

**COUNCIL ACTION FORM**

**SUBJECT: FLOOD MITIGATION – RIVER FLOODING (FUNDING AGREEMENT)**

**BACKGROUND:**

Following the floods of 2010, the City Council established a goal of mitigating the impact of future flooding in Ames. A comprehensive Flood Mitigation Study was completed in 2013 that considered many possible mitigation alternatives. **On December 10, 2013, the City Council approved a series of flood mitigation measures. These included elements targeted at: A) Undertaking a stream bank restoration of Squaw Creek; B) Working with IDOT to improve the conveyance capacity of the US Highway 30 bridge; C) Working through the Squaw Creek Watershed Management Authority to pursue flood mitigation alternatives in the upper reaches of the watershed; and D) Conducting a workshop to review and discuss the range of possible floodplain regulatory approaches.**

The stream bank restoration project (Element A, above) involves flood mitigation in the Squaw Creek channel including conveyance improvements approximately 2,000 feet either side of the South Duff Avenue bridge. In working with Iowa Department of Homeland Security & Emergency Management, City staff and the engineering consultant submitted an application to FEMA for grant funding. **On January 21, 2020 the City Manager received Congressional notification that the U.S. Department of Homeland Security’s Federal Emergency Management Agency (FEMA) would be announcing a Federal grant of \$3,747,450 for this project.** On January 29, 2020 Iowa Homeland Security and Emergency Management Department (HSEMD) announced approval of the resilient flood mitigation application submitted under Pre-Disaster Mitigation and sent the attached Subaward Agreement.

The cost share amounts for this grant are as follows:

<b>Funding Source</b>	<b>Funding Amount</b>	<b>% of Cost</b>
FEMA Grant:	\$ 3,747,450	75%
Local:	\$ 1,249,150	25%
<b>Total:</b>	<b>\$ 4,996,600</b>	<b>100%</b>

The period of performance shall be October 1, 2018 - June 19, 2022. All costs must be incurred during the period of performance, including eligible pre-award costs.

**ALTERNATIVES:**

1. Approve the FEMA grant funding agreement with the Iowa Department of Homeland Security and Emergency Management for the Flood Mitigation – River Flooding project.
2. Reject the FEMA grant funding agreement with the Iowa Department of Homeland Security and Emergency Management for the Flood Mitigation – River Flooding project and direct staff to proceed with the bank restoration project using 100% local funding.
3. Reject the FEMA grant funding agreement with the Iowa Department of Homeland Security and Emergency Management for the Flood Mitigation – River Flooding project and direct staff not to proceed with the bank restoration project at this time.

**CITY MANAGER'S RECOMMENDED ACTION:**

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, as noted above.

# **SUBAWARD AGREEMENT**

**Between**

**Iowa Department of Homeland Security and Emergency Management**

**And**

**City of Ames**

**PROJECT TITLE: City of Ames Squaw Creek Resilient Infrastructure Flood Mitigation Project**

**SUBAWARD AGREEMENT NO: PDMC- 2018--011 DUNS**

**NUMBER: 061320917**

**FEDERAL AWARD DATE: 1/28/2020**

**PERFORMANCE PERIOD START DATE: 10/01/2018**

**PERFORMANCE PERIOD END DATE: 6/19/2022**

**FEDERAL FUNDS OBLIGATED AMOUNT: \$3,747,450.00**

## **I. SCOPE OF WORK:**

This Subaward Agreement (AGREEMENT) is to provide **City of Ames** (SUBRECIPIENT) with federal assistance from the Pre-Disaster Mitigation Grant Program. The total subaward is **\$4,996,600.00**. The federal share shall not exceed **\$3,747,450.00** or **(75%)** of actual allowable subaward costs, whichever is less. The state share shall not exceed **\$0.00** or **(%)** of the actual allowable subaward costs, whichever is less. The SUBRECIPIENT shall provide at least **\$1,249,150.00** or **(25%)** through local non-federal (cash and/or in-kind) sources for actual allowable subaward costs. These funds are to assist the SUBRECIPIENT with completing the approved scope of work in accordance with the work schedule, milestones, and budget that were submitted to and approved by Iowa Department of Homeland Security and Emergency Management (HSEMD) and the Federal Emergency Management Agency (FEMA). Any modifications to the approved scope and/or budget must be submitted to and approved by HSEMD prior to executing the changes. This includes all change orders. The SUBRECIPIENT is required to obtain all necessary permits before any construction begins.

## **II. AGREEMENTS**

HSEMD will provide financial oversight and management in the role of recipient/pass-through entity based on the grant guidance in 2 CFR, Part 200, Subpart D, Section 200.331, the grant financial guide and other state and federal guidelines. HSEMD will provide technical assistance

and direction to the SUBRECIPIENT on programmatic and financial requirements. HSEMD will provide all appropriate documents and forms and make payments to the SUBRECIPIENT to complete the approved scope of work.

HSEMD is responsible for monitoring the SUBRECIPIENT's activities to provide reasonable assurance that the SUBRECIPIENT administers this subaward in compliance with federal and HSEMD requirements. Responsibilities include reviewing the SUBRECIPIENT's records that support receipts and expenditures, financial records are maintained and adequate for audit, proper cash management, and expenditures are eligible and allowable. A pre-award risk assessment is completed for each subrecipient to assist HSEMD in determining the minimum level of monitoring that will be needed throughout the life of this subaward in accordance with 2 CFR, Part 200, Section 200.205.

Additionally, the SUBRECIPIENT will be monitored periodically by HSEMD to ensure that the program goals, objectives, timelines, budgets, and other related program criteria are being met. Monitoring will be accomplished through a combination of office-based and on-site monitoring visits. Monitoring will involve the review and analysis of the financial, programmatic, and administrative records relative to each program, and will identify areas where technical assistance and other support may be needed.

The SUBRECIPIENT will allow HSEMD and auditors to access any necessary records and financial information as indicated in 2 CFR, Part 200, Subpart D, Section 200.336 and Section 200.337.

The SUBRECIPIENT will pass appropriate resolutions to assure HSEMD that it is participating, and will continue to participate, in the National Flood Insurance Program, if mapped.

The SUBRECIPIENT must disclose in writing any potential conflicts of interest to HSEMD in accordance with applicable FEMA policy and 2 CFR, Part 200, Subpart D, Section 200.112.

The SUBRECIPIENT must disclose in writing to HSEMD all violations of Federal criminal law involving fraud, bribery, or gratuity violations potentially affecting the federal subaward. Failure to make required disclosures can result in any of the remedies described in 2 CFR, Part 200, Subpart D, Section 200.338, Remedies for noncompliance, including suspension or debarment. (See also 2 CFR, Part 180 and 31 U.S.C. 3321.)

The SUBRECIPIENT and the SUBRECIPIENT's authorized representative agree to provide all supervision, inspection, accounting, and other services necessary to complete the scope of work from inception to closeout with the requirements set forth below.

### **III. PERIOD OF PERFORMANCE**

The approved Period of Performance for this subaward is from **10/01/2018 through 6/19/2022**. All work must be completed prior to the end of the Period of Performance. HSEMD will not reimburse the SUBRECIPIENT for costs that are obligated or incurred outside of the Period of Performance.

**If a time extension is needed, one must be requested at least 90 days prior to the end of the Period of Performance.** All requests must be supported by adequate justification submitted to HSEMD in order to be processed. This justification is a written explanation of the reason or reasons for the delay; an outline of remaining funds available to support the extended performance period; milestones that are unmet; and a description of performance measures necessary to complete the subaward. The Hazard Mitigation Time Extension Request Form will be made available to the SUBRECIPIENT. Without the justification, time extension requests will not be processed.

#### **IV. AUTHORITIES AND REFERENCES**

The SUBRECIPIENT shall comply with all applicable laws and regulations. A non-exclusive list of laws and regulations commonly applicable to FEMA grants follows hereto for reference only.

- 2 CFR, Part 200 - [http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title02/2cfr200\\_main\\_02.tpl](http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title02/2cfr200_main_02.tpl)
- Section 203 of the Robert T. Stafford Disaster Assistance and Emergency Relief Act (Stafford Act), 42 U.S.C. 5133, as amended
- Section 404 of the Robert T. Stafford Disaster Assistance and Emergency Relief Act (Stafford Act), 42 U.S.C. 5133, as amended
- Section 322 of the Robert T. Stafford Disaster Assistance and Emergency Relief Act (Stafford Act)
- Title 44 of the Code of Federal Regulations (CFR) – Part 13, Administrative Requirements
- Title 44 of the Code of Federal Regulations (CFR)- Part 201- Mitigation Planning
- Title 44 of the Code of Federal Regulations (CFR)- Part 206-Federal Disaster Assistance
- Title 31 CFR 205.6 Funding Techniques
- Hazard Mitigation Assistance Guidance, February 27, 2015- if applicable.
- SUBRECIPIENT's application that was received and approved by HSEMD and FEMA
- Any other applicable Federal Statutes including the Transparency and Recovery Act.

#### **V. GRANT MANAGEMENT SYSTEM**

To ensure federal funds are awarded and expended appropriately, the SUBRECIPIENT will establish and maintain a grant management system as outlined in 2 CFR, Part 200, Subpart D, Section 200.302 and internal controls in section 200.303. The standards for SUBRECIPIENT organizations stem from the Office of Management and Budget's (OMB) uniform administrative requirements and the cost principles in 2 CFR, Part 200, Subpart E. State, local and tribal organizations must follow the uniform administrative requirements standards in 2 CFR Part 200. These standards combined with the audit standards provided within 2 CFR, Part 200, Subpart F plus the requirements of the Generally Accepted Accounting Principles constitute the basis for all policies, processes and procedures set forth in this grant management system for the SUBRECIPIENT.

The SUBRECIPIENT's grant management system must include:

- internal controls based on the American Institute for Certified Public Accountants (AICPA) definitions and requirements in the government-wide administrative requirements and cost principles
- a chart of accounts that includes a separate cost center, fund, or accounting codes for each federal grant, program, or funding source
- procedures to minimize cash on hand in compliance with the Cash Management Improvement Act (CMIA) and good business processes
- the ability to track expenditures on a cash or accrual basis
- the ability to track expenditures in both financial and program budgets
- procedures to document all grant-related expenditures, broken down by budget line items
- procedures to ensure expenditures are eligible and allowable
- the ability to fulfill government-required financial reporting forms

## **VI. PROCUREMENT**

This AGREEMENT requires that all procurement be executed by the SUBRECIPIENT within the guidelines of 2 CFR, Part 200 Subpart D, Section 200.318 through Section 200.326 including Appendix II. Procurement standards must be in accordance with the written adopted procedures of the SUBRECIPIENT, provided that the local procurement standards conform to applicable State and Federal law and the standards identified in 2 CFR, Part 200. The SUBRECIPIENT must maintain written standards of conduct covering conflicts of interest as outlined in 2 CFR, Part 200 Subpart D, Section 200.318. The SUBRECIPIENT will ensure that every purchase order or other contract includes clauses required by Federal statutes and executive orders and their implementing regulations. **The SUBRECIPIENT must submit copies of its own written procurement guidelines, written conflict of interest guidelines, bid documents and contract documents to HSEMD prior to awarding or executing contracts. No contract will be accepted without HSEMD's prior review.**

## **VII. AUDIT**

The SUBRECIPIENT must comply with the requirements of the Single Audit Act Amendments of 1996 and 2 CFR, Part 200, Subpart F. Reference: Catalog of Federal Domestic Assistance (CFDA) Number: 97.047, (CFDA) Name: Pre-Disaster Mitigation.

## **VIII. PAYMENT REQUEST PROCESS**

The SUBRECIPIENT may submit a payment request up to 30 days prior to an anticipated expenditure or disbursement. The SUBRECIPIENT must be able to account for the receipt, obligation, and expenditure of funds. If interest is earned, the SUBRECIPIENT agrees to comply with the federal requirements from 2 CFR, Part 200, Subpart D, Section 200.305. The SUBRECIPIENT may keep interest earned on Federal grant funds up to \$500 per fiscal year. This maximum limit is not per subaward; it is inclusive of all interest earned as a result of all federal grant program funds received per year. Subrecipients are required to report all interest earned at least quarterly to HSEMD. HSEMD will provide instructions to the SUBRECIPIENT for the disposition of reported interest earned.

Payments to subrecipients are based on eligible expenditures that are specifically related to the approved subaward budget and scope of work. The SUBRECIPIENT has two options available to them when requesting payments from HSEMD. Subrecipients can request **Reimbursement** for allowable expenditures already paid, or request an **Advance** for expenditures to be paid within 30 days.

Payments shall be limited to the documented cash requirements submitted by the SUBRECIPIENT. The SUBRECIPIENT must submit a completed Payment Request Form and provide supporting documentation of eligible subaward costs to receive payment of funds.

- **Reimbursement** requests must include payment verification (i.e. paid invoices, receipts, payroll records with personnel activity reports, cancelled checks, general ledger print outs, etc.). HSEMD reserves the right to request that the SUBRECIPIENT submit additional expenditure documentation upon request.
- **Advance** payment requests must include the detailed costs the SUBRECIPIENT is obligated to pay (i.e. invoices, accepted quotes, executed contracts, or other documents). Payment verification documents (same documents required for a Reimbursement request) for the advance must be submitted to HSEMD within 30 days after the advance, and before future advances are made. If the SUBRECIPIENT is unable to demonstrate; the willingness to maintain written procedures that minimize the time elapsing between the transfer of funds and disbursement by HSEMD; a financial management system that meets the standards for fund control and accountability as established in 2 CFR, Part 200; or is considered a High Risk subrecipient; then reimbursement requests will be required.

No more than thirty (30) days should elapse between the date of receipt of a warrant and pay out of the funds by the SUBRECIPIENT. All supporting documentation must be submitted to HSEMD immediately following the SUBRECIPIENT's pay out of the funds.

**Required documents prior to payments from HSEMD.** Payment of funds will not be made to the SUBRECIPIENT until HSEMD has on file the following documents:

- FEMA Award Notification (attached to this AGREEMENT)
- Pre-Award Risk Assessment (attached to this AGREEMENT)
- Signed Subaward Agreement
- Substitute W9/Vendor Update Form (if not already on file at HSEMD)
- Chart of Accounts verifying that unique revenue and expenditure accounts, cost centers or account codes have been established within the SUBRECIPIENT's cash management/accounting system for each program included in this AGREEMENT.
- Procurement documents: written procurement and conflict of interest documents, method of procurement, bid specifications reviewed by HSEMD, copy of approved and executed contracts between the SUBRECIPIENT and contractor.
- Signed certification from the SUBRECIPIENT's authorized representative for the payment request as outlined in 2 CFR, Part 200, Subpart D, Section 200.415.

The maximum federal share to this subaward cannot exceed 75% of eligible subaward expenditures. Therefore, the local matching funds (cash and in-kind) must be at least 25% of eligible subaward expenditures (the state share is up to %). The SUBRECIPIENT is responsible for submitting proof of the local **non-federal** match that was used for this subaward to HSEMD. Expenditures must be in accordance with the approved scope of work and budget and in accordance with 2 CFR, Part 200, Subpart D, Section 200.29, Section 200.306 and Section 200.434. The SUBRECIPIENT contributions must be verifiable from the SUBRECIPIENT'S records, reasonable, allowable, allocable, and necessary under the grant program and must comply with all Federal requirements and regulations.

Cash match can be money contributed to the SUBRECIPIENT by the SUBRECIPIENT, other public agencies and institutions, private organizations and individuals as long as it comes from a non-federal source. Cash spent must be for allowable subaward costs in accordance with the SUBRECIPIENT's approved scope of work and budget and must be applicable to the period to which the cost sharing or matching requirement applies. Documentation can be copies of the SUBRECIPIENT's checks to the third parties and a copy of the SUBRECIPIENT's general ledger for revenues and expenses clearly showing the federal and non-federal cash sources.

In-kind match must comply with the requirements of 2 CFR, Part 200, Subpart D, Section 200.306 entitled "Cost sharing or matching". The value of in-kind contributions is also applicable to the period to which the cost sharing or matching requirement applies. The in-kind match provided must be documented by the third party contributing the in-kind services. The in-kind match must be specifically stated in the SUBRECIPIENT's scope of work and budget before in-kind match will be allowed to match this subaward. Documentation can be a letter (on letterhead) from the third party stating the scope of their work, what is being contributed as it relates to the scope of work, dates of service/donation, record of donor, the value (rates of staffing, equipment usage, supplies, etc.) a statement to the effect that the value is normally charged, deposit slips for cash contributions and a statement that the value is being waived on behalf of the SUBRECIPIENT to meet the matching requirements to the SUBRECIPIENT's subaward. Such documentation must be kept on file by the SUBRECIPIENT.

If the local match is insufficient to satisfy the local match requirements for receiving all available federal funds, the awarded federal funds will be reduced accordingly so as not to exceed the maximum federal share allowed under this subaward.

The SUBRECIPIENT must maintain records and documentation showing how the value placed on third-party in-kind contributions is derived. Regulations are in 2 CFR, Part 200, Subpart D, sections 200.306 and 200.434.



## **IX. PROGRAM INCOME**

Any program income generated must comply with 2 CFR, Part 200, Subpart D, Section 200.80 and Section 200.307. Program income must be deducted from the subaward's total allowable costs. All program income must be reported in the quarterly financial progress reports.

## **X. REPORTING REQUIREMENTS**

Quarterly programmatic and financial reports are required on the progress relative to the approved scope of work as outlined in 2 CFR, Part 200, Subpart D, Section 200.328. Subrecipients are required to complete the quarterly progress report forms that are provided by HSEMD and submit them by the due dates stated by HSEMD. **Due dates are January 15, April 15, July 15, and October 15. The first report is due following the end of the reporting period in which the subaward was awarded by FEMA. The reporting periods are January-March, April-June, July-September, and October-December.**

## **XI. CLOSE OUT**

The SUBRECIPIENT must prepare and submit by the end of the Period of Performance, and/or within 60 days of the completion of the approved scope of work, whichever comes first, all required financial, performance and other reports as outlined in 2 CFR, Part 200 Subpart D, Section 200.343 and Section 200.344. The SUBRECIPIENT must liquidate all obligations incurred under the subaward by the end of the Period of Performance. The SUBRECIPIENT must dispose of property purchased with subaward funds and dispose of or return government-furnished property no longer being used for subaward-related activities. All accounts must be settled, including reimbursements for any remaining allowable costs and refunds to HSEMD of any unobligated cash that was advanced.

## **XII. RECORD RETENTION**

The SUBRECIPIENT must retain records pertinent to the Federal subaward for three years after the date of the final expenditure report is submitted as outlined in 2 CFR Part 200, Subpart D, section 200.333.

## **XIII. WAIVERS**

No conditions or provisions of this AGREEMENT can be waived unless approved by HSEMD and the SUBRECIPIENT, in writing. Unless otherwise stated in writing, HSEMD's failure to insist upon strict performance of any provision of this AGREEMENT, or to exercise any right based upon a breach, shall not constitute a waiver of any right or obligation specified under this AGREEMENT.

#### **XIV. AMENDMENTS AND MODIFICATIONS**

This AGREEMENT may be amended or modified in reference to the subaward funds provided, administrative procedures, or any other necessary matter, but not to take effect until approved, in writing, by HSEMD and the SUBRECIPIENT.

#### **XV. COMPLIANCE, TERMINATION AND OTHER REMEDIES**

Unless otherwise stated in writing, HSEMD requires strict compliance by the SUBRECIPIENT and its authorized representative(s) with the terms of this AGREEMENT, and the requirements of any applicable local, state and federal statute, rules, regulations; particularly those included in the Assurances in the Application which was submitted to FEMA by HSEMD.

HSEMD may suspend or terminate any obligation to provide funding or demand return of any unused funds, following notice from HSEMD, if the SUBRECIPIENT fails to meet any obligations under this AGREEMENT or fails to make satisfactory progress toward administration or completion of said subaward. The SUBRECIPIENT is responsible for repayment of funds as a result of subsequent refunds, corrections, overpayments, or disallowed costs for ineligible expenditures.

The SUBRECIPIENT understands and agrees that HSEMD may enforce the terms of this AGREEMENT by any combination or all remedies available to HSEMD under this AGREEMENT, or under any other provision of law, common law, or equity.

#### **XVI. INDEMNIFICATION**

It is understood and agreed by HSEMD and the SUBRECIPIENT and its agents that this AGREEMENT is solely for the benefit of the parties to this subaward and gives no right to any other party. No joint venture or partnership is formed as a result of this AGREEMENT.

The SUBRECIPIENT, on behalf of itself and its successors and assigns, agrees to protect, save, and hold harmless HSEMD and the State of Iowa, and their authorized agents and employees, from all claims, actions, costs, damages, or expenses of any nature whatsoever by reason of the negligent acts, errors, or omissions of the SUBRECIPIENT or its authorized representative, its contractors, subcontractors, assigns, agents, licensees, arising out of or in connection with any acts or activities authorized by this AGREEMENT. The SUBRECIPIENT's obligation to protect, save, and hold harmless as herein provided shall not extend to claims or causes of action for costs, damages, or expenses caused by or resulting from the negligent acts, errors, or omissions of HSEMD, the State of Iowa, or any of their authorized agents or employees.

The SUBRECIPIENT further agrees to defend HSEMD, the State of Iowa, and their authorized agents and employees against any claim or cause of action, or to pay reasonable attorney's fees incurred in the defense of any such claim or cause of action, as to which the SUBRECIPIENT is required to protect, save, or hold harmless said parties pursuant to paragraph 2 of this part. The SUBRECIPIENT's obligation to defend, or to pay attorney's fees for the defense of such claims or causes of action as herein provided, shall not extend to claims or causes of action for costs,

damages, or expenses caused by or resulting from the negligent acts, errors, or omissions of HSEMD, the State of Iowa, or any of their authorized agents or employees.

#### **XVII. ACKNOWLEDGMENTS**

The SUBRECIPIENT shall include, in any public or private release of information regarding the activities supported by this subaward, language that acknowledges the funding contribution by HSEMD and FEMA.

#### **XVIII. INDEPENDENT CONTRACTOR STATUS OF APPLICANT**

The SUBRECIPIENT, its officers, employees, agents and council members shall all perform their obligations under this AGREEMENT as an independent contractor and not in any manner as officers, employees or agents of HSEMD or the State of Iowa. All references herein to the SUBRECIPIENT shall include its officers, employees, city council/board members, and agents. HSEMD shall not withhold on behalf of any such officer, employee, city council/board member, or agent, or pay on behalf of any such person, any payroll taxes, insurance, or deductions of any kind from the funds paid to the SUBRECIPIENT for administrative purposes.

#### **XIX. GOVERNING LAW, VENUE AND SEVERABILITY**

The laws of Iowa shall govern this AGREEMENT and venue for any legal action hereunder shall be in the Polk County District Court of Iowa. If any provision under this AGREEMENT or its application to any person or circumstances is held invalid by any court of rightful jurisdiction, said invalidity does not affect other provisions of this AGREEMENT which can be given effect without the invalid provision.

#### **XX. NOTICES**

The SUBRECIPIENT shall comply with all public notices or notices to individuals as required by applicable state and federal laws, rules, and regulations and shall maintain a record of such compliance.

#### **XXI. RESPONSIBILITY FOR SUBAWARD**

While HSEMD undertakes to provide technical assistance to the SUBRECIPIENT and its authorized representative in the administration of the subaward, said subaward remains the sole responsibility of the SUBRECIPIENT in accomplishing subaward objectives and goals. HSEMD undertakes no responsibility to the SUBRECIPIENT, or any third party, other than what is expressly set out in this AGREEMENT.

**XXII. NOTICES AND COMMUNICATIONS BETWEEN HSEMD AND SUBRECIPIENT**

All written notices and communications to the SUBRECIPIENT by HSEMD shall be to:

**Tracy Warner, Municipal Engineer  
City of Ames  
515 Clark Ave  
Ames, IA 50010**

Or the Alternate Point of Contact,

**Abdelhafiz Ibrahim, Civil Engineer  
City of Ames  
515 Clark Ave  
Ames, IA 50010**

All written communications to HSEMD by the SUBRECIPIENT and its authorized representative shall be to:

**Aimee Bartlett  
Attention: Mitigation Bureau  
Iowa Department of Homeland Security and Emergency Management  
7900 Hickman Road, Suite 500  
Windsor Heights, IA 50324**

**ENTIRE SUBAWARD AGREEMENT**

This AGREEMENT sets forth the entire AGREEMENT between HSEMD and the SUBRECIPIENT with respect to subject matter hereof. Commitments, warranties, representations and understandings or agreements not contained, or referred to, herein or amended thereto shall not be binding on either HSEMD or the SUBRECIPIENT. Except as may be expressly provided herein, no alteration of any of the terms or conditions of this AGREEMENT will be effective without written consent of both parties.

IN WITNESS WHEREOF, HSEMD and the SUBRECIPIENT have executed this AGREEMENT by the signatures of authorized persons of both entities and on the dates indicated below:

**Iowa Department of Homeland Security    City of Ames:  
and Emergency Management:**

\_\_\_\_\_  
Dennis Harper, Recovery Division  
Administrator

\_\_\_\_\_  
John Haila, Mayor

\_\_\_\_\_  
Date

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Authorized Representative (optional)

\_\_\_\_\_  
Date

Attachments: Exhibit A: FEMA Award Notification  
Exhibit B: Scope of Work  
Exhibit C: Pre-Award Risk Assessment

Exhibit A: FEMA Award Notification

FEMA Award Letter



Bartlett, Aimee &lt;aimee.bartlett@iowa.gov&gt;

## Notice of Pre-Disaster Mitigation Grant Award

1 message

**Bartlett, Aimee** <aimee.bartlett@iowa.gov>  
 To: Tracy Warner <twarner@city.ames.ia.us>  
 Cc: Carol Tomb <carol.tomb@iowa.gov>

Wed, Jan 29, 2020 at 8:07 AM

January 28, 2020

Tracy Warner  
 City of Ames  
 PO Box 811  
 Ames, IA 50010

Subject: Approval-City of Ames Resilient Infrastructure Flood Mitigation Project Application.

Dear Ms. Warner:

The Iowa Homeland Security and Emergency Management Department (HSEMD) is pleased to announce approval of the resilient flood mitigation application submitted under Pre-Disaster Mitigation. The cost share amounts for this grant are as follows:

Funding Source	Funding Amount	% of Cost
Federal:	\$ 3,747,450.00	75%
Local:	\$ 1,249,150.00	25%
<b>Total:</b>	<b>\$ 4,996,600.00</b>	<b>100%</b>

### Conditions of the Project are as follows:

#### Period of Performance Start and End Date:

The period of performance shall be October 1, 2018 - June 19, 2022. All costs must be incurred during the period of performance, including eligible pre-award costs.

#### Amount Awarded:

Funds approved under this award may not be used for other purposes. If costs exceed the amount of funding that has been approved by FEMA, then the Recipient or Subrecipient shall pay the costs that are in excess of the approved budget.

#### Programmatic Changes & General Terms and Conditions:

The Recipient and Subrecipient must comply with all applicable laws and regulations. The Recipient and Subrecipients are bound by Title 44 of the Code of Federal Regulations (CFR) and the February 27, 2015, Unified Hazard Mitigation Assistance Guidance.

#### Environmental Conditions:

This project impacts Squaw Creek, which would likely meet the definition of Waters of the United States (WOUS) and would be subject to Section 404 of the Clean Water Act (CWA), as administered by the USACE. The applicant is required to demonstrate compliance with CWA through submitting sufficient documentation to demonstrate work was accomplished with applicable CWA regulatory provisions.

Story County is within summer habitat range of Indiana bat and the Northern long-eared bat and abundant foraging habitat is present along the forested stream corridor along Squaw Creek upstream and downstream from the South Duff Avenue Bridge. Any tree removal should take place from November 31 through March 31 to ensure that tree removal takes place when both the Indiana bat and Northern long-eared bat would not be present in the affected project area.

Any changes to the approved Scope of Work will require re-evaluation for compliance with NEPA and other Laws and Executive Orders.

#### Reports:

Quarterly progress reports for PDMC projects are required.

**Closeout:**

Per 2 CFR Part 200, when the appropriate grant award performance period expires, the Recipient shall submit the following documents within 90 days: (1) a final Financial Report; (2) final Program Performance Report; (3) an inventory of equipment purchased under each grant's funds; (4) an inventory of Federally-owned property; and (5) other required documents specified by program regulation.

Prior to expending funds, a grant agreement ***must*** be signed and returned to HSEMD. The grant agreement provides detailed project and financial guidance to assist in completing all grant requirements. You will be contacted in the near future by HSEMD to set up a grant agreement meeting.

If there are any questions concerning this correspondence, please do not hesitate to contact any of our staff listed below.

Project Lead: Carol Tomb, 515-725-9305

Financial Team Lead: Katherine Hines, 515-725-9306

Sincerely,

**Aimee Bartlett | Hazard Mitigation Bureau Chief - Recovery Division**

Iowa Dept Homeland Security & Emergency Management | 7900 Hickman Rd, Suite 500

Windsor Heights, IA 50324 | Phone: (515) 725-9364 | Fax: (515) 725-3260



## Exhibit B: Scope of Work

### Scope of Work from Application



Iowa Homeland Security and Emergency Management Department  
Attn: Ms. Carol Tomb  
7900 Hickman Road, Suite 500  
Windsor Heights, IA 50324

Dear Ms. Tomb:

The City of Ames is pleased to submit this scope of work information as part of our application for the 2018 Pre-Disaster Mitigation Assistance (PDM) grant.

## Scope of Work Narrative

**Sub-Applicant: City of Ames**

**Project: Squaw Creek Resilient Infrastructure Flood Mitigation Project**

## Background

The proposed City of Ames project implements long-term mitigation measures as authorized under Section 404 of the Stafford Act. Appropriated Flood Mitigation funds is focused on lowering flood levels by up to 2 feet in the South Duff Avenue area of Ames. The construction would occur within Squaw Creek each side of the South Duff Avenue existing bridge. This project will increase channel conveyance of Squaw Creek at the South Duff Avenue bridge.

Following the floods of 2010, the City Council established a goal of mitigating the impact of future flooding in Ames. A comprehensive Flood Mitigation Study was completed in late 2013 that considered many possible mitigation alternatives across a wide range of factors, including: degree of reduction of flood water elevation, estimated annual damage reduction, construction costs, ongoing operations and maintenance costs, and environmental impacts.

During the comprehensive Flood Mitigation Study, Ames City staff and the consulting engineering team held numerous listening sessions with our citizens and business owners about how to reduce flood impacts in the community. Ultimately, the Ames City Council made the decision to move forward with the Flood Mitigation – River Flooding project that involves increasing channel conveyance of Squaw Creek at the South Duff Avenue bridge by removing excess deposition of sediment, establishing a multi-stage channel, reducing steepness and instability of highly eroding streambanks, thalweg management, and establishing a vegetated stream buffer to improve the creek/bridge alignment, creek capacity, and hydraulic flows utilizing natural channel design (multi-stage channel to reconnect the creek with the floodplain), streambank toe protection and native vegetation stabilization for more resilience in large storm events..

Engineer reviewed the information made available from the City's prior flood mitigation study. Based on the information provided, the expected ratio of pre to post project damages is 27.5% (thereby reducing damages by 72.5% for the 100-year event). (See WHKS & Co. letter dated 12/18/18 attached herewith Page 5)

## Mitigation Measures

This project will increase channel conveyance of Squaw Creek at the South Duff Avenue bridge by removing excess deposition of sediment, establishing a multi-stage channel, reducing steepness and instability of highly eroding streambanks, thalweg management, and establishing a vegetated stream buffer to improve the creek/bridge alignment, creek capacity, and hydraulic flows utilizing natural channel design (multi-stage channel to reconnect the creek with the floodplain), streambank toe protection and native vegetation stabilization for more resilience in large storm events.

## Design and Construction Considerations

The preliminary design involved extensive 2D hydraulic modeling. The modeling showed that the South Duff Avenue bridge and adjacent stream channels act as a restriction, which in turn causes increased flooding as water is forced from the channel and conveyed through the floodplain. Within the floodplain, buildings and other obstructions further alter the normal conveyance of water as flow is forced between buildings and along streets. Many design alternatives were modeled using advanced 2D modeling techniques. By increasing the channel conveyance near the South Duff Avenue bridge, the majority of flood water can be kept within the confines of the channel area. This in turn limits the amount of water diverted into the floodplain and reduces flood elevations throughout the system.

To ensure that the project will not exacerbate the problem downstream, the pre and post models were ran with identical downstream boundary conditions. The model showed that a portion of the flooding from existing conditions was a direct result of water being forced into conveyance through the developed floodplain. The water forced into the floodplain quickly turns and is conveyed back to the main channel immediately downstream of the South Duff Avenue bridge.

The proposed design consists of widening the existing channel and reconnecting it to the adjacent floodplain. This will allow conveyance to occur primarily within and adjacent to the channel. The improved channel will be constructed as a 2-stage channel to provide stability to channel system and create riparian area. The channel will include a variety of natural channel design techniques to improve habitat and water quality. The intent is that under normal flow conditions the low flow channel will be able to meander within the confines of the greater flood channel. This is a proven design technique that provides a wide variety of benefits and resiliency. This project design is in conformance with accepted engineering practices. In Iowa this means conformance with the Iowa Floodplain Criteria.

GPS Coordinates: 42.0135399, -93.6103113

## Independent Solution

As part of establishing and calibrating the 2D model for the project area, a boundary condition was created that set the S. Skunk River (located approximately 0.75 miles downstream of this project) at the same flood level (year event) as Squaw Creek (where the project is being constructed). This condition is reflected on the maps included in the project grant application (See (attached herewith) Maps: Existing Conditions 40-Year Flood Depth (Page 6), Proposed Project 40-Year Flood Depth (Page 7), Existing Conditions 100-Year Flood Depth (Page 8), and Flood Inundation Risk Gradients (Page 9)). The 2D model created by the engineer is consistent with flood levels experienced in Ames during events in 2008 and 2010. This model is also consistent with a model created by the Iowa Flood Center (See (attached herewith): Iowa Flood Center 2% Annual Chance (Page 10), Iowa Flood Center 1% Annual Chance (Page 11)).

While influenced by the other, S. Skunk River and Squaw Creek are separate watersheds. The S. Skunk River watershed consists of 315 square miles of drainage area. Squaw Creek (which terminates at the S. Skunk River in Ames, approximately 0.75 miles downstream of this project) consists of 204 square mile drainage area. (See Ames, IA, Story County, Watersheds Map Info. (Page 12)) Being separate watersheds, there is the chance that Squaw Creek can flood yet the S. Skunk River will not. If Squaw Creek gets more rainfall than S. Skunk River, the water can continue to flow. During extreme flood events, such as 2008 and 2010 experienced in Ames, both watersheds experienced event level rainfalls and resulted in creek and river flooding within the community. For this reason, the boundary condition was established in the 2D model such that both river and creek are experiencing the same flood level. This also demonstrates that this project will not exacerbate flooding downstream.

With the goal of establishing an independent solution, the proposed project increases channel conveyance of Squaw Creek at the South Duff Avenue bridge by removing excess deposition of sediment, widening and establishing a multi-stage channel, and creating thalweg management to increase the creek capacity and improve hydraulic flows utilizing natural channel design (multi-stage channel to reconnect the creek with the floodplain). This solution achieves independently lowering flood levels up to 2 ft in the S. Duff Avenue area as shown on Map 6B (Page 13). These lower flood levels drop water away from residential and commercial buildings (preventing outages and evacuation needs), drops water depths within the street networks thereby making it safer for citizens, visitors, and emergency responders,

and keeps the force of the water (highest velocities) within the Squaw Creek channel (See Map 6B (Page 13), Map 1 – Velocity 2015 Existing Conditions (Page 14) and Map 6 – Velocity 100-year Flood Elevations Proposed Project (Page 15)).

To add more resilience in large storm events, the project is reducing steepness and instability of highly eroding streambanks, establishing a vegetated stream buffer to improve the creek/bridge alignment, and adding streambank toe protection and native vegetation as stabilization measures to finalize construction. (See Typical Details (Page 16), Conceptual Grading Plan (Page 17) and Conceptual Sections (Page 18)).

## Detail Plans

The scope of the project involves construction in the Squaw Creek channel approximately 1500 feet each direction of the existing S. Duff Avenue bridge. The grading limits and cross sections have been included on attachments to demonstrate the physical construction to take place as part of this proposed project. (See Typical Details (Page 16), Conceptual Grading Plan (Page 17) and Conceptual Sections (Page 18))

Several maps are included within the project application to demonstrate the project and positive impacts of the project. Map 6B (Page 13) shows extents of the flooding under existing conditions (blue) and the new flood water elevations (purple) as a result of the proposed project. As can be seen on Map 6B (Page 13), the flood waters drop away from buildings in the area.

By removing excess deposition of sediment under the existing S. Duff Avenue bridge, the hydraulic flows of Squaw Creek significantly improve the ability to function to full capacity. As part of the proposed project and improving the creek/bridge alignment, sediment will not deposit as significantly under the existing bridge so the hydraulic flows will continue to be that of a healthy, balanced creek.

Maps have been included in the project application to demonstrate flood depths. The Map Existing Conditions 40-Year Flood Depth (Page 6) shows that there are varying flood depths in the area. The Proposed Project 40-Year Flood Depth map (Page 7) demonstrates that the deepest flood waters will be within the Squaw Creek channel and new conveyance areas. Shallower flood waters are within the street system and around buildings as a result of the proposed project. Map 6 – Velocity 100-year Flood Elevations Proposed Project map (Page 15) also demonstrates this conveyance with the higher velocities remaining within the Creek/Conveyance system.

## Level of Protection

A central component of the project is conveyance improvements within the channel approximately 1,500 feet either side of the South Duff Avenue bridge. This is estimated to reduce the water surface elevation of a 1% annual chance flood (i.e. – a “100-year” flood) by approximately 2 feet in the South Duff Avenue area, a major damage center.

S. Duff Avenue is currently drivable under the 25-year event. Through estimates obtained as part of 2-D modeling of the project, S. Duff Avenue is not drivable during an existing 40-year event (flood depths are approximately 2.5 ft deep). The proposed project will enable one lane in each direction to remain drivable on S. Duff Avenue during a 40-year event. According to the 2-D model, flood depths of 2-4 feet of water over the full width of the roadway, making it not passable, will occur between a 50 and 100-year event.

The design objective of this project is to reduce flood elevations associated with any given flood event. The level of protection achieved varies by location for any given event. The complex hydraulics of this area make it difficult to determine an exact level of protection that may typically associated with a more traditional 1D model. For example, the extent of flooding for a 100-year event will be similar for pre and post project situations, however the depth of flooding (and associated damages) will be greatly reduced. As shown on the attached maps, the extents of flooding are further away from the residential buildings. To reiterate the level of protection actually achieved will vary throughout the project area due to the two-dimensional nature of the flow. As part of the preliminary analysis a series of model result maps were made for the proposed project showing the reductions in local flood elevations throughout the impacted area.

During flood events such as the 2010 storm event, the depth and velocity of waters are so powerful that both vehicles and boats (used for evacuations) were not able to be used during peak impact. As shown on the Map 6B (Page 13), the depth of flood waters drops significantly from around the residential and commercial buildings as well as within the transportation street network. During events such as 2010, the velocity of the flood waters leaves the Squaw Creek channel and is highest along South Duff Avenue/South 5<sup>th</sup> Street intersection, which is where residents get access. In comparing Map 1 – Velocity (Page 14) with Map 6 – Velocity (Page 15), the proposed project enables the highest velocity of flood waters to remain within the Squaw Creek channel, thereby significantly reducing the risk to citizens and emergency responders.

## Loss of Function Events – Impact

City of Ames incurred the closure of South Duff Avenue for two days each in 2008 and 2010 due to flooding from Squaw Creek. The IDOT Traffic Flow Map: 2015 Annual Average Daily Traffic count has 26,400 one-way traffic trips per day. (See City of Ames detour letter (Page 20) and IDOT Traffic Flow Map (Page 19))

Potable Water Service to 1,408 residents: due to evacuations during flooding on August 11, 2010, 1,408 residents were without potable water service for one day.

While the impacted population also lost wastewater and electrical services, to be conservative, only the loss of potable water was used in the BCA.

## Residual Risk

Water main, storm sewer pipe and structures, and sanitary sewer pipes, structures, and siphon have risk of being damaged due to construction activities since they are in/crossing the project area.

After construction, the water main, storm sewer pipe, sanitary sewer pipes and siphon also have a risk of failure. The risk of failure is primarily related to infrastructure failure of the utility system. The failure could be a pipe break or a sewer structure fracture.

There is limited residual risk to the South Duff Avenue bridge and adjacent stream banks due to erosion. The proposed project will increase conveyance velocity through the bridge by approximately 1 ft/s. Measures will be put in place to protect against erosion, however some risk will remain as the design objectives call for using native vegetation and natural channel stabilization measures.

## Environmental Information

Environmental and historic reviews have been performed (See Environmental and Historic Preservation information). It is not anticipated that this project will have any significant environmental or historic preservation impacts. This project is expected to have numerous environmental benefits, including restoration of riparian area and preservation of green space.

## Additional Considerations

This project provides resiliency by reducing local flood elevations for all flooding events. The natural channel design also adds resiliency for the streambank stability during flood events as well as habitat and riparian buffer to improve water quality.

If you have any questions, please feel free to contact me at (515) 239-5160 or [twarner@city.ames.ia.us](mailto:twarner@city.ames.ia.us).

Respectfully,



Tracy L. Warner, P.E.  
Municipal Engineer

Exhibit C: Pre-Award Risk Assessment

Conducted by HSEMD



# Recovery Division Grant Pre-Award Risk Assessment

## Applicant Information

Applicant: \_\_\_\_\_

Applicant EIN: \_\_\_\_\_

Applicant DUNS: \_\_\_\_\_

Applicant Authorized Representative<sup>1</sup>: \_\_\_\_\_

Applicant Authorized Representative Phone: \_\_\_\_\_

Applicant Authorized Representative Email: \_\_\_\_\_

Assessment Completed by: \_\_\_\_\_

Assessment Date: \_\_\_\_\_

**Total Risk Assessment Score:** \_\_\_\_\_ of 15. **Risk Level\***: \_\_\_\_\_

## Financial Stability

 points \_\_\_\_\_ of 2.

Mark all applicable items.

- Turnover in key staff in the past 12 months (i.e. city clerk, financial manager, superintendent, etc.) **(-1 point)**
- Special investigations performed by the Iowa State Auditor in the past five (5) years. **(-1 point)**
- For each Federal award, the applicant’s accounting system has the ability to: **(1 point)**
  - Track revenues and expenditures separately from other expenditure and revenue sources. (including applicant matching funds) (i.e. separate accounts/work orders for each approved project)<sup>2</sup> *Attach chart of accounts/work order listing with particular accounts/work orders noted.*
  - Tie revenues and expenditures to approved grant budget(s) and scope(s) of work.
- Procedures for the segregation of duties<sup>3</sup> *Attach associated procedures.* **(1 point)**

## Quality Management Systems

 points \_\_\_\_\_ of 6.

Mark all applicable items.

- Procurement Policies. *Attach procurement policies* **(1 point)**

<sup>1</sup> 2 CFR §200.415 requires that fiscal reports (including grant agreements, payment requests, etc.) be “signed by an official who is authorized to legally bind the non-Federal entity”.

<sup>2</sup> 2 CFR §200.302(3) requires that records must adequately identify the source and use of federally-funded activities.

<sup>3</sup> Required per 2 CFR §200.303; Segregation of Duties is outlined in GAO-14-704G Federal Internal Control Standards 10.12-14

- Includes documentation to ensure that contractor/vendor is not suspended or disbarred from federally-funded projects.<sup>4</sup> (1 point)
- Includes procedure to document affirmative solicitation of small and minority businesses, and women’s business enterprises.<sup>5</sup> (1 point)
- Includes Contract Provisions for Non-Federal Entity Contracts Under Federal Awards<sup>6</sup>(1 point)
- Conflict of Interest Policies.<sup>7</sup> Attach associated policies. (1 point)
- Procedures for accounting for the entirety of employee time by individual Federal award and other non-Federally funded work (Personnel Activity Reports or similar). Attach employee time keeping procedures and examples of associated documentation.(1 point)

**Performance History** points \_\_\_\_\_ of 5

- New applicant (-1 point)
- Applicant has an outstanding balance with HSEMD (-1 point)
- Applicant is not suspended or disbarred from federal awards.<sup>4</sup> (1 point)

**Prior Grant Awards** (list only previous 4 programs)

(1 point for each grant in which all projects are completed and closed on or under budget)

CFDA #	# of Projects	Total \$ Obligated	Total \$ Expended	# Projects Completed and Closed	# of Quarterly Reports Completed	# of issues identified

**Prior Grant Monitoring Actions by HSEMD** (list only 5 most recent)

(-1 point for each identified issue).

Desk Review or Site Visit	Date	CFDA #	# of Projects Monitored	# of Issues Identified

<sup>4</sup> Must include documentation of check of contractor/vendor on Excluded Parties List System (EPLS) (<https://www.sam.gov>) (2 CFR §200.212)

<sup>5</sup> 2 CFR § 200.321; Listing available at <https://www.sam.gov>

<sup>6</sup> 2 CFR §200 Appendix II

<sup>7</sup> 2 CFR 200.112



**Prior Audit Findings** points \_\_\_\_\_

Review two (2) most recent audits of Federal Awards, and document findings on Federal awards.<sup>8</sup>

*(-1 point for each audit finding on a Federal award.)*

Fiscal Year Audited	CFDA #	Auditor Opinion (Qualified, Unqualified, Disclaimer, or Adverse)	Finding Type(s) (Internal Control, Material Weakness, Significant Deficiency)	# of Findings	# of Findings Resolved

**Statutory and Regulatory Requirement Implementation** points \_\_\_\_\_ of 2.

Mark all applicable items

- Procedures for reporting all violations of Federal criminal law involving fraud, bribery, or gratuity violations possibly affecting Federal awards.<sup>9</sup> *Attach associated policies (1 point)*
- Policies and procedures to safeguard personally identifiable information (i.e. Social Security numbers, dates of birth, medical information, etc.)<sup>10</sup> *Attach associated policies (1 point)*

**\*Risk Level:**

*(Note: Attachments must be included in order for the point to be awarded)*

<u>Points</u>	<u>Level</u>	<u>Actions</u>
<0-5	High	Site Monitoring Visit or Desk Review, regular site visit and administrative reviews by HSEMD staff.
6-10	Medium	Desk Review upon closeout of projects as needed; continued quarterly progress report monitoring and project closeout monitoring.
11-15	Low	Continued quarterly progress report monitoring and project closeout monitoring.

<sup>8</sup> Audit information is available at: <https://harvester.census.gov/idds2013/FY2013.aspx> or <http://auditor.iowa.gov/reports/search.php>

<sup>9</sup> 2 CFR §200.113 requires that all non-Federal entities and applicants for a Federal award must disclose in a timely manner and in writing to the Federal awarding agency or pass-through entity any violations that may affect the Federal award.

<sup>10</sup> 2 CFR §200.303