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Public Works

City Transit  
263-8152

## MEMORANDUM

Equipment Maintenance  
Roadway Maintenance  
Collection & Drainage  
Building & Grounds  
Engineering

To: Brian Stineman, Public Works Director  
FROM: Jim Edgmond, City Engineer  
DATE: August 8, 2019  
RE: Approval of Purchase Order for Survey for Possible River Front Demountable Flood Wall

## INTRODUCTION:

The City has requested proposals for a Survey and preliminary Engineering study for a Demountable flood wall along the riverfront. This will be a possible future project with the costs shared between the City, and Canadian Pacific Rail Road and potentially Heinz and HNI. The goal of this project will be to keep Mississippi Drive and the railroad tracks open during flooding events similar to what happened this past spring. Once the results of this study are known, better construction estimates can be done to determine the cost of the wall and to coordinate with the Corps of Engineers (USACE) to determine how they would permit this wall.

## BACKGROUND:

When the City met with Canadian Pacific Rail Road to do a post-flood event discussion on how to coordinate our mutual needs better, the possibility of doing this joint project was discussed. This study is the first step to see if the demountable wall is feasible.

City staff negotiated the survey proposal with Martin & Whitacre and staff is requesting approval of a purchase order for \$5,900.00 for the study. Canadian Pacific and HNI have agreed to each reimburse the city for one-third of the proposal amount, with the remaining third of \$1,966.67 to be paid for from the Engineering Budget.

## RECOMMENDATION/RATIONALE:

Recommend City Council approve a purchase order to Martin & Whitacre in the amount of \$5,900.00 for this proposal.

## BACKUP INFORMATION:

1. Proposal Letter



**Martin & Whitacre  
Surveyors & Engineers, Inc.**

Gary Whitacre, President  
Matt Krause, Vice President  
Seth Whitacre, Sec/Treas

July 9, 2019

Jim Edgmond  
City of Muscatine  
1459 Washington Street  
Muscatine, IA 52761

Re: Flood Wall Survey

Jim,

We appreciate the opportunity to continue our work with the City of Muscatine. As discussed in our meeting last week, we propose provide surveying and engineering services to depict the existing ground / trail profile between the railroad closure gate at the west end of the river front park and the westerly abutment of the railroad bridge over Mad Creek.

The survey work will be limited to a GPS quality profile following the current trail route approximately 0.5 feet from the northern trail edge. We will include ground data to connect the trail profile at each end to the closure structure and bridge abutment. We will also collect the curb profile changes at the street crossing and any other major grade changes.

The engineering work will be limited to researching the historic flood elevations and preparing plan and profile sheets with plotted survey and flood data. We will also calculate preliminary quantities of the pre-manufactured flood wall for the different flood elevations shown.

This proposal does not include any engineering for the construction of the flood wall or modifications to the existing storm water drainage system.

Our fee to perform this work will be \$5,900.00 and we can start immediately upon notice to proceed.

Respectfully submitted,

MARTIN & WHITACRE SURVEYORS & ENGINEERS, INC.

Matt Krause

#City Flood Wall Survey

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