



Animal Confinement Feedlot Conditional Use Permit Application

www.co.redwood.mn.us

Proposed Location of Feedlot Operation:

Permit #: 1-26 Date: 12-29-25

Address: 220th St City: Sleepy Eye State: MN Zip: 56085
House # Street Name

Parcel #: 50-001-1020 Township: Brookville Section: 1 Twp #: 110 Range: 34

Information about the Operation:

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

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 animal units will be 990.

Legal Description of Proposed Feedlot Location:

PT NENW 1-110N-34W

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

Zoning District: Agriculture

Soil Type 1: L201A

Soil Type 2: L83A

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 3300 number of animals on site x 350 number of days present
= 993,300 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: 993,300 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: 117 feet

Setback from center line of road: 150 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: 32296 190th St City: Sleepy Eye State: MN Zip: 56085

Home Phone: _____ Cell Phone: _____ Email: _____

List any additional applicants: _____

Land Owner: Complete only if different from Applicant

First Name: See next page 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: 32296 190th St City: Sleepy Eye State: MN Zip: 56085

Home Phone: _____ Cell Phone: _____ Email: _____

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) See next page

- 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 #: _____

~~Application Received: _____~~

~~Commission Action: _____ County Board Action: _____~~

~~Approved: _____ Date: _____ Approved: _____ Date: _____~~

~~Disapproved: _____ Date: _____ Disapproved: _____ Date: _____~~

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: 32296 190th St City: Sleepy Eye State: MN Zip: 56085

Home Phone: _____ Cell Phone: _____ Email: _____

List any additional applicants: _____

Land Owner: Complete only if different from Applicant

First Name: Karen Last Name: Christensen

Business Name: _____

Address: 904 Township RD City: Morgan State: MN Zip: 56266

Home Phone: 507-245-1930 Cell Phone: _____ Email: _____@gmail.com

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: purchase agreement

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: 32296 190th St City: Sleepy Eye State: MN Zip: 56085

Home Phone: _____ Cell Phone: _____ Email: _____

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): _____ Date: _____

Landowner Signature: Karen Christensen Date: 12/23/2025

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 #: 32955

Application Received: 12-29-2025

Commission Action:

Approved: _____ Date: _____

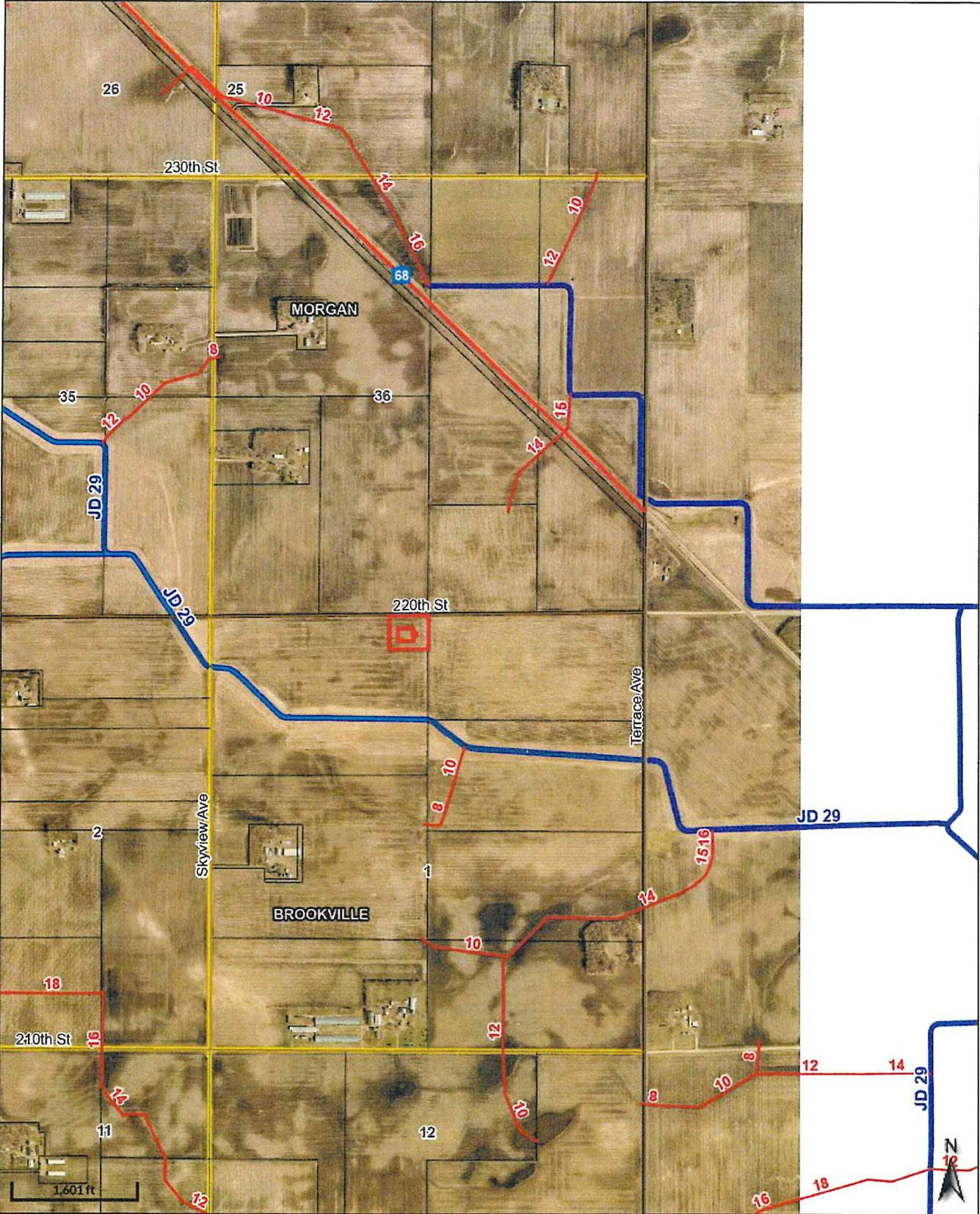
Disapproved: _____ Date: _____

County Board Action:

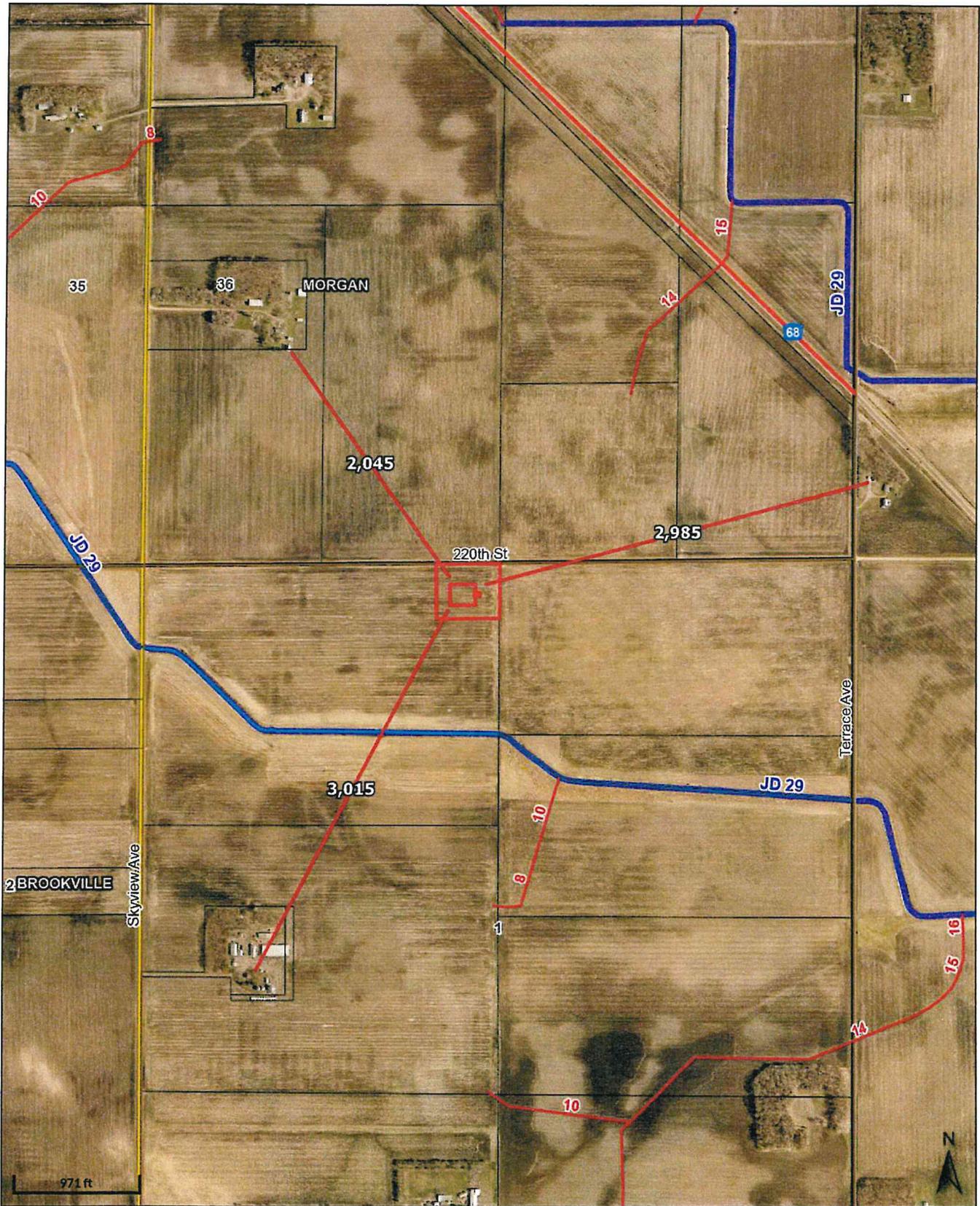
Approved: _____ Date: _____

Disapproved: _____ Date: _____

Neighborhood Map



Neighbors



Odors From Feedlots Setback Estimation Tool

OFFSET Ver 2.0
University of Minnesota
1/21/2017

Farm Name
 Address or County
 Evaluator
 Date

Clear All

OFFSET
Annoyance-free
96%

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

Building Sources

Building Type	Width (ft)	Length (ft)	# of Similar Sources	Total Area (sqft)	Control Technology	% air treated
Swine Finishing - deep pit	154	184	1	28336	None	
Dairy - free stall				0	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	<input type="text"/>
Odor Flux (ou/s/m2)	<input type="text"/>
H2S Flux (ug/s/m2)	<input type="text"/>
NH3 Flux (ug/s/m2)	<input type="text"/>
Documentation	<input type="text"/>
Add a Control Technology	
Name of technology	<input type="text"/>
Odor reduction (%)	<input type="text"/>
H2S reduction (%)	<input type="text"/>
NH3 Reduction (%)	<input type="text"/>
Documentation	<input type="text"/>

Area Sources	
Add a Source Type	
Name of Source	<input type="text"/>
Odor Flux (ou/s/m2)	<input type="text"/>
H2S Flux (ug/s/m2)	<input type="text"/>
NH3 Flux (ug/s/m2)	<input type="text"/>
Documentation	<input type="text"/>
Add Control Technology	
Name of technology	<input type="text"/>
Odor reduction (%)	<input type="text"/>
H2S reduction (%)	<input type="text"/>
NH3 Reduction (%)	<input type="text"/>
Documentation	<input type="text"/>

Conditions for Permit No. 1-26 (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 Nicholaus J. Rowe, P.E., dated November 6, 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 - Skyview Site
 Agency Interest ID: 265263
 Permit ID: NEW
 Service Type: Feedlot Permitting - Construction Short Form Issuance
 Transaction ID: 170070
 Submitted On: 2025-11-13 07:51:03

Permit Application Selection

Does your facility exceed any federal large CAFO thresholds? 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? No
 Do you want to apply for an SDS Permit? No
 Has a part of your facility been identified as a pollution hazard by the Minnesota Pollution Control Agency (MPCA) or your County Feedlot Officer? No
 Are you proposing construction or expansion of a facility? Yes
 Will the construction or expansion result in your facility having a capacity to house 300 or more animal units, or are you proposing to construct a manure storage area at a facility that has the capacity to house 300 or more animal units? Yes

Application Readiness

Based on your previous answers, you are applying for a Construction Short Form 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.

Feedlot Information

Feedlot Name: Schwartz Family LLC - Skyview Site
 Physical Address: 220th St
 Sleepy Eye MN 56085
 Mailing Address: 32296 190th St
 Sleepy Eye MN 56085-4374
 Location Description: NE 1/4 of NW 1/4, 1-110N-34W

Feedlot Location

Collection Method: Digitized - MPCA online map
 Coordinate System: Lat Long - decimal degrees
 Latitude: 44.36879
 Longitude: -94.87743
 Point of Reference: General Location
 County: Redwood
 Is the site located in Indian country?: No
 Parcel(s) County and ID:
 Township: 110
 Range: 34W
 Section: 1
 Quarter 160: NW
 Quarter 40: NE
 Quarter 10:
 Quarter 2.5:

Contacts

Contact Name: Brian Schwartz
 Contact Type: Feedlot Contact
 Organization Name: Schwartz Family LLC
 Organization Type: Private (Non-Government)
 Address: 32296 190th St
 Sleepy Eye MN 56085-4374
 Email: bschwartz@schwartzfarms.net
 jhaala@schwartzfarms.net
 Phone: 507-794-5779

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
 Email: jhaala@schwartzfarms.net
 Phone: 507-794-5779

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
 Email: jhaala@schwartzfarms.net
 Phone: 507-794-5779

Prevention Opportunities

Have you implemented any prevention activities in the past year? No
 Why not? New facility, site or project
 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	Animal Type	Capacity	Animal Units
Status: New	Swine 55-300 lbs	3,300	990
Structure Name: 1			
Length: 184 feet			
Width: 153 feet			
Coordinate System: Lat Long - decimal degrees			
Latitude: 44.36879			
Longitude: -94.87743			
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	3,300	990
Totals:	3,300	990

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: New

Sensitive Areas

Is any part of the facility located within 1,000 feet of surface waters or tile intakes? No
 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

Nutrient Management Plan

A copy of the NutrientManagementPlanfor2026-2027.pdf generated on 11/10/2025 12:21:13 PM is included in the submittal.

Attachments

Permit Application Documents:

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

Manure Storage Documents:

Attachment Type	File Name	Document Date
Construction Plans and Specifications	-Skyview Site11-6-25.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:	In what city were you born?
Challenge Question Answer:	*****

Certification Date and Time:	11/13/2025 7:50:56 AM
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The undersigned landowner agrees to allow manure from Schwartz Family, LLC-Skyview livestock feedlot to be spread on 420 acres of his/her land. The land is located in the SF NW 1/4, N 1/2 SW quarter of Section 142 in Breckville Township, Redwood County, Minnesota. 5 1/2 NW 1/4, N 1/2 SE 1/4 Sect. 35 Morgan Twp, Redwood County

The undersigned landowner is the holder of Permit Number NONE (if none is held, please indicate NONE).

If the land indicated above received manure from livestock in addition to that from the feedlot indicated above, please list the number and types of livestock below (if none, please indicate NONE).

Enclose a Farm Service Agency aerial photo of all areas on which manure will be spread. Outline the areas used.

x [Signature]

Signature of Landowner

This Agreement is good until 2046

Mark Christensen

Name of Landowner

21413 Skyview Ave 507-776-4026

Address

Phone Number

Sleepy Eye MN 56085 11-18-2025

City, State, Zip

Date

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

Feedlot Information

Feedlot name: Schwartz Family LLC - Skyview Site
Permit type:
Permit ID:
Registration ID: 127-128241

This is a Nutrient Management Plan for a Construction Short Form 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.

Table of Contents

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Mortality Management	10
Timing Information	11
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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	--	0 gal	990,000 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	3,300	350 day/year

Storage information

Storage type	Capacity	Storage length
Liquid	1,421,394 gal	365 day

Application

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

Analysis

Sampling frequency	Sampling method	Basis for analysis	Date last analyzed
once per year	Estimate (new structure)	Estimated	--

Nutrient content

	Total nitrogen (N)	Inorganic nitrogen (N)	Organic nitrogen (N)	Total phosphorus (P2O5)	Total potassium (K2O)
Expected	58 lb/1000gal	40.6 lb/1000gal	17.4 lb/1000gal	27.6 lb/1000gal	35.9 lb/1000gal

Annual generation

Estimated manure produced: 893,392.5 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	990,000 gal/yr	--	57,420 lb	40,194 lb	17,226 lb	27,324 lb	35,541 lb

Manure transfer plan

	Amount transferred	Available transfer acres
Expected	990,000 gal	600 acre

Notes

Field Map Summary

Total Farmable Acreage: 50 acre
 Fields with Manure applied: 0 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

<p>Drinking Water Features</p> <ul style="list-style-type: none"> Domestic Wells, Verified and Unverified Locations Drinking Water Supply Management Areas Domestic Well Buffers, Verified and Unverified Locations 	<p>Groundwater Features</p> <ul style="list-style-type: none"> Karst Sinkholes Springs Karst Sinkhole Buffers Vulnerable Groundwater Area Floodplain DFIRM, Modernized and Unmodernized Data 	<p>Water Bodies</p> <ul style="list-style-type: none"> NWI (Class 3, 4, 5) and Public Water Inventory, Wetlands NWI (Class 3, 4, 5) and Public Water Inventory, Wetlands Buffer Public Water Inventory, Lakes Public Water Inventory, Lakes Buffer 	<p>Water Ways</p> <ul style="list-style-type: none"> NHD, Intermittent Streams NHD, Intermittent Stream Buffers NHD and Public Drainage Systems, Ditches NHD and Public Drainage Systems, Ditch Buffers Public Water Inventory Streams 	<p> Public Water Inventory, Stream Buffers</p> <p>Soils</p> <ul style="list-style-type: none"> Coarse Textured Soils Shallow Bedrock Soils Slope greater than 6% less than 6% greater than 6% Field
--	---	---	---	--

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See Sensitive Features Appendix for more information.

Field Summary

Total farmable acreage: 50

Field name/ID	Farmable acreage	Crop grown	Crop most recently harvested	Nitrogen need	Phosphorus management	Manure applied
Site Field	50	Soybeans	Corn-Field	--	Yes	No

Field name/ID: Site Field

Field group name:
 Farmable acreage: 50
 Irrigated: No

Methodology information

Sensitive features	Planned manure application timing	Planned application methods	Crops grown
See Sensitive Feature Appendix for management techniques			
Drainage Ditch River, Stream Coarse-Textured Soil	April May September October 1-14 October 15-31 November	Broadcast - liquid tanker with double discs Injection - coulter	Corn-Field Soybeans

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	42 feet	2%	No	--	--

Planning

Irrigation

The field is not irrigated

Soil

No soil sample

A phosphorus application plan is required.

Phosphorus application plan

Crop year	Crop grown	Yield	Phosphorus removed	Manure application	Phosphorus from manure	Fertilizer application	Phosphorus from fertilizer	Excess phosphorus
2025	--	--	0 lb/ac	no	--	no	--	0 lb/ac
2024	--	--	1 lb/ac	no	--	no	--	-1 lb/ac
2023	--	--	1 lb/ac	no	--	no	--	-1 lb/ac
2022	--	--	1 lb/ac	no	--	no	--	-1 lb/ac
2021	--	--	1 lb/ac	no	--	no	--	-1 lb/ac

Phosphorus applied over 5 years	Phosphorus removed over 5 years	Excess phosphorus over 5 years
0 lb/ac	4 lb/ac	-4 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
Soybeans	65 bu	--	Corn-Field	Soybeans	Corn-Field

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
--	--	--	--	--	228 lb/ac

Phosphorus

Phosphorus needs	Phosphorus removal	Maximum phosphorus allowable
0 lb/ac	53 lb/ac	57 lb/ac Calculated according to your phosphorus application plan.

Nutrient application

Acreage after setback: 50

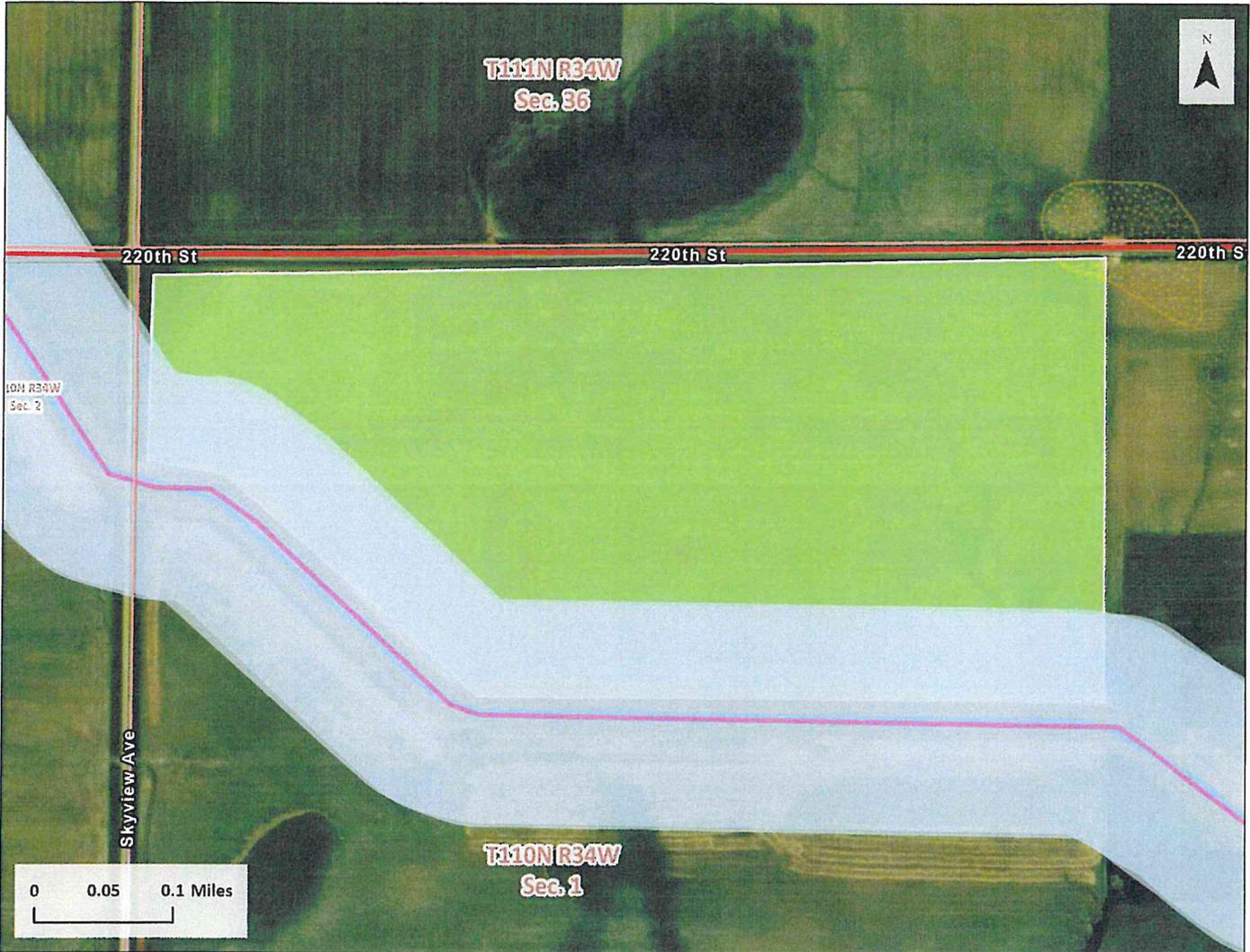
No manure applied.

No fertilizer applied.

Notes

There are no notes.

Field name: Site Field



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Map legend

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

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

Drainage Ditch River, Stream Coarse-Textured Soil

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 gasses 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 nitrapyrin-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 nitrapyrin-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 nitrapyrin-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 nitrapyrin-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 nitrapyrin-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.

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 ¼ inch or greater rainfall within 14 days of application

Sensitive Feature Appendix

Sensitive feature	Definition	Management techniques
Drainage Ditch	A constructed waterway, public or private, used to convey (ie. drain) surface water runoff or tile drainage from farm fields or other low areas on the landscape. This includes drainage ditches that are bermed to prevent direct surface runoff.	<p>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.</p> <ol style="list-style-type: none"> 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. 2. 50 ft wide grassed buffer. 3. 100 ft setback with at least 16.5 ft as grassed buffer. 4. Berm that prohibits runoff from entering the ditch.
River, Stream	Rivers and streams flow continuously and are identified on the DNR protected waters maps.	<ol style="list-style-type: none"> 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. 2. 100 ft wide grassed buffer. 3. 100 ft setback with at least 16.5 ft as grassed buffer.
Coarse-Textured Soil	1/3 or more of the field area has a soil type (at the surface, or within 3 ft of the surface) that ends in "sand". Soil types considered to be coarse-textured include: sand, loamy sand, loamy coarse sand, loamy very fine sand, fine sand, loamy fine sand, coarse sand, or very fine sand.	<ol style="list-style-type: none"> 1. Follow the BMPs for vulnerable groundwater areas included in the NPDES or SDS permit (required if NPDES or SDS permitted). 2. Delay fall application until soil temperatures are less than 50°F. 3. Use nitrogen BMPs recommended by U of MN.

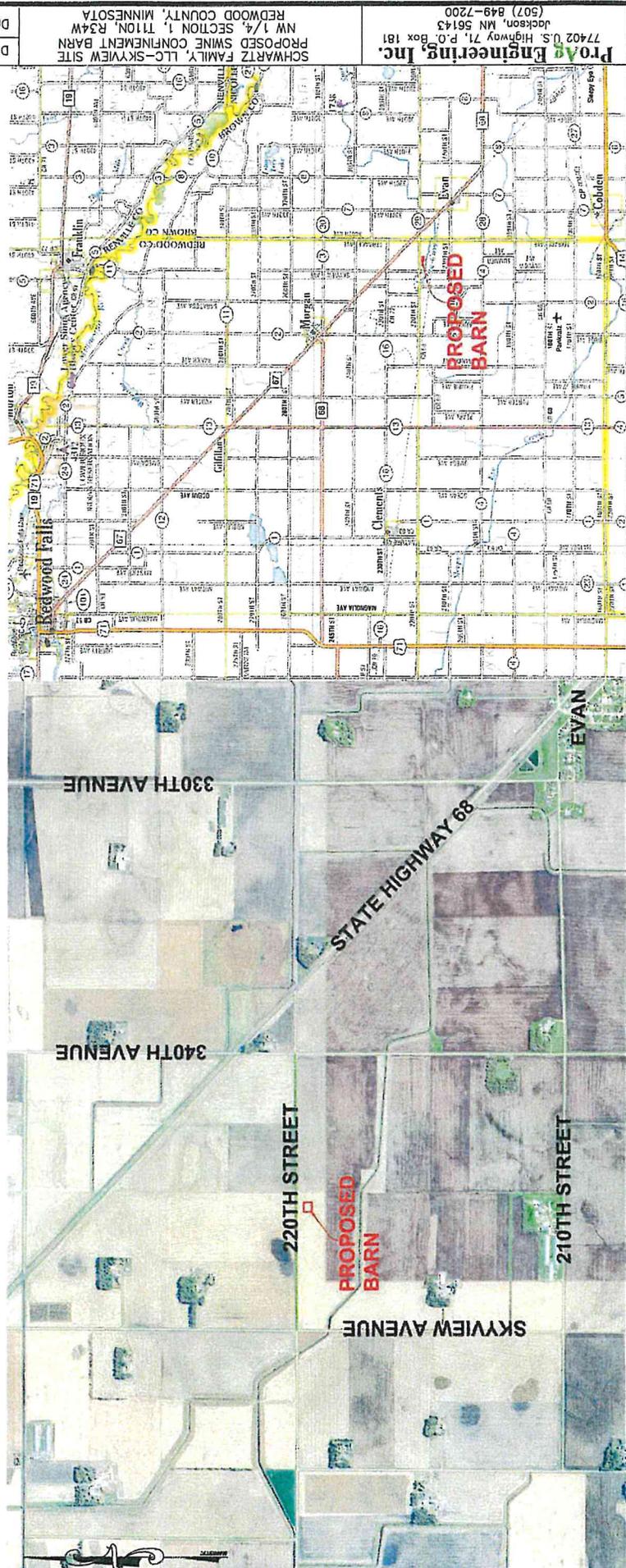
TABLE OF CONTENTS

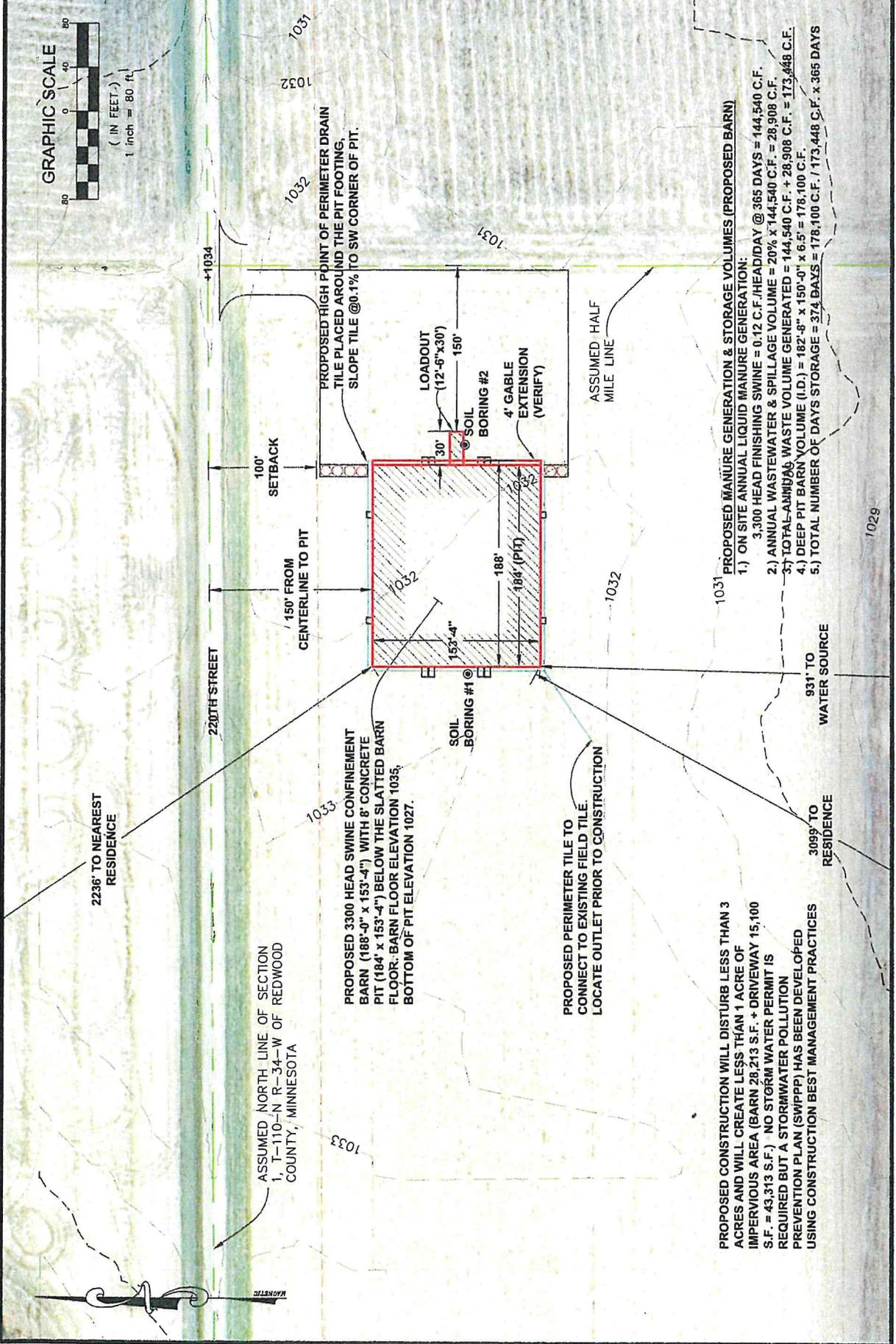
SHEET 1 --	COVER PAGE ROAD MAP	SHEET 6 --	CONSTRUCTION JOINTS CORNER REBAR PERIMETER TILE PERIMETER TILE SUMP PERIMETER TILE SYSTEM NOTE 12" DIVIDER WALL INSPECTION RISER DETAIL
SHEET 2 --	SITE PLAN	SHEET 7 --	CONCRETE & STRUCTURAL NOTES SLAT LEDGES & STEM WALLS NOTE
SHEET 3 --	PIT PLAN		
SHEET 4 --	SIDEWALL END WALL BRACING & BEAM POCKET COLUMN DETAIL		
SHEET 5 --	PUMP OUT PLAN PUMP OUT SECTION		

I hereby certify that this engineering document was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Nicholaus J. Rowe Date: *11/6/25*

Nicholaus J. Rowe, P.E.
License Number: 46735
By license renewal date is June 30, 2026.
Pages or sheets covered by this seal: *Sheet 1-7*



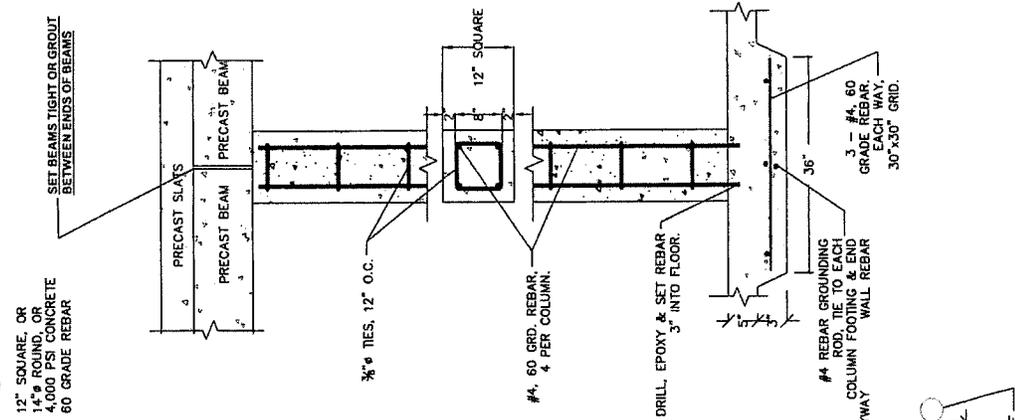


- PROPOSED MANURE GENERATION & STORAGE VOLUMES (PROPOSED BARN)**
 1.) ON SITE ANNUAL LIQUID MANURE GENERATION:
 3,300 HEAD FINISHING SWINE = 0.12 C.F./HEAD/DAY @ 365 DAYS = 144,540 C.F.
 2.) ANNUAL WASTEWATER & SPILLAGE VOLUME = 20% x 144,540 C.F. = 28,908 C.F.
 3.) TOTAL ANNUAL WASTE VOLUME GENERATED = 144,540 C.F. + 28,908 C.F. = 173,448 C.F.
 4.) DEEP PIT BARN VOLUME (I.D.) = 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

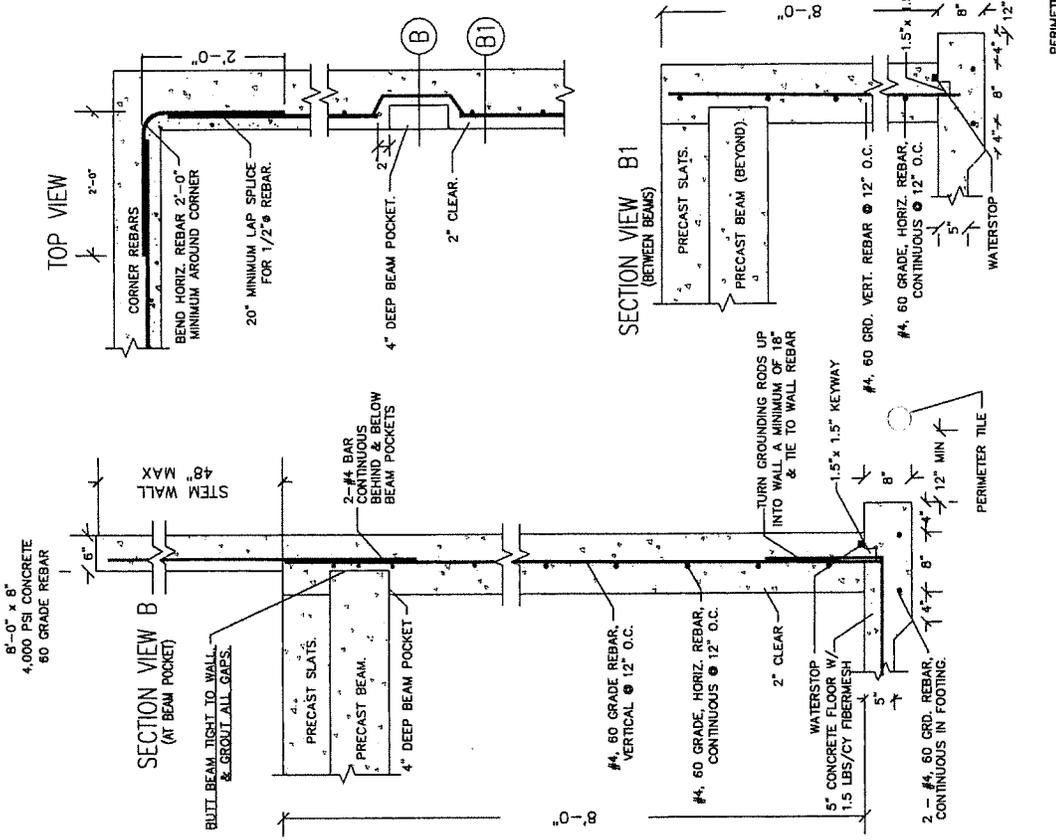
PROPOSED CONSTRUCTION WILL DISTURB LESS THAN 3 ACRES AND WILL CREATE LESS THAN 1 ACRE OF IMPERVIOUS AREA (BARN 28,213 S.F. + DRIVEWAY 15,100 S.F. = 43,313 S.F.) NO STORM WATER PERMIT IS REQUIRED BUT A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) HAS BEEN DEVELOPED USING CONSTRUCTION BEST MANAGEMENT PRACTICES

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

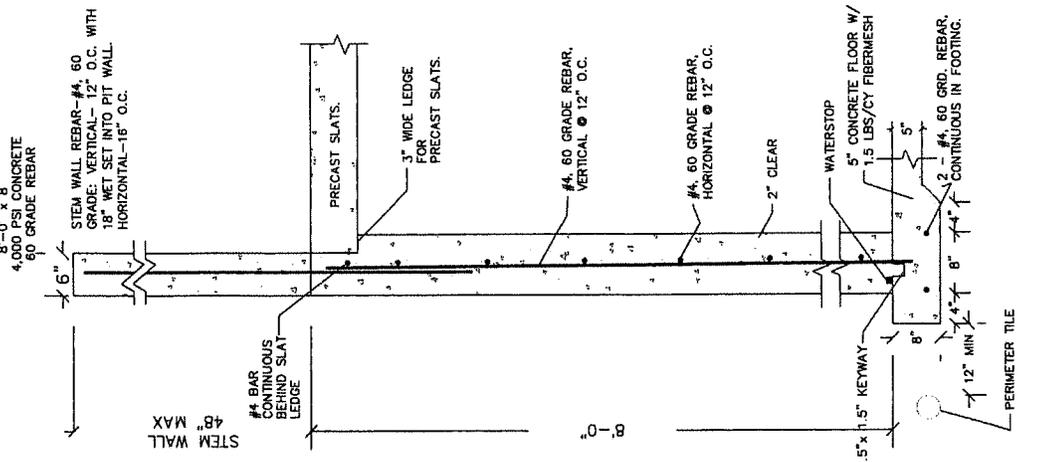
(C) COLUMN DETAIL



(B) END WALL BRACING & BEAM POCKET



(A) SIDE WALL



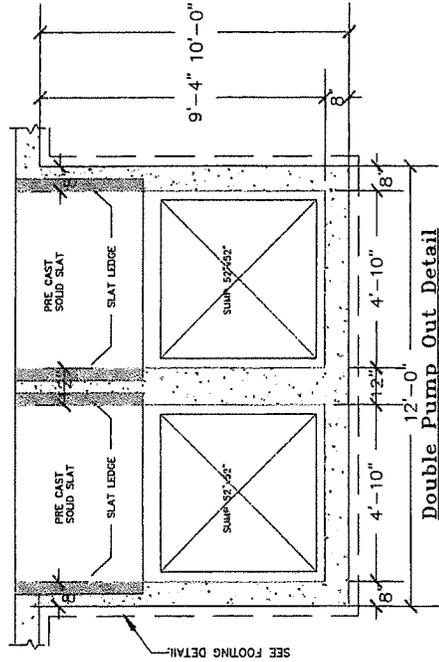
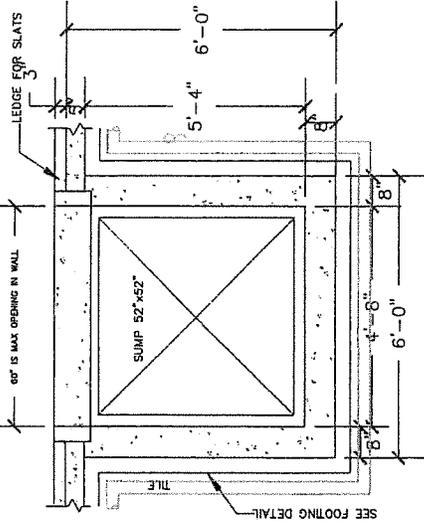
D TYPICAL PUMP OUT PLAN

BEAM MAY BE CAST-IN-PLACE WITH STEM WALL.
MINIMUM OF 2-#4, 60 GRADE REBARS IN BOTTOM OF BEAM.
PUMPOUT FOOTINGS AND FLOOR SHALL BE POURED
WITHOUT CONSTRUCTION JOINTS—SEE DETAIL 1.

KEYWAY UNDER WALLS SHALL BE CONTINUOUS
AROUND CORNERS AND PUMPOUTS.

CONSTRUCTION JOINTS ARE NOT TO BE WITHIN
THREE (3) FEET OF A PUMPOUT.

CAUTION: DO NOT DRIVE STAKES THRU PERIMETER TILE.



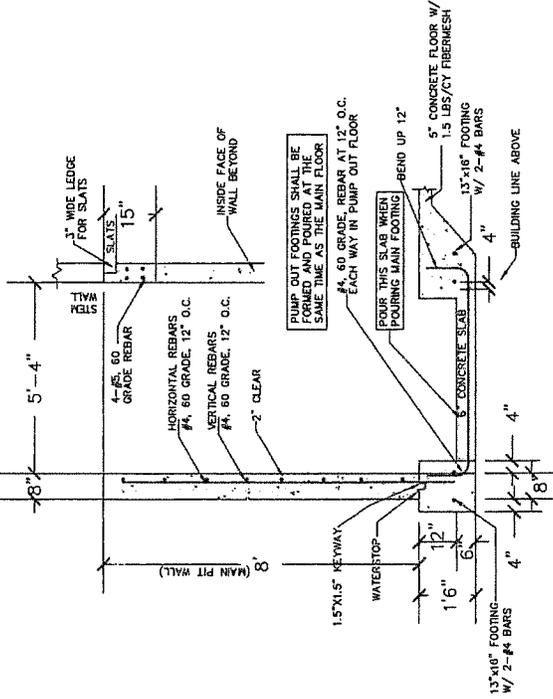
Double Pump Out Detail
(VERIFY)

E PUMP OUT SECTION

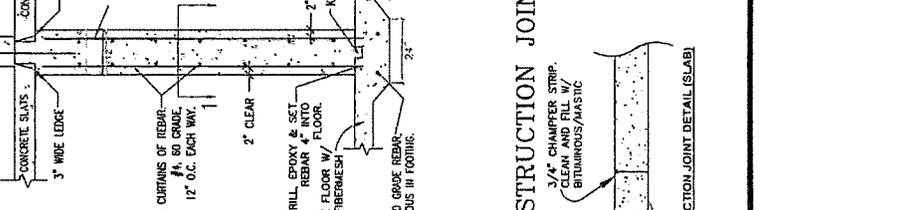
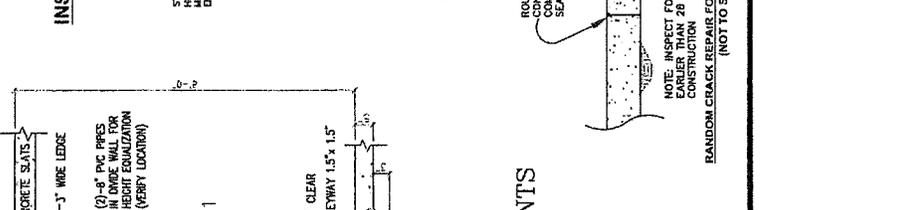
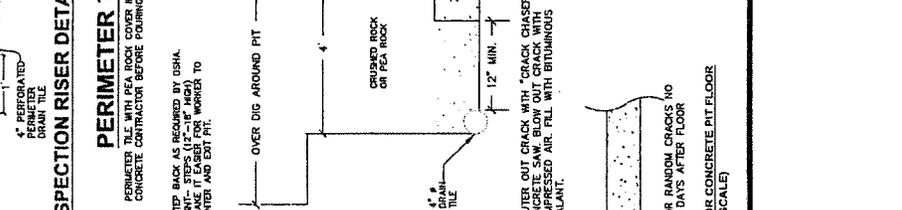
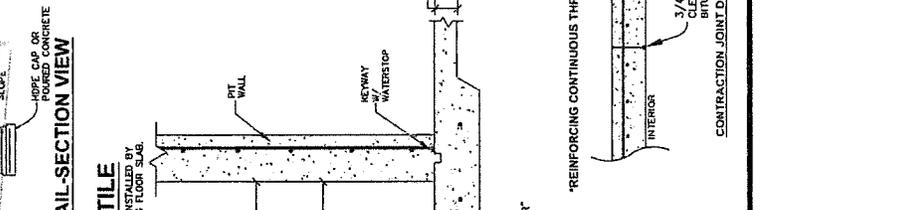
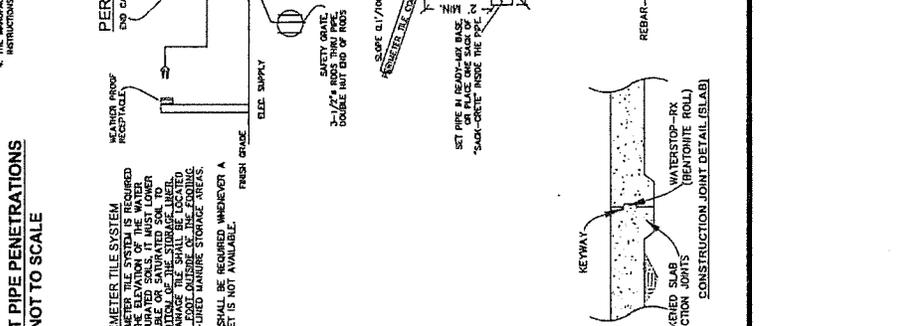
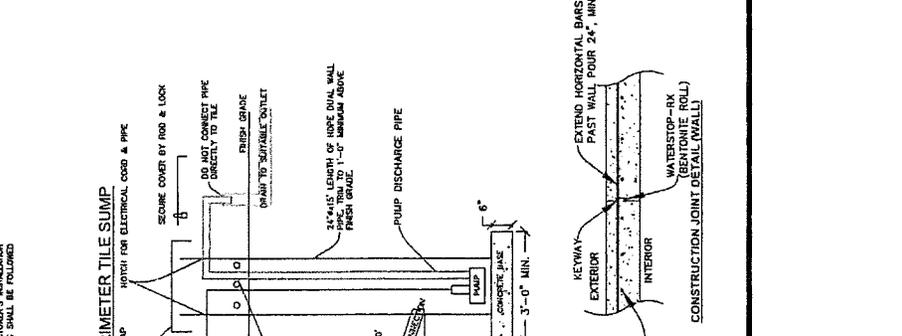
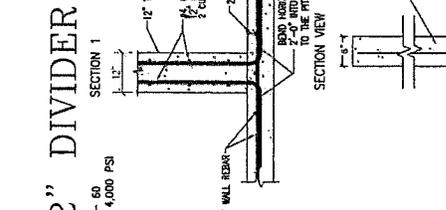
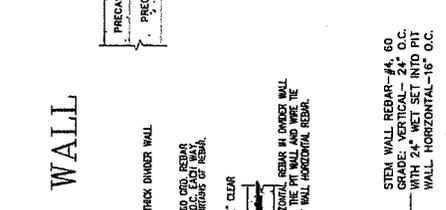
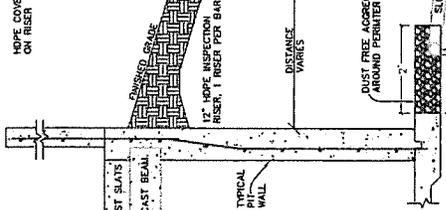
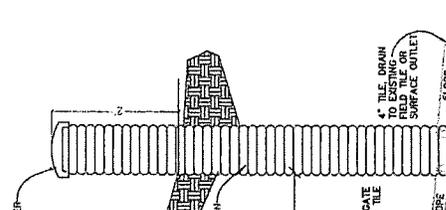
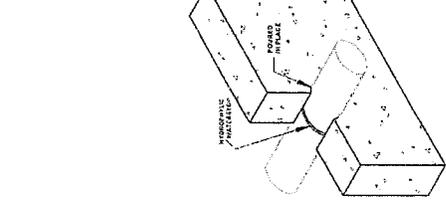
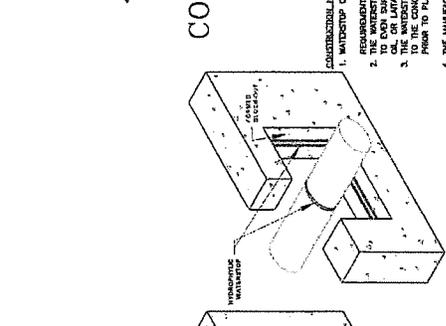
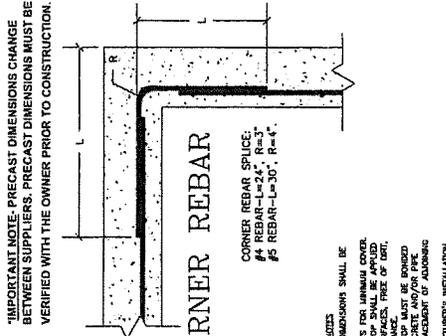
8" THICK WALLS FOR 6'-0" DEEP PITS.

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. PLOW TYPE MACHINES
SHALL NOT BE USED WHEN INSTALLING PERIMETER TILE AROUND CONCRETE
MANHOLE STORAGE STRUCTURES PRIOR TO GENERAL EXCAVATION, BECAUSE IT WILL
LOOSEN SOIL UNDER WALL FOOTING. USE ONLY A BACKHOE OR TRENCHER.



IMPORTANT NOTE: NUMBER OF PUMPOUTS & LOCATIONS DETERMINED
BY OWNERS DISCRETION. PRECAST DIMENSIONS CHANGE BETWEEN
SUPPLIERS. PUMPOUT LOCATIONS AND PRECAST DIMENSIONS MUST BE
VERIFIED WITH THE OWNER PRIOR TO CONSTRUCTION.



CONCRETE & STRUCTURAL NOTES:

A. GENERAL

- NOTES AND DETAILS ON THE STRUCTURAL DRAWINGS TAKE PRECEDENCE OVER THESE STRUCTURAL NOTES.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, AND SITE CONDITIONS PRIOR TO STARTING WORK. THE ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES.
- DESIGN CHANGES MUST BE APPROVED IN WRITING BY BOTH THE OWNER AND ENGINEER BEFORE PROCEEDING WITH THE WORK. SOME DESIGN CHANGES MAY ALSO REQUIRE MPCA, COUNTY FEEDLOT OFFICER AND/OR NRCS APPROVAL.
- ANCHOR BOLTS SHALL BE SET AS SPECIFIED BY BUILDING CONTRACTOR.
- ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE REQUIREMENTS OF THE FOLLOWING CODES:
 - UNIFORM BUILDING CODE (UBC)
 - INTERNATIONAL BUILDING CODE (IBC)
 - AMERICAN CONCRETE INSTITUTE (ACI)
 - CONCRETE REINFORCING STEEL INSTITUTE (CRSI) MANUAL OF STANDARD PRACTICE

B. DRAIN TILE

- CONTRACTOR SHALL VERIFY THE PROPOSED PIT, THE DRAIN TILE FLOW LINE MUST BE A MINIMUM OF 12" BELOW THE TOP OF THE DRAIN TILE SHALL BE HEAVY DUTY PERFORATED POLYETHYLENE TUBING 4" TILE WITH PEA ROCK COVER OR 4" TILE WITH FABRIC COVER AND SAND/GRAVEL COVER.
- CONNECT THE DRAIN TILE TO AN EXISTING PARM TILE IF AVAILABLE, DISCHARGE TO SURFACE DRAINAGE, OR DRAIN TO A SUMP AND PUMP TO SURFACE.

C. TEMPORARY BRACING AND BACKFILL

- TEMPORARY BRACING AND BACKFILL SHALL BE PROVIDED FOR ALL WALLS WHERE GRADE VARIES ON THE TWO SIDES UNTIL THE PERMANENT STRUCTURAL SUPPORT SYSTEM IS IN PLACE.
- BACKFILL ONLY AFTER THE FLOOR SLATS OR SOLID FLOOR HAS BEEN INSTALLED.
- DO NOT BACKFILL AGAINST WALL UNTIL SLATS ARE INSTALLED AND GROUTED.
- 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. FOOTINGS, FOUNDATIONS & SUBGRADE

- SOIL BEARING DESIGN VALUE: 3000 PSF (ASSUMED) ON VIRGIN SOIL OR COMPACTED FILL FOR FOOTINGS.
- PROTECT FOUNDATION EXCAVATIONS FROM FROST. DO NOT PLACE CONCRETE ON FROZEN GROUND.
- EXISTING DISTURBED SUBGRADE SHALL BE RECOMPACTED TO 95% OF STANDARD PROCTOR DENSITY.
- ALL FILL UNDER FOOTINGS AND SLABS SHALL BE COMPACTED TO A DRY DENSITY OF AT LEAST 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY AASHTO T-180.
- SAND FILL AS REQUIRED FOR LEVELING SUBGRADES SHALL BE PROVIDED AT ALL SLAB ON GRADE AREAS.

E. REINFORCED CONCRETE

- ALL CONCRETE AND REINFORCING WORK SHALL CONFORM TO AMERICAN CONCRETE INSTITUTE'S STANDARD BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE, (ACI 318-09)
- CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4000 PSI FLOOR, 4000 PSI WALLS
- WATER CEMENT RATIO SHALL BE 0.45 MAXIMUM
- CEMENT SHALL CONFORM TO ASTM C150, TYPE 1.
- COARSE AGGREGATE SHALL BE 1"
- READY-MIX CONCRETE SHALL BE MIXED & DELIVERED IN ACCORDANCE WITH ASTM C94.
- SUBGRADE SHALL BE BLENDED TO 7"
- CONCRETE TO BE CURED WITH SONOBOND CURE AND SEAL OR EQUAL.
- ADMITTRES 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.
- FLOORS SHALL BE 5" THK. WITH 1-1/2" CY OF 3/4" FIBRILLATED POLYPROPYLENE FIBERS.
- REINFORCING STEEL SHALL BE PLACED IN THE CENTER OF CONCRETE ELEMENT UNLESS NOTED OTHERWISE. STEEL MUST BE SUPPORTED WITH APPROPRIATE CHAIRS OR CONCRETE BLOCKS.
- IF CONSTRUCTION JOINTS NECESSARY, COORDINATE LOCATION WITH ENGINEER.
- 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

- 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.
- MINIMUM BENDING RADIUS SHALL BE 6 BAR DIAMETERS.
- ALL CONCRETE IS REINFORCED UNLESS SPECIFICALLY CALLED OUT AS "NOT REINFORCED". REINFORCE ALL CONCRETE NOT OTHERWISE SHOWN WITH THE SAME STEEL AS IN SIMILAR SECTIONS OR AREAS.
- THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT UNLESS OTHERWISE NOTED:

WHERE CAST AGAINST EARTH	3 INCHES
WHERE CAST AGAINST WEATHER	2 INCHES
OTHER	2 INCHES

G. TOLERANCES & QUALITY CONTROL

- WALL ALIGNMENT (HORIZONTALLY) SHALL DEVIATE NO MORE THAN 1/4" IN 10 FT. NO MORE THAN 3/4" OVER THE FULL LENGTH OF WALL.
- WALL BENDING (VERTICALLY) SHALL BE + OR - 1/4" OVER THE FULL LENGTH OF WALL.
- OVERALL FOUNDATION LENGTH & WIDTH DIMENSIONS AND DIAGONAL DIMENSIONS SHOULD BE WITHIN 1/2" OF PLAN DIMENSIONS.
- CONCRETE AND SHRINKAGE CRACKS WIDER THAN THE THICKNESS OF A PLASTIC CREDIT CARD SHALL BE FILLED WITHIN 48 HOURS WITH CEMENT GROUT SLURRY MOPPED INTO THE CRACKS. DO THE GROUTING OF FLOOR CRACKS BEFORE DIRT AND EQUIPMENT ARE BROUGHT ON THE FLOOR.

H. ELECTRICAL GROUND

- INSTALL REINFORCING BARS AS PER ELECTRICAL CODE GROUND AT A MINIMUM LOCATIONS AS PER ELECTRICAL CODE NOTIFY THE LOCAL ELECTRICAL INSPECTOR FOR INSPECTION PRIOR TO PLACING CONCRETE.
- WALL WEATHER CONCRETING
 - 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.

I. HOT WEATHER CONCRETING

- WHEN IT IS LIKELY THAT 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 306.

J. WATERSTOPS & SEALANTS

- WATERSTOP TO BE RIBBED PVC OR BENTONITE ROLL AT CONTRACTORS OPTION.
- WATERSTOP TO BE RIBBED PVC OR BENTONITE ROLL AT CONTRACTORS OPTION. WATERSTOPS SHALL BE PLACED IN ALL CONSTRUCTION JOINTS ON THE FLOOR AND WATERSTOP SPICES WITH SPLICING IRON.
- WATERSTOP SPICES WITH SPLICING IRON.
- SEALANT TO BE ELASTOMERIC POLYURETHANE OR BUTADIENIC ASPHALT BASED.

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

SHEET 7/7

Project No 25-139

Checked By N.J.R.

Date 11/6/25

Drawn T.J.A.

Proposed SWME CONFINEMENT BARN

PROPOSED SWME CONFINEMENT BARN

NW 1/4, SECTION 1, T10N, R34W

REDWOOD COUNTY, MINNESOTA

SCHWARTZ FAMILY, LLC-SKYEVIEW SITE

77402 U.S. Highway 71, P.O. Box 181

Jackson, MN 56143

(507) 849-7200

Prova Engineering, Inc.

SUBSURFACE SOIL LOG

PROJECT: Schwartz Family LLC-SkyView Site BORING NO: 1 DATE DRILLED: 11/3/2025

PROJECT NO: 25-139
 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 (USCS)	DEPTH BELOW SURFACE	SOIL DESCRIPTION	USCS Symbol
1032.3	GRADE		
	0 --	(TOPSOIL) DARK BROWN SILTY CLAY LOAM MEDIUM CONSISTENCY	CL
	2 --	GRAYISH BROWN SILTY CLAY LOAM, FEW GRAY MOTTLES, MEDIUM CONSISTENCY	CL
1027	PROPOSED BOTTOM OF PIT		
	4 --		
	6 --	LIGHT BROWN SILTY CLAY LOAM, TRACE Fe CONCRETIONS, TRACE CaCO ³ ACCUMULATIONS, MEDIUM CONSISTENCY	CL
1024.3	MEASURED GROUNDWATER ELEVATION ON 11/3/25		
	8 --		
1021.3	BOTTOM OF TEST HOLE		
	10 --		
	12 --	*SOIL BORING FILLED UPON COMPLETION TO PREVENT VERTICAL GROUNDWATER TRANSPORT.	
	14 --	*SOILS ARE SUITABLE FOR PROPOSED PIT FOUNDATION	
	16 --	**PERIMETER TILE REQUIRED**	
	18 --		
	20 --		
	22 --		
	24 --		
	26 --		
	28 --		
	30 --		
	32 --		

SUBSURFACE SOIL LOG

PROJECT: Schwartz Family LLC-SkyView Site BORING NO: 2 DATE DRILLED: 11/3/2025

PROJECT NO: 25-139
 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)

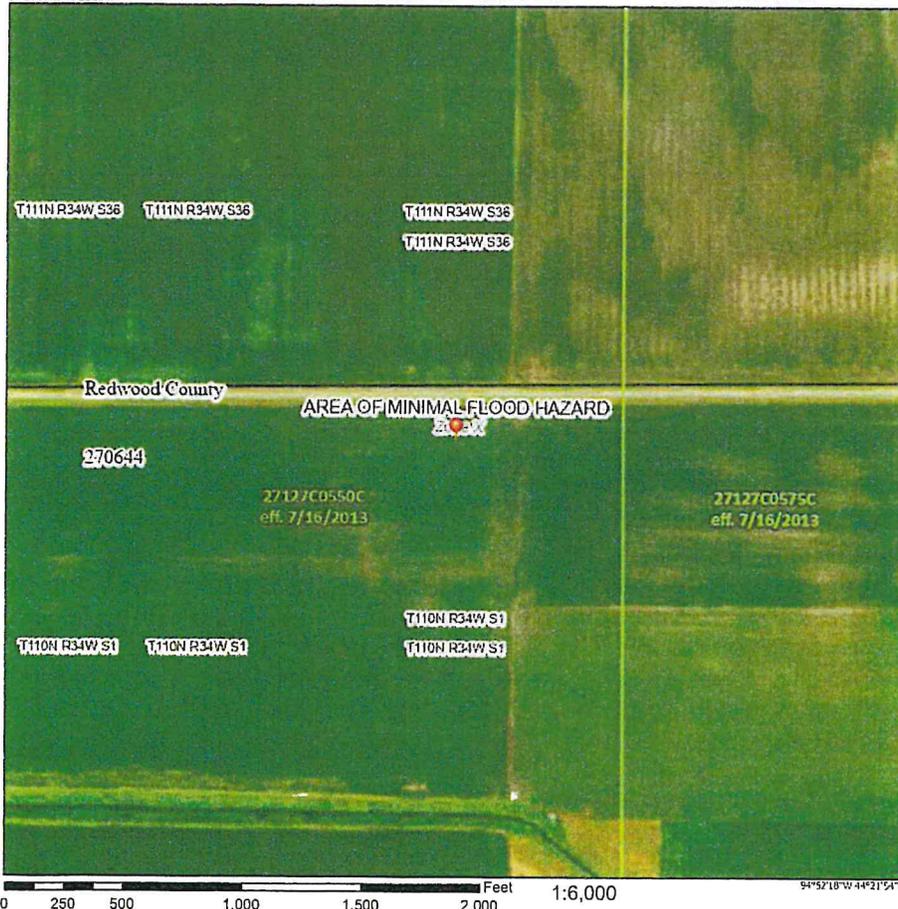
ELEVATION (USCS)	DEPTH BELOW SURFACE	SOIL DESCRIPTION	USCS Symbol
1031.3	GRADE		
	0 --	(TOPSOIL) DARK BROWN SILTY CLAY LOAM MEDIUM CONSISTENCY	CL
	2 --	GRAYISH BROWN SILTY CLAY LOAM, FEW GRAY MOTTLES, TRACE Fe CONCRETIONS, MEDIUM CONSISTENCY	CL
1027.0	PROPOSED BOTTOM OF PIT		
	4 --		
	6 --	LIGHT BROWN SILTY CLAY LOAM, TRACE Fe CONCRETIONS, TRACE CaCO ³ ACCUMULATIONS, MOIST MEDIUM CONSISTENCY	CL
1023.3	MEASURED GROUNDWATER ELEVATION ON 11/3/25		
	8 --		
1020.3	BOTTOM OF TEST HOLE		
	10 --		
	12 --	*SOIL BORING FILLED UPON COMPLETION TO PREVENT VERTICAL GROUNDWATER TRANSPORT.	
	14 --	*SOILS ARE SUITABLE FOR PROPOSED PIT FOUNDATION	
	16 --	**PERIMETER TILE REQUIRED**	
	18 --		
	20 --		
	22 --		
	24 --		
	26 --		
	28 --		
	30 --		
	32 --		



National Flood Hazard Layer FIRMette



94°52'56"W 44°22'20"N



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

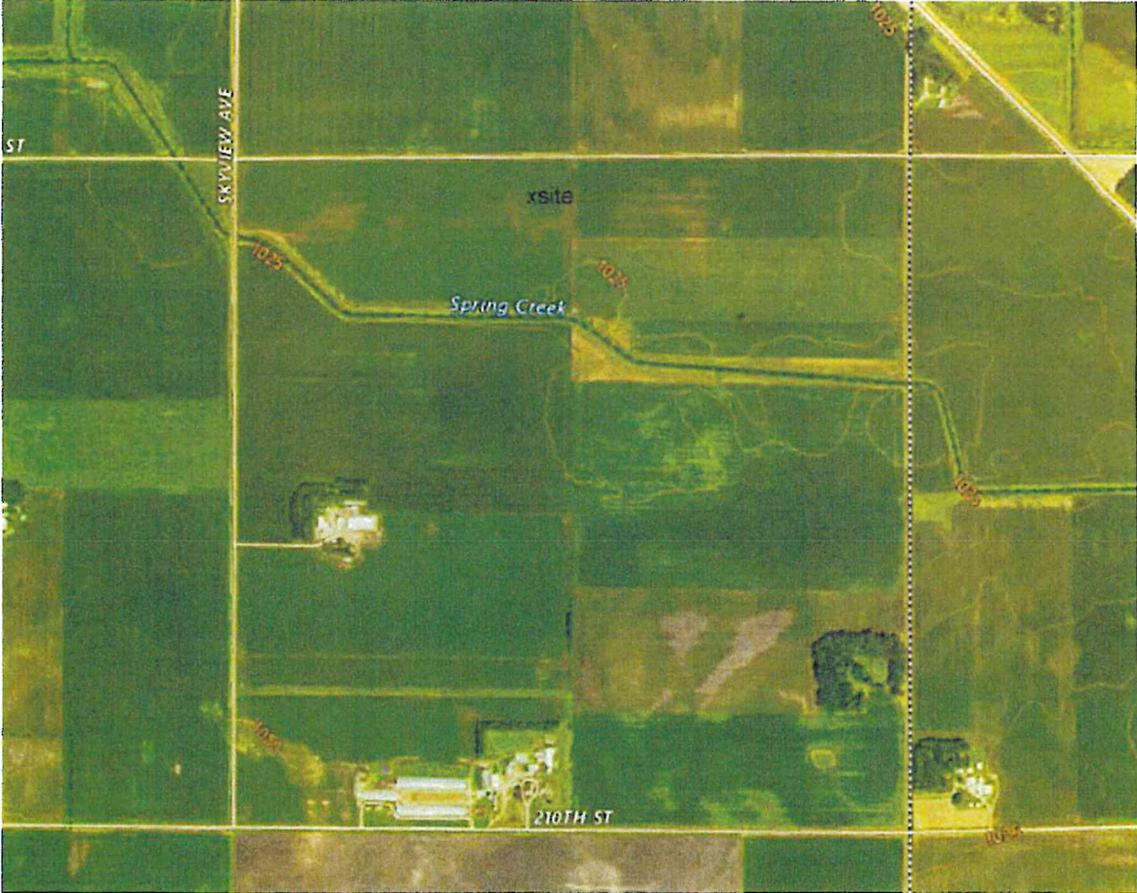
- SPECIAL FLOOD HAZARD AREAS**
 - Without Base Flood Elevation (BFE) Zone A & A99
 - With BFE or Depth Zone AE, A99, AH, & XH
 - Regulatory Floodway
- OTHER AREAS OF FLOOD HAZARD**
 - 0.2% Annual Chance Flood Hazard, Area of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
 - Future Conditions 1% Annual Chance Flood Hazard Zone X
 - Area with Reduced Flood Risk due to Levee. See Notes. Zone V
 - Area with Flood Risk due to Levee Zone V
- OTHER AREAS**
 - Area of Minimal Flood Hazard Zone V
 - Effective LOMRs
 - Area of Undetermined Flood Hazard Zone U
- GENERAL STRUCTURES**
 - Channel, Culvert, or Storm Sewer
 - Levee, Dike, or Floodwall
- OTHER FEATURES**
 - 20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
 - Coastal Transact
 - Base Flood Elevation Line (BFE)
 - Limit of Study
 - Jurisdiction Boundary
 - Coastal Transact Baseline
 - Profile Baseline
 - Hydrographic Feature
- MAP PANELS**
 - Digital Data Available
 - No Digital Data Available
 - Unmapped

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 basemap shown complies with FEMA's basemap accuracy standards.

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 11/6/2025 at 9:04 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.

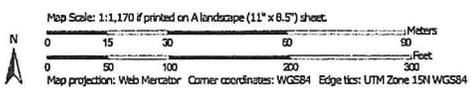
This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmapped areas cannot be used for regulatory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



Soil Map—Redwood County, Minnesota



Soil Map may not be valid at this scale.



USDA Natural Resources Conservation Service

Web Soil Survey National Cooperative Soil Survey

11/6/2025 Page 1 of 3

Soil Map—Redwood County, Minnesota

Map Unit Legend

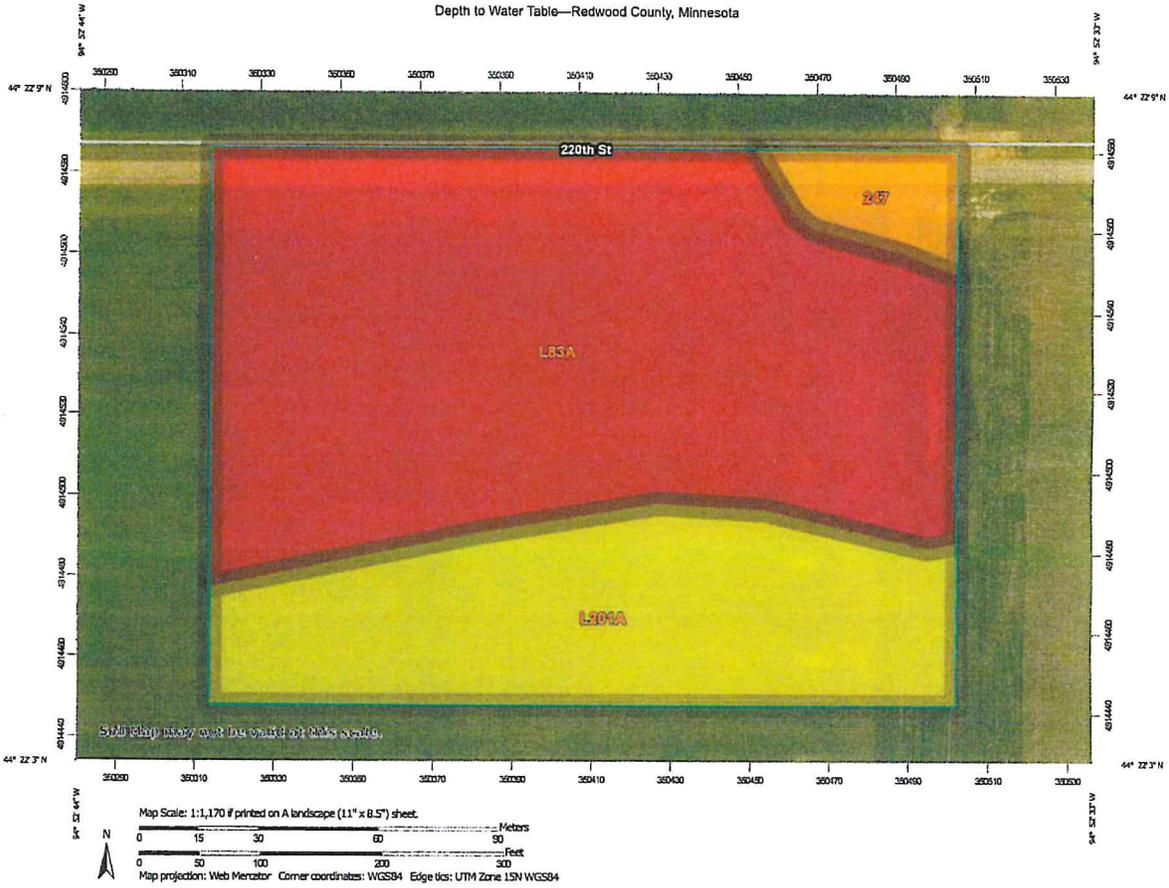
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
247	Under loam	0.3	4.2%
L83A	Webster clay loam, 0 to 2 percent slopes	4.2	65.2%
L201A	Normania loam, 1 to 3 percent slopes	2.0	30.8%
Totals for Area of Interest		6.5	100.0%

USDA Natural Resources Conservation Service

Web Soil Survey National Cooperative Soil Survey

11/6/2025 Page 3 of 3

Depth to Water Table—Redwood County, Minnesota



Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

11/6/2025
Page 1 of 3

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
2417	Underlain	410	0.3	4.2%
L83A	Webster clay loam, 0 to 10 2 percent slopes	10	4.2	65.2%
L201A	Norman loam, 1 to 3 percent slopes	70	2.0	30.6%
Totals for Area of Interest			6.5	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 Clarity: None Specified
- The-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
507-841-3289
nlc@proageng.com

TO: OWNER

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

- 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.
- 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.
- Each Contract for construction of the liquid manure storage (Concrete, tiling 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.
- 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.
 - You must notify ProAg Engineering, Inc. and the Permitting Agency:
 - Three days before you start construction.
 - Three days before you backfill.
 - Within three days of completion.
- 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.
- 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.
- DO NOT make a final payment to contractor until the Engineer's certifies that work is complete.
- 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) _____

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

Slats Grouted (Prior to backfilling) _____

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

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



ENGINEERING, INC.

Nicholaus J. Rowe, P.E.
77402 U.S. Hwy 71
P.O. Box 181
Jackson, MN 56143
507-844-3289
nric@pro4gengr.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
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.
 5. 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, waterstop 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, slabs 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
Saw & bear barns	65 psf	150 pif
Add an additional 160 pif on the edge(s) of slabs that support farrowing stalls.		
Dairy free-stall 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 _c , psi	Aggregate, max.	Fiber/mesh
Foofings & 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	none

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, waterstop, 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.
- C. WATERSTOP shall be 3/4" x 3/8" Waterstop RX, 3/4" x 1" Swelstop, Synko-Flex, Hydro-Flex waterstop; 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.
- 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.

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

Steel details for deformed rebar	#4 bars	4"	#5 bars	25"
Bar bending radius, minimum 6d ³				
Lap Splices, minimum 40d		20"		
Bend around corner, minimum		24"		30"

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, silt 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 bar 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 bar 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 barn 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.
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 seeded 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/ac for spring/summer seeding of areas that will be left undisturbed for 21 days or more.
- Winter wheat at 100 lbs/ac 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.

<u>General Roadside mix</u>			
Brome grass, smooth	9.8 lbs/ac	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/ac		
<u>Agricultural/Roadside mix</u>			
Alfalfa, creeping	15 lbs/ac	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/ac		

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) Childproof 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, sealing and exposed reinforcing steel.

1

- 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 Field 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 barns. 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)	

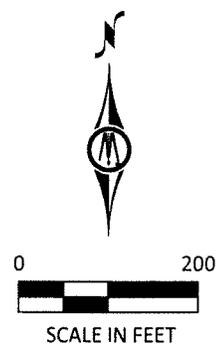
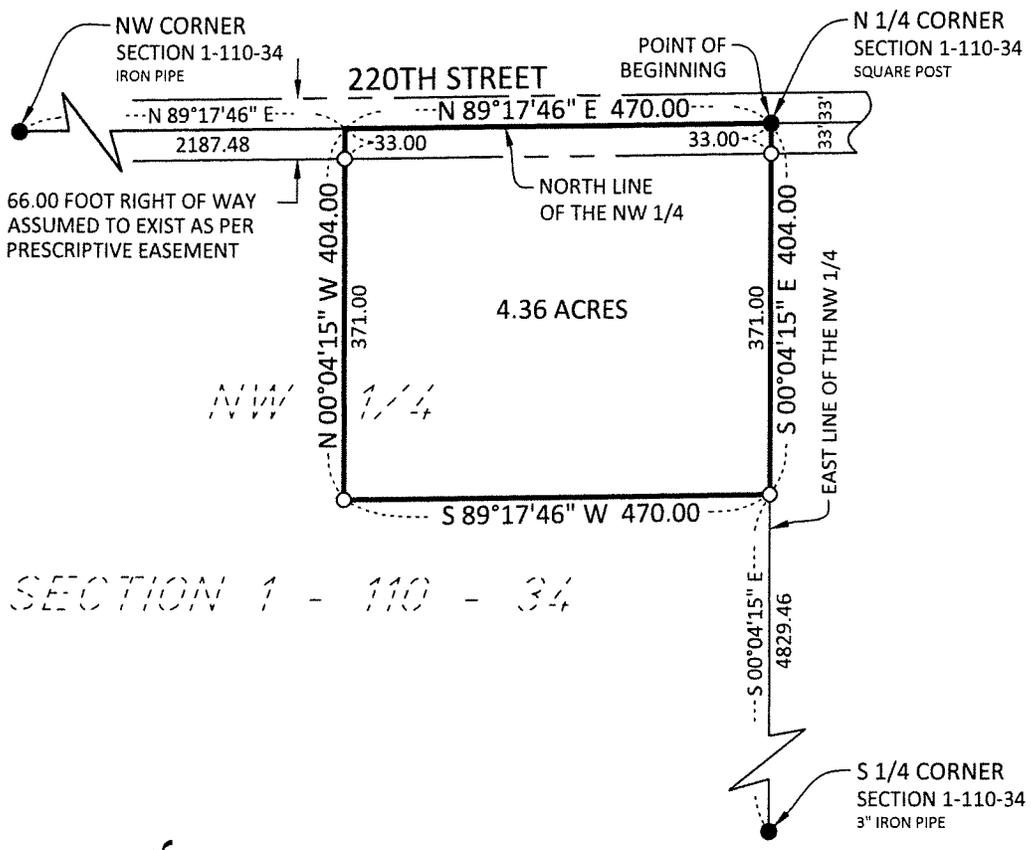
CHANGE IN TILE WATER COLOR OR ODOR

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.

2

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- LEGEND**
- 1/2" IRON PIPE MONUMENT SET MARKED BY LIC. NO. 44996
 - MONUMENT FOUND

SURVEYOR'S CERTIFICATION

I hereby certify that this survey, plan, or report 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.

Jesse D. Zeig 11/24/2025
 Jesse D. Zeig Date
 License Number 44996

SHEET 1 OF 2

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CERTIFICATE OF SURVEY BROOKVILLE TOWNSHIP, REDWOOD COUNTY, MINNESOTA		PART OF THE NW 1/4 SECTION 1-110-34
	BOLTON & MENK 1243 CEDAR STREET NE SLEEPY EYE, MN 56085 (507) 810-4184	FOR: SCHWARTZ FAMILY LLC

SEC. 1-110-34 (20)

LEGAL DESCRIPTION

That part of the Northwest Quarter of Section 1, Township 110 North, Range 34 West, Redwood County, Minnesota, described as follows:

Beginning at the North Quarter corner of said Section 1; thence South 00 degrees 04 minutes 15 seconds East, bearing based on Redwood County Coordinate System NAD83(11) on the east line of said Northwest Quarter of Section 1, a distance of 404.00 feet; thence South 89 degrees 17 minutes 46 seconds West, a distance of 470.00 feet; thence North 00 degrees 04 minutes 15 seconds West, a distance of 404.00 feet to the north line of said Northwest Quarter of Section 1; thence North 89 degrees 17 minutes 46 seconds East on said north line, a distance of 470.00 feet to the point of beginning.

Contains 4.36 acres of land.

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SHEET 2 OF 2

CERTIFICATE OF SURVEY
BROOKVILLE TOWNSHP, REDWOOD COUNTY, MINNESOTA

PART OF THE NW 1/4
SECTION 1-110-34



**BOLTON
& MENK**

1243 CEDAR STREET NE
SLEEPY EYE, MN 56085
(507) 810-4184

FOR: SCHWARTZ FAMILY LLC

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. 1-26

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:

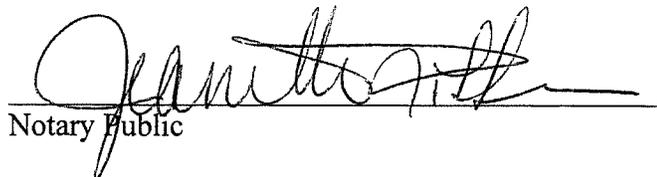
SEE ATTACHED

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 14th day of January 2026.

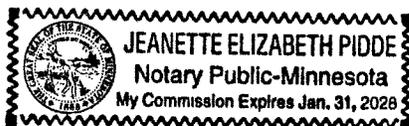


Lali Ortega
Environmental Administrative Assistant

Subscribed and sworn to before me, a Notary Public, on this 14th day of January 2026, by Lali Ortega.



Notary Public



Parcel ID	OWNER	C/O	Address	OWCITY	WST, OWZIPF
500011060	CHRISTENSEN/KEITH O & DEBRAR		44158 CO HWY 3	MORGAN	MN 56266
590361080	CHRISTENSEN/LARRY & LAVONNE	TRUSTS	26 INDIAN POINT DR	NEW ULM	MN 56073-3320
500012045	CHRISTENSEN/MARK COLIN/&	ANN MARIE CHRISTENSEN	21413 SKYVIEW AVE	SLEEPY EYE	MN 56085
500024020	CHRISTENSEN/MICHAEL D/&	SHARI A CHRISTENSEN	45413 210 ST	SLEEPY EYE	MN 56085
590363020	SCHIEFFERT/TIMOTHY G		701 CEDAR ST NE	SLEEPY EYE	MN 56085
500021050	SIMONSEN/AARON		11504 20TH ST NW	ANNANDALE	MN 55302
500021020	SIMONSEN/DAVID I & JOANNE M		22518 CO HWY 2	MORGAN	MN 56266
590354040	TAUER/JONATHAN JEFFREY/&	SAMANTHA KAY TAUER	45220 270 ST	MORGAN	MN 56266
590363030	TAUER/RANDAL J		22257 SKYVIEW AVE	MORGAN	MN 56266
500014020	VASQUEZ/ARLENE/ETAL		13225 58TH AVE N UNIT H	PLYMOUTH	MN 55442
	BROOKVILLE TOWNSHIP BOARD OF SUPERVISORS	% MICHAEL CHRISTENSEN, CLERK	45413 210TH ST	SLEEPY EYE	MN 56085
	CITY OF EVAN	% EDA LOSLEBEN, CLERK	PO BOX 9	EVAN	MN 56266
	CHRISTENSEN/KAREN	% JOHN SCHWARTZ	904 TOWNSHIP RD	MORGAN	MN 56266
	SCHWARTZ FARMS, LLC		32296 190TH ST	SLEEPY EYE	MN 56085
	APPLICANT/LANDOWNER				



NOTICE OF PUBLIC HEARING

An *Animal Confinement Feedlot Conditional Use Permit Application* has been filed by John Schwartz of Schwartz Family LLC, o/b/o landowner Karen Christensen, pursuant to Redwood County Code of Ordinances, Title XV, Sections 153.142 and 153.290 for the construction of a swine feedlot. The feedlot would consist of one total confinement barn capable of housing 3,300 head of finishing swine weighing between 55-300 pounds (990 total animal units), on the following described real property in Brookville Township, Redwood County, Minnesota:

That part of the Northwest Quarter of Section 1, Township 110 North, Range 34 West, described as follows: Beginning at the North Quarter corner of said Section 1; thence South 00 degrees 04 minutes 15 seconds East, bearing based on Redwood County Coordinate System NAD83(11) on the east line of said Northwest Quarter of Section 1, a distance of 404.00 feet; thence South 89 degrees 17 minutes 46 seconds West, a distance of 470.00 feet; thence North 00 degrees 04 minutes 15 seconds West, a distance of 404.00 feet to the north line of said Northwest Quarter of Section 1; thence North 89 degrees 17 minutes 46 seconds East on said north line, a distance of 470.00 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 27th day of January, 2026. 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, or in writing at Redwood County Environmental Office, P.O. Box 130, Redwood Falls, MN 56283.

DATED: January 6, 2026

Jeanette Pidde
Land Use & Zoning Supervisor
Redwood County Environmental Office

TO: Whom It May Concern

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

DATE: January 14, 2026

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



Please find enclosed a Notice of Public Hearing regarding an Animal Confinement Feedlot Conditional Use Permit Application submitted by John Schwartz of Schwartz Family LLC, o/b/o landowner Karen Christensen, pursuant to Redwood County Code of Ordinances, Title XV, Sections 153.142 and 153.290, for the construction of a swine feedlot. The feedlot would consist of one total confinement barn capable of housing 3,300 head of finishing swine weighing between 55-300 pounds (990 total animal units), on the following described real property in Brookville Township, Redwood County, Minnesota:

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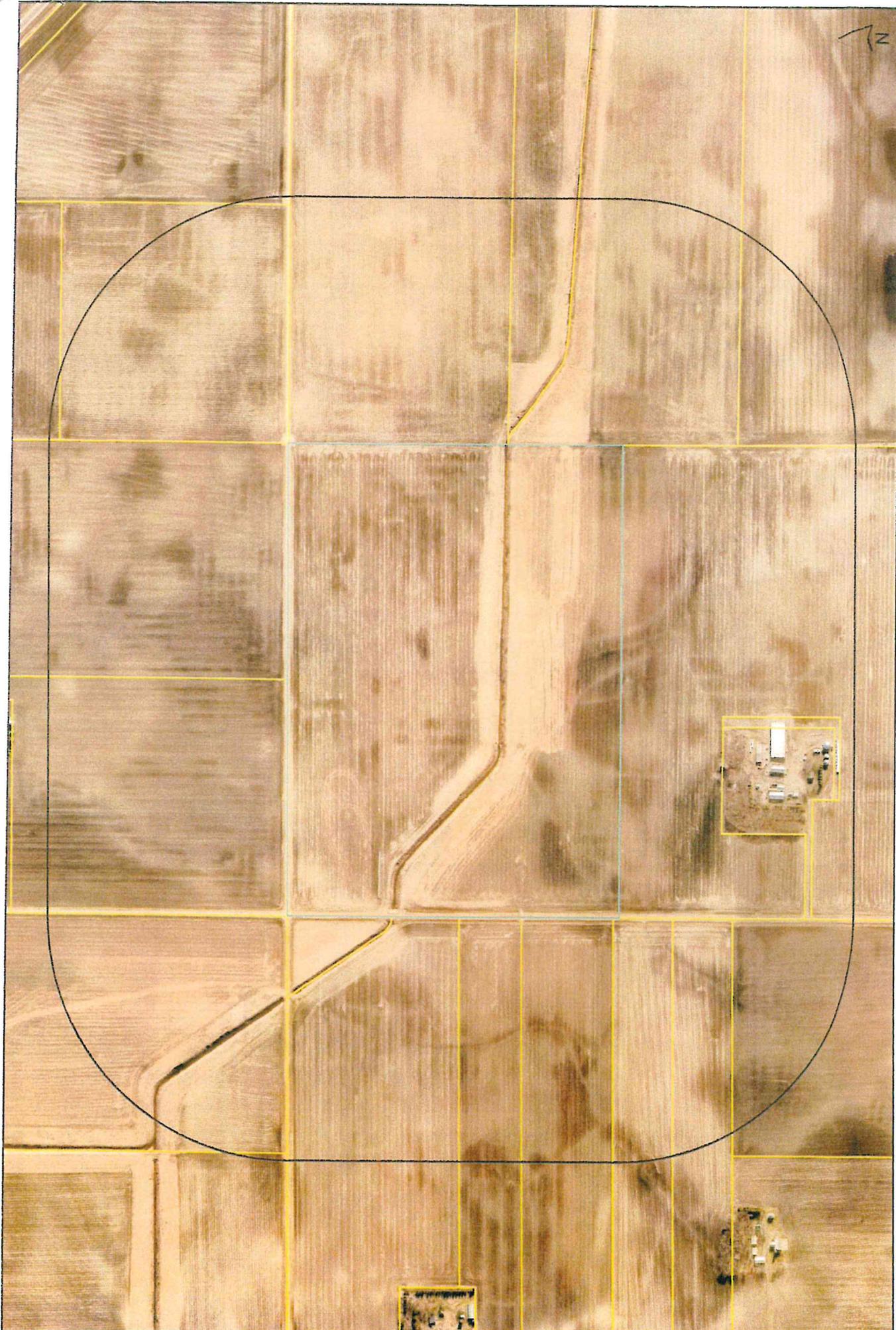
A public hearing thereon will be held before the Redwood County Planning Commission at the regularly-scheduled Planning Commission meeting starting at 1:00 p.m. on Tuesday, the 27th day of January, 2026. The meeting will be held in the Board Room of the Redwood County Government Center, 403 South Mill 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, 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 environmental@redwoodcounty-mn.gov



Parcel ID: 50-001-2020

CUP Notification Area:
0.26 miles from selected parcel



-  Selected Parcel(s)
-  Notification Area
-  Municipal Boundaries
-  Sections
-  Roads
-  County Boundary

RECEIVED

JAN 15 2026

Redwood Gazette



REDWOOD COUNTY ENVIRONMENTAL OFFICE

NOTICE OF PUBLIC HEARING

AFFIDAVIT OF PUBLICATION

Redwood Gazette
219 So Washington PO Box 299, Redwood Falls, MN 56283
(507) 637-2929

State of Florida, County of Broward, ss:

I, Anjana Bhadoriya, of lawful age, being duly sworn upon oath depose and say that I am an agent of Column Software, PBC, duly appointed and authorized agent of the Publisher of Redwood Gazette, County of Redwood, Minnesota.

The Redwood Gazette has complied with all of the requirements to constitute a qualified newspaper under Minnesota law, including those requirements found in Minnesota Statutes §331A.02.

Mortgage Foreclosure Notices. Pursuant to Minnesota Statutes §580.033 relating to the publication of mortgage foreclosure notices: The newspapers' known office of issue is located in Brown, Chippewa, Lyon, Polk, Redwood, Watonwan & Yellow Medicine counties. The newspapers comply with the conditions in §580.033, subd. 1, clause (1) or (2). If the newspaper known office of issue is located in a county adjoining the county where the mortgaged premises or some part of the mortgaged premises described in the notice are located, a substantial portion of the newspaper's circulation is in the latter county.

The affixed notice appeared in said newspaper on the following issues:

- Jan 15, 2026

Publication Fee: \$128.75
Order No. 4187380

Anjana Bhadoriya

Agent

VERIFICATION

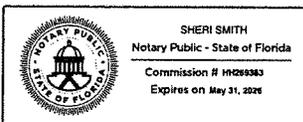
State of Florida
County of Broward

Signed or attested before me on this: 01/15/2026

[Signature]
Notary Public

Notarized remotely online using communication technology via Proof.

THIS IS NOT AN INVOICE!
Please do not use this form for payment remittance.



An Animal Confinement Feedlot Conditional Use Permit Application has been filed by John Schwartz of Schwartz Family LLC, o/b/o landowner Karen Christensen, pursuant to Redwood County Code of Ordinances, Title XV, Sections 153.142 and 153.290 for the construction of a swine feedlot. The feedlot would consist of one total confinement barn capable of housing 3,300 head of finishing swine weighing between 55-300 pounds (990 total animal units), on the following described real property in Brookville Township, Redwood County, Minnesota:

That part of the Northwest Quarter of Section 1, Township 110 North, Range 34 West, described as follows: Beginning at the North Quarter corner of said Section 1; thence South 00 degrees 04 minutes 15 seconds East, bearing based on Redwood County Coordinate System NAD83(11) on the east line of said Northwest Quarter of Section 1, a distance of 404.00 feet; thence South 89 degrees 17 minutes 46 seconds West, a distance of 470.00 feet; thence North 00 degrees 04 minutes 15 seconds West, a distance of 404.00 feet to the north line of said Northwest Quarter of Section 1; thence North 89 degrees 17 minutes 46 seconds East on said north line, a distance of 470.00 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 1:00pm on Tuesday, the 27th day of January, 2026. 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 Environ-

mental Office by telephone
at (507) 637-4023, via email
at environmental@red-
woodcounty-mn.gov, or in
writing at Redwood Coun-
ty Environmental Office,
P.O. Box 130, Redwood
Falls, MN 56283.

DATED: January 6, 2026

Jeanette Pidde
Land Use & Zoning Super-
visor
Redwood County Environ-
mental Office

Published in Redwood Ga-
zette January 15, 2026.

4187380

See enclosed for
Notice of Public Hearing -
Animal Confinement Feedlot
Conditional Use Permit Application

Affidavit of Publication

State of Minnesota)

) SS.

County of Renville)

RECEIVED

JAN 16 2026

REDWOOD COUNTY
ENVIRONMENTAL OFFICE

Denise Bonsack, being first duly sworn, on oath states as follows:

1. I am the publisher of the Standard-Gazette & Messenger, or the publisher's designated agent. I have personal knowledge of the facts stated in this Affidavit, which is made pursuant to Minnesota Statutes §331A.07.

2. The newspaper has complied with all of the requirements to constitute a qualified newspaper under Minnesota law, including those requirements found in Minnesota Statutes §331A.02.

3. The dates of the month and the year and day of the week upon which the public notice attached/copied below was published in the newspaper are as follows:

Wed, Jan 14, 2026

4. The publisher's lowest classified rate paid by commercial users for comparable space, as determined pursuant to § 331A.06, is as follows:

\$7.50

5. Mortgage Foreclosure Notices [Effective 7/1/15]. Pursuant to Minnesota Statutes §580.033 relating to the publication of mortgage foreclosure notices: The newspaper's known office of issue is located in Renville County. The newspaper complies with the conditions described in §580.033, subd. 1, clause (1) or (2). If the newspaper's known office of issue is located in a county adjoining the county where the mortgaged premises or some part of the mortgaged premises described in the notice are located, a substantial portion of the newspaper's circulation is in the latter county.

FURTHER YOUR AFFIANT SAITH NOT.

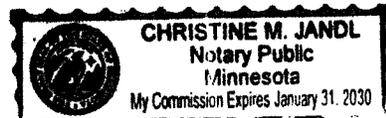
Denise Bonsack

[Signature]

Subscribed and sworn to before me on this 14 day of January 2026

Christine M. Jandl

Notary Public



**NOTICE OF
PUBLIC HEARING**

An Animal Confinement Feedlot Conditional Use Permit Application has been filed by John Schwartz of Schwartz Family LLC, o/b/o landowner Karen Christensen, pursuant to Redwood County Code of Ordinances, Title XV, Sections 153.142 and 153.290 for the construction of a swine feedlot. The feedlot would consist of one total confinement barn capable of housing 3,300 head of finishing swine weighing between 55-300 pounds (990 total animal units), on the following described real property in Brookville Township, Redwood County, Minnesota:

That part of the Northwest Quarter of Section 1, Township 110 North, Range 34 West, described as follows: Beginning at the North Quarter corner of said Section 1; thence South 00 degrees 04 minutes 15 seconds East, bearing based on Redwood County Coordinate System NAD83(11) on the east line of said Northwest Quarter of Section 1, a distance of 404.00 feet; thence South 89 degrees 17 minutes 46 seconds West, a distance of 470.00 feet; thence North 00 degrees 04 minutes 15 seconds West, a distance of 404.00 feet to the north line of said Northwest Quarter of Section 1; thence North 89 degrees 17 minutes 46 seconds East on said north line, a distance of 470.00 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 1:00pm on Tues-

day, the 27th day of January, 2026. 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, or in writing at Redwood County Environmental Office, P.O. Box 130, Redwood Falls, MN 56283.

DATED: January 6, 2026
Jeanette Pidde

Land Use & Zoning Supervisor

Redwood County Environmental Office

Published in the Standard-Gazette & Messenger January 14, 2026.

REDWOOD COUNTY PLANNING COMMISSION

Schwartz Family LLC

Animal Confinement Feedlot Conditional Use Permit

Application #1-26

January 27th, 2026



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?

- 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?

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?

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

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

NAME: _____

DATE: _____