

To:Goodhue Co Planning Advisory CommissionFrom:Megan Smith, Land Use Management DirectorMtg. Date:April 21, 2025Report Date:April 14, 2025

### SUMMARY OF REQUEST:

The Commission will be hearing testimony and considering a request submitted by Bombay Dairy, 5492 County Road 30 Blvd, Kenyon MN, to construct a manure storage facility that will store over 500,000 gallons of manure. The proposed dimensions of the concrete pit are 150 feet by 250 feet and would store up to 3 million gallons of manure. The pit will be pumped in the fall of each year and spread onto land that has been approved for such application of manure.

The location of the manure storage facility will be at 44656 County 1 Blvd, Wanamingo, MN, located on tax parcel 44.028.1301, and legally described as: THE W1/2 OF SW1/4 OF SEC 28-110-17 & PT OF E1/2 OF SW1/4 COM AT NW COR, S ALNG W LINE 949.94FT TO POB, N48°18'23"E 86.39FT, S88°41'37"E, IN SECT-28 TWP-110 RANGE-01, for a total of approximately 81.57 acres.

The farm is registered for 770 animal units of a mature dairy cows, and 200 dairy heifers, for a total of 970 animal units. A CUP was approved in December of 1998 to exceed 500 animal units.

Note that a variance application is currently under review for not meeting the 91% odor offset. The code requires that new construction on existing feedlots shall meet a 91% odor annoyance free rating distance as determined by the OFFSET odor evaluation model.

### ATTACHMENTS:

- 1. Application Materials
  - a. Plans drawn by ProAg Engineering, Inc. Jackson MN.
  - b. Manure Application Information
- 2. Map of Area

### **APPLICATION INFORMATION:**

Applicant: Bombay Dairy; Wayne Lexvold Agent for Applicant Address of Zoning request: 44656 County 1 Blvd, Wanamingo, MN Zoning district: A1 Property Size: 82 acres Township Information: Wanamingo Township Parcel: 44.028.1301

### **Applicable Regulations:**

Goodhue County Zoning Ordinance <u>http://www.co.goodhue.mn.us/DocumentCenter/View/2428</u>: Article 13 Confined Feedlot Regulations Article 21 Agricultural Protection District Goodhue County Comprehensive Plan

### ANALYSIS:

The Goodhue County Zoning ordinance requires a conditional use permit for any farm that stores over 500,000 gallons of manure. In addition, the following requirements specifically replate to this request:

- Manure storage. Animal manure, when utilized as domestic fertilizer, shall not be stored for longer than one year and shall be applied at rates not exceeding local agricultural crop nutrient requirements except where allowed by permit. Local agricultural crop nutrient requirements can be obtained at local Natural Resources Conservation Services offices or local Minnesota Extension Service offices, (MPCA 7020).
- Animal Manure. Any animal manure not utilized as domestic fertilizer shall be treated or disposed of in accordance with applicable state rules (MPCA 7020).
- Owner's duties. The owner of any animal feedlot shall be responsible for the storage, transportation, and disposal of all animal manure generated in a manner consistent with the provisions herein (MPCA 7020).

### **Proposed Findings of Fact:**

- 1. The conversion of an earthen mound manure lagoon with a concrete one does not appear to impede the normal and orderly development and improvement of surrounding vacant property for uses predominant to the area.
- 2. The proposed use will comply with Goodhue Co Zoning Ordinance, Article 4, requirements to obtain a conditional use permit.
- 3. The proposed use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially diminish and impair property values within the immediate vicinity.
- 4. That the establishment of the use will not impede the normal and orderly development and improvement of surrounding vacant property for uses predominant to the area.
- 5. That adequate utilities, access roads, drainage and other necessary facilities have been or are being provided.
- 6. That adequate measures have been or will be taken to provide sufficient off-street parking and loading space to serve the proposed use.
- 7. The use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, not substantially diminish and impair property values within the immediate vicinity. (Article 4, Sec. 5, Subd. 1).

- 8. That adequate measures have been or will be taken to prevent or control offensive odor, fumes, dust, noise, vibration, so that none of these will constitute a nuisance, and to control lighted signs and other lights in such a manner that no disturbance to neighboring properties will result. (Article 4, Sec. 5, Subd. 1).
- 9. H. The feedlot is not in conflict with County's Comprehensive Land Use Plan.

### Proposed Conditions of Approval:

- 1. A building permit mut be approved for the new lagoon
- 2. The feedlot must comply with all necessary state and federal permits and licensing, including Compliance with Goodhue County Zoning Ordinance: Article 13 confined feedlot regulations, and Article 21, agricultural protection district,
- 3. The owners will cooperate with inspections of the facility in coordination with Land Use staff.

### Planning Advisory Commission Recommendation:

After holding a public hearing, and considering the application, the Planning Advisory Commission recommended the County Board adopted the staff report into the record, adopt the findings of fact, and **approve** the request from Bombay Dairy to construct a 3-million-gallon manure storage lagoon.

## RECEIVED

GOODHUE COUNTY CONDITIONA MARY TERIM USE PERMIT APPLICATION

1000-

Parcel # 4402 81301 Land Use Managements Permit# 225-0010	
PROPERTY OWNER INFORMATION	
Last Name Bombay Dairy First Email: bombay dairy 95 @ gmail.com Street Address 5497 du 30 Blud Phone	1
STACTY SE ISTU	
City Kenyon State MN Zip 55946 Attach Legal Description as Exhibit "A"	
Authorized Agent Wayne Lexvold Phone 507-251-8283	
Mailing Address of Landowner: 5492 Cty 30 Blud Kenyon MW 55946 Mailing Address of Agent: 5492 Cty 30 Blud Kenyon MN 55946	
Mailing Address of Agent: 5492 Cty 30 Blud Kenyon MN 55946 PROJECT INFORMATION	
Site Address (if different than above): 44656 (ty / Blvd Wanamingo MV 55983	
Lot Size Structure Dimensions (if applicable) 150 × Miler 250 × 12 (ement What is the conditional/interim use permit request for? Construct manure storage for over 500,000 gallons Written justification for request including discussion of how any potential conflicts with existing nearby land uses will be minimized Odor offset did not meet 91% we are building a manure pit large enough to have a full year of storage. Pumping will take 3-4 days per year.	
DISCLAIMER AND PROPERTY OWNER SIGNATURE	
Signature of Landowner: Wyr Luhn Date 3-15-25	MAR 2 6 2025
TOWNSHIP INFORMATION Township Zoning Permit Attached?	5
By signing this form, the Township acknowledges being made aware of the request stated above. In no way does signing this application indicate the Township's official approval or denial of the request. Signature Town Shawa. Title (HAIR Date 3 - 20 - 25) Comments:	
COUNTY SECTION COUNTY FEE \$400 RECEIPT # 8612 DATE PAID 3/26/25	
Applicant requests a CUP/IUP pursuant to ArticleSectionSubdivisionof the Goodhue County Zoning Ordinance What is the formal wording of the request?	
Shoreland Lake/Stream Name Zoning District	
Date Received Date of Public Hearing DNR Notice City Notice	
Action Taken:Approve Deny Conditions:	
County	

NECELVED

Land Use Management

### SUMMARY OF PLANNING ADVISORY COMMISSION PROCEDURES

Step 1. Request application and discuss circumstances with staff.

**Step 2.** File application by the above-noted deadline this must include <u>all</u> of the following:

- a. A completed application form with the required filing fee;
- b. A full, recordable property description (Attached as exhibit "A")
- c. A complete site sketch listing all applicable distances, setbacks or other necessary measurements;
- d. When the septic system of the parcel on which the request was made is located within the shoreland overlay district, a septic system certification must be completed. (Note: Noncompliant septic systems are required to be upgraded regardless of the outcome of proceedings).
- e. Township Signature
- f. Other supporting documentation as required by staff.

Step 3. Process (completed by Land Use Management Staff):

- a. Public hearing notice sent to the County newspaper for publication
- b. Notification of property owners within 1/4 mile of affected property (or nearest 10);
- c. Staff review application and generate staff report
- d. Mail information packets to the members of the Board; and
- e. Mail agenda and staff report to the applicant.

**Step 4.** The Planning Advisory Commission (PAC) meetings are held the third Monday of each month unless otherwise stated.

- a. The PAC will make a recommendation for the Board of Commissioners.
- b. It is recommended that the applicant(s) or a representative attend the meeting to answer any questions the Board may have.

Step 5. Staff will forward the information onto the Board of Commissioners.

- a. The information will usually be placed on the first meeting of the month after the PAC made a recommendation (see attached calendar)
- b. It is recommended that the applicant(s) or a representative attend the meeting to answer any questions the Board may have.



GOODHUE COUNTY CONDITIONAL/INTERIM USE PERMIT APPLICATION

## PROJECT SUMMARY

Please provide answers to the following questions in the spaces below. If additional space is needed, you may provide an attached document.

1. Description of purpose and planned scope of operations (including retail/wholesale activities).

earthen manure lagoon with a Ceplacing a are produced. to store one years of manure compatione, Lt used ne We will hant one time a year to minimize odor and haut in good woather. 2. Planned use of existing buildings and proposed new structures associated with the proposal. buildings to house existing d lies will 1150 100 cous and

- 3. Proposed number of non-resident employees. Right now only family labor works at this facility. At some point we may look to hire someone to help
- 4. Proposed hours of operation (time of day, days of the week, time of year) including special events not within the normal operating schedule.

the pit We Dan hauling trom there working about ormali Sompone 15 5 hours per day

5. Planned maximum capacity/occupancy. 3,000,000 gallons

6. Traffic generation and congestion, loading and unloading areas, and site access some traffic on he there 11:00 Dumping inci and USP drag elds We licu C Most 050 are

7. Off-street parking provisions (number of spaces, location, and surface materials).

none

- 8. Proposed solid waste disposal provisions. <u>There will be a dumpster available</u> <u>during construction of pit</u>
- 9. Proposed sanitary sewage disposal systems, potable water systems, and utility services.

none



10. Existing and proposed exterior lighting.

Yard lights. There are

11. Existing and proposed exterior signage.

there 11:01 the safety around Dit. bp Signs

12. Existing and proposed exterior storage.

Exterior storage is for hay bales.

13. Proposed safety and security measures.

signs around the pit. there will tence be CINC safet

14. Adequacy of accessibility for emergency services to the site.

There are two driveways to access the site.

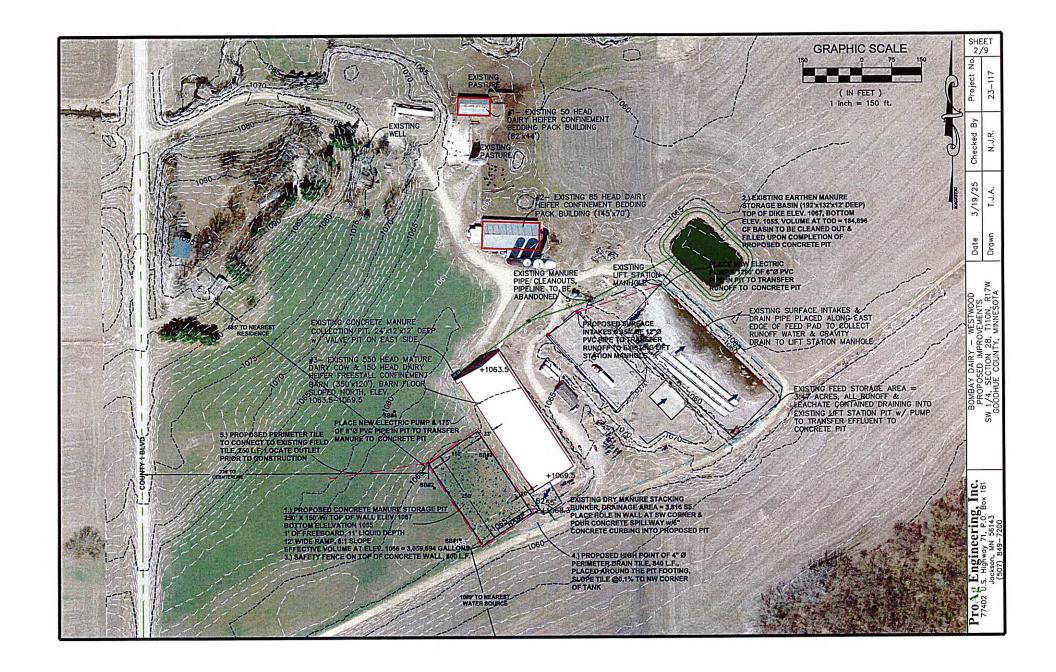
15. Potential for generation of noise, odor, or dust and proposed mitigation measures. potentral There is for odor during when WP are 3-4 pumping manure 16. Anticipated landscaping, grading, excavation, filling, and vegetation removal activities. We the 66 grading now Storage area grass 17. Existing and proposed surface-water drainage provisions. Surface water Will. trom adjacent CAMPOT beatile drain into pit There 1100 around Dit,

18. Description of food and liquor preparation, serving, and handling provisions.

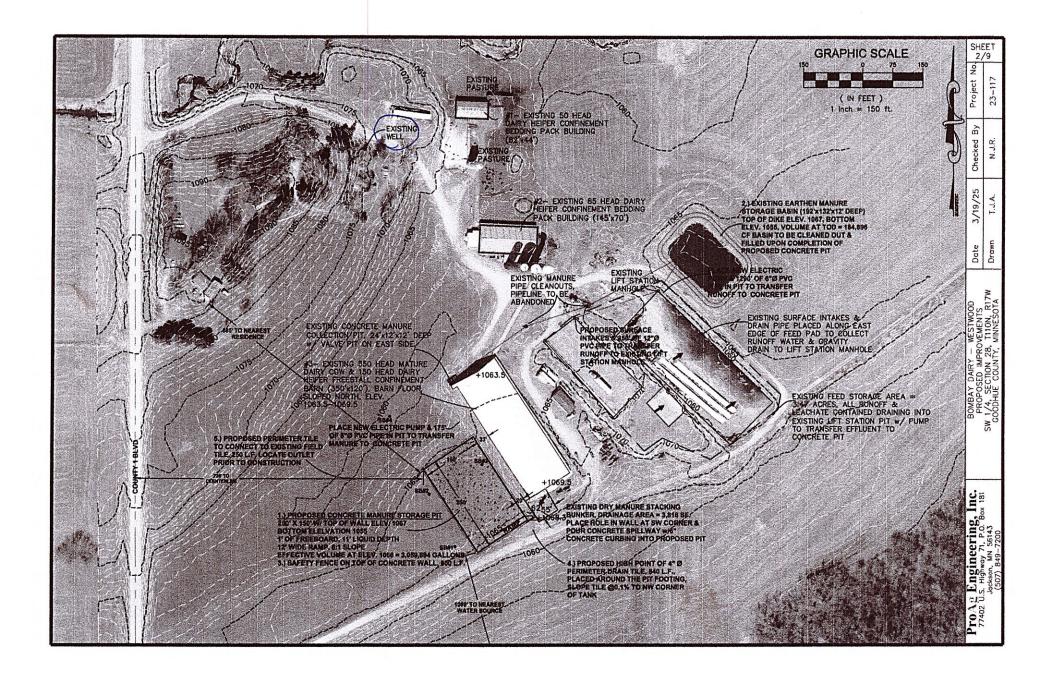
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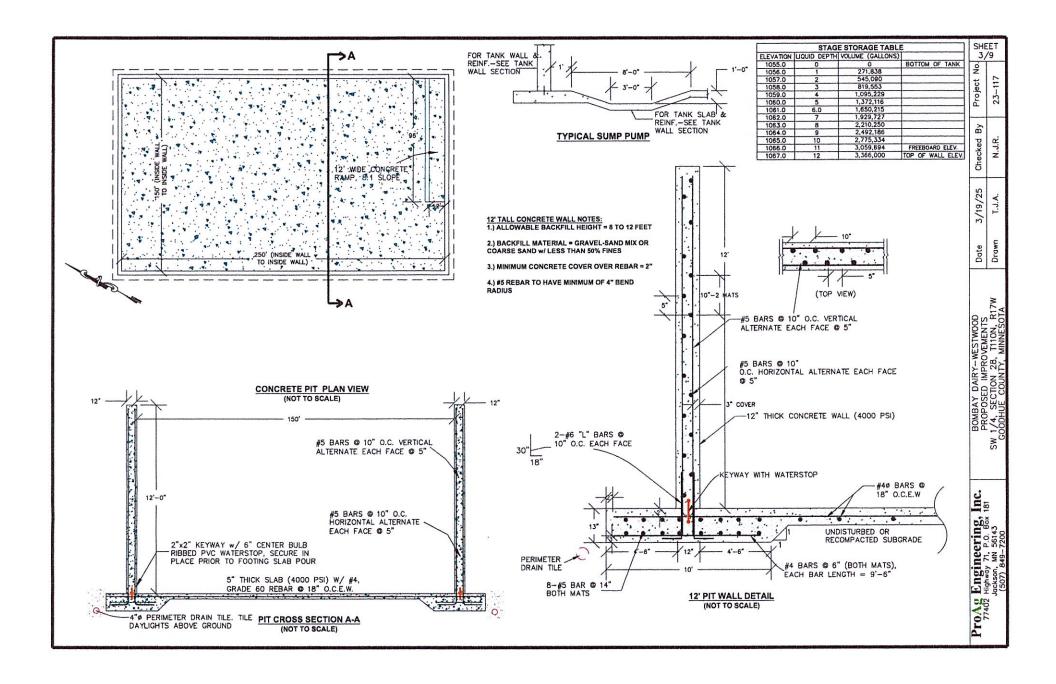
19. Provide any other such information you feel is essential to the review of your proposal. 010 building the Dit to be good neighbors and 9000 stewards of the Tand the WP want next generation to continue farming. We are a family to be able owned business and agriculture is important to our community.

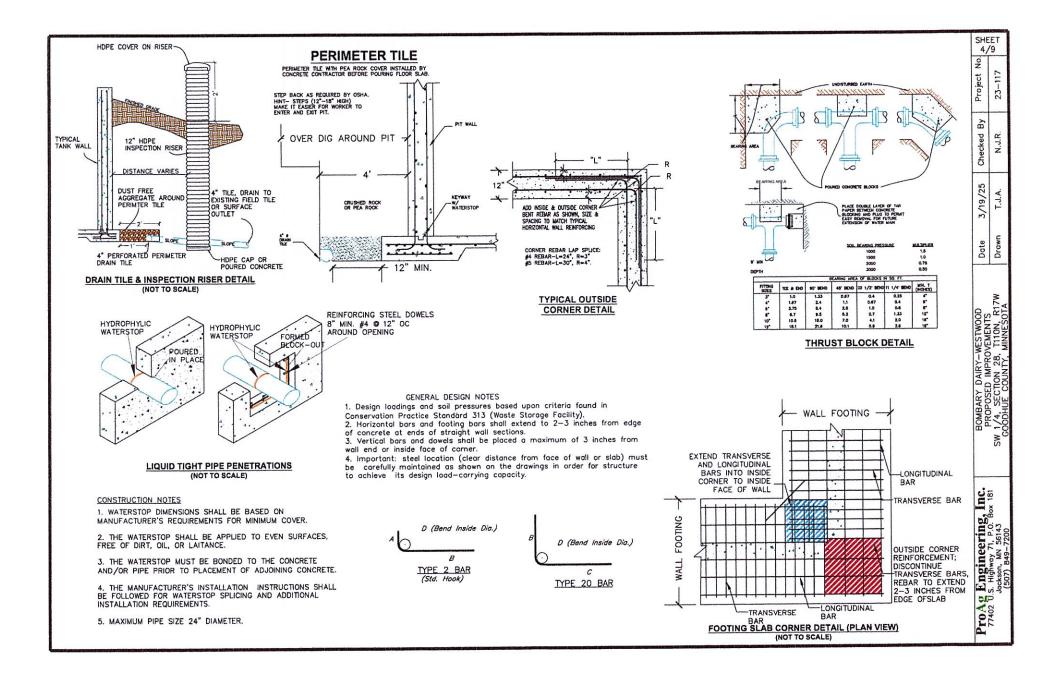


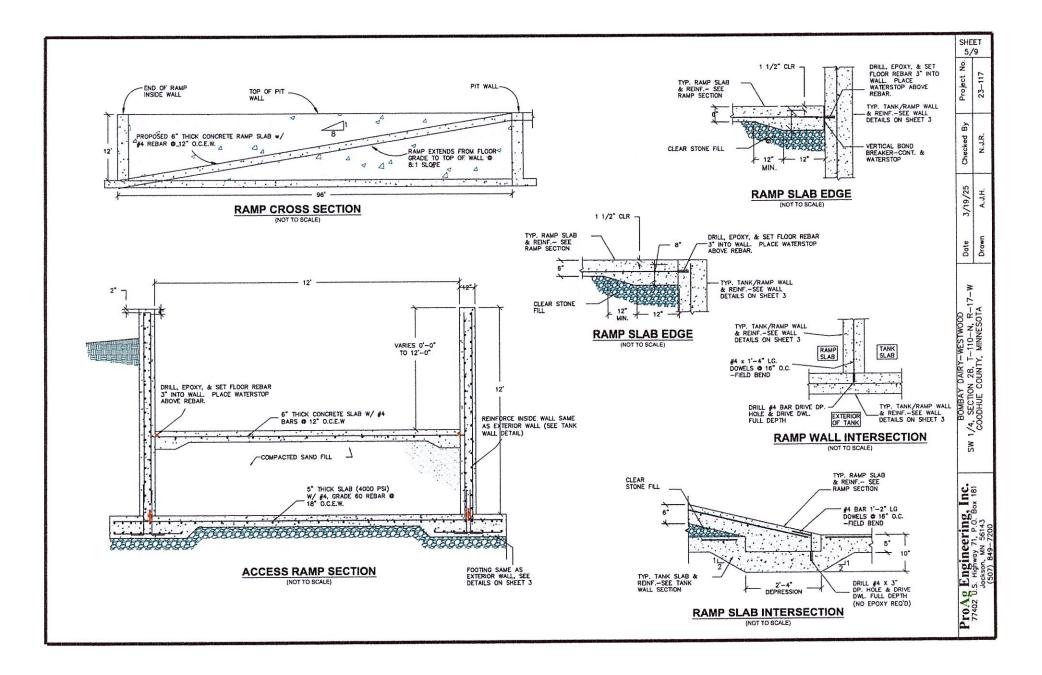


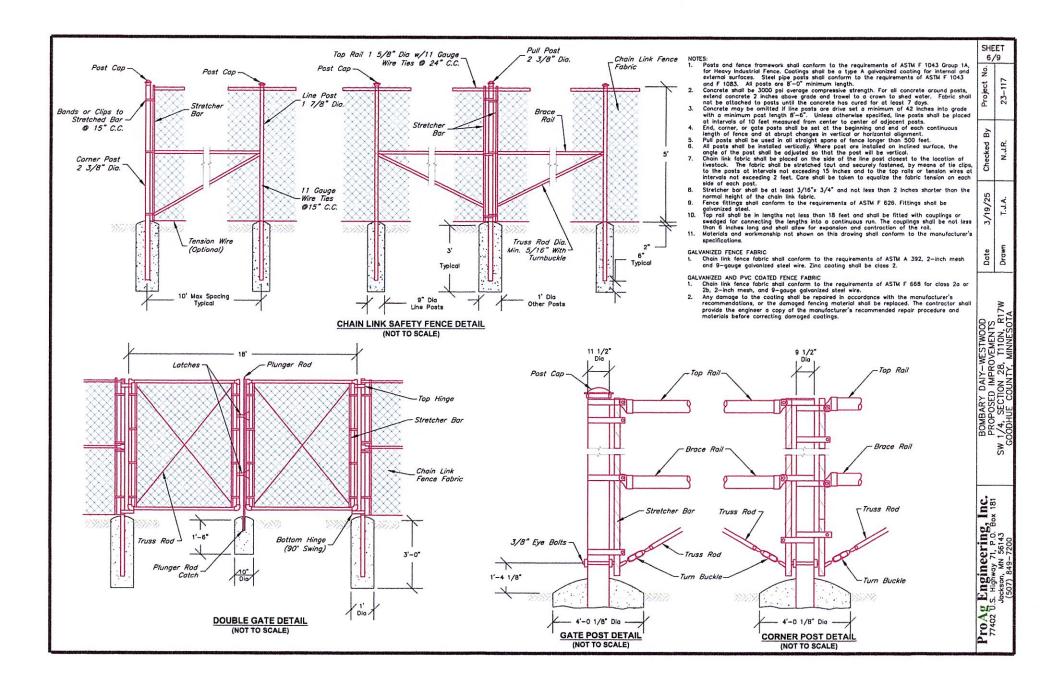
HEET 1-	SITE MAP ROAD MAP	SHEET 8-	FLATWORK DETAILS CURBING DETAILS	I hereby certify that this engineering document was prepared by me or	SHEE 1/9
HEET 2-	SITE PLAN	SHEET 9-	CONCRETE AND STRUCTURAL NOTES		roject N
HEET 3-	CONCRETE PIT PLAN VIEW CROSS SECTION 12' PIT WALL DETAIL STORAGE VOLUMES		CONSTRUCTION JOINT DETAILS	BOWE Cicense number 46735 My license renewal date is June 30, 2026	By P
HEET 4-	PERIMETER TILE & INSPECTION R PIPE PENETRATION DETAILS TYPICAL CORNER DETAIL	RISER DETAIL		-	Š
HEET 5-	RAMP DETAILS RAMP CROSS-SECTIONS				3/19/25
HEET 6-	SAFETY FENCE DETAIL				
HEET 7-	FLOOR PLAN				Date
	NTY 1 BLVD	SITE			PROPOSED IMPROVEMENTS SW1/4, SECTION 28, T110N, R17W
1st	COUNT	2000			Box 181

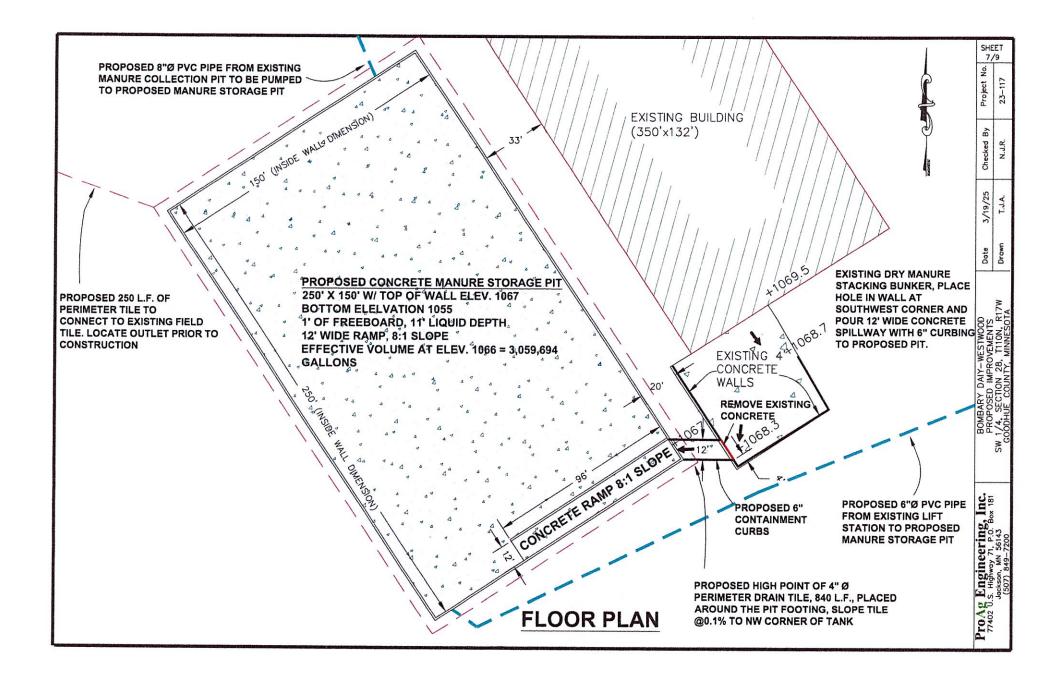


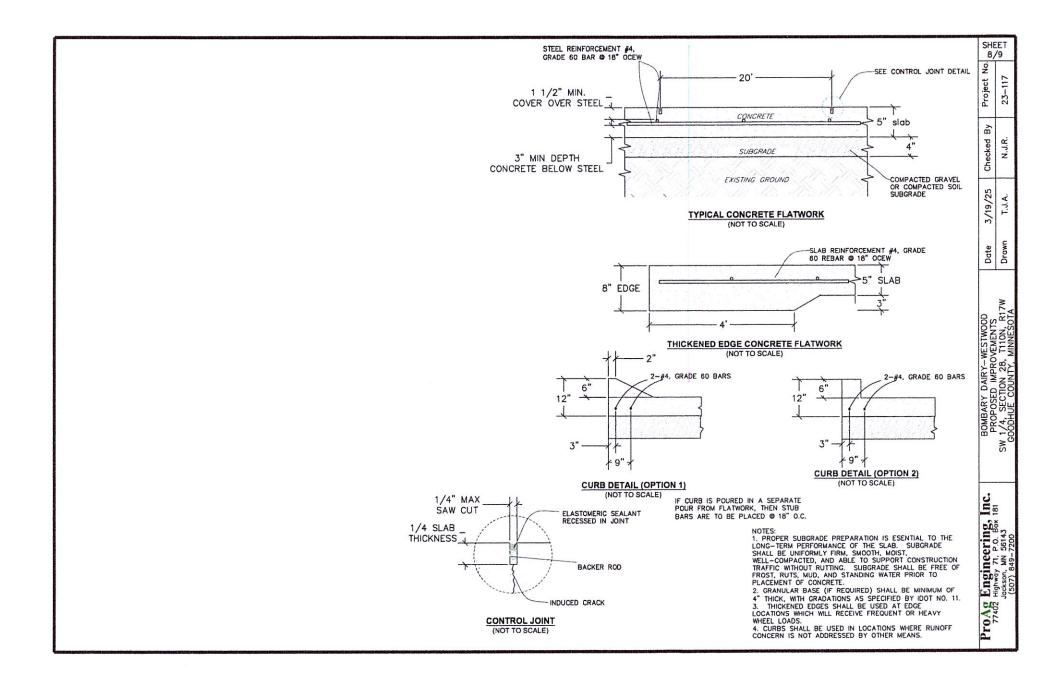


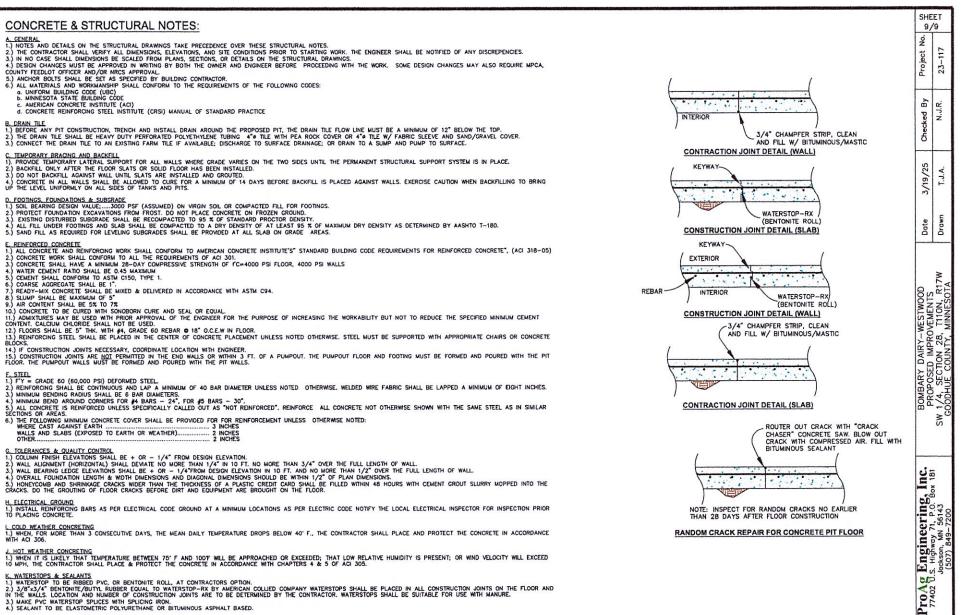




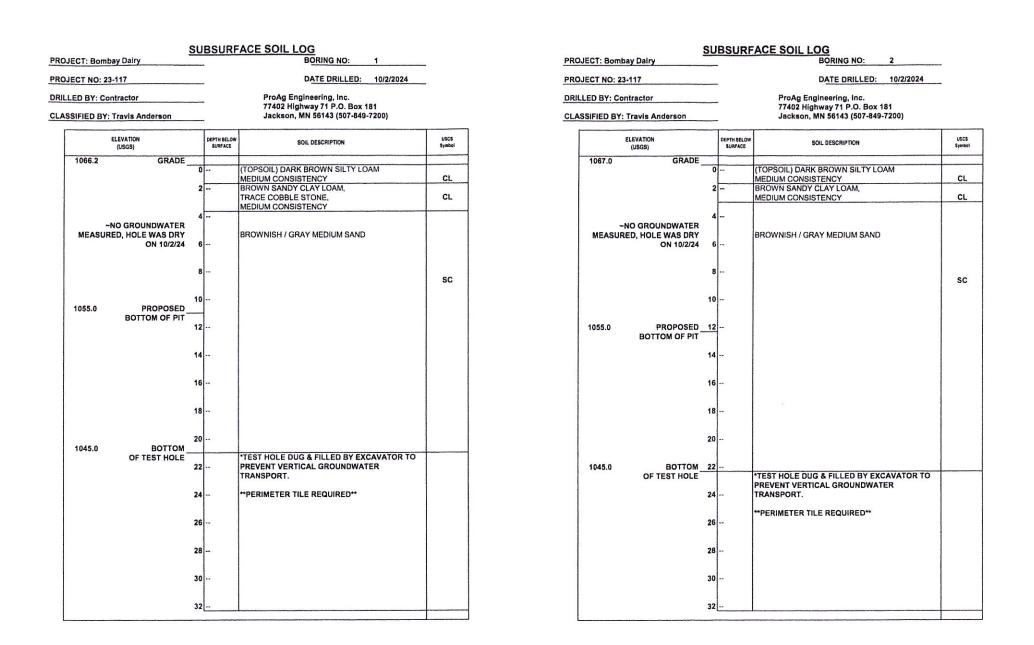


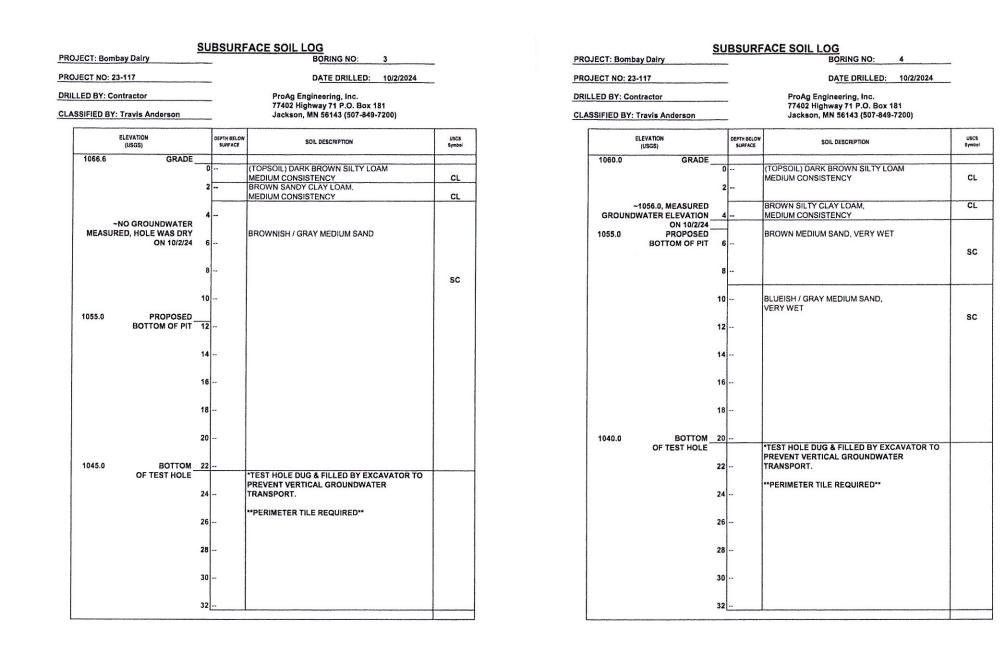




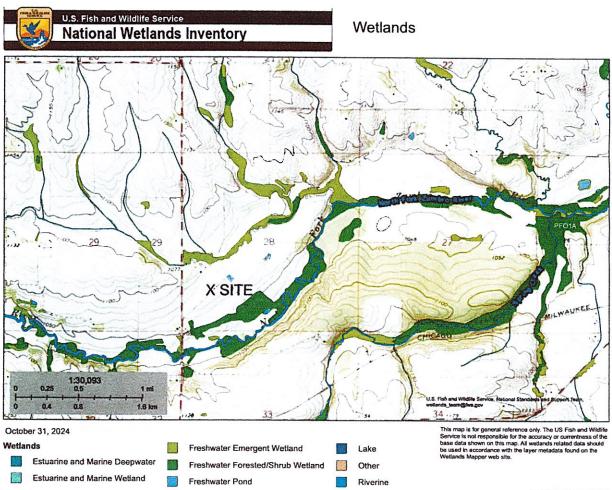


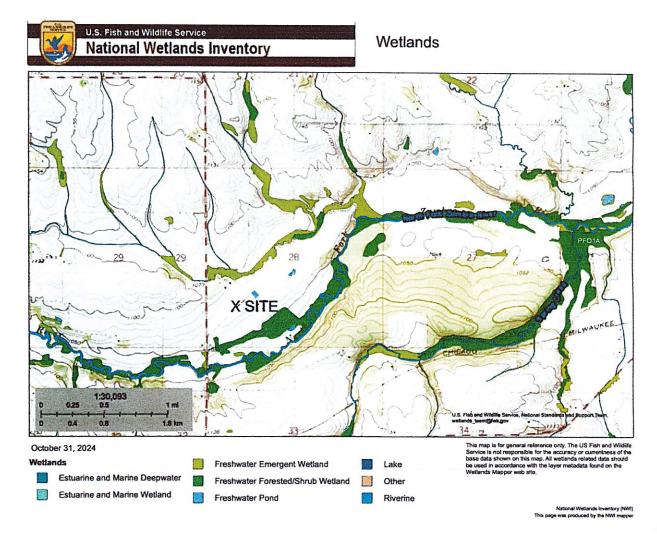
3.) MAKE PYC WATERSTOP SPLICES WITH SPLICING IRON. 4.) SEALANT TO BE ELASTOMETRIC POLYURETHANE OR BITUMINOUS ASPHALT BASED.





Wetlands Freshwater Emergent Wetland Lake Estuarine and Marine Deepwater Freshwater Forested/Shrub Wetland Other (Cel Estuarine and Marine Wetland Freshwater Pond Riverine National Wellands Inventory (NWI) This page was produced by the NWI mapper

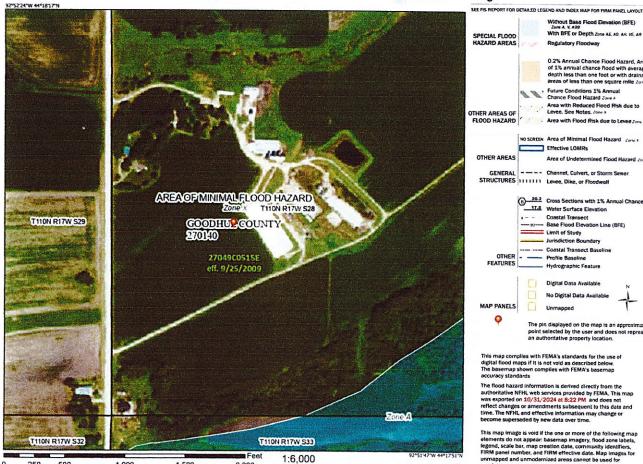


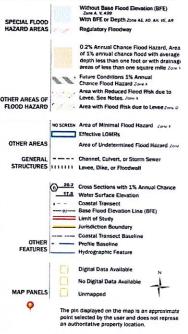


## National Flood Hazard Layer FIRMette



Legend





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

accurve, samearca The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 10/31/2024 at 8:22 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective hoformation 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 labets, legind, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images tor unmapped and unmodernized areas cannot be used for regulatory purposes.

0 250 500 1,000 1,500 2,000 .....

### **APPENDIX C**

### Karst Feature Inventory Reporting Form For a Proposed Liquid Manure Storage Area (LMSA)

The purpose of this form is to provide documentation regarding all karst features identified within ½ mile from the facility. Additional follow-up inspections may be needed by qualified individuals to assess potential karst features. Submit this form and required map(s) along with your plans and specifications for the LMSA.

#### Proposed LMSA Location

County: Goodhie	Township: T-110-N	R-17-W Sect.	28 x Sect .: SWK
Facility Owner Name: Banbary	Dairy-Westweed	Phone: (	)
Inspector Information			
Name: Trais Anderson	-	Date of Field Inspection:	10/2/24
Company/Organization: Pro Hg	Engineenry	Phone:	1507 849-7700
Field Conditions (snow cover, vegetation, et	.): open fields	fields were he	protect

#### KARST FEATURE INVENTORY DOCUMENTATION

The inspector must review existing map resources for all land within ½ mile of the proposed site and must also conduct a visual on-site inspection of the land within 1,000 feet of the proposed site, traversing the land closely enough to identify small sinkholes or other karst features. The following documentation is required.

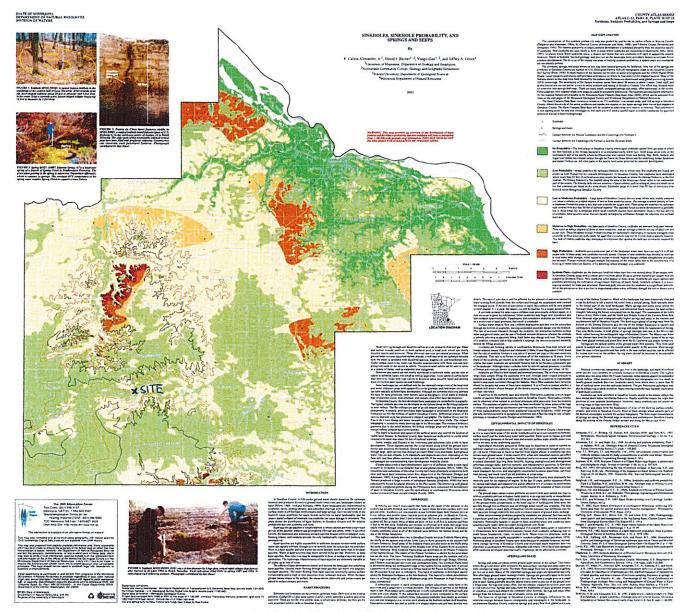
- 1. Where sinkhole probability maps exist, attach a copy of the map showing the location of the LMSA and all sinkholes within ½ mile.
- Attach a copy of an aerial photograph showing the location of the LMSA and all karst features within ½ mile. Number each Karst feature on the aerial photograph and provide a description in the table below:

	ture Sketch ID Description	Source of information	Feature size and description	Distance from LMSA & Other information
Ex.	Depression in the landscape	Walk-over survey	12 ft. in diameter and 1-2 ft. deep	Located 500 ft. from LMSA
#1	none			
#2				
#3				
#4				
#5				
#6				P
#7				
#8				+

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February 2017| wq-f8-04





GEOLOGIC ATLAS OF GOODHUE COUNTY, MINNESOTA



TO: OWNER

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

- <u>Distribute only complete sets</u> 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.
- <u>Ask your feedlot officer to send a copy of your feedlot permit to ProAg Engineering, Inc.</u>. We need this so we know who issued the permit and where reports should be sent.
- Each Contract for construction of the liquid manure storage (Concrete, tilling 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. <u>A Pre-Construction Meeting shall be held before you start construction</u>. 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. <u>Pictures</u> should be taken as the work progresses. This is good protection for you because if problems develop later, you will have a record of what was done. If the Engineer finds problems during inspection, he may request copies of the pictures. Close up pictures showing details are more important than panoramic views. Suggest using single use or digital cameras.
- MPCA requires that the design engineer submit a written construction report. We cannot do our final
  inspection and impact hammer test until the concrete is at least 28 days old and all accessory details
  shown on plans and specs are completed. Then allow at least 2 weeks for us to inspect and write
  our report.
- 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)



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:	DA	TE:	
LOCATION:1/4, SECTION,	TWP	CTY	
OWNER:	PHON	E:	
Owner's Representative	PHONE:		(to
OWNER: Owner's Representative conduct weekly inspections for SWPPP and no		t Officer.)	
GENERAL CONTRACTOR			
Contact	PHONE	l:	
EXCAVATION CONTRACTOR			
Contact Date to start excavation work	PHONE	i:	
Date to start excavation work			
CONCRETE CONTRACTOR			
Contact Date to start concrete work	mon	**	
CONCRETE READY MIX			
Contact	PHONE:	·	
PRE-CAST CONCRETE			
Contact	PHONE:		
GROUTS, BEAMS AND SLATS			
Contact	PHONE:	· · · · · · · · · · · · · · · · · · ·	
FEEDLOT OFFICER		·	
ELECTRICAL INSPECTOR	PHONE:		
	FIGAL.		
ENGINEER	PHONE	:	

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

25) Contractor sign MPCA Construction Report

#### SPECIFICATIONS for Concrete Lined Manure Storage Areas

#### 01001 QUALITY ASSURANCE AND CONTROL PLAN

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

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

- 1. Consult the feedlot permit for required submittals, notifications and approvals.
- 2. Arrange for pre-construction meeting with engineer, owner and contractors.
- 3. Notify engineer, 3 days before starting construction.
- 4. Notify permitting agency (MPCA or County) 3 days before starting construction.
- B. DURING CONSTRUCTION, Concrete Contractor shall:
  - 1. Notify Engineer, minimum 4 hrs before each concrete pour.
  - 2. Wait for Engineer's inspection before pouring concrete.
  - 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.
  - 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).
  - Engineer inspect grade and placement of reinforcing steel. Steel shall be supported on chairs and tied.
  - 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.
  - 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.
  - 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.

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#### SPECIFICATIONS for Concrete Lined Manure Storage Areas

- F. UPON COMPLETION, Owner shall notify Engineer when all of these items are done.
  - 1. Backfilling and finish grading completed.
  - 2. Pumpout covers and safety signs installed.
  - 3. Concrete Contractor sign MPCA Construction Inspection Form.
- G. ENGINEER shall conduct inspections as specified in Section 03001.B. and submit construction report to Owner and Permitting agency.

#### 01301 DESIGN CHANGES

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

#### 01401 SITE SURVEY

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

#### 01501 SUBSURFACE INFORMATION

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

#### 02101 EARTHWORK

- A. This section applies to earthwork (excavation and backfill) for concrete lined manure storage pits and tanks.
- B. Remove one foot (1') of topsoil under all concrete lined manure tanks. Save topsoil for finish grading.
- C. Removal of water: All excavations, fill, grading and embankments shall be maintained in a well drained condition at all times. The Contractor shall have temporary pumping equipment on site to remove water from trenches and excavations until the perimeter tile system is working.
- D. Any over-excavation for concrete footings and slabs on grade shall be backfilled with compacted sand/gravel.
- E. <u>WARNING Engineer must inspect outside of wall and tile and give approval before backfilling.</u> See Section 01001.
- F. CLEAN BACKFILL TRENCH. All organic material, cardboard, wood, paper, straw, etc. shall be removed from trench before backfilling. These materials will decay and contaminate the perimeter tile system.

#### SPECIFICATIONS for Concrete Lined Manure Storage Areas

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

#### 02401 PERIMETER TILE SYSTEM

MPCA Rules: Where a perimeter tile system is required to control the elevation of the water table or saturated solls, 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 bypass 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.

#### SPECIFICATIONS for Concrete Lined Manure Storage Areas

#### 02601 SEWER SYSTEM

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

#### 02701 FENCE AND GATES

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

#### 02801 SIGNS

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

#### 02901 OTHER WORK

The Owner shall be responsible for putting child-proof fences around open top tanks and childproof 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 th	e edge(s) of slabs that support f	arrowing 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

#### SPECIFICATIONS for Concrete Lined Manure Storage Areas

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

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

Concrete 28 day compres	ssive strenth, fc,psi	Aggregate, max.	Fibermesh
Footings & Floors	4,000	2"	none
Walls	4,000	1.5"	none
Columns	4,000	1.5"	none
Slump	3" - 6	5"	
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 <u>calcium chloride shall not be</u> used.

#### B. INSPECTIONS AND TESTING.

- Inspection before each concrete pour shall include evaluation of subgrade, forms, waterstop, placement and grade of reinforcing steel.
- 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.
- 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

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

#### SPECIFICATIONS for Concrete Lined Manure Storage Areas

Rods through construction joints 30" 36"

- F. Steel reinforcement shall be tied and supported on chairs, bolsters, spacers and other devices. Dowels and rods extending through construction joints shall be secured in positions against displacement before concrete is placed and shall be cleaned before subsequent pouring.
- G. Preparation of Forms and Subgrade: Prior to placement of concrete, the forms and subgrade shall be free of wood chips, sawdust, debris, standing water, ice, snow, extraneous oil, mortar and other harmful substances or coatings. Placement of concrete on mud, dried earth, uncompacted fill or frozen subgrade will not be permitted.
- H. Excavations shall be made to the dimensions and elevations indicated on the drawings. Should excavation through error be carried to a greater depth or size than indicated or required, such additional depth or size shall be filled with concrete at the CONTRACTOR'S EXPENSE.
- I. Tolerances: Elevations of floor slabs, top of walls, slat ledges, beam pockets and top of columns ± 1/4<sup>\*</sup>. Horizontal length and width of top of wall, location of beam pockets and columns ± 1/2<sup>\*</sup>. Straightness of top of wall ± 1/4<sup>\*</sup>. Anchor bolt spacing ± 1<sup>\*</sup>, centered in stem wall ± 1/2<sup>\*</sup>. 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 pil is constructed and prior to its use or during non-use, the concrete floor and subgrade must be protected from freezing. If the pil is empty when the ground surface around the pil begins to freeze, a minimum liquid depth of 2 feet must be added to the pil to prevent freezing the subgrade below the floor. If the barn and pil 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 added to the pil 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 pil instead of placing or leaving additional liquid in the pil.

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#### STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

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

#### Description of the site:

The site is a dairy operation. The project consists of construction of a manure storage 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.
- 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.
- Temporary stockpiles shall have slit 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.
- 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.
- 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.
- 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.
- If sediment escapes the site, off-site accumulations must be removed in a manner and frequency sufficient to minimize off-site impacts.

Assignment of Responsibilities for Execution of the SWPPP

#### STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

- 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.
- Owner shall inspect all BMP's weekly and within <u>24 hours after each rain event</u> of 1/2" or more in 24 hours and supervise proper maintenance of erosion and sediment control practices.
- 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.
- 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	Roadsic	le mix.
---------	---------	---------

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 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:

- 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.
- Childproof covers must be placed upon the pumpouts. Open pumpouts should never be left unattended.
- 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 selfcontained 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.
- 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.
  - 1

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

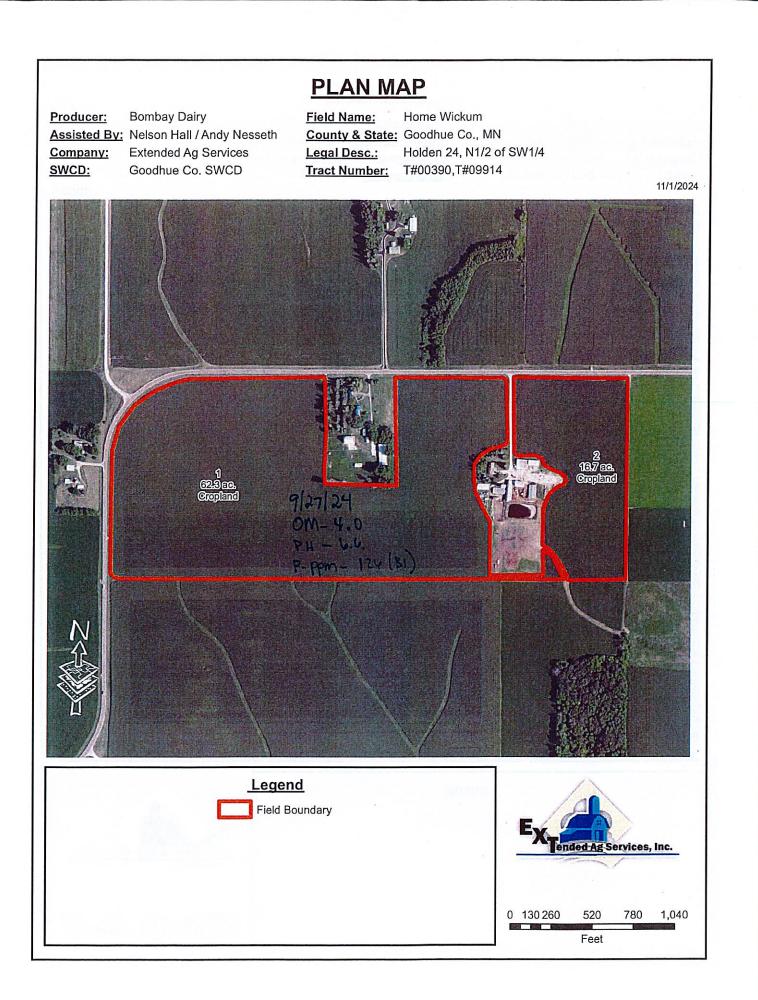
- The Owner shall contract with an independent laboratory to collect and analyze the samples. The laboratory must be certified. The laboratory report shall include: Chain of custody record, date, parameter, method used, results, units.
- 2. The water quality parameters to be monitored are:

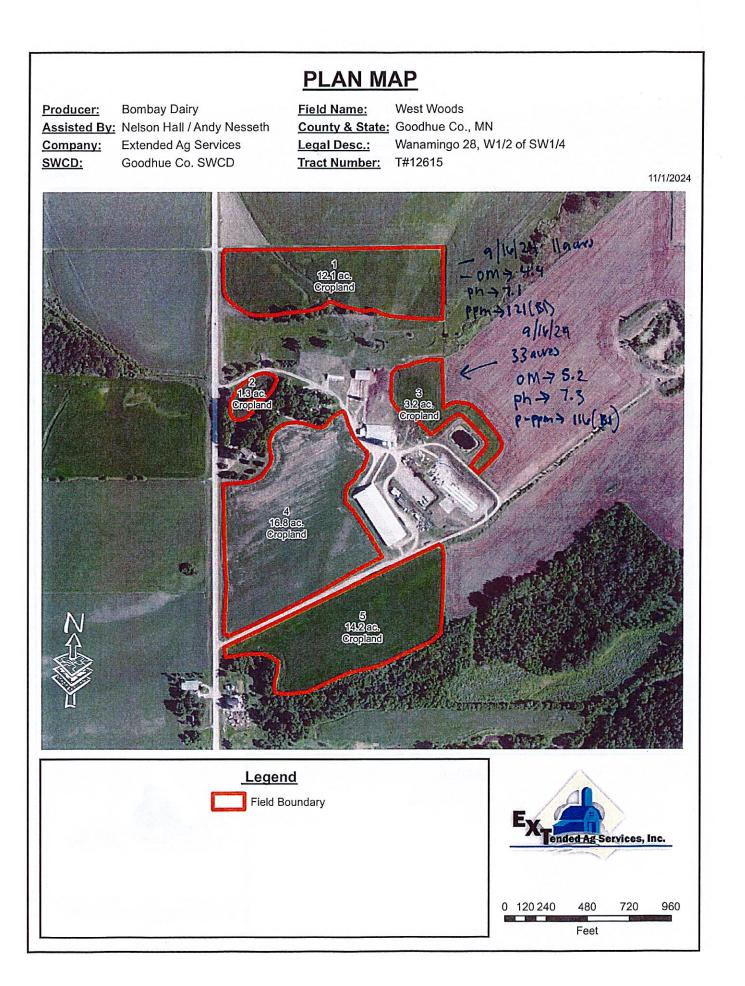
Total Kieldahl Nitrogen	Nitrate Nitrogen
Nitrite Nitrogen	Ammonium Nitrogen
Dissolved Oxygen	Chloride
Sulfate	Total Phosphorus
Fecal Coliform	pH
Temperature	Specific Conductivity
Flow (as determined by tim	e to fill 5 gallon pail)

#### 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.





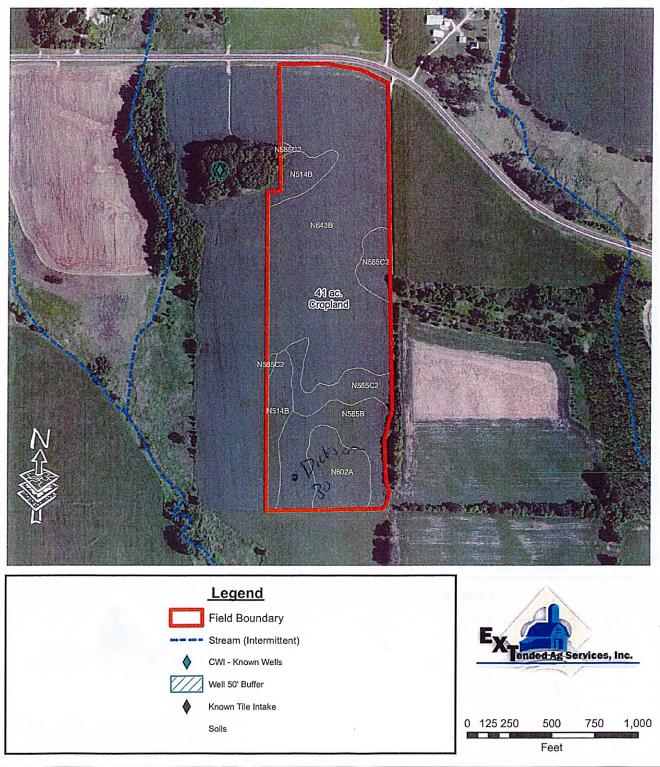
# **TRANSFER MAP**

Producer: Company: SWCD:

Bombay Dairy Assisted By: Nelson Hall / Andy Nesseth Extended Ag Services Goodhue Co. SWCD

Field Name: TRANSFER (Nystuen) County & State: Goodhue Co., MN Legal Desc.: zWanamingo 21, E1/4 of SW1/4 Tract Number:

11/1/2024

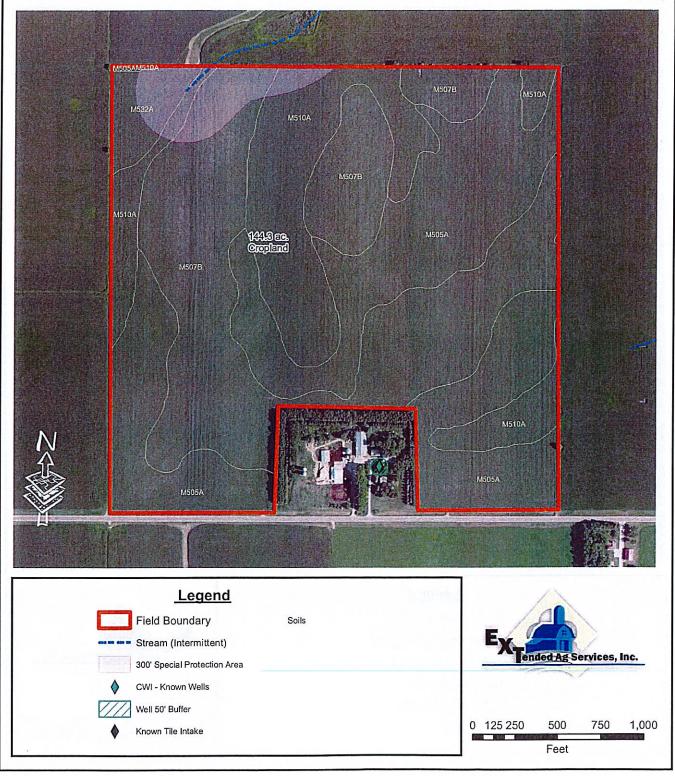


# TRANSFER MAP

Producer:Bombay DairyFAssisted By:Nelson Hall / Andy NessethGCompany:Extended Ag ServicesLSWCD:Goodhue Co. SWCDG

Field Name:TRANSFER (Nystuen)County & State:Goodhue Co., MNLegal Desc.:zCherry Grove 6, Mid1/4 of S1/2Tract Number:Field State

11/1/2024



# TRANSFER MAP

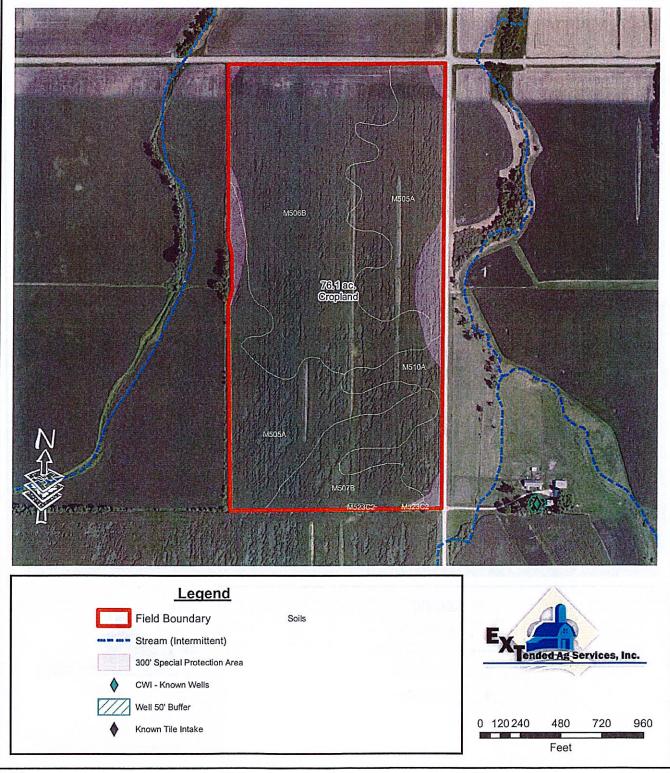
Producer: Company: SWCD:

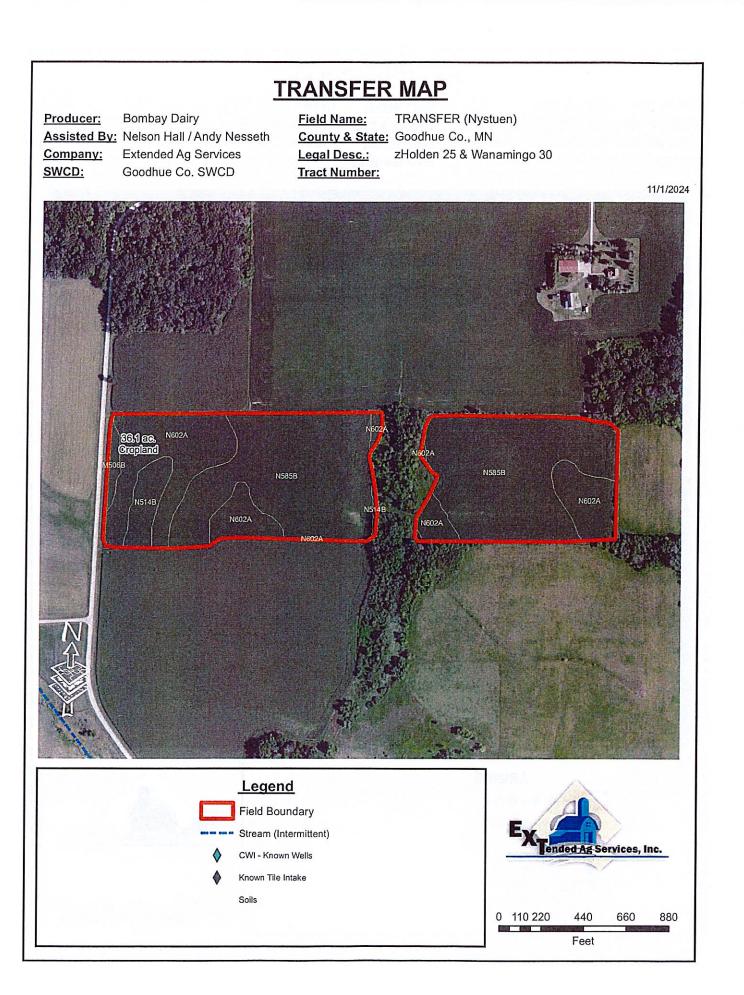
Bombay Dairy Assisted By: Nelson Hall / Andy Nesseth Extended Ag Services Goodhue Co. SWCD

Field Name: Legal Desc.: Tract Number:

TRANSFER (Nystuen) County & State: Goodhue Co., MN zHolden 20, E1/2 of NE1/4

11/1/2024





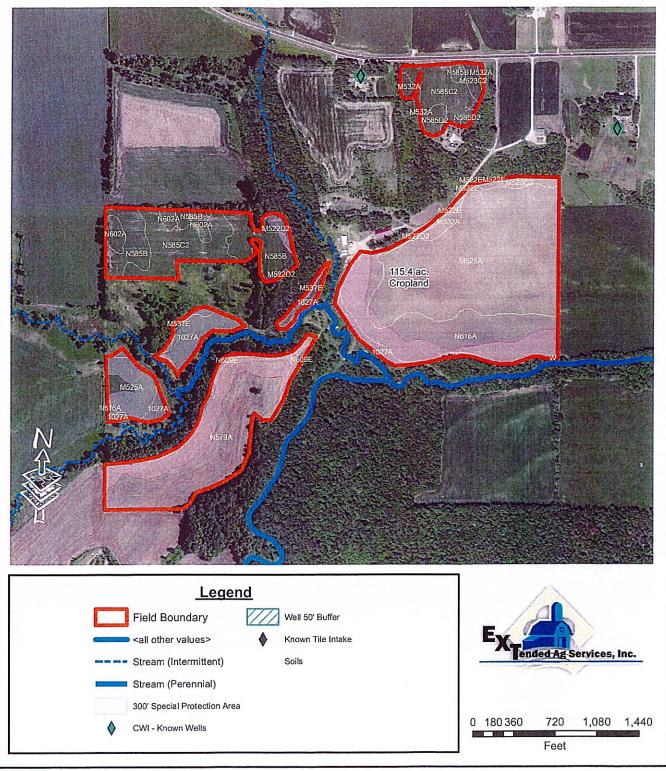
### TRANSFER MAP

Producer: Company: SWCD:

Bombay Dairy Assisted By: Nelson Hall / Andy Nesseth Extended Ag Services Goodhue Co. SWCD

TRANSFER (Fitzgerald) Field Name: County & State: Goodhue Co., MN zWanamingo 22, 27, 28 Legal Desc.: Tract Number:

11/1/2024



U.S. Department of Agriculture Natural Resources Conservation Service MN-CPA-37 August 2017

### USDA-NRCS Manure Ownership Transfer Agreement

Produce	er/USDA-NRCS Contract Holder	Bombay Dairy	
Address	5492 County 30 Boulevard Kenyon, MN 55946	Phone 507-330-6237 - 50 7 251 828 3	

Manure Ownership Transfer Agreements are required when the feedlot owner/operator applies manure from their facility onto land that they:

· Do not own, lease, or rent and

ž

:

Do not have control over crop and nutrient planning decisions

Livestock producers receiving financial assistance from NRCS with a conservation practice that requires development of a Nutrient Management plan or Comprehensive Nutrient Management Plan (CNMP) must manage or have their manufe managed according to NRCS requirements (same as state law). This requirement applies to all land where their manure is applied; regardless of land ownership, manure transfer. or sale to another.

Manure Source to be Transferred Bombar	Dairy	West 4	voods FAR.	m
When Transferred (Months) 2				
Volume Transferred	14 - 28			
USDA-NRCS Contract Holder Signature Bombar Dairy Wame Se	nol	Da	te	
	/			

#### **Fields to Receive Manure**

Acres Available for Land Application		
Map(s) attached with areas to receive manure identified		
Are these fields also receiving manure from another source?	No	
This agreement is valid through:	2029	

The undersigned manure recipient agrees to allow manure from the above source to be applied to the fields on the attached map(s) and will manage these manure applications according to NRCS Nutrient Management Requirements for the duration of this agreement.

Manure Recipient	s*	
Address 45719 6	oth Are Kenyon MN	Phone 507-319 -
Manure Recipient Signature	tren partner	Date 9-10-24
Mystum Fa	im hand hip.	

U.S. Department of Agriculture Natural Resources Conservation Service MN-CPA-37 August 2017

### **USDA-NRCS** Manure Ownership Transfer Agreement

Produce	er/USDA-NRCS Contract Holder	Bombay Dairy
Address	5492 County 30 Boulevard Kenyon, MN 55946	Phone 507-330-6237 - Donne 507-257-8283 - Way

Manure Ownership Transfer Agreements are required when the feedlot owner/operator applies manure from their facility onto land that they:

Do not own, lease, or rent and

2

:

Do not have control over crop and nutrient planning decisions

Livestock producers receiving financial assistance from NRCS with a conservation practice that requires development of a Nutrient Management plan or Comprehensive Nutrient Management Plan (CNMP) must manage or have their manure managed according to NRCS requirements (same as state law). This requirement applies to all land where their manure is applied; regardless of land ownership, manure transfer, or sale to another.

Manure Source to be	Fransferred	Bombay	Dairy	- Westw	ood Farm
When Transferred (Mo	onths)		/		
Volume Transferred	Units				
USDA-NRCS Contract Wupu Lynn	Holder Sigr	ature	• • • • • • • • • • • • • • • • • • •	Date 9-10-24	

#### **Fields to Receive Manure**

Acres Ausiloble for Load Application	
Acres Available for Land Application	
Map(s) attached with areas to receive manure identified	
Are these fields also receiving manure from another source?	No
This agreement is valid through:	2029

The undersigned manure recipient agrees to allow manure from the above source to be applied to the fields on the attached map(s) and will manage these manure applications according to NRCS Nutrient Management Requirements for the duration of this agreement.

•	
Goodhue MU 55027	Phone 65/301 5203
	Date 9.11.24
	Goodhue MM.55027

## Manure Storage, Handling, and Testing Information

MINNESOTA POLLUTION CONTROL AGENCY

Facility Name: Westwood

Owner/Operator Name: Wayne & Donna Lexvold

NPDES or SDS Permit? <u>No</u>

Date Last Revised: Registration Number: 049-73448

Permit Number:

Version 9.01 Last Updated: 1/13/22

Manure Sources	Manure Source #1	Manure	Source #2	Manure S	ource #3	Manure S	wq-f6-12
Description of Manure Source						manuro	
Group sources with similar nutrient content if they have identical animal type, water usage, feed rations, and manure storage	Erectell Steelerile						
Livestock Information	Freestall Stockpile	wy 15 manute and a state formation					
Predominate Animal Type				<u>是</u> 不是一些不是一些			
(Contributing to Manure Source)	Dairy Dry Cow						
Average Animal Weight	1,000 lbs	18 B	lbs		lbs		lbs
Animal Number	550						
Length of Time Livestock Spend In Facility	365 days/yr		days/yr		days/yr		days/yr
Additional Animal Type (Contributing to Manure Source)	Dairy Heifer						
Average Animal Weight	700 lbs	10 M	lbs		lbs		lbs
Animal Number	150		100		105		IDS
Length of Time Livestock Spend In Facility	365 days/yr		days/yr		days/yr		davaka
Storage Information		A Martinetter		Construction of the second	uays/yi	and the second second second	days/yr
Storage Type	Stockpile		CONTRACTOR CONTRACTOR OF A CON		CREAT WHEN AN AD A DEPOSIT OF		a leasanna fhis a' star leas
Capacity	481 ton	s	HE STORE		interior a		Maria
Storage Length	7 days	-	1		inclusion in the second		
Application Methods		ng 13 mining second second	TRANSFER DE MARTINE	End State Containing	interest for the second of	State Blackbarden	AND
Commercial Applicator (Yes/No or Name)	No		1923 Charles Contractor Contractor	and being the second and a second		RE-PLACED COLOR	
Spreader Type	Solids Spreader						
How Volume/Tonnage Determined per Load	Spreader Volume						
How Application Rate is Calibrated	Loads Applied per Field	高					
Manure Analysis - Existing facilities should	use actual manure test results	et le mentionenerer	When the strength of the strength of the		Charles and the second	ALL STATES OF ALL STATES OF ALL	
Sampling Frequency	Every 4 Years						the structure and the set and
Sampling Methods	Sample from Spreader Load	d					
Date Last Analyzed	10/10/24						
Basis for N,P, & K Values Below	Last Year's Sample						
Total N - (do not enter lab estimated availability)	12 lbs/ton		the second second		in the second		Publicosterio
Total P2O5 - (do not enter lab estimated availability)	5 lbs/ton		The second se		Constant and and a		individual and a state
Total K <sub>2</sub> O - (do not enter lab estimated availability)	15 lbs/ton				and a state of the		Galancian Salar
Annual Generation - Existing facilities shou	Id use actual production values	the second state of the second		Martin Constant Street All Street	North Contractor (Carlos	No. 10 Contraction of the	Called and an and the second
Total Manure Produced per Year (Estimated)	3,531 ton	S of the second second second	Cherry and the second second second	Cherry Country of the second s			
Total Manure Produced per Year (Actual)	4,000 ton	s	State I				A STREET, STRE
Annual N Produced	48,240 lbs	a la transmissione	lbs	a and a second second	lbs		lbs
Annual P <sub>2</sub> O <sub>5</sub> Produced	20,640 lbs	e A constant and the	lbs	AND STREET	lbs	And the subscription	lbs
Annual K <sub>2</sub> O Produced	60,080 lbs		lbs		lbs	TERMINAL PROPERTY OF	lbs
	Average Book Values		Peels Values		1.1/1		
			Book Values	Average Bo	ok values	Average Bo	ook Values
		N		N	Construction of the	N	angly and
	P <sub>2</sub> O <sub>5</sub> 3	P <sub>2</sub> O <sub>5</sub>	a state of the sta	P <sub>2</sub> O <sub>5</sub>	Contraction of the	P <sub>2</sub> O <sub>5</sub>	Statistics.
	K <sub>2</sub> O 6	K <sub>2</sub> O	Superior Description	K <sub>2</sub> O		K₂O	BEADLER'S

							Field			100			ds 1-	35)						NESOTA P	OLLU	TION		
			S ***Inse	ensitiv ert a ch	ve Fea neck m	tures ark by	(Identif double	y on A e-click	erial P	hoto c appro	or Sket	ch) cells*	**	(Tes		ed once ev	A CALL OF A CALL OF A CALL OF A CALL OF A CALL				inter			
<u>Unique</u> Field ID	Acreage					法通道问题				Sec.14		Quarry					Soil Test		the state the second state of the second state		Anticipated Manure Application Timing		LACKED DR	fo ble)
Attach Aerial Photo or Map With Location Description (twp-rng-sec)	Field Ac	Tile Intakes	Drainage Ditch	Lake, River, Stream	Intermittent Stream (If farmed call MPCA)	Wetland (non-farmed)	Coarse-Textured Soil (soil type ends in "sand")	Floodplain	Public Well Management Area	Shallow Bedrock	Sinkhole	Well, Mine, or	Other Conduit to Water	Year of Soil Test (red if outdated)	Field	sphorus (P) Average opm)	Organic Matter	Irrigation?	NOTE: NPDES & SDS permitted sites cannot apply liquid manure in the winter (unless emergency)	Distance from Field to Waters		Field Slope (%)		
Example	80	V		***Yc	ou mus	t doub	ole-click	cells	to inse	rt a ch	eck m	ark***		2005	30	Olsen	Med/High	No	Late Fall	800	ft	3%		
Wickum 62	62.3			1			11		100		1			2024	126	Bray	Med/High	No	Late Fall		100	070		
Lexy-Lane 17	17				~		-		-	1000-0				2024	126	Bray	Med/High	No	Spring & Fall					
Westwood 1	12			~	~	-	-				0.000	-		2024	121	Bray	Med/High	No	Spring & Fall			<u> </u>		
Westwood 2	1.3			~							18-20		-	2024	121	Bray	Med/High	No	Spring & Fall			<u> </u>		
Westwood 3	3.2			V						1.				2024	116	Bray	Med/High	No	Spring & Fall	1	-	<u> </u>		
Westwood 4	16.8							1115.56					1.000	2024	116	Bray	Med/High	No	Monthly	360	ft	8%		
Westwood 5	14.2													2024	116	Bray	Med/High	No	Monthly	615		4%		
Dicks on 30	41				-										1.0	Diay	Wearingi	No	Spring & Fall			470		
Nystuen CG 6	82				~						3			-				No	Spring & Fall	┨────		<u> </u>		
Nysteun CG sec 6	32			1.00														No	Spring & Fall			<u> </u>		
Nystuen H 20	76													-				No	Spring & Fall			<u> </u>		
Nystuen H & W 25 -30	21				-				-									No	Spring & Fall	┨────		<u> </u>		
Nystien W 30	15				-							-						No	Spring & Fall			<u> </u>		
Fitzgerald W 22	7.5									-					-			No	Spring & Fall			<u> </u>		
Fitzgerald W 27 & 28	54			~	~			~		1.5								No	Spring & Fall			<u> </u>		
Fitzgerald W 28	2.3		-	V	-			1			-	1						No	Spring & Fall			<u> </u>		
Fitzgerald W sec 28	4							-			-							No	Spring & Fall		$\left  \right $	<u> </u>		
Fitzgerald W sec 28 Veiths	21.3	-		1	1000	-			-	-	-	-	-	-	-			No				<u> </u>		
Fitzgerald W 28 Dirt	5			~								-	-					No	Spring & Fall			<u> </u>		
Fitzgerald Wanamingo 28	7		-	V							-		-						Spring & Fall			<u> </u>		
Fitzgerald W 28 Bottom	23			V			-	-	-						-			No	Spring & Fall		$\vdash$	<u> </u>		
	20			•				S. 1997										No	Spring & Fall					
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	19.19		-				1.19.00					-		23										
					-																			
		2	12										1000	-										
Total Acres (Fields 1 - 35)	1.1.1.1.1				Section -								0.748	6	100	and the state of								

Total Acres (Fields 1 - 35) 518

Sensitive Features Management Worksheet
This worksheet identifies all allowable techniques that can be used to provide protection to sensitive features as required in Minnesota Rules and/or permit conditions. One of the following measures must be employed for the applicable sensitive feature. Any of the identified practices are acceptable
Tile Intakes         Option A - Inject or incorporate within 24 hours and prior to rainfall within 300 ft, observe a 25 ft non-manured setback, and avoid long term soil P build-up         Option B - Inject or incorporate within 24 hours and prior to rainfall within 300 ft.         Option C - 35 ft grassed buffer         Option D - 100 ft setback with at least 16.5 ft as grassed buffer
Drainage Ditches Option A - Inject or incorporate within 24 hours and prior to rainfall within 300 ft, observe a 25 ft non-manured setback, and avoid long term soil P build-up Option B - 50 ft wide grassed buffer Option C - 100 ft setback with at least 16.5 ft as grassed buffer Option D - Protective Berm (prohibits runoff from entering the ditch)
Lakes, Rivers, and Streams Option A - Inject or incorporate within 24 hours and prior to rainfall within 300 ft, observe a 25 ft non-manured setback, and avoid long term soil P build-up Option B - 100 ft wide grassed buffer Option C - 100 ft setback with at least 16.5 ft as grassed buffer
Intermittent Streams and/or Public Waters Wetlands (over 10 acres) Option A - Inject or incorporate within 24 hours and prior to rainfall within 300 ft, observe a 25 ft non-manured setback, and avoid long term soil P build-up Option B - 50 ft wide grassed buffer Option C - 100 ft setback with at least 16.5 ft as grassed buffer
Wells, Mines, or Quarry Option A - 50 ft setback - minimum (100 ft if NPDES permitted)
Sinkholes Option A - Inject or incorporate within 24 hours and prior to rainfall upslope and within 300 ft and observe a 50 ft non-manured setback (100 ft non-manured setback for NPDES) Option B - Berm that prevents runoff from entering the sinkhole
Application of Manure During the Summer Months (June, July, and August) - This also includes September for NPDES permitted sites Option A - A cover crop will be planted on all fields that receive manure applications during June, July, and August
Other Conduits to Water Option A - Inject or incorporate within 24 hours and prior to rainfall within 300 ft, observe a 25 ft non-manured setback, and avoid long term soil P build-up Option B - 50 ft wide grassed buffer Option C - 100 ft setback with at least 16.5 ft as grassed buffer Option D - Protective Berm (prohibits runoff from entering the waters)
Early Fall Land Application - Unless otherwise required, this only applies to early fall manure application at NPDES or SDS permitted facilities Option A - Fall Application onto fields that are dominated by coarse-textured soils shall be delayed until soil temperatures in the upper six (6) inches, are less than 50 degrees Fahrenheit, unless otherwise first approved by the MPCA.

### Sensitive Features Management Worksheet

### CONTROL AGENCY

Even though no specific measures are required in Minnesota Rule, a complete MMP is required to identify measures that will be used to provide protection to the following areas. This worksheet will assist you in identifying which techniques will be used to provide protection to the following sensitive features even though **no specific practices are required** in Minnesota Rules.

This worksheet identifies possible techniques that can be used to provide protection to the following sensitive features. One of the following measures will be employed for the applicable sensitive feature. Any of the identified practices are acceptable.

#### Wetlands Under 10 Acres (uncultivated)

No specific state requirements unless a public waters wetland or other permit conditions apply.

Option A - Observe a non-manured setback

Option B - Maintain a grass buffer

- Option C Incorporate manure near the wetland
- Option D Prevent long term soil P buildup
- Option E Utilize soil conservation practices

Option F - Other:

### Public Well Management Area & Drinking Water Supply Management Areas

No specific state requirements unless other permit conditions apply.

Option A - Observe a non-manured setback

- Option B Follow practices recommended in city wellhead protection plan
- Option C Soil nitrate test will be used to refine nitrogen rate management decisions
- Option D Apply no earlier than late October or when soil temperatures are less than 50°F

Option E - Other:

Shallow Bedrock - less than 3 feet of soil over limestone bedrock

No specific state requirements unless other permit conditions apply.

Option A - Use composted manure or other process which kill bacteria

- Option B Maximize separation between fractured bedrock and manure
- Option C Incorporate manure

Option D - Other:

#### Floodplain

No specific state requirements unless other permit conditions apply.

- Option A Avoid manure application during peak flooding periods
- Option B Incorporate or inject manure when there is a risk of flooding
- Option C Avoid winter-time manure applications
- Option D Other:

### Crop and Nutrient Planning Worksheet (Fields 1-35)

MINNESOTA POLLUTION CONTROL AGENCY

Cropping Year: September 1, 2024

to August 31, 2025

Crop Land Manager's Name:

Field Information	Cover crop in	CATHOLIS & ACCOUNT OF SHARE WHEN	nformation n the land applicatio	n records form	(N	ist Year's M utrients for ave blank if n	2024 Crop)	Nutrient Recommendations and Credits N (lb/ac)    P <sub>2</sub> O <sub>5</sub> (lb/ac)									
Field ID	Crop Grown to Utilize the Nutrients Applied 2025 Crop	Expected Yield (per acre) crop receiving nutrients	Crop Most Recently Harvested 2024 Crop	Crop Grown 2 Years Ago 2023 Crop	Last Year's Manure Test N	Animal Type of Manure Applied Last Year	Last Year's Application Rate (per acre) Typically 9/1/23 to 8/31/24	N Recommendation after 2024 crop credits	Legume-N Credit from the 2023 Crop	N Credit from Manure Applied to 2024 Crop	N Credit from Irrigation Water	N Needs after all credits	N Removal after all credits	P <sub>2</sub> O5 Needs (based on soil test data)	P2O5 Removal (based on crop uptake)		
Wickum 62	Corn Silage	30 ton	Corn Silage	Corn Silage	13.8	Dairy	20 ton	195	0	69	(2)(( <del>)-</del> (d))	126	Grid Topic	0	114		
Lexy-Lane 17	Corn Silage	30 ton	Corn Silage	Corn Silage	13.8	Dairy	20 ton	195	0	69	10 10 10 10 10 10 10 10 10 10 10 10 10 1	126	48	0	114		
Westwood 1	Corn Silage	30 ton	Corn Silage	Corn Silage				195	0	Sec. 19	600 <u>222</u> 866	195	Section Sec	0	114		
Westwood 2	Corn Silage	30 ton	Corn Silage	Corn Silage				195	0	500-1-170)	26-12100	195	1000000.005	0	114		
Westwood 3	Corn Silage	30 ton	Corn Silage	Corn Silage				195	0	Sec	16 S	195	10 A	0	114		
Westwood 4	Corn Silage	30 ton	Corn Silage	Corn Silage				195	0		設立部議	195	a contraction	0	114		
Westwood 5	Corn Silage	30 ton	Corn Silage	Corn Silage				195	0		SN 112	195	100000	0	114		
Dicks on 30	Corn Silage	30 ton	Corn Silage	Corn Silage				195	0	301-11 (S		195	100 PA	0	114		
Nystuen CG 6	Corn Silage	30 ton	Corn	Soybeans			an and a	195	0	(8) ( <u></u> 20)		195	West rector	0	114		
Nysteun CG sec 6	Corn Silage	30 ton	Corn	Soybeans		eratinale a.	es e trade	195	0	28	Sector Sector	195	1444-5-31	0	114		
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Nystuen H & W 25 -30	Corn Silage	30 ton	Corn	Soybeans		a la construction	et o gette	195	0		212	195	1011208	0	114		
Nystien W 30	Corn Silage	30 ton	Corn	Soybeans		- Alter to the	and the state	195	0	ANY TO AN	Carenter No.	195	200 <u>110</u> 000	0	114		
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Fitzgerald W 27 & 28	Corn Silage	30 ton	Soybeans	Corn		1 18 1 18 18	and a marker - )	150	0	10000	N.Formati	150	365 144 651	0	114		
Fitzgerald W 28	Corn Silage	30 ton	Soybeans	Corn		State 1		150	0	200	250	150	Sec. 12	0	114		
Fitzgerald W sec 28	Corn Silage	30 ton	Soybeans	Corn			manual (1985)	150	0	24202720	and the second	150	50 La 10	0	114		
Fitzgerald W sec 28 Veiths	Corn Silage	30 ton	Soybeans	Corn	1.5	·	Similar and	150	0	( C	2 0 <u></u>	150		0	114		
Fitzgerald W 28 Dirt	Corn Silage	30 ton	Soybeans	Corn		CONTRACT, MARKET	10 20 40 40 5 T	150	0	ANT THE REAL	102 102	150	608322518	0	114		
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Fitzgerald W 28 Bottom	Corn Silage	30 ton	Soybeans	Corn				150	0			150		0	114		
				rees and some Statute of House a													

## Nutrient Application Planning Worksheet (Fields 1-25)

MINNESOTA POLLUTION CONTROL AGENCY

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Source 1: Freestall Stockpile (12.06-5.16-15.02)	Source 5:	Source 9:
Source 2:	Source 6:	Source 10:
Source 3:	Source 7:	Source 11:
Source 4:	Source 8:	Source 12:

Field Information Summ	ary	Crops Grow	n Summary	to Me	ents No et Yielo	d Goal		Manure Applicat (Nutrients for t	the 202	25 Crop)				ogen N/ac)		Phosphorus (Ib P <sub>2</sub> O <sub>5</sub> /ac)				
Field ID		Crop Grown to Utilize the Nutrients Applied	Crop Most Recently Harvested	afte nutrient crops	(Ib/acre er credits ts from p s and ma pplicatio	s for previous anure	rce (1-12)	Application Typically S Method of Application and Incorporation	Manure ne field)	Mar Applicat (gals/tons	iure ion Rate per acre)	from Manure ailable this year)	Fert Appli	otal ilizer cation acre)	Available N for deficiency)	Manure this year)	Fert Appli	otal ilizer cation 'acre)	of Re defici	
	Acres After	2025 Crop	2024 Crop	Nitrogen Needs	Nitrogen (Removal)	Phosphorus (Needs)	Manure Source	NPDES/SDS permitted sites cannot apply liquid manure in the winter (unless emergency)	Acres Receiving (reduce to split th	Calculated Max Rate based on Nitrogen	Planned Rate max used if blank	N from Manure (Available this year)	Starter	Supplemental	Excess Av (negative for	P from Manure (Available this year)	Starter	Supplemental	P in Excess (negative for	
Wickum 62	/62/	Corn Silage	Corn Silage	126	121 <del>-1-</del> 133	0	1	Incorp. after 4 days	62	23	20	48	70.8	0	-7	83	0	0	-31	
Lexy-Lane 17	217/	Corn Silage	Corn Silage	126		0	1	Incorp. after 4 days	17	23	20	48	70.8	0	-7	83	0	0	-31	
Westwood 1	12	Corn Silage	Corn Silage	195		0	1	Incorp. after 4 days	12	81	20	48	0	0	-147	83	0	0	-31	
Westwood 2	27/1/2	Corn Silage	Corn Silage	195		0	1	Incorp. after 4 days	1/1/2	81	20	48	0	0	-147	83	0	0	-31	
Westwood 3	3	Corn Silage	Corn Silage	195	観	0	1	Incorp. after 4 days	3	81	20	48	0	0	-147	83	0	0	-31	
Westwood 4	17	Corn Silage	Corn Silage	195	S	0	1	Incorp. after 4 days	17	81	20	48	0	0	-147	83	0	0	-31	
Westwood 5	14	Corn Silage	Corn Silage	195	122	0	1	Incorp. after 4 days	14	81	20	48	0	0	-147	83	0	0	-31	
Dicks on 30	41	Corn Silage	Corn Silage	195	()()	0	1	Incorp. after 4 days	41	51	20	48	70.8	0	-76	83	0	0	-31	
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Fitzgerald W 27 & 28	54	Corn Silage	Soybeans	150		0			2/11/		19.1.	And Control of Control	82		-150	214 months			-114	
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Field Information Su	mmary	Crops Grow	n Summary	to Me	ients N et Yiel	d Goal		Manure Applicat (Nutrients for t	tion In the 202	25 Crop)				ogen N/ac)			Phosp (Ib P2		
Field ID	er Setbacks	Crop Grown to Utilize the Nutrients Applied	Utilize the Recently		(Ib/acre er credits its from p s and m pplicatio	s for previous anure	rce (1-12)	Application Typicall Method of Application and Incorporation	Manure e field)	Mar Applicat (gals/tons	nure tion Rate s per acre)	Manure this year)	Fert Appli	otal ilizer cation 'acre)	/ailable N deficiency)	Manure this year)	To Ferti Applic (Ibs/a	ilizer cation acre)	of Removal deficiency)
	Acres After	2025 Crop	2024 Crop	Nitrogen Needs	Nitrogen (Removal)	Phosphorus (Needs)	Manure Source (1-12)	NPDES/SDS permitted sites cannot apply liquid manure in the winter (unless emergency)	Acres Receiving   (reduce to split th	Calculated Max Rate based on Nitrogen	Planned Rate max used if blank	N from Manure (Available this year)	Starter	Supplemental	Excess Available N (negative for deficiency)	P from Manure (Available this year	Starter	Supplemental	P in Excess of Removal (negative for deficiency)
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## Nutrient Application Planning Worksheet (Fields 26-50)

### Total Acres (Fields 1 - 50) = 518

	Amount Applied	Amount Remaining	Acres Applied
Source 1:	3,356	644	168
Source 2:			11
Source 3:	Constant April 19	design of the second second	
Source 4:			States and the states of

	Amount Applied	Amount Remaining	Acres Applied
Source 5:	Salar Sa		
Source 6:	1000		a constant
Source 7:			
Source 8:	10.000 <b></b>	and the second	

Г	I will transfer ow nership of the
54	remaining amount of manure.

	Amount Applied	Amount Remaining	Acres Applied
Source 9:	1.11	Contraction of the second	
Source 10:			Partie and
Source 11:	1999 1999		
Source 12:			16116 STA

## Manure Storage, Handling, and Testing Information

MINNESOTA POLLUTION CONTROL AGENCY

Facility Name: Westwood		NPDES or SDS Permit	? No Permit Numbe	×r.				
Owner/Operator Name: Wayne & Donna Lex	vold	Date Last Revised:	Registration Numbe					
Version 9.01 Last Updated: 1/13/22								
Manure Sources	Manure Source #1	Manure Source #2	Manure Source #3	Wq-f6-12 Manure Source #4				
Description of Manure Source Group sources with similar nutrient content if they have identical animal type, water usage, feed rations, and manure storage	Freestall Stockpile	Concrete manure pit	Manure Source #3	Manure Source #4				
Livestock Information			Particular and the second second					
Predominate Animal Type (Contributing to Manure Source)	Dairy Dry Cow	Dairy Dry Cow						
Average Animal Weight	1,000 lbs	1,000 lbs	lbs	lbs				
Animal Number	0	550		103				
Length of Time Livestock Spend In Facility	365 days/yr	365 days/yr	days/yr	days/yr				
Additional Animal Type (Contributing to Manure Source)	Dairy Heifer	Dairy Heifer						
Average Animal Weight	700 lbs	700 lbs	lbs	lbs				
Animal Number	0	150	103	IDS				
Length of Time Livestock Spend In Facility	365 days/yr	365 days/yr	days/yr					
Storage Information		para and a second secon	uaysiyi	days/yr				
Storage Type	Stockpile	Outdoor Concrete Pit/Tank						
Capacity	481 tons	3,059,694 gals	land and a second a	記 				
Storage Length	7 days	12 months						
Application Methods		in inoratio						
Commercial Applicator (Yes/No or Name)	No	Yes						
Spreader Type	Solids Spreader	Towed Hose						
How Volume/Tonnage Determined per Load	Spreader Volume	Commercial Applicator						
How Application Rate is Calibrated	Loads Applied per Field	Commercial Applicator						
Manure Analysis - Existing facilities should	use actual manure test results	Harris Contraction	a destruction of the second					
Sampling Frequency	Every 4 Years	Every 4 Years	1					
Sampling Methods	Sample from Spreader Load	Estimate (New Structure)						
Date Last Analyzed	10/10/24			2				
Basis for N,P, & K Values Below	Last Year's Sample	Book Value		di <u>seconda seconda se</u>				
Total N - (do not enter lab estimated availability)	12 lbs/ton	31 lbs/1000 gal	Notes and the second	in the second				
Total P2O5 - (do not enter lab estimated availability)	5 lbs/ton	15 lbs/1000 gal						
Total K <sub>2</sub> O - (do not enter lab estimated availability)	15 lbs/ton	21 lbs/1000 gai		The second se				
Annual Generation - Existing facilities should	d use actual production values		C. Les and the state of the second second second					
Total Manure Produced per Year (Estimated)	O tons	1,499,564 gals						
Total Manure Produced per Year (Actual)	O tons	2,950,000 gais	Provide the second s					
Annual N Produced	0 lbs	91,450 lbs	lbs	lbs				
Annual P <sub>2</sub> O <sub>5</sub> Produced	0 lbs	44,250 lbs	lbs	lbs				
Annual K <sub>2</sub> O Produced	0 lbs	61,950 lbs	lbs	lbs				
	Average Book Values	Average Book Values						
	N	N 31	Average Book Values	Average Book Values				
	P <sub>2</sub> O <sub>5</sub>	P <sub>2</sub> O <sub>5</sub> 15	P <sub>2</sub> O <sub>5</sub>	N				
	K <sub>2</sub> O	K <sub>2</sub> O 21	K <sub>2</sub> O	P <sub>2</sub> O <sub>5</sub>				
	The Association of the Associati	21		IN aU				

## General Field Information (Fields 1-35)

#### MINNESOTA POLLUTION CONTROL AGENCY

			***Inse	ert a cl	ve Feat heck m	ark by	double	e-click	ing the	appro	priate	cn) cells*	**	(Tes	Soils st requir	ed once ev	tion very 4 yrs)				Vinte	
<u>Unique</u> Field ID	Field Acreage		f	Stream	stream MPCA)	-farmed)	Ired Soil in "sand")		Area	ock		r Quarry	t s			il Test		on?	Anticipated Manure Application Timing	Application Field Info (If Applicable		
Attach Aerial Photo or Map With Location Description (twp-rng-sec)	Field A	Tile Intakes	Drainage Ditch	Lake, River, Stream	Intermittent Stream (If farmed call MPCA)	Wetland (non-farmed)	Coarse-Textured Soil (soil type ends in "sand")	Floodplain	Public Well Management Area	Shallow Bedrock	Sinkhole	Well, Mine, or	Other Conduit to Water	Year of Soil Test (red if outdated)	Field	sphorus (P) Average opm)	Organic Matter	Irrigation?	NOTE: NPDES & SDS permitted sites cannot apply liquid manure in the winter (unless emergency)	Distance from Field to Waters		Field Slope
Example	80	V		***Yc	ou must	doub	le-click	cells	to inse	rt a ch	eck m	ark***	North Real	2005	30	Olsen	Med/High	No	Late Fall	800	ft	3%
Wickum 62	62.3	upi IS.		1.1.1.1	1-10-10	Strails	1.2.2.2.2.2	22.343			1			2024	126	Bray	Med/High	No	Late Fall	800	all	3%
Lexy-Lane 17	17				V	12/2-								2024	126	Bray	Med/High	No	Spring & Fall		-	
Westwood 1	12			~	~									2024	121	Bray	Med/High	No	Spring & Fall			
Westwood 2	1.3			~										2024	121	Bray	Med/High	No	Spring & Fall		-	+
Westwood 3	3.2	2044		~	1.1	1.105		-		28003		1. 2. 1		2024	116	Bray	Med/High	No	Spring & Fall		-	
Westwood 4	16.8													2024	116	Bray	Med/High	No	Monthly	360	ft	8%
Westwood 5	14.2									- 20	7			2024	116	Bray	Med/High	No	Monthly	615	n	4%
Dicks on 30	41			199	and the	1		120100		-	3-				1.0	Diay	Wearingi	No	Spring & Fall	015	-	4%
Nystuen CG 6	82	12.2			~	-					1227			Sec. 19				No	Spring & Fall			-
Nysteun CG sec 6	32		1			1												No	Spring & Fall		-	-
Nystuen H 20	76										12 11							No	Spring & Fall		-	+
Nystuen H & W 25 -30	21					1												No	Spring & Fall		-	+
Nystien W 30	15	1.	1.1	1.24		1.04						_						No			-	+
Fitzgerald W 22	7.5											200						No	Spring & Fall			+
Fitzgerald W 27 & 28	54			~	~	1000		~										No	Spring & Fall			
Fitzgerald W 28	2.3			~		_		V			-							No	Spring & Fall			
Fitzgerald W sec 28	4																	No	Spring & Fall		-	
Fitzgerald W sec 28 Veiths	21.3																		Spring & Fall			
Fitzgerald W 28 Dirt	5	201		~									-					No	Spring & Fall			
Fitzgerald Wanamingo 28	7	Warts.		V						-		_						No	Spring & Fall		-	-
Fitzgerald W 28 Bottom	23	167.5		V		-				-					_			No	Spring & Fall			
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## Sensitive Features Management Worksheet

MINNESOTA POLLUTION CONTROL AGENCY

This worksheet identifies all allowable techniques that can be used to provide protection to sensitive features **as required** in Minnesota Rules and/or permit conditions. One of the following measures must be employed for the applicable sensitive feature. Any of the identified practices are acceptable.

ile Intakes	
Option A - Inject or incorporate within 24 hours and prior to rainfall within 300 ft, observe a 25 ft non-manured setback, and avoid long term soil P build-up	
phone by migor or moorporate within 24 hours and prior to rainfall within 300 ft.	
Option C - 35 ft grassed buffer	
Option D - 100 ft setback with at least 16.5 ft as grassed buffer	
Drainage Ditches	
Deption A - Inject or incorporate within 24 hours and prior to rainfall within 300 ft, observe a 25 ft non-manured setback, and avoid long term soil P build-up	
phone - so it wide grassed buffer	
ption C - 100 ft setback with at least 16.5 ft as grassed buffer	
ption D - Protective Berm (prohibits runoff from entering the ditch)	
akes, Rivers, and Streams	
ption A - Inject or incorporate within 24 hours and prior to rainfall within 300 ft, observe a 25 ft non-manured setback, and avoid long term soil P build-up	
prior b = 100 it wide grassed buller	
ption C - 100 ft setback with at least 16.5 ft as grassed buffer	
ntermittent Streams and/or Public Waters Wetlands (over 10 acres)	Auto Constantino Constantino Constantino Constantino Constantino Constantino Constantino Constantino Constanti
ption A - Inject or incorporate within 24 hours and prior to rainfall within 300 ft, observe a 25 ft non-manured setback, and avoid long term soil R build up	
phone by so it wide grassed build	
ption C - 100 ft setback with at least 16.5 ft as grassed buffer	
/ells, Mines, or Quarry	A deside provide that says in
ption A - 50 ft setback - minimum (100 ft if NPDES permitted)	
<u>inkholes</u>	
ption A - Inject or incorporate within 24 hours and prior to rainfall upslope and within 300 ft and observe a 50 ft non-manured setback (100 ft non-manured setback for NPDES)	
ption B - Berm that prevents runoff from entering the sinkhole	
pplication of Manure During the Summer Months (June, July, and August) - This also includes September for NPDES permitted sites	
ption A - A cover crop will be planted on all fields that receive manure applications during June, July, and August	
ther Conduits to Water	
ption A - Inject or incorporate within 24 hours and prior to rainfall within 300 ft, observe a 25 ft non-manured setback, and avoid long term soil P build-up	dentral .
priori b = 50 it wide grassed buller	
ption C - 100 ft setback with at least 16.5 ft as grassed buffer	
ption D - Protective Berm (prohibits runoff from entering the waters)	
arly Fall Land Application - Unless otherwise required, this only applies to early fall manure application at NPDES or SDS permitted facilities	
ption A - Fall Application onto fields that are dominated by coarse-textured soils shall be delayed until soil temperatures in the upper six (6) inches, are less than 50 degrees Eabrenheit, unless otherwise first approved by the MDOA	distant in
50 degrees Fahrenheit, unless otherwise first approved by the MPCA.	

### Sensitive Features Management Worksheet

#### MINNESOTA POLLUTION CONTROL AGENCY

Even though no specific measures are required in Minnesota Rule, a complete MMP is required to identify measures that will be used to provide protection to the following areas. This worksheet will assist you in identifying which techniques will be used to provide protection to the following sensitive features even though **no specific practices are required** in Minnesota Rules.

This worksheet identifies possible techniques that can be used to provide protection to the following sensitive features. One of the following measures will be employed for the applicable sensitive feature. Any of the identified practices are acceptable.

### Wetlands Under 10 Acres (uncultivated)

No specific state requirements unless a public waters wetland or other permit conditions apply.

Option A - Observe a non-manured setback

- Option B Maintain a grass buffer
- Option C Incorporate manure near the wetland
- Option D Prevent long term soil P buildup
- Option E Utilize soil conservation practices

Option F - Other:

### Public Well Management Area & Drinking Water Supply Management Areas

No specific state requirements unless other permit conditions apply.

Option A - Observe a non-manured setback

- Option B Follow practices recommended in city wellhead protection plan
- Option C Soil nitrate test will be used to refine nitrogen rate management decisions
- Option D Apply no earlier than late October or when soil temperatures are less than 50°F
- Option E Other:

Shallow Bedrock - less than 3 feet of soil over limestone bedrock

No specific state requirements unless other permit conditions apply.

- Option A Use composted manure or other process which kill bacteria
- Option B Maximize separation between fractured bedrock and manure
- Option C Incorporate manure
- Option D Other:

#### Floodplain

No specific state requirements unless other permit conditions apply.

- Option A Avoid manure application during peak flooding periods
- Option B Incorporate or inject manure when there is a risk of flooding
- Option C Avoid winter-time manure applications
- Option D Other:

### Crop and Nutrient Planning Worksheet (Fields 1-35)

MINNESOTA POLLUTION CONTROL AGENCY

Cropping Year: September 1, 2025

to August 31, 2026

### Crop Land Manager's Name:

Cropping	2026			inager's Name:	Internet		21.21	Constant of the		- tractor and		Photo States and					
Field Information	Cover crop in	Constitution of the state of the second second	nformation n the land applicatio	n records form	(N	ast Year's M utrients for eave blank if n	2025 Crop)	Nutrient Recommendations and Credits N (lb/ac)    P <sub>2</sub> O <sub>5</sub> (lb/ac)									
Field ID	Crop Grown to Utilize the Nutrients Applied 2026 Crop	Expected Yield (per acre) crop receiving nutrients	Crop Most Recently Harvested 2025 Crop	Crop Grown 2 Years Ago 2024 Crop	Last Year's Manure Test N	Animal Type of Manure Applied Last Year	Last Year's Application Rate (per acre) Typically 9/1/24 to 8/31/25	N Recommendation after 2025 crop credits	Legume-N Credit from the 2024 Crop	N Credit from Manure Applied to 2025 Crop	N Credit from Irrigation Water	N Needs after all credits	N Removal after all credits	P2O5 Needs (based on soil test data)	P2Os Removal (based on crop uptake)		
Wickum 62	Corn Silage	30 ton	Corn Silage	Corn Silage	12.06	Dairy	20 ton	195	0	60	100	135	100	0	114		
Lexy-Lane 17	Corn Silage	30 ton	Corn Silage	Corn Silage	12.06	Dairy	20 ton	195	0	60	101 H	135	100	0	114		
Westwood 1	Corn Silage	30 ton	Corn Silage	Corn Silage	12.06	Dairy	20 ton	195	0	60	100-00-00	135	100000	0	114		
Westwood 2	Corn Silage	30 ton	Corn Silage	Corn Silage	12.06	Dairy	20 ton	195	0	60	NO. CON	135	and the second	0	114		
Westwood 3	Corn Silage	30 ton	Corn Silage	Corn Silage	12.06	Dairy	20 ton	195	0	60	BUT BAR BAR	135	State of	0	114		
Westwood 4	Corn Silage	30 ton	Corn Silage	Corn Silage	12.06	Dairy	20 ton	195	0	60		135	()	0	114		
Westwood 5	Corn Silage	30 ton	Corn Silage	Corn Silage	12.06	Dairy	20 ton	195	0	60	8992298	135	Ville State	0	114		
Dicks on 30	Corn Silage	30 ton	Corn Silage	Corn Silage	12.06	Dairy	20 ton	195	0	60	Local State	135		0	114		
Nystuen CG 6	Corn Silage	30 ton	Corn Silage	Corn	No.		TRANSPORT DATA	195	0	1913/11/11	·····································	195	1990	0	114		
Nysteun CG sec 6	Corn Silage	30 ton	Corn Silage	Corn		THE STREET	With Sales	195	0	11/12/2013	ASPENSION	195	State of the second state	0	114		
Nystuen H 20	Corn Silage	30 ton	Corn Silage	Soybeans	Shinaka.	Distances.	internet and	195	0	00	Harrison and	195	20 ())	0	114		
Nystuen H & W 25 -30	Corn Silage	30 ton	Corn Silage	Corn	Constant	STREET, STREET, ST	STORES STREET	195	0	10 Kill	807200-988	195	Television of	0	114		
Nystien W 30	Corn Silage	30 ton	Corn Silage	Corn	123123	908908208		195	0	HER CONTRACT	HOLLOS	195	1000 mg	0	114		
Fitzgerald W 22	Corn Silage	30 ton	Corn Silage	Soybeans		Station and St	Harristense vere	195	0	1000 <u>-000</u> 100	States of the	195	(Secondors	0	114		
Fitzgerald W 27 & 28	Corn Silage	30 ton	Corn Silage	Soybeans	Renewal	Minister Strategy	PARTING CON	195	0	105122295	1000 COLOR	195	100-11106	0	114		
Fitzgerald W 28	Corn Silage	30 ton	Corn Silage	Soybeans	West and	Normal Contra	(anti-anti-anti-	195	0	Here and	(ig_1, 5))	195	80	0	114		
Fitzgerald W sec 28	Corn Silage	30 ton	Corn Silage	Soybeans	and the second	the second	Stolenesty Rees	195	0	180100-103	1000	195	100000	0	114		
Fitzgerald W sec 28 Veiths	Corn Silage	30 ton	Corn Silage	Soybeans	Margaret.	STREET, STREET, STR	Parent and a second	195	0			195	Second B	0	114		
Fitzgerald W 28 Dirt	Corn Silage	30 ton	Corn Silage	Soybeans	(Entrana)	Electron and the	Contraction of the	195	0	1010	1000 - 10000 - 10000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 -	195	Street and a second sec	0	114		
Fitzgerald Wanamingo 28	Corn Silage	30 ton	Corn Silage	Soybeans	deres a	Section in the	Without the second	195	0	100222013	202-22723	195	1997-20198	0	114		
Fitzgerald W 28 Bottom	Corn Silage	30 ton	Corn Silage	Soybeans				195	0		-	195		0	114		
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		2932						1200235	Contraction of the second	And the second				Decision of	Sales.		
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		19153	P						1. des at			教室建設	THURSDAY.	internal and	1. Sector		
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是中国的原则和新闻的自己的自己的		10.58	1	1 (22. 22. 7) ×				<b>秋秋</b> 秋秋		Real of	10000	资数规定	30733	20966	NAME:		
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		14. AND 10. OCT				- Andrewski - A	-	<b>S</b> STAND	Marker and	36224	<b>新教教教</b>	a filman	SHORE	Statistical	Million and		

## Nutrient Application Planning Worksheet (Fields 1-25)

MINNESOTA POLLUTION CONTROL AGENCY

> ✓ I will transfer ow nership of some of the manure.

	Manure Source Summary	
Source 1: Freestall Stockpile (12.06-5.16-15.02)	Source 5:	Source 9:
Source 2: Concrete manure pit (31-15-21)	Source 6:	Source 10:
Source 3:	Source 7:	Source 11:
Source 4:	Source 8:	Source 12:

Field Information Summ	ary	Crops Grow	n Summary	The local design of the local distance		Needed Manure Application Information eld Goal (Nutrients for the 2026 Crop)						Nitrogen (Ib N/ac)				Phosphorus (Ib P₂O₅/ac)				
Field ID	After Setbacks	Crop Grown to Utilize the Nutrients Applied	Crop Most Recently Harvested	afte nutrien crop: a	s and m pplicatio	s for previous anure ns	Source (1-12)	Application Typically S Method of Application and Incorporation	ceiving Manure to split the field)	Building States and St		N from Manure (Available this year)	Fert Appli (lbs/	otal ilizer cation acre)	s Available N e for deficiency)	P from Manure (Available this year)	Fert Appli (lbs/	otal ilizer cation /acre)	ess of Removal e for deficiency)	
	Acres	2026 Crop	2025 Crop	Nitrogen Needs	Nitrogen (Removal)	Phosphorus (Needs)	Manure	sites cannot apply liquid manure in the winter (unless emergency)	Acres Rec (reduce t	based on Nitrogen	max used if blank	N fr (Avail	Starter	Supplemental	Excess (negative	P fr (Avail	Starter	Supplemental	P in Excess (negative for	
Wickum 62	//62/	Corn Silage	Corn Silage	135	and the second s	0	2	Knife Injection	62	8,710	8000	124	0	0	-11	96	0	0	-18	
Lexy-Lane 17	/17/	Corn Silage	Corn Silage	135		0	1.1		1244		1		- Such		-135				-114	
Westwood 1	/12/	Corn Silage	Corn Silage	135		0	2	Knife Injection	12	8,710	8000	124	0	0	-11	96	0	0	-18	
Westwood 2	2/1/	Corn Silage	Corn Silage	135	18 (S	0	2	Knife Injection	1/1/2	8,710	8000	124	0	0	-11	96	0	0	-18	
Westwood 3	1/3/	Corn Silage	Corn Silage	135		0	2	Knife Injection	3	8,710	8000	124	0	0	-11	96	0	0	-18	
Westwood 4	17	Corn Silage	Corn Silage	135	187 <b></b>	0	2	Knife Injection	17	8,710	8000	124	0	0	-11	96	0	0	-18	
Westwood 5	2140	Corn Silage	Corn Silage	135	A	0	2	Knife Injection	/14/	8,710	8000	124	0	0	-11	96	0	0	-18	
Dicks on 30	41/	Corn Silage	Corn Silage	135		0	2	Knife Injection	//41//	8,710	8000	124	0	0	-11	96	0	0	-18	
Nystuen CG 6	82	Corn Silage	Corn Silage	195		0			19414						-195		_	- Comb	-114	
Nysteun CG sec 6	/32/	Corn Silage	Corn Silage	195		0			12/1						-195				-114	
Nystuen H 20	76	Corn Silage	Corn Silage	195		0			12224	1993 <del></del> - 1993		AL CONTRACT	0	0	-195		0	0	-114	
Nystuen H & W 25 -30	21	Corn Silage	Corn Silage	195	19 (s	0	2	Knife Injection	21	12,581	10000	155	0	0	-40	120	0	0	6	
Nystien W 30	15	Corn Silage	Corn Silage	195	99 <del></del> 98	0	2	Knife Injection	15	12,581	10000	155	0	0	-40	120	0	0	6	
Fitzgerald W 22	8	Corn Silage	Corn Silage	195		0	2	Knife Injection	8	12,581	10000	155	0	0	-40	120	0	0	6	
Fitzgerald W 27 & 28	54	Corn Silage	Corn Silage	195		0	2	Knife Injection	54	12,581	10000	155	0	0	-40	120	0	0	6	
Fitzgerald W 28	//2//	Corn Silage	Corn Silage	195		0	2	Knife Injection	7/2//	12,581	10000	155	0	0	-40	120	0	0	6	
Fitzgerald W sec 28	//4//	Corn Silage	Corn Silage	195	2011	0	2	Knife Injection	7/4//	12,581	10000	155	0	0	-40	120	0	0	6	
Fitzgerald W sec 28 Veiths	21/	Corn Silage	Corn Silage	195		0	2	Knife Injection	21	12,581	10000	155	0	0	-40	120	0	0	6	
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Fitzgerald Wanamingo 28	177/1	Corn Silage	Corn Silage	195	· · · ·	0	2	Knife Injection	47/	12,581	10000	155	0	0	-40	120	0	0	6	
Fitzgerald W 28 Bottom	23	Corn Silage	Corn Silage	195		0	2	Knife Injection	23	12,581	10000	155	0	0	-40	120	0	0	6	
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Field Information Sumr	nary	Crops Grow	n Summary	to Me	et Yiel (lb/acre	d Goal								ogen N/ac)		Phosphorus (Ib P₂0₅/ac)				
Field ID	After Setbacks	Crop Grown to Utilize the Nutrients Applied	Crop Most Recently Harvested	afte nutrien crop a	er credit its from p s and m pplicatio	s for previous anure ns	iource (1-	Method of Application and Incorporation	Receiving Manure (			N from Manure (Available this year)	Fert	otal tilizer cation /acre)	Excess Available N (negative for deficiency)	P from Manure (Available this year)	Tot Fertil Applic (Ibs/a	lizer ation cre)	P in Excess of Removal	
	Acres	2026 Crop	2025 Crop	Nitrogen Needs	Nitrogen (Removal)	Phosphorus (Needs)	Manure	sites cannot apply liquid manure in the winter (unless emergency)	Acres Rec (reduce to	based on Nitrogen	max used if blank	N fro (Availe	Starter	Supplemental	Excess (negative	P fro (Availa	Starter	Supplemental	P in Exce	
							1 5		277994 157777		4 1000.41	Second States			and a state				(Brid)	
		A SCHOOL STORES			保留ない			Real Process	21112		1	Barris and			Anna anna anna anna anna anna anna anna	State of			24400 1950-00	
	2/////			An		Balting .	1	h har a state har	4214	建建筑合成在			See 24	4		建制版	1		14.00	
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	11/1/2	A Design of the second s		1.18月1日		推动建筑	-	i chi chi chi chi chi chi chi chi chi ch	<u>1499.</u> 5		1.1.1.9	Eline.								
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	10000		Contraction of the	たいの問題	and the second	Riffordig. Bans store		12-13-15 BLAGN	<u>9774</u>		1 Migra		1_1_							
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	21111				A STATE		1	P. Carlo and States	9999	<b>HEREEN</b>		1000	t a			P. Constant				
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	11111					127,027	100		11111			Referra	1	a-mail					alonet Theory	
	11/11/			HI COR		Maria San	2.02		97711					and the second		- 41 - 45				
	1/1/1	And Company and	No. 1 Constant		annaithe ann		1	A state of the second of	11/14	A CONTRACTOR										
	911/14	ANALIS AND	West Analy Sold	The day	Base of	112/202	15356		11000	Alexandre de la		See Harris	1.1.15		And a starting				2012	

## Nutrient Application Planning Worksheet (Fields 26-50)

#### Total Acres (Fields 1 - 50) = 518

	Amount Applied	Amount Remaining	Acres Applied
Source 1:	「「「「「「「」」」	0	0
Source 2:	2,757,400	192,600	306
Source 3:	100 mar		and the second second
Source 4:	6327月24日日日日日	and the second	Service and service of

	Amount Applied	Amount Remaining	Acres Applied
Source 5:	and the second second second		and the second
Source 6:	1000 atta	2012 - 10 - 10 - 10 - 10 - 10 - 10 - 10	Sector States
Source 7:	1	1	
Source 8:			

✓ I will transfer ow nership of the remaining amount of manure.

	Amount Applied	Amount Remaining	Acres Applied
Source 9:	and	the state of the s	
Source 10:		Harding	12 (1)
Source 11:		Resident and the second second	Section 2 Section
Source 12:			1

and Application of Manure R.	Records (	Fields 1	-19)
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MINNESOTA POLLUTION CONTROL AGENCY

Be sure to make any changes necessary to represent the actual nutrient application (including dates of manure application) that occurred during the indicated crop year.

Cropping Year: September 1, 2024 to August 31, 2025 Crop Land Manger's Name:

Name of Facility Where Manure is Generated:

Name of Licensed Commercial Animal Waste Technician Used: No

Registration/Permit Number: 049-73448 License Number:

Manure Analysis Results - Entries must represent manure applied. (A recent sample, or a running average, can be used)											
Source ID	Description	Animal Type	Storage Type	Date Last Analyzed	N	P	ĸ	Units of Test			
Manure Source #1:	Freestall Stockpile	Dairy	Stockpile	10/10/2024	/12/	5.2	/15/	lbs/ton			
Manure Source #2:		STATISTICS OF		9.96738079019004	4111	1111	11/11	Takashtar			
Manure Source #3:	The first of the second s	ALARKA MARCAN CARDINAL SAD	Statement and the present of the loss of the	44444444444444444444444444444	1111	11111	11/1				
Manure Source #4:	and the second	Numer Parties (Carport	Mapping and summer weeks and a sufficiency	14144444444444	9214	1110.	9111	and the second second			
Manure Source #5:		The state of the second	and the second	91141199999999999999	414	1411	1111	der Hattensternin			
Manure Source #6:		an and the second for	an destation of the second second second	444444444444	1999	9/4/5	1111	the officer states			
Manure Source #7:			والمستعرفان والمشاهية ومتعاد ومتعاور والمتها	4444444444444	1992	11111	1414	A CONTRACTOR OF THE OWNER OF			
Manure Source #8:		in the second second	a second s	Gelien and a chief her	99994	9114	422	中于中的建筑。由于自			
Manure Source #9:	and the second second and the second		Service and the service of the servi	HANNIN MANY	4214	9114	414				
Manure Source #10:	and the second		Spinite and a second second state and a second second	COMPLETERIES (CONTRACTOR)	1111	11111	1111	North Activity of the			
Manure Source #11:	and the second		Ballin and a stranger and	HUMBHUNG HUMB	1214	1111.	4111	中国法院的问题			
Manure Source #12:	and the second	<b>这些新闻的</b> 。	Mall and the second for the first second	Maria and a state of the state	9199	HIM	144				

Field Information		Contract of the last	I Testing Info	Share and the second	Crop Information					(Nutrient	n Information 2025 Crop) 2024 to 8/31/2025)	Ар	Nitro plicati (Ib N		Phosphorus Application Rate (Ib P2O5/ac)					
Field ID	Acres Actually Used	Year of Most Recent Test	Soil Test Phosphorus Field Average (ppm)	Organic Matter	Crops of Crop Grown to Utilize the Nutrients Applied 2025 Crop	Grown Crop Most Recently Harvested 2024 Crop	Expected Yield (crop receiving manure)	Needs (Ib wal for leg	P2O5 Needs (Ib/ac) (based on soil test data)	Manure Source (1-12)	Dates of Application If Oct. 1-14, NPDES sites must record N BMP used (scroll right)	Application Rate Per Acre	Method of Application and Incorporation	Fertilizer N Applied + Irrigation Water N	Carry-Over N Last Year's Manure	Manure N This Year's	Total Available N This Year	Fertilizer P Applied	Manure P This Year's	Total Available P This Year
Example	80	2006	9 Olsen	Med/High	Corn	Soybeans	180	150	55	[1]	10/15 - 10/16	3000	Incorp. within 4 days	5	0	140	145	0	60	60
Wickum 62	62	2024	126 Bray	Med/High	Corn Silage	Corn Silage	30	195	0	1		20	Incorp. after 4 days	70.8	69	48	188	0	83	83
Lexy-Lane 17	17	2024	126 Bray	Med/High	Corn Silage	Corn Silage	30	195	0	1		20	Incorp. after 4 days	70.8	69	48	188	0	83	83
Westwood 1	12	2024	121 Bray	Med/High	Corn Silage	Corn Silage	30	195	0	1	and the strength	20	Incorp. after 4 days	0		48	48	0	83	83
Westwood 2	1	2024	121 Bray	Med/High	Corn Silage	Corn Silage	30	195	0	1		20	Incorp. after 4 days	0		48	48	0	83	83
Westwood 3	3	2024	116 Bray	Med/High	Corn Silage	Corn Silage	30	195	0	1	al alexander and a second	20	Incorp. after 4 days	0		48	48	0	83	83
Westwood 4	17	2024	116 Bray	Med/High	Corn Silage	Corn Silage	30	195	0	1	A State State State	20	Incorp. after 4 days	0		48	48	0	83	83
Westwood 5	14	2024	116 Bray	Med/High	Corn Silage	Corn Silage	30	195	0	1	Central and At	20	Incorp. after 4 days	0		48	48	0	83	83
Dicks on 30	41	51,2432	malacit silicato di		Corn Silage	Corn Silage	30	195	0	1	187711	20	Incorp. after 4 days	70.8		48	119	0	83	83
Nystuen CG 6	week!	1 8 1	State I and	A BILLAST SA	Corn Silage	Corn	30	195	0	10 9	「「「「「「「「」」		and the second second second second	70.8			71	0		0
Nysteun CG sec 6	101035	1236	Charles States	The Participation of	Corn Silage	Corn	30	195	0	E.C.	1000			70.8			71	0		0
Nystuen H 20	100	10.250	Carlos and Carlos	Same Mai	Corn Silage	Soybeans	30	150	0		Store and Bark			70.8			71	0		0
Nystuen H & W 25 -30		and the	alt a sales i		Corn Silage	Corn	30	195	0	133	The entry in		2	70.8		William Barris	71	0	Norman di	0
Nystien W 30	11.	20102	The second	LAND SEA	Corn Silage	Corn	30	195	0		NU SCRAPE		Section and the second	70.8		San and a second	71	0	A state of the second	0
Fitzgerald W 22		100	Selan and Sola	the states of	Corn Silage	Soybeans	30	150	0		Security 120g	dia <del>non</del> a dia	De line en la Million de	0	2	12-11-6	0	C AND		0
Fitzgerald W 27 & 28		12.20	ANALY STREET	THE REAL PROPERTY OF	Corn Silage	Soybeans	30	150	0		(MURLENDER)	(b)	and the second	0		201 <u>-221</u>	0	1. 25		0
Fitzgerald W 28	. Small		Diast - 1224	fine hereit	Corn Silage	Soybeans	30	150	0		a descention of the		Market Market	0		No.	0	1503	192 <u></u> 28	0
Fitzgerald W sec 28	1				Corn Silage	Soybeans	30	150	0	-	And the second second		Revenues and service have a	0			0		15	0
Fitzgerald W sec 28 Veiths					Corn Silage	Soybeans	30	150	0		and the second second second		and a set of the set of the	0		0 <sup>6</sup> 5	0		Receive	0
Fitzgerald W 28 Dirt			And Lines	and the second	Corn Silage	Soybeans	30	150	0					0		100	0		20	0

### Land Application of Manure Records (Fields 20-46)

2025

Cropping Year: September 1, 2024 to August 31,

Crop Land Manger's Name:

Name of Facility Wh	ere M	anure i	is Generated:			in grad diversity of the		and the second			And the second	F	Registration/Permit Nu	mber:	049-7	3448				
Field Information	1.00		I Testing Info required once e			Grop Informatic	on				(Nutrient	s for the	on Information e 2025 Crop) 2024 to 8/31/2025)		Nitro plicati (lb N	on Ra	ites	Phosphorus Application Rate (lb P2O5/ac)		
THE PERMIT	p			State of the	Crops	Grown	()	s)	;) Ita)	(2)	Dates of	Contraction of the second	En and the second	+	ø	Ľ'S		J	r's	
Field ID	Acres Actually Used	Year of Most Recent Test	Soil Test Phosphorus Field Average (ppm)	Organic Matter	Crop Grown to Utilize the Nutrients Applied 2025 Crop	Crop Most Recently Harvested	Expected Yield (crop receiving manuri	N Needs (Ib/ac) (removal for legumes)	P2O5 Needs (Ib/ac) (based on soil test data)	Manure Source (1-12)	Application If Oct. 1-14, NPDES sites must record N BMP used (scroll right)	Application Rate Per Acre	Method of Application and Incorporation	Fertilizer N Applied + Irrigation Water N	Carry-Over N Last Year's Manure	Manure N This Year's	Total Available N This Year	Fertilizer P Applied	Manure P This Year's	Total Available P This Year
Fitzgerald Wanamingo 28	1	1.500		1 10003 08	Corn Silage	Soybeans	30	150	0	38. 2	1			0			0		20 <u>01</u> 2	0
Fitzgerald W 28 Bottom			1 2 3	1 . A	Corn Silage	Soybeans	30	150	0		A a manage		1	0		14 Th	0			0
	_	1		Diseastrated		and the spectrum		Alexandra a	All Carlos							Contractor	Contraction of the second		A Sector	2010/01
						Carlo participa		140304	1224-201 6.538-652						-	ana an			200222	
						ALTIN THE			Second		J - Julian - marine		and the second se			(Assert)	ASS AS		Surger 1	and the
		1000	2011				111	Sec. 20	Sec.	25.48	M. Sameran	di la		1	- Kore		Series 18	1.000	物和限	19.5m)
			Sec. Contraction			Mark and a	1.11			210	H Semenced	8-35-			Silver a	10.041	in the			1216125
	3	11611	100	1455.121.535	1000		1000	Statist.	953.64	6.2	al a series and a series of	이는 전	1		10.0	10.13			14280	20124
			-	1000		Contract Some refe	See Cha	1631.1	J. States			Sec.	The state of the state of the			101.9.52			California (	
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						TATE PARTY AND		10000	Sec. 1	11-2-	81				11816	No.	20202		1222	100010
	1000 M							2012 M	Sec. 1	1850	Marken Stational	21.1.1.2	institution of a state of the		1.32%	取問			200345	
		(incod)		107230		Sundala di sata	A BEACH	STE ST	1888	201	S. L. GOMPH	1000	1994 (1994) (1994)		1.48	系如前			品的設計	Section 2
		1				the straight of	172.2	Sec. 1	Card a	1		129-121	20.00-00-02-00-00-00-00-00-00-00-00-00-00-0		1.167	1	12.34			1000
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	-					and the second	-	ale and	the second	-	American and				-	10120	ALC: NO		MACLENCE MICHINE	0.000
								BODSON B	ACCOUNTS A STATE							and the second	A STREET		and the second	
							1.5		1.3.3.4.FE								- assing			
						and a second strength	-	ALC: NO	1000	Sec. 1	w manufacture and		1			Sec. 194	TELES		14.2639	Sector.
					×.		1	Calle	kinder			-				131999	10000		(sciente)	100220
						- when the	. A.		Sec.		State					Stead	Birth.		New State	and the
	100					Second and the second		18 Martin	1.20		Mary superior is	11 m				和自然是	and the second s		151155	195-194
								Section 1	2000		in the second		and the second second			* Constant	924H		all starts	The set

#### Total Acres (Fields 1-46) = 168

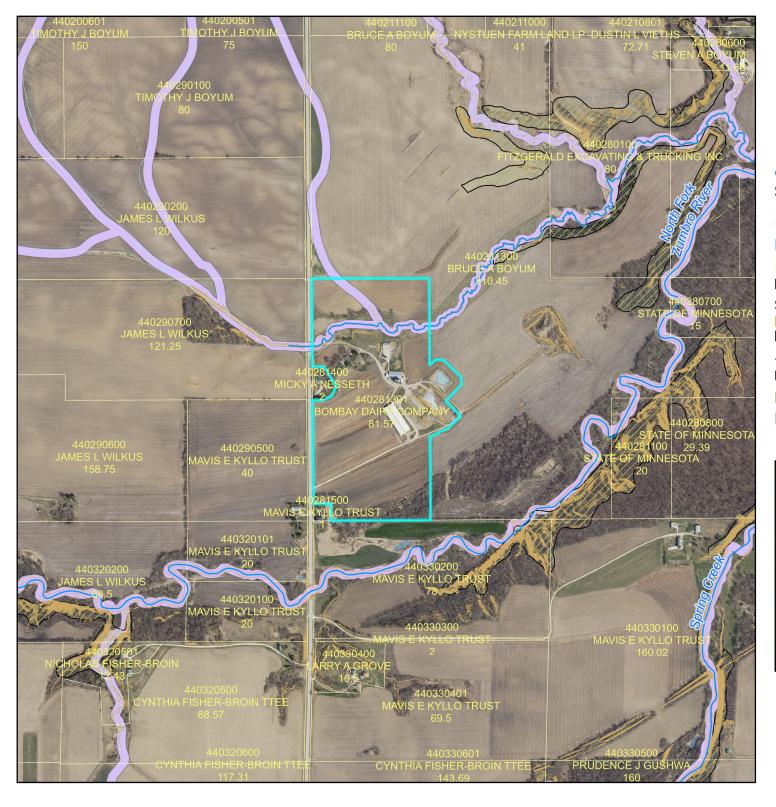
Manure Source Summary of Applied and Remaining Manure

5

	Amount Applied	Amount Remaining
Source 1:	3,356	644
Source 2:	and south in the second second	
Source 3:		Participant in the second
Source 4:		Real Profile Contraction

	Amount Applied	Amount Remaining
Source 5:	and a state of the	185 Te short a pherometer and
Source 6:	o Photo Barran Charles and	Restances in the second second
Source 7:		Alterior and the second second
Source 8:		

1		and the second
A Star I was	Amount Applied	Amount Remaining
Source 9:		New York Wester
Source 10:	Contraction and States and States	approximation and a second sec
Source 11:	CALLON THE MUSIC	All States Planta and
Source 12:	Constant and the second second	ST SECOND STREET, STORE STORE

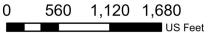


# Bombay Dairy

### Legend







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2024 Aerial Imagery Map Created April, 2025 Megan Smith