April 22, 2020

ATTENTION ALL REQUEST FOR BID(RFB) HOLDERS

RFB NO. 320008 - ADDENDUM NO. 2

FARMSTEAD CONCRETE REMOVAL & GRADING

PHEASANT BRANCH CONSERVANCY – ACKER FARM

BIDS DUE: TUESDAY, APRIL 28, 2020, 2:00 PM. DUE DATE AND TIME ARE NOT CHANGED BY THIS ADDENDUM.

This Addendum is issued to modify, explain or clarify the original Request for Bid (RFB) and is hereby made a part of the RFB. Please attach this Addendum to the RFB.

PLEASE MAKE THE FOLLOWING CHANGES:

1. **Bid Form**
   Page BF-1: Delete current page BF-1; Replace with new page BF-1, issued with this Addendum.

2. **Waste Facility Closure, Pages 1-14**
   Add "Waste Facility Closure" plans and specs to the RFB issued with this Addendum. Note: "Wisconsin Construction Specification – 3. Earthfill" included with the "Waste Facility Closure" plans applies only to that portion of the project.

3. **Drawings - Sheets 1-9**
   Delete current Sheets 1-9, noted below; replace with new Sheets 1-9, issued with this Addendum.
   1 of 9 - Title Page
   2 of 9 - Site Plan - Concrete
   3 of 9 - Site Plan - Restoration
   4 of 9 - Grading Plan
   5 of 9 - Sediment Basin & Trail
   6 of 9 - North Berm & Farm Site
   7 of 9 - South Berm
   8 of 9 - Lined Channel
   9 of 9 - Details

PLEASE NOTE THE FOLLOWING CONTRACTOR SUBMITTED QUESTIONS:

Q1: **I**s there any way to get a quantity established for the removal/crushing/placing of the concrete?
A1: Due to the variability in types of concrete, (e.g. walls, footings, flatwork) an accurate quantity could not be verified. In areas where inspected, the concrete flatwork averaged 4" – 5" in thickness.

Q2: Could you provide more information on the water control structures?
A2: Details have been added to the revised drawings issued with this addendum.

Q3: The drawings don't show trash/safety gates on culvert endwalls. Should they be added?
A3: Details have been added to the revised drawings issued with this addendum.

If any additional information about this Addendum is needed, please call Ryan Shore at 608/445-0109, shore@countyofdane.com.

Sincerely,
Ryan Shore
Project Manager

Enclosures:
Bid Form Page BF-1
Waste Facility Closure, Pages 1-14
Drawings - Sheets 1-9

Name of Bidding Firm: _____

SECTION 00 41 13

BID FORM

BID NO. 320008
PROJECT: FARMSTEAD CONCRETE REMOVAL & GRADING
PHEASANT BRANCH CONSERVANCY – ACKER FARM

TO: DANE COUNTY DEPARTMENT OF PUBLIC WORKS, HIGHWAY & TRANSPORTATION PROJECT MANAGER
1919 ALLIANT ENERGY CENTER WAY
MADISON, WISCONSIN 53713

NOTE: WISCONSIN STATUTE 77.54 (9M) ALLOWS FOR NO SALES & USE TAX ON THE PURCHASE OF MATERIALS FOR COUNTY PUBLIC WORKS PROJECTS.

BASE BID - LUMP SUM:
Provide construction services associated with farmstead demolition, tree removal and restoration. The project includes demolition, crushing & relocation of concrete foundations and feedlot/storage areas, tree removal and closure of milk house waste storage. The undersigned, having examined the site where the Work is to be executed and having become familiar with local conditions affecting the cost of the Work and having carefully examined the Drawings and Specifications, all other Construction Documents and Addenda thereto prepared by Dane County Department of Public Works, Highway & Transportation, hereby agrees to provide all labor, materials, equipment and services necessary for the complete and satisfactory execution of the entire Work, as specified in the Construction Documents, for the Base Bid stipulated sum of:

_____ and __ /100 Dollars
Written Price

$_____
Numeric Price

UNIT PRICING:

1. Remove concrete: $_____/lump sum

2. Crush concrete on site and pile, grade, and compact: $_____/lump sum

3. Closure of milk house waste storage.: $_____/lump sum

ALTERNATE BID 1 - LUMP SUM:
Add price for providing: excavation, grading and installation of water control structures for wetland restoration.

_____ and __ /100 Dollars
Written Price

$_____
Numeric Price (circle: Add or Deduct)

CONSTRUCTION PLAN

PRACTICE **Waste Facility Closure**

LANDOWNER **Dane County Land & Water Resource Dept.**

ADDRESS **5201 Fen Oak Dr. Madison, WI 53718**

OWNER PHONE NO. **608-224-3730** COUNTY **DANE**

TOWNSHIP **Springfield** T **8** N, R **8** E, SEC. **36**

FIELD OFFICE **Madison** PHONE NO. **608 - 224 - 3736**

DIGGERS HOTLINE

Call 3 Work Days Before You Dig!

Toll Free
1-800-242-8511

Milw. Area
1-414-259-1181

TDD
1-800-542-2289

N
W E
S
Not to Scale

LOCATION MAP

NOTICE TO LANDOWNERS AND CONTRACTORS REGARDING UTILITIES

Prior to the start of construction the owners of utilities must be notified of the pending construction. You will be liable for damages resulting from construction activities. (Call Diggers Hotline)

CONSTRUCTION DRAWINGS AND SPECIFICATIONS ACCEPTANCE

I/we have reviewed and do accept the attached plans. I/we agree to have this project constructed in accordance with these plans and specifications and to notify all affected utility companies.

Signed: _____ Date: 1/3/2020

Designed by: **Laurie Lambert** Date: **1/3/2020**

Checked by: Seth Ebel Date: 1-3-20

Approved by: Seth Ebel Date: 1-3-20

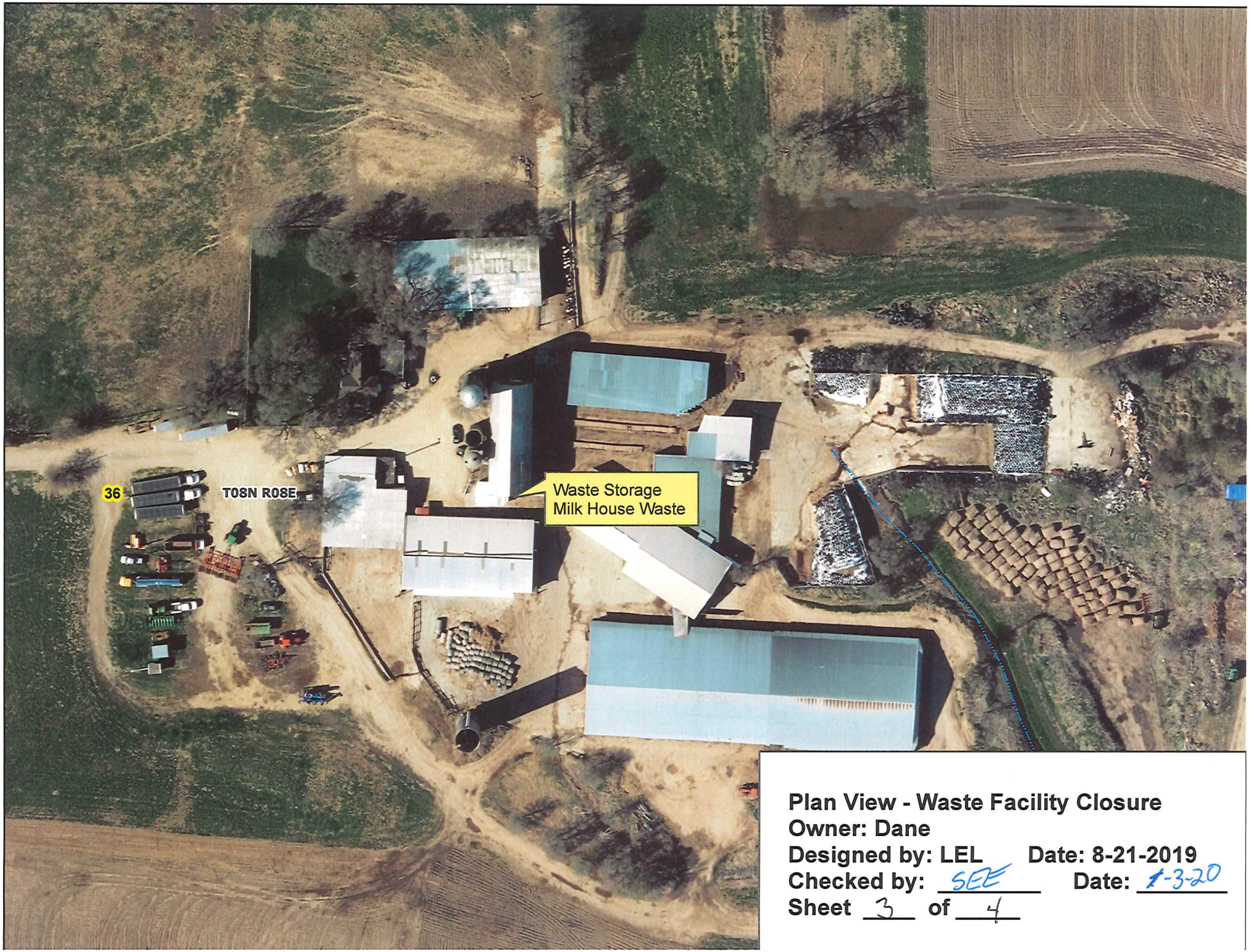
Approved by: _____ Date: _____

Job Approval Class: II

ESTIMATED QUANTITIES

ITEM	UNIT	QUANTITY	SHEET #	WI CONST. SPEC.
Waste Facilty Closure	Job	1	3,4,	3, 4

NOTES:	**OWNER:**	Dane County	
	DANE CO. LCD		
	DESIGNED :	LEL	**CHECKED:** SEE 1-3-20
	SHEET:	2	of 4
	DATE:	1/3/2020	



Plan View - Waste Facility Closure
Owner: Dane
Designed by: LEL **Date: 8-21-2019**
Checked by: SEE **Date: 1-3-20**
Sheet 3 of 4

Waste Facility Closure

Site Assessment:

- The existing waste facility was a storage tank for milkhouse waste. Waste was transferred from the milkhouse to the concrete tank by an underground pipe. It holds approximately 750 gallons. See map for location
- The dimensions and holding capacity of the waste facility are based on information given by the previous owners. Additional fill may be required if dimensions are incorrect.

Steps for structure closure:

(Work to be completed according to NRCS Conservation Practice Standard 360)

General Information:

1) **Utilities**
   - Contact Digger's Hotline at 1-800-242-8511 to locate utilities prior to the start of construction.
2) **Existing Waste**
   - Wastewater will removed and spread on site. Location will be determined by Dane County Land Conservation Department at the time of construction.
3) **Concrete Liner:**
   - Existing concrete floor is to be rendered unable to impound water.
   - If concrete floor is not removed, at a minimum, one puncture hole will be created every 50 square feet to allow water to pass.
   - The subgrade below the floor will be inspected by the Technician for any contamination. If contamination is discovered, all contaminated material will be removed and surface applied to surrounding crop fields at a maximum depth of 2 inches.
   - Existing concrete walls will be broken up and removed from site or used in the structure for fill.
4) **Fill Structure:**
   - All buried concrete will be covered with a minimum of 3 feet of mineral soil.
   - Existing material along the outside of structure may be used.
   - Compact material according to Wisconsin Construction Specification #3 (Earth Fill).
   - Finished grade shall provide a minimum 2 percent positive drainage to the south.

Ackers, Dane County, WI
Designed by: LEL Date: 1-3-20
Checked by SLE **Date:** 1-3-20
Sheet 4 **of** 4

Natural Resources Conservation Service
CONSERVATION PRACTICE STANDARD
WASTE FACILITY CLOSURE
Code 360
(No.)

DEFINITION

The decommissioning of facilities, and/or the rehabilitation of contaminated soil, in an environmentally safe manner, where agricultural waste has been handled, treated, and/or stored and is no longer used for the intended purpose.

PURPOSE

- Protect the quality of surface water and groundwater resources.
- Mitigate air emissions.
- Eliminate a safety hazard for humans and livestock.
- Safeguard the public health.

CONDITIONS WHERE PRACTICE APPLIES

This practice applies to agricultural waste storage facilities that are no longer needed as a part of a waste management system and are to be permanently closed or converted for another use.

This practice applies where impoundments that are to be converted to fresh water storage meet the current Wisconsin NRCS Conservation Practice Standard (WI CPS) to which the impoundment is proposed to be converted.

This practice applies to removal of soil contaminated by agricultural wastes that have been stored at the animal production area.

This practice does not apply to sites contaminated by materials that are considered hazardous wastes or are subject to specific clean-up criteria in state or federal laws, such as fuel or pesticides.

CRITERIA

General Criteria Applicable to all Purposes

The closure of waste facilities shall comply with all federal, tribal, state, and local laws, and rules or regulations including national pollutant discharge elimination system (NPDES) requirements.

Existing waste transfer components that convey waste to facilities or provide drainage from the facility area shall be removed and replaced with compacted earth material or otherwise rendered unable to convey waste.

Fill used for closure may include solid waste materials exempt for use pursuant to Wisconsin Administrative Code, Section NR 500.08, including used brick, building stone, concrete, reinforced concrete, broken pavement, and unpainted and untreated wood. If these materials are used, they shall be covered with at least 3 feet of clean mineral soil. The backfill height shall exceed the design finished grade by a minimum of 5 percent to allow for settlement. The top one foot of the backfill shall be constructed of the most impervious soil material readily available and mounded to shed rainfall runoff. If the area will have a soil surface, it shall also be covered with at least 3 inches of topsoil and be vegetated.

Precautions (fencing and warning signs) shall be used where necessary to ensure that the facility is not used for purposes incompatible with the facility modification.

Entry into an enclosed waste storage or waste transfer component shall not be allowed unless procedures published in ASABE Standard 470, Manure Storage Safety, are followed.

Erosion and Pollution Control. All disturbed areas shall be re-vegetated or treated with other suitable measures used to control erosion and restore the aesthetic value of the site. Sites, not suitable for re-vegetation through normal cropping practices, shall be vegetated in accordance with WI CPS Critical Area Planting (Code 342).

Measures shall be taken during construction to minimize site erosion and pollution of downstream water resources. This may include such items as silt fences, hay bale barriers, temporary vegetation, and mulching.

Liquid or Slurry Waste and Sludge (Accumulated Solids) Removal. Liquid and slurry wastes shall be agitated and pumped out to the maximum extent possible. Water shall be added as necessary to facilitate the agitation and pumping.

Remove manure and agricultural waste from the storage facility and waste transfer system to the maximum extent practicable. All manure and agricultural waste that could negatively impact water and/ or air quality or pose a safety hazard shall be removed as deemed practical. All liquid, slurry, sludge, and solid waste, and soil removed from the facility shall be utilized in accordance with WI CPS Nutrient Management (Code 590) or stored in a facility meeting WI CPS Waste Storage Facility (Code 313). In lieu of field application, removed soil may also be thinly spread as topsoil at the closure location and vegetated.

During sludge removal operations, the integrity of the liner, if one is present, shall be maintained to the extent possible to minimize the volume of contaminated soil removal.

Impoundment Liner Removal.

1. Flexible membrane liners shall be:
   - Removed and properly disposed of, or
   - Cleaned and rendered unable to impound water (punctured).

   Removed flexible membrane liners may be buried within the closure with a minimum cover of 3 feet of mineral soil.

2. Concrete liners shall be:
   - Removed and properly disposed of, or
   - Cleaned and rendered unable to impound water (punctured), or
   - Cleaned and remain in place if the site grade allows rainfall to drain off the concrete surface.

   Removed concrete liners may be buried within the closure with a minimum cover of 3 feet of mineral soil.

   Foundry sand previously placed under a concrete liner in accordance with NR 538, Beneficial Use of Industrial Byproducts, will require site-specific Wisconsin Department of Natural Resources (WDNR) approval of the closure plan.

3. Constructed clay liners shall be:
    - Completely removed, or
    - Rendered unable to impound water (partially excavated), or
    - Remain in place if the site grade allows rainfall to drain off the surface.

Contaminated Soil Removal. Flexible membrane, concrete, soil liners, or in-place soils shall be systematically investigated for leaks and contaminated soils (soil mixed with waste) beneath them. When contaminated soils are found, they must be removed to the extent necessary with a minimum depth of 6 inches.

The extent (area and depth) of contaminated soil to be removed shall be determined by color, odor, or consistency of the soil indicating permeation or saturation with waste.

Additional Criteria Applicable to Impoundment Closure or Conversion

Embankment Impoundments shall be breached so that they no longer impound waste. Portions of the embankment may remain in place. The slopes and bottom of the breach shall be stable for the soil material involved, however the side slopes shall be no steeper than three horizontal to one vertical (3:1).

The embankment material can be graded into the impoundment area; compacted in accordance with Wisconsin Construction Specification 3, Earthfill; and the area vegetated for another use.

Excavated Impoundments shall be backfilled and compacted in accordance with Wisconsin Construction Specification 3, Earthfill, so that these areas may be reclaimed for other uses.

Impoundments converted to fresh water storage shall be closed in accordance with the General Criteria and converted to a use that meets the requirements as set forth in the appropriate NRCS practice standard for the intended purpose. Where the original impoundment was not constructed to meet NRCS standards, the investigation for structural integrity shall be in accordance with National Engineering Manual (NEM) 501.23. When it is not possible to remove all the sludge and contaminated soils from a waste impoundment that is being converted to fresh water storage, the impoundment shall not be used for fish production, swimming, or livestock watering until the water quality is adequate for these purposes.

Additional Criteria Applicable to Fabricated Liquid Waste Facilities

If fabricated structures are to be demolished, disassembled or otherwise altered, it shall be done to such an extent that no water can be impounded. Disassembled materials such as pieces of metal shall be temporarily stored in such a manner that they do not pose a hazard to animals or humans until their final disposition.

Demolished materials shall be buried on-site within the facility or moved off-site to locations designated for such use by state or local officials.

Under-building reception structures, channels, or storage structures may be filled with clean mineral soil, sand, or controlled low strength materials (flowable fill) after complete removal of manure. The fill shall be surfaced with concrete, gravel, or other material appropriate for the intended use following closure.

CONSIDERATIONS

Considerations include additional design recommendations that are not required criteria, but may be used to enhance or avoid problems with the design and function of this practice.

Conduct pre-closure soil and water (surface and subsurface) testing to establish base line data surrounding the site at the time of closure. Establishing baseline data can be used in the future to address soil and water issues.

Alternative methods of sludge removal may be required where the impoundments contain large amounts of bedding, sand, oyster shells, soil, or other debris.

Minimize the impact of odors associated with land applying dry wastes and with agitation, emptying, and land applying wastewater and sludge from a waste impoundment by conducting these operations at a time when the humidity is low, when winds are calm, and when wind direction is away from populated areas. Adding chemical and biological additives to the waste prior to agitation and emptying can reduce odors. Odor impacts from land application can also be mitigated by using an incorporation application method.

Minimize agitation of the wastes to only the amount needed for pumping to reduce the potential for release of air emissions.

Soil to fill excavated areas should not come from important farmlands (prime, statewide, local, and/or unique).

If large-size material or wood is used as fill, consideration shall be given to filling methods and additional thickness of clean mineral soil cover to prevent and accommodate excess settling. It may be necessary to limit the quantity of wood, because it degrades.

Waste facility closure may improve utilization and aesthetics of the farmstead.

Breached embankments may detract from the overall aesthetics of the operation. Embankments should be removed and the site returned to its original grade.

Disassembled fabricated structures may be suitable for assembly at another site. Care should be taken during closure to minimize damage to the pieces of the facility, particularly coatings that prevent corrosion of metal pieces.

To minimize potential impacts to livestock, such as nitrate poisoning, initiate a testing and monitoring program of nutrient levels in crop products, particularly livestock feeds, harvested from sites of closed animal confinement facilities.

Consider the need for special permits or procedures concerning harmful materials to demolish an adjacent or associated buildings.

PLANS AND SPECIFICATIONS

Plans and specifications for the decommissioning of abandoned waste facilities and the rehabilitation of contaminated soil shall be in keeping with this standard and shall describe the requirements for applying the practice to achieve its intended purpose. At a minimum, include the following:

- A plan view showing the location and extent of the practice.
- Pertinent elevations and cross sections of the existing facility and excavation limits.
- Number, capacity, and quality of facility(ies) and estimate of liner material and soil volume to be moved.
- Location of known utilities.

- Requirements for salvage and disposal of structural or liner materials.
- Vegetative requirements.
- Utilization Plan for animal wastes and soil.
- Odor management or mitigation requirement.
- Safety plan requirements. Note: Per Occupational Safety and Health Administration (OSHA) confined space entry protocol, personnel shall not enter confined space of an enclosed waste facility without breathing apparatus or taking other appropriate measures.

OPERATION AND MAINTENANCE

The proper decommissioning and rehabilitation of a waste facility should require little or no operation and maintenance. However, if it is converted to another use, such as a fresh water facility, operation and maintenance shall be in accordance with the needs as set forth in the appropriate NRCS conservation practice standard for the intended purpose.

Monitor the closed site for settlement of filled areas that may need grading to shed rainfall runoff.

REFERENCES

USDA, NRCS National Engineering Handbook (NEH), Part 651, Agricultural Waste Management Field Handbook.

USDA, NRCS Wisconsin Field Office Technical Guide (FOTG), Section IV, Practice Standards and Specifications.

Wisconsin Administrative Code, Department of Natural Resources, Chapter NR 500, General Solid Waste Management Requirements.

Wisconsin Administrative Code, Department of Natural Resources, Chapter NR 538, Beneficial Use of Industrial Byproducts.

American Society of Agricultural and Biological Engineers (ASABE) Standard 470, Manure Storage Safety.

Rice, J.M., D.F. Caldwell, and F.J. Humenik. Ed. 2006. Closure of Earthen Manure Structures in Animal Agriculture and the Environment: National Center for Manure and Animal Waste Management White Papers. ASABE. Pub. Number 913C0306.

DEFINITIONS

Animal Production Area – Means any part of the livestock operation that is used for the feeding and housing of livestock. This includes the entire animal confinement and feeding area, and any adjacent manure storage areas, raw materials storage areas, and waste containment areas. This does not include pasture and cropland.

Embankment Impoundments – those with a depth of waste at the design level that is three feet or more above natural ground.

WISCONSIN CONSTRUCTION SPECIFICATION

3. EARTHFILL

A. SCOPE

The work shall consist of placing the earthfill required by the drawings. This specification does not apply to the earthfill required for waste storage facilities.

B. MATERIALS

All fill materials shall be obtained from required excavations and designated borrow areas. The selection, blending, routing, and disposition of materials in the various fills shall be subject to approval by the Technician.

Fill materials shall contain no sod, brush, roots, frozen soil, or other perishable materials. Stones larger than two-thirds of the uncompacted layer thickness shall be removed from the materials prior to compaction of the fill.

C. FOUNDATION PREPARATION

The foundation area shall be cleared of trees, stumps, roots, brush, rubbish, and stones having a maximum dimension greater than six (6) inches. Foundations shall be stripped to remove vegetation and other unsuitable materials or to the depth shown on the drawings, whichever is greater. Topsoil shall be stripped from the foundation area and stockpiled for use as a top dressing for vegetation establishment unless otherwise shown on the drawings.

Earth foundations shall be graded to remove surface irregularities and slopes steeper than 1:1.

The foundation surfaces shall be scarified parallel to the centerline of the fill to a minimum depth of 2 inches. The surface materials of the foundation shall be compacted and bonded with the first layer of earthfill. The moisture content of the scarified materials shall be maintained as specified for the earthfill.

D. PLACEMENT

Fill shall not be placed until the required excavation and preparation of the underlying foundation is completed and inspected and approved by the Technician. No fill shall be placed upon a frozen surface nor shall snow, ice, or frozen material be incorporated in the fill.

Fill shall be placed in approximately horizontal layers beginning at the lowest elevation of the foundation. The thickness of each layer of fill prior to compaction shall be as specified in Table 1. Materials placed by dumping in piles or windrows shall be spread uniformly to not more than the specified layer thickness prior to compaction.

Adjacent to structures, earthfill shall be placed in 4-inch lifts (prior to compaction) in a manner adequate to prevent damage to the structure and to allow the structure to gradually and uniformly assume the backfill loads.

The height of the fill shall be increased at approximately the same rate on all sides of the structure.

Placement of fill adjacent to concrete structures may begin after the concrete has cured for the minimum time specified.

Earthfill in dams, levees, and other structures designed to impound water shall be placed to meet the following additional requirements:

(1) The distribution of materials throughout each zone shall be essentially uniform, and the fill shall be free from lenses, pockets, streaks, or layers of material differing substantially in texture, moisture content, or gradation from the surrounding material.

(2) The embankment top shall be maintained approximately level during construction except for sectional construction as described in Section 7.

(3) Dam embankments shall be constructed in continuous layers from abutment to abutment, except where openings to facilitate construction or to allow passage of stream flow during construction are specified.

(4) If the surface of any layer becomes too hard and smooth to achieve a suitable bond with the succeeding layer, it shall be scarified parallel to the axis of the fill to a depth of not less than 2 inches before the next layer is placed.

E. CONTROL OF MOISTURE CONTENT

Fill materials shall have a moisture content sufficient to insure the required compaction. When kneaded in the hand, the soil will form a ball which does not readily separate and will not extrude out of the hand when squeezed tightly. The adequacy of the moisture content will be determined by the Technician.

Fill material or the top surface of the preceding layer of compacted fill that becomes too dry to permit suitable bond shall either be removed or scarified and wetted by sprinkling to an acceptable moisture content prior to placement of the next layer of fill.

Fill material that is too wet when deposited or the top surface of the preceding layer of compacted fill that becomes too wet shall be either removed or allowed to dry to an acceptable moisture content before compaction or placing additional layers of fill.

F. COMPACTION

The Contractor shall furnish and operate the types and kinds of equipment necessary to compact the fill materials.

Unless otherwise specified on the plans or approved by the Technician, compaction requirements for each layer of fill material are as shown in Table 1. The Technician shall determine the adequacy of compaction. Equipment passes in addition to those shown in Table 1 may be required.

Each pass shall consist of at least one complete coverage by the wheel, track, or roller over the entire surface of the fill layer in a direction parallel to the main axis of the fill.

Adjacent to structures or in confined areas, compaction of the fill shall be accomplished by means of manually directed or backhoe mounted power tampers or plate vibrators, hand tamping, or other methods approved by the Technician. The Technician shall determine if adequate compaction is being achieved. Heavy equipment shall not be operated within 2 feet of any structure. Compaction by means of drop weights operating from a crane or hoist of any type will not be permitted.

G. SPECIAL REQUIREMENTS FOR SECTIONAL CONSTRUCTION OF EMBANKMENTS

When sectional (or phase) construction of embankments is authorized, the work shall be accomplished in the following manner:

(1) Each section of the embankment that is constructed in the first phase shall be so placed that a slope not steeper than 3 feet horizontal to 1 foot vertical is maintained at the end of the embankment section adjacent to the gap in construction or closure section.

(2) Prior to placement of the closure sections, the surfaces of completed fills and excavations that will be in contact with the closure shall be stripped of all loose material, scarified, moistened, and recompacted as necessary.

Table 1. Equipment Compaction Requirements

Equipment Type		Applicable Soils[1]	Maximum Fill Height[2] (feet)	Layer Thickness[3] (inches)	Minimum Passes
Sheepsfoot roller (10,000 lb. min. operating weight)		ML, MH, CL, CH or SM, SC, GM, GC with >20% fines	None	9	1
Vibratory tamping roller (9,000 lb. min. operating weight)		SM, SC, GM, GC	None	9	2
Rubber-tired scraper or articulated haul truck (fully loaded)		GM, GC, SM, SC, ML, MH, CL, CH	None	9	1
Rubber-tired front end loader (fully loaded)		GM, GC, SM, SC, ML, MH, CL, CH	20	6	1
Track-type crawler (standard tracks)	30,000 lb. min.	GM, GC, SM, SC, ML, CL	10**	6	2
		SP, SW, GP, GW	6**	12	4
		CL, ML, SC, SM	15##	3	2
	less than 30,000 lb.	GM, GC, GP, GW, SM, SC, SP, SW, ML, CL	6**	6	2
Farm tractor (2,400 lb. min.)		GM, GC, SM, SC, ML, MH, CL, CH	15	6	2
Smooth steel drum vibratory roller (10,000 lb. min.)		SP, SW, GP, GW	None**	12	2

[1] Unified Soil Classification System.

[2] Measured from the top of the fill to the lowest point along the centerline of the fill.

[3] Prior to Compaction.

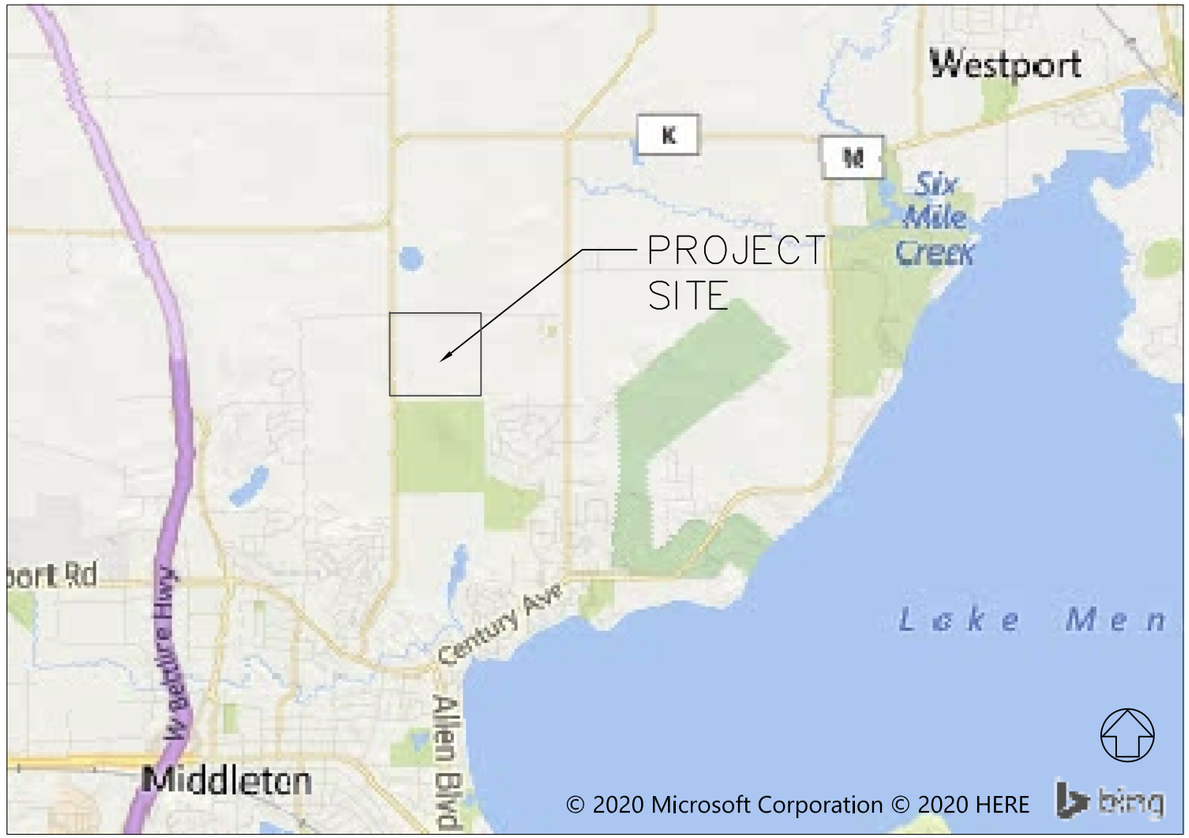
** The fill shall not have a permanent body of water stored against it.

This method may only be used for embankments that will not have the potential for a permanent body of water stored against it that is greater than 1/4 acre in surface area or more than 6 feet deep.

PHEASANT BRANCH CONSERVANCY
ACKER FARM RESTORATION

FOR THE

LAND & WATER RESOURCES DEPARTMENT
DANE COUNTY, WISCONSIN
MARCH 2020



DIGGERS HOTLINE
Dial 811 or (800) 242-8511
www.DiggersHotline.com

CONCRETE REMOVAL & WETLAND RESTORATION

DRAWING TITLE	SHEET NO.
TITLE PAGE	1
SITE PLAN – CONCRETE	2
SITE PLAN – RESTORATION	3
GRADING PLAN	4
SEDIMENT BASIN & TRAIL	5
NORTH BERM & FARM SITE	6
SOUTH BERM	7
LINED CHANNEL	8
DETAILS	9

CONTACTS:

DANE COUNTY
SARA RIGELMAN
5201 FEN OAK DRIVE
MADISON, WI 53718
608–224–3611

THERESA NELSON
5201 FEN OAK DRIVE
MADISON, WI 53718
608–221–7207

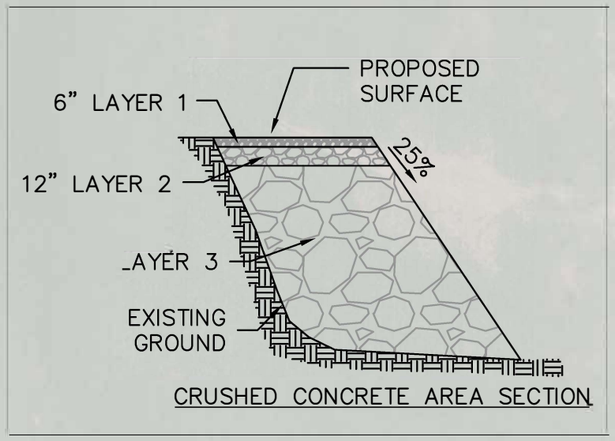
DANE COUNTY
LAND&WATER RESOURCES DEPARTMENT

TITLE SHEET
ACKER FARM RESTORATION
TOWN OF SPRINGFIELD, DANE COUNTY, WI

NO.	REVISION	DATE	BY

DATE: 03/17/2020
SCALE: NA
DRAWN BY: TMN
CHECKED BY: JDB
SHEET NUMBER: 1 OF 9

PHEASANT BRANCH RD



CRUSHED CONCRETE AREA NOTES:

- APPROX. 100'X100' OR LARGER IF MORE MATERIAL IS GENERATED
- STRIP TOPSOIL & STOCKPILE PRIOR TO FILLING
- MATCH GRADE WITH ROADWAY AND DRIVEWAY ON SOUTH AND WEST SIDES
- 4:1 SIDE SLOPES ON NORTH AND EAST SIDES
- LAYER 1: ¾" CRUSHED CONCRETE W/ FINES
- LAYER 2: 3" CRUSHED CONCRETE W/ FINES
- LAYER 3: 6"–8" CRUSHED CONCRETE

TREE REMOVAL AREAS

CONCRETE REMOVAL AREAS

REMOVE FENCE

REMOVE IF CONDITIONS ALLOW

REMOVE BOULDERS

REMOVE BOULDERS

CRUSHED CONCRETE AREA SEE DETAIL ABOVE

REMOVE FENCE

PRESERVE EXISTING OAK

REMOVE STUMPS

BURN/BURY & STOCKPILE AREA

CLOSE MILKHOUSE WASTE FACILITY

PROPERTY LINE

LIMIT DISTURBANCE TO REMOVAL AREAS AND WITHIN FARM SITE ACCESS ROADS.

IF ALTERNATE BID IS NOT ACCEPTED ALL DISTURBED AREAS SHALL BE RESTORED WITH 4" TOPSOIL AND SEEDED W/ COOL SEASON GRASSES (WIDOT MIX #20 OR SIMILAR) AT A RATE OF 3 LBS/1000SF AND MULCH AT A RATE OF 2 TONS/ACRE.

LARGE ROCKS/BOULDERS ON SITE CAN BE REUSED ONSITE, BURIED, OR REMOVED

0 100 200 Feet

DANE COUNTY

LAND&WATER RESOURCES DEPARTMENT

SITE PLAN – CONCRETE REMOVAL

ACKER FARM RESTORATION

TOWN OF SPRINGFIELD, DANE COUNTY, WI

NO.	REVISION	DATE	BY
1	RESTORATION NOTES	4/21/20	TMN

DATE: 03/17/2020

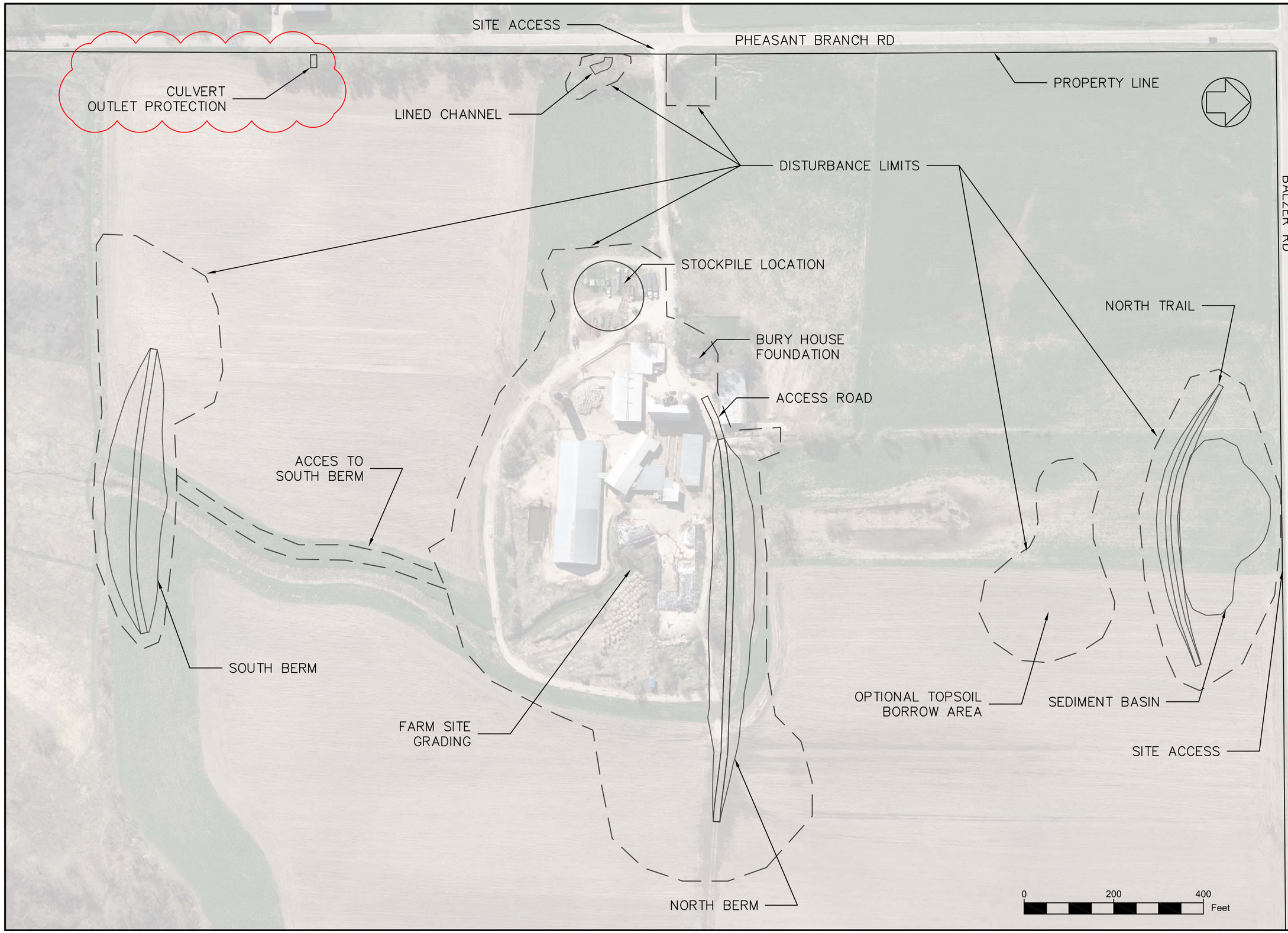
SCALE: 1" = 200'

DRAWN BY: TMN

CHECKED BY: JDB

SHEET NUMBER: 2 OF 9

BASE BID



DANE COUNTY

LAND&WATER RESOURCES DEPARTMENT

SITE PLAN – RESTORATION

ACKER FARM RESTORATION

TOWN OF SPRINGFIELD, DANE COUNTY, WI

NO.	REVISION	DATE	BY
1	OUTLET PROTECTION	4/21/20	TMN

DATE: 03/17/2020

SCALE: 1" = 200'

DRAWN BY: TMN

CHECKED BY: JDB

SHEET NUMBER: 3 OF 9

ALTERNATE BID

PHEASANT BRANCH RD

CULVERT OUTLET PROTECTION

LINED CHANNEL

PROPERTY LINE

DISTURBANCE LIMITS

CUT AREAS

FILL AREAS

BALZER RD

STOCKPILE LOCATION

AUXILIARY OVERFLOW

NORTH TRAIL

BURY HOUSE FOUNDATION

ACCESS ROAD

SILT FENCE OR SOCK

ACCES TO SOUTH BERM

STONE DITCH CHECK

SILT FENCE OR SOCK

STONE DITCH CHECK

SOUTH BERM

FARM SITE GRADING

OPTIONAL TOPSOIL BORROW AREA

SEDIMENT BASIN

SITE ACCESS

AUXILIARY OVERFLOW

NORTH BERM

0 200 400 Feet

DANE COUNTY

LAND&WATER RESOURCES DEPARTMENT

GRADING PLAN

ACKER FARM RESTORATION

TOWN OF SPRINGFIELD, DANE COUNTY, WI

NO.	REVISION	DATE	BY
1	OUTLET PROTECTION	4/21/20	TMN

DATE: 03/17/2020

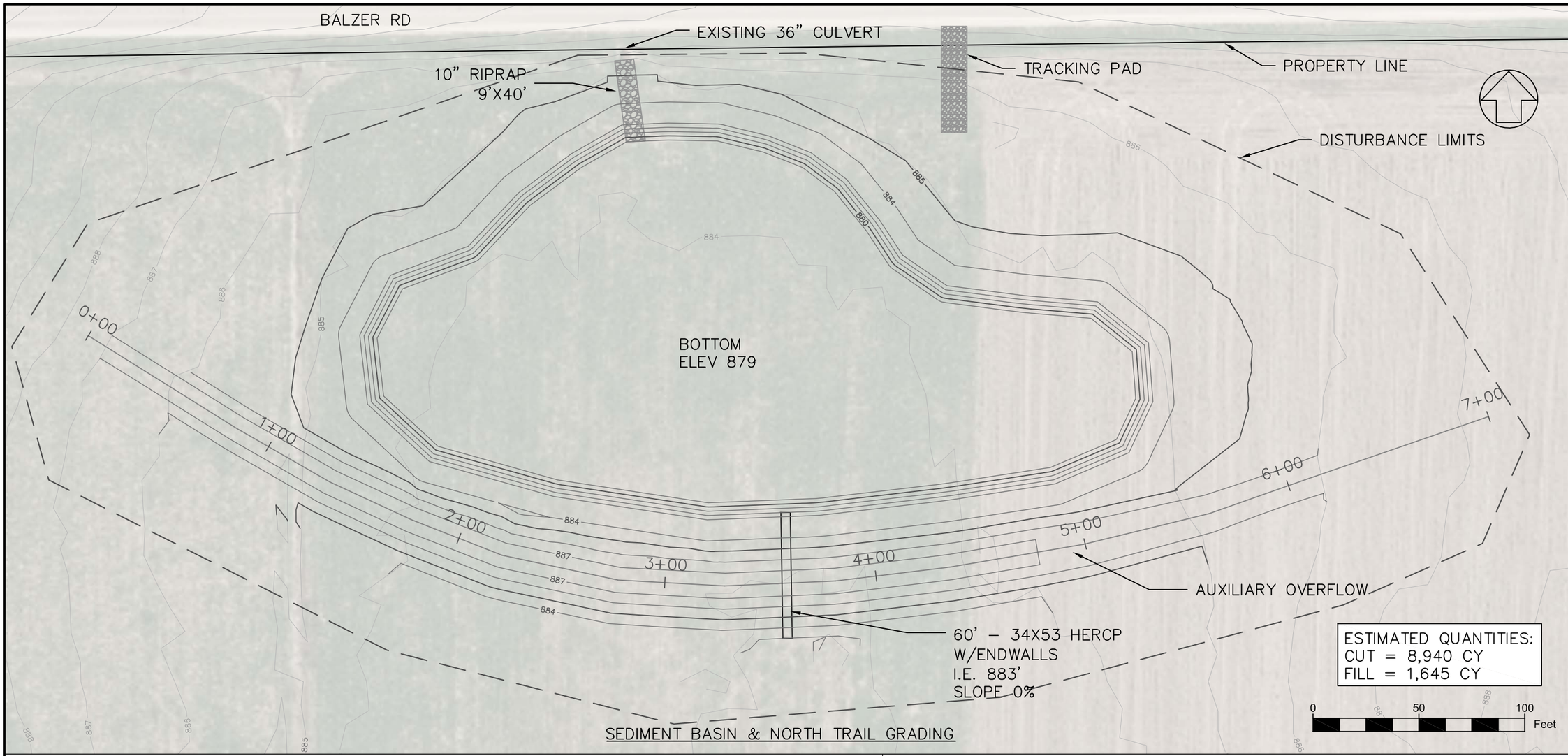
SCALE: 1" = 200'

DRAWN BY: TMN

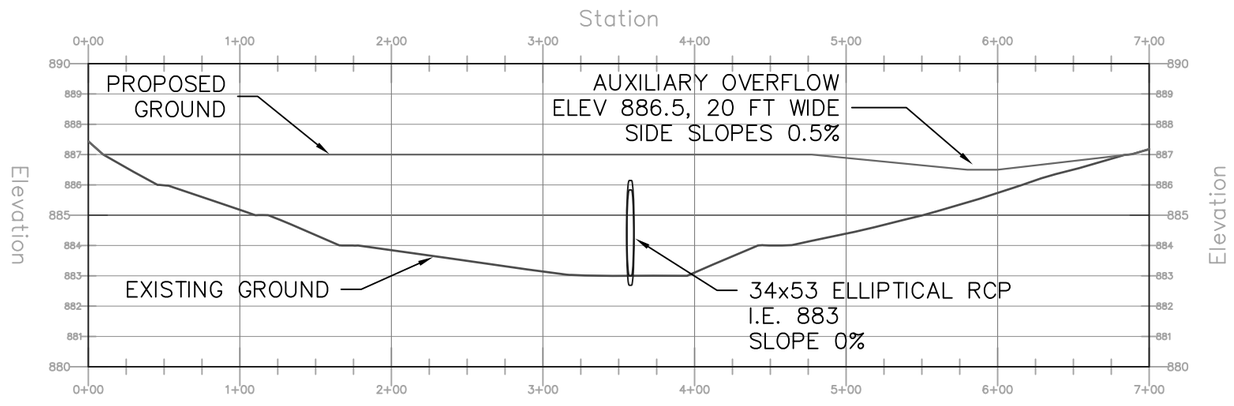
CHECKED BY: JDB

SHEET NUMBER: 4 OF 9

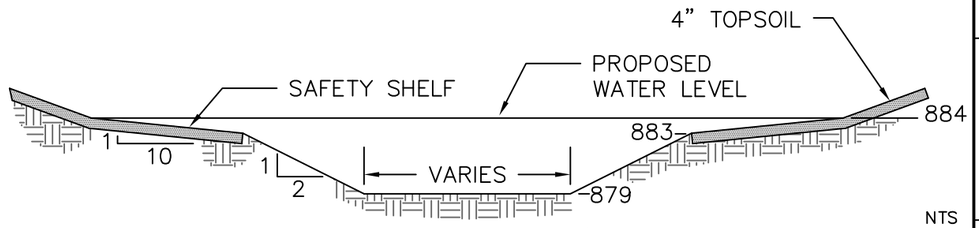
ALTERNATE BID



SEDIMENT BASIN & NORTH TRAIL GRADING

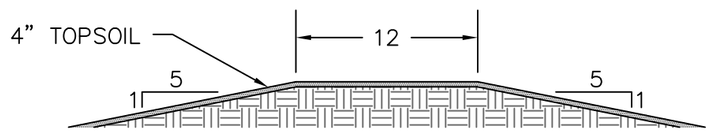


NORTH TRAIL PROFILE



NTS

SEDIMENT BASIN SECTION



NTS

NORTH TRAIL SECTION

DANE COUNTY

LAND&WATER RESOURCES DEPARTMENT

SEDIMENT BASIN & TRAIL

ACKER FARM RESTORATION

TOWN OF SPRINGFIELD, DANE COUNTY, WI

NO.	REVISION	DATE	BY

DATE: 03/17/2020

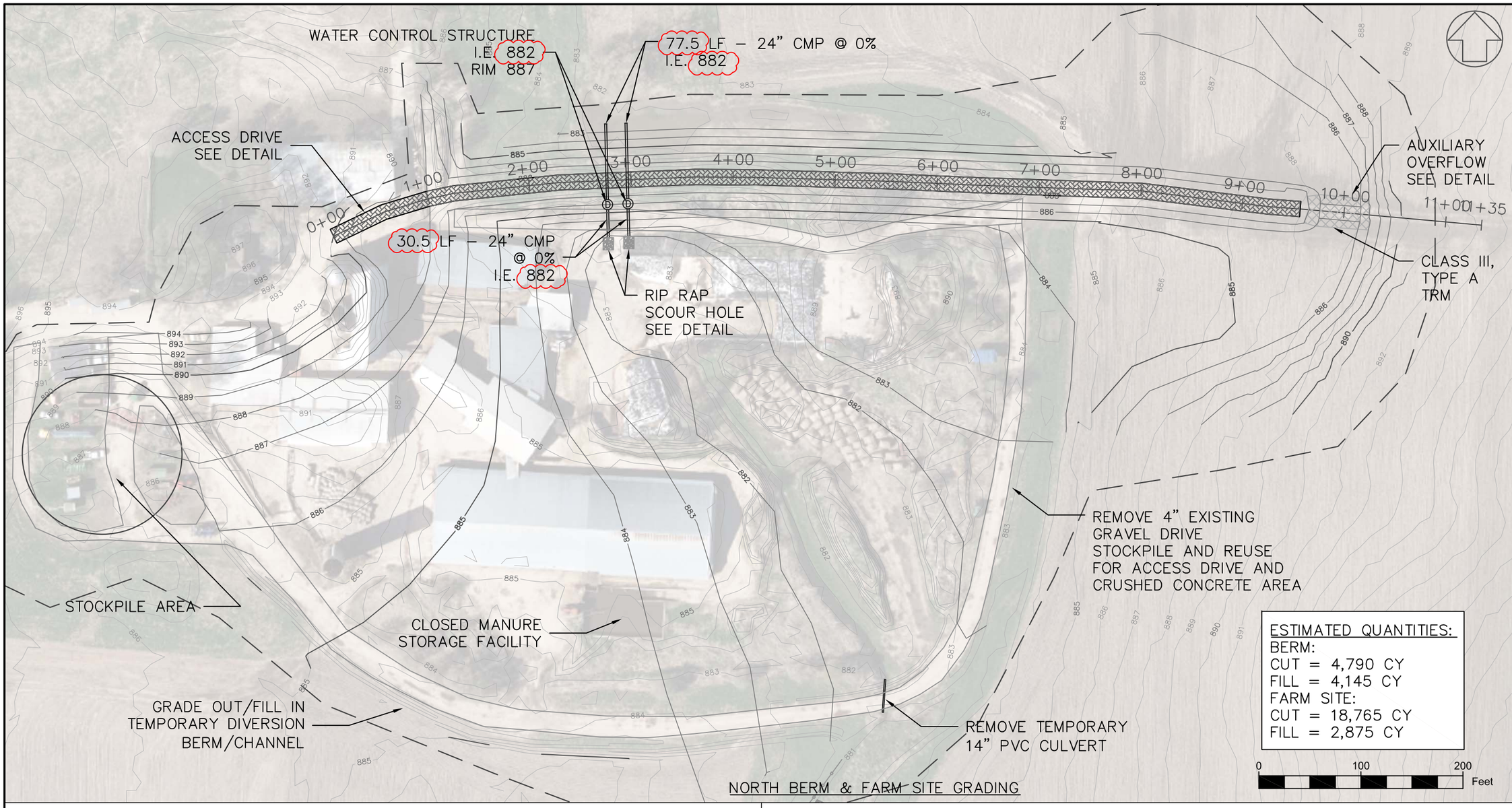
SCALE: AS SHOWN

DRAWN BY: TMN

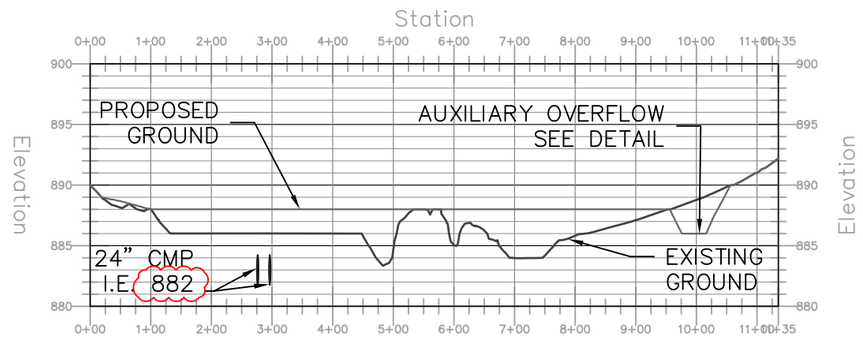
CHECKED BY: JDB

SHEET NUMBER: 5 OF 9

ALTERNATE BID

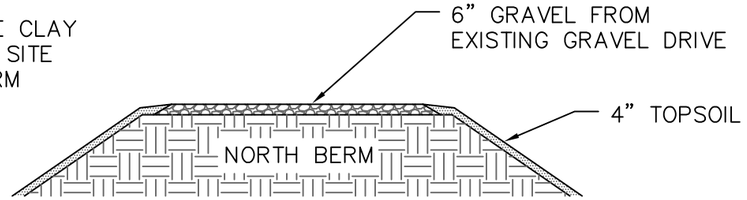


NORTH BERM & FARM SITE GRADING



NORTH BERM PROFILE

IF AVAILABLE, USE CLAY
EXCAVATED FROM SITE
FOR CORE OF BERM



FOLLOW NRCS CONSERVATION
PRACTICE STANDARD 378

ACCESS DRIVE DETAIL

NTS

DANE COUNTY

LAND&WATER RESOURCES DEPARTMENT

NORTH BERM & FARM SITE

ACKER FARM RESTORATION

TOWN OF SPRINGFIELD, DANE COUNTY, WI

NO.	REVISION	DATE	BY
1	PIPE & STRUCTURE IE AND LENGTHS	4/21/20	TMN

DATE: 03/17/2020

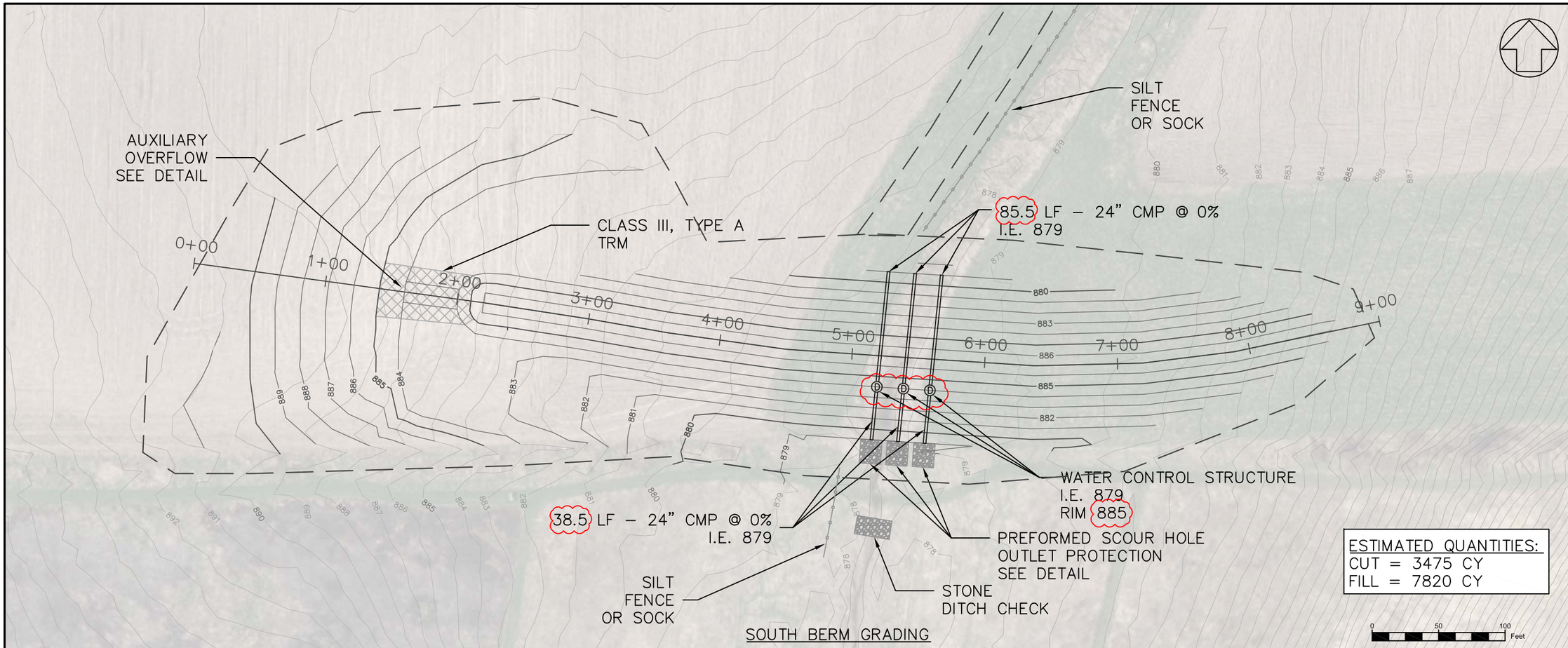
SCALE: AS SHOWN

DRAWN BY: TMN

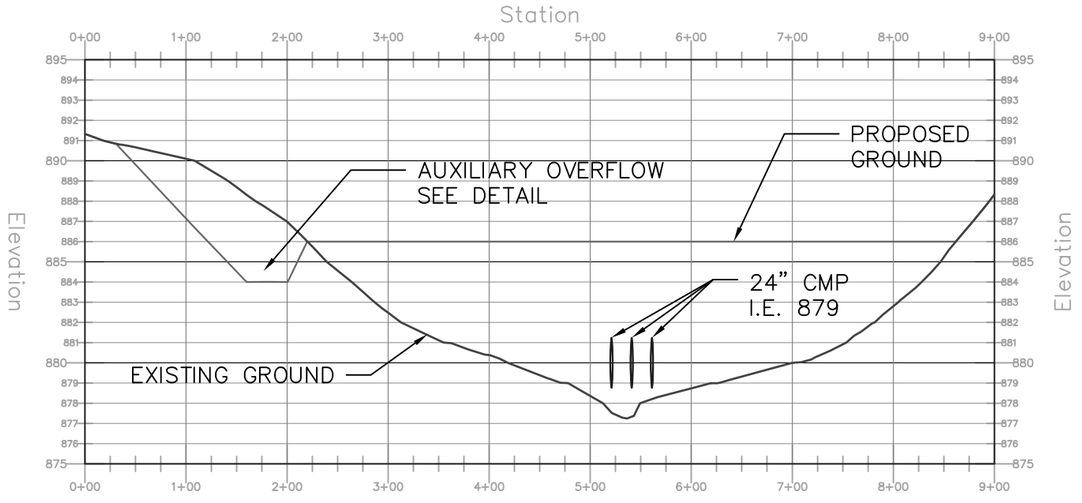
CHECKED BY: JDB

SHEET NUMBER: 6 OF 9

ALTERNATE BID

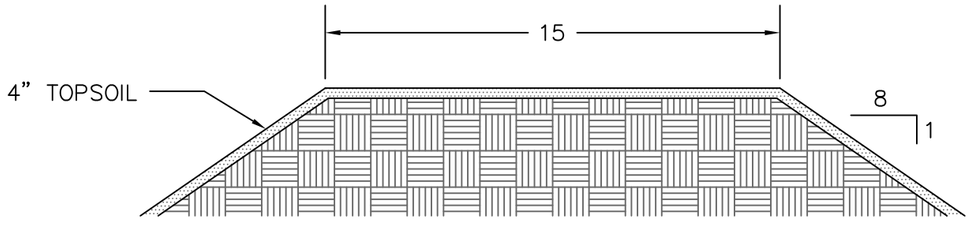


SOUTH BERM GRADING



SOUTH BERM PROFILE

IF AVAILABLE, USE CLAY
EXCAVATED FROM SITE
FOR CORE OF BERM



FOLLOW NRCS CONSERVATION
PRACTICE STANDARD 378

SOUTH BERM TYPICAL SECTION

NTS

DANE COUNTY
LAND&WATER RESOURCES DEPARTMENT

SOUTH BERM

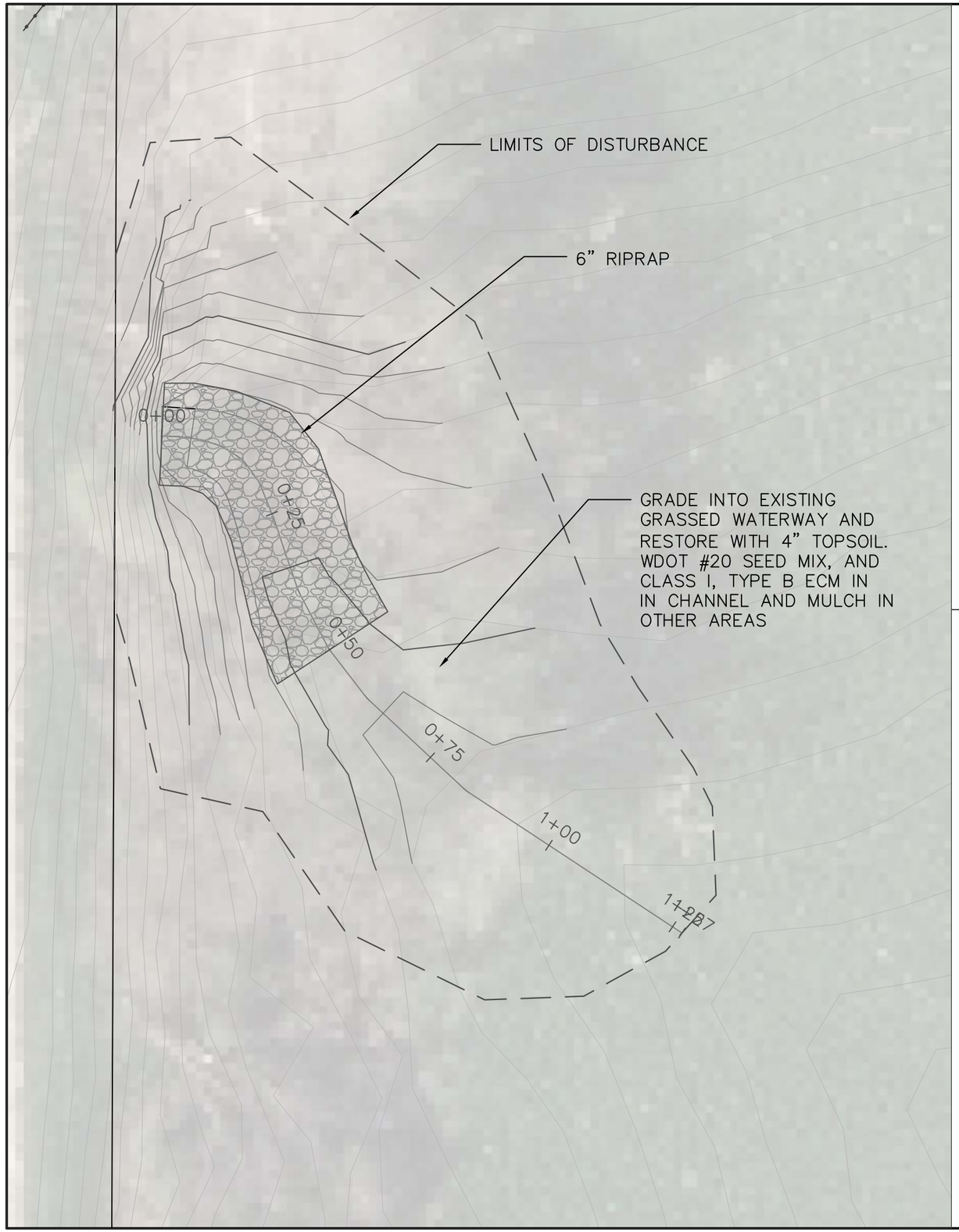
ACKER FARM RESTORATION

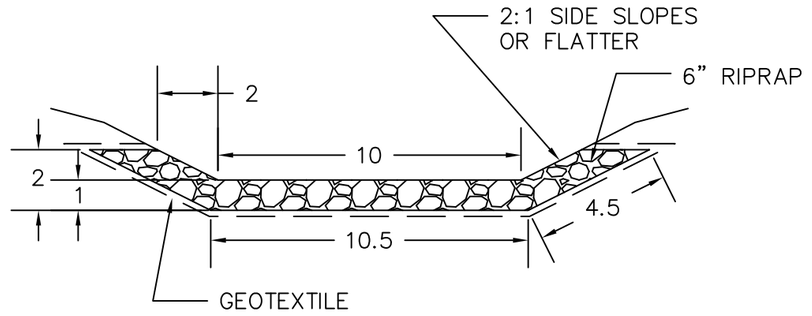
TOWN OF SPRINGFIELD, DANE COUNTY, WI

NO.	REVISION	DATE	BY
1	PIPE LENGTHS & STRUCTURE RIM ELEV.	4/21/20	TMN

DATE: 03/17/2020
SCALE: AS SHOWN
DRAWN BY: TMN
CHECKED BY: JDB
SHEET NUMBER: 7 OF 9

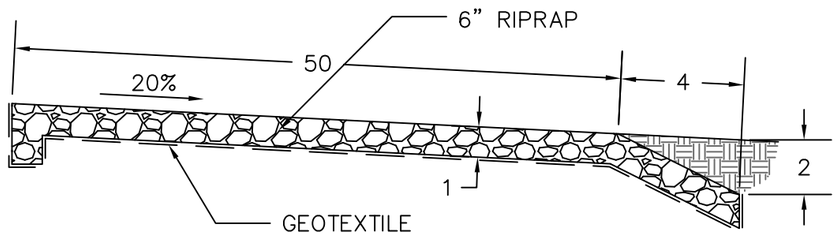
ALTERNATE BID





LINED CHANNEL SECTION

NTS



LINED CHANNEL PROFILE

NTS

DANE COUNTY

LAND&WATER RESOURCES DEPARTMENT

LINED CHANNEL

ACKER FARM RESTORATION

TOWN OF SPRINGFIELD, DANE COUNTY, WI

NO.	REVISION	DATE	BY

DATE: 03/17/2020

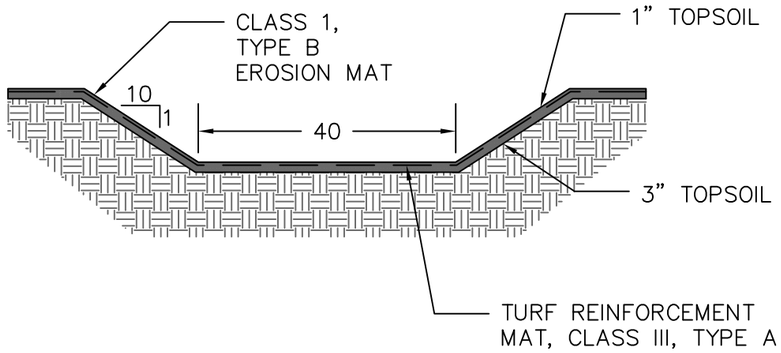
SCALE: NA

DRAWN BY: TMN

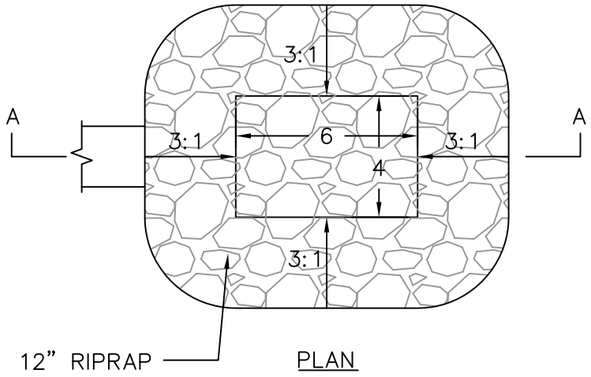
CHECKED BY: JDB

SHEET NUMBER: 8 OF 9

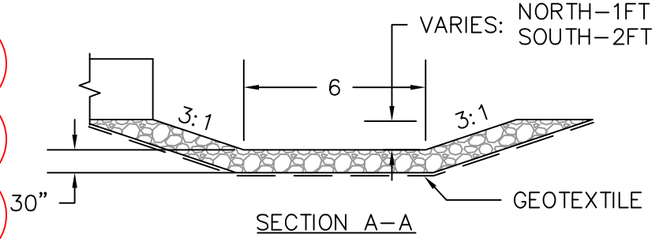
ALTERNATE BID



AUXILIARY OVERFLOW WITH TRM DETAIL



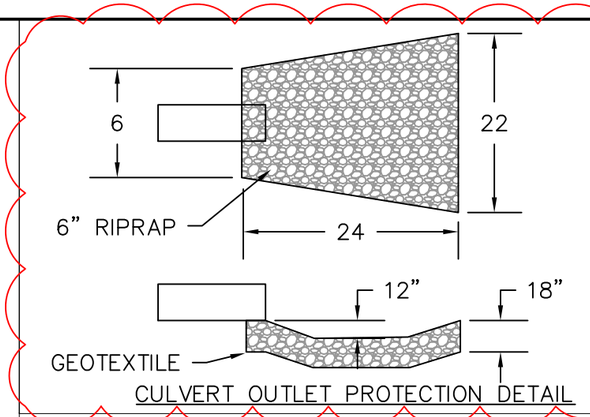
PLAN



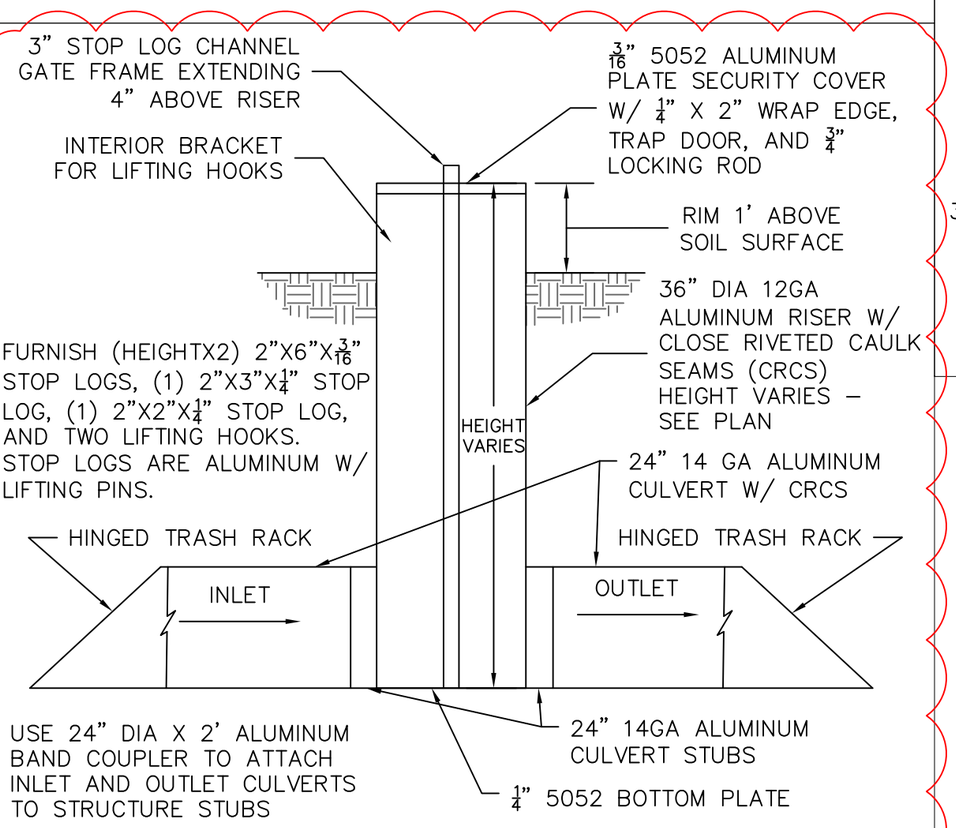
SECTION A–A

PREFORMED SCOUR HOLE OUTLET PROTECTION

NTS



CULVERT OUTLET PROTECTION DETAIL



RISER STRUCTURE SHALL HAVE 2" ANGLE INTERIOR BRACE (2@TOP, EVERY 2' DOWN) AND 1/8" WATERSEAL

STRUCTURE SHOP DRAWINGS ARE REQUIRED FOR ENGINEER'S REVIEW AND APPROVAL BEFORE FABRICATION OF WATER CONTROL STRUCTURES.

FOLLOW MANUFACTURERS INSTALLATION INSTRUCTIONS AND NRCS TECHNICAL STANDARD 378 – PONDS FOR PIPES & STRUCTURES THROUGH EMBANKMENTS

WATER LEVEL CONTROL STRUCTURE DETAIL

GRADING AND RESTORATION NOTES:

1. ALL GRADES SHOWN ARE FINAL SURFACE GRADES.
2. EXISTING CONTOURS ARE BASED ON 2017 DANE COUNTY LIDAR.
3. STRIP TOPSOIL FROM ALL AREAS TO BE EXCAVATED OR REGRADED AND STOCKPILE. IF NEEDED, ADDITIONAL TOPSOIL CAN BE REMOVED FROM AREA INDICATED ON PLAN.
4. SOIL USED FOR BERMS SHALL BE FREE OF LARGE PARTICLES AND DEBRIS AS STATED IN SPECIFICATIONS.
5. EXCAVATED SOIL NOT USED FOR TRAIL/BERM CONSTRUCTION SHALL BE SPREAD ONSITE AT LOCATIONS SPECIFIED BY ENGINEER.
6. ALL DISTURBED AREAS SHALL BE RESTORED WITH 4" OF TOPSOIL AND SEEDED WITH COOL SEASON GRASSES (WIDOT MIX #20 OR SIMILAR) AT A RATE OF 3 LBS/1000SF.
7. AREAS NOT RESTORED WITH EROSION MATTING SHALL BE RESTORED WITH MULCH.
8. MULCH SHALL BE WEED–FREE AND BE INSTALLED AT A RATE OF 2 TONS PER ACRE.

EROSION CONTROL NOTES:

1. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE.
2. CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION AND MAINTENANCE OF ALL EROSION CONTROL MEASURES.
3. CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH THE WDNR TECHNICAL STANDARDS.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL STORM WATER CONTROL MEASURES NECESSARY WITHIN CHANNELS OR DRAINAGE WAYS ON SITE.
5. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED WITHIN 24 HRS AT THE REQUEST BY STATE OR LOCAL INSPECTORS, OR ENGINEER.
6. CONTRACTOR SHALL TAKE PRECAUTIONS TO PREVENT SOIL FROM BEING TRACKED ONTO PUBLIC ROADWAYS AND SHALL SWEEP AS NECESSARY OR AT THE END OF EACH DAY.
7. IMMEDIATELY STABILIZE STOCKPILES AND SURROUND AS NEEDED WITH PERIMETER CONTROL IF PILES WILL REMAIN INACTIVE FOR 7 DAYS OR LONGER.
8. IMMEDIATELY STABILIZE ALL DISTURBED AREAS THAT WILL REMAIN INACTIVE FOR 14 DAYS OR LONGER.
9. STABILIZE AREAS OF FINAL GRADING WITHIN 7 DAYS OF REACHING FINAL GRADE.

GENERAL NOTES:

1. CRUSHED CONCRETE CAN BE USED FOR RIPRAP PROVIDED IT MEETS SIZE AND GRADATION REQUIREMENTS.
2. ANY EXCAVATED SOIL NOT USED FOR PLAN CAN BE SPREAD ONSITE AS DIRECTED BY ENGINEER.
3. ESTIMATED CUT AND FILL QUANTITIES DO NOT INCLUDE ANY ADJUSTMENT FACTORS; CUT IS LIKELY OVERESTIMATED DUE TO SITE MODIFICATIONS DONE SINCE 2017 LIDAR WAS COLLECTED.

DANE COUNTY
LAND&WATER RESOURCES DEPARTMENT

DETAILS

ACKER FARM RESTORATION

TOWN OF SPRINGFIELD, DANE COUNTY, WI

NO	REVISION	DATE	BY
1	WATER CONTROL STRUCTURE DETAILS & OUTLET PROTECTION	3/21/20	TMN

DATE: 03/17/2020

SCALE: NA

DRAWN BY: TMN

CHECKED BY: JDB

SHEET NUMBER:
9 OF 9

ALTERNATE BID