

## MEMORANDUM

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TO: RANDY HILL, PUBLIC WORKS DIRECTOR  
FROM: JON LUTZ, CITY ENGINEER  
SUBJECT: GENEVA CREEK CHANNEL SHAPING  
DATE: APRIL 29, 2014

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### INTRODUCTION:

The City of Muscatine administers the Geneva Creek Levee System which protects the Heinz plant on Isett Ave. As a result of a recent inspection by the USACE, the levee system was assigned an unacceptable rating due to sediment and shoaling around the Isett Ave Bridge which has decreased its stormwater capacity. See attachments for additional details.

Channel shaping is required to correct the problem. This work includes grading and debris removal to restore the original channel shape. Concrete revetment will be placed along the channel for erosion protection to avoid having to perform this same work in the near future. A concept plan is attached which shows the length of channel shaping required. This work is beyond the scope of City forces.

### BACKGROUND:

Martin & Whitacre Surveyors & Engineers has submitted a proposal to perform topographic survey, prepare construction plans, perform construction staking and assist with construction observation for a fee of \$5,270.00. We anticipate design to occur in May, bidding and permitting in June, and Construction in July 2014. Funding for this project is included in capital projects.

### RECOMMENDATION/RATIONALE:

The city engineer recommends accepting the design proposal and approving a purchase order to Martin & Whitacre Surveyor's & Engineers in the amount of \$5,270.00 for the Geneva Creek Channel Project at the May 1, 2014 Council meeting.

### ADDITIONAL INFORMATION:

1. USACE letter
2. Concept plan
3. Martin & Whitacre proposal



04/17/14

Jon Lutz, P.E.  
City Engineer  
City of Muscatine

RE: Geneva Creek Channel Shaping at Isett Avenue

Mr. Lutz,

#### INTRODUCTION

We appreciate the opportunity to provide a proposal for the Geneva Creek Project. We believe that our expertise and capabilities will be great assets to the project.

We understand that the project will include:

- Channel shaping of a 400' +/- length of Geneva Creek to improve flow and discourage erosion near the Isett Avenue Bridge

#### SCOPE OF WORK

##### Topographic Survey

We will perform a topographic survey to collect exist data from approximately 100' west of Isett Avenue to the Heinz Plant Bridge

##### Construction Plans

We will prepare construction plans to identify grades, location, typical sections and estimated project quantities for the channel shaping work

#### ADDITIONAL WORK OFFERED

##### Construction Staking

We will provide offset stakes on 50 foot intervals to identify the proposed channel

##### Post Design Engineering

We will make occasional visits to the site to observe the general nature of construction work and will provide necessary guidance to bidders. We expect the City to provide on-site inspection and observation.

### Exceptions

- We understand that the City will seek and acquire all necessary permitting to perform work
- We understand that the City will perform all work associated with easements and permission to perform work on private property
- We understand that the City will hold Martin & Whitacre harmless for all construction and ongoing maintenance liability issues
- We understand that the existing flow characteristics of the Isett Avenue bridge do not meet recommended guidelines for flood events, our work will not seek to improve overall flood conditions
- We offer no structural analysis of the existing bridge structure

### COMPENSATION

We propose the following Fee Schedule:

Topographic Survey	<b>\$1,500</b>
Civil Construction Plans	<b>\$2,500</b>
Construction Staking	<b>\$1,000</b>
Post Design Engineering	<b>\$270</b>

All items are on a not to exceed basis

We appreciate your consideration for this project. We believe that our experience and capabilities will help make this project a success. For additional information about our company please visit our website [www.martin-whitacre.com](http://www.martin-whitacre.com).

Please contact me with any questions or comments.

Sincerely,

MARTIN & WHITACRE SURVEYORS & ENGINEERS, INC

A handwritten signature in blue ink that reads "Adam Shatt". The signature is fluid and cursive, with "Adam" on the left and "Shatt" on the right, connected by a flourish.

Adam Shatt, P.E. LEED AP BD+C

Proposal Acceptance:

Signed: \_\_\_\_\_

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

Name: \_\_\_\_\_

Position: \_\_\_\_\_



**DEPARTMENT OF THE ARMY**  
ROCK ISLAND DISTRICT, CORPS OF ENGINEERS  
CLOCK TOWER BUILDING - P.O. BOX 2004  
ROCK ISLAND, ILLINOIS 61204-2004

October 31, 2013

**Emergency Management Division**

Mr. Jon Lutz, P.E.  
City of Muscatine  
Public Works Department  
1459 Washington Street  
Muscatine, Iowa 52761-5040

Dear Mr. Lutz:

This letter is in reference to the Muscatine, Iowa (Geneva Creek) Flood Risk Management System Project, Periodic Eligibility Inspection performed on May 9, 2013. During this inspection, it was determined that the maintenance condition of this channel system is considered **Unacceptable** as defined by Public Law (PL) 84-99 project maintenance standards. The enclosed report, photographs, and maps provide details of the inspection results.

With this letter, I regret to inform you that the Muscatine, Iowa (Geneva Creek) Flood Risk Management System Project located on the Right Descending Banks of Geneva Creek is no longer eligible for repair assistance under the authority of PL 84-99.

We are willing to meet with you and your associates to discuss repair strategies that will reinstate the Muscatine, Iowa (Geneva Creek) System into PL 84-99 program eligibility.

From a life safety and administrative perspective, it is important that corrective actions be implemented as soon as possible. Unacceptable items listed in the report must be repaired as soon as possible. Minimally Acceptable items in the report must be corrected within two (2) years of notification.

If the City requests the system to be reconsidered for the Rehabilitation and Inspection Program, all Unacceptable deficiencies listed in the attached "Flood Risk Management System Inspection Report" must be rectified, and a plan must be submitted to address all the Minimally Acceptable items. Acceptable rating standards for all rated items can be located under the rating guidelines column within the report.

Once you have completed these actions, you may request readmission into the Corps Rehabilitation and Inspection Program. This will require a written letter to the undersigned stating that the Unacceptable deficiencies have been repaired, a repair plan for Minimally Acceptable deficiencies has been submitted, and you would like to be considered active in the PL 84-99 inspection program. Subsequent to receipt of such request, the system will be inspected for identified deficiencies.

Pending successful determination by the USACE of an acceptable inspection, your levee system will again be considered active in the PL 84-99 Rehabilitation and Inspection Program.

Although this Muscatine, IA System's PL 84-99 eligibility status has changed, the requirement to submit plans to the Corps of Engineers for all proposed modifications occurring on or adjacent to the Flood Risk Management Project remains. We will continue to review plans prior to construction of any modification to ensure the changes will not adversely impact the functionality of the system or potentially create a threat to life safety.

Included with this letter is a copy of the System Wide Improvement Framework policy. This document describes how your system may be readmitted to the PL 84-99 Rehabilitation and Inspection Program using a plan developed by the sponsor and accepted by the USACE to implement system-wide improvements. To qualify for this program, your submitted plan must address system-wide issues, including correction of unacceptable inspection items, in a prioritized way to optimize flood risk reduction.

A copy of this letter has been furnished to the individuals and offices provided below:

Honorable David Loebsack  
Representative in Congress  
1527 Longworth House Office Building  
Washington, D.C. 20515

Mr. Matthew Shook  
Director  
Muscatine County EMA  
312 East 5<sup>th</sup> Street  
Muscatine, Iowa 52761

Mr. Mark Schouten  
Homeland Security and Emergency  
Management  
7105 NW 70<sup>th</sup> Avenue  
Camp Dodge, Building W4  
Johnston, Iowa 50131

Honorable Tom Harkin  
United States Senate  
731 Hart Senate Office Building  
Washington, D.C. 20510

Honorable Chris Brase  
United States Senate  
State Senator Chris Brase  
Des Moines, Iowa 50319

Mr. Chuck Gipp  
Iowa DNR Director  
502 East 9<sup>th</sup> Street  
Des Moines, Iowa 50319-0034

Honorable Dwayne M. Hopkins  
Mayor of Muscatine  
5602 Reynolds Avenue  
Muscatine, Iowa 52761

Mr. Randy Hill  
Public Works Director  
1459 Washington Street  
Muscatine, Iowa 52761

If you have any questions, please contact Mr. Alan Tamm at (309)794-5165, or email him at: [Alan.Tamm@usace.army.mil](mailto:Alan.Tamm@usace.army.mil).

Sincerely,

ORIGINAL SIGNED BY

Rodney L Delp  
Chief, Emergency Management  
Division

Enclosures



## Geneva Creek Channel Shaping

This map is a print product of the  
City of Muscatine Information Viewer.  
All data is displayed in Iowa State  
Plane South Coordinate System.

Author:  
Date: 1/13/2014