

Report of Findings

County Ditch No. 63 Lateral J7 Impoundment Renville County, Minnesota

25X.142020.000

July 2026



Real People. Real Solutions.

Submitted by:

Bolton & Menk, Inc.
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Certification

Report of Findings

For

County Ditch No. 63 Lateral J7 Impoundment

In

Renville County, Minnesota

25X.142020.000

July 2026

PROFESSIONAL ENGINEER

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

Signature: Bill L. Helget

Typed or Printed Name: Bill L. Helget

Date: 7/20/2026 License Number: 42046

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STATE OF MINNESOTA

RENVILLE COUNTY

IN THE MATTER OF THE PETITION TO IMPOUND AND DIVERT COUNTY DITCH NO 63 LATERAL J7 IN
RENVILLE COUNTY, MINNESOTA:

In June 2026, the Renville County Board, acting as the Drainage Authority for County Ditch No. 63 Lateral J7 (CD 63 Lat J7) in Renville County, in accordance with Minnesota Statute 103E.227, accepted a petition to impound portions of CD 63 Lat J7. Field surveys were performed to obtain elevations and establish a disposal site for the excess material from the impoundment of CD 63 Lat J7.

This Report of Findings summarizes the findings of the research, surveys, and analysis for the Impoundment and is submitted for consideration by the Drainage Authority.

I. LOCATION AND SCOPE OF THE IMPOUNDMENT

County Ditch No. 63 Lat J7 lies within and provides drainage to a watershed north of Olivia, Minnesota. The proposed Impoundment location lies within Section 6 of Bird Island Township. The outlet for CD 63 Lat J7 is Lateral J and County Ditch 63 in section 6 of Bird Island Township in Renville County. CD 63 ultimately drains into Beaver Creek and then into the Minnesota River. The total watershed draining into the impoundment system from Lidar contour data, is 158 acres.

The proposed Impoundment for County Ditch No. 63 Lat J7 includes the construction of a storage pond and a WASCOB. This proposed Impoundment will increase the storage within the existing impoundment. The increase in dead storage and live storage will help store overland water and reduce the overall flow and nutrient runoff. Exhibit 1 shows the general location of CD 63 Lat J7 and the proposed Impoundment.

Initial field survey information was collected by Renville County in January of 2026 subsequent surveys took place in spring of 2026. The survey included GPS locations and elevations for the existing ground, outlet of the tile and for private and public intakes on the system. The tile system design utilizes Lidar data, provided by the Minnesota Department of Natural Resources. This data, obtained from an aerial flight, results in contours of equal elevation at 2' vertical intervals.

II. EXISTING DITCH SYSTEM

Public records regarding County Ditch No. 63 Lat J7 were reviewed from Renville County. This information includes the reroute of CD 63 Lat J and CD 63 Lat J7.

CD 63 was petitioned in April 1915 and established July 11, 1916. CD 63 Lat J7 was included in the original plans. The original benefits for the ditch system in 1916 were \$477,791.

The benefits for CD 63 Lat J7 were recently redetermined. Current benefits for the CD 63 system are \$57,536,383.23.

III. CONDITION OF THE EXISTING IMPOUNDMENT

The portion of the CD 63 Lat J7 system proposed to be impounded consists of a tile that has been rerouted in 2026 around the existing impoundment. The existing impoundment can hold 930 cubic yards of water. The existing impoundment is in good condition but does not have sufficient watershed being directed into it to fully utilize the storage volume. The existing impoundment also does not have a direct outlet but is instead being drained through evapotranspiration.

IV. DISCUSSION OF THE IMPOUNDMENT

The proposed construction consists of drain tile construction and grading as shown in Exhibit 1. The drain tile will consist of a 10-inch and 12-inch tile. The grading work will include excavation at the existing impoundment location, construction of a WASCOB, and filling washout areas near the open ditch.

A. DESIGN DATA –TILE

The proposed drain tile is shown in Exhibit 1. The type of pipe that should be used for the construction will be bid as a contractor option as follows:

1. Dual Wall or Triple Wall Polypropylene Drain Tile meeting the requirements of the American Society for Testing Materials F2376. Pipe will be bedded in granular foundation rock.
2. Dual Wall Polyethylene Drain Tile meeting the requirements of the American Society for Testing Materials F 2648. Pipe will be bedded in granular foundation rock as shown on Exhibit 1. The perforated pipe will include micro perforations/slots to avoid granular infiltration into the pipe. An option would be provided for the contractor to shape the bottom of the trench to conform to the pipe and eliminate some of the granular bedding if the pipe manufacturer would warrant the material installation.
3. Reinforced concrete pipe meeting the requirements of MnDOT Specification 2501, with the joints being covered with geotextile fabric or gasketed joints.

The tile capacities can be seen in Table 1. These capacities were calculated using the Mannings equation. The drainage area in Table 1 represents the total upstream waters within the CD 63 Lat J system.

Table 1: Repair System Capacity				
Tile	Total Drainage Area (Acres)	Tile Size (Inches)	Tile Grade (%)	Calculated Capacity (CFS) n=0.012
North Tile	133	12	1.72	5.08
South Tile	25	10	0.27	1.24

B. DESIGN DATA – WASCOB

Exhibit 1 shows the location of the proposed water and sediment control basin (WASCOB). The WASCOB will be designed to meet NRCS practice standards, including holding a 10-year storm event. Select borrow material will be sourced from the excavation. From the Agricultural Best Management Practices Handbook for Minnesota, "WASCOBs consist of an embankment across the slope of a field or minor waterway to temporarily detain and release water through a piped outlet or through infiltration. They are constructed perpendicular to the flow direction. The key benefit of WASCOBs is detaining water from contributing areas, inducing sedimentation, and controlling the release of water, thereby reducing the erosive power of the water downstream."

The proposed basins will temporarily store overland runoff from the watershed. The slopes on the berm in agricultural fields will be at 1V:30H or flatter so that the berm can still be farmed. The top width of the berm will be 8 feet wide so that it can be easily navigated. The material used to construct these berms will come from the pond excavation. These berms

will create storage for runoff and will reduce the peak overland flows discharged to the CD 63 Main Open Ditch.

C. DESIGN DATA – IMPOUNDMENT

The proposed impoundment is shown on Exhibit 1. The created impoundment is designed to have 4.5-foot of permanent storage.

Table 2: Proposed Storage Summary				
System	Landowner	Live Storage Created (Acre-feet)	Total Ponding Area (Acres)	Total Watershed Area (Acres)
WASCOB	Hagen	35.6	24.2	133
Impoundment	Mertens	3.8	0.7	158

V. PERMIT REQUIREMENTS

No permits are required for this project. This includes an MPCA stormwater permit as this work is not representative of an improvement project.

VI. WETLAND CONSIDERATION

National Wetland Inventory Maps was reviewed to locate potential wetlands subject to regulations. Impacts of the potential drainage system on individual land parcels will be evaluated by the Natural Resources Conservation Service upon filing of a Form AD 1026 by landowners. This NRCS process will identify any wetlands and measures which need to be taken for the drainage construction to avoid impact to these wetlands. Because of federal data privacy requirements, it is not possible for non-landowners to obtain this information. Thus, the obligation for filling out these forms and doing this investigation will rest with individual landowners.

Drainage of non-directly impacted wetlands will be controlled by supplemental drainage systems installed by private owners. Owners are advised that such supplemental drainage may not be permitted under State Wetland Conservation Act, US Army Corps of Engineers and NRCS rules and may affect US Department of Agriculture program eligibility.

VII. WATER QUALITY

The total pollution reductions can be seen in the table below, these values were calculated using the MPCA Watershed Pollutant Load Reduction Calculator. The watershed is located within the Yellow Medicine watershed and East Fork Beaver Creek HUC 12 within the Watershed Pollutant Load Calculator.

Table 1: Erosion Reduction			
System	Nitrogen (estimated reduction) lbs./yr.	Phosphorous (estimated reduction) lbs./yr.	Sediment (TSS) T/yr.
WASCOB	135.1	17.0	2.0
Impoundment	2.6	0.1	0.0
Total	137.7	17.1	2.0

This impoundment is located within the Hawk Creek-Middle Minnesota Comprehensive Watershed Management Plan. The goals met by this impoundment within the CWMP is a reduction of Total Suspended Solids (TSS). This plan outlines the needs for Water Quality and Storage practices, especially within the upper parts of the watershed. This impoundment is located within the upper parts of the watershed as such it helps to eliminate pollutants early within the system.

VIII. ESTIMATE OF COST

The impoundment cost estimate is described in this report is shown in Exhibit 2. The total estimated cost for the Impoundment is \$207,614 that price includes the cost of administration and engineering fees. The cost share for this project is 90 percent grant funds and 10 percent local funds.

The rationale for the requested drainage system funds is that the proposed project will modify Renville County Ditch 63 Lateral J in a manner that benefits the drainage system while advancing water quality purposes. The project will conserve and make more adequate use of drainage system waters by temporarily storing and controlling the release of those waters; reduce downstream peak flows and flooding potential; reduce erosion and sedimentation; protect and improve water quality; and maintain the utility of the drainage system without depriving affected landowners of its benefit. To the extent the engineer identifies separable repairs or avoided repair costs within the project boundaries, Petitioners request that those costs and other drainage system benefits be considered in determining the amount, if any, of drainage system funds to contribute to the project.

Included in the estimate are the approximate 8.77 acres of agricultural land which will be temporarily taken out of production by construction and 1.43 acres of grass area that will be converted into a permanent impoundment. The individual landowners will be compensated for this loss through the damage process of further ditch proceedings.

There are additional benefits to the system including: flood storage, habitat creation, and reduced peak discharge rates of the downstream system. These benefits allow for other projects to be feasible downstream without exceeding the existing capacity of CD 63 Lat J7.

IX. RECOMMENDATIONS

The proposed Impoundment and Reroute of CD 63 Lat J7 in Renville County, as described in this report, is feasible, practical and necessary to provide drainage for the cultivation of crops within the watershed area.

It is our recommendation to proceed with the Impoundment as outlined in this report and that the Report of Findings be approved. If there are adequate funds, the recommendation is that the Drainage Authority order the Impoundment.

Exhibit 1: Preliminary Plans and Profiles

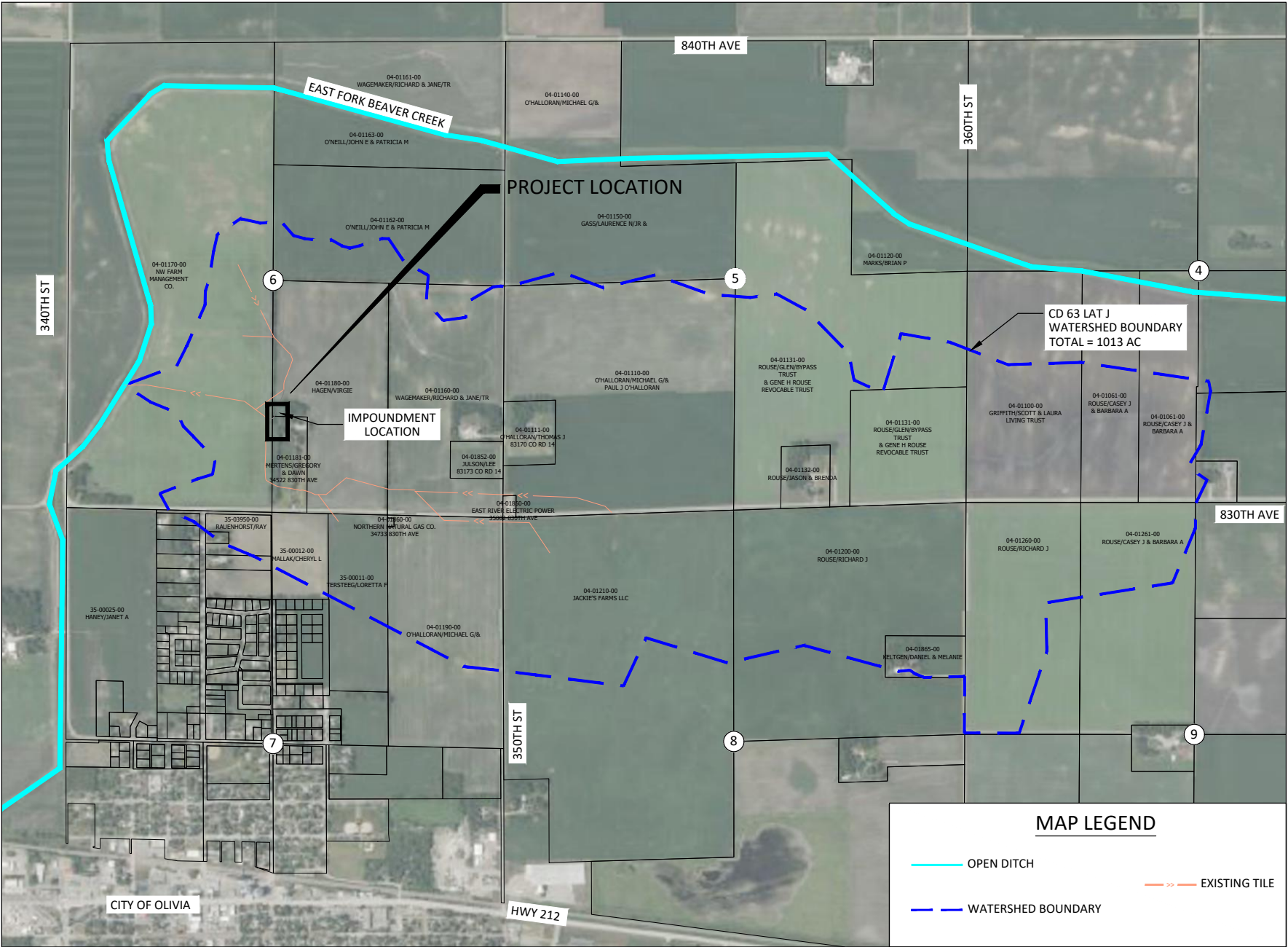
RENVILLE COUNTY

PRELIMINARY PLANS FOR

COUNTY DITCH 63 BRANCH J7 IMPOUNDMENT

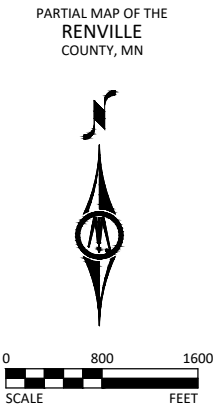
GRADING, EROSION CONTROL, DRAIN TILE AND SURFACE INTAKES

JULY, 2026



SHEET NUMBER	SHEET TITLE
GENERAL	
G0.01 - G0.02	TITLE SHEET, LEGEND, GENERAL NOTES
CIVIL	
C1.01 - C1.02	TABLES, DETAILS, TYPICAL SECTIONS, PHASING PLAN
C2.01	EROSION CONTROL PLAN, SWPPP
C3.01 - C3.03	GRADING PLAN
C5.01 - C5.02	STORM SEWER PLAN & PROFILE

THIS PLAN SET CONTAINS 10 SHEETS.



NOTE: EXISTING UTILITY INFORMATION SHOWN ON THIS PLAN HAS BEEN PROVIDED BY THE UTILITY OWNER. THE CONTRACTOR SHALL FIELD VERIFY EXACT LOCATIONS PRIOR TO COMMENCING CONSTRUCTION AS REQUIRED BY STATE LAW. NOTIFY GOPHER STATE ONE CALL, 1-800-252-1166 OR 651-454-0002.

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D UNLESS OTHERWISE NOTED. THIS UTILITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF C/ASCE 38-22, ENTITLED "STANDARD GUIDELINE FOR INVESTIGATING AND DOCUMENTING EXISTING UTILITIES".

PROJECT DATUM: RENVILLE CO COORDINATES HORIZONTAL: NAD83 (2011) VERTICAL: NAVD88	RECORD DRAWING INFORMATION
	OBSERVER:
	CONTRACTOR:
	DATE:

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY AN ENGINEER OR ARCHITECT REGISTERED IN THE STATE OF MINNESOTA.
PRELIMINARY NOT FOR CONSTRUCTION
LIC. NO. 42046 DATE MM/DD/YYYY



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Email: SleepyEye@bolton-menk.com
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DESIGNED	NO.	ISSUED FOR	DATE
JGB			
DRAWN			
WSS			
CHECKED			
BLH			
CLIENT PROJ. NO.			
25X.142020.000			

BUFFALO CREEK WATERSHED DISTRICT
COUNTY DITCH 63 BRANCH J7 IMPOUNDMENT
TITLE SHEET

SHEET
G0.01

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A:\IN\CD\25X14202000\CD\6301420200001.dwg 7/16/2026 1:04:10 AM Plotted by Jordan Bengtson

EXISTING TOPOGRAPHIC SYMBOLS

	ACCESS GRATE		REGULATION STATION GAS
	AIR CONDITION UNIT		SATELLITE DISH
	ANTENNA		SIGN TRAFFIC
	AUTO SPRINKLER CONNECTION		SIGNAL CONTROL CABINET
	BARRICADE PERMANENT		SOIL BORING
	BASKETBALL POST		SIREN
	BENCH		TELEPHONE BOOTH
	BIRD FEEDER		TILE INLET
	BOLLARD		TILE OUTLET
	BUSH		TILE RISER
	CATCH BASIN RECTANGULAR CASTING		TRANSFORMER-ELECTRIC
	CATCH BASIN CIRCULAR CASTING		TREE-CONIFEROUS
	CURB STOP		TREE-DEAD
	CLEAN OUT		TREE-DECIDUOUS
	CULVERT END		TREE STUMP
	DRINKING FOUNTAIN		TRAFFIC ARM BARRIER
	DOWN SPOUT		TRAFFIC SIGNAL
	ELECTRIC CAR CHARGE STATION		TRASH CAN
	FILL PIPE		UTILITY MARKER
	FIRE HYDRANT		VALVE
	FLAG POLE		VALVE POST INDICATOR
	FLARED END / APRON		VALVE VAULT
	FUEL PUMP		VAULT
	GRILL		VENT PIPE
	GUY WIRE ANCHOR		WATER SPIGOT
	HANDHOLE		WELL
	HANDICAP SPACE		WETLAND DELINEATED MARKER
	IRRIGATION SPRINKLER HEAD		WETLAND
	IRRIGATION VALVE BOX		WET WELL
	LIFT STATION CONTROL PANEL		YARD HYDRANT

PROPOSED TOPOGRAPHIC SYMBOLS

	CLEANOUT
	MANHOLE
	LIFT STATION
	STORM SEWER CIRCULAR CASTING
	STORM SEWER RECTANGULAR CASTING
	STORM SEWER FLARED END / APRON
	STORM SEWER OUTLET STRUCTURE
	STORM SEWER OVERFLOW STRUCTURE
	CURB BOX
	FIRE HYDRANT
	WATER VALVE
	WATER REDUCER
	WATER BEND
	WATER TEE
	WATER CROSS
	WATER SLEEVE
	WATER CAP / PLUG
	RIP RAP
	DRAINAGE FLOW
	TRAFFIC SIGNS

SURVEY SYMBOLS

	BENCHMARK LOCATION		CAST IRON MONUMENT
	CONTROL POINT		STONE MONUMENT
	MONUMENT FOUND		

EXISTING TOPOGRAPHIC LINES

	RETAINING WALL
	FENCE
	FENCE-DECORATIVE
	GUARD RAIL
	TREE LINE
	BUSH LINE

SURVEY LINES

	CONTROLLED ACCESS
	BOUNDARY
	CENTERLINE
	EXISTING EASEMENT LINE
	PROPOSED EASEMENT LINE
	EXISTING LOT LINE
	PROPOSED LOT LINE
	EXISTING RIGHT-OF-WAY
	PROPOSED RIGHT-OF-WAY
	SETBACK LINE
	SECTION LINE
	QUARTER LINE
	SIXTEENTH LINE
	TEMPORARY EASEMENT

EXISTING UTILITY LINES

	FORCEMAIN
	SANITARY SEWER
	SANITARY SERVICE
	STORM SEWER
	STORM SEWER DRAIN TILE
	WATERMAIN
	WATER SERVICE
	RECLAIMED WATER

PROPOSED UTILITY LINES

	FORCEMAIN
	SANITARY SEWER
	SANITARY SERVICE
	STORM SEWER
	STORM SEWER DRAIN TILE
	WATERMAIN
	WATER SERVICE
	PIPE CASING
	TRENCHLESS PIPE (PLAN VIEW)
	TRENCHLESS PIPE (PROFILE VIEW)

GRADING INFORMATION

	EXISTING CONTOUR MINOR
	EXISTING CONTOUR MAJOR
	PROPOSED CONTOUR MINOR
	PROPOSED CONTOUR MAJOR
	PROPOSED GRADING LIMITS / SLOPE LIMITS
	PROJECT LIMITS
	PROPOSED SPOT ELEVATION
	RISE:RUN (SLOPE)

HATCH PATTERNS

	BITUMINOUS		GRAVEL
	CONCRETE		

EXISTING PRIVATE UTILITY LINES

NOTE:
EXISTING UTILITY INFORMATION SHOWN ON THIS PLAN HAS BEEN PROVIDED BY THE UTILITY OWNER. THE CONTRACTOR SHALL FIELD VERIFY EXACT LOCATIONS PRIOR TO COMMENCING CONSTRUCTION AS REQUIRED BY STATE LAW. NOTIFY GOPHER STATE ONE CALL, 1-800-252-1166 OR 651-454-0002.

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D UNLESS OTHERWISE NOTED. THIS UTILITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-22, ENTITLED "STANDARD GUIDELINE FOR INVESTIGATING AND DOCUMENTING EXISTING UTILITIES".

	UNDERGROUND FIBER OPTIC
	UNDERGROUND ELECTRIC
	UNDERGROUND GAS
	UNDERGROUND COMMUNICATION
	OVERHEAD ELECTRIC
	OVERHEAD COMMUNICATION
	OVERHEAD UTILITY

UTILITIES IDENTIFIED WITH A QUALITY LEVEL :

LINE TYPES FOLLOW THE FORMAT: UTILITY TYPE - QUALITY LEVEL
EXAMPLE: G-A UNDERGROUND GAS, QUALITY LEVEL A
UTILITY QUALITY LEVEL (A,B,C,D) DEFINITIONS CAN BE FOUND IN CI/ASCE 38-22.

UTILITY QUALITY LEVELS:

QUALITY LEVEL D: PROVIDES THE MOST BASIC LEVEL OF INFORMATION. IT INVOLVES COLLECTING DATA FROM EXISTING UTILITY RECORDS. RECORDS MAY INCLUDE AS-BUILT DRAWINGS, DISTRIBUTION AND SERVICES MAPS, EXISTING GEOGRAPHIC INFORMATION SYSTEM DATABASES, CONSTRUCTION PLANS, ETC.

QUALITY LEVEL C: INVOLVES SURVEYING VISIBLE SUBSURFACE UTILITY STRUCTURES SUCH AS MANHOLES, HAND-HOLES, UTILITY VALVES AND METERS, FIRE HYDRANTS, PEDESTALS AND UTILITY MARKERS, AND THEN CORRELATING THE INFORMATION WITH EXISTING UTILITY RECORDS TO CREATE COMPOSITE DRAWINGS. INCLUDES QUALITY LEVEL D ACTIVITIES.

QUALITY LEVEL B: INVOLVES DESIGNATING THE HORIZONTAL POSITION OF SUBSURFACE UTILITIES THROUGH SURFACE DETECTION METHODS AND COLLECTING THE INFORMATION THROUGH A SURVEY METHOD. INCLUDES QUALITY LEVEL C AND D TASKS.

QUALITY LEVEL A: PROVIDES THE HIGHEST LEVEL OF ACCURACY. IT INVOLVES LOCATING OR POTHOLING UTILITIES AS WELL AS ACTIVITIES IN QUALITY LEVELS B, C, AND D. THE LOCATED FACILITY INFORMATION IS SURVEYED AND MAPPED AND THE DATA PROVIDES PRECISE PLAN AND PROFILE INFORMATION.

ABBREVIATIONS

A	ALGEBRAIC DIFFERENCE	GRAV	GRAVEL	RSC	RIGID STEEL CONDUIT
ADJ	ADJUST	GU	GUTTER	RT	RIGHT
ALT	ALTERNATE	GV	GATE VALVE	SAN	SANITARY SEWER
B-B	BACK TO BACK	HDPE	HIGH DENSITY POLYETHYLENE	SCH	SCHEDULE
BIT	BITUMINOUS	HH	HANDHOLE	SERV	SERVICE
BLDG	BUILDING	HP	HIGH POINT	SHLD	SHOULDER
BMP	BEST MANAGEMENT PRACTICE	HWL	HIGH WATER LEVEL	STA	STATION
BR	BEGIN RADIUS	HYD	HYDRANT	STD	STANDARD
BV	BUTTERFLY VALVE	I	INVERT	STM	STORM SEWER
CB	CATCH BASIN	K	CURVE COEFFICIENT	TC	TOP OF CURB
C&G	CURB AND GUTTER	L	LENGTH	TE	TEMPORARY EASEMENT
CIP	CAST IRON PIPE	LO	LOWEST OPENING	TEMP	TEMPORARY
CIPP	CURED-IN-PLACE PIPE	LP	LOW POINT	TNH	TOP NUT HYDRANT
CL	CENTER LINE	LT	LEFT	TP	TOP OF PIPE
CL	CLASS	MAX	MAXIMUM	TYP	TYPICAL
CLVT	CULVERT	MH	MANHOLE	VCP	VITRIFIED CLAY PIPE
CMP	CORRUGATED METAL PIPE	MIN	MINIMUM	VERT	VERTICAL
C.O.	CHANGE ORDER	MR	MID RADIUS	VPC	VERTICAL POINT OF CURVE
COMM	COMMUNICATION	NIC	NOT IN CONTRACT	VPI	VERTICAL POINT OF INTERSECTION
CON	CONCRETE	NMC	NON-METALLIC CONDUIT	VPT	VERTICAL POINT OF TANGENT
CSP	CORRUGATED STEEL PIPE	NTS	NOT TO SCALE	WM	WATERMAIN
DIA	DIAMETER	NWL	NORMAL WATER LEVEL		
DIP	DUCTILE IRON PIPE	OHW	ORDINARY HIGH WATER LEVEL		
DWY	DRIVEWAY	PC	POINT OF CURVE	AC	ACRES
E	EXTERNAL CURVE DISTANCE	PCC	POINT OF COMPOUND CURVE	CF	CUBIC FEET
ELEC	ELECTRIC	PE	PERMANENT EASEMENT	CV	COMPACTED VOLUME
ELEV	ELEVATION	PED	PEDESTRIAN, PEDESTAL	CY	CUBIC YARD
EOF	EMERGENCY OVERFLOW	PERF	PERFORATED PIPE	EA	EACH
ER	END RADIUS	PERM	PERMANENT	EV	EXCAVATED VOLUME
ESMT	EASEMENT	PI	POINT OF INTERSECTION	LB	POUND
EX	EXISTING	PL	PROPERTY LINE	LF	LINEAR FEET
FES	FLARED END SECTION	PRC	POINT OF REVERSE CURVE	LS	LUMP SUM
F-F	FACE TO FACE	PT	POINT OF TANGENT	LV	LOOSE VOLUME
FF	FINISHED FLOOR	PVC	POLYVINYL CHLORIDE PIPE	SF	SQUARE FEET
F&I	FURNISH AND INSTALL	PVMT	PAVEMENT	SV	STOCKPILE VOLUME
FM	FORCEMAIN	R	RADIUS	SY	SQUARE YARD
FO	FIBER OPTIC	R/W	RIGHT-OF-WAY		
F.O.	FIELD ORDER	RCP	REINFORCED CONCRETE PIPE		
GRAN	GRANULAR	RET	RETAINING		

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

BILL L. HELGET, P.E.
LIC. NO. 42046 DATE MM/DD/YYYY



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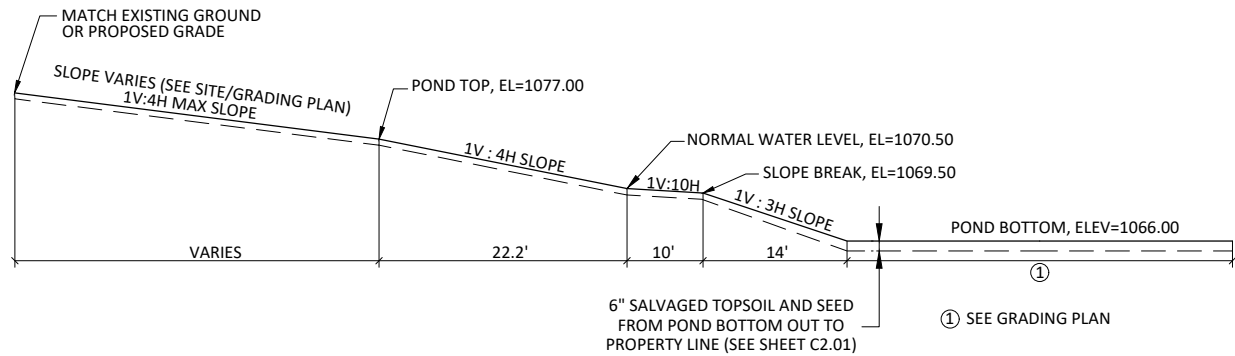
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CHECKED	BLH			
CLIENT PROJ. NO.	25X-142020.000			

BUFFALO CREEK WATERSHED DISTRICT
COUNTY DITCH 63 BRANCH J7 IMPOUNDMENT

LEGEND

SHEET

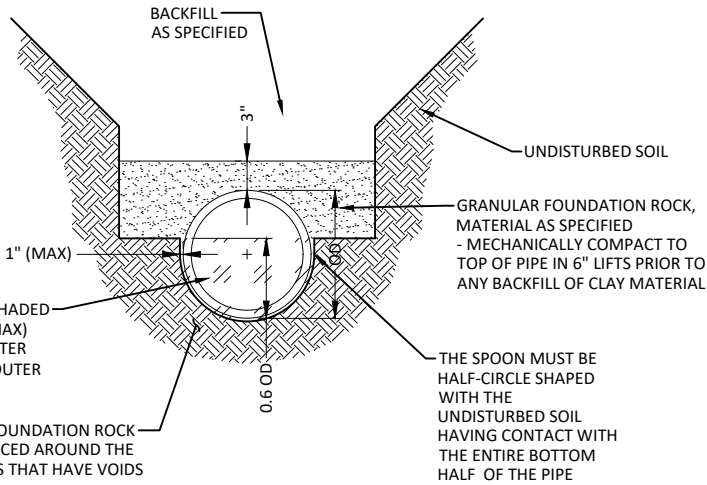
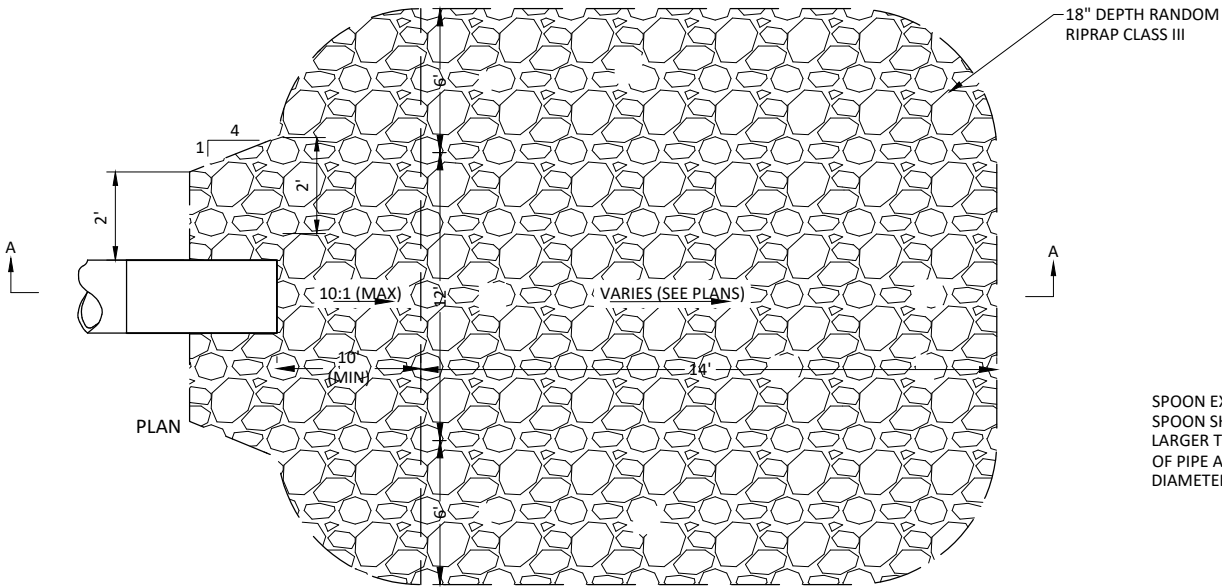
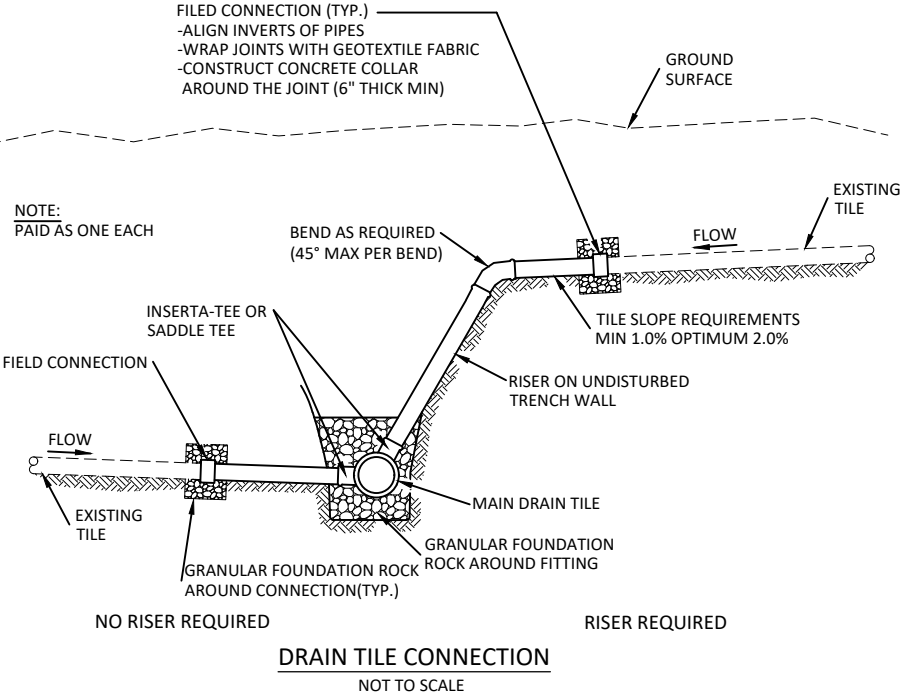
G0.02



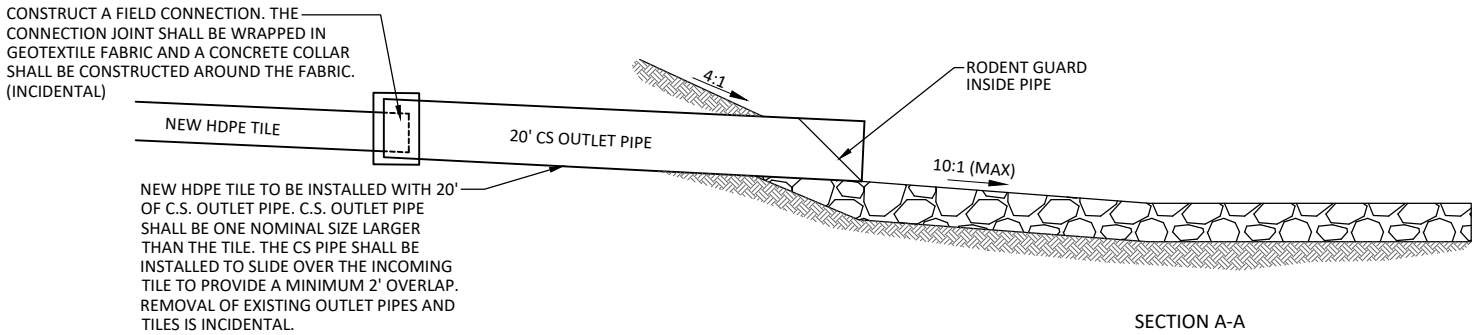
TYPICAL SECTION
STORM WATER DETENTION POND
NOT TO SCALE

GRANULAR MATERIAL DEPTH TO INVERT TABLE (ASTM F2648)	
TILE SIZE (IN)	MAX PIPE DEPTH (FT)
4	21
6	21
8	21
10	21
12	21
15	21
18	21
24	19
30	19
36	18
42	18
48	18
60	17

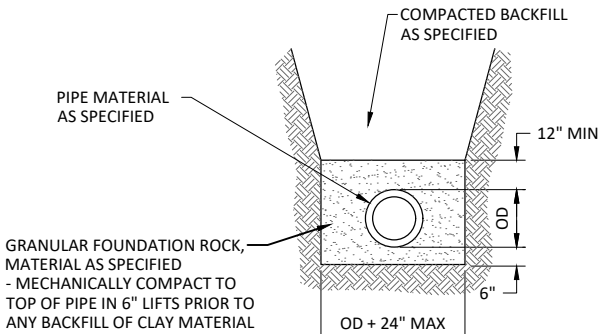
NOTE: THIS TABLE IS FOR REFERENCE PURPOSES ONLY. ACTUAL MAXIMUM AND MINIMUM DEPTHS SHALL BE DETERMINED IN CONJUNCTION WITH MANUFACTURER AND TESTING AGENCIES.



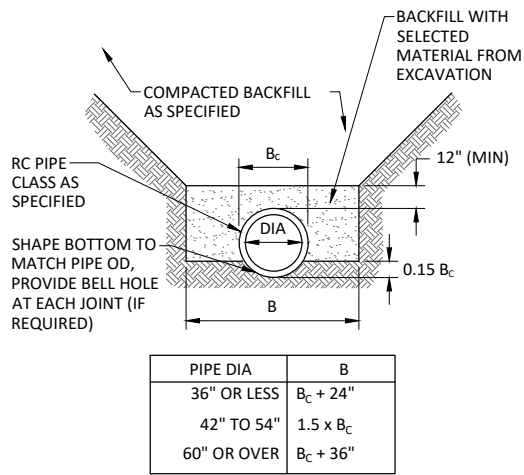
HDPE "SPOON" TRENCH BEDDING DETAIL
NOT TO SCALE



RIPRAP AT IMPOUNDMENT INLET
NOT TO SCALE



HDPE RECTANGULAR TRENCH BEDDING DETAIL
NOT TO SCALE



RC PIPE
CLASS "C" BEDDING
NOT TO SCALE

LAST REVISION:
04-2021

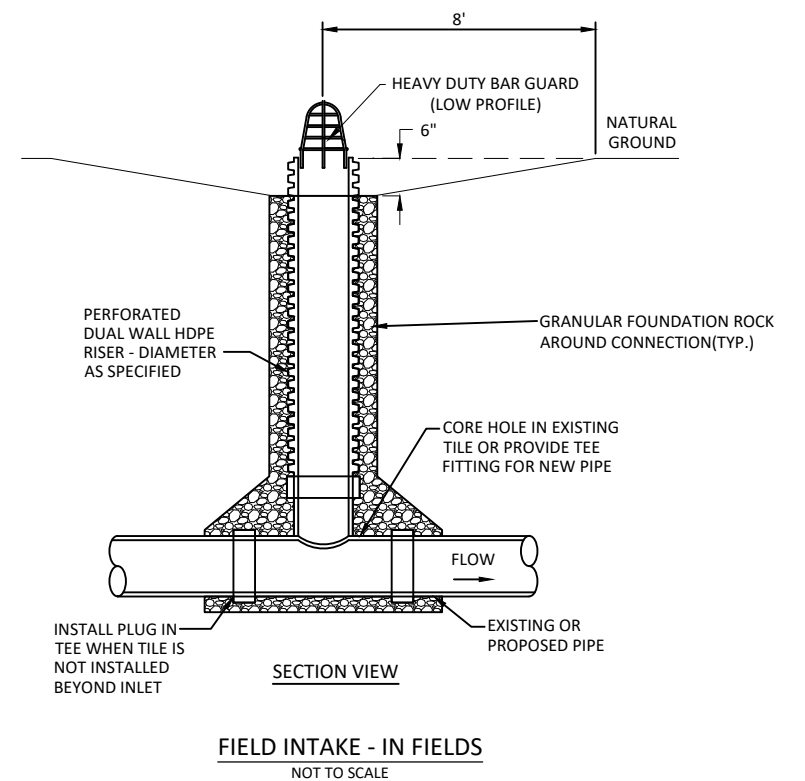
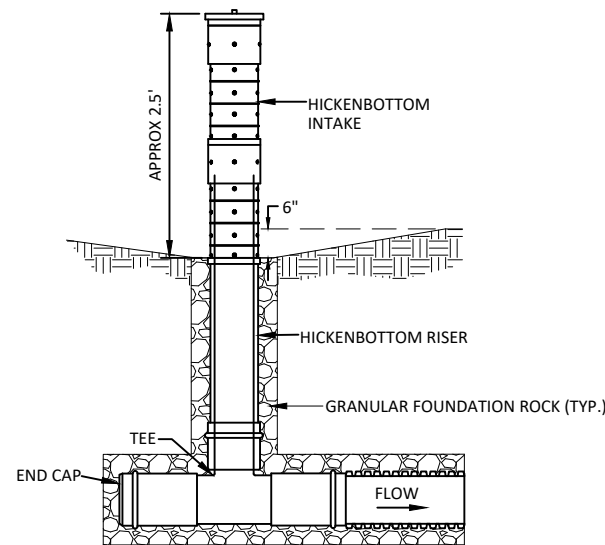
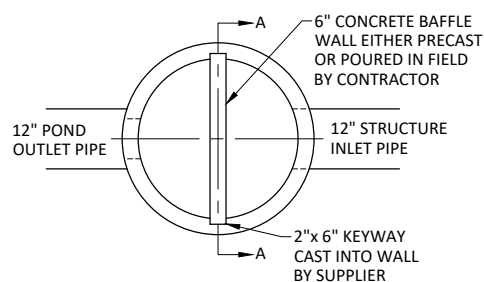
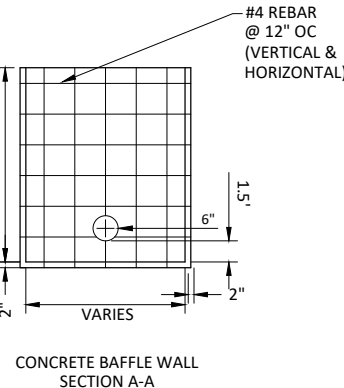
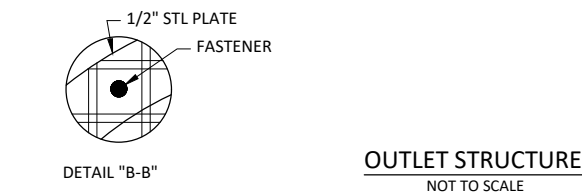
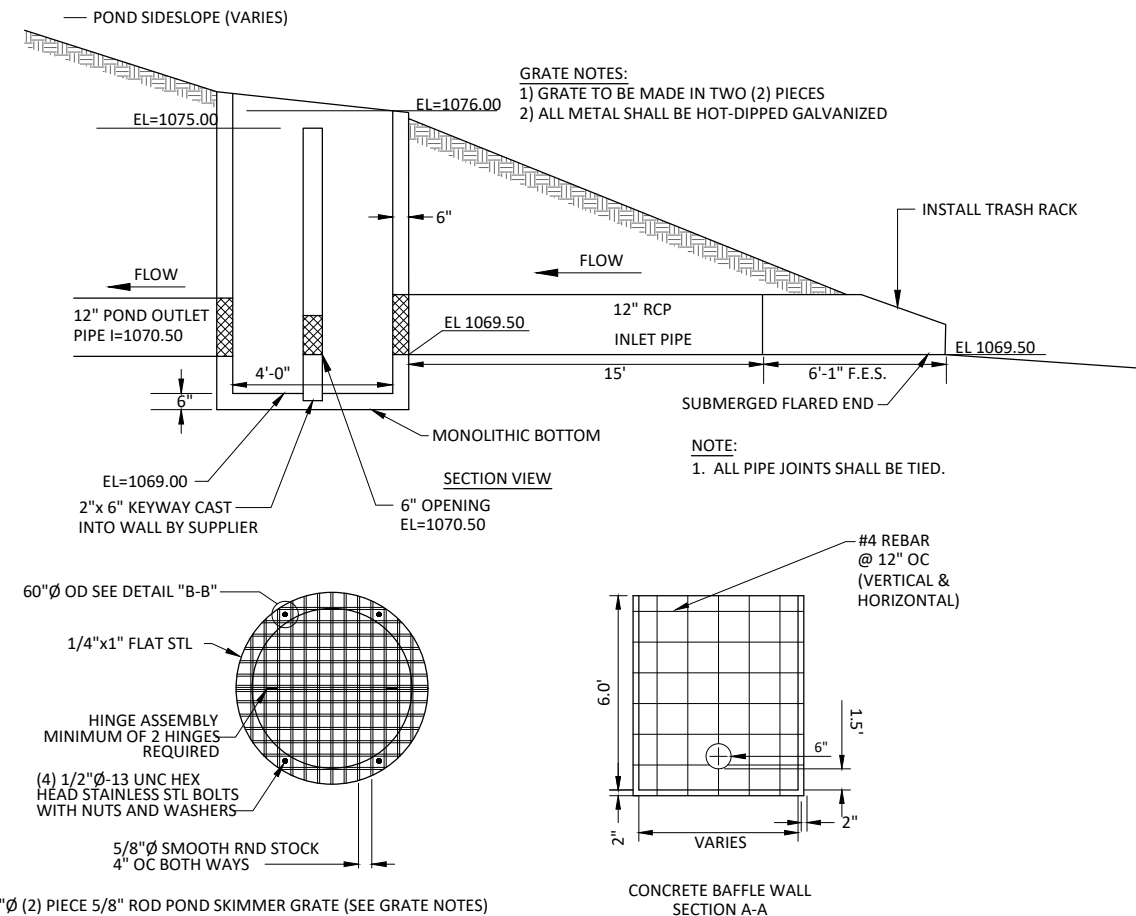
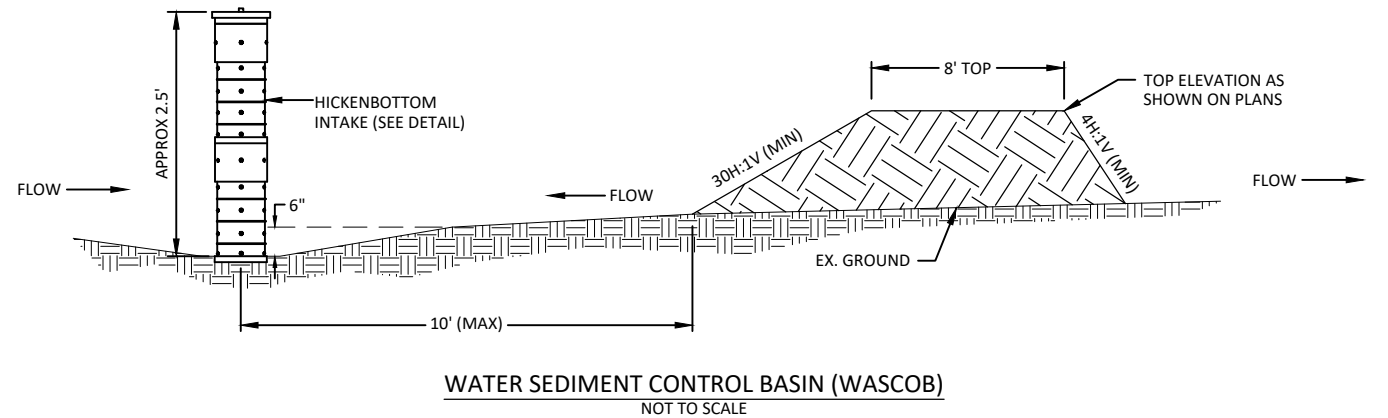
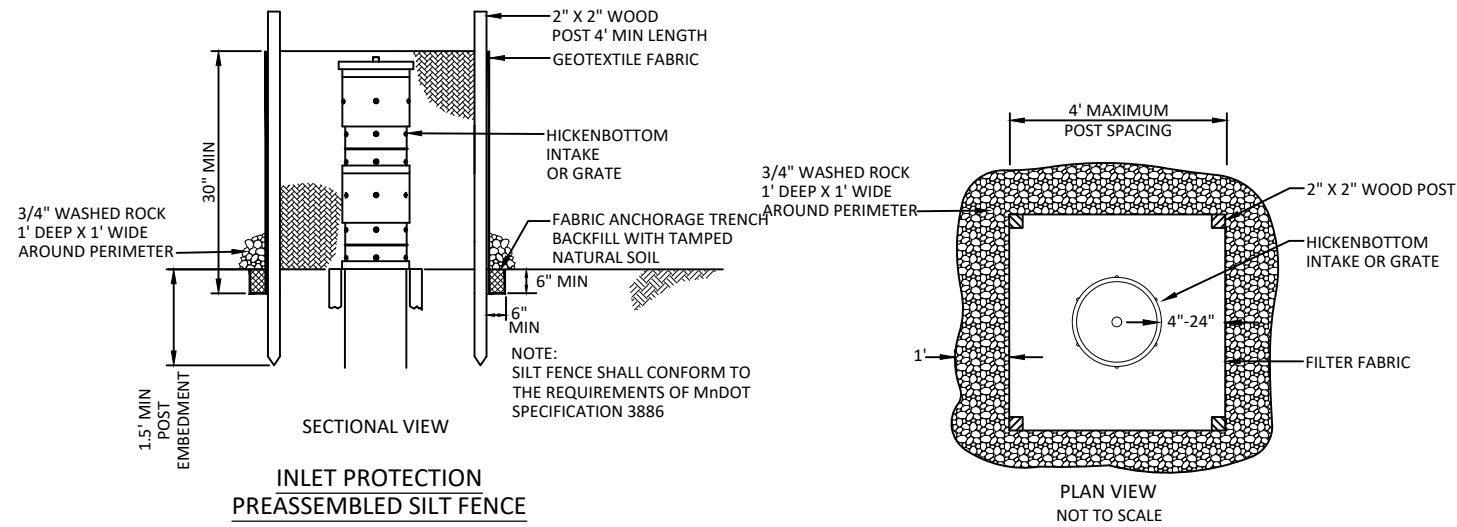
PLATE NO.
4-000

BUFFALO CREEK WATERSHED DISTRICT
COUNTY DITCH 63 BRANCH J7 IMPOUNDMENT
DETAILS
DRAIN TILE DETAILS

SHEET

C1.01





NOTE: PIPE LEADER, RISER, INTAKE, FITTINGS, FOUNDATION AGGREGATE INCLUDED FOR PRICE BID FOR HICKENBOTTOM INTAKE

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BILL L. HELGET, P.E.
LIC. NO. 42046 DATE MM/DD/YYYY



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SLEEPY EYE, MN 56085
Phone: (507) 810-4184
Email: SleepyEye@bolton-menk.com
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25X.142020.000			

BUFFALO CREEK WATERSHED DISTRICT
COUNTY DITCH 63 BRANCH J7 IMPOUNDMENT
DETAILS
DRAIN TILE DETAILS

SHEET
C1.02

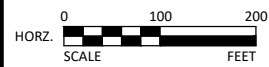


EROSION CONTROL LEGEND

- INLET PROTECTION
- CLASS III RIPRAP
- STABILIZED CONSTRUCTION EXIT (TO BE MARKED ON PLANS BY CONTRACTOR)
- MULCH TYPE 1
- PERMANENT SEEDING 1 - WD
SEED MIX = 30#/ACRE
FERTILIZER = 10-10-10 @350#/ACRE
- PERMANENT SEEDING 2 - MI
SEED MIX = 100 #/ACRE
FERTILIZER = 10-10-10 @350#/ACRE
- TEMPORARY SEEDING - O/WW
SEED MIX = 100 #/ACRE
FERTILIZER = 10-10-10 @350#/ACRE

SEEDING QUANTITY TABLE							
ITEM		SEED		FERTILIZER		EROSION CONTROL	
BID ITEM	QTY (ACRES)	MIX	QTY (LBS)	TYPE	QTY (LBS)	TYPE	QTY (TON)
PERMANENT SEED 1	0.7	WD	21	10-10-10	245	MULCH	7
PERMANENT SEED 2	0.1	MI	9.8	10-10-10	35		
TEMPORARY SEED	0.1	O/WW	15	10-10-10	35		

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BUFFALO CREEK WATERSHED DISTRICT
COUNTY DITCH 63 BRANCH J7 IMPOUNDMENT
STORMWATER POLLUTION PREVENTION PLAN
EROSION CONTROL PLAN

SHEET
C2.01



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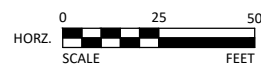
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BUFFALO CREEK WATERSHED DISTRICT
COUNTY DITCH 63 BRANCH J7 IMPOUNDMENT
C3 - GRADING PLAN
SITE PLAN

SHEET
C3.01

TOP = 1077.0
NWL = 1070.5
BOTTOM = 1066
SURFACE AREA = 0.7 ACRES
TOTAL STORAGE = 4.2 ACRE-Feet
LIVE STORAGE = 3.8 AC-FT
DEAD STORAGE = 0.4 AC-FT
EXCAVATION = 7,100 CY



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BUFFALO CREEK WATERSHED DISTRICT
COUNTY DITCH 63 BRANCH J7 IMPOUNDMENT
C3 - GRADING PLAN
POND PLAN

SHEET

C3.02

NOTE:
CONTRACTOR TO VERIFY FILL AREA AND SLOPE
ACCORDING TO AVAILABLE FILL. CONTRACTOR MAY USE
A 100H:1V AS THE MINIMUM SLOPE AND 15H:1V AS
THE MAXIMUM SLOPE TO FILL AND BLEND THE
DISPOSAL TO THE EXISTING GROUND.
CONTRACTOR TO GRADE SITE TO DRAIN TO PROPOSED
INTAKE OR THE EXISTING DITCH

PROPERTY LINE (TYP.)

COUNTY ROAD 65

COUNTY DITCH 63 OPEN DITCH

F&I:
1 EA - 12" FIELD INTAKE
1 EA - DRAIN TILE CONNECTION
60 LF - 12" PERFORATED DRAIN TILE

04-01181-00
MERTENS/GREGORY & DAWN
34522 830TH AVE

04-01170-00
NW FARM MANAGEMENT CO.

EX 28" LATJ

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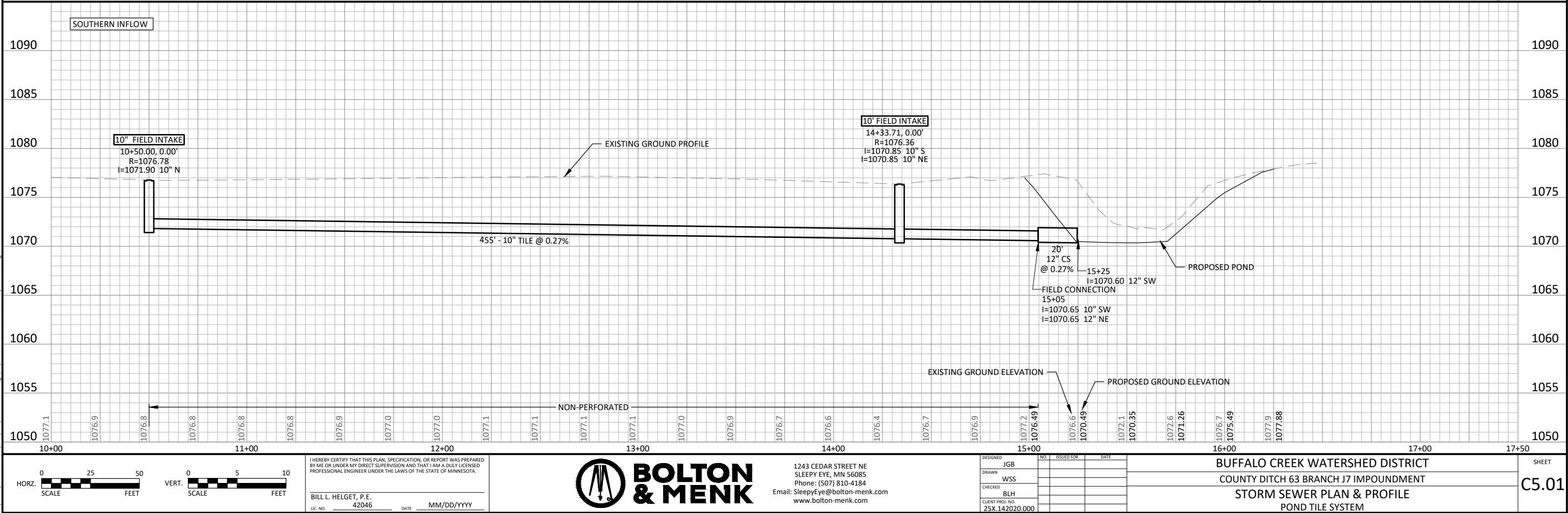
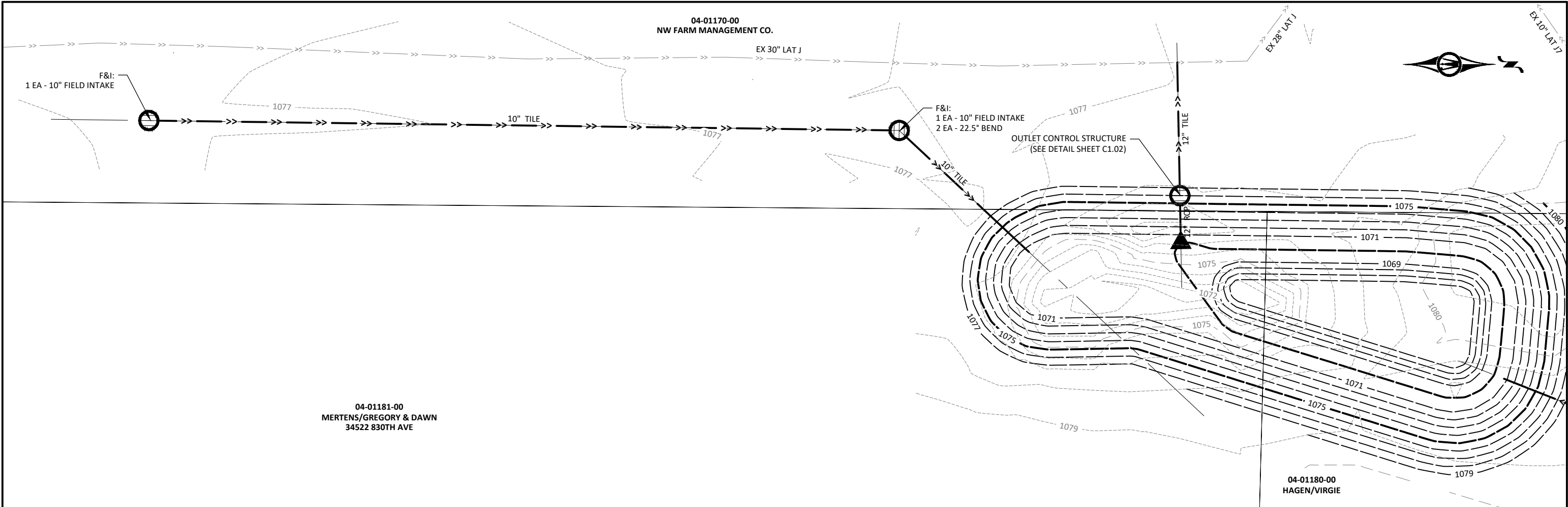
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CLIENT PROJ. NO.			
25X-142020-000			

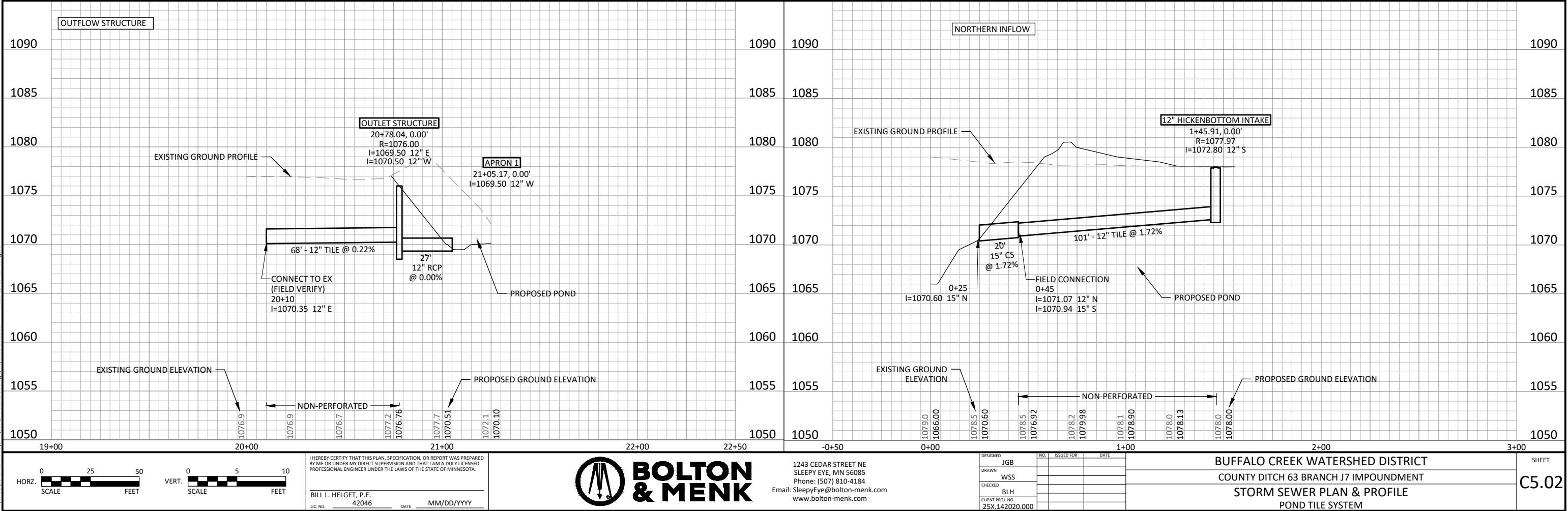
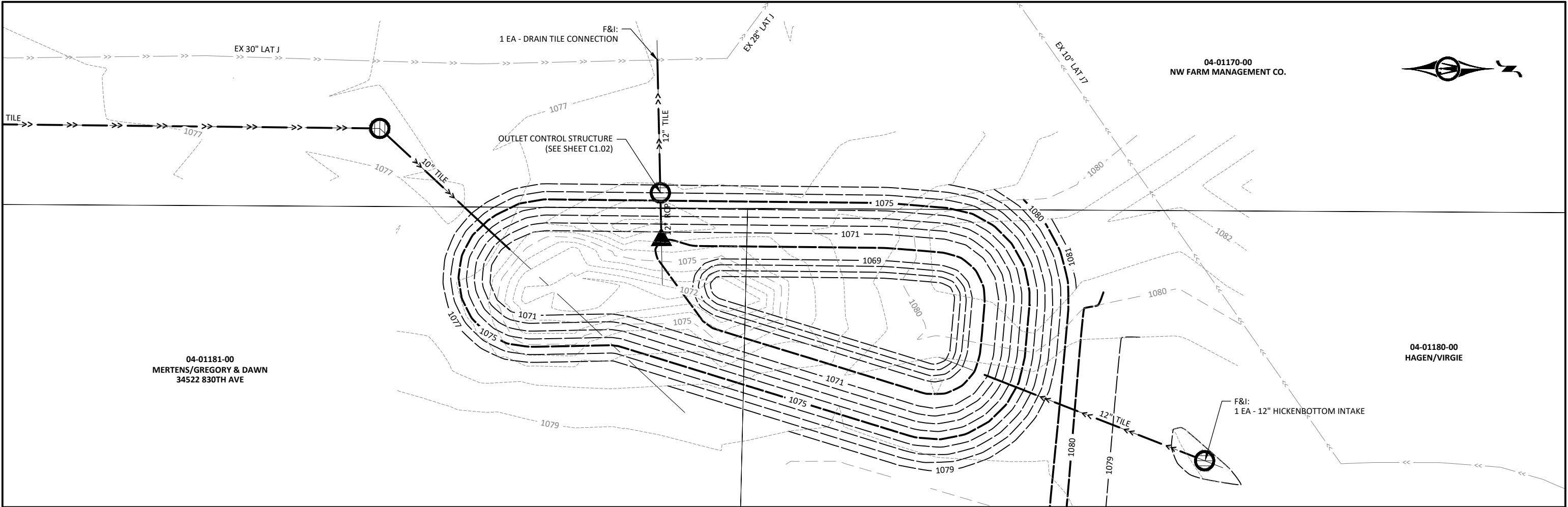
BUFFALO CREEK WATERSHED DISTRICT
COUNTY DITCH 63 BRANCH J7 IMPOUNDMENT
C3 - GRADING PLAN
DISPOSAL SITE PLAN

SHEET

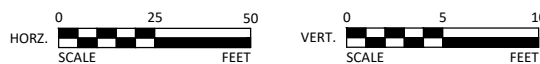
C3.03



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BUFFALO CREEK WATERSHED DISTRICT
COUNTY DITCH 63 BRANCH J7 IMPOUNDMENT
STORM SEWER PLAN & PROFILE
POND TILE SYSTEM

SHEET
C5.02

Exhibit 2: Preliminary Cost Estimate

ENGINEER'S ESTIMATE

County Ditch 63 Branch J7 Impoundment
Renville County, Minnesota
BMI PROJECT NO.: 25X.142020.000



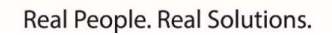
Real People. Real Solutions.

Date: 7/16/2026

Item No.	Item	Estimated Quantity	Unit	Unit Price	Total Amount
BASE BID					
1	MOBILIZATION	1	LS	\$7,500.00	\$7,500.00
2	EXPLORATORY EXCAVATION	12	HOURS	\$300.00	\$3,600.00
3	DRAIN TILE CONNECTION	2	EA	\$1,200.00	\$2,400.00
4	COMMON EXCAVATION (P)	7100	CY	\$4.00	\$28,400.00
5	COMMON EMBANKMENT (CV)	7100	CY	\$5.00	\$35,500.00
6	DRAIN TILE REPAIR	2	EA	\$1,500.00	\$3,000.00
7	10" FIELD INTAKE	1	EA	\$1,000.00	\$1,000.00
8	12" HICKENBOTTOM INTAKE	2	EA	\$1,250.00	\$2,500.00
9	OUTLET CONTROL STRUCTURE	1	LS	\$15,000.00	\$15,000.00
10	GRANULAR FOUNDATION ROCK	740	LF	\$4.00	\$2,960.00
11	10" DRAIN TILE	460	LF	\$19.00	\$8,740.00
12	12" DRAIN TILE	240	LF	\$26.00	\$6,240.00
13	12" RC PIPE	21	LF	\$100.00	\$2,100.00
14	12" CS TILE	20	LF	\$75.00	\$1,500.00
15	15" CS TILE	20	LF	\$80.00	\$1,600.00
16	12" RC PIPE APRON	1	EA	\$2,000.00	\$2,000.00
17	PERMANENT SEEDING, WD	0.1	ACRE	\$8,000.00	\$800.00
18	PERMANENT SEEDING, MI	0.7	ACRE	\$5,000.00	\$3,500.00
19	TEMPORARY SEEDING	0.1	ACRE	\$2,500.00	\$250.00
20	MULTCH TYPE 1	7	TON	\$350.00	\$2,450.00
21	RANDOM RIPRAP, CLASS III	60	TON	\$110.00	\$6,600.00
22	STABILIZED CONSTRUCTION EXIT	1	LS	\$2,000.00	\$2,000.00
ESTIMATED BASE BID TOTAL:					\$139,640.00
	TEMPORARY ROW DAMAGE (GRADING)	7.77	ACRE	\$1,200.00	\$9,324.00
	TEMPORARY ROW DAMAGE (TILE)	1.00	ACRE	\$600.00	\$600.00
	PERAMENT EASEMENT	1.43	ACRE	\$1,000.00	\$1,430.00
SUBTOTAL:					\$150,994.00
10% CONTINGENCY:					\$15,100.00
TOTAL ESTIMATED CONSTRUCTION COST:					\$166,094.00
DESIGN, ADMINISTRATION AND CONSTRUCTION ENGINEERING:					\$41,520.00
TOTAL ESTIMATED PROJECT COST:					\$207,614.00

Exhibit 3: Right-of-Way Table

Right-of-way Table



Date: 7/16/2026

Parcel No.	Property Owner	Legal Description	IMPOUNDMENT ROW			Temporary		Permanent
			Length	Width	Area (Acres)	\$600	\$1,200	\$1,000
IMPOUNDMENT								
04-01181-00	GREGORY & DAWN MERTENS	1/4 SE, 1/4 SW			1.13			\$1,130.00
04-01170-00	NW FARM MANAGEMENT CO.	1/4 SW, 1/4 SW			0.30			\$300.00
WASCOB								
04-01180-00	VIRGIE HAGEN	1/4 SE, 1/4 SW			0.49		\$588.00	
04-01170-00	NW FARM MANAGEMENT CO.	1/4 SW, 1/4 SW			0.05		\$60.00	
DRAIN TILE								
04-01170-00	NW FARM MANAGEMENT CO.	1/4 SW, 1/4 SW	625	70	1.00	\$600.00		
DISPOSAL SITE								
04-01170-00	NW FARM MANAGEMENT CO.	1/4 SW, 1/4 SW	494	40	0.45		\$540.00	
04-01170-00	NW FARM MANAGEMENT CO.	1/4 SE, 1/4 SW	822	40	0.75		\$900.00	
04-01170-00	NW FARM MANAGEMENT CO.	1/4 NW, 1/4 SW	147	100	0.34		\$408.00	
04-01170-00	NW FARM MANAGEMENT CO.	1/4 NW, 1/4 SW	903	140	2.90		\$3,480.00	
04-01170-00	NW FARM MANAGEMENT CO.	1/4 SW, 1/4 SW	867	140	2.79		\$3,348.00	
CD 63 BR J7 TOTAL			\$600.00 \$9,324.00 \$1,430.00					
H:\VRNCO\25X142020000\2_Preliminary\A_Calculations\[142020_ROW.xlsx]Sheet1								

Exhibit 4: Petition for Impoundment

**STATE OF MINNESOTA
RENVILLE COUNTY BOARD OF COMMISSIONERS
SEATED AS THE DRAINAGE AUTHORITY FOR RENVILLE COUNTY DITCH 63**

In the Matter of the Petition to Impound, Reroute, and Divert Renville County Ditch 63 (Mertens)	PETITION
--	-----------------

Pursuant to Minn. Stat. § 103E.227, Petitioners seek to impound, reroute, and divert drainage system waters of Renville County Ditch 63 Lateral J for beneficial use. For their Petition, the undersigned Petitioners state and allege the following:

1. Petitioners Gregory & Dawn Mertens are the owners of the following described real property currently within the benefitted area of County Ditch 63:

Property Owners/Address	Parcel I.D. #	Description
Mertens/Gregory & Dawn 34522 830th Ave. Olivia, MN 56277	04-01181-00	6-115-34 W450 of S 1275 of SW4 of SE4

2. Petitioner Renville County Soil and Water Conservation District is a special purpose unit of government that manages and directs natural resources management programs within Renville County, and promotes sustainable use of water and soil resources through innovative and mutually beneficial conservation activities with local stakeholders.
3. To conserve and make a more adequate use of water resources and to incorporate water quality enhancing elements as authorized by Minnesota Statutes, section 103E.011, subdivision 5, Petitioners request that the Renville County Board of Commissioners, acting as the drainage authority under Minnesota Statutes, chapter 103E for Renville County Ditch 63, impound, reroute, and divert the Renville County Ditch 63 Lateral J drainage system waters within Section 6 of Township 115 North, Range 34 West (Bird Island Township), Renville County.
4. Attached hereto as **Exhibit A** is a concept plan for the proposed project, including the location of the proposed installation and a map identifying the areas likely to be affected by the project.
5. The proposed impoundment, reroute, and diversion will provide temporary and permanent water storage for the Renville County Ditch 63 drainage system waters, which flow to Beaver Creek. The water storage, controlled release, and reduction in peak flows are intended to reduce erosion and sedimentation and to reduce sediment and nutrient loading in Renville County Ditch 63 and ultimately in Beaver Creek.
6. Petitioners anticipate that a significant portion of the project costs will be paid from grant funds made available through Minnesota's Clean Water Fund for eligible water quality, conservation,

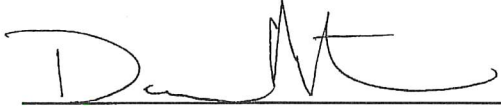
and related project components. Petitioners request drainage system funds in the amount of project costs not paid by grant funds or other non-drainage sources, as determined through the engineer's report and approved by the Drainage Authority, for costs attributable to modifying the drainage system, securing necessary rights-of-way and flowage easements, construction, and any other benefits to the drainage system. The requested use of drainage system funds is intended to supplement, and not replace, Clean Water Fund grant funding.

7. The rationale for the requested drainage system funds is that the proposed project will modify Renville County Ditch 63 Lateral J in a manner that benefits the drainage system while advancing water quality purposes. The project will conserve and make more adequate use of drainage system waters by temporarily storing and controlling the release of those waters; reduce downstream peak flows and flooding potential; reduce erosion and sedimentation; protect and improve water quality; and maintain the utility of the drainage system without depriving affected landowners of its benefit. To the extent the engineer identifies separable repairs or avoided repair costs within the project boundaries, Petitioners request that those costs and other drainage system benefits be considered in determining the amount, if any, of drainage system funds to contribute to the project.
8. Petitioners do not believe a public-waters-work permit or a water-use permit from the commissioner of natural resources is required under Minnesota Statutes, chapter 103G for the project, but Petitioners or the Drainage Authority will obtain any permit required before installing or constructing the project.
9. Pursuant to Minnesota Statutes, section 103E.227, subd. 2(b), a bond is not required because this Petition is filed by the Renville County Soil and Water Conservation District.
10. Pursuant to Minnesota Statutes, section 103E.227, subds. 3 to 5, Petitioners request the Renville County Drainage Authority appoint an engineer to investigate the effect of the proposed installation and file a report of findings; give notice and conduct a public hearing on the Petition and the engineer's report; and, if the statutory criteria are met, issue an order modifying the drainage system and authorizing the project, including the amount, if any, of drainage system funds approved for the project and the parties responsible for construction, operation, and maintenance of the drainage system modification.
11. The proposed project is of public and private benefit, and will not impair the utility of the Renville County Ditch 63 drainage system or deprive affected landowners of its benefit.
12. Petitioners will cooperate with the Renville County Drainage Authority in granting the necessary rights-of-way and flowage easements for the proposed project.

Respectfully submitted as of the last date below, by Petitioners:


Gregory Mertens

Date: 6/17/20


Dawn Mertens

Date: 6/17/20

Renville County Soil and Water Conservation District:


By Phil Smith, Chair
Board of Supervisors

Date: 7-9-20



