## **STATE OF MINNESOTA**

#### Before the

# JOINT DRAINAGE AUTHORITY BOARD FOR MARTIN AND FARIBAULT COUNTIES

# SITTING AS THE DRAINAGE AUTHORITY FOR

Judicial Ditch #2			
In the Matter of:  Repair of Judicial Ditch #2	PUBLIC HEARING NOTICE		
as the joint drainage authority for Judicial D may hold a public hearing proposed repairs of 17 and 18, Jo Daviess Township Faribault C at 1:30 p.m. on March 17, 2020, at Hamilton MN 56013. At the hearing, the drainage	pard of Martin and Faribault Counties, sitting bitch #2, pursuant to Minn. Stat. § 103E.705, of drainage system waters located in Sections County, Minnesota. The hearing shall be held in Hall, 202 South Moore Street, Blue Earth, authority will hear staff and accept publicing party having an interest in the project may		
Office, 201 Lake Ave. Fairmont, MN 56031 Main Blue Earth, MN <a href="http://www.co.faribault.mn.us/drainage/page">http://www.co.faribault.mn.us/drainage/page</a> accepted at the hearing and by mail at the case. Fairmont, MN 56031.	for inspection at the Martin County Auditor, Faribault County Auditor Office, 415 North 56013 or online at es/notices-reports. Written comments will be office of the Martin County Auditor, 201 Lake the an owner of property or political subdivision of designers and hadisial Ditab #2		
likely to be affected by the proposed repair of the description of the	Dated:		

#### JD2MF Repair Scope

The JD2MF open ditch underwent an extensive repair project that was completed in early 2014. The project consisted of a clean out of nearly the entire open ditch, the repair of all tile outlets to the open ditch, and multiple areas of slough repair. The JD2MF channel was inspected in the fall of 2019. Many areas of the open ditch had extensive sloughing, more concentrated to the outlet of the JD2MF ditch.

<u>Slough Repair</u>: Multiple sloughs have been identified that need repair. Approximately 2,395 linear feet of ditch requires slough repair where riprap is placed at the toe for stabilization. Ditch bank side-slope seeding will need to be done where vegetation is disturbed from slough repair.

<u>Ditch Bank Re-Slope</u>: Approximately 101 linear feet of ditch bank needs to be reshaped to the original 1.5:1 slope. This area is located just downstream of the CR1 bridge crossing in Jo Daviess Township Section 17 SWNW.

<u>Tile Outlet Repair</u>: Most of the tile outlets are in good condition, having been replaced and armored during the 2014 repair. One outlet where the ditch bank needs to be reshaped needs to be repaired in Jo Daviess Township Section 17 SWNW.

<u>Alternative Side Inlets</u>: Eight locations where gully erosion and/or traditional side inlets exist will be replaced with an alternative design. See ASI schedule for sizing information. Funding could be available to offset some of the cost of the installation and material costs.

<u>Buffer Seeding:</u> Some areas of the buffer will likely need to be tilled and re-seeded due to equipment traffic. This will be bid separately from the above activities.

#### **Attachments**

- 1. Overview map
- 2. Typical Slough Repair Detail
- 3. ASI/ASIRO Detail

## JD2MF Repair Cost Estimate

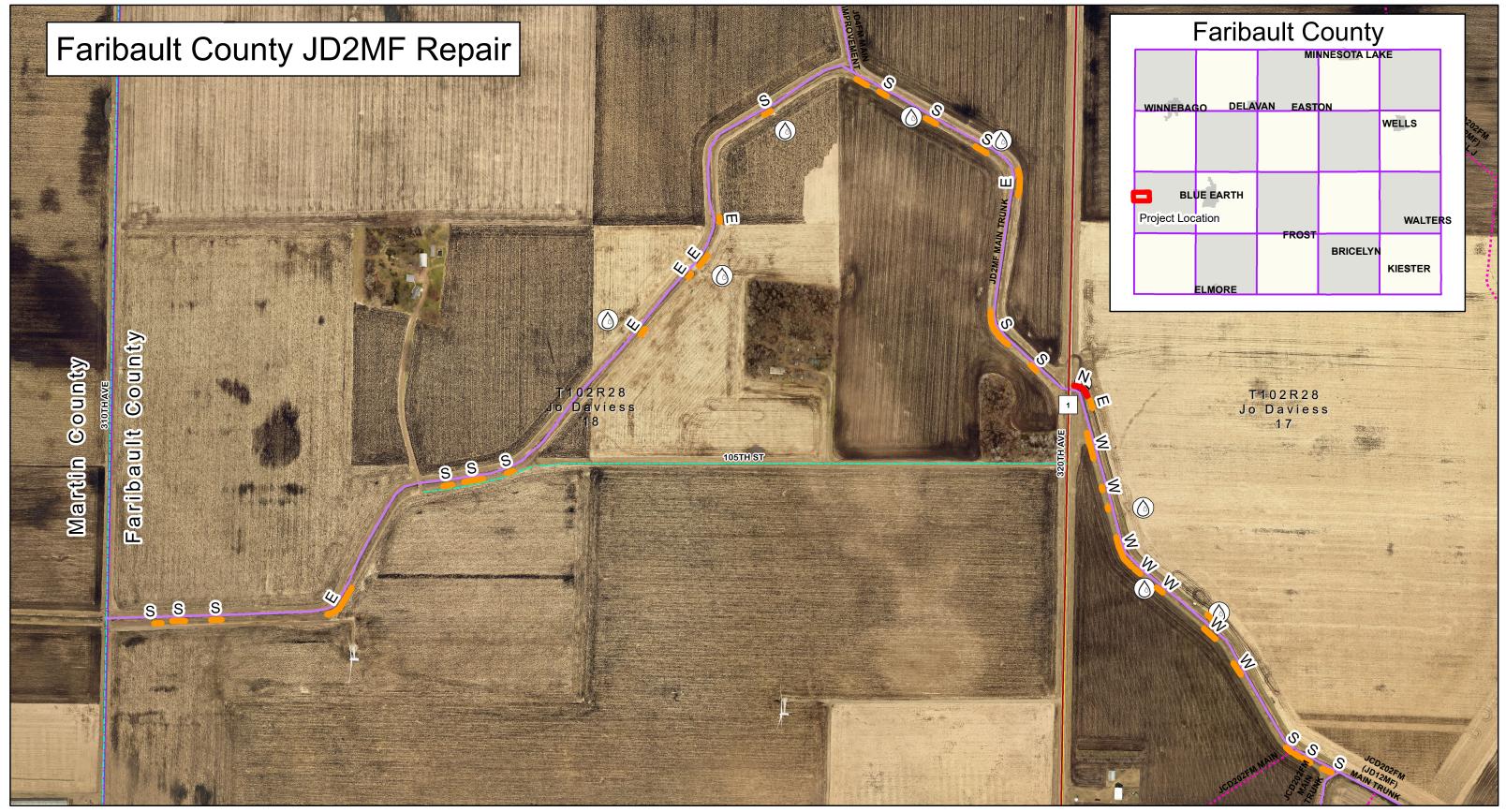
Item	Unit	Quant	Unit Price	Amount
Mobilization	LS	1	\$7,000.00	\$7,000.00
Typical Slough Repair (see detail)	LF	2395	\$5.25	\$23,950.00
Reshape 101 LF of ditch bank to a 1.5H:1V slope	CY	280	\$5.00	\$1,400.00
8" Tile Outlet Repair (see detail)	EA	1	\$600.00	\$600.00
Class III riprap w/ Geotextile Fabric	CY	450	\$75.00	\$33,750.00
Install 18-inch ASI Riser Assembly w/ Trash Grate (see detail)	EA	3	\$1,521.10	\$4,563.30
Install 15-inch ASI Riser Assembly w/ Trash Grate	EA	1	\$1,276.40	\$1,276.40
Install 12-inch ASI Riser Assembly w/ Hickenbottom	EA	3	\$797.50	\$2,392.50
Install 8-inch ASI Riser Assembly w/ Hickenbottom	EA	1	\$554.00	\$554.00
Install 18-inch ASI Outlet Assembly	EA	3	\$1,117.30	\$3,351.90
Install 15-inch ASI Outlet Assembly	EA	1	\$1,050.90	\$1,050.90
Install 12-inch ASI Outlet Assembly	EA	3	\$715.30	\$2,145.90
Install 8-inch ASI Outlet Assembly	EA	1	\$418.40	\$418.40
Till and seed buffer (County Buffer Blend)	AC	1.5	\$400.00	\$600.00
	•		Subtotal	\$83,053.30
10% Contingency			\$8,305.33	
	<b>Total Estimated Cost</b>		\$91,358.63	

### JD2MF Repair Bid

Item	Unit	Quant	Unit Price	Amount
Mobilization	LS	1		
Typical Slough Repair (see detail)	LF	2395		
Reshape 101 LF of ditch bank to a 1.5:1 slope	CY	280		
8" Tile Outlet Repair (see detail)	EA	1		
Class III riprap w/ Geotextile Fabric	CY	450		
Install 18-inch ASI Riser Assembly w/ Trash Grate (see detail)	EA	3		
Install 15-inch ASI Riser Assembly w/ Trash Grate	EA	1		
Install 12-inch ASI Riser Assembly w/ Hickenbottom	EA	3		
Install 8-inch ASI Riser Assembly w/ Hickenbottom	EA	1		
Install 18-inch ASI Outlet Assembly	EA	3		
Install 15-inch ASI Outlet Assembly	EA	1		
Install 12-inch ASI Outlet Assembly	EA	3		
Install 8-inch ASI Outlet Assembly	EA	1		
Total				

The undersigned offers to furnish labor, materials, and equipment necessary to complete the project in accordance with the project plans, specifications, and bid schedule, at the unit prices and/or amount specified.

NAME:	 	 	
SIGNATURE:			
DATE:			





Faribault County Drainage Department Public Open Ditch
Public Shallow Ditch
Public Tile

sen Ditch

Slough Areas

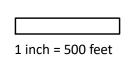
Typical Slough Repair

Re-Slope Bank

# **Other Repair Points**

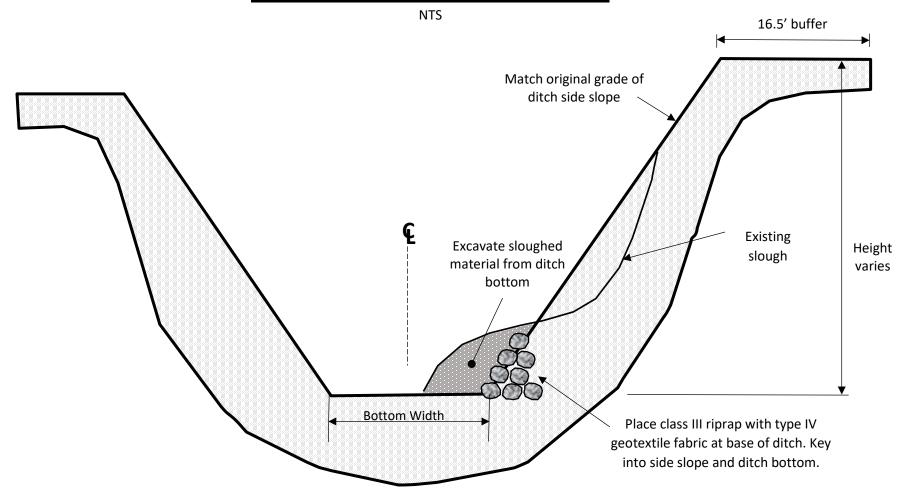
Alternative Side Inlet

Tile Outlet



Disclaimer: Faribault County and Faribault County SWCD do not warrant or guarantee accuracy of the GIS data. The data is meant for reference purposes only and should not be used for official decisions. The data contained in the maps were compiled from the best available records that could be found and may contain errors or omissions.

# **TYPICAL SLOUGH REPAIR**



#### **Notes:**

Topsoil shall be stripped before placing the excavated material in the designated area. Spread material far enough away from slough to lessen weight on the bank.

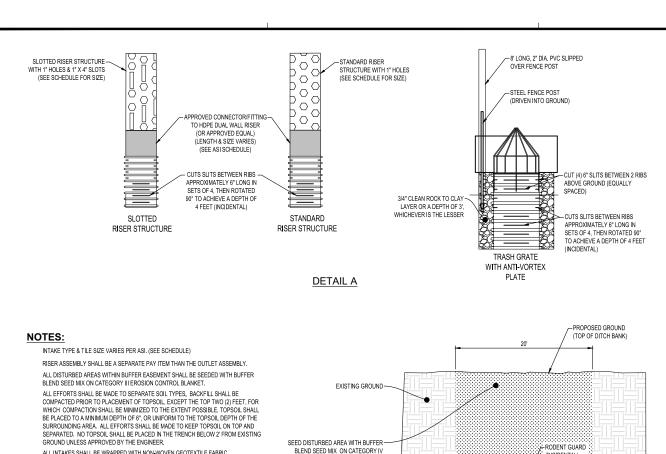
The fill area shall be graded to divert water to existing side intake structures.

The 16.5' buffer strip area shall not exceed a slope of 5H:1V to be passable by vehicle.

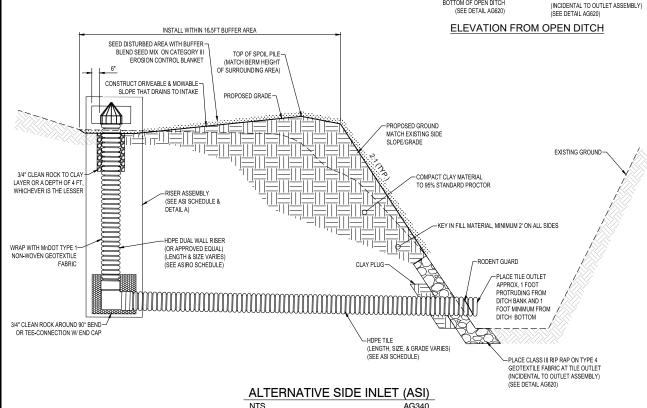
Depending on the severity of the slough, class IV riprap may be used instead of Class III. Geotextile fabric is incidental.

Suitable excavated material may be used to match the desired slope of the ditch bank.

Side slopes must be seeded as soon as possible (incidental) using the County Buffer Blend seed mix and Type 4 mulch or Category 3 erosion control blanket.



(INCIDENTAL) GEOTEXTILE BLANKET INTAKES SHALL BE FIELD ADJUSTED BASED ON ACTUAL LOCATION OF LOW AREAS, AS SHAPING OF LOW AREA TO GRADE TO DROP INTAKE SHALL BE INCIDENTAL TO PAY ITEM, PLACE CLASS III RIP RAP ON TYPE 4 PLACE TOP OF RIPRAP AT-GEOTEXTILE FABRIC AT TILE OUTLET (INCIDENTAL TO OUTLIET ASSEMBLY



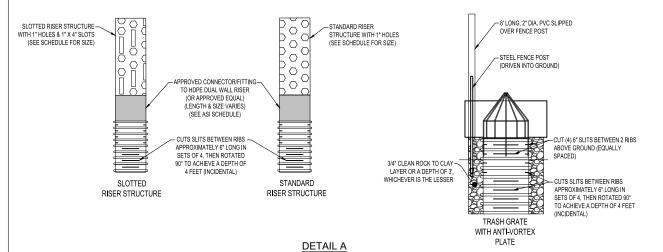
ALL SLITS CUT INTO RISER ARE INCIDENTAL TO RISER ASSEMBLY

TILE OUTLET ASSEMBLY SHALL CONFORM TO STANDARD TILE INSTALLATION.

ALL 3/4" CLEAN ROCK IS INCIDENTAL TO RISER ASSEMBLY

ALL OUTLET RIPRAP IS INCIDENTAL TO OUTLET ASSEMBLY

DETERMINED BY THE ENGINEER



#### NOTES:

INTAKE TYPE & TILE SIZE VARIES PER ASI. (SEE SCHEDULE)

RISER ASSEMBLY SHALL BE A SEPARATE PAY ITEM THAN THE OUTLET ASSEMBLY.

ALL DISTURBED AREAS WITHIN BUFFER FASEMENT SHALL BE SEEDED WITH BUFFER BLEND SEED MIX ON CATEGORY III EROSION CONTROL BLANKET.

ALL EFFORTS SHALL BE MADE TO SEPARATE SOIL TYPES. BACKFILL SHALL BE COMPACTED PRIOR TO PLACEMENT OF TOPSOIL, EXCEPT THE TOP TWO (2) FEET, FOR WHICH COMPACTION SHALL BE MINIMIZED TO THE EXTENT POSSIBLE, TOPSOIL SHALL BE PLACED TO A MINIMUM DEPTH OF 6", OR UNIFORM TO THE TOPSOIL DEPTH OF THE SURROUNDING AREA. ALL EFFORTS SHALL BE MADE TO KEEP TOPSOIL ON TOP AND SEPARATED. NO TOPSOIL SHALL BE PLACED IN THE TRENCH BELOW 2' FROM EXISTING GROLIND LINLESS APPROVED BY THE ENGINEER

ALL INTAKES SHALL BE WRAPPED WITH NON-WOVEN GEOTEXTILE FABRIC

ALL SLITS CUT INTO RISER ARE INCIDENTAL TO RISER ASSEMBLY

ALL 3/4" CLEAN ROCK IS INCIDENTAL TO RISER ASSEMBLY.

ALL OUTLET RIPRAP IS INCIDENTAL TO OUTLET ASSEMBLY INTAKES SHALL BE FIELD ADJUSTED BASED ON ACTUAL LOCATION OF LOW AREAS, AS

TILE OUTLET ASSEMBLY SHALL CONFORM TO STANDARD TILE INSTALLATION.

SHAPING OF LOW AREA TO GRADE TO DROP INTAKE SHALL BE INCIDENTAL TO PAY ITEM.

CLASS III RIPRAP ON TYPE 4 GEOTEXTILE FABRIC-

SEED DISTURBED AREA WITH BUFFER

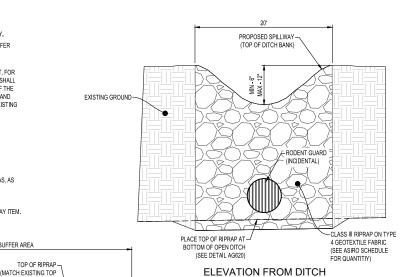
BLEND SEED MIX ON CATEGORY III

EROSION CONTROL BLANKET

(SEE ASIRO SCHEDULE FOR QUANTITY)

INSTALL WITHIN 16.5 BUFFER AREA

OF ADJACENT DITCH



**FARIBAULT** COUNTY **JUDICIAL DITCH** NO. 2

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PROJECT

JO DAVIESS TWP DESCRIPTION PROJ. NO PROJECT NO FILE NAME 23906 DETAILS RAWN BY DESIGNED BY REVIEWED BY ORIGINAL ISSUE DATE --/--/ CLIENT PROJECT NO

> **ALTERNATIVE** SIDE INLET **DETAILS**

SHEET

OF

TITLE PLACE CLASS III RIPRAP ON TYPE 4

GEOTEXTILE FABRIC AT TILE OUTLET (INCIDENTAL TO OUTLET ASSEMBLY)

(SEE DETAIL AG620)

PROPOSED SPILLWAY PROPOSED GRADE PROPOSED GROUND MATCH EXISTING SIDE SLOPE GRADE EXISTING GROUND--COMPACT CLAY MATERIAL 3/" CLEAN BOCK -CONSTRUCT DRIVEABLE TO 95% STANDARD PROCTOR TO CLAY LAYER OR 3 FT WHICHEVER IS THE LESSER & MOWABLE SLOPE THAT DRAINS TO INTAKE (EY IN MINIMUM 2' ON ALL SIDES -RISER ASSEMBLY (SEE ASIRO SCHEDULE & WRAP WITH MaDOT TYPE HDPF DUAL WALL RISER NON-WOVEN GEOTEXTILE RODENT GUARD (OR APPROVED EQUAL) CLAY PLUG-(LENGTH & SIZE VARIES) (SEE ASIRO SCHEDULE) 3/4" CLEAN ROCK AROUND 90° BEND OR TEE-CONNECTION W/ END CAP -HDPF TILF (LENGTH, SIZE, & GRADE VARIES)

> ALTERNATIVE SIDE INLET WITH RIPRAP OVERFLOW (ASIRO) NTS

(SEE ASIRO SCHEDULE)