

Iowa Homeland Security & Emergency Management
7900 Hickman Rd, Ste 500
Windsor Heights, IA 50324

**Iowa Flood Mitigation Program (FMP)
Flood Recovery Project Application**

What is the Flood Recovery Fund?

A Flood Recovery Fund is established in the state treasury under the control of the Flood Mitigation Board to provide funding to eligible political subdivisions of the state to implement flood response, flood recovery, or flood mitigation projects.

Eligibility:

- 1) An eligible applicant is a political subdivision of the state located in a county designated under presidential disaster declaration DR-4421-IA and also located in a county where the federal emergency management agency individual assistance program has been activated.
- 2) Eligible projects must support flood response, flood recovery, or flood mitigation. Eligible project types include construction and reconstruction of levees, embankments, impounding reservoirs, conduits or other means that are necessary for the protection from the effects of floodwaters and may include the deepening, widening, alteration, change, diversion, or other improvement of watercourses if necessary for the protection of such property from the effects of flood waters. A project may consist of one or more phases of construction or reconstruction that are contracted for separately if the larger project, of which the project is a part, otherwise meets the requirements of this subrule.

Application Process:

This application is designed to capture the necessary information to meet program requirements.

- 1) Description of the project and how the project supports flood response, flood recovery, or flood mitigation activities.
- 2) Description of financial assistance need through the Flood Recovery Fund.
- 3) Description of the necessary expense or serious need of the political subdivision.
- 4) Details on any additional funds to be applied to the project.

Flood Mitigation Board Process:

- 1) Review the application.
- 2) Approve, defer, or deny the application.

Iowa Flood Mitigation Program (FMP) Flood Recovery Project Application

I. Applicant Information

A. Applicant/Community Name		B. Address		City, State, Zip Code	
City of Fredonia		PO Box 169		Columbus Junction, Iowa 52738	
C. Point of Contact (POC) Name for Project		POC Title	POC Agency	POC Email	
Robert Bright		Councilman		rabrig1950@gmail.com	
POC PO Box and Zip Code	POC Street Address	POC City, State, Zip Code		POC Phone	
52738	1205 Concord	Columbus Junction, IA 52738		319-212-0553	
Alternate POC Name or Authorized Representative		Alt POC Title	Alt POC Agency	Alternate POC Email	
Penny Morgan		Mayor		pennymorgan88@gmail.com	
Alt POC PO Box and Zip Code	Alt POC Street Address	Alt POC City, State, Zip Code		Alt POC Phone	
52738	PO Box 169	Columbus Junction, IA 52738		563-554-7954	
D. Federal Tax ID # / FEIN	E. County Name	F. US Congressional District(s)		State Legislative Districts	
	Louisa	2		Senate 44	House 88
G. Is the Applicant/Community participating in the National Flood Insurance Program (NFIP)?			Community's CID Number		
Yes			190308		

II. Project Cost Information

A. Identify the requested funding source: Permanent Work

B. Project Budget Summary

Contractual Services- Construction	\$	135,550.00
Total Project Budget Summary	\$	135,550.00

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
Flood Recovery Fund		\$ -	\$ 135,550.00	\$ -	\$ 135,550.00
					-
					-
					-
Total Project Funding Source		\$ -	\$ 135,550.00	\$ -	\$ 135,550.00

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.

The City of Fredonia is at the mercy of the drainage of over 700 acres into a holding pond built by the railroad. This pond was built along time ago. It used to drain East but over time now drains West into town when we have a lot of rain and is not sufficient to handle the increased flow. The scope of the project is to replace the existing 15 inch tile with 36 inch RCP storm drain to improve the inflow.

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

We need to replace the existing 15 inch tile with 36 inch RCP storm drain. This will run approximately 1,000 feet under one town road and under one county road. The estimated cost of the proposed project is \$135,550. The city does not have the funding for this project to protect its 244 citizens from damaging flood events. Therefore, the City of Fredonia is requesting 100% financial assistance from the Flood Recovery Fund.

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.

This is our last hope to be able to get this project done. The City of Fredonia's estimated FY 2019 Revenue is \$113,680 and Expenditures is \$115,170 showing a deficit of \$1,490. The estimated budget for FY 2020 has a deficit of \$3,683. The city does not have funding for the needed prevention of the repetitive flooding that impacts homes, roads, and businesses.

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

No additional funds are available to apply to this project.

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

Project location:
Start at west extent : 41d 17' 08.59" N ; 91d 20' 21.89" W (41.285691; -91.339406)
End at East extent: 41d 17' 11.94"N ; 91d 20' 11.69" W (41.286703; -91.336524)

IV. Work Schedule

A. List the major milestones for this project.

Task	Months/Years from Award		Responsible Party
	Start	Complete	
Award	0	1	Flood Mitigation Board & IHSEMD
Final Design	2	5	City of Fredonia
Bid Letting	5	6	City of Fredonia
Construction	7	12	City of Fredonia
Completion & Closeout	12	15	City of Fredonia & IHSEMD
Total Project Duration:	15 months		

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.

Signature of the Chief Executive Officer

Penny Morgan

Penny Morgan
Name of the Chief Executive Officer

Mayor
Title

City of Fredonia
Organization

9-9-2019
Date

562-554-7954
Phone Number

Signature of the Authorized Representative

Robert Bright

Robert Bright
Name of Authorized Representative

Councilman
Title

City of Fredonia
Organization

09-07-2019
Date

PO Box 169
PO Box / Street Address

Columbus Junction, Iowa 52738
City, State and Zip Code

319-212-0553
Phone Number

rabrig1950@gmail.com
Email Address

Project Plan

Applicant: **City of Fredonia**

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.

The purpose of this project is to prevent flood damage to roads and properties by increasing the drainage pipes within the Canadian Pacific Railroad right of way along the tracks. This will provide increased capacity for the 720 acres of farmland overland stormwater flows, from heavy rain events, to discharge to the Iowa River and avoid flooding the project area.

See attached:

Supporting letter from Louisa County Engineer

Iowa Flood Center's, Assessment of Flooding Issues and Possible Mitigation Strategies for the City of Fredonia

Flood photos taken on May 31, 2019 by Councilman Robert Bright

ii. Map(s) identifying project area.

a. Topography

b. iSites

c. Drainage

d. National Flood Hazard Layer FIRMette

e. Iowa Elevation Tools

Flood Center

f. Iowa

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.

The city does not have funding to expend on this project. City residents have incurred residential flood damage that they paid via personal funds or insurance.

Due to the 2019 Flooding, the city has expended \$1,500 to clean a ditch and \$962.50 to fix a road. The cost of repairing or replacing a trash pump has not been determined.

See attached Louisa County Road Department Cost Estimate

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

Not applicable.

**NOTICE OF PUBLIC HEARING
BUDGET ESTIMATE**

FISCAL YEAR BEGINNING JULY 1, 2019 - ENDING JUNE 30, 2020

City of FREDONIA, Iowa

The City Council will conduct a public hearing on the proposed Budget at CITY HALL
on 2/11/2019 at 5:30 pm

The Budget Estimate Summary of proposed receipts and expenditures is shown below.

Copies of the the detailed proposed Budget may be obtained or viewed at the offices of the Mayor, City Clerk, and at the Library.

The estimated Total tax levy rate per \$1000 valuation on regular property 7.38268

The estimated tax levy rate per \$1000 valuation on Agricultural land is 3.00375

At the public hearing, any resident or taxpayer may present objections to, or arguments in favor of, any part of the proposed budget.

319-728-2008
phone number

LISA EXLINE
City Clerk/Finance Officer's NAME

		Budget FY 2020	Re-est. FY 2019	Actual FY 2018
		(a)	(b)	(c)
Revenues & Other Financing Sources				
Taxes Levied on Property	1	18,624	20,800	20,729
Less: Uncollected Property Taxes-Levy Year	2	0	0	0
Net Current Property Taxes	3	18,624	20,800	20,729
Delinquent Property Taxes	4	0	0	0
TIF Revenues	5	0	0	0
Other City Taxes	6	12,410	12,180	13,636
Licenses & Permits	7	0	0	0
Use of Money and Property	8	600	1,100	631
Intergovernmental	9	34,787	33,600	30,177
Charges for Services	10	46,200	46,000	41,083
Special Assessments	11	0	0	0
Miscellaneous	12	0	0	230
Other Financing Sources	13	0	0	0
Transfers In	14	0	0	0
Total Revenues and Other Sources	15	112,621	113,680	106,486
Expenditures & Other Financing Uses				
Public Safety	16	13,400	13,230	13,731
Public Works	17	31,200	31,200	19,717
Health and Social Services	18	0	0	0
Culture and Recreation	19	2,000	2,000	1,710
Community and Economic Development	20	0	0	0
General Government	21	19,700	19,640	12,772
Debt Service	22	0	0	0
Capital Projects	23	0	0	0
Total Government Activities Expenditures	24	66,300	66,070	47,930
Business Type / Enterprises	25	50,004	49,100	49,789
Total ALL Expenditures	26	116,304	115,170	97,719
Transfers Out	27	0	0	0
Total Expenditures/Transfers Out	28	116,304	115,170	97,719
Excess Revenues & Other Sources Over (Under) Expenditures/Transfers Out	29	-3,683	-1,490	8,767
Beginning Fund Balance July 1	30	117,551	119,041	110,274
Ending Fund Balance June 30	31	113,868	117,551	119,041



STATE OF IOWA
DESIGNATION OF APPLICANT'S AUTHORIZED REPRESENTATIVE

Rob Bright
(Name of Representative)

is hereby authorized to execute on behalf of

City of Fredonia
(Applicant Entity)

this mitigation project and to file it with

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

Signed August 12, 2019
(Date)

MARION Robert Reed Sr. MAYOR PROTEM
Chief Executive Officer
(Print Name and Title)

[Redacted Signature]
(Signature)

Rob Bright Councilman
Applicant's Authorized Representative
(Print Name and Title)

[Redacted Signature]
(Signature)

Attested: Lisa Exline City Clerk
(Print Name and Title)

[Redacted Signature]
(Signature)

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

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.

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

Robert Bright
Printed Name

Councilman
Title


Signature

9-7-2019
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.

City of Fredonia, Iowa Hazard Mitigation Plan

Prepared by: Larry Roehl, PE
Louisa County Engineer

Multiple residents of the City of Fredonia have received damages from stormwater runoff. The damages include water infiltration into basements, surface water flow to basements and damage to house foundations from continuous exposure to water. Health conditions have also deteriorated in several houses due to the development of molds and fungi in poorly ventilated spaces.

The City is adjacent to the Iowa River, Base Flood Elevation from the river is 587.5 ft. Much of the City is above elevation 590 ft and is not affected by River Flooding. The eastern area of the city adjacent to the CP railroad is affected by overland stormwater flows due to a limited drainage outlet.

The source of stormwater from the runoff and drainage of about 720 acres of farmland, the drainage path flows under the CP railroad just East of the City Limits via a 27-in diameter RCP and then flows along the railroad right of way to County Road G40 which is also Second Street in Fredonia. A material borrow pit just at the east city limit serves as a retention pond. The pond is drained along the railroad right of way and under Second Street by a 15-inch drain tile, an 18-in drain tile and surface grading. Second Street does not have a roadway culvert for the surface water flows. Excess stormwater that is not drained by the tile system must be removed by pumping to avoid damage to adjacent residences.

Summary of Existing Conditions:

Inflow from 27-in RCP under RR	25 CFS
Outflow through 18-in tile	6.3 CFS
Outflow through 15-in tile	3.8 CFS
Total Out flow	10.1 CFS

Storage in Retention pond, Base elevation = 595'

Storage to Elevation 596-ft	1.18 Ac-ft
Storage to Elevation 597-ft	2.55 Ac-ft
Storage to Elevation 598-ft	4.12 Ac-ft
Storage to Elevation 599-ft	6.00 Ac-ft

The pond is able to mitigate peak flows for minor rainfall events by serving as a storage buffer, however; it is overwhelmed by larger continuous inflows.

Options for drainage improvement:

A brief review of existing conditions indicates that while flow from the north side of the railroad to the south side is mitigated somewhat by the 27-in RCP; the outflow from the south side of the railroad to the west where it can be discharged to the Iowa River is less than inflow resulting in an accumulation of potential flood waters.

The University of Iowa; Iowa Flood Center; prepared a report on July 2019 assessing the flood issues, flooding sources, and potential mitigation strategies for the city to pass the peak flow from large rainfall events. Mitigation alternatives included the following:

Upgrade outlet pipes to 3 x 48-in RCP (total outlet capacity = 240 CFS)

Provide open ditch outlet 30-ft bottom width, 2:1 sideslopes, 2 ft water depth=229 CFS

Both alternatives would address peak inflow estimates for the 50-year event and will need a corresponding outlet through County G40 to drain stormwater away from the city. However; there is not adequate space in the Railroad and private ROW to implement either of these alternatives.

Recommendation for drainage improvements:

With the drainage from North of RR to South of RR restricted by the 27-in RCP and that there is additional pond area north of the RR to serve as storage, the required drainage outflow through the city does not need to match peak flow from stormwater runoff and yet needs to be greater than the inflow from the RR CMP.

Recommendation is to replace the existing 15-in tile with a 36-in RCP storm drain.

Calculated outflow capacity 36-in RCP	39.6 CFS
Existing outflow capacity 18-in tile	6.3 CFS
Total Proposed	45.9 CFS

Additional 36-in surface outlet at G40	51.0 CFS
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Total outflow capacity	96.9 CFS
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All work will be performed within the Railroad ROW and will need easements and design approvals from the Canadian Pacific RR.

Signed _____

Larry Roehl, PE
IA Lic. No. 13211

LOUISA COUNTY

ROAD DEPARTMENT

LARRY ROEHL, COUNTY ENGINEER

8313 K. AVENUE, WAPELLO, IOWA 52653

PH: 319-523-5271

FAX: 319-523-5272

E-MAIL: locoe@louisacomm.net

September 4, 2019

Fredonia Drainage Improvements
Estimate of Probable costs:

Class 10 Excavation	700 CY @ \$5.00	\$ 3,500
36-in RCP Storm	870 LF @\$105/LF	\$91,350
36-in RCP Apron	2 EA @ \$2,200	\$4,400
36-in RCP Roadway Pipe	60 LF @ \$105/LF	\$6,300
24-in RCP Roadway Pipe	60 LF @ \$75/LF	\$4,500
Repair ACC G40/3 rd Ave	110 SY @ \$100/SY	\$11,000
Traffic Control	LS	\$2,500
CP Railroad Insurance	LS	\$6,000
Mobilization	LS	\$6,000
Total		\$135,550

Larry Roehl, PE
County Engineer