SOUTH-MAN ENGINEERING</b>	
DATE DRAWN <b>NOVEMBER 2019</b>		DRAWING SCALE <b>SCALED TO FIT</b>	SHEET NUMBER <b>SP-3</b>
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## C. SITE ASSESSMENT OVERVIEW

Provincial Technical Overview of TRC 12-063 – Waldheim Colony				
Item No.	Provincial Requirements	Confirmed	Related Existing 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	The proponent is requesting approval to expand the pig operation from 600 sows, farrow to finish (750 Animal Units) to 1,500 sows, farrow to finish (1,875 Animal Units). The total size of the livestock operation, including all pigs and poultry, would be 2,127 Animal Units.	ARD
3	Project clearly defined as an animal confinement facility	X	Each of the barns being proposed are in excess of 6,458 sq. ft. (600 sq.m) and will therefore require a building permit from the Office of the Fire Commissioner under <i>The Building and Mobile Home Act</i> and the Manitoba Building Code.	MR
4	Identified all existing and proposed buildings and structures and related separation distances	X	<p>All existing and proposed buildings and structures, are in compliance with the minimum separation distances of Provincial Planning Regulation 81/2011.</p> <p>Note: The R.M. of Cartier Zoning By-law establishes separation distances between livestock operations and unrelated residences or designated residential areas. For a livestock operation with 2,127 Animal Units, the minimum separation distance from an earthen manure storage facility to an unrelated residence and a designated residential area is 2,641 feet and 10,564 feet respectively. The minimum separation distance from an animal housing facility to an unrelated residence and a designated residential area is 1,322 feet and 7,057 feet, respectively.</p> <p>The closest residence is located on the SE ¼ of 31-10-3 WPM and closest designated residential area is Elie. The distances between these to locations and the livestock operation exceed all minimum separation distances defined in the R.M. of Cartier Zoning By-law.</p>	MR
5	Demonstrated project site is not located within Nutrient Management Zone N4 or any Nutrient Buffer Zone	X	No person shall construct, install, site, locate, expand or modify a confined livestock area or manure storage facility in Nutrient Management Zone N4 or in a Nutrient Buffer Zone according to the Nutrient Management Regulation ( <i>M.R. 62/2008</i> ) under <i>The Water Protection Act</i> .	ARD (WS & WSM)

## Provincial Technical Overview of TRC 12-063 – Waldheim Colony

Item No.	Provincial Requirements	Confirmed	Related Existing Provincial Safeguards	Dept.
6	Identified suitable water source: existing well and a water consumption rate of 74,253 imperial gallons per day	X	<p>This project proposal has noted an estimated water usage that will exceed 25,000 litres per day, therefore a Water Rights Licence will be required. The proponent has applied to amend their existing Water Rights Licence. They are currently in good standing with the Water Use Licensing Section.</p> <p><b>Note:</b> All operations using more than 25,000 litres (5,499 imp gal) per day must maintain a Water Rights Licence under <i>The Water Rights Act</i>, Water Rights Regulation (<i>M.R. 126/87</i>).</p>	CC
7	Proposed project site meets development plan, zoning by-law	X	<p>The proposed project site is designated 'Rural General Policy Area' in the White Horse Plains Planning District Development Plan (By-law No. 1-2016). This policy area provides for the widest range of agricultural activities, including livestock operations. The proposed project site is zoned "AG" Agricultural General Zone in the R.M. of Cartier Zoning By-law (By-law No. 1658-18). Livestock operations that are greater than 300 Animal Units are a Conditional Use. The minimum site area is 80 acres with a minimum site width of 600 Feet. The proposed project is consistent with the policies of the Development Plan and meets the minimum bulk regulations of the Zoning By-law.</p> <p>The R.M. of Cartier Zoning By-law establishes separation distances between livestock operations and unrelated residences or designated residential areas. For a livestock operation with 2,127 Animal Units, the minimum separation distance from an earthen manure storage facility to an unrelated residence and a designated residential area is 2,641 feet and 10,564 feet respectively. The minimum separation distance from an animal housing facility to an unrelated residence and a designated residential area is 1,322 feet and 7,057 feet, respectively.</p> <p>The closest residence is located on the SE ¼ of 31-10-3 WPM and closest designated residential area is Elie. The distances between these to locations and the livestock operation exceed all minimum separation distances defined in the R.M. of Cartier Zoning By-law.</p>	MR

## Provincial Technical Overview of TRC 12-063 – Waldheim Colony

Item No.	Provincial Requirements	Confirmed	Related Existing Provincial Safeguards	Dept.
8	Identified any unsealed abandoned wells on the project site or spread fields	X	<p>The site assessment identifies that the water use for livestock operation is from an existing well on the property at NE of section 20-10-3W. The provincial water well database contains information for five wells present on the property. However it is not identified in the proposal which well is associated with the proposed livestock operation. The database also identifies wells present within the spread field locations. Therefore during manure spreading, the setback distances to all groundwater features as prescribed under The Environment Act's Livestock Manure and Mortalities Management Regulation should be considered as a minimum distance.</p> <p>As per <i>The Groundwater and Water Well Act</i>, Well Standards Regulation 215/2015:</p> <p>If there are unused water wells on the site or spread fields these shall be properly sealed. 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: <a href="https://www.gov.mb.ca/sd/water/groundwater/wells_groundwater/index.html">https://www.gov.mb.ca/sd/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>	<b>ARD (WS&amp;WSM)</b>
9	Identified suitable manure storage methods	X	<p>A permit to expand the existing manure storage facility must be obtained, prior to initiating any of the expansion work, in accordance with the Livestock Manure and Mortalities Management Regulation (MR 42/98). An application for a permit to expand the manure storage must be submitted to Environmental Approval Branch of Conservation and Climate (EABDirector@gov.mb.ca). 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>.</p>	<b>CC</b>
10	Identified acceptable manure application methods	X	<p>The proponent must submit and adhere to a manure management plan approved for the facility as per the Livestock Manure and Mortalities Management Regulation (MR 42/98).</p>	<b>CC</b>
11	Mortalities disposal methods identified composting.	X	<p>The proponent has indicated that mortalities will be dealt with by composting. Composting mortalities must be completed in accordance with section 15.1 of the Livestock Manure and Mortalities Management Regulation (MR 42/98).</p>	<b>CC</b>

## Provincial Technical Overview of TRC 12-063 – Waldheim Colony

Item No.	Provincial Requirements	Confirmed	Related Existing Provincial Safeguards	Dept.
12	Proposed suitable setback distances from water and property lines for manure, livestock and mortalities	X	The proponent indicates that setback distances meet minimum requirements set out in the Livestock Manure and Mortalities Management Regulation (MR 42/98).	CC
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 as per <i>The Water Resources Administration Act</i> , Designated Flood Area Regulation 59/2002. Water Management, Planning and Standards is not aware of any major overland flooding risk at this location.	MI
14	Proposed acceptable odour control measures	X	<p>The proponent has indicated that existing shelterbelts will be used. 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.</p> <p><i>The Planning Act</i> allows Municipal Councils to require a manure storage cover and the planting of a shelter belt as conditions of approval.</p>	ARD  MR
15	Proposed sufficient and suitable land for manure spreading with minimum setbacks from water sources	X	Waldheim Colony is required to demonstrate that they have access to at least 3500 acres of suitable land for manure application. They have demonstrated that they have access to 4750 suitable acres with soil tests for manure application with an additional 1802 acres without soil tests. Details of the land assessment are provided in the appendices.	ARD

## Provincial Technical Overview of TRC 12-063 – Waldheim Colony

Item No.	Provincial Requirements	Confirmed	Related Existing Provincial Safeguards	Dept.
16	Indicated if spread fields are located in the Red River Valley Special Management Area or any other regularly inundated area	X	Proposed spread fields are not located within the Red River Valley Special Management Area and are not subject to frequent flooding or inundation.	CC
17	Proposed spread fields, that meet development plan and zoning by-law requirements	X	The proposed spread fields are located in the R.M.s of Cartier, Grey and Macdonald. These lands are designated for agricultural use, and are zoned “AG” Agricultural General Zone in their respective Zoning By-laws. The proposed spread fields are appropriately designated and zoned for such a use.	MR
18	Proposed acceptable manure transportation methods	X	The proponent has indicated dragline as means of transportation. This is considered acceptable under the LMMMR. Elm River Channel Provincial Waterway is approximately one mile to the North, Scott Drain Provincial Waterway is approximately one mile to the South, and the La Salle River Provincial Waterway is approximately three miles to the East. If any manure hoses cross these Provincial Waterways require prior authorization from Manitoba Infrastructure. We can be contacted at <a href="mailto:MITWaterReview@gov.mb.ca">MITWaterReview@gov.mb.ca</a> .	CC  MI
19	Identified suitable trucking routes and access points	X	The proposed truck haul routes utilizes a municipal road with an existing access connection onto PTH 23. We do not anticipate a significant increase in use of that access. We note that according to the spread fields maps, there is no crossing a provincial highway. However, we note the following regulations: Manure spreading: please note that any structures placed within the controlled area of PTH 32 or PR 240 (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. The placement of temporary draglines or any other temporary machinery/equipment for manure application within the right-of-way of PTH 23 and PR 240 requires permission from our regional office in Portage. Please contact the Regional Planning Technologist (Denise Stairs) at (204) 871-2239. 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 PTH 23 and PR 240 (125 feet from the edge of the right-of-way).	MI

## Provincial Technical Overview of TRC 12-063 – Waldheim Colony

Item No.	Provincial Requirements	Confirmed	Related Existing Provincial Safeguards	Dept.
20	Identified proposed trucking routes – local roads	X	Under <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.	MR
21	Confirmed that no rare species are impacted on new sites/lands	X	The Conservation Data Centre Report indicates that no species listed under the provincial Endangered Species and Ecosystems Act, the federal Species at Risk Act, or classed as at-risk according to internationally recognized standards, have been documented in the project area.	ARD (WL&F)

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

## D. PUBLIC COMMENTS AND DISPOSITIONS

N/A

## 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 Portage 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 Portage Community Planning Office), and
  - c) every person who made representation at the hearing.

*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

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.

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, or
- (ii) a decision to impose any condition on the approval (that the applicant decides to challenge).

## F. TECHNICAL REVIEW COMMITTEE MEMBERS

<b>Name</b>	<b>Department</b>	<b>Title Branch</b>	<b>Contact</b>
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

# Appendices

## Agriculture and Resource Development:

### Water Science and Watershed Management Branch:

Staff in the Water Science and Watershed Management Branch have reviewed the site assessment for the Waldheim Colony proposal in the RM of Cartier and have the following comments:

- Nutrient management that avoids excess loss of nutrients to surface waters is 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 either inject or incorporate manure within 48 hours of broadcast. Injection of manure at appropriate rates poses lower environmental risk than other manure application methods. When manure is broadcast, immediate incorporation reduces losses of nitrogen via ammonia-volatilization and reduces the risk of N and P losses in runoff to surface waters.
- 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. Application of liquid manure with injection will reduce N losses compared to broadcast methods and is encouraged whenever possible.
- 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 6,812 acres may be required for the long-term environmental sustainability of the operation. The proponent has identified 4,750 acres for manure application. Application to meet crop N requirements is estimated to use 3,500 acres. 6,812 acres is estimated to achieve P balance 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 (Bi Carb) soil test levels so as to prevent excessive P buildup when applying manure at rates above P balance (P removal by harvested crops).

## **Agri-Resources Branch:**

Waldheim Colony has met the land requirements for 1500 sows (farrow to finish), 4000 broilers, 20,000 layers and 20,000 pullets, as follows:

In areas of lower livestock intensity such as the RM of Cartier, 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 and could be brought into the Waldheim Colony manure management plan to balance phosphorus with crop removal, should it be necessary in the future.

In order to determine the land requirements for Waldheim Colony, nitrogen and phosphorus excretion by all of the livestock are compared to nitrogen utilization and phosphorus removal by the proposed crops to be grown. The calculation takes into consideration typical, modern feeding practices for pig production and realistic, long-term 10-year crop yields from the Manitoba Agricultural Services Corporation (MASC) for the RMs of Cartier, MacDonald and Grey.

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 predominantly Class 2 and 3 (prime agricultural land). The limitations include wetness (W) and salinity (N).

Waldheim Colony is required to demonstrate that they have access to at least 3500 acres of suitable land for manure application. They have demonstrated that they have access to 4750 suitable acres with soil tests for manure application with an additional 1802 acres without soil tests.