



TECHNICAL REVIEW COMMITTEE

A TECHNICAL REVIEW REPORT

PREPARED FOR

**THE RURAL MUNICIPALITY
OF HANOVER**

DOERKSEN POULTRY

NW 1/4 20-7-6 EPM

TRC 12-069

April 23, 2020

A. INTRODUCTION – THE TEAM

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

Agriculture and Resource Development (ARD)

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

Conservation and Climate (CC)

- Environmental Engineer
- Environment Officer
- Water Rights Licensing Technologist

Infrastructure (MI)

- GIS Analyst, Water Management and Structures Division
- Senior Development Review Technologist

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

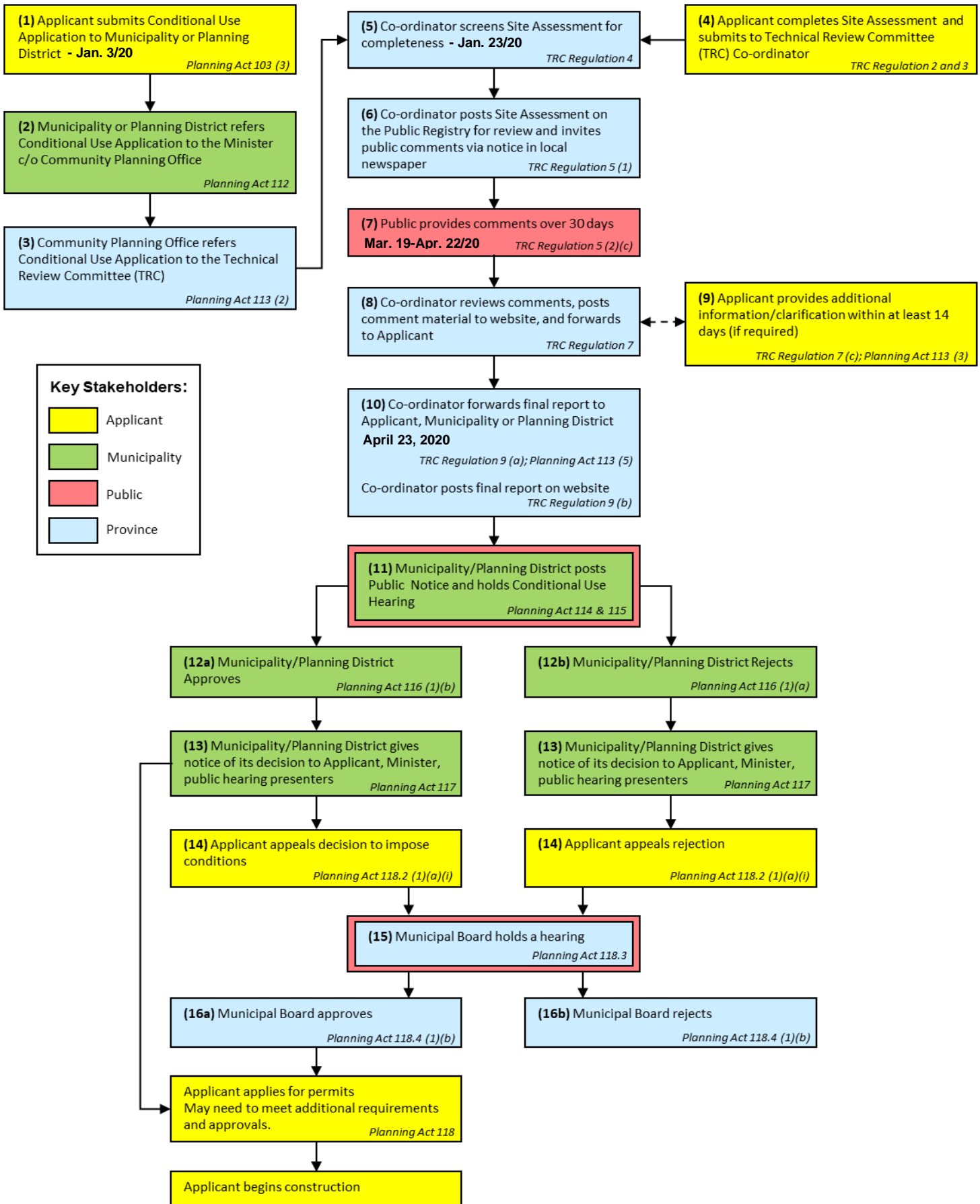
Purpose of TRC Reports

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

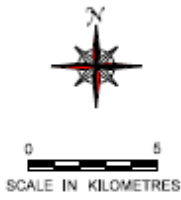
Applicant: Doerksen Poultry

Site Location: NW ¼ 20-7-6 EPM. Refer to map below.

Proposal: To establish a poultry operation of 80,000 layers (664 Animal Units) at NW ¼ 20-07-06 EPM.

This will involve the following:

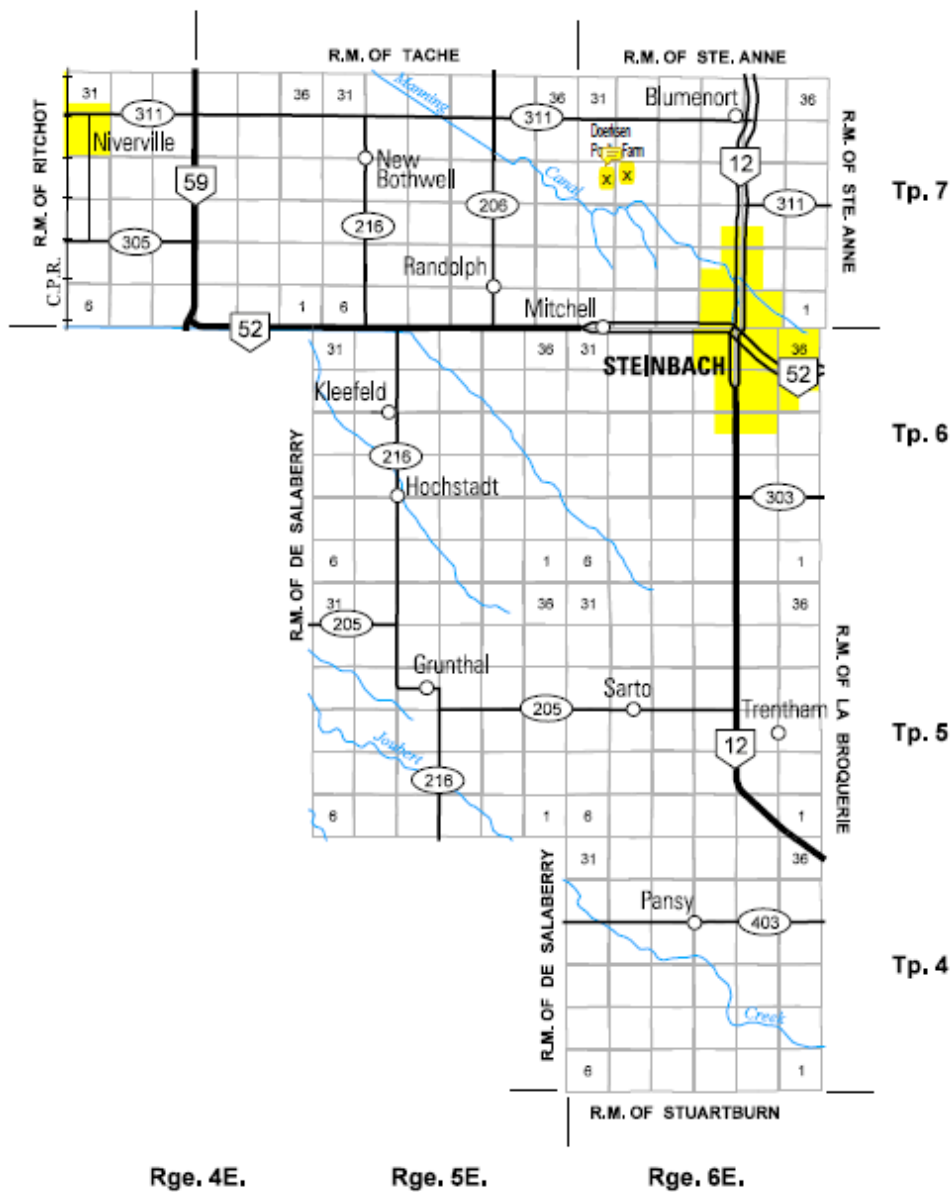
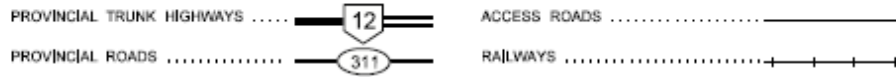
- No existing buildings will be replaced however the layer barn destroyed by fire will be rebuilt and expanded and the pullet barn renovated for egg storage.
- Permanent solid manure storage facility
- Consuming a maximum of 4,840 imperial gallons of water per day from an existing well.
- Composting mortalities off site
- Truck haul routes as shown in map below



R.M. OF HANOVER

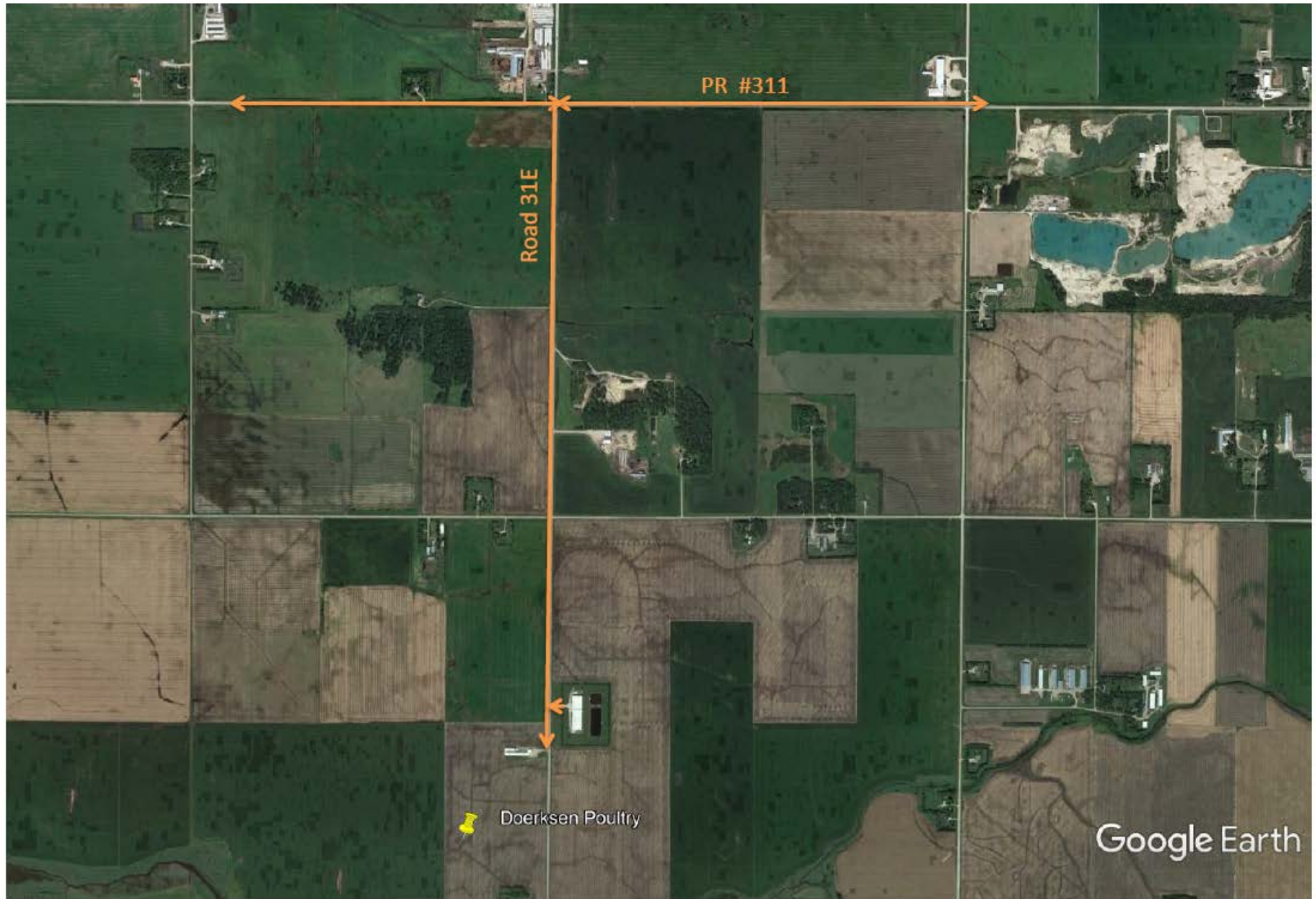
PROVINCE OF MANITOBA
INFRASTRUCTURE
HIGHWAY PLANNING AND DESIGN BRANCH
GEOGRAPHIC & RECORDS MANAGEMENT SECTION
WINNIPEG
JANUARY 2015

LEGEND





Doerksen Poultry Farm Ltd Site Layout



Truck Route Map

C. SITE ASSESSMENT OVERVIEW

Item No.	Provincial Requirements	Confirmed	Related Provincial Safeguards	Dept.
1	Submitted complete site assessment	X	The proposal is consistent with the Provincial requirements for a livestock operation.	MR
2	Clearly identified the current and proposed type and number of animals and animal units	X	Doerksen Poultry Farm Ltd is seeking Conditional Use approval to operate an 80,000 layer operation, which is equivalent to 664 animal units (AU).	ARD ¹
3	Project clearly defined as an animal confinement facility	X	The proposed replacement layer barn is 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	Any proposed development that does not meet the required setbacks or livestock separation distances as established in the RM of Hanover zoning by-law, requires Council's approval and a public hearing to vary those requirements. Given the proposed size of the operation and it's proximity to the closest rural residential dwellings (SE 19-7-6E, NE 19-7-6E and SE 20-7-6E) and the closest designated area, LUD of Blumenort, it appears that the operation meets the separation distance requirements of the zoning by-law. Variance orders will no be 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.	ARD ²
6	Identified suitable water source: (existing well) and a water consumption rate of 4,840 imperial gallons per day	X	All operations using more than 25,000 litres (5,499 imp gal) per day must maintain a Water Rights Licence under The Water Rights Act, Water Rights Regulation (M.R. 126/87). Based on our understanding of the proposed project, the estimated annual usage falls below the licensing threshold, and therefore a Water Rights Licence is not required for this site.	CC

¹ Agri-Resource Branch

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

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>Designation The proposed livestock operation, located in SE ¼ 19-7-6E in the RM of Hanover, is designated “Agriculture 1 Policy Area” pursuant to the RM of Hanover Development Plan By-law No. 2417-18. The proposal complies with livestock operation policies 3.1.5.5; 3.1.5.6; 3.1.5.7; 3.1.5.8 and 3.1.5.9 of the development plan. Expansion of existing operations, containing more than 400 AU within the “Agriculture 1 Policy Area” is a Conditional Use as per policy 3.1.5.9.</p> <p>Zoning The proposed site is zoned “AG” Agriculture General pursuant to the RM of Hanover Zoning By-law No. 2418-18. “AG” zone has a minimum site area requirement of 80 acres with a minimum site width requirement of 600 feet. The proposed project complies with the zoning site requirements of the zoning by-law.</p>	MR
8	Identified any unsealed abandoned wells on the project site or spread fields	X	<p>The site assessment indicates that there are no unused wells on the spread fields. If unused water wells on the site or spread fields are later located these shall be properly sealed and a sealed well report must be filed with the Groundwater Management Section of Agriculture and Resource Development for each well sealed. Information on well sealing and well sealing reports are available from Agriculture and Resource Development (204-945-6959) or: https://www.gov.mb.ca/sd/water/groundwater/wells_groundwater/index.html. All but the most basic wells should be sealed by a well drilling professional. A list of currently licensed well drilling professionals can also be accessed from the above web page.</p>	ARD ³
9	Identified suitable manure storage methods	X	<p>A permit to construct the proposed manure storage facility must be obtained, prior to initiating any of the construction work, in accordance with the Livestock Manure and Mortalities Management Regulation. An application for a permit to construct the manure storage must be submitted to Environmental Approval Branch of Conservation and Climate (EABDirector@gov.mb.ca). Design guidelines and application forms are available at: https://www.gov.mb.ca/sd/waste_management/livestock_program/index.html.</p>	CC
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>	CC

³ Water Science and Watershed Management Branch

Item No.	Provincial Requirements	Confirmed	Related Provincial Safeguards	Dept.
11	Mortalities disposal methods identified as composting	X	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).	CC
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 MR 42/98.	CC
13	Indicated if proposed project site is within designated flood area or is otherwise at risk of flooding	X	This location is not within a Designated Flood Area. There is no known risk of overland flooding.	MI
14	Proposed acceptable odour control measures	X	The proponent has indicated that existing shelterbelts will be used. 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.	ARD ⁴
		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.	MR
15	Proposed sufficient and suitable land for manure spreading with minimum setbacks from water sources	X	Manitoba Agriculture and Resource development assessed the land available for manure application taking into consideration the approval for an additional 25,500 layers across the road and the possibility of a shared land base. The required land base for both Doerksen Poultry Farm Ltd operations is 1615 acres. Doerksen Poultry Farm Ltd has demonstrated that they have access to sufficient suitable acres for both operations. Details of the land assessment are provided in Appendix A.	ARD ⁵
		X	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.	CC

⁴ Agri-Resource Branch

⁵ Agri-Resource Branch

Item No.	Provincial Requirements	Confirmed	Related 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	Per Section 14.2(1) of the Livestock Manure and Mortalities Management Regulation, the proposed spread fields are located within the Red River Valley Special Management Area and as such fall manure applications (September 10 – November 10) to tilled land must be injected or incorporated within 48 hours.	CC
17	Proposed spread fields that meet development plan and zoning by-law requirements	X	<p><u>Development Plan</u> The spread fields that are located in the RM of Hanover are designated “Agriculture 1 Policy Area” and “Agriculture 2 Policy Area”. The proposed spread fields are cultivated agricultural lands and meet the intent of the Development Plan By-law 2417-18.</p> <p>The spread fields that are located in the RM of Tache (SE 2-9-6E and NE 2-9-6E) are designated “Agriculture”. The lands are active farmlands and meet the intent of the Development Plan By-law 5-2016.</p> <p>One spread field is located in the City of Steinbach (SW 9-7-6E) and designated as “Development Reserve II Policy Area”. The subject land is open agricultural land and meets the intent of the Steinbach Official Community Plan (OCP) 2099 as agricultural activities are the dominant land use in the “DR II” area.</p> <p><u>Zoning By-law</u> The spread fields that are located in Hanover are zoned “Agriculture General” and “Agriculture Limited”. The RM of Hanover Zoning By-law does not provide specific setback distance requirements from a spread field to a residence and a designated area. The lands proposed for spread fields are in agricultural use and meet the minimum zoning site requirements for agricultural activities. The application of manure on farm land is considered agriculture operation and associated activities. Note that spread fields that are in close proximity to the urban communities should consider taking measures to reduce potential negative impacts i.e. odour from manure spreading.</p> <p>The two spread fields located in the RM of Tache, is zoned “AG” Agriculture General. The lands are in agricultural use and complies with minimum zoning site requirements for agricultural activities as per the RM of Tache Zoning By-law 10-2017.</p> <p>The spread field, located in the City of Steinbach (SW 9-7-6E) is zoned “DR II” Development Reserve II in the City of Steinbach Zoning By-law 2100. While the zoning by-law does not identify specific setback distance requirements from spread fields to a residence, the subject property meets the minimum zoning site requirements for agricultural activities.</p>	MR

Item No.	Provincial Requirements	Confirmed	Related Provincial Safeguards	Dept.
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 solid spreader as means of manure transportation. This is considered acceptable under the Livestock Manure and Mortalities Management Regulation.	CC
		X	<p>Please be advised that any structures placed within the controlled area of PR 311 (125 feet from the edge of the right-of-way) requires a permit from our office. The contact is Sheena del Rosario at (204) 945-3457 or Sheena.DelRosario@gov.mb.ca. The placements of temporary drag lines or any other temporary machinery/equipment for manure application within the right-of-way of PR 311 requires permission from our regional office in Steinbach. Please contact the Acting Regional Planning Technologist (Robert Fender) at (204) 371-6858 or Robert.fender@gov.mb.ca. In addition, please notify the Acting Regional Planning Technologist for the placement of temporary draglines or other temporary equipment for manure application within the controlled area of PR 311 (125 feet from the edge of the right-of-way).</p> <p>Manning Canal has been designated as a Provincial Waterway. Provincial Waterways are subject to section 14(4) of <i>The Water Resources Administration Act</i> which states:</p> <p><i>“No person shall place any material on, remove any material from, or construct, carry out, reconstruct, establish, or place, any works or structures on, over, or across, a provincial waterway, except as may be authorized in writing by the minister and subject to such terms and conditions as the minister may prescribe.”</i></p> <p>Provincial Waterway Authorization must be obtained by Water Management and Structures prior to the commencement of any construction or activity along a Provincial Waterway, including the use of draglines. Please contact MITWaterReview@gov.mb.ca to apply for Provincial Waterway Authorization.</p>	MI
19	Identified suitable trucking routes and access points	X	The subject property has frontage along a municipal road. The proposed truck haul route will utilize an existing municipal road connecting onto PR 311. We do not anticipate a significant increase in use.	MI
20	Identified proposed trucking routes – local roads	X	<p>The proposed livestock operation is approximately 1.5 mile west of PTH 12, two miles south-west of Blumenort and about half a mile north of City of Steinbach. The proposed site has an existing access onto Road 31E. Proposed trucking routes will have access to PR 311 and PTH 12.</p> <p>As per Section 116(2) of <i>The Planning Act</i>, municipalities as a condition of approval may require proponent to enter into a development agreement regarding the condition and upkeep of local roads used as truck haul routes.</p>	MR

Item No.	Provincial Requirements	Confirmed	Related Provincial Safeguards	Dept.
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 ⁶

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

⁶ Wildlife and Fisheries Branch

D. PUBLIC COMMENTS AND DISPOSITIONS

Public Comment Summary	
David Grienke Blumenort, MB. R0A 0C1	SUPPORT Commenter highlighted good practices observed by farm operators. These include keeping a tidy yard area, professional and friendly, and large and well managed land base and utilization of nutrients.
Greg Braun	SUPPORT Commenter has been neighbours with Doerksen Poultry all their lives. They do an excellent job with their farming operation and are generous and respectful neighbours. Commenter fully supports the proponent's plan to build and expand.

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

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.

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,
- (ii) a decision to impose any condition on the approval.

F. TECHNICAL REVIEW COMMITTEE MEMBERS

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

Appendices

Appendix A Land Assessment Agri-Resource Branch Manitoba Agriculture and Resource Development

Manitoba Agriculture and Resource development assessed the land available for manure application taking into consideration the approval for an additional 25,500 layers across the road and the possibility of a shared land base.

Doerksen Poultry Farm Ltd has met the land requirements for 105,500 layers (80,000 + 25,500) as follows:

Approximately 87 % of the land available for manure application is in the RM of Hanover. Because Hanover has a high density of livestock, on these lands it is currently the Province of Manitoba's policy to balance crop nitrogen uptake and crop phosphorus removal with the nitrogen and phosphorus generated by the layers. Approximately 13% of the land is in the RM of Tache. For these lands, the Province of Manitoba balanced the nitrogen and phosphorus generated by the layers with crop nitrogen removal and twice crop phosphorus removal. The policy in areas of lower livestock intensity assumes that more land is available in the region to balance phosphorus with crop removal, should it be necessary in the future.

Typical, modern feeding practices for layer production were used to estimate nutrient excretion for Doerksen Poultry Farm Ltd. Realistic, long-term 10-year crop yields from the Manitoba Agricultural Services Corporation (MASC) for Risk Area 12 were used to estimate crop nitrogen uptake and phosphorus removal rates for the crop rotation specified in the proposal.

Land suitability is determined using soil testing for phosphorus and soil survey to establish the agriculture capability. All of the lands with soil tests were below 60 ppm Olsen P, as required to be considered suitable. Detailed 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 are predominantly wetness (W) and salinity (N) with a small proportion of land with sloping topography (T) or dense (D) soils.

The required land base for both Doerksen Poultry Farm Ltd operations is 1615 acres. Doerksen Poultry Farm Ltd has demonstrated that they have access to sufficient suitable acres for both operations.

Water Science and Watershed Management Branch:

Proper nutrient management applications that avoid excess loss of nutrients to surface waters are needed on lands receiving manure in southern Manitoba because long-term trend analysis of total phosphorus and total nitrogen has shown significant increases in these nutrients in the Assiniboine and Red rivers (Jones and Armstrong 2002).

The proponent plans to broadcast and incorporate all manure within 48 hours. Incorporation of manure at appropriate rates poses lower environmental risk than broadcast only application and conserves nitrogen increasing the fertilizer value of the manure.

For most crops, manure contains an excess of phosphorus (P) compared to nitrogen (N) and as a result, application at N-based rates causes a buildup of soil P. Practices which reduce N losses from the manure improve the N:P ratio in the manure and help slow P buildup when manure is applied at N-based rates. The proponent plans to incorporate manure within 48 hours which will reduce environmental risk and conserve nitrogen compared to broadcast only applications. Minimizing the time between broadcast and incorporation will further reduce losses and increase the fertilizer value of the manure.

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

Manitoba has included phosphorus as a nutrient by which fertilizer application through manure, synthetic fertilizer, and municipal waste sludge to agricultural lands may be limited. To remain environmentally sustainable over a long-term planning horizon of 25 years or more, the proponent must be able to balance phosphorus inputs from applied manure and other nutrient sources such as commercial fertilizers with crop removal rates to avoid further build-up in soils. Consequently, sufficient land base must be available such that manure can be applied at no more than 1 times crop P removal rates (P balance). For long-term planning purposes, the proponent needs to have sufficient land available to ensure that manure can be applied at 1 times crop P removal. The proposed site shares a land base with an adjacent poultry barn and the proponent has calculated the land base for the combined manure production of the two operations. The proponent acknowledges that 2,167 acres may be required for the long-term environmental sustainability of the operations. The proponent has identified 1,915 acres for manure application. Application to meet crop N requirements is estimated to use 697 acres. Application of P is estimated to use 1,915 acres (2,167 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 soil test levels so as to prevent excessive P buildup when applying manure at rates above P balance (P removal by harvested crops).