

Laingspring Farm Ltd.

Notes to Site Assessment for additional Animal Units

1. RM of Hanover Conditional Use Application
2. Page 2, proposed size of Operation
3. Page 6, adjustment of liquid volume of manure produced. From 1,569,960 imp gals to 1,839,600 Imp Gals
4. Manure Storage Facility Dimension Tables. Reflecting the increased volume of manure produced. Storage days changes from 581 to 496.
5. Page 9, Total area suitable for manure application changes from 623 acres to 703 acres with the addition of SW 18-7-7
6. Page 10, Minimum area required for manure application changes from 578 acres to 674 acres.
7. Supporting Documents, Land Base Calculator, Manure Application Field Characteristics Table, recent soil test for SW 18-7-7
8. Page 13, Separation distances reflecting operation over 400 A.U.

**SITE ASSESSMENT: Contact Information and
Privacy and Publication Notice**

For Large Livestock Operation Proposals (300 or more Animal Units)

Operator Contact Information

Name of Operation: _____
Corporation Name (if applicable): LAINGSRING FARM LTD.
 Contact Name: RAY LAING.
Mailing Address: Box 494
City/Town: STENBACH Province: MB Postal Code: R5G 1M3
Phone No: 204-346-3286 Fax No: _____ E-mail: LAINGSRING@GMAIL.COM

Design Consultant/Advisor Contact Information

Company Name: _____
 Contact Person: _____
Mailing Address: _____
City/Town: _____ Province: _____ Postal Code: _____
Phone #: _____ Fax #: _____ E-mail: _____

√ Please indicate the primary project contact above

Privacy and Publication Notice

Why the information is being collected ("purposes")

The Technical Review Committee ("TRC") requires the information (including any personal information) contained in this form, in your Site Assessment and in your Supporting Documents in order to review your submission and to prepare its report.

Our legal authority to collect the information

The authority to collect this information is found in *The Planning Act*, the *Technical Review Committee Regulation* and *The Freedom of Information and Protection of Privacy Act*.

Information collected will not be used or disclosed for other purposes unless you consent or we are authorized to do so by *The Planning Act*, the *Technical Review Committee Regulation* or *The Freedom of Information and Protection of Privacy Act*.

What information will be published and where it will be published

As required by subsection 5(1) of the *Technical Review Committee Regulation* in order to enable public comment on your application, your complete Site Assessment and Supporting Documents (Location Map, Animal Unit Calculation Table, Water Requirement Calculation Table, Manure Storage Calculation Table, Existing and Proposed Manure Storage Facility Dimension Tables (if applicable), Manure Application Field Characteristics Table, application field soil sample results, Land Base Calculator, Project Site Plan, Land Use & Spread Field Map, Truck Haul Routes and Access Points Map):

- will be posted on a public website; and
- sent to the applicable planning district office or municipal office where any interested member of the public may view it.

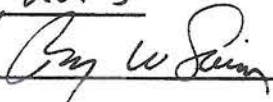
Please note: This "Site Assessment: Contact Information and Privacy and Publication Notice" form will not be posted or sent to the applicable planning district or municipality.

If you have questions about the collection, use, disclosure or publication of the information please contact the Technical Review Coordination Unit at Manitoba Local Government, phone number: (204) 945-8353.

Verification of Accuracy of Information

I do hereby verify that the information contained in the attached Site Assessment and Supporting Documents is accurate and complete to my knowledge.

Date: Feb 5, 2013

Signature: 

For Office Use Only

Date of Receipt of completed Site Assessment including all Supporting Documents:

Confirmation of Receipt Sent: _____

Please forward completed Site Assessment and Supporting Documents to:

Technical Review Coordination Unit
Room 604 – 800 Portage Avenue
Winnipeg MB R3G 0N4

SITE ASSESSMENT

For Large Livestock Operation Proposals (300 Animal Units or more)

Purpose

The set up, or expansion, of a livestock operation that has 300 Animal Units or more is subject to Part 7 of The Planning Act. This includes consideration as a conditional use by the municipal council or planning district board. It also includes a review by the Technical Review Committee (TRC) appointed by the Minister of Local Government. The Technical Review Committee Regulation requires a site assessment to help the committee do its review and allow people who will be affected by the livestock operation to comment on the proposal.

Description of Operation

Operation name: LAINGSPRING FARM LTD.

Operation location (project site):

Rural Municipality (RM) of HANOVER

Legal description: section, township, range or river lot(s)

NW 12 - 7 - 6 E

Municipal tax roll number(s) 00 84 500 . 000

Show the location of the operation (project site) on a location map. (See Location Map for example).

For help with mapping, contact your Community and Regional Planning Regional Office.

Location Map attached

For links to resources, click on the **highlighted underlined items**.

For definitions, click on the Glossary of Terms.

For additional help, contact the Technical Review Coordination Unit.

RURAL MUNICIPALITY OF HANOVER



No. 135

STENIMBACH, MANITOBA

Nov 17/20, 1920 1847

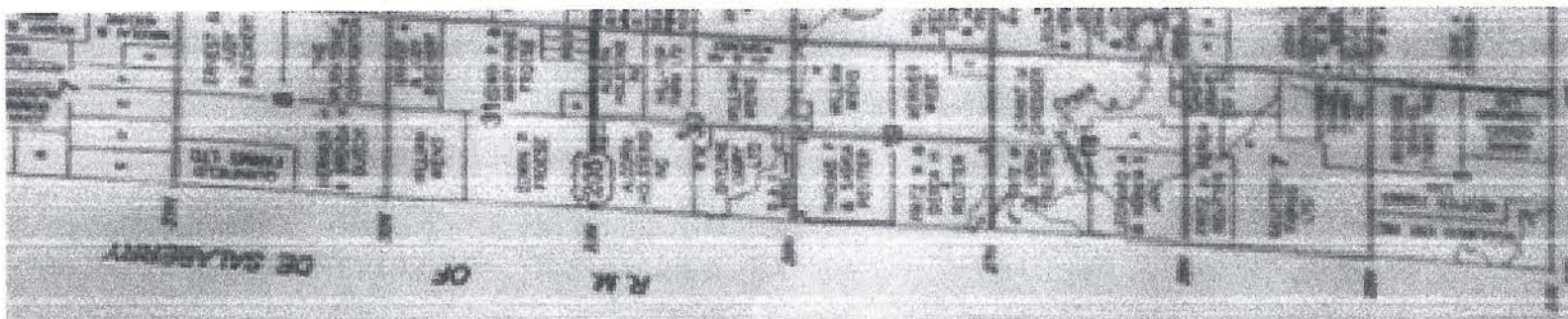
For 1250 2.00-4.00 For 1250 2.00-4.00

TWP. 6

DE SALABERRY

OF

R.M.



Nature of Project

- New operation
- Expansion of existing operation

State if any existing buildings will be replaced or demolished. If existing buildings will be reused, state how they will be reused.

EXISTING DAIRY BARN WILL BE CONVERTED
FOR YOUNG STOCK USE

Proposed Type and Size of Operation

State the proposed type and size of the operation. (See Animal Units Calculation Table.)

Type of operation (Column B from Animal Unit Calculation Table)	Existing number of animals (Column C from Animal Unit Calculation Table)	Total Animal Units (Column F from Animal Unit Calculation Table)
DAIRY	100 DAIRY COWS	420 PROPOSED
	200 ANIMAL UNITS	

- Animal Units Calculation Table attached

Animal Confinement Facilities

To ensure a confined livestock area can be built in a way that ensures the environment is protected, a permit is required for operations with 300 Animal Units or more. Permits are required by the Livestock Manure and Mortalities Management Regulation, under *The Environment Act* (MR 42/98).

Type of housing: barn outdoor seasonal feeding area feedlot

Show all existing and proposed buildings on the project site plan. See Project Site Plan example and the Project Site Plan Guide for help creating your site plan.

- Project Site Plan attached

LAINSPRING FARM LTD

NW 12-7-6E

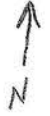


From GOOGLE MAPS



Municipal Rd 38 N

NW 12-7-6E
160 ACRES



CREEK

LANE

ABANDONED
WELL

EXISTING
WELL

ABOUSE

SHOP

47 METERS

EXISTING
STABLE

CATTLE
SHELTER

PROPOSED
BARN

FEDS LOT

PROPERTY LINE
570 METERS

PROPERTY LINE

DRAINAGE

82 m

35 METERS

83 m

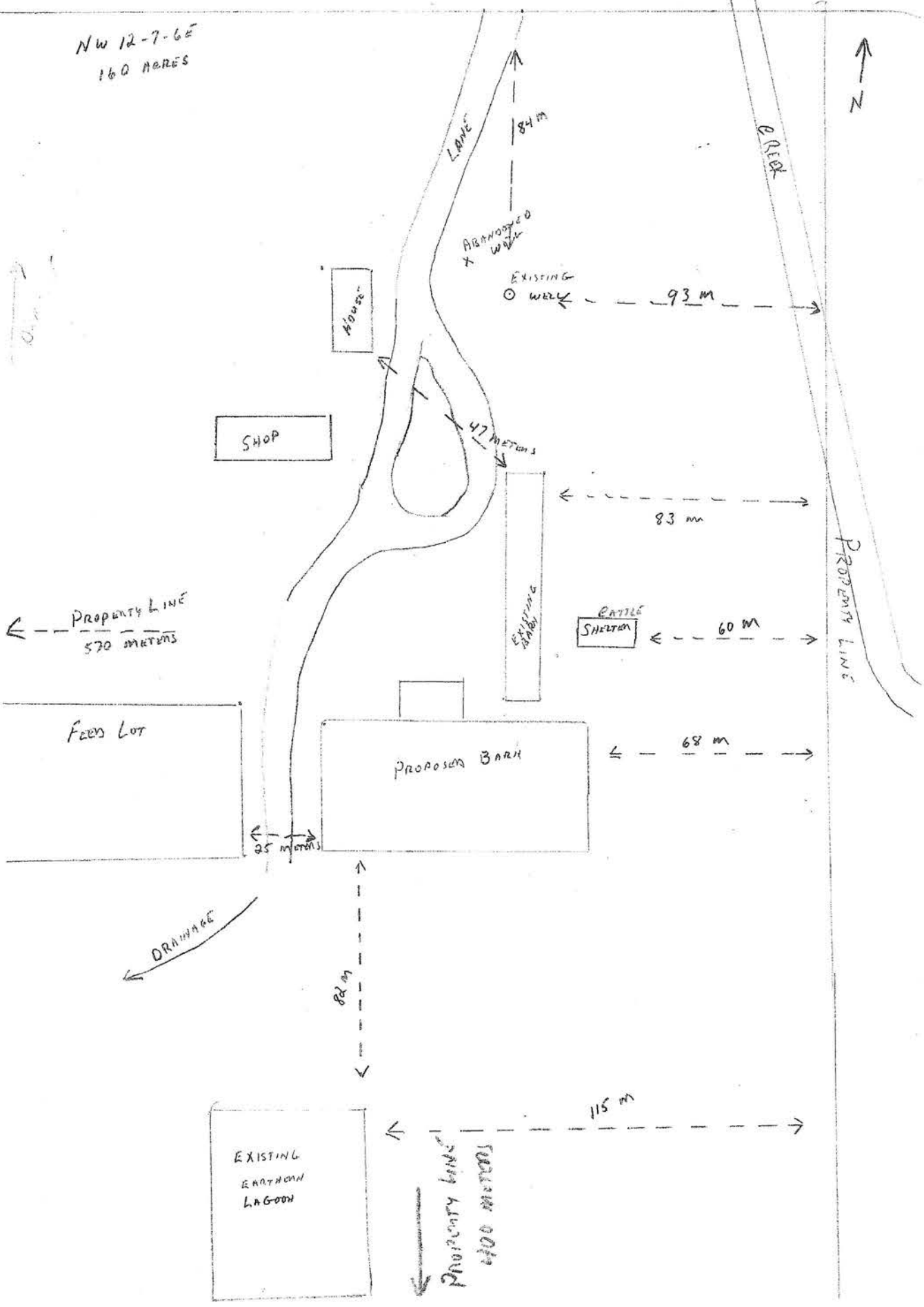
60 m

68 m

EXISTING
BATHING
LAGOON

PROPERTY LINE
400 METERS

115 m



Environmental Farm Planning

Environmental farm planning is a voluntary, confidential self-assessment process designed to help farm managers identify the environmental strengths and weaknesses of their operations.

Do you have an Environmental Farm Plan yes no

Water

Project Sites Unsuitable for Development

To protect water quality, the Nutrient Management Regulation (MR 62/2008), under *The Water Protection Act*, prohibits the set up or expansion of nutrient generating facilities in Nutrient Management Zone 4 (Agriculture Capability Class 6, 7 and unimproved organic soils) and Nutrient Buffer Zones. This includes barns, confined livestock areas and manure storage facilities

The Nutrient Buffer Zone is an area of land along water bodies (ex: rivers, lakes, streams, drains) that varies, depending on the waterway.

The proposed barn and/or manure storage facility:

is
is not

located within Nutrient Management Zone 4 (Class 6, 7 and unimproved organic soils) or any Nutrient Buffer Zone.

Determine the agriculture capability class (es) of the project site, and its limitations. (See Agri-Maps.)

Water Source

To be sustainable, a livestock operation must have access to a sufficient quantity and quality of water for livestock.

Water source for operation:

- pipeline (public) river
 lake
 dugout (dimensions : _____ x _____ x _____)
 proposed well existing well

If using an existing well, provide a copy of the water well log and logs for other wells on the property. Logs can be obtained from Manitoba Water Stewardship by calling 204-945-7418 in Winnipeg; 1-800-214-6497 toll free.

Statement of Completion

Manitoba Environmental Farm Plan

This Is To Recognize That

Laingspring Farm Ltd.

Has Successfully Completed The Environmental Farm Planning Process In The Province Of Manitoba

As Per The Approved Methodology For Manitoba.

Farm Stewardship Association of Manitoba Inc.



FSAM Review Committee Member

FSAM Facilitator

Date of Issue: May 29, 2006

EFPP Number: FMB 2006/07-1752

Driller's Report

Well Location	QTR SE SEC 14 TWP 7 RGE 6 E <input checked="" type="checkbox"/> W <input type="checkbox"/>	GPS Reading									
	R. Lot Parish	Lat. N° 49.55898									
	Remarks	Long W° 96.65500									
Well Owner	Name L'aingspring Farms	Location Sketch of Well									
	Address Box 494 Phone 346-3286										
	Steinbach R5G 1M3 Cell Phone										
Well Identification											
Well Use	Production <input checked="" type="checkbox"/> Test Well <input type="checkbox"/> Recharge <input type="checkbox"/> Observation <input type="checkbox"/>										
Water Use	Domestic <input type="checkbox"/> Livestock <input checked="" type="checkbox"/> Industrial <input type="checkbox"/> Irrigation <input type="checkbox"/> Air-condition <input type="checkbox"/> Other <input type="checkbox"/> Specify										
Date well completed	July 6, 2012										
Depth Below Ground in Feet	DESCRIPTION WELL LOG	Water Record									
0	15	Till									
15	30	Sand									
30	70	Till									
70	100	Sandy Till									
100	178	Limestone									
WELL CONSTRUCTION											
Depth Below Ground Level	Casing	Open Hole	Perforations	Gravel Pack	Casing Grout	Inside Diameter	Outside Diameter	Screen Slot size	TYPE	MATERIAL	MAKE
0	100	x				5	5½		Insert Glued	PVC	
100	178		x			4	4¼				
40	100				x				Grout	Cement	
Top of Casing 2 Feet above <input type="checkbox"/> Below <input type="checkbox"/>											
REMARKS:											
Well must be vented											
PUMPING TEST						CONTRACTOR					
Date of Test: July 6, 2012						License Number 592 12					
Pumping <input checked="" type="checkbox"/> Flowing <input type="checkbox"/> Rate 20 I.G.P.M.						Name Echo Drilling Ltd.					
Water level before pumping 7 Above <input type="checkbox"/> Below <input checked="" type="checkbox"/>						Address 307 PTH 12 N Steinbach, MB. R5G 1T8					
Pumping level at end of test 8 Above <input type="checkbox"/> Below <input checked="" type="checkbox"/>						Drill Operator Robert Parent					
Duration of test 1 HRS Minutes											
Recommended pumping rate 40 I.G.P.M.											
With pump intake at 50 Feet below ground level											

Source Water Analysis Reports

Annual, livestock, source water monitoring analysis reports must be submitted to Manitoba Conservation, for existing operations with operations of 300 Animal Units or more.

Have you submitted an annual, source water monitoring report for the current calendar year? yes no

Will livestock have direct access to surface water? yes no

If yes, identify:

Name of the water body _____

Steps that will be taken to prevent direct access of livestock to the water body.

Water Requirements

To protect the sustainability of water sources, all operations using more than 25,000 litres (5,499 imperial gallons) per day must have the Water Rights Licence required by the Water Rights Regulation (MR 126/87) under *The Water Rights Act*.

For more information, contact the Water Use Licensing Section at 204-945-3983 in Winnipeg; 1-800-214-6497 toll free.

Water Use

To calculate the total water use, go to the Water Requirement Calculation Table.

Maximum daily use: 8010 imperial gallons or litres
Maximum annual use: 2,923,650 acre-feet or cubic decameters

Water Requirement Calculation Table attached

Ground Water (Contamination Risk Protection)

Improper storage and handling of manure or mortalities increases the risk of contaminating groundwater. Beneficial management practices (BMP), mitigation measures and requirements for the permit process reduce this risk. Soil testing, manure management planning and proper engineering, along with construction and management of manure storage structures reduce the risk of contaminating groundwater.

Check the mitigation measures used for the existing components of the operation that may pose a risk of contamination. Also check any measures that may be used with the proposed components for this expansion, if applicable:



ANALYSIS REPORT
Water Samples

Customer Name:
LAINGSPRING FARM LTD.
BOX 494
STEINBACH, MB
R5G 1M3

Receive Date: 19/12/2012
Report Date: 20/12/2012

Sample ID: L060

Test method:

Coliform and E.coli by Colilert Quanti-tray Method, "Standard Methods for Examination of Water and Wastewater".
Results are reported as Most Probable Number in 100ml (MPN/100ml).
Maximum Acceptable Concentrations (MAC) for Coliform and E.coli are according to the "Guidelines for Canadian Drinking Water Quality Summary Table" http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/2012-sum_guide-res_recom/index-eng.php.

If you need information related to the water test results, please contact the Manitoba Water Stewardship Office of Drinking Water at 204-945-5762.

Test Results:

	Coliform reported in MPN/100ml (MAC: 0 MPN/100ml)	0
	E.coli reported in MPN/100ml (MAC: 0 MPN/100ml)	0

Issued by: Krystyna Jackowski Deputy Lab Manager

Horizon Lab Ltd.
36 Scurfield Blvd.
Winnipeg MB R3Y 1N9
T 204 488 2035
F 204 488 4772
www.horizonlab.ca

Water Use Licensing Section
Box 16, 200 Saulteaux Crescent
Winnipeg MB R3J 3W3

Telephone : 204-945-3983
Fax : 204-945-7419
Email: wateruse@gov.mb.ca

February 22, 2013

File: Laingspring Farm Ltd. -1

Laingspring Farm Ltd.
Box 494
Steinbach, MB R5G 1M3

Dear Sir or Madam:

This will acknowledge receipt of your application for a Water Rights licence to divert water from a groundwater well for agricultural purposes.

Your application has been placed on our list of submitted applications, which we attempt to process on a first come - first served basis. We regret any inconvenience that a delay in processing may cause.

The Water Use Licensing Section's contact person for your licence application is Lorraine Thibert. Ms. Thibert will contact you as soon as possible to discuss your proposed project. If you have further questions regarding your licence application, please contact Ms. Thibert at 204-945-6693.

Yours truly,



Christopher McCombe
Water Use Licensing

CC: L. Thibert

Application for Licence to Construct a Well and Divert Groundwater

Manitoba Water Stewardship
 Water Licensing Branch
 200 Saulteaux Crescent
 Winnipeg MB R3J 3W3



Pursuant to The Water Rights Act

APPLICANT'S NAME: LAING SPRING FARM LTD TELEPHONE: 204 346 3286

POST OFFICE ADDRESS: Box 494, STEINBACH, MB., R5G 1M3.

hereby applies for authority to construct a water well(s) on the following described land(s):

	<u>NW</u>	<u>12</u>	<u>7</u>	<u>6</u>	<u>E</u>
LSD	OR QUARTER	SECTION	TOWNSHIP	RANGE	E OR W

or otherwise described as _____

and divert groundwater for DOMESTIC, AGRICULTURE
(domestic, municipal, agricultural, industrial, irrigation, other)

purposes on the following described land:

	<u>NW</u>	<u>12</u>	<u>7</u>	<u>6</u>	<u>E</u>
LSD	OR QUARTER	SECTION	TOWNSHIP	RANGE	E OR W

or otherwise described as _____

at the following rates: _____ cubic metres per second
.03682 cubic decametres per day
13.439 cubic decametres per year

Number of hectares to be irrigated: — (if applicable)

The above described lands are held as follows: (check applicable box)

- as registered owner
- as lessee
- purchased under agreement for sale
- to be negotiated

Copy(s) of the certificate(s) of title or title number(s) must be included

TITLE # 1961641

Is this application for renewal or transfer of an existing licence? yes no Previous licence no. _____

Date: JAN 29 20 13 Ray W Spring
(signature of applicant / signature du demandeur)

FOR OFFICE USE ONLY

Application filed with the Executive Director, Infrastructure and Operations, at Winnipeg, Manitoba on _____, 20 _____

 (Signature of Executive Director)

**** IMPORTANT ****

FEE OF \$50.00 MUST ACCOMPANY THIS APPLICATION, CHEQUE AND APPLICATION TO BE MAILED TO:

**MANITOBA CONSERVATION
 CASHIER'S OFFICE
 BOX 42, 200 SAULTEAUX CRESCENT
 WINNIPEG MB R3J 3W3**

CHEQUES TO BE MADE PAYABLE TO MINISTER OF FINANCE

Water Requirement Calculation Table

Livestock	Number	IG/day per animal in summer	IG/day per animal in summer	IG/day
Beef/Dairy/Bison				
Feeder/heifer/steer (600 lb.)	200	5	9	1,800
Feeder (900 lb.)		7	12	-
Feeder (1250 lb.)		10	15	-
Cow/calf pair		12	15	-
Dry cow	30	10	12	360
Milking cow	195	25	30	5,850
Bison		8	10	-
Horses				
Horses		8	11	-
Hogs				
Sow (Farrow/wean)			6.5	-
Dry Sow/Boar			4	-
Feeder			3	-
Nursery (33 lb.)			2	-
Chickens				
Broilers			0.035	-
Roasters/Pullets			0.04	-
Layers			0.055	-
Breeders			0.07	-
Turkeys				
Turkey Growers			0.13	-
Turkey Heavies			0.16	-
Sheep/Goats				
Sheep/Goats			2	-
Ewes/Does			3	-
Lambs/Kids (90 lb.)			1.6	-
TOTAL				8,010
TOTAL				2,923,650

Enter this number on page 4 of the Site Assessment.

Enter this number on page 4 of the Site Assessment.

Notes:

(Imperial gallons per day – IG/day)

For beef, dairy, bison and horse enterprises:

Use summer numbers if appropriate for the operation. Otherwise base projections on winter values. Always use the greater of the two values.

Water Rights Licences are issued to a specific legal land description. Obtaining a Water Rights License or information as to the licensing requirements can be obtained through Manitoba Water Stewardship at (204) 945-3983 or 1-800-282-8069 Ext 3983.

Other consumption values:

Normal household consumption, 40-55 imperial Gallons per day per person
(180-250 l/day/person)
Hydrant flow, 10 imperial GPM (45 l/min)

Conversion Factor: 1271,470 Imperial Gallons = 1 acre-foot

	Exist	Proposed
Manure is stored in a storage facility built by permit or registered by Manitoba Conservation.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Storage includes leachate collection.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Earthen storage has between 400 and 500 days' storage.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Steel/concrete tank has between 250 and 500 days' storage.	<input type="checkbox"/>	<input type="checkbox"/>
Manure storage facility meets required setbacks.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Field storage (solid manure) locations are changed annually.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Field storage meets required setbacks.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All application fields are soil tested annually for nitrate-N and Olsen phosphorus.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
All manure is applied according to a manure management plan.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Licensed commercial manure applicator is used to apply manure.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Abandoned wells have been properly sealed.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Other:

Flooding

The Livestock Manure and Mortalities Management Regulation prohibits an operator from putting a manure storage facility within the boundaries of the 100-year flood plain elevation. Manure storage facilities that have protection for a flood-water level at least 0.6 meters higher than the 100-year flood water level are exempt.

The Designated Flood Area Regulation under *The Water Resources Administration Act* requires a Designated Flood Area Permit before a proposed structure (such as a barn) can be built within a Designated Flood Area.

The flood protection level for structures located within a Designated Flood Area is the 100-year flood elevation or an elevation set by Manitoba Water Stewardship. Contact the Forecasting and Flood Co-ordination Branch at 204-945-2121 in Winnipeg; 1-800-214-6497 toll free.

The proposed site:
is is not

located in a Designated Flood Area: Red River Valley Designated Flood Area or Lower Red River Designated Flood Area

Note: At the time a permit is issued, verification is needed to ensure any proposed barns are located within the 100-year flood plain elevation; or an elevation set by Manitoba Water Stewardship.

Watershed Management Planning

Integrated watershed management planning is a co-operative effort by local residents, stakeholders and governments to create a long term plan to manage water and land-based activities for watersheds.

What are the names of the watershed and sub-watershed where the livestock operation and the fields identified for manure application are located.

Name of watershed(s): SEINE RIVER

Name of sub-watershed(s): _____

Name of Integrated Watershed Management Plan for the proposed project site, if applicable: SEINE RIVER INTEGRATED WATERSHED MANAGEMENT PLAN

For more on Integrated Watershed Management Planning, call Watershed Planning and Programs at 204-945-7408 in Winnipeg; 1-800-214-6497 toll free.

Manure Related

The Livestock Manure and Mortalities Management Regulation sets requirements for the use, management and storage of livestock manure in agricultural operations, to ensure it is handled in an environmentally sound manner. For more on this, call Manitoba Conservation at 204-945-5168 in Winnipeg.

Improper storage, handling and/or land application of manure can contaminate water and/or cause unacceptable odours for neighbours. The following is used to assess the manure management system.

Manure Type

The type of manure generated and used by the operation influences storage, handling and land application options available.

What type(s) of manure will be generated?

solid semi-solid liquid

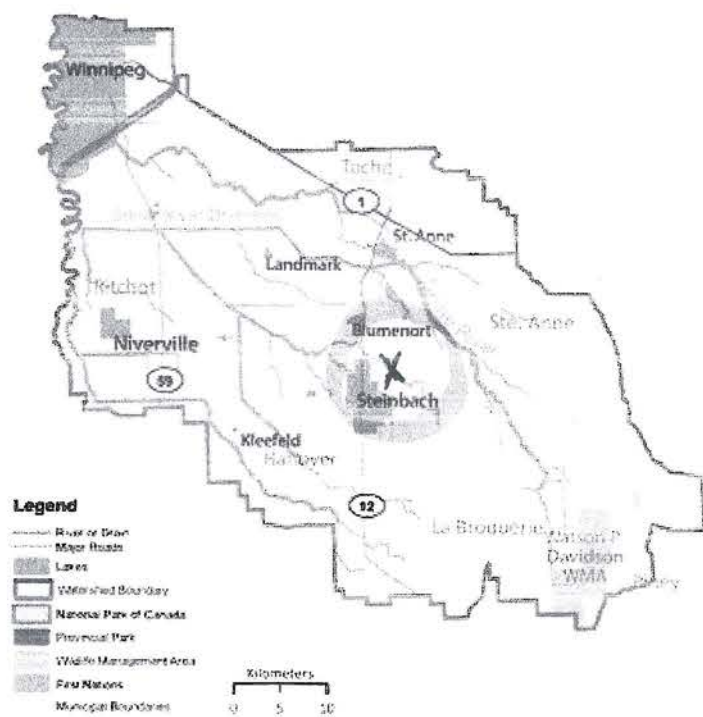
Manure Volume or Weight

The quantity of manure will determine the capacity requirements for the manure storage facility or field storage area.

What is the total volume or weight of manure generated annually by the livestock operation? (See Manure Storage Calculation Table.)

liquid volume: 1839600 imp Gals solid weight: _____

Manure Storage Calculation Table attached



Manure Storage Type and Capacity

The type of storage system used will affect the capacity requirements for the manure storage facility or field storage area.

What type of manure storage system will be used by the operation?

- under-barn concrete earthen concrete/steel tanks
 field storage confined livestock area

Provide the dimensions of the existing and/or proposed manure storage facilities, if applicable. (See Existing and Proposed Manure Storage Facility Dimensions Table.)

Existing and Proposed Manure Storage Facility Dimension Table attached

Odour Control Measures (project site)

Barns and manure storage facilities can be significant sources of livestock odours. The use of manure storage covers and shelterbelts can reduce this, particularly for the neighbourhoods close to the operation.

What odour control measures you are planning to use?

Manure storage cover: yes no

Type of cover: STRAW

Shelterbelt planting: yes no existing shelterbelt

Other measures (specify): _____

Manure Treatment

The Livestock Manure and Mortalities Management Regulation states that nobody can expand a confined livestock area or a manure storage facility for pigs, unless it includes anaerobic digestion or other environmentally sound manure treatment that is the same or better than anaerobic digestion. The alternative treatment must be approved by the Manitoba government.

Does your proposal include anaerobic digestion or another environmentally sound treatment for manure? yes no not applicable

Manure Application Method

The Livestock Manure and Mortalities Management Regulation requires the registration of annual manure management plans for new or expanding operations with 300 Animal Units or more.

Existing and Proposed Manure Storage Facility Dimension Tables

If applicable, indicate the dimensions of any existing manure storage facility (MSF) that will be used to store manure from the proposed project:

Existing Manure Storage Facility Dimensions

CELL	Width	Length	Depth	Height (Above Grade)	Slope (H:L)		Storage Capacity (days)
					Inside	Outside	
Primary	160 ft	290 ft	12 ft	ft	8:12	6:12	496 DAYS
Secondary	ft	ft	ft	ft			
Tertiary	ft	ft	ft	ft			
		Diameter	Height	Depth			
				(Above Grade)			
Circular Tank		ft	ft	ft			

Permit/Registration # LM - 0531

Existing Manure Storage Facility Dimensions

CELL	Width	Length	Depth	Height (Above Grade)	Slope (H:L)		Storage Capacity (days)
					Inside	Outside	
Primary	ft	ft	ft	ft			
Secondary	ft	ft	ft	ft			
Tertiary	ft	ft	ft	ft			
		Diameter	Height	Depth			
Circular Tank		ft	ft	ft			

Permit/Registration # _____

Laingspring Farm Ltd.

Manure Storage Capacity.

We estimate that the current capacity of our Earthern MSF Permit # LM-0531 at 550 days for our present operation.

Currently the waste from 110 milking cows and the milkhouse waste water and water from the plate cooler is going into the MSF. I say we estimate at 550 days as we have never totally emptied the facility. We agitate the manure and spread annually on the fields that are available for manure application at that time.. Typically 4 to 5 feet of manure remains in the facility.

In our new operation in which we plan to have 180 milk cows and 30 dry cows we estimate that we will have 496 days of storage. This is arrived at by the calculation of 27 Imp gals per day per cow resulting in 2,069,550 gals of waster per year. With a capacity of 2,800, 000 gals this should result in storage days of 496 days. It should not be any more than this as 2500 square feet of the new facility will be straw pack, where the waste from 20 animals at a time will be handled as solid manure.

Additionally all plate cooler water will be collected in a storage tank and recycled through the operation as drinking water for the cows and wash water This will result in significant reduction in volume per cow from our present operation.

A handwritten signature in black ink, appearing to be 'Pill' with a long horizontal flourish underneath.



Conservation

Environmental Operations
Unit B - 284 Reimer Avenue
Steinbach, Manitoba R5G 0R5
Tel - (204)346-6060 Fax - (204)326-2472

January 14, 2010

Ray Laing
Laingspring Dairy
Box 494
Steinbach, Manitoba R0A 2A0

Dear Mr. Laing

Re: **Earthen Manure Storage Facility - Annual Inspection**
NW 14-7-6 EPM, R.M. of Hanover - Our Reference # LM-0531

This follows our visual site inspection of your earthen manure storage facility (the 'facility') associated with the above mentioned livestock operation conducted on December 3, 2009. This facility was constructed under the authority of permit number LM-553, which is now referenced as number LM-0531. Maintenance and operation of your facility is subject to the following section of the *Livestock Manure and Mortalities Management Regulation* (MR 42/98).

Size and operation of a manure storage facility

- 4 An operator who stores livestock manure in a manure storage facility shall
- (c) maintain and operate the manure storage facility in a manner that does not cause pollution of surface water, groundwater or soil; and
 - (d) operate and maintain the manure storage facility in a manner that sustains its structural integrity.

M.R. 52/2004; 172/2009

At the time of the site visit, the facility was empty. Our observations in and around the facility suggest that the grounds were generally well maintained. We did not observe evidence of physical damage to the structure, or other potential issues.

The above comments are based solely on conditions observed at the time of the site visit. This letter does not imply that your facility meets current construction standards, or that operation of the facility will not impact the environment. The limited nature of our inspection implies only that your facility does not appear to pose an immediate environmental threat. Modifications and/or repairs may be required in the future if subsequent inspections or new information highlight additional or new deficiencies.

If you have any questions concerning this annual inspection, please call the undersigned at (204) 346-6063 or Mark Stephens, District Supervisor, at (204) 346-6068.

Yours sincerely,

Larry Markwart
Environment Officer

c: Mark Stephens, District Supervisor

Manitoba
spirited energy

Does the operation currently file an annual manure management plan with Manitoba Conservation? (For operations with 300 Animal Units or more, only)

yes no

Manure application methods and the season they're applied in affect odour, nutrient availability, crop response, land base requirements and the risk of water contamination.

Application method: broadcast broadcast and incorporation within 48 hours
 injection

The Livestock Manure and Mortalities Management Regulation prohibits new operations and existing livestock operations 300 Animal Units or more from application of manure, from November 10 of one year to April 10 of the following year (winter application).

Time of year for application: spring summer fall

The Livestock Manure and Mortalities Management Regulation puts restrictions on fall application of manure in the Red River Valley Special Management Area.

The proposed spread fields:

are

are not

in the Red River Valley Special Management Area.

Land Available for Manure Application

The land available for manure application includes all suitable land (owned, leased or under agreement) that is available to the operation for manure application. Manure from any other livestock operation is not permitted to be used on this land.

Under the Livestock Manure and Mortalities Management Regulation and the Nutrient Management Regulation, application of nutrients is not permitted on **Agriculture Capability Class 6, 7 and unimproved organic soils (Nutrient Management Zone 4) and within Nutrient Buffer Zones. The Nutrient Buffer Zone is an area of land along water bodies (ex: rivers, lakes, streams, drains) that varies depending on the waterway.**

Areas of a field that are Class 6, 7, unimproved organic soils (Nutrient Management Zone 4) or are within the nutrient buffer zones are considered unsuitable for manure application. In addition, fields with 60 parts per million Olsen phosphorus (P) in the top six inches (15 centimetres) of soil will not be included in the land base calculation.

Use the Manure Application Field Characteristics Table to determine the following:

Total suitable area available for manure application

703 ACRES

Manure Application Field Characteristics Table attached

Copies of soil test reports that are no more than 12 months old must also be included with this submission.

Soil test reports for the required area for manure application attached.

Land Required for Manure Application

Long term, land base requirements for manure application are calculated based on estimates of the quantity of nutrients (nitrogen and phosphorus) excreted by livestock and the removal of nutrients by the proposed crops.

Phosphorus

The quantity of phosphorus excreted by the livestock depends on the type, number and age of livestock (see Animal Units Calculation Table), the quantity and availability of phosphorus fed to the livestock and the amount retained by the livestock.

The removal of phosphorus by crops depends on the crops grown and the historical crop yield averages. (See Manure Application Field Characteristics Table.)

The Livestock Manure and Mortalities Management Regulation requires that the proposal must satisfy Manitoba Conservation that "sufficient land is available to the operator to implement an appropriate manure management plan" for a manure storage facility, before Manitoba Conservation issues a permit.

In areas of high livestock intensity (ex: RMs of Hanover and La Broquerie), it is Manitoba Conservation policy to approve a manure storage facility permit if the operation shows it has access to sufficient suitable land to apply manure at a rate equivalent to one times the crop removal rate of phosphorus.

Are any of the lands for manure application in the RMs of Hanover or La Broquerie? yes no

In areas with lower livestock intensity, Manitoba Conservation may issue a manure storage facility permit, if:

- the operation shows it has access to sufficient suitable land to apply manure at a rate equivalent to two times the crop removal rate of phosphorus (and)
- if long-term phosphorus inputs from manure application will be balanced with one times the crop removal rate of phosphorus to prevent build up in soils

Use the Land Base Calculator to calculate the minimum area required for manure application.

Total minimum area required for manure application at two times crop removal, for operations outside of Hanover and La Broquerie	
Total minimum area required for manure application at one times crop removal, for operations within Hanover and La Broquerie AND For the long-term sustainability of operations outside of Hanover and La Broquerie	674 ACRES USING DETAILED ROTATIONS

For more, call Manitoba Agriculture, Food and Rural Initiatives (MAFRI) at 204-945-3869 in Winnipeg or contact your local MAFRI GO Office.

Land Base Calculator attached

Land Base Requirement Summary

By comparing the land available for manure application with the land required for manure application, state whether sufficient suitable land for manure application:

- has not been identified
- has been identified for two times the crop removal rate of phosphorus (for operations outside of the RMs of Hanover or La Broquerie)
- has been identified for one times the crop removal rate of phosphorus (for operations within the RMs of Hanover and La Broquerie)

I acknowledge that over the long term, up to 674 ACRES acres/hectares (which is one times crop removal from table above) may be required for the long term environmental sustainability of the operation.

Operation:

Crop	P ₂ O ₅ Removed per Unit of Crop	N Removed per Unit of Crop	Historical Average Yield	Unit	Acreage	Total Removal		
						P ₂ O ₅	2(P ₂ O ₅)	Nitrogen (N)
Alfalfa	13.80	58.00	3.7	tons/ac	239	17.4	34.7	73.0
Barley Grain	0.42	0.97		bu/ac				
Barley Silage	11.80	34.40		tons/ac				
Canola	1.04	1.93		bu/ac				
Corn Grain	0.44	0.97	96	bu/ac	227	13.6	27.3	30.1
Corn Silage	12.70	31.20	4.79	tons/ac	237	20.5	41.0	50.4
Dry edible beans	1.39	4.17		cwt/ac				
Fababeans	1.79	5.02		cwt/ac				
Flax	0.65	2.13		bu/ac				
Grass hay	10.00	34.20		tons/ac				
Lentils	1.03	3.39		cwt/ac				
Oats	0.26	0.62		bu/ac				
Peas	0.69	2.34		bu/ac				
Potatoes	0.09	0.32		cwt/ac				
Rye	0.45	1.06		bu/ac				
Soybeans	0.84	3.87		bu/ac				
Sunflower	1.10	2.80		cwt/ac				
Wheat - Spring	0.59	1.50		bu/ac				
Wheat - Winter	0.51	1.04		bu/ac				
					703	51.5	103.0	153.4

MLL

AgrilInsurance

Crop Management History

Ag. Contract Name

01 610618 LAINGSRING FARM LTD

JANUARY 23, 2012

CROP	VARIETY	DATE SEEDED	ACRES	YLD./ACRE		FERTILIZER			
				FLD.	AREA AVG	N	P	K	S
NE 26-06-06 E H14									
2011	ALFALFA	XXXXXX	40	N/A	2.99				
	ALFALFA	NO VAR	15	N/A	2.99				
2010	ALFALFA	XXXXXX	40	2.08	3.18				
	ALFALFA	NO VAR	15	N/A	3.18				
2009	ALFALFA	XXXXXX	40	3.50	2.53				
	ALFALFA	NO VAR	15	2.28	2.83				
2008	ALFALFA	XXXXXX	40	3.22	2.84				
	ALFALFA	NO VAR	15	3.31	2.84				
2007	ALFALFA	XXXXXX	40	3.84	2.88				
	ALFALFA	NO VAR	15	3.82	2.95				
SE 09-07-06 E E32									
2011	GRAIN CORN	26/MAY	150	51	86	120	25	15	
2010	SOYBEANS	20/MAY	150	15	30		10		
2009	ARGENTINE CANOLA	06/JUN	150	44	74	80	20	15	
2008	GRAIN CORN	17/MAY	150	107	116	109	36	10	
NW 11-07-06 E D14									
2011	GRAIN CORN	25/MAY	63	76	85	120	25	15	
	TOO WET TO SEED	NO VAR	7	N/A	N/A				
2010	SILAGE CORN	19/MAY	70	4.79	5.58	90	25	15	
2009	GRAIN CORN	29/MAY	70	0	28	10	15		
2008	GRAIN CORN	07/MAY	74	131	113	67	26	13	
2007	SOYBEANS	11/MAY	76	36	34	20	25	15	
NW 12-07-06 E D14									
2011	SILAGE CORN	20/MAY	128	16.1	8.96	120	25	15	
2010	GRAIN CORN	24/APR	128	90	105	15	15		
2009	GRAIN CORN	11/MAY	128	60	78	10	15		
2008	SILAGE CORN	09/MAY	100	15.9	12.2				
	ALFALFA	XXXXXX	28	4.15	2.84				
2007	SILAGE CORN	08/MAY	98	16.5	11.6				
	ALFALFA	XXXXXX	28	8.97	2.95				
SE 13-07-06 E D14									
2011	GRAIN CORN	19/MAY	100	68	85	120	25	15	
	ALFALFA	NO VAR	40	1.41	2.99		40	25	
2010	ALFALFA	XXXXXX	40	4.69	3.11				
	SOYBEANS	25-04R	98	27	25		10		
2009	GRAIN CORN	18/MAY	30	0	28	10	15		
	SILAGE CORN	05/JUN	65	7.57	10.4	10	15		
	GREENFEED	06/JUN	40	65	1.41	60	50	15	
2008	GRAIN CORN	05/MAY	65	123	113	33	15	10	
	GRAIN CORN	11/MAY	45	123	112	110	35	10	
2007	SILAGE CORN	27/APR	65	15.4	11.6	25	15	10	
SW 13-07-06 E D14									
2011	GRAIN CORN	20/MAY	25	112	85	120	25	15	
	ALFALFA	NO VAR	85	1.41	2.99		40	25	
2010	GRAIN CORN	19/MAY	25	100	105	90	25	15	
	ALFALFA	NO VAR	85	3.79	3.11				
2009	GRAIN CORN	18/MAY	25	0	28	95	15		
	GREENFEED	06/JUN	85	61	1.41	60	50	15	
2008	GRAIN CORN	11/MAY	62	113	113	110	35	10	
	GRAIN CORN	05/MAY	20	122	113	33	15	10	
	ALFALFA	XXXXXX	25	2.57	3.11				
2007	SILAGE CORN	27/APR	18	13.2	11.6	25	15	10	
	ALFALFA	XXXXXX	25	5.14	2.95				
NW 06-07-07 E D14									
2011	ALFALFA	XXXXXX	95	2.10	2.99				
2010	ALFALFA	XXXXXX	95	5.05	3.18				
2009	ALFALFA	XXXXXX	95	4.42	2.53		55		
2008	ALFALFA	XXXXXX	95	5.23	2.84		17	40	
2007	GREENFEED	06/MAY	95	3.64	2.25	50	30	25	
SW 18-07-07 E D14									
2011	GREENFEED	14/JUN	95	1.02	.64	60	25	15	
2010	GRAIN CORN	26/APR	20	100	105	90	25	15	
	GRAIN CORN	26/APR	75	100	105	90	25	15	

The yields shown are based on information received to date and are subject to change.

AgrilInsurance

Crop Management History

Ag. Contract Name

01 610618 LAINGSRING FARM LTD

JANUARY 23, 2012

CROP	VARIETY	DATE SEEDED	ACRES	YLD./ACRE		FERTILIZER				
				FLD.	AREA AVG	N	P	K	S	
SW 18-07-07 E D14										
2009	GRAIN CORN	PIONEER 39D97	19/MAY	50	21	28	60	15		
	ALFALFA	NO VAR	XXXXXX	45	2.97	2.53		55		
2008	ALFALFA	NO VAR	XXXXXX	95	3.07	2.84		17	40	
2007	ALFALFA	NO VAR	XXXXXX	95	3.33	2.95				
R 1 024 002 T D32										
2011	SOYBEANS	25-10RY	27/MAY	145	21	25				
2010	GRAIN CORN	PIONEER P7213R	28/APR	145	70	108	90	25	15	
2009	SOYBEANS	90A06	30/MAY	145	14	10		15		
2008	SOYBEANS	90A06	20/MAY	145	32	34		26		
2007	GRAIN CORN	PIONEER 39M26	01/MAY	145	116	119	100	45	40	5

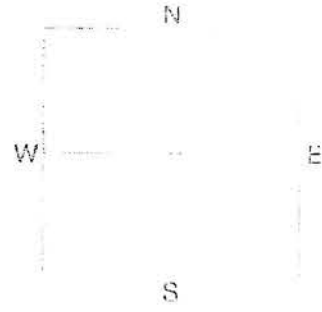
The yields shown are based on information received to date and are subject to change.



Soil Analysis by Agvise Laboratories
 (http://www.agvise.com)
 Northwood: (701) 587-6010
 Benson: (320) 843-4109

SOIL TEST REPORT

FIELD ID
 SAMPLE ID
 FIELD NAME
 COUNTY
 TWP **SW 18-7-7**
 SECTION **18** QTR ACRES **0**
 PREV. CROP **Alfalfa**



SUBMITTED FOR:
LAINGSRING

SUBMITTED BY: **TE2698**
RICHARDSON PIONEER-STEINB
34 PIONEER ROAD
STEINBACH, MB **R5G 1W4**

REF # **14073648** BOX # **0**
 LAB # **NW20433**

Date Sampled

Date Received **05/11/2013**

Date Reported **5/16/2013**

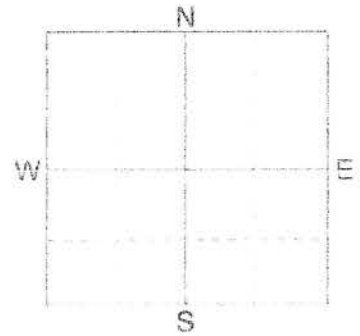
Nutrient In The Soil		Interpretation	1st Crop Choice		2nd Crop Choice		3rd Crop Choice	
Nitrate	0-6"	12 lb/ac						
	6-24"	24 lb/ac						
	0-24"	36 lb/ac						
Olsen	9 ppm							
Phosphorus	242 ppm							
Chloride								
Sulfur	0-6"	10 lb/ac						
	6-24"	198 lb/ac						
Bromine								
Zinc	1.68 ppm							
Manganese								
Copper								
Magnesium								
Calcium								
Sodium								
Org.Matter	5.4 %							
Carbonate (CEC)								
	0-6"	0.36 mmho/cm						
	6-24"	0.54 mmho/cm						
Soil pH	6-6"	7.7						
Buffer pH								
Cation Exchange Capacity								
% Base Saturation (Typical Range)								
% Ca								
% Mg								
% K								
% Na								
% H								



Soil Analysis by Agvise Laboratories
 Northwood: (701) 587-6010
 Benson: (320) 843-4109

SOIL TEST REPORT

FIELD ID **HOME**
 SAMPLE ID
 FIELD NAME
 COUNTY **NW 12-7-6E**
 TWP
 SECTION QTR ACRES **0**
 PREV. CROP **140**



SUBMITTED FOR:
LAINGSRING

SUBMITTED BY: **TE2698**
RICHARDSON PIONEER-STEINB
34 PIONEER ROAD
STEINBACH, MB R5G 1W4

REF # **527547** BOX # **0**
 LAB # **NW174613**

Date Sampled

Date Received **11/01/2012**

Date Reported **1/30/2013**

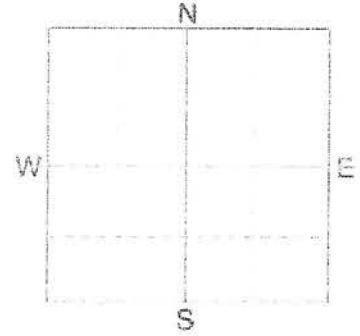
Nutrient In The Soil		Interpretation	1st Crop Choice		2nd Crop Choice		3rd Crop Choice			
Depth	Concentration		LB/ACRE	APPLICATION	LB/ACRE	APPLICATION	LB/ACRE	APPLICATION		
Nitrate	0-6" 11 lb/ac 6-24" 39 lb/ac 0-24" 50 lb/ac	*****	YIELD GOAL		YIELD GOAL		YIELD GOAL			
Phosphorus	Olsen 40 ppm	*****	SUGGESTED GUIDELINES		SUGGESTED GUIDELINES		SUGGESTED GUIDELINES			
Potassium	111 ppm	*****	N		N		N			
Chloride			P ₂ O ₅		P ₂ O ₅		P ₂ O ₅			
Sulfur	0-6" 52 lb/ac 6-24" 330 lb/ac	*****	K ₂ O		K ₂ O		K ₂ O			
Boron			Cl		Cl		Cl			
Zinc	2.80 ppm	*****	S		S		S			
Iron			B		B		B			
Manganese			Zn		Zn		Zn			
Copper			Fe		Fe		Fe			
Magnesium			Mn		Mn		Mn			
Calcium			Cu		Cu		Cu			
Sodium			Mg		Mg		Mg			
Org. Matter	4.7 %	*****	Lime		Lime		Lime			
Carbonate(CCE)			Soil pH		Cation Exchange Capacity		% Base Saturation (Typical Range)			
Sol. Salts	0-6" 0.38 mmho/cm 6-24" 0.5 mmho/cm	*****	Buffer pH			% Ca	% Mg	% K	% Na	% H
			0-6" 8.5							



Soil Analysis by Agvise Laboratories
 Northwood: (701) 587-6010
 Benson: (320) 843-4109

SOIL TEST REPORT

FIELD ID **CRIKSIDE**
 SAMPLE ID
 FIELD NAME **CRIKSIDE**
 COUNTY **SE 13-7-6E**
 TWP
 SECTION QTR ACRES **0**
 PREV. CROP **150 Acres**



SUBMITTED FOR:
LAINGSRING

SUBMITTED BY: **TE2698**
RICHARDSON PIONEER-STEINB
34 PIONEER ROAD
STEINBACH, MB R5G 1W4

REF # **527542** BOX # **0**
 LAB # **NW174703**

Date Sampled

Date Received **11/01/2012**

Date Reported **1/30/2013**

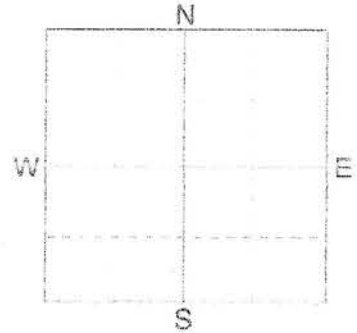
Nutrient In The Soil		Interpretation	1st Crop Choice		2nd Crop Choice		3rd Crop Choice	
	0-6" 23 lb/ac		YIELD GOAL		YIELD GOAL		YIELD GOAL	
	6-24" 60 lb/ac		SUGGESTED GUIDELINES		SUGGESTED GUIDELINES		SUGGESTED GUIDELINES	
Nitrate	0-24" 83 lb/ac		LB/ACRE	APPLICATION	LB/ACRE	APPLICATION	LB/ACRE	APPLICATION
Phosphorus	Olsen 21 ppm		N		N		N	
Potassium	269 ppm		P ₂ O ₅		P ₂ O ₅		P ₂ O ₅	
Chloride			K ₂ O		K ₂ O		K ₂ O	
Sulfur	0-6" 120 +lb/ac		Cl		Cl		Cl	
	6-24" 360 +lb/ac		S		S		S	
Boron			B		B		B	
Zinc	1.58 ppm		Zn		Zn		Zn	
Iron			Fe		Fe		Fe	
Manganese			Mn		Mn		Mn	
Copper			Cu		Cu		Cu	
Magnesium			Mg		Mg		Mg	
Calcium			Lime		Lime		Lime	
Sodium			Soil pH		Cation Exchange Capacity		% Base Saturation (Typical Range)	
Org.Matter	4.6 %		Buffer pH			% Ca	% Mg	% K
Carbonate(CCE)						% Na	% H	
Sol. Salts	0-6" 0.8 mmho/cm		0-6" 7.8					
	6-24" 2.12 mmho/cm							



Soil Analysis by Agvise Laboratories
 Northwood: (701) 587-6010
 Benson: (320) 843-4109

SOIL TEST REPORT

FIELD ID **N OF CREEK**
 SAMPLE ID
 FIELD NAME **N OF CRIKSID**
 COUNTY **SW 13-7-6E**
 TWP
 SECTION QTR ACRES **0**
 PREV. CROP **115**



SUBMITTED FOR:
LAINGSRING

SUBMITTED BY: **TE2698**
RICHARDSON PIONEER-STEINB
34 PIONEER ROAD
STEINBACH, MB **R5G 1W4**

REF # **527549** BOX # **0**
 LAB # **NW174614**

Date Sampled _____ Date Received **11/01/2012** Date Reported **1/30/2013**

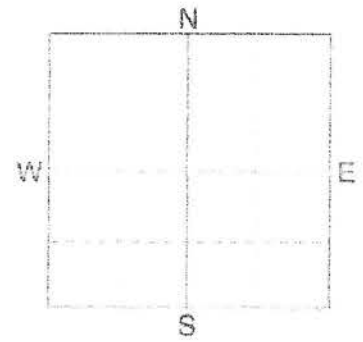
Nutrient In The Soil		Interpretation	1st Crop Choice		2nd Crop Choice		3rd Crop Choice	
Depth	Concentration		LB/ACRE	APPLICATION	LB/ACRE	APPLICATION	LB/ACRE	APPLICATION
0-6"	9 lb/ac							
6-24"	6 lb/ac							
0-24"	15 lb/ac							
Nitrate								
Phosphorus	Olsen 17 ppm							
Potassium	227 ppm							
Chloride								
Sulfur	0-6" 76 lb/ac 6-24" 360 +lb/ac							
Boron								
Zinc	1.37 ppm							
Iron								
Manganese								
Copper								
Magnesium								
Calcium								
Sodium								
Org.Matter	5.7 %							
Carbonate(CCE)								
0-6"	0.81 mmho/cm							
6-24"	1.88 mmho/cm							
Soil Salts								
			Soil pH	Buffer pH	Cation Exchange Capacity	% Base Saturation (Typical Range)		
						% Ca	% Mg	% K
						% Na	% H	
			0-6" 8.2					



Soil Analysis by Agvise Laboratories
 Northwood: (701) 587-6010
 Benson: (320) 843-4109

SOIL TEST REPORT

FIELD ID **EAST OF DENNIS**
 SAMPLE ID
 FIELD NAME
 COUNTY **NW 6-7-7E**
 TWP
 SECTION QTR ACRES **95**
 PREV. CROP



SUBMITTED FOR:
LAINGSRING

SUBMITTED BY: **TE2698**
RICHARDSON PIONEER-STEINB
34 PIONEER ROAD
STEINBACH, MB R5G 1W4

REF # **527543** BOX # **0**
 LAB # **NW174611**

Date Sampled

Date Received **11/01/2012**

Date Reported **1/30/2013**

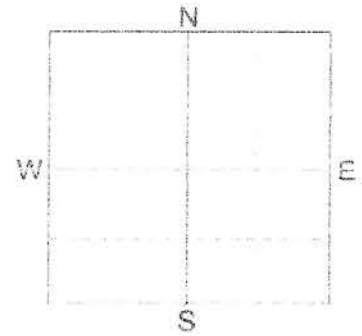
Nutrient In The Soil		Interpretation	1st Crop Choice		2nd Crop Choice		3rd Crop Choice	
		Low Med High						
	0-6" 20 lb/ac 6-24" 126 lb/ac		YIELD GOAL		YIELD GOAL		YIELD GOAL	
Nitrate	0-24" 146 lb/ac		SUGGESTED GUIDELINES		SUGGESTED GUIDELINES		SUGGESTED GUIDELINES	
Phosphorus	Olsen 13 ppm		LB/ACRE	APPLICATION	LB/ACRE	APPLICATION	LB/ACRE	APPLICATION
Potassium	127 ppm		N		N		N	
Chloride			P ₂ O ₅		P ₂ O ₅		P ₂ O ₅	
Sulfur	0-6" 12 lb/ac 6-24" 42 lb/ac		K ₂ O		K ₂ O		K ₂ O	
Boron			Cl		Cl		Cl	
Zinc	1.07 ppm		S		S		S	
Iron			B		B		B	
Manganese			Zn		Zn		Zn	
Copper			Fe		Fe		Fe	
Magnesium			Mn		Mn		Mn	
Calcium			Cu		Cu		Cu	
Sodium			Mg		Mg		Mg	
Org. Matter	4.0 %		Lime		Lime		Lime	
Carbonate(CCE)			Soil pH	Buffer pH	Cation Exchange Capacity	% Base Saturation (Typical Range)		
Soil Salts	0-6" 0.35 mmho/cm 6-24" 0.5 mmho/cm		% Ca	% Mg	% K	% Na	% H	
			0-6" 8.2					



Soil Analysis by Aqvis Laboratories
 Northwood: (701) 587-6010
 Benson: (320) 843-4109

SOIL TEST REPORT

FIELD ID **STE ANNE**
 SAMPLE ID **12+210**
 FIELD NAME
 COUNTY **RL 24-25**
 TWP
 SECTION **QTR** ACRES **150**
 PREV. CROP



SUBMITTED FOR:
LAINGSRING

SUBMITTED BY: **TE2698**
RICHARDSON PIONEER-STEINB
34 PIONEER ROAD
STEINBACH, MB **R5G 1W4**

REF # **527551** BOX # **0**
 LAB # **NW174612**

Date Sampled

Date Received **11/01/2012**

Date Reported **1/30/2013**

Nutrient In The Soil		Interpretation	1st Crop Choice		2nd Crop Choice		3rd Crop Choice	
		Low Med High						
	0-6" 23 lb/ac							
	6-24" 60 lb/ac							
	0-24" 83 lb/ac							
Nitrate								
Phosphorus	Olsen 12 ppm							
Potassium	312 ppm							
Chloride								
Sulfur	0-6" 46 lb/ac							
	6-24" 312 lb/ac							
Boron								
Zinc	1.49 ppm							
Iron								
Manganese								
Copper								
Magnesium								
Calcium								
Sodium								
Org. Matter	8.4 %							
Carbonate(CCE)								
	0-6" 0.95 mmho/cm							
	6-24" 1.06 mmho/cm							
Sol. Salts								
			YIELD GOAL		YIELD GOAL		YIELD GOAL	
			SUGGESTED GUIDELINES		SUGGESTED GUIDELINES		SUGGESTED GUIDELINES	
			LB/ACRE	APPLICATION	LB/ACRE	APPLICATION	LB/ACRE	APPLICATION
			N		N		N	
			P ₂ O ₅		P ₂ O ₅		P ₂ O ₅	
			K ₂ O		K ₂ O		K ₂ O	
			Cl		Cl		Cl	
			S		S		S	
			B		B		B	
			Zn		Zn		Zn	
			Fe		Fe		Fe	
			Mn		Mn		Mn	
			Cu		Cu		Cu	
			Mg		Mg		Mg	
			Lime		Lime		Lime	
Soil pH		Buffer pH	Cation Exchange Capacity		% Base Saturation (Typical Range)			
					% Ca	% Mg	% K	% Na % H
0-6" 7.6								



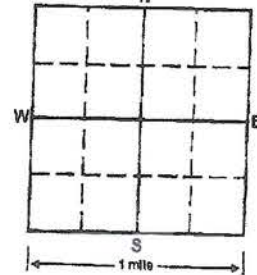
Soil Analysis by: Agvise Laboratories
Northwood: (701) 587-6010
Benson: (320) 843-4109

SOIL TEST REPORT

FIELD GRAVEL PIT
SAMPLE
CNTY
TWP
SEC 0 QTR ACRE: S 0
PREV. CROP Corn-Grain

REF# 11367743 LAB# 132426 BOX# 425

Field Location



SUBMITTED FOR:

LAINGSRING DAIRY

STEINBACH, MB
R0G 1W4

SUBMITTED BY: TE2698

RICHARDSON PIONEER-STEINB
34 PIONEER ROAD
STEINBACH, MB
R5G 1W4

Date Sampled:

Date Received:

10/28/2010

Date Reported:

4/25/2011

NUTRIENT IN SOIL

INTERPRETATION

1st CROP CHOICE

2nd CROP CHOICE

3rd CROP CHOICE

NUTRIENT IN SOIL		INTERPRETATION				1st CROP CHOICE		2nd CROP CHOICE		3rd CROP CHOICE			
		VLow	Low	Med	High	Yield Goal		Yield Goal		Yield Goal			
0-6"	19 lb/ac												
6-24"	33 lb/ac												
0-24"	52 lb/ac	*****	****										
Nitrate													
Olsen Phosphorus	15 ppm	*****	*****	*****	*****								
Potassium	160 ppm	*****	*****	*****	*****								
Chloride													
0-6"	16 lb/ac	*****	*****										
6-24"	360 +lb/ac	*****	*****	*****	*****								
Sulfur													
Boron													
Zinc	1.31 ppm	*****	*****	*****	**								
Iron													
Manganese													
Copper													
Magnesium													
Calcium													
Sodium													
Org. Matter	4.3 %	*****	*****	*****									
Carbonate													
0-6"	0.51 mmho/cm	*****	*****										
6-24"	0.62 mmho/cm	*****	*****										
Sol. Salts													
						Soil pH	Buffer pH	Cation Exchange Capacity	% Base Saturation (Typical Range)				
									% Ca	% Mg	% K	% Na	% H
						8.0							

SUGGESTED GUIDELINES

SUGGESTED GUIDELINES

SUGGESTED GUIDELINES

LB/ACRE APPLICATION

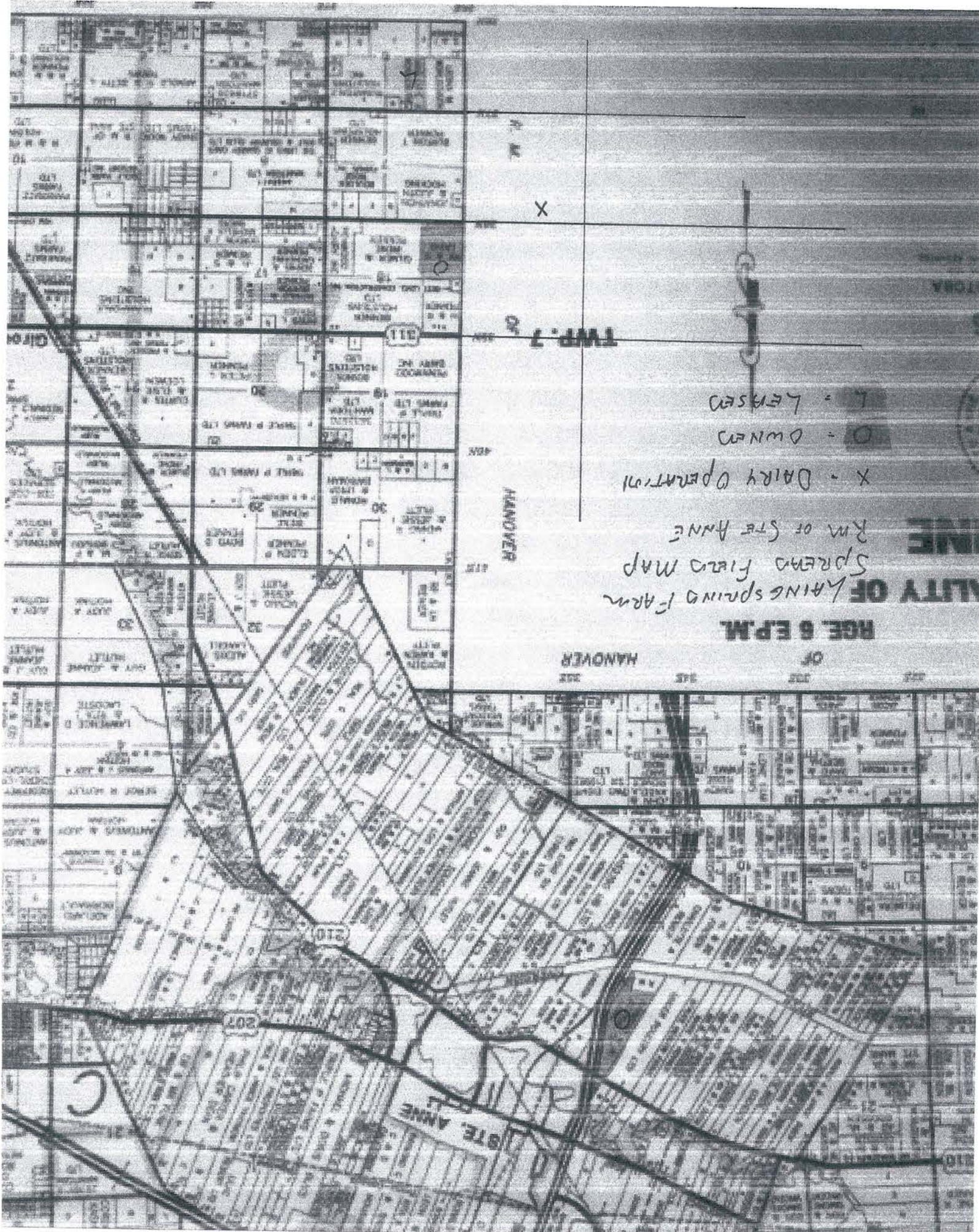
LB/ACRE APPLICATION

LB/ACRE APPLICATION

N	
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Mn	
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Mg	
Lime	



LAINING SPRING FARM
SPREAD FIELD MAP
RM OF STE ANNE

X - DAIRY OPERATION
O - OWNED
L - LEASED

RGE. 6 E.P.M.

HANOVER

TWP. 7

HANOVER

STE ANNE

210

207

C

X

STE ANNE

TWP. 7

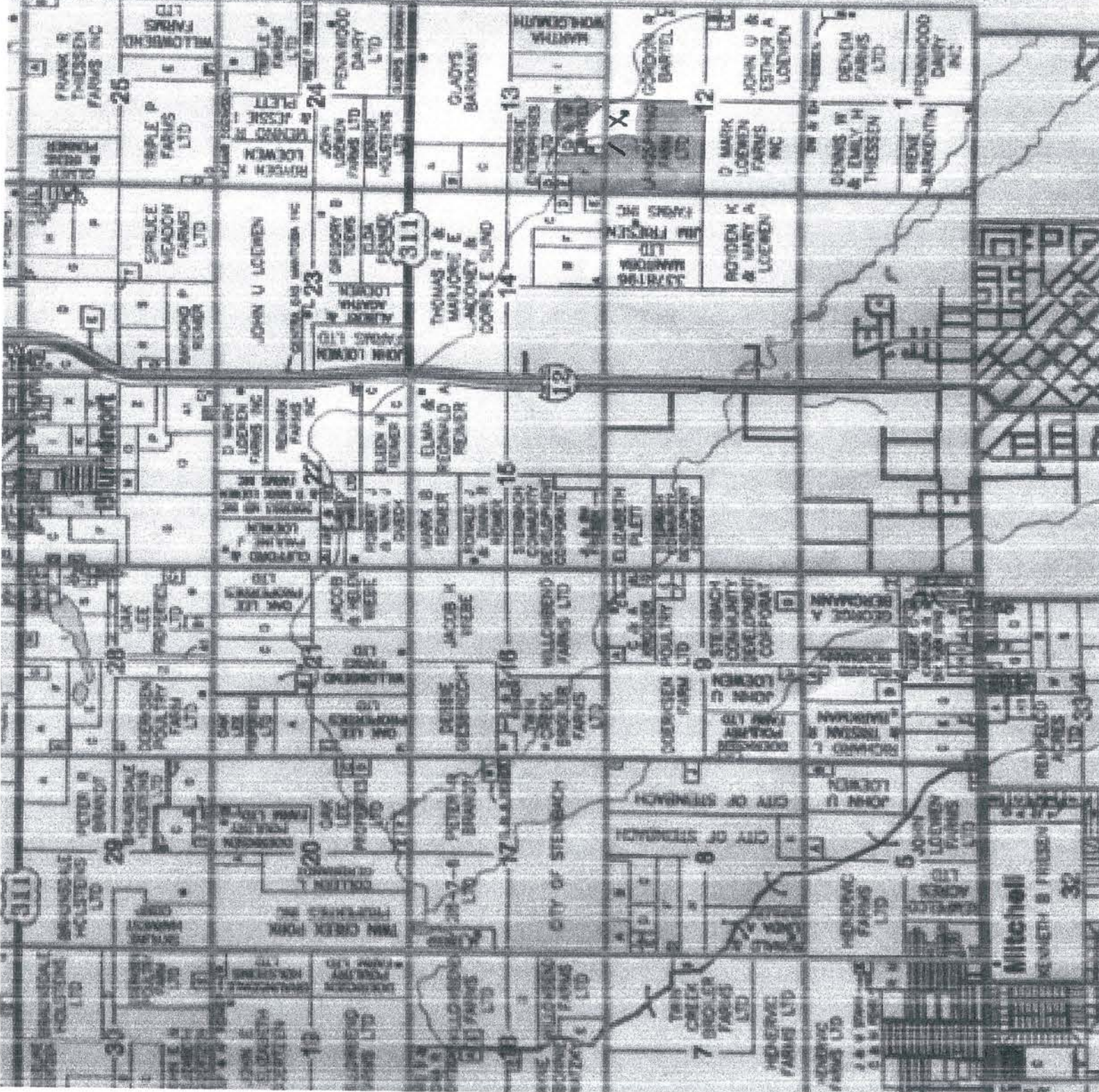
SPREAD FIELD MAP
Rm of Hanuun

OF

LAINGSPRING FARM
- DAIRY OPERATION
- EXPANSION SITE

○ - SPREAD FIELDS
OWNERS

- SPREAD FIELDS
LEASED



Mitchell

32

Quarter	Soil Classification	Ag Capability	Acres	notes
NW 12-7-6 E	RIV	2W	160	minus yard
	GNL(7)-PMG(3)	2W(7)-3M(3)		
South half 13-7-6E	GNL(7)-PMG(3)	2W(7)-2M(3)	320	minus yards
	SCY(8)-RIV(2)	2W(8)-2W(2)		
W 1/2 SW 18-7-7E	SCY(8)-RIV(2)	2W(7)-2M(3)	80	104 ac field minus 24 acres of class 5 and gravel pit
E 1/2 NW 6-7-7 E	GNL(5)-NUS(5)	2W	100	Order 3 drain - leave 3m buffer when spreading
RL-24-AN	OBO(8)-RIV(2)	2W	70	Order 4 drain set back accordingly
RL-25-AN	OBO(8)-RIV(2)	2W	70	Order 4 drain set back accordingly

Roll.

Troneter

Lease Agreement

This agreement is between MARJORIE WOLFE MATH (landowner)
and LANSING SPRING FARM LTD (tenant) for the lease of
the parcel of land described as EAST HALF OF NW 6-7-7E 95 ACRES

For the purpose of CRIPPING CORN OR ALFALFA
[describe agricultural purpose(s) and operation]

1. The term of this lease shall be from MARCH 1, 2013 to MARCH 1, 2018
3. The tenant agrees to pay a lease fee to the landowner of \$ 65 per acre or \$ 6175 total per year. The tenant agrees to pay such sum at the beginning of the lease term and on the anniversary thereof unless otherwise mutually agreed. A late penalty of up to [1] %/month may be assessed on all late payments. This lease fee may be renegotiated annually.
4. The tenant agrees to employ standard best management practices. It shall not be considered a default of this Lease if weather or other circumstance prevents timely practices or harvesting.
5. The landowner agrees to pay all taxes and assessments associated with this parcel.
6. The terms of this lease may be amended by mutual consent.
7. Landowner retains his/her right to access the parcel(s) for the purposes of inspection with prior notification to the tenant.
8. Other special terms and conditions of this lease: MANURE MAY BE APPLIED
WITHIN MANITIBA CONSERVATION GUIDELINES

Signed:

Marjorie Wolfe Math

date FEB 4, 2013

LANSING SPRING FARM LTD

Ray W. Smith

date FEB 5, 2013

Lease Agreement

This agreement is between ROBERT AND JENNIFER BRADY (landowner)
and LAINGSRING FARM LTD., (tenant), for the lease of
the parcel of land described as PART OF THE WEST HALF OF SE 13-7-6E

For the purpose of CROPPING CORN OR ALFALFA
[describe agricultural purpose(s) and operation]

1. The term of this lease shall be from MARCH 1, 2013 to MARCH 1, 2018

3. The tenant agrees to pay a lease fee to the landowner of \$ 70 per acre or \$ _____ total, per year. The tenant agrees to pay such sum at the beginning of the lease term and on the anniversary thereof unless otherwise mutually agreed. A late penalty of up to [1]%/month may be assessed on all late payments. This lease fee may be renegotiated annually.

4. The tenant agrees to employ standard best management practices. It shall not be considered a default of this Lease if weather or other circumstance prevents timely practices or harvesting.

5. The landowner agrees to pay all taxes and assessments associated with this parcel.

6. The terms of this lease may be amended by mutual consent.

7. Landowner retains his/her right to access the parcel(s) for the purposes of inspection with prior notification to the tenant.

8. Other special terms and conditions of this lease: MANURE MAY BE APPLIED WITH IN MANITOBA CONSERVATION GUIDELINES

Signed:

Robert Brady + Jennifer Brady
J Brady date FEB 4/2013

LAINGSRING FARM LTD
Ray W. Spring date FEB 4, 2013

Lease Agreement

This agreement is between CRIKSIDE ENTERPRISES LTD. (landowner)
and LAINSPRING FARM LTD (tenant), for the lease of
the parcel of land described as NORTH HALF OF SW 13-7-6E, 65 ACRES

For the purpose of CROPPING CORN AND ALFALFA
[describe agricultural purpose(s) and operation]

1. The term of this lease shall be from MARCH 1, 2013 to MARCH 1, 2018
3. The tenant agrees to pay a lease fee to the landowner of \$ 70 per acre or \$ 4550 total, per year. The tenant agrees to pay such sum at the beginning of the lease term and on the anniversary thereof unless otherwise mutually agreed. A late penalty of up to [1]%/month may be assessed on all late payments. This lease fee may be renegotiated annually.
4. The tenant agrees to employ standard best management practices. It shall not be considered a default of this Lease if weather or other circumstance prevents timely practices or harvesting.
5. The landowner agrees to pay all taxes and assessments associated with this parcel.
6. The terms of this lease may be amended by mutual consent.
7. Landowner retains his/her right to access the parcel(s) for the purposes of inspection with prior notification to the tenant.
8. Other special terms and conditions of this lease: MANURE MAY BE APPLIED WITHIN MANITOBA CONSERVATION GUIDELINES

Signed:

Crikside Ent. Ltd.
[Signature] date 05/02/13
LAINSPRING FARM LTD.
[Signature] date FEB 5, 2013

Lease Agreement

This agreement is between ROBERT AND LINDA BRANT (landowner)
and LAINGSRING FARM LTD, (tenant), for the lease of
the parcel of land described as PART OF THE WEST HALF OF SE 13-7-6E

For the purpose of CROPPING CORN AND ALFALFA
[describe agricultural purpose(s) and operation]

1. The term of this lease shall be from MARCH 1, 2013 to MARCH 1, 2018
3. The tenant agrees to pay a lease fee to the landowner of \$ 70 per acre or \$ _____ total, per year. The tenant agrees to pay such sum at the beginning of the lease term and on the anniversary thereof unless otherwise mutually agreed. A late penalty of up to [1]%/month may be assessed on all late payments. This lease fee may be renegotiated annually.
4. The tenant agrees to employ standard best management practices. It shall not be considered a default of this Lease if weather or other circumstance prevents timely practices or harvesting.
5. The landowner agrees to pay all taxes and assessments associated with this parcel.
6. The terms of this lease may be amended by mutual consent.
7. Landowner retains his/her right to access the parcel(s) for the purposes of inspection with prior notification to the tenant.
8. Other special terms and conditions of this lease: MANURE MAY BE APPLIED
WITHIN MANITOBA CONSERVATION GUIDELINES

Signed:

[Signature]
date 02/05/13

LAINGSRING FARM LTD
[Signature] date FEB 4, 2013

Lease Agreement

This agreement is between MARTHA WOHLGEMUTH (landowner)
and LAINESPRING FARM LTD, (tenant), for the lease of
the parcel of land described as EAST HALF OF SE 13-7-6E 80 ACRES

For the purpose of CROPPING CORN AND ALFALFA
[describe agricultural purpose(s) and operation]

1. The term of this lease shall be from MARCH 1, 2013 to MARCH 1, 2018
3. The tenant agrees to pay a lease fee to the landowner of \$ 60 per acre or \$ 4800 total, per year. The tenant agrees to pay such sum at the beginning of the lease term and on the anniversary thereof unless otherwise mutually agreed. A late penalty of up to [1]%/month may be assessed on all late payments. This lease fee may be renegotiated annually.
4. The tenant agrees to employ standard best management practices. It shall not be considered a default of this Lease if weather or other circumstance prevents timely practices or harvesting.
5. The landowner agrees to pay all taxes and assessments associated with this parcel.
6. The terms of this lease may be amended by mutual consent.
7. Landowner retains his/her right to access the parcel(s) for the purposes of inspection with prior notification to the tenant.
8. Other special terms and conditions of this lease: MANURE MAY BE APPLIED WITHIN MANITOBA CONSERVATION GUIDELINES

Signed: MARTHA WOHLGEMUTH

PER: Martha Wohlgemuth date FEB 4, 2013

LAINESPRING FARM LTD
By W. Jones date FEB 4, 2013

Mortalities (Dead Animal) Disposal

The Livestock Manure and Mortalities Management Regulation sets requirements for the use, management and storage of livestock mortalities in agricultural operations. It ensures livestock mortalities are handled in an environmentally sound manner. Permanent composting facilities require a permit from Manitoba Conservation. Winter application of composted mortalities is prohibited.

Type of disposal: rendering
 composting
 incineration (in approved incinerator only)

Mass Mortalities

The Livestock Manure and Mortalities Management Regulation sets requirements for mass mortalities.

A plan for mass mortalities (endorsed by Manitoba Conservation) is in place.

What steps will be taken in the case of mass mortalities?

IN THE EVENT OF A CATASTROPHIC EVENT SUCH AS
A FIRE, CARCASSES COULD BE DISPOSED OF AT THE
BRADY ROAD LANDFILL. ONSITE BURIAL IS AN OPTION
DEPENDING ON THE TIME OF YEAR

Project Site Description: land use planning considerations

For assistance contact your Community and Regional Planning Regional Office.

Development Plan and Zoning Bylaw

The Development Plan and Zoning Bylaw adopted under The Planning Act, set policy and regulations for the use and development of land. A proposed livestock operation must comply with the requirements of this bylaw. In the absence of a bylaw, the Provincial Planning Regulation under The Planning Act applies.

Development Plan

Every development plan must contain a livestock operation policy (LOP) that identifies areas where new or expanded livestock operations may be allowed. It must also set general standards for the location and setback of livestock operations. Identifying the plan's land use designation and policies (for the planning district or municipality that affect the site and proposed spread fields) will help confirm the project's compliance.

Name of development plan	RM of Hanover
By-law number	2170
Land use designation of project site	Rural Area
Livestock operation policies – quote supportive policy numbers	3-3.5 ; 3-3.7 (expansion)
Other development plan policies – quote supportive policy numbers	3-3.14 ; 3-3.15
Non-supportive development plan policies	

The development plan livestock operation policies support the size and location of the proposed operation.

Zoning Bylaw

Identifying the zoning for the project site, the proposed spread fields and the related zoning provisions, helps determine the project's compliance and the minimum separation distances needed between the operation and property boundaries and other natural features and land uses. The zoning bylaw contains specific regulations that govern location and setback of livestock operations.

What are the minimum project site requirements stated in the zoning bylaw?

	Project site dimensions	Minimum zoning bylaw site requirements
Minimum site area	160 ACRES	160 acres
Minimum site width	2640 ft	1000 feet
Minimum front yard	375 ft	164 feet
Minimum side and rear yard	200 ft	164 feet

Separation Distances

Using the proposed size of the operation (see Animal Units Calculation Table) and the type of animal housing and manure storage facility, complete the following table.

Indicate the distance from:

earthen manure storage facility or feedlot **OR**

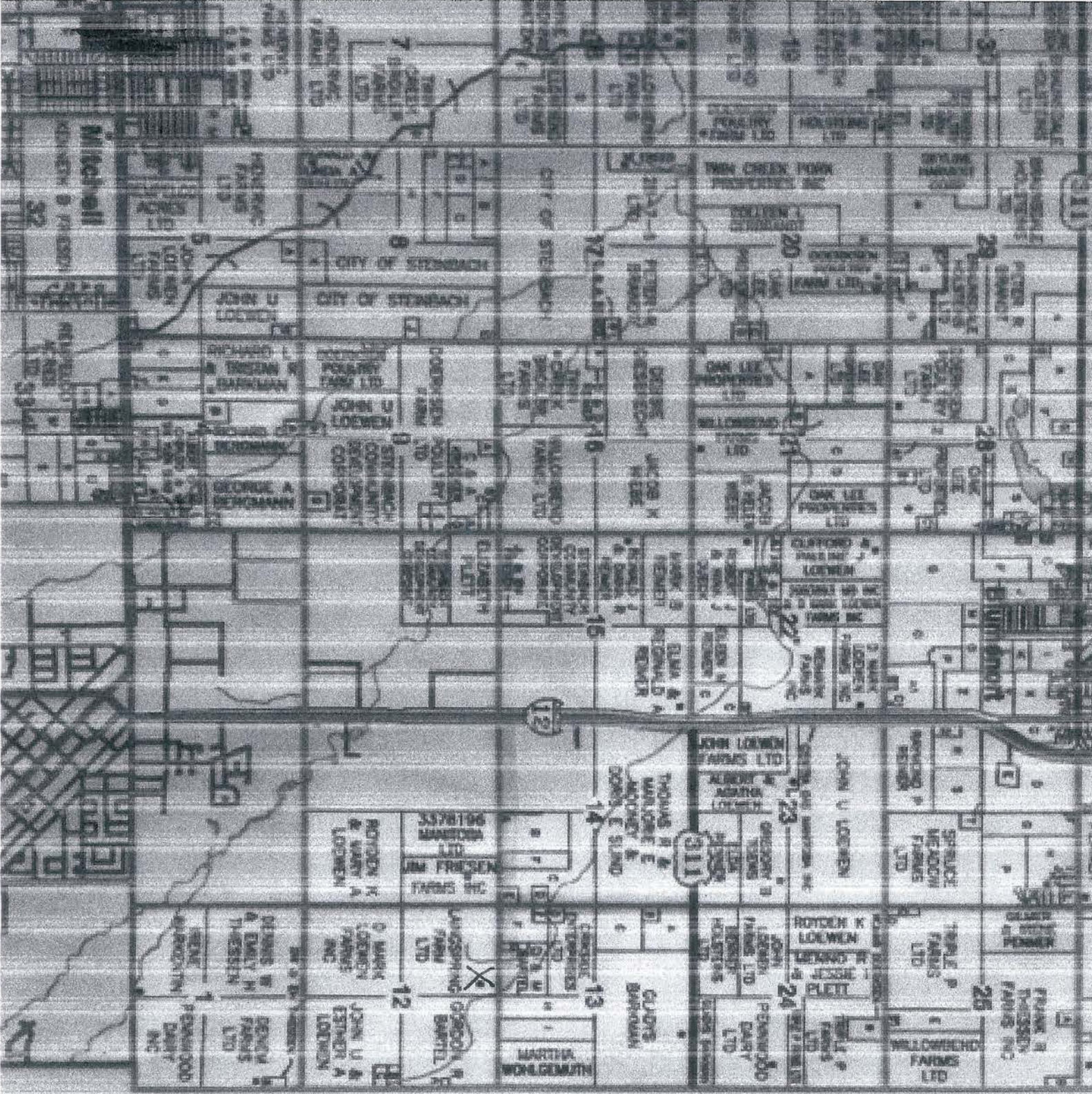
animal confinement facility or non-earthen manure storage facility

To	Minimum separation distance required (by the zoning bylaw)	If land use feature is within the minimum distance	
		Provide actual distance	Provide location or name of feature (ex: Red River)
Residence/dwelling	500 m	450 m	ROB + JEN BRANT SE 13-7-66
Designated area (non-agricultural)	2.0 km	1.4 km	CITY OF STONBRIDGE NE 35-6-66
Surface water	NONE		NONE
Surface watercourse	100 m	200 m	CLASS 3 DRAIN NW 12-7-66
Crown land	NONE	NONE	NONE
Wildlife Management Area	NONE		NONE
Livestock operation	NONE	1.2 km	JONATHAN HOCKING NW 7-7-76
Other significant features/land uses	NONE		NONE

In cases where minimum separation distances are not stated in the zoning bylaw or development plan, the minimum separation distances in the Provincial Planning Regulation apply.

Show: a) location of the project site, location and ownership of spread fields and c) land uses and significant features (i) within a 3 kilometre radius of the project site and (ii) within and adjacent to each spread field on a Land Use & Spread Field Map. (See Land Use & Spread Field Map Example).

Land Use & Spread Field Map attached



R. M. OF STE ANNE

TWP. 7

Truck Haul Routes

*X - Dairy Operator
Proposed Expansion*

Truck Haul Route

Truck Haul Routes and Access Points

One consideration with new or expanding livestock operations is the potential impact on existing public roads (municipal and provincial), access and the need for improvements or mitigation.

What roads and access points will be used for the proposed operation? (See Truck Haul Routes and Access Points Map for an example).

For help with mapping, contact your Community and Regional Planning Regional Office.

Truck Haul Routes and Access Points Map attached

Supporting Documents

Check off the supporting documents included in this submission:

- Contact Information and Privacy and Publication Notice**
- Location Map** (shows proposed project within rural municipality)
- Animal Unit Calculation Table**
- Water Requirement Calculation Table**
- Manure Storage Calculation Table**
- Existing and Proposed Manure Storage Facility Dimension Tables**
(if applicable)
- Manure Application Field Characteristics Table**
- Recent manure application field soil sample results** (Nitrate- N lb/ac at 0-6 and 6-24 inch depths, Phosphorus – ppm at 0-6 inch depth)
- Land Base Calculator**
- Project Site Plan** (proposed operation showing current and proposed structures)
- Land Use and Spread Field Map** (location and ownership of operation, spread fields, location and distance to non-agricultural uses, development plan designation, zoning for project site and spread fields)
- Truck Haul Routes and Access Points Map** (with routes and access points on municipal/provincial roads and/or provincial trunk highways)

Manure Application Field Characteristics Table

Field	Legal Description ¹	Municipality	O/L/A ²	Acres ³ Available	Features ⁴	Expected Crop to be Grown (Historical Yield Average)	Soil Nitrate ^{5,6}	Soil Phosphorus ^{5,7}	Acres Suitable for Manure Spreading ⁸	Development Plan Designation ⁹	Zoning ¹⁰
1	Nw 12-7-6e	Hanover	O	160	Yard site, well, class 3 drain	alfalfa	50 lbs/acre	40 ppm	128	Rural	Rural
2	Se 13-7-6e	Hanover	L	160	Yard site, well, class 2 drain	Corn silage	83	21	150	Rural	Rural
3	Sw 13-7-6e	Hanover	OL	160	Yard site, well, class 3 drain	Corn silage	15	17	115	Rural	Rural
4	W ½ Sw 18-7-7e	Site Anne	O	100	Gravel pit, Class 5 soils	alfalfa	36	9	80	Rural Agriculture	Agriculture
5	Nw 6-7-7e	Site Anne	L	100	Yard site, well, class 2 drain	Grain corn	146	13	95	Rural Agriculture	Agriculture
6	Rl 24 -25	Site Anne	O	135	Municipal Lagoon, class 4 drain	Grain corn	83	12	135	Rural Agriculture	Agriculture
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
TOTAL PROPOSED				815							
										TOTAL	703

1. _____ Indicates Roll Number, Sec, Twshp, Rge or River Lot,
2. _____ Indicates how the land has been secured for spreading O – Own / L – Lease / A – Agreement
3. _____ Acreage available should take into account setbacks from water courses, including ditches, property lines (refer to setback tables in the SA Guide)
4. _____ Features indicate any dwellings, other uses, wells (existing or abandoned), water bodies or other natural features within or adjacent to a spread field (note if any native habitat is proposed for manure application)
5. _____ Soil fertility analysis must be completed by an accredited soil-testing laboratory.
6. _____ Nitrate concentration N (lb/ac at 0-24 inch depth)
7. _____ Phosphorus concentration (ppm P at 0-6 inch depth) based on extraction method specified
8. _____ Suitable acreage is to be based on soil, crop and setback calculations
9. _____ Please reference the Development Plan for the designations
10. _____ Please reference the Zoning Bylaw of your municipality(ies)

Laingspring Farm Ltd.

Notes to set back requirements.

1. The river lots 24 & 25 and the Seine river Diversion, there is a Roadway/ Dike between the property and the diversion as well as another ditch. A setback of at least 40 metres.
- 2, Nw 6-7-7 e, there is a setback of small trees and grass of 20 metres between the class 3 drain and field.
3. SW 13-7-6 e, there will be a grassed setback of 8 metres from the waterway.
4. The Class 2 drain thru SE 13-7-6e and 13-7-6e is also taken into consideration in the calculations. and no manure is applied within 3 metres of this drain.
5. W ½ SW 18-7-7e. Setbacks reflect 5 acres of gravel pit and 15 acres of Class 5 soils that will not be used for manure spreading.

A handwritten signature in black ink, appearing to be 'ML', with a horizontal line underneath it.

Operation Name:

STEP 1: Livestock Information

Species	Type	Livestock Places	Animal Units	Cycle Length (Days)	Cycles / Year	Output per head per cycle		Annual Production Nitrogen		Annual Production P ₂ O ₅	
						kg N	kg P ₂ O ₅	kg	lb	kg	lb
1 Dairy	Dairy Cows (including associated livestock)	210	420	365	1	154.5	75	32445	71379	15750	34650
2											
3											
4											
5											
6											
7											
8											
9											
10											
		Total AU									

STEP 2: Crop Rotation Information

1. Detailed Rotation (Farm Data)	Removal (lb/ac)		
	Nitrogen (N)	P ₂ O ₅	2 X P ₂ O ₅
	153	51	103

STEP 3: Manure Storage Information

1. N-losses	Value (%)
	10

Base Total N:	Acres	
	2 X P ₂ O ₅ Removal	1 X P ₂ O ₅ Removal
32445	71379	15750
29200.5	64241.1	--
LAND BASE REQUIRED		
Nitrogen (N) based	421	421
Phosphorus (P ₂ O ₅) based	337	674

Footnotes:

- 1 Enter the data for livestock species, type, places and N losses in the light green boxes.
- 2 The nitrogen (N) and phosphorus (expressed as P₂O₅) land bases provided in the bright green boxes are based on nutrient excretion, nutrient removal and N losses during storage. Nutrient removal includes only the quantity of nutrient that is in the harvested portion of the plant and is exported from the field. The land base calculations are not based on nutrient uptake. Nutrient uptake is the total quantity of nutrient taken up by the plant and stored in the roots, leaves and seeds. More information on nutrient removal can be found at http://www.gov.mb.ca/agriculture/soilwater/nutrient/pdf/nmi_manureillage_factsheet.pdf.
- 3 The N land base assumes zero volatilization losses during field application using best management practices for N conservation. Field N losses from nitrification, denitrification and leaching are also not included.
- 4 The nutrient excretion values for each livestock category (except sows and turkeys) are adapted from Le Centre de reference en agriculture et agroalimentaire du Quebec - CRAAQ.
- 5 The nutrient excretion value for sows is based upon unpublished data for Manitoba.