

PRESENTATION TO
**WATER TOPICS OVERVIEW
COMMITTEE**

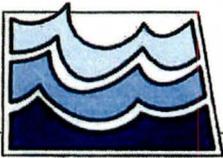
SEPTEMBER 22, 2016

JOINT MEETING WITH THE
STATE WATER COMMISSION



FM AREA
DIVERSION
PROJECT

Financial Status



North Dakota State Water Commission

900 EAST BOULEVARD AVENUE, DEPT 770 • BISMARCK, NORTH DAKOTA 58505-0850
(701) 328-2750 • TTY 1-800-366-6888 or 711 • FAX (701) 328-3696 • <http://swc.nd.gov>

Agenda E1

MEMORANDUM

TO: Governor Jack Dalrymple
Members of the State Water Commission
FROM: *D* Garland Erbele, PE, Chief Engineer/Secretary
SUBJECT: NDSWC Cost-Share Participation Request - Fargo Flood Control Project
DATE: June 23, 2016

The Metro Flood Diversion Authority cost-share request is for a grant towards the Fargo Flood Control Project. The estimated project cost is \$2.2 billion, with \$450,000,000 as the estimated federal cost-share. The State Water Commission's 2015 - 2017 biennium appropriation bill, Senate Bill 2020, shows the legislature's intent is to provide state funding not to exceed \$570,000,000 for one-half of the local cost of construction of a federally authorized Fargo Flood Control Project. The intent included \$120,000,000 for Fargo interior flood control projects with \$60,000,000 in the 2015 - 2017 biennium appropriation. The Fargo Flood Control Project legislative appropriations are shown in the following table.

	Biennium	Flood Control	Date	Interior	Date	Total
Intent		\$450,000,000		\$120,000,000		\$570,000,000
Approved	2009-2011	\$ 45,000,000	6/23/09			\$45,000,000
	2011-2013	\$ 30,000,000	6/21/11			\$30,000,000
	2013-2015	\$100,000,000	9/15/14			\$100,000,000
	2015-2017	\$ 69,000,000	Pending	\$60,000,000	12/18/15	\$129,000,000
Total Approved		\$244,000,000		\$60,000,000		\$304,000,000
Balance		\$206,000,000		\$60,000,000		\$266,000,000

The legislation indicated the remaining \$266,000,000 would be funded with \$66,500,000 over each of the next four bienniums. The State Water Commission's 2015 - 2017 biennium appropriation bill included \$69,000,000 for the Fargo Flood Control Project as show in the attached funding sections.

I recommend the State Water Commission approve cost share at 50 percent, not to exceed \$69,000,000, for the Fargo Flood Control Project to the Metro Flood Diversion Authority from the available funds appropriated to the State Water Commission in the 2015 - 2017 biennium. The funding is towards eligible costs and contingent on available funding.

GE:JM:ph/1928
Attachment

JACK DALRYMPLE, GOVERNOR
CHAIRMAN

GARLAND ERBELE, P.E.
CHIEF ENGINEER-SECRETARY

Senate Bill No. 2020
Fargo Flood Control Project
June 23, 2016

SECTION 8. FARGO FLOOD CONTROL PROJECT FUNDING - EXEMPTION. Of the funds appropriated in the water and atmospheric resources line item in section 1 of this Act, \$69,000,000 is for Fargo flood control projects, for the biennium beginning July 1, 2015, and ending June 30, 2017. Any funds not spent by June 30, 2017, are not subject to section 54-44.1-11 and must be continued into the next or subsequent bienniums and may be expended only for Fargo flood control projects, including levees and dikes. Except as otherwise provided, these funds may be used only for land purchases and construction, including right-of-way acquisition costs and may not be used for the purchase of dwellings. No more than ten percent of these funds may be used for engineering, legal, planning, or other similar purposes. The city of Fargo, Cass County, and the Cass County joint water resource district must approve any expenditures made under this section. Costs incurred by nonstate entities for dwellings or other real property which are not paid by state funds are eligible for application by the nonstate entity for cost-sharing with the state.

SECTION 9. LEGISLATIVE INTENT - FARGO FLOOD CONTROL PROJECT FUNDING. It is the intent of the sixty-fourth legislative assembly that the state provide one-half of the local cost-share of Fargo flood control projects, including constructing a federally authorized Fargo flood control project, and that total Fargo flood control project funding to be provided by the state not exceed \$570,000,000. It is the intent of the sixty-fourth legislative assembly that the \$120,000,000 of the \$570,000,000, be used for Fargo interior flood control projects and that any funds spent for the Fargo interior flood control projects after July 1, 2017, require 50 percent matching funds from the Fargo flood authority. It is the intent of the sixty-fourth legislative assembly that the \$266,000,000 yet to be designated by the state for the Fargo flood control project be made available in equal installments over the next four bienniums, beginning July 1, 2017. It is the intent of the sixty-fourth legislative assembly that funding for the Fargo flood control project will end June 30, 2021, if a federal appropriation for project construction has not been provided by June 30, 2021.

**Fargo-Moorhead Metropolitan Area Flood Risk Management Project
State Water Commission Funds Reimbursement Worksheet
Fargo Flood Control Project Costs - HB1020 & SB2020**

Time Period for This Request: August 1, 2016 - August 31, 2016

Drawdown Request No: 33	
Requested Amount:	\$ 4,655,547
Total Funds Expended This Period:	\$ 6,526,024
Total Funds Requested at 100% Match	2,785,070
Remaining Funds Requested at 50% Match	3,740,954
SB 2020 Matching Requirements	50%
Total Funds Requested at 50% Match	1,870,477
Total Funds Requested:	\$ 4,655,547

STATE AID SUMMARY:		
Summary of State Funds Appropriated		
Appropriations from 2009 Legislative Session	\$	45,000,000
Appropriations from 2011 Legislative Session		30,000,000
Appropriations from 2013 Legislative Session		100,000,000
Appropriations from 2015 Legislative Session		69,000,000
Appropriations to be funded in 2017 Legislative Session - Available 7/1/2017	51,500,000	
Appropriations to be funded in 2019 Legislative Session - Available 7/1/2019	51,500,000	
Appropriations to be funded in 2021 Legislative Session - Available 7/1/2021	51,500,000	
Appropriations to be funded in 2023 Legislative Session - Available 7/1/2023	51,500,000	
Total State Funds	206,000,000	244,000,000
Less: Payment #1 through #35 - City of Fargo		(55,510,209)
Less: Payment #1 - Cass County		(136,039)
Less: Payment #1 through #20 - FM Diversion Authority		(28,862,208)
Less: Payment #21 - FM Diversion Authority		(2,580,786)
Less: Payment #22 - FM Diversion Authority		(3,998,879)
Less: Payment #23 - FM Diversion Authority		(1,985,040)
Less: Payment #24 - FM Diversion Authority		(2,752,283)
Less: Payment #25 - FM Diversion Authority		(10,000,000)
Less: Payment #26 - FM Diversion Authority		(1,021,657)
Less: Payment #27 - FM Diversion Authority		(4,940,909)
Less: Payment #28 - FM Diversion Authority		(2,209,200)
Less: Costs Moved from Fargo Flood Control (Diversion) to Interior Flood Control		20,301,855
Less: Payment #29 - FM Metro Area Flood Risk Management Project		(2,900,000)
Less: Payment #30 - FM Metro Area Flood Risk Management Project		(3,681,747)
Less: Payment #31 - FM Metro Area Flood Risk Management Project		(6,900,000)
Less: Payment #32 - FM Metro Area Flood Risk Management Project		(3,725,044)
Less: Payment #33 - FM Metro Area Flood Risk Management Project		(4,655,547)
Total Funds Reimbursed		(115,557,693)
Total State Fund Balances Remaining	\$	128,442,307

City of Fargo
 State Water Commission Funds Reimbursement Worksheet
 Interior Flood Control Projects - SB2020

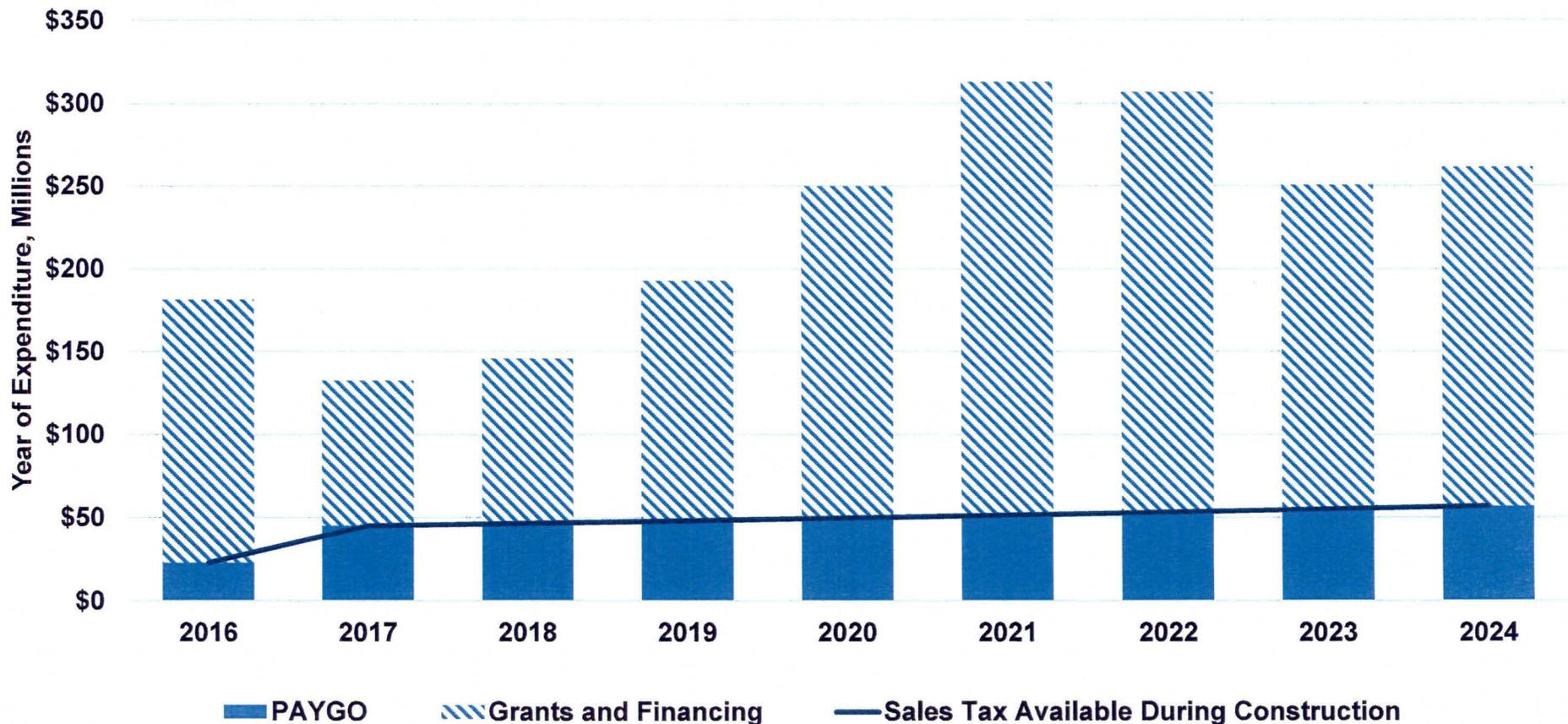
Time Period for This Request: May 13, 2015 - May 31, 2016

Drawdown Request No: 7	
Requested Amount:	\$ 44,509,936.54
Total Funds Expended This Period:	44,509,936.54
Total Funds Requested at 100%	44,509,936.54
Total Funds Requested:	\$ 44,509,936.54

STATE AID SUMMARY:			
Summary of State Funds Appropriated			
Appropriations from 2015 Legislative Session		\$	60,000,000.00
Appropriations to be funded in 2017 Legislative Session - Available 7/1/2017	15,000,000.00		
Appropriations to be funded in 2019 Legislative Session - Available 7/1/2019	15,000,000.00		
Appropriations to be funded in 2021 Legislative Session - Available 7/1/2021	15,000,000.00		
Appropriations to be funded in 2023 Legislative Session - Available 7/1/2023	15,000,000.00		
Total State Funds Appropriated	60,000,000.00		60,000,000.00
Less: Payment #1	Received on: 12/28/2015		(12,065,171.00)
Less: Payment #2	Received on: 2/1/2016		(1,207,497.00)
Less: Payment #3	Received on: 3/10/2016		(223,507.00)
Less: Payment #4	Received on: 3/31/2016		(423,052.00)
Less: Payment #5	Received on: 5/20/2016		(408,251.00)
Less: Payment #6	Received on: 6/20/2016		(1,162,585.46)
Less: Payment #7	Received on: 7/22/2016		(44,509,936.54)
Total Funds Reimbursed			(60,000,000.00)
Total State Fund Balances Remaining		\$	-

Expected Expenditures through Construction

- Costs that exceed available sales tax revenues and grants (State appropriations) will be publicly and privately financed



Financial Plan Utilizes an Extension of Existing City of Fargo and Cass County Flood-Related Sales Taxes

	City of Fargo		Cass County
	½ ¢	½ ¢	½ ¢
Current Expiration Date	2032	2029	2031
Purpose	Infrastructure & Flood Control	Flood Control	Flood Control
Sales Taxes to be Extended	1½¢ 		



In-Town Construction

SEPTEMBER 19, 2016 CONSTRUCTION UPDATE

PREPARED BY CITY OF FARGO ENGINEERING

DIVERSION FM-14-92 (2ND ST N-SOUTH OF LS)



Contractor: Industrial Builders

TOTAL PROJECT COST-\$16,835,104.58

PROJECT COMPLETION DATE

11/7/2016

CLOSED

2ND ST FROM 1ST AVE TO 3RD AVE N

ANTICIPATED OPENING END OF OCTOBER 2016

1ST AVE N FROM BRIDGE THRU 3RD ST

ANTICIPATED OPENING END OF
SEPTEMBER 2016

ONGOING WORK

FLOODWALL CONSTRUCTION

FLOODWALL FOOTINGS COMPLETE

UNDERGROUND CONSTRUCTION COMPLETE

1ST AVE & 2ND ST ROAD PREP & PAVING

DIVERSION FM-14-93 (2ND ST N-N OF LS)



Contractor: Industrial Builders

TOTAL PROJECT COST-\$12,946,699.05
PROJECT COMPLETION DATE 10/15/2016

CLOSED

2ND ST FROM 3RD AVE TO 6TH AVE N

ANTICIPATED OPENING EARLY
NOVEMBER 2016

4TH AVE N & 3RD ST INTERSECTION – REOPENED

ONGOING WORK

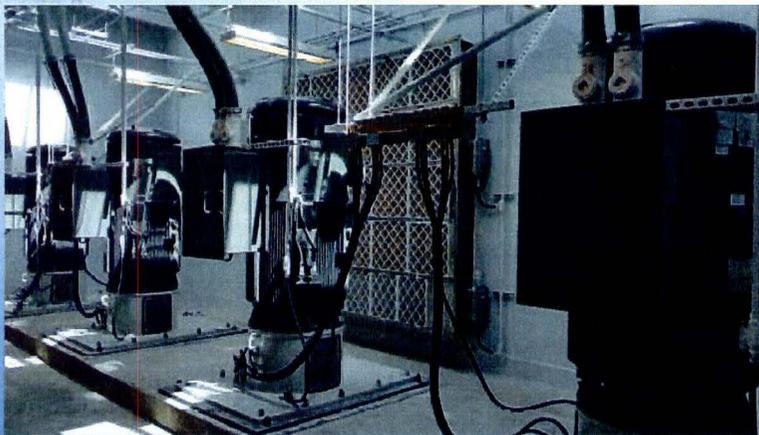
FLOODWALL & RETAINING WALL STEM WALLS

ROAD RECONSTRUCTION PREP

FLOODWALL & RETAINING WALL FOOTINGS
COMPLETE

UNDERGROUND CONSTRUCTION - COMPLETE

DIVERSION FM-14-81 (4TH STREET LEVEE)



Contractor: ICS

TOTAL PROJECT COST-\$17,796,063.63

PROJECT COMPLETION DATE
9/5/2016

4TH STREET SOUTH

REOPENED – 6/15/2016

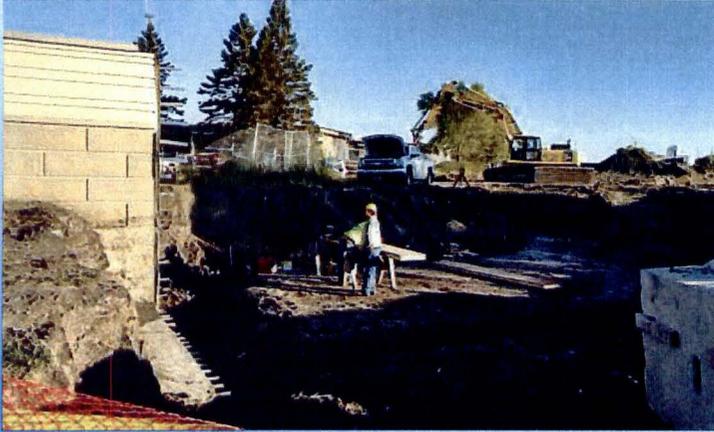
NO CURRENT TRAFFIC IMPACTS

ONGOING WORK

STORM SEWER CONNECTION TO NEW LS
COMPLETE

OLD LIFT STATION &
OUTFALL PIPE REMOVAL THRU EXISTING LEVEE

DIVERSION FM-14-82 (PARK EAST APT AREA)



Contractor: HOUGH

TOTAL PROJECT COST-\$1,448,373.17

PROJECT COMPLETION DATE
10/31/2016

2ND STREET SOUTH (MAIN AVE TO 4TH ST S)

CLOSED - 7/18/2016

TENTATIVE REOPEN - 9/23/2016
(PENALTY FOR MISSING 9/1/16 CONTRACT DATE)

ONGOING WORK

ROAD REPLACEMENT

CONSTRUCTION OF LEVEE

STORM SEWER INSTALLATION

FLOODWALL CONSTRUCTION

DIVERSION FM-14-52 (EL ZAGAL)



Contractor: REINER CONTRACTING

TOTAL PROJECT COST-\$1,542,795.94

PROJECT COMPLETION DATE
10/7/2016

ELM STREET OPENED

9/1/2016

ONGOING WORK

SIDEWALK RECONSTRUCTION

FLOODWALL CONSTRUCTION

**DIVERSION FM-15-H1 (MICKELSON FIELD LEVEE
EXTENSION)**

TOTAL PROJECT COST-\$724,910.00

PROJECT COMPLETION DATE
9/15/2016



NORTH TERRACE

CLOSED – 7/6/2016

REOPENED – 8/15/2016

NO CURRENT TRAFFIC IMPACTS

ONGOING WORK

FINAL GRADING

SEEDING

Contractor: Industrial Builders

FM-15-A1

CONTRACT COST-\$272,346.05

PROJECT COMPLETION DATE

MAGELLAN'S CONTRACTOR HAS MOBILIZED
TO SOUTHWOOD DR.

SOUTHWOOD DRIVE FLOOD RISK MANAGEMENT PROJECT



Contractor: H & S CONTRACTING

FM-15-B1

TOTAL PROJECT COST-\$2,478,197

PROJECT COMPLETION DATE 10/15/2016

CLOSED

9 HOLES ON THE ROSE CREEK GOLF COURSE

CLOSED 4/22/2016

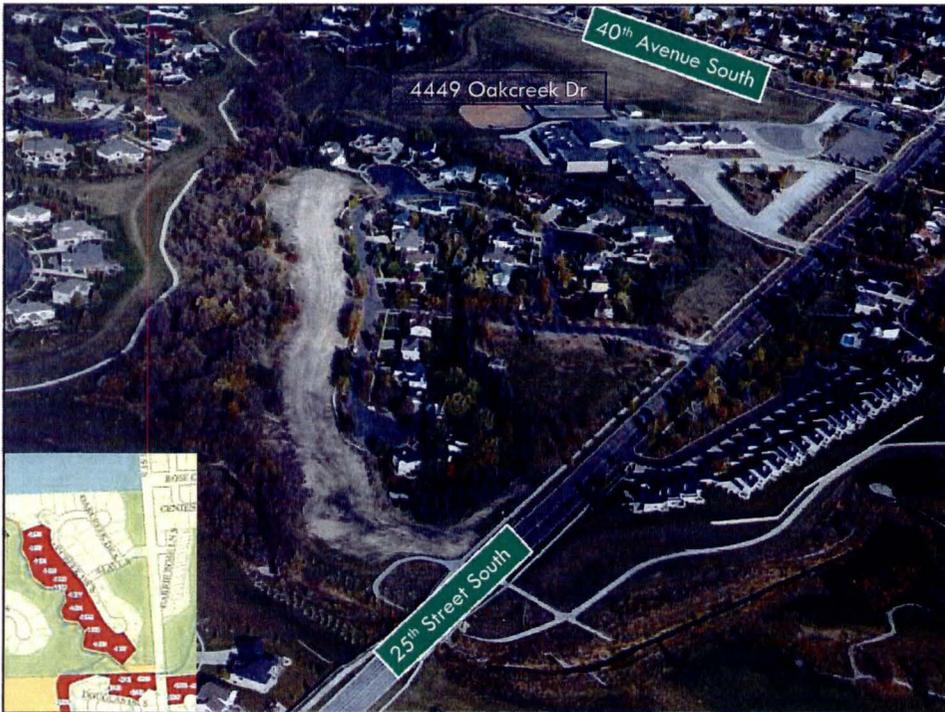
DURATION ESTIMATE 176 DAYS

WORK ON THE COURSE IS NEARING COMPLETION WITH MINOR SPOT RESEEDING AND PUNCHLIST ITEMS

ROSE CREEK FLOOD RISK MANAGEMENT PROJECT



Contractor: Griffin Construction



4449 Oak Creak Acquisition

\$\$\$ TO DATE

\$6.5 M IN ACQUISITIONS & MOVING EXPENSES

\$500,000 IN DECONSTRUCTION OF HOMES

\$730,000 IN CONSTRUCTION OF LEVEE

OFFER MADE AT THE APPRAISED VALUE OF 4449 OAKCREEK \$675,000 (ASSESSED VALUE IS \$521,600)

Required to pass a stage of 35 ft. through Fargo-Moorhead

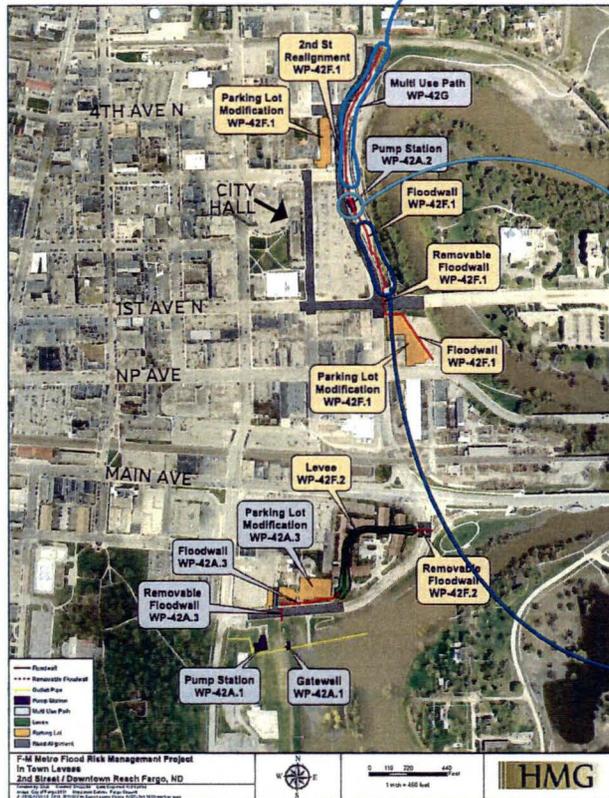
- ▶ **Key aspect of Diversion Project**
- ▶ Allows passage of additional flow through town
- ▶ Reduces frequency and duration of FM Diversion Project operation
- ▶ Provides increased flood protection until Diversion built
- ▶ 12 contracts totaling over \$80 M
- ▶ Designed and constructed by non-Federal Sponsors

2nd Street Floodfighting | 2009



- ▶ Flood of record: river crest of 40.8 ft
- ▶ Temporary levee required at a river stage of 30 ft
 - ▶ Can't be built until river reaches a river stage of 24 ft due to bank stability
 - ▶ Top constructed to river stage of 44 ft
 - ▶ Required over 25,000 CY of clay

Downtown Fargo, ND



Floodwall North and Road Reconstruction



- ▶ Construction cost of \$13.8M – Substantial completion Fall 2016
- ▶ Required demolition of 3 commercial properties
- ▶ 2nd Street N. relocated 100 ft west

- ▶ Floodwall elevation: 906.20 ft. (River stage 39.5 ft + 5.5ft)
- ▶ Removable floodwall length: 40 ft
- ▶ Retaining wall length: 280 ft

2nd St. Pump Station, Outfall, Floodwall & Gatewell



- ▶ Construction cost of \$8M – Substantially completed
- ▶ Pumping capacity: 75,000 gallons/minute [GPM]
- ▶ Pump station is 33-feet deep
- ▶ Floodwall elevation: 906.20 ft. (river stage 39.5 ft + 5.5ft)
- ▶ Floodwall length: 50-feet

Floodwall South



- ▶ Construction cost of \$16.6M – Substantial completion Fall 2016
- ▶ 2nd Street N. relocated 100 ft west
- ▶ Floodwall elevation: 906.20 ft (River stage 39.5 ft + 5.5ft)
- ▶ Floodwall length: 870-ft.

- ▶ Removable floodwall length: 160 ft
- ▶ 6'x6' box culvert included under road for pump station operation



Diversion Construction

Project Partnership Agreement signed

Cities of Fargo, Moorhead, Diversion Authority and U.S. Army Corps of Engineers sign agreement; officially commit to Project

The Mayors of Fargo and Moorhead, the Chair of the Flood Diversion Board of Authority, and the Principle Deputy Assistant Secretary of the Army for Civil Works Lowry Crook signed a Project Partnership Agreement (PPA) for the FM Area Diversion Project.

Officials met on July 11, at the Fargo Community Theater to sign the agreement. The PPA is the official agreement that marks the beginning of the Diversion Project's construction phase. The U.S. Army Corps of Engineers is anticipated to begin construction this fall.

"Today starts a new chapter for flood protection for our region," Dr. Tim Mahoney, Mayor of Fargo said. "Now our focus will be on construction, mitigation, and seeing this project built. It will be great to see Corps construction start this fall and I'm looking forward to beginning the search for a P3 contractor with the issuance of an RFQ at our next board meeting."

"I think it's important that we continue to work together to protect our communities from the threat of flooding," Del Rae Williams, Mayor of Moorhead said. "This is a big project. It's going to take some time to get it built, but I'll be very happy to have permanent flood protection to protect Moorhead residents' jobs and way of life."

"Today, we signed an agreement to be a full partner with Corps to see the Diversion Project constructed," Darrell Vanyo, Chair of the Flood Diversion Board of Authority said. "This plan has been studied since 2008 and has achieved many milestones; including, environmental studies by the



Officials at the Project Partnership Agreement signing on July 11, at the Fargo Community Theater.

Corps and Minnesota DNR, federal authorization, federal funding for construction, and now a project partnership agreement has been signed. While our direction is now clear due to this agreement, we have some more work to do to finalize our mitigation plans, and that will be a top priority of mine as Chair in the coming months."

"This is a permanent flood protection for this region," Sen. John Hoven said to the crowd. "It is about the region. It's about all of us. It's about everybody."

"Uncontrolled water can devastate in billion dollar ways. If we are serious about public safety, if we are serious about protecting property, we have to be serious about doing a project that protects the region and protects the people of this region," Sen. Heidi Heitkamp said.

Signing for the Corps was Principal Deputy Assistant Secretary of the Army (Civil Works), Lowry Crook.

"Thank you to each of you for all of your commitment," Crook told officials after signing the agreement.

Diversion Inlet Structure

First Federal Construction Contract

- Gated control structure
- Pile foundation
- 3 Tainter gates
- 3-4 year construction
- \$25 to 100 Million construction cost
- RFP: Low Price/Technically Acceptable
- Start construction Fall 2016



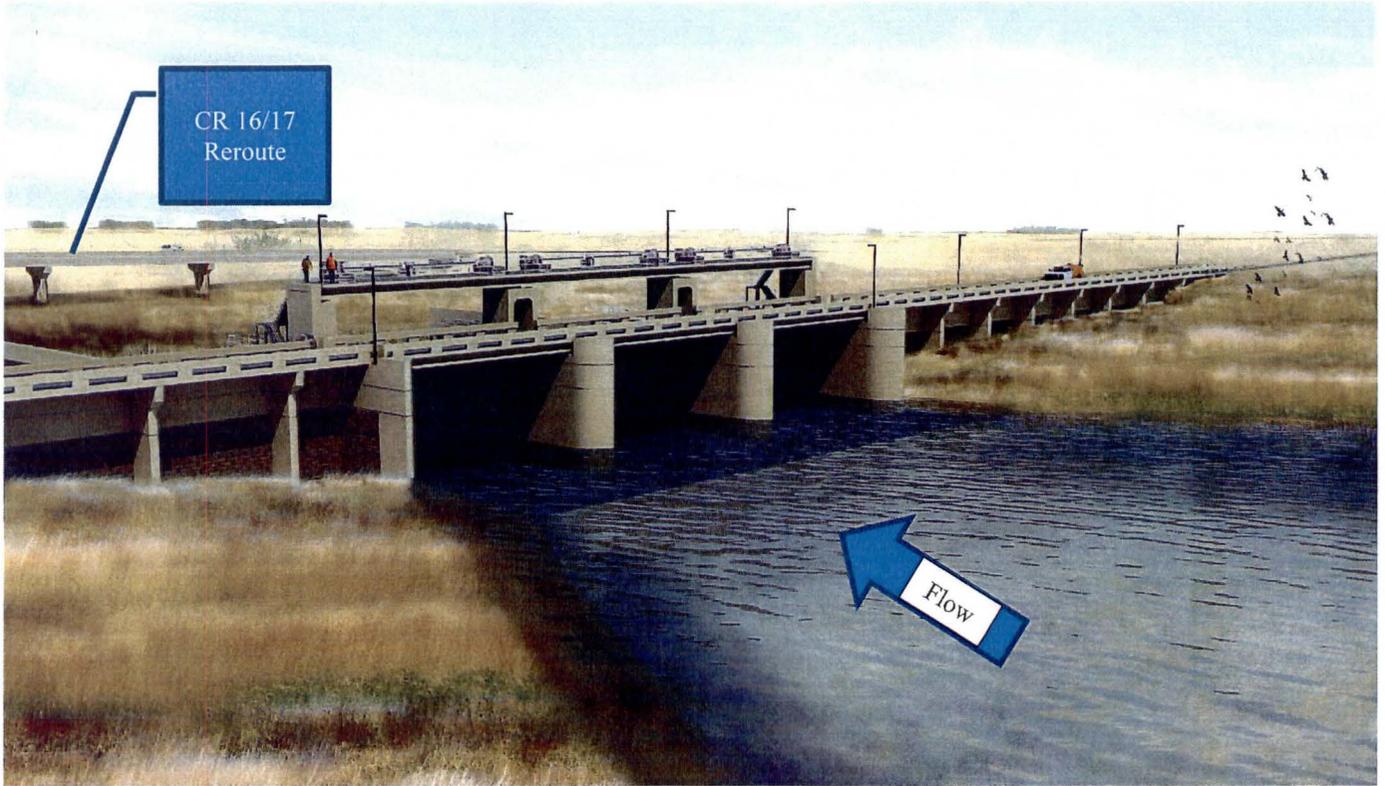
View of Inlet Structure (Looking Downstream from the Embankment Area) - GATES DOWN



Inlet Structure - Aesthetic Treatments

February 9, 2016



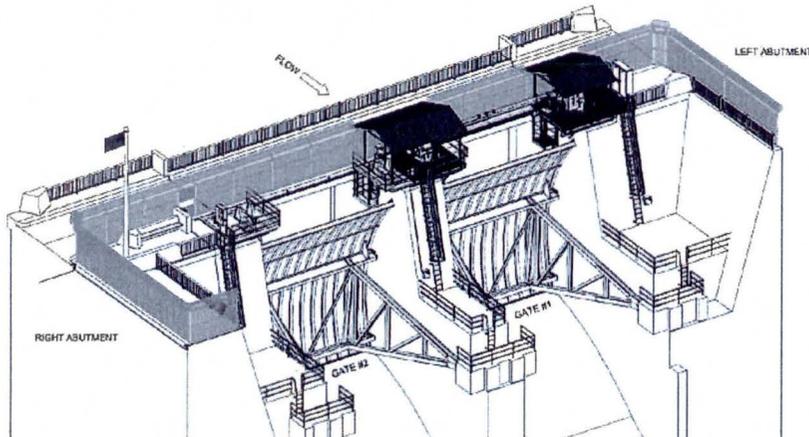


View of Inlet Structure (Looking Downstream from the Embankment Area) - GATES DOWN



Diversion Inlet Structure is a gated control structure that will control the amount of water that enters the diversion channel from the upstream staging area. Features include steel piling, mass concrete, three 50-foot wide tainter gates, a parabolic spillway, stilling basin, abutment walls, dam walls to tie the structure to the dam embankments, a vehicle service bridge across the top of the dam walls and across the structure, a mechanical platform and a control building.

- Allows greater control in keeping downstream impacts negligible
- 100/500-year flows = 20,000 cubic feet per second (cfs)
- Each gate will weigh 87,000 pounds (Equal to a fully-loaded semi rig)
- Located in NE corner of County Roads 17 and 16



Example gates and machinery

Fargo Moorhead Metro Project Timeline

ACTION LEAD	ACTION	CONTACT	DATE
MVP/non-Fed Sponsors	Submitted permit applications to MnDNR	MVP/non-Fed Sponsors	18 FEB
State of ND	401 Cert and Dam Construction Permit issued	NDDOH and NDSWC	4 FEB and 8 JUL
MVD	Meeting with Minnesota Governor, Mark Dayton	GOV Office	24 JUN
MN DNR	Determination of Adequacy	MN DNR	29 JUN
ASA(CW)	PPA Signing	MVD/Districts	11 JUL
MVP	1 st Federal Contract Award – Diversion Inlet, ND	MVP	Mid-OCT
MVP	Start Inlet Construction – mobilization and preload site	MVP	Late-NOV soonest
MVP	Site preload ends (275 days). Start remaining construction of Inlet.	MVP	Sept 2017
MVP	Complete Inlet Construction	MVP	2020



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FOR IMMEDIATE RELEASE

Diversion Authority Releases RFQ Seeking Contractors Interested in Building the P3 Portion of the Project

(July 14, 2016) – The Flood Diversion Board of Authority authorized the release of a Request for Qualifications (RFQ) this afternoon. The RFQ invites respondents to submit their qualifications to design, build, finance, operate, and maintain the Public-Private Partnership (P3) portion of the FM Area Diversion Project.

Qualifications documents must be submitted by interested firms by 4 p.m. (Central Time) September 7, 2016.

“The RFQ process helps us ensure we have well-qualified companies we can work with, that provide the level of quality and value we desire,” Darrell Vanyo, Chair of the Flood Diversion Board of Authority said. “This is a very complex project and we are going to be reviewing the submittals very carefully before we begin the final procurement stage. The final stage will ultimately result in a significant contract with the right P3 firm.”

Last September, a Notice of Intent was issued by the Diversion Board of Authority, officially announcing how the Project was anticipated to be constructed. The Project will utilize a split delivery approach. The U.S. Army Corps of Engineers will use traditional design-bid-build methods for construction of the Southern Embankment and the Diversion Authority will use a P3 approach for the Diversion Channel. The Diversion Authority has hosted two well-attended Industry Days for interested firms.

“Given the level of interest we saw in the Project during the Industry Days, I’m confident we will have many excellent firms submitting their qualifications,” Tim Mahoney, Mayor of Fargo, said. “This is an exciting project because it’s the first P3 project the U.S. Army Corps of



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Engineers has ever participated in. The Diversion Project will set the new standard for how large public works projects are completed around the country.”

After qualifications submittals have been received and reviewed, the Diversion Board of Authority will create a short list of several qualifying firms and issue a Request for Proposals (RFP) to those firms.

About the Flood Diversion Authority

The Flood Diversion Authority was formed through a joint powers agreement between the City of Fargo; the City of Moorhead; Cass County, North Dakota; Clay County, Minnesota; and the Cass County Joint Water Resource District. The Authority board is made up of 13 members representing these stakeholders. The purpose of the Flood Diversion Authority is to build a flood diversion project to protect the approximately 200,000 residents of the greater metropolitan area. For more information, go to www.fmdiversion.com



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FOR IMMEDIATE RELEASE

Six Contractors Interested in Building the P3 Portion of the FM Area Diversion Project

(Sept 21, 2016) – The Flood Diversion Board of Authority received Statement of Qualifications (SOQ) from six respondents to its Request for Qualifications (RFQ) released to design, build, finance, operate, and maintain the Public-Private Partnership (P3) portion of the FM Area Diversion Project.

“The number of responses from the industry shows there is great interest in the project.” Darrell Vanyo, Chair of the Flood Diversion Board of Authority said. “This also helps ensure that we will have a competitive procurement process with a healthy competition of good ideas and responsible costs.”

The names of the respondents are:

- Red River Partners
- Red River Alliance
- Red River Valley Partners
- Red River Valley Alliance
- Red River Infrastructure Solutions
- Lake Agassiz Partners

The RFQ was approved and released by the Diversion Board of Authority in July following the signing of the Project Partnership Agreement with the U.S. Army Corps of Engineers.

Last September, a Notice of Intent was issued by the Diversion Board of Authority, officially announcing how the Project would be constructed. The Project will utilize a split delivery approach. The U.S. Army Corps of Engineers will use traditional design-bid-build methods for construction of the Southern Embankment and the Diversion Authority will use a P3



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approach for the Diversion Channel. The Diversion Authority hosted a well-attended Industry Day for firms interested in the P3 portion.

The SOQs are being reviewed by technical teams and the results will be tabulated. Once the tabulations are completed, the results will be provided to the Diversion Board of Authority. A short list of several qualifying firms will be created and a Request for Proposals (RFP) will be issued to those firms.

About the Flood Diversion Authority

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Mitigation Plan



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Fargo, ND 58108

FOR IMMEDIATE RELEASE

Diversion Authority Releases Detailed Mitigation Plan

(September 16, 2016) – The Diversion Authority has developed a detailed Mitigation Plan outlining mitigation requirements that will be followed for the Fargo-Moorhead Area Diversion Project to address the outstanding issues previously identified during studies by the US Army Corps of Engineers and the Minnesota Department of Natural Resources (MDNR). The plan is currently under review by the MDNR and the North Dakota State Water Commission (NDSWC).

The plan outlines the steps the Diversion Authority will take to ensure the fair treatment of people, property and the environment impacted by the project. The Mitigation Plan consists of comprehensive property mitigation and environmental mitigation plans. The Mitigation Plan is also a compilation of a series of plans for a variety of topics.

Completing a comprehensive Mitigation Plan was a top priority of the Diversion Authority and Chairman Darrell Vanyo. ([see Chairman's 2016 Goals](#))

“The release of our Mitigation Plan is a major step forward towards permanent flood protection for the Fargo-Moorhead area,” said Chairman Darrell Vanyo. “I hope this plan and the commitments being made to mitigate the potential impacts of project related to agricultural, environmental, and property impacts put some who are impacted more at ease.”

The Mitigation Plan has been shared with permitting agencies in the State of Minnesota through the MDNR and the State of North Dakota through the NDSWC. It is intended to be a living document that will be reviewed and amended periodically with input from agencies and others.

“I hope this plan shows that we are serious about taking care of those who are impacted in rural Minnesota and North Dakota,” said Moorhead Mayor Del Rae Williams. “We will continue to work with permitting agencies in both States to review and refine this plan.

About the Flood Diversion Authority

The Flood Diversion Authority was formed through a joint powers agreement between the City of Fargo; the City of Moorhead; Cass County, North Dakota; Clay County, Minnesota; and the



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Mitigation Plan

September 9, 2016



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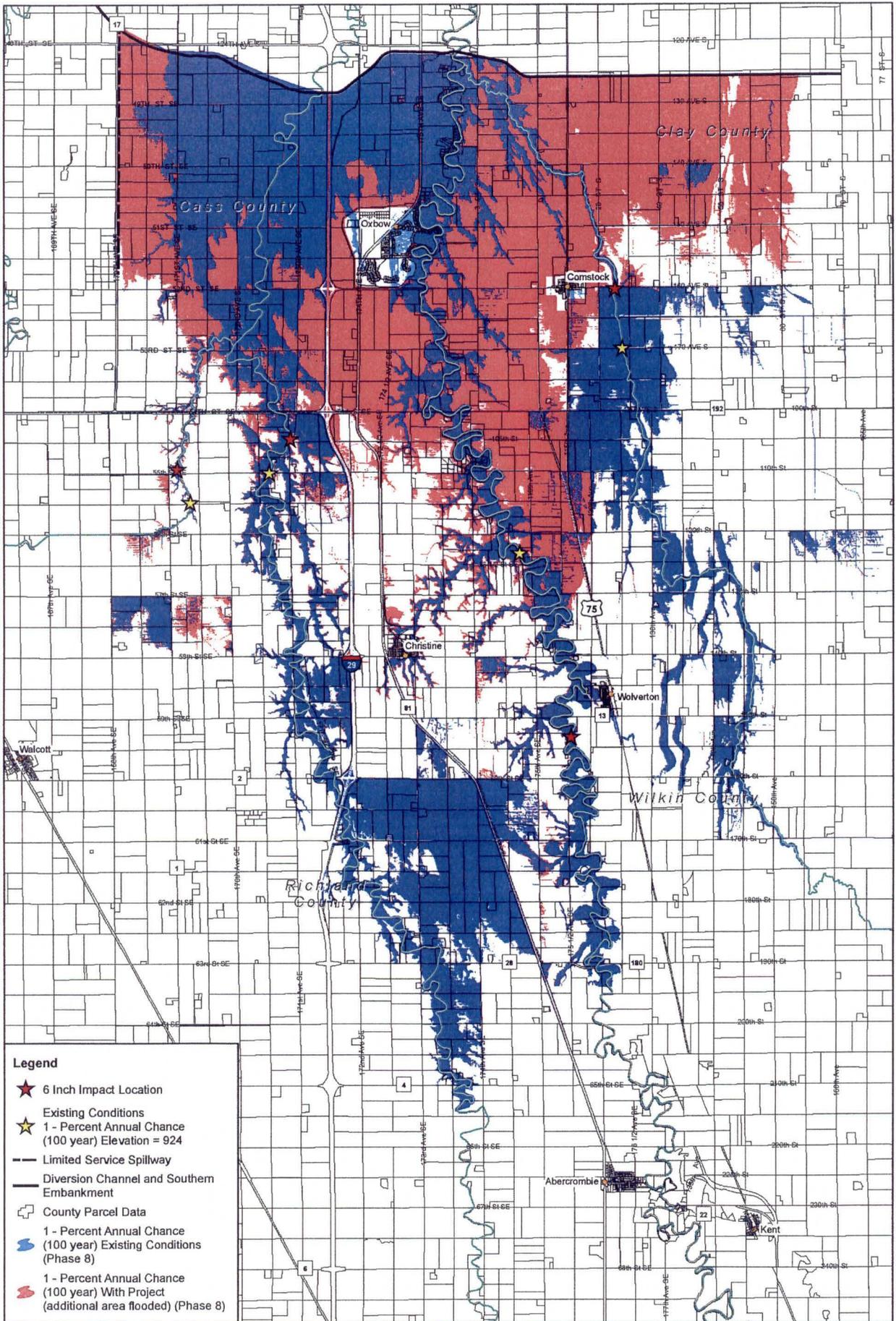
Preface

The Diversion Authority has prepared this Mitigation Plan to document the mitigation requirements that will be followed for the Fargo-Moorhead (FM) Area Diversion Project (Project). This Mitigation Plan has been drafted in coordination with the US Army Corps of Engineers (USACE), and in consultation with the North Dakota State Water Commission (NDSWC) and the Minnesota Department of Natural Resources (MDNR). Throughout this Mitigation Plan, the Project is commonly referred to as the 'FM Area Diversion Project', but it should be noted that USACE, other agencies, and certain documents identify the Project as the 'Fargo-Moorhead Metro Flood Risk Management Project'.

The Project has been studied extensively by the Diversion Authority, USACE, MDNR and others. The Project has received a Federal Record of Decision (ROD), Federal authorization by Congress through the Water Resources Reform and Development Act (WRRDA) of 2014. The Project received a "new start" and its first Federal construction appropriation in 2016. In addition, the Diversion Authority entered into a Project Partnership Agreement (PPA) with USACE on July 11, 2016.

This Mitigation Plan is intended to be a living document that will be reviewed and amended periodically as additional information and operations prompt updates.

This Mitigation Plan consists of both property mitigation and environmental mitigation plans. This document is a compilation of a series of plans for a variety of topics. Collectively, the mitigation plans for each individual topic serve as a component of the overall mitigation plan for the Project.



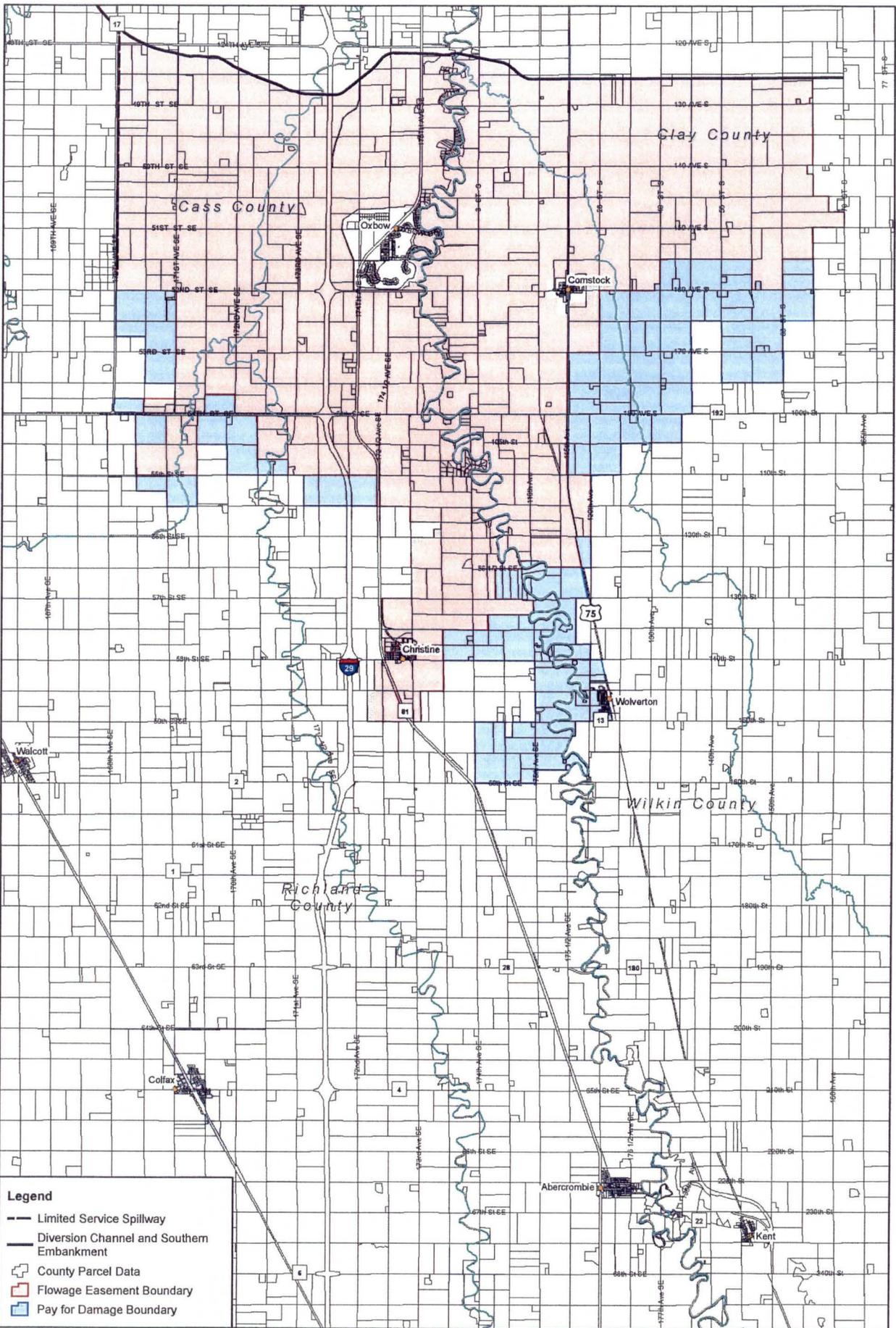
Legend

- ★ 6 Inch Impact Location
- ★ Existing Conditions
- ★ 1 - Percent Annual Chance (100 year) Elevation = 924
- Limited Service Spillway
- Diversion Channel and Southern Embankment
- County Parcel Data
- 1 - Percent Annual Chance (100 year) Existing Conditions (Phase 8)
- 1 - Percent Annual Chance (100 year) With Project (additional area flooded) (Phase 8)

**Map 1: Upstream Retention Area Mitigation Plan
1 - Percent Annual Chance (100 year) Floodplain**



Created By: emelson Data Created: 8/22/2016 Date Exported: 9/6/2016 Image: 2015 County NAD
Elevation Data: IM LIDAR Horizontal Datum: NAD 1983 BLM Zone 14N RUS Vertical Datum: North American 1983
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**Map 4: Upstream Retention Area Mitigation Plan
Flowage Easement & Pay for Damages**

Created By: emeborn Date Created: 8/22/2018 Date Exported: 9/6/2018 Image: 2015 County NADP
 Elevation Data: IRI LIDAR Horizontal Datum: NAD 1983 SJK Zone 14N BLUS Vertical Datum: North American 1983
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Property Acquisition

Typical Property Acquisition Process

June 2016

The Fargo-Moorhead Metro Flood Diversion Authority (DA) and Cass County Joint Water Resources District (CCJWRD) are responsible for the acquisition of real property. The parties will utilize the following steps for acquiring properties in North Dakota:

- 1. Design Team (USACE, HMG, or P3 Developer)**
 - a. Advises Program Management Consultant (PMC) of Right of Way (ROW) needs at 65 percent design.
 - b. PMC establishes a budget for the acquisition needs by Phase or Work Package.
- 2. PMC-LAND**
 - a. Presents Land Acquisition Directive (with budget) to Diversion Authority's Finance Committee for approval.
 - b. Submits the executed Land Acquisition Directive to CCJWRD.
 - c. PMC assigns acquisition to a land acquisition firm.
 - d. Land acquisition firm accepts assignment, prepares proposed fee for review by PMC.
 - e. PMC initiates task order amendment for Land Agent, obtains CCJWRD approval, executes documents with Land Agent, and provides fully executed documents to parties.
- 3. Right of Entry**
 - a. PMC identifies parcels which require Right of Entry (ROE) for boundary surveying.
 - b. Legal prepares ROE request for access to conduct boundary survey.
 - c. CCJWRD manages ROE request and receipt forms, conducts initial follow-up calls, and notifies PMC and Land Agent when additional follow-up is required.
 - d. Land Agent conducts any necessary additional follow-ups to establish singular point of contact.
- 4. Survey Parcel**
 - a. PMC conducts boundary survey and supplies initial certificate of survey exhibits to Land Agent (and appraiser).
- 5. Notice of Intent to Acquire (NOI)**
 - a. Land Agent sends property owner certified letter of NOI.
 - b. Land Agent contacts property owner by phone to describe acquisition process, offers to meet.
- 6. Parcel Appraisal**
 - a. Appraiser, using certificate of survey exhibit, conducts appraisal following federal standards.
 - b. Appraiser submits draft appraisal report for review (see Appraisal Review Plan for additional details).
 - c. Upon appraisal review, Just Compensation value approved by CCJWRD (in accordance with NDCC § 32-15-06.1).
- 7. Parcel Purchase Negotiation**
 - a. Land Agent presents appraisal to property owner and makes initial offer of just compensation based on appraisal amount.
 - b. Land Agent has 45 days (goal) to negotiate fair market value for acquisition. Land Agent has 90 days (goal) to negotiate relocation benefits, where applicable.
 - c. Legal team develops Purchase Agreement based on Land Agent recommendation.
 - d. Land Agent meets with property owner to present Purchase Agreement; execute Purchase Agreement.
 - e. If outstanding terms, negotiate additional terms and seek CCJWRD approval regarding any additional negotiations.
 - f. PMC prepares final acquisition exhibits (Certificate of Survey) and supplies to legal team for inclusion in the closing documents.

Typical Property Acquisition Process



June 2016

- g. Upon final approval of Purchase Agreement by landowner and CCJWRD, legal team prepares deed and additional documents required for closing.
- h. Exhaust all reasonable negotiation opportunities via personal meetings and phone contacts.

8. Parcel Close

- a. The Title Company prepares partial mortgage releases, closing statement, 1099, and conducts the closing with owner.

9. Eminent Domain for Acquisition

- a. If negotiation opportunities are exhausted and a negotiated acquisition is unlikely, designer, Land Agent, and PMC present negotiation details to CCJWRD.
- b. If CCJWRD concludes negotiated acquisition unlikely and judicial action will be necessary to acquire the property, legal team, in coordination with designer, Land Agent, and PMC, presents RESOLUTION OF NECESSITY and RESOLUTION OF OFFER TO PURCHASE for CCJWRD's consideration and approval. CCJWRD makes a decision based on timing and type of property being acquired as to which eminent domain process will be used to acquire the necessary property.
- c. Upon approval of RESOLUTIONS by CCJWRD, Land Agent presents RESOLUTIONS, along with final offer to property owner and notifies owner of one-week deadline for acceptance.
- d. If no acceptance, legal team starts an eminent domain action to acquire the necessary property.
- e. Legal team continues negotiations with landowner or landowner's counsel throughout judicial process. Legal team engages landowner's counsel in discovery and pre-trial motions and otherwise prepares for trial.
- f. Following acquisition of the property through the judicial process, Diversion Authority, USACE, etc., may proceed with construction on parcel.

Typical Property Acquisition Process

June 2016

Workflow diagram summary presented below. Detailed workflow diagram attached.

