

TECHNICAL REVIEW COMMITTEE

A TECHNICAL REVIEW REPORT
PREPARED FOR

THE RURAL MUNICIPALITY
OF

STE. ANNE

PENNWOOD DAIRY INC.

SE¹/₄ 18-7-7 EPM
TRC 12 – 049

December 13, 2018

A. INTRODUCTION – THE TEAM

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

- Agriculture (Ag); Livestock Environment, Nutrient Management and Business Development Specialists, Agricultural Engineer, and Veterinarians
- Municipal Relations (MR); Community Planners
- Infrastructure (MI); Development Review Technologists, Engineering and Operations Division; Development Review Officers, Water Management and Structures Division
- Sustainable Development (SD); Land-Water Specialist, Licensing and Livestock Officer, Environment Officer, Habitat Mitigation and Wildlife Land Specialist, Regional Wildlife Manager, Groundwater Specialist, Water Rights Licensing Technologist
and
- Any other specialist or department that may have an interest, which may be consulted during the process.

The Technical Review Coordinator, (Senior Planner, MR) chairs the committee.

THE REPORT (TRC Process Box 17)

Prime Purpose of TRC Reports

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

- a) Enable municipal councils 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 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, measures 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.

THE PROCESS

TRC Process Chart with actual pertinent dates and brief overview:

The Technical Review Process: TRC-12-049 –Pennwood Dairy Inc.



B. DESCRIPTION OF PROPOSED LIVESTOCK OPERATION

To view a detailed description, go to:

<http://www.gov.mb.ca/mr/livestock/index.html>

Applicant: Pennwood Dairy Inc.

Site Location: Pt. SE ¼ 18-7-7EPM, located approximately 2 miles (3.2 km) SW of the community of Giroux or approximately 3 miles (4.8 km) east of the community of Clear Springs. Refer to map below.

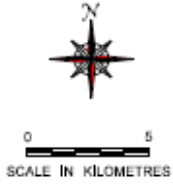
Proposal: To expand the current Pennwood Dairy Inc. operation from 800 animals (1600 Animal Units) to 1705 animals (3410 Animal Units).

This will involve the following:

- Constructing new interconnected dairy barn to accommodate proposed expansion
- Retaining all existing buildings/ barns
- Manure storing is by earthen manure storage facility and field storage:
 - To achieve required capacity for earthen manure storage, two options are being considered: deepening existing lagoon by increasing berm height or by adding a second cell
- Consuming 57,773 imperial gallons of water per day (from an existing well)
- Composting mortalities
- Using the truck haul routes as shown in Maps below

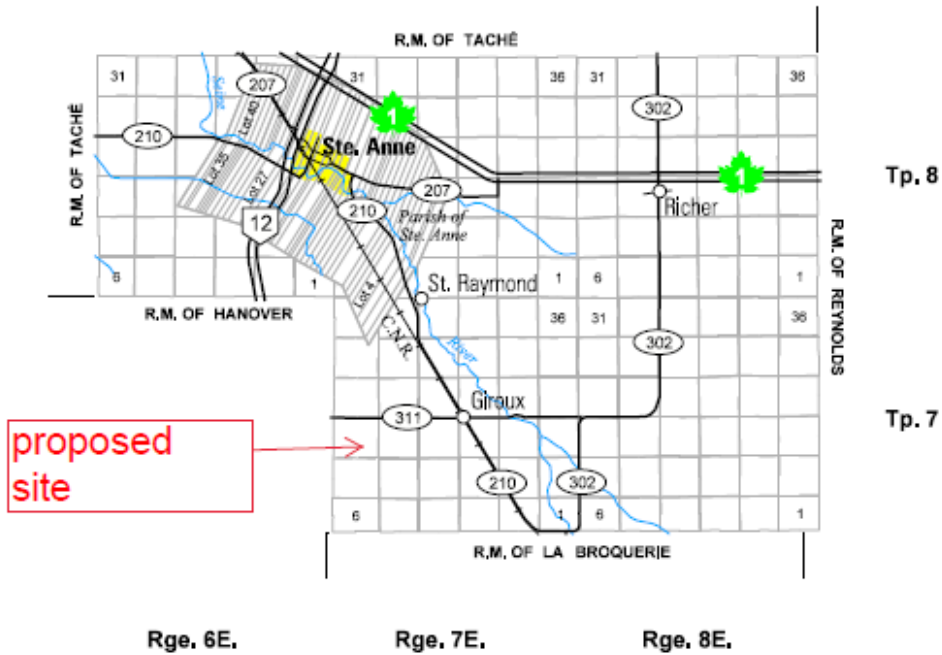
R.M. OF STE. ANNE

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



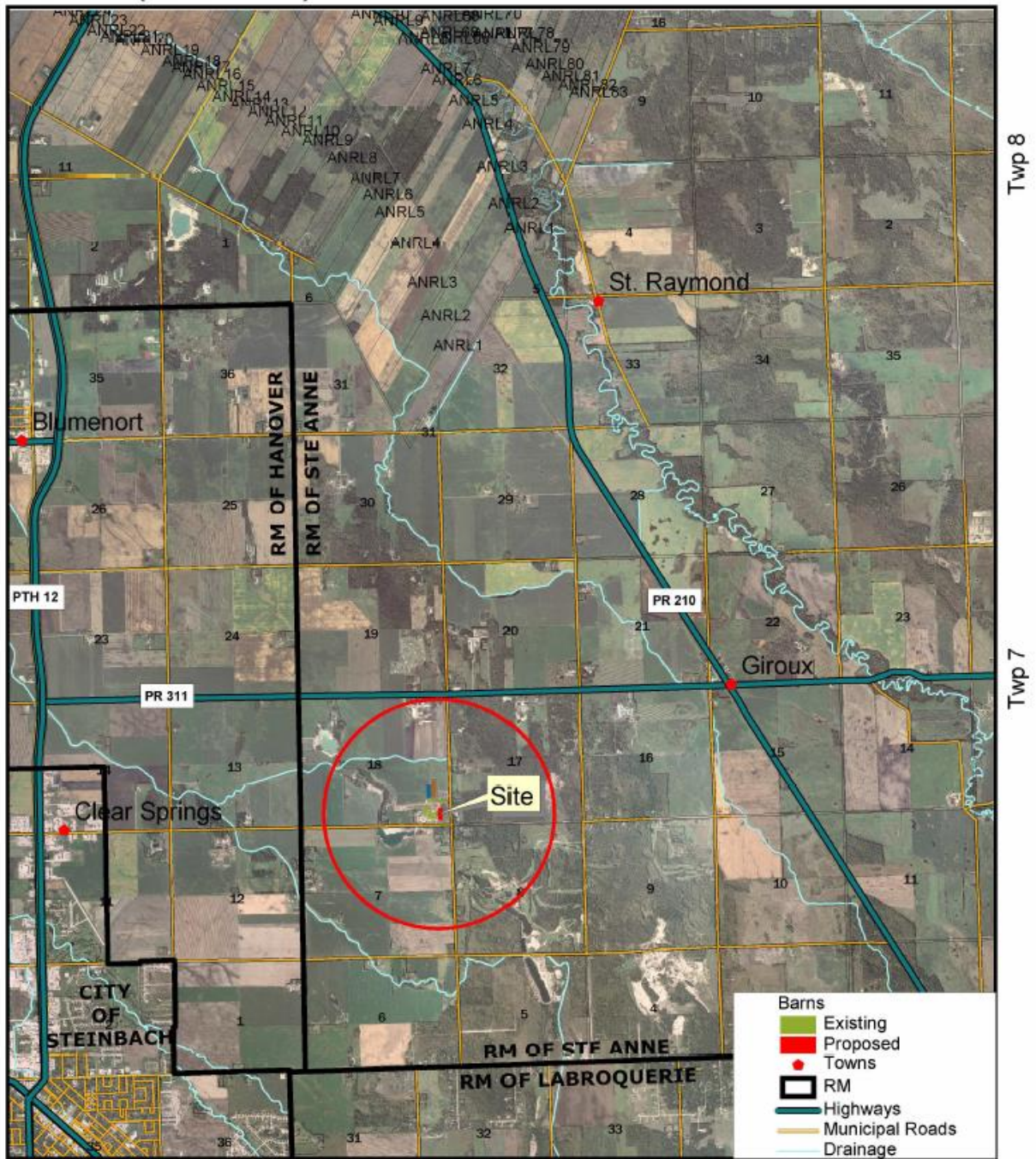
LEGEND

TRANS-CANADA HIGHWAY		ACCESS ROADS	
PROVINCIAL TRUNK HIGHWAYS		RAILWAYS	
PROVINCIAL ROADS			



SHEET 1 of 1

Penwood Dairy Location (SE 18-7-7E)



Rge. 6E

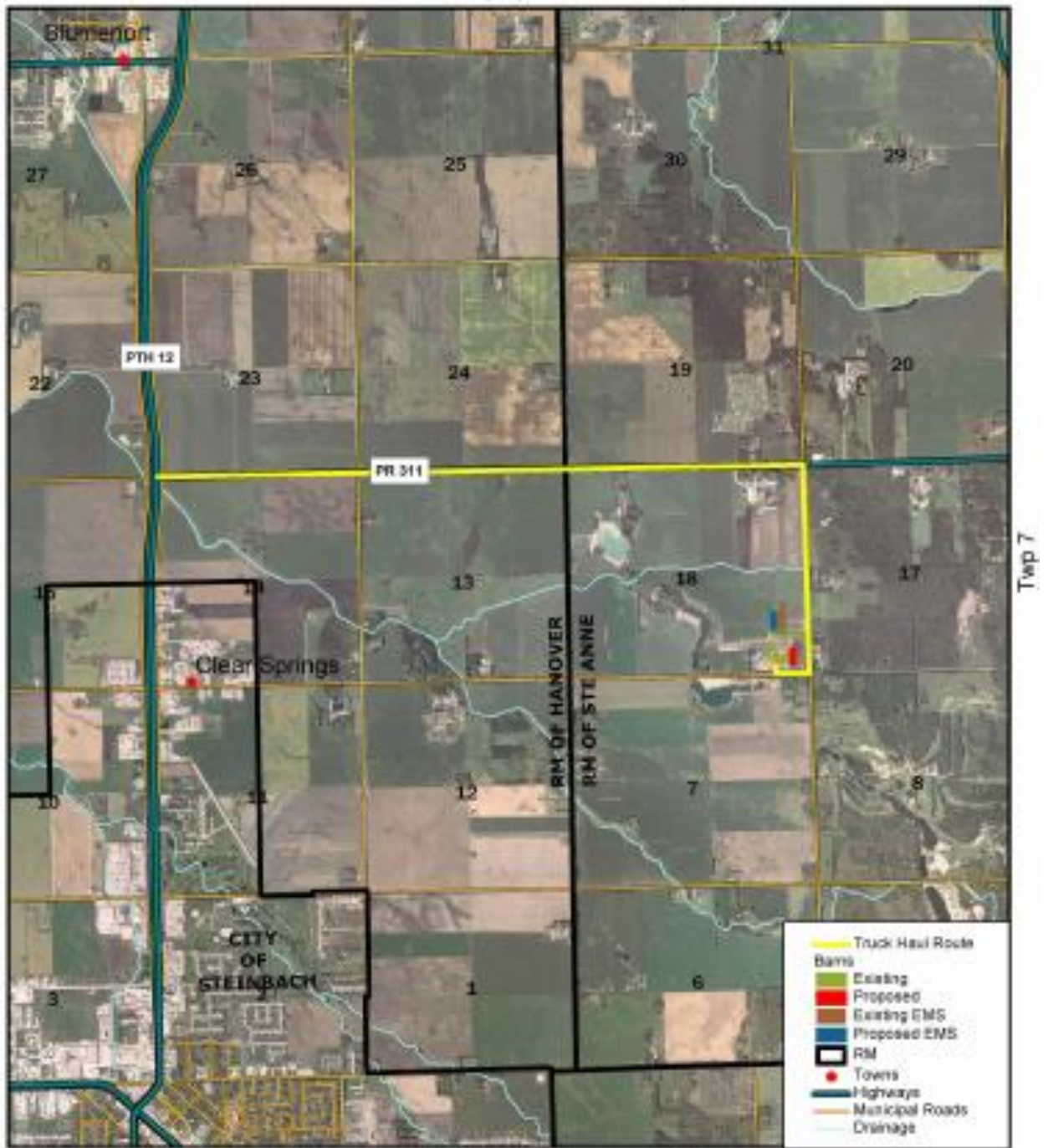
Rge. 7E



Data Sources:
Fields and dwellings drawn by Tone Ag in consultation with landowner, and subject to change.
Orthophotos are 1:50,000 from Manitoba Land Initiative website
Highways are from Manitoba Highways and Transportation 1:60,000 map 1994
Sections are from Manitoba Land Initiative website



Pennwood Dairy Truck Haul Route and Access Map (SE 18-7-7E)



Rge. 6E

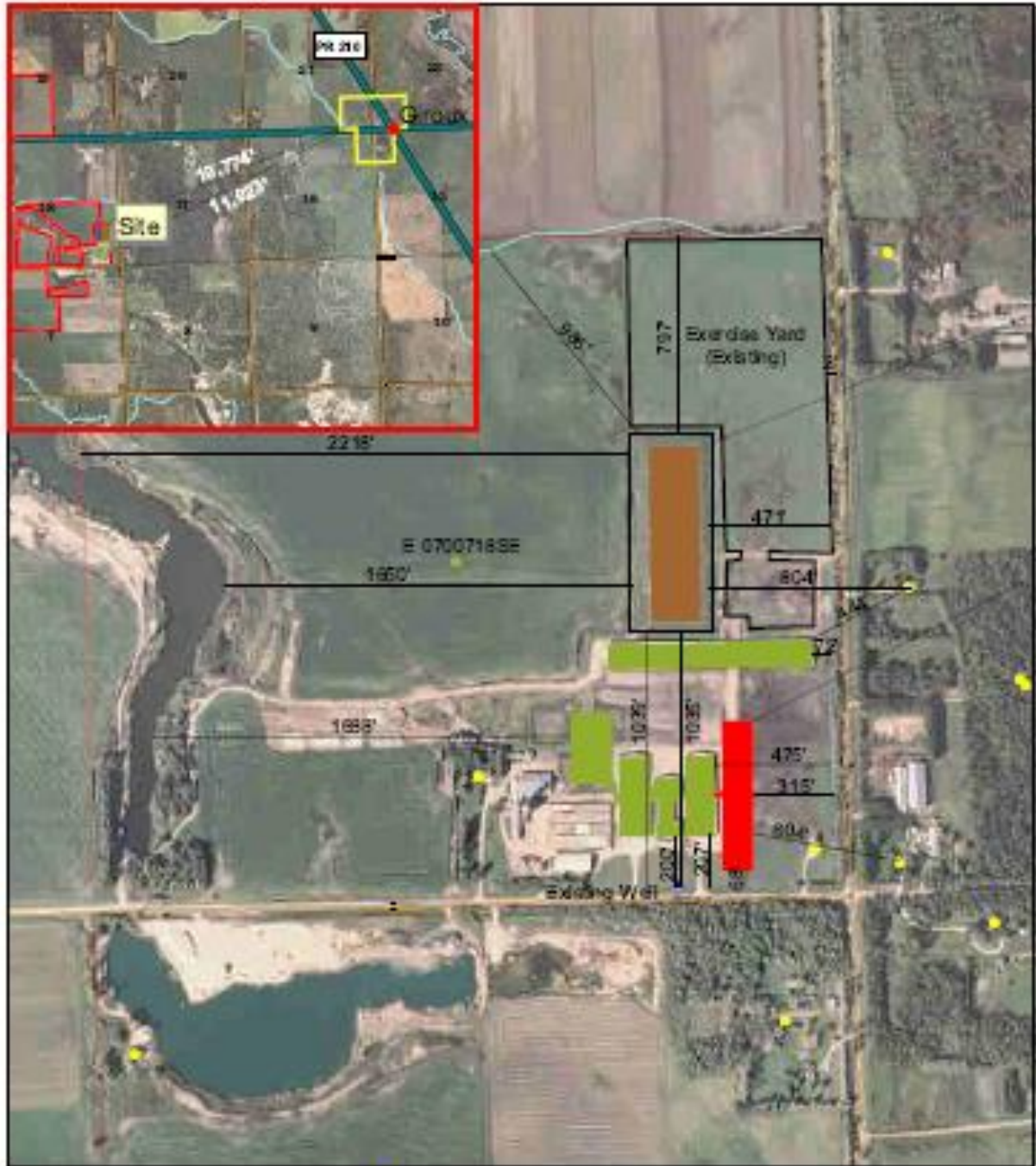
Rge. 7E



Data Source:
Fieldnotes by Tom Agnew combined with
aerobics, and subject to change.
Elevation is 100,000 from Modified Land Satellite photos.
Elevations are from Modified Elevation and
Topographic 1:40,000 map 2014
Notation: New Modified Land Satellite photos

2017-06-21
T-A-C
TAKING AG
CONNECTING

Penwood Dairy Project Site Plan (SE 18-7-7E) - Option I



● Dwelling Units
■ Existing Barns
■ Proposed Barns
■ Existing EMS
 Municipal Roads
 Drainage

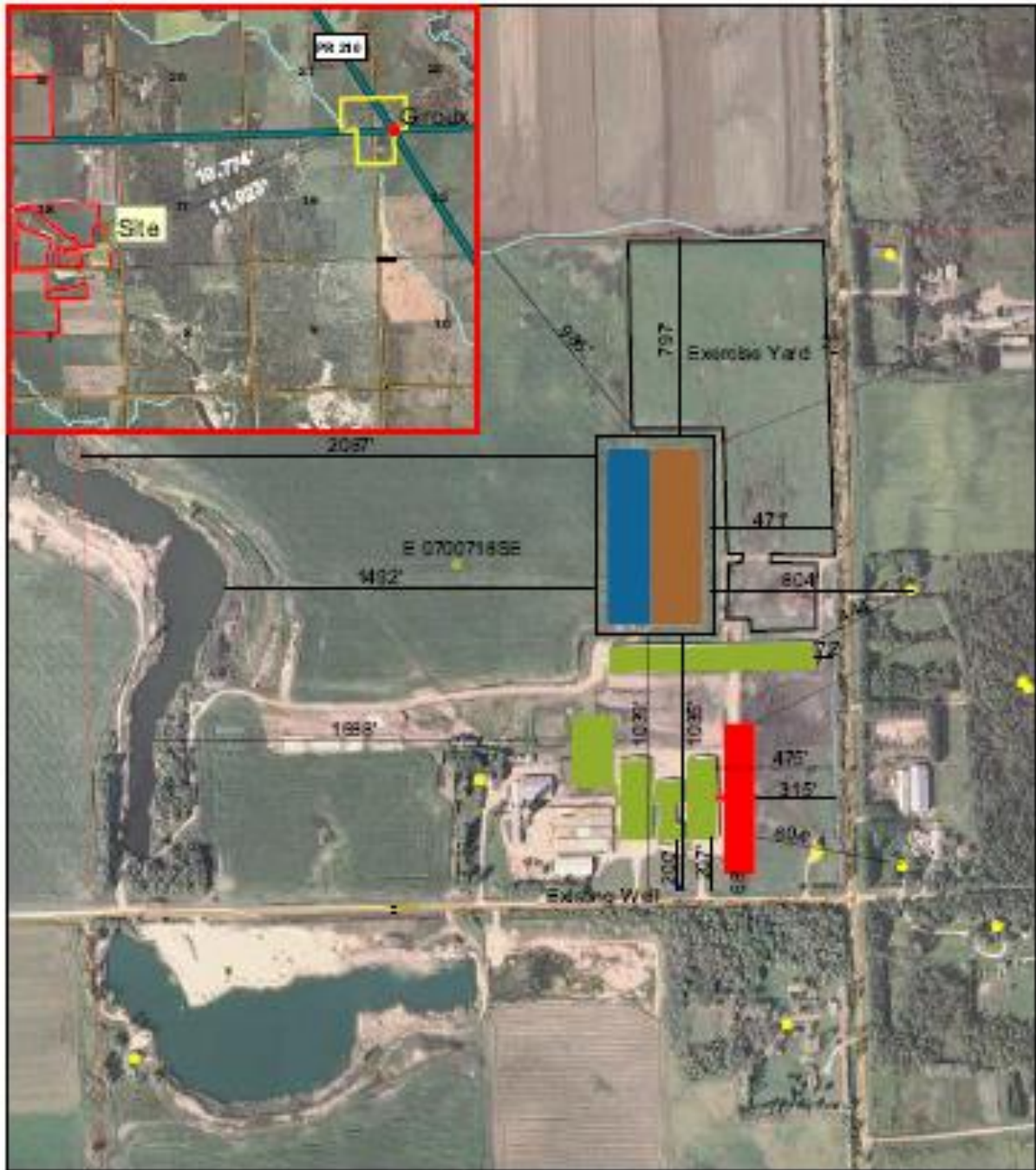
Scale: 0.1 0 0.1 Miles
 1:6500

Data Sources:
 2 Mile drive by Tom Ag in coordination with landowner, and subject to change.
 Orthophoto: 1:65,000 from State and Indiana aerial photography with street imagery and Topographic 1:65,000 map 1994.
 Easements are from Standard Land Institute records.


 2018-09-13


 T-A-C
 TRC
 CONSULTING

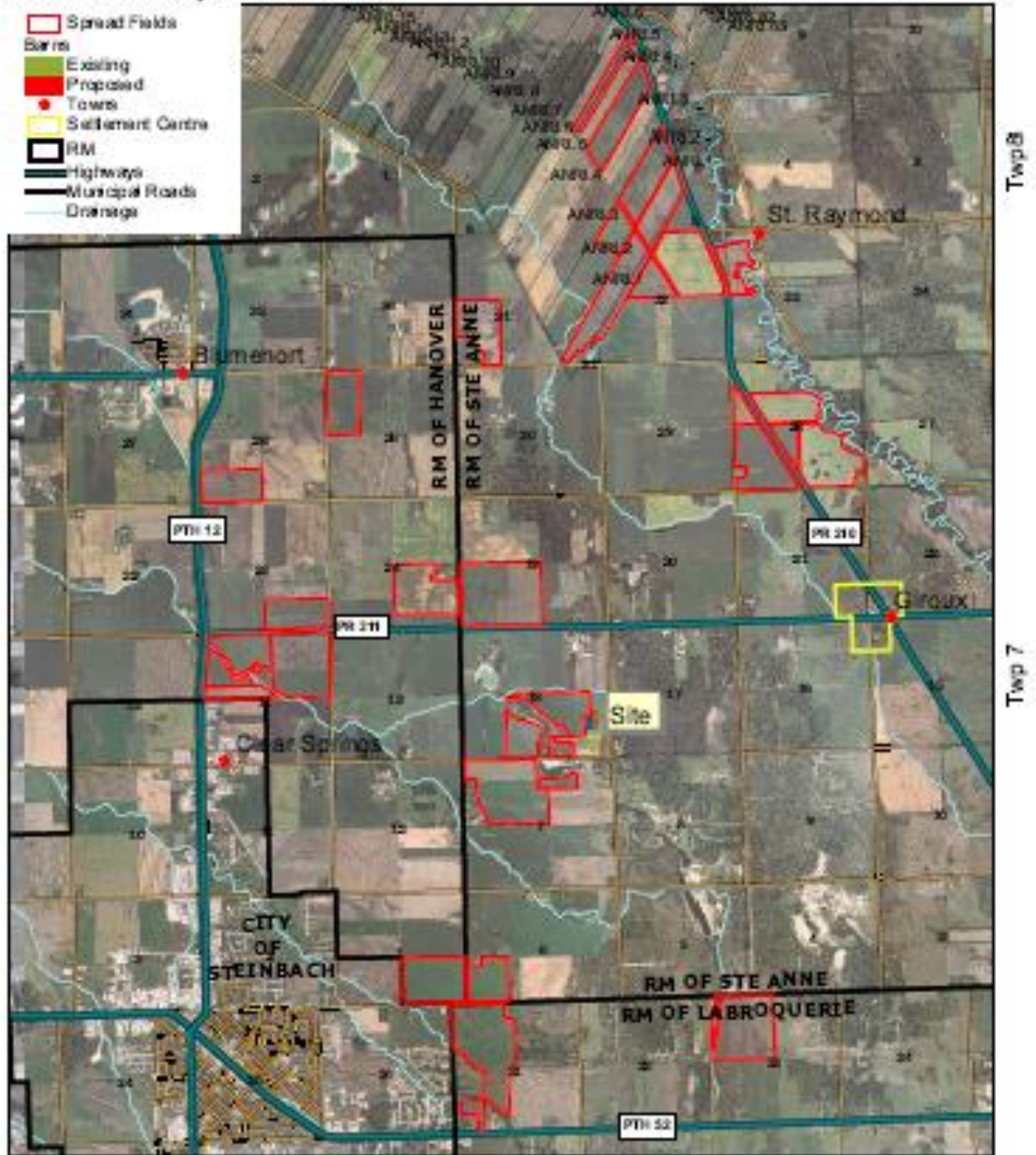
Penwood Dairy Project Site Plan (SE 18-7-7E) - Option II



- Dwelling Units
- Barns
- Existing
- Prop covered
- Existing EMS
- Prop covered EMS
- Municipal Roads
- Drainage

Site Notes:
 1. All items by Town Ag in consultation with landowners and subject to change.
 2. Displacement > 100,000 from school and industry vehicle.
 3. Highway and from school and industry vehicle.
 4. Highway vehicle > 100,000 way 1004.
 5. Vehicle use from Municipal Land Industry vehicle.

Penwood Dairy Land Use & Spread Fields



Data Source:
 Field based drawings by Tom Agri in consultation with
 landowner and subject to change.
 © Copyright © 2018 Tom Agri and landowner.
 Highway and road data by Tom Agri and landowner.
 © Copyright © 2018 Tom Agri and landowner.
 Boundaries are from Manitoba Land Information Centre



C. SITE ASSESSMENT OVERVIEW

Assessment Overview Table

Provincial Technical Overview of TRC 12-049 – Pennwood Dairy Inc.			
Items Provided by Project Proponent	Confirmed	Related Existing Provincial Safeguards	Dept
1. Submitted complete Site Assessment	X	The proposal is consistent with the Provincial requirements for a livestock operation.	MR
2. Clearly defined the project as an Animal Confinement Facility	X	Any barn in excess of 6,458 sq. ft. each will require a building permit from the Office of the Fire Commissioner.	MR
3. Proposed Project Site Physical Suitability	X	Semi-detailed soil survey indicates that Pennwood Dairy Inc is located on land that has been mapped as Agriculture Capability Classes 2 to 5 which is suitable for development.	Ag
4. Proposed Project Site Flood Risk Potential	X	Water Management, Planning and Standards is not aware of any major, overland flood hazard at this location.	MI
5. Identified 57,773 imperial gallons/day required for proposed operation	X	Pennwood Dairy Inc. was licensed for their proposed expansion in April, 2017. This project is in compliance with the Water Use Licensing Section.	SD
6. Proposed measures to meet storage and application regulations for manure	X	Any applicable permit or annual submissions under the Livestock Manure and Mortalities Management Regulation would be processed by Environmental Approvals Branch of Sustainable Development. Pennwood Dairy Inc. has identified spreadfields located within “certain areas”, as defined by the Livestock Manure and Mortalities Management Regulation (LMMMR).	SD
7. Proposed Project Site with suitable mortalities disposal methods (composting)	X	The LMMMR establishes requirements for the use, management and storage of livestock mortalities in all livestock operations in Manitoba. Pennwood Dairy Inc. has indicated that mortalities will be composted. The Dairy does not currently have a plan for mass mortalities; however, has indicated they will be addressing the issue as part of their expansion. More specific information is included in the Livestock Manure	SD

Provincial Technical Overview of TRC 12-049 – Pennwood Dairy Inc.

Items Provided by Project Proponent	Confirmed	Related Existing Provincial Safeguards	Dept
10. Proposed Project Site that is a sufficient distance from native prairie, Wildlife Managements Areas and Crown Land.	X	The distance of the project exceeds 1 mile from any parcel of Crown land which would include a Provincial Park, Wildlife Management Area, Ecological Reserve, Provincial Forest, and Wildlife Refuge/ Sanctuary. The Lands Branch has no objection to the proposal.	SD
11. Proposed Spreadfields that are sufficient, and suitable for manure spreading	X	<p>Pennwood Dairy Inc. is required to demonstrate that they have access to 2591 acres of suitable land for manure application. Pennwood Dairy has satisfied the Provincial land requirement by providing 2625 suitable acres. A detailed explanation of the land assessment can be found in Appendix B.</p> <p>All of the manure will be applied as a fertilizer for crop production. Manitoba Agriculture recommends using the services of a manure management planner. Manure management planners must be Professional Agrologists or Certified Crop advisors and must have successfully completed training in manure management planning delivered by the Assiniboine Community College.</p> <p>The proponent has indicated that a commercial manure applicator will be used to apply the liquid manure. Commercial manure applicators must be trained and licensed in Manitoba. The training is delivered by the Assiniboine Community College and licensing is through Manitoba Agriculture.</p>	Ag
12. Proposed Spreadfields with sufficient minimum setbacks on Spreadfields from natural features (water sources etc.)	X	As required under the LMMMR, all livestock operations spreading manure are subject to appropriate setbacks as set out by the province. The proponent has acknowledged the setback areas for all water features have been observed and excluded from land base calculations. All setbacks should be clearly communicated to and observed by those involved in manure application to minimize the risk of nutrients entering surface waters. (Refer to Appendix C)	SD
13. Proposed Spreadfields that have been secured by spread agreements	X	The proposal indicates that almost all of the land available for manure application is owned by Pennwood Dairy Inc. A land agreement was provided for the new field located on the N½ of SE23-7-6E.	Ag

Provincial Technical Overview of TRC 12-049 – Pennwood Dairy Inc.

Items Provided by Project Proponent	Confirmed	Related Existing Provincial Safeguards	Dept
14. Proposed Spread fields that meet development plan and zoning by-law requirements	X	<p>All the proposed spread fields in the RM of Ste. Anne are located on lands designated Rural Agricultural Area with the exception of NW33-7-7E and part of NE 32-7-7E, which are designated Rural Mixed Area. Nonetheless, the land currently within the Rural Mixed Area are cultivated agricultural lands. Therefore, the proposed spread fields meet the intent of the RM of Ste. Anne Development Plan By-Law No. 13-2007.</p> <p>The spread fields in the RM of Ste. Anne are zoned A, Agriculture, with the exception of NW 33-7-7E and part of NE 32-7-7E, which are zoned RM, Rural Mixed. As with the designations, the land zoned RM, Rural Mixed is cultivated, and therefore the proposed spread fields comply with the RM of Ste. Anne Zoning By-Law No. 10-2010.</p> <p>All the proposed spread fields in the RM of Hanover are located on lands designated Rural Area. They meet the intent of the RM of Hanover Development Plan By-Law No. 2170. The spread fields are zoned “R” Rural, and complies with the RM of Hanover Zoning By-Law No. 2171.</p> <p>All the proposed spread fields in the RM of La Broquerie are located on lands designated Agriculture Area 2. They meet the intent of the RM of La Broquerie Development Plan By-Law No. 20-2011. The spread fields are zoned Rural Area 2, and comply with the RM of La Broquerie Zoning By-Law No. 10-2013.</p>	MR
15. Proposed trucking routes and access points that may impact Provincial Roads or Provincial Trunk Highways	X	<p>The proposed truck route utilizes an existing Government Road Allowance that connects onto PR 311. We don't anticipate a substantial increase in use for the existing access.</p> <p>Please be advised that any structures placed within the controlled area of PR 210 and 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.</p> <p>Any structures placed within the controlled area of PTH 12 and PTH 52 (125 feet from the edge of the right-of-way) requires a permit from the Highway Traffic Board. Please phone (204) 945-8921 for information regarding such permits.</p> <p>The placements of temporary drag lines or any other temporary machinery/equipment for manure application</p>	MI

Provincial Technical Overview of TRC 12-049 – Pennwood Dairy Inc.

Items Provided by Project Proponent	Confirmed	Related Existing Provincial Safeguards	Dept
		within the right-of-way of PR 210, PR 311, PTH 12 and PTH 52 requires permission from our regional office in Steinbach. Please contact the Acting Regional Planning Technologist (Robert Fender) at (204) 371-6858. 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 210, PR 311, PTH 12 and PTH 52 (125 feet from the edge of the right-of-way).	
16. Proposed trucking routes – local roads	X	Under <i>The Planning Act</i> , municipalities as a condition of approval may require Pennwood Dairy Inc. to enter into a Development Agreement regarding the condition and upkeep of local roads used as truck haul routes.	MR
17. Declared Provincial Waterways	X	<p>“Several Provincial Waterways are in the vicinity of the spread fields, including the Manning Canal, the Johnson Drain, and the Seine River Diversion.</p> <p>Provincial Waterways are subject to Section 14 of the Water Resources Administration Act, which states:</p> <p>“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.”</p> <p>Water Management and Structures requires a Provincial Waterway Authorization be obtained for any development crossing or along a Provincial Waterway, including the use of temporary manure hoses.”</p>	MI

Provincial Departments

- Ag – Agriculture
- MR –Municipal Relations
- MI – Infrastructure
- SD – Sustainable Development

D. PUBLIC COMMENTS & DISPOSITIONS

Public Comment Summary	
<p>1. Cliff Unger</p>	<p>Concerns</p> <p>In regards to Pennwood Dairy Inc. - expanding their operation 800 to 1705 animals that's more than doubling their herd. My concern is waste disposal, Pennwood Dairy Inc has not been the tidiest farmer in this area when it comes to waste management they do what they want and maybe have to but we are one mile east of Steinbach and Pennwood Dairies is 1 3/4 miles north, they often spread waste east south and west of me which gets within 1/2 mile from Steinbach.</p> <p>2 years ago they left all around very messy and the RM had to clean out the ditch just north of us so spring water would be able to flow properly, they don't and sometimes can't work it into the ground for a week or two depending on weather conditions which is not their fault but to have such an expansion so close is concerning.</p> <p>I would like to see them not spread or pump waste anywhere south of road 37N or west of 36E. I live 36E between 36N and 37N section 6-7-7 sw. Thanks for letting me share this, I am a farmer at heart born and raised on a dairy farm I do understand and respect and appreciate farming. Thanks</p>
<p>2. Boyd Penner Farms Martha Boyd & Ty-Bo Penner</p>	<p>Opposed</p> <p>We are in opposition to the expansion due to the amount of manure already being moved by this farm. The draglines go for miles spilling in the ditches, (which takes forever to clean up. *2017 manure ran into ditches off the fields because of too much liquid manure. Never cleaned up)</p> <p>The mounds of dry manure hauled by trucks not only bring in flies, they make the roads near impossible to drive on (definitely not safely) the truck drivers themselves are dangerous, they rarely (if ever) stop at intersections and are speeding cutting people off.</p> <p>The amount of feed needed for the cows the farm has currently brings too much mud and damage to the roads.</p> <p>There has been enough expansion in the area. The roads cannot handle more.</p> <p>There is already too much manure for one location. This increase will only make matters worse.</p> <p>Thank you for your consideration.</p>

<p>3.</p> <p>Mrs. Sina Bateman Clearsprings Road E.</p>	<p>Opposed</p> <p>I am writing to express opposition to the Pennwood Dairy Inc. proposal to expand its dairy operation from 800 to 1705 (1600 to 3410 Animal Units) located at Pt. SE 1/4 18-7-7 EPM.</p> <p>The setbacks imposed by this expansion and the impact on residential development in the setback area is a grave infringement on gainful and scientific appropriate land usage and designation, not only for the region, but also to the South East region of Manitoba's population growth potential and enterprise opportunities. All opportunities by any other interests for development used to increase tax income generated by residents in the vicinity, would be destroyed by the above mentioned operation's expansion plan, which serves only for their own personal monetary gain, thereby not contributing to the quality of life to the already existing residents. This is wealth destruction by one operator at the expense of the region's population and future gainful growth potential.</p> <p>This expansion will also devalue residential and nonresidential properties that are not agricultural land and will never be considered for agricultural use due to the trees, stone and soil type. This setback will essentially render this residential area as useless, and devalue existing properties.</p> <p>Other concerns I have are; increase in commercial traffic, road safety, road quality, ground water concerns, water depletion and or stress, manure storage/dispersion, proper designation and usage of land type, soil type, etc., stewardship of (ie. Care for) environments, and concern for intensive livestock on small parcels of land which are not able to sustain and provide for this large quantity of animal units and or waste production.</p> <p>I am certain that with ingenuity and technological advances in agriculture, the practice of setbacks is an outdated form of best procedures. I am confident that the Government of Manitoba is interested in diversification, best land usage practices, environmental sustainability and economic growth and progress for all its citizens and industry. I believe all sectors are able to coexist in a progressive manner that benefits all, instead of at the expense or detriment of one or the other.</p>
<p>4.</p> <p>Suzanne and James Goulden Road 38N</p>	<p>Concerns</p> <p>I'd like to ask some questions concerning the expansion of Pennwood Dairy Inc.</p> <p>We had a neighbour come around and explain some concerns to us, but after calls to the RM of Ste Anne I have been unable to confirm or deny her claims. If her claims hold true, then they are cause for concern as property owners within less than a two-mile radius of Pennwood Dairy.</p> <p>1) Can the waste from cattle seep far enough in to the ground to affect our drinking water? Can our water be</p>

	<p>contaminated over time (even if it's several years)?</p> <p>2) Currently our properties are zoned "mixed." We have been told that if Pennwood expands our property zoning would be changed to "agriculture." If this happens then apparently:</p> <ol style="list-style-type: none"> a. Our property values drop significantly. b. We are restricted from making any changes to our property in the way of additions, or adding out buildings, etc. Is there any truth to these claims? <p>3) If they are more than doubling the number of cattle, with the smell be an issue. Currently, we are not affected at all by smell from Pennwood Dairy. I'd like to know that will not change.</p> <p>Obviously, if any of the above is true, this is very concerning for us and our neighbours.</p> <p>Another question: Is there anything about the expansion of Pennwood Dairy that we should be concerned about? That the government or the dairy itself should be disclosing to the effected neighbourhood?</p> <p>I would also like to state that if there are no concerns that would adversarially affect us or our property, or that of our neighbours, then I have no issues with the expansion of the dairy farm.</p> <p>Thank you for your attention to this matter.</p>
<p>5. Herm Martins</p>	<p>Opposed</p> <p>I am opposed to TRC - 12-049 - Pennwood Dairy Inc. expansion for a number of reasons.</p> <p>1. Inconsistent information</p> <p>Number of animals milked on the farm. In June, 2017, Mr. Gilmer Penner told me that they had milk quota for 1,200 cows, but because of efficiency they were milking only 1,000 cows or 2000 AI not 1,705. These numbers are Inconsistent with this application. It is essential to have the true and accurate numbers.</p> <p>2. Increase of this size also means an increase in traffic by 113.125% or 2.13 times more traffic.</p> <p>Their driving practices are not according to the rules of the road.</p> <p>a) Failing to stop at STOP signs.</p> <p>My family just witnessed an incident where a Pennwood truck failed to Stop, forcing a car that had the right of way, into the ditch. The Pennwood driver just left the scene, leaving the vehicle owner to fend for himself.</p> <p>b) Use of off road tires on their trucks. These tires tear up the roads considerably.</p> <p>c) Do not cover their loads.</p>

	<p>When we meet up with one of their trucks we get a shower of silage.</p> <p>d) Do not share the road well.</p> <p>They drive as if others are intruding on their road.</p> <p>3. Manure Handling</p> <p>I have a great concern with their manure deposit system</p> <p>a) They have spread manure onto standing water on the field.</p> <p>b) Do not incorporate within 48 hours but more like 48 days.</p> <p>c) Manure is spread over a number of months. July to October</p> <p>d) No buffer zone for spreading manure along and into ditches and waterways.</p> <p>e) Manure spilled on the roads is very annoying. When we enter our home garage with our vehicle, we get the smell. I do not enjoy this nor should I have to endure this. Keep the ___ on your land and field but Not on the road.</p> <p>4.. Distance of Control</p> <p>a) Would there be a restriction put onto the neighbors?</p> <p>b) Would Pennwood Dairy Inc. then control if a neighbour's empty lot owner wanted to build as house?</p> <p>c) Would this not make the lot worthless?</p> <p>d) Would Quarry Oaks Golf Course still be allowed to put up many new homes?</p> <p>e) Would my home depreciate greatly?</p> <p>f) What is Pennwood Dairy Inc.'s restriction for the distance of residential homes?</p> <p>These are true and valid concerns that need to be addressed! Only after I see Pennwood Dairy Inc., adhere to the rules of the Province and try to be a good neighbor, would I endorse this project. As of now, I am totally opposed to it.</p>
<p>6. Dennis and Sandra Watson SE 16-7-7E</p>	<p>Opposed</p> <p>We oppose the expansion for the following reasons:</p> <p>Cessation of nearby residential development. It's our understanding that future residential development of nearby properties (~3 km radius setback?) will be frozen should this application be approved. The affected areas are poorly-suited for agricultural use because of many rocks and trees – the very things that make them well-suited for residential development. The R.M. of Ste. Anne will lose these opportunities for tax revenue, so tax increases to existing properties may be unavoidable when additional revenue is needed by the R.M.</p> <p>Impact on residential property values. There are many homes in the affected area that will have their values negatively-</p>

	<p>affected by a much larger livestock operation nearby. We believe that these homes will have less appeal to the majority of potential buyers who would otherwise enjoy living near the city of Steinbach and near a top golf club (Quarry Oaks). This is already an attractive residential area. There won't be enough dairy employees looking for nearby homes to compensate the loss of other potential buyers.</p> <p>Increase in large truck travel. The roads near Pennwood Dairy are already affected by the large trucks and tractors needed to support the operation. The adjacent gravel roads are consistently chewed up, and we frequently see field mud thrown from the tires onto paved highway 311. More large vehicle traffic will require more road maintenance by the R.M. to remedy, and this will come at some cost – presumably borne by Ste. Anne taxpayers.</p> <p>Groundwater contamination risks. We understand that Manitoba Sustainable Development has regulations in place to ensure that livestock operations cannot negatively impact water sources be it groundwater or surface water without there being consequences. We're much more concerned with prevention and monitoring than we are with post-contamination penalties. What assistance/remediation is available for nearby residents, though, should our well water become undrinkable?</p>
<p>7. Tim and Matilda Field</p>	<p>Opposed</p> <p>In reference to the proposed expansion of a dairy operation TRC-12-049 - Pennwood Dairy Inc.</p> <p>I feel that we already have enough farm traffic in our area (Pennwood Dairy being one of them), who drive over the speed limit, don't slow down for children or pedestrians, and who do not observe Stop signs. We have nearly been hit by Pennwood's grain trucks on more than one occasion when they drove through a stop sign. As one of my neighbors put it, "What's that farmer's problem? Why doesn't he stop at stop signs? I've almost been t- boned by him three times this year." Also my children have narrowly escaped being hit while biking on our roads. When we see a Pennwood truck coming we head for the ditches where we are showered with dust, gravel, road debris, and the chaff from whatever they are hauling. Common courtesy would be to slow down a bit and move over for pedestrians. In short, as drivers, they are always in a hurry, dangerous, and disrespectful.</p> <p>With Pennwood's proposed expansion from 800 to 1705 animals, I'm assuming that traffic will increase, causing more stress to our roads and ditches which are mulched up and destroyed annually by farm traffic. When they drive from their</p>

	<p>fields onto paved roads they leave such large chunks of dirt and in such large quantities that driving is hazardous. Washboard and potholes on our gravel roads from heavy traffic makes driving difficult and dangerous as well. On wet years, the ruts are so deep that vehicles bottom out or get stuck entirely. On dry years, dust from the fields and roads leaves a thick coat of dirt on everything in the yard. As well, the farm smells are unbearable at certain times of the year making it impossible to hang laundry out to dry, open out windows for a breath of fresh air or sit on the deck and enjoy an otherwise nice evening. What we do not need is more farm traffic.</p> <p>I also believe it is too populated an area for that size of operation. With the City of Steinbach expanding, housing developments less than two miles away, and three golf courses in the vicinity, the extra noise, smell and traffic would affect us all.</p> <p>I'm also concerned about the environmental impact that a mega farm like this would have; things like drainage, air quality, impact on water supply, impact on water quality, impact on current wildlife, the amount of sewage that will be produced and need to be stored over winter and spread in spring, sewage/chemical leeching, pollution, etc ...</p> <p>I'm not a fan of "factory farming" nor am I a fan of farms who feel the need to monopolize the market. It's easy to say "let's double in size", but the effects of such a decision will be felt (and smelt) in our community for generations to come. I believe the proposal to expand this farm over double its current size only really benefits Pennwood Dairy and not the community as a whole, and as such, am opposed to this expansion.</p>
<p>8. Stephanie Klassen and Jordan Kroeker</p>	<p>Concerns</p> <p>We live just one-mile south of Pennwod Dairy. I have two main concerns regarding the proposed expansion.</p> <ol style="list-style-type: none"> 1. Environmental impact: I would like an environmental impact report to be done by a reputable agency regarding the impact on ground water as the water table is high on my property. Any ill effects on water quality are unacceptable. 2. Roads: does this proposed expansion have an impact on increased heavy machinery traffic down normally quiet country roads? What will be done to address the additional road maintenance required? Will this expansion, which will cost local residents, include increased contributions to the RM? <p>Thank you for asking about our concerns.</p>
<p>9. Lynden & Laurie Broesky 36161 Rd 36N</p>	<p>Opposed</p> <p>It has been brought to our attention that the proposed expansion of Pennwood Dairy Inc., TRC 12-049, may</p>

	<p>adversely affect our property. From our understanding they are asking for a two- mile buffer around the proposed expansion, that will prevent any subdivisions or building in the future. We own 26 acres within this proposed 2- mile buffer. Our property is not viable farm land; rocks and bush. Our daughter and her husband, and our parents have expressed an interest in building a house sometime in the future. We would consider subdividing our property in the future to allow them this opportunity. A two- mile buffer proposed by Pennwood Dairy Inc. would prevent our ability to subdivide our property. We are strongly opposed to this proposed buffer. We are not opposed to their expansion, but their expansion should not prevent us or others from future improvements to their properties.</p>
<p>10. Tilstone Prairie Inc.</p>	<p>Objects</p> <p>Please refer to the 10- page comment in Appendix D</p>

A full copy of the public comments as well as the proponent's response may be viewed on the public registry at the following link

<http://www.gov.mb.ca/mr/livestock/index.html>

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

E. CONCLUSIONS & RECOMMENDATIONS

Overall 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

- As per Section 114(1) of *The Planning Act*, Council must set a date for a Conditional Use hearing.
- As per Section 114(2) of *The Planning Act*, at least 14 days before the date of the hearing, Council must:
 - a) send notice of the hearing to
 - (1) the applicant,
 - (2) the Minister, (c/o the Steinbach Community & Regional Planning Office)
 - (3) all adjacent planning districts and municipalities, and
 - (4) 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;
 - b) publish the notice of hearing in one issue of a newspaper with a general circulation in the planning district or municipality; and
 - c) post a copy of the notice of hearing on the affected property in accordance with Section 170 of *The Planning Act*.
- 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.
- 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 & Regional Planning Office); and
 - c) every person who made representation at the hearing.
- The project site will require variances to vary:
 - 1) the minimum separation distance between the earthen manure storage facility and the nearest residence (SW ¼ 17-7-7E) from 2,625 ft. to 804 ft.;

- 2) the minimum separation distance between the earthen manure storage to the nearest non-agricultural designated area (Rural Residential Designated area: SW ¼ 5-7-7E) from 10,499 ft. to 9,100 ft.; and
- 3) re the minimum separation distance between the animal confinement facility (barn) to the nearest residence (SW ¼ 17-7-7E) from 1,312 ft. to 444 ft.
- As per Section 169(4)(b) of The Planning Act, a copy of the notice of hearing to vary the separation distance involving a livestock operation must be sent to every owner of property located within the separation distance that is proposed to be varied.
 - As per Section 174(1) of The Planning Act, Council can hold all required hearings together in a single combined hearing. It is recommended that during the course of this public hearing, Council first deal with the matter of the conditional use order followed by the variation orders.
 - As per Section 174(2) of The Planning Act the notice of hearing for each matter to be considered at a combined hearing may be combined into a single notice of hearing.
 - Council should specify the type of operation, legal land location, number of animals in each livestock category and total animal units in its Conditional Use Order.

Council is welcome to contact Manitoba Sustainable Development 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 a Variance be applied for prior to the Conditional Use Hearing to vary the separation distance between the earthen manure storage structure and animal confinement facility (barn) and other land use features as noted above. This will enable Council the option of holding a combined Conditional Use and Variation Hearing.
- That the proponent request the municipality hold a combined hearing, if desirable.
- That any additional measures identified through subsequent Provincial and Federal licensing or permitting in order to minimize any identified risks to health, safety and the environment be undertaken.

F. TECHNICAL REVIEW COMMITTEE MEMBERS

Name	Department	Title	Telephone
Don Malinowski Chair	Municipal Relations	Senior Planner Community & Regional Planning Branch	945-8353
Petra Loro	Agriculture	Livestock Environment Specialist Agri-Resource Branch	945-3869
Shannon Beattie	Sustainable Development	Policy Analyst, Central Co-ordination Unit	945-3814
Jeff DiNella	Infrastructure	Senior Development Review Technologist Highway Planning and Design Branch	945-2664

Appendices

Appendix A

**Land Use Planning Matters for Pennwood Dairy Inc
Manitoba Municipal Relations
Steinbach Regional Office
October 2018**

The Planning Act 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.

The proposed livestock operation expansion is on land designated as Rural Agriculture Area pursuant to the RM of Ste. Anne Development Plan By-Law No. 13-2007. The proposal complies with Development Plan policies 5.5.1.a.i. allowing for the expansion of existing livestock operations within the Rural Agriculture Area. However, it seems to conflict with Policy 5.5.1.a.ii., which requires the expanding operation to meet mutual separation distances from nearby dwellings and designated residential areas, where minor variations of setback requirements may be considered by Council on unique circumstances.

There are already several dwellings within the minimum separation distance of the operation at its current capacity. The expansion of the operation would further increase the required setback distances to dwellings and designated areas. The expansion to 3410 AU requires a minimum separation distance of:

To single residence

To EMS	To animal housing facility
2625 ft.	1312 ft.

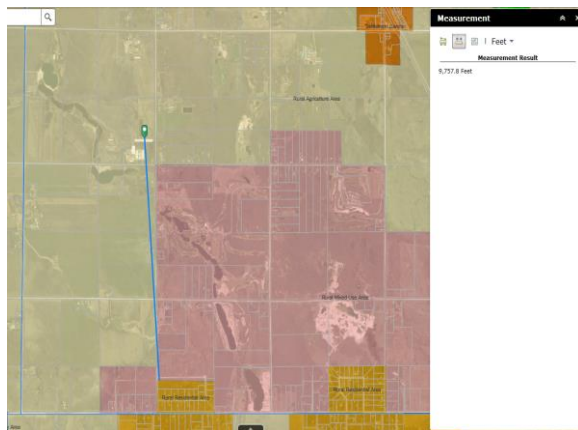
To designated areas

To EMS	To animal housing facility
10499 ft.	6988 ft.

It is noted that the location of the proposed new barn also further reduces the distance between nearby dwellings and the operation. With several dwellings in close proximity, the variances required would not be of a minor nature, and therefore may be in conflict with Policy 5.5.1.a. ii.

Should Council deem the expansion to be in conformance with the Development Plan, **variance orders are required** to vary the minimum separation distance between all dwellings within 1312 ft. to the proposed new barn, as well as all dwellings within 2625 ft. to the earthen manure storage facility (either existing or proposed under option II).

Furthermore, while the Giroux Settlement Centre is located 10774 ft. away from the EMS, which meets the setback distances, there is a Rural Residential Area designation on the SW¼ 5-7-7 EPM which is located approximately 9757 ft. from the EMS. As such, a **variance order** would also be required to vary the minimum separation distance between the designated area and the EMS.



The proposed livestock operation expansion is on land zoned A, Agriculture. *Livestock operations greater than or equal to 200 AU in size* is a conditional use and requires a minimum site area of 80 acres. The property has a site area of 80 acres, and therefore meets the requirement. Minimum site width requirements as well as yard requirements are to be determined by Council. **A conditional use permit is required** for the expansion of the livestock operation.

Appendix B

Land Base Requirements for Pennwood Dairy Inc Manitoba Agriculture Petra Loro and Clay Sawka November 2018

In areas of lower livestock intensity such as the RM of Ste. Anne, 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. In areas of high livestock intensity, specifically the RMs of Hanover and La Broquerie, the proponent must balance phosphorus excretion by the livestock

with crop phosphorus removal over the long-term. The land requirement calculation takes into consideration typical nutrient excretion rates for dairy as well as realistic, long-term crop yields from the Manitoba Agricultural Services Corporation (MASC) for the RMs of Ste Anne and Hanover.

Pennwood Dairy Inc. has lands both inside and outside of Hanover and La Broquerie. Manitoba Agriculture calculated the land required for the manure nutrients based on crop nitrogen utilization and 2 times crop phosphorus removal for lands in Ste. Anne, and crop nitrogen utilization and phosphorus balance (1X) for the lands in Hanover and La Broquerie. Additional suitable land is required for the manure in the RMs of Hanover and La Broquerie to provide greater assurance in areas with a high density of livestock that soil test phosphorus can be maintained below 60 ppm Olsen P over the long-term. Since the land in Hanover and La Broquerie is based on phosphorus "balance", with appropriate manure management planning, it should be possible to maintain soil test phosphorus levels below 60 ppm Olsen P over the long-term. The land requirement in the RM of Ste Anne assumes more land can be brought into the Pennwood Dairy Inc. manure management plan, should it be necessary in the future to balance manure phosphorus with crop phosphorus removal.

Land suitability is determined using soil testing for phosphorus and soil survey to establish the agriculture capability. Soil tests must be below 60 ppm Olsen P to be considered suitable. Recent soil test information for SE 24-7-6E indicates that soil test levels currently exceed 60 ppm Olsen P. As such, this 110-acre field was removed from the suitable land base and replaced with a 60-acre field on the N½ of SE-23-7-6E. According to semi-detailed soil survey, the agriculture capability of the land included in the proposal is Class 2 to 5. Class 2 to 5 soils are considered suitable for manure application. The associated limitations include wetness (W), droughtiness (M), stoniness (P) and density (D).

According to the above land calculation, Pennwood Dairy Inc. is required to demonstrate that they have access to 2591 acres of suitable land for manure application. Pennwood Dairy has satisfied the Provincial land requirement by providing 2625 suitable acres.

Additional Notes:

Manitoba Agriculture has noted the following:

- An annual manure management plan must be registered with Environmental Approvals Branch of Sustainable Development prior to manure application.
- Field storage locations for solid manure must be moved the year following the year of establishment and a crop must be grown following removal of the manure in order to reduce soil nutrient accumulation.
- A Manure Storage Facility permit from the Environmental Approvals Branch of Sustainable Development is required prior to the modification or expansion of the manure storage facility.
- A Confined Livestock Area permit from Environmental Approvals Branch of Sustainable Development may be required if the confined livestock area is modified or expanded.

Appendix C Manitoba Sustainable Development

Water Science and Watershed Management Branch have reviewed the site assessment for Pennwood Dairy Inc. in the RM of Ste. Anne and have the following comments:

- Proper nutrient management that avoids excess loss of nutrients to surface waters are needed on lands receiving manure in southern Manitoba because long-term trend analysis of total phosphorus and total nitrogen has shown significant increases in these nutrients in the Assiniboine and Red rivers (Jones and Armstrong 2002).
- The proponent plans to inject the liquid manure and broadcast the solid manure with incorporation within 48 hours. Injection of manure at appropriate rates poses lower environmental risk than other manure application methods. To reduce the risk of runoff losses from broadcast applications, application should not occur to saturated, frozen or snow covered soils or when heavy rainfall is expected within 24 hours. Broadcast applications of manure are most susceptible to runoff losses of nutrients when runoff events occur within the first week or two after application. Applications to frozen soil or to soil shortly before the soil freezes are therefore much more likely to result in nutrient losses during spring snowmelt – ideally fall broadcast applications should occur well ahead of the soil freezing.
- Manure tends to have an excess of phosphorus (P) compared to nitrogen (N) and as a result, for most crops, application at N-based rates causes a buildup of soil P. Practices which minimize N losses from the manure improve the N:P ratio in the manure and help reduce P buildup when manure is applied at N-based rates.
- The proponent has acknowledged the setback areas for all water features have been observed and excluded from land base calculations. All setbacks should be clearly communicated to and observed by those involved in manure application to minimize the risk of nutrients entering surface waters.
- 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 4,193 acres may be required for the long-term environmental sustainability of the operation. The proponent has identified 2,625 acres to apply manure. Application to meet crop N requirements is estimated to require 2,233 acres (4,193 acres is estimated to achieve P balance with current crop choices and yield potential). It is important to rotate manure application across all spread fields so as to prevent excessive P buildup when applying manure at rates above P balance (P removal by harvested crops).
- As phosphorus levels build up in soils, the concentration of phosphorus in runoff to surface waters increases. Many of the proposed spread fields show soil test phosphorus levels high enough that crops would likely not respond to additions of phosphorus beyond starter phosphorus. Crop rotations and manure/fertilizer application rates which draw on these phosphorus reserves and draw down soil test phosphorus will reduce the risk of phosphorus losses in runoff.

- The proponent is considering adding a second cell to their manure storage. With appropriate management, a two-cell lagoon system will allow for more economical transport of phosphorus and more efficient utilization of manure nutrients which can reduce the risk of nitrogen and phosphorus loss to surface and groundwater.
- All unused water wells on the site and spread fields shall be properly sealed. A sealed well report must be filed with the Groundwater Management Section of Sustainable Development for each well sealed. Information on well sealing and the sealed well reports are available from Sustainable Development (204-945-6959) or http://www.gov.mb.ca/sd/waterstewardship/water_quality/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. All groundwater features, including water wells, should be given as a minimum, the amount of buffer during manure application as outlined in the regulations.

Environmental Approvals Branch have reviewed the site assessment for Pennwood Dairy Inc. in the RM of Ste. Anne and have the following comments:

- Any applicable permit or annual submissions under the Livestock Manure and Mortalities Management Regulation would be processed by Environmental Approvals Branch of Sustainable Development. Pennwood Dairy Inc. has identified spreadfields within "certain areas", as defined by the Livestock Manure and Mortalities Management Regulation. Prior to obtaining a permit to construct or expand a manure storage facility, Pennwood Dairy Inc. must be able to demonstrate access to sufficient land in order to apply manure. Lands assessed for this report will suffice as sufficient for such permitting requirements if unchanged at time of application, however if the Pennwood Dairy is unable to secure sufficient land, they must submit a plan to the Director of Environmental Approvals demonstrating how they will keep phosphorus levels below 60 ppm.
- Pennwood Dairy Inc. must submit annual Manure Management Plans (MMP), as prescribed under the Livestock Manure and Mortalities Management Regulation. The MMP process is administered through the Environmental Approvals Branch of Sustainable Development. Details on the requirements for manure management plans, including future soil sampling and analysis requirements, are available at www.gov.mb.ca/sd/envprograms/livestock.
- Information on livestock mortality disposal is provided in section 9 of the site assessment, which requires Pennwood Dairy Inc. to select from four provincially approved methods of disposal. More specific information is included in the Livestock Manure and Mortalities Management Regulation and at <http://www.gov.mb.ca/sd/envprograms/livestock>.
- In section 10.6 of the site assessment, the proponent proposes to meet minimum setback distances, as required under the Livestock Manure and Mortalities Management Regulation.

Section 8.7 required Pennwood Dairy Inc. to indicate all setbacks have been observed and excluded from land base calculations.

Appendix D

10-page Public Response from Tilstone Prairie Inc.

1

PENNWOOD DAIRY INC TRC-12-049

Submitted by Tilstone Prairie Inc. October 26, 2018

OBJECTIONS to the proposed expansion of the Intensive Livestock Operation (ILO) are as follows:

INCONSISTENCY:

We object based on the inconsistency in the number of Animals on site/ proposed. These inconsistencies are:

- The separation table on page 3 of the report indicates that the operation is expanding from 800 animals (1,600 AU) to 1705 animals (3,410 AU). However, when reviewing the table 10-3 on page 19 of the report it shows minimum separation distances for an operation between 1601 AU to 3,200 AU. The public review process needs to be based on the correct figures.
- The current herd is indicated to be 800 cows whereas the owner professed to Herm Martens (38047 Rd 38 N) that the dairy was milking a herd of 1000 cows and possesses a quota for 1200 cows (200 calving?)
- Given that Pennwood Dairy Inc is underreporting the current number of cows being milked/quota, is it not likely that the ILO plans to milk 2000 – 2500 cows at this location?

SETBACKS:

We object to the setbacks (both not being met and the implications of creating the setbacks)

- The separation distances for an operation of this size would be 10,499 from an earthen manure storage facility.
- The report indicates that the nearest designated area is Giroux. We note that in fact the nearest designated area is actually the Rural Residential Area located in the SW ¼ 5-7-7 EPM. When measured using the measuring tool on the Manitoba Assessment website we note that the distance between this Rural Residential designation is actually 9,099 feet. An expansion of this size requires a minimum separation distance of 10,499 feet. In order for the public to properly review the document these tables should be corrected to reflect the correct distances.



Furthermore, the operation does not even meet the minimum setback distances from the nearest residence to earthen manure storage; or to a designated area to the earthen manure storage. The area contains approximately 100 residences and is in close proximity to the City of Steinbach ~ 2 miles from city limits as the crow flies (37 N & Old Tom Road), as well as a number of recreational uses including Quarry Oaks and Cherry Hill Estates.

Land Use Planning for Agriculture (Retrieved from <https://mail.google.com/mail/u/0/?tab=wm#search/Stephen.Walker%40gov.mb.ca?projector=1>) states:

Mutual separation distances are required by The Planning Act as a planning tool to separate livestock operations from houses and residential areas and vice versa. The goal is protect residences, residential areas, and recreational areas from nuisances and complaints associated with livestock operations (such as odour, noise, dust, etc).

*As noted below in the Rural Municipality of Ste. Anne zoning map and the clusters of residences of various designations in the area, the Planning Act's goal to protect residences etc is not in compliance with Pennwood Dairy Inc's expansion plan.

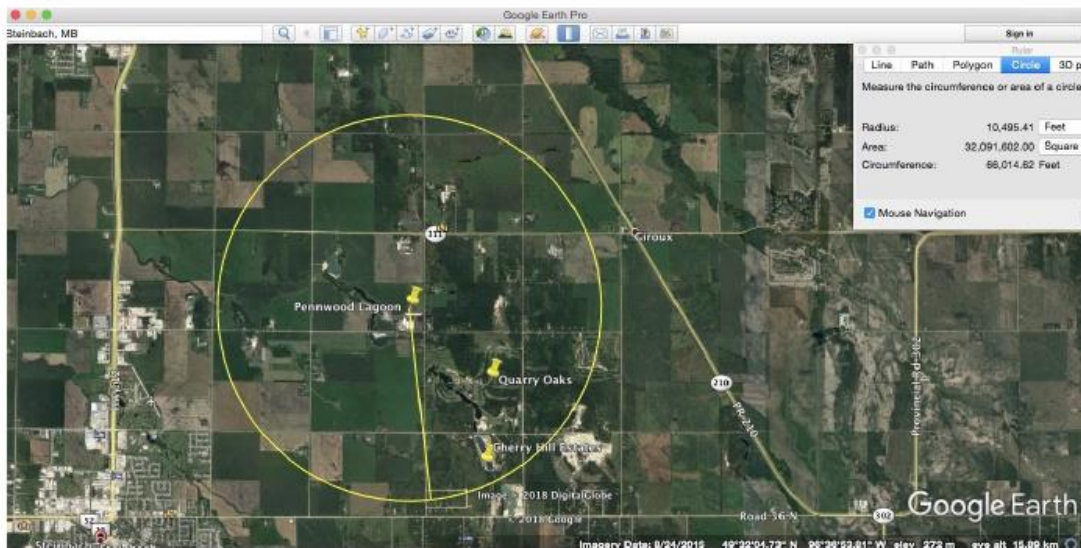


RM of Ste . Anne zoning map. Pennwood Dairy Inc. at Rd 37 E & Rd 38 N
Setback to east, south & southeast zoned: Rural Residential 5, Rural Mixed, Rural Residential and Commercial Recreational Resort. As noted in the Land Use Planning for Agriculture publication: *"The more non-farm uses in agricultural areas, the more likely land-use conflicts will arise."*

It also needs to be noted, that there is a residence immediately across the road to the east ~ 200 feet (the first of 7-8 residences) of Pennwood Dairy Inc, in a designated agriculture zone (separation distance to a single residence ~ 2625 from an earthen lagoon).

[Since] Another [Planning Act] goal is to allow farmers the option to establish and/or expand the investment in their livestock operations in agricultural areas based on market pressures.

Pennwood Dairy Inc. expansion plans do not conform to The Planning Act goal to expand their livestock operations in agricultural areas. It is obvious from the RM of Ste. Anne zoning map in addition to the number of residences to the east and southeast that this is not an 'agricultural area. In fact, the setback includes the non-agricultural areas that the setback is meant to protect!



Note: Pennwood Dairy Inc. setback encroaches on a designated rural residential area (sw-5-7-7e) & includes ~ 100 residences in Rural Residential 5 and rural mixed and both Quarry Oaks Golf Course & Cherry Hill Estates recreation site in a Commercial Recreational Resort zone.

IMPACT ON DEVELOPMENT & ECONOMICS:

We object based on location and impact of sterilizing a desirable area of land near Steinbach – the land in the rural mixed, residential and recreational zones will not be able to be developed to its maximum potential if the operation is allowed to expand.

There is a high demand for residential development in the area southeast of Pennwood Dairy. One such example is the Quarry Oaks Golf Course.

A condo development was envisioned in 2011 by Quarry Oaks Golf Course owners and supported by Community Planning but denied by the RM of Ste. Anne Council. The dairies in the area lobbied against it. In the case of Pennwood Dairy, Quarry Oaks rural residential development was a barrier to the dairy's future expansion goals. The tax revenue coming from the proposed Quarry Oaks condo development would have been very substantial for the municipality.

Quarry Oaks Golf Course should be encouraged to apply for residential development again. Cottonwood Golf Course closed after the municipality denied residential development at this golf course. Will the same thing happen to Quarry Oaks Golf Course if they are not allowed to develop a subdivision?

In addition, there are other similar parcels of land in this area comprised of stones and trees that the owners have indicated they would like to develop in the future, such as the 80-acre parcel adjacent to Quarry Oaks and owners along Loewen Blvd. It would not be too bold to predict ~ 1/2 a million in taxes for the municipality. The tax revenue for the municipality in 2017 was \$2,655,170.00. The municipality operates on a 'shoestring'

budget. More revenue is needed going forward as residents demand a higher level of infrastructure and services, in addition to specific needs like those of Richer and Giroux that need appropriate sewer systems instead of holding tanks.

Furthermore, the Pennwood Dairy expansion will devalue residential and non-agricultural properties in the area due to the heavy commercial road traffic, quality of life, and potential odour. Non-residential properties that are in the rural mixed, residential and commercial zones eg land largely of trees, stone and quarries have never been considered for agricultural use in the 10,500 feet setback will be devalued since the land is rendered useless for anything but residential, an option that is negated by the expansion. Pennwood Dairy Inc, needs the 10,500 setback in order to expand, and yet, the property owners who act as a buffer zone for the dairy aren't compensated.

The 'compensation' to the municipality and area re: a dozen or so low-paying dairy jobs and additional municipal taxes coming from the dairy expansion won't in any way compensate rural residents and property owners generally or the municipality in potential tax revenue from rural development in the area etc.

TAX BURDEN IMPLICATIONS:

We object based on the tax implications to residents. Approximately 75% of municipal taxes are derived from rural residents. Ratepayers have strongly voiced a need for better roads and drainage and other infrastructure and recreational needs. Since rural residents pay the majority of taxes that support the municipality, more revenue by the RM of Ste Anne will need to come from this tax base. This leaves the option to:

- 1) increase the mill rate or
- 2) increase the rural residential population in an area that doesn't restrict agriculture and
 - a) is desirable for development based on land class and
 - b) in a location near a large urban centre such as Steinbach

TIMING:

We object based on timing. The proposed expansion of Pennwood Dairy Inc appears to be an aim to pre-empt the planned RM of Ste. Anne review of the municipal development plan. An expansion of the size that Pennwood Dairy has applied for should obviously be put on hold until the newly elected reeve and council has had an opportunity to establish itself, review its priorities and needs going forward including the municipal development plan that is scheduled for review by Council after the election.

Council should have a full range of options open to them to develop the new municipal development plan rather than have Pennwood Dairy Inc be given conditional approval for the expansion in a location in high demand for residential development; and then Council be limited to trying to plan the next municipal development plan with what's 'left

over.' Limiting the land use for decades to the east and south-east of Pennwood Dairy Inc as a buffer also limits the municipality's tax revenue options.

TRAFFIC:

We object to the increase in commercial traffic: More than doubling the size of Pennwood Dairy will more than double heavy commercial truck traffic in an area that already has a lot of local rural residential traffic in addition to other traffic from as far as Richer making its way to and from Steinbach. Residents already complain about issues with Pennwood Dairy violating the rules of the road. Having more commercial traffic of the same type will damage already stressed roads further. The tires on the trucks are treaded similar to tracks on construction equipment eg bulldozers to gain traction on fields. These same tires chew up the roads when driving on them from the fields to the ILO site. In addition, there are already other ILOs eg Rumardale and Benner Holsteins already use these roads.

GROUND WATER DEPLETION/STRESS:

We object because ground water levels are much below normal in the area (less than 10 percentile) (MB Govt Sustainable Development Water Stewardship.) This indicates that more water is being used in this area than can be replaced from the recharge area of the Sandilands where ground water levels are above normal.



'Screen shot' Oct 25, 2018 red dot "much below normal" Carbonate Aquifer near Steinbach (recharge area at Sandilands above normal)

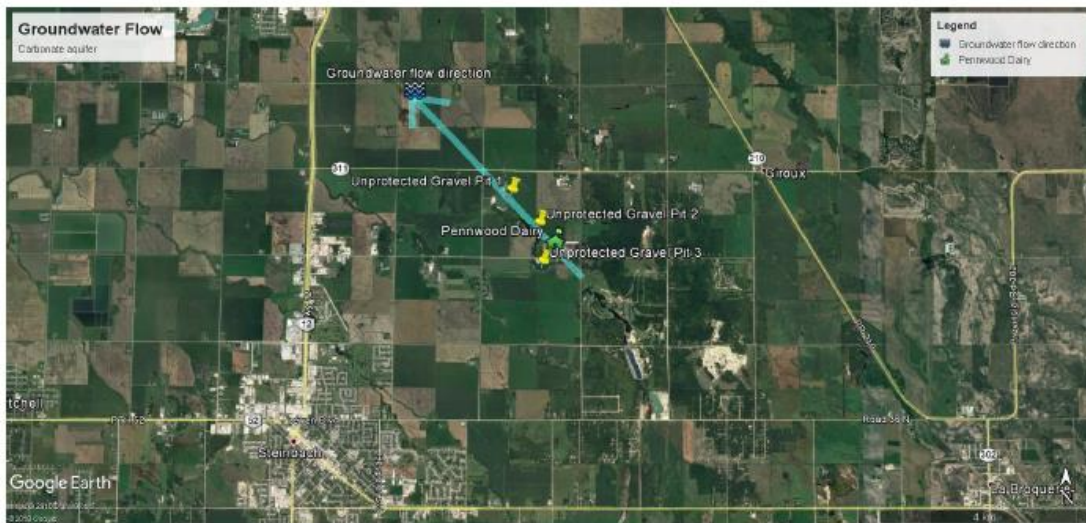
<https://manitoba.maps.arcgis.com/apps/webappviewer/index.html?id=28fc1a53c9f8435d897501724766a992>

Cows require a lot of water to produce milk, in addition to a large requirement for the 'servicing' operations of an ILO this size. Intensive livestock operations are the "single largest consumer of water in Canada" (cited from: <http://scienceforpeace.ca/the->

environmental-impacts-of-intensive-livestock-operations-in-canada) This especially becomes an issue when the water is taken from the aquifers faster than the recharge rate. The flow rate triggered by the Pennwood Dairy Inc expansion may simply be unable to keep up with well water demand. This will only get worse with such a large demand shock an operation like this will impose since increasing the Pennwood Dairy milking herd by such a large quantity will introduce a very large drawdown cone affecting the region's wells negatively. Wells may go dry, forcing homeowners to re-drill a deeper well. Will this expansion place residents in the same predicament as New Bothwell residents currently find themselves in?

GROUND & SURFACE WATER CONTAMINATION:

We object because of ground water concerns. A mined quarry is within several hundred feet of Pennwood Dairy. Ground water is readily vulnerable to contamination via the mined quarry and represents a callous disregard for the environmental risk factors. Having so many animals this close to the unprotected gravel pits makes the aquifer vulnerable to a possible contamination plume in the aquifer. See below the gravel pit locations as well as the carbonate aquifer groundwater flow.



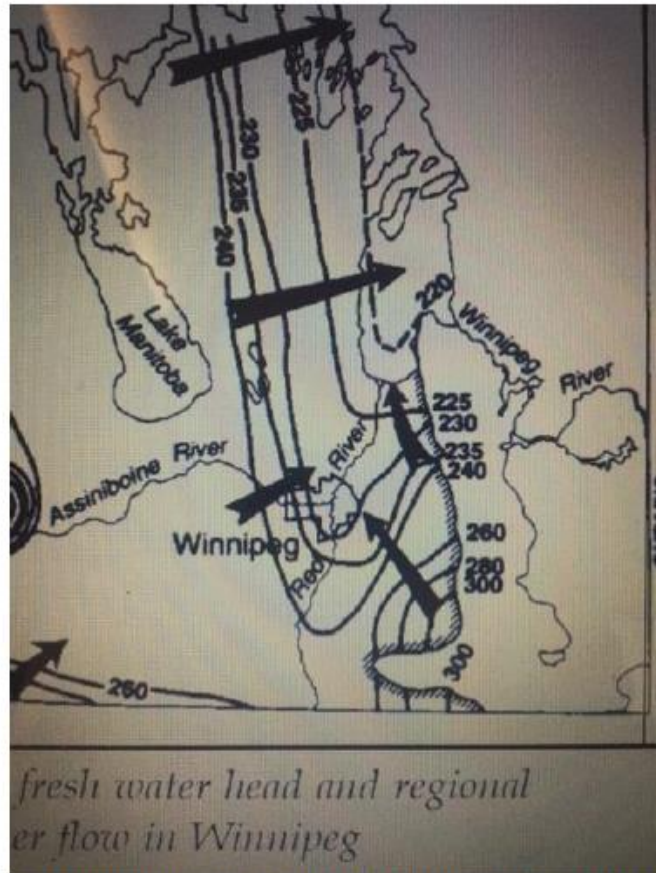


Figure 8. GROUNDWATER IN MANITOBA: HYDROGEOLOGY, QUALITY CONCERNS, MANAGEMENT NHRI Contribution No. CS-93017 March, 1995
This image depicts the flow of ground water in the carbonate aquifer indicated in previous image above.

Having observation wells would not prevent the ground water from becoming contaminated. Instead, it would alert observers that contamination had taken place. In the event of ground water contamination which takes many years to reverse; it also would expose populations especially to the north west of Pennwood Dairy to health risks eg, Blumenort, Greenland and Landmark since the ground water flows in the Winnipeg formation aquifer. Do we need to remind ourselves of the fatal water contamination at Walkerton, ON? Mitigating measures such as a lined lagoon reduces the risk but does not remove the risk entirely. The risk factor remains. And since Pennwood Dairy Inc is already violating the lagoon size by having a quota for 1200 cows, it doesn't bode well going forward for the ground water. In addition, the Rumardale and Benner Holsteins ILOs are already in the area.

PENNWOOD DAIRY OPTIONS:

Since the *Land Use Planning for Agriculture* publication indicates that directing “livestock operations away from developed areas” is a priority and since Pennwood Dairy plans to build an additional barn as well as install another lagoon, their needs would better be served to locate the expansion on other land the dairy owns such as at 28-7-7e where there are less people and doesn't deny future development for the RM in the area, it would decrease the risk of ground water contamination. (Is the ILO going to take the 'extra' 400 cows he owns to the new site?)

A dairy the size of the planned expansion not including wages has a potential profit of ~ 2.7 million a year plus (the approximate tax revenue of all of the RM of Ste. Anne [~ profit margin 25 %: cow production 8500 L/YR @ ~ .75 L X 1705 cow]).

Such a lucrative revenue for a dairy the size of Pennwood Dairy Inc indicates that the dairy has the resources to locate the additional barn and lagoon required for further expansion at another location eg 28-7-7e whereas the RM of Ste. Anne has few other options to increase its tax base. The recent Dairy Farm Investment Program announced by the federal government in August, 2018 is available should Pennwood Dairy decide to pursue more environmentally friendly options for manure disposal such as Henry Holdtman a dairy farmer has done in Rosser, MB by accessing *Growing Forward 2 funding*. Pennwood Dairy might consider making dung pellets as a way of manure disposal, should the dairy agree to locate the additional barn and lagoon at another site. A satellite lagoon might also be considered north of the current ILO site where manure could be piped to.

'Share your views' BULLETIN:

The bulletin is written in technical language that is not easily understood by the average resident or how the proposed expansion affects them.

- the report has come during an election period when residents are discussing the election etc & unable to coordinate a collective response.
- the report gives only a short notice to ratepayers to try to gather information about how such a huge expansion will impact them.
- The distance to urban sites is misleading, eg distance to the 'Clearspring community'? The referenced location is the commercial district of the City of Steinbach.
- Neither the report or the bulletin explains how the proposed dairy expansion will impact rural residents, eg, that the setbacks will mean there will be no further residential development in the area, quality of life, impact on non-agricultural values, heavy road traffic with trucks that will cause worsening roads.
- The proposed expansion negates further residential development in an area that has the potential to be a large tax revenue source for the entire municipality; and therefore, the bulletin should have been distributed to all RM residents.

WE RECOMMEND:

That this application be denied. If the expansion were to be considered for the 28-7-7 e site or another site where Pennwood Dairy Inc owns land, we request that prior to approval or consideration that a comprehensive independent study be undertaken eg., such as by the Canada West Foundation that would address potential municipal tax base destruction in the setback area, surface and ground water contamination, ground water depletion, traffic flows, nuisance issues, impact on residential and non-agricultural property values and quality of life of rural residents.



Shirley Hiebert

President, Tilstone Prairie Inc



Don Hiebert BSc Eng. (Geological)

Director, Tilstone Prairie Inc.

Dated October 26, 2018

Appendix E

Pennwood Dairy's Response to Public Comments

Penwood Dairies Response to Comments posted during Public Review

Penwood Dairy would like to take the time to address the concerns raised by the eleven area residents addressing the proposed dairy farm expansion. We appreciate the time our neighbours have taken to voice their concerns and we respect all opinions. The comments submitted share common themes and the following is a response to the major concerns expressed during the public review.

1. MANURE APPLICATION AND STORAGE

Penwood Dairy currently utilizes an earthen manure storage (EMS) to store the liquid manure produced on our farm until used as fertilizer on our agricultural land. We are working with DGH Engineering on a plan to expand/modify our current EMS in order to handle the increase in manure from our proposed expansion. EMS systems are regulated and routinely audited by the Province of Manitoba in order to ensure that manure stays within the lagoon and does not contaminate ground and surface water. Construction / modification will require that our engineering firm submit detailed drawings for approval by the Province.

Penwood Dairy uses a licensed custom manure applicator to inject our liquid manure in the spring and fall. This process normally takes around 5 days to complete. For solids, the manure that is produced on our farm is hauled out and stored on the field designated for spreading that year. Since 2001, all fields utilized for manure spreading have been filed in a Manure Management Plan and approved by Manitoba Sustainable Development prior to manure application. Penwood Dairy conducts annual manure analysis and soil testing to determine crop nutrient requirements and monitor soil residual nitrates and phosphates to ensure these are well below the regulatory limits.

The comment that manure spread is a “waste disposal” operation is misleading and totally incorrect. Manure is a valuable natural fertilizer for crops grown on affected lands. It should be noted it replaces commercial chemical fertilizer that is used on fields not utilizing manure.

In a reference to a spill that happened in 2017, we cleaned up the spill as soon as conditions allowed to the satisfaction of the RM of Ste Anne. Also, we made the decision to no longer work with that custom manure applicator as they were not adhering to spreading setbacks and proper guidelines for spreading manure. We have always encouraged our neighbours to notify us about any manure spills, so we can work to ensure manure stays on our fields and does not enter any waterways. Manure is a valuable resource and helps our farm be sustainable by cycling nutrients and not having to import conventional phosphorus fertilizer. We do not want to see any of these nutrients applied for crop production leave our fields.

As well, Penwood Dairies has undertaken to coordinate spreading operations with other neighbouring farmers so that, as much as possible, pipelines minimize the use of and crossing of government road allowances.

According to the land calculator provided by MB Agriculture for our site assessment, Pennwood Dairy has enough land base to inject / spread all liquid and solid manure for the proposed expansion.

Lastly, and most importantly, we encourage our neighbours to contact Sustainable Development of the Province of Manitoba or contact the farm directly to address any concerns they may have.

2. WATER USAGE AND QUALITY

Surface and groundwater protection are provided through environmental regulations and monitoring done by the Province of Manitoba through, for example, monitoring wells adjacent to the earthen manure storage structure. Provincial regulation also strictly prohibits the application of manure near drinking wells, drains and aquifer recharge areas. In terms of water usage, Pennwood Dairy currently has a Water Rights License that is regulated by MB Sustainable Development. Working with the province, we want to ensure that water supplies will not be impacted by the proposed expansion. Clean, abundant and safe drinking water is not only important for our community but essential to the health of our herd.

3. COMMENT ON THE NUMBER OF LIVESTOCK IN THE EXISTING OPERATION

There were two comments made on the number of cows currently being milked at Pennwood Dairy. Our facility currently has two 400-head milking barns, allowing us to milk 800 cows per day. The average dairy farm in Manitoba currently gets 1.2 kg of milkfat / day. Effective management and the use of advanced technology and efficiencies allows our dairy operation to produce an average of 1.45 kg / day which is in line with the noted quota from the Milk Board.

4. ROADS AND TRUCK TRAFFIC

There are two components to issues relating to roads: safety and damage. With respect to the safety aspect, truck drivers for Pennwood Dairies are older and licensed, and have been advised to maintain a maximum speed of 60 kph, stop at all stop signs and exercise caution at uncontrolled intersections. To further address this issue as part of the proposed expansion, additional coordination with drivers is needed which will be met by numerous modes, including additional seminars for drivers and firm instruction as to routes to use that would avoid, as much as possible, conflict with other traffic and land uses in the area. Additionally, and most importantly, we encourage that Pennwood Dairies be contacted directly and promptly should issues arise so that specific situations can be addressed with affected drivers.

Traffic on roads comprise basically three components: commercial trucks and service vehicles supplying the daily needs of the operation, including feed; truck hauling operations by the dairy for daily requirements, including solid manure and silage

The statement by one of the comments, suggesting that residential development contributes positively to the development of a municipality has not, in our opinion, been shown to be the case. In all instances, municipalities with large residential components of development experience financial issues, leading to increasing property taxes (municipal and school) for residences. We are not aware of any situations where large scale rural residential development in a municipality has resulted in reductions in taxes.

7. CORRECTION TO SEPARATION DISTANCES

The following table corrects separation distances as they apply to the proposed expansion:

To the following land use features	Minimum separation distance required in the R.M. of Ste. Anne Zoning Bylaw or Provincial Planning Regulation (if applicable) for		If land use feature is less than the minimum separation distance required in the Zoning Bylaw or Provincial Planning Regulation	
	Earthen Manure Storage	Animal Confinement Facility	Provide Actual Distance	Provide location or name of feature
Residence / dwelling	2625 ft.	1312 ft.	804 ft. – EMS 444 ft.- existing ACF	dwelling in pt. SW 17-7-7E
Designated area (non-agricultural)	10499 ft.	6988 ft.	9100 ft. - EMS 8129 ft. - ACF	Rural Residential Area in SW 5-7-7E
Livestock operation	N / A	N / A	N / A	N / A
Other significant features / land uses	N / A	N / A	N / A	N / A

“EMS” – stands for earthen manure storage

“ACF” – stands for animal confinement facility

Pennwood Dairies will undertake to apply for variance orders to address any shortcomings related to Zoning Bylaw requirements.