Site Assessment

For Large Livestock Operation Proposals

(300 Animal Units or more) whenever a municipal conditional use approval is required

1.0 Purpose

The establishment or expansion of a livestock operation that has 300 Animal Units or more and requires a municipal conditional use approval is subject to Part 7 of The Planning Act. This includes a review by the provincial Livestock Technical Review Committee (TRC). The Technical Review Committee Regulation requires a site assessment be undertaken by the proponent to help the committee complete its review and allow the public to comment on the proposal.

2.0 Assistance

Municipal tax roll number(s):

111000.000, 111100.000, 111200.000, 111300.000

For assistance in completing this Site Assessment form, the following resources are available:

- Site Assessment Footnotes
- Site Assessment Supporting Documents
- The <u>Land Use and Development Web Application</u> for Municipal Tax Roll Numbers, development plans and zoning by-law information.
- <u>Manitoba Agriculture and Resource Development Contacts</u> for assistance with animal unit calculations, manure application field acreage calculations, agriculture capability and Manitoba Agricultural Services Corporation yields.
- <u>Manitoba Conservation and Climate Contacts</u> for information on environmental regulatory requirements.
- Livestock Technical Review Co-ordination Unit for additional help.

3.0 Description of Livestock Operation

Legal name of operation: Rosevalley Hogs	
Name of municipality:	
Dufferin	
Legal description: quarter, section, township, range, meridian or river l	ot(s):
22-6-6W	



1. Location Map attached. 4.0 Nature of the Project² Indicate if the proposal is for a new or expanding livestock operation: New operation Expansion of existing operation If the operation is expanding, indicate when the operation was established: State operation's original name if different from current: Describe what is being proposed: It is proposed to expand pig production from 800 to 1400 sows: farrow-to-finish and poultry production (from existing 5,000 pullets and 10,000 layers to 10,000 pullets and 20,000 layers, respectively) in conjunction with the existing 5 dairy cows. State if any existing buildings will be replaced or demolished. If existing buildings will be reused or expanded, state how they will be reused or expanded. (Note: Certain proposals involving the replacement or alteration of existing animal housing may be exempted from conditional use approvals and provincial technical reviews. To determine if you may be eligible, refer to the Frequently Asked Questions document and contact your municipal office. The existing hog, poultry and cow barns will continue to house the animals and new buildings will be constructed to accommodate hog and poultry expansions.

Prepare a Location Map of the project site. (see Location Map Example¹).

5.0 Current and Proposed Type and Size of Operation³

Using the <u>Animal Units Calculator</u> insert the total number of animals for each animal category associated with the <u>current</u> and <u>proposed</u> operation.

2. Animal Units Calculator attached.

6.0 Animal Confinement

Based on the nature of the proposed project, indicate each type of animal confinement facility or confined livestock area to be found on site (post construction). Note animal category of each facility or area and its size and check off the type of project it is.

Table 6-1: Animal Confinement

T	ype of structure			Type of p	roject	
Animal	confinement facility⁴	Structure size (square footage)	New construction	Replacement	Alteration	Use existing as is
Barn	Animal category					
(1)	Finisher barn	Phase 1: 16,100 sq. ft Phase 2: 35,420 sq. ft	✓			
(2)	Nursery/finisher barn	48,666.8 sq.ft	,			✓
(3)	Pullet barn	6,000 sq.ft				1
(4)	Cow barn	6,000 sq.ft				✓
(5)	Gestation barn	13,800 sq.ft				✓
(6)	Farrowing barn	3,900+7,500 sq.ft				✓
(7)	Layer barn	8,000 sq.ft				1
(8)	Gestation barn	24,325 sq.ft	1			
(9)	Farrow barn	18,216 sq.ft	✓			
(10)	Nursery barn	4,900 sq.ft	✓			
Confined livestock area ⁵						
Feedlot						
Paddock					25	
Corral						
Exercise yard						
Holding area						

6.1 Project Site Plan

Prepare a Project Site Plan. Show all existing and proposed buildings, additions to existing buildings and any existing or proposed confined livestock areas as well as separation distances. See the Project Site Plan Example and Guide for assistance.6

3. Project Site Plan attached.

6.2 Project Sites Unsuitable for Development ⁷
Will the proposed confined livestock area and/or manure storage facility be located within Nutrient Management Zone N48 or any Nutrient Buffer Zone?9
☐ Yes ☑ No
7.0 Water Source
Indicate the type of water source for the operation (check all that apply):
☐ Pipeline (public)/water cooperative
Proposed well – location:
Existing well – location:
Surface water – source and location: order 5 drain (tributary of La Salle River)
Other, describe:
Will livestock have direct access to surface water (not including dugouts)?
☐ Yes ☑ No
If yes, identify the name of the surface water feature(s):

7.1 Water Requirements¹⁰

Estimate the total water use for your project using the appropriate water requirement calculator listed below:

- For non-dairy operations, use the <u>Water Requirement Calculator</u>.
- For commercial dairy operations, use the <u>Dairy Barn Water Requirement Calculator</u>.

Maximum daily water use:	58,045		
,	☑ Imperial gallons	☐ Litres	
Maximum annual water use:	21,186,352		
	☑ Imperial gallons	☐ Cubic decameters	
4a. Water Requirement	Calculator attached.		
☐ 4b. Dairy Barn Water Re	guirement Calculator attached.		

8.0 Siting and Land Use Planning Considerations¹¹

8.1 Development Plan¹²

Using the <u>Land Use and Development Web Application</u> or the municipality's development plan, provide the following information:

Table 8-1: Development Plan

Name of planning district (if applicable)	Carman-Dufferin Planning District (Dufferin); MSTW Planning District (Thompson)
Name of municipality	Dufferin; Thompson
Development plan by-law number	03/2014 (Dufferin); 1-2014 (Thompson).
Land use designation of project site	General & Restricted Agriculture Policy Areas (Dufferin); Agriculture Policy Area (Thompson).

8.2 Zoning By-law¹³

Using the <u>Land Use and Development Web Application</u> and the municipality's zoning by-law, provide the following information:

Table 8-2: Zoning By-law

	04/2014 ite:Agricultural Restricted Zone site requirements as per zoning by	y-law:
	Proposed project site dimensions	Zoning by-law project site requirements
Minimum site area	640 acres (4 parcel of 160 acres)	80 acres
Minimum site width	5,280 ft	660 ft
Minimum front yard	796 ft	125 ft
Minimum side and rear yard	691 ft (side yard) & 1,790 ft (rear yard)	25 ft

8.3 Separation Distances (zoning by-law)¹⁴

Using the proposed size of the operation (see <u>Animal Units Calculator</u>) and the type of animal housing and manure storage facility, complete the following table.

Table 8-3: Separation Distances

	distance require by-law to the f land use feature	num separation ed in the zoning following listed es (if applicable). priate box(es):	minimum sepa	feature is <u>less than</u> the ration distance required in law complete this section:
5	☑ Earthen manure storage facility	☑ Animal confinement facility	Provide actual distance	Provide location or name of feature (e.g., Red River)
	or	or	j=	
	☐ Feedlot	☑ Non-earthen manure storage facility		
Residence/dwelling	4,594 ft	2,296 ft	3,650 ft	Residence on SE 23-6-6W from EMS
Designated area (non-agricultural)	9,186 ft	6,135 ft	7,920 ft	Graysville Village Center from EMS

If any separation distance is less than the zoning by-law minimum, a variance order will be required from the municipality.

8.4 Land Use Map

Indicate the following on a Land Use Map (see Land Use Map Example):

- a) Location of the project site.
- b) Land uses and significant features including dwellings (not related to the proposal) within a three-kilometre radius of the project site.
- 5. Land Use Map attached.

9.0 Abandoned Wells¹⁵

Are there any known unsealed abandoned wells on the project site or spread fields?

☐ Yes ☑ No

If yes, identify the location(s) on the Project Site Plan or on the Spread Field Maps as applicable.

10.0 Manure Production/Storage and Mortalities (Dead Animal) Disposal¹⁶

10.1 Manure Type

What type(s) of manui	e will be	generated?
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☑ Solid ☐

☐ Semi-solid

Liquid

10.2 Manure Storage Type and Construction

Indicate if the operation is planning to construct, modify or expand a manure storage facility, ¹⁷ or use an existing manure storage facility:

	Construct
--	-----------

Expand

Modify

■ Use existing

☐ Not applicable

What type of manure storage will be used by the operation? Check all that are applicable:

☑ Concrete tank

☐ Steel tank

Earthen manure storage facility

☐ Permanent solid manure storage facility

☐ Molehill manure storage facility

☐ Under-barn concrete manure storage facility (30-day capacity or greater)

Permanent manure composting facility

Field storage

10.3 Mortalities (Dead Animal) Disposal¹⁸

Ind	licate the type of mortalities disposal:	
V	Rendering	
4	Composting	
	Incineration (in approved incinerator only)	
	Other (describe):	
Do	es the proposal include a permanent site for composting mortalities that will use manure? ¹⁹	
Ø	Yes 🗖 No	
If ye	es, identify the location(s) on the Project Site Plan.	

10.4 Proposed Setback Distances from Water and Property Lines

Use the following table to indicate the proposed setback distances from water and property lines. Provide the name of the feature.

Table 10-4: Setback Distances from Water and Property Lines

			_	
Feature	Structures	Minimum setback distance (m) ²⁰	Proposed setback distance (m)	Provide location or name of feature (e.g., Red River)
	Manure storage facility	100 m	107 (tank), 229 (EMS)	Order 1 drain west of tank & EMS
	Field storage	100 m	>100	No specific
Surface watercourses,	Manure composting site	100 m	N/A	N/A
sinkholes, spring or well	Confined livestock area	100 m	N/A	N/A
	Mortalities disposal site	100 m	N/A	N/A
	Mortalities composting site	100 m	56	Order 1 drain
ir.	Manure storage facility	100 m	270 (tank); 100 (EMS)	East property line
	Manure composting site	100 m	N/A	N/A
Property line	Confined livestock area	100 m	N/A	N/A
	Mortalities composting site	100 m	325	East property line

	ım setback distance
10.5 Building in Flood Areas ²¹	
Using the links below, determine if any proposed structure will be in a Designated F	lood Area.
Upper Red River Valley Designated Flood Area	
Lower Red River Designated Flood Area	
Are any of the proposed structures in a Designated Flood Area?	
☐ Yes ☑ No	
11.0 Odour Control Measures (project site) Indicate which odour control measures are planned. Manure storage cover:	
☐ Yes ☑ No ☐ Not applicable	
• •	
If yes, type of cover:	
If yes, type of cover: Shelterbelt planting:	
If yes, type of cover: Shelterbelt planting: Yes No Z Existing shelterbelt	
If yes, type of cover: Shelterbelt planting: Yes No Existing shelterbelt	
If yes, type of cover: Shelterbelt planting: Yes No Z Existing shelterbelt	
If yes, type of cover: Shelterbelt planting: Yes No Z Existing shelterbelt	
If yes, type of cover: Shelterbelt planting: Yes No Z Existing shelterbelt	
If yes, type of cover: Shelterbelt planting: Yes No Z Existing shelterbelt	
If yes, type of cover: Shelterbelt planting:	

12.0 Land Available for Manure Application²²

☑ 10. Soil test reports for the land available for manure application attached.

12.1 Land Calculation

Fill out and attach the <u>Manitoba Land Calculator²³ to determine the minimum number of acres for the</u> manure nutrients.
From the calculator, indicate:
Acres for Nitrogen uptake: ²⁴ _2,986
Acres for Phosphorus removal: ²⁴ 2,727
6. Copies of long-term Manitoba Agricultural Services Corporation (MASC) yields ²⁵ attached.
7. Manitoba Land Calculator attached.
Contact Manitoba Agriculture and Resource Development at 204-918-0325 in Winnipeg if assistance is required.
12.2 Long-Term Environmental Sustainability From the land calculator, indicate acres for Phosphorus balance: ²⁶ 5,453
 ✓ I acknowledge that the amount of acres indicated in the Manitoba Land Calculator up to 5,453 acres may be required for Phosphorus balance (one times crop P₂O₅ removal) and the ong-term environmental sustainability of the operation. 12.3 Characteristics of Manure Application Fields²7
Fill out and attach the Manure Application Field Characteristics Table.
Provide Spread Field Maps of land available for manure application along with their agricultural capability see Spread Field Map Example).
For all land available for manure application, attach copies of soil test reports that are no more than 36 months old and that demonstrate that soil phosphorus levels are below 60 ppm Olsen P in the top six inches (15 centimeters) of soil.
Have the regulatory setbacks ²⁸ and all water features been observed and excluded from land base calculations for this operation?
☑ Yes ☐ No
☑ Yes ☐ No
2 8. Manure Application Field Characteristics Table attached.

13	3.0 Manure Transportation and Application Equipment								
Wil	l a commercial manure applicator be used? ²⁹								
☑	Yes 🗖 No								
lde	ntify the proposed transportation method:								
v	Dragline								
	Solid spreader								
	Other:								
Ido	ntify the proposed application method (check all that apply):								
_	Full/true injection								
	Partial injection (Aerway or Coulter)								
ш	Low-level broadcast application								
	High-level broadcast application								
	Immediate incorporation								
	Incorporate within 48 hours								
	No incorporation – provide reason:								
13.	.1 Season of Application								
lde	ntify the proposed timing of application (check all that apply):								
V	Spring								
	Summer (e.g., to a growing crop)								
☑	Fall								
13.	.2 Manure Application on Lands Subject to Frequent Flooding or Inundation ³⁰								
Are	any of the lands available for manure application located in the <u>Red River Valley Special Management</u> a or another area that is subject to flooding on an average basis at least once every five years?								

☐ Yes ☐ No

14.0 Projected Truck Haul Routes and Access Points³¹

Complete the following table.

Table 14-1: Truck Haul Routes and Access Points

	Estimated average number of times per day accessing		Access from PTH/PR onto site will mainly require a left or right hand turn (please check one)				Access onto PTH/PR from site will mainly require a left or right hand turn (please check one)			
Vehicle type	Provincial Trunk Highway (PTH)	Provincial Road (PR)	Provincial Trunk Highway (PTH)		Provincial Road (PR)		Provincial Trunk Highway (PTH)		Provincial Road (PR)	
	((((((((((((((((((((LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT
Truck		2			ű	√			√	
Tractor trailer				J						
Other, specify		4			✓					✓

Identify on a map the roads and access points that will be used for the proposed operation (see <u>Truck Haul Routes and Access Points Map Example</u>).

☑ 11. Truck Haul Routes and Access Points Map attached.

15.0 Conservation Data Centre Report

(only required for new project sites and non-agricultural land being converted to cropland)

A Conservation Data Centre report must be requested and the response attached to this Site Assessment. The request may be submitted electronically to: https://gov.mb.ca/sd/environment_and_biodiversity/cdc/index.html.

☑ 12. Conservation Data Centre Report attached.

Were rare species identified in the Conservation Data Centre Report?

☑ Yes ☐ No

16.0 Supporting Documents Checklist

Check off the supporting documents attached to this submission.

- ✓ 1. Location Map
- 2. Animal Units Calculator
- ☑ 3. Project Site Plan
- 4a. Water Requirement Calculator
- 4b. Dairy Barn Water Requirement Calculator
- ✓ 5. Land Use Map
- 6. Copies of long-term Manitoba Agricultural Services Corporation (MASC) yields
- 7. Manitoba Land Calculator
- **2** 8. Manure Application Field Characteristics Table
- 9. Spread Field Map (showing agricultural capability and field boundaries)
- ☑ 10. Soil test reports for the land available for manure application (no more than 36 months old)
- 11. Truck Haul Routes and Access Point Map
- 12. Conservation Data Centre Report (only for new project sites and non-agricultural land being converted to cropland)
- ☑ 13. Contact information and privacy publication notice (attach separately)
- ☑ 14. Conditional Use Application
- 15. Other, specify: A strategy to avoid damaging/destroying the habitat or existence of Bobolink on the site

17.0 Additional Information

Include any additional information you deem helpful for the Technical Review Committee to review your proposal.

It is proposed to expand pig production from 800 to 1400 sows: farrow-to-finish and poultry production (from existing 5,000 pullets and 10,000 layers to 10,000 pullets and 20,000 layers, respectively) in conjunction with the existing 5 dairy cows. Additional barns and a manure storage facility to accommodate the expansion of livestock inventory will be constructed in different phases: the first and immediate phase is construction of a new barn to accommodate 1,200 grower/finisher pigs which are currently housed off-site in a rented barn. However, additional barns and an earthen manure storage facility will be constructed on a long-term plan to facilitate the additional sows: farrow-to-finish. The existing concrete tank is capable of storing manure production from 1100 sows: f-f, 10,000 pullets and 5 dairy cows for 254 days eliminating the need for winter application of manure. Solid manure from layers will be field stored. As the proposed earthen manure storage is situated closer to the nearest residences located on NW 23-6-6W and SE 23-6-6W and Graysville village center than the minimum separation distances required by the zoning bylaw, application is to be submitted to the RM for variation order. The proposed EMS location has been selected to be in close proximity to the existing manure tank and the existing infrastructure (access road) to transport the manure. Minimum setback distances to surface water courses will be adhered to. Sufficient land base has been identified in the RMs of Dufferin and Thompson for utilization of the manure nutrients to ensure long-term environmental sustainability. Filing of an annual manure management plan will ensure monitoring of the sustainability. The existing water rights licence will be expanded to facilitate the increase in the livestock population.

18.0 Declaration

	I do hereby verify that the information contained in the Site Assessment, and all required supporting documents, are accurate and complete to my knowledge.						
Date:	2020/01/15						
	(YYYY/MMM/DD)						
Name:	Peter Grieger (print clearly)						
Signature:	/t A						