Redwood County Environmental Office -- PO Box 130, Redwood Falls, MN 56283 Phone: (507) 637-4023

www.co.redwood.mn.us

Animal Confinement Feedlot Conditional Use Permit Application

Permit #: 5-26 **Date:** 1-13-26

Proposed Location of Feedlot Operation:

Address: [ ] 180th St (House # / Street Name) **City:** Springfield **State:** MN **Zip:** 56087

Parcel #: 67-025-2040 **Township:** Sundown **Section:** 25 **Twp #:** 110 **Range:** 35

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:

NENW 25-110N-35W - See Survey.

Site / Plan Information:

NOTICE: Change of land use may affect your property taxes.

Zoning District: \Agriculture

Soil Type 1: 247

Soil Type 2: 227

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 2: Width: Length:

Building 3: Width: Length:

Building 4: Width: Length:

Setback from road right-of-way: 67 feet

Setback from center line of road: 164 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: Brennen **Last Name:** Boettger

Business Name: _____

Address: 17680 Co Rd 3 **City:** Springfield **State:** MN **Zip:** 56087

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: John **Last Name:** Schwartz

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): John Schwartz **Date:** 1/7/26

Landowner Signature Brennen Boettger **Date:** 1/7/26

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

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

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

Permit fee: $700.00 **Receipt #:** 32968

Application Received: 1-13-2026

Commission Action:

Approved: _____ **Date:** _____

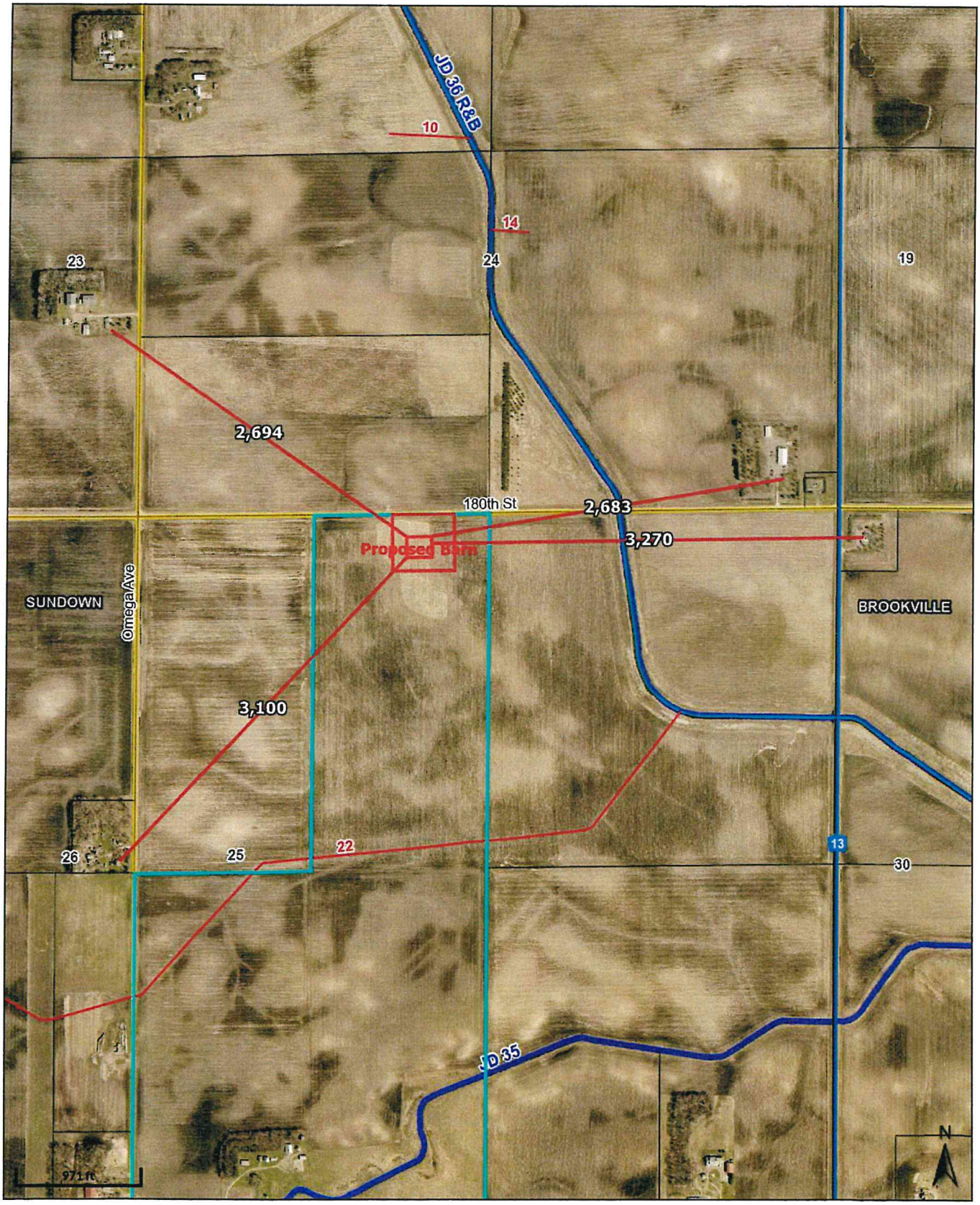
Disapproved: _____ **Date:** _____

County Board Action:

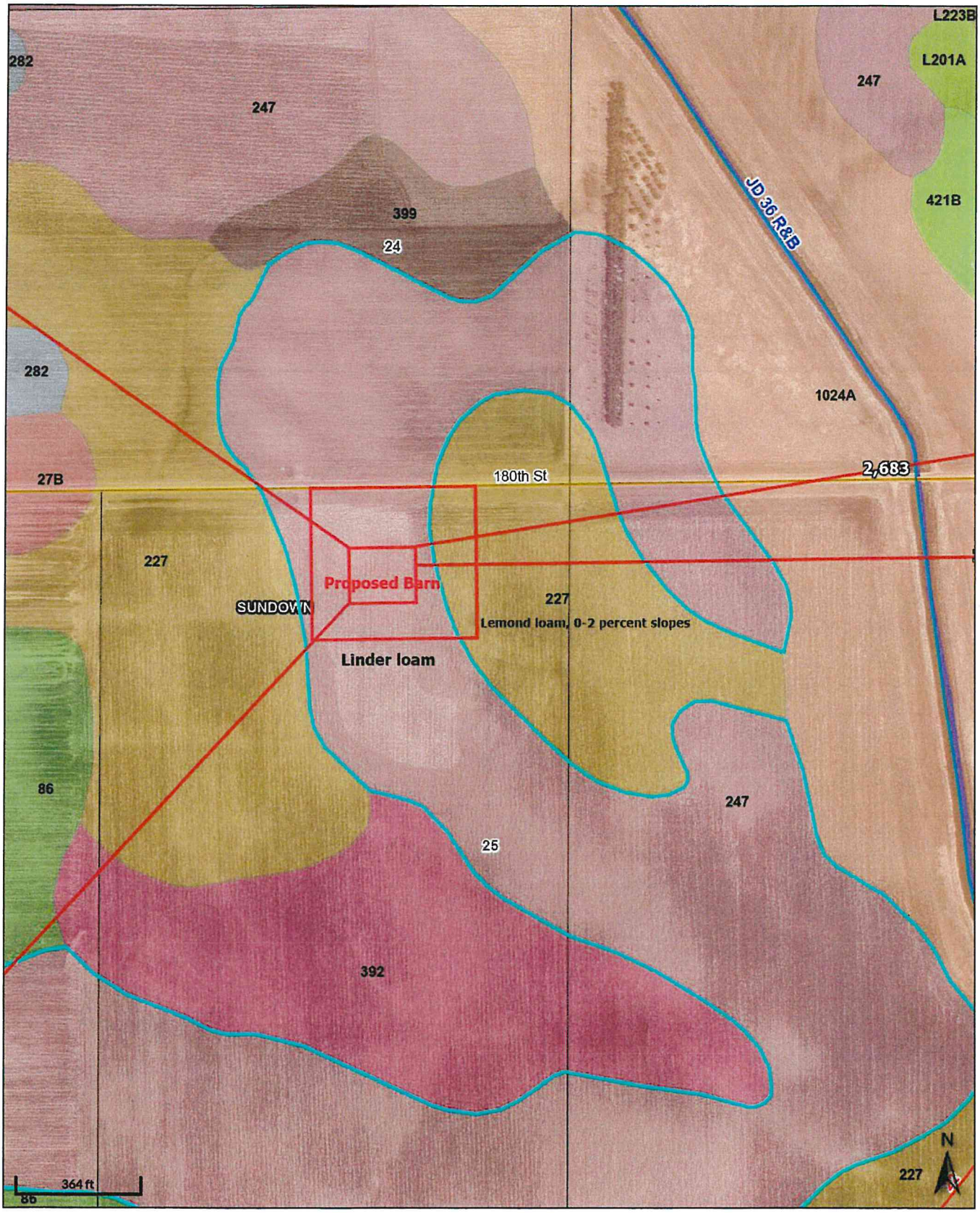
Approved: _____ **Date:** _____

Disapproved: _____ **Date:** _____

Area Map


JD 36 R&B
10
14
24
23
19
2,694
180th St
2,683
3,270
Proposed Barn
SUNDOWN
Omega Ave
BROOKVILLE
3,100
26
25
22
13
30
JD 35
971 ft
N

Soils


L223B
282
L201A
247
247
JD 36 R&B
399
421B
24
282
1024A
27B
180th St
2,683
227
Proposed Barn
227
Lemond loam, 0-2 percent slopes
Linder loam
86
247
25
392
364 ft
N
227
86

Conditions for Permit No. 5-26 (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 13, 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 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.

MINNESOTA POLLUTION CONTROL AGENCY
520 Lafayette Road N St Paul MN 55155-4194

Submittal Information

Facility Name:	Schwartz Family LLC - Sundown Site
Agency Interest ID:	265469
Permit ID:	NEW
Service Type:	Feedlot Permitting - Construction Short Form Issuance
Transaction ID:	172207
Submitted On:	2025-12-05 14:38:38

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 contruction 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 - Sundown Site
Physical Address:	180th St Springfield MN 56087
Mailing Address:	32296 190th Sleepy Eye MN 56085
Location Description:	NE 1/4 of the NW 1/4, 25-110N-35W

Feedlot Location

Collection Method:	Digitized - MPCA online map
Coordinate System:	Lat Long - decimal degrees
Latitude:	44.31099
Longitude:	-94.9992
Point of Reference:	General Location
County:	Redwood
Is the site located in Indian country?:	No
Parcel(s) County and ID:	
Township:	110
Range:	35W
Section:	25
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
Email:	bschwartz@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: 44.31099			
Longitude: -94.9992			
Collection Method: Digitized - MPCA online map			
Reference Point: General Location			

LMSA-Underfloor Storage
Length: 184 feet
Width: 153 feet
Depth: 8 feet
Volume: 1,421,396 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	No
• A state or federally designated wild and scenic river district	No
• The Minnesota River Project Riverbend Area	No
• The Mississippi Headwaters Area	No
• A drinking water supply management area	No
• Within 1000 feet of a sinkhole, cave, resurgent spring, disappearing spring, Karst window, blind valley or dry valley	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 12/1/2025 11:30:57 AM is included in the submittal.

Attachments

Permit Application Documents:

Attachment Type	File Name	Document Date
Non-Delegated County Public Meeting Minutes	Minutes from Redwood Co P.pdf	12/1/2025
Verification of Good Neighbor Notice	Affidavit of Publication.pdf	12/1/2025

Manure Storage Documents:

Attachment Type	File Name	Document Date
Construction Plans and Specifications	Sundown plans & specs 11-18-2025.pdf	11/18/2025

Certification

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

The person that signs this application must be one of the following:
A. For a corporation, a principal executive officer of at least the level of vice president
B. For a partnership, a general partner
C. For a sole proprietorship, the proprietor

Name of Signing Party:	John Schwartz
Username of Signing Party:	JSchwartz
Challenge Question:	What is your favorite sport?
Challenge Question Answer:	*****
Certification Date and Time:	12/5/2025 2:38:32 PM

Land Application Agreement
For Receiving Manure on Cropland

E ¼ - 36 The undersigned landowner agrees to allow manure from _____
½ SW¼ - 24 livestock feedlot to be spread on 550 acres of his/her land. The land is located in the
E ¼ - 23 _____ quarter of Section _____, in Sundown Township,
Redwood County, Minnesota.
W ¼ - 25
NW ¼ - 25 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).

None

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

Signature of Landowner

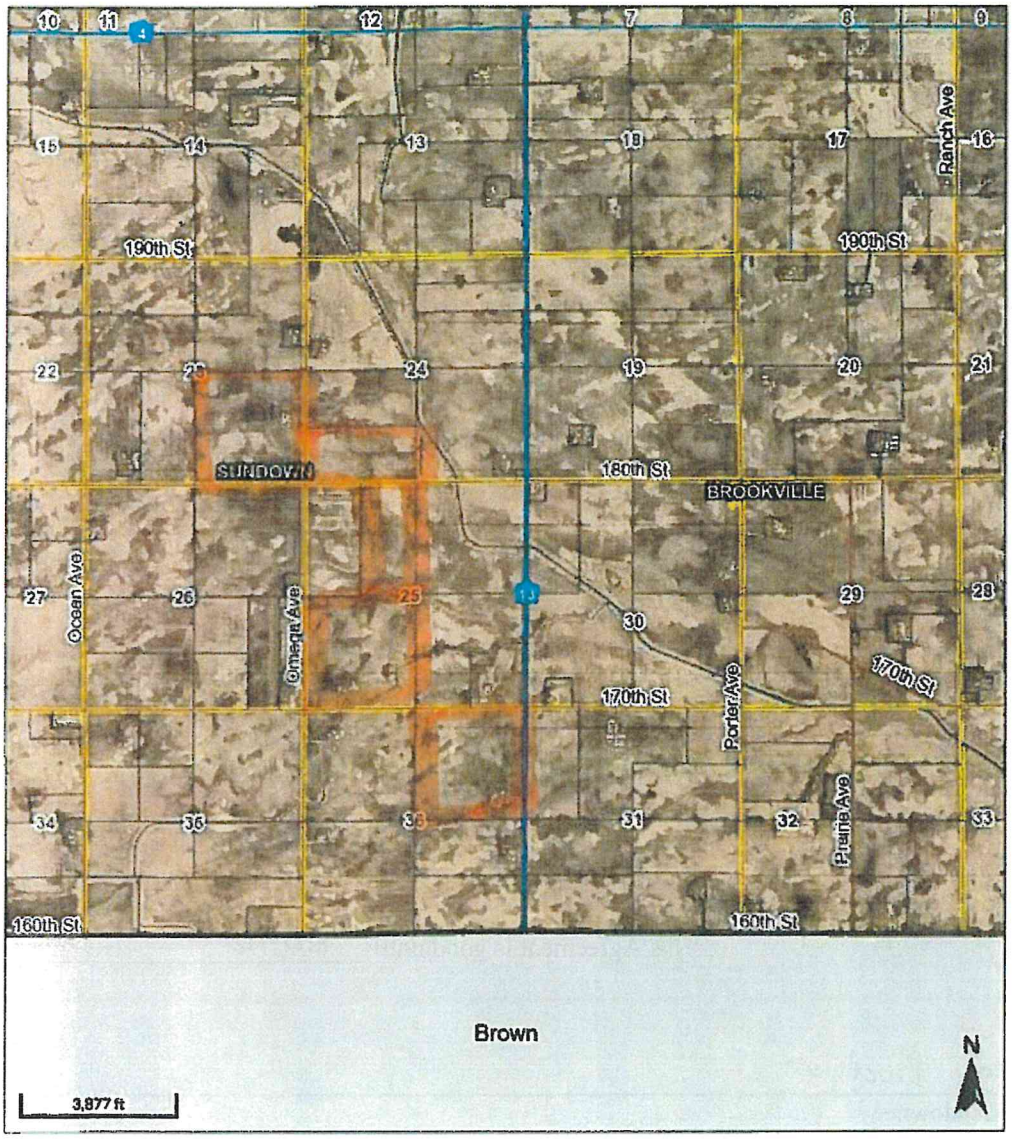
This Agreement is good until 2046

Brennen Boettger
Name of Landowner

17680 Co Rd 3 — 1507 227 1938
Address — Phone Number

Springfield MN 56087 — 7/26
City, State, Zip — Date

Beacon™ Redwood County, MN



Overview

Legend

- Municipal Boundaries
- Surrounding Counties
- Townships
- Parcels

Major Roads

- State/Federal
- County
- County/Twp/City
- Minor Roads

Date created: 1/7/2026
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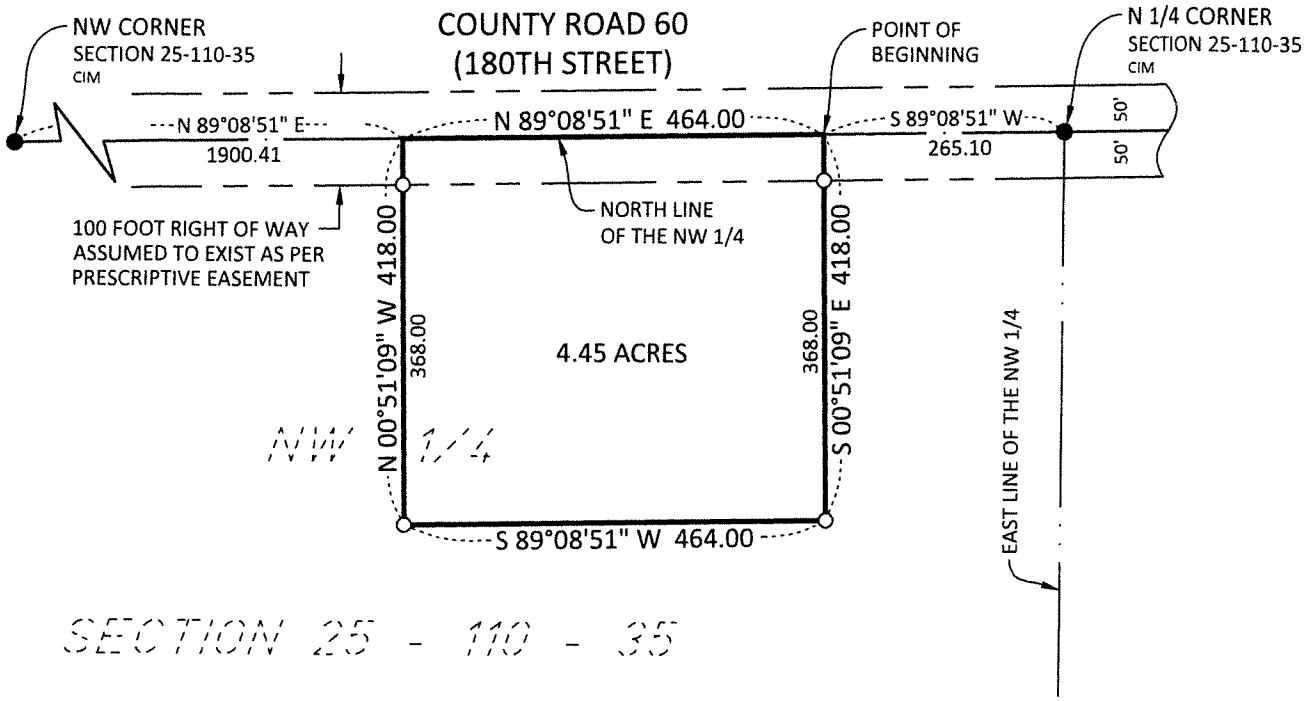
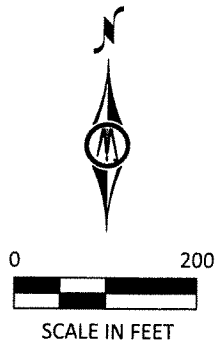
Developed by SCHNEIDER GEOSPATIAL





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 — 11/25/2025

Jesse D. Zeig
License Number 44996
Date

SHEET 1 OF 2

CERTIFICATE OF SURVEY

SUNDOWN TOWNSHIP, REDWOOD COUNTY, MINNESOTA

PART OF THE NW 1/4
SECTION 25-110-35

BOLTON & MENK

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

FOR: SCHWARTZ FAMILY LLC

JOB NUMBER: 25X.141481.000 FIELD BOOK: DRAWN BY: RK

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SEC. 25-110-35 (20)

LEGAL DESCRIPTION

That part of the Northwest Quarter of Section 25, Township 110 North, Range 35 West, Redwood County, Minnesota, described as follows:

Commencing at the North Quarter corner of said Section 25; thence South 89 degrees 08 minutes 51 seconds West, bearing based on Redwood County Coordinate System NAD83(11) on the north line of said Northwest Quarter of Section 25, a distance of 265.10 feet to the point of beginning; thence South 00 degrees 51 minutes 09 seconds East, a distance of 418.00 feet; thence South 89 degrees 08 minutes 51 seconds West, a distance of 464.00 feet; thence North 00 degrees 51 minutes 09 seconds West, a distance of 418.00 feet to the north line of said Northwest Quarter of Section 25; thence North 89 degrees 08 minutes 51 seconds East on said north line, a distance of 464.00 feet to the point of beginning.

Contains 4.45 acres of land.

CERTIFICATE OF SURVEY
SUNDOWN TOWNSHIP, REDWOOD COUNTY, MINNESOTA

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

PART OF THE NW 1/4
SECTION 25-110-35

FOR: SCHWARTZ FAMILY LLC

JOB NUMBER: 25X.141481.000 FIELD BOOK: DRAWN BY: RK

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SEC. 25-110-35 (20)

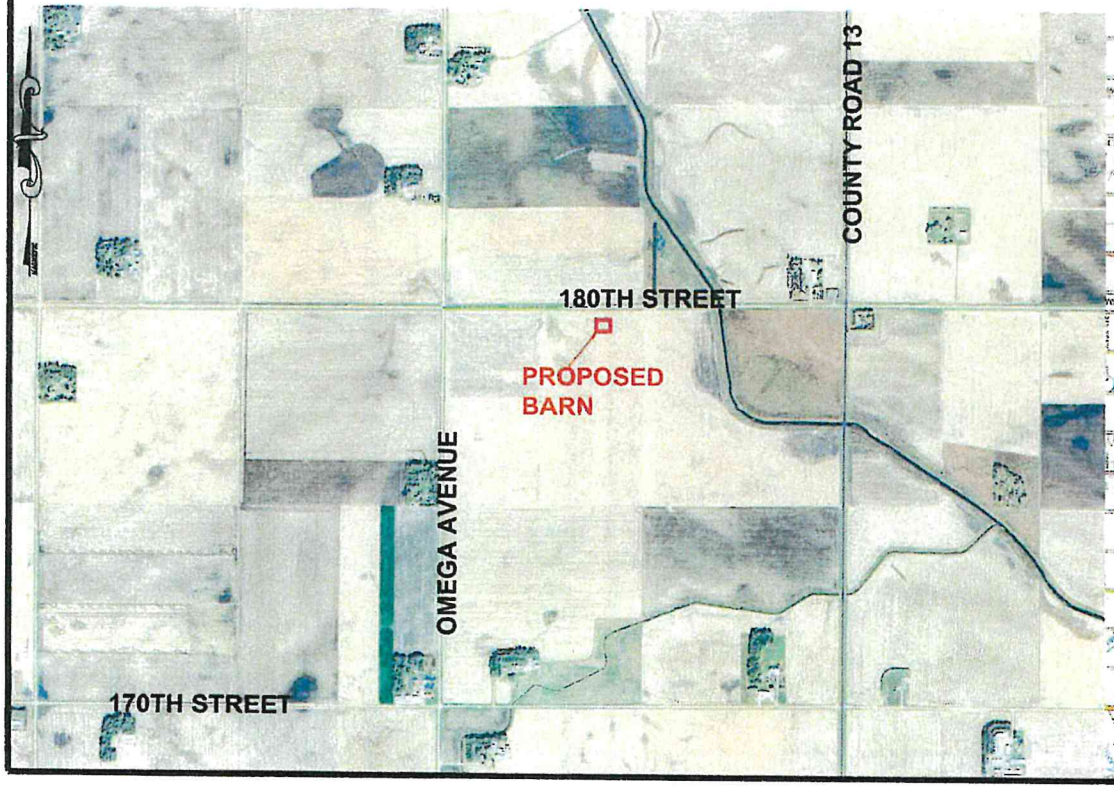
TABLE OF CONTENTS

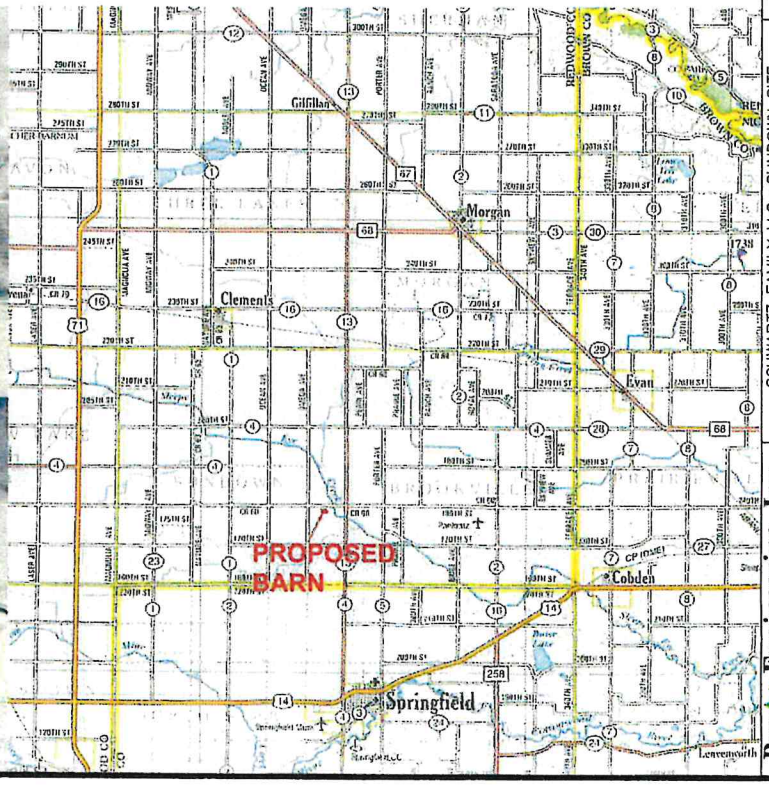
REGISTERED PROFESSIONAL ENGINEER
46735
NICHOLAUS J. ROWE
MINNESOTA

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

Date 11/13/25

Nicholaus J. Rowe, P.E.
License number 46735
My license renewal date is June 30, 2026
Pages or sheets covered by this seal: Sheets 1-7



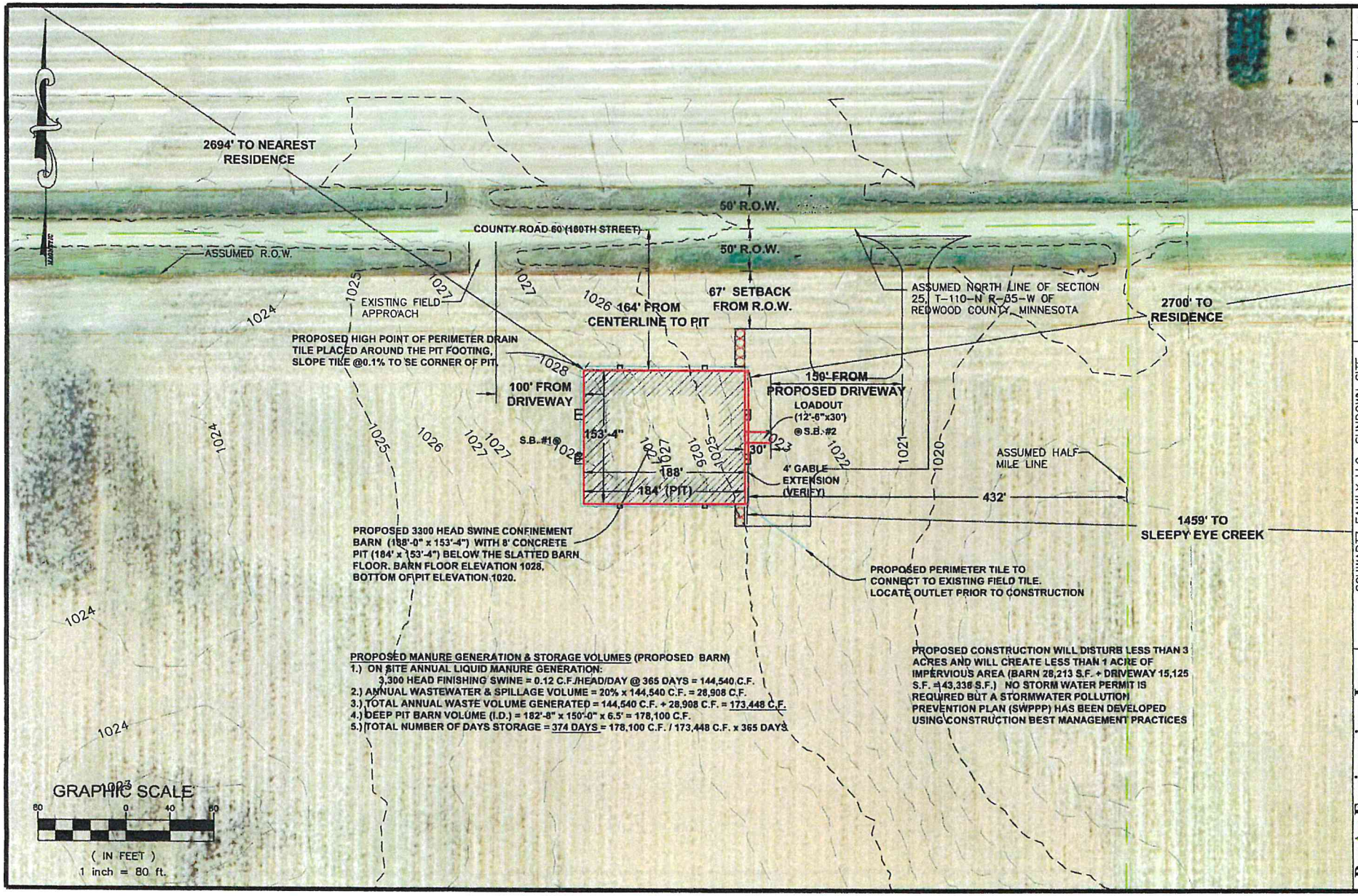


SHEET 1/7

Project No.	25-141
Checked By	N.J.R.
Date	11/13/25
Drawn	T.J.A.

SCHWARTZ FAMILY LLC.–SUNDOWN SITE
PROPOSED SWINE CONFINEMENT BARN
NW 1/4, SECTION 25, T110N, R35W
REDWOOD COUNTY, MINNESOTA

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



SHEET 2/7

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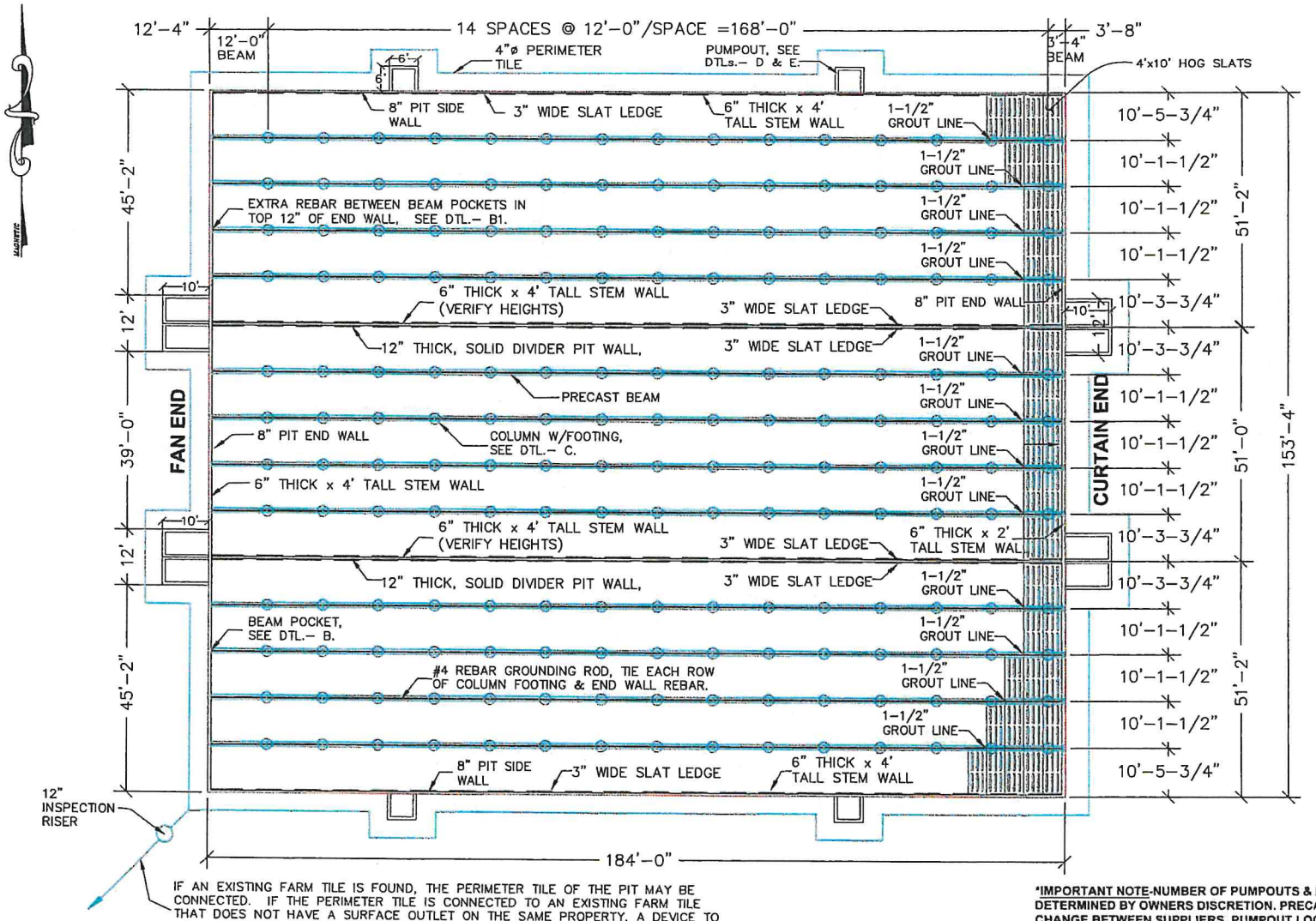

IF AN EXISTING FARM TILE IS FOUND, THE PERIMETER TILE OF THE PIT MAY BE CONNECTED. IF THE PERIMETER TILE IS CONNECTED TO AN EXISTING FARM TILE THAT DOES NOT HAVE A SURFACE OUTLET ON THE SAME PROPERTY, A DEVICE TO ALLOW MONITORING OF THE WATER IN THE TILE MUST BE INSTALLED.

*IMPORTANT NOTE-NUMBER OF PUMPOUTS & LOCATIONS DETERMINED BY OWNERS DISCRETION. PRECAST DIMENSIONS CHANGE BETWEEN SUPPLIERS. PUMPOUT LOCATIONS AND PRECAS DIMENSIONS MUST BE VERIFIED WITH THE OWNER PRIOR TO CONSTRUCTION. VERIFY ALL STEM WALL HEIGHTS w/OWNER

PIT FLOOR PLAN
(OUTSIDE DIMENSIONS 184'-0"x 153'-4"x 8' PIT)
NOT TO SCALE

SHEET 3/7

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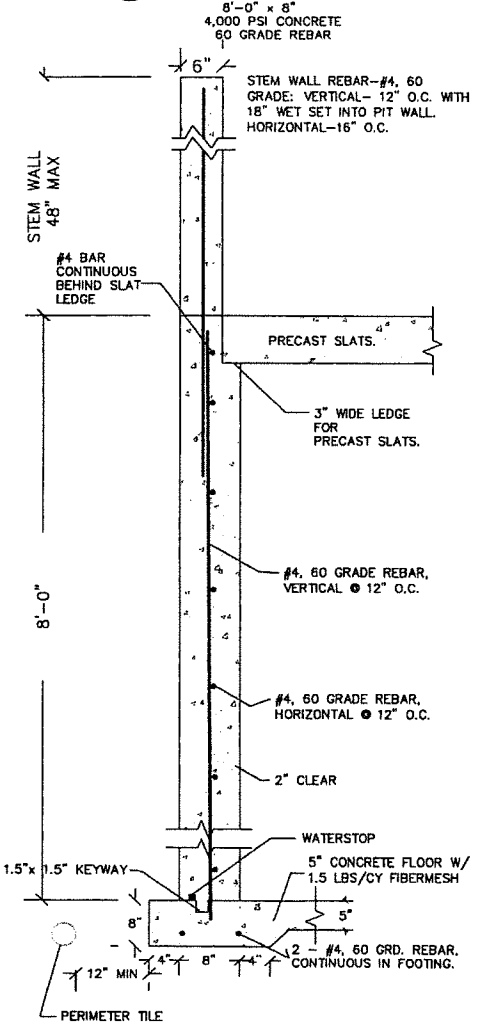
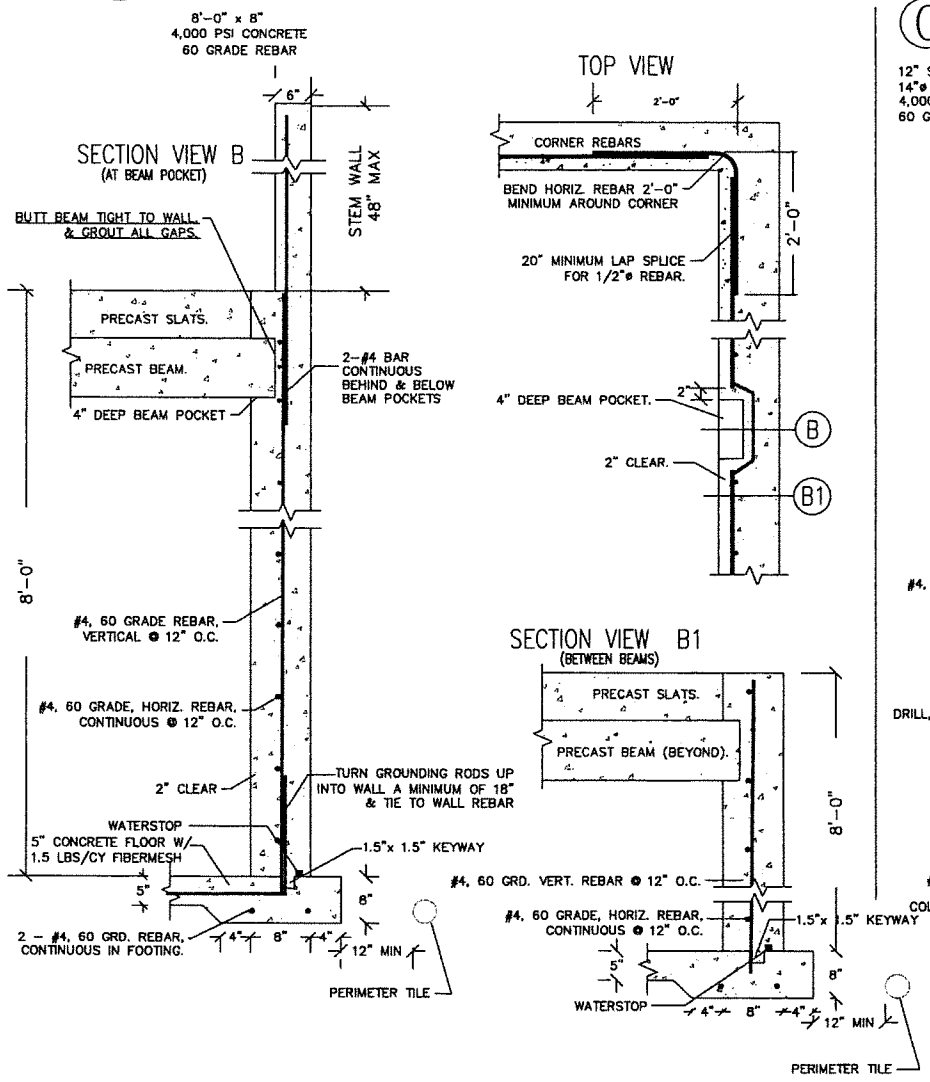
(A) SIDE WALL

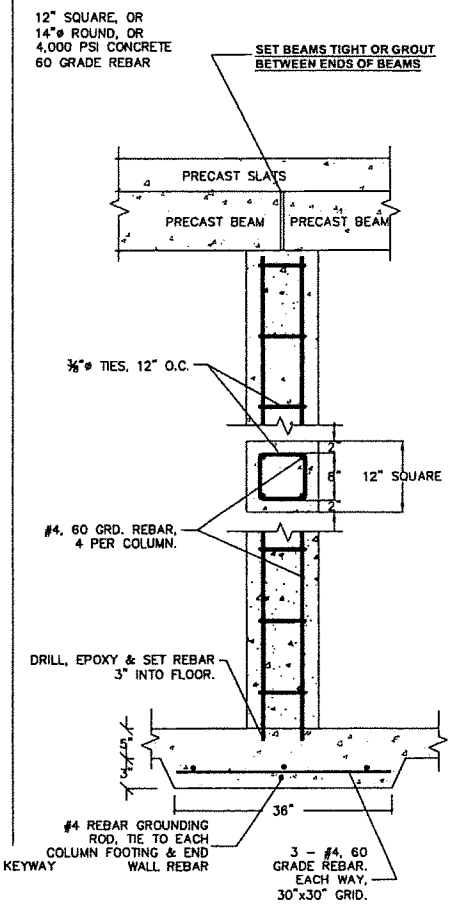


(B) END WALL BRACING & BEAM POCKET



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

(C) COLUMN DETAIL



SHEET 4/7	
Project No.	25-141
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Date 11/13/25	Drawn T.J.A.

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(D) TYPICAL PUMP OUT PLAN

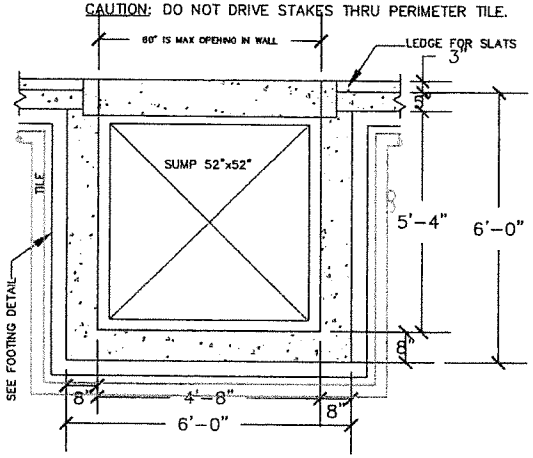
BEAM MAY BE CAST-IN-PLACE WITH STEM WALL.
MINIMUM OF 2-#4, 60 GRADE REBARS IN BOTTOM OF BEAM.

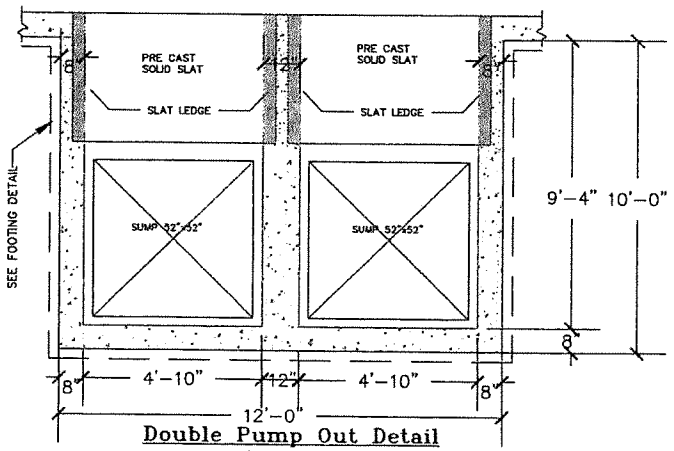
PUMPOUT FOOTINGS AND FLOOR SHALL BE POURED WITHOUT CONSTRUCTION JOINTS-SEE DETAIL 1.

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.





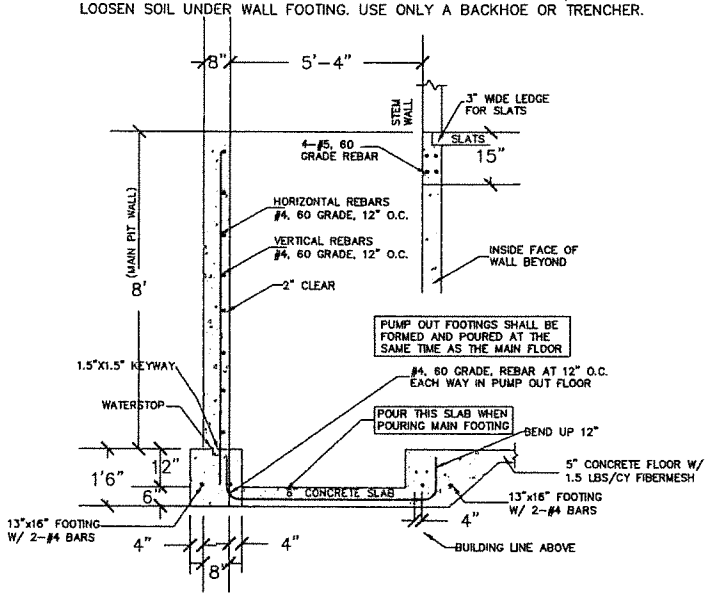
Double Pump Out Detail
(VERIFY)

(E) PUMP OUT SECTION

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

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

TO DEWATER THE SITE IN ADVANCE OF GENERAL EXCAVATION SHALL BE DECIDED BY THE OWNER, ENGINEER AND CONTRACTOR AT TIME OF THE PRECONSTRUCTION MEETING. IF THE TILE IS INSTALLED IN ADVANCE OF EXCAVATION, IT SHOULD BE INSTALLED 4 FT OUT FROM THE PIT WALL AND AT LEAST 2 FT BELOW THE TOP OF THE PIT FLOOR (IN ORDER TO GO UNDER PUMPOUT SUMP). SLOPE THE TILE AT 0.2 FT PER 100 FT TO THE SUMP OR DAYLIGHT OUTLET. 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.



***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.**

SHEET 5/7

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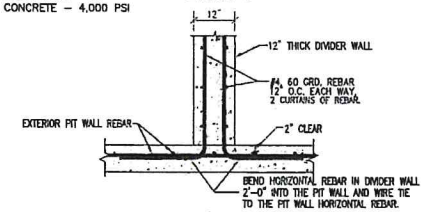
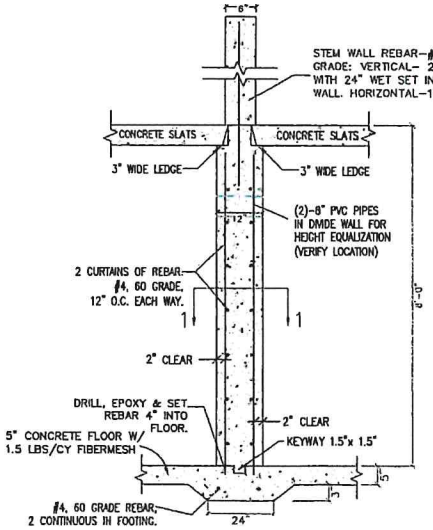
12" DIVIDER WALL

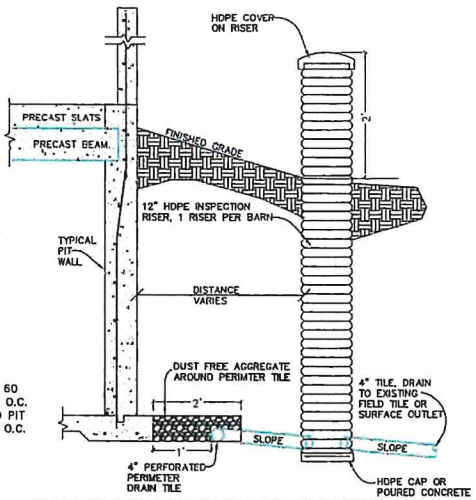
STEEL GRADE – 60
CONCRETE – 4,000 PSI

SECTION 1



SECTION VIEW

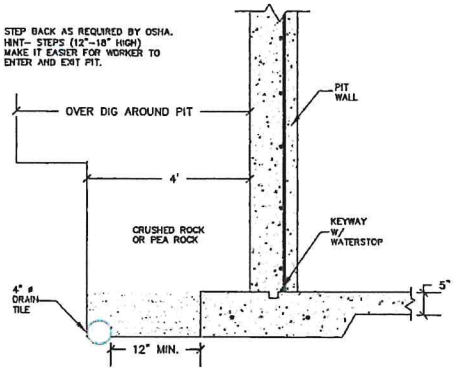




INSPECTION RISER DETAIL-SECTION VIEW

PERIMETER TILE

PERIMETER TILE WITH PEA ROCK COVER INSTALLED BY CONCRETE CONTRACTOR BEFORE POURING FLOOR SLAB.



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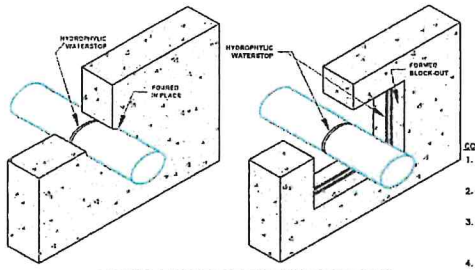
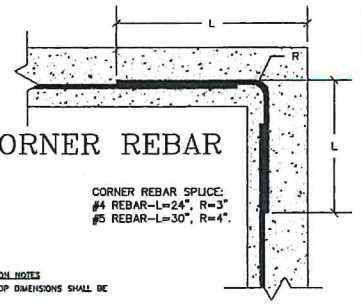


LIQUID TIGHT PIPE PENETRATIONS
NOT TO SCALE

CONSTRUCTION NOTES
1. WATERSTOP DIMENSIONS SHALL BE REQUIREMENTS FOR MINIMUM COVER.
2. THE WATERSTOP SHALL BE APPLIED TO EVEN SURFACES, FREE OF DIRT, OIL, OR LATANCE.
3. THE WATERSTOP MUST BE BONDED TO THE CONCRETE AND/OR PIPE PRIOR TO PLACEMENT OF ADJOINING
4. THE MANUFACTURER'S INSTALLATION INSTRUCTIONS SHALL BE FOLLOWED



CORNER REBAR

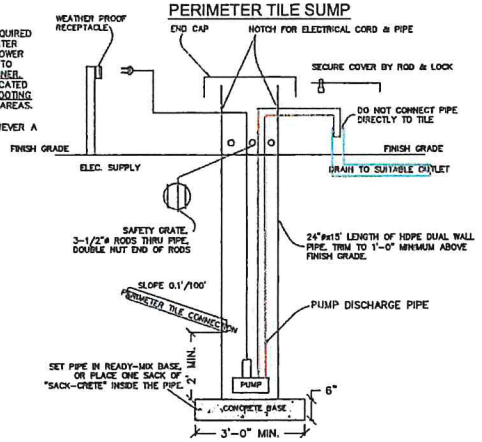
CORNER REBAR SPLICE:
#4 REBAR–L=24", R=3"
#5 REBAR–L=30", R=4".

PERIMETER TILE SYSTEM

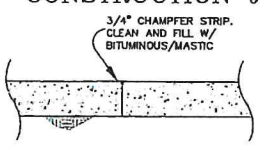
WHERE A PERIMETER TILE SYSTEM IS REQUIRED TO CONTROL THE ELEVATION OF THE WATER TABLE OR SATURATED SOILS, IT MUST LOWER THE WATER TABLE OR SATURATED SOIL TO BELOW THE BOTTOM OF THE STORAGE LINER. PERIMETER DRAINAGE TILE SHALL BE LOCATED AT LEAST ONE FOOT OUTSIDE OF THE FOOTING OF CONCRETE–LINED MANURE STORAGE AREAS.

SUMP PUMPS SHALL BE REQUIRED WHENEVER A GRAVITY OUTLET IS NOT AVAILABLE.

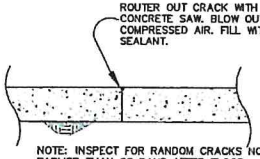
PERIMETER TILE SUMP



CONSTRUCTION JOINTS



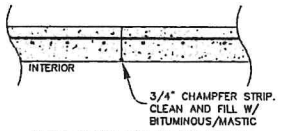
CONTRACTION JOINT DETAIL (SLAB)



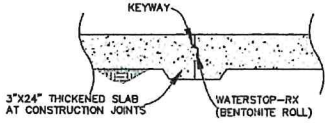
NOTE: INSPECT FOR RANDOM CRACKS NO EARLIER THAN 28 DAYS AFTER FLOOR CONSTRUCTION

RANDOM CRACK REPAIR FOR CONCRETE PIT FLOOR
(NOT TO SCALE)

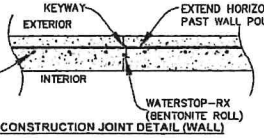
*REINFORCING CONTINUOUS THROUGH ALL JOINTS



CONTRACTION JOINT DETAIL (WALL)



CONSTRUCTION JOINT DETAIL (SLAB)



CONSTRUCTION JOINT DETAIL (WALL)

SHEET 6/7

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CONCRETE & STRUCTURAL NOTES:

A. GENERAL
1.) NOTES AND DETAILS ON THE STRUCTURAL DRAWINGS TAKE PRECEDENCE OVER THESE STRUCTURAL NOTES.
2.) THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, AND SITE CONDITIONS PRIOR TO STARTING WORK. THE ENGINEER SHALL BE NOTIFIED OF ANY DISCREPENCIES.
3.) IN NO CASE SHALL DIMENSIONS BE SCALED FROM PLANS, SECTIONS, OR DETAILS ON THE STRUCTURAL DRAWINGS.
4.) DESIGN CHANGES MUST BE APPROVED IN WRITING BY BOTH THE OWNER AND ENGINEER BEFORE PROCEEDING WITH THE WORK. SOME DESIGN CHANGES MAY ALSO REQUIRE MPCA, COUNTY FEEDLOT OFFICER AND/OR NRCS APPROVAL.
5.) ANCHOR BOLTS SHALL BE SET AS SPECIFIED BY BUILDING CONTRACTOR.
6.) ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE REQUIREMENTS OF THE FOLLOWING CODES:
   a. UNIFORM BUILDING CODE (UBC)
   b. MINNESOTA STATE BUILDING CODE
   c. AMERICAN CONCRETE INSTITUTE (ACI)
   d. CONCRETE REINFORCING STEEL INSTITUTE (CRSI) MANUAL OF STANDARD PRACTICE

B. DRAIN TILE
1.) BEFORE ANY PIT CONSTRUCTION, TRENCH AND INSTALL DRAIN AROUND THE PROPOSED PIT, THE DRAIN TILE FLOW LINE MUST BE A MINIMUM OF 12" BELOW THE TOP.
2.) THE DRAIN TILE SHALL BE HEAVY DUTY PERFORATED POLYETHYLENE TUBING 4"ø TILE WITH PEA ROCK COVER OR 4"ø TILE W/ FABRIC SLEEVE AND SAND/GRAVEL COVER.
3.) CONNECT THE DRAIN TILE TO AN EXISTING FARM TILE IF AVAILABLE; DISCHARGE TO SURFACE DRAINAGE; OR DRAIN TO A SUMP AND PUMP TO SURFACE.

C. TEMPORARY BRACING AND BACKFILL
1). PROVIDE TEMPORARY LATERAL SUPPORT FOR ALL WALLS WHERE GRADE VARIES ON THE TWO SIDES UNTIL THE PERMANENT STRUCTURAL SUPPORT SYSTEM IS IN PLACE.
2.) BACKFILL ONLY AFTER THE FLOOR SLATS OR SOLID FLOOR HAS BEEN INSTALLED.
3.) DO NOT BACKFILL AGAINST WALL UNTIL SLATS ARE INSTALLED AND GROUTED.
4.) CONCRETE IN ALL WALLS SHALL BE ALLOWED TO CURE FOR A MINIMUM OF 14 DAYS BEFORE BACKFILL IS PLACED AGAINST WALLS. EXERCISE CAUTION WHEN BACKFILLING TO BRING UP THE LEVEL UNIFORMLY ON ALL SIDES OF TANKS AND PITS.

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

E. REINFORCED CONCRETE
1.) ALL CONCRETE AND REINFORCING WORK SHALL CONFORM TO AMERICAN CONCRETE INSTITUTE'S" STANDARD BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE". (ACI 318-05)
2.) CONCRETE WORK SHALL CONFORM TO ALL THE REQUIREMENTS OF ACI 301.
3.) CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF f'c=3500 PSI FLOOR, 4000 PSI WALLS
4.) WATER CEMENT RATIO SHALL BE 0.45 MAXIMUM
5.) CEMENT SHALL CONFORM TO ASTM C150, TYPE 1.
6.) COARSE AGGREGATE SHALL BE 1".
7.) READY-MIX CONCRETE SHALL BE MIXED & DELIVERED IN ACCORDANCE WITH ASTM C94.
8.) SLUMP SHALL BE MAXIMUM OF 5"
9.) AIR CONTENT SHALL BE 5% TO 7%
10.) CONCRETE TO BE CURED WITH SONOBORN CURE AND SEAL OR EQUAL.
11.) ADMIXTURES MAY BE USED WITH PRIOR APPROVAL OF THE ENGINEER FOR THE PURPOSE OF INCREASING THE WORKABILITY BUT NOT TO REDUCE THE SPECIFIED MINIMUM CEMENT CONTENT. CALCIUM CHLORIDE SHALL NOT BE USED.
12.) FLOORS SHALL BE 5" THK. WITH WITH 1-1/2#/CY OF 3/4" FIBRILLATED POLYPROPOLENE FIBERS.
13.) REINFORCING STEEL SHALL BE PLACED IN THE CENTER OF CONCRETE PLACEMENT UNLESS NOTED OTHERWISE. STEEL MUST BE SUPPORTED WITH APPROPRIATE CHAIRS OR CONCRETE BLOCKS.
14.) IF CONSTRUCTION JOINTS NECESSARY, COORDINATE LOCATION WITH ENGINEER.
15.) CONSTRUCTION JOINTS ARE NOT PERMITTED IN THE END WALLS OR WITHIN 3 FT. OF A PUMPOUT. THE PUMPOUT FLOOR AND FOOTING MUST BE FORMED AND POURED WITH THE PIT FLOOR. THE PUMPOUT WALLS MUST BE FORMED AND POURED WITH THE PIT WALLS.

F. STEEL
1.) F'Y = GRADE 60 (60,000 PSI) DEFORMED STEEL.
2.) REINFORCING SHALL BE CONTINUOUS AND LAP A MINIMUM OF 40 BAR DIAMETER UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL BE LAPPED A MINIMUM OF EIGHT INCHES.
3.) MINIMUM BENDING RADIUS SHALL BE 6 BAR DIAMETERS.
4.) MINIMUM BEND AROUND CORNERS FOR #4 BARS - 24". FOR #5 BARS - 30".
5.) ALL CONCRETE IS REINFORCED UNLESS SPECIFICALLY CALLED OUT AS "NOT REINFORCED". REINFORCE ALL CONCRETE NOT OTHERWISE SHOWN WITH THE SAME STEEL AS IN SIMILAR SECTIONS OR AREAS.
6.) THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR FOR REINFORCEMENT UNLESS OTHERWISE NOTED:
   WHERE CAST AGAINST EARTH ..... 3 INCHES
   WALLS AND SLABS (EXPOSED TO EARTH OR WEATHER)..... 2 INCHES
   OTHER..... 2 INCHES

G. TOLERANCES & QUALITY CONTROL
1.) COLUMN FINISH ELEVATIONS SHALL BE + OR - 1/4" FROM DESIGN ELEVATION.
2.) WALL ALIGNMENT (HORIZONTAL) SHALL DEVIATE NO MORE THAN 1/4" IN 10 FT. NO MORE THAN 3/4" OVER THE FULL LENGTH OF WALL.
3.) WALL BEARING LEDGE ELEVATIONS SHALL BE + OR - 1/4"FROM DESIGN ELEVATION IN 10 FT. AND NO MORE THAN 1/2" OVER THE FULL LENGTH OF WALL.
4.) OVERALL FOUNDATION LENGTH & WIDTH DIMENSIONS AND DIAGONAL DIMENSIONS SHOULD BE WITHIN 1/2" OF PLAN DIMENSIONS.
5.) HONEYCOMB 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
1.) INSTALL REINFORCING BARS AS PER ELECTRICAL CODE GROUND AT A MINIMUM LOCATIONS AS PER ELECTRIC CODE NOTIFY THE LOCAL ELECTRICAL INSPECTOR FOR INSPECTION PRIOR TO PLACING CONCRETE.

I. COLD WEATHER CONCRETING
1.) 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.

J. HOT WEATHER CONCRETING
1.) 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 305.

K. WATERSTOPS & SEALANTS
1.) WATERSTOP TO BE RIBBED PVC, OR BENTONITE ROLL, AT CONTRACTORS OPTION.
2.) 3/8"x3/4" BENTONITE/BUTYL RUBBER EQUAL TO WATERSTOP-RX BY AMERICAN COLLIED COMPANY WATERSTOPS SHALL BE PLACED IN ALL CONSTRUCTION JOINTS ON THE FLOOR AND IN THE WALLS. LOCATION AND NUMBER OF CONSTRUCTION JOINTS ARE TO BE DETERMINED BY THE CONTRACTOR. WATERSTOPS SHALL BE SUITABLE FOR USE WITH MANURE.
3.) MAKE PVC WATERSTOP SPLICES WITH SPLICING IRON.
4.) SEALANT TO BE ELASTOMETRIC POLYURETHANE OR BITUMINOUS ASPHALT BASED.

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

SLAT LEDGES & STEM WALL CONCRETE NOTES

1.) ANY SLAB ON GRADE WHICH WILL HAVE A VERTICAL WALL ON TOP SHALL HAVE A KEYWAY AND WATERSTOP AT SLAB/WALL INTERFACE.

2.) WATERSTOP TO BE BENTONITE ROLL OR RIBBED PVC © CONTRACTORS OPTION.

3.) SLAT LEDGES MUST BE 3" WIDE x 4" HIGH.

4.) 12" CENTER DIVIDER WALLS: THE 3" WIDE x 4" LEDGE ON BOTH SIDES OF THE 12" WALL MUST BE FORMED AND POURED WITH THE WALL.

5.) 8" OUTSIDE WALLS: THE 3" WIDE x 4" LEDGE ON INSIDE SIDE OF 8" WALL MUST BE FORMED AND POURED WITH WALL.

DO NOT POUR WALL AND SET SLATS ON TOP. DO NOT EVEN ASK, BECAUSE THE 4" HIGH STEM IS NEEDED FOR SLATS BRACING THE TOP OF WALL

6.) A CONSTRUCTION JOINT IS PERMITTED BETWEEN THE PIT WALL AND STEM WALL, BUT THE CONSTRUCTION JOINT MUST BE EQUAL OR HIGHER THAN THE TOP OF THE PRE-CAST SLATS.

SHEET 7/7

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

SUBSURFACE SOIL LOG

PROJECT:Schwartz Family LLC-Sundown Site

BORING NO: 1

PROJECT NO: 25-141

DATE DRILLED: 11/12/2025

DRILLED BY: Pro Ag Engineering

CLASSIFIED BY: Brad Buhl

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

ELEVATION (USGS)		DEPTH BELOW SURFACE	SOIL DESCRIPTION	USCS Symbol
1028.0	GRADE	0	(TOPSOIL) DARK BROWN SILTY CLAY LOAM MEDIUM CONSISTENCY	CL
		2	GRAYISH BROWN SILTY CLAY LOAM, TRACE GRAY MOTTLES, TRACE Fe CONCRETIONS, MEDIUM CONSISTENCY	CL
	-NO GROUNDWATER MEASURED, BORING WAS DRY 11/12/2025	4		
		6	LIGHT BROWN SILTY CLAY LOAM, TRACE FINE SAND, FEW GRAY MOTTLES, MEDIUM CONSISTENCY	CL
1020.0	PROPOSED BOTTOM OF PIT	8		
		10		
		12		
1015.0	BOTTOM OF TEST HOLE	14	*SOIL BORING FILLED UPON COMPLETION TO PREVENT VERTICAL GROUNDWATER TRANSPORT.	
		16	*SOILS ARE SUITABLE FOR PROPOSED PIT FOUNDATION	
		18	**PERIMETER TILE REQUIRED**	
		20		
		22		
		24		
		26		
		28		
		30		
		32		

SUBSURFACE SOIL LOG

PROJECT:Schwartz Family LLC-Sundown Site

BORING NO: 2

PROJECT NO: 25-141

DATE DRILLED: 11/12/2025

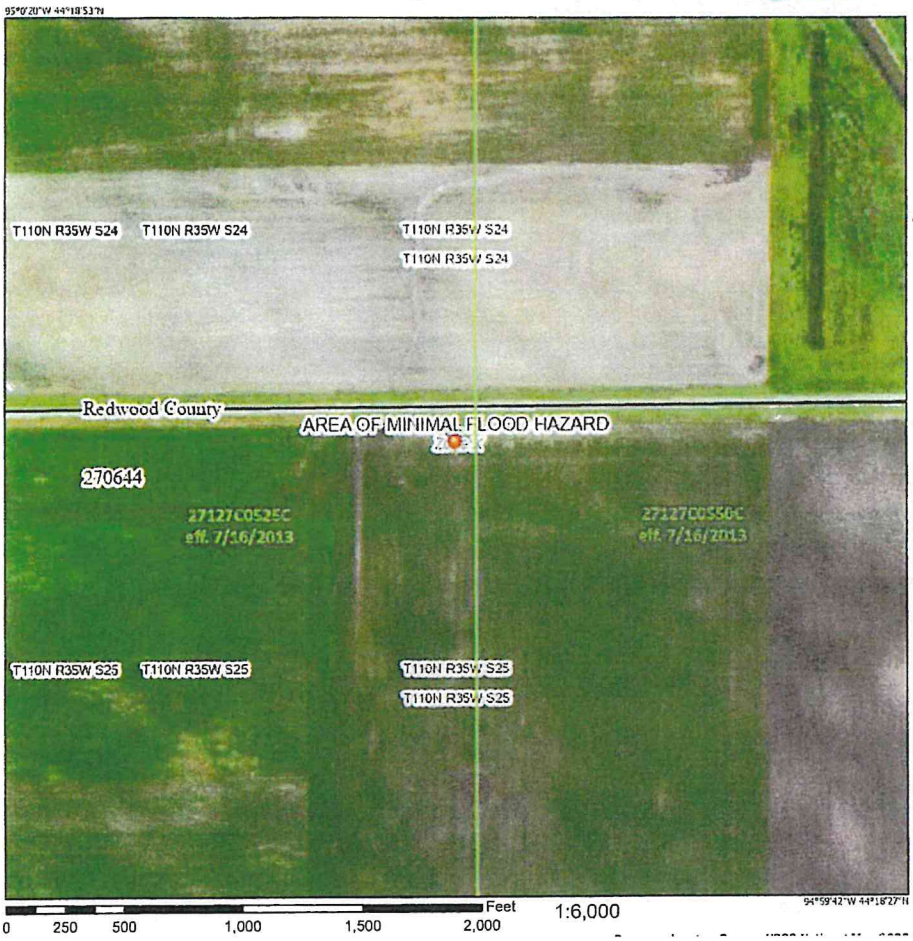
DRILLED BY: Pro Ag Engineering

CLASSIFIED BY: Brad Buhl

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

ELEVATION (USGS)		DEPTH BELOW SURFACE	SOIL DESCRIPTION	USCS Symbol
1022.3	GRADE	0	(TOPSOIL) DARK BROWN SILTY CLAY LOAM MEDIUM CONSISTENCY	CL
		2	GRAYISH BROWN SILTY CLAY LOAM, TRACE GRAY MOTTLES, TRACE Fe CONCRETIONS, MEDIUM CONSISTENCY	CL
1020.0	PROPOSED BOTTOM OF PIT	4		
		6	LIGHT BROWN SILTY CLAY LOAM, TRACE FINE SAND, FEW GRAY MOTTLES, MEDIUM CONSISTENCY	CL
	-NO GROUNDWATER MEASURED, BORING WAS DRY 11/12/2025	8		
		10		
1010.3	BOTTOM OF TEST HOLE	12		
		14	*SOIL BORING FILLED UPON COMPLETION TO PREVENT VERTICAL GROUNDWATER TRANSPORT.	
		16	*SOILS ARE SUITABLE FOR PROPOSED PIT FOUNDATION	
		18	**PERIMETER TILE REQUIRED**	
		20		
		22		
		24		
		26		
		28		
		30		
		32		

National Flood Hazard Layer FIRMette



FEMA

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, V, A99
- With BFE or Depth Zone AE, AO, AH, VE, AR
- 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 X
- Area with Flood Risk due to Levee Zone D

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard Zone X
- Effective LOMRs
- Area of Undetermined Flood Hazard Zone D

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represe 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 **11/11/2025 at 4:44 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 unmodernized areas cannot be used for regulatory purposes.

Sleepy Eye Creek

CO

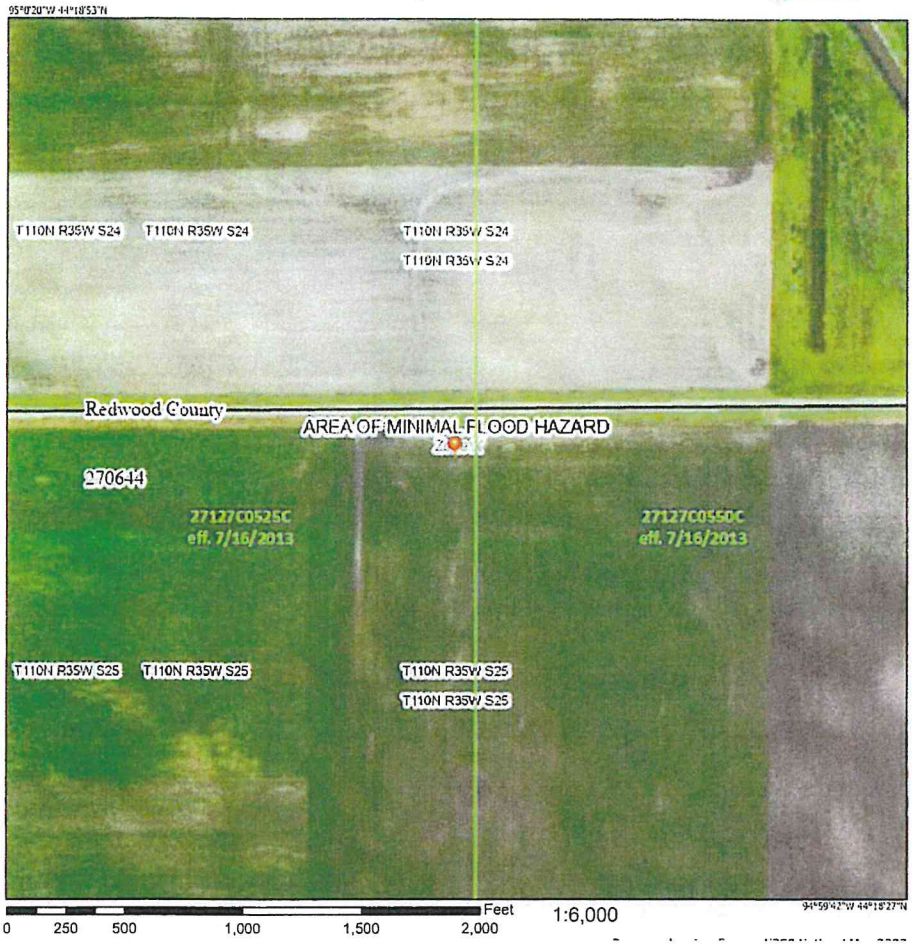
xsite

OMEGA AVE

170TH ST

CO RD 13

National Flood Hazard Layer FIRMette



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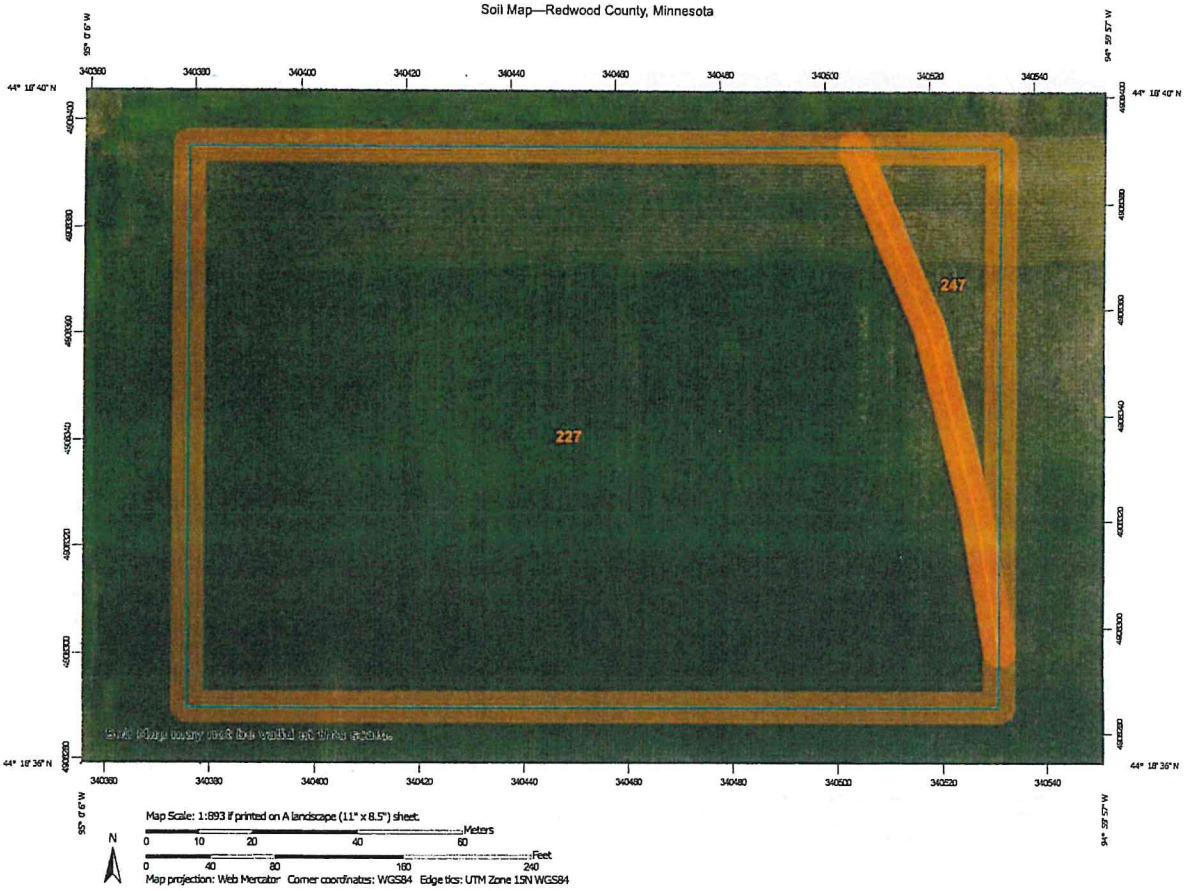
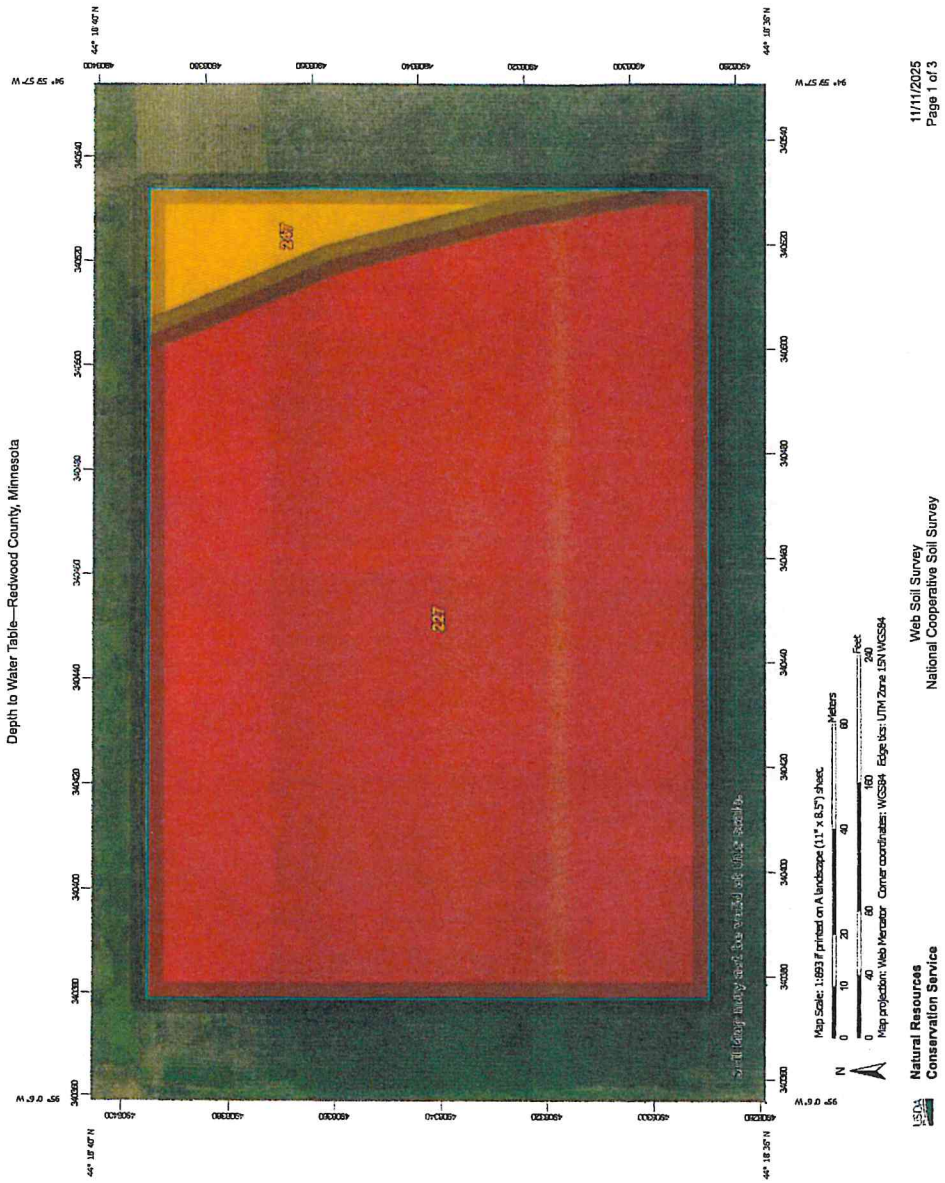


Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
227	Lemond loam, 0 to 2 percent slopes	3.8	93.4%
247	Linder loam	0.3	6.6%
Totals for Area of Interest		4.1	100.0%



Depth to Water Table

Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
227	Lemond loam, 0 to 2 percent slopes	10	3.8	93.4%
247	Linder loam	40	0.3	6.6%
Totals for Area of Interest			4.1	100.0%

Description

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

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

Rating Options

Units of Measure: centimeters

Aggregation Method: Dominant Component

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

Interpret Nulls as Zero: No

Beginning Month: January

Ending Month: December

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

TO: OWNER

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

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

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

Owner: _____

Location: _____

Barn or Tank Identification: _____

Date _____ Comment _____ Initials

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

Floor Reinforcement (Grade, size, clean, location)

*Pouring Floor (Concrete, quality, take test cylinder

Floor (Cracks sealed)

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

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

*Pouring Walls (Concrete quality, take test cylinders)

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

Outside of Walls (Honeycomb patched prior to backfilling)

Inside of Walls (Honeycomb patched)

Walls (Do impact hammer test)

Columns (Honeycomb patched)

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

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
507-841-3269
nic@proageng.com

PRE-CONSTRUCTION MEETING

PROJECT: _____ **DATE:** _____

LOCATION: ____1/4, SECTION ____, _____ TWP. _____ CTY

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

GENERAL CONTRACTOR _____
Contact _____ PHONE: _____

EXCAVATION CONTRACTOR _____
Contact _____ PHONE: _____
Date to start excavation work _____

CONCRETE CONTRACTOR _____
Contact _____ PHONE: _____
Date to start concrete work _____

CONCRETE READY MIX _____
Contact _____ PHONE: _____

PRE-CAST CONCRETE _____
Contact _____ PHONE: _____

GROUTS, BEAMS AND SLATS _____
Contact _____ PHONE: _____

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	_____

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.
      Steel shall be supported on chairs and tied.
   4. Perimeter tile shall be laid at least 12 inches from pit wall and covered with pea rock or 1/4" – 1/2" crushed rock.
   5. Grounding inspection by Electrical Inspector.

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

D. BEFORE POURING CONCRETE PIT WALLS; the following must be completed:
   1. Contractor give Engineer & Electrical Inspector advance notice.
   2. Engineer inspect forms, reinforcing steel, 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, slats and slabs in place and grouted.
   3. Permanent tile sump pump or inspection port set in-place, (braced if necessary) and ready for backfilling.
   4. All organic debris shall be removed from the overdig area.
   5. Engineer must inspect Items 1 thru 4 and approve before backfilling.

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.

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 by 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.

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 sytem 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 plf
Hog finishing barns	60 psf	125 plf
Sow & boar barns	65 psf	150 plf
Add an additional 160 plf on the edge(s) of slabs that support farrowing stalls.		
Dairy free-stall barns	100 psf	250 plf
Dairy holding & handling pens	125 psf	312 plf

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

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 strenth, f'c,psi		Aggregate, max.	Fibermesh
Footings & Floors	3,500	2"	1.5 lb/cuyd
Walls	4,000	1.5"	none
Columns	4,000	1.5"	none

Slump	3" – 6"
Air entrained	5% - 7%
Water:cement ratio	0.5

Fly Ash, maximum 20% of cementious material. Silica Fume, maximum 20% of cementious material. The combination of fly ash and silica fume shall not exceed 35% of total cementious 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" Swellstop; 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, fy = 60,000 psi (Grade 60)

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

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

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

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

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

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

*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 pervious area, and all drainage ditches and grass waterways have been stabilized, then the silt fence may be removed.
11. The Owner shall keep the plans and records on file for a minimum of six (6) years.

Maintenance of BMP's

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

Assignment of Responsibilities for Execution of the SWPPP

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

Grass Seeding Guidelines

All inplace 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.

General Roadside mix.

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 lb/ac	

Agricultural Roadside mix.

Alfalfa, creeping	15 lb/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 lb/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' of manure is recommended from each section before complete emptying of any one section is undertaken.
7) No person should enter a Waste Storage Structure without proper training and without wearing a self-contained breathing device. A second person should remain outside of the structure and should have an immediate means of removing the person inside the structure in an emergency.
8) Regular quarterly inspections should be made of the structure and its surroundings for leaks, concrete deterioration and pumpout cover conditions. Inspection of the slats for signs of deterioration is advised.
9) Concrete should be inspected for large cracks and exposed reinforcing steel. Joints should be checked for unusual openings.
10) Concrete surfaces should be quarterly inspected for erosion, scaling and exposed reinforcing steel.

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

RECORDS

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

PERIMETER TILE MONITORING AND CONTINGENCY PLAN

INSPECT PERIMETER TILE AT LEAST ONE WEEK BEFORE EMPTYING STORAGE

All below ground waste storage structures require perimeter tile to relieve the hydrostatic pressures which would otherwise damage the sides of the concrete tanks and manure storage pits under 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.

MINNESOTA POLLUTION CONTROL AGENCY
520 Lafayette Road N St Paul MN 55155-4194

Nutrient Management Plan for 2026-2027
Created: 11/20/2025 09:41:06 AM

Feedlot Information
Feedlot name: Schwartz Family LLC - Sundown Site
Permit type:
Permit ID:
Registration ID: 127-128255

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

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	Flow meter

Analysis

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

Nutrient content

	Total nitrogen (N)	Inorganic nitrogen (N)	Organic nitrogen (N)	Total phosphorus (P_2O_5)	Total potassium (K_2O)
Expected	58 lb/1000gal	33 lb/1000gal	25 lb/1000gal	44 lb/1000gal	40 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 (P_2O_5) produced	Annual potassium (K_2O) produced
Anticipated	990,000 gal/yr	--	57,420 lb	32,670 lb	24,750 lb	43,560 lb	39,600 lb

Manure transfer plan

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

Notes

Field Map Summary

Total Farmable Acreage: 75 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

Drinking Water Features
- Domestic Wells, Verified and Unverified Locations
- Drinking Water Supply Management Areas
- Domestic Well Buffers, Verified and Unverified Locations

Groundwater Features
- Karst Sinkholes
- Springs
- Karst Sinkhole Buffers
- Vulnerable Groundwater Area

Floodplain
- DFIRM, Modernized and Unmodernized Data

Water Bodies
- 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

Water Ways
- NHD, Intermittent Streams
- NHD, Intermittent Stream Buffers
- NHD and Public Drainage Systems, Ditches
- NHD and Public Drainage Systems, Ditch Buffers
- Public Water Inventory Streams
- Public Water Inventory, Stream Buffers

Soils
- Coarse Textured Soils
- Shallow Bedrock Soils

Slope greater than 6%
- less than 6%
- greater than 6%
- Field

See Sensitive Features Appendix for more information.

Field Summary

Total farmable acreage: 75

Field name/ID	Farmable acreage	Crop grown	Crop most recently harvested	Nitrogen need	Phosphorus management	Manure applied
Site Field	75	Soybeans	Corn-Field	--	Yes	No

Field name/ID: Site Field

Field group name:
Farmable acreage: 75
Irrigated: No

Methodology information

Sensitive features See Sensitive Feature Appendix for management techniques	Planned manure application timing	Planned application methods	Crops grown
Intermittent Stream Coarse-Textured Soil Vulnerable Groundwater Area	April May September October 1-14 October 15-31 November	Broadcast - liquid tanker with double discs Injection - coulter Injection - knife	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	300 feet	2%	Yes	--	--

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	--	--	75 lb/ac	no	--	yes	75 lb/ac	0 lb/ac
2024	--	--	53 lb/ac	no	--	no	--	-53 lb/ac
2023	--	--	75 lb/ac	no	--	yes	75 lb/ac	0 lb/ac
2022	--	--	53 lb/ac	no	--	no	--	-53 lb/ac
2021	--	--	75 lb/ac	no	--	yes	75 lb/ac	0 lb/ac

Phosphorus applied over 5 years	Phosphorus removed over 5 years	Excess phosphorus over 5 years
225 lb/ac	331 lb/ac	-106 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	159 lb/ac Calculated according to your phosphorus application plan.

Nutrient application
Acreage after setback: 75

No manure applied.

No fertilizer applied.

Notes
There are no notes.

Field name: Site Field

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

Map legend

- Township and range
- Section

Drinking Water Features

- Domestic Wells, Verified and Unverified Locations
- Drinking Water Supply Management Areas
- Domestic Well Buffers, Verified and Unverified Locations

Groundwater Features

- Karst Sinkholes
- Springs
- Karst Sinkhole Buffers
- Vulnerable Groundwater Area

Floodplain

- DFIRM, Modernized and Unmodernized Data

Water Bodies

- 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

Water Ways

- NHD, Intermittent Streams
- NHD, Intermittent Stream Buffers
- NHD and Public Drainage Systems, Ditches
- NHD and Public Drainage Systems, Ditch Buffers
- Public Water Inventory Streams
- Public Water Inventory, Stream Buffers

Soils

- Coarse Textured Soils
- Shallow Bedrock Soils

Slope greater than 6%

- less than 6%
- greater than 6%
- Field

Sensitive features (See Sensitive Features Appendix for more information.)
Intermittent Stream Coarse-Textured Soil Vulnerable Groundwater Area

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 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.

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 ½ inch or greater rainfall within 14 days of application

Sensitive Feature Appendix

Sensitive feature	Definition	Management techniques For each sensitive feature, one of the listed techniques will be used to provide protection to this sensitive feature, as required in Minnesota Rules and/or permit conditions.
Intermittent Stream	Intermittent streams typically only flow after a major storm event or snowmelt. They are denoted by dashed lines on USGS topo maps, even if they are farmed through. Some road ditches are mapped and considered an intermittent stream.	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.
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.	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.
Vulnerable Groundwater Area	Any area identified on the Vulnerable Groundwater Areas map available at: https://www.pca.state.mn.us/business-with-us/feedlots	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.

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. 5-26**

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 9th day of February 2026.

Lali Ortega
Environmental Administrative Assistant

Subscribed and sworn to before me, a Notary Public, on this 9th day of February 2026, by Lali Ortega.

JEANETTE ELIZABETH PIDDE
Notary Public-Minnesota
My Commission Expires Jan. 31, 2028

Notary Public

Parcel ID	OWNER	C/O	Address	CITY	STATE	ZIP
670254020	BLOEMKE/BONNIE/TRUST		9 LIBERTY ST	NEW ULM	MN	56073
670254040	BLOEMKE/ROSS		PO BOX 404	WALNUT GROVE	MN	56180
670361020	BOETTGER/GREG & AMY		18270 OMEGA AVE	SPRINGFIELD	MN	56087
670243020	DAUER/FRED/JR		41600 190 ST	MORGAN	MN	56266
670252020	DAUER/RICHARD E		18640 OMEGA AVE	SPRINGFIELD	MN	56087
670264020	JENSEN/GLENN P & ANITA V		17040 OMEGA AVE	SPRINGFIELD	MN	56087
670362020	JENSEN/GRANT G/& LYNETTE L	HEIDERSCHEIDT-JENSEN	16839 OMEGA AVE	SPRINGFIELD	MN	56087
670264060	JENSEN/KAREN		16399 OMEGA AVE	SPRINGFIELD	MN	56087
670351020	KURITZ/KAREN/FAMILY TRUST	% KAREN KURITZ	2460 HALE AVE N	OAKDALE	MN	55128
670264030	LANDKAMMER/GERARD		16446 OCEAN AVE	SPRINGFIELD	MN	56087-3038
670261020	NELSON/ROGER H & CLARE ANN		17524 OMEGA AVE	SPRINGFIELD	MN	56087
670254060	PLATZ/KARA		39829 170 ST	SPRINGFIELD	MN	56087
670244020	SCHULTZ FAMILY LIMITED PARTNERSHIP		17929 CO HWY 13	SPRINGFIELD	MN	56087
670251020	WENISCH/CORY		20654 CO RD 5	SPRINGFIELD	MN	56087
	SUNDOWN TOWNSHIP BOARD OF SUPERVISORS	% JODY RYAN, CLERK	16738 MIDWAY AVE	SPRINGFIELD	MN	56087
	BOETTGER/BRENNEN		17680 CO RD 3	SPRINGFIELD	MN	56087
	SCHWARTZ FAMILY LLC	% JOHN SCHWARTZ	32296 190TH ST	SLEEPY EYE	MN	56085

APPLICANT

TO: Whom It May Concern

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

DATE: February 9th, 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 Brennen Boettger, 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 Sundown Township:

That part of the Northwest Quarter of Section 25, Township 110 North, Range 35 West, Redwood County, Minnesota, described as follows: Commencing at the North Quarter corner of said Section 25; thence South 89 degrees 08 minutes 51 seconds West, bearing based on Redwood County Coordinate System NAD83(11) on the north line of said Northwest Quarter of Section 25, a distance of 265.10 feet to the point of beginning; thence South 00 degrees 51 minutes 09 seconds East, a distance of 418.00 feet; thence South 89 degrees 08 minutes 51 seconds West, a distance of 464.00 feet; thence North 00 degrees 51 minutes 09 seconds West, a distance of 418.00 feet to the north line of said Northwest Quarter of Section 25; thence North 89 degrees 08 minutes 51 seconds East on said north line, a distance of 464.00 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 24th day of February, 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

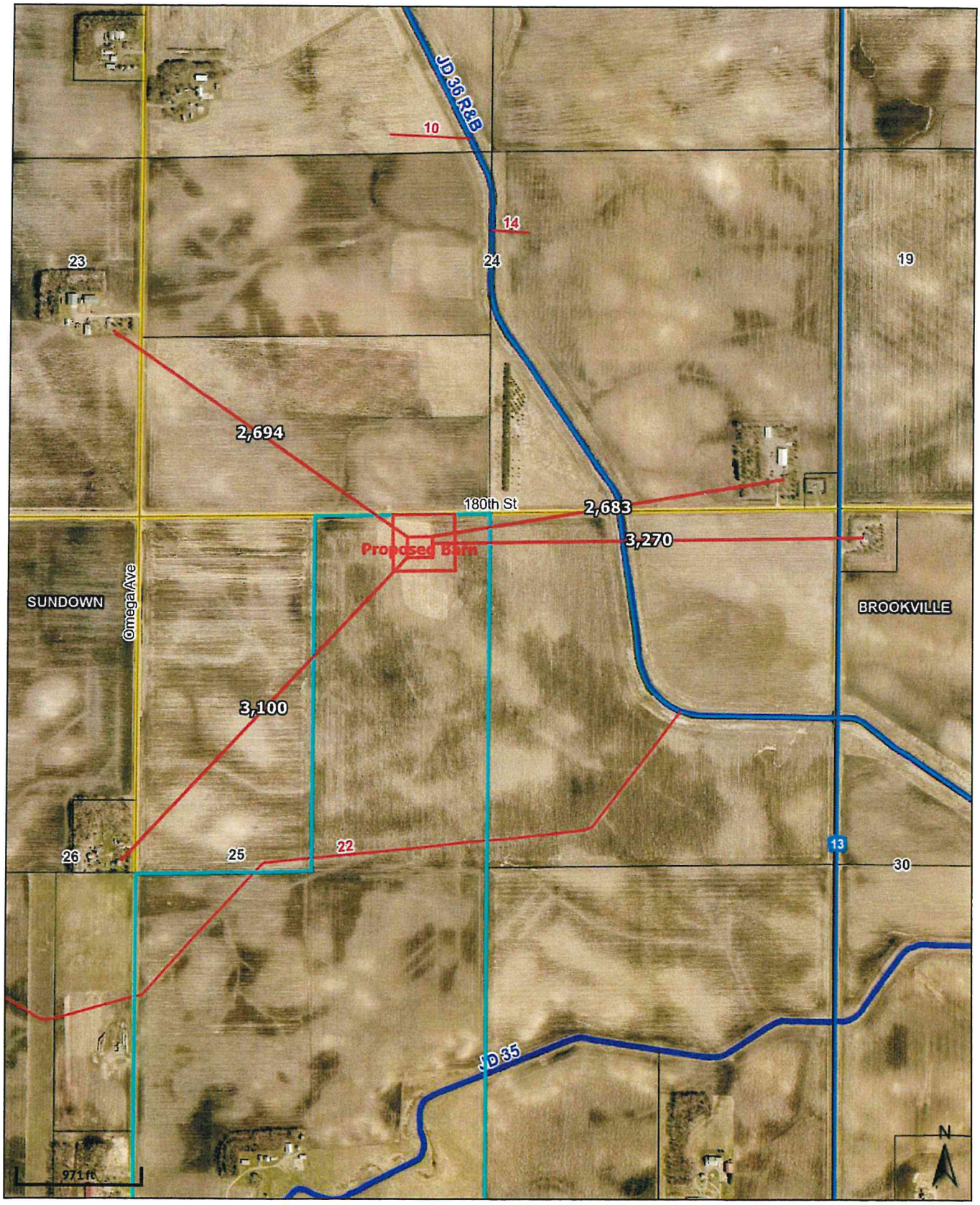
Selected Parcel(s)
Notification Area
Parcels
County Boundary
Municipal Boundaries
Sections
Roads

Parcel IDs: 67-025-2040

CUP Notification Area:
0.25 miles from selected parcel

0 1,500 3,000 Feet

Area Map


JD 36 R&B
10
14
23
24
19
2,694
180th St
2,683
Proposed Barn
3,270
SUNDOWN
Omega Ave
BROOKVILLE
3,100
26
25
22
13
30
JD 35
971ft
N

REDWOOD COUNTY PLANNING COMMISSION
Schwartz Family LLC
Animal Confinement Feedlot Conditional Use Permit
Application #5-26
February 24th, 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: _____