



**TECHNICAL REVIEW COMMITTEE**

**A TECHNICAL REVIEW REPORT**

**PREPARED FOR**

**THE RURAL MUNICIPALITY  
OF CARTWRIGHT-ROBLIN**

**HOLMFIELD COLONY**

**11-3-15 WPM**

**TRC 12-094**

**February 17, 2023**

## **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**

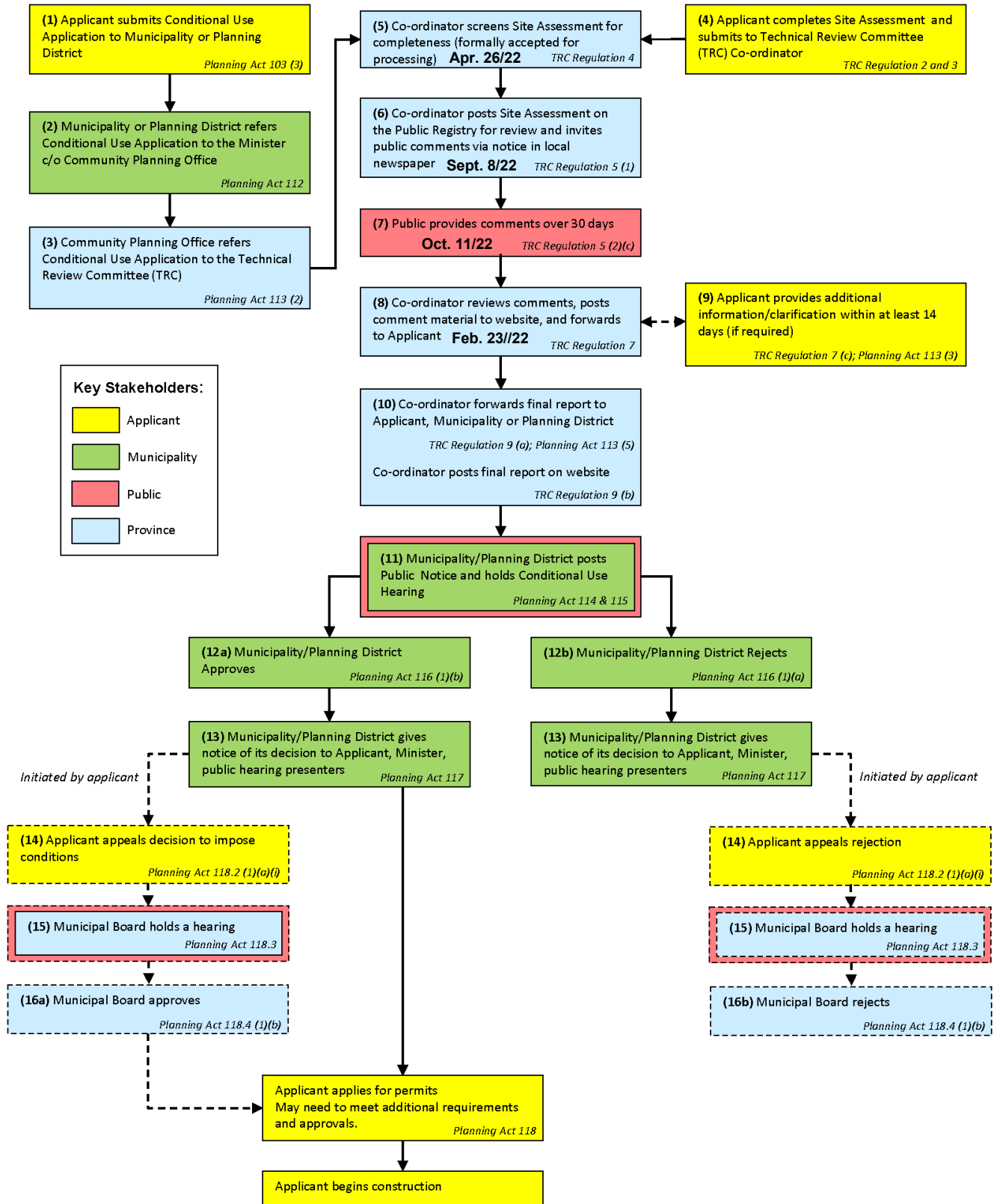
### Purpose of TRC Reports

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](https://www.gov.mb.ca/mr/livestock/public_registries.html)

**Applicant:** Holmfield Colony

**Site Location:** 11-3-15 WPM Refer to map below.

**Proposal:** To expand the existing operation:

- Increase the number of sows: farrow/finish from 520 sows (650 AU) to 1000 sows (1250 AU).

The existing number of dairy cows, beef cows, feeder cattle, broilers, layers, geese and ducks will remain the same

This will involve the following:

- Demolition an existing building;
- Construction of one new building;
- Expansion of existing earthen storage;
- Estimated daily water use of 45,531 imperial gallons from an existing well;
- Composting mortalities;
- Truck haul routes as shown in map below

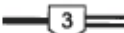
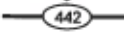



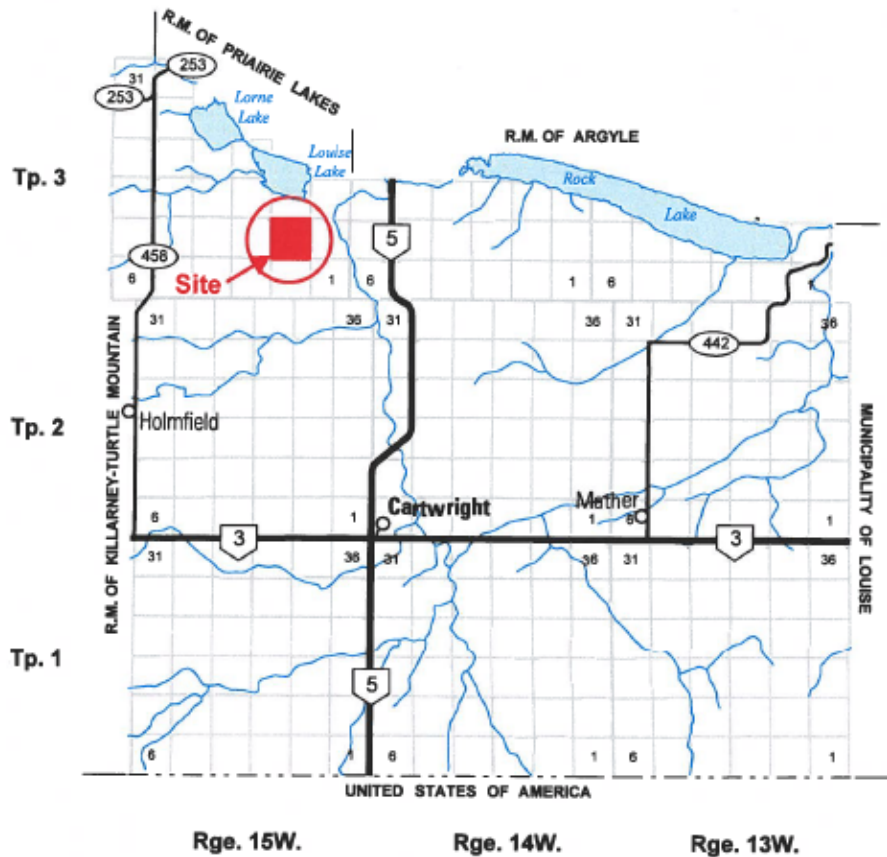
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SCALE IN KILOMETRES

# CARTWRIGHT-ROBLIN MUNICIPALITY

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

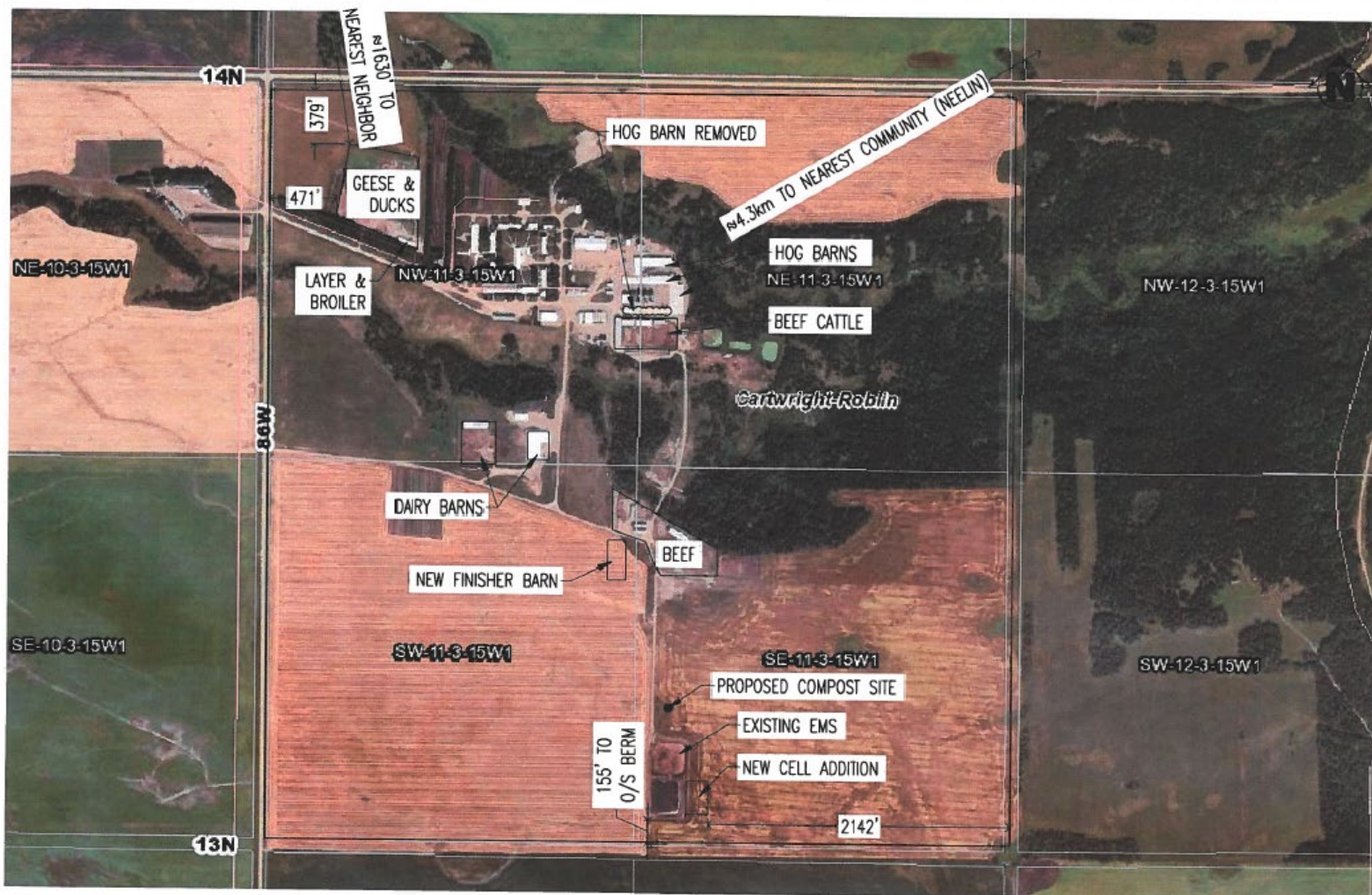
### LEGEND

- PROVINCIAL TRUNK HIGHWAYS ..... 
- PROVINCIAL ROADS ..... 
- ACCESS ROADS ..... 



**Holmfeld Colony**  
**11-3-15W**  
**RM of Cartwright-Roblin**

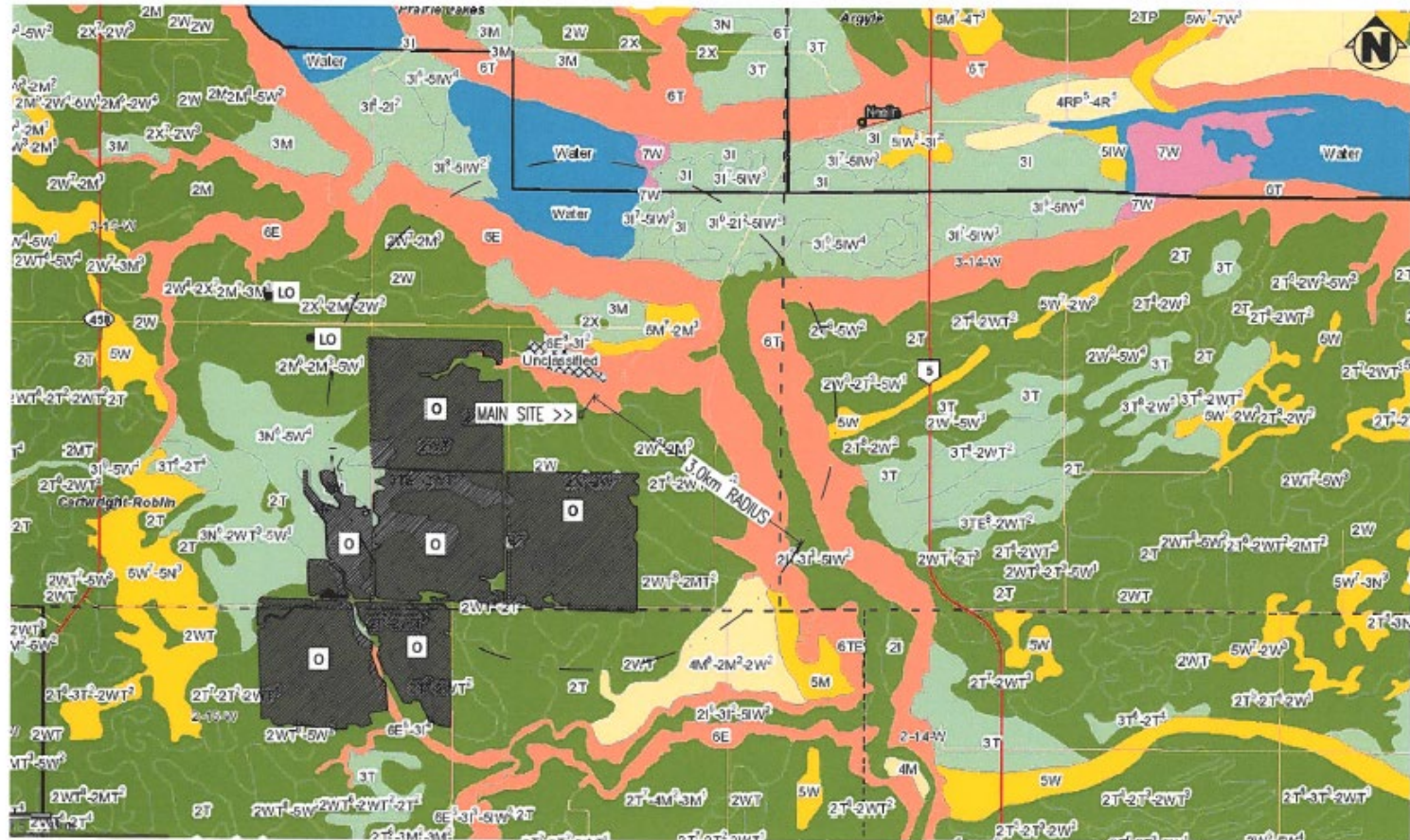
SHEET 1 of 1



PROJECT NAME <b>HOLMFIELD COLONY TECH REVIEW</b>		BUILDING AREA <b>N/A</b>	
SHEET TITLE <b>SITE PLAN</b>		DRAWN BY <b>A. KLOWAK SOUTH-MAN ENGINEERING</b>	
DATE DRAWN <b>MAY 2021</b>		DRAWING SCALE <b>SCALED TO FIT</b>	SHEET NUMBER <b>SP-1</b>
THIS DRAWING IS THE PROPERTY OF SOUTH-MAN ENGINEERING, WINNIPEG, MANITOBA, CANADA.			

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**LEGEND:**

- LO - LIVESTOCK OPERATIONS
- O - SPREAD FIELDS (OWNED)
- - 3km NOTIFICATION AREA FOR THE PUBLIC CONDITIONAL USE HEARING

- SOIL CLASS 2
- SOIL CLASS 3
- SOIL CLASS 4
- SOIL CLASS 5
- SOIL CLASS 6

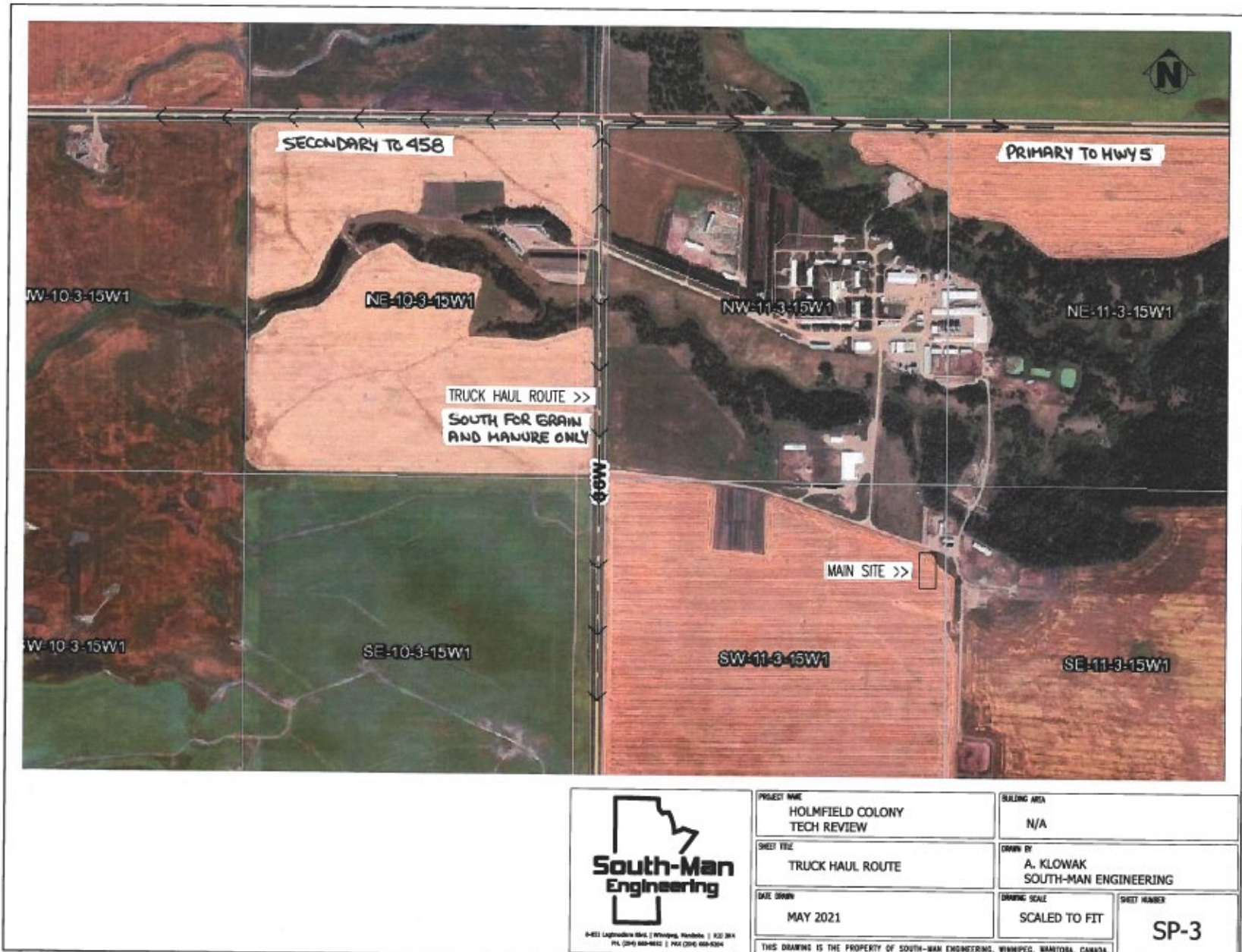


4811 Leighton Blvd., Winnipeg, Manitoba | R2J 3K4  
 TEL (204) 666-6622 | FAX (204) 666-6624

<b>PROJECT NAME</b> HOLMFIELD COLONY TECH REVIEW	<b>BUILDING AREA</b> N/A	
<b>SHEET TITLE</b> SPREAD FIELD MAP	<b>DRAWN BY</b> A. KLOWAK SOUTH-MAN ENGINEERING	
<b>DATE DRAWN</b> MAY 2021	<b>GRAPHIC SCALE</b> SCALED TO FIT	<b>SHEET NUMBER</b> SP-2B
<small>THIS DRAWING IS THE PROPERTY OF SOUTH-MAN ENGINEERING, WINNIPEG, MANITOBA, CANADA.</small>		

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## C. SITE ASSESSMENT OVERVIEW

Provincial Technical Overview of TRC 12-094 – Holmfield Colony				
Item No.	Provincial Requirements	Confirmed	Related Provincial Safeguards	Dept.
1	Submitted complete site assessment	X	Technical Review Committee Regulation 119/2011 requires an applicant to submit a completed site assessment.	MR
2	Clearly identified the current and proposed type and number of animals and animal units	X	Holmfield Colony is currently seeking Conditional Use approval to expand their pig operation from 520 sows (farrow to finish) to 1000 sows (farrow to finish) for a total of 1250 animal units as pigs. The remaining livestock on the operation will remain unchanged. The total size of the livestock operation when all livestock are considered will be 2160 AU.	AGR
3	Project clearly defined as:  <b>1250 AU animal confinement facility</b>	X	The proposed animal confinement facility is not regulated under the Livestock Manure and Mortalities Management Regulation.	ECP
		X	Holmfield Colony is seeking approval to expand their operation and build a barn which meets the definition of an animal confinement facility under <i>The Planning Act</i> . The application also proposes to expand the earthen manure storage facility.  The new proposed barns is in excess of 6,458 square feet (600 square metres). Therefore, a building permit will be required from the Inspection and Technical Services Branch (Municipal Relations) under <i>The Building and Mobile Home Act and the Manitoba Building Code</i> . <a href="https://firecomm.gov.mb.ca/itsm_main.html">https://firecomm.gov.mb.ca/itsm_main.html</a>	MR
4	Identified all existing and proposed buildings and structures and related separation distances	X	The project site plan forming part of the site assessment indicates the closest neighbor to the north is 1,630 feet away from the closest facilities (Geese and Duck facilities) of the existing livestock operation. Zoning bylaw amendment 338-2010 requires a minimum mutual separation distance of 1,148 feet from the nearest single residence. This separation distance is met, and therefore a variance is not required.	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

## Provincial Technical Overview of TRC 12-094 – Holmfield Colony

Item No.	Provincial Requirements	Confirmed	Related Provincial Safeguards	Dept.
<b>6</b>	Identified suitable water source: <b>Existing Well</b>  and a water consumption rate of <b>45,531</b> imperial gallons per day	<b>X</b>	The applicant currently holds a valid Water Rights Licence with the Water Use Licensing Section; however, they will need to submit an application to amend the existing licence in order to include the additional animals. An application can be submitted via our online portal – <a href="http://www.manitoba.ca/waterlicensingportal">www.manitoba.ca/waterlicensingportal</a>	<b>ECP</b>

## Provincial Technical Overview of TRC 12-094 – Holmfield Colony

Item No.	Provincial Requirements	Confirmed	Related Provincial Safeguards	Dept.
7	Proposed project site meets development plan, zoning by-law	X	<p><i>The Planning Act</i> requires that development plans must include a livestock operation policy that guides zoning by-laws dealing with livestock operations.</p> <p><i>The Planning Act</i> requires municipalities to issue development permits for any development on a site. All development must comply with the Zoning By-law and Development Plan. Any proposed development that does not meet the separation distances or setbacks requires Council approval and a public process to vary those requirements.</p> <p><b>Designation</b> The expanding livestock operation is located in the S ½ 11-03-15WPM in the RM of Cartwright-Roblin, is designated General Agricultural Area (Pelican – Rock Lake Development Plan By-law No. 28, adopted on January 14, 2022) and the proposal complies with Development Policies 12.2.4.11 (Livestock Operations).</p> <p><b>Zoning</b> The RM of Roblin Zoning By-law No. 301-04 in effect is dated but is being updated to comply with the policies of the new Pelican – Rock Lake Development Plan now in effect. The proposed site is zoned “AG” Agricultural General Zone (RM of Roblin Zoning By-law No. 301-04) and satisfies the minimum site area requirement of 80 acres and minimum site width requirement of 800 feet.</p> <p>Zoning bylaw amendment 338-2010 requires a minimum mutual separation distance of 1,148 feet from the nearest single residence. This separation distance is met, and therefore a variance is not required.</p> <p>Zoning bylaw amendment 338-2010 requires a minimum mutual separation distance of 6,135 feet from designated areas. This separation distance is met, and therefore a variance is not required.</p> <p>The <b>RM of Roblin Zoning Bylaw No. 301-04</b> requires a minimum 100M (328 feet) setback between earthen manure storage facilities and all property lines. If this setback is not satisfied, a variance order will be required.</p>	MR

## Provincial Technical Overview of TRC 12-094 – Holmfield Colony

Item No.	Provincial Requirements	Confirmed	Related Provincial Safeguards	Dept.
8	Identified any unsealed abandoned wells on the project site or spread fields	X	<p>The proposal identifies that the water use for the proposed livestock operation is from the existing well at SE 13-3-15W. The provincial water well database does not contain information for a well associated with the proposed livestock operation. Groundwater Management Section (GMS) encourage the proponent to submit a well record for the existing well at: <a href="mailto:groundwater@gov.mb.ca">groundwater@gov.mb.ca</a> to update the provincial water well database. The proposal indicates no abandoned wells present on the site or spread fields, however the provincial water well database indicates that there are wells present within the proposed spread field locations at SE8-3-14W, SW16-3-15W, NW34-2-14W, 32-2-14W, 7-3-14W, 2-3-15W, 10-3-15W and SE32-2-15W. The accuracy of the well location and its status in the database is not known or reported wrong. Most of these wells are plotting within a section. Therefore GMS expect the proponent to make an attempt to identify these wells and If any of these wells are in use then a minimum buffer as outlined in regulations must be maintained during spreading. The wells 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.</p> <p>Information on well sealing and well sealing reports are available from MB Environment, Climate and Parks (204-945-6959) or: <a href="https://www.gov.mb.ca/water/groundwater/wells_groundwater/index.html">https://www.gov.mb.ca/water/groundwater/wells_groundwater/index.html</a>. 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. If the proponent confirm that a reasonable effort has been made and no well(s) was located on land that has been identified for spreading then no further actions are required.</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



## Provincial Technical Overview of TRC 12-094 – Holmfield Colony

Item No.	Provincial Requirements	Confirmed	Related Provincial Safeguards	Dept.
9	Identified suitable manure storage methods	X	<p>The applicant will modify or expand an existing manure storage. Under the Livestock Manure and Mortalities Management Regulation, the applicant must obtain a permit from Environment, Climate and Parks to modify or expand the storage. Once in operation the applicant must:</p> <ul style="list-style-type: none"> <li>• Ensure there is sufficient capacity to store all manure through the winter.</li> <li>• Maintain the structural integrity of the storage.</li> <li>• Operate the storage so that it does not pollute surface water, ground water or soil.</li> </ul> <p>The applicant will also store solid manure as field storage. Under the Livestock Manure and Mortalities Management Regulation, the applicant must:</p> <ul style="list-style-type: none"> <li>• Locate the manure at least 100 m from any surface watercourse, sinkhole, spring, or well.</li> <li>• Ensure the manure does not pollute surface water, groundwater, or soil.</li> <li>• Land-apply the stored manure the following year.</li> </ul>	ECP
10	Identified acceptable manure application methods	X	<p>Under the Livestock Manure and Mortalities Management Regulation, the applicant must:</p> <ul style="list-style-type: none"> <li>• Operate with an annual manure management plan which includes: <ul style="list-style-type: none"> <li>○ Manure type, volume, and nutrient values</li> <li>○ Spread field location and soil class</li> <li>○ Soil tests showing nitrogen and phosphorus levels</li> <li>○ Crops to be grown</li> <li>○ Manure application rate</li> </ul> </li> <li>• Ensure manure does not pollute groundwater, soil or escape the operation's boundaries.</li> <li>• Follow requirements for the land application of manure, including nitrogen limits and phosphorus thresholds.</li> </ul>	ECP
11	Mortalities disposal methods identified <b>Composting</b>	X	<p>The applicant will compost mortalities. Under the Livestock Manure and Mortalities Management Regulation, the applicant must:</p> <ul style="list-style-type: none"> <li>• Ensure the composting does not pollute surface water, groundwater, or soil.</li> <li>• Locate the composting site at least 100 m from any surface watercourse, well, or the operation's boundaries.</li> <li>• Ensure the composting facilities and process are acceptable to the Director.</li> </ul>	ECP

## Provincial Technical Overview of TRC 12-094 – Holmfield Colony

Item No.	Provincial Requirements	Confirmed	Related Provincial Safeguards	Dept.
12	Proposed suitable setback distances from water and property lines for manure, livestock and mortalities	X	The applicant has noted that the mortalities disposal or composting site will not meet the required setback distances from any surface watercourse and the operation's boundaries. The applicant will move the site to a new location.	ECP
13	Indicated if proposed project site is within designated flood area or is otherwise at risk of flooding	X	We do not have any information to assess the flood risk in this area. The property is not within a designated flood area.	MTI
14	Proposed acceptable odour control measures	X	The proponent has indicated that no additional odour control technologies will be implemented. 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.	AGR
		X	No odour control measures are proposed for either the animal confinement facility or new earthen 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 Holmfield Colony is 2759 acres. Holmfield Colony has met the land requirement by demonstrating that they have access to 2837 suitable acres with soil tests. They own an additional 4664 acres that is available for manure application bringing the total land base to 7501. This is sufficient land for the long-term environmental sustainability of the operation. Additional details can be found in the appendix.	AGR
		X	Under the Livestock Manure and Mortalities Management Regulation, manure spreading must meet setback distances to all surface watercourse and groundwater features.	ECP
16	Indicated if spread fields are located in the Red River Valley Special Management Area or any other regularly inundated area	X	The applicant has indicated that no spread fields are located within the Red River Valley Special Management Area or any other regularly inundated area.	ECP

## Provincial Technical Overview of TRC 12-094 – Holmfield Colony

Item No.	Provincial Requirements	Confirmed	Related Provincial Safeguards	Dept.
17	Proposed spread fields that meet development plan and zoning by-law requirements	X	All lands identified for manure spreading are designated “General Agricultural Area” and zoned “AG” Agricultural General Zone. Said land use designation and municipal zoning district (above) allow spreading of manure associated with newly siting and/or expanding livestock operations.	MR
18	Proposed acceptable manure transportation methods	X	No comment from department	ECP
	<b>Dragline and Solid Spreader</b>	X	Please be advised that any structures placed within the controlled area of PR 458, PTH 3, and PTH 6 or any Provincial Road (PR) or Provincial Trunk Highway (PTH) within this area (125 feet from the edge of the right-of-way) requires a permit from our office. The contact is Erica Paulo at 431-338-9897 or <a href="mailto:Erica.Paulo@gov.mb.ca">Erica.Paulo@gov.mb.ca</a> . The placements of temporary drag lines or any other temporary machinery/equipment for manure application within the right-of-way of the above noted highways requires permission from our regional office in Steinbach. Please contact the Regional Planning Technologist, Brian Hickman at (204) 726-6822 or <a href="mailto:Brian.Hickman@gov.mb.ca">Brian.Hickman@gov.mb.ca</a> . In addition, please notify the Regional Planning Technologist for the placement of temporary draglines or other temporary equipment for manure application within the controlled area of the above noted highways (125 feet from the edge of the right-of-way).	MTI
19	Identified suitable trucking routes and access points	X	The subject farm has frontage along municipal roads. The proposed truck haul route will utilize an existing GRA connecting onto PTH 5. We have no concerns.	MTI
20	Identified proposed trucking routes – local roads	X	The proposed site is accessed via municipal road 86W with the primary haul route east along a municipal road to PTH No. 5 and a secondary haul route west along a municipal road to PR. No. 458.  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.	MR

## Provincial Technical Overview of TRC 12-094 – Holmfield Colony

Item No.	Provincial Requirements	Confirmed	Related Provincial Safeguards	Dept.
21	Known rare species will not be impacted on new sites/lands	X	The information provided in the assessment suggest that there will not be any conflicts with species protected under the <i>Endangered Species and Ecosystems Act</i> and/or <i>Species at Risk Act</i> , or designated as rare or uncommon by the Manitoba Conservation Data Centre (MBCDC). This review is based on existing data known to the MBCDC of the 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. 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.	NRND

**Provincial Departments:** Agriculture (AGR); Environment, Climate and Parks (ECP); Transportation and Infrastructure (MTI); Natural Resources and Northern Development (NRND); Municipal Relations (MR)



## D. PUBLIC COMMENTS AND DISPOSITIONS

<b>Public Comment Summary</b>	
Randy Dousselaere	Commenter owns property next to site. Concerns: <ul style="list-style-type: none"><li>• Odour</li><li>• Proximity to river bank</li><li>• Pollution of water table and well water</li><li>• Lowering property values of surrounding properties</li></ul>

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](https://www.gov.mb.ca/mr/livestock/public_registries.html)

See Appendix B 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 Brandon 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 Brandon 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 Environment, Climate and Parks, Environmental Approvals Branch or Regional Environmental Compliance and Enforcement staff with respect to the Livestock Manure and Mortalities Management Regulation (M.R. 42/98) including compliance and enforcement issues.

**Recommended Actions to Proponent**

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

## F. TECHNICAL REVIEW COMMITTEE MEMBERS

<b>Name</b>	<b>Department</b>	<b>Title Branch</b>	<b>Contact</b>
Erin McCleery	Municipal Relations	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
Colin Murray	Natural Resources and Northern Development	Information Manager- Manitoba Conservation Data Centre <i>Fish and Wildlife Branch, Natural Resources and Northern Development</i>	204-945-7760
Bryce Wood	Environment, Climate and Parks	Environmental Officer <i>Environmental Approvals Branch</i>	204-781-7226
Jeff DiNella	Transportation and Infrastructure	Senior Development Review Technologist <i>Highway Planning and Design Branch</i>	204-945-2664



## Appendix A

### Land Use and Ecosystem Resilience Branch – Manitoba Agriculture

In areas of lower livestock intensity such as the RM of Cartwright-Roblin, 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 livestock and poultry production were used to estimate nutrient excretion for Holmfield Colony. Realistic, long-term 10-year crop yields from the Manitoba Agricultural Services Corporation (MASC) for the RM of Cartwright-Roblin 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. Semi-detailed soil survey is available to determine the agriculture capability of the land. The agriculture capability of the land included in the proposal is primarily Class 2 and 3. The primary limitations in the area are wetness (W), topography (T), lack of moisture (M) with some areas of salinity (N) and erosion (E).

The required land base for Holmfield Colony is 2759 acres. Holmfield Colony has met the land requirement by demonstrating that they have access to 2837 suitable acres with soil tests. They own an additional 4664 acres that is available for manure application bringing the total land base to 7501 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 (liquid manure) or broadcast and incorporated (solid manure). Injection and broadcast with incorporation will reduce the risk to surface water when compared to broadcast only 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. Injection and incorporation are both practices which reduce N loss when compared to broadcast only 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.

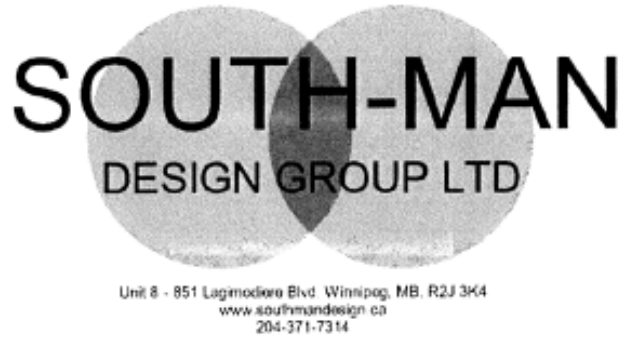
Manitoba has included phosphorus as a nutrient by which fertilizer application through manure, synthetic fertilizer, and municipal waste sludge to agricultural lands may be limited. Many agricultural soils in Manitoba, especially areas with low livestock intensity, are considered phosphorus deficient 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 Cartwright-Roblin, 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 5385 acres may be required for the operation. The proponent has identified 2837 acres for manure application at this time. Application to meet crop N requirements is estimated to use 2759 acres. Application at 2 times the crop removal of P is estimated to use 2693 acres (5385 acres is estimated to achieve P balance [phosphorus removal equal to phosphorus application] with current crop choices and yield potential). They own an additional 4664 acres that may be used for manure application as needed bringing the total land base to 7501 acres.

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

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

## Appendix B



**December 23, 2022**

**Re: Holmfield Colony – Technical Review  
Public Comment Response**

In support of the Technical Review, the following response has been prepared to the comments and concerns expressed by a nearby resident of the proposed operation.

**Randy Dousselaere -**

There are no hog barns in close proximity to the river/creek bank as suggested. In addition, all manure generated by the hog barns are in liquid form and are conveyed to the earthen manure storage situated to the south of the main development site. All hogs are contained within barn facilities so the possibility for hog manure impacting the river/creek as suggested, is very unlikely.

One of the intentions of the proposal is to construct new barns to replace the existing infrastructure. The proposed location is further separated from residents to the north and consequently should reduce odours produced from the production facilities by virtue of separation distance. Over time all of the existing hog barns within the current yard site will be relocated to the south near the site of the proposed barn. In your situation, being located directly to the east of the proposed barn site, it is expected that once all of the barns have been resituated that less odour will be experienced during the colder months when the predominant wind direction is from the north and northwest. Winds from the west to south-southwest would be anticipated to impact your site, however the odour levels experienced are not expected to change dramatically due to the proposed changes as the majority of the odour which is experienced currently, is likely the result of the existing earthen manure storage. All reasonable efforts will be made to minimize and mitigate odour production not only as a courtesy to neighbours but also because the colony residences are situated in direct line of prevailing southeast to southwest winds and in closer proximity to the production units and odour sources than any neighbours. Following the completion of stages of construction, shelter belt planting will occur in order to reduce the potential for odour impacts.

The intention of the colony is to make significant efforts to avoid conflicts and impacts on their neighbours. Ultimately, their goal is to have as little impact on the community and surrounding neighbours as practically

feasible, yet still have the ability to grow to support their families. In the absence of any significant manufacturing or commercial enterprise on site, agriculture and particularly livestock production is the most viable method to achieve this growth as the potential to increase land base for crop production is limited within the region.

Respectfully Submitted,

South-Man Design Group Ltd.

Per,



Peter Grieger, P. Eng