



Redwood County

www.co.redwood.mn.us

## Animal Confinement Feedlot Conditional Use Permit Application

### Proposed Location of Feedlot Operation:

Permit #: 12-25 Date: 11/19/25

Address: 22748 Magnolia Ave  
House # Street Name

City: Clements

State: MN

Zip: 56224

Parcel #: 60-036-1020 Township: New Avon

Section: 36

Twp #: 111

Range: 36

### Information about the Operation:

#### General description of feedlot operation (including type and number of animal units, barns, and manure storage plan):

this is an existing / active feedlot with a total confinement barn with under barn, concrete MSA for 2080 head of swine 55-300 lbs. We are proposing to construct a new 184' x 153' x 8' total confinement barn with under barn, concrete, MSA for 3300 head of swine 55 - 300 lbs. Total AU will be 1614 after construction.

#### Legal Description of Proposed Feedlot Location:

PT NENE 36-111N-36W

See attached Exhibit A.

### Site / Plan Information: NOTICE: Change of land use may affect your property taxes.

Zoning District: Agriculture

Soil Type 1: L201A

Soil Type 2: 421B

Water source for the site: private well

Drainage System: subsurface drain tile

#### Estimated water use:

##### Animal 1

Animal Type: Swine 55 - 300 lbs

0.86 gallons/day/animal x 5380 number of animals on site x 350 number of days present  
= 1,619,380 gallons/yr/site

##### Animal 2

Animal Type: \_\_\_\_\_

       gallons/day/animal x        number of animals on site x        number of days present  
=        gallons/yr/site

##### Animal 3

Animal Type: \_\_\_\_\_

       gallons/day/animal x        number of animals on site x        number of days present  
=        gallons/yr/site

Total Gallons: 1,619,380 0

### Proposed Building(s) Information: (Please enter dimensions in feet)

Building 1: Width: 153' Length: 184'

Building 3: Width: \_\_\_\_\_ Length: \_\_\_\_\_

Building 2: Width: \_\_\_\_\_ Length: \_\_\_\_\_

Building 4: Width: \_\_\_\_\_ Length: \_\_\_\_\_

Setback from road right-of-way: 267 feet

Setback from center line of road: 300 feet

Estimated date for beginning construction: May 2026

Estimated completion date: August 2026

**General Contractor:**

Name: Romsdahl Construction

City: St James

State: MN

**Applicant Information:**

Note: If the applicant is not one natural person, requested information and signature(s) must be provided for each partner/associate/co-applicant and must include documentation of each co-applicant's legal identity and the legal relationship between them. Each partner/associate/co-applicant must sign or affirm the application before it will be accepted for consideration.

First Name: \_\_\_\_\_ Last Name: \_\_\_\_\_

Business Name: Schwartz Family LLC

Address: 3226 190th St City: Sleepy Eye State: MN Zip: 56085

Home Phone: 507-794-5779 Cell Phone: \_\_\_\_\_ Email: jhaala@schwartzfarms.net

List any additional applicants: \_\_\_\_\_

**Land Owner:** Complete only if different from Applicant

First Name: \_\_\_\_\_ Last Name: \_\_\_\_\_

Business Name: \_\_\_\_\_

Address: \_\_\_\_\_ City: \_\_\_\_\_ State: MN Zip: \_\_\_\_\_

Home Phone: \_\_\_\_\_ Cell Phone: \_\_\_\_\_ Email: \_\_\_\_\_

If the applicant is not the owner of the land, please specify the type of agreement the applicant has with the owner of the land at the proposed site: \_\_\_\_\_

**Feedlot Operator:** Complete only if different from Applicant

If the operator is not a natural person(s), you must also provide documentation of the operator's legal identity.

First Name: \_\_\_\_\_ Last Name: \_\_\_\_\_

Business Name: Schwartz Farms LLC

Address: 3229 190th St City: Sleepy Eye State: MN Zip: 56085

Home Phone: 507-794-5779 Cell Phone: \_\_\_\_\_ Email: jhaala@schwartzfarms.net

I affirm that the forgoing information is true and accurate. I understand that if any portion of this information is false or materially misleading, any conditional use permit issued in reliance upon this information is voidable at the election of Redwood County.

Applicant(s) Signature(s): [Signature] Date: 11/14/25

Landowner Signature: [Signature] Date: 11/14/25

List of Required Documentation: (Application not complete until received)

- MPCA Application
- Manure Spreading Agreements
- Pit Design
- Manure Management Plan

**Office Use Only** \* The section below is to be filled out by the Environmental Office Staff

Permit fee: \$700.00 Receipt #: 32951

Application Received: 11-19-2025

**Commission Action:**

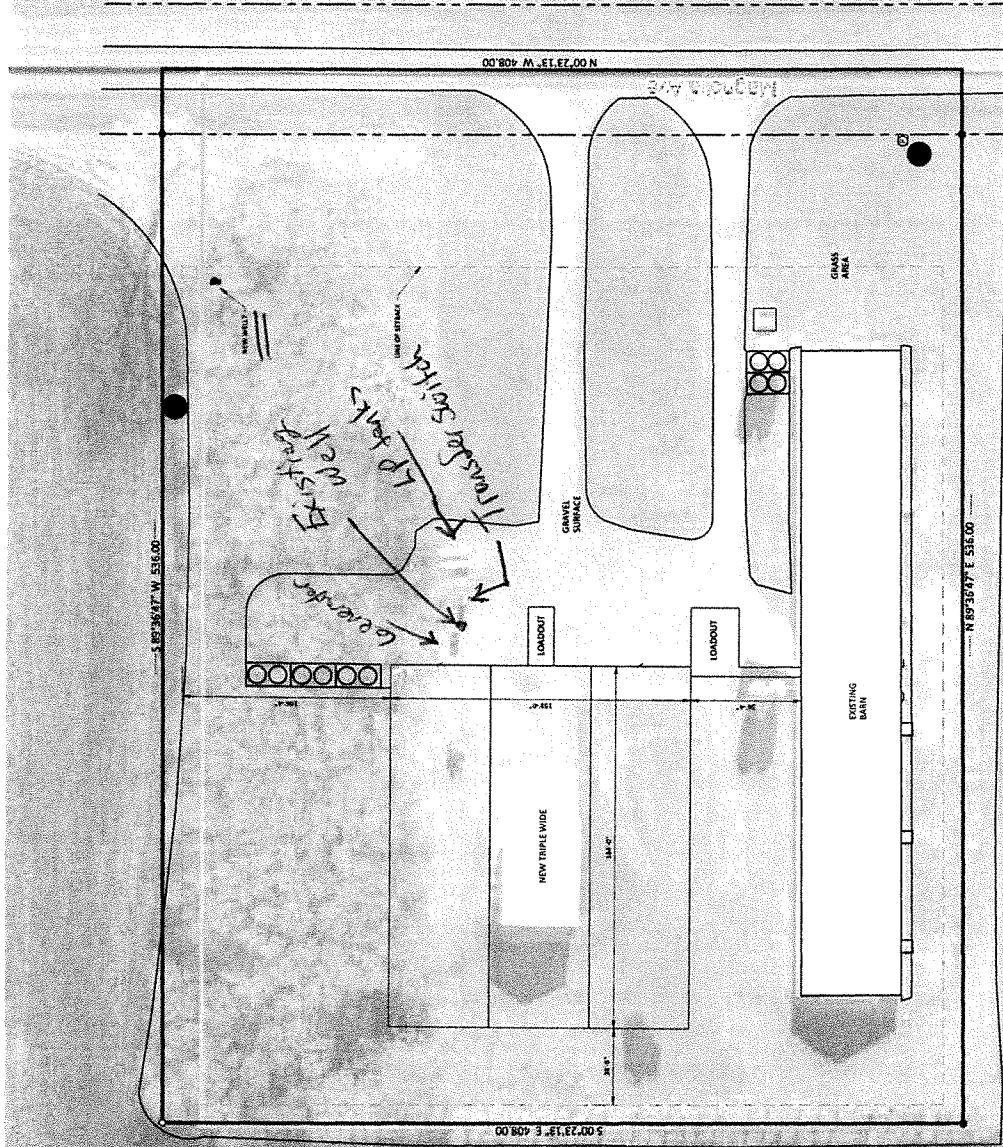
**County Board Action:**

Approved: \_\_\_\_\_ Date: \_\_\_\_\_ Approved: \_\_\_\_\_ Date: \_\_\_\_\_

Disapproved: \_\_\_\_\_ Date: \_\_\_\_\_ Disapproved: \_\_\_\_\_ Date: \_\_\_\_\_

### **EXHIBIT A**

Part of the Northeast Quarter of the Northeast Quarter (NE¼ NE¼) of Section Thirty-six (36), Township One Hundred Eleven (111), Range Thirty-six (36), described as follows: Commencing at the northeast corner of said Section 36; thence southerly along the east line of said Northeast Quarter 858.42 feet to the point of beginning of the tract to be described; thence continuing southerly along said east line 408.00 feet; thence westerly deflecting right 90 degrees, 00 minutes, 00 seconds 536.00 feet; thence northerly deflecting right 90 degrees, 00 minutes 00 seconds 408.00 feet; thence easterly deflecting right 90 degrees 00 minutes, 00 seconds 536.00 feet to the point of beginning. This tract of land contains 5.02 acres of land and is subject to any and all easements of record.



PROJECT: SCHREIER SITE - ON EARTH

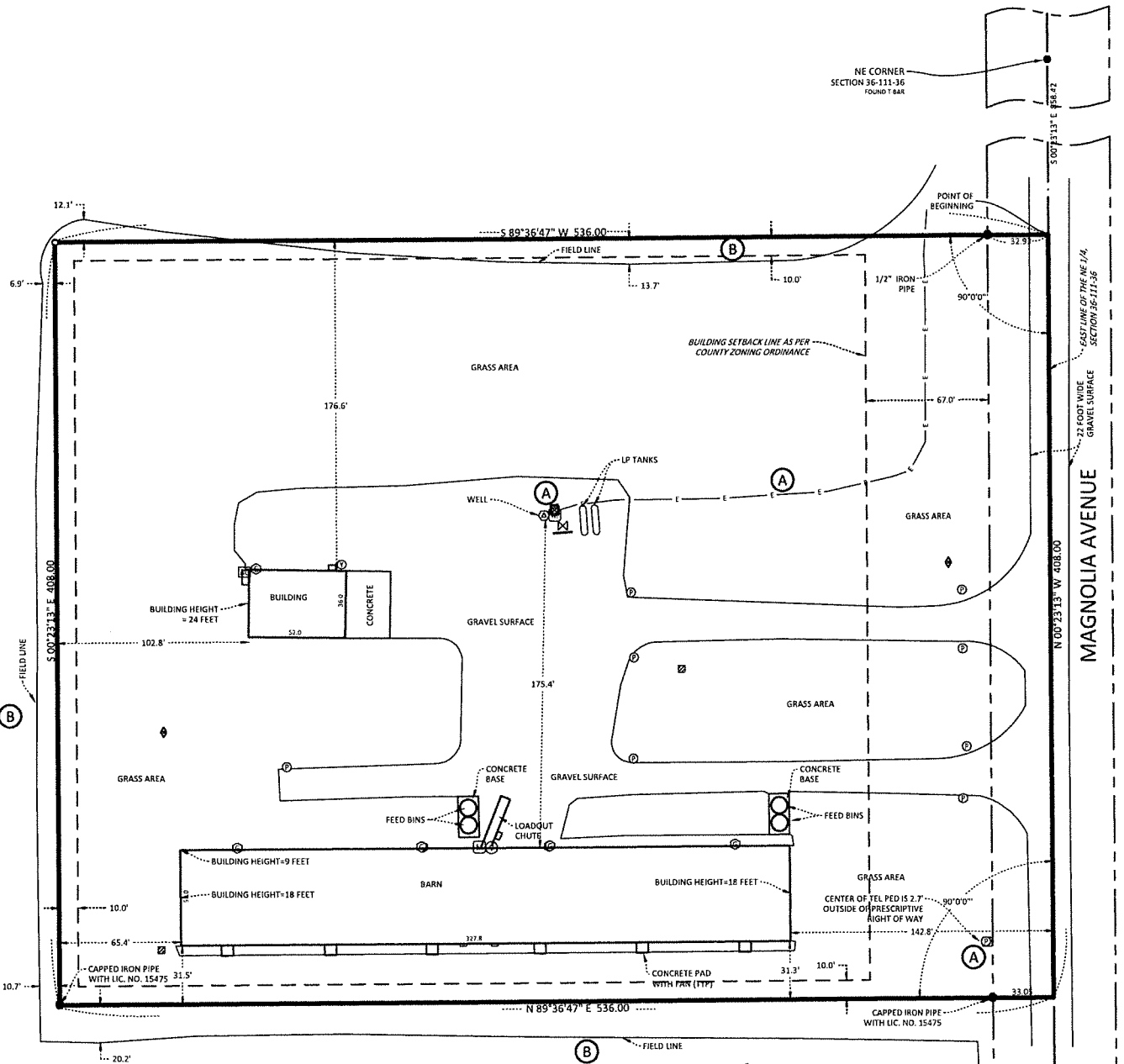
DATE: 100925

SHEET: S2

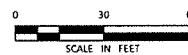
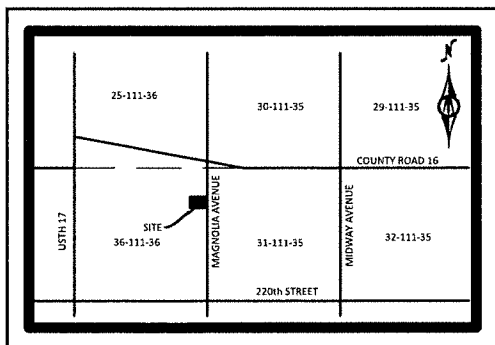


SCHWARTZ FARMS

\* 24 - 72" SDI 5 hole wet/dry shelf feeders along groove



VICINITY MAP



LEGEND

- |   |                                                      |           |                      |
|---|------------------------------------------------------|-----------|----------------------|
| ○ | 1/2" IRON PIPE MONUMENT SET MARKED BY LIC. NO. 44996 | ⬢         | CONTROL POINT        |
| ● | MONUMENT FOUND                                       | M         | METER                |
| ⊕ | PEDESTAL-COMMUNICATION                               | P         | POST                 |
| ⊕ | PEDESTAL-ELECTRIC                                    | W         | WELL                 |
| ⊕ | CATCH BASIN                                          | Y         | YARD HYDRANT         |
| ⊕ | AIR CONDITIONER                                      | V         | VALVE                |
| ⊕ | GAS REGULATOR                                        | ⊕         | TRANSFORMER-ELECTRIC |
| ⊕ | VENT                                                 | — E — E — | ELECTRIC UNDERGROUND |

## STATEMENT OF POSSIBLE ENCROACHMENTS

The following are possible encroachments that may affect the subject property. Bolton & Menk, Inc. does not guarantee that all encroachments have been identified.

- (A) It is not known if the telephone pedestal, electric transformer and underground telephone and electric lines, which appear to serve subject property, are confined to an easement.
- (B) The observed occupation line, which is graphically depicted on this survey map, does not coincide with the boundary line defined within the legal description provided.

## TABLE A ITEMS

**Item 1 - Monuments placed (or a reference monument or witness to the corner) at all major corners of the boundary of the surveyed property, unless already marked or referenced by existing monuments or witnesses in close proximity to the corner.**

- As shown on this survey.

**Item 2 - Address(es) of the surveyed property if disclosed in documents provided to or obtained by the surveyor, or observed while conducting the fieldwork.**

- There was no visible address listed on the property.

**Item 3 - Flood zone classification (with proper annotation based on federal Flood Insurance Rate Maps or the state or local equivalent) depicted by scaled map location and graphic plotting only.**

- Subject property lies in Zone X of the Flood Insurance Rate Map, Panel No. 27127C0350C, dated July 16, 2013 and IS NOT in a Special Flood Hazard Area. Zone X is defined as AREAS OF MINIMAL FLOODING. Field surveying was not performed to determine this zone. An elevation certificate may be needed to verify this determination or apply for an amendment from the Federal Emergency Management Agency.

**Item 4 - Gross land area (and other areas if specified by the client).**

- Subject property, as presented in the title insurance commitment, contains a total of 5.02 acres of land.

**Item 6 (a) - If the current zoning classification, setback requirements, the height and floor space area restrictions, and parking requirements specific to the surveyed property are set forth in a zoning report or letter provided to the surveyor by the client or the client's designated representative, list the above items on the plat or map and identify the date and source of the report or letter.**

- This surveyor was not provided with a report or letter with and zoning information.

**Item 6 (b) - If the zoning setback requirements specific to the surveyed property are set forth in a zoning report or letter provided to the surveyor by the client or the client's designated representative, and if those requirements do not require an interpretation by the surveyor, graphically depict those requirements on the plat or map and identify the date and source of the report or letter.**

- This surveyor was not provided with a report or letter with any zoning information and therefore has not depicted any zoning information on this survey.

**Item 7 (a) Exterior dimensions of all buildings at ground level.**

- As shown on this survey.

**Item 7 (c) Measured height of all buildings above grade at a location specified by the client. If no location is specified, the point of measurement shall be identified.**

- As shown on this survey.

**Item 8 - Substantial features observed in the process of conducting the fieldwork (in addition to the improvements and features required pursuant to Section 5 above) (e.g., parking lots, billboards, signs, swimming pools, landscaped areas, substantial areas of refuse).**

- As shown on this survey.

**Item 10 - As designated by the client, a determination of the relationship and location of certain division or party walls with respect to adjoining properties.**

- As shown of this survey.

**Item 11 - Evidence of underground utilities on or serving the surveyed property (in addition to the observed evidence of utilities required pursuant to Section 5.E.iv.) as determined by:**

(b) markings coordinated by the surveyor pursuant to a private utility locate request

**Note to the client, insurer, and lender - With regard to Table A, item 11, information from the sources checked above will be combined with observed evidence of utilities pursuant to Section 5.E.iv to develop a view of underground utilities. However, lacking excavation, the exact location of underground features cannot be accurately, completely, and reliably depicted. In addition, in some jurisdictions, 811 or other similar utility locate requests from surveyors may be ignored or result in an incomplete response, in which case the surveyor shall note on the plat or map how this affected the surveyor's assessment of the location of the utilities. Where additional or more detailed information is required, the client is advised that excavation may be necessary.**

- Underground utility lines and structures are shown in an approximate way only, according to information provided by others. A request that utilities be located for this survey was made through Gopher State One Call (Ticket No. 212174328). The underground utility lines and structures shown on this map represent the information provided to Bolton & Menk, Inc. as a result of that request. The surveyor does not guarantee that the information provided was either complete or accurate. The surveyor does not guarantee that there are no other underground utility lines and structures, active or abandoned, on or adjacent to the subject property.

**Item 16 - Evidence of recent earth moving work, building construction, or building additions observed in the process of conducting the fieldwork.**

- There is no observable evidence of earth moving work, building construction or building additions within recent months.

**Item 17 - Proposed changes in street right of way lines, if such information is made available to the surveyor by the controlling jurisdiction. Evidence of recent street or sidewalk construction or repairs observed in the process of conducting the fieldwork.**

- Surveyor wasn't provided within documentation indicating there are proposed changes in street right of way, either completed or proposed. There is no observable evidence of recent street or sidewalk construction or repairs.

**Item 18 - Pursuant to Sections 5 and 6 (and applicable selected Table A items, excluding Table A item 1), include as part of the survey any plottable offsite (i.e., appurtenant) easements disclosed in documents provided to or obtained by the surveyor.**

- Surveyor did not acquire and was not provided any supplemental information to the documents provided in the Title Commitment.

**Item 20 - Locate all wells and their distances from the hog facility.**

- As shown on this survey.

# ALTA/NSPS LAND TITLE SURVEY SCHREIER SITE NEW AVON TOWNSHIP, REDWOOD COUNTY, MINNESOTA TITLE COMMITMENT NO. NU-20210301-1

## LEGAL DESCRIPTION

The following were provided in Fidelity National Title Insurance Company Commitment Number NU-20210307-1, Effective Date of July 16, 2021, at 8:00 a.m., Schedule A.

Part of the Northeast Quarter of the Northeast Quarter (NE ¼ NE ¼) of Section Thirty-six (36), Township One Hundred Eleven (111), Range Thirty-six (36), described as follows: Commencing at the northeast Corner of said Section 36; thence southerly along the east line of said Northeast Quarter 858.42 feet to the point of beginning of the tract to be described; thence continuing southerly along said east line 408.00 feet; thence westerly deflecting right 90 degrees, 00 minutes, 00 seconds 536.00 feet; thence northerly deflecting right 90 degrees, 00 minutes 00 seconds 408.00 feet; thence easterly deflecting right 90 degrees 00 minutes, 00 seconds 536.00 feet to the point of beginning. This tract of land contains 5.02 acres of land and is subject to any and all easements of record.

## SURVEYOR'S NOTES

- Subject property boundaries that are graphically depicted on this survey map coincide with the property described in Schedule A of the title insurance commitment.
- The subject property has constructed vehicular access to and from the Magnolia Avenue right of way.
  - The entire 66 feet of Magnolia Avenue right of way is assumed to exist per prescriptive easement. This surveyor is not aware of any controlled access restrictions for the right-of-way of Magnolia Ave.
- Orientation of the bearing system used for this survey is based on the NAD83(2011) coordinate projection for Redwood County, Minnesota.
- Subject property is Abstract property.

## NOTES CORRESPONDING TO SCHEDULE B - EXCEPTIONS

The following were provided in Fidelity National Title Insurance Company Commitment Number NU-20210307-1, Effective Date of July 16, 2021, at 8:00 a.m., Schedule B - Exceptions. The items referenced correspond to the items defined in the Title Commitment's Schedule B - Exceptions. The items referenced are followed by comments made by Bolton & Menk, Inc. addressing the item and are referenced on survey map by item number.

Items 1 through 12, Schedule B - Exceptions are not addressed on this survey.

(13) Township Resolution, filed for record July 27, 1984, in Book 103 of Misc., Page 77.

The subject property is not burdened by said resolution, nor is said resolution appurtenant to the subject property, therefore, said resolution is not shown on this survey map.

(14) Conditional Use Permit #11-04, dated July 20, 2004, filed for record July 20, 2004, as Document No. 313831

The subject property is affected by said conditional use permit, the permit does not have a defined location that can be plotted, therefore, said permit area is not shown on this survey map.

(15) Easement, dated April 11, 2005, filed for record July 25, 2005, as Document No. A317651; Assignment of Easement, dated April 11, 2005, filed for record July 25, 2005, as Document No. A317653.

The subject property does benefits from said easement. The affected parcels are off site and therefore are not graphically depicted on this survey.

(16) Easement, dated April 11, 2005, filed for record July 25, 2005, as Document No. A317652; Assignment of Easement, dated April 11, 2005, filed for record July 25, 2005, as Document No. A317653.

The subject property does benefits from said easement. The affected parcels are off site and therefore are not graphically depicted on this survey.

## SURVEYOR'S CERTIFICATION

To: 1) Schwartz Family, LLC; 2) Fidelity Nation Title Insurance Company;

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2021 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1, 2, 3, 4, 6a, 6b, 7a, 7c, 8, 11b, 16, 17, 18, and 20, Table A thereof. I hereby certify that this survey was prepared by me or under my direct supervision and that I am a duly licensed land surveyor under the laws of the State of Minnesota.

The field work was completed on August 11, 2021.  
Date of Plat or Map: August 24, 2021.

Jesse D. Zeig  
By: Jesse D. Zeig  
jesse.zeig@bolton-menk.com  
www.bolton-menk.com  
Registration No. 44996  
Date Signed: August 24, 2021

Note: This certification is made to the parties listed above as a professional opinion based on the knowledge information and belief of the surveyor as of the date of issuance. Over time, survey and title conditions may change from those shown on this survey or in the title commitment. The above parties are advised that updated title documentation and surveys will be required to confirm conditions affecting the subject property after date of issuance of this survey.

ALTA/NSPS SURVEY  
NEW AVON TWP., REDWOOD COUNTY, MINNESOTA



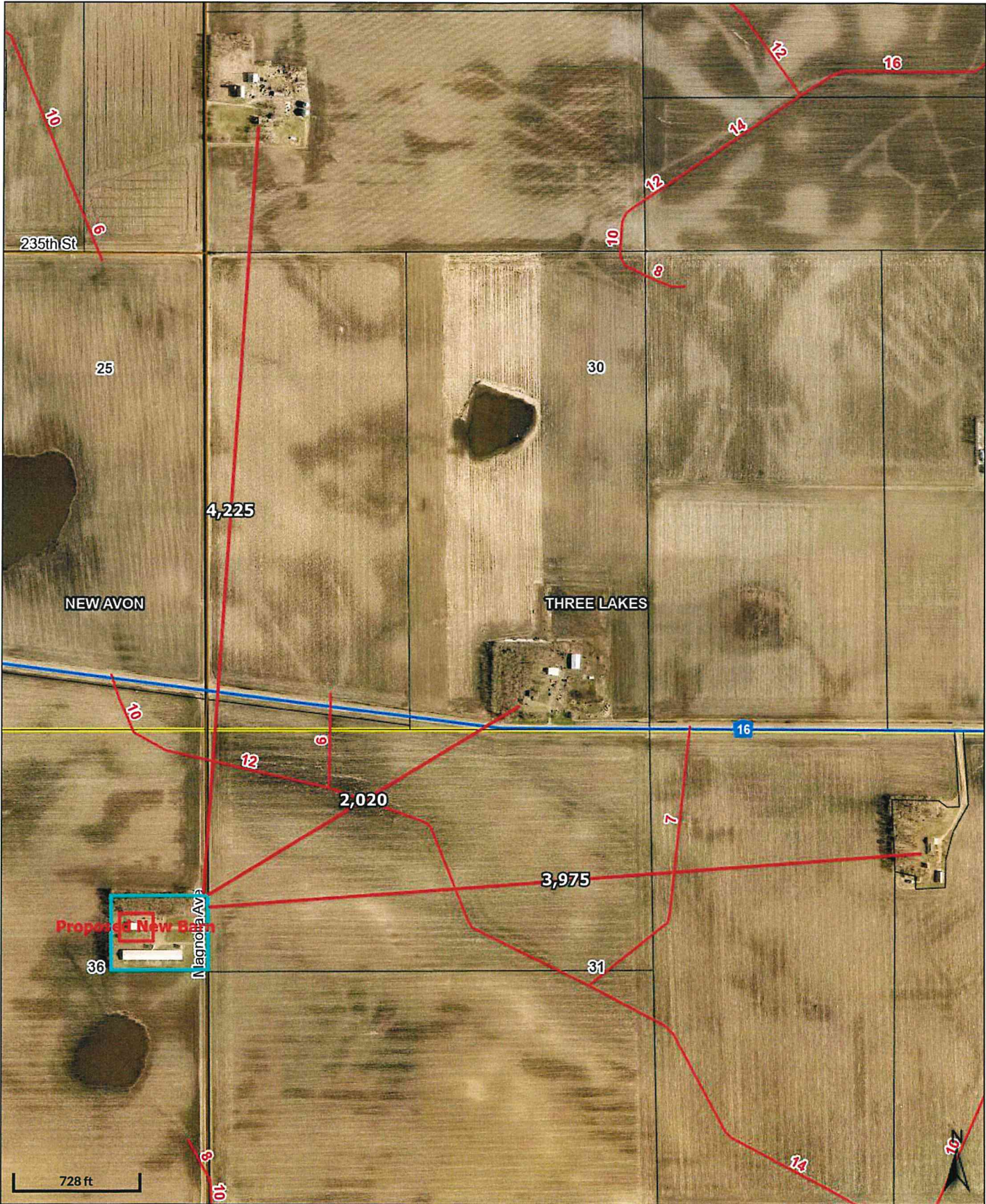
**BOLTON  
& MENK**

1243 CEDAR STREET NE  
SLEEPY EYE, MINNESOTA 56085  
(507) 794-5541

PART OF THE NE 1/4,  
SECTION 36-111-36

FOR: SCHWARTZ FAMILY, LLC

Neighborhood



# Odors From Feedlots Setback Estimation Tool

Farm Name	Schwartz Family
Address or County	New Avon Township
Evaluator	Jeanette Pidde
Date	11/21/2025

Clear All

OFFSET Ver 2.0  
University of Minnesota  
1/21/2017

OFFSET  
Annoyance-free  
96%

Source Edge to Nearest Neighbor (ft)	2300
Source Edge to Property Line (ft)	38

## Building Sources

Building Type	Width (ft)	Length (ft)	# of Similar Sources	Total Area (sqft)	Control Technology	% air treated
Swine Finishing - deep pit ▼	153	184	1	28152	None ▼	
Swine Finishing - deep pit ▼	50	325	1	16250	None ▼	
Dairy - loose housing ▼				0	None ▼	
None ▼				0	None ▼	
None ▼				0	None ▼	
None ▼				0	None ▼	
None ▼				0	Biofilter ▼	

## AREA SOURCES

Source Description	Shape	Width (ft) (or Dia)	Length (ft)	Area (sqft)	Control Technology
Earthen manure storage ▼	Rectangle ▼			0	None ▼
User added ▼	Rectangle ▼			0	None ▼
None ▼	Rectangle ▼			0	None ▼
None ▼	Rectangle ▼			0	None ▼
None ▼	Rectangle ▼			0	None ▼
None ▼	Rectangle ▼			0	None ▼
None ▼	Rectangle ▼			0	None ▼

Building Sources	
Add Source Type	
Name of Source	
Odor Flux (ou/s/m2)	
H2S Flux (ug/s/m2)	
NH3 Flux (ug/s/m2)	
Documentation	
Add a Control Technology	
Name of technology	
Odor reduction (%)	
H2S reduction (%)	
NH3 Reduction (%)	
Documentation	

Area Sources	
Add a Source Type	
Name of Source	
Odor Flux (ou/s/m2)	
H2S Flux (ug/s/m2)	
NH3 Flux (ug/s/m2)	
Documentation	
Add Control Technology	
Name of technology	
Odor reduction (%)	
H2S reduction (%)	
NH3 Reduction (%)	
Documentation	

**Conditions for Permit No. 12-25 (Schwartz Farms)**

1. The permit holder shall comply with all applicable laws, rules, and regulations, including but not limited to Redwood County Zoning Ordinance, as hereafter amended from time to time.
2. The permit holder shall allow the Redwood County Environmental Office to inspect the site for all purposes permitted by law whenever deemed necessary by the Redwood County Environmental Office.
3. The permit holder shall contact all relevant local, state, and federal authorities/entities and inquire as to whether a permit and/or license is required. If a permit and/or license is required, the permit holder shall apply for and obtain any and all required permits and/or licenses. A copy of all such permits and/or licenses shall be provided to the Redwood County Environmental Office within thirty (30) days of the date the permit holder receives the same.
4. All waste, refuse, and the like generated by or from the conditional use must be disposed of in the manner provided by the applicable local, state, and federal statutes, rules, and regulations.
5. The permit holder shall take appropriate and reasonable measures to assure that all surface water runoff satisfies all applicable local, state, and federal discharge standards.
6. The permit holder shall not allow the conditional use to be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted. The permit holder shall not allow the extraction interim use to impede the normal and orderly development and improvement of surrounding vacant property for uses predominant to the area. Adequate measures shall be taken to prevent or control offensive odor, fumes, dust, and vibration, so that none of the foregoing will constitute a nuisance now or in the future.
7. Adequate access roads, drainage, and other necessary facilities shall be provided at all times and shall continue to be provided by the permit holder now and in the future.
8. The manner in which manure is stored and disposed of shall comply with all applicable local, state, and federal laws, rules, and regulations. If manure is applied to land, it shall be applied to land at agronomic rates. Applied manure shall be injected or incorporated within 24 hours. The permit holder shall retain a record of all locations where manure is applied to land. Such records shall be maintained for a period of no less than five (5) years, measured from the date the manure is applied to land. Such records shall be submitted to the Redwood County Environmental Office upon request. The permit holder shall report any changes in spread agreements or spread areas to the Redwood County Environmental Office within thirty (30) days subsequent to any such change.
9. The permit holder shall abide by the Odor Management Plan attached to the application, or by any amended plan approved by the Zoning Administrator.
10. The County Board of Commissioners may at any time impose additional conditions as necessary and appropriate including but not limited to: the planting of trees and shrubs for use as a

windbreak for the feedlot operation; the furnishing and placing in a dedicated account, to be administered by the County, an annual payment for reclamation purposes based upon the number of Animal Units involved; and restrictions on the days on which a manure storage structure may be disturbed or manure may be transferred, applied, incorporated, or injected.

11. Dead livestock shall be stored in such a manner as to not create a nuisance. Disposal of dead livestock by burial is strictly prohibited. Dead hogs may be composted according to the Redwood County Swine Composting Protocol, which is attached hereto.
12. The permit holder shall construct the manure storage structure/concrete pit(s) to meet or exceed the minimum requirements set forth in the plans and specifications prepared by Nicholas J. Rowe, P.E., dated November 3, 2025, attached to the permit holder's application.
13. A perimeter tile line shall be maintained around the outside of the base of the pit wall and an inspection manhole shall be provided where the perimeter tile branches out into the local drain tile system.
14. The permit holder shall install a warning sign at all entrances to the concrete pits. These signs shall warn the reader of the dangers of entering the pit.
15. No construction on the pit shall be done between October 15th and April 15th, except by approval of the Zoning Administrator. The Environmental Office shall be contacted for inspection prior to pouring the pit floor and pit walls.
16. The Redwood County Planning Commission shall review the conditional use permit and shall be authorized to take any and all necessary action(s), including but not limited to revoking the conditional use permit and/or requiring the permit holder to reapply for a conditional use permit, if: 1) The Redwood County Environmental Office acquires information previously unavailable that indicates the terms and conditions of the permit do not accurately represent the actual circumstances of the permitted facility or the conditional use; 2) It is discovered subsequent to the issuance of the permit the permit holder failed to disclose all facts relevant to the issuance of the permit or submitted false or misleading information to the Redwood County Environmental Office, the Redwood County Planning Commission, or the Redwood County Board of Commissioners; 3) The Redwood County Environmental Office determines the permitted facility or conditional use endangers human health or the environment; and/or (4) The permit holder violates any of the herein described conditions, the Redwood County Ordinances, State statutes, or Federal laws.

## Redwood County Swine Composting Protocol:

- I. Purpose and scope: To allow hog producers to compost their dead livestock (carcasses) in lieu of rendering. These guidelines are based upon Minnesota Rules 1719 (Board of Animal Health), which are incorporated herein by reference. In any instance where these guidelines diverge from Minnesota Rules 1719, the stricter rule shall control.
- II. Site selection – must take into account:
  - a. Prevailing winds – reasonable attempts must be made to avoid sites where the prevailing winds will carry odors onto neighboring land uses (excepting agricultural fields and feedlots).
  - b. Public view – the compost facility must be shielded from public view, so that the composting material is not visible from public roadways or neighboring land uses.
- III. Facility – requirements for construction:
  - a. Overall design: Compost facility must consist of at least three (3) compost bays each with 20 cubic feet of area for every one (1) pound daily normal mortality. Each bay must have poured concrete walls on three sides and be gated on the front so that wild and domestic animals cannot access the compost. The entire structure must sit on a concrete pad and have a roof to deflect rainwater from the compost.
  - b. Floor: Floor must be constructed of 5" thick impervious concrete. Floor must be sloped toward the rear of the facility to keep liquid from running out of the composting area onto the ground.
  - c. Walls: Walls must be constructed of 6" thick impervious concrete. Cement walls must be no more than 5' high. If lower than 5', the walls must include fencing up to 5' to prevent wild or domestic animals from accessing the compost. Cement walls must be high enough to contain the compost material.
  - d. Roof: Roof must be supported by treated wood or metal supports and rafters. Roof must completely cover the composting bays so as to deflect rainwater.
- IV. Process – the following practices must be observed:
  - a. Dead pigs must be added within 24 hours of death.
  - b. Each composting bay shall begin with a 1' layer of litter. Thereafter, carcasses shall be stacked up to 1' and covered by 1' of litter. Add additional layers as needed.
  - c. Litter can be finely chopped vegetable matter (such as corn stalks), sawdust, or finished compost. The carbon to nitrogen ratio must be in the range of 15:1 to 35:1.
  - d. Carcasses must be kept at least 6" from the edge of the compost bay.
  - e. The 3 compost bays allow for a three stage composting process. When the first bay is full, start a new pile in the second bay. When the second bay is full, start a new pile in the third bay. When the third bay is full, empty the first bay and start over. Turn each bay every 7 to 10 days. Add water as necessary to keep up the heat.
  - f. Temperature:
    - i. Must be taken and recorded in each bay daily.
    - ii. Must be at least 130 degrees Fahrenheit.
    - iii. Temperature records must be kept on hand for 2 years.
- V. Protocol:
  - a. Must keep a written composting protocol describing the composting steps on-site.
  - b. Must instruct all employees on-site about the protocol.
- VI. Pests, such as flies and rodents, must be controlled
- VII. Transportation of Carcasses on public roads:
  - a. An owner who transports the owner's own carcasses does not need a permit to do so.
  - b. Carcasses transported on public roads must be in leak-proof, covered containers.
- VIII. Finished compost:
  - a. Must contain no visible soft tissue pieces.
  - b. May be handled and stored according to PCA and Dept. of Agriculture rules.

## Submittal Information

Facility Name: Schwartz Family, LLC - Schreier  
Agency Interest ID: 89671  
Permit ID: NEW  
Service Type: Feedlot Permitting - SDS General Permit Issuance  
Transaction ID: 170036  
Submitted On: 2025-11-13 08:27:26

## Permit Application Selection

Does your facility exceed any federal large CAFO thresholds? Yes  
Does your facility discharge to US Waters? No  
Do you want to apply for NPDES Permit? No  
Does your facility currently or after proposed expansion have a capacity to house 1,000 or more animal units? Yes  
Are you eligible for the SDS general permit? Yes

## Application Readiness

Based on your previous answers, you are applying for a SDS General Permit.

Are you constructing new or expanding an existing feedlot or manure storage area (MSA)? Yes  
Is the ultimate capacity of the feedlot 500 or more animal units, or will the MSA hold manure produced by 500 or more animal units? Yes  
Acres Disturbed 0.75  
Is the facility Minnesota Agricultural Water Quality Certified? No  
Is the feedlot in a non-delegated county? Yes

### Acknowledgements

I have notified all government authorities and local zoning authorities about the proposed construction or expansion, in accordance with Minn. R. 7020.2000 subp. 5.

I have made a separate application for a Construction Stormwater (CSW) NPDES general permit.

I understand that if the MPCA determines the facility does not meet the criteria for coverage under the general permit, this application will be denied and a new application must be submitted.

## Feedlot Information

Feedlot Name: Schwartz Family, LLC - Schreier  
Physical Address: 22748 Magnolia Ave  
Clements MN 56224  
Mailing Address: 32296 190th St  
Sleepy Eye MN 56085-4374  
Location Description:

## Feedlot Location

Collection Method: Digitized - MPCA online map  
Coordinate System: Lat Long - decimal degrees  
Latitude: 44.38049  
Longitude: -95.10734  
Point of Reference: General Location  
County: Redwood  
Is the site located in Indian country?: No  
Parcel(s) County and ID: Redwood 600361020  
Township: 111  
Range: 36W  
Section: 36  
Quarter 160: NE  
Quarter 40: NE  
Quarter 10:  
Quarter 2.5:

## Contacts

Contact Name:	Brian Schwartz
Contact Type:	Feedlot Contact
Organization Name:	
Organization Type:	
Address:	32296 190th St Sleepy Eye MN 56085-4374
Email:	bschwartz@schwartzfarms.net jhaala@schwartzfarms.net
Phone:	5072762407 5077945779 5077948954
Contact Name:	John Schwartz
Contact Type:	Owner
Organization Name:	Schwartz Family LLC
Organization Type:	Private (Non-Government)
Address:	32296 190th St Sleepy Eye MN 56085-4374
Email:	jhaala@schwartzfarms.net
Phone:	5072762407 5077945779 undefined
Contact Name:	Joe Schwartz
Contact Type:	Owner
Organization Name:	Schwartz Family LLC
Organization Type:	Private (Non-Government)
Address:	32296 190th St Sleepy Eye MN 56085-4374
Email:	jhaala@schwartzfarms.net
Phone:	5072762407 5077945779 undefined
Contact Name:	Danielle Havemeier
Contact Type:	Billing Contact
Organization Name:	Schwartz Family LLC
Organization Type:	Private (Non-Government)
Address:	32296 190th St Sleepy Eye MN 56085-4374
Email:	dhavemeier@schwartzfarms.net
Phone:	507-794-5779

## Prevention Opportunities

Have you implemented any prevention activities in the past year?	Yes
How did you do it? Equipment Modifications	
Would you like to be contacted to discuss prevention opportunities?	No

## Animal Holding & Numbers

### Animal Holding Areas

Does the facility have pasture access?	No		
Are there animal holding areas at this facility?	Yes		
Is there a well within 1000 feet?	Yes 100 ft.		
Total Confinement with Underfloor Liquid Storage	<b>Animal Type</b>	<b>Capacity</b>	<b>Animal Units</b>
Status: Active	Swine 55-300 lbs	2,080	624
Structure Name: 1			
Length: 328 feet			
Width: 51 feet			
Coordinate System: Lat Long - decimal degrees			
Latitude: 44.38028			
Longitude: -95.10834			

Collection Method: Digitized - MPCA online map

Reference Point: General Location

LMSA-Underfloor Storage

Length: 328 feet

Width: 51 feet

Depth: 8 feet

Volume: 861,157 gallons

Total Confinement with Underfloor Liquid Storage

Status: New

Structure Name: 2

Length: 184 feet

Width: 153 feet

Coordinate System: Lat Long - decimal degrees

Latitude: 44.38068

Longitude: -95.10875

Collection Method: Digitized - MPCA online map

Reference Point: General Location

LMSA-Underfloor Storage

Length: 184 feet

Width: 153 feet

Depth: 8 feet

Volume: 1,421,394 gallons

#### Total Animal Headcount

Animal Type	Capacity	Units
Swine 55-300 lbs	5,380	1,614
Totals:	5,380	1,614

## Manure Storage Areas

Are there manure storage or treatment areas at this feedlot? Yes

Is there a well within 1000 feet? Yes 100 ft.

This manure storage or treatment area is co-located with a Total Confinement with Underfloor Liquid Storage area.

LMSA - Underfloor Storage

Structure Name: 1

Status: Active

This manure storage or treatment area is co-located with a Total Confinement with Underfloor Liquid Storage area.

LMSA - Underfloor Storage

Structure Name: 2

Status: New

## Feed Storage Areas

Is feed at the facility stored in an outdoor pile or bunker? No

## Mortality Management

Are animal mortalities composted in a manner that utilizes manure or litter as a part of the compost material? No

## Air Emissions Plan

I will employ the following Air Emissions Plan. (This satisfies the requirements of Minn. Rule 7020.0505 subp4.B (1))

Affirmed

List of facility components likely to generate significant odors and methods use to mitigate odors\*

#### Animal holding areas

- Disperse/mix air with tree plantings
- Regular removal of manure
- Promptly clean up any spilled feed
- Use spray oil to reduce dust
- Treatment of escaping air with control technologies

- Higher oil and fat content in feed to reduce dust
- Eliminate manure buildup under gates, feeders, etc.
- Maintain exhaust fans and avoid manure and dust accumulation
- Maintain clean, dry floors to eliminate manure buildup
- I will consult the MPCA to identify changes that can be made to reduce odors

#### Manure storage areas

- Maintain crust on basin by using organic bedding
- Cover liquid manure storage area with straw
- Cover liquid manure storage area with synthetic cover
- Anaerobic digestion
- Separate solids with settling basin or liquid/solid separator
- Utilize a pit additive to break down solids
- Cover the solid manure stockpile

- Notify neighbors of manure application periods and avoid holidays
- Disperse/mix air with tree plantings
- Add straw or other bedding material to reduce odor/emissions
- Treatment of escaping air with control technologies
- Reduce length of time stockpile is maintained
- Solid manure composting
- I will consult the MPCA to identify changes that can be made to reduce odors

\*In the event that continued odor complaints are validated, at least one of the practices identified above will be implemented pursuant to MPCA request/approval

#### Response to documented exceedances

If ambient air quality monitoring indicates an exceedance of the Hydrogen Sulfide Standard, the applicant will submit a report, at the MPCA's request, that provides documentation that one of the following will control the emissions.

#### Liquid manure storage areas

- Chemical additions
- Natural crusting
- Straw cover
- Synthetic cover (i.e., HDPE)
- Treatment of escaping air

#### Solid manure storage areas

- Synthetic cover
- Frequent manure removal
- Frequent land application
- Incineration
- Composting

The report must provide evidence that the technology will control the emissions, indicate when the technology will be installed and fully operational, and indicate what temporary measures will be taken to minimize emissions prior to installation. Alternatives may be approved at the discretion of the MPCA. The measures with the report will be immediately implemented upon MPCA approval.

## Sensitive Areas

Is any part of the facility located within 1,000 feet of surface waters or tile intakes?	Yes
Surface Water Types:	
Is any part of the facility located within a delineated flood plain (100 year flood)?	No
Is any part of the facility located within designated shoreland?	No
Are there four or more sinkholes within 1,000 feet of the facility?	No
Is any part of the facility located within 300 feet of a known sinkhole?	No
Is any part of the facility located within 1,000 feet of any of the following types of wells?	No
-a community water supply well,	
-a well serving a public school as defined under Minn.Stat. 120A. 05,	
-a well serving a private school excluding home school sites	
-a well serving a licensed child care center where the well is vulnerable(Minn.R. 4720.5550, subp. 2)	

## Environmental Review

Are you only applying for reissuance of an existing permit? (no construction projects, physical alteration, or operational changes to the facility or process)?	No
Are you required to prepare, are you preparing, or have you completed any of the following items for any responsible governmental unit (RGU) other than the MPCA (e.g. City, Township, County, State or Federal Agency) as part of this project? Environmental Assessment Worksheet(EAW), Environmental Impact Statement(EIS), Alternative Urban Areawide Review(AUAR), Federal Environmental Assessment(EA)	No
Has this project been petitioned for an environmental review?	No
Subp. 2 - Construction or expansion of a nuclear fuel or nuclear waste processing facility?	No
Subp. 3 - Construction of an electric power generating plant and associated facilities designed for or capable of operating at a capacity of 25 megawatts or more but less than 50 megawatts and for which an air permit from MPCA is required?	No
Subp. 4 - Construction of a new or expansion of an existing petroleum refinery?	No
Subp. 5A - Construction of a facility for the conversion of coal, peat, or other biomass sources to a gaseous, liquid, or solid fuel (this includes anaerobic digesters)?	No
Subp. 5B - Construction of a facility for the production of alcohol fuels?	No
Subp. 8A - Construction or expansion of a coal transfer facility?	No
Subp. 8B - Construction or expansion of a hazardous materials transfer facility?	No
Subp. 10A - Construction or expansion of a storage facility for coal?	No
Subp. 10B - Construction of a facility for the storage of hazardous materials?	No
Subp. 10C & Subp. 10D - Expansion of a facility for the storage of hazardous materials?	No
Subp. 10H - Construction or expansion of a facility that will store silica sand?	No
Subp. 13 - Construction or expansion of a paper or pulp processing facility?	No
Subp. 15 - Construction or modification of a stationary source of air emissions resulting in an increase in air emissions or greenhouse gases?	No
Subp. 16 - Construction or expansion of a hazardous waste disposal facility?	No
Subp. 17 - Construction or expansion of a mixed municipal solid waste disposal, transfer, energy recovery, or compost facility?	No
Subp. 18A & Subp. 18B - Expansion, modification or replacement of a municipal sewage collection system?	No
Subp. 18C - Expansion or reconstruction of an existing municipal or domestic wastewater treatment facility?	No
Subp. 18D - Construction of a new municipal or domestic wastewater treatment facility?	No
Subp. 18E - Expansion or modification of an existing industrial process wastewater treatment facility?	No
Subp. 18F - Construction of a new industrial process wastewater treatment facility?	No
Subp. 25 - Incineration of wastes containing Polychlorinated Biphenyls (PCBs)?	No
Subp. 29 - Construction or expansion of an animal feedlot facility?	Yes
Subp. 29.1 - Are you constructing an animal feedlot facility with a capacity of 1,000 animal units or more?	No
Subp. 29.2 - Are you expanding an animal feedlot by 1,000 animal units or more?	No
Subp. 29.3 - Are you constructing or expanding an animal feedlot facility by more than 500 animal units?	Yes
Subp. 29.4 - Is the existing or proposed facility located wholly or partially in any of the following sensitive locations: • Shoreland or delineated floodplain • A state or federally designated wild and scenic river district • The Minnesota River Project Riverbend Area • The Mississippi Headwaters Area • A drinking water supply management area • Within 1000 feet of a sinkhole, cave, resurgent spring, disappearing spring, Karst window, blind valley or dry valley	No No No No No No
A - Has a previous phase of this project been conducted in the last 3 years?	No
B - Are you planning an expansion or another phase of this project within the next 3 years?	No
C - Do you have other existing facilities or proposed projects that may affect the same geographic area as this project?	No

## Facility Monitoring

Is your facility required to perform groundwater, surface water or surface discharge monitoring?	No
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## Nutrient Management Plan

A copy of the NutrientManagementPlanfor2026-2027.pdf generated on 11/10/2025 11:39:37 AM is included in the submittal.

## Attachments

### Permit Application Documents:

Attachment Type	File Name	Document Date
Non-Delegated County Public Meeting Minutes	Minutes from Redwood Co P.pdf	11/10/2025
Verification of Good Neighbor Notice	affidavit of publication.pdf	11/10/2025

### Manure Storage Documents:

Attachment Type	File Name	Document Date
Construction Plans and Specifications	Schreier Site 11-3-25.pdf	11/10/2025

### Other Documents:

Attachment Type	File Name	Document Date
Emergency Response Plan	Emergency Response Plan.pdf	11/10/2025

## Certification

I hereby certify that the design, construction, and operation of the facility will be in accordance with this application and plans, specifications, reports, and related communications approved by the MPCA, and in accordance with applicable permit conditions or regulations/standards of the MPCA. I also certify under penalty of law that this document and all attachments were prepared under my direction or supervision and the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

The person that signs this application must be one of the following:

- A. For a corporation, a principal executive officer of at least the level of vice president
- B. For a partnership, a general partner
- C. For a sole proprietorship, the proprietor

Name of Signing Party: John Schwartz  
 Username of Signing Party: JSchwartz  
 Challenge Question: What was your first job?  
 Challenge Question Answer: \*\*\*\*\*  
 Certification Date and Time: 11/12/2025 2:53:45 PM

## Payment

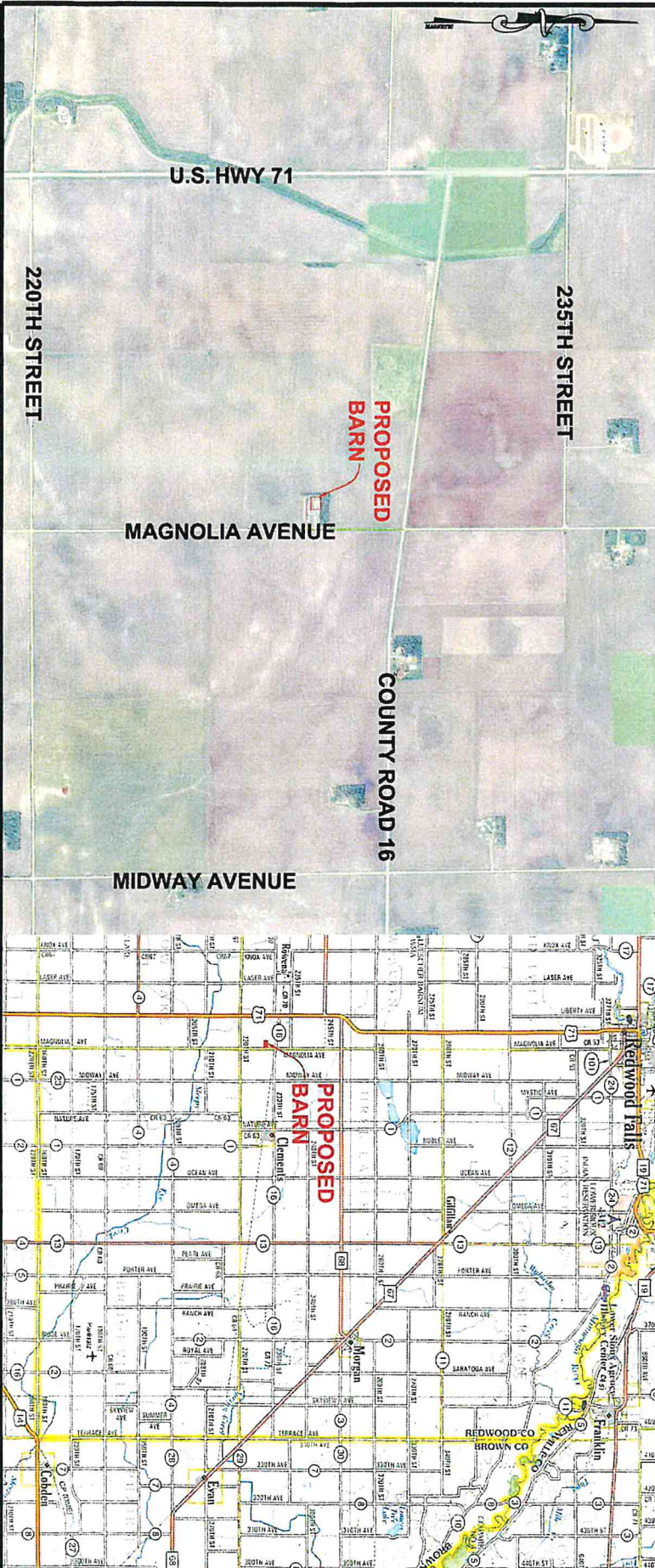
SDS General Issuance Application Fee	\$620.00
Total	\$620.00

Bank Transaction Confirmation ID: MNPPCA000113031

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SHEET 3 -	SITE PLAN		PERIMETER TILE
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	SIDEWALL END WALL BRACING & BEAM POCKET COLUMN DETAIL	SHEET 7 -	PERIMETER TILE SYSTEM NOTE
			12" DIVIDER WALL
			INSPECTION RISER DETAIL
SHEET 5 -	PUMP OUT PLAN PUMP OUT SECTION		CONCRETE & STRUCTURAL NOTES
			SLAT LEDGES & STEM WALLS NOTE

**SITE ADDRESS:**  
**22748 MAGNOLIA AVENUE**  
**CLEMENTS, MN 56224**



I hereby certify that this engineering document was prepared by me or under my direct supervision and I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.  
 Nicholas J. Rowe, P.E.  
 License number: 46735  
 My license renewal date is June 30, 2025  
 Pages or sheets covered by this seal: Sheet-1-7  
 Date: 11/3/25

**ProAg Engineering, Inc.**  
 77402 U.S. Highway 71, P.O. Box 181  
 Jackson, MN 56143  
 (507) 849-7200

**SCHWARTZ FAMILY LLC.-SCHREIER SITE**  
**PROPOSED SWINE CONFINEMENT BARN**  
 NE 1/4, SECTION 36, T11N, R36W  
 REDWOOD COUNTY, MINNESOTA

Date	11/3/25	Checked By	Project No.
Drawn	T.J.A.	N.J.R.	25-137

SHEET  
1/7

- PROPOSED MANURE GENERATION & STORAGE VOLUMES (PROPOSED BARN)**

  - 1) ON SITE ANNUAL LIQUID MANURE GENERATION:  
3,300 HEAD FINISHING SWINE = 0.12 C.F./HEAD/DAY @ 365 DAYS = 144,540 C.F.
  - 2) ANNUAL WASTEWATER & SPILLAGE VOLUME = 20% x 144,540 C.F. = 28,908 C.F.
  - 3) TOTAL ANNUAL WASTE VOLUME GENERATED = 144,540 C.F. + 28,908 C.F. = 173,448 C.F.
  - 4) DEEP PIT BARN VOLUME (LD) = 182'-8" x 150'-0" x 6.5' = 178,100 C.F.
  - 5) TOTAL NUMBER OF DAYS STORAGE = 374 DAYS = 178,100 C.F. / 173,448 C.F. x 365 DAYS

**PROPOSED PERIMETER TILE TO CONNECT TO EXISTING FIELD TILE. LOCATE OUTLET PRIOR TO CONSTRUCTION.**

**PROPOSED HIGH POINT OF PERIMETER DRAIN TILE PLACED AROUND THE PIT FOOTING. SLOPE TILE @ 0.1% TO SW CORNER OF PIT.**

**4013' TO NEAREST WATER SOURCE**

**2344' TO NEAREST RESIDENCE**

**MAGNOLIA AVENUE**

**PROPOSED 3300 HEAD SWINE CONFINEMENT BARN (188'-0" x 153'-4") WITH 8' CONCRETE PIT (184' x 153'-4") BELOW THE SLATTED BARN FLOOR. BARN FLOOR ELEVATION 1067, BOTTOM OF PIT ELEVATION 1059.**

**EXISTING BARN FLOOR ELEVATION 1067.0**

**4' GABLE EXTENSION (VERIFY) 1066**

**LOADOUT CENTERLINE 301' FROM (12'-6" x 30')**

**EXISTING WELL TO BE REMOVED**

**SOIL BORING #1**

**SOIL BORING #2**

**56'-4"**

**188'**

**184' (PIT)**

**153'**

**1063**

**1064**

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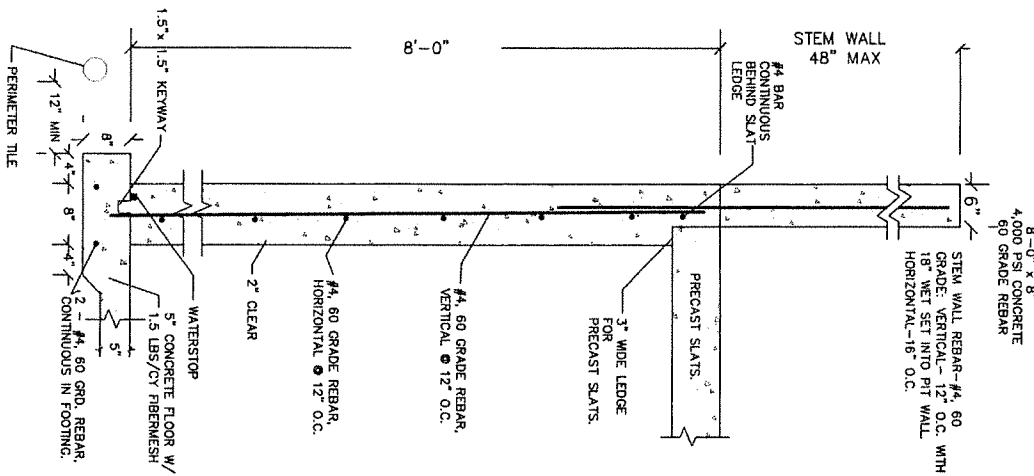
**GRAPHIC SCALE**

( IN FEET )  
1 inch = 80 ft.

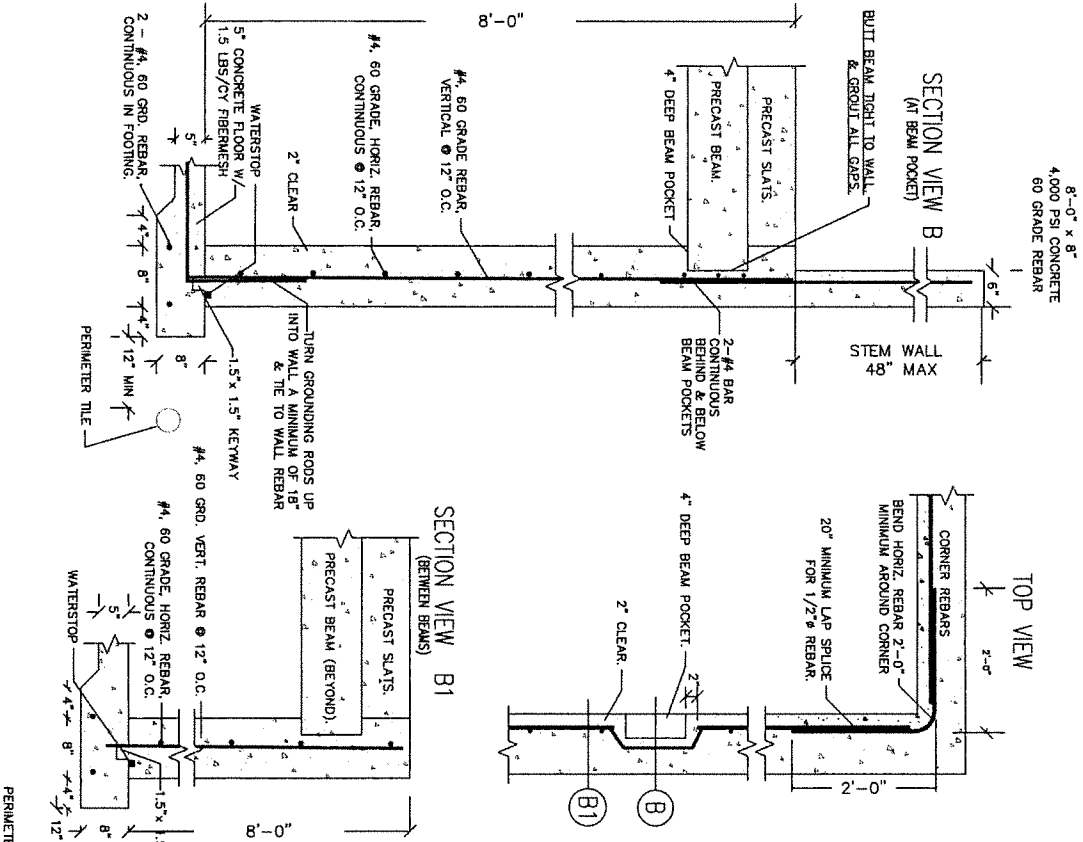


Date	11/3/25	Checked By	Project No.	SHEET 3/7
Drawn	T.J.A.	N.J.R.	25-137	

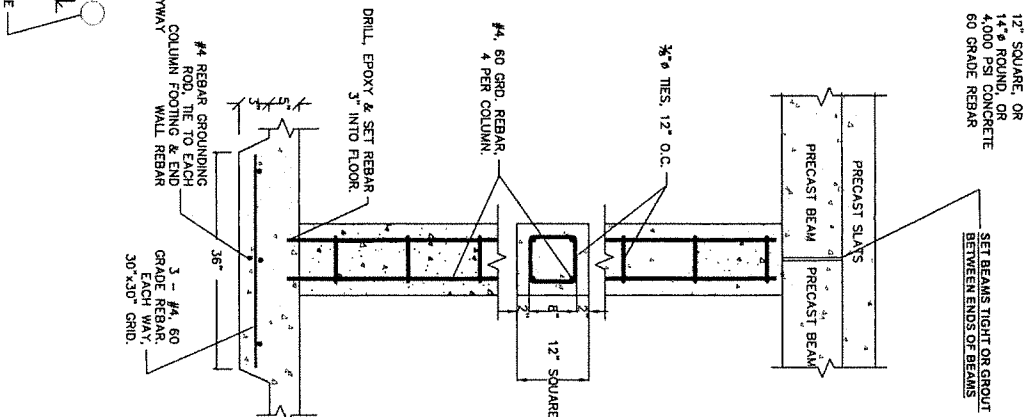
# (A) SIDE WALL



# (B) END WALL BRACING & BEAM POCKET



# (C) COLUMN DETAIL



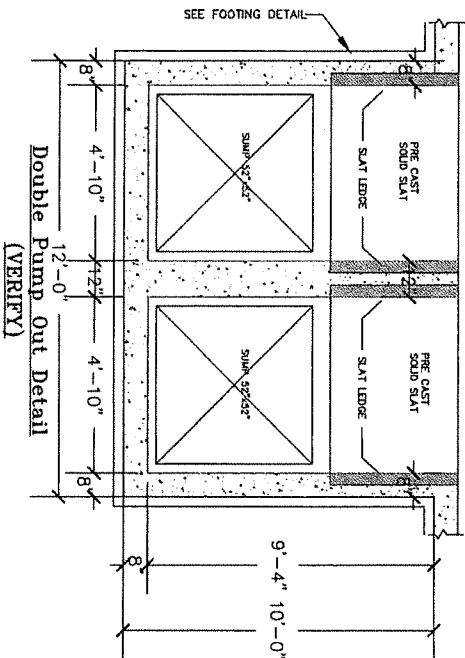
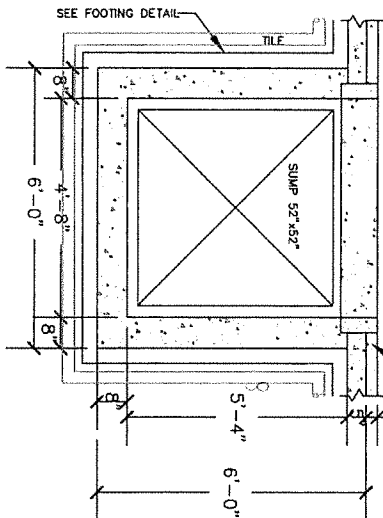
IMPORTANT NOTE: PRECAST DIMENSIONS CHANGE BETWEEN SUPPLIERS. PRECAST DIMENSIONS MUST BE VERIFIED WITH THE OWNER PRIOR TO CONSTRUCTION.

# D TYPICAL PUMP OUT PLAN

BEAM MAY BE CAST-IN-PLACE WITH STEEL WALL.  
MINIMUM OF 2-#4, 60 GRADE REBARS IN BOTTOM OF BEAM.  
PUMP/OUT FOOTINGS AND FLOOR SHALL BE POURED  
WITHOUT CONSTRUCTION JOINTS-SEE DETAIL 1.  
KEYWAY UNDER WALLS SHALL BE CONTINUOUS  
AROUND CORNERS AND PUMP/OUTS.  
CONSTRUCTION JOINTS ARE NOT TO BE WITHIN  
THREE (3) FEET OF A PUMP/OUT.

CAUTION: DO NOT DRIVE STAKES THRU PERIMETER TILE.

60" IS MAX OPENING IN WALL

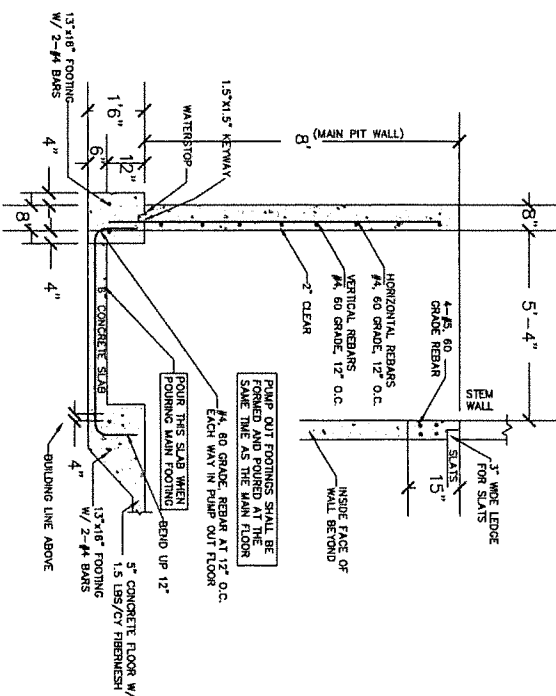


# E PUMP OUT SECTION

8" THICK WALLS FOR 8'-0" DEEP PITS.

LOCATE PERIMETER TILE SO SIDE OF TRENCH  
BECOMES SIDE OF GENERAL EXCAVATION FOR PIT.

TO Dewater the site in advance of general excavation shall be decided by  
the owner, engineer, and contractor at time of the preconstruction  
meeting. If the tile is installed in advance of excavation, it should be  
installed 4 ft out from the pit wall and at least 2 ft below the top  
of the pit floor (in order to go under pumpout sump). Slope the tile at  
0.2 ft per 100 ft to the sump or daylight outlet. Flow the machines  
shall not be used when installing perimeter tile around concrete  
manure storage structures prior to general excavation, because it will  
loosen soil under wall footing. Use only a backhoe or trencher.



\*IMPORTANT NOTE: NUMBER OF PUMP/OUTS & LOCATIONS DETERMINED  
BY OWNERS DISCRETION. PRECAST DIMENSIONS CHANGE BETWEEN  
SUPPLIERS. PUMP/OUT LOCATIONS AND PRECAST DIMENSIONS MUST BE  
VERIFIED WITH THE OWNER PRIOR TO CONSTRUCTION.



## CONCRETE & STRUCTURAL NOTES:

- A. GENERAL.
  1. NOTES AND DETAILS ON THE STRUCTURAL DRAWINGS TAKE PRECEDENCE OVER THESE STRUCTURAL NOTES.
  2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, AND SITE CONDITIONS PRIOR TO STARTING WORK.
  3. IN NO CASE SHALL DIMENSIONS BE SCALED FROM PLANS, SECTIONS, OR DETAILS ON THE STRUCTURAL DRAWINGS.
  4. DESIGN CHANGES MUST BE APPROVED IN WRITING BY BOTH THE OWNER AND ENGINEER BEFORE PROCEEDING WITH THE WORK. SOME DESIGN CHANGES MAY ALSO REQUIRE MPRA.
  5. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE REQUIREMENTS OF THE FOLLOWING CODES:
    - a. UNIFORM BUILDING CODE (UBC)
    - b. MINNESOTA STATE BUILDING CODE
    - c. AMERICAN CONCRETE INSTITUTE (ACI)
    - d. CONCRETE REINFORCING STEEL INSTITUTE (CRS) MANUAL OR STANDARD PRACTICE
- B. DRAIN TILE.
  1. BEFORE ANY PIT CONSTRUCTION, TRENCH AND INSTALL DRAIN AROUND THE PROPOSED PIT. THE DRAIN TILE FLOW LINE MUST BE A MINIMUM OF 12" BELOW THE TOP OF THE DRAIN TILE. THE DRAIN TILE SHALL BE HEAVY DUTY PERFORATED POLYETHYLENE TUBING 4" TILE WITH PEAK ROCK COVER OR 4" TILE W/ FABRIC SLEEVE AND SAND/DRAVEL COVER.
  2. CONNECT THE DRAIN TILE TO AN EXISTING FLOW TILE IF AVAILABLE; DISCHARGE TO SURFACE DRAINAGE, OR DRAIN TO A SUMP AND PUMP TO SURFACE.
- C. INTERIOR BRACING AND BACKFILL.
  1. PROVIDE TEMPORARY LATERAL SUPPORT FOR ALL WALLS WHERE GRADE VARIES ON THE TWO SIDES UNTIL THE PERMANENT STRUCTURAL SUPPORT SYSTEM IS IN PLACE.
  2. DO NOT ALLOW AFTERS THE FLOOR SLABS ON SOLID FLOOR HAS BEEN INSTALLED.
  3. DO NOT ALLOW EXCAVATIONS TO BE MADE AGAINST EXISTING WALLS.
  4. CONCRETE IN ALL WALLS SHALL BE ALLOWED TO CURE FOR A MINIMUM OF 14 DAYS BEFORE BACKFILL IS PLACED AGAINST WALLS. EXERCISE CAUTION WHEN BACKFILLING TO BRING UP THE LEVEL UNIFORMLY ON ALL SIDES OF TANKS AND PITS.
- D. FOOTING FOUNDATIONS & SUBGRADE.
  1. SOIL BEARING DESIGN VALUE SHALL BE 2,000 PSF (ASSUMED) ON VIRGIN SOIL OR COMPACTED FILL FOR FOOTINGS.
  2. PROTECT FOUNDATION EXCAVATIONS FROM FROST. DO NOT PLACE CONCRETE ON FROZEN GROUND.
  3. EXISTING DISTURBED SUBGRADE SHALL BE RECOMPACTED TO 95 % OF STANDARD PROCTOR DENSITY.
  4. ALL FILL UNDER FOOTINGS AND SLAB SHALL BE COMPACTED TO A DRY DENSITY OF AT LEAST 95 % OF MAXIMUM DRY DENSITY AS DETERMINED BY AASHTO T-180.
  5. SAND FILL AS REQUIRED FOR LEVELING SUBGRADES SHALL BE PROVIDED AT ALL SLAB OR GRADE AREAS.
- E. REINFORCED CONCRETE.
  1. ALL CONCRETE AND REINFORCING WORK SHALL CONFORM TO AMERICAN CONCRETE INSTITUTE'S STANDARD BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE. (ACI 318-05)
  2. CONCRETE WORK SHALL CONFORM TO ALL THE REQUIREMENTS OF ACI 301.
  3. ALL CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 70-3500 PSI FLOOR, 4000 PSI WALLS.
  4. ALL FILL UNDER FOOTINGS AND SLAB SHALL BE COMPACTED TO A DRY DENSITY OF AT LEAST 95 % OF MAXIMUM DRY DENSITY AS DETERMINED BY AASHTO T-180.
  5. SAND FILL AS REQUIRED FOR LEVELING SUBGRADES SHALL BE PROVIDED AT ALL SLAB OR GRADE AREAS.
  6. COARSE AGGREGATE SHALL BE 1".
  7. READY-MIX CONCRETE SHALL BE MIXED & DELIVERED IN ACCORDANCE WITH ASTM C94.
  8. AIR CONTENT SHALL BE 5% TO 7%.
  9. ALL CONCRETE SHALL BE 32.5 OR 40 MPA.
  10. ADMIXTURES MAY BE USED WITH PRIOR APPROVAL OF THE ENGINEER FOR THE PURPOSE OF INCREASING THE WORKABILITY BUT NOT TO REDUCE THE SPECIFIED MINIMUM CEMENT CONTENT. CALCIUM CHLORIDE SHALL NOT BE USED.
  11. FLOORS SHALL BE 5" THK. WITH 1-1/2" CY OF 3/4" FIBRILLATED POLYPROPYLENE FIBERS.
  12. REINFORCING STEEL SHALL BE PLACED IN THE CENTER OF CONCRETE PLACEMENT UNLESS NOTED OTHERWISE. STEEL MUST BE SUPPORTED WITH APPROPRIATE CHAIRS OR CONCRETE BLOCKS.
  13. CONSTRUCTION JOINTS NECESSARY COORDINATE LOCATION WITH ENGINEER.
  14. CONSTRUCTION JOINTS ARE NOT PERMITTED IN THE END WALLS OR WITHIN 3 FT. OF A PUMP-OUT. THE PUMP-OUT FLOOR AND FOOTING MUST BE FORMED AND POURED WITH THE PIT FLOOR. THE PUMP-OUT WALLS MUST BE FORMED AND POURED WITH THE PIT WALLS.
- F. STEEL.
  1. FTY - GRADE 60 (60,000 PSI) REFORCED STEEL.
  2. REINFORCING SHALL BE CONTINUOUS AND LAP A MINIMUM OF 40 BAR DIAMETER UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL BE LAPPED A MINIMUM OF EIGHT INCHES.
  3. MINIMUM BENDING RADIUS SHALL BE 6 BAR DIAMETERS.
  4. MINIMUM BEND AROUND CORNERS FOR #4 BARS - 24" FOR #5 BARS - 30".
  5. ALL CONCRETE IS REINFORCED UNLESS SPECIFICALLY CALLED OUT AS NOT REINFORCED. REINFORCE ALL CONCRETE NOT OTHERWISE SHOWN WITH THE SAME STEEL AS IN SIMILAR SITUATIONS.
  6. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT UNLESS OTHERWISE NOTED:
 

WHERE CAST AGAINST EARTH	3 INCHES
WALLS AND SLABS (EXPOSED TO EARTH OR WEATHER)	2 INCHES
- G. TOLERANCES & QUALITY CONTROL.
  1. COLUMN FINISH ELEVATIONS SHALL BE + OR - 1/4" FROM DESIGN ELEVATION.
  2. WALL ALIGNMENT (HORIZONTAL) SHALL DEVIATE NO MORE THAN 1/4" IN 10 FT. NO MORE THAN 3/4" OVER THE FULL LENGTH OF WALL.
  3. WALL BEARING LEDGE ELEVATIONS SHALL BE + OR - 1/2" FROM DESIGN ELEVATION IN 10 FT. AND NO MORE THAN 1/2" OVER THE FULL LENGTH OF WALL.
  4. CONCRETE SHALL BE PLACED AND FINISHED WITHIN 1 HOUR OF POURING.
  5. HONEYCOMBING AND SHRINKING CRACKS WIDER THAN THE THICKNESS OF A PLASTIC CREDIT CARD SHALL BE FILLED WITHIN 48 HOURS WITH GROUT. GROUT SLURRY DROPPED INTO THE CRACKS. DO THE GROUTING OF FLOOR CRACKS BEFORE DIRT AND EQUIPMENT ARE BROUGHT ON THE FLOOR.
- H. ELECTRICAL GROUND.
  1. INSTALL REINFORCING BARS AS PER ELECTRICAL CODE GROUND AT A MINIMUM LOCATIONS AS PER ELECTRIC CODE NOTIFY THE LOCAL ELECTRICAL INSPECTOR FOR INSPECTION PRIOR TO PLACING CONCRETE.
- I. SOIL WEATHER CONCERNING.
  1. WHEN FAVORABLE MORE THAN 5 CONSECUTIVE DAYS, THE MEAN DAILY TEMPERATURE DROPS BELOW 40° F., THE CONTRACTOR SHALL PLACE AND PROTECT THE CONCRETE IN ACCORDANCE WITH ACI 308.
- J. WEATHERING CONCERNING.
  1. TEMPERATURE BETWEEN 75° F AND 100° F WILL BE APPROACHED OR EXCEEDED. THAT LOW RELATIVE HUMIDITY IS PRESENT; OR WIND VELOCITY WILL EXCEED 10 MPH, THE CONTRACTOR SHALL PLACE & PROTECT THE CONCRETE IN ACCORDANCE WITH CHAPTERS 4 & 5 OF ACI 308.
- K. WATERSTOP & SEALANTS.
  1. WATERSTOP SHALL BE RIBBED PVC OR BENTONITE ROLL AT CONTRACTORS OPTION.
  2. 3/4" RIBBED POLYURETHANE WATERSTOP OR BENTONITE ROLL COULD COMPANY WATERSTOPS SHALL BE PLACED IN ALL CONSTRUCTION JOINTS ON THE FLOOR AND IN THE WALLS. LOCATION AND NUMBER OF CONSTRUCTION JOINTS ARE TO BE DETERMINED BY THE CONTRACTOR. WATERSTOPS SHALL BE SUITABLE FOR USE WITH MAUIRE.
  3. MAKE PVC WATERSTOP SPLICES WITH SPOILING IRON.
  4. SEALANT TO BE ELASTOMERIC POLYURETHANE OR BITUMINOUS ASPHALT BASED

IMPORTANT NOTE- PRECAST DIMENSIONS CHANGE BETWEEN SUPPLIERS. PRECAST DIMENSIONS MUST BE VERIFIED WITH THE OWNER PRIOR TO CONSTRUCTION.

## SLAB LEDGES & STEM WALL CONCRETE NOTES

- 1.) ANY SLAB ON GRADE WHICH WILL HAVE A VERTICAL WALL ON TOP SHALL HAVE A KEYWAY AND WATERSTOP AT SLAB/WALL INTERFACE.
- 2.) WATERSTOP TO BE BENTONITE ROLL OR RIBBED PVC @ CONTRACTORS OPTION.
- 3.) SLAT LEDGES MUST BE 3" WIDE x 4" HIGH.
- 4.) 12" CENTER DIVIDER WALLS: THE 3" WIDE x 4" LEDGE ON BOTH SIDES OF THE 12" WALL MUST BE FORMED AND POURED WITH THE WALL.
- 5.) 8" OUTSIDE WALLS: THE 3" WIDE x 4" LEDGE ON INSIDE SIDE OF 8" WALL MUST BE FORMED AND POURED WITH WALL.
- 6.) DO NOT POUR WALL AND SET SLATS ON TOP. DO NOT EVEN ASK. BECAUSE THE 4" HIGH STEM IS NEEDED FOR SLATS BRACING THE TOP OF WALL
- 6.) A CONSTRUCTION JOINT IS PERMITTED BETWEEN THE PIT WALL AND STEM WALL, BUT THE CONSTRUCTION JOINT MUST BE EQUAL OR HIGHER THAN THE TOP OF THE PRE-CAST SLATS.

## SUBSURFACE SOIL LOG

PROJECT: Schwartz Family LLC-Schreier Site

BORING NO: 1

PROJECT NO: 25-137

DATE DRILLED: 10/29/2025

DRILLED BY: Pro Ag Engineering

CLASSIFIED BY: Brad Buhl

ProAg Engineering, Inc.  
77402 Highway 71 P.O. Box 181  
Jackson, MN 56143 (507-849-7200)

ELEVATION (USGS)	GRADE	DEPTH BELOW SURFACE	SOIL DESCRIPTION	USCS Symbol
1064.3	0	0	(TOPSOIL) DARK BROWN SILTY CLAY LOAM MEDIUM CONSISTENCY	CL
	2	2	LIGHT BROWN SILTY CLAY LOAM, FEW GRAY MOTTLES, MEDIUM CONSISTENCY	CL
1059.0	4	4	PROPOSED BOTTOM OF PIT	
	6	6	BROWN SILTY CLAY LOAM, FEW GRAY MOTTLES, MEDIUM CONSISTENCY	CL
1056.3	8	8	MEASURED GROUNDWATER ELEVATION ON 10/29/25	
	10	10		
1052.3	12	12	BOTTOM OF TEST HOLE	
	14	14	*SOIL B ORING FILLED UPON COMPLETION TO PREVENT VERTICAL GROUNDWATER TRANSPORT.	
	16	16	*SOILS ARE SUITABLE FOR PROPOSED PIT FOUNDATION	
	18	18	**PERIMETER TILE REQUIRED**	
	20	20		
	22	22		
	24	24		
	26	26		
	28	28		
	30	30		
	32	32		

## SUBSURFACE SOIL LOG

PROJECT: Schwartz Family LLC-Schreier Site

BORING NO: 2

PROJECT NO: 25-137

DATE DRILLED: 10/29/2025

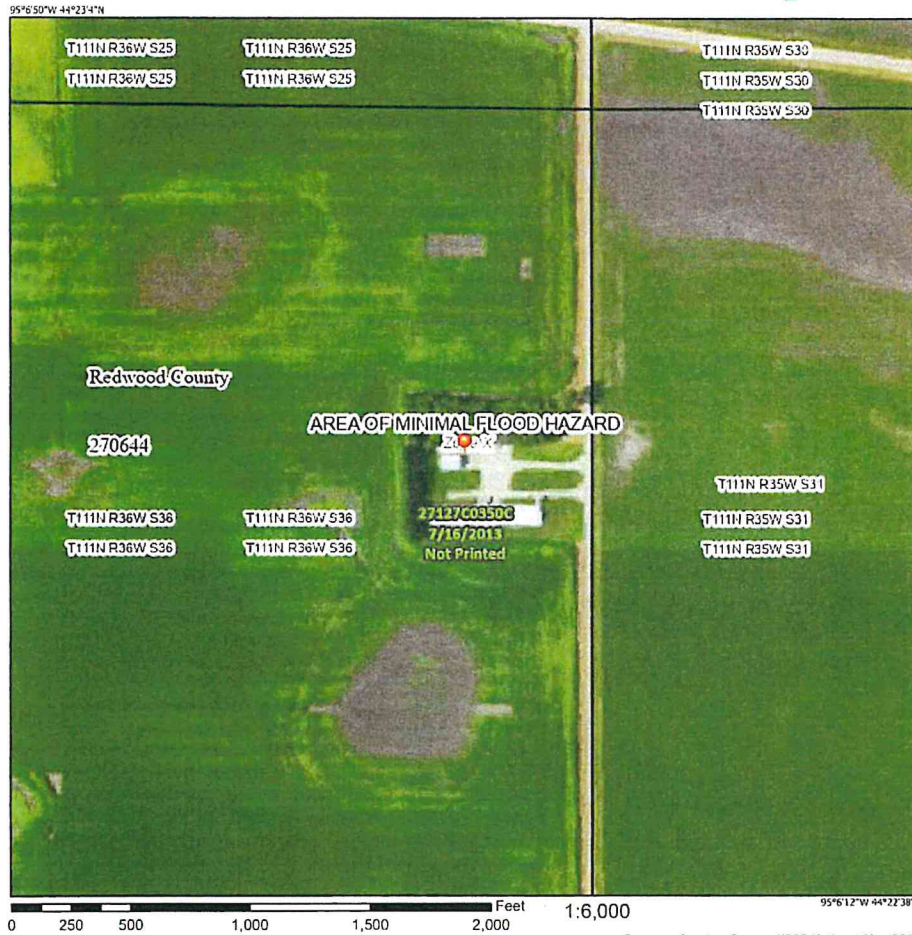
DRILLED BY: Pro Ag Engineering

CLASSIFIED BY: Brad Buhl

ProAg Engineering, Inc.  
77402 Highway 71 P.O. Box 181  
Jackson, MN 56143 (507-849-7200)

ELEVATION (USGS)	GRADE	DEPTH BELOW SURFACE	SOIL DESCRIPTION	USCS Symbol
1063.2	0	0	(TOPSOIL) DARK BROWN SILTY CLAY LOAM MEDIUM CONSISTENCY	CL
	2	2	LIGHT BROWN SILTY CLAY LOAM, FEW GRAY MOTTLES, MEDIUM CONSISTENCY	CL
1059.0	4	4	PROPOSED BOTTOM OF PIT	
	6	6	BROWN SILTY CLAY LOAM, FEW GRAY MOTTLES, MEDIUM CONSISTENCY	CL
1054.2	8	8	MEASURED GROUNDWATER ELEVATION ON 10/29/25	
	10	10		
1051.2	12	12	BOTTOM OF TEST HOLE	
	14	14	*SOIL B ORING FILLED UPON COMPLETION TO PREVENT VERTICAL GROUNDWATER TRANSPORT.	
	16	16	*SOILS ARE SUITABLE FOR PROPOSED PIT FOUNDATION	
	18	18	**PERIMETER TILE REQUIRED**	
	20	20		
	22	22		
	24	24		
	26	26		
	28	28		
	30	30		
	32	32		

# National Flood Hazard Layer FIRMette



## Legend

- SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT
- SPECIAL FLOOD HAZARD AREAS**
- Without Base Flood Elevation (BFE) Zone 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100
  - With BFE or Depth Zone 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100
  - Regulatory Floodway
  - 0.2% Annual Chance Flood Hazard, Area of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100
  - Future Conditions 1% Annual Chance Flood Hazard Zone 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100
  - Area with Reduced Flood Risk due to Levee. See Notes. Zone 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100
  - Area with Flood Risk due to Levee Zone 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100
- OTHER AREAS OF FLOOD HAZARD**
- NO SCREEN Area of Minimal Flood Hazard Zone 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100
  - Effective LOMRs
  - Area of Undetermined Flood Hazard Zone 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100
- OTHER AREAS**
- Channel, Culvert, or Storm Sewer
  - Levee, Dike, or Floodwall
- GENERAL STRUCTURES**
- Cross Sections with 1% Annual Chance Water Surface Elevation
  - Coastal Transect
  - Base Flood Elevation Line (BFE)
  - Limit of Study
  - Jurisdiction Boundary
  - Coastal Transect Baseline
  - Profile Baseline
  - Hydrographic Feature
- OTHER FEATURES**
- Digital Data Available
  - No Digital Data Available
  - Unmapped
- MAP PANELS**
- The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The base map shown complies with FEMA's base map accuracy standards.

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 11/5/2025 at 4:32 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: base map imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Parcel ID 60-036-1020  
Sec/Twp/Rng 36-111-36  
Property Address  
TOWN OF NEW AVON  
District n/a  
Brief Tax Description COM @ PT 858.42' S OF NE COR NE 1/4, TH S 408', W 536', N 408', E 536' TO POB, S.02A  
(Note: Not to be used on legal documents)

Alternate ID n/a  
Class AGRICULTURE  
Acreage 5.02  
Owner Address SCHWARTZ FAMILY LLC  
32276 190 ST  
SLEEPY EYE MN 56085

Date created: 11/5/2025  
Last Data Upload: 11/4/2025 9:26:23 PM  
Developed by SCHNEIDER SCENARIOS

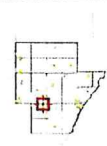


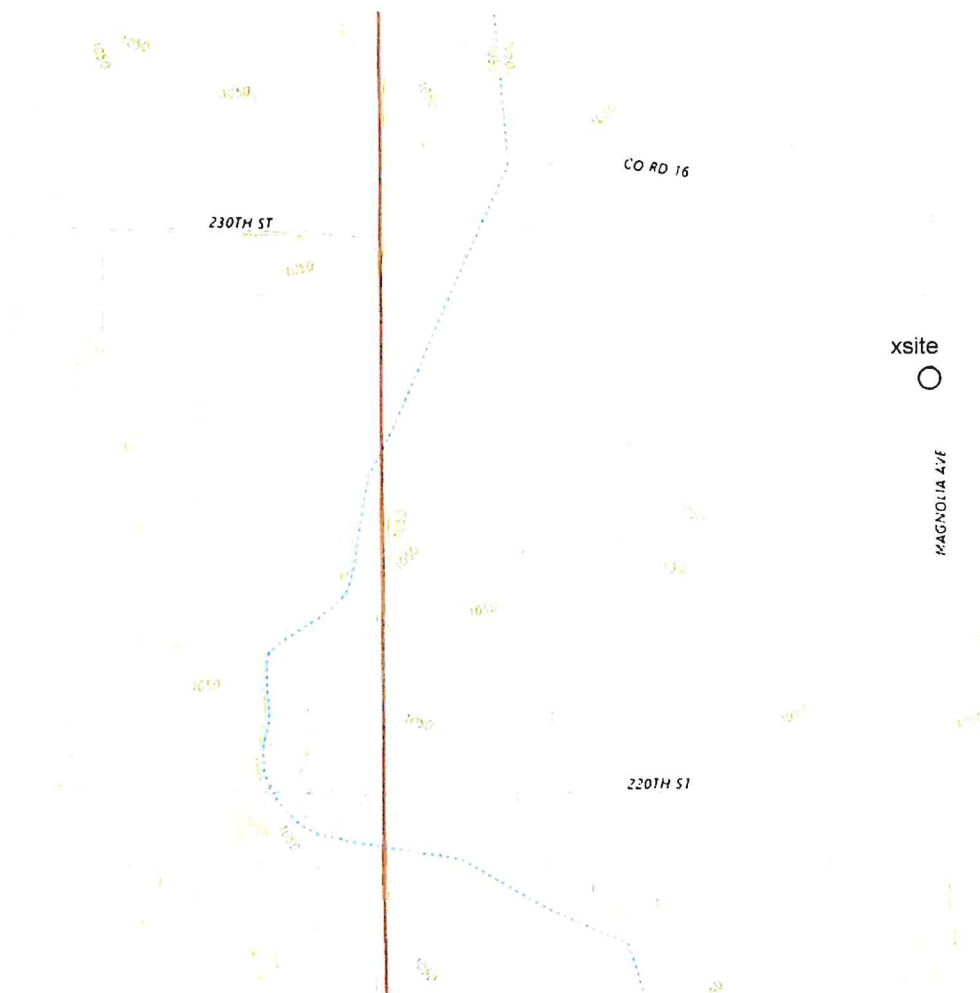
Beacon Redwood County, MN

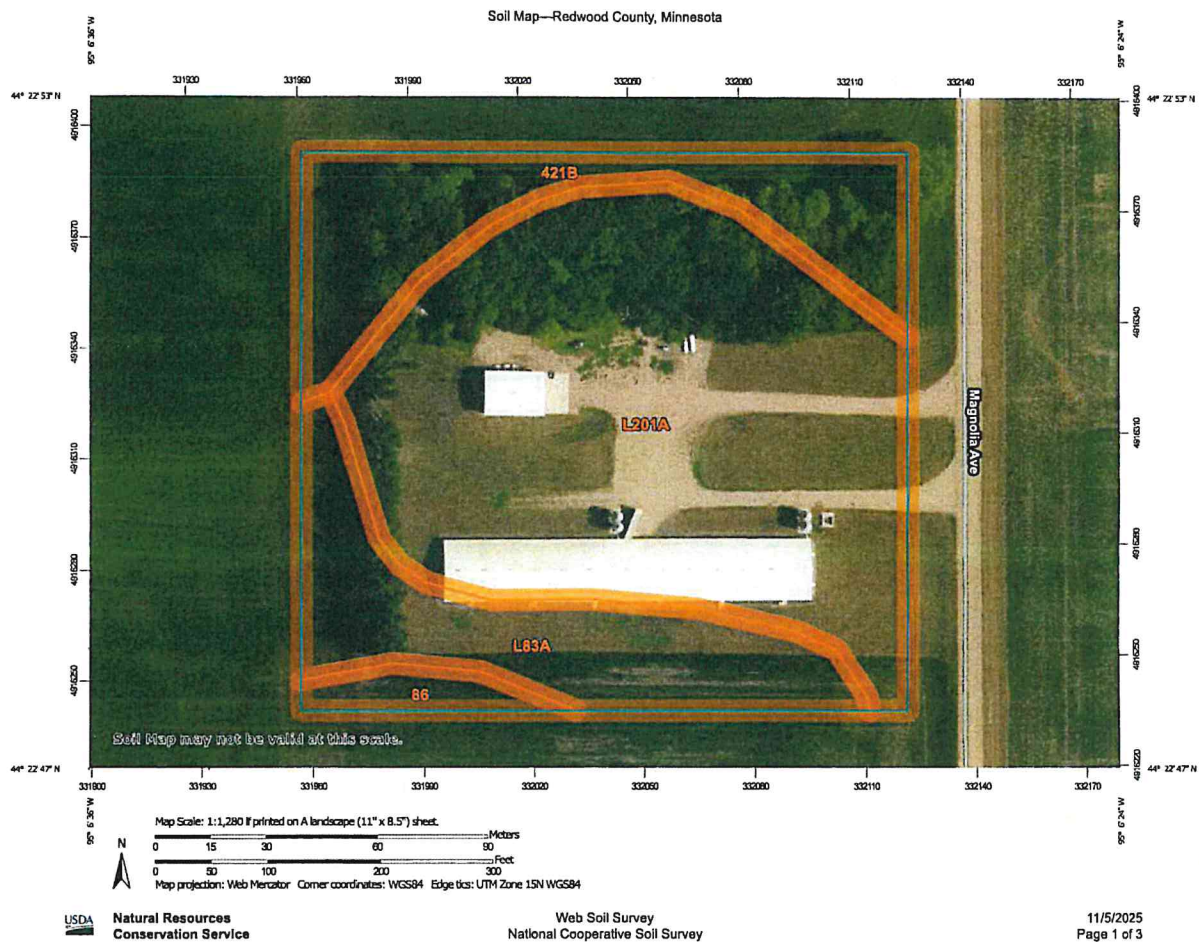
## Legend

- Municipal Boundaries
- Surrounding Counties
- Townships
- Parcels
- Major Roads
- State/Federal
- County
- County/Twp/City
- Minor Roads

## Overview







Soil Map—Redwood County, Minnesota

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
86	Canisteo clay loam, 0 to 2 percent slopes	0.2	2.7%
421B	Antietam loam, 2 to 6 percent slopes	1.1	18.1%
L83A	Webster clay loam, 0 to 2 percent slopes	1.1	18.4%
L201A	Normania loam, 1 to 3 percent slopes	3.7	60.7%
Totals for Area of Interest		8.2	100.0%



Depth to Water Table—Redwood County, Minnesota

## Depth to Water Table

Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
86	Canisteo clay loam, 0 to 2 percent slopes	0	0.2	2.7%
421B	Amiel loam, 2 to 6 percent slopes	110	1.1	18.1%
L83A	Webster clay loam, 0 to 2 percent slopes	0	1.1	18.4%
L201A	Normania loam, 1 to 3 percent slopes	70	3.7	60.7%
Totals for Area of Interest			6.2	100.0%

## Description

"Water table" refers to a saturated zone in the soil. It occurs during specified months. Estimates of the upper limit are based mainly on observations of the water table at selected sites and on evidence of a saturated zone, namely grayish colors (redoximorphic features) in the soil. A saturated zone that lasts for less than a month is not considered a water table.

This attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

## Rating Options

Units of Measure: centimeters  
Aggregation Method: Dominant Component  
Component Percent Cutoff: None Specified  
Tie-break Rule: Lower  
Interpret Nulls as Zero: No  
Beginning Month: January  
Ending Month: December



ENGINEERING, INC.

77402 U.S. Hwy 71  
P.O. Box 181  
Jackson, MN 56143  
507-841-3269  
nlic@proageng.com

TO: OWNER

## INSTRUCTIONS FOR OWNER TO FOLLOW BEFORE—DURING—AFTER CONSTRUCTION OF MANURE STORAGE

1. Distribute only complete sets of plans and specifications: Keep a record of who gets plans because you may need to retrieve them later. Please call if you need more copies.
2. Ask your feedlot officer to send a copy of your feedlot permit to ProAg Engineering, Inc.. We need this so we know who issued the permit and where reports should be sent.
3. Each Contract for construction of the liquid manure storage (Concrete, filling earthen basins) should include the following statement:
  - 10% of the contract amount will be held back until the MPCA Construction Inspection of Liquid Manure Area form has been signed by the Contractor and returned to the Engineer and Engineer certifies that the contract work is complete.
4. A Pre-Construction Meeting shall be held before you start construction. The pre-construction meeting must include the Owner, Engineer, Excavating Concrete Contractors, and County Feedlot Officer. If you start construction without a pre-construction meeting, we reserve the right to cancel our contract.
5. You must notify ProAg Engineering, Inc. and the Permitting Agency:
  1. Three days before you start construction.
  2. Three days before you backfill.
  3. Within three days of completion.
6. Pictures should be taken as the work progresses. This is good protection for you because if problems develop later, you will have a record of what was done. If the Engineer finds problems during inspection, he may request copies of the pictures. Close up pictures showing details are more important than panoramic views. Suggest using single use or digital cameras.
7. MPCA requires that the design engineer submit a written construction report. We cannot do our final inspection and impact hammer test until the concrete is at least 28 days old and all accessory details shown on plans and specs are completed. Then allow at least 2 weeks for us to inspect and write our report.
8. DO NOT make a final payment to contractor until the Engineer's certifies that work is complete.
9. DO NOT put manure in the structure until you have received Engineer's Construction Report.

INSPECTIONS: ProAg Engineering, Inc. must inspect before pouring concrete

Owner: \_\_\_\_\_

Location: \_\_\_\_\_

Barn or Tank Identification: \_\_\_\_\_

Date \_\_\_\_\_ Comment \_\_\_\_\_ Initials \_\_\_\_\_

Subgrade (No standing water or mud, forms set for proper floor thickness)

Floor Reinforcement (Grade, size, clean, location)

\*Pouring Floor (Concrete, quality, take test cylinder)

Floor (Cracks sealed)

Perimeter Tile, Monitoring Port or Sump & Pump, Tile Outlet (Functional before forming walls)

Wall Forms and Reinforcement (Grade of steel, spacing, vertical reinforcement secured)

\*Pouring Walls (Concrete quality, take test cylinders)

Water Supply Lines (None permitted through pit floor or walls below the HW line)

Outside of Walls (Honeycomb patched prior to backfilling)

Inside of Walls (Honeycomb patched)

Walls (Do impact hammer test)

Columns (Honeycomb patched)

Beams Grouted (First 3 beams at end walls and each side of solid divider walls)

Slabs Grouted (Prior to backfilling)

Backfill (Height and slope to drain roof away from barns)

Finish Grading (Roads, drives, storm water catch basins & drainage)



Nicholaus J. Rowe, P.E.  
77402 U.S. Hwy 71  
P.O. Box 181  
Jackson, MN 56143  
507-841-3269  
nlic@proageng.com

PRE-CONSTRUCTION MEETING

PROJECT: \_\_\_\_\_ DATE: \_\_\_\_\_

LOCATION: \_\_\_\_\_ 1/4, SECTION \_\_\_\_\_ TWP. \_\_\_\_\_ CTY \_\_\_\_\_

OWNER: \_\_\_\_\_ PHONE: \_\_\_\_\_  
Owner's Representative \_\_\_\_\_ PHONE: \_\_\_\_\_  
(to conduct weekly inspections for SWPPP and notify Engineer and Feedlot Officer.)

GENERAL CONTRACTOR \_\_\_\_\_ PHONE: \_\_\_\_\_  
Contact \_\_\_\_\_

EXCAVATION CONTRACTOR \_\_\_\_\_ PHONE: \_\_\_\_\_  
Contact \_\_\_\_\_  
Date to start excavation work \_\_\_\_\_

CONCRETE CONTRACTOR \_\_\_\_\_ PHONE: \_\_\_\_\_  
Contact \_\_\_\_\_  
Date to start concrete work \_\_\_\_\_

CONCRETE READY MIX \_\_\_\_\_ PHONE: \_\_\_\_\_  
Contact \_\_\_\_\_

PRE-CAST CONCRETE \_\_\_\_\_ PHONE: \_\_\_\_\_  
Contact \_\_\_\_\_

GROUTS, BEAMS AND SLATS \_\_\_\_\_ PHONE: \_\_\_\_\_  
Contact \_\_\_\_\_

FEEDLOT OFFICER \_\_\_\_\_ PHONE: \_\_\_\_\_

ELECTRICAL INSPECTOR \_\_\_\_\_ PHONE: \_\_\_\_\_

ENGINEER \_\_\_\_\_ PHONE: \_\_\_\_\_

PRE-CONSTRUCTION MEETING CHECK LIST  
OW-Owner, OR-Owner's Representative, CC-Concrete Contractor,  
EC-Electrical Contractor, EN-Engineer, EX-Excavator, PC-Precast Supplier  
RESPONSIBILITY

- | ITEM                                                                    | RESPONSIBILITY |
|-------------------------------------------------------------------------|----------------|
| 1) Telephone directory                                                  | _____          |
| 2) Port-a-potty or Johnny-on-the-spot                                   | _____          |
| 3) Storm Water Pollution Prevention Plan, SWPPP, weekly inspections.    | _____          |
| 4) Stake out buildings and pits                                         | _____          |
| 5) Locate underground utilities                                         | _____          |
| 6) Call UTILITIES CALL CENTER                                           | _____          |
| 7) Notify Engineer three days before starting                           | _____          |
| 8) Notify Engineer three days before backfilling                        | _____          |
| 9) Notify Electrical Inspector for grounding inspections                | _____          |
| 10) Notify Engineer four hours before each concrete pour                | _____          |
| 11) Temporary electrical power                                          | _____          |
| 12) Temporary Water                                                     | _____          |
| 13) Telephone service                                                   | _____          |
| 14) Layout worksite, limits of worksite                                 | _____          |
| 15) Equipment and employee parking                                      | _____          |
| 16) Dirt stockpile area                                                 | _____          |
| 17) Construction materials stockpile area(s)                            | _____          |
| 18) Keep traffic off septic drainfield area(s)                          | _____          |
| 19) Security (daytime, night time)                                      | _____          |
| 20) Bio-security                                                        | _____          |
| 21) Refuse disposal dumpster/burn pit                                   | _____          |
| 22) Concrete truck wash-out area                                        | _____          |
| 23) Does everyone have correct plans?                                   | _____          |
| 24) At completion of construction, notify Engineer for final inspection | _____          |
| 25) Contractor sign MPCA Construction Report                            | _____          |

## SPECIFICATIONS for Concrete Lined Manure Storage Areas

### 01001 QUALITY ASSURANCE AND CONTROL PLAN

Work under these specifications is subject to County and MPCA inspection and review.

#### A. BEFORE STARTING CONSTRUCTION, Owner shall:

1. Consult the feedlot permit for required submittals, notifications and approvals.
2. Arrange for pre-construction meeting with engineer, owner and contractors.
3. Notify engineer, 3 days before starting construction.
4. Notify permitting agency (MPCA or County) 3 days before starting construction.

#### B. DURING CONSTRUCTION, Concrete Contractor shall:

1. Notify Engineer, minimum 4 hrs before each concrete pour.
2. Wait for Engineer's inspection before pouring concrete.
3. Concrete testing will occur at a minimum of one sample per 100 yards of placed concrete. Testing will include: Air/Slump/Strength per ASTM standards. Sampled concrete will be later tested at a certified testing facility to determine PSI strength requirements and quality assurance.
4. If concrete is provided by different supplier or with different mixes, additional testing will be done on the first truck according to ASTM standards. Engineer must be notified immediately if any change does occur.

#### C. BEFORE POURING CONCRETE PIT FLOORS, the following must be completed:

1. Contractor give Engineer & Electrical Inspector advance notice.
2. Engineer inspect subgrade and floor slab thickness (full 5" thick).
3. Engineer inspect grade and placement of reinforcing steel.
4. Steel shall be supported on chairs and tied.
4. Perimeter tile shall be laid at least 12 inches from pit wall and covered with pea rock or 1/4" - 1/2" crushed rock.
5. Grounding inspection by Electrical Inspector.

Placement of the perimeter tile and rock cover shall be done by the Concrete Contractor. Tile and rock provided by Owner.

#### D. BEFORE POURING CONCRETE PIT WALLS, the following must be completed:

1. Contractor give Engineer & Electrical Inspector advance notice.
2. Engineer inspect forms, reinforcing steel, watershed and tile.
3. Tile system shall be working with (temporary or permanent) automatic sump pump or daylight outlet.
4. Grounding inspection by Electrical Inspector.

#### E. BEFORE BACKFILLING, Items 1 thru 4 must be complete, then Owner notify Engineer, and MPCA or CFO and allow 3 work days for inspection.

1. Concrete contractor shall have patched all cracks and honeycomb.
2. Pre-cast concrete beams, slats and slabs in place and grouted.
3. Permanent tile sump pump or inspection port set in-place, (braced if necessary) and ready for backfilling.
4. All organic debris shall be removed from the overdig area.
5. Engineer must inspect Items 1 thru 4 and approve before backfilling.

## SPECIFICATIONS for Concrete Lined Manure Storage Areas

#### F. UPON COMPLETION, Owner shall notify Engineer when all of these items are done.

1. Backfilling and finish grading completed.
2. Pumpout covers and safety signs installed.
3. Concrete Contractor sign MPCA Construction Inspection Form.

#### G. ENGINEER shall conduct inspections as specified in Section 03001.B. and submit construction report to Owner and Permitting agency.

### 01301 DESIGN CHANGES

Design changes must be approved in writing by both the Owner and the Engineer before proceeding with the work. Some design changes may also require MPCA, COUNTY and/or NRCS approval.

### 01401 SITE SURVEY

The Contractor shall be responsible for layout of the work. Bidders must visit the site and acquaint themselves with existing conditions. Contractor shall CALL GOPHER-1 and be responsible for location of existing utilities in areas of work.

### 01501 SUBSURFACE INFORMATION

All available data relating to the subsurface material and conditions that are based upon test borings has been obtained by the Engineer for his/her own use in designing the project. Its accuracy or completeness is not guaranteed by the Owner or Engineer and in no event is it to be considered a part of the contact plans or specifications.

### 02101 EARTHWORK

#### A. This section applies to earthwork (excavation and backfill) for concrete lined manure storage pits and tanks.

#### B. Remove one foot (1') of topsoil under all concrete lined manure tanks. Save topsoil for finish grading.

#### C. Removal of water: All excavations, fill, grading and embankments shall be maintained in a well drained condition at all times. The Contractor shall have temporary pumping equipment on site to remove water from trenches and excavations until the perimeter tile system is working.

#### D. Any over-excavation for concrete footings and slabs on grade shall be backfilled with compacted sand/gravel.

#### E. WARNING Engineer must inspect outside of wall and tile and give approval before backfilling. See Section 01001.

#### F. CLEAN BACKFILL TRENCH. All organic material, cardboard, wood, paper, straw, etc. shall be removed from trench before backfilling. These materials will decay and contaminate the perimeter tile system.

SPECIFICATIONS for Concrete Lined Manure Storage Areas

- G. Do not backfill against concrete walls until the concrete has cured at least 7 days and all slat and slab floors and beams are in place and grouted to properly brace the walls. Exercise caution when backfilling to bring up the level uniformly on all sides of tanks and pits. Keep all heavy equipment back from the pit and tank walls a distance equal to the depth of the fill. Top off backfill with one foot (1') of topsoil, disk and leave smooth for planting grass.

**02401 PERIMETER TILE SYSTEM**

MPCA Rules: Where a perimeter tile system is required to control the elevation of the water table or saturated soils, it must lower the water table or saturated soils to below the bottom of the storage liner. Perimeter drainage tile shall be located at least one foot outside of the footing of the concrete-lined manure storage areas. Each manure storage area shall have a dedicated drain tile system with a dedicated riser, manhole or other access for collection of tile-water samples.

- A. PERIMETER TILE shall be 4 inch (unless otherwise shown on plans) heavy duty perforated corrugated polyethylene plastic agricultural drain pipe. Tile shall be bedded and covered with pea rock or 1/4" - 1/2" crushed rock.
- B. EXISTING TILE LINES intercepted during trenching for the perimeter tile system shall be removed back 10 feet from the tank wall. Existing tiles shall be connected to a suitable by-pass tile system. Do NOT connect existing area tile lines to the perimeter tile system, unless authorized by the Engineer.
- C. GRAVITY OUTLET FOR PERIMETER TILE shall not be used where flood water may backup into the tile and contaminate the dedicated sampling port. The tile outlet shall have a rodent guard. The tile outlet may serve as dedicated sampling port, when it is easily accessible and will never be inundated and contaminated by flood water.
- D. SUMP PUMPS shall be required whenever a gravity outlet is not available. On sites with more than one below ground manure storage structure, only one common sump pump system is required, but each structure must have an individual sampling port.
- E. PUMP shall be submersible type with 20 feet heavy duty electrical cord. Pump shall have an adjustable piggy back float switch. Pump shall be capable of 25 GPM at 15 feet head. Pump shall be fitted with a discharge hose or pipe equal or larger than the discharge of the pump. Furnish and install fused weatherproof disconnect switch, plug and receptacle for each pump. Plug type connections should be used for quick exchange of pumps by farm workers.
- F. ALTERNATE PLAN to dewater the site in advance of general excavation shall be decided by the owner, engineer and contractor at time of the pre-construction meeting. If the tile is installed in advance of excavation, it should be installed 4 feet out from the pit wall and at least 2 feet below the top of the pit floor. Slope the tile at 0.2 feet per 100 feet to the sump or daylight outlet. Plow type machines shall NOT be used when installing perimeter tile around concrete manure storage structures prior to general excavation, because it will loosen soil under wall footing. Use only a backhoe or trencher.
- G. CLEAN BACKFILL TRENCH. All organic material, cardboard, wood, paper, straw, etc. shall be removed from trench before backfilling. These materials will decay and contaminate the perimeter tile system.

SPECIFICATIONS for Concrete Lined Manure Storage Areas

**02601 SEWER SYSTEM**

- A. Sewer system consists of drains from the barns, cleanouts, sewer main, sewer outlet into concrete tanks and earthen basins, and level control between lagoon cells.
- B. Gravity sewer pipe (non-pressurized) shall be PVC SDR-35 with gasket or glued joints. Sewer cleanouts (CO) shall be located as shown on the plan.
- C. All holes for pipes passing through floors and walls shall be sealed water tight.

**02701 FENCE AND GATES**

All open top concrete tanks less than 4 feet of wall above ground and earthen manure storage basins shall be fenced. Fence and gates shall be child and livestock proof to prevent unsupervised access.

**02801 SIGNS**

The Owner shall post warning signs every 100-150 feet around open top tanks and earthen basins: "DANGER, DEEP WATER, KEEP OUT". Post warning sign at each manure pit, reception pit, pumping station and manhole where a confined space may contain manure gases: "DANGER, POISONOUS GAS IN PIT, KEEP OUT".

**02901 OTHER WORK**

The Owner shall be responsible for putting child-proof fences around open top tanks and child-proof covers on all sumps, pump out ports and providing and utilizing safety guard fences around pump outs when open.

**03000 PRECAST CONCRETE**

- A. The Precast manufacturer shall submit design data for checking load capacity of the precast system or an Engineer's Certification that the pre-cast components meet the following design loads. For design of beams, slabs and slats refer to Concrete Manure Storages Handbook, MWPS-36, by Midwest Plan Service.

Type of barn	Solid slabs & beams	Slats
Hog nursery barns	35 psf	50 pif
Hog finishing barns	60 psf	125 pif
Sow & boar barns	65 psf	150 pif
Add an additional 160 pif on the edge(s) of slabs that support farrowing slats.		
Dairy free-slat barns	100 psf	250 pif
Dairy holding & handling pens	125 psf	312 pif

- B. To properly brace pit or tank walls, space between ends of beams, slats and slabs shall be filled with grout and allowed to set 3 days before backfilling.

**03001 CAST IN PLACE CONCRETE**

SPECIFICATIONS for Concrete Lined Manure Storage Areas

- A. READY MIX CONCRETE shall meet requirements of ASTM C-94

CONTRACTOR shall give copy of this page to Ready Mix Plant prior to bidding.

Concrete 28 day compressive strength, F <sub>c</sub> , psi	Aggregate, max.	Fibermesh
Footings & Floors	3,500	2"
Walls	4,000	1.5"
Columns	4,000	1.5"
Slump	3" - 6"	none
Air entrained	5% - 7%	none
Water/cement ratio	0.5	

Fly Ash, maximum 20% of cementitious material. Silica Fume, maximum 20% of cementitious material. The combination of fly ash and silica fume shall not exceed 35% of total cementitious materials. Fly ash and silica fume will increase resistance to sulfates and reduce permeability. CAUTION: fly ash slows curing, especially in cold weather.

To minimize shrinkage cracks in floors, minimize the amount of cement-water paste and maximize the amount of large aggregate. The use of water reducing plasticizers is encouraged. Contractor may order water reducing or other admixtures, except calcium chloride shall not be used.

B. INSPECTIONS AND TESTING.

1. Inspection before each concrete pour shall include evaluation of subgrade, forms, watertop, placement and grade of reinforcing steel.
  2. Concrete shall be sampled and tested for temperature, entrained air, slump and strength (test cylinders) as per ASTM C-94. Minimum of one sample per 100 yards placed.
  3. The Inspector shall forward the inspection report including results of the ASTM tests to the Engineer.
  4. The Engineer may request core samples be taken for any concrete of questionable strength or quality. All such concrete found to be defective shall be removed and replaced by the Contractor. If concrete is provided by different supplier or with different mixes, additional testing will be done on the first truck according to ASTM standards. Engineer must be notified immediately if any change does occur.
- D. All steel in the concrete floors and walls in livestock buildings must form an EQUIPOTENTIAL PLANE and be bonded to the electrical system. This must be coordinated with the Electrical Contractor and will require inspection by the Electrical Inspector prior to each pour of concrete.
- C. WATERSTOP shall be 3/4" x 3/8" Watertop RX; 3/4" x 1" Swellstop; Synko-Flex; Hydro-Flex watertop; Green-streak, Con-Seal CS-231, 220 or 102, or approved equal. These materials come in paper-backed coil or strips and shall be applied as per manufacturer's instructions.

E. REINFORCING STEEL shall be deformed bars, fy = 60,000 psi (Grade 60)

Steel details for deformed rebar	#4 bars	#5 bars
Bar bending radius, minimum 6d3"	4"	25"
Lap splices, minimum 40d	20"	30"
Bend around corner, minimum	24"	

SPECIFICATIONS for Concrete Lined Manure Storage Areas

Rods through construction joints 30" 36"

- F. Steel reinforcement shall be tied and supported on chairs, bolsters, spacers and other devices. Dowels and rods extending through construction joints shall be secured in positions against displacement before concrete is placed and shall be cleaned before subsequent pouring.

- G. Preparation of Forms and Subgrade: Prior to placement of concrete, the forms and subgrade shall be free of wood chips, sawdust, debris, standing water, ice, snow, extraneous oil, mortar and other harmful substances or coatings. Placement of concrete on mud, dried earth, uncompacted fill or frozen subgrade will not be permitted.

- H. Excavations shall be made to the dimensions and elevations indicated on the drawings. Should excavation through error be carried to a greater depth or size than indicated or required, such additional depth or size shall be filled with concrete at the CONTRACTOR'S EXPENSE.

- I. Tolerances: Elevations of floor slabs, top of walls, slab ledges, beam pockets and top of columns ± 1/4". Horizontal length and width of top of wall, location of beam pockets and columns ± 1/2". Straightness of top of wall ± 1/4". Anchor bolt spacing ± 1", centered in stem wall ± 1/2". Thickness of floor slab shall not be less than 5 inches at any point.

- J. Shrinkage cracks and honeycomb areas shall be filled with a mixture of masonry cement and water of medium consistency and brushed into the cracks with a stiff brush. Honeycomb areas shall: 1) have loose stones hammered out, 2) be wetted by brushing in a watery paste of masonry cement, 3) and filled and sealed with mixture of masonry cement with sand.

- K. COLD WEATHER: When for more than 3 consecutive days the mean daily temperature drops below 40°F, the contractor shall place and protect the concrete in accordance with ACI 306.

- L. HOT WEATHER CONSTRUCTION: When it is likely that temperature between 80°F and 100°F will be approached or exceeded; that low relative humidity is present; or wind velocity will exceed 10 mph, the contractor shall place and protect the concrete in accordance with Chapters 4 & 5 of ACI 305.

- M. Freeze/Thaw & Non-Use Protection, Long & Short Term After Construction: After the concrete pit is constructed and prior to its use or during non-use, the concrete floor and subgrade must be protected from freezing. If the pit is empty when the ground surface around the pit begins to freeze, a minimum liquid depth of 2 feet must be added to the pit to prevent freezing the subgrade below the floor. If the barn and pit are not being used for any extended period of time throughout the year (minimum of 60 days), a minimum liquid depth of 2 feet must be maintained in the pit to prevent freezing, groundwater pressure heaving, etc. The barn can also be heated during non-use times during cold weather to prevent freezing in the bottom of the pit instead of placing or leaving additional liquid in the pit.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

\*These are recommendations and are not intended to meet the requirements of a site specific SWPPP for an NPDES Storm Water Discharge Permit.

Description of the site:

The site is currently cropland. The project consists of construction of a swine confinement operation with multiple deep pits. After construction, the area surrounding pit will be planted to grass.

Construction Sequence and Best Management Practices (BMP's)

1. The construction site shall be planted to grass (or cover crop) prior to commencement of construction. See Grass Seeding Guidelines.
2. Areas not to be disturbed during construction shall be staked and marked. Considerable rain water and sediment can be trapped on areas planted to grass and not compacted by construction traffic.
3. Install silt fence as shown on the site plan as needed to prevent erosion.
4. All drive entrances shall be protected with rock. Install road culvert(s) as per highway department specifications.
5. Build a berm to prevent field water from entering the construction site. Make berm 18-24" high with 3:1 side slopes. Use loose top soil from the berm area. A berm is an alternative to using silt fence. The loose soil will absorb a lot of water. Construct the berm on the contour with no channel on the up-hill side of the berm.
6. Temporary stockpiles shall have silt fence or other effective sediment controls and cannot be placed in stormwater conveyances, ditches or grass waterways.
7. Dewatering of pits and basins shall be done in a manner that does not cause nuisance conditions or discharge onto down-slope property. Rain and ground water in pit excavations shall not be allowed to flow direct into open tile, unless the tile inlet has silt fence or other protection or the perimeter tile is installed and covered with pea rock or crushed rock.
8. After backfilling and final grading is done, those areas shall be planted to grass. Slopes steeper than 5:1 shall be mulched. All seeding and mulching operations shall commence within 1 week after completion of each portion of the construction or as soon as soil conditions permit. See Grass Seeding Guidelines.
9. After berms are removed and backfill around barns is re-graded (the following spring) those areas shall be re-seeded to grass.
10. Final stabilization is achieved when soils have been stabilized by a uniform perennial vegetative cover over at least 70% of the previous area, and all drainage ditches and grass waterways have been stabilized, then the silt fence may be removed.
11. The Owner shall keep the plans and records on file for a minimum of six (6) years.

Maintenance of BMP's

1. Owner shall inspect all BMP's weekly and within 24 hours after each rain event of 1/2" or more in 24 hours.
2. Silt shall be removed from behind silt fences within 24 hours of when the depth reaches 1/3 the height of the fence.
3. Mud and crushed rock are tracked onto public roads, it shall be removed within 24 hours.
4. If sediment escapes the site, off-site accumulations must be removed in a manner and frequency sufficient to minimize off-site impacts.

Assignment of Responsibilities for Execution of the SWPPP

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

1. Owner shall be responsible for execution, inspection, record keeping and up-dating The SWPPP as required in Appendix C of the NPDES Feedlot Permit. See form for the Storm Water Pollution Prevention Plan Record.
2. Owner shall inspect all BMP's weekly and within 24 hours after each rain event of 1/2" or more in 24 hours and supervise proper maintenance of erosion and sediment control practices.
3. Earthwork Contractor shall be responsible for implement, manage and maintain both temporary and permanent erosion and sediment control BMP's (except seeding) until final grading has been completed on site.
4. Owner shall be responsible for seedbed preparation, planting and mulching operations prescribed by the SWPPP.
5. Changes to the SWPPP shall be approved and recorded by Owner prior to implementation.

Grass Seeding Guidelines

All in-place topsoil shall be salvaged to the maximum extent possible. It is ideal to place 6 inches of top soil in areas to be seeded. Harrowing before and packing with roller after planting will help germination, make the ground smoother and easier to mow. Seeding mixture and rates are recommendations based on DOT specs. Fertilizer is important for quick growth. Mixtures 250 and 280 can be mowed.

Temporary seeding: Fertilizer 10-10-20 at 200 lbs/acre.

- Oats at 100 lbs/acre for spring/summer seeding of areas that will be left undisturbed for 21 days or more.
- Winter wheat at 100 lbs/acre for fall seeding of areas that will be disturbed again in the spring, such as backfill around barns.

Turf and agricultural grasses: Fertilizer 20-10-20 at 350 lbs/acre.

General Roadside mix.		
Brome grass, smooth	9.8 lbs/acre	14.0%
Bluegrass, Kentucky "Certified Park"	20.3	29.0
Bluegrass, Canada	9.8	14.0
Switch grass	2.1	3.0
Wheat-grass, slender	2.8	4.0
Rye-grass, perennial	14.7	21.0
Timothy	2.1	3.0
Redtop	2.1	3.0
Alfalfa, creeping	4.2	6.0
White clover	2.1	3.0
Total	70 lbs/acre	
Agricultural Roadside mix.		
Alfalfa, creeping	15 lbs/acre	30.0%
Brome grass, smooth	10	20.0
Redtop	3	6.0
Rye-grass, perennial	15	30.0
Switch grass	2	4.0
Timothy	2	4.0
Wheat-grass, slender	3	6.0
Total	50 lbs/acre	

## **OPERATION, INSPECTION AND MAINTENANCE PLAN**

### **NEED FOR OPERATION, INSPECTION AND MAINTENANCE PLAN**

Although this Waste Storage Structure has been designed in accordance with MPCA recommendations and its based upon the best available technical knowledge, it must be recognized that any Waste Storage Structure needs to be properly maintained, including periodic inspection. You, the Owner, are responsible for this Waste Storage Structure. The following guidelines for safe operation and maintenance are recommended.

- (1) routine inspections, maintenance and record keeping to be completed to identify and document damage to the liner.
- (2) methods to be used to repair areas of damaged liner;
- (3) methods used to monitor the liquid level in the basin to evaluate proper operation and adequate available storage capacity; and
- (4) routine inspections of perimeter tile line outlets and inspection manholes to ensure proper operation of the system.

Annually, the liquid will be mixed and removed for land application. Liquid level in the pit(s) shall be monitored quarterly (4 times per year) and after any water line breaks or abnormal additions to the pit. The level shall be measured using a rod or wood stick and the depth recorded.

### **SEMI-ANNUAL INSPECTION OF LIQUID STORAGE AND HANDLING SYSTEMS**

Establish a time each spring and fall for a thorough inspection of the liquid storage and handling systems. DO NOT ENTER COVERED PITS & TANKS.

All concrete storage tanks and reception pits shall be inspected to evaluate the outside of structures for cracks and deterioration of concrete. Any cracks showing discharge of liquid shall be inspected by an engineer and repairs done as prescribed by the engineer.

Maintain the following in proper working order:

- 1) Finish earthwork around the structure should be designed to carry runoff away from the foundation. Rainwater diversions to direct 'clean' water away and 'dirty' water into storage facilities. Grass should be established in those areas not covered by concrete and gravel.
- 2) Chituproof covers must be placed upon the pumpouts. Open pumpouts should never be left unattended.
- 3) Warning signs shall be posted to prevent children and others from using the pit other than the intended use.
- 4) Animal wastes shall be handled and utilized as specified in the Manure Management Plan.
- 5) The Waste Storage Structure requires continuous ventilation to safely remove poisonous and noxious gases. Manure agitation will release large amounts of gas and may create a hazardous situation. Ensure that the ventilation fans are operating before agitation and, if possible, evacuate the building.
- 6) Manure pits that contain bearing divider walls should be emptied using a modified pumping plan. All manure sections should be partially emptied to prevent possible divider wall failure. Removal of about 3/4 of manure is recommended from each section before complete emptying of any one section is undertaken.
- 7) No person should enter a Waste Storage Structure without proper training and without wearing a self-contained breathing device. A second person should remain outside of the structure and should have an immediate means of removing the person inside the structure in an emergency.
- 8) Regular quarterly inspections should be made of the structure and its surroundings for leaks, concrete deterioration and pumpout cover conditions. Inspection of the slats for signs of deterioration is advised.
- 9) Concrete should be inspected for large cracks and exposed reinforcing steel. Joints should be checked for unusual openings.
- 10) Concrete surfaces should be quarterly inspected for erosion, scaling and exposed reinforcing steel.

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- 11) Perimeter tile, sump pumps, sampling ports and rodent guards at outlets.
- 12) The structure walls are designed to resist earth loads only. Do not operate any equipment on this surface.
- 13) The beam and flooring system is designed for animal loads only. Do not operate any equipment on this surface.
- 14) If, during the inspection, serious defects are discovered, remedial actions may be required. The County Feedlot Officer and Engineer should be contacted and possible the MPCA.

### **RECORDS**

Record the inspections, evaluations and maintenance done in a spiral bound notebook. Also take and date pictures before and after any maintenance work is done on cover and liquid storage and handling facilities.

## **PERIMETER TILE MONITORING AND CONTINGENCY PLAN**

### **INSPECT PERIMETER TILE AT LEAST ONE WEEK BEFORE EMPTYING STORAGE**

All below ground waste storage structures require perimeter tile to relieve the hydrostatic pressures which would otherwise damage the sides of the concrete tanks and manure storage pits under dams. There is a serious problem if the water level in the sump or inspection port is above the pit floor.

It is very important that the ground water level be lowered prior to emptying the manure storage pit. It may take a week or more for the system to lower the ground water pressure once the problem has been corrected.

### **BASE LINE SAMPLING**

It is recommended that base line sampling be done before manure is put in the storage facility to document any pre-existing contamination that may be in the soil. This is especially important if the site is in an old barn-yard area or has received heavy applications of manure for many years.

Base line samples should be collected at least two (2) times prior to the addition of manure into the waste storage structure. If there is no flow from the tile, sampling shall begin as soon as water is available for sampling. Each 'base line' sampling event shall be scheduled at least two (2) weeks apart.

1. The Owner shall contract with an independent laboratory to collect and analyze the samples. The laboratory must be certified. The laboratory report shall include: Chain of custody record, date, parameter, method used, results, units.
2. The water quality parameters to be monitored are:

Total Kjeldahl Nitrogen	Nitrate Nitrogen
Nitrite Nitrogen	Ammonium Nitrogen
Dissolved Oxygen	Chloride
Sulfate	Total Phosphorus
Fecal Coliform	pH
Temperature	Specific Conductivity
Flow (as determined by time to fill 5 gallon pail)	

### **CHANGE IN TILE WATER COLOR OR ODOR**

If visual observation of the tile water indicates a change in color or odor, then a more urgent response is necessary. A change in color or odor may be caused by either soil and/or manure water. If this should occur, immediately stop all discharge to field tile. Notify the MPCA or Engineer immediately.

Install a sump pump and discharge the tile water onto a vegetated filter strip area. If necessary, plug the line going to field tile with bentonite 'chips'. Bentonite chips may be obtained from your well driller.

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Nutrient Management Plan for 2026-2027  
Created: 11/13/2025 08:52:06 AM

Feedlot Information

Feedlot name: Schwartz Family LLC - Schreier Site

Permit type:

Permit ID:

Registration ID: 127-101040

This is a Nutrient Management Plan for a SDS permit type.

The facility does not have less than 300 animal units.

If any manure is transferred I will provide a Manure Transfer Tracking Form to each recipient.

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Manure Source Summary

Description	Primary animal	Storage type	Date last analyzed	Amount applied	Amount remaining	Manure transferred
Swine Liquid	Swine - Grow/Finish 55-300 lbs	Liquid	12/03/2024	675,500 gal	938,500 gal	Yes

**Manure source: Swine Liquid**

**Source information**

Type of manure: animal waste

	Animal	Average weight	Number of animals	Time in facility
Primary animal	Swine - Grow/Finish 55-300 lbs	130 lbs	5,380	350 day/year

**Storage information**

Storage type	Capacity	Storage length
Liquid	2,556,914 gal	365 day

**Application**

Spreader type	Determine load volume or tonnage	Method of application rate calibration
Liquid tanker	Commercial applicator	Flow meter

**Analysis**

Sampling frequency	Sampling method	Basis for analysis	Date last analyzed
once per year	Well-agitated composite	This year's sample	12/03/2024

**Nutrient content**

	Total nitrogen (N)	Inorganic nitrogen (N)	Organic nitrogen (N)	Total phosphorus (P2O5)	Total potassium (K2O)
Expected	48.4 lb/1000gal	33.8 lb/1000gal	14.6 lb/1000gal	21.7 lb/1000gal	35.1 lb/1000gal

**Annual generation**

Estimated manure produced: 1,456,500.5 gal/yr

	Annual production	Manure received	Total nitrogen (N)	Annual inorganic nitrogen (N) produced	Annual organic nitrogen (N) produced	Annual phosphorus (P2O5) produced	Annual potassium (K2O) produced
Anticipated	1,614,000 gal/yr	--	78,118 lb	54,553 lb	23,564 lb	35,024 lb	56,651 lb

**Manure transfer plan**

	Amount transferred	Available transfer acres
Expected	1,614,000 gal	2,000 acre

**Notes**

Field Map Summary

Total Farmable Acreage: 193 acre  
Fields with Manure applied: 193 acre



Basemap Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Map legend

Drinking Water Features	Groundwater Features	Water Bodies	Water Ways	
Domestic Wells, Verified and Unverified Locations	Karst Sinkholes	NWI (Class 3, 4, 5) and Public Water Inventory, Wetlands	NHD, Intermittent Streams	Public Water Inventory, Stream Buffers
Drinking Water Supply Management Areas	Springs	NWI (Class 3, 4, 5) and Public Water Inventory, Wetlands Buffer	NHD, Intermittent Stream Buffers	<b>Soils</b>
Domestic Well Buffers, Verified and Unverified Locations	Karst Sinkhole Buffers	Public Water Inventory, Lakes	NHD and Public Drainage Systems, Ditches	Coarse Textured Soils
	Vulnerable Groundwater Area	Public Water Inventory, Lakes Buffer	NHD and Public Drainage Systems, Ditch Buffers	Shallow Bedrock Soils
	<b>Floodplain</b>		Public Water Inventory Streams	<b>Slope greater than 6%</b>
	DFIRM, Modernized and Unmodernized Data			less than 6%
				greater than 6%
				Field

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See Sensitive Features Appendix for more information.

Field Summary

Total farmable acreage: 193

Field name/ID	Farmable acreage	Crop grown	Crop most recently harvested	Nitrogen need	Phosphorus management	Manure applied
Site Field	193	Corn-Field	Soybeans	150 lb/ac	Yes	Yes

**Field name/ID: Site Field**

Field group name:  
Farmable acreage: 193  
Irrigated: No

**Methodology information**

Sensitive features	Planned manure application timing	Planned application methods	Crops grown
See Sensitive Feature Appendix for management techniques			
Intermittent Stream	April May September October 1-14 October 15-31 November	Broadcast - liquid tanker with double discs Injection - coulter Injection - knife	Corn-Field Edible Beans Soybeans Sugarbeets

**Winter application**

Application w/in 1000 ft of water	Shortest distance to water	Field slope	Emergency application site	Snow-manure application site	MN Phosphorus Index result
Yes	154 feet	2%	Yes	--	--

**Planning**

**Irrigation**  
The field is not irrigated

**Soil**  
A phosphorus application plan is required.

Year of most recent soil test	Test method	Phosphorus (P) field average (ppm)	Organic matter level
2023	Bray	38	Med/high (3% and greater)

**Phosphorus application plan**

Crop year	Crop grown	Yield	Phosphorus removed	Manure application	Phosphorus from manure	Fertilizer application	Phosphorus from fertilizer	Excess phosphorus
2025	Soybeans	65 bu	53 lb/ac	no	0 lb/ac	no	0 lb/ac	-53 lb/ac
2024	Corn-Field	220 bu	75 lb/ac	yes	33 lb/ac weighted average	no	0 lb/ac weighted average	-42 lb/ac
2023	--	--	53 lb/ac	no	--	no	--	-53 lb/ac
2022	--	--	75 lb/ac	yes	33 lb/ac	no	--	-42 lb/ac
2021	--	--	53 lb/ac	no	--	no	--	-53 lb/ac

Phosphorus applied over 5 years	Phosphorus removed over 5 years	Excess phosphorus over 5 years
66 lb/ac	309 lb/ac	-243 lb/ac

**Crop info**

Crop grown to utilize nutrients	Yield	Cover crop	Crop recently harvested	Crop grown 2 years ago	Crop grown 3 years ago
Corn-Field	220 bu	--	Soybeans	Corn-Field	Soybeans

**Past nutrient application**  
No manure applied

**Nutrient recommendations/credits**

**Nitrogen**

Max nitrogen recommendation	Min legume-nitrogen credit	Nitrogen credit from manure	Nitrogen credit from irrigation	Max N to apply	Nitrogen removal
150 lb/ac	--	--	--	150 lb/ac	--

**Phosphorus**

Phosphorus needs	Phosphorus removal	Maximum phosphorus allowable
0 lb/ac	75 lb/ac	318 lb/ac Calculated according to your phosphorus application plan.

**Nutrient application**  
Acreage after setback: 193

Manure applied

Manure source	Application method	Application rate	Nitrogen from manure	Phosphorus from manure
Swine Liquid	Injection - coulter	3,500 gal/ac	119 lb/ac	61 lb/ac
Total nutrients from manure			119 lb/ac	61 lb/ac

Fertilizer applied

Fertilizer brand	Fertilizer timing	Application rate	Nitrogen from fertilizer	Phosphorus from fertilizer	Potassium from fertilizer
Urea (46% N)	Supplemental	65 lb/ac	30 lb/ac	0 lb/ac	0 lb/ac
Total nutrients from fertilizer			30 lb/ac	0 lb/ac	0 lb/ac

Total nutrients applied

Nitrogen	Phosphorus
Total nitrogen applied: 149 lb/ac	Total phosphorus applied: 61 lb/ac
Max N to apply/N removal: 150 lb/ac	Phosphorus removed: 75 lb/ac
Balance: -1 lb/ac (deficit)	Balance: -14 lb/ac (deficit)

Notes  
There are no notes.

Field name: Site Field



Basemap Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Map legend

<div><div></div></div> Township and range				
<div><div></div></div> Section				
Drinking Water Features	Groundwater Features	Water Bodies	Water Ways	Public Water Inventory, Stream Buffers
<div><div></div></div> Domestic Wells, Verified and Unverified Locations	<div><div></div></div> Karst Sinkholes	<div><div></div></div> NWI (Class 3, 4, 5) and Public Water Inventory, Wetlands	<div><div></div></div> NHD, Intermittent Streams	Soils
<div><div></div></div> Drinking Water Supply Management Areas	<div><div></div></div> Springs	<div><div></div></div> NWI (Class 3, 4, 5) and Public Water Inventory, Wetlands Buffer	<div><div></div></div> NHD, Intermittent Stream Buffers	<div><div></div></div> Coarse Textured Soils
<div><div></div></div> Domestic Well Buffers, Verified and Unverified Locations	<div><div></div></div> Karst Sinkhole Buffers	<div><div></div></div> Public Water Inventory, Lakes	<div><div></div></div> NHD and Public Drainage Systems, Ditches	<div><div></div></div> Shallow Bedrock Soils
	<div><div></div></div> Vulnerable Groundwater Area	<div><div></div></div> Public Water Inventory, Lakes Buffer	<div><div></div></div> NHD and Public Drainage Systems, Ditch Buffers	Slope greater than 6%
	Floodplain		<div><div></div></div> Public Water Inventory Streams	less than 6%
	<div><div></div></div> DFIRM, Modernized and Unmodernized Data			<div><div></div></div> greater than 6%
				<div><div></div></div> Field

The State of Minnesota makes no representations or warranties expressed or implied, with respect to the reuse of the data provided herewith regardless of format or the means of transmission. There is no guarantee or representation to the user as to the accuracy, currency, suitability, or reliability of this data for any purpose. The user accepts the data "as is." The State of Minnesota assumes no responsibility for loss or damage incurred as a result of any user's reliance on this data. All maps and other material provided herein are protected by copyright. Permission is granted to copy and use the materials herein for any lawful [noncommercial] purpose.

Sensitive features (See Sensitive Features Appendix for more information.)

Intermittent Stream

## End Materials

If you transfer manure you must provide the Manure Transfer Tracking form to each manure recipient. Create this form from the Nutrient Management Tool report feature.

## Methodology Nutrient Information

### Nitrogen (N) Management

- Based on the crop rotation, nutrient application rates will not exceed the N needs/removal of the crops as derived from the most recent MN Extension Service (MES) publications and MPCA fact sheets "Manure Nitrogen Rates For Corn Production (wq-f8-18)" and "Manure Management For Corn On Irrigated Sandy Soils (wq-f8-52)"
  - Any deviation will follow the standards allowed in Minn. Rule 7020.2225, subp. 3(A)(2) and any issued permit.
- Manure application rates will be calculated using the following factors:
  - N needs for non-legumes and N removal for legumes
  - Actual manure analysis test results, when available (most recent or historical average)
  - Soil test results (where applicable)
  - First year N availability will be based on MES guidance
  - If applicable, N credits for previous crops and/or manure applications will be accounted for according to MES guidance.
  - If applicable, N credits from irrigation will be accounted for in the calculations.
  - If applicable, any fertilizer N applied will be accounted for in the calculations.
- Feedlot permits may have additional restrictions for N application.

### Phosphorus (P) Management

- In the instances described below, the rate and frequency of manure applications must not allow soil P build-up over any 6 year period.
  - Soil test levels exceed 150 Bray or 120 Olsen
  - Soil test levels exceed 75 Bray or 60 Olsen and the field is within 300 feet of an open tile intake
  - Soil test levels exceed 21 Bray or 16 Olsen and the field is within 300 feet of a lake, stream, intermittent stream, drainage ditch without protective berms, or public waters wetland
- Manure application rates will be calculated using the following factors:
  - Crop P needs and removal rates will be based on the most recent MN Extension Service (MES) publications
  - Actual manure analysis test results, when available (most recent or historical average)
  - Soil test results (where applicable)
  - An availability factor of 80 percent
  - If applicable, any fertilizer P will be accounted for in the calculations
  - P application for the previous 5 years will be used to determine the maximum amount to apply in the 6th year to avoid P build-up.
- Feedlot permits may have additional restrictions for P application.

## Soil Erosion Conservation Measures

**All winter application fields and all fields at NPDES permitted sites** – You are required to employ one or more soil erosion conservation measures.

- Establish grassed waterways
- Contour stripcropping
- No-Till cropping
- Terracing
- Meet tolerable soil erosion rates ("T") as defined by NRCS
- Use rotations that include other than row crops (alfalfa, grass, etc)
- Chisel or disk tillage with residue
- Field edge buffers
- Contour buffer strip
- Sediment control basin
- Plant a cover crop on bare ground

## Mortality Management

- Rendering BMPs
  - Kept in an animal-proof, enclosed area
  - At least 200 feet from a neighbor's buildings
  - Picked up within 72 hours (7 days if refrigerated to less than 45 degrees)
- Composting BMPs
  - Built on an impervious, weight-bearing pad that is large enough to allow equipment to maneuver. Note: Class V gravel material is not considered to be impervious.
  - Covered with a roof to prevent excessive moisture on the composting material, but if sawdust or other water-repelling material is used as the bulking agent, a roof may not be necessary.
  - Built of non-resistant material that is strong enough to withstand the force exerted by equipment.
  - Large enough to handle each day's normal mortality through the endpoint of the composting which consists of a minimum of two (2) heat cycles.
- Burial BMPs
  - Stay 5 feet above seasonal high water table.
  - Stay 1000 feet away from lakes and 300 feet away from rivers, streams, ditches, etc.
  - Be covered immediately with enough soil to keep scavengers out (three feet is sufficient)
  - Not be placed in sandy or gravelly soil types.
  - Maintain at least 10 feet vertical separation between dead animals and bedrock.
- Incineration BMPs

- Capable of producing emissions not to exceed 20 percent opacity.
- Fitted with an afterburner that maintains flue gases at 1,200 degrees Fahrenheit for at least 0.3 seconds.
- Ash from the incinerator must be handled in such a manner as to prevent particulate matter from becoming airborne.
- Other methods
  - As approved by BAH and MPCA

## Timing Information

### Fall

The MPCA encourages the use of the following BMPs to mitigate potential nitrate leaching from manure applied during the fall.

- Cover crops
- Delaying application until soil temps are 50°F or less
- Nitrogen stabilizing agent/product

### NPDES permit requirements

#### From September 1 to September 30

- All manure applications must use one of the following BMPs:
  - Cover crop or other crop planted within 14 days of application
  - Application to an actively growing crop expected to utilize the N applied

#### From October 1 to October 14

- Manure applications in vulnerable groundwater areas must use one of the following BMPs:
  - Until 2026 follow the requirements for non-vulnerable groundwater areas
  - Starting in 2026 follow the requirements for September application
- Manure applications in non-vulnerable groundwater areas must use one of the following BMPs:
  - Soil temps are 50°F or less for 2 consecutive days
  - Use a nitrpyrin-based nitrogen stabilizing agent/product at the recommended rate
  - Use one of the BMPs for September application
  - Split application with no more than 50% of N applied October 1 - 14

#### From October 15 to October 31 (starting in 2027)

- Manure applications in vulnerable groundwater areas must use one of the following BMPs:
  - Use one of the BMPs for September application
  - Soil temps are 50°F or less for 2 consecutive days and a perennial crop is grown 2 out of 5 years
  - For liquid manure - Soil temps are 50°F or less for 2 consecutive days and a nitrpyrin-based nitrogen stabilizing agent/product is added at the recommended rate
  - For solid manure - Soil temps are 50°F or less for 2 consecutive days and a split application with no more than 50% of N applied October 15 – 31.
- Manure applications in non-vulnerable groundwater areas are encouraged, but not required, to utilize nitrogen BMPs.

#### From November 1 to November 30 (starting in 2027)

- Liquid manure applications in vulnerable groundwater areas are required to use one of the following BMPs:
  - Use one of the BMPs for September application
  - A perennial crop is grown 2 out of 5 years
  - A nitrpyrin-based nitrogen stabilizing agent/product at the recommended rate
- Solid manure applications in vulnerable groundwater areas are encouraged, but not required, to utilize nitrogen BMPs.
- Manure applications in non-vulnerable groundwater areas are encouraged, but not required, to utilize nitrogen BMPs.

### SDS permit requirements

#### From September 1 to September 30

- All manure applications must use one of the following BMPs:
  - Cover crop or other crop planted within 14 days of application
  - Application to an actively growing crop expected to utilize the N applied

#### From October 1 to October 14

- Manure applications in vulnerable groundwater areas must follow the requirements for September application
- Manure applications in non-vulnerable groundwater areas must use one of the following BMPs:
  - Soil temps are 50°F or less for 2 consecutive days
  - Use a nitrpyrin-based nitrogen stabilizing agent/product at the recommended rate
  - Use one of the BMPs for September application
  - Split application with no more than 50% of N applied October 1 - 14

#### From October 15 to October 31 (starting in 2027)

- Manure applications in vulnerable groundwater areas must use one of the following BMPs:
  - Use one of the BMPs for September application
  - Soil temps are 50°F or less for 2 consecutive days and a perennial crop is grown 2 out of 5 years
  - For liquid manure - Soil temps are 50°F or less for 2 consecutive days and a nitrpyrin-based nitrogen stabilizing agent/product is added at the recommended rate
  - For solid manure - Soil temps are 50°F or less for 2 consecutive days and a split application with no more than 50% of N applied October 15 – 31.
- Manure applications in non-vulnerable groundwater areas are encouraged, but not required, to utilize nitrogen BMPs.

#### From November 1 to November 30 (starting in 2027)

- Liquid manure applications in vulnerable groundwater areas are required to use one of the following BMPs:
  - Use one of the BMPs for September application
  - A perennial crop is grown 2 out of 5 years
  - A nitrapiyrin-based nitrogen stabilizing agent/product at the recommended rate
- Solid manure applications in vulnerable groundwater areas are encouraged, but not required, to utilize nitrogen BMPs.
- Manure applications in non-vulnerable groundwater areas are encouraged, but not required, to utilize nitrogen BMPs.

## Land Application Site Inspection Frequency

All manure applications:

- At least once each day manure is applied to the field
- At the end of manure application to the field

When manure is not injected or incorporated:

- Within 24 hours of any  $\frac{1}{4}$  inch or greater rainfall within 14 days of application

## Sensitive Feature Appendix

Sensitive feature	Definition	Management techniques
		For each sensitive feature, one of the listed techniques will be used to provide protection to this sensitive feature, as required in Minnesota Rules and/or permit conditions.
Intermittent Stream	Intermittent streams typically only flow after a major storm event or snowmelt. They are denoted by dashed lines on USGS topo maps, even if they are farmed through. Some road ditches are mapped and considered an intermittent stream.	<ol style="list-style-type: none"><li>1. Observe a 25 ft non-manured setback, inject or incorporate within 24 hours and prior to rainfall within 300 ft, and avoid long term soil phosphorus build-up.</li><li>2. 50 ft wide grassed buffer.</li><li>3. 100 ft setback with at least 16.5 ft as grassed buffer.</li></ol>

AGREEMENT FOR REMOVAL AND  
FIELD APPLICATION OF MANURE

This Agreement for Removal and Field Application of Manure ("Agreement") is made to be effective the 4th day of Nov, 2021, by and between Schwartz Farms ("Schwartz") and Neitzel Farms Inc ("Applicator") and is as follows: CDN JS

RECITALS:

A. Applicator owns farmland, produces crops, and wishes to obtain the benefit of manure produced in hog facilities operated by Schwartz.

B. Schwartz wishes to hire Applicator for the removal of manure from such facilities and for field application of the same, but in accordance with the terms and conditions set forth herein.

C. Schwartz and Applicator have had discussions with regard to entering into such an agreement and wish to reduce their agreement to writing.

NOW, THEREFORE, in consideration of the premises and under the mutual covenants, promises and conditions set forth herein, Schwartz and Applicator hereby agree as follows:

1. **Purchase of Manure.** Schwartz agrees to sell and transfer to Applicator, and Applicator agrees to accept and purchase from Schwartz and field apply all manure produced at the Schwartz hog confinement facilities which are located on an approximately five (5) acre tract described on the attached **Schedule 1** hereto (the "**Facilities**").

2. **Payment Terms.** Applicator shall pay Schwartz a percentage of manure value as determined by reference to **Schedule 2** hereto. Terms of payment are as follows:

a. Manure value shall be determined by reference to the nutrient in the manure (N, P, and K), the amount of manure removed from the Facilities, and the comparable cost of a like amount of commercial fertilizer. Schwartz shall test the manure from the Facilities in determining manure value. Applicator shall be responsible for all costs associated with sampling to test the manure from the Facilities in determining manure value. Upon request, Applicator shall be responsible for providing accurate soil tests from Applicator's property. Schwartz's determination of manure value and quantity shall be final absent manifest error.

b. Applicator shall be responsible for and shall cause compliance with the applicable Manure Management Plan for the property where the manure will be field applied. Applicator will provide to Schwartz, in advance of any field application, such information as Schwartz may require in order to determine manure value.

c. Applicator shall secure, by easement assignable to Schwartz, sufficient acres to cause compliance with the Manure Management Plan.

d. Applicator shall have the right, subject to Schwartz's biosecurity requirements, to enter the Facilities to monitor manure levels, obtain manure samples, and remove manure.

e. Schwartz will invoice Applicator within 60 days after application. Manure applications performed from September 1 to December 10 will be due and payable on the next January 10. Manure applications performed from December 10 to August 31 will be due 30 days after initial invoice date.

f. SCHWARTZ MAKES NO WARRANTY, EITHER EXPRESS OR IMPLIED, AS TO THE MANURE RECEIVED BY APPLICATOR OR ITS USE. SCHWARTZ SHALL NOT BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL, OR OTHER DAMAGES REGARDING USE OF MANURE - AND NO CLAIM OF ANY KIND SHALL BE GREATER THAN THE AMOUNT PAID BY APPLICATOR TO SCHWARTZ FOR MANURE VALUE.

3. **Term.** This Agreement shall commence on the date first set forth above and, unless sooner terminated by default, shall terminate and end on 12/31/2024 *JS*  
*1 year evergreen thereafter*

4. During the term hereof, Applicator shall, at its expense, remove and field apply all manure produced at the above-described Facilities in accordance with the terms hereof. *CON*

5. Applicator shall timely remove manure from the above referenced Facilities so that manure levels do not impede normal production operations as established by Schwartz.

6. Applicator agrees that Applicator shall provide all vehicles, personnel and equipment necessary to carry out this Agreement. Applicator shall be solely responsible for operation and maintenance of all equipment used by Applicator in carrying out this Agreement and Applicator shall be responsible for any and all employees of Applicator's who are employed, engaged, or assigned to carry out the terms and conditions of this Agreement.

7. Manure shall be transported by Applicator in such a manner so as to avoid leaks, spills, or excessive application.

8. Applicator shall follow all federal, state and local laws, rules and regulations applicable to transportation and applying manure including, but not limited to, seasonal restrictions on manure applications, manure application rates, and manure application setbacks. Applicator shall immediately notify Schwartz of any unforeseen accidents, conditions or circumstances that arise during the transport or application of manure to ensure that the appropriate regulatory authorities or bodies may be notified as necessary. Notwithstanding its obligation to notify Schwartz of any such occurrences, Applicator shall be responsible for timely reporting any such occurrences to the appropriate regulatory authorities in addition to reporting to Schwartz.

9. At all times, Applicator shall maintain and if requested deliver to Schwartz records, documents, reports as may be required by law or regulation in connection with transport and application of manure.

10. At all times, Applicator shall do such things as may be necessary to cause compliance with any manure management plan to which Schwartz is a party.

11. Applicator and Applicator's employees and contractors shall obtain and maintain any and all training, certifications, applicable permits, licenses and/or regulatory approvals necessary to perform under the terms and conditions of this Agreement, including, without limitation, Minn. Stat. § 18C.430.

12. Applicator shall pay all costs and expenses required to perform this Agreement.

13. **Default and Indemnification.**

a. Default shall be a material breach of a term or condition hereof. In the event of default, the non-defaulting party shall have any and all remedies that may exist at law or in equity. Schwartz's remedies, in the event of Applicator default, shall specifically include the right to hire substitute performance of Applicator's duties hereunder. Pursuant to such substitute performance Schwartz shall be entitled to field apply manure on any land where Schwartz holds an easement or other right to field apply manure and to assess Applicator a charge of 150% of the cost of such substitute performance.

b. Applicator shall indemnify, defend and hold harmless Schwartz and any of Schwartz's employees from and against any and all claims, liabilities or demands, of any nature whatsoever, whether imposed by a governmental regulatory office or by a private person or entity, including costs, litigation expenses, attorneys' fees and liabilities incurred in connection with or arising out of any claim of injury to or death of any person or persons, or damage to property of any kind, caused or claimed to be caused in whole or in part by the acts or omissions of Applicator or by any person directly or indirectly employed or hired by Applicator, while engaged in the performance of the work under this Agreement or any activity associated with such work.

14. Applicator shall purchase and have in effect at all times, appropriate workers' compensation and employer's liability insurance (if applicable); comprehensive general liability; and comprehensive automobile liability.

15. This Agreement and associated rights and obligations granted herein are binding upon the parties' heirs, successors, and permitted assigns. The duties and obligations of Applicator hereunder are personal to it. Applicator agrees that it may not assign any rights or delegate any duties arising out of this Agreement without the prior written consent of Schwartz, which consent shall not be unreasonably withheld.

16. It is understood that the services provided by Applicator hereunder are performed as an independent contractor and Applicator shall not be, nor hold itself out as, an agent or employee of Schwartz.

17. The parties agree that this Agreement is made in Brown County in the State of

Minnesota and shall be governed by and construed in accordance with the laws of the State of Minnesota. Any dispute arising herefrom shall be subject to the exclusive jurisdiction of and venued in the Minnesota District Court for Brown County, State of Minnesota. Applicator specifically consents to the exercise of personal jurisdiction over Applicator by the Minnesota District Court for Brown County, and further consents to the exclusive venue in such Court. Any other forum for dispute resolution shall be located in New Ulm, Minnesota. Applicator hereby waives any right to a jury trial relating to any claims or causes of actions arising from or with respect to this Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement to be effective as of the date first set forth above.

SCHWARTZ:

Pchwartz Farms Inc  
By: John Schwartz  
Name: John Pchwartz  
Title: CEO

APPLICATOR:

Neitzel Farms Inc

By: C. Douglas Neitzel  
Name: Neitzel Farms  
Title: President

### SCHEDULE 1

Real property in Redwood County, Minnesota described as follows:

Part of the Northeast Quarter of the Northeast Quarter (NE $\frac{1}{4}$  NE $\frac{1}{4}$ ) of Section Thirty-six (36), Township One Hundred Eleven (111), Range Thirty-six (36), described as follows: Commencing at the northeast corner of said Section 36; thence southerly along the east line of said Northeast Quarter 858.42 feet to the point of beginning of the tract to be described; thence continuing southerly along said east line 408.00 feet; thence westerly deflecting right 90 degrees, 00 minutes, 00 seconds 536.00 feet; thence northerly deflecting right 90 degrees, 00 minutes 00 seconds 408.00 feet; thence easterly deflecting right 90 degrees 00 minutes, 00 seconds 536.00 feet to the point of beginning. This tract of land contains 5.02 acres of land and is subject to any and all easements of record.

## SCHEDULE 2

Applicator shall pay to Schwartz manure value, determined under Section 2.a. hereof. These payments will be based upon the following:

- Averaging the price obtained from three named commercial fertilizer supplier/dealers below for N, P, and K.
- The price used from these dealers shall be the average price of the N, P, and K of the corresponding year that the manure is removed from the site.
- Three named dealers:
  - o Farmward Co-op, Morgan, Minnesota
  - o Crystal Valley Co-op, Jackson, Minnesota
  - o CHS, Magnolia, Minnesota
- Schwartz's calculations, absent manifest error, shall be conclusive as to the amount of Applicator's payment to Schwartz.

**AFFIDAVIT OF SERVICE VIA U.S. MAIL**

STATE OF MINNESOTA    )  
                                          ) ss  
COUNTY OF REDWOOD    )

**RE:   *Application for Animal Confinement Feedlot Conditional Use Permit* submitted by John Schwartz of Schwartz Family LLC; Permit Application No. 12-25**

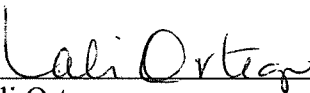
I, Lali Ortega, a person not less than eighteen (18) years of age, being first duly sworn upon oath, hereby state a copy of the following:

1. *Written Notice of Public Hearing on Application for Animal Confinement Feedlot Conditional Use Permit; and*
2. *Notice of Public Hearing*

was duly served upon:

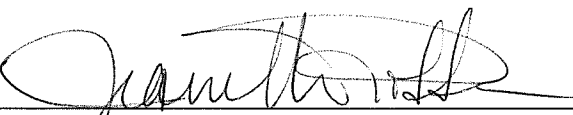
SEE ATTACHED

by enclosing a copy of the same in an envelope, with postage prepaid, and depositing said envelope in a United States Postal Service mailbox located at Redwood Falls, Minnesota on the 15<sup>th</sup> day of December 2025.

  
\_\_\_\_\_  
Lali Ortega  
Environmental Administrative Assistant

Subscribed and sworn to before me, a Notary Public, on this 15<sup>th</sup> day of December 2025, by Lali Ortega.



  
\_\_\_\_\_  
Notary Public



600364020	BUTLER/JACQUELINE ALIVING	TRUST	420 21ST ST SW	HURON	SD	57350
690304030	DAHMES LEGACY FARM II LLP		23288 MIDWAY AVE	CLEMENTS	MN	56224
600253060	GREENFIELD LLP	% KATHERINE NEITZEL	5005 KELSEY TERRACE	EDINA	MN	55436
690312020	HOFFBECK/BOBBY L & BEVERLY I		23604 MIDWAY AVE	CLEMENTS	MN	56224-1106
690311060	HOFFBECK/CHAD M & SHANNON		41467 CO HWY 16	MORGAN	MN	56266
600364040	JACOBUS/MARY J/ REV TRUST	% MARY J JACOBUS	17867 HAMBURG AVE	LAKEVILLE	MN	55044
690313020	KODET/JEFFREY & RONDI		34814 280 ST	REDWOOD FALLS	MN	56283
690303020	NOTTLESLE G & KIM		34339 CO HWY 16	CLEMENTS	MN	56224
600253020	SALFER/JULIA/RLT		23991 LASER AVE	WABASSO	MN	56293
600361020	SCHWARTZ FAMILY LLC		32296 190 ST	SLEEPY EYE	MN	56085
600362060	SUNDERMAN/KENT J & GAIL L	ETAL	15314 CHARLES ST	OMAHA	NE	68154
690303030	TIPTON/LAURA		1608 CLAIRE CT	NORTH MANKATO	MN	56003
	NEW AVON TOWNSHIP	% BRAD NEUMANN, CLERK	29175 230TH ST	WABASSO	MN	56293

APPLICANT

TO: Whom It May Concern

FROM: Jeanette Pidde *JP*  
Land Use and Zoning Supervisor  
Redwood County Environmental Office

DATE: December 15<sup>th</sup>, 2025

RE: Notice of Public Hearing on Animal Confinement Feedlot  
Conditional Use Permit Application



Please find enclosed a Notice of Public Hearing regarding an Application for Conditional Use Permit submitted by John Schwartz of Schwartz Family LLC, pursuant to Redwood County Code of Ordinances, Title XV, Sections 153.142 and 153.290, for the expansion of a swine feedlot. After expansion, the feedlot would consist of two total confinement barns capable of housing 5,380 head of finishing swine weighing between 55-300 pounds (1,614 total animal units), on the following described real property in New Avon Township, Redwood County, Minnesota:

Part of the Northeast Quarter of the Northeast Quarter of Section Thirty-six, Township One Hundred Eleven, Range Thirty-six, described as follows: Commencing at the northeast corner of said Section 36; thence southerly along the east line of said Northeast Quarter 858.42 feet to the point of beginning of the tract to be described; thence continuing southerly along said east line 408.00 feet; thence westerly deflecting right 90 degrees 00 minutes 00 seconds 536.00 feet; thence northerly deflecting right 90 degrees, 00 minutes 00 seconds 408.00 feet; thence easterly deflecting right 90 degrees 00 minutes 00 seconds 536.00 feet to the point of beginning.

A public hearing thereon will be held before the Redwood County Planning Commission at the regularly scheduled Planning Commission meeting starting at 1:00 p.m. on Tuesday, the 30<sup>th</sup> day of December, 2025. The meeting will be held in the Board Room of the Redwood County Government Center, 403 South Mill Street, Redwood Falls, MN 56283.

Pursuant to Redwood County Code of Ordinances, all property owners of record within five hundred (500) feet of the incorporated areas and/or one-quarter (1/4) of a mile of the affected property or the ten (10) properties nearest to the affected property, whichever would provide notice to the greatest number of landowners in the unincorporated areas, the township in which the affected property is located, and all municipalities within two (2) miles of the property are required to be notified in writing of the time and place of the public hearing.

If you have any comments or questions regarding this matter, please contact the Redwood County Environmental Office by telephone at (507) 637-4023, via email at [Environmental@redwoodcounty-mn.gov](mailto:Environmental@redwoodcounty-mn.gov), or by mail at *Redwood County Environmental Office, P.O. Box 130, Redwood Falls, MN 56283*, and/or attend the public hearing at the time and date set forth in the Notice of Public Hearing.

enclosure

**Redwood County Government Center - Environmental Department**  
**P.O. Box 130 Redwood Falls, MN 56283**  
**(507) 637-4023   [redwoodcounty-mn.us](http://redwoodcounty-mn.us)   [environmental@redwoodcounty-mn.gov](mailto:environmental@redwoodcounty-mn.gov)**



## NOTICE OF PUBLIC HEARING

An *Application for Conditional Use Permit* has been filed by John Schwartz of Schwartz Family LLC, pursuant to Redwood County Code of Ordinances, Title XV, Sections 153.142 and 153.290 for the expansion of a swine feedlot. After expansion, the feedlot would consist of two total confinement barns capable of housing 5,380 head of finishing swine weighing between 55-300 pounds (1,614 total animal units), on the following described real property in New Avon Township, Redwood County, Minnesota:

Part of the NE $\frac{1}{4}$  of the NE $\frac{1}{4}$  of Section 36, Township 111, Range 36, described as follows: Commencing at the northeast corner of said Section 36; thence southerly along the east line of said Northeast Quarter 858.42 feet to the point of beginning of the tract to be described; thence continuing southerly along said east line 408.00 feet; thence westerly deflecting right 90 degrees 00 minutes 00 seconds 536.00 feet; thence northerly deflecting right 90 degrees, 00 minutes 00 seconds 408.00 feet; thence easterly deflecting right 90 degrees 00 minutes 00 seconds 536.00 feet to the point of beginning.

A public hearing thereon will be held before the Redwood County Planning Commission at the regularly scheduled Planning Commission meeting starting at 1:00 p.m. on Tuesday, the 30<sup>th</sup> day of December, 2025. The meeting will be held in the Board Room of the Redwood County Government Center, 403 South Mill Street, Redwood Falls, MN 56283.

If you have any comments or questions regarding this matter, please contact the Redwood County Environmental Office by telephone at (507) 637-4023, via email at [environmental@redwoodcounty-mn.gov](mailto:environmental@redwoodcounty-mn.gov), or in writing at Redwood County Environmental Office, P.O. Box 130, Redwood Falls, MN 56283.

DATED: December 9, 2025

Jeanette Pidde  
Land Use & Zoning Supervisor  
Redwood County Environmental Office



Selected Parcel(s)

Notification Area

Parcels

County Boundary

Municipal Boundaries

Sections

Roads

0

1,000

2,000

Feet

Parcel ID: 60-036-1020

**CUP Notification Area:**  
**0.5 miles from selected parcel**

**REDWOOD COUNTY PLANNING COMMISSION**

**Schwartz Family LLC**

**Animal Confinement Feedlot Conditional Use Permit**

**Application #12-25**

**December 30, 2025**



**FINDINGS OF FACT**

***ORDINANCE CRITERIA – The Planning Commission may recommend the granting of a Conditional Use Permit in any district provided the proposed use is listed as a conditional use for the district and upon a showing that the standards and criteria stated in this Ordinance will be satisfied and that the use is in harmony with the general purposes and intent of this Ordinance and the Comprehensive Plan.***

**In determining whether the proposed use is in harmony with the general purposes and intent of the Ordinance and the Comprehensive Plan, the Planning Commission shall consider and make findings on the following questions:**

- 1) What potential health safety and welfare impacts were raised at the hearing and why will they, or why won't they, impact the neighboring residents?

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- 2) What potential impacts on area property uses were raised at the hearing and why will they, or why won't they, impact the use and enjoyment of other property in the area?

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- 3) What potential impacts on property values or future development were raised at the hearing, and why will they, or why won't they, impact the neighboring properties?

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- 4) What infrastructure is needed to support the proposed use and how will it be provided?

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- 5) How do the goals, purpose and policies of the Zoning Ordinance and Comprehensive Plan apply to the proposed project?

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NAME: \_\_\_\_\_

DATE: \_\_\_\_\_