Pottawattamie County Emergency Management Agency
205 South Main Street
Council Bluffs, IA 51503

Iowa Flood Mitigation Program (FMP)
Flood Recovery Fund - Project Application

Vanman Levee District

Iowa Flood Mitigation Program (FMP)
Flood Recovery Project Application

I. Applicant Information

A. Applicant/Community Name	B. Address		City, State, Zip Code
Vanman Levee District	31938 130th St.		Missouri Valley, IA 51555

C. Point of Contact (POC) Name for Project	POC Title	POC Agency	POC Email
Lyle McIntosh	Trustee	Vanman #30	brkfarmer1@aol.com

POC PO Box and Zip Code	POC Street Address	POC City, State, Zip Code	POC Phone
	same as above		402-651-3884

Alternate POC Name or Authorized Representative	Alt POC Title	Alt POC Agency		Alternate POC Email
Douglas Reed	EMA Director	Emergency Management		dreed@pcema-ia.org

Alt POC PO Box and Zip Code	Alt POC Street Address	Alt POC City, State, Zip Code	Alt POC Phone
	205 S Main St	Council Bluffs, IA 51503	712-242-6034

D. Federal Tax ID # / FEIN	E. County Name	F. US Congressional District(s)	State Legislative Districts	
			Senate	House
[redacted]	Pottawattamie	3	11	22

G. Is the Applicant/Community participating in the National Flood Insurance Program (NFIP)?	Community's CID Number
yes	**190232**

II. Project Cost Information

A. Identify the requested funding source: **Permanent Work**

B. Project Budget Summary

Land rights acquisition	$	21,500.00
Construction	$	2,844,204.00
Engineering	$	151,400.00
Legal	$	10,000.00
	$	-
Levee Repairs outside of DeSoto Bend relocation project	$	-
Contruction	$	2,145,017.50
Engineering	$	125,000.00
Legal	$	10,000.00
	$	-
Total Project Budget Summary	**$**	**5,307,121.50**

C. Project Funding Source

Identify all anticipated funding sources for the project and the amounts.

State that you have applied for and/or received approved federal, state and/or local financial assistance.

Please insert additional rows as needed.

Identify source	Applied/ Received	Federal $	State $	Local $	TOTAL
FRF Funding - DeSoto Bend project	Applied		$ 3,027,104.00		$ 3,027,104.00
					$ -
FEMA - Levee outsite DeSoto area	Unknown Status	$ 1,710,013.13			$ 1,710,013.13
State 10% PA - Levee outside DeSoto area			$ 228,001.75		$ 228,001.75
FRF Funds 15% - Levee outside DeSoto area			$ 342,002.62		$ 342,002.62
					$ -
					$ -
					$ -
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					$ -
					$ -
					$ -
					$ -
					$ -
Total Project Funding Source		$ 1,710,013.13	$ 3,597,108.37	$ -	$ 5,307,121.50

III. Project Plan Summary

A. Provide a brief description of the project and how the project supported flood response or will support future flood recovery and flood mitigation activities. This is a summary of Tab B - Project Plan.

This project calls for an easement set-back of the existing Vanman Levee within the DeSoto Bend National Wildlife Refuge. (2) large holes from the floods of 2011 will continue to allow unobstructed Missouri River inflows during highwater and flood level events into the county impacting the agricultural sector, county transportation infrastructure (including critical farm-to-market roads) as well as creating cascading events and effects that ultimately impact closures at or around Interstate 29.

The movement of the levee will place a new levee section at higher elevation, reduce floodwater pinch points, create a larger flood containment area, and expand floodwater drainage capacity while significantly mitigating risk to the levee, property, and critical infrastructure. The project will also contribute to increased public safety by protecting critical transportation routes, such as I-29, by reducing the chances of flood related closures in that area which requires rerouting of interstate traffic loads to county highway and secondary road systems not designed for those traffic flows which increase the likelihood of transportation incidents and accidents. In addition, ongoing flooding throughout the year caused an additional complete breach, partial breach and left miles of sediment and debris damage on the lower portions of the system that will also be addressed.

B. Provide a brief description of the financial assistance need through the Flood Recovery Fund.

Many levee and drainage districts in Pottawattamie County are still paying off debt incurred by the 2011 Missouri River flooding. Local funding capacity is not available to make standard repairs, let alone a mitigation project that will decrease the likelihood of future levee failures and inland flooding events. Additionally, the existing holes in the Vanman Levee were originally created by the flooding of 2011 and the district was denied access to their levee by the federal government to fix and maintain that section of levee due to their failure to recognize the legal easements in place when U.S. Fish and Wildlife purchased the land for a federal refuge. Therefore, there is a significant likelihood for denial of FEMA public assistance funding this year to make repairs with mitigation or repairs under an improved project scope of work due the pre-existing and unmaintained damages. Without this funding it is more than likely that the levee breaches will remain, due to a lack of funding and the next high water or even minor flooding event will inundate the northwest sector of the county. Additional areas of damge that qualify under the FEMA PA program will be financially supported through those eventual approved projects and FRF funds will be utilized to meet the local cost match of those projects.

C. Explain how financial assistance through the Flood Recovery Fund is essential to meet the necessary expenses or serious needs of the applicant related to flood response, flood recovery, and flood mitigation.

The approval of funding from the FRF is beyond essential for this project. First, and foremost, as the situation caused by access denial of the federal government prior to and after 2011, the damages cannot be solely attributed to this 2019 disaster rendering it ineligible for FEMA assistance, per their program policy. The proposed project in this application will decrease emergency response requirement during future flood events, lessen recovery costs of future flood events, thus mitigating a significant risk to private and public property and critical infrastructure of local, county, and state governments.

D. Provide details of any additional funds that can be applied to the project.

There are levee damages south of the DeSoto Bend area that can easily be attributed to the FEMA Public Assistance program. Additionally, it is the intent of the district to continue working with FEMA on overcoming the past access denials of the federal government and get all or a portion of this proposed project approved under the public assistance program. Any fuding received can be used to offset the award under the FRF and/or be utilized to replenish some of the fudning awarded under the FRF.

E . Description of Project Location (i.e. Latitude and Longitude (minimum 6 digits after the decimal), Neighborhood, Subdivision, Geographic Boundaries, Driving Directions, etc.)

41.469538, -95.966873
41.460416, -95.918782 to 41.489667, -95.996569
41.489716, -95.996574
41.5046201, -95.994483

IV. Work Schedule

A. List the major milestones for this project.

Task	Months/Years from Award			Responsible Party
	Start	Complete		
DeSoto project	3/1/2020	8/1/2020		District and contracted engineer
Lower Vanman damage sites	Inititated	5/1/2020		District and contracted engineer
Total Project Duration:	**6**			

V. Certifications

To the best of my knowledge and belief, I certify that all data in this application packet is complete, true and correct. The governing body of the applicant has duly authorized this document and hereby applies for assistance as documented in this application. The applicant understands that the project shall not proceed until Flood Mitigation Board approval is granted.

[redacted]

Lyle McIntosh
Name of the Chief Executive Officer

Trustee
Title

Vanman Levee District
Organization

February 3, 2020
Date

402-651-3884
Phone Number

[redacted]
Signature of the Authorized Representative

Douglas Reed
Name of Authorized Representative

Emergency Management Director
Title

Pottawattamie Co Emergency Mgmt Agency
Organization

February 3, 2020
Date

205 S Main St
PO Box / Street Address

Council Bluffs, IA 51503
City, State and Zip Code

712-242-6034
Phone Number

dreed@pcema-ia.org
Email Address

Project Plan

Applicant: Vanman

Political subdivision shall attach to the Flood Recovery Project Application the project plan.

Project plan shall include:

1. **a. A detailed description of the project Scope of Work.**

   i. How the project supported flood response or will support future flood recovery and flood mitigation activities.

   This project will provide funding to abandon the longstanding damaged levee section, move it east under a cooperative agreement with USFWS, creating a new levee section adjoined with the Coulthard Levee (Harrison Co.) and connecting back to the mainline Vanman south of DeSoto Ave.

   Additional levee breach repairs will occur on the southern Vanman Levee, replacement of a damaged culvert pipe that runs through the breached section (Nobles Lake DD), and clean/clear debris, silt, and sediment from the entire levee system.

   ii. Map(s) identifying project area. See attached maps.

   See attached maps showing the properties and locational area within Pottawattamie County

2. **a. An estimated cost of the project (detailed budget):**

   i. A detailed description of the amount of funds expended to date and the funding source.

   Funds are being obligated in order to seal the lower Vanman breach in anticipation of new onset flooding within the next 90-120 days creating an exigent circumstance within the district and the county.

3. **a. If available: A copy of the application(s) from other funding sources and subsequent approval letter(s).**

   Available via FEMA Grants Portal.

STATE OF IOWA
DESIGNATION OF APPLICANT'S AUTHORIZED REPRESENTATIVE

Doug Reed is hereby authorized to execute on behalf of
(Name of Representative)

Vanman Levee District this mitigation project and to file it with
(Applicant Entity)

Iowa Homeland Security and Emergency Management (HSEMD) for the purpose of obtaining financial assistance under the Flood Mitigation Bill, Senate File 2217.

Signed 2/3/2020
(Date)

Lyle McIntosh
Chief Executive Officer
[redacted] *t Name and Title)*

(Signature)

Doug Reed, EMA Director
plicant's Authorized Representative
[redacted] *(Print Name and Title)*

(Signature)

Attested: Scott Manz, EMA Specialist
(Print Name and Title)

(Signature)

91-522 625-1366

SUBSTITUTE W 9 / VENDOR UPDATE FORM

CPK-45933

(Please print or type except for signature)

In order for the State of Iowa to pay you the amount that is due to you and to comply with the IRS regulations on reporting these payments, we are requesting the following information. Failure to provide this information will result in withholding of payment.

BOX A

Are you/your business:

	YES	NO
Individual [I]		X
or **Sole Proprietorship [S]**		X

If the answer to both was no, please complete Box B.

If you answered yes to either item, please provide Your Social Security number:

_____ - _____ - _____

AND

Complete the Name and Address below:

Last Name: First Name: MI

Doing Business As:

Address:

Address:

City: State Zip

BOX B

Is your business:

		YES	NO
Corporation	[C]		
Partnership	[P]		
Estate of Trust	[E]		
Public Service Corp	[U]		
Government	[G]	x	
Other	[O]		

Please Explain:

Please provide us with your **Federal Employer Identification number:**

[redacted]

AND

Complete the Name and Address below:

Last Name: First Name: MI

McIntosh Lyle

Doing Business As:
Vanman Levee District

Address:
31938 130th St.

Address:

City, State Zip
Missouri Valley, IA 51555

CERTIFICATION MUST BE SIGNED BY VENDOR

Certification - Under penalties of perjury, I certify that:

(1) The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and

(2) I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividend, or (c) the IRS has notified me that I am no longer subject to backup withholding.

Signature: [redacted] Date: 2/3/2020

FOR OFFICE USE ONLY (Refer to Procedure 270.450 for more details)

From:
Dept.

Contact:

Added For Purchasing:

☐ Yes ☐ No

☐ Add

☐ Change
(Include vendor code and changes only)

☐ Delete

Reason:

Minority Impact Statement

Pursuant to 2008 Iowa Acts, HF 2393, Iowa Code Section 8.11, all funding applications submitted to the State of Iowa shall include a Minority Impact Statement. This is the state's mechanism to require applicants to consider the potential impact of the project's proposed programs or policies on minority groups.

Please choose the statement(s) that pertains to this application. Complete all the information requested for the chosen statement(s).

☐ The proposed project programs or policies could have a disproportionate or unique **positive** impact on minority persons.

Describe the positive impact expected from this project

Indicate which group is impacted:

- ☐ Women
- ☐ Persons with a Disability
- ☐ Blacks
- ☐ Latinos
- ☐ Asians
- ☐ Pacific Islanders
- ☐ American Indians
- ☐ Alaskan Native Americans
- ☐ Other

☐ The proposed project programs or policies could have a disproportionate or unique **negative** impact on minority persons.

Describe the negative impact expected from this project

Present the rationale for the existence of the proposed program or policy.

Provide evidence of consultation of representatives of the minority groups impacted.

Indicate which group is impacted:

- ☐ Women
- ☐ Persons with a Disability
- ☐ Blacks

☐ Latinos

☐ Asians

☐ Pacific Islanders

☐ American Indians

☐ Alaskan Native Americans

☐ Other

[X] The proposed project programs or policies are **not expected to have** a disproportionate or unique impact on minority persons.

Present the rationale for determining no impact.

The restoration of drainage and levee district structures and facilities will protect persons of all classes of persons regardles of their demographic.

I hereby certify that the information on this form is complete and accurate, to the best of my knowledge:

Douglas C. Reed
Printed Name

Emergency Management Director
Title

[redacted]
Signature

2/3/2020
Date

Definitions

"Minority Persons", as defined in Iowa Code Section 8.11, mean individuals who are women, persons with a disability, Blacks, Latinos, Asians or Pacific Islanders, American Indians, and Alaskan Native Americans.

"Disability", as defined in Iowa Code Section 15.102, subsection 5, paragraph "b", subparagraph (1):
b. As used in this subsection:

(1) "*Disability*" means, with respect to an individual, a physical or mental impairment that substantially limits one or more of the major life activities of the individual, a record of physical or mental impairment that substantially limits one or more of the major life activities of the individual, or being regarded as an individual with a physical or mental impairment that substantially limits one or more of the major life activities of the individual.

"*Disability*" does not include any of the following:

(a) Homosexual or bisexuality.

(b) Transvestism, transsexualism, pedophilia, exhibitionism, voyeurism, gender identity disorders not resulting from physical impairments or other sexual behavior disorders.

(c) Compulsive gambling, kleptomania, or pyromania

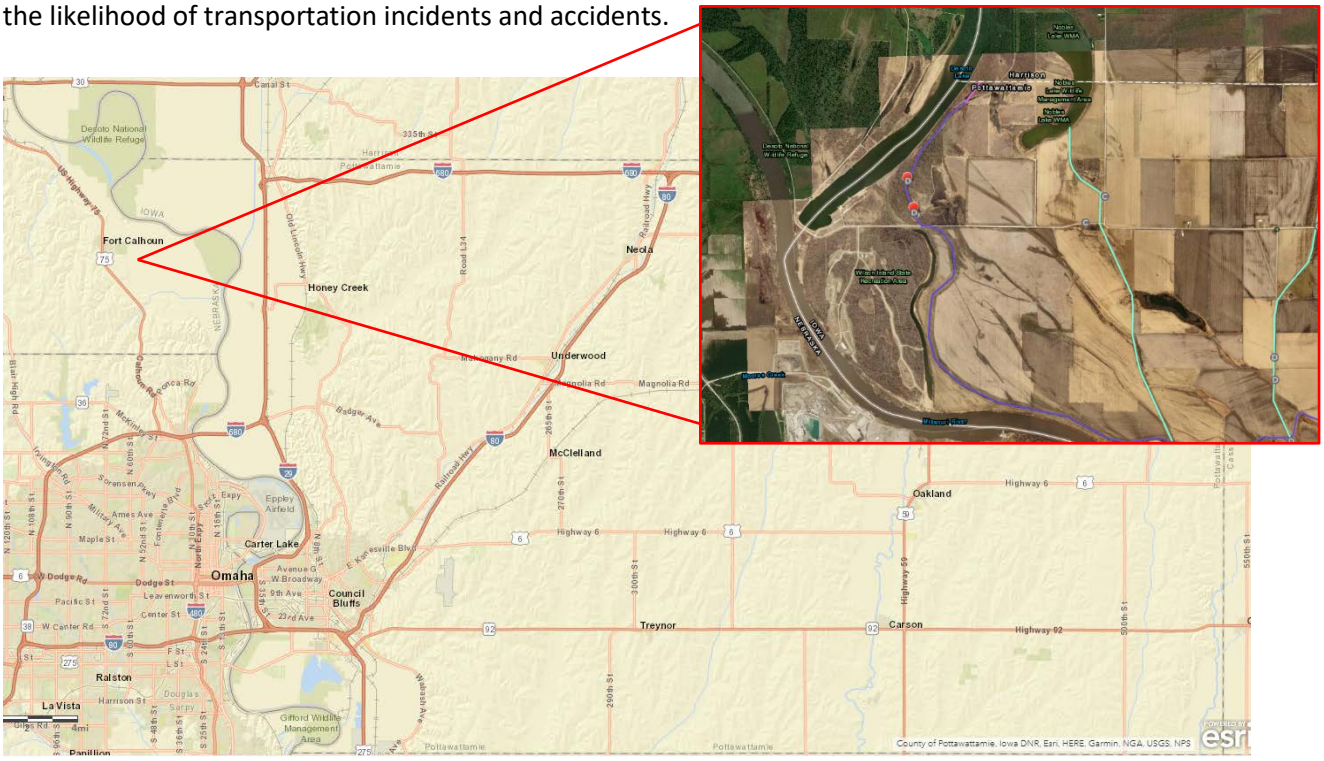
(d) Psychoactive substance abuse disorders resulting from current illegal use of drugs.

"State Agency", as defined in Iowa Code Section 8.11, means a department, board, bureau, commission, or other agency or authority of the State of Iowa.

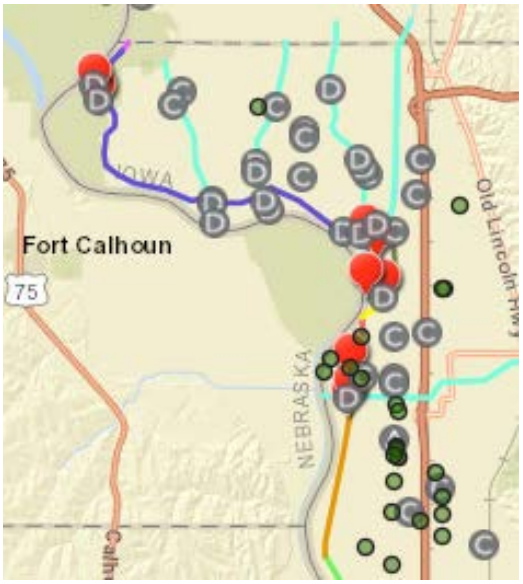
SCOPE of WORK

This project calls for an easement set-back of the existing Vanman Levee within the DeSoto Bend National Wildlife Refuge and construction of a new levee segment of approximately (1) mile. (2) large holes with a preliminary temporary repair estimate of up to $1.5 million dollars will continue to allow unobstructed Missouri River inflows during high water and flood level events into the county impacting the agricultural sector, county transportation infrastructure (including critical farm-to-market roads) as well as creating cascading events and effects that ultimately impact closures at or around Interstate 29.

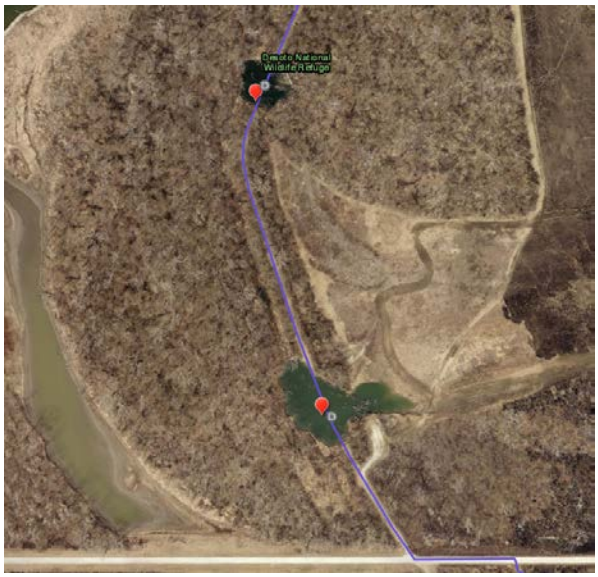
The movement of the levee will place a new levee section at higher elevation, reduce floodwater pinch points, create a larger flood containment area, and expand natural floodwater drainage capacity while significantly mitigating risk to the levee, property, and critical infrastructure. The project will also contribute to increased public safety by protecting critical transportation routes, such as I-29, by reducing the chances of flood related closures in that area which requires rerouting of interstate traffic loads to county highway and secondary road systems not designed for those traffic flows which increase the likelihood of transportation incidents and accidents.



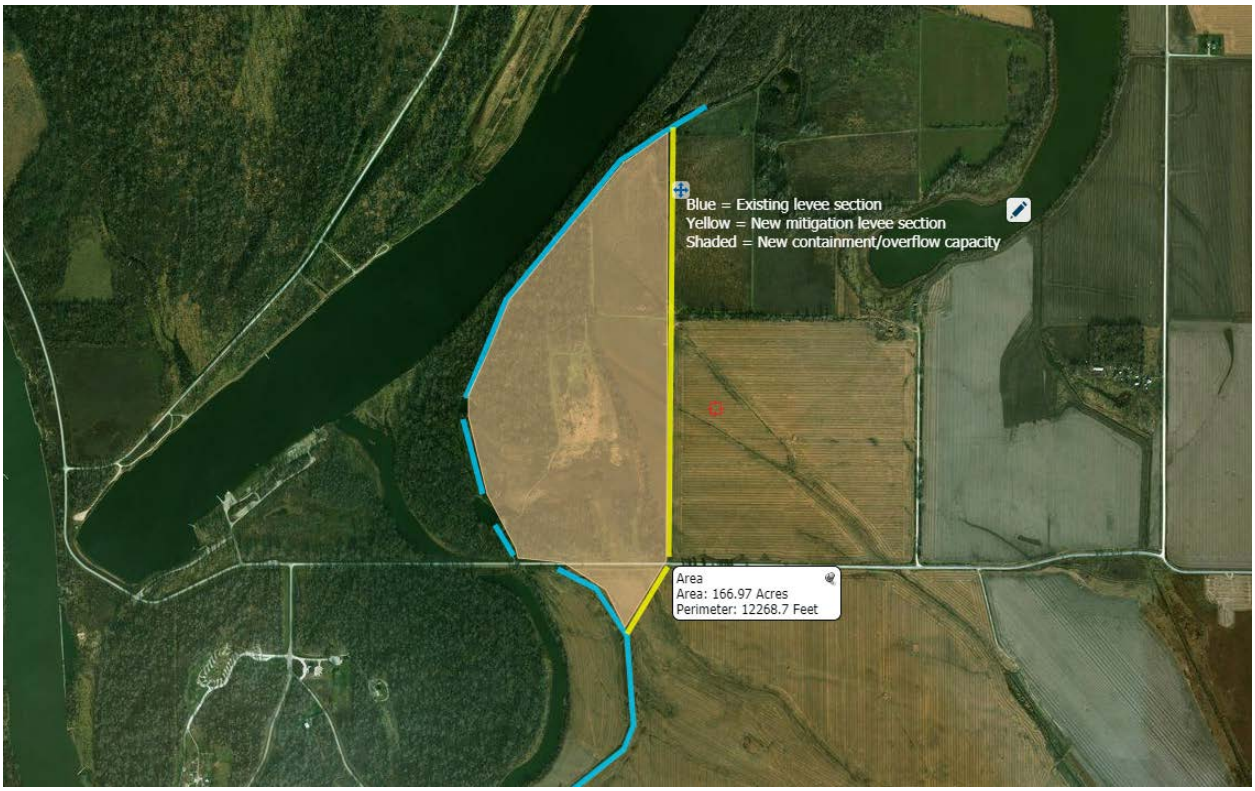
The area of impact sits in the northwest sector of Pottawattamie County, Iowa and in proximity to a federal wildlife refuge, state campground, I-29 and I-680, several farm-to-market roads, railroads, and critical bi-state commuting routes. It also home to a vast area of agricultural land.



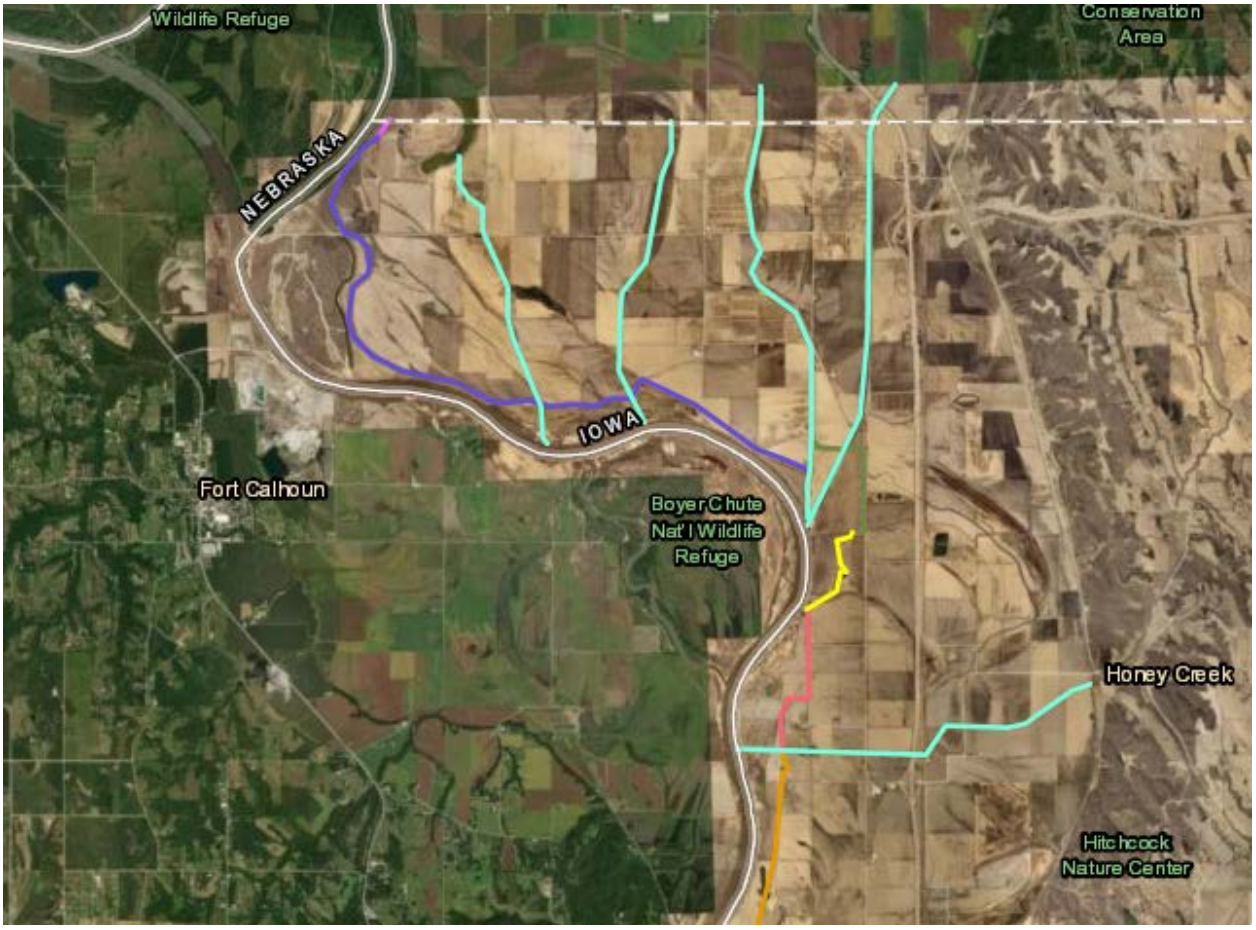
Snapshot of area damages impacted by the levee



North breach = 174.5' x 33' / South breach = 336.9' x 33'



- Blue line signifies existing levee section with breaches
- Yellow line signifies proposed mitigation levee section
- Shaded area signifies the new containment/overflow flood capacity of the river and lake
- Shaded area within the refuge is now all NEW natural wetlands viable habitat



This picture identifies the levee and drainage ditch structures with direct or residual benefit from this project regarding flood mitigation. The floodwaters from the existing breaches (as well as another on the Coulthard levee, which is connected to the Vanman) allow water to flow into the NW sector of the county. Although direct inflow may not impact some of the southern structures from the identified damage sites, the inundated area and pressures along with other areas of inflow produce a cascading effect moving north to south.

PROJECT SUMMARY

In consideration of the cost, work required and challenges to fix the existing structure (access, environmental conditions, environmental impact in the refuge regarding tree growth, etc.) a mitigation project of constructing a new levee segment will maximize funds allocated and provided some of the most significant flood mitigation benefits achieved to date. At a cost of $2 million dollars (est.) and the fact that interstate closures in the area alone, cost $4 million per day, the cost benefit of this project makes sense, even with the levee segment only being a contributing factor to the interstate impacts.

This project is further supported in the Countywide Mitigation Plan's goals and strategies, specifically:

- **Goal 2** – **Minimize the potential impact and damages from flooding events.**
  - Strategy 2.2: Enhance the efficient flow of storm water throughout the planning area.
  - Strategy 2.3: Maintain and improve dam and levee structures.

- **Goal 5** – **Minimize the potential impact of infrastructure system disruptions.**
  - Strategy 5.2: Maintain and upgrade public infrastructure systems to maximize resilience and redundancy.

SUNDQUIST ENGINEERING, P.C.

CLIENT: Vanman Levee District
PREPARED BY: TJG/tkk
S.E. PROJECT NO: 60120
DATE: 01/21/20

DESOTO NWR LEVEE RELOCATION
VANMAN LEVEE DISTRICT
POTTAWATTAMIE COUNTY, IOWA

OPINION OF PROBABLE CONSTRUCTION COSTS

ITEM NO.	ITEM CODE	ITEM	UNIT	TOTAL	UNIT PRICE	TOTAL COST
1	2101-0850001	CLEARING AND GRUBBING	ACRE	1.2	$ 10,000.00	$ 12,000.00
3	2102-2625001	EMBANKMENT-IN-PLACE, CONTRACTOR FURNISHED	CY	116716	20.00	2,334,320.00
2	2102-2710070	EXCAVATION, CLASS 10, ROADWAY AND BORROW	CY	1136.4	8.00	9,091.20
4	2102-5020010	OBLITERATE OLD ROADBED	STA	10.7	2,700.00	28,890.00
5	2105-8425015	TOPSOIL, STRIP, SALVAGE AND SPREAD	CY	9273	7.00	64,911.00
6	2109-9300100	CONSTRUCTION OF NATURAL SUBGRADE FOR PAVEMENT, BASE COURSE, PAVEMENT WIDENING, OR SUBBASE	MILE	0.2652	25,000.00	6,630.00
7	2121-7425020	GRANULAR SHOULDER, TYPE B	TON	378.28	28.00	10,591.84
8	2123-7450020	SHOULDER FINISHING, EARTH	STA	28	150.00	4,200.00
9	2303-1031750	HOT MIX ASPHALT STANDARD TRAFFIC, BASE COURSE, 3/4 IN. MIX	TON	1894.67	42.00	~~79,576.00~~ 79,576.14
10	2303-1252343	ASPHALT BINDER, PG 52-34S, STANDARD TRAFFIC	TON	75.79	580.00	~~43,956.27~~ 43,957.20
11	2307-0025003	AGGREGATE, ROADWAY COVER, 3/8 IN.	TON	112	52.00	5,824.00
12	2307-0600451	BINDER BITUMEN, MC-3000	GAL	2240	3.20	7,168.00
13	2417-0225024	APRONS, METAL, 24 IN. DIA.	EACH	2	500.00	1,000.00
14	2417-1060024	CULVERT, CORRUGATED METAL ROADWAY PIPE, 24 IN. DIA.	LF	84	50.00	4,200.00
15	2503-3775024	GATE, OUTLET CONTROL, FLAP, 24 IN.	EACH	1	3,000.00	3,000.00
16	2510-6745850	REMOVAL OF PAVEMENT	SY	4355.56	9.00	39,200.00
17	2528-8445110	TRAFFIC CONTROL	LS	1	3,000.00	3,000.00
18	2533-4980005	MOBILIZATION	LS	1	120,000.00	120,000.00
19	2599-9999005	LEVEE ACCESS GATE	EACH	2	2,000.00	4,000.00
20	2601-2634100	MULCHING	ACRE	11.5	600.00	6,900.00
21	2601-2636043	SEEDING AND FERTILIZING (RURAL)	ACRE	11.5	150.00	1,725.00
22	2602-0000020	SILT FENCE	LF	18006	3.00	54,018.00
	TOTAL					$ ~~2,844,201.31~~ ~~2,906,303.42~~ 2,844,203.38

SUNDQUIST ENGINEERING, P.C.

CLIENT: Vanman Levee District
PREPARED BY: TJG
S.E. PROJECT NO: 60120
DATE: 01/21/20

DESOTO NWR LEVEE RELOCATION
VANMAN LEVEE DISTRICT
POTTAWATTAMIE COUNTY, IOWA

OPINION OF PROBABLE PROJECT COSTS

ITEM	COST	
LAND RIGHTS ACQUISITION	$ 21,500.00	
CONSTRUCTION	~~2,844,000.00~~	~~2,906,303.42~~
ENGINEERING	151,400.00	2,844,203.38
LEGAL	10,000.00	
TOTAL PROJECT COST	$ ~~3,026,900.00~~	~~3,089,203.42~~
		3,027,103.38

SUNDQUIST ENGINEERING, P.C.

CLIENT: Vanman Levee District
PREPARED BY: TJG/tkk
S.E. PROJECT NO: 60419
DATE: 01/20/20

2019 FLOOD REPAIR
OUTSIDE OF DESOTO NWR
VANMAN LEVEE DISTRICT
POTTAWATTAMIE COUNTY, IOWA

OPINION OF PROBABLE PROJECT COSTS

ITEM	COST	
CONSTRUCTION	$ 2,145,000.00	2,145,017.50
ENGINEERING	125,000.00	
LEGAL	10,000.00	
TOTAL PROJECT COST	$ 2,280,000.00	2,280,017.50
LESS WORK COMPLETED	$ (37,480.00)	expended as of 1/20/20
REMAINING PROJECT COSTS	~~$ 2,843,420.00~~	~~2,242,537.~~ 50

SUNDQUIST ENGINEERING, P.C.

CLIENT: Vanman Levee District
PREPARED BY: TJG/tkk
S.E. PROJECT NO: 60419
DATE: 01/20/20

2019 FLOOD REPAIR
OUTSIDE OF DESOTO NWR
VANMAN LEVEE DISTRICT
POTTAWATTAMIE COUNTY, IOWA

OPINION OF PROBABLE CONSTRUCTION COSTS

ITEM NO.	ITEM CODE	ITEM	UNIT	TOTAL	UNIT PRICE	TOTAL COST
1	2101-1001000	REMOVAL OF FLOOD DEBRIS	CY	14135	8.50	$ 120,147.50
2	2102-2625001	EMBANKMENT-IN-PLACE, CONTRACTOR FURNISHED	CY	91776	20.00	1,835,520.00
3	2533-4980005	MOBILIZATION	LS	1	80,000.00	80,000.00
4	2601-2634100	MULCHING	ACRE	5.4	600.00	3,240.00
5	2601-2636043	SEEDING AND FERTILIZING (RURAL)	ACRE	5.4	150.00	810.00
6	2602-0000020	SILT FENCE	LF	26325	4.00	105,300.00
	TOTAL					$ 2,145,017.50

CONSTRUCTION PLANS FOR:

2019 FLOOD REPAIRS
DESOTO NWR LEVEE RELOCATON
VANMAN LEVEE DISTRICT
POTTAWATTAMIE COUNTY, IOWA

SCALES: As Noted

PERMITS

THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF U.S. ARMY CORPS OF ENGINEERS NATIONWIDE PERMIT 3, PERMIT NO. A COPY OF THIS PERMIT IS AVAILABLE FROM THE ENGINEER UPON REQUEST. THE U.S. ARMY CORPS OF ENGINEERS RESERVES THE RIGHT TO VISIT THE SITE WITHOUT PRIOR NOTICE.

THIS PROJECT IS COVERED BY IOWA DNR FLOODPLAIN CONSTRUCTION PERMIT NO.

THIS PROJECT IS COVERED BY THE IOWA DEPARTMENT OF NATURAL RESOURCES NPDES GENERAL PERMIT NO. 2. THE CONTRACTOR SHALL CARRY OUT THE TERMS AND CONDITIONS OF GENERAL PERMIT NO. 2 AND THE STORM WATER POLLUTION PREVENTION PLAN WHICH IS A PART OF THESE CONTRACT DOCUMENTS.

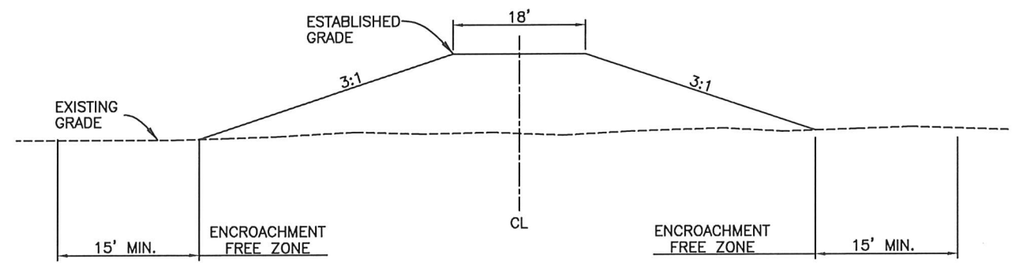
DRAWING APPROVAL

ALL SHOP DRAWINGS THAT REQUIRE APPROVAL SHALL BE APPROVED BY SUNDQUIST ENGINEERING, P.C.

ADDRESS: 120 SOUTH MAIN, P.O. BOX 220
DENISON, IOWA 51442-0220
TELEPHONE: (712)263-8118

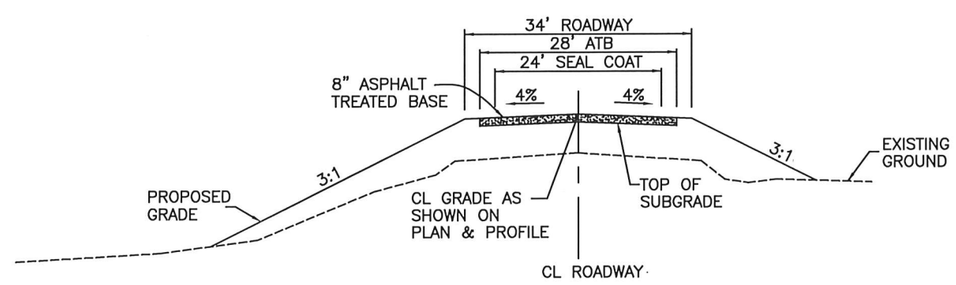
INDEX OF SHEETS

NO.	DESCRIPTION
A1	TITLE SHEET
C1	GENERAL INFORMATION
D1-2	LEVEE PLAN & PROFILE
D3	ROAD PLAN AND PROFILE
R1-2	POLLUTION PREVENTION PLAN



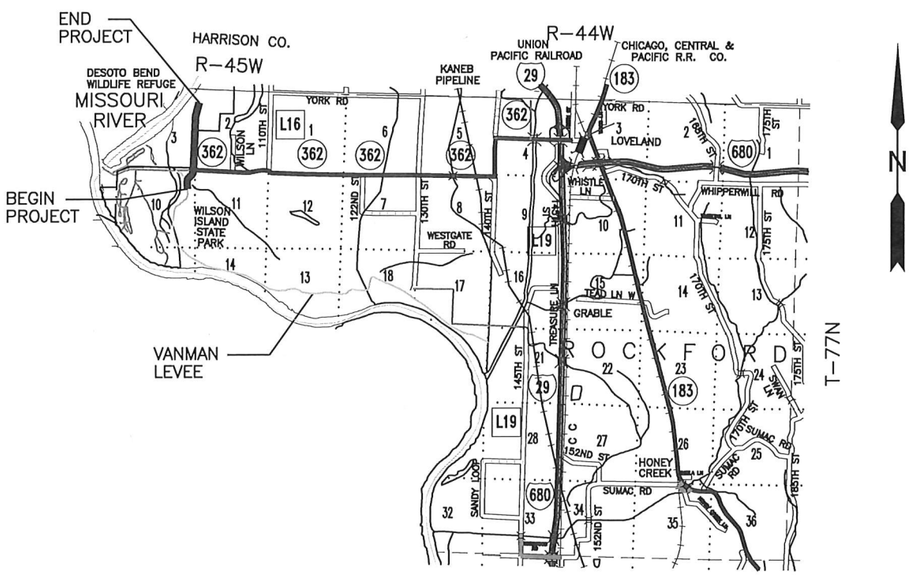
TYPICAL LEVEE CROSS SECTION

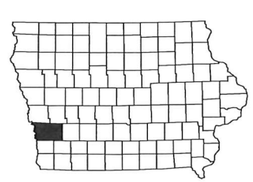
NOT TO SCALE



TYPICAL ROADWAY CROSS SECTION

NOT TO SCALE





LOCATION MAP SCALE

0 1 2 3

SCALE IN MILES

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LICENSED PROFESSIONAL ENGINEER TROY J. GROTH 14450 IOWA

I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

01/20/2020

TROY J. GROTH, P.E. #14450 DATE

MY LICENSE RENEWAL DATE IS DECEMBER 31, 2021.

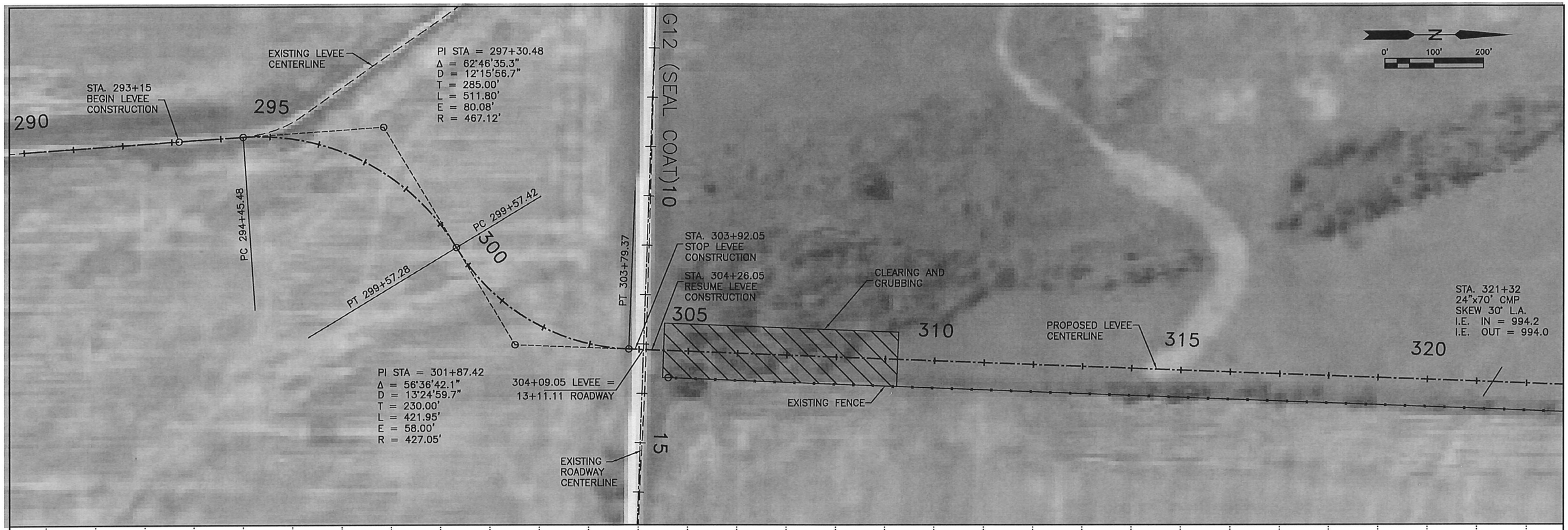
PAGES OR SHEETS COVERED BY THIS SEAL:
ALL SHEETS

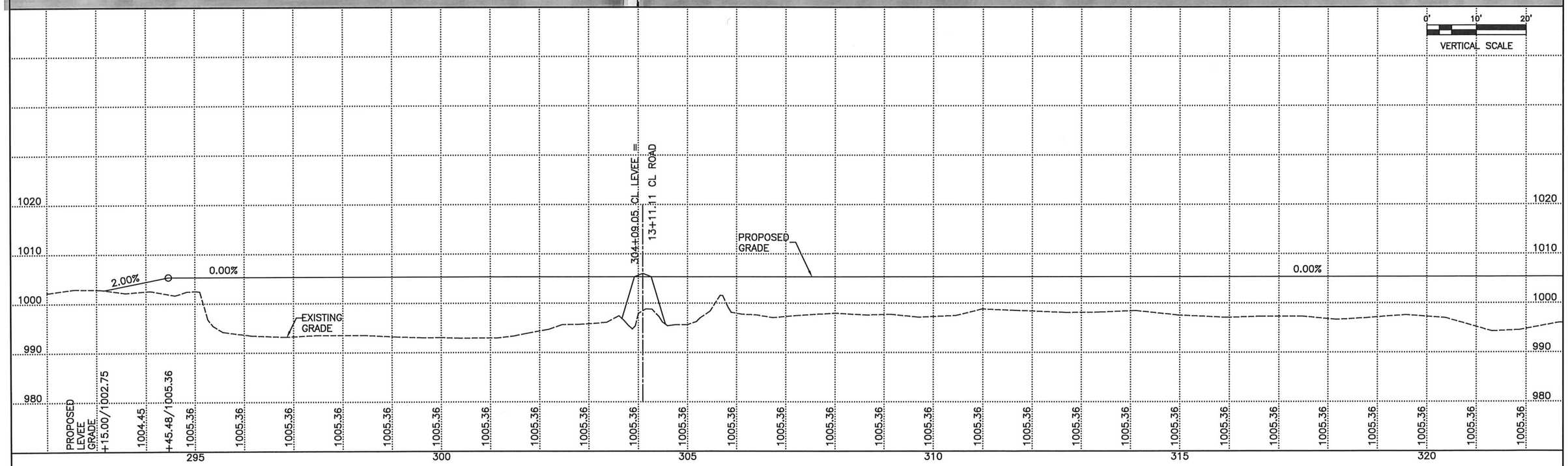
STANDARD ROAD PLANS

105–4
10–18–11

The following Standard Road Plans apply to construction work on this project.

NUMBER	DATE	TITLE
DR–101	04–18–17	PIPE CULVERT (BEDDING AND BACKFILL)
DR–104	04–19–16	DEPTH OF COVER TABLES FOR CONCRETE AND CORRUGATED PIPE
DR–203	04–21–20	METAL PIPE APRONS AND BEVELED ENDS
DR–501	04–17–18	CORRUGATED METAL TYPE "A" DIAPHRAGM
EC–201	10–15–19	SILT FENCE
EW–101	10–17–17	EMBANKMENT AND REBUILDING EMBANKMENTS
TC–252	04–19–16	ROUTES CLOSED TO TRAFFIC





REV:

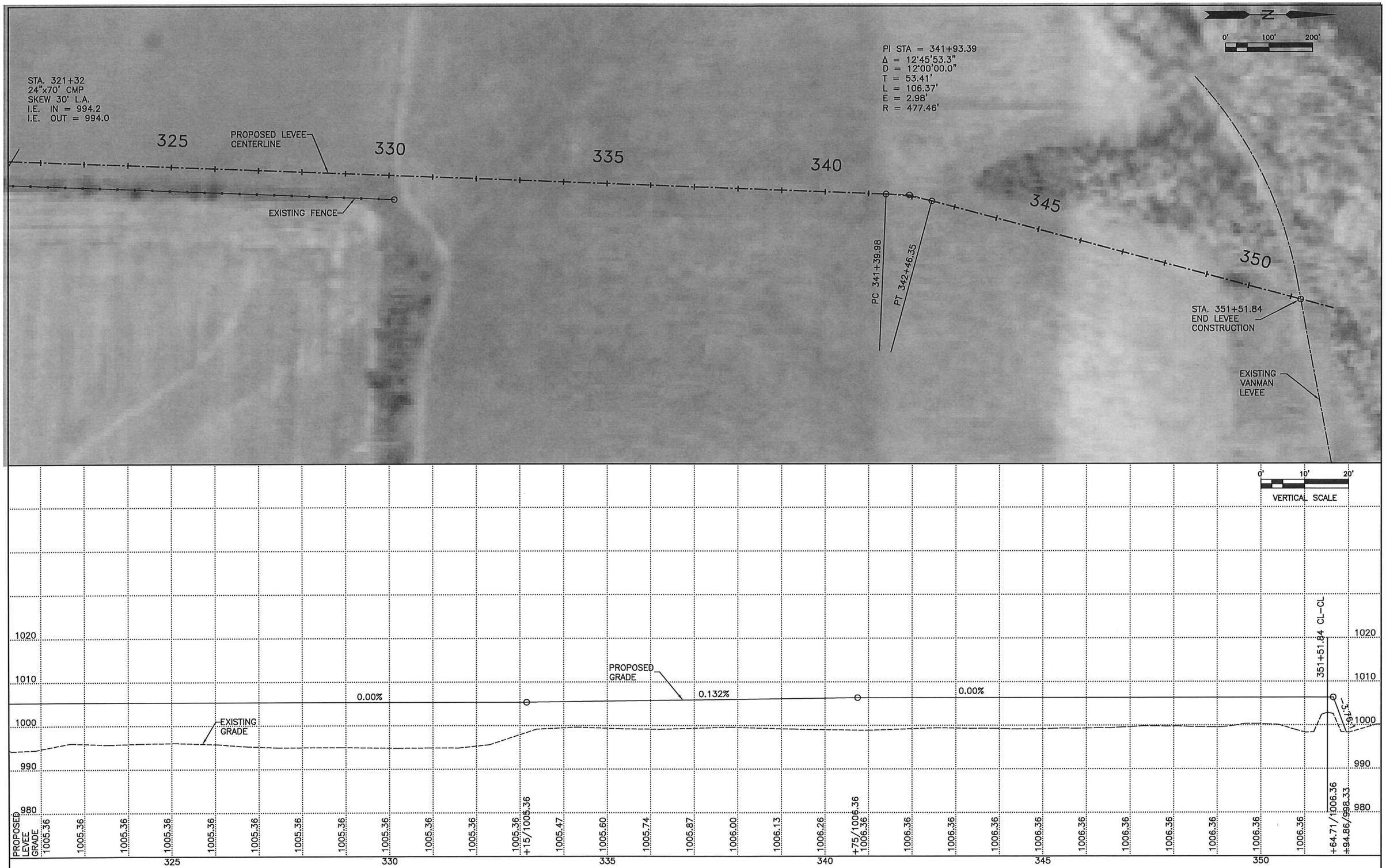
SUNDQUIST ENGINEERING, P.C. | 120 S. MAIN, P.O. BOX 220, DENISON, IOWA 51442 P712 263 8118 F712 263 2181 SUNDQUISTENGINEERING.COM

SE PROJECT NO. 60120 DATE: 01/2020 DRAWN BY: TKK REVIEWED BY: TJG APPROVED BY: TJG

VANMAN LEVEE DISTRICT

DESOTO NWR LEVEE RELOCATION

SHEET D1



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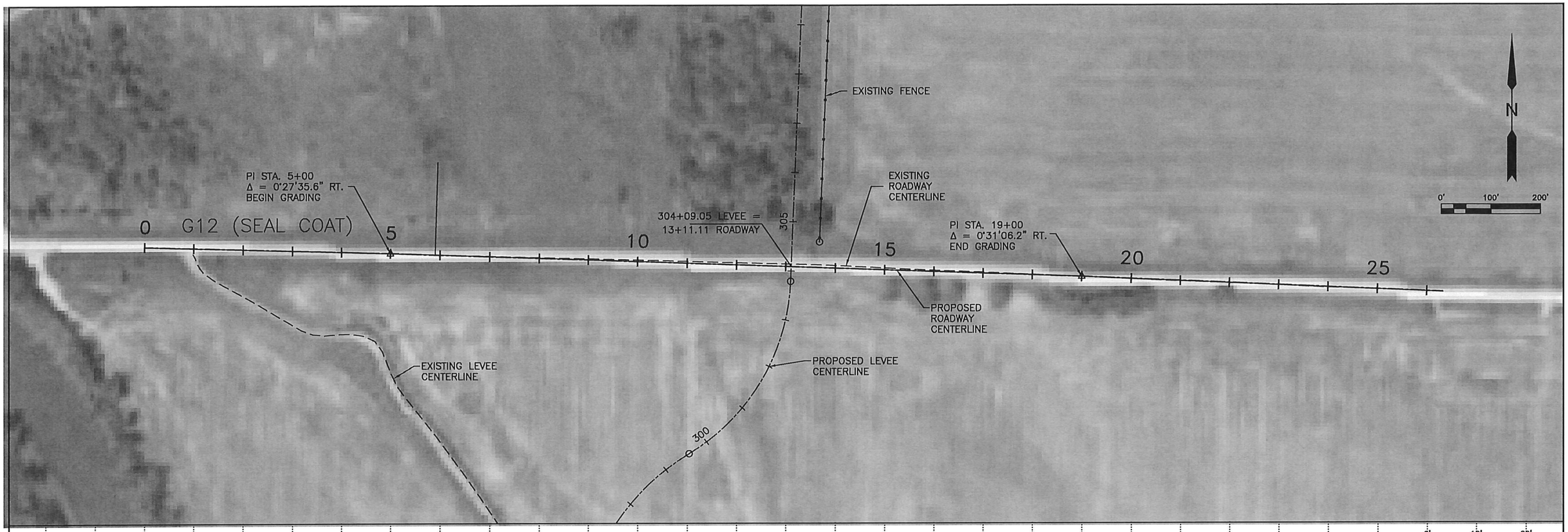
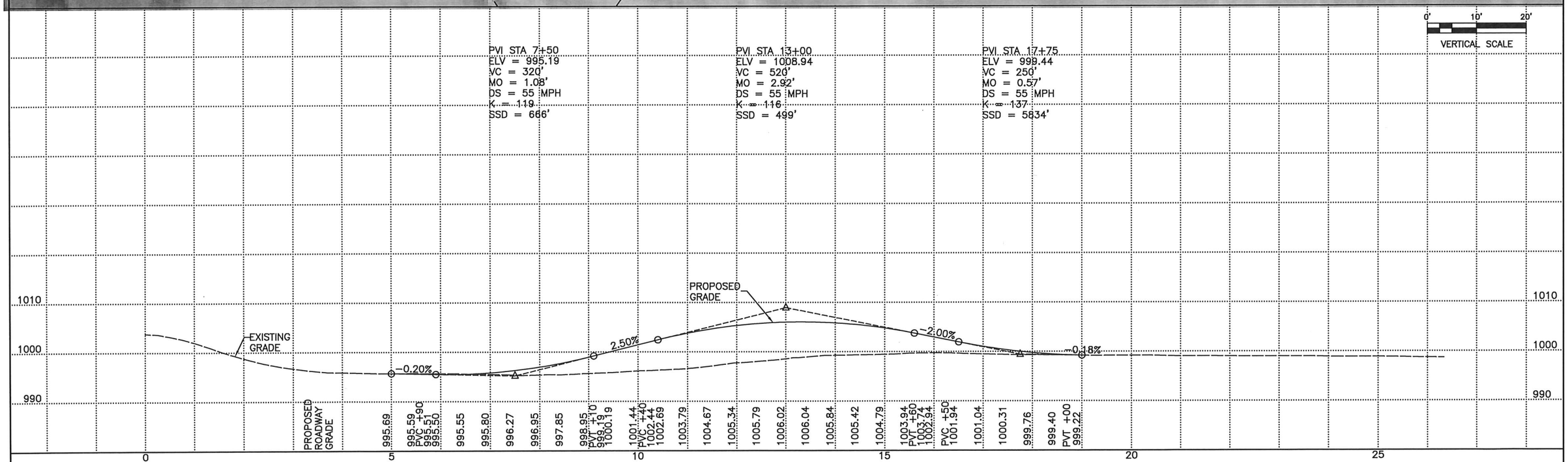
SE PROJECT NO. 60120 DATE: 01/2020 DRAWN BY: TKK REVIEWED BY: TJG APPROVED BY: TJG

VANMAN LEVEE DISTRICT

DESOTO NWR LEVEE RELOCATION

SHEET D2





REV:

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SE PROJECT NO. 60120 DATE: 01/2020 DRAWN BY: TKK REVIEWED BY: TJG APPROVED BY: TJG

VANMAN LEVEE DISTRICT

DESOTO NWR LEVEE RELOCATION

SHEET D3

This project is regulated by the requirements of the Iowa Department of Natural Resources (DNR) National Pollutant Discharge Elimination System (NPDES) General Permit No. 2 OR an Iowa Department of Natural Resources (DNR) National Pollutant Discharge Elimination System (NPDES) individual storm water permit. The Contractor shall carry out the terms and conditions of this permit and the Pollution Prevention Plan (PPP).

This Base PPP includes information on Roles and Responsibilities, Project Site Description, Controls, Maintenance Procedures, Inspection Requirements, Non-Storm Water Controls, Potential Sources of Off Right-of-Way Pollution, and Definitions. This plan references other documents rather than repeating the information contained in the documents. A copy of this Base Pollution Prevention Plan, amended as needed per plan revisions or by contract modification, will be readily available for review.

All contractors shall conduct their operations in a manner that controls pollutants, minimizes erosion, and prevents sediments from entering waters of the state and leaving the highway right-of-way. The prime contractor shall be responsible for compliance and implementation of the PPP for their entire contract. This responsibility shall be further shared with subcontractors whose work is a source of potential pollution as defined in this PPP.

I. ROLES AND RESPONSIBILITIES

A. Designer:
1. Prepares Base PPP included in the project plan.
2. Prepares Notice of Intent (NOI) submitted to Iowa DNR.
3. Is signature authority on the Base PPP.

B. Contractor:
1. Signs a co-permittee certification statement adhering to the requirements of the NPDES permit and this PPP. All co-permittees are legally required under the Clean Water Act and the Iowa Administrative Code to ensure compliance with the terms and conditions of this PPP.
2. Designates a Water Pollution Control Manager (WPCM), who has the duties and responsibilities as defined in Section 2602 of the Standard Specifications.
3. Submits an Erosion Control Implementation Plan (ECIP) and ECIP updates according to Section 2602 of the Standard Specifications.
4. Installs and maintains appropriate controls. This work may be subcontracted.
5. Supervises and implements good housekeeping practices.
6. Conducts joint required inspections of the site with inspection staff. When Contractor is not mobilized on site, Contractor may delegate this responsibility to a trained or certified subcontractor. Contracting Authority also may waive joint inspection requirement during winter shutdown. In both circumstances, WPCM (or trained or certified delegate from the Contractor) is still responsible to review and sign inspection reports.

Complies with training and certification requirements of Section 2602 of the Standard Specifications.

C. Subcontractors:
1. Sign a co-permittee certification statement adhering to the requirements of the NPDES permit and this PPP if responsible for sediment or erosion controls or involved in land disturbing activities. All co-permittees are legally required under the Clean Water Act and the Iowa Administrative Code to ensure compliance with the terms and conditions of this PPP.
2. Implement good housekeeping practices.

D. RCE/Project Engineer:
1. Is Project Storm Water Manager.
2. Takes actions necessary to ensure compliance with storm water requirements including, where appropriate, issuing stop work orders, and directing additional inspections at construction project sites that are experiencing problems with achieving permit compliance.
3. Orders the taking of measures to cease, correct, prevent, or minimize the consequences of non-compliance with the storm water requirements of the Applicable Permit.
4. Supervises all work necessary to meet storm water requirements at the Project, including work performed by contractors and subcontractors.
5. Requires employees, contractors, and subcontractors to take appropriate responsive action to comply with storm water requirements, including requiring any such person to cease or correct a violation of storm water requirements, and to order or recommend such other actions as necessary to meet storm water requirements.
6. Is familiar with the Project PPP and storm water site map.
7. Is the point of contact for the Project for regulatory officials, Inspector, contractors, and subcontractors regarding storm water requirements.
8. Is signature authority on Notice of Discontinuation.

E. Inspector:
1. Updates PPP whenever there is a change in design, construction, operation, or maintenance which has a significant effect on the discharge of pollutants from the project.
2. Maintains an up-to-date record that identifies contractors and subcontractors as co-permittees.
3. Makes these plans available to the DNR upon their request.
4. Conducts joint required inspections of the site with the contractor/subcontractor.
5. Completes an inspection report after each inspection.
6. Is signature authority on storm water inspection reports.

II. PROJECT SITE DESCRIPTION

A. This Pollution Prevention Plan (PPP) is for the relocation of the Vanman Levee in parts of Sections 2, 3 and 10, T-77N, R-45W, Pottawattamie County, Iowa.

B. This PPP covers approximately 20.2 acres with an estimated 12.2 acres being disturbed. The portion of the PPP covered by this contract has 12.2 acres disturbed.

C. The PPP is located in an area of one soil association (Monona-Ida-Napier). The estimated weighted average runoff coefficient number for this PPP after completion will be 0.2.

D. Storm Water Site Map – Multiple sources of information comprise the base storm water site map including:
1. Drainage patterns - Plan and Profile sheets and Situation plans.
2. Proposed Slopes - Cross Sections.
3. Areas of Soil Disturbance - Construction limits shown on Plan and Profile sheets.
4. Location of Structural Controls - Tabulations on C sheets.
5. Locations of Non-structural Controls - Tabulations on C sheets.
6. Locations of Stabilization Practices - Generally within construction limits shown on Plan and Profile sheets.
7. Surface Waters (including wetlands) - Project Location Map and Plan and Profile sheets.
8. Locations where Storm Water is Discharged - Plan and Profile sheets.

E. The base storm water site map is amended by contract modifications and progress payments (fieldbook entries) of completed erosion control work. Also, due to project phasing, erosion and sediment controls shown on project plans may not be installed until needed, based on site conditions. For example, silt fence ditch checks will typically not be installed until the ditch has been installed. Installed locations may also be modified from tabulation locations by field staff. Installed locations will be documented by fieldbook entries.

F. Runoff from this work will flow into Missouri River.

POLLUTION PREVENTION PLAN

110-12L
10-16-18

III. CONTROLS

A. The Contractor's ECIP specified in Article 2602.03 of the Standard Specifications for accomplishment of storm water controls should clearly describe the intended sequence of major activities, and for each activity define the control measure and the timing during the construction process that the measure will be implemented.

B. Preserve vegetation in areas not needed for construction.

C. Sections 2601 and 2602 of the Standard Specifications define requirements to implement erosion and sediment control measures. Actual quantities used and installed locations may vary from the Base PPP and amendment of the plan will be documented via fieldbook entries or by contract modification. Additional erosion and sediment control items may be required as determined by the inspector and/or contractor during storm water monitoring inspections. If the work involved is not applicable to any contract tems, the work will be paid for according to Article 1109.03 paragraph B of the Standard Specifications.

1. EROSION AND SEDIMENT CONTROLS

a. Stabilization Practices
1) Site plans will ensure that existing vegetation or natural buffers are preserved where attainable and disturbed portions of the site will be stabilized.
2) Initialize stabilization of disturbed areas immediately after clearing, grading, excavating, or other earth disturbing activities have:
a) Permanently ceased on any portion of the site, or
b) Temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days.
3) Staged permanent and/or temporary stabilizing seeding and mulching shall be completed as the disturbed areas are completed. Incomplete areas shall be stabilized according to paragraph III, C, 1, a, 2, b above.
4) Permanent and Temporary Stabilization practices to be used for this project are located in the Estimated Project Quantities (100-0A, 100-1A, or 100-1C) and Estimate Reference Information (100-4A) located in the C sheets. Typical drawings detailing construction of the practices to be used on this project are referenced in the Standard Road Plans Tabulation (105-4) in the C sheets.
5) Preservation of existing vegetation within right-of-way or easements will act as vegetative buffer strips.
6) Preservation of topsoil: Bid items to be used for this project are located in the Estimated Project Quantities (100-0A, 100-1A, or 100-1C) and Estimate Reference Information (100-4A) located in the C sheets. Additional information may be found in Tabulations in the C or T sheets or is referenced in Section 2105 of Standard Specifications.

b. Structural Practices
1) Structural practices will be implemented to divert flows from exposed soils and detain or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Additionally, structural practices may include: silt basins that provide 3600 cubic feet of storage per acre drained or equivalent sediment controls, outlet structures that withdraw water from surface when discharging basins, and controls to direct storm water to vegetated areas.
2) Structural practices to be used for this project are located in the Estimated Project Quantities (100-0A, 100-1A, or 100-1C) and Estimate Reference Information (100-4A) located in the C sheets, as well as all other item specific Tabulations. Typical drawings detailing construction of the devices to be used on this project can be found in the B sheets or are referenced in the Standard Road Plans Tabulation (105-4) located in the C sheets.

c. Storm Water Management
1) Measures shall be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed. This may include velocity dissipation devices at discharge locations and along length of outfall channel as necessary to provide a non-erosion velocity flow from structure to water course. If included with this project, these items are located in the Estimated Project Quantities (100-0A, 100-1A, or 100-1C) and Estimate Reference Information (100-4A) located on the C sheets of the plan, as well as all other item specific Tabulations. Typical drawings detailing construction of the practices to be used on this project are referenced in the Standard Road Plans Tabulation (105-4) in the C sheets. The installation of these devices may be subject to Section 404 of the Clean Water Act.

2. OTHER CONTROLS

a. Contractor disposal of unused construction materials and construction material wastes shall comply with applicable state and local waste disposal, sanitary sewer, or septic system regulations. In the event of a conflict with other governmental laws, rules and regulations, the more restrictive applicable laws, rules or regulations shall apply.
1) Vehicle Entrances and Exits – Construct and maintain entrances and exits to prevent tracking of sediments onto roadways.
2) Material Delivery, Storage and Use – Implement practices to prevent discharge of construction materials during delivery, storage, and use.
3) Stockpile Management – Install controls to reduce or eliminate pollution of storm water from stockpiles of soil and paving.
4) Waste Disposal – Do not discharge any materials, including building materials, into waters of the state, except as authorized by a Section 404 permit.
5) Spill Prevention and Control – Implement chemical spill and leak prevention and response procedures to contain and clean-up spills and prevent material discharges to the storm drain system and waters of the state.
6) Concrete Residuals and Washout Wastes – Waste shall not be discharged to a surface water and is not allowed to adversely affect a water of the state. Designate temporary concrete washout facilities for rinsing out concrete trucks. Provide directions to truck drivers where designated washout facilities are located. Designated washout areas should be located at least 50 feet away from storm drains, streams or other water bodies. Care should be taken to ensure these facilities do not overflow during storm events.
7) Concrete Grooving/Grinding Slurry - Do not discharge slurry to a waterbody or storm drain. Slurry may be applied on foreslopes or removed from the project.
8) Vehicle and Equipment Storage and Maintenance Areas – Perform on site fueling and maintenance in accordance with all environment laws such as proper storage of on site fuels and proper disposal of used engine oil or other fluids on site. Employ washing practices that prevent contamination of surface and ground water from wash water. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge.
9) Litter Management – Ensure employees properly dispose of litter. Minimize exposure of trash if exposure to precipitation or storm water would result in a discharge of pollutants.
10) Dewatering - Properly treat water to remove suspended sediment before it re-enters a waterbody or discharges off-site. Measures are also to be taken to prevent scour erosion at dewatering discharge point.

3. APPROVED STATE OR LOCAL PLANS

During the course of this construction, it is possible that situations will arise where unknown materials will be encountered. When such situations are encountered, they will be handled according to all federal, state, and local regulations in effect at the time.

IV. MAINTENANCE PROCEDURES

The Contractor is required to maintain all temporary erosion and sediment control measures in proper working order, including cleaning, repairing, or replacing them throughout the contract period. This shall begin when the features have lost 50% of their capacity.

V. INSPECTION REQUIREMENTS

A. Inspections shall be made jointly by the Contractor and the Contracting Authority at least once every seven calendar days. Storm water monitoring inspections will include:
   1. Date of the inspection.
   2. Summary of the scope of the inspection.
   3. Name and qualifications of the personnel making the inspection.
   4. Review of erosion and sediment control measures within disturbed areas for the effectiveness in preventing impacts to receiving waters.
   5. Major observations related to the implementation of the PPP.
   6. Identification of corrective actions required to maintain or modify erosion and sediment control measures.

B. Include storm water monitoring inspection reports in the Amended PPP. Incorporate any additional erosion and sediment control measures determined as a result of the inspection. Immediately begin corrective actions on all deficiencies found within 3 calendar days of the inspection and complete within 7 calendar days following the inspection. If it is determined that making the corrections less than 72 hours after the inspection is impracticable, it should be documented why it is impracticable and indicate an estimated date by which the corrections will be made.

VI. NON–STORM WATER DISCHARGES

This includes subsurface drains (i.e. longitudinal and standard subdrains) and slope drains. The velocity of the discharge from these features may be controlled by the use of headwalls or blocks, Class A stone, erosion stone or other appropriate materials. This also includes uncontaminated groundwater from dewatering operations, which will be controlled as discussed in Section III of the PPP.

VII. POTENTIAL SOURCES OF OFF RIGHT–OF–WAY (ROW) POLLUTION

Silts, sediment, and other forms of pollution may be transported onto highway right–of–way (ROW) as a result of a storm event. Potential sources of pollution located outside highway ROW are beyond the control of this PPP. Pollution within highway ROW will be conveyed and controlled per this PPP.

VIII. DEFINITIONS

A. Base PPP – Initial Pollution Prevention Plan.
B. Amended PPP – May include Plan Revisions or Contract Modifications for new items, storm water monitoring inspection reports, and fieldbook entries made by the inspector.
C. IDR – Inspector's Daily Report – this contains the inspector's daily diary and bid item postings.
D. Controls – Methods, practices, or measures to minimize or prevent erosion, control sedimentation, control storm water, or minimize contaminants from other types of waste or materials. Also called Best Management Practices (BMPs).
E. Signature Authority – Representative authorized to sign various storm water documents.

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature	Signature
Printed or Typed Name	Printed or Typed Name

POLLUTION PREVENTION PLAN

110–12L
10–16–18

12/23/2019

Vanman Levee District
31938 130th Street
Missouri Valley, IA 51555

US Fish and Wildlife
DeSoto Bend National Wildlife Refuge
Tom Cox, Manager
1434 316th Lane
Missouri Valley, IA 51555

Dear Mr. Cox:

As Trustees of the Vanman Levee District, we are writing to request that the US Fish and Wildlife Service consider a proposal to relocate a portion of the District's existing easements and accompanying right-of-way within the DeSoto Bend National Wildlife Refuge ("NWR") property. We believe that relocating a portion of both the easement and the levee itself will provide benefits to all parties involved, including: the USFWS, the Vanman Levee District, the District's residents and landowners, other public drainage and levee facilities further downstream, Pottawattamie County and the Iowa Department of Transportation.

As you are aware, the stretch of the Vanman Levee that exists within the NWR boundaries suffered two major and one minor breach during the flooding events of 2011. While the minor breach was partially repaired, the two major breaches have gone without repair due to their magnitude, location and complexity. In March 2019, these existing breaches allowed Missouri River floodwaters to exit DeSoto Lake and flank behind the otherwise intact line of protection that the Vanman Levee provided against the Missouri River outside of the NWR. Consequently, these flanking floodwaters that exited the NWR property caused substantial damages to private property, public facilities and county and federal roads.

It is generally agreed upon by NWR personnel, levee district trustees, county officials and FEMA representatives that repairing the Vanman Levee in its current condition at its current location within the NWR is a monumental task that would likely cause considerable disturbance inside of NWR property (although within the existing right-of-way of the levee district). Moreover, it has become apparent that restoring the levee in its current location, given its current proximity to DeSoto Lake, may not provide optimal efficacy during future flooding events. Therefore, we propose relocating the easement and levee approximately 2,000 feet to the east, near the NWR property line (see attached graphic). We believe that doing so will substantially benefit all stakeholders involved.

<u>Benefits to U.S. Fish & Wildlife Service / DeSoto Bend National Wildlife Refuge</u>

1. ***Reduced Total Easement Area:*** The proposed new levee alignment will be straighter and, therefore, shorter than the current levee route. The proposed alignment will result in fewer linear feet and total acres of easement within USFWS property than currently exist.
2. ***Increased Storage:*** The proposed alignment will retreat up to 2,200 feet to the east of the current levee location, thereby providing a significant amount of additional buffer between DeSoto Lake and the Vanman Levee. Approximately 160 acres of additional flood storage would be created on the "wet" side of the levee. After realignment, wetlands currently located on the "dry" side of the Vanman Levee would be more directly connected to the DeSoto Lake ecosystem.

3. ***Less Invasive Repairs:*** Attempting to repair the existing levee breaches in their current locations will require considerable disturbance and destruction of the many large trees that were allowed to grow in the district's right-of-way. Such a removal process would involve considerable expense and habitat disturbance. The proposed alignment utilizes land that is already relatively free of trees.
4. ***Higher Natural Elevation:*** The proposed alignment would be situated on lands that are generally at higher naturally-occurring elevations versus the current alignment. Therefore, the proposed levee would likely be a shorter levee than the current levee, while still providing the same level of protection.
5. ***Increased Lake Outlet Capacity:*** It is generally agreed that DeSoto Lake does not have adequate drainage outlet structures relative to the capacity of the lake, especially when the lake fills with floodwaters. This lack of adequate outlet capacity for the lake is one of the primary contributing factors that led to the creation of the breaches in the Vanman Levee in 2011. Construction of the NWR "cutoff levee" in the late 1950s and early 1960s severed the link between the newly created oxbow lake and an old river chute on the east side of Wilson Island State Park. Without access to the natural outlet provided by the old river chute, and without any other means of adequate relief, floodwaters in 2011 continued to accumulate in DeSoto Lake until they forced the creation of several breaches and then escaped eastward. By realigning the Vanman Levee to proposed location near the east NWR property line, a lower elevation stretch of DeSoto Avenue could be utilized as a safer outlet path for future floodwaters that might accumulate in DeSoto Lake. In the past, this stretch of road has been observed to be the path over which floodwaters exiting DeSoto Lake have flowed after passing through the existing levee breaches. After realignment, this stretch of road would go from being previously located on the "dry" side of the existing Vanman Levee to being located on the "wet" side of the realigned Vanman Levee. Once located on the "wet" side of the realigned levee, this area would provide additional outlet means for floodwaters in DeSoto Lake to rejoin the main Missouri River channel in a safer manner via the naturally-occurring old river chute described above.

<u>Benefits to Vanman Levee District:</u>

1. ***Easements Already Exist:*** The levee district has already purchased and currently owns easements crossing property now owned by the USFWS. By trading easement locations and relocating to another alignment within USFWS property, no new additional easements need be purchased from adjoining landowners.
2. ***Reduced Cost:*** Preliminary engineering estimates show that construction of the proposed levee alignment would likely cost less than repairing the existing breaches on the current alignment.
3. ***Design Quality:*** The proposed section of new levee could be built to modern levee design standards, thereby providing a superior construction quality and level of protection versus patching breaches in the current facility that was built over 70 years ago.
4. ***Ease of Maintenance:*** In the proposed location near the east property line of the NWR, the levee facility could be more easily maintained and kept free of tree growth than is possible in the present location, which is surrounded by woodland and wetland environments.
5. ***Setback Distance from Standing Water:*** In the present alignment, the current levee is, in some places, within 250 feet of the DeSoto Lake shoreline when the oxbow lake is at typical, non-flood elevations. Consequently, even in a non-flood year, this can create a saturation environment for both the levee structure itself, and the soil strata upon which it is constructed. The proposed alignment would create a setback of approximately 1,000 to 3,000 feet from the shoreline of the oxbow lake. In typical non-flood years, this would remove the levee from a constantly saturated substrata environment. During flood events, the proposed setback alignment would protect the levee from the most powerful hydraulic

forces that develop in the oxbow DeSoto Lake, which is a former Missouri River channel and is capable of exhibiting active flow during flooding events.

Benefits to Surrounding Infrastructure:

Keeping future floodwaters on the "wet" side of the Vanman Levee is critical to ensuring the protection of public and private lands and infrastructure. The following properties have been subject to threat and/or damage from floodwaters exiting the breaches that exist within DeSoto Bend NWR:

1. Pottawattamie County public roads have suffered repeated erosive damage in 2011 and 2019 via floodwaters escaping the breaches in the NWR, including: the hard-surfaced DeSoto Avenue, gravel-surfaced 130th Street and Westgate Road.
2. The Vanman Levee protects over 6,000 acres of productive agricultural land. Approximately 4,000 of those acres were inundated by floodwaters exiting the breaches within the confines of the NWR. Numerous private agricultural irrigation systems were significantly damaged.
3. Several residential structures are protected by the Vanman Levee. At least 3 former residences required demolition due to severe damages suffered in the flooding of 2011. Several more residences sustained damages due, in part, to floodwaters escaping the NWR in both 2011 and 2019. Approximately 10 single family residences still exist today in the district designated as protected by the Vanman Levee.
4. Several other public facilities have been impacted by floodwaters escaping the levee breaches within the NWR. All of these facilities exist south and east of the NWR and are at lower naturally-occurring elevations than the breaches within the NWR. Therefore, floodwaters exiting DeSoto Lake via the breaches flow naturally toward these facilities. Public facilities that have been substantially impacted by these escaping floodwaters include: the Nobles Lake Drainage District, the Fensler Drainage District, the banks of the Allen Creek and Boyer River (under supervision of the H&P Drainage District), the Honey Creek Levee & Drainage District, and Interstate 29.

We propose that the material source(s) for construction of the realigned levee will be selected from among three general possibilities, following extensive study and cost/benefit analysis:
1. Relocation of material currently residing in the intact portion of the Vanman Levee that will be abandoned once realignment is complete.
2. Use of suitable material present within the agreed upon new levee district right-of-way.
3. Importation of suitable material from an off-site source.

This proposal is contingent upon the ability of the Vanman Levee District to procure federal and/or State of Iowa funding to accomplish the realignment.

Respectfully submitted,

Vanman Levee District Trustees

Lyle McIntosh Chairman	John Doty Trustee	Dan Hoyt Trustee

January 15, 2020

To: FEMA Officials
From: Scott Schram, District 4 Engineer, Iowa DOT
RE: I-29 Mobility and Levee Resiliency

Dear FEMA Officials:

The Iowa DOT has become aware of challenges faced by several levee districts along the Missouri River, particularly the Vanman Levee north of Council Bluffs. This levee system protects portions of I-29 between Council Bluffs and Sioux City. Due to circumstances beyond the Levee District's control, damages from 2011 were not repaired. As a result, I-29 was overtopped on four separate occasions in 2019 for a total of nearly 14 weeks. Total out of distance travel and user cost is estimated at nearly $20,000,000 over that duration. The Iowa DOT supports the levee districts in their pursuit of relief funding to restore the resiliency of the system and maintain mobility throughout the corridor. Please let this letter serve as a letter of support.

Regards,

[redacted]

Scott Schram PH.D., P.E.
District 4 Engineer
Iowa DOT

712-243-7626 / 515-290-4679 | Scott.Schram@iowadot.us | www.iowadot.gov
Address: 300 W. Broadway Suite 12
Council Bluffs, IA 51503

A BREACH IN PARTNERSHIPS, A BREACH IN LEVEES:

White Paper Regarding the Vanman Levee District Of Pottawattamie County, Iowa

Prepared By:

Pottawattamie County
Emergency Management Agency
205 S Main Street, Council Bluffs, Iowa 51503

December 2019

Problem Statement

The Vanman Levee District, a legal entity established under the provisions of Iowa Code Chapter 468, has suffered significant damages from the historic flood events of 2011 and 2019. Both flood disasters have prompted Presidential Major Disaster Declarations. The events of 2011 caused significant breaches to the upper Vanman Levee which was constructed on rural lands subsequently purchased by the United States Government, now known as “DeSoto Bend National Wildlife Refuge, under the management of the U.S. Fish and Wildlife Service. Due to denial of access to the levee district trustees within DeSoto Bend by the federal government, repairs were unable to be made in 2011, despite appeals.

These existing breaches significantly contributed to downstream cascading damages of the Allen Creek, Boyer River, and lower Vanman Levee. Continuing trapped and flows of waters to the south of the cascading impacts also contributed to closures and damages along and around Interstate 29.

The levee district now faces challenges in initiating disaster recovery repairs because administrative procedures within the Public Assistance Program administered by the Federal Emergency Management Agency (FEMA) do not allow for cost recovery claims of unrepaired damages from incidents or disasters occurring prior to the authorized disaster period (DR-4421).

This situation leaves the district helpless as the denial of access prior to and after the 2011 flood disaster renders the district ineligible for FEMA assistance in relation to the 2019 flood disaster.

If unresolved, this situation will result in a higher threat to human life, significant property damage, and significant losses to the agricultural and interstate commerce economy in the area in future flood events; of which, could occur as early as the Spring of 2020.

Background

The following represents a synopsis of significant events with the Vanman Levee in respect to the problem statement. The information is a compilation of data from multiple sources that has been vetted by the Emergency Management Agency in the preparation of this document. Some dates are estimated based on available information, documentation, and interviews.

Timeline and Discussion Points Regarding Vanman Levee

1943: Plan developed and easements purchased for the construction of the Vanman Levee (See Attachment 1).

1946: Vanman Levee completed.

1952: Coulthard Levee District #2 formed and easements purchased (adjoining levee to the north).

12-15-1958: Henry K. and Raymond G. Peterson and spouses sign a deed conveying the property now known as DeSoto Bend to the United States Government subject to specific easements for levee purposes and for use as a levee reserved for both the Coulthard and Vanman Levees. In the same general timeframe, various other

landowners agree to sell adjoining properties to the United States Government, also subject to specific levee easements.

Construction of an entirely new levee road by the U.S. Government across the south end of the DeSoto Bend river channel created an oxbow lake (DeSoto Lake). The road was constructed without adequate outlet capacity to evacuate any future floodwaters that enter the newly created DeSoto Lake.

This new road construction was made over a chute and natural water flow area, which is arguably a violation of law. In addition, the road was constructed 2 feet higher than the Coulthard Levee, causing water to be diverted to the east (in the 2011 flood); this diversion of natural flow overtopped the Coulthard and Vanman Levees causing damage. This causational circumstance is also a potential violation of Iowa Code §468.148[1].

1958 to 2011: Throughout these years, during which major flooding was largely absent, the U.S. Fish and Wildlife Service (USFWS) verbally denied the occasional requests by the levee district trustees for access to the levees in order to perform their statutory duties which include: levee inspections, basic maintenance, vegetation and tree

[1] **468.148 Injuring or diverting — damages.** Any person who shall willfully break down or through or injure any levee or bank of a settling basin, or who shall dam up, divert, obstruct, or willfully injure any ditch, drain, or other drainage improvement authorized by law shall be liable to the person or persons owning or possessing the lands for which such improvements were constructed in double the amount of damages sustained by such owner or person in possession; and in case of a subsequent offense by the same person, the person shall be liable in treble the amount of such damages. [C73, §1227; C97, §1961; C24, 27, 31, 35, 39, §7579; C46, 50, 54, 58, 62, 66, 71, 73, 75, 77, 79, 81, §455.159] 89 Acts, ch 126, §2 CS89, §468.148

remediation, improvement planning, etc. In the absence of adequate levee district funds to contest these denials in violation of legal easements recognized in the 1958 purchase agreements, and without imminent flood threats, the status quo of access denial prevailed throughout this timeframe.

June 2011: With continued rising floodwaters threatening the area, members of the 2011 Flood Fight Coalition and Vanman Levee trustees verbally requested access to enter Desoto National Wildlife Refuge in order to perform emergency measures on levees to reduce damage and catastrophic failure. Vanman Levee trustees informed local refuge management regarding the existing levee easements. Permission to enter the refuge is continually denied.

6-26-2011: After a breach of the Missouri River bank south of the Blair Bridge on U.S. Highway 30, floodwaters enter and quickly fill DeSoto Lake. The DeSoto Bend Wildlife Refuge Manager calls the Flood Fight Coalition members to a meeting on DeSoto Avenue. The Manager suggests that breaking DeSoto Avenue would provide emergency evacuation of floodwaters from DeSoto Lake since there were no other adequate outlets capable of relieving the quantity of floodwaters entering DeSoto Lake [This situation was due to the road construction described at Line 47 on page 5]. The County Engineer informed the coalition that the

portion of road in question was on federal land and the county did not have jurisdiction to breach the roadway.

Despite the assessment that breaching this section of DeSoto Avenue would allow higher water to flow south through an old river chute (its natural pathway obstructed by the road construction previously mentioned) near Wilson Island State Park and directly back into the Missouri River, the request by the DeSoto Bend Wildlife Refuge Manager was denied by his USFWS supervisory authorities. The refuge manager recommended the levee authorities provide a formal written request to USFWS officials the next morning. The Manager described plans to request future budgetary funds to lower that road in order to provide an outlet for high water in the future.

6-27-2011: Trustees of the Vanman Levee, H&P Drainage District, Fensler Drainage District and Wilson Drainage District meet at Missouri Valley City Hall with Harrison County Attorney Jennifer Mumm to draft a request to break DeSoto Avenue in order to protect public and private property from flooding. The request is delivered to DeSoto Refuge Manager on DeSoto Avenue at approximately 10:00 AM. As the letter was being reviewed, floodwaters breached the line of defense provided by the Vanman and Coulthard levees prompting emergency evacuations of the area. The time delay due to the denial by USFWS supervisory

personnel, in opposition of the recommendations of their on-site manager, pushed the capacity of the levees beyond its critical point.

7-27-2011: The named districts at Lines 86 and 87, now joined by the City of Missouri Valley and the Chairman of the Flood Fight Coalition, delivered a second written request to the Refuge Manager to again request breaking DeSoto Avenue in an effort to reduce the ongoing damage to public and private property from flood channeling, silting and erosion. USFWS officials ignored the request providing no written response to the request.

August – December, 2011: Three major levee breaches are confirmed in the Vanman and Coulthard levees within the DeSoto Bend National Wildlife Refuge where requests of the Flood Fight Coalition members were historically denied access for maintenance, inspection and pre-emergency preparations were denied by USFWS.

The Refuge Manager stated at several meetings during the 2011 flood disaster that the USFWS intended to repair the breaches when it was possible and when funds were available. However, at later meetings during 2012, USFWS officials stated that funds were not available to implement those repairs.

Summer 2012: Vanman Levee trustees verbally request FEMA field personnel to inspect levee breaches on Vanman Levee District property within USFWS wildlife refuge. After three separate verbal requests, FEMA personnel denied the request claiming that FEMA could not provide funding for emergency or permanent work under the Public Assistance program within federal lands and facilities. This denial was made with the trustees contending that the legal easements of the district negated that policy provision.

12-14-2012: Vanman Levee's attorney files a time extension with Iowa Homeland Security and Emergency Management to allow more time to appeal the FEMA denial and provide further proof of the district's easement (See Attachment 2).

1-28-2013: Iowa Homeland Security and Emergency Management denies the extension request (See Attachment 3).

Representatives from the Vanman and Coulthard Levee Districts, Harrison and Pottawattamie County Boards of Supervisors, and members of the Flood Fight Coalition met in Missouri Valley with representatives from federal legislators regarding the breaches within DeSoto Bend National Wildlife Refuge. The local officials requested congressional help to: 1) Compel USFWS to secure funds to repair the breaches resulting from the 2011 disaster; 2) Restore the levees to

pre-flood condition; and 3) Lower the portion of Desoto Avenue to a suitable elevation sufficient to facilitate a "spillway" during high water and flood events in order to reduce the danger of future breaches to the Vanman and Coulthard levees.

2-4-2013: The Trustees of the Vanman Levee District, along with the Boards of Supervisors of Harrison and Pottawattamie Counties, made written appeals Senators Harkin and Grassley and Congressmen King and Latham describing the problems within DeSoto National Wildlife Refuge and requesting assistance in resolving the issues with USFWS upper management (See Attachment 4).

3-27-2013: Representatives from all interested parties (USFWS personnel, congressional aides, county officials, levee district trustees, etc.) attend a meeting at DeSoto National Wildlife Refuge headquarters to discuss the 2011 breaches. USFWS declined to fund the repairs.

Summer 2013: The Iowa Attorney General's office toured the breach sites on the Vanman and Coulthard levees with levee trustees and county officials. After a month of study, the Attorney General's office returned a verbal opinion that the USFWS road, constructed in the 1950s, constituted an illegal blockage of the natural flow of

water which would inhibit floodwaters trying to escape DeSoto Lake due to the lack of inadequate alternative outlets during road construction.

2013 – 2019: Levee trustees continued to make appeals through elected leadership at the state and federal levels to assist in getting access to the levees and securing funding to make repairs. The efforts remained futile.

March 2019: Floodwaters once again entered DeSoto Lake and then escaped through the breaches that had not been repaired since 2011. Escaping floodwaters ravaged private property and public infrastructure, including: Pottawattamie County roads, Fensler Drainage District, Nobles Lake Drainage District, H&P District Allen Creek, Honey Creek Levee and contributed to the inundation of Interstate 29 and area residential properties.

May 2019: Attempts were again made to engage federal legislators in assisting with the DeSoto Bend issues. The office of U.S. Senator Joni Ernst inquired of the matter with USFWS. This inquiry prompted a response from their Chief of Congressional and Legislative Affairs. In a written response from USFWS, despite containing inaccurate and misleading statements, did acknowledge two critical points.

1) " … Ownership was confirmed to be with the levee districts through easements …", and
2) "… The Refuge has no jurisdiction or authority for completing maintenance and repairs on the levee. That responsibility falls entirely on the levee district" (See Attachment 5).

Current Status: The Vanman Levee and its trustees are in a locked pattern of uncertainty with existing damages dating back to 2011, exacerbated by the 2019 flooding and new damages along the additional six miles of the Vanman system. The situation poses a clear and present danger in future flood events. Application to FEMA has been made for all repairs and the pre-existing breaches from 2011 is now in question again under FEMA Public Assistance policies, not over ownership or valid easements at this point, but the fact that is was unrepaired damaged from a previous disaster. A situation clearly created by a breach of trust and cooperation with federal officials at USFWS.

Solution

Policy Determination by FEMA. In coordination with the State Coordinating Officer, Vanman Levee trustees and local emergency management should meet with the Federal Coordinating Officer to develop the final information to be presented to the FEMA Region 7 Administrator. The result of this review by the Regional Administrator will yield the only reasonable and prudent decision that can be made – the authorization to approve public assistance program dollars, inclusive of any applicable mitigation funds to return the integrity of the levee system within DeSoto Bend National Wildlife Refuge in order to protect life and property.

Determination Rationale. The denial of access by the federal government preceding the flood disaster of 2011 created a degraded levee system due to overgrown vegetation, sapling and tree growth, and animal activity along the levee system within the refuge. The continued denial of access immediately preceding the 2011 flood disaster prevented levee trustees to inspect, assess, and implement emergency protective measures in an attempt to prevent the catastrophic failures that occurred. The position of USFWS denying recognition of legal easements within the refuge to the levee system led to an additional federal agency, FEMA, denying access to recovery dollars through the Public Assistance program in 2011 that would have allowed for immediate repairs of the levee. The failure of the federal government to

recognize and/or acknowledge its legal obligations identified in its purchase of the land in relation to levee easements and the failure to repair the levees in lieu of the proper process was the chief contributing chain of events that led to increased damages to public and private property in the 2019 flood disaster.

Additionally, the actions of the USFWS directly led to the determination by FEMA that the levee district was not eligible to receive disaster recovery dollars in order to repair the levees. The entirety of circumstances between the 2011 and 2019 disasters now threaten the eligibility of access to federal recovery dollars due to pre-existing, unrepaired damages.

As the federal government has now validated the easements and jurisdiction of the levee district authority over the Vanman levee within DeSoto Bend, it should be determined that exceptional circumstances existed which prevented the district from the access and assistance they were eligible to receive and therefore be determined eligible to restore the levee system.

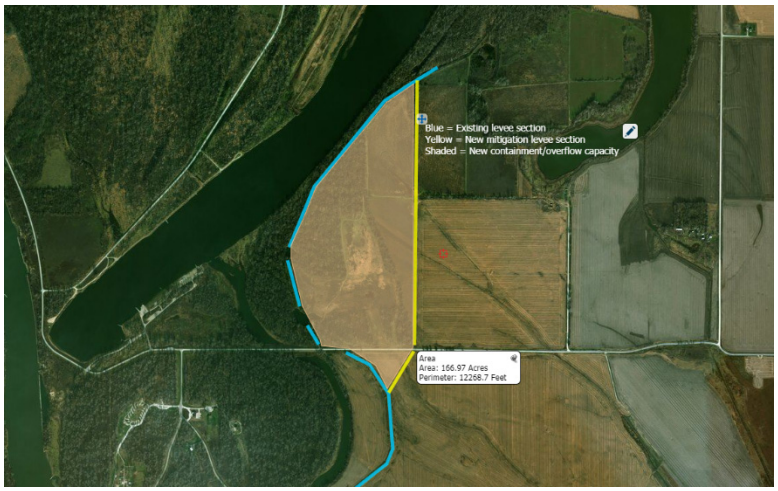
Restoration Options. The Vanman Levee District has proposed two restoration options:
1) Repair the existing levee breaches within DeSoto Bend to original design condition, or
2) Negotiate an easement setback to the east side of the DeSoto property and build a new levee section as a mitigation project that will strengthen the overall levee system, take less time to complete, provide a larger containment area for floodwaters coming through DeSoto Bend, and create additional wetlands within the refuge.

OPTION 1 – RESTORE EXSISTING LEVEE BREACHES

Engineering	$123,000
Debris	$108,000
Construction	$962,000
Legal	$53,000
TOTAL	***$1,246,000***

OPTION 2 – ALTERNATE LEVEE SECTION

Engineering	$98,000
Construction	$1,003,000
Legal	$50,000
TOTAL	***$1,151,000***



** Initial/prelminary estimates at time of publication. Amounts will increase with engineering completion.*

Conclusion

This white paper identifies a clear path and rationale for achieving a solution that meets agreeable objectives by all interested parties; a levee system that protects life and property as a result of cooperative and collaborative efforts by local, state, and federal partners serving the interest of the taxpayers served by each.

In the end, there is no real interest or priority at the local level to argue a case of fault and financial responsibility. The critical priority is to restore the integrity of the Vanman Levee system. Without access to disaster recovery funds, this will not be achievable. The recognition of public assistance program policies and limitation should be weighed against the unusual circumstances surrounding the events over decades that all contributed to the situation at hand. Many of the issues contributing to this situation occurred long before any current officials and agents of the involved parties were in their positions. Poor coordination, communication, and documentation by many people on all sides of the existing situation through the history of this levee have contributed to the case at hand.

The time is at hand for officials at all levels of government to focus on the continued threat created by this situation, ignore the faults of the past, and make the decision to do that which is right for the people we serve.

ATTACHMENT 1

Excerpt of Minutes – Commission to Fix the Value of Lands Take for Right of Way Filed 11-13-1943 by C.A. Bowers, Pottawattamie County Auditor

IN THE MATTER OF THE JOHN VANMAN LEVEE IN ROCKFORD TOWNSHIP, POTTAWATTAMIE COUNTY, IOWA:

TO THE BOARD OF SUPERVISORS OF POTTAWATTAMIE COUNTY, IOWA:

Gentlemen:

The undersigned, having heretofore appointed appraisers of right-of-way for the levee to be constructed in this matter, hereby report to your Honorable Board as follows:

We were duly appointed by the County Auditor as appraisers of said right-of-way on the 3rd day of November, 1943, and, thereafter, we qualified as said appraisers.

Thereafter, on the 13 day of November, 1943, we went to the site of the proposed levee and viewed the lands and grounds designated in the report of the engineer to be used as right-of-way for the levee and appraise same in the following amounts:

Sec. 20-77-44		
NE NE 220x1300 ft. 6 A. H. T. Foss (Geo. Kellogg)	$50.00 per acre	Total $300.00
NW NE 200x1400 ft. 6.4 A. Ernest Briley	50.00 per acre	Total 320.00
Sec. 17-77-44		
S½ SW¼ 2200x200 10 A. Frank McIntosh	30.00 per acre	Total 300.00
NW SW 1020x200 4.8 A. Emil W. Gunther	50.00 per acre	Total 240.00
Sec. 18-77-44		
NE SE 1400x200 6.4 A. Emil W. Gunther	50.00 per acre	Total 320.00
Gov. lots 1+2 Accretions thereto ~~3980~~x200 ~~18.2 A.~~ 12.8 A. Frank McIntosh	30.00 per acre	Total ~~546.00~~ 378.00
Accretions to Sec. 2-11-12 and 13 in 77-45 21300x200 96 A. Owners under contract Hnery K. Peterson & Raymond G. Peterson.	30.00 per acre	Total 2880.00
Govt. Lots 1 & 2 in Sec. 3, 1500x200 7 A. Wm. Dean	30.00 per acre	Total 210.00
NW NW Section 2. 1200 x 200 5.5 A. Owners under contract Hnery K. Peterson and Raymond G. Peterson	30.00 per acre	Total 165.00
Accretions to Sec.2-11-12 and 13 in 77-45 440x200 2 A. Wm. Dean	30.00 per acre	Total 60.00

Respectfully reported,
J. H. Mayne
Chester Childs
Geo. H. Darrington
Appraisers

Filed Nov. 13, 1943
C. A. Bowers

ATTACHMENT 2

FEMA Extension Request (2011 Flood Disaster)

IOWA HOMELAND SECURITY AND EMERGENCY MANAGEMENT DIVISION

PUBLIC ASSISTANCE TIME EXTENSION REQUEST

Disaster #: DR-1998 PA ID #: 155-URU2D-00

Applicant Name: Vanman Levee District

Project Worksheet #: 378 Current Project Completion Date: December 27, 2012

APPLICANT REQUESTS THE CURRENT COMPLETION DATE BE EXTENDED TO: October 31, 2014 ✓

Description of circumstances that caused the delay in completion:

The 2011 Missouri River flooding caused damage to the Applicant's improvements in Section 2-77N-45W Pottawattamie County. Damages consist of breaches in the levee and scouring of the levee tops due to overtopping by flood waters. This portion of the levee was originally built on right-of-way obtained by easement from private landowners. The private lands were subsequently purchased in 1958 by the Federal government to establish the DeSoto National Wildlife Refuge (NWR) under the management of the U.S. Fish and Wildlife Service (FWS).

On several occasions during the damage assessment time frame, the Applicant discussed with FEMA and State of Iowa representatives that damage existed to the levee in Desoto NWR and that the Applicant had valid and legal easements in place. The Applicant was informed that repairs on Federal land are not eligible under the Public Assistance program, and thus, these damages have not been included on any PW.

The Applicant continues to believe that the valid easements highlight the fact that it is bound by the Code of Iowa to repair its improvements regardless of who owns fee title to land underlying its easements. In addition to the exposure of District properties to future flood danger, a much larger area, including valuable public infrastructure such as Interstate 29 and US Highway 30, are also in the risk zone, which magnifies the need for taking the time necessary to further examine this matter. Therefore, the Applicant is preparing a request to IHSEMD for review and approval of these additional sites and desires these repairs be included in PW# 378. The request will include a suggested timeline which allows for a thorough examination and discussion of this matter.

Detailed time-line for completing the remainder of the work on this project:

DATE(S)			PROJECT WORK TO BE DONE
Dec. 2012	TO	Feb. 2013	Request FEMA approval of additional sites and request a version be written to PW# 378.
Mar. 2013	TO	Dec. 2013	Proceed with mutual discussions with FEMA to receive approval of additional sites.
Jan. 2013	TO	Apr. 2014	Survey and design repairs, seek federal and state environmental permits.
May, 2014	TO	Jun. 2014	Advertise for and receive bids, enter into construction contract.
July, 2014	TO	Oct. 2014	Initiate and complete repairs.
	TO		
	TO		
	TO		
	TO		

Project to be completed by: [x] Contract [ ] Force Account [ ] Combination

[redacted] completed on proposed time-line: $360,000.00

[redacted] 12/14/2012 Date

[redacted] r Vanman Levee District

RECEIVED

DEC 17 2012

ATTACHMENT 3

FEMA Extension Denial (2011 Flood Disaster)

Iowa
Fields of Opportunities

STATE OF IOWA

TERRY E. BRANSTAD
GOVERNOR

KIM REYNOLDS
LT. GOVERNOR

DEPARTMENT OF PUBLIC DEFENSE
IOWA HOMELAND SECURITY AND
EMERGENCY MANAGEMENT DIVISION
MARK SCHOUTEN, HOMELAND SECURITY ADVISOR
AND EMERGENCY MANAGEMENT ADMINISTRATOR

JAN 0 8 2013

Mr. Lyle McIntosh
Vanman Levee District
115 North 6th Street
Missouri Valley, IA 51555

Disaster #: 1998
PA ID #: 155-URU2D-00
Project Worksheet #(s): 378
Category: D
Applicant's Time Extension Request

Dear Mr. McIntosh:

In accordance with 44 CFR §206.204 (c)(2), the State of Iowa denies a project time extension for completing the scope of work for the Project Worksheet(s) referenced above.

The Applicant did not provide adequate justification to substantiate a time extension of their current deadline date for the scope of work included within project worksheet 378. The Applicant has stated their intention to request additional damages. To date, this request has not been received by Iowa Homeland Security and Emergency Management (HSEMD). HSEMD has determined that at this time, a time extension is not required to complete the current scope of work for project worksheet 378.

The completion date for the project(s) will remain **December 27, 2012**.

Questions may be directed to Dennis Harper, State Public Assistance Officer, at (515) 725-3231.

Sincerely,

[redacted]

Patrick J. Hall
Alternate Governor's Authorized Representative

PJH/kae

Enclosures

1

7105 NW 70th AVENUE / CAMP DODGE / BLDG. W-4 / JOHNSTON, IOWA 50131-1824 / 515-725-3231
WWW.IOWAHOMELANDSECURITY.ORG

ATTACHMENT 4

Congressional Letter of Assistance

February 4, 2013

Letter to Senators Harkin and Grassley and to Congressman King and Latham

From BOS of Pottawattamie County and Harrison County and Vanman Levee District Trustees

We are writing to you because we need your help in regard to issues relative to the US Fish and Wildlife Service [USFWS] and its operation of Desoto Bend National Wildlife Refuge [Refuge] and flood risk reduction/protection provided by levees that are located within the confines of the Refuge. Those levees are called the Vanman and the Coulthard. Those levees were constructed in 1946 and 1952 respectively. They provided protection from Missouri River flooding to parts of Harrison and Pottawattamie Counties. They were built along the eastern edge of a large bend in the river known as Desoto Bend. Easements were acquired from the adjacent landowners at the time of construction. Those easements remain in force today.

In 1958, lands adjacent to the levees were sold to the United States of America as part of the ultimate establishment of the Refuge. Subsequent to that purchase, the lands owned by the United States of America came to be operated by the USFWS.

In that same time period, the US Army Corps of Engineers [COE] cutoff the large bend in the Missouri River that was called Desoto Bend for purposes of constructing the Congressionally authorized Missouri River Bank Stabilization and Navigation Project. In order to prevent the river from reclaiming the now abandoned river bend, the COE constructed a large earthen embankment to separate the Missouri River from the area which was purchased by the United States of America for the Refuge. This large embankment ran for approximately 5 miles from the Vanman levee on the downstream end to another levee at the upstream end. This embankment served to block the Missouri River from accessing the Desoto Bend and also to function as a levee to keep Missouri River flood water out of the Refuge. This embankment also blocked any floodwater that could ever be on the refuge side from rejoining the river

as it blocked all chutes and channels. This embankment was built a few feet higher than the Vanman and Coulthard levees. Due to upstream dam construction on the Missouri River in the 1950's and 1960's that drastically reduced the frequency of flooding and this newly constructed embankment/levee, the Vanman and Coulthard levees within the Refuge were not needed for flood protection until 2011.

In June 2011 during the Missouri River flood, an upstream levee located on private property west of the Refuge overtopped and subsequently breached allowing a large amount of continuously flowing flood water to flow into the Refuge. This floodwater remained for approximately one day within the confinement provided by the Vanman and Coulthard levees on the east, high ground on the north, and the COE constructed embankment/levee on the south. Once this confined area was filled, the full conveyance of floodwater overtopped the Vanman and Coulthard levees on the east as the COE built embankment/levee on the south that blocked all chutes and channels that would have allowed the floodwater to rejoin the main Missouri River was higher than the levees to the east. In fact, the top of this COE embankment/levee remained dry for the duration of the flood. This floodwater then flowed in an easterly and southerly direction for the remainder of the flood [approximately 2 months]. This floodwater impacted farmland, county roads, and farmsteads and contributed to flooding of I 29 and the

Canadian Southern RR. With the long duration of flooding, the Vanman and Coulthard levees were severely breached.

Subsequent to the flood, several meetings have occurred with the local refuge manager in an effort to repair the breached Vanman and Coulthard levees. The local refuge manager was very helpful in trying to fight the 2011 flood and has been very concerned about the levees being not repaired and having the COE embankment higher than the eastern levees, which contributed to the breaching and subsequent damage to those levees. However, the authority of the local refuge manager appears to be limited in regard to those issues.

On January 28, 2013 we met with your representatives at a meeting in Missouri Valley, Iowa. At that meeting, we discussed all of the above facts and resultant issues that remain unresolved. As a result of that

meeting, we are writing to you to help orchestrate a meeting at the highest levels within the USFWS that you deem necessary in order to discuss the issues stated above and to come to resolution that will restore the level of flood protection/flood risk reduction that all the downstream areas need. While considerable funds have been expended by entities to repair and rebuild levees downstream from the Refuge, all that fund expenditure and effort remains at total risk until the upstream Vanman and Coulthard levees are repaired and the issue with the COE built embankment being higher than the Vanman and Coulthard levees is resolved. Considering the potential risk impact to not only private properties, but also key public infrastructure, this issue needs to be addressed as soon as possible.

Thank you in advance for the assistance that you all will provide to us.

Harrison County BOS

Pottawattamie County BOS

Vanman Levee District

ATTACHMENT 5

USFWS Recognition of District's Legal Rights and Authorities

From: "McKern, Emily (Ernst)" <Emily_McKern@ernst.senate.gov>
Date: May 20, 2019 at 9:24:26 AM CDT
To: "LYLE F. McINTOSH" <BRKFarmer1@aol.com>
Subject: FW: FWS Issue in Iowa

Lyle—

Again, good to see you last week, and I'm glad you brought these issues to our attention. Mike Farr, Senator Ernst's policy person covering river issues, reached out to FWS with your concerns. Their response is below. I'm sure you'll find their response unsatisfactory, but I would be happy to hear your response and relay that back to Mike and FWS.

Thanks,
Emily

Emily McKern || **Constituent Services Director**
Office of U.S. Senator Joni K. Ernst
Phone: (712) 352-1167
Mobile: (712) 310-1111
Fax: (712) 352-0087
Address: 221 Federal Building, 8 South Sixth Street, Council Bluffs, IA 51501

And this is what our folks on the ground tell us:

Ownership/authority of the levees referred to in the inquiry was uncertain until recent years when the question was raised by the levee districts. Ownership was confirmed to be with the levee districts through easements and the levee districts used that confirmation to request funding from FEMA for repairs but were denied. With the exception of a request to raise the levee and blow out another one during a 24 hour flood fight in 2011, the Refuge has never been asked to provide access for maintenance or repairs. In that 2011 circumstance, the action was not completed due to safety and feasibility concerns. The Refuge has no jurisdiction or authority for completing maintenance and repairs on the levee. That responsibility falls entirely on the levee district.

I hope this is helpful.

Marty

•••

--

Martin Kodis
Chief, Division of Congressional and Legislative Affairs
U.S. Fish and Wildlife Service

5275 Leesburg Pike
Falls Church, VA 22041

703-358-2241 ph
703-358-2245 fax