Finance Committee Agenda

METRO FLOOD DIVERSION AUTHORITY

Diversion Authority Finance Committee

April 24, 2024 @4:00pm CST

This meeting will be in-person at Fargo City Hall Commission Chambers (225 4th St N, Fargo, ND 58102).

1. Call to Order
    a. Roll call of Members
2. Approve minutes from March 27, 2024
   [Attachment 00.01] (Pg. 3)
3. Approve Order of Agenda
4. Approval of Bills
   [Attachment 00.02] (Pg. 6)
5. Finance Report
   [Attachment 01.00] (Pg. 23)
6. Cash Budget Report
   [Attachment 02.00] (Pg. 45)
7. DA Board Approval Contracting Actions – Nothing for Approval
8. MOUs and Agreements
   [Attachment 03.00] (Pg. 52)
    a. Novell & MFDA Release Agreement [Attachment 03.01] (Pg. 55)
    b. Stockpile Access and Removal Agreement [Attachment 03.02] (Pg. 57)
    c. City of Oxbow & MFDA MOU for the OHB [Attachment 03.03] (Pg. 62)
    d. Minnesota Power (a division of Allete, Inc.) & MFDA MURA [Attachment 03.04] (Pg. 90)
9. Other Business
    a. Land Acquisition Directives (LADs)
       [Attachment 04.00] (Pg. 186)
        i. LAD-00002-R2 [Attachment 04.01] (Pg. 188)
        ii. LAD-MN-001-R08 [Attachment 04.02] (Pg. 191)
        iii. LAD-MN-001-R07 [Attachment 04.03] (Pg. 194)
    b. Legal and Consultant Compensation in 2023
10. Next Meeting: May 22, 2024
11. Adjournment

MEDIA AND PUBLIC PARTICIPATION INFORMATION

There are multiple ways to attend or watch this public meeting.

- View the Meeting on Fargo TV or at www.TVFargo.com
- View the Meeting on the City of Fargo's Facebook or Twitter feed.
- View the Meeting at FMDiversion.com/Meeting
- View the Meeting at Twitter.com/FMDiversion

METRO FLOOD DIVERSION AUTHORITY

Metro Flood Diversion Authority Finance Committee Meeting Minutes

4:00 PM – March 27, 2024
Fargo City Hall, Red River Room

A regular meeting of the Metro Flood Diversion Authority Finance Committee was held on March 27, 2024. The following members were present: Bernie Dardis, Mayor, City of West Fargo; Susan Thompson, Finance Director, City of Fargo; Rick Steen, Cass County Joint Water Resource District; Shelly Carlson, Mayor, City of Moorhead; Chad Peterson, Cass County Commissioner; Lori Johnson, Clay County Auditor/Treasurer; Mike Redlinger, Administrator, City of Fargo; Tony Grindberg, Cass County Commissioner; Dave Piepkorn, Fargo City Commissioner; Mike Rietz, City of Moorhead Assistant City Manager and Brandy Madrigga, Cass County Finance Director.

Member(s) absent: Dr. Tim Mahoney, Mayor, City of Fargo.

1. CALL TO ORDER

Mayor Dardis called the meeting to order at 4:00 PM. Roll call was taken, and a quorum was present.

2. APPROVE MINUTES FROM THE FEBRUARY 2024 MEETING

MOTION PASSED

Mr. Grindberg moved to approve the minutes from the February 2024 meeting and Mr. Peterson seconded the motion. On a voice vote, the motion carried.

3. APPROVE ORDER OF THE AGENDA

MOTION PASSED

Mr. Peterson moved to approve the order of the agenda as presented and Mayor Carlson seconded the motion. On a voice vote, the motion carried.

4. APPROVAL OF BILLS

Ms. Thompson reported that the bills payable through March 19, 2024, total $3,262,696, and are payable to the usual vendors, with Clay County being the largest at $2,004,211.

MOTION PASSED

Mr. Grindberg moved to approve the bills as presented and Mr. Piepkorn seconded the motion. On a roll call vote, the motion carried.

5. FINANCIAL REPORT

Ms. Thompson reported that the total assets as of February 29, 2024, are $253,908,216; liabilities total $163,797, and the current net position is $253,744,419.

MOTION PASSED

Mr. Peterson moved to approve the financial report as presented and Mayor Carlson seconded the motion. On a voice vote, the motion carried.

6. EXECUTIVE DIRECTOR FINANCIAL REPORT

Mr. Nicholson reported that revenues for the month total $3,861,000, and $9,182,000 in revenues have been received fiscal year-to-date. Actual costs to date are $1,047,000, with a 2024 fiscal year total of $17,393,422. The operations budget costs are $267,327 to date with a remaining balance of $1,382,673.

7. DA BOARD APPROVAL CONTRACTING ACTIONS

Mr. Nicholson provided an overview and summary of the following contracting actions:

a. JT Lawn Services - $250,714

Task Order 1, Amendment 0 – Mowing and Weed Control Services – This is a new task order for mowing and weed control services that are required on several MFDA owned properties for 2024.

b. Minnkota Power Cooperative, Inc. - $263,000

Task Order 6, Amendment 0 – Utility Relocation – This task order will include the relocation of the Minnkota Oxbow Substation diesel generators to the Minnkota Colfax Substation. This work is scheduled to be completed by September 30, 2024.

MOTION PASSED

Mr. Peterson moved to approve both contracting items as presented, and Mayor Carlson seconded the motion. On a roll call vote, with only Mr. Grindberg voting "nay", the motion carried.

8. MOUs and AGREEMENTS

Mr. Shockley provided an overview and summary of the following agreement:

CapX & MFDA Encroachment Agreement

This agreement authorizes the Authority to access easements owned by the CapX 2020 project partners. Access includes the ability to operate construction machinery beneath the CapX 2020 project infrastructure and to construct the drainage and borrow ditches for Reach SE-4 of the Comprehensive Project. Design and construction of the remainder of Reach SE-4 on the CapX 2020 project easements will be set forth in a MURA.

MOTION PASSED

Mr. Peterson moved to approve the CapX agreement as presented, and Mr. Piepkorn seconded the motion. On a roll call vote, the motion carried with Mr. Grindberg abstaining from voting.

9. OTHER BUSINESS

a. WP 47B Bid Award

Mr. Bakkegard provided an update on WP 47B. The Work Package was publicly advertised, and four bids were received at the bid opening on February 29, 2024.

The engineer's estimate for the project was $2,896,859, and it is their recommendation to award the bid to Sellin Brothers, Inc., in the amount of $1,749,847, the lowest responsive bidder.

MOTION PASSED

Mayor Carlson moved to award the bid to Sellin Brothers, Inc., in the amount of $1,749,847, and Mr. Piepkorn seconded the motion. On a roll call vote, the motion carried.

b. Payment of Condemnation & Acquisition of Funds to the MCCJPA

Mr. Shockley provided an overview of the above-referenced document for information only.

The Authority is the entity responsible for reimbursing the MCCJPA for property acquisition costs associated with the Project. Due to timing constraints, the Fiscal Agent (the City of Fargo) was directed pursuant to the Master Indenture of Trust to provide Clay County and Moorhead funds sufficient to make the necessary deposits for eminent domain filings as well as expected closing costs to occur by the end of

March 2024. These costs were required to be paid as part of the court process and this memo is being provided to explain the transfers. The expense for the deposits was anticipated and approved as part of the Authority's 2024 Cash Budget.

The Metro Flood Diversion Authority Finance Committee and Board will receive and file this memo regarding the funding reimbursement to both the City of Moorhead and Clay County, MN (collectively the MCCJPA) for the following amounts:

- City of Moorhead = $610,470 for eminent domain filings
- Clay County = $8,076,239 for eminent domain filings
- Clay County = $3,340,000 for expected closings by the end of March 2024

10. NEXT MEETING

The next meeting will be April 24, 2024.

11. ADJOURNMENT

The meeting adjourned at 4:25 PM.

Finance Committee Bills from April 2024

Vendor	Description		
Cass County Joint Water Resource District	Diversion bills – Request #119 CCJWRD	$	6,309,645.36
Clay County	Diversion bills – Request #40 MCCJPA	$	547,227.50
Ohnstad Twichell, P.C.	Legal services rendered through March 21, 2024	$	147,109.58
City of Fargo	2023 Digital Imagery and LiDAR Mapping	$	130,396.52
Rush River Water Resource District	Reimburse engineering services related to MOU	$	13,045.00
Cass County	Reimburse misc expenses from Diversion Authority office	$	6,960.34
Maple River Water Resource District	Reimburse engineering services related to MOU	$	4,524.55
City of Christine	Reimburse legal services related to MOU	$	4,452.13
Southeast Cass Water Resource District	Reimburse legal and engineering services related to MOU	$	3,338.94
Total Bills Received through April 17, 2024		$	7,166,699.92

Cass County
Joint Water
Resource
District

Rodger Olson
Chairman
Leonard, North
Dakota

Ken Lougheed
Manager
Gardner, North Dakota

Keith Weston
Manager
Fargo, North Dakota

Jacob Gust
Manager
Fargo, North Dakota

Rick Steen
Manager
Fargo, North Dakota

Melissa Hinkemeyer
Director, Secretary

1201 Main Avenue West
West Fargo, ND 58078-1301

701-298-2381
FAX 701-298-2397
wrd@casscountynd.gov
casscountynd.gov

SENT VIA EMAIL

April 14, 2024

Diversion Authority
P.O. Box 2806
Fargo, ND 58108-2806

Greetings:

RE: Metro Flood Diversion Project
Oxbow-Hickson-Bakke Ring Levee Project

Enclosed please find copies of bills totaling $6,309,645.36 regarding the above referenced projects. The breakdown is as follows:

Metro Flood Diversion	$6,296,467.86
DPAC	$2,890.50
Oxbow-Hickson-Bakke Ring Levee	$10,287.00

At this time, we respectfully request 100% reimbursement per the Joint Powers Agreement between the City of Fargo, Cass County and Cass County Joint Water Resource District dated June 1, 2015.

If you have any questions, please feel free to contact us.

Thank you.

Sincerely,

CASS COUNTY JOINT WATER RESOURCE DISTRICT
Leilei Bao
Leilei Bao
Accountant

Enclosures

		METRO FLOOD DIVERSION RIGHT OF ENTRY/LAND ACQUISITION COST SHARE INVOICES						4/14/2024
Invoice Paid	Invoice Date	Invoice No.		Project No.	Amount		Vendor	Description
					11.36		Cass County Joint WRD	Miscellaneous Diversion related postage
3/11/2024	3/2/2024	0000Y93E24094			22.10		UPS	Postage
3/22/2024	3/8/2024	194657		130007	15,800.00		Ohnstad Twichell, PC	Diversion Right of Way Acquisition
3/22/2024	3/8/2024	194659		160007	2,977.50		Ohnstad Twichell, PC	Channel Phase III
3/22/2024	3/8/2024	194660		170007	30,053.39		Ohnstad Twichell, PC	Upstream Mitigation Area
3/22/2024	3/8/2024	194661		187007	2,703.00		Ohnstad Twichell, PC	Diversion-Southern Embankment
3/22/2024	3/8/2024	194662		197007	1,005.00		Ohnstad Twichell, PC	Western Tie Back
3/22/2024	3/8/2024	194663		207007	75.00		Ohnstad Twichell, PC	I-29 Grade Raise
3/22/2024	3/8/2024	194664		207007	1,651.00		Ohnstad Twichell, PC	Wetland Mitigation Drain 27
3/22/2024	3/8/2024	194665		237007	390.00		Ohnstad Twichell, PC	FM Diversion- MLGC Dispute
3/22/2024	3/8/2024	194666		247007	700.18		Ohnstad Twichell, PC	1099 Preparation - 2023 Acquisitions
3/22/2024	3/8/2024	194667		187007	90.00		Ohnstad Twichell, PC	BIO/GEO Easements
3/22/2024	3/8/2024	194668		207007	1,917.50		Ohnstad Twichell, PC	Larry Brandt Revocable Living Trust (OIN 9348) QTED
3/22/2024	3/8/2024	194669		207007	97.50		Ohnstad Twichell, PC	Janet Wanzek Estate (OIN 8672-8675/9747) QTED
3/22/2024	3/8/2024	194670		207007	1,235.00		Ohnstad Twichell, PC	Orten Brodshaug RLT (OIN 5008/1930/1932/1940/1941/8517-8)
3/22/2024	3/8/2024	194671		217007	3,770.00		Ohnstad Twichell, PC	Charles Coster Real Estate Trust (OIN 9736/9737) QTED
3/22/2024	3/8/2024	194672		227007	325.00		Ohnstad Twichell, PC	Varriano (OIN 1130) ED
3/22/2024	3/8/2024	194673		227007	877.00		Ohnstad Twichell, PC	Embden Partners LLP (OIN 836/232/5613) ED
3/22/2024	3/8/2024	194674		227007	404.00		Ohnstad Twichell, PC	Storvick (OIN 860/2005) ED
3/22/2024	3/8/2024	194675		227007	2,728.50		Ohnstad Twichell, PC	Hamilton (OIN 1949/1956/5036) ED
3/22/2024	3/8/2024	194676		237007	97.50		Ohnstad Twichell, PC	KLF LLP (OIN 9347) ED
3/22/2024	3/8/2024	194677		237007	520.00		Ohnstad Twichell, PC	Rick Bellemare & Ronald Bellemare (OIN 1080/1081) ED
3/22/2024	3/8/2024	194678		237007	830.50		Ohnstad Twichell, PC	Christenson (OIN 7002) ED
3/22/2024	3/8/2024	194679		237007	1,137.50		Ohnstad Twichell, PC	Brakken (OIN 1173N) ED
3/22/2024	3/8/2024	194680		237007	383.21		Ohnstad Twichell, PC	2023 Consolidated ED Actions
3/22/2024	3/8/2024	194681		237007	357.50		Ohnstad Twichell, PC	Brakke (OIN 1920/1933/1934/1939) ED
3/22/2024	3/8/2024	194682		237007	65.00		Ohnstad Twichell, PC	Rupp, Tyler & Kim (OIN 9231/9232) ED
3/22/2024	3/8/2024	194683		247007	5,696.50		Ohnstad Twichell, PC	2024 Right of Entry
3/22/2024	3/5/2024	835172		38810.00001	128.25		Larkin Hoffman	Terry and Kristie Sauvageau Acquisition
3/22/2024	3/5/2024	835174		38810.00012	395.00		Larkin Hoffman	Hanson FE Acquisition
3/22/2024	3/5/2024	835175		38810.00017	2,054.70		Larkin Hoffman	Johnson,Larry and Jane FE Acquisition
3/22/2024	3/5/2024	835176		38810.00022	237.00		Larkin Hoffman	Nelson Trusts FE Acquisition
3/22/2024	3/5/2024	835177		38810.00041	79.00		Larkin Hoffman	Kenneth C. and Melanie M. Kundsen
3/22/2024	3/5/2024	835178		38810.00044	474.00		Larkin Hoffman	Tim and Sharon Schultz
3/22/2024	3/5/2024	835179		38811.00045	197.50		Larkin Hoffman	Becca Saunders
3/22/2024	3/5/2024	835180		38810.00048	553.00		Larkin Hoffman	Michele Johnson
3/22/2024	3/5/2024	835185		38810.00006	356.00		Larkin Hoffman	High Plains Properties
3/22/2024	3/5/2024	835183		38810.00057	640.65		Larkin Hoffman	Joshua Kinneberg
3/22/2024	3/5/2024	835184		38810.00059	513.50		Larkin Hoffman	Michael and Darla Rufer
3/22/2024	3/5/2024	835173		38810.00004	2,212.00		Larkin Hoffman	Richland/Cass Cos./Applications for Permit to Enter Land
3/22/2024	3/5/2024	835181		38810.00052	112.25		Larkin Hoffman	James Thoreson
3/22/2024	3/5/2024	835182		38810.00053	1,461.50		Larkin Hoffman	Granholt Family Farm
3/22/2024	1/31/2024	2966		3283-00	3,772.86		ProSource Technologies LLC	TO 2 - Proj Mgmt and ROW Services
4/2/2024	2/29/2024	3124R		3283-00	5,487.60		ProSource Technologies LLC	TO 2 - Proj Mgmt and ROW Services
4/2/2024	3/15/2024	2024-003			6,903.55		DKJ Appraisal	Review Appraisals for MFDP
3/22/2024	3/1/2024	13783.0290			22,453.00		Crate Construction	Relocation re Odegaard OIN 2014
3/18/2024	3/8/2024	13783.0290			2,803.80		Joseph Sauvageau	Relocation expense
3/18/2024	3/8/2024	13783.0290			2,500.00		Terry Sauvageau	Relocation expense
3/28/2024	3/18/2024	13783.0290			66.00		Allen and Dawn (OIN 8678x)	TCE extension payment
3/28/2024	3/18/2024	13783.0290			367.08		PTJ LLLP (OIN 9744x)	TCE extension payment
3/18/2024	2/22/2024				4,089,378.46		Karen G Offutt Trust	Property purchase for MFDP
3/15/2024	3/15/2024			272676	1,083,617.99		The Title Company	BJM Land property purchase (OIN 9993,9994)
3/15/2024	3/15/2024			268782	56,370.00		The Title Company	Flowage Easement Zach and Heidi Pfingsten (OIN 7209)
3/15/2024	3/15/2024			273033	749,705.92		The Title Company	Flowage Easement of Darwin and Sandra Duval (OIN 1912)

4/8/2024	3/20/2024			270391E	50.00		The Title Company	RIMP loan draw fee for 6G Farms
3/22/2024	3/5/2024	1200601929			24,738.53		HDR Engineering Inc	TO1 Property Acquisition Services
4/2/2024	3/22/2024	37616		19706	4,292.50		Moore Engineering, Inc.	FM Diversion Design Coordination - P3 RFP Technical reviews
4/2/2024					1,350.00		Irene Backlund	Environmental easement on OIN 859
3/28/2024					104,644.00		Glass Impressions	Relocation
4/2/2024	3/28/2024				14,702.37		Larry Richard	Relocation
4/1/2024	3/14/2024	1136126			215.57		Cass County Electric Cooperative	Service to 4005 124 Ave S Home
4/1/2024	3/14/2024	1129748			8.40		Cass County Electric Cooperative	Service to 4005 124 Ave S Heat
4/1/2024	3/14/2024	1160310			34.02		Cass County Electric Cooperative	Service to 4005 124 Ave S Storage add
4/1/2024	3/14/2024	1122560			36.65		Cass County Electric Cooperative	service to 1701 14 St S
4/1/2024	3/14/2024	1132241			48.87		Cass County Electric Cooperative	Service to 5251 174 1/2 AV SE
4/1/2024	3/14/2024	1125474			214.95		Cass County Electric Cooperative	Service to 12004 57 ST S
4/2/2024	2/25/2024	ARIV1028694			1,701.00		Ulteig Engineers, Inc.	TO 2 - Proj Mgmt and ROW Services
4/2/2024	3/8/2024	9972			3,500.00		Building and Grounds	debris removal from OIN 923N1 for MFDP
4/2/2024	2/29/2024	13783.00-46			32,169.65		SRF Consulting Group, Inc.	Project mgmt, ROW Services and relocation services
				Total	**6,296,467.86**			
			DIVERSION PROJECT ASSESSMENT DISTRICT (DPAC) INVOICES					
Invoice Paid	Invoice Date	Invoice No.		Project No.	Amount		Vendor	Description
3/22/2024	3/8/2024	194656		120007	2,890.50		Ohnstad Twichell, P.C.	Legal-Diversion Project, Assessment District
				Total	**2,890.50**			
	OXBOW-HICKSON-BAKKE RING LEVEE INVOICES							
Invoice	Invoice	Invoice	Purchase	Project				
Paid	Date	No.	Order No.	No.	Amount		Vendor	Description
3/22/2024	3/8/2024	194658		140007	10,287.00		Ohnstad Twichell, P.C.	Legal - OHB Levee Project
				Total	**10,287.00**			
				Grand Total	**6,309,645.36**			

COUNTY AUDITOR
LORI J. JOHNSON
Office Telephone (218) 299-5006

April 9, 2024
Diversion Authority
P.O. Box 2806
Fargo, ND 58108-2806

RE: Metro Flood Diversion Project

Greetings:

Attached to this email, please find a spreadsheet summary of invoices/expense and all documentation for invoices paid by Clay County for the FM Flood Diversion project. All requests were approved or authorized by the Diversion Authority. Current invoice/expense reimbursement request total is as follows:

Metro Flood Diversion	$547,227.50

We respectfully request 100% reimbursement as per the Joint Powers Agreement.

If you have any questions, please feel free to contact us.

Sincerely,

Lori J. Johnson
Clay County Auditor

Enclosures

Clay County Government Center
3510 12th Ave S
PO Box 280
Moorhead, MN 56560

FM Diversion MCCJPA invoices					Processed			
	Invoice		Invoice		Date			Reimb
Vendor	Date		Amount	Invoice #	Approved	Date Paid	Check #	Request
Ohnstad Twichell	3/6/24	general 2024	$10,788.50	194590	3/8/24	3/13/24	564508	4/9/2024
Ohnstad Twichell	3/6/24	eminent domain clay	$3,887.59	194588	3/8/24	3/13/24	564508	4/9/2024
Ohnstad Twichell	3/6/24	Southern embankment	$15,118.58	194587	3/8/24	3/13/24	564508	4/9/2024
Ohnstad Twichell	3/6/24	eminent domain wilkin	$8,034.92	194589	3/8/24	3/13/24	564508	4/9/2024
Ohnstad Twichell	3/6/24	Upstream mitigation	$44,863.33	194586	3/8/24	3/13/24	564508	4/9/2024
Ohnstad Twichell	3/6/24	enviro monitoring	$67.50	194585	3/8/24	3/13/24	564508	4/9/2024
Larkin Hoffman	3/5/24	Prof svcs thru 2/29/24	$2,370.00	835194	3/15/24	3/20/24	118304	4/9/2024
Red River Valley Coop	3/4/24	svc 13689 3rd st s	$55.16		3/15/24	3/20/24	564573	4/9/2024
Red River Valley Coop	3/4/24	svc 3348 180th ave s	$86.57		3/15/24	3/20/24	564573	4/9/2024
ProSource Technologies	2/29/24	Prof svcs thru 3/2/24	$22,726.38	3125	3/18/24	3/27/24	564686	4/9/2024
SRF Consulting Group	2/29/24	Prof svcs thru 2/29/24	$13,523.00	13820.00-41	3/26/24	4/3/24	564782	4/9/2024
The Hawley Herald	2/5/24	jpa mtg	$30.00	5337	3/26/24	4/3/24	564788	4/9/2024
Larkin Hoffman	3/5/24	Prof svcs thru 2/29/24	$2,304.00	835196	3/26/24	4/3/24	118517	4/9/2024
Larkin Hoffman	2/6/24	Prof svcs thru 1/31/24	$685.75	833859	3/26/24	4/3/24	118517	4/9/2024
The Title Co	3/21/24	oin 1630 askegaard trust exchange agreement	$17,620.73		3/21/24	3/21/24	TBD	4/9/2024
The Title Co	3/21/24	oin 1840 brandt	$408,266.15		3/21/24	3/21/24	TBD	4/9/2024
The Title Co	4/5/24	Refund OIN 257n, 257x Scott & Ruth Blilie	-$3,154.66		4/5/24	4/5/24	516661	4/9/2024
The Title Co	4/5/24	Refund OIN 257n, 257x Scott & Ruth Blilie	-$46.00		4/5/24	4/5/24	516661	4/9/2024
			$547,227.50					

OHNSTAD TWICHELL, P.C.
Attorneys at Law
P.O. Box 458
West Fargo, ND 58078-0458
(701) 282-3249

15-1395 (JTS) Invoice # 195328
Flood Diversion Board
Bond Counsel Work - PPP

Date: April 10, 2024

To: Flood Diversion Board
P.O. Box 2806
Fargo, ND 58108-2806

PROFESSIONAL SERVICES RENDERED

	Hours	Rate	Totals
JTS	108.8	$398.00	$43,302.40
CMM	2.1	$398.00	$835.80
ADC	2.1	$398.00	$835.80
LDA	2.1	$398.00	$835.80
KJS	92.6	$398.00	$36,854.80
TJL	1.0	$398.00	$398.00
LWC	0.4	$398.00	$159.20
DCP	17.4	$398.00	$6,925.20
KJM	49.8	$345.00	$17,181.00
SJH	0.3	$325.00	$97.50
TJF	22.7	$265.00	$6,015.50
AJR	22.2	$235.00	$5,217.00
TWS	1.6	$225.00	$360.00
MRH	3.8	$225.00	$855.00
LAH	11.0	$225.00	$2,475.00
CEB	21.8	$150.00	$3,270.00
LDS	18.8	$225.00	$4,230.00
Total Fees:	**378.5**		**$129,848.00**
Monthly Credit Card Processing Fee			$4,055.81
Westlaw			$81.21
NDRIN			$69.00
Prof Service Fee Gwendolyn			$12,000.00
Meals			$86.12
Secretary of State			$960.00
Search Fee			$9.44
Total Expenses:			**$17,261.58**
Grand Total			**$147,109.58**

		Rates
JTS	John T. Shockley, Partner, Supervising Attorney	$398.00
CMM	Christopher M. McShane, Partner	$398.00
ADC	Andrew D. Cook, Partner	$398.00
SNW	Sarah M. Wear, Partner	$398.00
LDA	Lukas D. Andrud, Partner	$398.00
KJS	Katie J. Schmidt, Partner	$398.00
MWM	Marshall W. McCullough, Partner	$398.00
TJL	Tyler J. Leverington, Partner	$398.00
LWC	Lukas W. Croaker, Partner	$398.00
BTB	Brent T. Boeddeker, Partner	$398.00
DCP	David C. Piper, Partner	$398.00
ABG	Alexander B. Gruchala, Associate	$365.00
JRS	J.R. Strom, Associate	$350.00
KJM	Kathryn J. McNamara, Associate	$345.00
JAM	Jenna A. McPherson, Associate	$310.00
SJH	Stephen J. Hilfer, Associate	$325.00
TJF	Tiffany J. Findlay, Associate	$265.00
KKW	Katherine K. Wong, Associate	$290.00
MAN	Morgan A. Nyquist, Associate	$280.00
CAS	Carol A. Stillwell, Paralegal	$235.00
AJR	Andrea J. Roman, Paralegal	$235.00
CRR	Christie R. Rust, Paralegal	$225.00
TWS	Tim W. Steuber, Paralegal	$225.00
MRH	Meghan R. Hockert, Paralegal	$225.00
LAH	Lacey A. Hruby, Paralegal	$225.00
DLR	Dena L. Ranum, Paralegal	$180.00
ATW	Amy T. White, Paralegal	$205.00
CEB	Claire E. Bruland, Paralegal	$150.00
LDS	Lynne D. Spaeth, Paralegal	$225.00

COST ADVANCES BY US FOR YOUR ACCOUNT, FOR WHICH WE HAVE NOT BEEN BILLED, WILL APPEAR ON YOUR NEXT STATEMENT.

PROFESSIONAL SERVICES RENDERED

15-1395 JTS Invoice # 195328	Flood Diversion Board	Bond Counsel Work - P3	
FILE NUMBER	MATTER DESCRIPTION	INVOICE - TOTAL FEES	
151395-1	General Topics	$13,495.40	
151395-4	Public Finance Issues	$1,256.50	
151395-5	Consultant Contract Review/Development	$1,224.70	
151395-9	Environmental Permitting Issues/NEPA		*exp only
151395-12	USACE Interface/Questions	$17,905.70	
151395-13	Third Party Utility MOU's	$33,505.90	
151395-17	EPA WIFIA Loan	$119.40	
151395-20	USDOT PABs	$47.00	
151395-23	PRAM	$1,042.00	
151395-24	P3 Implementation	$40,463.30	
	P3 Contract Administration ($41,722.30 to be paid by DA)		
151395-27	UMA/Utility Review	$10,184.90	
151395-28	CCJWRD Temporary RIB 2024A	$7,635.70	
151395-29	Deed Restrictions	$2,967.50	
TOTAL		**$129,848.00**	

THE CITY OF Fargo FAR MORE

FINANCE OFFICE
PO Box 2083
225 4th Street North
Fargo, ND 58102
Phone: 701.241.1333 | Fax: 701.476.4188
www.FargoND.gov

April 15, 2024

Metro Flood Diversion Board of Authority
PO Box 2806
Fargo, ND 58108-2806

Dear Metro Flood Diversion Board of Authority,

The City of Fargo is requesting for reimbursement the Diversion Authority's share of payment for the 2023 Digital Orthophotography, LiDAR/Contours, Planimetrics and Impervious Surfaces project. The cost share for this project was approved by the City of Fargo Board of Commissioners on February 6, 2023. Total requested for reimbursement for this payment is $130,396.52.

The 2023 project has now been completed by Fugro USA Land, Inc., so this will be the only reimbursement request for this project.

If you have any questions relating to our request, please feel free to contact us. Thank you.

Sincerely,

Wyatt Papenfuss
Finance Manager
City of Fargo

CASS COUNTY GOVERNMENT

Rush River
Water Resource
District

William A. Hejl
Chairman
Amenia, North Dakota

Dick Sundberg
Manager
Harwood, North Dakota

Jacob Gust
Manager
Fargo, North Dakota

Melissa Hinkemeyer
Director, Secretary

1201 Main Avenue West
West Fargo, ND 58078-1301

701-298-2381
FAX 701-298-2397
wrd@casscountynd.gov
www.casscountynd.gov

SENT VIA EMAIL

March 19, 2024

Diversion Authority
P.O. Box 2806
Fargo, ND 58108-2806

Greetings:

RE: Metro Flood Diversion Project

Enclosed please find a copy of invoices totaling $13,045 regarding the Metro Flood Diversion Project.

At this time, we respectfully request 100% reimbursement per the Memorandum of Understanding between Metro Flood Diversion Authority and Rush River Water Resource District dated December 21, 2020.

If you have any questions, please feel free to contact us. Thank you.

Sincerely,

RUSH RIVER WATER RESOURCE DISTRICT

Leilei Bao
Accountant
Leilei Bao
Enclosure

INVOICE: INV009461

Date 04/04/2024
Invoice account 198

CITY OF FARGO
PO BOX 2083
FARGO, ND 58107-2083

Description	Quantity	Unit price	Amount
FM DIVERSION MISC EXPENSES	1.00	6,960.34	6,960.34
FM DIVERSION PAYROL EXPENSES	1.00	118,550.21	118,550.21

Sales subtotal amount	Total discount	Total charges	Net amount	Sales tax	Round-off	Currency	Total
125,510.55	0.00	0.00	125,510.55	0.00	0.00	USD	125,510.55

Due date 05/04/2024

Please detach and send this copy with remittance.

MAKE CHECK PAYABLE TO:
Cass County Government
211 9th Street South
P.O Box 2806
Fargo, ND 58108-2806

Invoice:**INV009461**

Date: 04/04/2024

Total: 125,510.55

Name: CITY OF FARGO

Account #: 198

Due date 05/04/2024

CASS COUNTY GOVERNMENT

Maple River Water Resource District

Rodger Olson
Chairman
Leonard, North Dakota

Gerald Melvin
Manager
Buffalo, North Dakota

Chad Miller
Manager
Buffalo, North Dakota

Melissa Hinkemeyer
Director, Secretary

1201 Main Avenue West
West Fargo, ND 58078-1301

701-298-2381
FAX 701-298-2397
wrd@casscountynd.gov
www.casscountynd.gov

SENT VIA EMAIL

March 22, 2024

Diversion Authority
P.O. Box 2806
Fargo, ND 58108-2806

Greetings:

RE: Maple River WRD Reimbursements

Enclosed please find a copy of an invoice totaling $4,042.55 regarding the Metro Flood Diversion project.

At this time, we respectfully request 100% reimbursement per the *Memorandum of Understanding* between the Metro Flood Diversion Authority and Maple River Water Resource District dated December 21, 2020.

If you have any questions, please feel free to contact us. Thank you.

Sincerely,

MAPLE RIVER WATER RESOURCE DISTRICT

Leilei Bao

Leilei Bao
Accountant

Enclosure

CASS COUNTY GOVERNMENT

1201 Main Avenue West
West Fargo, ND 58078-1301

701-298-2381
FAX 701-298-2397
wrd@casscountynd.gov
www.casscountynd.gov

SENT VIA EMAIL

April 15, 2024

Diversion Authority
P.O. Box 2806
Fargo, ND 58108-2806

Greetings:

RE: Maple River WRD Reimbursements

Enclosed please find a copy of an invoice totaling $482.00 regarding the Metro Flood Diversion project.

At this time, we respectfully request 100% reimbursement per the *Memorandum of Understanding* between the Metro Flood Diversion Authority and Maple River Water Resource District dated December 21, 2020.

If you have any questions, please feel free to contact us. Thank you.

Sincerely,

MAPLE RIVER WATER RESOURCE DISTRICT

Leilei Bao

Leilei Bao
Accountant

Enclosure

1/12/2024

City of Christine - SUMMARY OF INVOICING
Reimbursement Request #12
January 12, 2024

Vendor	Invoice Date	Invoice #	Invoice Amount
Swanson & Warcup	11/30/2023	1566	$929.50
Swanson & Warcup	12/31/2023	1718	$104.50
Total Swanson & Warcup			**$1,034.00**
Lies, Bullis & Hatting	12/21/2023	66977	$600.63
Total Lies, Bullis & Hatting			**$600.63**
Moore Engineering, Inc.	12/28/2023	36494	$30,875.30
Total Moore Engineering, Inc.			**$30,875.30**
Total Invoiced This Reimbursement Request			**$32,509.93**

3/1/2024

City of Christine - SUMMARY OF INVOICING
Reimbursement Request #13
March 1, 2024

Vendor	Invoice Date	Invoice #	Invoice Amount	
Swanson & Warcup	1/31/2024	1780	$137.50	
Total Swanson & Warcup			**$137.50**	
Lies, Bullis & Hatting	1/19/2024	67359	~~$5,400.63~~	**$2,680.00**
Total Lies, Bullis & Hatting			**~~$5,400.63~~**	**$2,680.00**
Moore Engineering, Inc.	1/24/2024	36809	$11,984.97	
Total Moore Engineering, Inc.			**$11,984.97**	
Total Invoiced This Reimbursement Request			**~~$17,523.10~~**	$14,802.47

CASS COUNTY GOVERNMENT

Southeast Cass Water Resource District

Keith Weston
Chairman
Fargo, North Dakota

Dave Branson
Manager
Fargo, North Dakota

Rick Steen
Manager
Fargo, North Dakota

Melissa Hinkemeyer
Director, Secretary

1201 Main Avenue West
West Fargo, ND 58078-1301

701-298-2381
FAX 701-298-2397
wrd@casscountynd.gov
casscountynd.gov

SENT VIA EMAIL

March 22, 2024

Diversion Authority
P.O. Box 2806
Fargo, ND 58108-2806

Greetings:

RE: Metro Flood Diversion Project

Enclosed please find a copy of invoices totaling $3,151.44 regarding the above referenced project.

At this time, we respectfully request 100% reimbursement per the *Memorandum of Understanding* between the Metro Flood Diversion Authority and Southeast Cass Water Resource District dated February 25, 2021.

If you have any questions, please feel free to contact us. Thank you.

Sincerely,

SOUTHEAST CASS WATER RESOURCE DISTRICT

Leilei Bao

Leilei Bao
Accountant

Enclosure

Southeast Cass Water Resource District

Keith Weston
Chairman
Fargo, North Dakota

Dave Branson
Manager
Fargo, North Dakota

Rick Steen
Manager
Fargo, North Dakota

Melissa Hinkemeyer
Director, Secretary

1201 Main Avenue West
West Fargo, ND 58078-1301

701-298-2381
FAX 701-298-2397
wrd@casscountynd.gov
casscountynd.gov

SENT VIA EMAIL

April 15, 2024

Diversion Authority
P.O. Box 2806
Fargo, ND 58108-2806

Greetings:

RE: Metro Flood Diversion Project

Enclosed please find a copy of invoices totaling $187.5 regarding the above referenced project.

At this time, we respectfully request 100% reimbursement per the *Memorandum of Understanding* between the Metro Flood Diversion Authority and Southeast Cass Water Resource District dated February 25, 2021.

If you have any questions, please feel free to contact us. Thank you.

Sincerely,

SOUTHEAST CASS WATER RESOURCE DISTRICT

Leilei Bao

Leilei Bao
Accountant

Enclosure

FM Metropolitan Area Flood Risk Management Project
Fiscal Accountability Report Design Phase
As of 03/31/24

	790: FM Diversion Project Fund						770: Budget Fund			773: Excess Capital Fund			
	2011-2020	2021	2022	2023	2024	Total	2021-2023	2024	Total	2023	2024	Total	Grand Total
Revenues													
City of Fargo	229,263,214	39,900,525	41,606,950	43,281,539	3,486,512	357,538,740		-	-	-	-	-	357,538,740
Cass County	238,074,113	20,605,468	20,077,388	21,720,075	1,777,253	302,254,297		-	-	-	-	-	302,254,297
State Water Commission	270,967,976	44,928,872	21,249,909			337,146,758		-	-	-	-	-	337,146,758
State of ND - Legacy Fund	-	-	105,992,160	129,134,268		235,126,428		-	-	-	-	-	235,126,428
State of ND - SRF	-	-	1,272,652	8,316,726	2,731,423	12,320,801		-	-	-	-	-	12,320,801
Cass County Joint Water Resource District	-	28,630,991				28,630,991		-	-	-	-	-	28,630,991
Other Agencies	706,805	-				706,805		-	-	-	-	-	706,805
City of Oxbow MOU Repayment	2,822,634	122,038				2,944,671		-	-	-	-	-	2,944,671
Reimbursements	168,602	52,055	18,930	15,735		255,322		-	-	-	-	-	255,322
Lease/Rental Payments	2,951,681	622,459	743,700	744,622	11,000	5,073,462		-	-	-	-	-	5,073,462
Asset Sales	1,235,569	1,802,265	1,348,132	4,125,699	303,705	8,815,371		-	-	-	-	-	8,815,371
Interest Income	4,790,772	1,011,554	1,377,312	7,208,616	1,493,051	15,881,305		-	-	-	-	-	15,881,305
Miscellaneous	4,886	7,336	1,987	70,350		84,560	3,320,850	414,799	3,735,649	-	-	-	3,820,209
Total Revenues	750,986,254	137,683,563	193,689,120	214,617,631	9,802,944	1,306,779,512	3,320,850	414,799	3,735,649	-	-	-	1,310,515,161
Expenditures													
7905 Army Corp Payments	53,159,000	-	-	24,800	-	53,183,800	-	-	-	-	-	-	53,183,800
7910 WIK - Administration	6,125,744	2,650,150	1,994,938	3,221,009	281,065	14,272,906	3,249,868	138,969	3,388,837	-	-	-	17,661,743
7915 WIK - Project Design	36,316,433	2,261,337	2,491,982	4,347,833	322,423	45,740,008	-	-	-	-	-	-	45,740,008
7920 WIK - Project Management	70,718,325	13,629,756	14,935,064	14,936,935	1,119,262	115,339,342	-	-	-	-	-	-	115,339,342
7925 WIK - Recreation	278,223	-	-	-	-	278,223	-	-	-	-	-	-	278,223
7930 LERRDS - North Dakota	275,657,728	42,321,398	53,946,968	73,162,817	2,672,627	447,761,538	-	-	-	-	-	-	447,761,538
7931 LERRDS - Minnesota	4,982,754	3,832,050	5,722,668	5,714,157	12,568,684	32,820,313	-	-	-	-	-	-	32,820,313
7940 WIK Mitigation - North Dakota	1,022,658	35,279,546	57,777	1,039,429	496	37,399,905	-	-	-	-	-	-	37,399,905
7941 WIK Mitigation - Minnesota	-	112,271	357,080	933,799	15,611	1,418,761	-	-	-	-	-	-	1,418,761
7950 Construction - North Dakota	104,100,296	25,488,649	17,899,069	17,768,082	388,528	165,644,624	-	-	-	-	-	-	165,644,624
7951 Construction - Minnesota	-		210,000	669,048	-	879,048	-	-	-	-	-	-	879,048
7952 Construction - O/H/B	33,612,243	2,070,541	646,144	118,976	8,896	36,456,800	-	-	-	-	-	-	36,456,800
7955 Construction Management	11,598,799	180,481	137,041	1,062	263	11,917,646	-	-	-	-	-	-	11,917,646
7959 SRF Construction	-	-	5,936,985	7,781,266	(132,255)	13,585,996	-	-	-	-	-	-	13,585,996
7980 Operations & Maintenance	190,811	2,971	138,066	83,898	-	415,746	-	-	-	-	-	-	415,746
7990 Project Financing	48,092,864	14,236,187	9,053,457	9,422,840	205,644	81,010,992	-	-	-	-	-	-	81,010,992
7995 Project Eligible - Off Formula Costs	-	-	-	-	-	-	-	-	-	-	-	-	-
7999 Non Federal Participating Costs	221,686	-	-	-	-	221,686	-	-	-	-	-	-	221,686
Total Expenditures	646,077,564	142,065,337	113,527,239	139,225,950	17,451,242	1,058,347,332	3,249,868	138,969	3,388,837	-	-	-	1,061,736,169
Other Financing Sources (Uses)													
Transfers From Other Diversion Funds	-	-				-		-	-	-	-	-	-
Transfers to Other Diversion Funds	-	659,566	1,250,000	1,395,000	412,500	3,717,066		-	-	-	-		3,717,066
Total Other Financing Sources (Uses)	-	659,566	1,250,000	1,395,000	412,500	3,717,066		-	-	-	-	-	3,717,066

FM Metropolitan Area Flood Risk Management Project
Statement of Net Position
March 31, 2024

	FM Diversion Project Fund	Budget Fund	Grand Total
Assets			
Cash	$ 207,979,692	$ 346,812	$ 208,326,504
Cash Horace 3.01 MIT	4,302,577	-	4,302,577
Cash BRRWD	8,572,214	-	8,572,214
Cash Held In Trust at BND			
Excess Revenue Fund	269,375	-	269,375
Temp Debt Obligation Fund	541,612	-	541,612
Authority Loan Fund	121,837	-	121,837
P3 Reserve Fund	16,133,951	-	16,133,951
SRF Loan Reserve Fund	2,284,920		2,284,920
Revenue Fund	1,189		1,189
Prepaid Expense	4,633,885	-	4,633,885
Refundable Deposit	50,000		50,000
Total assets	**244,891,251**	**346,812**	**245,238,063**
Liabilities			
Vouchers payable	28,549	-	28,549
Retainage payable	128,336	-	128,336
Rent Deposit	13,750	-	13,750
Deferred Revenue	5,500		5,500
Total liabilities	**176,136**	**-**	**176,136**
NET POSITION	**$ 244,715,115**	**$ 346,812**	**$ 245,061,927**

METRO FLOOD DIVERSION AUTHORITY

Data Through Date: Friday, March 29, 2024

Summary Of Expenses
EXP-2024-03

Monday, April 15, 2024

Account Number	Check Date	Check Number	Vendor Name	Transaction Amount	Description	Project Number	Project Description
770-7910-429.33-37	3/14/2024	334519	HighRoad Partners, LLC	$700.00	MARCH HR PARTNER FEES	V09701	HR SERVICES
			Other Services / HR Services	**$700.00**			
770-7910-429.34-15	3/7/2024	334371	Marco Technologies	$686.20	DIVERSION IT SERVICES	V10301	SERVICE AGREEMENT - IT
	3/28/2024	334839	Marco Technologies	$2,042.84	DIVERSION IT SERVICES	V10301	SERVICE AGREEMENT - IT
			Technical Services / Computer Services	**$2,729.04**			
			770 Subtotal	**$3,429.04**			
790-0000-206.10-00	3/21/2024	334720	Schmidt and Sons Inc.	$2,000.00	PAY RETAINAGE	V03803	WP50C-STRUCTURE REMOVALS
	3/28/2024	334830	JR Ferche Inc.	$27,410.50	Pay retainage	V11801	WP47D AGREEMENT
			Retainage	**$29,410.50**			
790-7910-429.33-20	3/28/2024	334804	EIDE BAILLY LLP	$397.50	DIVERSION CONSULTING	V00102	General & Admin. WIK
			Other Services / Accounting Services	**$397.50**			
790-7910-429.33-25	4/5/2024	1095	OHNSTAD TWICHELL PC	$82,577.83	AFP Ohnstad Twichell P	V00102	General & Admin. WIK
			Other Services / Legal Services	**$82,577.83**			
790-7910-429.34-20	3/7/2024	334298	C THREE MEDIA, LLC	$13,856.31	VIDEOGRAPHY SERVICES	V08601	VIDEOGRAPHY
	3/28/2024	334831	Michael H Klein	$1,012.50	PUBLIC OUTREACH/COMM	V07201	COMMUNICATION CONSULTING
	3/28/2024	334849	Neon Loon Communications, LL	$9,163.20	COMMUNICATIONS SUPPORT	V09601	COMMUNICATIONS SUPPORT
			Technical Services / Marketing / Public Relat.	**$24,032.01**			
790-7910-429.42-05	3/14/2024	334472	Ambassador, Inc.	$925.00	DIVERSION CLEANING	V10501	JANITORIAL SERVICES
			Cleaning Services / Custodial Services	**$925.00**			
790-7915-429.33-05	3/28/2024	334770	AECOM	$10,132.48	CULTURAL RESOURCES INVEST	V01004	SEAI CULTURAL RES INVEST
	3/28/2024	334823	HOUSTON-MOORE GROUP L	$183,868.63	PROJECT MGMT	V01633	DESIGN & CONST. SUPPORT
	3/28/2024	334823	HOUSTON-MOORE GROUP L	$128,222.26	PROJECT MGMT	V01634	H&H MITIG. & PERMIT SUPPO
			Other Services / Engineering Services	**$322,223.37**			
790-7915-429.38-99	3/20/2024	ES15230	Fugro USA Land, Inc.	$30,549.30	DA COST SHARE-GIS231	V02504	2023 DIGITAL IMAGERY PROJEC
			Other Services / Other Services	**$30,549.30**			

METRO FLOOD DIVERSION AUTHORITY

Data Through Date: Friday, March 29, 2024

Summary Of Expenses
EXP-2024-03

Monday, April 15, 2024

Account Number	Check Date	Check Number	Vendor Name	Transaction Amount	Description	Project Number	Project Description
790-7920-429.33-05	3/28/2024	334823	HOUSTON-MOORE GROUP L	$44,643.67	PROJECT MGMT	V01633	DESIGN & CONST. SUPPORT
	3/28/2024	334823	HOUSTON-MOORE GROUP L	$39,898.00	PROJECT MGMT	V01634	H&H MITIG. & PERMIT SUPPO
			Other Services / Engineering Services	**$84,541.67**			
790-7920-429.33-79	3/14/2024	334489	CH2M Hill Engineers Inc	$420,582.51	PROGRAM MGMT	V00211	CH2M HILL-6/2019-12/2021
	3/14/2024	334489	CH2M Hill Engineers Inc	$614,137.49	SUPPORT SERVICES	V00212	P3 PROCUREMENT SUPPORT
			Other Services / Construction Management	**$1,034,720.00**			
790-7930-429.33-05	3/28/2024	334769	ADVANCED ENGINEERING I	$252,654.12	DIVERSION PROJECT	V00302	PROGRAM MGMT SERVICES
	3/28/2024	334823	HOUSTON-MOORE GROUP L	$30,203.29	PROJECT MGMT	V01633	DESIGN & CONST. SUPPORT
	3/28/2024	334823	HOUSTON-MOORE GROUP L	$1,844.00	PROJECT MGMT	V01634	H&H MITIG. & PERMIT SUPPO
			Other Services / Engineering Services	**$284,701.41**			
790-7930-429.33-79	3/14/2024	334489	CH2M Hill Engineers Inc	$35,541.76	PROPERTY ACQUISITION	V00210	CH2M HILL-LAND ACQUISITON
			Other Services / Construction Management	**$35,541.76**			
790-7930-429.38-99	3/7/2024	334386	NDSU BUSINESS OFFICE-BO	$98,471.25		V02703	WEATHER GAUGE AGREEMENT
			Other Services / Other Services	**$98,471.25**			
790-7930-429.73-20	3/7/2024	334416	Schmidt and Sons Inc.	$112,000.00	PROPERTY STRUCTURE MITIGA	V03808	WP-38B CONSTRUCTION
	3/12/2024	LT03240	Schmidt and Sons Inc.	($100,800.00)	REV 12.31.23 AP 3.7.2024	V03808	WP-38B CONSTRUCTION
	3/18/2024	LT03240	Schmidt and Sons Inc.	($11,200.00)	REV 12.31.23 AP 3.7.2024	V03808	WP-38B CONSTRUCTION
	3/11/2024	LT15230	Schmidt and Sons Inc.	$100,800.00	12.31.23 AP-3.7.2024 CK	V03808	WP-38B CONSTRUCTION
	3/18/2024	LT15230	Schmidt and Sons Inc.	$11,200.00	12.31.23 AP-3.07.24	V03808	WP-38B CONSTRUCTION
			Infrastructure / Site Improvements	**$112,000.00**			

METRO FLOOD DIVERSION AUTHORITY

Data Through Date: Friday, March 29, 2024

Summary Of Expenses
EXP-2024-03

Monday, April 15, 2024

Account Number	Check Date	Check Number	Vendor Name	Transaction Amount	Description	Project Number	Project Description
790-7931-429.71-30	3/18/2024	ES03240	1250N - CITY OF MOORHEAD	$90,000.00	REC WIRE PMT TO MCCJPA	V02301	MN LAND PURCHASES
	3/18/2024	ES03240	1257N - CITY OF MOORHEAD	$108,000.00	REC WIRE PMT TO MCCJPA	V02301	MN LAND PURCHASES
	3/18/2024	ES03240	1261N - CITY OF MOORHEAD	$36,500.00	REC WIRE PMT TO MCCJPA	V02301	MN LAND PURCHASES
	3/18/2024	ES03240	1269 - BLILIE 6	$36,500.00	REC WIRE PMT TO MCCJPA	V02301	MN LAND PURCHASES
	3/18/2024	ES03240	1270N - CITY OF MOORHEAD	$201,172.00	REC WIRE PMT TO MCCJPA	V02301	MN LAND PURCHASES
	3/18/2024	ES03240	1272N - CITY OF MOORHEAD	$500.00	REC WIRE PMT TO MCCJPA	V02301	MN LAND PURCHASES
	3/18/2024	ES03240	1276 - ISRAELSON/GARY & N	$11,530.00	REC WIRE PMT TO MCCJPA	V02301	MN LAND PURCHASES
	3/18/2024	ES03240	1277 - ISRAELSON/GARY & N	$12,544.00	REC WIRE PMT TO MCCJPA	V02301	MN LAND PURCHASES
	3/18/2024	ES03240	1315 - NESS/JAMES A	$93,880.00	REC WIRE PMT TO MCCJPA	V02301	MN LAND PURCHASES
	3/18/2024	ES03240	1316 - NESS/JAMES A	$5,940.00	REC WIRE PMT TO MCCJPA	V02301	MN LAND PURCHASES
	3/18/2024	ES03240	1317 - NESS/JAMES A	$7,576.00	REC WIRE PMT TO MCCJPA	V02301	MN LAND PURCHASES
	3/18/2024	ES03240	1650N - TODD A & JANE M B	$725,000.00	REC WIRE PMT TO MCCJPA	V02301	MN LAND PURCHASES
	3/18/2024	ES03240	1670N - LARRY W NESS	$692,772.00	REC WIRE PMT TO MCCJPA	V02301	MN LAND PURCHASES
	3/18/2024	ES03240	1671 - BRAKKE 2	$355,840.00	REC WIRE PMT TO MCCJPA	V02301	MN LAND PURCHASES
	3/18/2024	ES03240	1672 - BRAKKE 2	$120,065.00	REC WIRE PMT TO MCCJPA	V02301	MN LAND PURCHASES
	3/18/2024	ES03240	1678N - THERESA J B NELSO	$796,962.00	REC WIRE PMT TO MCCJPA	V02301	MN LAND PURCHASES
	3/18/2024	ES03240	1794 - WILLEM 1	$438,285.00	REC WIRE PMT TO MCCJPA	V02301	MN LAND PURCHASES
	3/18/2024	ES03240	1795 - WILLEM 2	$460,000.00	REC WIRE PMT TO MCCJPA	V02301	MN LAND PURCHASES
	3/18/2024	ES03240	1796 - NESS 6	$295,040.00	REC WIRE PMT TO MCCJPA	V02301	MN LAND PURCHASES
	3/18/2024	ES03240	1815N - MOORHEAD CLAY C	$308,200.00	REC WIRE PMT TO MCCJPA	V02301	MN LAND PURCHASES
	3/18/2024	ES03240	1820N - CLAY COUNTY	$1,821.00	REC WIRE PMT TO MCCJPA	V02301	MN LAND PURCHASES
	3/18/2024	ES03240	1822N - LARRY NESS	$530,228.00	REC WIRE PMT TO MCCJPA	V02301	MN LAND PURCHASES
	3/18/2024	ES03240	1824 - NESS 4	$192,392.00	REC WIRE PMT TO MCCJPA	V02301	MN LAND PURCHASES
	3/18/2024	ES03240	1826 - NESS 5	$647,866.00	REC WIRE PMT TO MCCJPA	V02301	MN LAND PURCHASES
	3/18/2024	ES03240	1827 - NESS 7	$24,990.00	REC WIRE PMT TO MCCJPA	V02301	MN LAND PURCHASES
	3/18/2024	ES03240	1829N - MOORHEAD CLAY C	$308,200.00	REC WIRE PMT TO MCCJPA	V02301	MN LAND PURCHASES
	3/18/2024	ES03240	1830 - WILLEM 1	$18,865.00	REC WIRE PMT TO MCCJPA	V02301	MN LAND PURCHASES
	3/18/2024	ES03240	1833N - CLAY COUNTY	$118,000.00	REC WIRE PMT TO MCCJPA	V02301	MN LAND PURCHASES
	3/18/2024	ES03240	1836 - BLILIE 3	$599,830.00	REC WIRE PMT TO MCCJPA	V02301	MN LAND PURCHASES
	3/18/2024	ES03240	1839 - CROWE 1	$738,700.00	REC WIRE PMT TO MCCJPA	V02301	MN LAND PURCHASES
	3/18/2024	ES03240	1842N - THERESA J B NELSO	$1,678,705.00	REC WIRE PMT TO MCCJPA	V02301	MN LAND PURCHASES

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Summary Of Expenses
EXP-2024-03

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Account Number	Check Date	Check Number	Vendor Name	Transaction Amount	Description	Project Number	Project Description
790-7931-429.71-30	3/18/2024	ES03240	1845N - MARK J & BARBARA	$430,000.00	REC WIRE PMT TO MCCJPA	V02301	MN LAND PURCHASES
	3/18/2024	ES03240	1861N - RICHARD ALLEN WI	$989,000.00	REC WIRE PMT TO MCCJPA	V02301	MN LAND PURCHASES
	3/18/2024	ES03240	1876N - THERESA J B NELSO	$869,688.00	REC WIRE PMT TO MCCJPA	V02301	MN LAND PURCHASES
	3/18/2024	ES03240	5061 - BRAKKE SHIRLEY A	$75,790.00	REC WIRE PMT TO MCCJPA	V02301	MN LAND PURCHASES
	3/18/2024	ES03240	8356N - CITY OF MOORHEAD	$500.00	REC WIRE PMT TO MCCJPA	V02301	MN LAND PURCHASES
	3/18/2024	ES03240	9152N - CITY OF MOORHEAD	$5,828.00	REC WIRE PMT TO MCCJPA	V02301	MN LAND PURCHASES
			Land / Land Purchases	**$12,026,709.00**			
790-7940-429.38-73	3/28/2024	334822	City of Horace	$76,318.00	INFRASTRUCTURE FUND REQ	V11601	HORACE 3.01 MIT
	4/3/2024	LT03240	City of Horace	($76,318.00)	REV 12.31.23 AP 3.28.2024	V11601	HORACE 3.01 MIT
	4/3/2024	LT15230	City of Horace	$76,318.00	12.31.23 AP 3.28.2024	V11601	HORACE 3.01 MIT
			Other Services / Economic Relief Fund	**$76,318.00**			
790-7941-429.33-05	3/28/2024	334795	MOORE ENGINEERING INC	$12,045.96	REIMB MOORE ENGINEERING	V10102	LAGOON
			Other Services / Engineering Services	**$12,045.96**			
790-7950-429.33-05	3/7/2024	334369	MOORE ENGINEERING INC	$7,045.49	REIMB MOORE ENGINEERING	V08901	MAPLE RIVER-DRAIN EXPENSE
	3/7/2024	334411	MOORE ENGINEERING INC	$10,743.75	REIMB MOORE ENGINEERING	V08801	RUSH RIVER-DRAIN EXPENSE
	3/7/2024	334423	MOORE ENGINEERING INC	$7,070.00	REIMB MOORE ENGINEERING	V12201	SE CASS WRD MOU
	3/28/2024	334823	HOUSTON-MOORE GROUP L	$2,604.50	PROJECT MGMT	V01633	DESIGN & CONST. SUPPORT
	3/5/2024	ES15230	City of Fargo	$2,889.50	City of Fargo	V05405	LEVEE/FLOODWALL - BELMONT
	3/5/2024	ES15230	KLJ ENGINEERING, LLC	$46,061.40	KLJ ENGINEERING, LLC	V05434	FM24A-S UNIV WALL REP
	4/1/2024	ES15230	City of Fargo	$0.00	City of Fargo	V05405	LEVEE/FLOODWALL - BELMONT
			Other Services / Engineering Services	**$76,414.64**			
790-7950-429.33-06	3/7/2024	334295	BRAUN INTERTEC CORP	$65,158.75	MATERIAL TESING	V00406	TASK ORDER #4
			Other Services / Quality Testing	**$65,158.75**			
790-7950-429.33-32	3/5/2024	ES15230	Tinjum Appraisal Company, Inc.	$3,600.00	TINJUM APPRAISAL COMPANY	V05401	DEMOLITION/LEVEE-HARWOOD
			Other Services / Appraisal Services	**$3,600.00**			
790-7950-429.41-05	3/7/2024	334302	Cass Rural Water	$27.05	ACCT #18789	V05006	DIVERSION INLET UTILITY
			Utility Services / Water and Sewer	**$27.05**			

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790-7950-429.73-52	3/19/2024	ES03240	Red River Valley Alliance LLC	$17,440.50	RECORD DIVERSION WIRE	V11401	P3 DEVELOPER PAYMENTS
	4/1/2024	ES15230	INDUSTRIAL BUILDERS INC	$0.00	INDUSTRIAL BUILDERS INC	V05409	FLOOD MIT-WOODCREST DRIVE
			Infrastructure / Flood Control	**$17,440.50**			
790-7950-429.73-58	4/1/2024	ES15230	City of Fargo	$0.00	City of Fargo	V05419	STORM LIFT STATION #24
			Infrastructure / Storm Sewer Systems	**$0.00**			
790-7950-429.73-70	3/7/2024	334300	Cass County Electric Cooperativ	$8,588.80	LINE RETIREMENT	V04715	57th ST SE-LINE REPLACE
	3/7/2024	334303	CENTURYLINK COMMUNIC	$3,439.60	LINE ABANDONMENT	V04809	TO7-112TH AVE ABANDONMENT
	3/28/2024	334830	JR Ferche Inc.	$2,899.58	UTILITY RELOCATION	V11801	WP47D AGREEMENT
			Infrastructure / Utilities	**$14,927.98**			
790-7950-429.74-10	4/1/2024	ES15230	City of Fargo	$0.00	City of Fargo	V05405	LEVEE/FLOODWALL - BELMONT
			Capital Outlay / Machinery & Equipment	**$0.00**			
790-7952-429.33-05	3/28/2024	334823	HOUSTON-MOORE GROUP L	$8,895.65	PROJECT MGMT	V01633	DESIGN & CONST. SUPPORT
			Other Services / Engineering Services	**$8,895.65**			
790-7955-429.33-05	3/28/2024	334823	HOUSTON-MOORE GROUP L	$262.50	PROJECT MGMT	V02827	IN TOWN LEVY MAINTENANCE
			Other Services / Engineering Services	**$262.50**			
790-7959-429.33-05	4/1/2024	ES15230	HOUSTON ENGINEERING IN	$0.00	HOUSTON ENGINEERING INC	V05406	DRAIN 27 LIFT STATION #56
	4/1/2024	ES15230	HOUSTON ENGINEERING IN	$0.00	HOUSTON ENGINEERING	V05433	NR24B - LIFT STAT 11 & 57
			Other Services / Engineering Services	**$0.00**			
790-7959-429.34-76	3/5/2024	ES15230	City of Fargo	$615.75	City of Fargo	V05406	DRAIN 27 LIFT STATION #56
			Technical Services / Televised Swr Inspection	**$615.75**			
790-7959-429.73-52	3/5/2024	ES15230	Rick Electric Inc	$83,993.00	RICK ELECTRIC INC	V05406	DRAIN 27 LIFT STATION #56
	4/1/2024	ES15230	FUSION AUTOMATION INC.	$0.00	FUSION AUTOMATION INC.	V05431	STORM LIFT IMPR #47 & #48
			Infrastructure / Flood Control	**$83,993.00**			
790-7980-429.38-99	3/20/2024	ES15230	City of Fargo	$29,375.49	RECORD FLDLFT COSTS AS	V02822	O & M - LIFTS #18 & #23
			Other Services / Other Services	**$29,375.49**			
790-7980-429.52-10	3/20/2024	ES15230	North Dakota Insurance Departm	$7,401.48	RECORD FLDLFT COSTS AS	V02822	O & M - LIFTS #18 & #23
			Insurance / Property Insurance	**$7,401.48**			

METRO FLOOD DIVERSION AUTHORITY

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Account Number	Check Date	Check Number	Vendor Name	Transaction Amount	Description	Project Number	Project Description
790-7980-429.62-51	3/20/2024	ES15230	XCEL ENERGY-FARGO	$47,120.83	RECORD FLDLFT COSTS AS	V02822	O & M - LIFTS #18 & #23
			Energy / Electricity	**$47,120.83**			
790-7990-429.33-05	3/28/2024	334823	HOUSTON-MOORE GROUP L	$50,859.30	PROJECT MGMT	V01633	DESIGN & CONST. SUPPORT
			Other Services / Engineering Services	**$50,859.30**			
790-7990-429.33-25	4/5/2024	1095	OHNSTAD TWICHELL PC	$46,737.35	AFP Ohnstad Twichell P	V00102	General & Admin. WIK
			Other Services / Legal Services	**$46,737.35**			
790-7990-429.33-47	3/7/2024	334401	Program Advisor Services, LLC	$54,400.00	CONSULTING SERVICES	V05801	CONSULTING SERVICES
			Other Services / Consulting Services	**$54,400.00**			
790-7990-429.34-57	3/27/2024	7674	BANK OF NORTH DAKOTA	$17,483.00	DIVERSION BND TRUSTEE FEE	V08502	MONTHLY TRUSTEE FEE
			Technical Services / FMDA Trustee Fees BND	**$17,483.00**			
790-7998-555.90-81	3/27/2024	ES03240	Diversion Admin Budget Transfe	$0.00	ANNUAL ADMIN BDGT TRF-MAR	VADMIN	Diversion Administration
			FMDA Admin. Budget Fund	**$0.00**			
			790 Subtotal	**$14,779,877.83**			

Total Amount Invoiced this period:	**$14,783,306.87**	
	$29,410.50	**Less Paid Retainage**
	$14,753,896.37	**Total Less Paid Retainage**

METRO FLOOD DIVERSION AUTHORITY

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Cumulative Vendor Payments Since Inception (Paid Only)

Vendor Name	Approved Contract/Invoiced Amount	Liquidated	Outstanding Encumbrance	Purpose
LAND PURCHASE	$376,426,750.55	$376,426,750.55	$0.00	Land Purchase
CH2M HILL ENGINEERS INC	$153,344,991.12	$116,506,931.27	$36,838,059.85	Project & Construction Management
HOUSTON-MOORE GROUP LLC	$94,554,195.48	$72,339,736.28	$22,214,459.20	Engineering Services
INDUSTRIAL BUILDERS INC	$62,813,089.79	$62,813,089.79	$0.00	2nd St N Pump Station Project and 2nd St Floodwall, South of Pu
ARMY CORP OF ENGINEERS	$53,183,800.00	$53,183,800.00	$0.00	Local Share
NORTH DAKOTA PUBLIC FINANCE AUTHORIT	$37,785,300.00	$37,785,300.00	$0.00	Debt Service
RICHLAND-WILKIN JPA	$35,000,000.00	$35,000,000.00	$0.00	Economic Impact Relief Fund
OHNSTAD TWICHELL PC	$22,434,708.28	$22,434,708.28	$0.00	Legal Services
KEY CONTRACTING INC	$20,315,278.41	$20,315,278.41	$0.00	FM1413 - Oakcreek and Copperfield Court Levee
MEYER CONTRACTING	$19,244,280.80	$19,244,280.80	$0.00	WP-43CD and Gatewell - PVD & Surcharge Installation
INDUSTRIAL CONTRACT SERVICES INC	$18,419,743.64	$18,419,743.64	$0.00	4th St Pump Station and 2nd Street Floodwall
ADVANCED ENGINEERING INC	$14,379,176.00	$12,266,795.22	$2,112,380.78	Lands Management and Public Outreach
WELLS FARGO	$11,607,080.05	$11,607,080.05	$0.00	Debt Service
DORSEY & WHITNEY LLP	$11,448,007.98	$11,448,007.98	$0.00	Legal Services
DAKOTA UNDERGROUND	$11,141,625.69	$11,141,625.69	$0.00	Utility Relocation
LANDSCAPES UNLIMITED	$11,007,612.78	$11,007,612.78	$0.00	Golf Course Construction - Oxbow Country Club
OKEEFE, OBRIAN, LYSON & FOSS LTD	$9,962,512.68	$9,962,512.68	$0.00	FLDBUY - COF Flood Home Buyouts
CITY OF FARGO	$7,803,973.22	$7,798,334.47	$5,638.75	Utility Relocation, Accounting Svcs, Interest on Deficit Funds
MOORE ENGINEERING INC	$7,686,230.01	$6,231,717.92	$1,454,512.09	Engineering Services
ASHURST LLP	$6,352,853.01	$6,352,853.01	$0.00	PPP Legal Counsel
SRF CONSULTING GROUP	$6,331,729.08	$3,125,491.15	$3,206,237.93	Engineering Services
CASS RURAL WATER	$6,286,389.81	$6,181,517.30	$104,872.51	Utilities and Utility Relocation
NUSTAR PIPELINE OPERATING PARTNERSHIP	$5,884,100.74	$5,867,251.62	$16,849.12	Utility Relocation
HOUSTON ENGINEERING INC	$5,516,675.48	$5,516,675.48	$0.00	Engineering Services
ERNST & YOUNG	$5,377,000.00	$5,017,370.30	$359,629.70	P3 Financial Advisory Services
BRAUN INTERTEC CORP	$4,774,098.26	$1,971,509.32	$2,802,588.94	Materials Testing
PROSOURCE TECHNOLOGIES, INC	$4,429,291.71	$3,356,532.20	$1,072,759.51	Land Acquisition Services

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Vendor Name	Approved Contract/Invoiced Amount	Liquidated	Outstanding Encumbrance	Purpose
CASS COUNTY GOVERNMENT	$4,224,567.96	$4,224,567.96	$0.00	Gravel on County Rd 17 Bypass
RED RIVER VALLEY ALLIANCE LLC	$3,776,558.86	$3,776,558.86	$0.00	P3 Developer payments
CENTURYLINK COMMUNICATIONS	$3,733,806.33	$3,603,633.31	$130,173.02	Utility Relocation
RILEY BROS	$3,656,841.67	$3,656,841.67	$0.00	Construction - OHB Ring Levee & WP-28A
MAGELLAN PIPELINE	$3,607,000.00	$2,852,375.85	$754,624.15	Utility Relocation
BNSF RAILWAY CO	$3,602,991.40	$3,581,295.20	$21,696.20	Permits for In-Town Levee Projects
RED RIVER VALLEY & WESTERN RAILROAD C	$3,589,388.46	$3,589,388.46	$0.00	Railroad Facilities and the Rail Property
SCHMIDT AND SONS INC.	$3,167,638.25	$2,813,222.83	$354,415.42	Residential Demolition in Oxbow
CHS INC.	$3,049,153.37	$3,049,153.37	$0.00	Purchase Agreement (DB-1011)
PLENARY AMERICAS USA LTD	$3,000,000.00	$3,000,000.00	$0.00	Stipend Payment for P3 RFP
CROWN APPRAISALS	$2,851,230.00	$2,183,030.00	$668,200.00	Flowage Easements Valuation and Appraisal Services
SELLIN BROS INC	$2,814,909.59	$2,814,909.59	$0.00	Riverwood Flood Risk Project - Construction
MINNESOTA DNR	$2,636,755.60	$2,617,681.40	$19,074.20	EIS Scoping and Permit Application
PROGRAM ADVISOR SERVICES, LLC	$2,510,982.87	$2,044,067.22	$466,915.65	Program Consulting Services
CASS COUNTY ELECTRIC COOPERATIVE	$2,486,320.31	$2,098,319.51	$388,000.80	Electrical Services
HDR ENGINEERING, INC.	$2,478,606.52	$1,881,862.59	$596,743.93	Engineering Services
OXBOW, CITY OF	$2,383,317.16	$2,383,317.16	$0.00	OXBOW MOU - LAND ADVANCE
LANDWEHR CONSTRUCTION INC	$2,304,622.16	$2,304,622.16	$0.00	In-Town and WP-43 Demolition Contracts
HOUGH INC	$2,088,832.83	$2,088,832.83	$0.00	Construction WP-42F.2 and Oxbow River Intake & Pumping Syst
CASS COUNTY JOINT WATER RESOURCE DI	$2,051,139.37	$2,051,139.37	$0.00	O/H/B Ring Levee, DPAC, Postage, Miscellaneous
EXCAVATING INC - FARGO	$2,018,659.41	$2,018,659.41	$0.00	Excavation and Utilities
ACONEX (NORTH AMERICA) INC	$2,010,595.97	$1,547,273.06	$463,322.91	Electronic Data Mgmt and Record Storage System
URS CORPORATION	$1,805,670.90	$1,805,670.90	$0.00	Cultural Resources Investigations
ULTEIG ENGINEERS INC	$1,611,901.59	$1,487,683.09	$124,218.50	Land Acquisition Services
REINER CONTRACTING INC	$1,599,646.21	$1,599,646.21	$0.00	El Zagal Flood Risk Management
WAGNER CONSTRUCTION INC.	$1,476,462.45	$770,028.50	$706,433.95	Utility Relocation
AECOM	$1,401,419.14	$1,030,451.85	$370,967.29	Cultural Resources Investigations

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Vendor Name	Approved Contract/Invoiced Amount	Liquidated	Outstanding Encumbrance	Purpose
CASS COUNTY TREASURER	$1,372,112.65	$1,372,112.65	$0.00	Property Taxes
UNITED STATES GEOLOGICAL SURVEY	$1,332,840.00	$478,677.50	$854,162.50	Water Level Discharge Collection & Stage Gage Installation
AON RISK SERVICES CENTRAL INC	$1,328,940.33	$1,250,003.83	$78,936.50	Risk Advisory Services P3 Pre-Award
XCEL ENERGY-FARGO	$1,306,121.19	$1,306,121.19	$0.00	Utility Relocation
US BANK	$1,205,546.13	$1,205,546.13	$0.00	Loan Advance Debt Service Payments
CONSOLIDATED COMMUNICATIONS	$1,081,127.97	$1,081,127.97	$0.00	Utility Relocation
KPH, INC.	$1,025,640.12	$1,025,640.12	$0.00	WP-43D5 Construction
CITY OF HORACE	$990,496.15	$990,496.15	$0.00	Infrastructure Fund
MINNKOTA POWER COOPERATIVE	$940,269.48	$565,269.48	$375,000.00	Utility Relocation
CLERK OF DISTRICT COURT	$939,044.32	$939,044.32	$0.00	FLDBUY - COF Flood Home Buyouts
TERRACON CONSULTING ENGINEERS	$887,718.41	$887,718.41	$0.00	Materials Testing
LARKIN HOFFMAN ATTORNEYS	$866,123.26	$866,123.26	$0.00	Legal Services
SBA COMMUNICATIONS	$851,648.91	$851,648.91	$0.00	Utility Relocation
SPRINT COMMUNICATIONS COMPANY L.P.	$812,034.58	$812,034.58	$0.00	Fiber Optic Relocation
COMPASS LAND CONSULTANTS, INC	$804,820.00	$635,689.43	$169,130.57	Property Appraisal Services
UNITED STATES ENVIRONMENTAL PROTECTI	$767,386.35	$767,386.35	$0.00	WIFIA LOAN APPLCATION FEE
BORDER STATES PAVING, INC	$762,980.64	$762,980.64	$0.00	Street repairs
CC STEEL, LLC	$755,550.09	$755,550.09	$0.00	Lift Station Improvements
MASTER CONSTRUCTION CO INC	$739,364.30	$739,364.30	$0.00	Flood Mitigation - Royal Oaks Area - Construction
DAKOTA CARRIER NETWORK	$727,348.58	$727,348.58	$0.00	Utility Relocation
ERIK R JOHNSON & ASSOCIATES	$686,572.23	$686,572.23	$0.00	Legal Services
PATCHIN MESSNER VALUATION COUNSELORS	$641,462.50	$486,633.75	$154,828.75	Property Appraisal Services
METROPOLITAN COUNCIL OF GOVERNMENTS	$637,390.01	$637,390.01	$0.00	Digital Aerial Photography
BANK OF NORTH DAKOTA	$636,066.53	$636,066.53	$0.00	Legal review fees
NEON LOON COMMUNICATIONS, LLC	$635,958.00	$336,954.03	$299,003.97	Communications Support
CLAY COUNTY AUDITOR	$613,712.50	$613,712.50	$0.00	Property Taxes - MN
NDSU BUSINESS OFFICE-BOX 6050	$606,145.00	$454,616.25	$151,528.75	Ag Risk Study Services

METRO FLOOD DIVERSION AUTHORITY

Monday, April 15, 2024

Data Through Date: Friday, March 29, 2024

Cumulative Vendor Payments Since Inception (Paid Only)

Vendor Name	Approved Contract/Invoiced Amount	Liquidated	Outstanding Encumbrance	Purpose
DUCKS UNLIMITED	$587,180.00	$587,180.00	$0.00	Wetland Mitigation Credits
AT&T	$586,269.60	$586,269.60	$0.00	Utility Relocation
LINNCO, INC.	$534,003.11	$534,003.11	$0.00	House Demo and Removal
MIDCONTINENT COMMUNICATIONS	$527,490.41	$527,490.41	$0.00	Utility Relocation
RED RIVER BASIN COMMISSION	$501,000.00	$501,000.00	$0.00	Retention Projects - Engineering Services
HOFFMAN & MCNAMARA CO.	$491,334.67	$491,334.67	$0.00	General Landscaping and Planting (WP-42G)
BUFFALO-RED RIVER WATERSHED DISTRICT	$474,032.90	$474,032.90	$0.00	Retention Projects - Engineering Services
RICK ELECTRIC INC	$455,200.00	$455,200.00	$0.00	Riverwood Flood Risk Project - Electrical
RED RIVER VALLEY COOPERATIVE ASSOC	$450,935.85	$450,935.85	$0.00	Electricity - Home Buyouts
ROBERT TRENT JONES	$440,431.73	$440,431.73	$0.00	Oxbow MOU - Golf Course Consulting Agreement
LTP ENTERPRISES INC.	$438,600.00	$55,856.00	$382,744.00	Test Holes and Test Well Drilling
BEAVER CREEK ARCHAEOLOGY	$396,970.25	$369,370.25	$27,600.00	Engineering Services
C THREE MEDIA, LLC	$394,063.70	$328,715.06	$65,348.64	Videography Services
MBA	$380,636.36	$380,636.36	$0.00	Golf course and pump house - Oxbow Country Club
WATTS AND ASSOCIATES, INC.	$350,000.00	$330,373.18	$19,626.82	Crop insurance product development services
MVM CONTRACTING	$339,448.03	$339,448.03	$0.00	Fiber Relocation
SWANSON HEALTH PRODUCTS, INC.	$337,059.00	$337,059.00	$0.00	FM1471 - Storm Lift Stations #55 and #56 - Drain 27
INTEGRA REALTY RESOURCES	$320,750.00	$260,725.00	$60,025.00	Property Appraisal Services
DFI BRIDGE CORPORATION	$316,211.21	$316,211.21	$0.00	Bridge Construction - Oxbow Country Club
FEDERAL STEEL SUPPLY, INC.	$307,378.00	$307,378.00	$0.00	OHB - 42 inch steel pipe
DIRT DYNAMICS	$301,332.37	$301,332.37	$0.00	HD18A1 - Oakcreek, Copperfield & Univerisy - Demo
GARY KILLEBREW	$279,500.00	$279,500.00	$0.00	Project Manager Services - Oxbow Country Club
TURMAN & LANG	$277,139.55	$277,139.55	$0.00	Legal Services
JR FERCHE INC.	$277,004.58	$277,004.58	$0.00	Water System Improvements
MOODYS INVESTORS SERVICE, INC.	$274,375.00	$274,375.00	$0.00	WIFIA loan fees
702 COMMUNICATIONS	$266,892.07	$266,892.07	$0.00	Utility Relocation
FORUM COMMUNICATIONS	$248,913.75	$248,913.75	$0.00	Advertising Services

METRO FLOOD DIVERSION AUTHORITY

Monday, April 15, 2024

Data Through Date: Friday, March 29, 2024

Cumulative Vendor Payments Since Inception (Paid Only)

Vendor Name	Approved Contract/Invoiced Amount	Liquidated	Outstanding Encumbrance	Purpose
PR FOR GOOD, INC	$242,482.28	$242,482.28	$0.00	Communications Support Services
FREDRIKSON & BYRON, PA	$241,881.28	$241,881.28	$0.00	Lobbying Services
PLEASANT TOWNSHIP	$238,722.25	$238,722.25	$0.00	Building Permit Application
NORTHERN IMPROVEMENT COMPANY	$235,531.95	$235,531.95	$0.00	CR-17 asphalt paving
MICHAEL H KLEIN	$234,965.25	$88,558.60	$146,406.65	Communications Support
DAWSON INSURANCE AGENCY	$232,155.45	$232,155.45	$0.00	Property Insurance - Home Buyouts
GRAY PANNELL & WOODWARD LLP	$231,300.68	$231,300.68	$0.00	Legal Services
APEX ENGINEERING GROUP INC	$227,256.79	$227,256.79	$0.00	Engineering
WILLIAM D. SCEPANIAK, INC.	$226,235.21	$226,235.21	$0.00	ROADWAY RESHAPING & AGGREGATE SURFACING
GA GROUP, PC	$204,229.32	$164,229.32	$40,000.00	Government Relations
AMERICAN ENTERPRISES, INC.	$200,281.00	$200,281.00	$0.00	Construction/Demolition
CITY OF OXBOW MOU	$200,000.00	$200,000.00	$0.00	Oxbow Park Relocation MOU Amendment
EXECUTIVE MANAGEMENT SYSTEMS, INC.	$196,763.96	$196,763.96	$0.00	Executive Coaching
SERKLAND LAW FIRM	$189,803.71	$189,803.71	$0.00	Legal services
MAPLETON, CITY OF	$179,605.00	$87,870.22	$91,734.78	Prelim Engineering Services
SPRINGSTED INCORPORATED	$178,010.15	$178,010.15	$0.00	Financial Advisor
KADRMAS LEE & JACKSON, INC.	$176,164.00	$176,164.00	$0.00	Engineering Services
LANDVEST, INC.	$167,000.00	$0.00	$167,000.00	Appraisal services
MUNICIPAL AIRPORT AUTHORITY	$166,981.00	$166,981.00	$0.00	Easement for Airport
SOIL BORINGS	$166,232.50	$166,232.50	$0.00	Soil Borings
RED RIVER COMMUNICATIONS	$160,943.20	$0.00	$160,943.20	Fiber Relocation
KLJ ENGINEERING, LLC	$156,242.25	$156,242.25	$0.00	Lift Station Improvements
PFM PUBLIC FINANCIAL MANAGEMENT	$146,460.00	$146,460.00	$0.00	Financial Advisor
S&P GLOBAL RATINGS	$145,625.00	$145,625.00	$0.00	Ratings Evaluation Service
DAILY NEWS	$143,075.16	$143,075.16	$0.00	Advertising Services
EIDE BAILLY LLP	$141,643.25	$105,480.75	$36,162.50	Audit Services
CHAPMAN AND CUTLER	$140,000.00	$140,000.00	$0.00	Legal Services

METRO FLOOD DIVERSION AUTHORITY

Monday, April 15, 2024

Data Through Date: Friday, March 29, 2024

Cumulative Vendor Payments Since Inception (Paid Only)

Vendor Name	Approved Contract/Invoiced Amount	Liquidated	Outstanding Encumbrance	Purpose
QUANTUM SPATIAL, INC.	$139,061.35	$139,061.35	$0.00	Digital Aerial Photography
JT LAWN SERVICE LLC	$137,044.00	$137,044.00	$0.00	Mowing and weed control
MARCO TECHNOLOGIES	$125,554.72	$73,171.39	$52,383.33	IT Services
SENTRY SECURITY, INC.	$121,212.85	$121,212.85	$0.00	Security Services
AFFINITEXT INC	$118,630.00	$74,413.20	$44,216.80	Document Management Services
ENVENTIS	$115,685.62	$115,685.62	$0.00	Utility Relocation
GE BOCK REAL ESTATE, LLC	$112,590.00	$112,590.00	$0.00	Property Appraisal Services
TINJUM APPRAISAL COMPANY, INC.	$112,100.00	$112,100.00	$0.00	Property Appraisal Services
OXBOW COUNTRY CLUB	$110,391.68	$110,391.68	$0.00	Golf Course - Oxbow
JORGE PAGAN	$109,500.00	$109,500.00	$0.00	Appraisal services
MAPLETON TOWNSHIP	$108,030.00	$108,030.00	$0.00	Lost tax revenue and attorney fees
DAVID CLARDY	$105,215.05	$105,215.05	$0.00	Home buyouts - easement
147 Vendors	**Report Totals:**	**$1,136,542,691.23**	**$1,057,913,134.07**	**$78,629,557.16**

METRO FLOOD DIVERSION AUTHORITY

Monday, April 15, 2024

Data Through Date: Friday, March 29, 2024

Parcel (OIN) Physical Location Summary

Project / Physical Location	Parcels	Acquired / Sold	Cancelled OIN's (HC)	PCT Acquired / Cancelled	Remaining OIN's	Cost To Date
	9	**0**	**0**	**0%**	**9**	**$0**
UMA-W2	9	0	0	0%	9	$0
BIOGEO	**425**	**203**	**131**	**79%**	**91**	**$1,101,731**
BIOGEO	295	202	2	69%	91	$330,046
HC	130	1	129	100%	0	$771,685
CHANNEL	**711**	**504**	**206**	**100%**	**1**	**$99,121,577**
ENV	1	0	0	0%	1	$0
HC	240	34	206	100%	0	$3,559,111
LAP01	130	130	0	100%	0	$8,026,504
LAP02	99	99	0	100%	0	$13,602,554
LAP03	84	84	0	100%	0	$22,790,904
LEGACY	156	156	0	100%	0	$51,141,254
SheyMit	1	1	0	100%	0	$1,250
DOWNSTREAM	**7**	**0**	**7**	**100%**	**0**	**$0**
HC	7	0	7	100%	0	$0
Habitat Improveme	**22**	**6**	**0**	**27%**	**16**	**$2,000**
ENV	5	5	0	100%	0	$0
Habitat_Shey	17	1	0	6%	16	$2,000
MOBILITY	**123**	**0**	**1**	**1%**	**122**	**$0**
DA_MOB37_MN	51	0	0	0%	51	$0
DA_MOB37_ND	19	0	0	0%	19	$0
DA_MOB38TH	52	0	0	0%	52	$0
HC	1	0	1	100%	0	$0

METRO FLOOD DIVERSION AUTHORITY

Monday, April 15, 2024

Data Through Date: Friday, March 29, 2024

Parcel (OIN) Physical Location Summary

Project / Physical Location	Parcels	Acquired / Sold	Cancelled OIN's (HC)	PCT Acquired / Cancelled	Remaining OIN's	Cost To Date
SEAILAND	**509**	**463**	**39**	**99%**	**7**	**$91,408,402**
DRAIN 27	39	39	0	100%	0	$20,565,082
HC	45	6	39	100%	0	$458,806
LEGACY	126	126	0	100%	0	$21,439,155
SE_I29	10	10	0	100%	0	$4,383,360
SE-1	41	40	0	98%	1	$6,526,631
SE-2A	13	13	0	100%	0	$3,914,646
SE-2B	74	69	0	93%	5	$11,318,469
SE-3	11	11	0	100%	0	$1,009,802
SE-4	70	69	0	99%	1	$10,062,044
SE-5	24	24	0	100%	0	$1,406,709
SE-INLET	9	9	0	100%	0	$2,952,107
SE-RRCS	37	37	0	100%	0	$6,932,634
SE-WRCS	10	10	0	100%	0	$438,958
Sheyenne Mitigatio	**3**	**1**	**0**	**33%**	**2**	**$1,750**
SheyMit	3	1	0	33%	2	$1,750
WP36	**2**	**2**	**0**	**100%**	**0**	**$2,750**
WRDAM	2	2	0	100%	0	$2,750
WP38	**1,026**	**301**	**376**	**66%**	**349**	**$89,680,433**
HC	380	4	376	100%	0	$1,283,123
LEGACY	3	3	0	100%	0	$750
UMA	570	293	0	51%	277	$88,379,407
UMA-C	56	0	0	0%	56	$0
UMA-W	14	1	0	7%	13	$17,153
UMA-W2	3	0	0	0%	3	$0
WP40	**18**	**8**	**10**	**100%**	**0**	**$48,923**
DRAYTON	7	7	0	100%	0	$48,923
HC	10	0	10	100%	0	$0
LEGACY	1	1	0	100%	0	$0
WP42	**66**	**49**	**4**	**80%**	**13**	**$37,850,061**
HC	4	0	4	100%	0	$0
LEGACY	6	6	0	100%	0	$18,014,935
WP42	56	43	0	77%	13	$19,835,126

METRO FLOOD DIVERSION AUTHORITY

Monday, April 15, 2024

Data Through Date: Friday, March 29, 2024

Parcel (OIN) Physical Location Summary

Project / Physical Location	Parcels	Acquired / Sold	Cancelled OIN's (HC)	PCT Acquired / Cancelled	Remaining OIN's	Cost To Date
WP43	**268**	**121**	**147**	**100%**	**0**	**$79,807,670**
Non-OIN Hard Land Cost	0	0	0	0%	0	$22,598,547
HC	148	1	147	100%	0	$500
LEGACY	6	6	0	100%	0	$3,589,519
WP43A	1	1	0	100%	0	$0
WP43B	6	6	0	100%	0	$1,927,138
WP43C	74	74	0	100%	0	$45,142,769
WP43D	19	19	0	100%	0	$5,286,226
WP43D5	5	5	0	100%	0	$1,175,055
WP43G	9	9	0	100%	0	$87,915
Totals	**3,189**	**1,658**	**921**	**81%**	**610**	**$399,025,298**

FM Metropolitan Area Flood Risk Management Project
Lands Expense - Life To Date
As of March 31, 2024

Property Address	Purchase Date	Purchase Price	Earnest Deposit	Relocation Assistance	Sale Proceeds	Total
Commercial Relocations - Fargo		16,099,989.70	-	16,300,462.10	(1,100.00)	32,399,351.80
Home Buyouts - Fargo		3,044,054.89	-	521,417.80	-	3,565,472.69
Home Buyouts - Moorhead		495,809.91	-	84,060.80	(8,440.00)	571,430.71
Home Buyouts - Oxbow		29,678,181.97	-	17,142,531.46	(368,167.87)	46,452,545.56
Home Buyouts - Hickson		1,031,674.37	-	120,422.18	-	1,152,096.55
Home Buyouts - Horace		7,604,598.67	-	595,320.88	-	8,199,919.55
Home Buyouts - Argusville		215,030.91	-	6,912.57	-	221,943.48
Easements - Fargo		504,716.00	-	-	-	504,716.00
Easements - Hickson		500.00	-	-	-	500.00
Easements - Oxbow		55,500.00	-	-	-	55,500.00
Easements - Diversion Inlet Control Structure		4,234,581.90	-	-	-	4,234,581.90
Easements - Piezometer		259,765.00	-	-	-	259,765.00
Easements - Minesota		1,542,370.79	-	-	-	1,542,370.79
Farmland Purchases		304,252,512.56	-	5,109,571.44	(19,209,928.67)	163,086,038.75

FM Metropolitan Area Flood Risk Management Project
Lands Expense - Life To Date
As of March 31, 2024

Property Address	Purchase Date	Purchase Price	Earnest Deposit	Relocation Assistance	Sale Proceeds	Total
Land Purchases		169,848,424.67	-	2,563,701.41	(9,353,087.33)	163,086,038.75
Auditor's Lot 1 of the Southwest Quarter (SW1/4) in Section 8, Township 137 North of Range 49 West, of the Fifth Principal Meridian, said tract is also described as follows: Beginning at the Southwest section corner of said Section 8; thence North 0°00'00" East on the west section line of said Section 8 for a distance of 152.50 feet; thence South 89°56'56" East, parallel with the south section line of said Section 8 for a distance of 720 feet; thence South 00°00'00" East, parallel with West section line of said Section 8 for a distance of 152.50 feet; to the South section line of said Section 8; thence North 89°56'56" West on the south section line of said Section 8 for a distance of 720 feet to the point of beginning.	6/29/2023	153,390.50				
N1/2 SE1/4 Sec 29 137N 48W, Holy Cross Twp, Clay County, MN	8/3/2023	372,653.83				
Auditors Lot 4 of the SW Quarter Section 34, in Township 138 North of Range 49 West of the Fifth Principal Meridian, Cass County North Dakota	8/31/2023	4,045,125.04				
All that part of the fractional N% of Section 31, Township 137 North, Range 48 West of the 5" P.M., Clay County, Minnesota,	8/31/2023	2,203,072.86				
The W1/2SW1/4 of Section 33, Township 138 North, Range 49 West of the Fifth Principle Meridian, Cass County, North Dakota	10/26/2023	53,576.00				
Part of NE1/4 SE1/4 24-136-49 Richland County	10/26/2023	20,685.00				
Lots 17 and 18, Block 2, of River Shore Subdivision a part of Government Lots 5, 6 and 7, of Section 7, Township 137 North, Range 48 West, Cass County, North Dakota.	12/28/2023	73,064.40				
Part of NE1/4 27-138-49 Cass County North Dakota	12/28/2023	1,252,891.00				
5515 174th St SE. Christine, ND Section 12-136N-49W, Richland County, ND	2/29/2024	962,175.56				
Part of SW1/4 29-137-48 Clay County MN	2/8/2024	221,165.40				
Part of the SW 1/4 SE1/4 34-137-48 Clay County MN	2/29/2024	210,070.00				
		369,019,286.67	-	39,880,699.23	(19,587,636.54)	389,312,349.36
					Property Management Expense	6,110,254.11
					Grand Total	**$ 395,422,603.47**

FM Metropolitan Area Flood Risk Management Project
In-Town Levee Work
as of March 31, 2024

Vcode #	Vendor Name	Descriptions	Contract Amount	Amount Paid
V02801	Industrial Builders	WP42.A2 - 2nd Street North Pump Station	$ 8,696,548.46	$ 8,696,548.46
V02802	Terracon Consulting	WP-42 (In Town Levees) Materials Testing	$ 884,070.41	$ 884,070.41
V02803	Consolidated Communications	2nd Street Utility Relocation	$ 1,178,781.73	$ 1,178,781.73
V02804	702 Communications	2nd Street Utility Relocation	$ 266,892.07	$ 266,892.07
V02805	ICS	WP-42A.1/A.3 - 4th St Pump Station & Gatewell and 2nd St Floodwall S	$ 18,365,229.13	$ 18,365,229.13
V02806	HMG	WP42 - Services During Construction	$ 6,513,429.90	$ 6,513,429.90
V02807	CCJWRD	In-Town Levee Work	$ 3,756,545.64	$ 3,756,545.64
V02808	City of Fargo	Relocation of fiber optic along 2nd Street North	$ 397,906.52	$ 397,906.52
V02809	AT & T	2nd Street Utility Relocation	$ 586,269.60	$ 586,269.60
V02811	Xcel Energy	2nd Street & 4th Street Utility Relocations	$ 769,791.73	$ 769,791.73
V02812	Industrial Builders	WP-42F.1S - 2nd Street North Floodwall, South of Pump Station	$ 16,720,591.15	$ 16,720,591.15
V02813	Landwehr Construction	Park East Apartments Demolition	$ 1,169,651.74	$ 1,169,651.74
V02814	Primoris Aevenia	2nd Street Utility Relocation	$ 16,230.00	$ 16,230.00
V02815	Centurylink Communications	2nd Street Utility Relocation	$ 2,660,937.92	$ 2,660,937.92
V02816	Landwehr Construction	WP-42C.1 - In-Town Levees 2nd Street/Downtown Area Demo	$ 907,999.08	$ 907,999.08
V02817	Reiner Contracting, Inc	WP-42H.2 - El Zagal Area Flood Risk Management	$ 1,599,646.21	$ 1,599,646.21
V02818	Industrial Builders	WP-42I.1 - Mickelson Levee Extension	$ 738,880.50	$ 738,880.50
V02819	Industrial Builders	WP42F.1N - 2nd Street North	$ 13,362,906.82	$ 13,362,906.82
V02820	CH2M Hill	WP42 - Construction Management Services	$ 851,775.30	$ 851,775.30
V02821	Hough Incorporated	WP42F.2 - 2nd Street South	$ 1,639,524.33	$ 1,639,524.33
V02822	City of Fargo	COF - 2016 O&M on Lifts	$ 406,921.54	$ 406,921.54
V02823	Hoffman & McNamara	WP-42G General Landscaping and Planting	$ 491,334.67	$ 491,334.67
V02824	City of Fargo	COF – In-Town Flood Protection Debt Payments	$ 30,283,715.00	$ 30,283,715.00
V01703	Various	In-Town Property Purchases	$ 21,176,116.94	$ 19,958,677.43
V02825	Industrial Builders	WP-42E - 2nd Street South and Main Avenue Flood Mitigation	$ 8,632,103.73	$ 8,632,103.73
V02826	City of Fargo	In-Town Levee Maintenance	$ 8,823.82	$ 8,823.82
V054XX	City of Fargo	In-Town Complementary Work - Reimbursements	$ 39,289,243.78	$ 39,289,243.78
			$ 181,371,867.72	$ 180,154,428.21

Legacy Bond Fund Balance Report
As of 03/31/2024

Total Authorized	**$ 435,500,000.00**
Current Allocation	**$ 435,500,000.00**
Available funds remaining	**$ 200,373,571.55**

Funds Requested

	2021	2022	2023	2024	Total
January	$ -	$ 2,942,906.60	$ 9,981,188.76		$ 12,924,095.36
February	$ -	$ 4,564,036.17	$ 8,921,227.42		$ 13,485,263.59
March	$ -	$ 5,302,899.35	$ 17,730,945.56		$ 23,033,844.91
April	$ -	$ 1,472,504.37	$ 11,046,323.21		$ 12,518,827.58
May	$ -	$ 1,450,140.38	$ 4,548,883.57		$ 5,999,023.95
June	$ -	$ 4,423,864.76	$ 14,466,204.50		$ 18,890,069.26
July	$ -	$ 2,663,992.40	$ 3,974,515.98		$ 6,638,508.38
August	$ 5,059,974.19	$ 13,491,974.29	$ 13,633,750.92		$ 32,185,699.40
September	$ 2,970,327.95	$ 8,406,666.33	$ 965,586.18		$ 12,342,580.46
October	$ 6,089,707.34	$ 4,618,116.80	$ 23,248,333.49		$ 33,956,157.63
November	$ 6,415,461.09	$ 11,768,061.46	$ 8,921,783.21		$ 27,105,305.76
December	$ 6,854,966.95	$ 17,496,559.97	$ 11,695,525.26		$ 36,047,052.18
Total	$ 27,390,437.51	$ 78,601,722.88	$ 129,134,268.06	$ -	$ 235,126,428.45

Funds Received

May 2022	$ 27,390,437.51				$ 27,390,437.51
Jul 2022		$ 12,809,842.12			$ 12,809,842.12
Sep 2022		$ 7,346,509.51			$ 7,346,509.51
Dec 2022		$ 29,180,749.82			$ 29,180,749.82
Jan 2023			$ 29,264,621.43		$ 29,264,621.43
Apr 2023			$ 18,902,416.18		$ 18,902,416.18
Aug 2023			$ 47,792,356.84		$ 47,792,356.84
Nov 2023			$ 18,573,853.08		$ 18,573,853.08
Feb 2024				$ 43,865,641.96	$ 43,865,641.96
					$ -
					$ -
Total	$ 27,390,437.51	$ 49,337,101.45	$ 114,533,247.53	$ 43,865,641.96	$ 235,126,428.45

State Revolving Fund (SRF) Status Report
As of 03/31/2024

Total Authorized	**$**	**51,634,000.00**
Funds Received to Date	**$**	**12,320,801.21**
Available Balance Remaining	**$**	**39,313,198.79**

Funds Requested

Draw Request Number	Period Covered	Amount	Date Submitted
1	12-Aug through 17-Oct-2022	$ 1,272,651.90	19-Dec-22
2	09-Dec through 16-Dec-2022	$ 2,125,033.67	17-Jan-23
3	03-Feb through 10-Feb-2023	$ 2,539,298.51	03-Apr-23
4	11-Feb through 30-Apr. 2023	$ 1,600,121.65	25-Jul-23
5	11-July through 28-Sept. 2023	$ 2,052,271.94	24-Oct-23
6	11-July through 28-Sept. 2023	$ 2,731,423.54	07-Feb-24
Total		**$ 12,320,801.21**	

Funds Received

Draw Request Number	Period Covered	Amount	Date Received
1	12-Aug through 17-Oct-2022	$ 1,272,651.90	23-Dec-22
2	09-Dec through 16-Dec-2022	$ 2,125,033.67	10-Feb-23
3	03-Feb through 10-Feb-2023	$ 2,539,298.51	21-Apr-23
4	11-Feb through 30-Apr. 2023	$ 1,600,121.65	21-Aug-23
5	11-July through 28-Sept. 2023	$ 2,052,271.94	08-Nov-23
6	11-July through 28-Sept. 2023	$ 2,731,423.54	22-Feb-24
Total		**$ 12,320,801.21**	

METRO FLOOD DIVERSION AUTHORITY

Diversion Authority Finance Committee Meeting

April 24, 2024

Cash Budget Report

Annual Revenue Status

Revenue Sources	2024 Approved Budget (Thousands)	Current Month (Thousands)	Fiscal Year To Date (Thousands)
City of Fargo Sales Tax	$44,000	$3,487	$6,430
Cass County Sales Tax	$22,000	$1,777	$3,243
State of ND - Legacy Bond Fund Draws	$118,891	$0	$0
State of ND - SRF	$15,000	$0	$2,731
Financing Proceeds	$7,500	$805	$2,264
Reimbursements	$25	$0	$0
Sales of Assets	$1,000	$0	$304
Property Income	$500	$1	$3
Miscellaneous	$100	$0	$0
Horace Infrastructure Escrow Account	$4,298	$0	$0
BRRWD Escrow Account	$3,000	$0	$0
MIT Inter-Fund Transfers	$0	$139	$416
Total Revenue Sources	**$216,314**	**$6,209**	**$15,391**

Overall Status – Level 1 Summary

METRO FLOOD DIVERSION AUTHORITY

Data Through Date: Friday, March 29, 2024

Schedule Budget Categories (Non-Federal Work)	OVERALL PROGRAM FINANCIAL PLAN ($MM)			CURRENT FISCAL YEAR		
	Program EAC	Actual Cost to Date	Program ETC	FY 2024 Budget	FY 2024 Cost	FY Remaining
CHANNEL / P3	$96.4	$57.0	$39.4	$14,528,000	$2,870,290	$11,657,710
MILESTONE PAYMENTS TO THE DEVELOPER	$867.0	$0.0	$867.0	$34,854,159	$0	$34,854,159
OTHER MITIGATION / CONSTRUCTION	$39.5	$36.2	$3.3	$800,000	$193,948	$606,052
ND / MN RIVER STAGE 37' PROJECTS	$213.3	$163.4	$49.9	$28,700,000	$3,313,905	$25,386,095
LANDS AND IMPACTED PROPERTY MITIGATION	$571.7	$454.4	$117.3	$64,000,000	$17,593,112	$46,406,888
ENGINEERING & DESIGN FEES	$98.5	$59.9	$38.6	$8,315,850	$1,625,174	$6,690,676
PROG. MANAGEMENT/LEGAL/FINANCIAL/PROCUREMENT	$165.4	$110.9	$54.6	$19,790,200	$3,529,291	$16,260,909
DA CONSTRUCTION CONTINGENCY	$163.9	$3.8	$160.1	$5,040,841	$17,441	$5,023,401
3RD PARTY MOU MITIGATION	$153.4	$70.4	$83.0	$32,920,677	$2,920,179	$30,000,498
NET CURRENT INTEREST / FINANCING FEES PAID	$75.7	$50.0	$25.7	$6,300,000	$0	$6,300,000
P3 RESERVE FUND	$16.1	$0.0	$16.1	$0	$0	$0
WIFIA/ SRF DSRA FUNDING	$15.1	$0.0	$15.1	$0	$0	$0
DA PAYMENT TO USACE	$70.7	$53.2	$17.5	$0	$0	$0
DA O&M (PRE-SC)	$14.9	$0.4	$14.5	$200,000	$83,979	$116,021
DEBT TRANSFERS TOTAL	$330.3	$2.0	$178.0	$864,000	$0	$864,000
Report Totals	**$2,892.0**	**$1,061.7**	**$1,680.0**	**$216,313,727**	**$32,147,318**	**$184,166,409**

Overall Status – Level 2 Detail

METRO FLOOD DIVERSION AUTHORITY

Data Through Date: Friday, March 29, 2024

Schedule Budget Categories (Non-Federal Work)	Program Level (Millions)			Fiscal Year		
	Financial Plan	Cost to Date	Balance Remaining	FY Budget 2024	Cost to Date	Balance Remaining
Program Execution						
Channel / P3	$96.40	$57.05	$39.35	$14,528,000	$2,870,290	$11,657,710
Management, Legal, Financial, Procurement P3	$96.40	$57.05	$39.35	$14,528,000	$2,870,290	$11,657,710
Milestone Payments to the Developer	$867.05	$0.00	$867.05	$34,854,159	$0	$34,854,159
Milestone Payments to the Developer	$865.80	$0.00	$865.80	$32,854,159	$0	$32,854,159
Non-Contingency Change Events	$1.25	$0.00	$1.25	$2,000,000	$0	$2,000,000
Other Mitigation / Construction	$39.51	$36.17	$3.34	$800,000	$193,948	$606,052
WP-26 Diversion Inlet	$0.07	$0.07	$0.00	$0	$0	$0
WP-27 Red River - West Embankment	$0.00	$0.00	$0.00	$0	$0	$0
WP-28 - Cass County Road 16 and 17 Bridge	$1.90	$1.62	$0.28	$0	$0	$0
WP-29 Red River - East Embankment	$0.00	$0.00	$0.00	$0	$0	$0
WP-30 Wild Rice River Control Structure	$0.00	$0.00	$0.00	$0	$0	$0
WP-31 I-29 Grade Raise	$3.20	$2.86	$0.34	$0	$0	$0
WP-35 Red River Control Structure	$0.00	$0.00	$0.00	$0	$0	$0
WP-43 Oxbow-Hickson-Bakke	$31.04	$28.50	$2.54	$800,000	$0	$800,000
WP-50 Phase II Demo	$3.30	$3.13	$0.17	$0	$193,948	($193,948)
ND / MN River Stage 37' Projects	$213.30	$163.45	$49.85	$28,700,000	$3,313,905	$25,386,095
WP-42 In-Town Levees	$91.00	$90.48	$0.52	$0	$0	$0
Fargo- River Stage 37' Projects	$107.30	$72.97	$34.33	$28,700,000	$3,313,905	$25,386,095
Clay County - River Stage 37' Projects	$6.00	$0.00	$6.00	$0	$0	$0
Cass County - River stage 37' Projects	$9.00	$0.00	$9.00	$0	$0	$0
Lands and Impacted Property Mitigation	$571.70	$454.45	$117.25	$64,000,000	$17,593,112	$46,406,888
Management, Legal, Financial, Procurement Lands	$87.20	$46.08	$41.12	$7,250,000	$1,320,651	$5,929,349
Diversion Channel & Assoc. Infrastructure	$140.00	$99.12	$40.88	$100,000	$0	$100,000
Southern Embankment & Assoc. Infrastructure	$57.50	$60.06	($2.56)	$14,050,000	$9,174,854	$4,875,146
Mitigation & Assoc. Infrastructure	$108.20	$107.32	$0.88	$100,000	$50	$99,950
WP-38 Upstream Staging	$139.80	$103.84	$35.96	$42,500,000	$7,097,557	$35,402,443
In-Town Flood Protection	$39.00	$38.02	$0.98	$0	$0	$0

Overall Status – Level 2 Detail

METRO FLOOD DIVERSION AUTHORITY

Data Through Date: Friday, March 29, 2024

Schedule Budget Categories (Non-Federal Work)	Program Level (Millions)			Fiscal Year		
	Financial Plan	Cost to Date	Balance Remaining	FY Budget 2024	Cost to Date	Balance Remaining
Non-Construction						
Engineering & Design Fees	$98.50	$59.94	$38.56	$8,315,850	$1,625,174	$6,690,676
Management, Legal, Financial, Procurement	$37.47	$21.44	$16.02	$7,550,000	$1,376,723	$6,173,277
Work-In-Kind Programs (WIK) Studies	$17.13	$14.72	$2.42	$280,000	$62,512	$217,488
Indicative Design	$7.19	$7.13	$0.06	$0	$0	$0
Land, Easements, ROW, Relocation & Disposal Areas	$0.47	$0.46	$0.01	$0	$0	$0
Permitting	$7.84	$5.20	$2.65	$35,850	$20,000	$15,850
Certification	$2.05	$0.00	$2.05	$0	$0	$0
FMDA Detention Funding	$3.00	$0.72	$2.28	$0	$0	$0
Other Mitigation Projects	$23.35	$10.28	$13.07	$450,000	$165,939	$284,061
Prog. Management/Legal/Financial/Procurement	$165.43	$110.87	$54.56	$19,790,200	$3,529,291	$16,260,909
Program Management Costs	$103.23	$68.84	$34.39	$9,603,000	$2,258,095	$7,344,905
Diversion Authority Operations	$11.47	$4.34	$7.13	$1,679,200	$260,626	$1,418,574
Program Financial Services	$6.52	$3.33	$3.19	$165,000	$4,190	$160,810
DA Legal Services	$20.35	$18.76	$1.59	$3,500,000	$586,197	$2,913,803
CCJWRD Legal Services	$16.86	$10.44	$6.42	$3,900,000	$227,451	$3,672,549
Outreach Costs	$7.00	$5.16	$1.84	$943,000	$192,732	$750,268
DA Construction Contingency	$163.90	$3.78	$160.12	$5,040,841	$17,441	$5,023,401
System Wide and P3 Comp Events Contingency	$95.90	$3.78	$92.12	$145,841	$17,441	$128,401
Diversion Channel & Assoc. Infrastructure (MOU's & Utilities) Contingency	$17.60	$0.00	$17.60	$0	$0	$0
Other Mitigation Projects Contingency	$2.00	$0.00	$2.00	$0	$0	$0
In-Town Flood Protection Contingency	$6.80	$0.00	$6.80	$4,895,000	$0	$4,895,000
Land Acquisition Contingency	$41.60	$0.00	$41.60	$0	$0	$0

Overall Status – Level 2 Detail

METRO FLOOD DIVERSION AUTHORITY

Data Through Date: Friday, March 29, 2024

Schedule Budget Categories (Non-Federal Work)	Program Level (Millions)			Fiscal Year		
	Financial Plan	Cost to Date	Balance Remaining	FY Budget 2024	Cost to Date	Balance Remaining
Stakeholder Coordination						
3rd Party MOU Mitigation	$153.41	$70.39	$83.03	$32,920,677	$2,920,179	$30,000,498
Channel - Utility Relocations & Other Mitigation	$35.10	$19.56	$15.54	$0	$851,649	($851,649)
WP-40 Drayton Dam Mitigation	$0.00	$0.00	$0.00	$0	$0	$0
WP-41 Future Stream Mitigation - Surrounding Counties	$36.00	$35.37	$0.63	$0	$0	$0
WP-46 SEAI / UMA Utility Relos	$27.94	$10.87	$17.08	$10,112,722	$447,538	$9,665,184
WP-47 Contracted Utility Relocations	$0.00	$1.14	($1.14)	$4,140,525	$1,120,248	$3,020,277
WP-52 Township & City MOU Agreements	$54.37	$3.45	$50.92	$18,667,430	$500,745	$18,166,685
Financing						
Net Current Interest / Financing Fees Paid	$75.70	$50.05	$25.65	$6,300,000	$0	$6,300,000
Net Current Interest / Financing Fees Paid	$75.70	$50.05	$25.65	$6,300,000	$0	$6,300,000
P3 Reserve Fund	$16.10	$0.00	$16.10	$0	$0	$0
P3 Reserve Fund	$16.10	$0.00	$16.10	$0	$0	$0
WIFIA/ SRF DSRA Funding	$15.10	$0.00	$15.10	$0	$0	$0
WIFIA/ SRF DSRA Funding	$15.10	$0.00	$15.10	$0	$0	$0
DA Payment to USACE	$70.70	$53.16	$17.54	$0	$0	$0
DA Payment to USACE	$70.70	$53.16	$17.54	$0	$0	$0
DA O&M (pre-SC)	$14.90	$0.41	$14.49	$200,000	$83,979	$116,021
DA O&M (pre-SC)	$14.90	$0.41	$14.49	$200,000	$83,979	$116,021
Debt Transfers Total	$330.30	$2.04	$177.96	$864,000	$0	$864,000
Debt Transfers Total WF	$150.30	$0.00	$0.00	$0	$0	$0
Debt Transfers Total TRIBR	$180.00	$2.04	$177.96	$864,000	$0	$864,000
Report Totals	$2,892.00	$1,061.74	$1,679.96	$216,313,727	$32,147,318	$184,166,409

Diversion Authority Operations – Budget Summary

METRO FLOOD DIVERSION AUTHORITY

Expense Category	FY2024 Budget	Cost to Date	Remaining Budget
Salary	$1,164,188	$270,881	$893,307
Benefits	$326,612	$85,612	$241,000
Office	$72,200	$18,203	$53,997
Other	$87,000	$22,495	$64,505
Totals *	**$1,650,000**	**$397,191**	**$1,252,809**

*** Includes pending costs**

METRO FLOOD DIVERSION AUTHORITY

Diversion Authority Finance Committee Meeting

April 24, 2024

MOU and Agreement Actions for Consideration

John Shockley

MFDA MOUs & Agreements (Action)

MOU Parties	Project	MOU or Agreement Cost and Summary
Novel Energy Solutions L.L.C., Novel Blilie Solar, LLC, and MN Wolter CSG, LLC & MFDA	Release Agreement	The attached release letter is between Novel Energy Solutions L.L.C., Novel Blilie Solar, LLC, and MN Wolter CSG, LLC ("Releasor") and the Metro Flood Diversion Authority and its member entities specifically including the City of Moorhead and the Moorhead Clay County Joint Powers Authority ("Releasee"). The Releasor is a solar developer who wishes to construct a solar photovoltaic system on the Blilie property. The Releasee wishes to introduce additional flood water of the same Blilie property as part of the operation of the Fargo-Moorhead Metropolitan Flood Risk Management Project ("Project"). By approving the release letter, the Releasor releases, discharges and holds the Releasee harmless from any and all claims, liabilities, damages, causes of action, known or unknown, which Releasor may have against Releasee arising out of or relating to the operation of the Project. In exchange for the release of Claims, Releasee will provide Releasor with the necessary documentation to construct the solar photovoltaic system. This is a $0 agreement.
MACS Demo Contractors, CCJWRD & MFDA	Stockpile Access and Removal Agreement	The Authority has accumulated a stockpile of material that is of limited value to the Authority. CCJWRD is the legal owner of the property upon which the stockpile material is located on. The purpose of this agreement is to grant access to the contractors approved as part of the Master Agreement for Construction Services for demo contracts under WP-38C to utilize the stockpile of material at properties identified within the agreement.

MFDA MOUs & Agreements (Action)

MOU Parties	Project	MOU or Agreement Cost and Summary
City of Oxbow & MFDA MOU	OHB Levee	This MOU describes the roles and responsibilities of the City of Oxbow and the Authority for the completion of the OHB levee project. The Authority will work with USACE to complete design and construction of the levee, with reviews completed by the City of Oxbow. The Authority will reimburse the City of Oxbow for such reviews. Following completion, the Authority will be responsible for maintenance of the levee, with the City of Oxbow responsible for operations and maintenance of other project areas completed inside the levee.
Minnesota Power, a division of Allete, Inc. & MFDA MURA	SEAI & UMA	The purpose of this Agreement is to ensure a coordinated, time-efficient, and cost-effective process for completing the Utility Relocation Project, for coordinating operations and maintenance activities after completion of the Utility Relocation Project, and for the development of individual Task Orders issued in conjunction with, and subject to, the terms and conditions of the Agreement.

March 21, 2024

To Whom it May Concern:

This General Release ("Release") is made on —— day of March, 2024 by and between Novel Energy Solutions L.L.C., a Minnesota limited liability company; Novel Blilie Solar, LLC, a Minnesota limited liability company; and MN Wolter CSG, LLC, a Minnesota limited liability company ("Releasor") and, Metro Flood Diversion Authority, a North Dakota political subdivision its Member Entities – specifically including the City of Moorhead, a Minnesota political subdivision - and the Moorhead, Clay County Joint Powers Authority, a Minnesota Political Subdivision, ("Releasee").

1. The Member Entities of the Metro Flood Diversion Authority are, the City of Fargo a North Dakota political subdivision, Cass County, a North Dakota political subdivision, Cass County Joint Water Resource District, a North Dakota political subdivision, the City of Moorhead, a Minnesota Political Subdivision and Clay County, a Minnesota political subdivision.

2. Releasor and Releasee are not parties to any prior agreement. Releasee is named in the Condemnation action identified as Wilkin County Civil Number 84-CV-23-500 as a party with a property interest in the Blilie land. Releasor and Luther Blilie and Shelly Blilie, as husband and wife, and Kelly Blilie and Stefanie Blilie, husband and wife executed a lease agreement on July 25, 2020.

3. Releasor is entering into this Release voluntarily and is represented by legal counsel.

   Releasor is a solar developer who wishes to construct a solar photovoltaic system on the leased area. Releasee wishes to introduce additional flood waters on the Blilie's land, as part of the operation of the Fargo- Moorhead Metropolitan Area Flood Risk Management Project. . Releasor hereby acknowledges and agrees that an impact to the system may occur as a result of the additional flood waters and Releasor has been provided all information it deems necessary to make a determination of the impact to the system.
4. Releasor hereby releases, discharges, and holds Releasee harmless from any and all claims, liabilities, damages, causes of action, known or unknown, which Releasor may have against Releasee arising out of or relating to the operation of the Fargo-Moorhead Metropolitan Area Flood Risk Management Project. ("Claims").

5. In exchange for the release of Claims, Releasee will provide Releasor with the necessary documentation to construct the solar photovoltaic system.

6. This Release shall be binding upon the parties. The individual or individuals signing on behalf of Releasor have the authority to release the Claims and have not assigned or transferred any Claims

to another party. This release constitutes the entire agreement between the parties and supersedes all prior oral or written agreements or understandings between the parties concerning the subject matter of this release. This Release may not be altered, amended or modified, except by written document signed by the parties. The terms of this Release shall be governed by and construed in accordance with the laws of the state of Minnesota.

Novel Energy Solutions L.L.C.

By: Cliff Kaehler
Name: Cliff Kaehler
Its: CEO

Metro Flood Diversion Authority

By:
Name:
Its:

By:
Name:
Its:

Moorhead Clay County JPA

Novel Blilie Solar, LLC,

Cliff Kaehler, Authorized Signatory

MN Wolter CSG, LLC

Cliff Kaehler, Authorized Signatory

4871-9985-6303, v. 2

Stockpile Access and Removal Agreement Release, Hold Harmless, and Indemnification Agreement

METRO FLOOD DIVERSION AUTHORITY

This Agreement is made and entered into on [Month Day], 20[XX], by and between the Metro Flood Diversion Authority, a North Dakota political subdivision ("MFDA" or "Authority"), Cass County Joint Water Resource District ("CCJWRD"), and [Name of Contractor], a duly licensed contractor in the State of North Dakota ("Contractor").

RECITALS

1. The Authority has accumulated a stockpile of material that has been determined to have limited value to the Authority, and that the cost of reducing the same exceeds the value to the Authority.
2. CCJWRD is a Member Entity of the Authority and CCJWRD is the legal owner of the real property upon which the stockpile of material is located upon.
3. The stockpile of material is located at (NW ¼ of T 138 R49 Sec. 28 adjacent to 57th Street South) (hereinafter the "CCJWRD Property"), and such area is accessible by use of existing section line roadways and an access roadway. See Attachment A for location.
4. The existing section line roadways and the access roadway are not constructed or intended for heavy truck traffic, and such activity will likely cause damage to the roads.

AGREEMENT

Now therefore, for good and valuable consideration hereby acknowledged, the parties hereto agree as follows:

1. The Effective Date of this Agreement is [Month Day], 20[XX].
2. The Authority retains the right to control and manage its facilities and may enforce all reasonable rules for its management as determined by the Authority in its sole discretion. The Authority retains the right to restrict access to the CCJWRD Property to no more than four (4) Contractors at any one time to excavate from the stockpile.
3. Contractor shall be granted access to the CCJWRD Property to access the material and use its own equipment to remove material. The existing stockpile has four (4) designated locations, as shown in Attachment A, for excavation. Contractor will be assigned by the Authority to a specific location to excavate.
4. The Authority and Contractor agree Contractor may remove material only from their designated location of the stockpile, unless otherwise agreed to in writing signed by the Authority and Contractor.
5. The Authority shall designate [Name] as its representative and Contractor shall designate [Name] as its representative for purposes of coordination and communicating daily operations to prevent conflicts, promote efficiency, and reduce damage to roads.
6. Contractor's access to the stockpile shall be limited to a period from _____ to _____, unless otherwise agreed to in writing, signed by the Authority's and Contractor's representatives.

7. The Contractor will be responsible for the maintenance of the existing section line roadways and the access roadway, including grading, dust control, and gravel replacement, as deemed necessary by the Authority. With approval from the Authority, the Contractor may construct temporary access improvements within the limits of the Borrow Access Road as shown in Attachment A. The Contractor will be responsible for keeping the roadways safe and passable and to coordinate/cooperate with other Contractors who may be present. Contractor will be required to get an approved haul route prior to commencement of work.

8. Contractor agrees to deposit with the Authority in the amount of five thousand dollars ($5,000) to assure the availability of funds in the event Contractor's activities cause any damage or fails to adequately maintain the existing section line roadways and the access roadway or any of the Authority's facilities.

9. Contractor agrees to abide by any such rules, policies and conditions that may be in effect from time to time.

10. Contractor agrees that access to the material shall be limited to Contractor on a first come, first served basis, and that the amount of material that may be removed from the material is at the sole discretion of the Authority.

11. Contractor understands and agrees that the Authority may terminate Contractor's access at any time, with or without notice to the Contractor. If Contractor is terminated due to breach of this contract, the Contractor will not be allowed access to the CCJWRD Property in future requests.

12. Contractor shall deliver a copy of its North Dakota Contractor's License to the Authority a minimum of ten (10) business days prior to access to the stockpile being granted.

13. Contractor shall deliver proof of insurance to the Authority, naming the Authority and CCJWRD as an additional insureds, in accordance with Contract requirements for a project let by the Authority in the normal course, prior to access to the stockpile being granted. Such shall be general commercial liability insurance and shall provide for a minimum policy limit of two million dollars ($2,000,000) per occurrence and four million ($4,000,000) aggregate limit. Said general commercial liability insurance shall have a minimum deductible of not more than fifty thousand dollars ($50,000). All on-road trucks and trailers shall be insured at the minimum requirements required by North Dakota law for commercial trucks and trailers.

14. Contractor shall indemnify, defend, and hold harmless the Authority and CCJWRD, their officers, agents, and employees against all liability and costs, including attorneys' fees, in any way connected to Contractor's access to the CCJWRD Property. The indemnification, defense, and hold harmless provisions of this Agreement shall survive the expiration and/or termination of this Agreement for a period of six (6) years commencing upon the termination or expiration of this Agreement.

15. Contractor understands and agrees that this Agreement binds Contractor, its successors, and assigns.

16. This Agreement shall expire on the final date upon which Contractor removes material from the CCJWRD. The Authority representative shall document such date and provide Contractor with notice of the final date of removal.

17. This Agreement will be construed and enforced in accordance with North Dalota law. The parties agree any litigation arising out of this Agreement will be venued in District Court in Cass County, North Dakota, and the parties waive any objection to venue or personal jurisdiction.

18. If any court of competent jurisdiction finds any provision or part of this Agreement is invalid, illegal, or unenforceable, that portion will be deemed severed from this Agreement, and all remaining terms and provisions of this Permanent Easement will remain binding and enforceable.

19. This Agreement, together with any amendments, constitutes the entire agreement between the parties regarding the matters described in this Agreement, and this Agreement supersedes all other previous oral or written agreements between the parties.

20. Any modifications or amendments to this Agreement must be in writing and signed by Parties.

Metro Flood Diversion Authority,
a North Dakota political subdivision

_____
Michelle "Shelly" A. Carlson, Chair

_____
Michael Redlinger, Co-Executive Director

_____
Robert Wilson, Co-Executive Director

Cass County Joint Water Resource District,
a North Dakota political subdivision

_____
Rodger Olson, Chair

_____
Melissa Hinkemeyer, Secretary

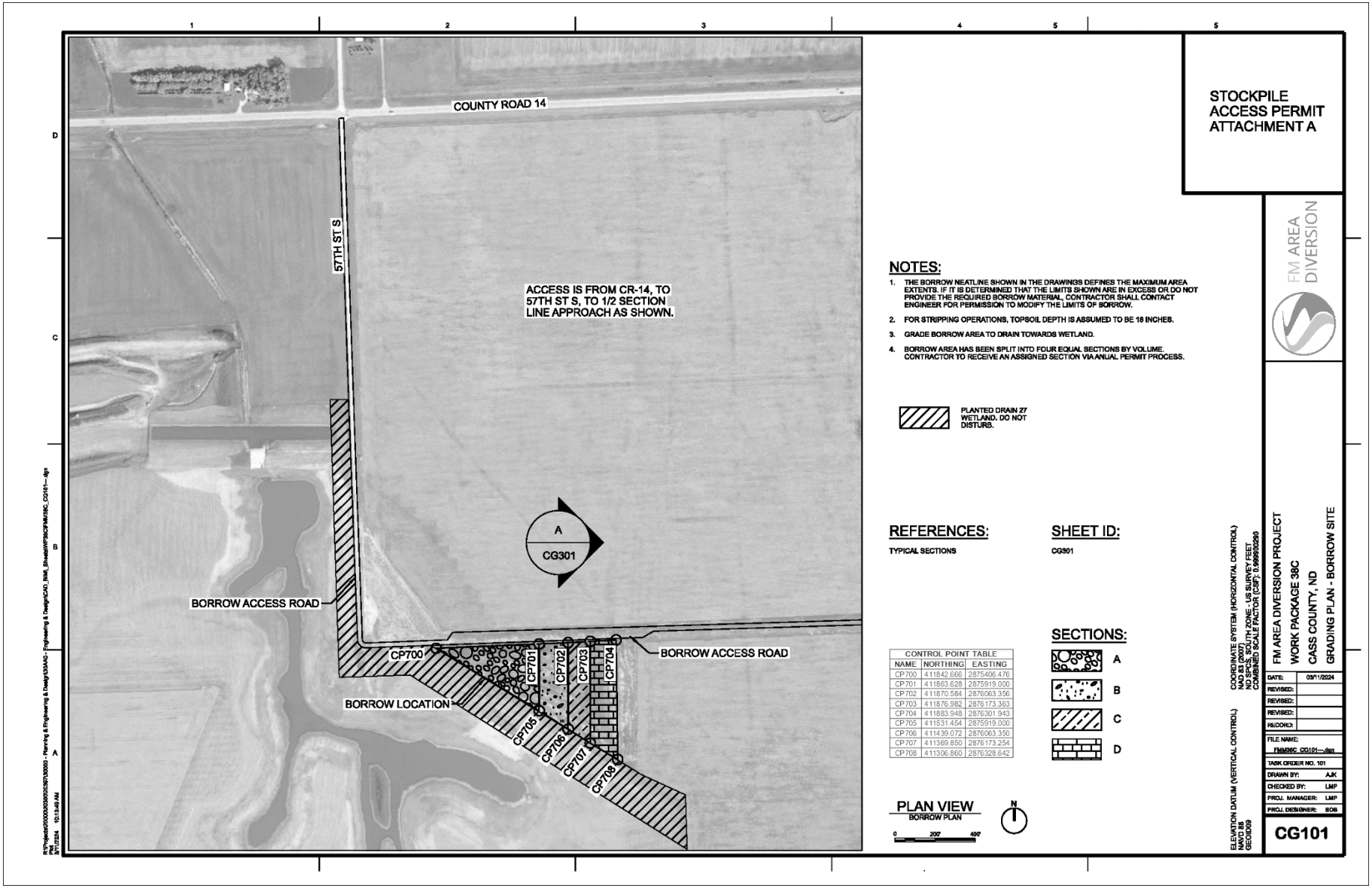
Contractor

_____

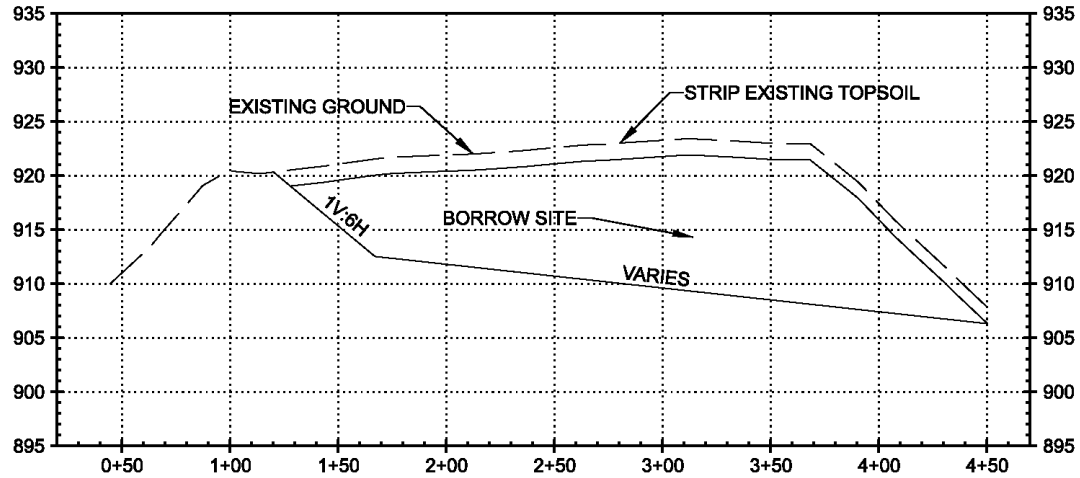
By: _____

Its: _____

Exhibit A


COUNTY ROAD 14
57TH ST S
ACCESS IS FROM CR-14, TO 57TH ST S, TO 1/2 SECTION LINE APPROACH AS SHOWN.
A
CG301
BORROW ACCESS ROAD
BORROW ACCESS ROAD
BORROW LOCATION
CP700
CP701
CP702
CP703
CP704
CP705
CP706
CP707
CP708
STOCKPILE ACCESS PERMIT ATTACHMENT A
NOTES:
1. THE BORROW NEATLINE SHOWN IN THE DRAWINGS DEFINES THE MAXIMUM AREA EXTENTS. IF IT IS DETERMINED THAT THE LIMITS SHOWN ARE IN EXCESS OR DO NOT PROVIDE THE REQUIRED BORROW MATERIAL, CONTRACTOR SHALL CONTACT ENGINEER FOR PERMISSION TO MODIFY THE LIMITS OF BORROW.
2. FOR STRIPPING OPERATIONS, TOPSOIL DEPTH IS ASSUMED TO BE 18 INCHES.
3. GRADE BORROW AREA TO DRAIN TOWARDS WETLAND.
4. BORROW AREA HAS BEEN SPLIT INTO FOUR EQUAL SECTIONS BY VOLUME. CONTRACTOR TO RECEIVE AN ASSIGNED SECTION VIA ANUAL PERMIT PROCESS.
PLANTED DRAIN 27 WETLAND. DO NOT DISTURB.
REFERENCES:
TYPICAL SECTIONS
SHEET ID:
CG301
SECTIONS:
A
B
C
D
CONTROL POINT TABLE
NAME | NORTHING | EASTING
CP700 | 411842.666 | 2875406.476
CP701 | 411863.628 | 2875919.000
CP702 | 411870.584 | 2876063.356
CP703 | 411876.982 | 2876173.363
CP704 | 411883.948 | 2876301.943
CP705 | 411531.454 | 2875919.000
CP706 | 411439.072 | 2876063.350
CP707 | 411369.850 | 2876173.254
CP708 | 411306.860 | 2876328.642
PLAN VIEW
BORROW PLAN
0 200' 400'
N
COORDINATE SYSTEM (HORIZONTAL CONTROL) NAD 83 (2007) ND SPCS, SOUTH ZONE - US SURVEY FEET COMBINED SCALE FACTOR (CSF): 0.999910259
ELEVATION DATUM (VERTICAL CONTROL) NAVD 88 GEOID09
FM AREA DIVERSION
FM AREA DIVERSION PROJECT
WORK PACKAGE 38C
CASS COUNTY, ND
GRADING PLAN - BORROW SITE
DATE: 03/1/2024
REVISED:
REVISED:
REVISED:
RECORD:
FILE NAME: FMM38C_CG101--.dgn
TASK ORDER NO. 101
DRAWN BY: AJK
CHECKED BY: LMP
PROJ. MANAGER: LMP
PROJ. DESIGNER: BOB
CG101

STOCKPILE
ACCESS PERMIT
ATTACHMENT A



A CG101 TYPICAL SECTION BORROW SITE

VERTICAL SCALE 0 2.5' 5'

HORIZONTAL SCALE 0 25' 50'

NOTES:

1. TOPSOIL DEPTH ASSUMED TO BE 18 INCHES. STRIPPING OF TOPSOIL AT BORROW SITE SHALL BE INCIDENTAL TO THE TOPSOIL IMPORT BID ITEM.

FM AREA DIVERSION

FM AREA DIVERSION PROJECT
WORK PACKAGE 38C
CASS COUNTY, ND
TYPICAL CROSS SECTION - BORROW SITE

COORDINATE SYSTEM (HORIZONTAL CONTROL)
NAD 83 (2011)
ND SPCS, SOUTH ZONE - US SURVEY FEET
COMBINED SCALE FACTOR (CSF): 0.999902290

ELEVATION DATUM (VERTICAL CONTROL)
NAVD 88
(GEOID18)

DATE:	03/11/2024
REVISED:	-
REVISED:	-
REVISED:	-
RECORD:	-
FILE NAME:	FMM38C_CG301—dgn
TASK ORDER NO. 101	-
DRAWN BY:	AJK
CHECKED BY:	LMP
PROJ. MANAGER:	LMP
PROJ. DESIGNER:	BDS

CG301

Execution Version

MEMORANDUM OF UNDERSTANDING

BY AND BETWEEN

METRO FLOOD DIVERSION AUTHORITY

AND

CITY OF OXBOW, NORTH DAKOTA

Dated as of _____, 2024

Relating to:

A Memorandum of Understanding outlining the respective roles and responsibilities of the Parties in regard to the impacts resulting from construction of the OHB Levee of the Fargo-Moorhead Metropolitan Area Flood Risk Management Project.

TABLE OF CONTENTS

MEMORANDUM OF UNDERSTANDING

THIS MEMORANDUM OF UNDERSTANDING (hereinafter the "MOU") is made and entered into this ___ day of _____, 2024 (the "Effective Date"), by and between the Metro Flood Diversion Authority (the "Authority") and the City of Oxbow, North Dakota (the "City").

In consideration of the mutual covenants made herein and for other valuable consideration, the receipt of which is hereby acknowledged, the Authority and the City agree as follows:

ARTICLE I.
DEFINITIONS

Section 1.01 DEFINITIONS. All capitalized terms used and not otherwise defined herein shall have the meanings given to them in this MOU and as defined in this section unless a different meaning clearly applies from the context.

"Comprehensive Project" means the project commonly known as the Fargo-Moorhead Metropolitan Area Flood Risk Management Project, which includes the OHB Levee, the OHB Levee Crossings, and the Interior Storm Sewer Improvements described in this MOU.

"Elements" means the OHB Levee, the OHB Levee Crossings, and the Interior Storm Sewer Improvements collectively.

"Final Completion" means the time at which the work performed under the construction contract between USACE and its contractor has progressed to the point of being complete, as defined by such contract.

"Final Design" means a design has reached ninety-five percent (95%) completion, as determined by USACE.

"Interior Storm Sewer Improvements" means the installation of storm sewer infrastructure, along 7th Street, within the interior of the OHB Levee that will facilitate drainage of water between holding ponds, as shown on Exhibit B.

"Material Modification" means a modification affecting the operation or performance of an OHB Levee Crossing.

"OHB Levee" means that portion of the levee constructed around the City of Oxbow, North Dakota, the unincorporated Village of Hickson, North Dakota, and the Bakke Subdivision, Cass County, North Dakota, in WP-43B, as part of the Comprehensive Project and shown on Exhibit A.

"OHB Levee Crossings" means crossings of the OHB Levee at 51st Street Southeast and 174½ Avenue Southeast, as shown on Exhibit A.

"Party" means the Authority or the City, as the context may require, and its respective legal representatives, successors, and permitted assigns, and wherever a reference in this MOU is made to any Parties hereto, **"Parties"** means the Authority and the City, collectively, and their respective legal representatives, successors, and permitted assigns.

"Preliminary Design" means a preliminary design for the OHB Levee or an OHB Levee Crossing, as designed to an extent determined by USACE.

"Substantial Completion" means the time at which the work performed under the construction contract between USACE and its contractor has progressed to the point of being substantially complete, as defined by such contract.

ARTICLE II.
POINT OF CONTACT AND INTENT

Section 2.01 POINT OF CONTACT. On the Effective Date, the Authority will assign a point of contact ("Point of Contact") to work with the City Representative, as appointed here. The intended purpose of this Point of Contact is to allow the City Representative to provide information to the Authority and the United States Army Corps of Engineers ("USACE") regarding activities that may be occurring on property near active construction that may have an impact on USACE's work, e.g., agricultural spraying on neighboring property, as well as allow the City Representative to inform the Authority and USACE of conflicts or concerns the City may have. A map of the proposed location for the OHB Levee is attached in Exhibit A.

Section 2.02 PRIOR CITY MOUS. The Authority and the City previously entered into a Memorandum of Understanding, dated October 24, 2013, along with a first Amendment to Memorandum of Understanding, dated November 30, 2015, and a Second Amendment to Memorandum of Understanding, dated May 24, 2018, thereto (collectively, the "Prior City MOU"). The Authority and the City agree that all of their respective roles and responsibilities described in the Prior City MOU have been satisfied with the exception of the mill and overlay to be completed on River Bend Road, South Schnell Drive, Westview Lane, Trent Jones Drive, and Club House Drive, estimated to be completed in 2024, and the intent of this MOU is to set forth any additional roles or responsibilities that either Party has subsequent to the Effective Date. In the event there is a conflict between the Prior City MOU and this MOU, this MOU controls.

ARTICLE III.
DESIGN

Section 3.01 ELEMENTS. USACE is responsible for designing the Elements and has completed the Final Design. The Authority will submit the Final Design of the Elements to the engineer for the City for review and comment. The engineer for the City will provide any comments on designs to the Authority within fourteen (14) calendar days of receipt. The engineer for the City is encouraged to work with the engineer for Pleasant Township during design reviews where the entities have shared jurisdiction. The Authority will submit any comments from the City to USACE for review, but the Parties agree and acknowledge that USACE will have the ultimate discretion on design.

Section 3.02 FINANCING. The City may seek reimbursement from the Authority in accordance with Article X for expenses incurred in reviewing designs. This reimbursement does not count toward the amounts of reimbursement that may be sought in Sections 10.01 and 10.02.

ARTICLE IV.
PRELIMINARY PLANNING AND ENGINEERING ACTIVITIES

Section 4.01 SITE TESTING. The Authority will ensure all applicable preliminary engineering activities for the Elements, including: (a) technical studies and analyses; (b) geotechnical, seismic, flooding, and biological investigations; (c) right-of-way mapping, surveying, and appraisals; (d) utility subsurface investigations and mapping; and (e) archeological, paleontological, and cultural investigations are completed.

Section 4.02 MITIGATION. The Authority is responsible for the investigation, remediation, and removal of all hazardous materials necessary to complete construction of the Elements.

Section 4.03 ENVIRONMENTAL REVIEW. The Authority will coordinate with USACE to ensure that all applicable environmental laws are followed and that the Elements receive all necessary environmental clearances.

Section 4.04 UTILITY RELOCATION. The Authority is responsible for coordinating and/or performing utility relocations for the Elements.

Section 4.05 PERMITS AND APPROVALS. The Authority must obtain a floodplain development permit for construction of the Elements from the City. The City will not require the Authority to obtain any additional permits or authorizations for the Project except for those specifically set forth in this MOU.

Section 4.06 FINANCING. The City will not have to incur any costs or expenses for preliminary planning or engineering activities. In the event it incurs expenses to review any permit applications filed by the Authority, the City will include those costs and expenses, as determined by the City in its sole discretion, in the cost of the permit.

Section 4.07 PLATTING. The Authority intends to plat the footprint of the OHB levee in its entirety, including that portion of the levee included in WP-43B, and will file such plats with the City as required by Applicable Law. The City will review such documentation in good faith and will use its best efforts to work with the Authority in the platting process.

ARTICLE V.
PROPERTY INTEREST ACQUISITION

Section 5.01 ACQUISITION. The City is not responsible for obtaining any property interests for the Elements. To allow for construction of the Elements on real property interests held by the City, the City will grant permits to the Authority in such locations as are needed to construct the Elements.

Section 5.02 WEED CONTROL. On property in which the Authority has obtained an interest for the development of an Element, the Authority will designate personnel to monitor and maintain control of weeds in accordance with all applicable noxious weed control ordinances.

ARTICLE VI.
CONSTRUCTION

Section 6.01 ELEMENTS. USACE will be responsible for constructing the Elements and any other physical alterations necessary for construction, operation, and maintenance of the Elements.

Section 6.02 DESIGN MODIFICATIONS. If USACE submits a design modification for an Element, the Authority will share the proposed modification with the engineer for the City for review and comment. The engineer for the City will complete its review and submit comments to the Authority within seven (7) calendar days of receipt. The Authority will submit the comments to USACE, but the Parties agree and acknowledge that USACE will have the ultimate discretion on design modifications.

Section 6.03 COORDINATION OF PARTIES. The City will coordinate and work through the Authority and USACE on any and all questions that develop during construction of the Elements.

Section 6.04 CONSTRUCTION SCHEDULE. Once available, the Point of Contact will provide the City Representative with a proposed schedule for construction of the Elements and for road closures, as well as designated haul routes. The Point of Contact will provide schedule updates to the City Representative as they become available. The Authority will try to sequence road closures as much as possible in order to maintain public access to areas impacted by the Comprehensive Project.

Section 6.05 PERMITS AND MAINTENANCE DURING CONSTRUCTION. The construction contractors will be responsible for securing permits along haul routes and for securing permits for any temporary or permanent access. In the event the City believes maintenance is not being performed or is being underperformed, it will notify the Point of Contact, and the Authority will coordinate the maintenance, which may include, if agreed upon, the City performing the maintenance and seeking reimbursement from the Authority.

Section 6.06 PROJECT UPDATES AND COMPLETION. The Point of Contact will interact with the City Representative on a regular basis to provide updates on the construction of the Elements. The Authority will coordinate with USACE on when any milestones are reached, including Substantial Completion and Final Completion. Following close-out of a USACE contract for the OHB Levee Crossings and Interior Storm Sewer Improvements, USACE will turn back control of the OHB Levee Crossings and any roads impacted by the Interior Storm Sewer Improvements to the Authority, who in turn will transfer control to the City or to the City and Pleasant Township where they have shared jurisdiction.

Section 6.07 REVIEW ACCESS. The Authority will coordinate with USACE to allow for worksite control rules that permit and facilitate reasonable access to the City for the Elements for

the reasonable review of work. The presence or absence of a City inspector does not relieve the Authority from any requirement in this MOU, nor is an inspector authorized to change any term or condition of the MOU. The City agrees that during any review contemplated under this section, its representatives will follow USACE construction safety practices (e.g., registering at field office and wearing personal safety equipment). The City understands that its representatives cannot direct the construction contractors, and any conversations with construction contractors must occur in the presence of USACE construction staff.

Section 6.08 AS-BUILT DRAWINGS. The Authority will coordinate with USACE to provide as-built drawings of the Elements to the City.

Section 6.09 FINANCING. The City will not be responsible for any costs or expenses associated with construction of the Elements.

ARTICLE VII.
MAINTENANCE

Section 7.01 MAINTENANCE. Following the transfer of control of an OHB Levee Crossing or a road impacted by the Interior Storm Sewer Improvements, the City will be responsible for operations and maintenance of the OHB Levee Crossings, any roads impacted by the Interior Storm Sewer Improvements, and any Interior Storm Sewer Improvements, either individually or as agreed between the City and Pleasant Township where there is shared jurisdiction. A map designating the areas within the City for which the City will be responsible for operations and maintenance is attached hereto as Exhibit E. The Authority will be responsible for maintaining the OHB Levee.

ARTICLE VIII.
FUTURE CHANGES OR ADDITIONS

Section 8.01 OHB LEVEE CROSSINGS.

(a) The City retains the ability, at its sole cost and expense, to adjust or alter the OHB Levee Crossings to the extent such may be accomplished without adversely affecting, changing, or altering the OHB Levee. If there is an adjustment or alteration, then the City must secure separate written approval from the Authority and USACE. USACE's written approval may be through the issuance of a Section 408 permit or successor USACE permitting regime. For purposes of this MOU, the Parties understand and agree that an adjustment or alteration of the OHB Levee will result if the City performs work outside of the OHB Levee Crossing footprint or performs work that is not routine road work such as repairing or replacing existing roadway surface and subgrade.

(b) If it becomes necessary or desirable to change, alter, widen, or reconstruct the OHB Levee to accommodate a City-initiated project, the cost of such work, if approved by the Authority and USACE, including any cost incidental to alteration of the OHB Levee, made necessary by such changes, will be the expense of the City. The City will perform any hydraulic modeling associated with any proposed changes.

Section 8.02 INTERIOR STORM SEWER IMPROVEMENTS.

(a) The City retains the ability, at its sole cost and expense, to adjust or alter the road atop the Interior Storm Sewer Improvements (7th Street) to the extent such may be accomplished without adversely affecting, changing, or altering the Interior Storm Sewer Improvements. If there is a need to adjust or alter the Interior Storm Sewer Improvements, then the City must secure separate written approval from the Authority and USACE. USACE's written approval may be through the issuance of a Section 408 permit or successor USACE permitting regime.

(b) If it becomes necessary or desirable to change, alter, widen, or reconstruct the Interior Storm Sewer Improvements to accommodate a City-initiated project, the cost of such work, if approved by the Authority and USACE, including any cost incidental to alteration of the Interior Storm Sewer Improvements, made necessary by such changes, will be the expense of the City.

Section 8.03 OHB LEVEE AND OTHER COMPREHENSIVE PROJECT COMPONENTS.

(a) The Authority retains the ability, at its sole cost and expense, to adjust or alter the OHB Levee, the Interior Storm Sewer Improvements, or other elements of the Comprehensive Project to the extent such may be accomplished without adversely affecting, changing, or altering the OHB Levee Crossings or the road atop the Interior Storm Sewer Improvements.

(b) If it becomes necessary or desirable to change, alter, widen, or reconstruct an OHB Levee Crossing or the road atop the Interior Storm Sewer Improvements to accommodate the OHB Levee, the Interior Storm Sewer Improvements, or another element of the Comprehensive Project, the cost of such work, if approved by the City and USACE, including any incidental costs made necessary by such changes, will be the expense of the Authority.

ARTICLE IX.
COMPREHENSIVE PROJECT OPERATION AND CLEAN-UP

Section 9.01 NOTICE OF OPERATION. The Authority Representative will provide the City Representative with reasonable advanced notice of the anticipated operation of the Comprehensive Project. The Authority will coordinate with the City in the Authority's placing and removing of road barriers and signage, as necessary, for the operation of the Comprehensive Project. The Authority will be responsible for procuring any such road barriers or signage.

Section 9.02 POST-OPERATION CLEAN-UP. Following operation of the Comprehensive Project, the Authority will provide reimbursement for repair and clean-up work on City lands, including City roads. Aside from the requirement set forth in this section to provide such reimbursement, the Authority is additionally required to do so by the North Dakota Office of State Engineer in the Post-Operation Public Lands Repair and Clean-Up Plan. The current form of the Post-Operation Public Lands Repair and Clean-Up Plan, which is a portion of the Authority's Property Rights Acquisition and Mitigation Plan, is attached to this MOU as Exhibit C. The Post-Operation Public Lands Repair and Clean-Up Plan may be amended, but the requirement that the Authority provide reimbursement for the repair and clean-up work on City lands will not be

eliminated, and any amendments are subject to approval by the North Dakota Office of State Engineer.

ARTICLE X.
REIMBURSEMENT AND INVOICING

Section 10.01 CONSTRUCTION COSTS AND EXPENSES. Between the Effective Date and completion of the later of the following: (i) the second OHB Levee Crossing or (ii) the Interior Storm Sewer Improvements, in addition to any reimbursable costs or expenses set forth herein, the City may seek reimbursement from the Authority for any costs or expenses incurred as a result of work provided under this MOU, in an amount up to $3,000.00 annually. The reimbursement of costs or expenses incurred in excess of $3,000.00 may be sought under other applicable provisions under this MOU, including under Section 10.03. The first annual period shall be from the Effective Date until the date preceding the first anniversary of the Effective Date. Annual periods thereafter shall run from the anniversary of the Effective Date until the earlier of: (i) the date preceding the next anniversary of the Effective Date or (ii) the date of completion of the later of either the second OHB Levee Crossing or the Interior Storm Sewer Improvements.

Section 10.02 POST-CONSTRUCTION COSTS AND EXPENSES. Following the completion of the later of the following: (i) the second OHB Levee Crossing or (ii) the Interior Storm Sewer Improvements, in addition to any reimbursable costs and expenses set forth herein, the City may seek reimbursement from the Authority for any costs or expenses incurred in relation to the OHB Levee Crossings and the Interior Storm Sewer Improvements in an amount up to $1,500.00 annually. The reimbursement of costs or expenses incurred in excess of $1,500.00 may be sought under other applicable provisions of this MOU, including under Section 10.03. The first annual period shall be from the date of the completion of the later of either the second OHB Levee Crossing or the Interior Storm Sewer Improvements until the date preceding the first anniversary of such date. Annual periods thereafter shall run from the anniversary of such date to the date preceding the next anniversary of such date.

Section 10.03 EXTRAORDINARY EXPENSES. In addition to the allowable reimbursements set forth in Sections 10.01 and 10.02, the City may each seek reimbursement from the Authority for extraordinary expenses if, except as set forth herein, prior to incurring the expense, the City receives written authorization from the Authority. The Authority will not unreasonably withhold approval of these requests. If emergency circumstances exist, in the discretion of the City, and it is unreasonable to secure written authorization prior to incurring the expense, the City may incur the expense and notify the Authority of the incurrence of the expense within a reasonable time following the resolution of the emergency. The Authority will also not unreasonably withhold approval of these requests.

Section 10.04 INVOICING.

(a) The City will remit hard copy invoices to the Authority at the Authority's main office, and the invoices will be processed by the Authority for the following month. The City will also submit copies of the invoices to the Authority electronically at APInvoicesFMDiv@jacobs.com, copied to bakkegardk@fmdiversion.gov. Each invoice should include the identification of the City, a description of the activity included in the invoice, and the

address where payment should be remitted. The City may (i) initially pay for work included in an invoice and then seek reimbursement from the Authority for the payment or (ii) submit invoices directly to the Authority for initial payment. In either instance, the Authority will remit payment to the City.

(b) After the Authority receives a City invoice, the Authority will either process the invoice for payment or give specific reasons, in writing, within fifteen (15) calendar days, why part or all of the Authority's payment is being withheld and what actions the City must take to receive the withheld payment.

(c) In the event of disputed billing, only the disputed portion will be withheld from payment and the Authority will pay the undisputed portion. The Authority will exercise reasonableness in disputing any bill or portion thereof. Interest will accrue on any disputed portion of the billing determined to be due and owing to the City.

(d) Payment does not imply acceptance of services or that the invoice is accurate. In the event an error is identified within three (3) months of receipt of payment, the City must credit any payment error from any payment that is due or that may become due to the City under this MOU.

(e) The Authority will be charged interest at the rate of one-half percent (1/2%) per month, or the maximum amount permitted by North Dakota law if a lesser amount, on all past-due amounts thirty (30) days after receipt of an invoice. Payments must first be credited to interest and then to principal.

ARTICLE XI.
TERM AND TERMINATION

Section 11.01 TERM. This MOU will continue in full force and effect for ten (10) years following the Effective Date and will automatically renew for successive 1-year terms unless a Party gives 365 calendar days' advanced written notice of a desire to not renew to the other Party.

Section 11.02 TERMINATION. The Parties may also mutually agree, in writing, to terminate this MOU.

ARTICLE XII.
MISCELLANEOUS

Section 12.01 AMENDMENTS. This MOU may be amended only by written instrument duly executed by the Parties or their respective successors or assigns, except to the extent expressly provided otherwise in this MOU.

Section 12.02 SEVERABILITY AND SAVINGS CLAUSE. Each provision, section, sentence, clause, phrase, and word of this MOU is intended to be severable. If any provision, section, sentence, clause, phrase, or word hereof is held by a court with jurisdiction to be illegal or invalid for any reason whatsoever, such illegality or invalidity will not affect the validity of the remainder of this MOU.

Section 12.03 FORCE MAJEURE. No Party will be liable to the other Party during any period in which its performance is delayed or prevented, in whole or in part, by circumstances beyond its reasonable control. Circumstances include, but are not limited to, the following: act of God (e.g., flood, earthquake, wind), fire, war, act of public enemy or terrorist, act of sabotage, strike or other labor dispute, riot, misadventure of the sea, inability to secure materials and/or transportation, or a restriction imposed by legislation or an order or a rule or regulation of a governmental entity. If such a circumstance occurs, the Party claiming the delay must undertake reasonable action to notify the other Party of the same.

Section 12.04 AUTHORIZED REPRESENTATIVES. The Authority and the City hereby designate the following individuals as their initial authorized representatives, respectively, to administer this MOU on their respective behalf:

(a) Authority Representative: Kris Bakkegard, Director of Engineering

(b) City Representative: Mayor

Section 12.05 NOTICE.

(a) All notices to the Authority will be marked as regarding the OHB Levee and will be delivered to the following addresses or as otherwise directed by the Authority Representative:

4784 Amber Valley Parkway South
Suite 100
Fargo, North Dakota 58104

(b) All notices to the City will be marked as regarding the OHB Levee and will be delivered to the following addresses or as otherwise directed by the City Representative:

P.O. Box 176
Kindred, ND 58051

Section 12.06 GOVERNING LAW. This MOU is governed and construed in accordance with the laws of the State of North Dakota.

Section 12.07 FEDERAL LOBBYING RESTRICTIONS. Recipients of federal financial assistance may not pay any person for influencing or attempting to influence any officer or employee of a federal agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress with respect to the award, continuation, renewal, amendment, or modification of a federal grant, loan, or contract. These requirements are implemented for the United States Environmental Protection Agency ("EPA") in 40 CFR Part 34, which also describes types of activities, such as legislative liaison activities and professional and technical services, which are not subject to this prohibition. On or prior to the Effective Date, the City will complete and submit to the Authority the certification and disclosure forms in Appendix A and Appendix B to 40 CFR Part 23, which are attached within Exhibit D to this MOU. In the event the Authority solicits assistance from the City to complete an element of the Comprehensive Project and funds

made available to the Authority by the Water Infrastructure Finance and Innovation Act are utilized to finance such element, the City will also require all subcontractors and suppliers of any tier awarded a subcontract over $100,000 to complete and submit the certification and disclosure forms pursuant to the process set forth in 40 CFR Part 34.110.

Section 12.08 DEBARMENT AND SUSPENSION. In the event the Authority solicits assistance from the City to complete an element of the Comprehensive Project and funds made available to the Authority by the Water Infrastructure Finance and Innovation Act are utilized to finance such element, the City certifies it will not knowingly enter into a contract with anyone who is ineligible under 40 CFR Part 32 to participate in the Comprehensive Project. Suspension and debarment information can be accessed at http://www.sam.gov. The City represents and warrants that it has or will include a term or conditions requiring compliance with this provision in all of its subcontracts described in this Section. On or prior to the Effective Date, the City will complete and submit to the Authority the federal certification form regarding debarment and suspension, which is attached within Exhibit D of this MOU.

Section 12.09 CIVIL RIGHTS OBLIGATIONS. In the event the Authority solicits assistance from the City to complete an element of the Comprehensive Project and funds made available to the Authority by the Water Infrastructure Finance and Innovation Act are utilized to finance such element, the City will comply with the following, federal non-discrimination requirements:

(a) Title VI of the Civil Rights Act of 1964, which prohibits discrimination based on race, color, and national origin, including limited English proficiency (LEP).

(b) Section 504 of the Rehabilitation Act of 1973, which prohibits discrimination against persons with disabilities.

(c) The Age Discrimination Act of 1975, which prohibits age discrimination.

(d) Section 13 of the Federal Water Pollution Control Act Amendments of 1972, which prohibits discrimination on the basis of sex.

(e) 40 CFR Part 7, as it relates to the foregoing.

(f) Executive Order No. 11246.

On or prior to the Effective Date, the City will complete and submit to the Authority the federal certification form regarding civil rights, which is attached within Exhibit D of this MOU.

Section 12.10 LITIGATION; VENUE. All litigation between the Parties arising out of or pertaining to this MOU or its breach will be filed, heard, and decided in the State District Court of Cass County, North Dakota, which will have exclusive jurisdiction and venue. If there is litigation, regardless of the outcome, each Party will be responsible for its own attorney's fees.

IN WITNESS WHEREOF, the Authority and the City caused this MOU to be executed.

(Remainder of page intentionally left blank.)

Signature Page for the Metro Flood Diversion Authority

The governing body of the Metro Flood Diversion Authority approved this MOU on the ___ day of _____, 2024.

METRO FLOOD DIVERSION AUTHORITY

By: _____
Michelle (Shelly) A. Carlson, Chair

By: _____
Michael Redlinger, Co-Executive Director

By: _____
Robert Wilson, Co-Executive Director

ATTEST:

_____
Dawn Lindblom, Secretary

Signature Page for the City of Oxbow

The governing body of the City of Oxbow approved this MOU on the ___ day of _____, 2024.

CITY OF OXBOW

By: _____
Jim Nyhof, Mayor

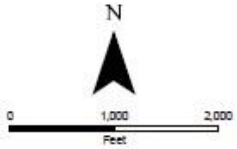
ATTEST:

_____
Stacey Fett, City Auditor

EXHIBIT A

OHB Levee and OHB Levee Crossings Maps

Any reliance upon this map is at user's own risk. AE2S does not warrant the map or its features are either spatially or temporally accurate or fit for a particular use.
All parcel acreages and legal descriptions shown hereon are based on County GIS data. Final acreages and legal descriptions to be determined by boundary survey.
Coordinate System: NAD 1983 StatePlane North Dakota South FIPS 3302 Feet | Produced by: hrecords - AE2S, LLC |
C:\Data\Projects\GIS Projects\FM Area Diversion\012 Lands Program\Property Acquisition\OHB\OxbowLevee_crossings_Pleasant_twp.mxd

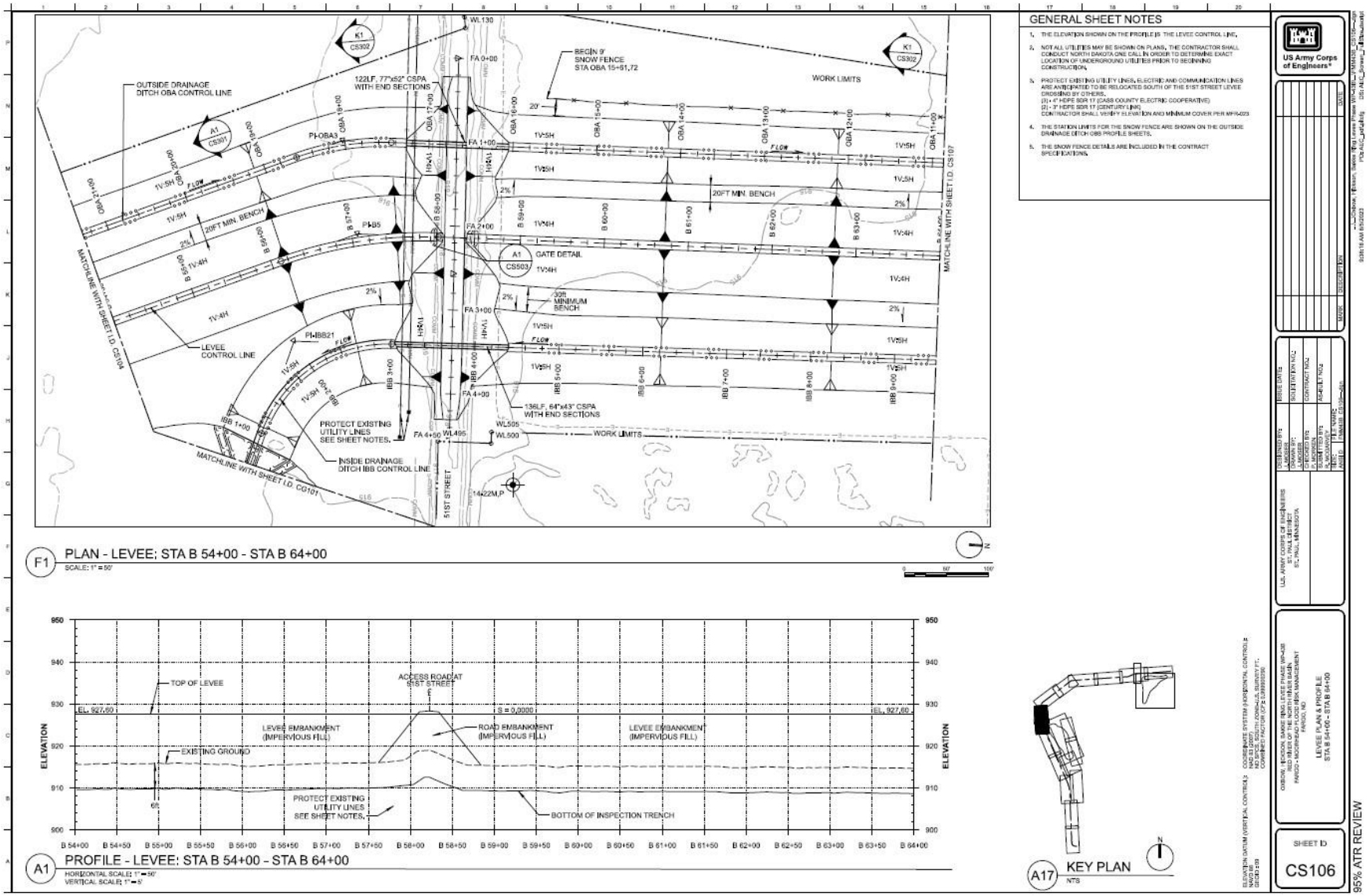


OHB Levee

Pleasant Township
Cass County, ND

FM AREA DIVERSION
Map Date: 9/1/2023

FM AREA DIVERSION


GENERAL SHEET NOTES
1. THE ELEVATION SHOWN ON THE PROFILE IS THE LEVEE CONTROL LINE.
2. NOT ALL UTILITIES MAY BE SHOWN ON PLANS. THE CONTRACTOR SHALL CONDUCT NORTH DAKOTA ONE CALL IN ORDER TO DETERMINE EXACT LOCATION OF UNDERGROUND UTILITIES PRIOR TO BEGINNING CONSTRUCTION.
3. PROTECT EXISTING UTILITY LINES. ELECTRIC AND COMMUNICATION LINES ARE ANTICIPATED TO BE RELOCATED SOUTH OF THE 51ST STREET LEVEE CROSSING BY OTHERS.
(1) - 4" HDPE SDR 17 (CASS COUNTY ELECTRIC COOPERATIVE)
(2) - 3" HDPE SDR 17 (CENTURY LINK)
CONTRACTOR SHALL VERIFY ELEVATION AND MINIMUM COVER PER MFR-003
4. THE STATION LIMITS FOR THE SNOW FENCE ARE SHOWN ON THE OUTSIDE DRAINAGE DITCH OBS PROFILE SHEETS.
5. THE SNOW FENCE DETAILS ARE INCLUDED IN THE CONTRACT SPECIFICATIONS.
OUTSIDE DRAINAGE DITCH OBA CONTROL LINE
122LF, 77"x52" CSPA WITH END SECTIONS
BEGIN 9' SNOW FENCE STA OBA 15+51.72
WORK LIMITS
20FT MIN. BENCH
30ft MINIMUM BENCH
GATE DETAIL
LEVEE CONTROL LINE
136LF, 64"x43" CSPA WITH END SECTIONS
PROTECT EXISTING UTILITY LINES SEE SHEET NOTES.
INSIDE DRAINAGE DITCH IBB CONTROL LINE
MATCHLINE WITH SHEET I.D. CS104
MATCHLINE WITH SHEET I.D. CS107
MATCHLINE WITH SHEET I.D. CG101
51ST STREET
F1 PLAN - LEVEE; STA B 54+00 - STA B 64+00
SCALE: 1" = 50'
TOP OF LEVEE
ACCESS ROAD AT 51ST STREET
EL. 927.60
S = 0.0000
LEVEE EMBANKMENT (IMPERVIOUS FILL)
ROAD EMBANKMENT (IMPERVIOUS FILL)
EXISTING GROUND
PROTECT EXISTING UTILITY LINES SEE SHEET NOTES.
BOTTOM OF INSPECTION TRENCH
ELEVATION
A1 PROFILE - LEVEE: STA B 54+00 - STA B 64+00
HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 5'
A17 KEY PLAN
NTS
US Army Corps of Engineers
LEVEE PLAN & PROFILE STA B 54+00 - STA B 64+00
SHEET ID
CS106
95% ATR REVIEW

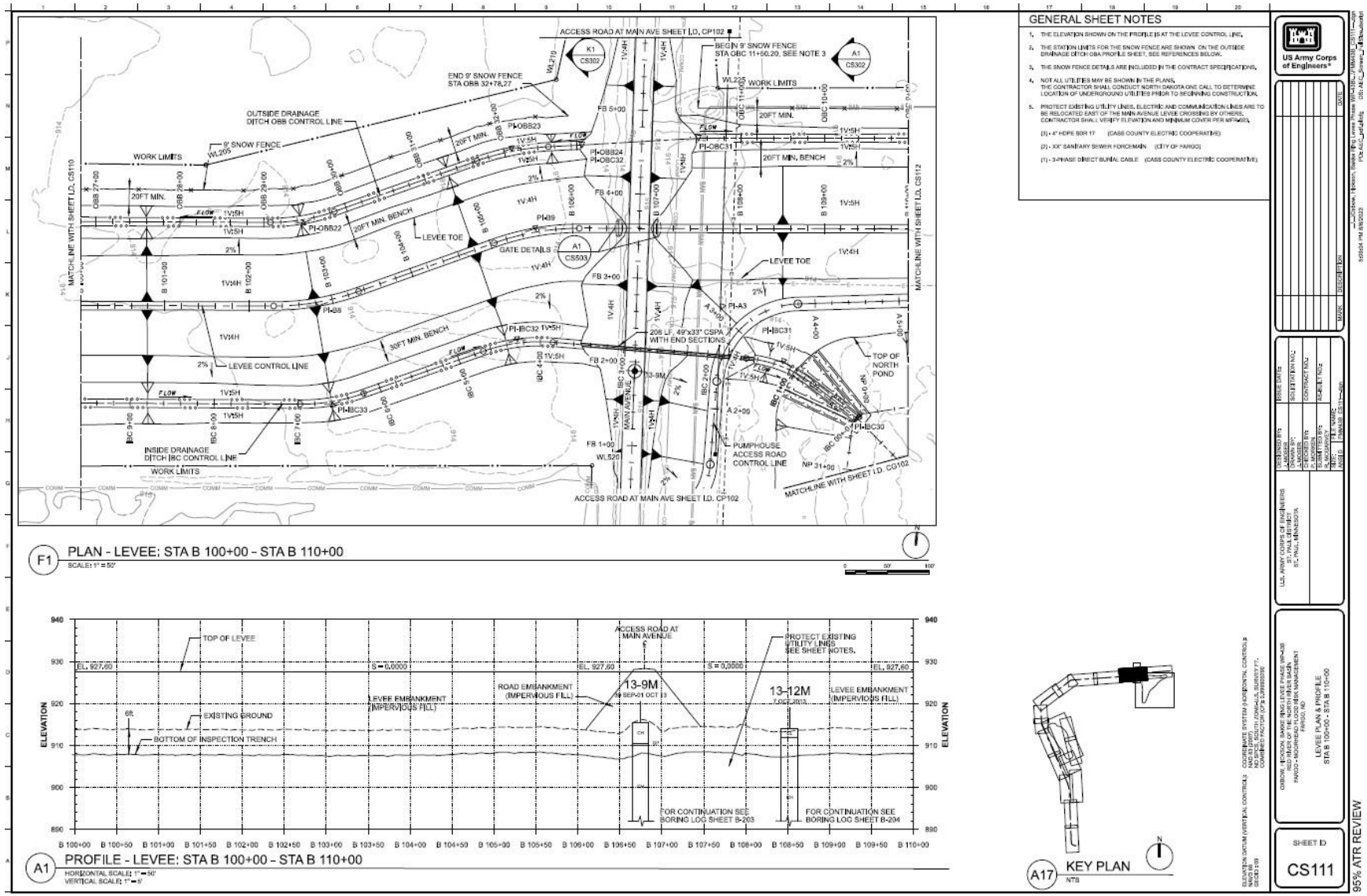

GENERAL SHEET NOTES
1. THE ELEVATION SHOWN ON THE PROFILE IS AT THE LEVEE CONTROL LINE.
2. THE STATION LIMITS FOR THE SNOW FENCE ARE SHOWN ON THE OUTSIDE DRAINAGE DITCH OBA PROFILE SHEET, SEE REFERENCES BELOW.
3. THE SNOW FENCE DETAILS ARE INCLUDED IN THE CONTRACT SPECIFICATIONS.
4. NOT ALL UTILITIES MAY BE SHOWN IN THE PLANS. THE CONTRACTOR SHALL CONDUCT NORTH DAKOTA ONE CALL TO DETERMINE LOCATION OF UNDERGROUND UTILITIES PRIOR TO BEGINNING CONSTRUCTION.
5. PROTECT EXISTING UTILITY LINES. ELECTRIC AND COMMUNICATION LINES ARE TO BE RELOCATED EAST OF THE MAIN AVENUE LEVEE CROSSING BY OTHERS. CONTRACTOR SHALL VERIFY ELEVATION AND MINIMUM COVER PER MFR-005.
(3) - 4" HDPE SDR 17 (CASS COUNTY ELECTRIC COOPERATIVE)
(2) - XX" SANITARY SEWER FORCEMAIN (CITY OF FARGO)
(1) - 3-PHASE DIRECT BURIAL CABLE (CASS COUNTY ELECTRIC COOPERATIVE)
ACCESS ROAD AT MAIN AVE SHEET I.D. CP102
BEGIN 9' SNOW FENCE STA OBC 11+50.20, SEE NOTE 3
END 9' SNOW FENCE STA OBB 32+78.27
OUTSIDE DRAINAGE DITCH OBB CONTROL LINE
WORK LIMITS
LEVEE TOE
LEVEE CONTROL LINE
INSIDE DRAINAGE DITCH IBC CONTROL LINE
GATE DETAILS
208 LF, 49"x33" CSPA WITH END SECTIONS
TOP OF NORTH POND
PUMPHOUSE ACCESS ROAD CONTROL LINE
MAIN AVENUE
MATCHLINE WITH SHEET I.D. CS110
MATCHLINE WITH SHEET I.D. CS112
MATCHLINE WITH SHEET I.D. CG102
F1 PLAN - LEVEE: STA B 100+00 - STA B 110+00
SCALE: 1" = 50'
TOP OF LEVEE
EXISTING GROUND
BOTTOM OF INSPECTION TRENCH
LEVEE EMBANKMENT (IMPERVIOUS FILL)
ROAD EMBANKMENT (IMPERVIOUS FILL)
ACCESS ROAD AT MAIN AVENUE
PROTECT EXISTING UTILITY LINES SEE SHEET NOTES.
13-9M
13-12M
FOR CONTINUATION SEE BORING LOG SHEET B-203
FOR CONTINUATION SEE BORING LOG SHEET B-204
ELEVATION
A1 PROFILE - LEVEE: STA B 100+00 - STA B 110+00
HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 5'
A17 KEY PLAN
US Army Corps of Engineers
LEVEE PLAN & PROFILE STA B 100+00 - STA B 110+00
SHEET ID
CS111
95% ATR REVIEW

EXHIBIT B

Interior Storm Sewer Improvements Map

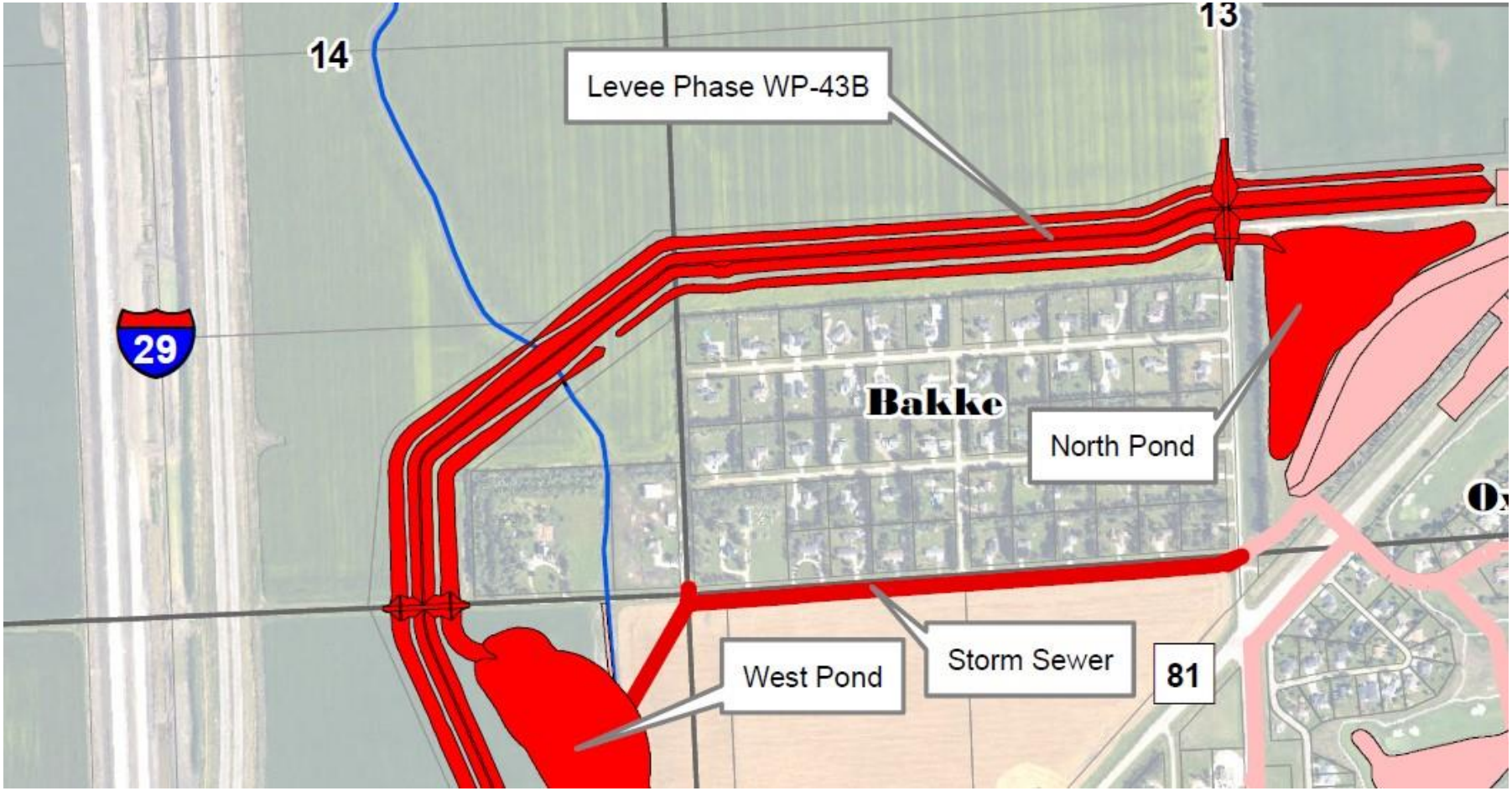


EXHIBIT C
POST-OPERATION PUBLIC LANDS REPAIR AND CLEAN-UP POLICY

Post-Operation Repair and Clean-Up Plan: Public Lands

Introduction

Operation of the Project will result in the staging and retention of flood waters upstream of the Southern Embankment. The upstream retention of flood waters will impact a different amount of acres for each flood event depending on the magnitude of the flood and a variety of other factors. There are a variety of "public lands" in the upstream mitigation area such as township and county roads, drainage ditches, cemeteries, and parks. In recognition that operation of the upstream retention area may cause some damage to these public lands as well as the accumulation of debris (logs, straw, trash, etc.), the Diversion Authority has developed the following post-operation public lands repair and clean-up plan.

Post-Operation Public Lands Repair and Clean-Up Plan

If the Project operates, the Diversion Authority will enact the following post-operation public lands repair and clean-up plan. The plan is specific to repair and clean-up of public lands in the upstream mitigation area from operation of the Project. Public lands include township and county roads, drainage ditches, cemeteries, and parks. This plan will allow local government entities (townships, water boards, etc.) to contract for the repair and clean-up work on the public lands, and then submit for reimbursement to the Diversion Authority. This plan allows the local government entities the ability to contract for the work as they prefer.

- The plan will pattern the approach that FEMA uses for post-disaster damage assessment and reimbursements.
- The Diversion Authority will declare the Project operated.
- The Diversion Authority will define the boundary of the upstream mitigation cleanup area based on the actual flood event.
- The Diversion Authority will distribute an annual newsletter that will include information related to post-operation mitigation programs.
- The Diversion Authority will notify public entities of eligible areas and request that the public entity identify any damage that may have been caused by the Project operation, including debris removal.
- The Diversion Authority will send a representative to meet with the public entities to verify damage on a site by site basis.
- The public entities shall solicit quotes (in conformance with procurement, legal, and regulatory requirements) for the repairs or clean-up work at each site, and submit the quotes for each site to the Diversion Authority for review.
- The Diversion Authority shall review the quotes for reasonableness, and either approve, request additional details, or deny the quote.
- The Diversion Authority will confirm the work was completed in accordance with the quote, and then reimburse the public entity.

- The Diversion Authority will also consider reimbursement of emergency repairs that may be needed in advance of following this process.
- The Diversion Authority will establish a reasonable deadline for submission of damage claims.

EXHIBIT D
FEDERAL CERTIFICATION FORMS

CERTIFICATION REGARDING FEDERAL LOBBYING

The undersigned certifies to the best of his or her knowledge and belief that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in any award documents for any of its subcontractors at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subcontractors shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into a contract with the Authority. By executing this certificate the undersigned agrees and acknowledges that he/she has been duly authorized to execute this certificate.

Company/
Entity Name: _____

Signed: _____

Its: _____

Date: _____

PLEASE RETURN TO:
Metro Flood Diversion Authority
P.O. Box 2806
Fargo, ND 58108-2806

CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS

This certification is required by the regulations implementing Executive Order 12549, Debarment and Suspension, 13 CFR Part 145. The regulations were published as Part VII of the May 26, 1988 *Federal Register* (pages 19160-19211).

(BEFORE COMPLETING CERTIFICATION, READ INSTRUCTIONS ON PAGE 2)

(1) The official representative of the party contracting with the Metro Flood Diversion Authority certifies to the best of its knowledge and belief that it and its principals:

(a) Are not presently debarred, suspended, proposed for disbarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;

(b) Have not within a three-year period preceding this application been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and

(d) Have not within a three-year period preceding this application had one or more public transactions, including contracts (Federal, State, or local) terminated for cause or default.

(e) Are not presently debarred, suspended, declared ineligible or voluntarily excluded from performing work for the State of North Dakota, the State of Minnesota, the Metro Flood Diversion Authority or any of its Member Entities.

(2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective primary participant shall attach an explanation to this proposal.

(3) The Official signing this certificate has been and is duly authorized to sign this certificate on behalf of the entity or entities which intend to enter into a contract with the Metro Flood Diversion Authority.

Official Business Name _____

Date: _____ By: _____

Name and Title of Authorized Representative

PLEASE RETURN TO:

Metro Flood Diversion Authority
P.O. Box 2806
Fargo, ND 58108-2806

_____

Signature of Authorized Representative

INSTRUCTIONS FOR CERTIFICATION

1. By signing and submitting this certification, the prospective contracting party is providing the certification set out below.

2. The inability of a person to provide the certification required below will not necessarily result in denial of participation in this covered transaction. The prospective contracting party shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the Metro Flood Diversion Authority's (the "Authority") determination whether to enter into this transaction. However, failure of the prospective contracting party to furnish a certification or an explanation shall disqualify such person from entering into contracts with the Authority.

3. The certification in this clause is a material representation of fact upon which reliance was placed when the Authority determined to enter into a contract with the prospective contracting party. In order to qualify for participation in the U.S. EPA WIFIA program the Authority is required to obtain this certification. If it is later determined that the prospective contracting party knowingly rendered an erroneous certification, in addition to other remedies available to both the Authority and the Federal Government, the Authority may terminate this transaction for cause or default.

4. The prospective contracting party shall provide immediate written notice to the Authority to which this Certificate is submitted if at any time the prospective contracting party learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

5. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549. You may contact the Authority for assistance in obtaining a copy of those regulations (13 CFR Part 145).

6. The prospective contracting party agrees by submitting this certification that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the Authority.

7. The prospective contracting party further agrees by submitting this certification that it will require a "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Covered Transactions," from all sub-contractors without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

8. A contracting party in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A contracting party may decide the method and frequency by which it determines the ineligibility of its principals.

9. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a contracting party is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

10. Except for transactions authorized under paragraph 6 of these instructions, if a contracting party in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the Authority may terminate this transaction for cause or default.

ASSURANCE OF COMPLIANCE – CIVIL RIGHTS CERTIFICATE

TITLE VI OF THE CIVIL RIGHTS ACT OF 1964, SECTION 504 OF THE REHABILITATION ACT OF 1973, THE AGE DISCRIMINATION ACT OF 1975, SECTION 13 OF THE FEDERAL WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972, 40 CFR PART 7, AND EXECUTIVE ORDER NO. 11246

The undersigned provides this assurance for the purpose of entering into a contract with the Metro Flood Diversion Authority (Authority) related to the Fargo-Moorhead Metropolitan Area Flood Risk Management Project (Project), which is receiving federal financial assistance. Specifically, the US EPA WIFIA Program requires this assurance of all contractors and subcontractors providing services for the Project.

The undersigned assures that it will comply with:

1. Title VI of the Civil Rights Act of 1964, as amended, which prohibits discrimination on the basis of race, color, or national origin including limited English proficiency (LEP);
2. Section 504 of the Rehabilitation Act of 1973, as amended, which prohibits discrimination against persons with disabilities;
3. The Age Discrimination Act of 1975, as amended, which prohibits age discrimination;
4. Section 13 of the Federal Water Pollution Control Act Amendments of 1972, which prohibits discrimination on the basis of sex;
5. 40 CFR Part 7, as it relates to the foregoing; and
6. Executive Order No. 11246.

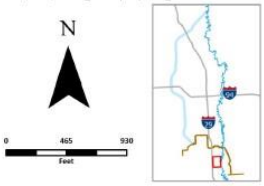
The undersigned understands that this Assurance is binding on the undersigned, its successors, transferees, and assignees at any time during which federal financial assistance is provided to the Project. The undersigned will ensure that all contractors, subcontractors, or others with whom it arranges to provide services or benefits are not discriminating in violation of items 1-6. Otherwise, the contracts for services can be terminated for cause and the undersigned can be declared ineligible to contract for the Project.

By signing this form, the undersigned is agreeing to the above provisions and that he/she is duly authorized to execute this form.

Signature of Authorized Official	Title
Print Name	Name of Institution or Agency
Date	Street
	City, State, Zip Code
PLEASE RETURN TO: Metro Flood Diversion Authority P.O. Box 2806 Fargo, ND 58108-2806	Office Email Address

EXHIBIT E
CITY MAINTENANCE MAP

Any reliance upon this map is at user's own risk. AE2S does not warrant the map or its features are either spatially or temporally accurate or fit for a particular use.
All parcel acreages and legal descriptions shown hereon are based on County GIS data. Final acreages and legal descriptions to be determined by boundary survey.
Coordinate System: NAD 1983 StatePlane North Dakota South FIPS 3302 Feet | Edited by: cwickenheiser|C:\Data\Projects\GIS Projects\FM Area Diversion\012 Lands Program\Property Acquisition\OHB\Oxbow_Area.aprx | OHB_Area



OXBOW MOU AMENDMENT
FUTURE VEGETATIVE FREE ZONE (VFZ)
WP43B OHB LEVEE

FM AREA DIVERSION PROJECT
Map Date: 1/19/2024

FM AREA DIVERSION

Execution Version

MASTER UTILITY RELOCATION AGREEMENT

By and Between

METRO FLOOD DIVERSION AUTHORITY

and

MINNESOTA POWER,
a division of Allete, Inc.

Dated as of April 25, 2024

Relating to:

Utility Relocation in the Southern Embankment and Associated Infrastructure and the Upstream Mitigation Area for the Fargo-Moorhead Metropolitan Area Flood Risk Management Project

This instrument was drafted by:
Ohnstad Twichell, P.C.
John T. Shockley
P.O. Box 458
West Fargo, North Dakota 58078

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Execution Version

MASTER UTILITY RELOCATION AGREEMENT

THIS MASTER UTILITY RELOCATION AGREEMENT (the "Agreement") is made and entered into this 25th day of April, 2024 (the "Effective Date"), by and between the Metro Flood Diversion Authority, a North Dakota political subdivision, whose post office address is 207 4th St. N., Suite A, Fargo, ND 58102 (the "Authority"), and Minnesota Power, a division of Allete, Inc., whose post office address 30 W Superior Street, Duluth, MN 55802-2093 (the "Utility") (collectively, the Authority and the Utility are referred to as the "Parties").

RECITALS

WHEREAS, construction of the locally preferred plan for the Fargo-Moorhead Metropolitan Area Flood Risk Management Project (the "Comprehensive Project") in the Fargo, North Dakota, and Moorhead, Minnesota, Metropolitan Area was authorized by Section 7002(2) of the Water Resources Reform and Development Act of 2014, Public Law 113-121; and

WHEREAS, the Authority, the City of Fargo, North Dakota, and the City of Moorhead, Minnesota, are the Non-Federal Sponsors ("NFS") for the Comprehensive Project and have entered into a Project Partnership Agreement ("PPA") on July 11, 2016, and amended as of March 19, 2019, with the United States Army Corps of Engineers ("USACE") for the construction, operation, and maintenance of the Comprehensive Project; and

WHEREAS, the PPA sets forth a split delivery method for the Comprehensive Project, establishing the respective responsibilities of both the NFS and the USACE; and

WHEREAS, the Authority was created to undertake and fulfill the NFS' obligations under the PPA; and

WHEREAS, pursuant to the PPA, the NFS will be responsible for completing the Upstream Mitigation Area ("UMA"), the area where the Authority is required to obtain property rights as mitigation for the temporary storage of floodwaters during Comprehensive Project operations; and all mitigation features that are not the responsibility of the USACE; and

WHEREAS, pursuant to Article II of the PPA, the NFS shall be responsible for all real property interests and relocations required for construction, operation, and maintenance of the Comprehensive Project; and

WHEREAS, the Utility has real property interests (hereinafter referred to as "Prior Property Interests") within the area generally described in Article III of this Agreement and further described in **Exhibit A**; and

WHEREAS, it will be necessary for the Prior Property Interests to be relocated, protected, removed, or adjusted (hereinafter referred to as the "Utility Relocation Project") by either the Authority or Utility in coordination with construction of the Comprehensive Project; and

WHEREAS, the Authority and the Utility desire to set forth in writing their mutual understandings and to define the terms and conditions and each Party's rights and obligations in connection with the Utility Relocation Project; and

WHEREAS, this Agreement is only intended to bind the parties in regard to the portion of the Comprehensive Project south of the Storm Water Diversion Channel and Associated Infrastructure ("SWDCAI") and shall have no implications for or binding power in regard to the Parties work, efforts, or relations in the SWDCAI. The Parties interactions with one another in the SWDCAI shall be governed by a separate agreement between the Parties.

NOW, THEREFORE, in consideration of the mutual promises contained herein and other valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereby state as follows:

ARTICLE I.
DEFINITIONS AND INTERPRETATION

Section 1.01 DEFINITIONS. All capitalized and bolded terms used and not otherwise defined herein shall have the meanings given to them in this Agreement and as defined in this Section unless a different meaning clearly applies from the context.

"Age Discrimination Act of 1975" means the Age Discrimination Act of 1975 (42 U.S.C. Sections 6101-6107).

"Agreement" means this **Master Utility Relocation Agreement**.

"Authority" means the **Metro Flood Diversion Authority**, a **North Dakota** political subdivision created by the **Joint Powers Agreement** dated June 1, 2016.

"Best Efforts" means acting in **Good Faith** and in accordance with generally accepted commercial practices and using reasonable due diligence to undertake all action contemplated by this **Agreement**, in accordance with applicable federal and state laws, regulations, and rules; however, the obligation to use **Best Efforts** does not mean a duty to take action that would be in violation of applicable federal or state law.

"Betterment" means any upgrading of **Utility** that is not attributable to or made necessary by the **Utility Relocation Project**, made for the benefit of and at the election of the **Utility**. The following are not considered **Betterments**: (a) replacement devices or materials of equivalent standards, though not identical; (b) replacement of devices or materials no longer regularly manufactured with an equivalent or next higher grade or size; or (c) any upgrading required by applicable law or regulation.

"Business Day(s)" means any day that is not a Saturday, a Sunday, or a public holiday under the laws of **North Dakota**.

"Cass County" means **Cass County**, **North Dakota**.

"Cass County Joint Water Resource District" or **"CCJWRD"** means the **Cass County Joint Water Resource District**, a political subdivision of the **State of North Dakota**, its successors, and assigns.

"CFR" means the Code of Federal Regulations.

"Civil Rights Act of 1964" means the Civil Rights Act of 1964 (Pub.L. 88-352, 78 Stat. 241, enacted July 2, 1964).

"Clay County" means **Clay County**, **Minnesota**.

"Certificate of Comprehensive Project Substantial Completion" means a written certificate issued by the **Director of Engineering** indicating that the **Comprehensive Project** has been completed and no elements remain to be completed.

"Comprehensive Project" means the **Fargo-Moorhead Metropolitan Area Flood Risk Management Project** authorized by Section 7002(2) of the **Water Resources Reform and Development Act of 2014**, as generally described in the **Final Feasibility Report and Environmental Impact Statement**, Fargo-Moorhead Metropolitan Area Flood Risk Management, dated July 2011 and approved in accordance with the Chief's Report, as amended by the Supplemental Environmental Assessment, Fargo-Moorhead Metropolitan Area Flood Risk Management Project, dated September 2013 and approved by the U.S. Army Engineer, St. Paul, on September 19, 2013, and as amended by the Second Supplemental Environmental Assessment dated August 27, 2018 (2018 SEA), and the Engineering Documentation Report, Fargo-Moorhead Metropolitan Area Flood Risk Management Project, ND and MN, Modifications Through February 2019.

"Congress" means the **Congress** of the United States of America.

"Contract Work Hours and Safety Standards Act" means the **Contract Work Hours and Safety Standards Act** (40 U.S.C. 3701 et seq.).

"Copeland (Anti-Kickback) Act" means the **Copeland Act** (18 U.S.C. 874 and 40 U.S.C. 3145).

"**Costs**" means all costs, expenses, and fees of whatever nature and kind, excluding internal costs that would have been incurred by the **Utility** regardless of the existence of the **Comprehensive Project**.

"Davis-Bacon Act" means the **Davis-Bacon Act** of 1931 (40 U.S.C. 3141 et seq.).

"Diversion Inlet Structure" means the hydraulic control structure to control the flow of water entering the **SWDCAI** north of the **SEAI** as detailed in the documented entitled the "FMM Diversion Inlet Structure Red River of the North River Basin Fargo, ND."

"Dilworth" means **Dilworth**, **Minnesota**.

"Director of Engineering" means the individual or his/her designee who is officially appointed by the **Executive Director** as the **Director of Engineering** for the **Authority**.

"Effective Date" means the date on which both **Parties** have executed this **Agreement**.

"Executive Director" means the chief administrative officer of the **Metro Flood Diversion Authority**.

"Executive Order No. 11246" means **Executive Order No. 11246**, dated September 24, 1965.

"Fargo" or **"City of Fargo"** means **Fargo**, **North Dakota**.

"Fargo-Moorhead Metropolitan Area" means **Fargo**, **North Dakota**, **Moorhead**, **Minnesota**, and surrounding communities; it is further defined by the United States Census Bureau as comprising all of **Cass County**, **North Dakota**, and **Clay County**, **Minnesota**, which includes the cities of **Dilworth**, **Minnesota**, **West Fargo**, **North Dakota**, and numerous other towns and developments from which commuters travel daily for work, education, and regular activities.

"Fargo-Moorhead Metropolitan Area Flood Risk Management Project" has the same definition as "**Comprehensive Project**."

"Fargo-Moorhead Metropolitan Area Southern Embankment – MFR-023, Utility Guidelines and References" or **"MFR-023"** means the **Fargo-Moorhead Metropolitan Area Southern Embankment – MFR-023, Utility Guidelines and References** drafted by the **USACE** for the relocation of components in the **SEAI**.

"Federal Water Pollution Control Act Amendments of 1972" means the **Federal Water Pollution Control Act Amendments of 1972** (Pub.L. 92-500, 86 Stat. 816, enacted October 18, 1972).

"Final Design Submittal" means the design submittal described in Article VII of this **Agreement**.

"Final Feasibility Report and Environmental Impact Statement" or **"FEIS"** means the **Final Feasibility Report and Environmental Impact Statement**, **Fargo-Moorhead Metropolitan Area Flood Risk Management Project**, dated July 2011 and approved by the Chief of Engineers on December 19, 2011, as amended by the Supplemental Environmental Assessment, **Fargo-Moorhead Metropolitan Area Flood Risk Management Project**, dated September 2013 and approved by the District Engineer, St. Paul District on September 19, 2013, as amended by the Final Supplemental Environmental Assessment #2, Modifications to the **Fargo-Moorhead Metropolitan Area Flood Risk Management Project**, dated February 2019, approved by the District Engineer, St. Paul District on February 28, 2019, and which may be further amended by future supplemental environmental assessments.

"Frontier" or **"City of Frontier"** means **Frontier**, **North Dakota**.

"Good Faith" means observance of reasonable commercial standards of fair dealing in a given trade of business.

"Harwood" or **"City of Harwood"** means **Harwood**, **North Dakota**.

"Horace" or the **"City of Horace"** means **Horace**, **North Dakota**.

"Joint Powers Agreement" or **"JPA"** means the **Joint Powers Agreement** dated as of June 1, 2016, by and between the **Member Entities**, as amended from time to time, which created and continued the **Authority**.

"Master Utility Relocation Agreement" or **"Agreement"** means this **Master Utility Relocation Agreement** by and between the **Authority** and **Utility**.

"Member Entities" shall mean **Moorhead**, **Fargo**, **Clay County**, **Cass County**, and **CCJWRD**.

"Metro Flood Diversion Authority" has the same definition as "**Authority**."

"Minnesota" means the **State of Minnesota**.

"Moorhead" or **"City of Moorhead"** means **Moorhead**, **Minnesota**.

"Moorhead-Clay County Joint Powers Authority" means the Moorhead-Clay County Joint Powers Authority, a Minnesota joint powers authority created by the City of Moorhead and Clay County through the Minnesota Land Acquisition Joint Powers Agreement, dated July 1, 2019.

"Non-Federal Project Costs" means the local cost share of the total cost of the **Comprehensive Project** not provided by the U.S. Government.

"Non-Federal Sponsors" or **"NFS"** means the entities providing the **Non-Federal Project Costs** for the **Comprehensive Project**, which includes the **City of Fargo**, the **City of Moorhead**, and the **Authority** created pursuant to the **JPA.**

"North Dakota" means the **State of North Dakota**.

"Parties" means the entities to this **Agreement**, specifically the **Authority** and the **Utility**.

"Post Construction Submittal" means the design submittal described in Article VII of this **Agreement**.

"PPA" means the **Project Partnership Agreement** executed by and between the Department of the Army and the **City of Fargo**, **North Dakota**, the **City of Moorhead**, **Minnesota** and the **Metro Flood Diversion Authority** for construction of the **Fargo-Moorhead Metropolitan Area Flood Risk Management Project**, dated July 11, 2016.

"Preliminary Design Submittal" means the design submittal described in Section 7.05(a) of this **Agreement**.

"Prior Property Interest(s)" means any property interest(s) owned by the **Utility** that the **Authority** deems necessary to **Relocate**.

"Project" means the design, construction, finance, operations, and maintenance of the **SEAI** and the **UMA**.

"Project Footprint" means the physical area within which the **SEAI** and the **UMA** will be contained.

"Project Property" means real property acquired for the **Project**, including, but not limited to, land, rights-of-way, easements, licenses, and leases.

"Protected Area" means generally the area north of the **SEAI** and east of the **Project** including the communities of **Moorhead**, **Minnesota**, **Frontier**, **North Dakota**, **Horace**, **North Dakota**, **Fargo**, **North Dakota**, **West Fargo**, **North Dakota**, **Reile's Acres**, **North Dakota**, and **Harwood**, **North Dakota**.

"Red River" means the **Red River of the North**.

"Red River Communications" or **"RRC"** means a Red River Communications, a North Dakota business providing telephone communications, wireline, wireless broadband service, and video services.

"Red River Control Structure" means the hydraulic control structure to be procured by **USACE**, and located within the **SEAI**, designed to control and/or meter the flow of the **Red River** through the **Protected Area**.

"Reile's Acres" or **"City of Reile's Acres"** means **Reile's Acres**, **North Dakota**.

"Rehabilitation Act of 1973" means the **Rehabilitation Act of 1973** (Pub.L. 93-112, 87 Stat. 355, enacted September 26, 1973).

"Relocate" or **"Relocated"** or **"Relocation"** means providing a functionally equivalent facility to the owner of a utility, cemetery, highway, railroad (excluding railroad bridges and approaches thereto required for construction of the **Comprehensive Project**), or public facility when such action is authorized in accordance with applicable legal principles of just compensation; or providing a functionally equivalent facility when such action is specifically provided for, and is identified as a **Relocation** in the authorizing legislation for the **Project** or any report referenced therein. Providing a functionally equivalent facility may take the form of alteration, lowering, rising, or replacement and attendant demolition of the affected facility or part thereof.

"Richland County" means **Richland County**, **North Dakota**.

"Shop Drawings and Samples" means shop drawings, laying drawings, erection drawings, fabrication drawings, product information, catalog information, samples, mock-ups,

plans, test procedures and results, descriptions of services, descriptions of specific means and methods and related documentation.

"Site" means the physical location at which any **Utility Adjustment Construction Work** is being done, has been done, or will be done as part of the **Utility Relocation Project**.

"**Southern Embankment and Associated Infrastructure"** or **"SEAI"** consisting of the **Diversion Inlet Structure**, **Wild Rice** and **Red River Control Structure**, associated road raises, and earthen dam embankment reaches.

"Substantial Completion Date of the Comprehensive Project" means the date on which the **Director of Engineering** issues a **Certificate of Comprehensive Project Substantial Completion**.

"Supplemental Plan" means a plan submitted for approval pursuant to Article III, in the event that **Undisclosed Prior Property Interests** are identified after one or more plans have already been approved pursuant to Article III.

"SWDCAI" means the approximately thirty (30) mile, twenty thousand (20,000) cubic feet per second (cfs) channel and associated features, including the outlet, river and drain inlets, road bridges, railroad bridges, aqueducts, and recreational features, to be constructed as part of the **Comprehensive Project**.

"Task Order" means a document executed by the **Authority** and **Utility**, including any amendments, stating the scope of services, times for performance of services, compensation, and any other relevant information for a specific project.

"**Undisclosed Prior Property Interests"** mean **Prior Property Interests** not disclosed in Section 3.02 of this **Agreement**.

"United States Army Corps of Engineers" or **"USACE"** means the **United States Army Corps of Engineers**.

"Upstream Mitigation Area" or **"UMA"** means the area where the **Authority** is required to obtain property rights as mitigation for the temporary storage of floodwaters during **Comprehensive Project** operations, as shown in **Exhibit B**.

"U.S. EPA" means the United States Environmental Protection Agency.

"Utility" means **Minnesota Power**.

"Utility Adjustment" means each **Relocation** (temporary or permanent), abandonment, protection in place, removal (of previously abandoned utilities as well as of newly abandoned utilities), replacement, reinstallation, or modification of existing utilities necessary to accommodate construction, operation, maintenance or use of the **Project**. The **Utility Adjustment Work** for each crossing of the **Project** right-of-way by a utility that crosses the **Project** right-of-way more than once will be considered a separate **Utility Adjustment**. For any utility installed longitudinally within the **Project** right-of-way, the **Utility Adjustment Work** for

each continuous segment of that utility located within the **Project** right-of-way will be considered a separate **Utility Adjustment**.

"Utility Adjustment Completion" means that the **Utility Adjustment Construction Work** for a **Utility Adjustment** is sufficiently complete in the opinion of the **Authority** and the **Utility**.

"Utility Adjustment Construction Work" means all **Utility Adjustment Work** related to construction.

"Utility Adjustment Design Work" means all **Utility Adjustment Work** related to design.

"Utility Adjustment Work" means all efforts and **Costs** necessary to accomplish the required **Utility Adjustments**, including all coordination, **Utility Adjustment Design Work**, design review, permitting, **Utility Adjustment Construction Work**, inspection and maintenance of records, whether provided by the **Authority** or by the **Utility**.

"Utility Relocation Project" means the process of acquiring **Project Property**, **Relocating** any **Prior Property Interests**, and all other steps necessary, as determined by the **Authority**, to prepare the **Project Property** for construction of the **Project**.

"Water Resources Reform and Development Act" means the Water Resources Reform and Development Act of 2014, Public Law 113-121.

"West Fargo" means **West Fargo**, **North Dakota**.

"Wild Rice River" means the river of the same name located in the **State of North Dakota**.

"Wild Rice River Control Structure" or **"WRRCS"** means the control structure for the **Wild Rice River** located southeast of the **City of Horace**, **North Dakota**.

"Wilkin County" means **Wilkin County**, **North Dakota**.

Section 1.02 TERMS GENERALLY. The definition of terms herein shall apply equally to the singular and plural forms of the terms defined. Whenever the context may require, any pronoun shall include the corresponding masculine, feminine, and neuter forms. The words "include," "includes," and "including" shall be deemed to be followed by the phrase "without limitation." The word "will" shall be construed to have the same meaning and effect as the word "shall." Unless the context requires otherwise (a) any definition of or reference to any agreement, instrument, or other document herein shall be construed as referring to such agreement, instrument, or other document as from time to time amended, supplemented, or otherwise modified (subject to any restrictions on such amendments, supplements, or modifications set forth herein), (b) any reference herein to any person shall be construed to include any person's permitted successors and assigns, (c) the words "herein," "hereof," and "hereunder," and words of similar import, shall be construed to refer to this **Agreement** in its entirety and not to any particular provision hereof, and (d) all references herein to articles, sections, exhibits, and

schedules shall be construed to refer to articles and sections of, and exhibits and schedules to, this **Agreement**.

Section 1.03 SURVIVAL OF TERMS. The terms of this **Agreement** shall survive through the **Substantial Completion Date of the Comprehensive Project** and for successive ten-year terms until one of the **Parties** hereto terminates this **Agreement** as provided for herein.

ARTICLE II.
PURPOSE OF MASTER UTILITY RELOCATION AGREEMENT

Section 2.01 PURPOSE. The purpose of this **Agreement** is to ensure a coordinated, time-efficient, and cost-effective process for completing the **Utility Relocation Project**, for coordinating operations and maintenance activities after completion of the **Utility Relocation Project**, and for the development of individual **Task Orders** issued in conjunction with, and subject to, the terms and conditions of this **Agreement**.

Section 2.02 COORDINATION BETWEEN ENGINEERS. The **Authority** and **Utility** are likely to employ the use of professional engineers in the analysis, design, and completion of designs, plans, and completion of work. Engineers employed by the **Parties** shall maintain open lines of communication, coordinate, and collaborate with engineers employed by other parties described herein.

Section 2.03 COORDINATION WITH USACE. **Utility** shall not communicate directly with the **USACE** regarding any aspect of the **Comprehensive Project** or any other subject-matter referenced in, related to, or arising from this **Agreement**, without the prior written authorization of the **Authority**, except as required by Section 9.01(a) and Section 9.04 of this **Agreement**.

ARTICLE III.
REAL PROPERTY INTERESTS

Section 3.01 INTENT. It is the intent of the **Parties** hereto that all **Prior Property Interests** shall be identified herein. Specifically, **Prior Property Interests** shall be detailed in the table contained in Section 3.02 and further documented in **Exhibit A** to this **Agreement**.

Section 3.02 ACQUISITION OF PRIOR PROPERTY INTERESTS. The **Prior Property Interests** to be **Relocated** pursuant to the terms and conditions of this **Agreement** include, but are not limited to, the **Prior Property Interests** documented in **Exhibit A** and described in the table below:

Location (Section-Township-Range)	Utility Owner	Location	Existing Crossing Type/Info	Other Attributes	Right-of-Way Document	Structure Affected? (Y/N)
2-136N-49W	Allete	ND	N/A	Structure Number 1641	209173 / 209174 / 208670 / 208827	N
2-136N-49W	Allete	ND	N/A	Structure Number 1642	208827	N

2-136N-49W	Allete	ND	N/A	Structure Number 1643	208827	N
2-136N-49W	Allete	ND	N/A	Structure Number 1644	208827	N
1-136N-49W	Allete	ND	N/A	Structure Number 1645	206949	N
1-136N-49W	Allete	ND	N/A	Structure Number 1646	206949	N
1-136N-49W	Allete	ND	N/A	Structure Number 1647	206949	N
1-136N-49W	Allete	ND	N/A	Structure Number 1648	206949 / 208240	N
1-136N-49W	Allete	ND	N/A	Structure Number 1649	208240	N
1-136N-49W	Allete	ND	N/A	Structure Number 1650	208240 / 207879	N
1-136N-49W	Allete	Red River (ND Side)	HVDC line raise crossing over the Red River Structure Number: 1651	Structure Number 1651	207879	Y
6-136-48	Allete	Red River (MN Side)	HVDC line raise crossing over the Red River Structure Number: 1652	Structure Number 1652	130058	Y
6-136-48	Allete	MN	Necessary HVDC improvement in order to facilitate line raise crossing over the Red River Structure Number: 1653	Structure Number 1653	130058	Y
6-136-48	Allete	MN	Necessary HVDC improvement in order to facilitate line raise crossing over the Red River Structure Number: 1654	Structure Number 1654	130059	Y
6-136-48	Allete	MN	N/A	Structure Number 1655	130059	N

6-136-48	Allete	MN	N/A	Structure Number 1656	130059	N
6-136-48	Allete	MN	N/A	Structure Number 1657	130059	N
6-136-48	Allete	MN	N/A	Structure Number 1658	130059	N
5-136-48	Allete	MN	N/A	Structure Number 1659	130060	N
5-136-48	Allete	MN	N/A	Structure Number 1660	130060	N
5-136-48	Allete	MN	N/A	Structure Number 1661	130060	N
5-136-48	Allete	MN	N/A	Structure Number 1662	130060	N
5-136-48	Allete	MN	N/A	Structure Number 1663	130060	N

Section 3.03 UNDISCLOSED PRIOR PROPERTY INTERESTS. If the **Authority**, for any reason, determines **Undisclosed Prior Property Interests** not described in Section 3.02 should be **Relocated**, such **Relocation** shall occur under the terms of this **Agreement**, as if the **Prior Property Interests** were described herein.

Section 3.04 DISCOVERY OF UNDISCLOSED PRIOR PROPERTY INTERESTS PRIOR TO APPROVAL OF PLANS. **Undisclosed Prior Property Interests** identified for **Relocation** prior to request for submission of the first submittal required by Article VII shall be **Relocated** through the same process as if the **Undisclosed Prior Property Interests** were disclosed herein.

Section 3.05 DISCOVERY OF UNDISCLOSED PRIOR PROPERTY INTERESTS AFTER THE APPROVAL OF PLANS. Should **Undisclosed Prior Property Interests** be identified after the approval of one or more plans pursuant to Article VII, the **Utility** shall, within sixty (60) days of written notification of the **Undisclosed Prior Property Interests**, submit a **Supplemental Plan** meeting the requirements of Article VII, for the **Undisclosed Prior Property Interests**. Each **Party** shall have the same rights and responsibilities as they would have if the **Supplemental Plan** were included in the previously approved plans, as detailed in Article VII, unless explicitly provided otherwise herein. If the **Utility** fails to submit a **Supplemental Plan** for approval within sixty (60) days, as required by this Section, the **Utility** shall forfeit its right to have the costs of the **Relocation** of the **Undisclosed Prior Property Interests** approved or denied before the **Utility Adjustment Work** is completed.

Section 3.06 COOPERATION IN PLATTING. The **Authority** intends to plat right-of-way acquired for **Project** purposes. **Utility** shall reasonably cooperate with said platting efforts if requested to do so by the **Authority**.

ARTICLE IV.
RESPONSIBILITY FOR UNDISCLOSED PRIOR PROPERTY INTERESTS

Section 4.01 UTILITY RESPONSIBILITY. The **Utility** shall bear the costs of **Relocating** all **Undisclosed Prior Property Interests**.

Section 4.02 REQUESTS FOR RELIEF. Within thirty (30) calendar days of **Utility Adjustment Completion**, the **Utility** may file a written request for relief with the **Authority** to request payment or partial payment for costs of the **Relocating Undisclosed Property Interests**. This request for relief shall be a separate document from the reports required by Article VII but shall be submitted to the **Authority** in conjunction with the reports required by Article VII. All requests for relief shall include an itemized list of costs, the total amount requested, and justification for **Utility's** failure to identify the **Undisclosed Prior Property Interest**. Requests for relief may be approved, approved in part and denied in part, or denied.

ARTICLE V.
RIGHT OF SITE ACCESS

Section 5.01 RIGHT OF SITE ACCESS. To ensure the **Authority** is able to proceed with construction of the **Project** in a timely and efficient manner, as well as to properly monitor and ensure completion of the **Utility Relocation Project**, the **Authority** shall have a right-of-way in, on, over, and across any and all **Sites** as well as the right to access, enter, and inspect any **Site**.

Section 5.02 NON-REVOCABLE RIGHT OF THE METRO FLOOD DIVERSION AUTHORITY. Except for the termination of this Agreement, nothing herein shall be construed as limiting or providing for the termination of the rights described herein as it pertains to the **Authority**.

Section 5.03 NOTICE REQUIRED. The **Authority** must provide at least twenty-four (24) hours' advance notice to **Utility** prior to exercising the rights described in this Article. The **Authority** is not required to provide advance notice to **Utility** prior to exercising the rights described in this Article on property owned by the **Moorhead-Clay County Joint Powers Authority** or the **Cass County Joint Water Resource District**.

Section 5.04 DELAY FOR SAFETY PURPOSES. If the **Authority** attempts to exercise the rights described in this Article, but doing so would pose a safety hazard, the **Authority** shall be kept from accessing, entering, or inspecting the **Site** in question, only for as long as is reasonably required to make the **Site** safety for access, entry, and inspection.

Section 5.05 FAILURE TO ALLOW ACCESS, ENTRY, AND INSPECTION. Should the **Authority**, having authority to access, enter, and inspect a **Site** be denied access for more than twenty-four (24) hours, other than when the **Authority** deems such a delay appropriate under Section 5.04, the **Utility** shall be assessed the same fees as on the same schedule as described in Section 6.03.

ARTICLE VI.
REQUIRED REPORTS

Section 6.01 REQUIRED REPORTS. The **Utility** shall prepare any reports, analysis, plans, cost estimates, or other information and materials within the scope identified in a **Task Order** pertaining to the utility infrastructure, the **Utility Relocation Project**, or the **Project**, as requested by the **Authority**.

Section 6.02 DEADLINES. All reports, analysis, plans, cost estimates, and other information and materials requested by the **Authority** shall be provided before December 31, 2026, and/or identified in a **Task Order** pertaining to the **Utility** infrastructure, the **Utility Relocation Project**, or the **Project**.

Section 6.03 FAILURE TO TIMELY PRODUCE. Should the **Utility** fail to produce any reports, analysis, plans, cost estimates, or other information and materials requested of them by the **Authority**, for any reason other than the **Authority's** delay in requesting such information and materials, and such failure results in an unreasonable delay of **Utility Adjustment Construction Work**, the **Utility** may be assessed a fee of five hundred dollars ($500) for each day the requested information is past due.

Section 6.04 APPEAL OF FEES ASSESSED. Within thirty (30) days of submitting requested information after the due date, the **Utility** may appeal the assessment of fees provided for in Section 6.03, by submitting a written appeal to the **Authority**. Within thirty (30) days of submission of a written appeal of assessed fees explaining the reasons for failure and other mitigating factors for consideration in determining whether or not to waive the fee, the **Authority** shall, in Good Faith and commercially reasonable discretion, approve or deny the appeal of assessed fees.

ARTICLE VII.
PERFORMANCE AND CONSTRUCTION

Section 7.01 UTILITY ADJUSTMENT DESIGN WORK. The **Utility** shall be responsible for the completion of all **Utility Adjustment Design Work**. The **Utility** shall complete all **Utility Adjustment Design Work** prior to February 28, 2027, or such later date as specified in a **Task Order** pertaining to the utility infrastructure, the **Utility Relocation Project**, or the **Project**, provided to **Utility** by the **Authority**.

Section 7.02 UTILITY ADJUSTMENT CONSTRUCTION WORK. The Utility Adjustment Construction Work shall be as follows:

a. The **Utility** shall be responsible for the completion of all **Utility Adjustment Construction Work**. The **Utility** shall complete all **Utility Adjustment Construction Work** prior to February 28, 2027, or such later date as specified in a **Task Order** for such work.

b. If a portion of the **Utility Adjustment Construction Work** is outside of the **Project Property**, the **Utility** shall be responsible for that portion of the **Utility Adjustment Construction Work**. The **Utility** shall meet the requirements of

federal law in regard to any **Work** contracted out to third parties, for which the **Authority** will reimburse the **Utility**.

Section 7.03 ADDITIONAL RIGHT-OF-WAY OUTSIDE THE PROJECT FOOTPRINT. Should the **Utility** require additional right-of-way to complete the **Utility Relocation Project**, the **Utility** shall notify the **Authority** of said needs as soon as reasonably possible after discovering the need. The **Authority** shall use its **Best Efforts** to acquire the necessary right-of-way but shall not be responsible for any damages related to time delays associated with the acquisition of additional right-of-way needed to accommodate **Betterments**; provided, however, that **Utility** shall likewise not be liable to **Authority** for any damages related to time delays associated with the acquisition of additional right-of-way which are determined to be necessary in connection with any work required by the **Authority** pursuant to the terms of this Agreement. In the event the **Utility Relocation Project** directly or indirectly causes the **Utility** to acquire additional property interests, the **Utility** shall consult with the **Authority** prior to determining the price at which they will offer to purchase said property interests. The **Utility** will only offer to purchase additional property interests at a price consented to by the **Authority**.

Section 7.04 TECHNICAL SPECIFICATIONS. The **Utility Relocation Project** must be designed in accordance with the **Fargo-Moorhead Metropolitan ("FMM") Area Southern Embankment – MFR-023, Utility Guidelines for the Southern Embankment and References** ("MFR-023") which is hereby incorporated by reference and attached as **Exhibit C** to this **Agreement**. The requirements set forth in **MFR-023** shall only apply to **Utility Adjustment Work** within the **SEAI**. All **Utility Adjustment Work** in the **UMA** shall be conducted in accordance with Section 7.05 of this **Agreement**.

Section 7.05 COORDINATION FOR UTILITY ADJUSTMENT IN THE UMA. All **Utility Adjustment Work** in the **UMA** shall be designed, constructed, and completed in accordance with federal, state, and local regulations and guidelines. In the event **Utility Adjustment Work** shall be completed in the **UMA**, the **Utility** will work in conjunction with the **Authority**, in **Good Faith**, to design and submit a **Utility Adjustment** plan for the **Authority** to review, comment and approve.

Section 7.06 PROPOSALS AND PLANS. Anytime following execution of this **Agreement**, the **Utility** may submit to the **Authority**, for each **Utility Adjustment**, a **Preliminary Design Submittal**, a **Final Design Submittal**, and a **Post Construction Submittal** for review, comment, and approval by the **Authority** as defined and at the specific timelines specified in **MFR-023**.

(a) Preliminary Design Submittal. The **Utility** shall complete a **Preliminary Design Submittal** to a minimum of approximately thirty-five percent (35%) level of design completion and define the basis of design for all aspects of each **Utility Adjustment** of the **Utility Relocation Project**. The **Preliminary Design Submittal** shall include calculations demonstrating that the proposed configuration meets and satisfies the technical requirements contained herein. The **Preliminary Design Submittal** shall also provide sufficient detail to demonstrate compliance with all design and construction requirements as described in **MFR-023**. The **Preliminary Design Submittal** shall include, at a minimum, sketches

and/or relocation plans, text defining the general proposed plan, and a scoping estimate of construction costs.

(b) Final Design Submittal. The **Utility** shall complete a **Final Design Submittal** including, but not limited to, fully developed design and relocation plan, drawings, specifications, and all other supporting information, design documentation, etc. The **Final Design Submittal** shall also contain complete applicable technical specifications. In addition to the aforementioned information, the **Final Design Submittal** shall include fully developed design and relocation plans, drawings, specifications, design documentation including calculations for the expected volume of grout needed to fill the annular spaces and all other supporting information, design documentation, and a final estimate of construction costs. The **Final Design Submittal** shall be utilized to develop individual **Task Orders** for consideration and approval by the **Authority** prior to completion of the **Utility Adjustment Work**.

(c) Post Construction Submittal. The **Utility**, in coordination with the **NFS** shall complete and provide a **Post Construction Submittal**. The **Utility** acknowledges and agrees that **Post Construction Submittals** shall be conducted in accordance with the **MFR-023**. The **Post Construction Submittal** shall include, but is not limited to:

1. Acceptance testing documentation and inspection records, including standard proctor and field moisture density results.

2. Pipe inspection schedule and maintenance plan for future recurring inspections.

3. Design documentation that includes calculations for the expected volume of grout needed to fill the annular space.

4. Post-Construction Report that includes the amount that the expected amount of grout was used for filling the annular space.

5. As-Built Drawings: Submit As-Built drawings for the complete utility line relocation showing complete detail, including trench dimensions, pipe profile, pipe alignment, valve locations, connection box locations, manholes and all other pertinent as-built information.

6. As-Built Surveys.

(d) Review. The **Authority** shall complete a full review of each submittal and provide comments and/or approval.

1. The **Authority's** review of submittals shall be restricted to a determination of whether the submittal complies with the specifications and requirements set forth in this **Agreement**.

2. The **Authority** shall complete a full review and provide comments on submittals within twenty (20) **Business Days** of the date on which the **Authority** receives a full and complete submittal. Should the **Authority** determine that a submittal is not in compliance with the terms and specifications provided in this **Agreement**, and the **Utility** resubmits a previously submitted submittal, the **Authority** shall review the submittal and respond within ten (10) **Business Days**. The **Authority's** review of the re-submittal shall be limited to the portions of the initial submittal deemed insufficient as well as any other portions of the submittal which have been amended or added since the initial submission. In the event that the **Authority** does not provide comments within the period prescribed by this **Agreement**, the **Utility** shall provide written notice of the failure to respond. If the **Authority** does not respond within five (5) **Business Days** of receiving written notification, the submittal shall be deemed approved.

Section 7.07 REQUIREMENT OF APPROVAL. No **Utility Adjustment Construction Work** may begin until the **Authority** approves the **Final Design Submittal**.

Section 7.08 SHOP DRAWING AND SAMPLE SUBMITTALS. The **Utility** shall submit **Shop Drawings** and **Samples** that detail the **Utility Adjustment Construction Work** to be performed by the **Utility** on the **Utility Relocation Project** within the **Project Footprint**. The **Authority** shall review the **Shop Drawings** and **Samples** in accordance with the procedure and timelines in Section 7.06 for the review of submittals.

Section 7.09 ADJUSTMENTS TO THE PROJECT. Should the planned route of the **SEAI** change in a material manner, the **Utility** and the **Authority** shall immediately interface to adjust plans for the **Utility Relocation Project**, as necessary. **Utility** shall not be liable to **Authority** for any damages related to time delays associated with the **Authority's** changes route.

Section 7.10 ADJUSTMENTS TO THE UTILITY ADJUSTMENT WORK. Any changes or modifications to the **Final Design Submittal** during construction that materially affect the performance or construction of the **Utility Adjustment Work** will be subject to written approval by the **Authority**. The **Utility** will submit the proposed changes or modifications to the **Authority** for review and approval. The **Authority** shall review the submittals in accordance with procedure and timelines in Section 7.06. **Utility** infrastructure not required to be **Relocated** prior to the deviation from the **Final Design Submittal**, which need to be **Relocated** after deviation from the **Final Design Submittal** shall not be treated as **Undisclosed Prior Property Interests** for purposes of assigning responsibility for costs.

Section 7.11 INSPECTION. The **Utility** shall be responsible for inspection of all **Utility Adjustment Construction Work**.

Section 7.12 UTILITY COMPLETION. Within ten (10) **Business Days** of the anticipated date for **Utility Adjustment Completion**, the **Utility** and the **Authority** will schedule a final inspection, whereby the **Utility** shall be responsible for holding an inspection of the **Utility's** portion of **Utility Adjustment Construction Work** to determine whether the **Utility Adjustment** meets the **Post Construction Submittal** and any material changes or modifications made per Sections 7.09 and 7.10. If the **Authority** finds the construction is not in conformance

with the **Post Construction Submittal** or any approved material changes or modifications, the **Authority** will notify the **Utility** of such fact and the **Utility** will correct such nonconformance in the construction work and re-notify for inspection. Once the **Authority** finds the **Utility Adjustment** has reached **Utility Adjustment Completion**, the **Authority** will provide a certificate of **Utility Adjustment Completion**.

Section 7.13 THIRD PARTY CONTRACTORS. Should the **Utility** engage any third-party contractor to fulfill, contribute to, or otherwise act in regard to an obligation assigned to **Utility** in this **Agreement**, the **Utility** shall abide by all restrictions and requirements provided for in Article XIII and as provided in the federal lobbying restrictions which is attached as **Exhibit D** to this **Agreement**.

Section 7.14 INVOICING REQUIREMENTS. All invoices provided to the **Authority** pursuant to or arising from this **Agreement** shall comply with invoicing requirements provided in the **Authority** invoicing requirements which is as attached as **Exhibit E** to this **Agreement**.

ARTICLE VIII.
PAYMENT OF COSTS

Section 8.01 NECESSITY TO KEEP COSTS LOW. The **Utility** and the **Authority** each recognize the need to minimize the cost of the **Utility Relocation Project**, while seeking to maintain the same quality of service to the **Utility's** customer. The **Utility** and the **Authority** shall be diligent in keeping costs as low as reasonably possible.

Section 8.02 GENERALLY. The **Authority** shall pay all reasonable costs of the **Utility Relocation Project** approved under Section VII and actually incurred, whether those costs are incurred by the **Utility** or the **Authority**, excluding the **Utility's** internal costs.

Section 8.03 REPORTING OF COSTS. Upon completion of the **Utility Relocation Project**, the **Utility** shall submit a detailed, itemized report of the costs and expenses of the **Utility Relocation Project** to the **Authority** for review.

Section 8.04 REJECTION OF COSTS. The **Authority** may reject reported costs and expenses to the extent that it deems any specific costs or expenses are unreasonable, as determined in **Good Faith** in **Authority's** commercially reasonable discretion. Notice of rejection of any costs or expenses must be provided to the **Utility** in writing, which notice shall contain a detailed explanation of the **Authority's** reason for rejecting such costs or expenses.

Section 8.05 APPEAL OF A DECISION TO REJECT COSTS. The **Utility** may appeal a decision rejecting any cost by providing the **Authority** written notice of the appeal and justification for its expenses within twenty (20) days of its receipt of the rejection notice. **Authority** shall respond to **Utility's** written notice of appeal within twenty (20) days of its receipt of the same.

Section 8.06 PAYMENT OF ACCEPTED COSTS. Within thirty (30) days of the determination of the **Authority's** full liability to the **Utility**, the **Authority** shall issue a single, full payment of the amount owed to the **Utility**.

Section 8.07 BETTERMENTS. In no situation shall any **Party** other than the **Utility** be responsible for costs and expenses of **Betterments** installed during the **Utility Relocation Project**.

ARTICLE IX.
FUTURE RIGHTS AND RESPONSIBILITIES

Section 9.01 RIGHT OF WAY. Should the **Authority** deem it necessary for the purpose of the **Utility Relocation Project**, the **Authority** shall grant the **Utility** a right-of-way below, above, and across the **Project Footprint** so the **Utility** can properly maintain its facilities in the right-of-way, subject to the following restrictions and obligations:

a. Coordination with USACE. In the event the **Utility** deems it necessary to perform **Utility Adjustment Work**, within the right-of-way, beyond operation and maintenance for the **Utility Relocation Project**, **Utility** shall be responsible for coordination with the **USACE** to obtain appropriate review and approval.

b. Maintenance of Utility Property. Following completion of the **Utility Relocation Project**, the **Utility** shall be responsible for all maintenance of **Utility** property and associated infrastructure. The **NFS** and **Utility** shall be responsible for preparing an operation and maintenance agreement that sets forth the roles and responsibility of each **Party**. The **Utility** shall be responsible for preparing a maintenance and abandonment plan for all utilities located within the work limits of the **SEAI** and/or **UMA**. The **Utility** acknowledges and agrees that all maintenance of the **Utility** property and associated infrastructure shall be conducted in accordance with the **MFR-023**.

c. Post Construction Access. Following completion of the **Utility Relocation Project**, the **Utility** shall provide the **Authority** with seven (7) days' written notice of any maintenance it intends to do within the **Project Footprint**. Notwithstanding the foregoing, **Authority** acknowledges and agrees that no advance written notice shall be required from **Utility** prior to maintenance work conducted in emergency situations, as determined by **Utility** in **Utility's** reasonable discretion.

d. Approval for Ground Disturbing Maintenance or Repairs. Subject to the exception for emergency situations stated in subsection (c) above, the **Utility** must submit and obtain approval for any and all plans for maintenance or repair that requires the ground within the **Project Footprint** to be disturbed, from the **Authority**.

e. Clean Up. The **Utility** shall ensure that after any maintenance or repairs to **Utility** property, the ground within the **Project Footprint** is returned as nearly as practicable to the state in which it existed prior to the maintenance or repair that caused the ground within the **Project Footprint** to be disturbed.

f. Intentionally omitted.

g. Intentionally omitted.

h. Damage to the SEAI or UMA. Should **Utility** property malfunction, deconstruct, or otherwise cause damage to the **SEAI** and/or the **UMA**, the **Utility** shall take immediate action to stop on-going damage to the **SEAI** and/or the **UMA** and will consult with the **Authority** on how to repair all damage that occurs.

i. Abandonment. Should the **Utility** abandon or remove a utility line within the easement and fail to replace the line within three (3) years of removal, the **Utility** shall forfeit and extinguish said easement.

Section 9.02 USE OF EXISTING EASEMENT. In the event **Utility** property is **Relocated** within the **Utility's** currently existing easement or right-of-way, the **Utility** shall be bound to exercise its rights under said easement, subject to the requirements and obligations contained in this Article. The requirements of this Article shall survive so long as the **Utility** has property located within the **Project Footprint**.

Section 9.03 RECORD KEEPING. The **Utility** shall maintain or cause to be maintained (by way of contract and enforcement of such contract) a complete set of records detailing all costs it incurs in the **Utility Relocation Project**, in accordance with the recordkeeping and audit requirements of this **Agreement** and the laws of **North Dakota**.

Section 9.04 FUTURE PERMITS. Should the **Utility** file a formal permit application pertaining to the **Utility** line **Relocated** pursuant to this **Agreement** with the **Authority** after the **Effective Date**, the **Authority** shall grant, at no cost to the **Utility**, the permit application so long as the permit application meets all reasonable requirements listed in the instructions to said permit application and the proposed crossing would not unreasonably risk harm to the **SEAI** or the **UMA** or interfere with other facilities already contained within the **Project Footprint**, as reasonably determined, in **Good Faith**, by the **Authority**. In addition to the permit application granted by the **Authority**, **Utility** shall be responsible for obtaining all other permits necessary and required by the **USACE**. Should an existing **Utility** line be modified in the future, the **Authority**, in its sole discretion, shall determine whether the modification is allowable under a previously existing permit or whether the modification is significant enough in its nature or effect to require the **Utility** to apply for a new permit.

ARTICLE X.
DISPUTES WITH CONTRACTORS AND OTHER THIRD PARTIES

Section 10.01 COORDINATION. The **Parties** shall coordinate with respect to any dispute with third parties. Such coordination shall include any potential or ongoing litigation.

ARTICLE XI.
DISPUTES AMONG THE UTILITY AND THE METRO FLOOD DIVERSION AUTHORITY

Section 11.01 INTENT AND PROCEDURE. The **Utility** and the **Authority** shall use their **Best Efforts** to ensure that the provisions of this **Agreement** are fulfilled. The **Parties** agree to act in **Good Faith** to undertake resolution of disputes in an equitable and timely manner and in accordance with the provisions of this **Agreement**. If disputes cannot be resolved informally by

the **Parties** or under other, situation-specific dispute resolution mechanisms contained herein, the following procedure shall be used.

Section 11.02 PROCEDURE TO COMMENCE DISPUTE RESOLUTION PROCESS. The **Parties** agree that in the event of an alleged breach of any of the terms of this **Agreement**, the **Party** making such allegation shall, except as provided in Section 13.01 (Notices) of this **Agreement**, provide thirty (30) days written notice to the other **Party** of the alleged breach. The written notice shall contain reasonable description of the underlying facts and an explanation of why the **Party** providing notice believes those facts constitute a breach. Following transmittal of the notice, the **Party** alleged to have caused the breach shall be given a reasonable time (as provided in Section 12.03 of this **Agreement**), not less than ten (10) days to correct or remedy the alleged breach, to meet and confer with the other **Party**, and/or to participate in mediation with the other **Party** prior to initiating any litigation, arbitration, or any administrative proceeding, unless the alleged breach has the potential to cause immediate and irreparable harm, in which case the **Party** alleging the harm may initiate litigation prior to complying with the provisions of this Section 11.02 while, at the same time, following the procedures set forth in Sections 11.01 and 13.01 of this **Agreement** as applicable.

Section 11.03 TIME TO CORRECT. The reasonableness of the time afforded to the **Party** alleged to have breached this **Agreement** pursuant to Section 11.02 of this **Agreement** to cure the alleged breach and engage in dispute resolution processes shall be determined by considering the circumstances, including the potential harm, injury, or damages that are or may result from the alleged breach and the extent to which the harm, injury, or damages may worsen with the passage of time.

Section 11.04 MEDIATION. If there is a failure between the **Parties** to resolve a dispute on their own, the **Parties** shall first attempt to mediate the dispute. The **Parties** shall agree upon a single mediator or, if they cannot agree, shall obtain a list of court-appointed mediators from the Cass County District Court Administrator, and select a mediator by alternately striking names until one remains. The **Authority** shall strike the first name, followed by the **Utility**, in that recurring order until one name remains.

Section 11.05 ARBITRATION. If there is a failure between the **Parties** to resolve a dispute on their own, the **Parties** shall first attempt to arbitrate the dispute. The **Parties** shall agree upon a single arbitrator, that is mutually agreeable to the **Parties**. Judgment on the award rendered by the arbitrator may be entered in any court having jurisdiction thereof.

Section 11.06 Intentionally omitted.

Section 11.07 LITIGATION IF DISPUTE NOT RESOLVED. If the dispute is not resolved within thirty (30) days after the end of mediation proceedings, the **Parties** may litigate the matter.

Section 11.08 LEGAL FEES. Each **Party** will be responsible for their own attorney's fees in connection with a dispute under this Article.

Section 11.09 WAIVER OF JURY TRIAL. THE **PARTIES** HEREBY KNOWINGLY, IRREVOCABLY, VOLUNTARILY, AND INTENTIONALLY WAIVE ANY RIGHTS THAT ANY MAY HAVE TO A TRIAL BY JURY WITH RESPECT TO ANY ACTION, PROCEEDING, COUNTERCLAIM, OR DEFENSE BASED ON THIS **AGREEMENT**, OR ARISING OUT OF, UNDER, OR IN ANY CONNECTION WITH THIS **AGREEMENT**, OR WITH RESPECT TO ANY COURSE OF CONDUCT, COURSE OF DEALING, STATEMENTS (WHETHER ORAL OR WRITTEN), OR ACTIONS OF ANY PARTY HERETO RELATING TO THIS **AGREEMENT**. THIS PROVISION IS A MATERIAL INDUCEMENT FOR ALL MEMBER ENTITIES ENTERING INTO THIS **AGREEMENT**. THIS PROVISION APPLIES ONLY TO SUITS BETWEEN THE **UTILITY** AND THE **AUTHORITY** ARISING OUT OF OR RELATED TO THIS **AGREEMENT** AND DOES NOT APPLY TO THIRD-PARTY CLAIMS OR SUITS BY OR ON BEHALF OF THE **PARTIES** FOR **PROJECT PROPERTY** ACQUISITION AND/OR CONSTRUCTION CONTRACT CLAIMS AND DEFENSES.

ARTICLE XII.
USE OF EMINENT DOMAIN

Section 12.01 EMINENT DOMAIN. Nothing in this **Agreement** shall be construed as limiting the **Authority**, or its **Member Entities'** ability to exercise its powers of eminent domain.

Section 12.02 NULLIFICATION BY EMINENT DOMAIN. Should the **Authority** initiate eminent domain proceedings to accomplish the goals of the **Utility Relocation Project**, the terms of the **Agreement** shall be null and void at the option of the **Authority**.

Section 12.03 NULLIFICATION AFTER COSTS INCURRED. Should the terms of this **Agreement** be nullified under Section 12.02, after plans and proposals described in Section VII have been approved as required by Article VII, the **Utility** shall, within thirty (30) days of being served with notice of the eminent domain proceeding, submit a report of its costs to the **Authority** in the same manner it would have submitted a report of costs pursuant to Article VII had the **Utility Relocation Project** been completed.

ARTICLE XIII.
MISCELLANEOUS

Section 13.01 NOTICE. All notices under the **Agreement** will be in writing and: (a) delivered personally; (b) sent by certified mail, return receipt requested; (c) sent by a recognized overnight mail or courier service, with deliver receipt requested; or (d) sent by facsimile or email communication followed by a hard copy and with receipt confirmed by telephone or return receipt (in the case of email communication), to the following addresses:

a. All notices to the **Authority**, including **Project** correspondence, submittals, and samples, will be marked as regarding the **Project** and will be delivered to the following address or as otherwise directed by the **Authority's** authorized representative:

Jacobs Engineering Group, Inc.
64 4th Street North, Suite 300
Fargo, North Dakota 58102

b. All legal notices to the **Authority**, in addition to being provided to the **Authority's** representative as provided above, will also be provided to the **Executive Director** at the following address or as otherwise directed by the **Authority's** representative:

Metro Flood Diversion Authority
Attn: Executive Director
207 4th Street North, Suite A
Fargo, North Dakota 58102

and

APInvoicesFMDiv@jacobs.com
PaulsenJ@FMDiversion.gov

c. All notices to the **Utility** will be marked as regarding the **Project** and will be delivered to the following address or as otherwise directed by the **Utility's** authorized representative:

Minnesota Power
Attn: Dean Harrison and Dan Aagenes
30 W. Superior Street
Duluth, MN 55802
Email: dharrison@mnpower.com; daagenes@mnpower.com

d. Notices will be deemed received when actually received in the office of the addressee (or by the addressee if personally delivered) or when delivery is refused, as shown on the receipt of the U.S. Postal Service, private courier, or other person making the delivery. Notwithstanding the foregoing, notices sent by facsimile after 4:00 p.m. Central Time and all other notices received after 5:00 p.m. Central Time will be deemed received on the first **Business Day** following delivery.

Section 13.02 ASSIGNMENT. Neither **Party** may transfer or assign this **Agreement**, nor any rights or obligations under this **Agreement**, without the express written consent of the other **Party**. Each **Party** shall only be permitted to transfer or assign rights or obligations under this **Agreement** by giving thirty (30) days' written notice pursuant to Section 13.01 to the other **Party** of its intent to transfer or assign.

Section 13.03 WORKERS' COMPENSATION. Each **Party** shall be responsible for injuries or deaths of its own personnel. Each **Party** will maintain workers' compensation insurance or self-insurance coverage, covering its own personnel while they are providing assistance pursuant to this **Agreement**. Notwithstanding any other provision of this **Agreement**, each **Party** waives the right to pursue a legal action against one of the other **Parties** for any workers' compensation

benefits paid to its own employee or volunteer or their dependents, even if the injuries are caused wholly or partially by the negligence of any other **Party** or its officers, employees, or volunteers.

Section 13.04 INSURANCE. The **Utility** shall list the **Authority** as additional insureds on any insurance policy obtained in connection with the **Utility Relocation Project**. No **Utility Adjustment Work** may be done until a certificate of insurance listing the aforementioned entities as additional insureds is produced. An additional insured shall be given notice at least thirty (30) days before an insurance policy on which it is an additional insured is canceled or allowed to expire. In the event that the policy is terminated for any reason and notice has not been previously given to the additional insureds, the formerly insured shall give notice to the additional insureds as soon as is reasonably possible.

Section 13.05 INDEMNIFICATION. The **Utility** shall indemnify and hold harmless the **Authority**, its **Member Entities**, and directors, officers, employees, and agents harmless against any and all allegations, claims, actions, suits, demands, damages, liabilities, obligations, losses, settlements, judgments, costs and expenses (including attorney's fees) (collectively "**Claims**"), which arise out of, relate to or result from any act or omission of the **Utility** or failure of **Utility's** facilities or property except to the extent such **Claims** arise out of the negligence or willful misconduct of the **Authority**, its **Member Entities**, directors, officers, employees and agents.

Section 13.06 RELATIONSHIPS CREATED. The **Parties** agree this **Agreement** does not create any agency, partnership, joint venture, or any other relationship between the **Parties**.

Section 13.07 GOVERNING LAW. This **Agreement** shall be controlled by the laws of the **State of North Dakota**. Any action brought as a result of any claim, demand, or cause of action arising under the terms of this **Agreement** shall be venued in **Cass County** in the **State of North Dakota**, and the **Parties** waive any objection to personal jurisdiction.

Section 13.08 CONFLICT. In the event of a conflict between the **Parties** pertaining to the terms and conditions of this **Agreement**, this **Agreement** shall control and govern the relocation of **Utility** infrastructure, lines, and property for purposes of the **SEAI** and the **UMA**, but not the relocation of **Utility** infrastructure, lines, and property for purposes of the **SWDCAI**.

Section 13.09 SEVERABILITY. Each provision, section, sentence, clause, phrase, and word of this **Agreement** is intended to be severable. If any provision, section, sentence, clause, phrase, and word hereof is held by a court with jurisdiction to be illegal or invalid for any reason whatsoever, such illegality or invalidity shall not affect the validity of the remainder of this **Agreement**.

Section 13.10 MODIFICATIONS. Any modifications or amendments to this **Agreement** must be in writing and signed by both **Parties** to this **Agreement**.

Section 13.11 BINDING EFFECT. This **Agreement** shall be binding upon and inure to the benefit of the **Parties** hereto and their respective personal representatives, successors, and assigns.

Section 13.12 REPRESENTATION. The **Parties**, having been represented by counsel or having waived the right to counsel, have carefully read and understand the contents of this **Agreement**, and agree they have not been influenced by any representations or statements made by any other parties.

Section 13.13 HEADINGS. Headings in this **Agreement** are for convenience only and will not be used to interpret or construe its provisions.

Section 13.14 COUNTERPARTS. This **Agreement** may be executed in counterparts, each of which shall be deemed to be an original but all of which taken together shall constitute one and the same agreement and shall become effective when one or more counterparts have been signed by each of the **Parties** and delivered to the other **Party**.

Section 13.15 REPRESENTATION OF AUTHORITY. Each **Party** signing this **Agreement** represents and warrants that he or she is duly authorized and has legal capacity to execute and deliver this **Agreement** and that the **Agreement** is a valid and legal agreement binding on such **Party** and enforceable in accordance with its terms.

Section 13.16 FEES. Subject to the limitations expressly provided in this **Agreement**, the fees provided for herein shall not be interpreted or deemed to be the **Authority's** sole source of recovery for damages in any way arising from or related to **Utility's** delay, actions, or failure to act. Subject to the limitations expressly provided in this **Agreement**, the **Authority** shall have all remedies available to it at law in addition to any fees paid to the **Authority** by **Utility** pursuant to this **Agreement**.

Section 13.17 ELECTRONIC SIGNATURES. The **Parties** acknowledge and agree that this **Agreement** may be executed by electronic signature, which shall be considered an original signature for all purposes and shall have the same force and effect as an original signature.

Section 13.18 FEDERAL LOBBYING RESTRICTIONS. Recipients of federal financial assistance may not pay any person for influencing or attempting to influence any officer or employee of a federal agency, member of **Congress**, an officer or employee of **Congress**, or any employee of a member of **Congress** with respect to the award, continuation, renewal, amendment, or modification of a federal grant, loan, or contract. These requirements are implemented for **U.S. EPA** in 40 **CFR** Part 34, which also describes types of activities, such as legislative liaison activities and professional and technical services, which are not subject to this prohibition. Upon award of this contract, **Utility** shall complete and submit to the **Authority** the certification and disclosure forms in Appendix A and Appendix B to 40 **CFR** Part 34, which are attached as **Exhibit D** to this **Agreement**. **Utility** shall also require all subcontractors and suppliers of any tier awarded a subcontract over $100,000 to similarly complete and submit the certification and disclosure forms pursuant to the process set forth in 40 **CFR** 34.110.

Section 13.19 DEBARMENT AND SUSPENSION. **Utility** certifies that it will not knowingly enter into a contract with anyone who is ineligible under the 40 **CFR** Part 32 to participate in the **Project**. Suspension and debarment information can be accessed at http://www.sam.gov. **Utility** represents and warrants that it has or will include a term or conditions requiring compliance with this provision in all of its subcontracts under this **Agreement**. Upon award of this contract,

Utility shall complete and submit to the **Authority**, the federal certification form regarding debarment and suspension, which is attached as **Exhibit D** to this **Agreement**.

Section 13.20 DAVIS-BACON ACT AND OTHER LABOR LAWS. **Utility** shall comply with the following federal labor requirements:

a. **Davis-Bacon Act**, which requires the payment of prevailing wage rates to all laborers and mechanics on construction projects in excess of $2,000.

b. The **Contract Work Hours and Safety Standards Act**, which requires time and one-half pay for overtime hours worked in excess of forty hours in any workweek.

c. The **Copeland Act** (Anti-Kickback Act), which prohibits employers from inducing an employee to give up any part of compensation to which he or she is entitled.

Section 13.21 CIVIL RIGHTS OBLIGATIONS. The **Utility** shall comply with the following, federal non-discrimination requirements:

a. Title VI of the **Civil Rights Act of 1964**, which prohibits discrimination based on race, color, and national origin, including Limited English Proficiency ("LEP").

b. Section 504 of the **Rehabilitation Act of 1973**, which prohibits discrimination against persons with disabilities.

c. The **Age Discrimination Act of 1975**, which prohibits age discrimination.

d. Section 13 of the **Federal Water Pollution Control Act Amendments of 1972**, which prohibits discrimination on the basis of sex.

e. 40 **CFR** Part 7, as it relates to the foregoing.

f. **Executive Order No. 11246**.

Section 13.22 CERTIFICATION. **Utility** shall complete and submit to the **Authority**, the federal certification form regarding civil rights, which is attached as **Exhibit D** to this **Agreement**.

Section 13.23 TERMINATION. This **Agreement** may be terminated by the **Authority**, at any time and for any reason with three (3) calendar days written notice to the **Utility**; provided, however, that if **Utility** has incurred any expenses for work required under the terms of this **Agreement**, **Authority's** reimbursement obligation for such work shall likewise survive termination of this Agreement.

(Signatures appear on the following pages.)

IN WITNESS WHEREOF, the **Parties** executed this **Agreement** on the date first written above.

AUTHORITY:

Metro Flood Diversion Authority

_____

Michael Redlinger, Co-Executive Director

_____

Robert Wilson, Co-Executive Director

_____

Michelle (Shelly) A. Carlson, Chair

ATTEST:

_____

Dawn Lindblom, Secretary

Execution Version

UTILITY:

Minnesota Power

_____

By:

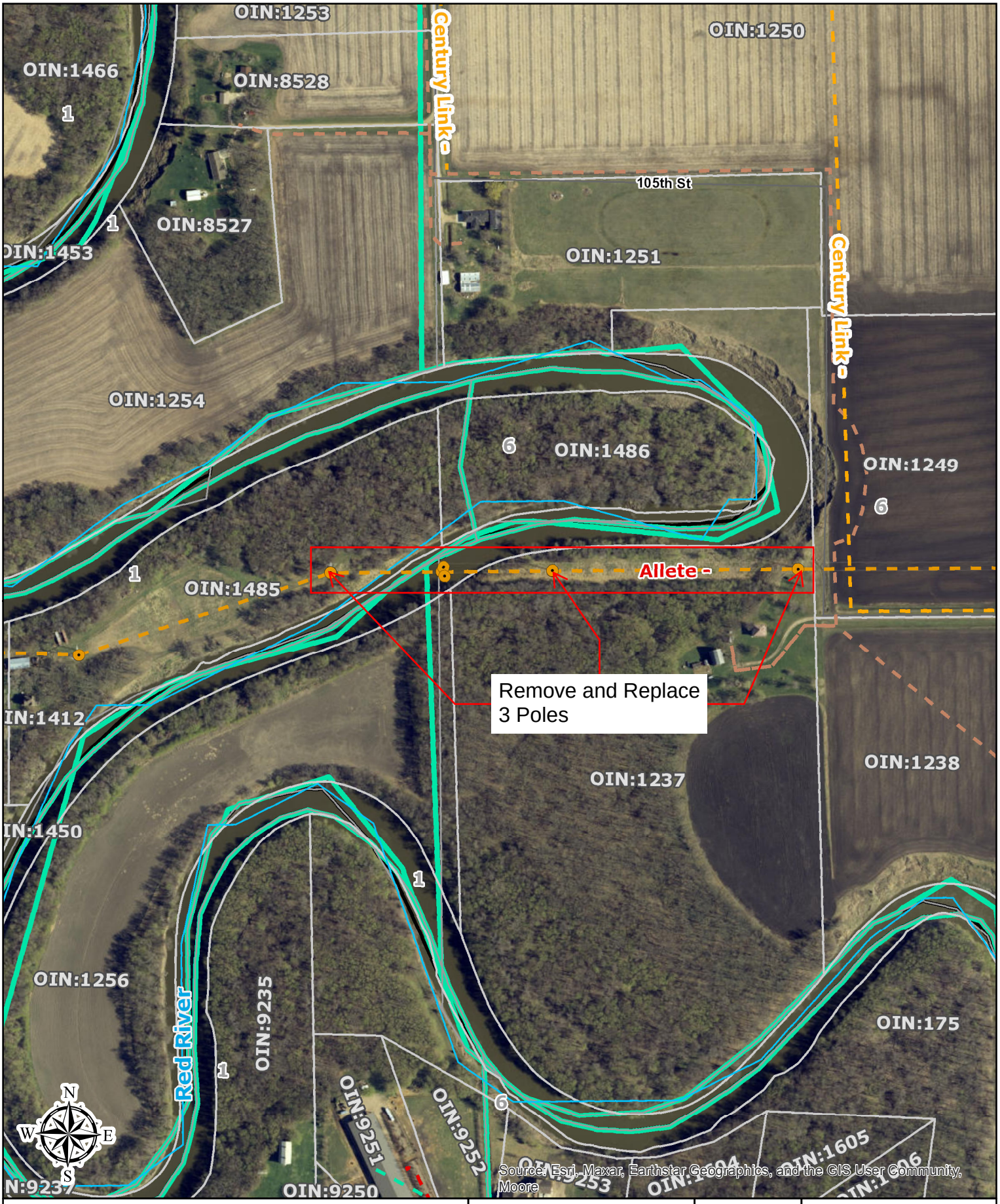
Its: _____

ATTEST:

By: _____

Its: _____

Exhibit A



...

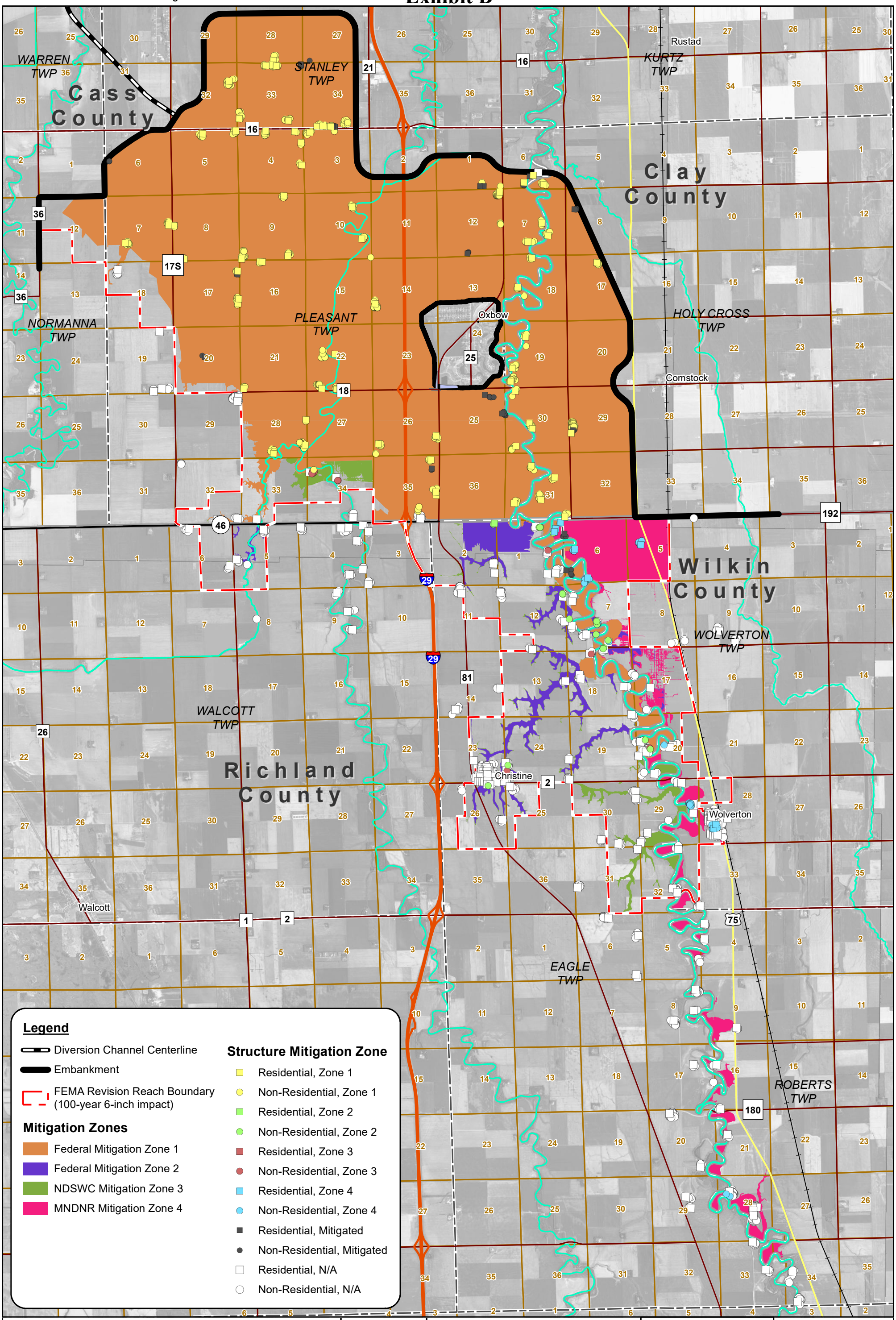
Created By: ... DateCreated: 07-03-2024 Created from WebMap by Moore Engineering

0 145 290 580

Feet

moore engineering, inc.

Exhibit B



FM AREA DIVERSION PROJECT UPSTREAM MITIGATION AREA & MITIGATION ZONES

Created By: KMV Date Created: 06/18/18 Date Saved: 09/15/20 Date Exported: 09/15/20
Plotted By: kyle.volk Parcel Date: Varies Aerial Image: N/A Elevation Data: 2008 Lidar
Horizontal Datum: NAD 1983 StatePlane North Dakota South FIPS 3302 Feet Vertical Datum: NAVD1988
T:\Projects\19100\19116\2020 Mitigation Plan Maps\2020_06_17\CLOMR5_UMA_Zones_Map_2020_09_15_Revision_Reach.mxd

N W E S

0 0.65 1.3 2.6 Miles

Source: CLOMR FEMA Case Number 19-08-0683R

FM AREA DIVERSION PROJECT

Exhibit C

EMVP-EC-D February 10, 2021

MEMORANDUM FOR RECORD

SUBJECT:
Fargo-Moorhead Metropolitan (FMM) Area Southern Embankment - MFR-023, Utility Guidelines for the Southern Embankment

1. REFERENCES

a. USACE. Engineering Manual 1110-2-2902 *Conduits, Culverts and Pipes*. 22 May 2020.

b. USACE. Engineering Pamphlet No. 1110-2-18, *Guidelines for Landscape Planting and Vegetation Management at Levees, Floodwalls, Embankment Dams, and Appurtenant Structures*. 1 May 2019.

c. ANSI/IEEE C2 – National Electric Safety Code.

2. PURPOSE

Requirements for pipelines[1] and other utility lines crossing the dam are primarily defined in References under paragraph 1. As noted in Chapter 2 of Reference 1a, internal erosion accounts for nearly half of all embankment dam failures with many of those failures occurring along pipelines. These potential failure modes are also discussed at length in Chapter 2 of Ref 1a. Understanding how these failures occur and the risks associated with these failures is key in designing the proposed utility crossings and was the basis of this MFR to minimize risks to the dam and allow the dam to perform as intended.

Ideally, all utilities would be relocated around the Fargo-Moorhead Metropolitan Area (FMM) Southern Embankment (SE) Project and would not cross the dam embankment or be placed within the Project work limits. However, given the length of the Project, (21 miles of dam), utilities will need to cross the line of the protection. Therefore, these guidelines will aid impacted utility owners and the Non-Federal Sponsor (NFS) in developing an approved utility relocation plan. These guidelines are general; each proposed utility relocation within the SE Project work limits shall be reviewed by the United States Army Corps of Engineers (USACE) on a case-by-case basis.

3. PROJECT DESCRIPTION

The FMM SE Project is a "dry dam" consisting of a 21-mile long earthen dam embankment and three gated structures. The SE Project will be constructed to meet USACE dam safety criteria and is to be built under several contracts spanning multiple years. The three gated structures are located at the inlet to the diversion channel near the intersection of Cass County Road 16 (CR

[1] Conduits, pipes, and culverts that convey fluids or gases, or serve as encasements for utility lines, or intercept seepage.

16) and Cass County Road 17 (CR 17) south of Horace, North Dakota; at the Wild Rice River; and at the Red River of the North. These three structures are referred to as the Diversion Inlet Structure (DIS), Wild Rice River Structure (WRRS), and Red River Structure (RRS), respectively.

4. EXISTING UTILITY REMOVAL AND ABANDONMENT

In general, existing utilities within the SE Project work limits and/or that cross the proposed dam embankment alignment shall be removed and or abandoned prior to the USACE issuing a notice to proceed for an awarded construction contract.

Existing utility lines may remain in place until the relocated utility becomes operational or may be temporarily relocated provided its design is coordinated in line with the USACE design and construction schedule. Temporary utility relocations shall be coordinated with the USACE prior to the SE Project 65% plans and specifications and may be placed within the SE Project work limits.

4.1. Overhead Utilities

In general, overhead utility lines and poles shall be removed from the SE Project work limits by the responsible utility owner prior to construction. Above ground appurtenances, utility pedestals and boxes, or any other utility related infrastructure shall also be removed by the utility owner prior to award of the USACE construction contract. Existing overhead power may be allowed to stay in place based upon approval from the USACE.

4.2. Underground Utilities

Responsible utility companies shall disconnect, cap, and abandon existing underground utility lines located within the SE Project work limits. Abandoned underground utility lines will be removed as necessary by the USACE construction contractor.

Any remaining abandoned underground utility lines, abandoned above ground utility lines, and any related utility infrastructure within the SE Project work limits shall be described and listed with enough detail to include as part of the SE Project 65% plans and specifications ahead of contract award.

5. PROPOSED UTILITY CROSSINGS OF THE DAM EMBANKMENT

The paragraphs below provide the general guidance for utilities crossing the FMM SE Project.

5.1. Alignment and Utility Corridor

Utility owners shall develop a plan for relocation of utilities (electric, water, sewer, communication, gas, etc.) that cross or lie within the SE Project work limits. Utility companies shall submit proposed utility relocation plans to the NFS and USACE for review and comment

prior to utility relocation construction. The number of utility crossing locations shall be minimized and the use of utility corridors where multiple utilities cross in the same general location is preferred. Final crossing location and orientation relative to the SE Project alignment shall be approved by the NFS and USACE during SE Project design stages.

Wherever possible, the utilities shall be rerouted to one of the nearest seven proposed utility corridors provided in Table 1 and Figure 1 below.

Table 1: List of Utility Corridors.

ID	Location	Description
1	Diversion Inlet Structure	Shoulder of County Road 16
2	45th Street S	Shoulder of 45th Street S
3	County Road 16	Shoulder of County Road 16
4	Wild Rice River Structure	173rd Ave SE access ramp to Dam
5	Red River Structure	Roadway shoulder of County Road 81
6	Comstock, MN	Roadway shoulder of 160th Ave S (County Road 2)
7	HWY 75 & 100th Street Intersection	Roadway shoulder of U.S. Highway (HWY 75)

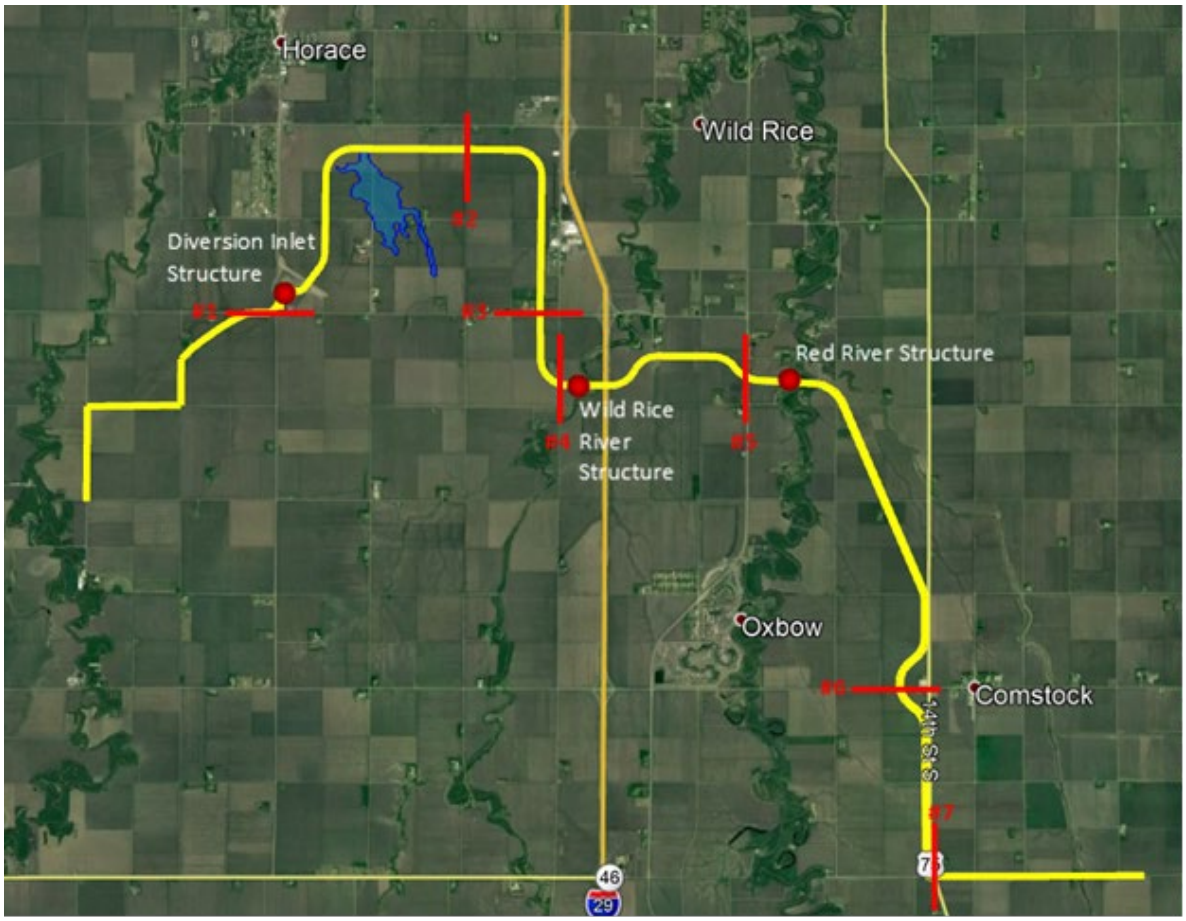


Figure 1: Locations of the utility corridors along the FMM Southern Embankment Project

5.2. Overhead Utilities

Poles, guy wires, and anchors shall be located 25 feet beyond the daylight of the SE Project borrow and local drainage ditches. Overhead work clearance requirements for dam construction shall be determined by Table 232-1 of Ref 1c, and dam embankments shall be considered "road, streets, and other areas subject to truck traffic," as the dam will be regularly traversed for operation, maintenance, repair, rehabilitation, and emergency operations. Clearance distances shall be selected per voltage levels and the type of cable, conductor, or wire. Section 23 and sections C and D of Ref 1c have methods for calculating the required clearances for routing electrical lines with voltages exceeding 22 kV.

5.3. In-Ground Utilities Crossing the Dam Embankment

Utilities crossing the dam embankment shall be designed according to Ref 1a, as well as the guidance provided below. These guidelines apply to the portion of the utility located within the dam embankment footprint and within the SE Project work limits.

5.3.1. Up and Over Dam Embankment Crossing

Proposed utility crossings above the allowable crossing elevation of 925 feet (NAVD88) will be evaluated on a case by case basis, and drawings/calculations shall be submitted to fully document the design. The following are provided as guidelines:

(1) Proposed utility crossings shall be aligned to cross as close to perpendicular as possible to the dam embankment centerline at the approved utility corridor crossing. Variations to the crossing angle may be dictated by field conditions and the location of connecting utilities. If possible, crossings shall be located where the existing ground is at its highest elevation. Final crossing location and orientation relative to the dam embankment alignment shall be approved by the NFS and USACE during SE Project design stages.

(2) In general, non-pipeline utilities (Cable TV, Telecommunications and Underground Power lines) shall cross up and over the top of the dam embankment at an elevation above 925 feet (NAVD88). This elevation includes the 1.5 feet of expected settlement for most of the dam embankment reaches. Calculations are required to show that each utility line has adequate strength/flexibility to withstand the expected loading and settlement.

(3) For pipelines that need to be protected from freezing (e.g. water lines and sanitary sewer force mains), additional dam embankment fill will be required to meet local requirements for 10 feet minimum cover. Earthen fill is the preferred alternative for frost protection, as it is more reliable than insulation.

(4) Selecting the most appropriate pipe material for a specific environment is an essential step in reducing the risk associated with the long-term performance of a pipe. A list of applicable pipe materials by function along with potential concerns for each pipe function, is provided in Table 3-2 in Ref 1a.

(5) Controlled Low-Strength Material (CLSM) backfill must be used to encapsulate pipes through its horizontal alignment when trenched within/through the crest of the dam to reduce the chance of seepage along or into the pipe. See Figure 5-40 of Ref 1a.

For pressurized utilities, the following guidelines also apply:

(6) Pipeline material and joints shall be pressure rated to withstand all fluid pressures that may be encountered. Recommended viable pipe materials by pipe function are listed in Table 3-2 of Ref 1a.

(7) Pipelines shall be evaluated for the need for air-release, air vacuum and combination valves at the crest of the dam embankment. If needed, the valves shall be adequately protected from frost.

(8) Pipe bends shall have appropriately designed thrust restraints. See Section 5.5.13 of Ref 1a.

(9) Calculations are required to show that each utility line has adequate strength and flexibility to withstand the expected loading and settlement.

(10) If manholes are required for access to rapid closure valves and testing access points, watertight sealed manholes shall be located a minimum of 25 feet outside the upstream and downstream dam embankment toes.

5.3.2. Under Dam Embankment Crossing

Utilities crossing under the dam embankment shall be designed according to Ref 1a, as well as the guidance provided below. These crossings will also be evaluated on a case by case basis, and calculations shall be submitted to fully document the design. There are additional factors that must be considered and addressed in a site-specific engineering evaluation before any such crossing would be approved. Chapter 5 of Ref 1a discusses these factors and concerns. Pressure pipelines are of particular concern because of the damage that can occur to the dam embankment if a line fails in the foundation of the dam embankment. The guidelines in Paragraph 5.3.1 above will apply to crossings under the dam embankment as well as the following additional guidelines.

(1) If open-cut methods are utilized, the crown of the pipeline must be at least 3 feet

below the bottom of the dam inspection trench and bottom of borrow/drainage ditches associated with the SE Project. This guideline serves to reduce the chance of damaging the utility during construction and/or during future maintenance activities. Utilities susceptible to freezing shall be located a minimum of 10 feet below the ditches or as required by local code.

(2) If open cut is utilized, the trench shall extend under and 20 feet beyond the proposed dam embankment prism toes. Topsoil shall be stripped from the trench area and set aside separate from the excavated trench material. The utility pipeline will be required to be encased in CLSM (specification attached). The new pipeline shall be placed on supports to allow the CLSM to flow beneath the pipe and completely fill the pipe haunches. See Sections 5.5.7 and 5.5.18.1. of Ref 1a. Supports shall be placed from L/4 to L/5 from the pipe ends, where L is the pipe segment length. See Section 5.5 in Ref 1a for further detail. CLSM shall be placed in the trench to 1 foot above the crown of the pipe. The remaining trench shall be backfilled with compacted impervious fill from material excavated from the trench, excluding topsoil. Fill shall not be placed on any subgrade that is wet, muddy, frozen, containing frost, or covered with snow. Trenches shall be backfilled in maximum 12-inch (uncompacted) layers and compacted to a density of at least 95-percent of the maximum density obtained by standard proctor (ASTM D698). Fill shall be within the limits of 3 percentage points above the optimum and 1 percentage point below the optimum moisture content of the standard proctor as determined by field moisture density tests. Field moisture density tests shall be either by nuclear method (ASTM D6938) or the rubber balloon method (ASTM D2167). Testing frequency shall be at least one test per 250 lineal foot, for each lift.

(3) If horizontal directional drilling is utilized, it shall be accomplished pursuant to Section 5.6 of Ref 1a and the attached "Guidelines for Installation of Utilities Beneath Corps of Engineers Levees Using Horizontal Directional Drilling", June 2002, and the St. Paul District's "Guidance Pertaining to Horizontal Directional Drilling Under a Flood Barrier/Channel." The pipe entry and exit locations (pits) must be located so that they are a distance of at least 20 times the embankment height or 300 feet (whichever is greater) from the embankment centerline.

(4) Utility relocation design shall include watertight sealed manholes on both sides of the dam embankment for access to rapid closure valves (see Section 5.5 below), regular operation and maintenance activities, and to facilitate recurring inspections of pressurized utilities passing under the dam embankment. Watertight sealed manholes shall be located a minimum of 25 feet outside the upstream and downstream embankment toes.

5.4. Casing for Utility Lines

(1) All pressurized utility lines (sewer, water, and gas) crossing under the dam embankment shall be cased. The use of casing pipe should also be considered for other utility crossings.

(2) USACE recommends the use of HDPE or steel pipe for casing pipe material. All casing specifications shall be submitted to USACE for review and comment prior to installation.

(3) In general, if horizontal directional drilling is utilized casing pipe material shall be limited to one that can be joined together continuously, while maintaining sufficient strength to resist the high tensile stresses imposed during the pullback operation.

(4) Casing shall extend a minimum of 20 feet beyond the proposed dam embankment prism toes if open cut method is utilized. If horizontal directional drilling is utilized casing pipe will extend from entry to exit pit.

(5) The annular space between the casing and the carrier pipe must be grouted and sealed under the dam embankment prism and extend a minimum of 20 feet beyond the dam embankment prism toes to reduce the likelihood of future seepage or settlement related issues. The design documentation for the grouting must include calculations for the expected volume of grout needed to fill the annular space.

5.5. Rapid Closure Valves

All pressurized pipelines crossing above or below the dam embankment shall have positive shut-off valves installed on either side of the dam embankment. The purpose of the valves is to provide pipeline isolation in the event of leakage, rupture, repairs, or relocation. All pressurized pipes crossing the dam must be designed in a way that allows rapid closure in the event of a rupture to prevent gas or fluid from escaping within or beneath the dam embankment causing internal erosion; and to prevent backflow of floodwater into the benefitted area. The rapid closure valves shall be located a minimum of 25 feet beyond the toes of the dam embankment. If a utility company wants to relocate valves outside of SE Project limits, the utility company must submit a detailed plan with justification to USACE. USACE will review the plan and provide its decision on whether or not to grant a variance. Final valve type used shall be determined on a case by case basis.

5.6. Non-Pipeline Utility Crossings

Cable TV, Telecommunications and Underground Power lines are typically trenched into the ground at depths ranging from 3 to 4 feet below the ground surface. For non-pipeline utilities that will be relocated up and over the dam embankment, the utilities shall be relocated in the dam embankment above the allowable crossing elevation of 925 feet (NAVD 88).

When crossing underneath the dam embankment, the non-pipeline utility may be horizontally directionally drilled pursuant to Paragraph 5.3.2 (3). Any open annular space in the casing pipe must be grouted or filled, as noted in paragraph 5.4 (5) above.

6. UTILITY RELOCATIONS NOT CROSSING THE DAM EMBANKMENT BUT WITHIN PROJECT WORK LIMTIS

Utility relocations within the SE Project work limits, but not crossing within the dam embankment or located underneath the dam embankment prism, shall be designed to meet all federal, state, and local requirements. Relocations shall be designed to withstand heavy loading from construction equipment and shall meet minimum frost protection depths as required. Consideration shall be given to prevent excavation of the dam embankment if the utility is required to be replaced or repaired. Utilities running parallel to the SE Project alignment must be located a minimum of 25 feet beyond the daylight of the SE Project borrow and local drainage ditches.

Existing utilities running parallel to the SE Project alignment and located within 25 feet of the daylight of the SE Project borrow and local drainage ditches will be evaluated on a case-by-case basis. The NFS and USACE will make a determination if the utility may remain in place.

7. INSPECTIONS

7.1. Acceptance Testing and Inspection

Pipelines crossing the dam embankment will require acceptance testing as described in Section 5.8 of Ref 1a following standards and guidance for pipe testing per Table 5-4 of Ref 1a. USACE requires that each joint be tested hydrostatically to determine whether it exceeds the maximum joint leakage specified by the pipe's applicable ASTM. Utility companies must submit a plan that outlines their proposed testing. Specifications shall be written to require testing after installation.

7.2. Post-Construction Inspection

A post-construction inspection of pipes within the inspection limits of the dam as determined in Section 6.3 of Ref 1a must be performed no sooner than 30 days after completion of the project to assess backfilling, grading, paving, placement of concrete structures, etc. See Section 5.8.3 of Ref 1a.

7.3. Recurring Inspections

Pipes must be inspected, and their conditions assessed on a recurring basis so that any potential impact to the integrity of a USACE dam can be evaluated regularly. Water distribution and sewer force main testing must include in-line inspection, hydrostatic pressure testing, direct assessment or other technology that is demonstrated to provide an equivalent understanding of the condition

of the pipe. Natural gas testing must include internal inspection tools, pressure tests, or direct assessment to address threats of external corrosion, internal corrosion and stress corrosion cracking; or other inspection technology that is demonstrated to provide an equivalent understanding of the condition of the pipe. Description of inspection methods and design of pipeline to accommodate recurring inspections shall be included in the design documentation.

Some third-party pipes/conduits serve as casings for utilities (e.g., electric, fiber optic) and will cross the dam within a larger casing pipe. Neither the utility conduit nor its larger casing pipe will require regular inspections provided these are designed in accordance with Sections 5.4 (4), 5.4 (5) and 5.6 above.

8. RESPONSIBILITIES

Per the Project Partnership Agreement (PPA), the NFS is required to perform relocations, which includes utilities. The NFS is thus responsible for:

(1) Coordination with utility owners impacted by the proposed SE Project.
(2) Development of a schedule to implement the relocations which includes at a minimum design, review, and construction.
(3) Hold coordination meetings as needed during the design of relocations.
(4) Development of draft and final demolition and relocation plans and design documentation that will be submitted to the USACE for review and comment, and inclusion into plans and specifications.
(5) Evaluate USACE comments and coordinate with USACE reviewers to close out comments.
(6) Depending on the type and location of proposed utilities within the Project work limits, some relocations may need to be constructed prior to dam embankment construction. For utility relocations that will need to be completed prior to the dam embankment construction, final approved relocation plans must be submitted to the appropriate USACE design team no later than 30 days prior to the 65% dam embankment design package submittal date.
(7) Utility relocation plans shall be transmitted to the USACE Technical Lead.
(8) Provide construction oversight of utility relocations and abandonments within the Southern Embankment Project footprint. Construction oversight shall be administered by a professional engineer. Construction reporting and documentation shall be in accordance with Section 5.9 of Ref 1a.
(9) Facilitating recurring inspections of pipelines that are within the SE Project work limits. Schedule for recurring inspections must be coordinated with the Utility companies and USACE. All inspection reports shall be submitted to USACE.
(10) Future utility relocations and coordination of new utilities after SE Project completion shall be in accordance with the SE Operations and Maintenance manual and pursuant

to CFR 33 USC 408.

The USACE shall be responsible for:

(1) Participation in coordination meetings.
(2) Incorporating demolition and relocation plans into the dam embankment design packages, if applicable.
(3) Timely review of draft and final demolition and relocation plans during the 65% and 95% dam embankment design packages. These will be reviewed with the dam embankment design packages in accordance with the FMM SE Project review plan.
(4) For utilities to be relocated under the dam embankment prior to its construction, the USACE shall have 14 days to review the utility relocation documents per submittal. All comments shall be submitted in writing to the NFS and be routed through the USACE Technical Lead. Final utility relocation plans will require written approval from the USACE Design Branch chief prior to construction.
(5) Utilize construction reporting and documentation for all utilities in the dam foundation for creation of the foundation report for the Southern Embankment.
(6) Evaluate inspection reports from the NFS to assess the threat the pipe may represent to the structural integrity or operational adequacy of the SE Project, and ensure any recommended actions are communicated to the utility owner through the NFS.

9. DOCUMENTATION REQUIREMENTS

The section below contains the documentation requirements for utilities that are within the SE Project work limits.

9.1. DESIGN SUBMITTAL REQUIREMENTS

The NFS is required to provide submittals of their design documentation, plans, specifications, and all other supporting information for all utility relocations to the USACE for review and acceptance. At a minimum, two submittals shall be provided to the USACE for review. The first review will be a draft submittal that includes, at a minimum, sketches or relocation plans and text defining the general proposed plan. This review will be submitted to the USACE after the dam embankment's 35% project review but prior to the 65% review. The final utility submittal will include the fully developed design and relocation plan, drawings, specifications, design documentation including recurring inspection methods and access points as well as calculations for the expected volume of grout needed to fill the annular spaces, and all other supporting information, etc. This will be submitted to the USACE for approval after the SE Project's 95% review, but prior to the SE Project's final sign off. However, for utilities that will be relocated under the dam embankment prior to its construction, NFS and USACE approval must be obtained before the final ROW drawings are completed for the SE Project to ensure

adequate lands are acquired for the project. Coordinate with the Technical Lead to determine the final ROW submittal date.

9.2. MAINTENANCE AND ABANDONMENT PLAN

The NFS and the utility owners shall prepare an operation and maintenance agreement that at a minimum describes the roles and responsibility of each party. Responsible utility owners shall also prepare a maintenance and abandonment plan for all utilities located within the work limits of the SE Project. The plan shall address applicable facility maintenance, periodic valve testing, leakage, repair (if applicable), and abandonment.

9.3. POST CONSTRUCTION SUBMITTAL REQUIREMENTS

The NFS in coordination with the utility owners is required to provide construction reporting to the USACE in accordance with Section 5.9 of Ref 1a and the following:

(1) Acceptance testing documentation and inspection records as described in Section 5.8 of Ref 1a, including standard proctor and field moisture density results.
(2) Pipe inspection schedule and maintenance plan for future recurring inspections.
(3) Design documentation that includes calculations for the expected volume of grout needed to fill the annular space.
(4) Post-Construction Report that shows the actual volume of grout used for filling the annular space. This will include documentation that is quantifiable and verifies that the annular space in the pipe has been filled.
(5) As-Built Drawings: Submit As-Built drawings for the complete utility line relocation showing complete detail, including trench dimensions, pipe profile, pipe alignment, valve locations, connection box locations, manholes and all other pertinent as-built information.
(6) As-Built Surveys (see requirements listed in AS-BUILT REQUIREMENTS paragraph).

10. UTILITY MARKERS

Crossing identification and markings will be required for each utility that is within the SE Project work limits. Color coded fiberglass service line marker posts shall be provided for all underground utilities at each crossing point on both sides of the embankment. Markers (Length 72 in; width 1 in.) shall identify service lines, valves, and underground property. Marker posts shall be located 50 feet from the toe of the dam embankment.

Additionally, all piping shall be provided with tracer wire or other applicable passive marking system to facilitate utility location by field personnel for future maintenance and repair. For trenched pipe, the tracer wire shall be installed in the trench at a bury depth recommended by the

manufacturer. For directionally drilled pipes, tracer wire shall be installed along the as-built pipe alignment at a bury depth recommended by the manufacturer.

Above-ground signing shall be included at each crossing with information including project stationing at pipe crossing, top of pipe elevation (including datum), pipe diameter, products that are carried in the pipe, and pipe owner and/or emergency contact.

11. AS BUILT REQUIREMENTS

As-Built plans and As-Built survey data is required for all relocations within the work limits of the SE Project. As-Built drawings shall be submitted in electronic format (drawing set in PDF format and CAD files in a format compatible with Bentley MicroStation). Survey point data (X, Y, Z, description) shall be submitted in ASCII text format. FGDC-compliant metadata files shall be submitted which describes, in general, when the as-built survey was conducted, who conducted the survey, how it was conducted, and the accuracy of the survey data. As-Built drawings and surveys shall be done in the project spatial reference system:

NAD83 (2011), North Dakota State Plane Coordinate System, South Zone
NAVD 88 (GEOID18)
US Survey Feet

12. CONTACT

Any questions concerning this MFR should be directed to Renee McGarvey, PLA, FMM Technical Lead, St. Paul District.

13. SIGNATURES

CSAJKO.WILLIAM.L.1228659599 Digitally signed by CSAJKO.WILLIAM.L.1228659599 Date: 2021.02.17 08:05:14 -06'00'

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Michael Bart, P.E.
Chief of Engineering and Construction
Engineering and Construction Division

ATTACHMENTS

1. Guidance Pertaining to Horizontal Directional Drilling Under a Flood Barrier/Channel
2. Draft Controlled Low-Strength Material (CLSM) Specification
3. Guidelines for Installation of Utilities Beneath Corps of Engineers Levees Using Horizontal Directional Drilling.

ATTACHMENT 1

Guidance Pertaining to Horizontal Directional Drilling Under a Flood Barrier/Channel

GUIDANCE

Pertaining to

Horizontal Directional Drilling Under a Flood Barrier/Channel

The following information and guidance pertains to horizontal directional drilling (HDD) under an engineered flood barrier (i.e floodwall, levee embankment, diversion channel).

The two primary concerns with horizontal directional drilling (HDD) beneath a levee or floodwall are:

1. Hydrofracturing (drilling fluid pressure exceeding the tensile strength of the soil) the foundation soils beneath the flood barrier during drilling operations.

2. Development of a preferential seepage path along the pipeline/utility after installation.

Generally, the COE would require the following information in the permit application for any utilities installed by HDD that pass beneath a flood barrier.

1. Proposed drill path alignment (both plan and profile views).

2. Location of entry and exit points.

3. Proposed depth of cover.

4. Diameter of the borehole, diameter of pipe and type of pipe to be installed, if used, or diameter of utility.

5. Proposed method to fill annulus.

6. Location, elevations, and clearances of all utility crossings and structures.

Based on our recent experience, we feel comfortable with the following recommendations/guidelines:

- Allow the Contractor to proceed without actively monitoring the drill pressures. Suggest that only fresh drilling mud be used. It may not be necessary to insist on this provision depending on the length of flood barrier to be traversed, however it will be easier to maintain a proper viscosity if clean mud is used.

- If “mud motor” HDD technology is used, hold the density of the drilling fluid as close as possible to 8.4 lbs/gallon (or 45seconds/quart in a Marsh Funnel).

- Bentonite can be used to fill the annulus.

- Generally, depth of burial should be at least 10 feet below grade where the utility passes under the flood barrier.

- Fluid jetting methods should not be used as a means of cutting beneath a flood protection project.

- The Contractor will be responsible for repairing any soil fracturing, drilling fluid reaching the surface, etc. as well as any slope failure resulting from the drilling process. The Contractor should note any spots where fluid loss occurs, and the COE should get a record of the amount of fluid loss as well as the location.

- Prior to commencing, the Contractor should explain their method for maintaining directional control during drilling operations. In other words, how will he/she verify where the bit is horizontally and vertically so that it does not accidentally wander beneath the levee foundation any more than absolutely necessary?

- The Contractor should provide an “as-built” drawing upon completion of the directional drilling and installation of the line. This drawing should include alignment & profile data.

- It should be plainly stated that any foundation or flood barrier damage resulting from the directional drilling will be repaired by the Contractor to City/Gov’t. specifications at Contractor expense.

- The Contractor should be informed that the suspension of the requirement to actively monitor downhole pressures does not relieve them of the ultimate responsibility of leaving the flood barrier foundation in the same condition, as it was before the horizontal drilling procedure was undertaken.

ATTACHMENT 2

Draft Controlled Low-Strength Material (CLSM) Specification

Fargo Moorhead Metro Flood Reduction Project
CLSM Requirements for Utility Relocations

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SECTION 03 22 70.01 13

CONTROLLED LOW-STRENGTH MATERIAL (CLSM)
04/12

PART 1 GENERAL

1.1 REFERENCES

All publications referenced shall be the most current version, edition, standard, latest revision, or reapproval unless otherwise stated. The following publications and standards listed below will be referred to only by the basic designation thereafter, and shall form a part of this specification to the extent indicated by the references thereto:

ASTM INTERNATIONAL (ASTM)

ASTM C 33/C 33M	(2011a) Standard Specification for Concrete Aggregates
ASTM C 94	(2011b) Ready-Mixed Concrete
ASTM C 150	(2011) Standard Specification for Portland Cement
ASTM C 220	(1991; R 2009) Standard Specification for Flat Asbestos-Cement Sheets
ASTM C 618	(2008) Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use as a Mineral Admixture in Portland Cement Concrete
ASTM C 685	(2010) Concrete Made by Volumetric Batching and Continuous Mixing
ASTM C 940	(2010a) Expansion and Bleeding of Freshly Mixed Grouts for Preplaced-Aggregate Concrete in the Laboratory
ASTM D 4832	(2010) Preparation and Testing of Controlled Low Strength Material (CLSM) Test Cylinders
ASTM D 5971	(2007) Standard Practice for Sampling Freshly Mixed Controlled Low-Strength Material
ASTM D 6023	(2007) Standard Test Method for Density (Unit Weight), Yield, Cement Content, and Air Content (Gravimetric) of Controlled Low-Strength Material (CLSM)
ASTM D 6103	(2004) Standard Test Method for Flow Consistency of Controlled Low Strength Material (CLSM)

1.2 DESIGN REQUIREMENTS

Controlled Low-Strength Material (CLSM) mixture proportion shall consist of 100 pounds or less of portland cement plus fly ash per cubic yard; pozzolan; sand; water; and a fluidifier, if required to obtain the required slump. The CLSM fill mixture proportion shall have a flow consistency of more than 8 inches. The flow consistency shall be determined in accordance with ASTM D 6103. CLSM fill shall have a compressive strength of 100 psi at 28 days. The compressive strength of the CLSM shall be determined in accordance with ASTM D 4832 after being made and cured in accordance with ASTM D 4832. The mixture proportions shall be reported in accordance with ASTM C 94. If the CLSM is to be placed using a concrete pump, the mixture proportions shall be designed so that it will not segregate in the pump line under pressure or when there is an interruption in flow.

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Data

On-Site Batching and Mixing

Water Reducing

Concrete Mixture Proportions

The Contractor shall submit manufacturer's literature from suppliers which demonstrates compliance with applicable specifications for all equipment and materials.

SD-07 Schedules

Placing

The methods and equipment for transporting, handling, and depositing the CLSM backfill and CLSM fill shall be submitted to the Contracting Officer prior to the first placement.

SD-08 Statements

Concrete Mixture Proportions

CLSM mixture proportions shall be the responsibility of the Contractor and shall be designed in accordance with the criteria in paragraph DESIGN REQUIREMENTS. Ten days prior to placement of CLSM, the Contractor shall submit to the Contracting Officer the mixture proportions that will produce CLSM of the qualities required. Mixture proportions shall include the dry weights of cementitious material(s); and saturated surface-dry weights of the fine aggregate; the quantities, types, and names of admixtures; and quantity of water per cubic yard of concrete. All materials included in the mixture proportions shall be of the same type and from the same source as will be used on the project.

SD-09 Reports

CLSM Mixture Proportions Tests

Applicable test reports shall be submitted to verify that the CLSM mixture proportions selected will produce CLSM of the quality specified. The results of all tests and inspections conducted at the project site shall be reported informally at the end of each shift and in writing weekly and shall be delivered to the Contracting Officer within 3 days after the end of each weekly reporting period.

SD-13 Certificates

Cement

Cementitious Material will be accepted on the basis of a manufacturer's certificate of compliance.

Aggregates

Aggregates will be accepted on the basis of certificate of compliance that the aggregates meet the requirements of the specifications under which it is furnished.

PART 2 PRODUCTS

2.1 MATERIALS

2.1.1 Ready-Mixed Concrete

Ready-mixed concrete shall conform to ASTM C 94, except as otherwise specified.

2.1.1.1 Volumetric Batching and Continuous Mixing

Volumetric batching and continuous mixing shall conform to ASTM C 685.

2.1.1.2 On-Site Batching and Mixing

The Contractor shall have the option of using an on-site batching and mixing facility. The method of measuring materials, batching operation, and mixer shall be submitted for review by the Contracting Officer. On-site plant shall conform to the requirements of either ASTM C 94 or ASTM C 685.

2.1.2 Portland Cement

Portland Cement shall conform to ASTM C 150, Type I or II, low alkali.

2.1.3 Pozzolan

Pozzolan shall be Class F or C fly ash conforming to ASTM C 618.

2.1.4 Sand

Sand shall meet the requirements of fine aggregate of ASTM C 33/C 33M.

2.1.5 Fluidifier

The fluidifier shall give the CLSM fill the following salient characteristics:

a. must have less than 1 percent bleed water in accordance with ASTM C 940

b. have an initial set time of more than 5 hours in accordance with ASTM C 220 modified by using a Ferioli apparatus

c. have a flow consistency equal to or more than 8 inches in accordance with ASTM D 6103

d. have a compressive strength of 100 psi at 28 days in accordance with ASTM D 4832

e. maintain a homogeneous mixture during pumping

1. Quantity of admixture(s) required in the mixture proportion is governed by the salient characteristics specified.

2. The admixture shall be added as directed by the manufacturer, in most cases it added to the CLSM at the job site and mixed for a minimum of 5 minutes at mixing speed.

2.1.6 Water

Water shall be potable water that is fresh, clean, and free from sewage, oil, acid, alkali, salts, or organic matter.

2.2 MIXING AND TRANSPORTING

The CLSM shall be mixed and transported in accordance with ASTM C 94.

PART 3 EXECUTION

3.1 TRENCH PREPARATION

Once the trench has been dug it shall be cleaned of all loose material and debris to the satisfaction of the Contracting Officer before any CLMS fill is placed. The new utility pipeline shall be placed on firm ground at the bottom of the trench and a minimum of 1 foot of CLSM fill shall be placed above the top of the pipeline. The pipeline shall be securely anchored to maintain its position and prevent it from any movement during placement of the CLSM.

3.2 PLACEMENT

3.2.1 General

CLSM placement shall not be permitted when, in the opinion of the Contracting Officer, weather conditions prevent proper placement. When CLSM is mixed and/or transported by a truck mixer, the CLSM shall be delivered to the site of the work and discharge shall be completed within 1-1/2 hours (or 45 minutes when the placing temperature is 85 degrees F or greater unless a retarding admixture is used). The fluidifier shall not be added to the Ready Mix trucks until they have arrived onsite. The fluidifier shall be added to each truck at the proper dosage rate and mixed

for 5 minutes and no more than 15 minutes before it is placed. CLSM shall be conveyed from the mixer to point of placement as rapidly as practicable by methods which prevent segregation or loss of ingredients.

3.2.2 Consolidation

Consolidation of the CLSM will not be required.

3.3 TESTS

3.3.1 General

The individuals who sample and test CLSM as required in this specification shall have demonstrated a knowledge and ability to perform the necessary test procedures equivalent to ACI minimum guidelines for certification of concrete Field Testing Technicians, Grade I.

3.3.2 Inspection Details and Frequency of Testing

3.3.2.1 Flow Consistency

Flow consistency shall be checked once during each shift that CLSM is produced for each class of concrete required. Samples shall be obtained in accordance with ASTM D 5971 and tested in accordance with ASTM D 6103. Whenever a test result is outside the specifications limits, the CLSM shall not be delivered to the placement and an adjustment should be made in the batch weights of water and fine aggregate. The adjustments are to be made so that the water-cement ratio does not exceed that specified in the submitted CLSM mixture proportion.

3.3.2.2 Compressive-Strength Specimens

At least one set of test specimens shall be made each day on CLSM placed during the day or every 10 cubic yards placed. Additional sets of test cylinders shall be made, as directed by the Contracting Officer, when the mixture proportions are changed or when low strengths are detected. A random sampling plan shall be developed by the Contractor and approved by the Contracting Officer prior to the start of construction. The plan shall assure that sampling is accomplished in a completely random and unbiased manner. A set of test specimens for concrete with strength as specified in paragraph DESIGN REQUIREMENTS shall consist of six cylinders, one tested at 7 days, one tested at 14 days, and two tested at 28 days. Two cylinders shall be tested as directed. Test specimens shall be molded and cured in accordance with ASTM D 4832 and tested in accordance with ASTM D 4832. All compressive strength tests shall be reported immediately to the Contracting Officer.

3.3.3 Density

At least one set of test specimens shall be made each day on CLSM placed during the day or every 20 cubic yards placed. A random sampling plan shall be developed by the Contractor and approved by the Contracting Officer prior to the start of construction. The plan shall assure that sampling is accomplished in a completely random and unbiased manner. Test procedures and calculations shall be in accordance with ASTM D 6023.

3.3.4 Reports

The Contractor shall prepare reports of all tests and inspections conducted

at the project site.

-- End of Section --

ATTACHMENT 3

Guidelines for Installation of Utilities Beneath Corps of Engineers Levees Using Horizontal Directional Drilling

ERDC/GSL TR-02-9

US Army Corps of Engineers®
Engineer Research and Development Center

Guidelines for Installation of Utilities Beneath Corps of Engineers Levees Using Horizontal Directional Drilling

Carlos A. Latorre, Lillian D. Wakeley, and Patrick J. Conroy

June 2002

Geotechnical and Structures Laboratory

ERDC/GSL TR-02-9
June 2002

Guidelines for Installation of Utilities Beneath Corps of Engineers Levees Using Horizontal Directional Drilling

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Final report

Prepared for U.S. Army Corps of Engineers
Washington, DC 20314-1000

Contents

Preface

The work documented in this report was performed during May through October 2001 as part of the technology transfer component of the Geotechnical Engineering Research Program (GTERP), specifically in the work unit entitled Applications of Trenchless Technology to Civil Works. Funding for preparation and publication of this report was provided by the U.S. Army Corps of Engineers as part of its ongoing support of civil works research. Mr. Carlos Latorre, U.S. Army Engineer Research and Development Center (ERDC), Geotechnical and Structures Laboratory (GSL), is principal investigator for this work unit. The research team also includes Dr. Lillian D. Wakeley, GTERP Manager (ERDC, GSL), Mr. Patrick J. Conroy, U.S. Army Engineer District (USAED), St. Louis (MVS), and Mrs. Nalini Torres (ERDC, GSL). Mr. Jim Chang, CECW, is GTERP Technical Monitor.

The guidelines and specifications provided in this report are based on work completed previously by Dr. R. David Bennett, formerly GSL, ERDC; and Mr. Joseph M. Morones, State of California, Department of Transportation; and modified with their cooperation by Mr. Latorre. This report was prepared by Messrs. Latorre and Conroy and Dr. Wakeley. The authors gratefully acknowledge technical review of this document by Mr. George Sills, USAED, Vicksburg, Mr. Pete Cali, USAED, New Orleans; and Mr. John Wise, USAED, Fort Worth.

This report was completed at ERDC under the general supervision of Dr. Wakeley, Chief, Engineering Geology and Geophysics Branch, Dr. Robert L. Hall, Chief, Geosciences and Structures Division, GSL, and Dr. Michael J. O'Connor, Director, GSL.

At the time of publication of this report, Dr. James R. Houston was Director of ERDC, and COL John W. Morris III, EN, was Commander and Executive Director.

1 Introduction

Background

Early methods of installing pipelines and utilities across rivers and streams involved excavation of trenches. After the placement of the pipeline, the trenches were backfilled to protect the pipeline from hazards. These early dredged crossings were generally sited at the channel crossing of the thalweg between bends of the river. Here the river is generally a wide, shallow rectangle. This location is chosen because of its hydraulic stability and the economic limitation of the dredging equipment.

In and across the U.S. Army Engineer Division, Mississippi Valley (MVD), lies the heart of the pipeline transmission network of the United States. Hundreds of individual pipelines traverse from Texas and out of the Gulf of Mexico across the numerous rivers, bayous, and wetlands of Louisiana to service the northeast population centers on the Atlantic coast. Along the leveed banks of the lower Mississippi River, pipeline crossings exist between almost every bendway. The crossings of these earthen flood control structures present a difficult and expensive construction problem resulting from concerns about the integrity of the levee which may be subjected to sliding, piping, and erosion failures.

Horizontal Directional Drilling Method

In the early 1970s, a new process was introduced to install pipelines by use of horizontal directional drilling (HDD) techniques acquired from the oil and gas industry. The method has steadily grown to achieve worldwide acceptance and has been used in over 3,000 installations totaling over 1,288 km (800 miles) of pipelines. Today pipeline installations increasingly rely upon HDD technology as the primary method for crossings of watercourses, wetlands, utility corridors, roads, railroads, shorelines, environmental areas, and urban areas.

The placement of pipelines by the HDD method requires the drilling of a guided pilot bore, generally using a 7.3- to 11.43-cm- (2-7/8- to 4-1/2-in.-) diam drill pipe. At the lead, or downhole, end of the pilot string is a fluid powered cutting tool. The cutting tool is either a drill motor to which a bit is connected or a jet bit with nozzles. Drilling fluid is pumped through the string, and fluid causes the motor to rotate which turns the bit to cut the hole. With jet bits, the velocity from the jet nozzle erodes the hole in front of the drill pipe. Located

behind the drill head is a section of the drill pipe with a small bend or angular deviation. This section, known as a bent sub or bent housing, allows the motor or jet nozzle to be directed. A steering tool is latched onto a locking tool on the drill pipe. In this steering tool are a magnetometer and other devices to determine the azimuth, inclination, and orientation of the tool or tool face. Position determinations are made, and the data from the steering tool are plotted in the field to determine the profile and alignment of the bore. Analysis of this position plot is then used to determine drilling progress and path. At a desired location, the pilot drill pipe exits the ground. The pilot bore is then enlarged by pulling reaming tools back through the bore. Once this operation is completed, the pipeline or conduit is attached to the drill pipe and pulled back through the predrilled bore. This is accomplished as the drill pipe is removed, joint by joint, from the drilled path until the pipeline reaches the ground surface at the entry end of the bore.

One of the primary parameters in horizontal directional drilling is the drilling fluid or mud. The drilling mud is usually comprised of a bentonite and water mixture with the main function to power the downhole cutting tool used to open the bore. Secondary functions of the drilling mud are to serve as a lubricant for the pipeline during installation and, in cases of rock or hard ground bores, to remove cuttings from the bore.

The use of HDD has been restricted, in part, by major misunderstandings of how the HDD process actually functions. It is assumed by many that it is similar to well drilling or tunneling in that an open bore is required. This is true only in hard geologic materials such as rock. The majority of HDD pipeline crossings installed to date have been performed in soft ground comprised chiefly of alluvial deposits of silts, sand, and clay. In these types of soils, the process begins with a small pilot bore from which various cutters are inserted to loosen the soil as it is mixed into a slurry by injection of the drilling mud. Once this slurry pathway has been made large enough, generally 25.4 to 30.5 cm (10 to 12 in.) greater than the diameter of the pipeline, the installation of the pipeline commences by pulling the pipeline back through the soft slurry pathway. Some of the in situ soil and fluid are then compressed into the formation, and the remainder of the soil is actually pumped out of the path.

The information in this report represents some of the experiences of the Corps of Engineer (CE) Districts involving HDD for installation of utilities under levees. The experience of the U.S. Army Engineer District (USAED), St. Louis, in dealing with installation of communications systems was identified as having wide applicability to the Corps. Engineering documentation from two St. Louis District projects, the set of guidelines presented in “Installation of Pipelines Beneath Levees Using Horizontal Directional Drilling” (Staheli et al. 1998), Engineer Manual (EM) 1110-2-1913 (Headquarters, Department of the Army (HQDOA) 2000), and the State of California Department of Transportation (CalTrans) Encroachment Permits, “Guidelines and Specifications for Horizontal Directional Drilling Installations” (Morones 2000), provided the basis for this report. A paper on the subject was presented at the Corps Infrastructure Systems Conference in August 2001.

Problem Identification

Although horizontal directional drilling could offer cost-effective, safe alternatives to installing pipelines with open trenching, the CE has no standard guidelines allowing the installation of pipelines with this construction method. As a result, permitting policies are extremely varied and some districts strictly prohibit the use of this technique. While recommended guidelines for pipeline installation using HDD were developed for use by the CE Districts through this work unit back in 1998, as part of a lengthy and detailed EM, the guidelines were not readily recognized by permitting offices as applicable to the questions they face. Also, there is growing pressure on Corps offices particularly by communications companies to install cables under levees.

Objectives

The objectives are to provide and distribute this information to targeted potential users like the CE District permitting offices and engineers that receive applications from utility companies to install utilities under levees. This report addresses those questions and helps CE offices with the growing pressure they are receiving from private companies to allow them to install cables/pipelines under levees. These guidelines are presented in a quick and organized manner that will provide criteria by which to evaluate proposals (e.g., application review, approving, disapproving, and/or making recommendations) for levee crossings, beneath rivers, and within levee rights-of-way using HDD techniques without endangering the levees; and the use of HDD for pipeline installation in areas where the installation technique might be applicable and capable of providing a tremendous cost savings to the Corps of Engineers and the pipeline industry. These guidelines will also help to demonstrate that, very often, these techniques offer substantial economic and operational advantages over current practices. Last but not least, these guidelines will help us stay involved in the development of this fast and fairly new emerging technology.

Potential Benefits

The pipeline industry would realize a tremendous benefit from the use of HDD in crossing of flood control levees. This benefit would include significant cost reduction in construction and maintenance presently required for levees and adjacent road crossings such as bridges, concrete boxes, earthen cover, and ramps. The use of the technique could also benefit the Corps of Engineers by: (a) eliminating blockage of levee crown from buried pipelines, pipeline bridges, or conduit boxes, (b) eliminating differential settlement imposed on levees by the construction of buried pipelines, pipeline bridges, or conduit boxes, (c) improving the operation and safety of grass cutting and other maintenance equipment on the levees, and (d) reducing risk of rupture of pipelines located above or near ground surface on levee slopes, (e) reducing disruption in urban areas, and (f) providing better public acceptance and increasing environmental consciousness.

Potential Problem

While considering any alteration request, the District's prime objective is to protect the integrity of the flood protection systems. In the case of HDD, designers must be aware and take into account during the design stage the following:

a. Hydrofracture during installation.

b. Preferred seepage path after construction.

To allow third parties to utilize HDD techniques, the District needed methods and processes to prevent these problems from occurring.

2 HDD Guidelines and Specifications

Permit Application Submittal

The permit application package should contain the following information in support of the permit application.

a. Location of entry and exit point.

b. Equipment and pipe layout areas.

c. Proposed drill path alignment (both plan and profile view).

d. Location, elevations, and proposed clearances of all utility crossings and structures.

e. Proposed depth of cover.

f. Soil analysis.

g. Product material (HDPE/steel), length, diameter-wall thickness, reamer diameter.

h. Detailed pipe calculations, confirming ability of product pipe to withstand installation loads, and long-term operational loads.

i. Proposed composition of drilling fluid (based on soil analysis) viscosity and density.

j. Drilling fluid pumping capacity, pressures, and flow rates proposed.

k. State right-of-way lines, property, and other utility right-of-way or easement lines.

l. Elevations.

m. Type of tracking method/system.

n. Survey grid establishment for monitoring ground surface movement (settlement or heave) because of the drilling operation.

o. Contractor's work plan (see page 11 in this document).

All additional permit conditions shall be set forth in the special provisions of the permit.

Table 1 outlines recommended depths for various pipe diameters:

Table 1
Recommended Minimum Depth of Cover[1]

Diameter	Depth of Cover
50 mm (2 in.) to 150 mm (6 in.)	1.2 m (4 ft)
200 mm (8 in.) to 350 mm (14 in.)	1.8 m (6 ft)
375 mm (15 in.) to 600 mm (24 in.)	3.0 m (10 ft)
625 mm (25 in.) to 1,200 mm (48 in.)	4.5 m (15 ft)

[1] These depths do not apply for crossing under flood protection projects.
(Permission to reprint granted by California Department of Transportation, Office of Encroachment Permits, January 10, 2001).

The permittee/contractor shall, prior to and upon completion of the directional drill, establish a Survey Grid Line and provide monitoring.

Upon completion of the work, the permittee shall provide an accurate as-built drawing of the installed pipe.

Soil Investigations

A soil investigation should be undertaken. This investigation must be suitable for the proposed complexity of the installation to confirm ground conditions.

Soil analysis

Common sense must be utilized when requiring the extensiveness of the soil analysis. A soil analysis is required in order to obtain information on the ground conditions that the contractor will encounter during the HDD operation.

If the contractor can go to the project site and complete an excavation with a backhoe to 0.03 m (1 ft) below the proposed depth of the bore, that is a soil investigation. In all cases when an excavation is made in creating an entrance and exit pit for an HDD project, that is also an example of a soil investigation. The HDD process is in itself a continual and extensive soil analysis as the pilot bore is made. As the varying soils and formations are encountered, the drilling slurry will change colors, therefore providing the contractor with continual additional information.

The purpose and intent of the soil analysis is to assist the contractor in developing the proper drilling fluid mixture and to ensure the CE and the Levee Board that the contractor is aware of the conditions that do exist in the area of the proposed project. This prepares the contractor in the event they should encounter a zone of pretectonics and that they would need additives or preventive measures in dealing with inadvertent returns (hydrofractures).

The discretion on the extensiveness of the soil analysis is left to each individual CE District permitting office and/or Levee Board, respectfully, for their respective areas. The HDD inspector/geotechnical engineer plays a large role in assisting the District Permitting Office and Levee Board in making decisions on the extensiveness. Each individual HDD inspector/geotechnical engineer has a general knowledge of the soil conditions in their area of responsibility.

In many circumstances, the soil information has already been prepared, either by the CE District, Levee Board, or by City and County Entities. This information, if available, should be provided to the requesting permittee.

Determination of soil investigations

The CE District Geotechnical Engineer (DGE) should determine the extensiveness of the Soil Investigation to be performed based on the complexity of the HDD operation. DGE may recommend, according to the guidelines listed below, a combination of or modification to the guideline to fit the following respective areas:

a. Projects less than 152 mm (500 ft) in length, where the product or casing is 20 cm (8 in.) or less in diameter.[1]

(1) A field soil sampling investigation to a depth of 0.3 m (1 ft) below the proposed drilling.

(2) Subsurface strata, fill, debris, and material.

b. Projects less than 244 m (800 ft) in length, where the product or casing is 36 cm (14 in.) or less in diameter.[1]

(1) A field soil sampling investigation to a depth of 0.3 m (1 ft) below the proposed drilling.

(2) Subsurface strata, fill, debris, and material.

(3) Particle size distribution (particularly, percent gravel and cobble).

c. Projects where the product or casing is 41 cm (16 in.) or greater in diameter. A geotechnical evaluation by a qualified soil engineer is necessary to determine the following:[1]

[1] Does not apply when crossing a flood protection project.

(1) Subsurface strata, fill, debris, and material.

(2) Particle size distribution (particularly percent gravel and cobble).

(3) Cohesion index, internal angle of friction, and soil classification.

(4) Plastic and liquid limits (clays), expansion index (clays), soil density.

(5) Water table levels and soil permeability.

d. Projects where the product or casing is 61 cm (24 in.) or greater in diameter, or when project crosses flood control projects. A geotechnical evaluation by a qualified soil engineer is required to determine the following:

(1) Subsurface strata, fill, debris, and material.

(2) Particle size distribution (particularly, percent gravel and cobble).

(3) Cohesion index, internal angle of friction, and soil classification.

(4) Plastic and liquid limits (clays), expansion index (clays), soil density, and standard penetration tests.

(5) Rock strength, rock joint fracture and orientation, water table levels, and soil permeability.

(6) Areas of suspected and known contamination should also be noted and characterized.

Boreholes or test pits should be undertaken at approximately 75- to 125-m (250- to 410-ft) intervals where a proposed installations greater than 305 m (1,000 ft) in length and parallel to an existing road. Additional boreholes or test pits should be considered if substantial variations in soil conditions are encountered.

Should the soil investigation determine the presence of gravel, cobble, and/or boulders, care should be exercised in the selection of drilling equipment and drilling fluids. In such ground conditions, the use of casing pipes or washover pipes may be required or specialized drilling fluids utilized. Fluid jetting methods used as a means of cutting **should only be considered** where soils have a high cohesion such as stiff clays. Jetting should not be allowed when crossing under a flood protection project.

Preconstruction and Site Evaluation

The following steps should be undertaken by the permittee/contractor in order to ensure safe and efficient construction with minimum interruption of normal, everyday activities at the site:

a. Notify owners of subsurface utilities along and on either side of the proposed drill path of the impending work through USA alert (the one-call program). All utilities along and on either side of the proposed drill path are to be located.

b. Obtain all necessary permits or authorizations to carry construction activities near or across all such buried obstructions.

c. Expose all utility crossings using a hydroexcavation, hand excavation, or other approved method (potholing) to confirm depth.

d. Arrange construction schedule to minimize disruption (e.g., drilling under major highways and/or river crossings).

e. Determine and document the proposed drill path, including horizontal and vertical alignments and location of buried utilities and substructures along the path.

The size of excavations for entrance and exit pits should be of sufficient size to avoid a sudden radius change of the pipe and consequent excessive deformation at these locations. Sizing the pits is a function of the pipe depth, diameter, and material. All pits, over 1.52 m (5 ft) in depth must abide by Occupational, Safety, and Health Administration (OSHA) regulations.

Prior to commencement of the project, the area should be physically walked over and visually inspected by District Geotechnical Engineer, the driller, and members of the Levee Board for potential entry/exit sites. The following should be addressed:

a. When on CE/Levee Board property, it should be established whether or not there is sufficient room at the site for: entrance and exit pits; HDD equipment and its safe unimpeded operation; support vehicles; fusion machines; aligning the pipe to be pulled back in a single continuous operation.

b. Suitability of soil conditions should be established for HDD operations. (The HDD method is ideally suited for soft subsoils such as clays and compacted sands. Subgrade soils consisting of large grain materials like gravel, cobble, and boulders make HDD difficult to use and may contribute to pipe damage.)

c. The site should be checked for evidence of substructures, such as manhole covers, valve box covers, meter boxes, electrical transformers, conduits or drop lines from utility poles, and pavement patches. HDD may be a suitable method in areas where the substructure density is relatively high.

Installation Requirements

The permittee shall ensure that appropriate equipment is provided to facilitate the installation: in particular, the drill rig shall have sufficient pulling capacity to meet the required installation loads determined by the detailed pipe calculations. The drill rig should have the ability to provide pull loads, push loads, torque, and the permittee shall ensure that they are monitored during the drilling operation. The permittee shall ensure the drill rod can meet the bend radii required for the proposed installation (a general rule of thumb is 100 times, in feet, the diameter of the installed pipe in inches).

During construction, continuous monitoring and plotting of pilot drill progress shall be undertaken. This is necessary to ensure compliance with the proposed installation alignment and allow for the undertaking of appropriate course corrections that would minimize “dog legs,” should the bore begin to deviate from the intended bore path. The actual path of the pilot hole should be plotted against the design drill path.

Monitoring shall be accomplished by manual plotting based on location and depth readings provided by the onboard locating/tracking system or by hand-held walkover tracking systems. These readings map the bore path based on information provided by the locating/tracking system. Readings or plot points shall be undertaken on every drill rod.

For installations where tight control of alignment and grade is required, readings shall be undertaken every 1.0 to 1.5 m (3 to 5 ft). At the completion of the bore, an as-built drawing shall be provided. Prior to commencement of a directional drilling operation, proper calibration of the sonde equipment shall be undertaken.

Monitoring of the drilling fluids such as the pumping rate, pressures at the drill rig and pressures in the annular space behind the drill bit (when drilling under flood control projects), viscosity, and density during the pilot bore, back reaming, and/or pipe installation stages shall be undertaken to ensure adequate removal of soil cuttings and the stability of the borehole is maintained. Excess drilling fluids shall be contained at entry and exit points until recycled or removed from the site. Entry and exit pits should be of sufficient size to contain the expected return of drilling fluids and soil cuttings.

The permittee shall ensure that all drilling fluids are disposed of in a manner acceptable to the appropriate local, state, or federal regulatory agencies. When drilling in contaminated ground, the drilling fluid shall be tested for contamination and disposed of appropriately. Restoration of damage to a levee caused by hydrofracture or any other aspect of the directional drilling operation shall be the responsibility of the permittee. Plans for all restoration or repair work shall be submitted for approval by the Levee District or Corps of Engineers District.

To minimize heaving during pullback, the pullback rate shall be determined by which maximizes the removal of soil cuttings and which minimizes compaction of the ground surrounding the borehole. The pullback rate shall also

minimize overcutting of the borehole during the back reaming operation to ensure that excessive voids are not created and result in postinstallation settlement.

The permittee shall, prior to and upon completion of the directional drill, establish a Survey Grid Line and provide monitoring as outlined in their submitted detailed monitoring plan. Subsurface monitoring points shall be established along the HDD centerline and along any flood protection project that the HDD crosses under to provide early indications of settlement, since large voids may not materialize during drilling as a result of pavement bridging.

Should settlement occur, all repairs would be the responsibility of the permittee. To prevent future settlement should the drilling operation be unsuccessful, the permittee shall ensure the backfill of any void(s) with grout or backfilled by other means. Plans for all restoration or repair work shall be submitted for approval.

Considerations

The following considerations must be taken into account.

a. *Different ground conditions:* The availability of adequate geotechnical information is invaluable in underground construction; it acts to reduce the risk born by the permittee/contractor. However, even in the presence of good geotechnical data, unexpected ground conditions may be encountered. The Contractor's plan should describe the response to different ground conditions.

b. *Turbidity of water and inadvertent returns:* During construction, events like drill bit lockup or being off the design drill path may lead to work stoppage. The permittee/contractor should offer a mechanism to mutually address and mitigate these problems if and when they should arise. For example, contingency plans for containment and disposal of inadvertent returns or hydrofractures.

Permittee/contractor responsibilities

The permittee/contractor should provide the following items: construction plan, site layout plan, project schedule, communication plan, safety procedures, emergency procedures, company experience record, contingencies plan, and drilling fluid management plan.

Construction plan requirements. The permittee shall identify in the construction plan:

a. Location of entry and exit pits.

b. Working areas and their approximate size.

c. Proposed pipe fabrication and layout areas.

d. State right-of-way lines, property lines.

e. Other utility right-of way and easement lines.

f. Pipe material and wall thickness.

g. Location of test pits or boreholes undertaken during the soil investigation.

h. Identify the proposed drilling alignment (both plan and profile view) from entry to exit.

i. Identify all grades and curvature radii.

j. All utilities (both horizontal and vertical).

k. Structures with their clearances from the proposed drill alignment.

l. Confirm the minimum clearance requirements of affected utilities and structures.

m. Required minimum clearances from existing utilities and structures.

n. Diameter of pilot hole, and number and size of prereams/backreams.

o. Access requirements to site (if required).

p. Crew experience.

q. Type of tracking equipment.

Locating and tracking. The permittee shall describe the method of locating and tracking the drillhead during the pilot bore. Systems include walkover, wire-line, or wireline with wire surface grid. The locating and tracking system shall be capable of ensuring the proposed installation can be installed as intended.

Typical walkover sondes have an effective range of 10 to 15 m, depending on the Electro-magnetic properties of the soil and the extent of local magnetic interference. Depending on the profile of the borehole, the driller may lose contact with the sondes over certain sections of the alignment. As much as practically possible, the sonde should maintain contact with the drill bit. If the “blind” section is expected to be too long or in the vicinity of a buried object, the project engineer may specify the use of a wire-line system or a magnetic navi-gation tool.

The locating and tracking system shall provide the following information:

a. Clock and pitch information.

b. Depth.

c. Beacon temperature.

d. Battery status.

e. Position (x,y).

f. Azimuth: Where direct overhead readings (walkover) are not possible.

Figure 1 shows a universal housing that will work with any drill-string on all HDD rigs. The placement of the sonde should be before the backreamer. This housing can be utilized in the initial pilot bore. After exiting, the cutting head can be removed and the reamer installed. This housing chamber can utilize any of the sonde batteries manufactured, regardless of manufacturer. There is also a 6-cm (2.5 in.) mini-sonde combination available for smaller rigs.

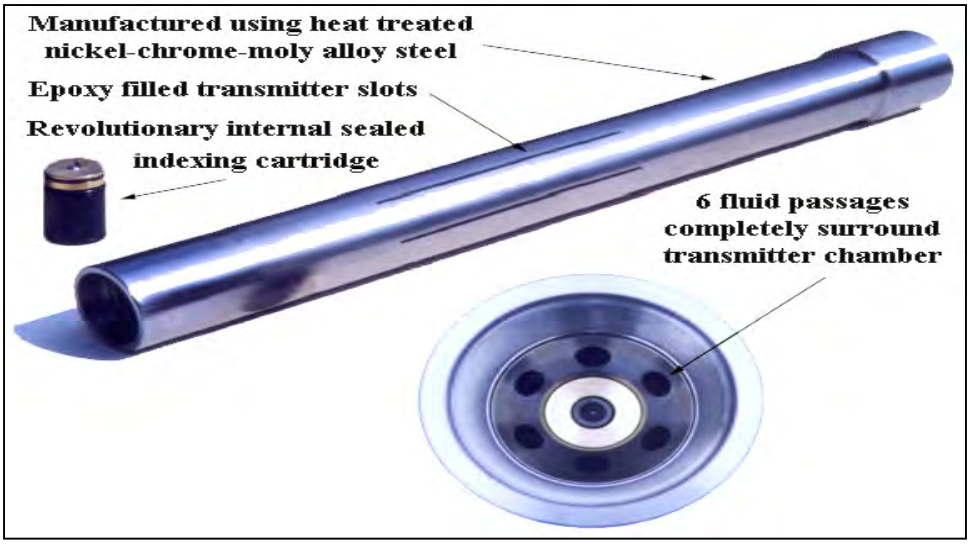

Figure 1. Universal housing for drill-string on HDD rigs (Permission to reprint granted by California Department of Transportation, Office of Encroachment Permits, January 10, 2001)

Drilling fluids management plan. The following information should be provided as part of the drilling fluid management plan. The proposed viscosities for soil transportation to the entry and exit pits are:

a. Pumping capacity and pressures must be estimated.

b. Source of fresh water for mixing the drilling mud must be identified. (Necessary approvals and permits are required for sources such as streams, rivers, ponds, or fire hydrants.)

c. Method of slurry containment must be described and detailed.

d. Method of recycling drilling fluid and spoils (if applicable) must be explained.

e. Method of transporting drilling fluids and spoils offsite must be described.

Drilling fluid pressures in the borehole should not exceed that which can be supported by the foundation soils. Calculation of maximum allowable pressures shall be done for all points along the drill path, taking into account the shear strength of the foundation soils, the depth of the drill path, the bore diameter, and the elevation of the groundwater table. Drilling fluids serve the following functions:

a. Remove cuttings from the bottom of the hole and transport them to the surface.

b. Hold cuttings in suspension when circulation is interrupted.

c. Release cuttings at the surface.

d. Stabilize the hole with an impermeable cake.

e. Cool and lubricate the drill bit and drill string.

f. Control subsurface pressures.

g. Transmit hydraulic horsepower.

h. Cool the locating transmitter sonde preventing burnout.

Previous experience. The permittee's contractor should provide a list of projects completed by his company, location, project environment (e.g., urban work, river crossing), product diameter, and length of installation. The permittee's contractor should also provide a list of key personnel.

Safety. The drilling unit should be equipped with an electrical strike safety package. The package should include warning sound alarm, grounding mats (if required), and protective gear. The permittee/contractor should have a copy of the company safety manual that includes:

a. Operating procedures that comply with applicable regulations, including shoring of pits and excavations when required.

b. Emergency procedures for inadvertently boring into a natural gas line, live power cable, water main, sewer lines, or a fiber-optic cable, which comply with applicable regulations.

c. Emergency evacuation plan in case of an injury.

Contingency plans. The Contingency plan should address the following:

a. Inadvertent return, spill (e.g., drilling fluids, and hydraulic fluids), including measures to contain, clean, and repair the affected area.

b. Cleanup of surface seepage of drilling fluids and spoils (i.e., hydrofracture).

Communication plan. The communication plan should address the following:

a. The phone numbers for communication with owner or his representative on the site.

b. Identification of key person(s) who will be responsible for ensuring that the communications plan is followed.

c. Issues to be communicated including safety, progress, and unexpected technical difficulties.

Traffic control.

a. When required, the permittee/contractor is responsible for supplying and placing warning signs, barricades, safety lights, and flags or flagmen, as required for the protection of pedestrians and vehicle traffic.

b. Obstruction of the roadway, on major road, should be limited to off-peak hours.

Additional Requirements

Information that may be required, include other permits, bonding, and certification as listed in the following sections.

Additional permits

a. Obtaining water (i.e., hydrants, streams, etc.)

b. Storage, piling, and disposal of material.

c. Water/bentonite disposal.

d. Any other permits required carrying out the work.

Bonding and certification requirements

a. Payment bond (if required).

b. Performance bond (if required).

c. Certificate of insurance.

d. WCB certificate letter.

e. ACSA certificate of recognition.

Drilling Operations

The following points provide general remarks and rules of thumb related to the directional boring method.

a. Only operators who have “Proof of Training” by the North American Society of Trenchless Technology (NASTT) should be permitted to operate the drilling equipment in CE/Levee Board property.

b. Drilling mud pressure in the borehole should not exceed that which can be supported by the foundation soils to prevent heaving or a hydraulic fracturing of the soil (i.e., hydrofracture). Allowing for a sufficient cover depth does not necessarily guarantee against hydrofracture. Sound, cautious drilling practice minimizes the chance of hydrofracture occurrence. Also, measuring mud pressures in the annular space behind the drill bit and comparing these mud pressures with the calculated maximum allowable pressures help minimize the occurrence of hydrofracture. Typical bore depth of 0.75 to 1.0 m gives pipes with an Outside Diameter (O.D.) of 50-200 mm a minimum cover of 0.65 m. While circumstances may dictate greater depths, shallower depths are not recommended.

c. The drill path alignment should be as straight as possible to minimize the fractional resistance during pullback and to maximize the length of the pipe that can be installed during a single pull.

d. It is preferable that straight tangent sections be drilled before the introduction of a long radius curve. Under all circumstances, a minimum of one complete length of drill rod should be utilized before starting to level out the borehole path.

e. The radius of curvature is determined by the bending characteristics of the product line, and it is increasing with diameter.

f. Entrance angle of the drill string should be between 8 and 20 deg, with 12 deg being considered optimal. Shallower angles may reduce the penetrating capabilities of the drilling rig, while steeper angles may result in steering difficulties, particularly in soft soils. A recommended value for the exit angle of the drill string is within the range of 5 to 10 deg.

g. Whenever possible, HDD installation should be planned so that back reaming and pulling for a leg can be completed on the same day. If necessary, it is permissible to drill the pilot hole and preream one day, and complete both the final ream and the pullback on the following day.

h. If a drill hole beneath a levee must be abandoned, the hole should be backfilled with grout or bentonite to prevent future subsidence.

i. Pipe installation should be performed in a manner that minimizes the over-stressing and straining of the pipe. This is of particular importance in the case of a polyethylene pipe.

Equipment setup and site layout

a. Sufficient space is required on the rig side to safely set up and operate the equipment. The workspace required depends on the type of rig to be used. A small rig may require as little as 3- by 3-m working space, while a large river crossing unit requires a minimum of 30- by 50-m working area. A working space of similar dimensions to that on the rig side should be allocated on the pipe side, in case there is a need to move the rig and attempt drilling from this end of the crossing.

b. If at all possible, the crossing should be planned to ensure that drilling proceed downhill, allowing the drilling mud to remain in the hole, minimizing inadvertent return.

c. Sufficient space should be allocated to fabricate the product pipeline into one string, thus enabling the pullback to be conducted in a single continuous operation. Tie-ins of successive strings during pullback may considerably increase the risk of an unsuccessful installation.

Drilling and back-reaming

a. Drilling mud should be used during drilling and back reaming operations. Using water exclusively may cause collapse of the borehole in unconsolidated soils. While in clays, the use of water may cause swelling and subsequent jamming of the product.

b. Heaving may occur when attempting to back-ream a hole that is too large. This can be avoided by using several prereams to gradually enlarge the hole to the desired diameter.

c. A swivel should be included between the reamer and the product pipe to prevent the transfer of rotational torque to the pipe during pullback.

d. In order to prevent over stressing of the product during pullback, a weak link, or break-away pulling head, may be used between the swivel and the leading end of the pipe. More details regarding breakaway pulling heads can be found in paragraph entitled “Break-away Pulling Head.”

e. The pilot hole must be back-reamed to accommodate and permit free sliding of the product inside the borehole. A rule of thumb is to have a borehole 1.5 times the outer diameter of the product. This rule of thumb should be observed particularly with the larger diameter installations (≥ 250-mm O.D.). Some recommended values for final preream diameter

as a function of the product O.D. are given in Table 2. These values should be increased by 25 percent if excessive swelling of the soil is expected to occur or the presence of boulders/cobbles is suspected.

f. The conduit must be sealed at either end with a cap or a plug to prevent water, drilling fluids, and other foreign materials from entering the pipe as it is being pulled back.

g. Pipe rollers, skates, or other protective devices should be used to prevent damage to the pipe from the edges of the pit during pullback, eliminate ground drag, or reduce pulling force and subsequently reduce the stress on the product.

h. The drilling mud in the annular region should not be removed after installation but permitted to solidify and provide support for the pipe and neighboring soil.

Table 2
Recommended Back-Ream Hole Diameter (after Popelar et al. 1997)

Nominal Pipe Diameter, mm	Back-Ream Hole Diameter, mm
50	75 to 100
75	100 to 150
100	150 to 200
150	250 to 300
200	300 to 350
250	350 to 400
≥300	At least 1.5 times product OD

Drilling Fluid - Collection and Disposal Practices

The collection and handling of drilling fluids and inadvertent returns, along with the need to keep drilling fluids out of streams, streets, and municipal sewer lines, have been among the most debated topics. These points include:

a. Drilling mud and additives to be used on a particular job should be identified in the permit package, and their Material Safety Data Sheets (MSDS) should be provided to the Permit Office.

b. Excess drilling mud slurry shall be contained in a lined pit or containment pound at exit and entry points, until recycled or removed from the site. Entrance and exit pits should be of sufficient size to contain the expected return of drilling mud and spoils.

c. Methods to be used in the collections, transportation, and disposal of drilling fluids, spoils, and excess drilling fluids should be in compliance with local ordinances, regulations, and environmentally sound practices in an approved disposal site.

d. The slurry should be tested for contamination and disposed of in a manner which meets government requirements when working in an area of contaminated ground.

e. Precautions should be taken to keep drilling fluids out of the streets, manholes, sanitary and storm sewers, and other drainage systems, including streams and rivers.

f. Recycling drilling fluids is an acceptable alternative to disposal.

g. All diligent efforts should be made by contractor to minimize the amount of drilling fluids and cuttings spilled during the drilling operation, and complete cleanup of all drilling mud overflows or spills shall be provided.

There are legitimate concerns associated with the fluid pressures used for excavation during the horizontal directional drilling process and the risk of hydraulic fracturing. Reasonable limits must be placed on maximum fluid pressures in the annular space of the bore to prevent inadvertent drilling fluid returns to the ground surface. However, it is equally important that drilling pressures remain sufficiently high to maintain borehole stability, since the ease in which the pipe will be inserted into the borehole is dependent upon borehole stability. Limiting borehole pressures are a function of pore pressure, the pressure required to counterbalance the effective normal stresses acting around the bore (depth), and the undrained shear strength of the soil.

Tie-Ins and Connections

Trenching may be used to join sections of conduits installed by the directional boring method. An additional pipe length, sufficient for joining to the next segment, should be pulled into the entrance pit. This length of the pipe should not be damaged or interfere with the subsequent drilling of the next leg. The contractor should leave a minimum of 1 m of conduit above the ground on both sides of the borehole.

Alignment and Minimum Separation

The product should be installed to the alignment and elevations shown on the drawings within the prespecified tolerances (tolerance values are application dependent, for example, in a major river crossing, a tolerance of ±4 m from the exit location along the drill path center line may be an acceptable value). This tolerance is not acceptable when installing a product line between manholes. Similarly, grade requirements for a water forcemain are significantly different from those on a gravity sewer project.

When a product line is installed in a crowded right-of-way, the issue of safe minimum separation distance arises. Many utility companies have established regulations for minimum separation distances between various utilities. These

distances needed to be adjusted to account for possible minor deviation when a line product is installed using HDD technology. As a rule of thumb, if the separation distance between the proposed alignment and the existing line is 5 m or more, normal installation procedures can be followed. If the separation is 1.5 m or less, special measures, such as observation boreholes are required. The range between 1.5 and 5 m is a "gray" area, typically subject to engineering judgment (a natural gas transmission line is likely to be treated more cautiously than a storm water drainage line).

Break-Away Pulling Head

Recent reports from several natural gas utility companies reveal concerns regarding failure experienced on HDPE pipes installed by horizontal directional drilling. These failures were attributed to deformation of the pipe due to the use of excessive pulling force during installation. A mitigation measure adopted by some gas companies involves the use of break-away swivels to limit the amount of force used when pulling HDPE products. Some details regarding these devices and their applications are given below.

a. The weak link used can be either a small diameter pipe (but same SDR) or specially manufactured break-away link. The latter consists of a breaking pin with a defined tensile strength incorporated in a swivel. When the strength of the pin is exceeded it will break, causing the swivel to separate. A summary of pulling head specifications is given in Table 3 (all products are SDR 11). Note that the values provided in Table 3 could be considered conservative.

Table 3
Pulling Head Specifications

Pipe Diameter (in.)[1]	Diameter of Break-Away Swivel (in.)	Maximum Allowable Pulling Force (lb)[2]
1-1/4	7/8	850
2	1-1/4	1,500
4	1 3/8	5,500
6	2-1/2	12,000
8	3	18,500

[1]To convert inches to centimeters, multiply by 2.54.
[2]To convert pounds to kilograms, multiply by 0.4535.

b. The use of break-away swivels is particularly warranted when installing small diameter HDPE pipes (up to 10-cm (4 in.) O.D.). Application of such devices in the installation of larger diameter products is not currently a common practice.

c. If the drilling equipment-rated pulling capacity is less than the safe load, the use of a weak link may not be required.

d. Exceeding the product elastic limit can be avoided simply by following good drilling practices, namely: regulating pulling force; regulating pulling speed; proper ream sizing; and using appropriate amounts of drilling slurry fluid.

Protective Coatings

In an HDD installation, the product may be exposed to extra abrasion during pullback. When installing a steel pipe, a form of coating which provides a corrosion barrier as well as an abrasion barrier is recommended during the operation, the coating should be well bonded and have a hard smooth surface to resist soil stresses and reduce friction, respectively. A recommended type of coating for steel pipes is mill applied Fusion Bonded Epoxy.

Site Restoration and Postconstruction Evaluation

All surfaces affected by the work shall be restored to their preconstruction conditions. Performance criteria for restoration work will be similar to those employed in traditional open excavation work. If required, the permittee/ contractor shall provide a set of as-built drawings including both alignment and profile. Drawings should be constructed from actual field readings. Raw data should be available for submission at any time upon request. As part of the “As-Built” document, the contractor shall specify the tracking equipment used, including method or confirmatory procedure used to ensure the data were captured.

References

American Gas Association, Pipeline Research Committee. (1994). "Drilling fluids in pipeline installation by horizontal directional drilling." *Practical application manual*. PR-227-9321, Tulsa, OK.

Brizendine, A. L., Taylor, H. M., and Gabr, M. A. (1995). "LEVSEEP: Analysis software for levee underseepage and rehabilitation," Technical Report GL-95-10, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.

Conroy, Patrick J., Latorre, Carlos A., and Wakeley, Lillian D. "Installation of fiber-optic cables under flood-protection structures using horizontal directional drilling techniques" (Technical Report in preparation), U.S. Army Engineer Research and Development Center, Vicksburg, MS.

Delft Geotechnics. (1997). A report by Department of Foundations and Underground Engineering prepared for O'Donnell Associates, Inc., Sugarland, TX.

Gabr, M. A., Taylor, Hugh M., Brizendine, Anthony L., and Wolff, Thomas. (1995). "LEVEEMSU: Analysis software for levee underseepage and rehabilitation," Technical Report GL-95-9, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.

Hair, J. D., and Associates, Inc., Cappozoli, Louis J., and Associates, Inc., and Stress Engineering Services, Inc. (1995). "Installation of pipelines by horizontal directional drilling." *Engineering design guide*. PR-227-9424, Tulsa, OK.

Headquarters, Department of the Army. (1987). "Hydrologic analysis of interior areas," Engineer Manual EM 1110-2-1413, Washington, DC.

_____ . (2000). "Design and construction of levees," Engineer Manual 1110-2-1913, Washington, DC.

Luger, H. J., and Hergarden, H. J. A. M. (1988). "Directional drilling in soft soils: Influence of mud pressures." *Proceedings, International No-Dig '88*. Washington, DC.

Morones, Joseph M. (2000). “Guidelines and specifications for horizontal directional drilling installations,” Caltrans Encroachment Permits, Department of Transportation, State of California.

Popelar, C., Kuhlman, C., Grant, T., and Shell, G. G. (1997). “Horizontal directional drilling guidelines for installing polyethylene gas distribution pipes,” Gas Research Institute, GRI-97/0033, 27 pp.

Staheli, K., Bennett, R. D., O’Donnell, H. W., and Hurley, T. J. (1998). “Installation of pipelines beneath levees using horizontal directional drilling,” Technical Report CPAR-GL-98-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.

U.S. Army Engineer District, Vicksburg. (1993). “Project operations—Project maintenance standards and procedures,” District Regulations 1130-2-303, Vicksburg, MS.

Wells, J. T., and Kemp, G. P. (1981). “Atchafalaya mudstream and recent mudclat progradation; Louisiana chenier plain.” *31st annual meeting, Gulf Coast Association of Geological Societies and 25th annual meeting of Gulf Coast Section of Society of Economic Paleontologists and Mineralogists*. Corpus Christi, TX.

Wolff, T. F. (1989). “LEVEEMSU: A software package designed for levee underseepage analysis,” Technical Report GL-89-13, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.

REPORT DOCUMENTATION PAGE

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June 2002	Final report	

4. TITLE AND SUBTITLE

Guidelines for Installation of Utilities Beneath Corps of Engineers Levees Using Horizontal Directional Drilling Techniques

5a. CONTRACT NUMBER

5b. GRANT NUMBER

5c. PROGRAM ELEMENT NUMBER

6. AUTHOR(S)

Carlos A. Latorre, Lillian D. Wakeley, Patrick J. Conroy

5d. PROJECT NUMBER

5e. TASK NUMBER

5f. WORK UNIT NUMBER

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)

U.S. Army Engineer Research and Development Center
Geotechnical and Structures Laboratory
3909 Halls Ferry Road, Vicksburg, MS 39180-6199;
U.S. Army Engineer District, St. Louis
1222 Spruce Street, St. Louis, MO 63103-2833

8. PERFORMING ORGANIZATION REPORT NUMBER

ERDC/GSL TR-02-9

9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)

U.S. Army Corps of Engineers
Washington, DC 20314-1000

10. SPONSOR/MONITOR'S ACRONYM(S)

11. SPONSOR/MONITOR'S REPORT NUMBER(S)

12. DISTRIBUTION / AVAILABILITY STATEMENT

Aproved for public release; distribution is unlimited.

13. SUPPLEMENTARY NOTES

14. ABSTRACT

Applications for permits to drill beneath levees are increasing in permitting offices of the U.S. Army Corps of Engineer Districts. This report provides a basis for consistent and science-based consideration of these permit applications. It describes methods of horizontal directional drilling (HDD) beneath levees and lists the types of geotechnical and other data that are essential to judging the safety of proposed drilling for infrastructure modifications and installation of utilities. Critical considerations include setback distances, levee toe stability, thickness and integrity of the top stratum, and other geotechnical parameters. Data provided for vertical and horizontal permeabilities, top stratum thickness, hydraulic gradient at levee toe, and other parameters are based on experience in the U.S. Army Engineer Districts, Vicksburg and St. Louis, and the California Department of Transportation. In appropriate geotechnical settings with appropriate operational care, utilities can be installed beneath flood-control levees using HDD without compromising the integrity and function of the levee.

15. SUBJECT TERMS

Annular space
Directional drilling
Fiber-optic cables
Geotechnical engineering
HDD
Hydrofracture
Residual pressure
Trenchless technology

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT	b. ABSTRACT	c. THIS PAGE			19b. TELEPHONE NUMBER *(include area code)*
UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED		41	

Standard Form 298 (Rev. 8-98)
Prescribed by ANSI Std. 239.18

Exhibit D

FEDERAL CERTIFICATION FORMS
CERTIFICATION REGARDING FEDERAL LOBBYING

The undersigned certifies to the best of his or her knowledge and belief that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in any award documents for any of its subcontractors at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subcontractors shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into a contract with the Authority. By executing this certificate the undersigned agrees and acknowledges that he/she has been duly authorized to execute this certificate.

Company/
Entity Name: _____

Signed: _____

Its: _____

Date: _____

PLEASE RETURN TO:
Metro Flood Diversion Authority
P.O. Box 2806
Fargo, ND 58108-2806

CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS

This certification is required by the regulations implementing Executive Order 12549, Debarment and Suspension, 13 CFR Part 145. The regulations were published as Part VII of the May 26, 1988 *Federal Register* (pages 19160-19211).

(BEFORE COMPLETING CERTIFICATION, READ INSTRUCTIONS ON PAGE 2)

(1) The official representative of the party contracting with the Metro Flood Diversion Authority certifies to the best of its knowledge and belief that it and its principals:

- (a) Are not presently debarred, suspended, proposed for disbarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- (b) Have not within a three-year period preceding this application been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
- (d) Have not within a three-year period preceding this application had one or more public transactions, including contracts (Federal, State, or local) terminated for cause or default.
- (e) Are not presently debarred, suspended, declared ineligible or voluntarily excluded from performing work for the State of North Dakota, the State of Minnesota, the Metro Flood Diversion Authority or any of its Member Entities.

(2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective primary participant shall attach an explanation to this proposal.

(3) The Official signing this certificate has been and is duly authorized to sign this certificate on behalf of the entity or entities which intend to enter into a contract with the Metro Flood Diversion Authority.

Official Business Name _____

Date: _____ By: _____

Name and Title of Authorized Representative

_____

Signature of Authorized Representative

PLEASE RETURN TO:
Metro Flood Diversion Authority
P.O. Box 2806
Fargo, ND 58108-2806

INSTRUCTIONS FOR CERTIFICATION

1. By signing and submitting this certification, the prospective contracting party is providing the certification set out below.

2. The inability of a person to provide the certification required below will not necessarily result in denial of participation in this covered transaction. The prospective contracting party shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the Metro Flood Diversion Authority's (the "Authority") determination whether to enter into this transaction. However, failure of the prospective contracting party to furnish a certification or an explanation shall disqualify such person from entering into contracts with the Authority.

3. The certification in this clause is a material representation of fact upon which reliance was placed when the Authority determined to enter into a contract with the prospective contracting party. In order to qualify for participation in the U.S. EPA WIFIA program the Authority is required to obtain this certification. If it is later determined that the prospective contracting party knowingly rendered an erroneous certification, in addition to other remedies available to both the Authority and the Federal Government, the Authority may terminate this transaction for cause or default.

4. The prospective contracting party shall provide immediate written notice to the Authority to which this Certificate is submitted if at any time the prospective contracting party learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

5. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549. You may contact the Authority for assistance in obtaining a copy of those regulations (13 CFR Part 145).

6. The prospective contracting party agrees by submitting this certification that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the Authority.

7. The prospective contracting party further agrees by submitting this certification that it will require a "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Covered Transactions," from all sub-contractors without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

8. A contracting party in a covered transaction may rely upon a certification of a prospective

participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A contracting party may decide the method and frequency by which it determines the ineligibility of its principals.

9. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a contracting party is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

10. Except for transactions authorized under paragraph 6 of these instructions, if a contracting party in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the Authority may terminate this transaction for cause or default.

ASSURANCE OF COMPLIANCE – CIVIL RIGHTS CERTIFICATE

TITLE VI OF THE CIVIL RIGHTS ACT OF 1964, SECTION 504 OF THE REHABILITATION ACT OF 1973, THE AGE DISCRIMINATION ACT OF 1975, SECTION 13 OF THE FEDERAL WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972, 40 CFR PART 7, AND EXECUTIVE ORDER NO. 11246

The undersigned provides this assurance for the purpose of entering into a contract with the Metro Flood Diversion Authority (Authority) related to the Fargo-Moorhead Metropolitan Area Flood Risk Management Project (Project), which is receiving federal financial assistance. Specifically, the US EPA WIFIA Program requires this assurance of all contractors and subcontractors providing services for the Project.

The undersigned assures that it will comply with:

1. Title VI of the Civil Rights Act of 1964, as amended, which prohibits discrimination on the basis of race, color, or national origin including limited English proficiency (LEP);
2. Section 504 of the Rehabilitation Act of 1973, as amended, which prohibits discrimination against persons with disabilities;
3. The Age Discrimination Act of 1975, as amended, which prohibits age discrimination;
4. Section 13 of the Federal Water Pollution Control Act Amendments of 1972, which prohibits discrimination on the basis of sex;
5. 40 CFR Part 7, as it relates to the foregoing; and
6. Executive Order No. 11246.

The undersigned understands that this Assurance is binding on the undersigned, its successors, transferees, and assignees at any time during which federal financial assistance is provided to the Project. The undersigned will ensure that all contractors, subcontractors, or others with whom it arranges to provide services or benefits are not discriminating in violation of items 1-6. Otherwise, the contracts for services can be terminated for cause and the undersigned can be declared ineligible to contract for the Project.

By signing this form, the undersigned is agreeing to the above provisions and that he/she is duly authorized to execute this form.

Signature of Authorized Official	Title
Print Name	Name of Institution or Agency
Date	Street

City, State, Zip Code

Office Email Address

PLEASE RETURN TO:
Metro Flood Diversion Authority
P.O. Box 2806
Fargo, ND 58108-2806

Exhibit E

AUTHORITY INVOICING REQUIREMENTS

Utility will submit copies of the invoice to:

Bakkegardk@FMDiversion.gov and APInvoicesFMDiv@jacobs.com

Utility's invoices must be detailed and precise. Utility's invoices must clearly indicate fees and expenses for the current billing period month and include at least the following information:

i. Utility's name and address;

ii. Utility's federal employer identification number;

iii. Unique invoice number;

iv. Billing period;

v. Description of each activity performed for each day in which services were performed;

vi. Work order number associated with each activity;

vii. Name, billing rate, and hours worked by each person involved in each activity;

viii. Total amount of fees and costs "billed to date," including the preceding months;

ix. Preferred remittance address, if different from the address on the invoice's coversheet; and

x. All of the work performed during that billing period.

After the Authority receives Utility's invoice, the Authority will either process the invoice for payment or give Utility specific reasons, in writing within fifteen (15) business days, why part of all of the Authority's payment is being withheld and what actions Utility must take to receive the withheld amount. In the event of disputed billing, only the disputed portion will be withheld from payment and the Authority shall pay the undisputed portion. Payment does not imply acceptance of services or that the invoice is accurate. In the event an error is identified following the receipt of payment, Utility must credit any payment in error from any payment that is due or that may become due to Utility under this Agreement or return the overpayment to the Authority within thirty (30) calendar days of the identification of the error.

And any other information referenced within this Agreement.

METRO FLOOD DIVERSION AUTHORITY

Diversion Authority Finance Committee Meeting

April 24, 2024

Land Acquisition Directives for Consideration

Jodi Smith

Land Acquisition Directives (Action)

LAD Number	Work Package	Property Acquisitions
LAD-00002-R2	WP-42 In Town Levees	OIN 9213 – Property Acquisition Budget = $40,000
LAD-MN-001-R08	Forest Mitigation	OIN 7215 – Property Acquisition Budget = $300,000
LAD-MN-001-Rev07	Upstream Mitigation Area City of Wolverton, MN	OINs 8792, 8793, 8795, 8796, 8797, 8798, 8799 and 8802 = $2,681,500

METRO FLOOD DIVERSION AUTHORITY

FARGO-MOORHEAD AREA DIVERSION

LAND ACQUISITION DIRECTIVE (LAD)	LAD-00002	REV-02

DATE: 3/13/2024

ACQUIRING ENTITY: Cass County Joint Water Resource Districts (CCJWRD)

WORK PACKAGE: WP-42 In Town Levees

BACKGROUND:

The Metro Flood Diversion Authority approved a budget for property acquisitions that is intended to provide a source of funding for acquisition for properties that would ultimately be needed for the project.

This Land Acquisition Directive (LAD) will serve as a tracking and reporting tool for property acquisitions.

PROPERTY ACQUISTIONS:

The following property acquisition is recommended and directed. This property is impacted by the Project and is needed for either construction or operation.

OIN	Parcel Type	Former Owner	Current Owner
9213	PERMANENT EASEMENT	Professional Associates	Professional Associates

Property Acquisition cost for above listed OIN: $40,000

ATTACHMENTS:

- Parcel Map of listed Property Parcel

Recommended by:	Dean K. Vetter	Project Manager
	Lands Program Management Consultant / AE2S	
		*03/13/2024*
	Signature	Date
Directed by:		Finance Committee Chair
	Diversion Authority Finance Committee	Title
	Signature	Date

Any reliance upon this map is at user's own risk. AE2S does not warrant the map or its features are either spatially or temporally accurate or fit for a particular use.

All parcel acreages and legal descriptions shown hereon are based on County GIS data. Final acreages and legal descriptions to be determined by boundary survey.

Coordinate System: NAD 1983 StatePlane North Dakota South FIPS 3302 Feet | Edited by: cwickenheiser | C:\Data\Projects\GIS Projects\FM Area Diversion\012 Lands Program\Lands Program Management\Land Acquisition Directives\LAD Work.aprx| LADsRemaining

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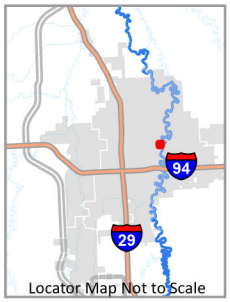


Land Acquisition Directives (LAD)

OIN 9213
In-Town Levee
City of Fargo-Cass County, ND

FM AREA DIVERSION
Map Date: 3/13/2024

FM AREA DIVERSION

METRO FLOOD DIVERSION AUTHORITY

FARGO-MOORHEAD AREA DIVERSION PROJECT

LAND ACQUISITION DIRECTIVE (LAD) LAD-MN-001 REV-08

DATE: 2/29/2024

AQUIRING ENTITY: Moorhead – Clay County Joint Powers Authority (MCCJPA)

WORK PACKAGE: Forest Mitigation

BACKGROUND:

The Diversion Authority approved a budget for property acquisitions that is intended to provide a source of funding for acquisition for properties that would ultimately be needed for the project.

This Land Acquisition Directive (LAD) will serve as a tracking and reporting tool for property acquisitions.

PROPERTY ACQUISTIONS:

The acquisition of property rights on the following property is recommended and directed. This property is needed for Forest Mitigation to fulfill permit requirements. This LAD authorizes the MCCJPA and its member entities to acquire the property listed below. The acquisition of this property is expected to be complete by June 2024.

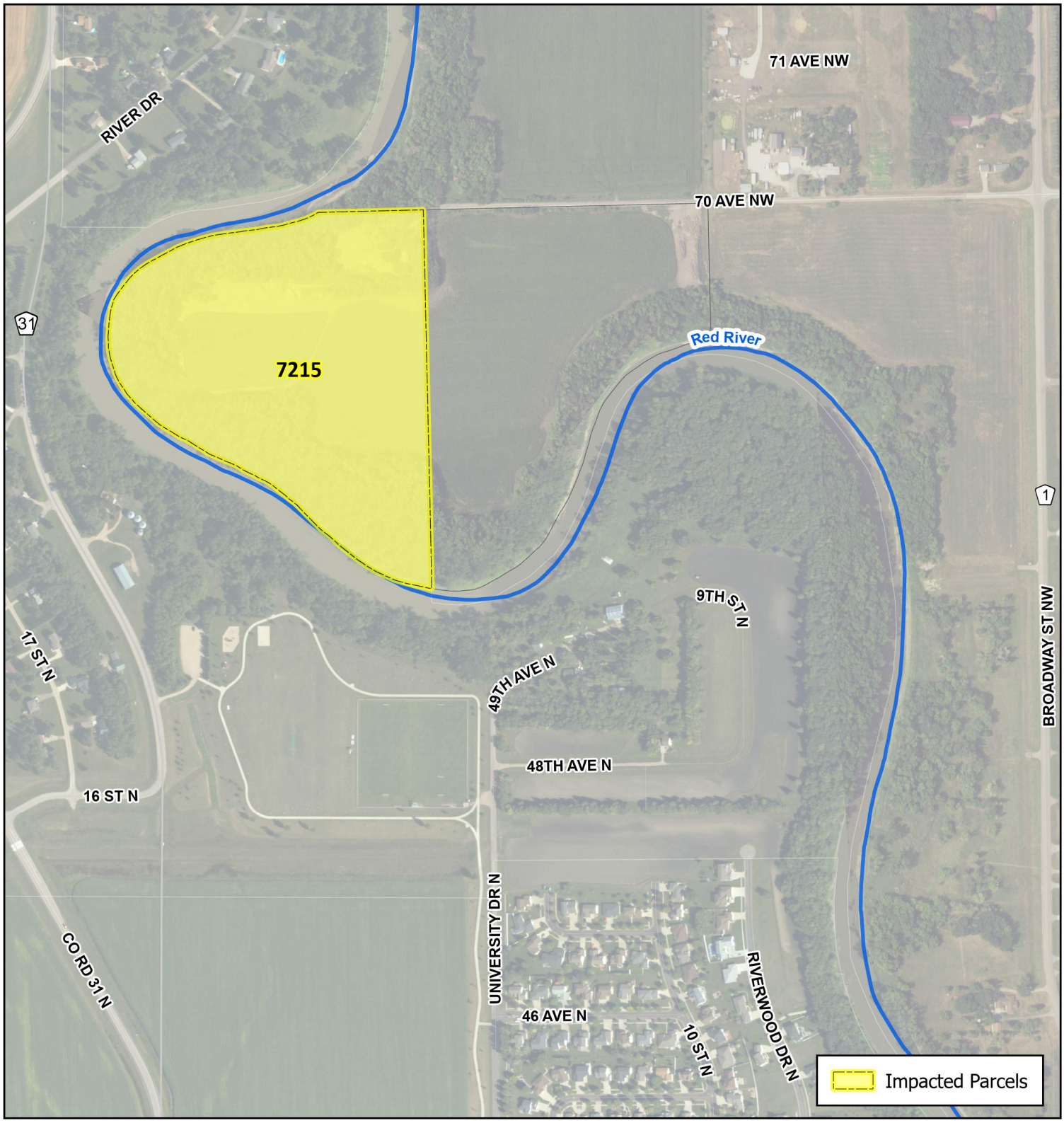
OIN	Parcel Type	Current Owner	Parcel Acres (County Data)
7215	LAND	SCHMIDT & SONS, INC.	29.2 Deeded Acres

Property Acquisition Budget for above listed OIN: $300,000

ATTACHMENTS:

- Parcel Map of listed Property Parcel

Recommended by:	Dean K. Vetter AE2S	Project Manager
	 Signature	*02/29/2024* Date
Directed by:		Finance Committee Chairman
	Diversion Authority Finance Committee	Title
	Signature	Date



Any reliance upon this map is at user's own risk. AE2S does not warrant the map or its features are either spatially or temporally accurate or fit for a particular use.
All parcel acreages and legal descriptions shown hereon are based on County GIS data. Final acreages and legal descriptions to be determined by boundary survey.
Coordinate System: NAD 1983 StatePlane North Dakota South FIPS 3302 Feet | Edited by: cwickenheiser | C:\Data\Projects\GIS Projects\FM Area Diversion\012 Lands Program\Lands Program Management\Land Acquisition Directives\LAD Work.aprx| LADsRemaining

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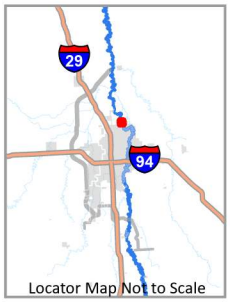


Land Acquisition Directives (LAD)

OIN 7215
Forest Mitigation
Clay County, MN

FM AREA DIVERSION
Map Date: 2/29/2024

FM AREA DIVERSION

METRO FLOOD DIVERSION AUTHORITY

FARGO-MOORHEAD AREA DIVERSION PROJECT

LAND ACQUISITION DIRECTIVE (LAD) LAD-MN-001 REV-07

DATE: 4/12/2024

AQUIRING ENTITY: Moorhead – Clay County Joint Powers Authority (MCCJPA)

WORK PACKAGE: Upstream Mitigation Area - City of Wolverton, MN

BACKGROUND:

The Diversion Authority approved a budget for property acquisitions that is intended to provide a source of funding for acquisition for properties that would ultimately be needed for the project.

This Land Acquisition Directive (LAD) will serve as a tracking and reporting tool for property acquisitions.

PROPERTY ACQUISTIONS:

The acquisition of property rights on the following properties are recommended and directed. These properties are impacted by the Project and acquisition of property rights is needed for operation. This LAD authorizes the MCCJPA and its member entities to acquire the property rights for the following Upstream Mitigation Area parcels.

OIN	Parcel Type	Current Owner
8792	LAND	DONALD M AND LEONE NELSON
8793	LAND	CITY OF WOLVERTON
8795	RES	CHARLES & HEATHER GOULET
8796	RES	MICHAEL R OLTHOFF
8797	LAND	MICHAEL R OLTHOFF
8798	RES	DONALD M NELSON
8799	LAND	HOWARD G HANSON JR
8802	LAND	DONALD M NELSON

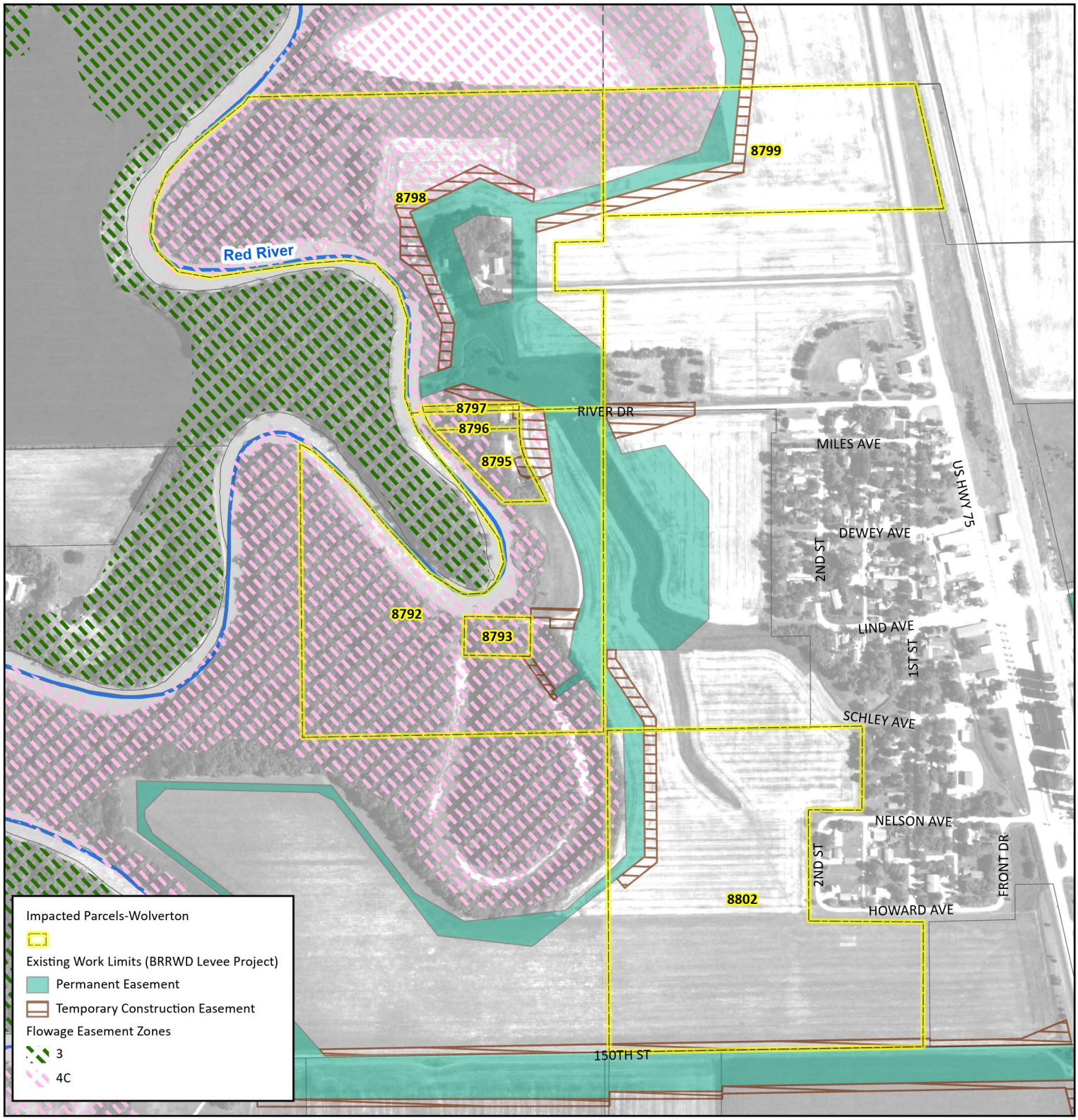
Property Acquisition Budget for above listed OINs: $2,681,500*

* Buffalo Red River Watershed District (BRRWD) Levee Project property rights are being acquired by BRRWD and are NOT included in this LAD.

ATTACHMENTS:

- Parcel Map of all listed Property Parcels

Recommended by:	Dean K. Vetter AE2S	Project Manager
		*04/12/2024*
	Signature	Date
Directed by:		Finance Committee Chairman
	Diversion Authority Finance Committee	Title
	Signature	Date



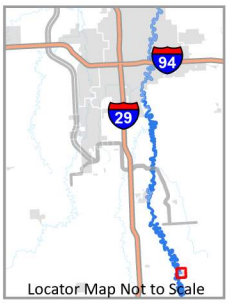
Any reliance upon this map is at user's own risk. AE2S does not warrant the map or its features are either spatially or temporally accurate or fit for a particular use.

All parcel acreages and legal descriptions shown hereon are based on County GIS data. Final acreages and legal descriptions to be determined by boundary survey.

Coordinate System: NAD 1983 StatePlane North Dakota South FIPS 3302 Feet | Edited by: cwickenheiser | C:\Data\Projects\GIS Projects\FM Area Diversion\012 Lands Program\Lands Program Management\Land Acquisition Directives\LAD Work.aprx| LAD_Christine_Wolverton

N

0 360 720
Feet



Land Acquisition Directive (LAD)

Upstream Mitigation Area
City of Wolverton
Wilkin County, MN

FM AREA DIVERSION

FM AREA DIVERSION
Map Date: 4/5/2024