

# AMENDED AGENDA

## EXECUTIVE COMMITTEE

**Tuesday, November 22, 2022 – 3:30 p.m.**

**111 S. Michigan Ave., Rm. 200, Saginaw, MI 48602**

Members: Carl Ruth – Chairman, Gerald Little, Sheldon Matthews, Michael Webster, Dennis Krafft  
Others: Controller, County Clerk, Civil Counsel, Finance Director, Personnel Director, Board Staff

- I. Call to Order
- II. Welcome
- III. Correction/Approval of Minutes **(October 18, 2022 Special Meeting – Attached)**
- IV. Public Comment
  - *Speakers limited to 3 minutes*
- V. Agenda

(1) Referrals from October 26, 2022 Committee of the Whole regarding use of American Rescue Plan Act (ARPA) funds:

- Discussion, re: Bridgeport Fire Department communication that they did not ask for ARPA funds that were pledged to them
- Request from Buena Vista Charter Township to hold/set aside up to \$500,000 of ARPA funds for removal and demolition of the vacant “Welcome Inn” Motel, with the caveat that if there is a positive gain Saginaw County will recoup those funds, until federal funding is finalized
- Discussion, re: Kayak Launch Project in Chesaning on the Shiawassee River (1 of 35 nationally recognized trail systems) and the request for this project is \$375,000
- Discussion, re: Community Corrections request for \$165,789 to continue current staffing levels, financial support to indigent offenders under pretrial electronic monitoring, and programs to address trauma and opiate/methamphetamine addiction

(2) Referrals from November 15, 2022 Committee of the Whole regarding use of American Rescue Plan Act (ARPA) funds:

- **Request #36** Recommendation to allocate \$160,750 to HealthSource Saginaw for mental health technician staffing
- **Request #38** Recommendation to allocate \$60,000 to Crime Stoppers of Saginaw County
- **Request #22** Recommendation to allocate \$40,000 to Child & Family Services for mental health counseling for uninsured, high deductible or inability to pay
- **Request #23** Recommendation to allocate \$20,000 to Public Libraries of Saginaw for a Library of Things
- **Request #33** Recommendation to allocate \$500,000 to the Saginaw Community Food Club for a non-profit grocery store

(3) **Robert Belleman, Controller/CAO, re:**

- **11-22-27** Requesting a Letter of Support to the State of Michigan regarding funding of the Midland Flood Reduction Plan, estimated to cost \$117 million
- **11-22-28** Requesting amendment of the FY 2023 General Fund budget by appropriating an additional \$6,500 for architectural/engineering services associated with the Board of Commissioners/Controller's Office Relocation Project
- **11-22-29** Recommendation to use \$120,000 of the \$1 million in ARPA funding set aside for Public Works on the Sarle Drain (\$60,000) and the Bement Drain (\$60,000)

(4) Referral from November 16, 2022 Committee of the Whole, re:

- **11-22-30** Recommendation to approve Option #1 – new construction of a Mosquito Abatement facility at an estimated cost of \$10,956,973

(5) Any other matters to come before the committee

VI. Miscellaneous

VII. Adjournment

**Note:** American Rescue Plan Act discussions began 8/31/21 at a Committee of the Whole (CoW) meeting at Horizons Conference Center. Subsequent CoW sessions were held 10/26/21 @ Spaulding Township; 11/9/21 @ Frankenmuth; 12/31/21 @ YMCA; 1/25/22 @ Buena Vista; 4/12/22 @ Board Office; 6/1/22 @ Horizons; 9/14/22 @ Board Office; 10/11/22 @ Board Office; 10/26/22 @ Board Office; and 11/15/22 @ Board Office.

The Board of Commissioners also issued a news release on November 16, 2021 to inform interested municipalities and non-profit organizations that requests were to be submitted to the County Controller on or before January 20, 2022 for consideration at the Committee of the Whole meeting on January 25, 2022. The ARPA funding request deadline was January 20, 2022. The Board of Commissioners has not considered any ARPA funding requests submitted after January 20, 2022.

**MINUTES**  
**EXECUTIVE COMMITTEE – SPECIAL**  
**Tuesday, October 18, 2022 – 4:00 p.m.**  
**111 S. Michigan Ave., Rm. 200, Saginaw, MI 48602**

Present: Carl Ruth – Chairman, Gerald Little, Sheldon Matthews, Michael Webster, Dennis Krafft  
Others: Robert Belleman, Vanessa Guerra, Dave Gilbert, Koren Thurston, Jennifer Broadfoot, Jessica Sargent, Tarsha Works, Kitty Packard, Kathy Smith, Jack Tany, Marissa Sawdon, Suzy Koepplinger

- I. Call to Order---**Chairman Ruth at 4:00 p.m.**
- II. Welcome
- III. Correction/Approval of Minutes (***September 27, 2022 Special Meeting – Attached***)  
---**Moved by Matthews, seconded by Little, to approve. Motion carried.**
- IV. Public Comment---**None**
  - *Speakers limited to 3 minutes*
- V. Agenda

- (1) Referrals from October 11, 2022 Committee of the Whole regarding use of American Rescue Plan Act (ARPA) funds:

**Saginaw Future:**

- **Proposal #2** Approval to support funding a minimum of up to \$5 million for a Transformational Economic Development Project using ARPA funds  
---**Moved by Krafft, seconded by Matthews, to approve funding a minimum of up to \$5 million to Saginaw Future for a Transformational Economic Development Project with a deadline to start construction by March 21, 2024. Motion carried by the following roll call vote:**  
**Yes: Krafft, Webster, Matthews, Little – 4; No: Ruth – 1; Total: - 5**  
**(Board Report)**

**Buena Vista Charter Township:**

- **Proposal #14** Approval to use up to \$500,000 of ARPA funds for removal and demolition of the vacant “Welcome Inn” Motel, with the caveat that if there is a positive gain Saginaw County will recoup those funds  
---**Removed from the agenda due to federal funding for the project secured through Congressman Kildee’s office**

**Thomas Township:**

- **Proposal #15** Approval to use up to \$400,000 of ARPA funds for the Thomas Township Nature Center & Preserve  
---**Moved by Matthews, seconded by Krafft, to approve using up to \$120,000 of ARPA funds for the Thomas Township Nature Center & Preserve. Motion carried. (Board Report)**

(2) **Controller/CAO, re:**

- Approval to use ARPA Revenue Replacement funds for three (3) previously approved Budget requests: Corporation Counsel (\$35,000); PLUS Home Surveillance (\$150,483); and Saginaw Future (\$140,525)

***---Moved by Matthews, seconded by Little, to approve. Motion carried. (Board Report)***

- Update on employee healthcare

***---Moved by Matthews, seconded by Little, to make a one-time \$2 million contribution to the Healthcare Fund to be allocated to all applicable departments and the General Fund portion to be applied against Revenue Replacement funds; Further, to establish the new employee premium share as \$30 for single, \$150 for double, and \$110 for family and incorporate into Memorandums of Understanding with all applicable unions. Motion carried by the following roll call vote:***

***Yes: Matthews, Webster, Krafft, Little, Ruth – 5; No: - 0; Total: - 5  
(Board Report)***

- Discussion of possible early closure on Monday, October 31, 2022 (Halloween)

***---Moved by Krafft, seconded by Matthews, to approve. Motion carried. (Board Report)***

(3) Any other matters to come before the committee

- Chairman Ruth presented a resolution for possible adoption. The resolution would commit the county to Operation Green Light where the county will shine a green light from the courthouse in respect and honor for Veterans November 1 – 13, 2022. The resolution encourages citizens to shine green lights as well.

***---Moved by Krafft, seconded by Matthews, to forward the resolution to the full board for approval. Motion carried. (Res. 2022 - 14)***

VI. Miscellaneous---***None***

VII. Adjournment---***Moved by Matthews, seconded by Krafft, to adjourn. Motion carried; time being 4:45 p.m.***

**Note:** American Rescue Plan Act discussions began 8/31/21 at a Committee of the Whole (CoW) meeting at Horizons Conference Center. Subsequent CoW sessions were held 10/26/21 @ Spaulding Township; 11/9/21 @ Frankenmuth; 12/31/21 @ YMCA; 1/25/22 @ Buena Vista; 4/12/22 @ Board Office; 6/1/22 @ Horizons; 9/14/22 @ Board Office; and 10/11/22 @ Board Office.

The Board of Commissioners also issued a news release on November 16, 2021 to inform interested municipalities and non-profit organizations that requests were to be submitted to the County Controller on or before January 20, 2022 for consideration at the Committee of the Whole meeting on January 25, 2022. The ARPA funding request deadline was January 20, 2022. The Board of Commissioners has not considered any ARPA funding requests submitted after January 20, 2022.

Respectfully Submitted,  
Carl Ruth, Committee Chair  
Vanessa Guerra, County Clerk  
Suzy Koepplinger, Committee Clerk





# COUNTY OF SAGINAW

## OFFICE OF COUNTY CONTROLLER **EXECUTIVE**

111 SOUTH MICHIGAN AVENUE  
SAGINAW, MICHIGAN 48602

November 17, 2022

**ROBERT V. BELLEMAN**  
Controller/Chief Administrative Officer  
rbelleman@saginawcounty.com

Commissioner Carl E. Ruth, Chairman  
Board of Commissioners  
County of Saginaw  
111 S. Michigan Avenue  
Saginaw, MI 48602

11-22-27

RECEIVED  
SAGINAW COUNTY  
BOARD OF COMMISSIONERS  
2022 NOV 17 12:35 PM

**RE: REQUEST FOR LETTER OF SUPPORT FOR STATE FUNDING OF  
MIDLAND FLOOD REDUCTION PLAN**

Dear Chairman Ruth:

Bridgette Gransden, Midland County Administrator, requested the County of Saginaw submit a letter of support to State of Michigan funding of the Midland Flood Reduction Plan. A copy of the Midland Flood Reduction plan is attached for your review. Spicer group estimates the Midland Flood Reduction plan to cost \$117 million inclusive of construction costs at \$107 million and a regional flood study at \$10 million.

I will be attending the special Executive Committee on November 22, 2022 to answer any questions you or other Committee members may have.

Sincerely,

  
Robert V. Belleman  
Controller/CAO

C: Lt. Mark Przybylski, Saginaw County Emergency Management

**Potential wording for a letter of support (please make it your own as you wish)**

On behalf of \_\_\_\_\_, we are writing to express our support for the “Midland Flood Reduction Plan” developed by the Midland Business Alliance (MBA) Advisory Committee on Infrastructure and their engineering partners.

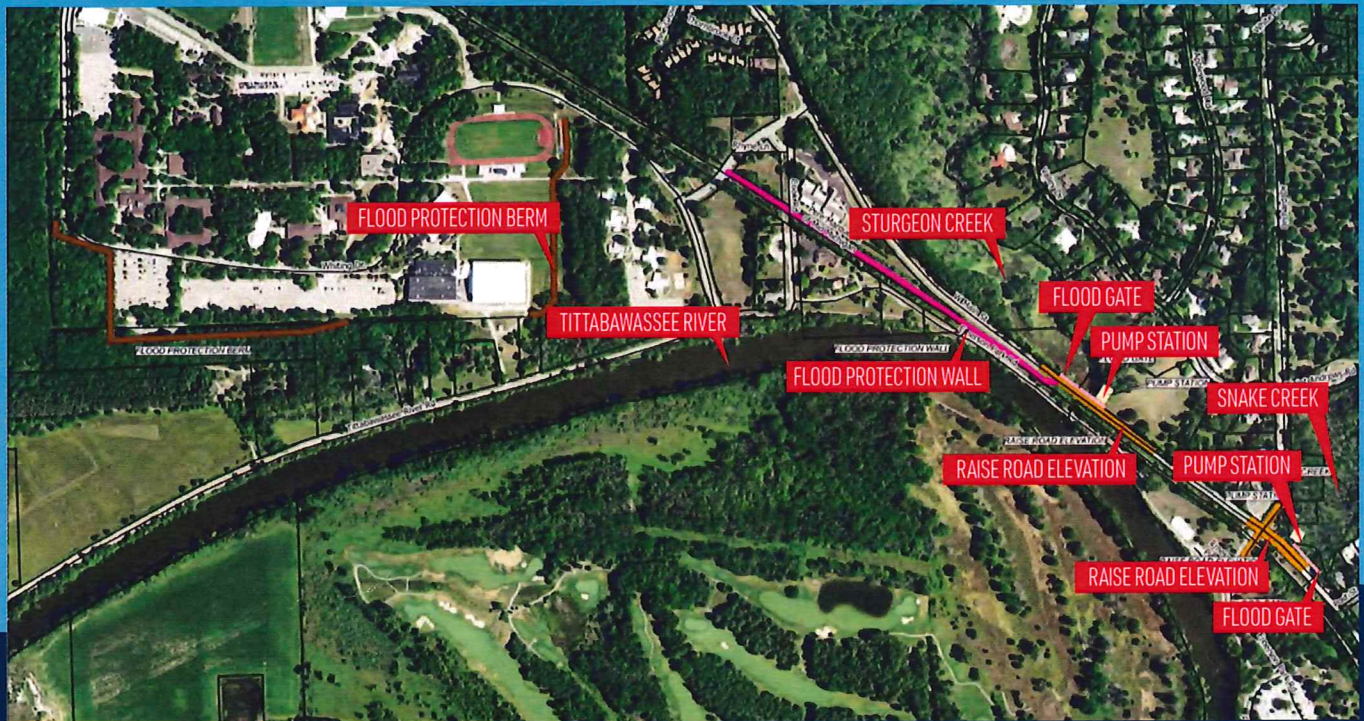
This plan is part of a larger effort to reduce the frequency and severity of flooding in the mid-Michigan region. We have continued to support the MBA’s work on flood reduction.

While a large hydrologic/hydraulic study is underway with the U.S. Army Corps of Engineers, we support the pursuit of targeted solutions in the interim. The Midland Flood Reduction Plan would help answer a significant amount of flooding in Midland. By addressing the typical flooding that occurs in Midland, the engineers estimate that 650 homes and businesses would be helped directly.

By using a series of flood protection walls, flood gates, and pump stations, the project would protect citizens from floodwater levels similar to our devastating 2017 flood, which was just below a 100-year flood event. The engineers have focused on the Sturgeon Creek, Snake Creek, and the Inman Drain areas in Midland. These areas typically flood when high water levels on the Tittabawassee River back up into them.



# MIDLAND FLOOD REDUCTION PLAN



## Overview

The Tittabawassee River is the largest of the Saginaw River system's four main tributaries. Flooding in Midland typically occurs three out of five years, and major flooding impacted the city and surrounding areas in 1986, 2013, 2017, and 2020. Continued flooding occurs in the west portion of the city near Sturgeon and Snake Creeks, which connect with the Tittabawassee. Flooding extends up these creeks significantly, encompassing more than 800 acres for a 100-year event. Much of this flooding is the result of Tittabawassee River floodwaters backing up the creeks and overflowing their banks.

## Flood Protection

The purpose of these projects is to reduce the impact of river flooding and protect residents and businesses in Midland. Engineering concepts and planning-level cost estimates are provided by Spicer Group, Inc.

Recent flood events have resulted in significant inundation and damage in the areas adjacent to Sturgeon Creek, Snake Creek, and the Inman Drain. These projects address this flooding by using a system of flood protection walls, berms, flood gates, and pump stations in this area.

### Engineering design:

- Floodwalls/berms set to 0.3 feet below 100-year flood elevation
- Homes/businesses protected from floodwater levels similar to the 2017 flood event
- Level of design protects against majority of recent flood events without reducing the current 100-year floodplain storage volume

- Flood gates sized to maintain outgoing stream flow of Sturgeon and Snake Creeks
- When Tittabawassee floodwaters start to peak, flood gates close to prevent these waters from backing up into the creeks
- Pump stations on both creeks then start to pump outgoing stream flows while flood gates are closed
- Final hydrologic/hydraulic modeling from the U.S. Army Corps of Engineers (study currently underway) will be used to finalize design specifications



MIDLAND BUSINESS ALLIANCE

ADVISORY COMMITTEE  
ON INFRASTRUCTURE



### Sturgeon Creek Flood Gates/Pump Station

To prevent floodwaters from backing up Sturgeon Creek, this portion of the project would include the addition of flood gates at the mouth of Sturgeon Creek, upstream of Main Street. Open most of the time, the gates would be closed during high-water stages on the Tittabawassee River. Modifications to the culverts crossing under Main Street would be required to connect to the flood gate system. A pump station would be located near the Main Street crossing to provide an outlet for stream flow when flood gates are closed.

### Rail Trail Area Floodwall

To prevent Tittabawassee River floodwaters from extending overland, an added floodwall would extend northwest of Sturgeon Creek along the Pere Marquette Rail Trail. Made from steel sheet piling, the floodwall would extend from higher ground at University Avenue to the southeast past the mouth of Sturgeon Creek (~2,500 feet total distance). The sheet piling would extend up to ~4 feet above the ground surface and be driven into the ground for sufficient stability. Ends of the floodwall would tie into adequately high features, such as the Main Street embankment. Because the elevation of Main Street south of the crossing is close to that required to protect from the floodwaters, its elevation would be raised for just ~800 feet of roadway.

### Flood Reduction Berm

Flooding of Northwood University occurs due to direct overbank flooding from the Tittabawassee River. A series of surrounding berms would intercept this flow and prevent it from inundating this area. Approximately 3,500 feet of earthen berms, averaging 3 feet high, would be constructed on the east, south, and west sides of campus and would terminate into adjacent high ground.

### Snake Creek Flood Gates/Pump Station

Flood gates would be located near Snake Creek's crossing with Main Street. The pump station could be located in the northwest quadrant of the crossing.

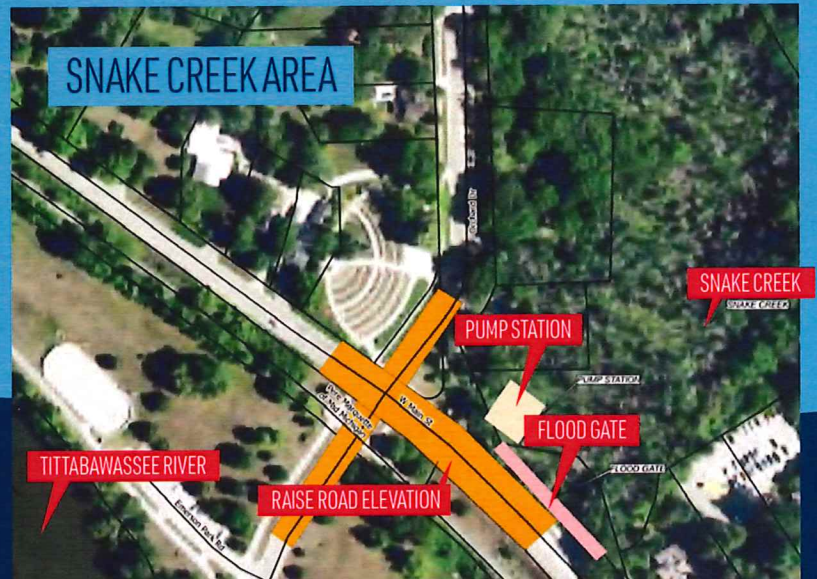
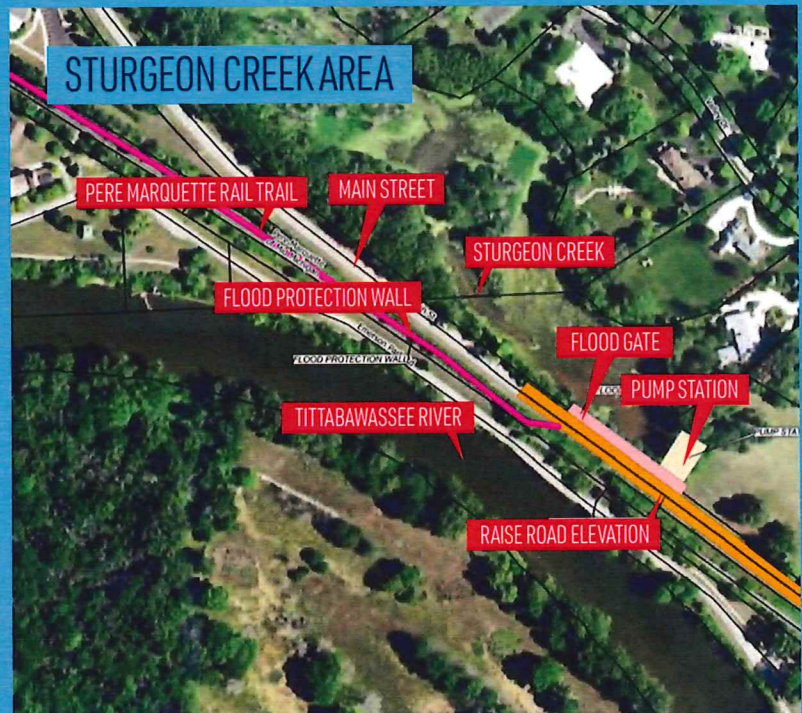
### Main Street Elevation Raised

As Main Street is largely situated above flood level, except for a sag near Snake Creek, floodwalls are not included here. Rather, Main Street would be raised for ~400 feet. Reconstruction of the Orchard Drive/Emerson Park Road intersection would be necessary due to the change in grade of Main Street.

[mbami.org/floodstudy](http://mbami.org/floodstudy)

300 Rodd Street, Midland, MI 48640

[mba@MBAmi.org](mailto:mba@MBAmi.org) | 989.839.9522



Projects	Project Cost	Estimated Structures Protected*	
		Residential	Commercial
Sturgeon Creek Area	\$73,000,000	340	30
Snake Creek Area	\$34,000,000	260	20
Regional Flood Reduction Plan	\$10,000,000	To be determined	
<b>TOTAL</b>	<b>\$117,000,000</b>	<b>600</b>	<b>50</b>

\*Estimated from City of Midland GIS structure data





October 5, 2022

J.W. Fisher & Lee Ann Keller  
Co-Chairs – Advisory Committee on Infrastructure  
Midland Business Alliance  
300 Rodd Street, Suite 101  
Midland, MI 48640

RE: Midland 2022 Flood Reduction Project

Mr. Fisher & Ms. Keller:

As you are aware, Midland has experienced significant flooding in recent years and the community desires to develop and implement projects and practices that will result in flood reduction. Initial steps towards this objective are already in motion, including river model updates, community discussion on flood reduction projects and scoping of flood reduction studies. Implementing the desired flood reduction measures in Midland will require extensive effort and funding to implement.

The USACE is currently sponsored by Midland County, for which they are actively working to update hydrology and hydraulic models for the Tittabawassee River and select tributaries in Midland County. The USACE effort is anticipated to progress into an evaluation of regional flood reduction measures.

Also, the Midland Business Advisory Committee on Infrastructure has engaged Spicer Group as a technical advisor to consult with the USACE effort and with the community effort, including screening potential flood reduction projects and project planning.

Spicer Group has received input from the Committee and the community regarding potential flood reduction approaches. This letter outlines a flood reduction project concept that is supported by the MBA and appears feasible. The flood reduction project focuses on the Sturgeon and Snake Creeks, which are tributaries of Tittabawassee River. This letter also outlines the need for a comprehensive regional study with a focus on long-term planning for flood reduction, as it is understood that flood reduction will require a regional planning effort.

#### **INTRODUCTION**

The Tittabawassee River is the largest of the four main tributaries of the Saginaw River system. It, like the other rivers in the region, has a history of flooding. Major flooding of the Tittabawassee River has impacted Midland and the surrounding area recently in 1986, 2013, 2017, and 2020. As many as 600 structures are located within the 50-year floodplain and 1,200 structures are located within the 100-year floodplain in the Midland area.

Based on a prior USACE study, the most damaging floods typically occur as a result of snow melt coupled with protracted spring rains and occasionally ice jams. Floods occur about 3 years out of 5, with 75% occurring prior to May 15. This USACE study considered a project for local flood protection, by channel improvement, levee construction, and related work, as authorized by the Flood Control Act of 1958. Various structural alternatives were investigated by the USACE, but were ultimately rejected in favor of a non-structural alternative. The selected plan, as detailed in the USACE's *Final Environmental Impact Statement*, dated July 1980, called for permanent evacuation of the floodplain, with associated floodplain regulation and recreational development. It is our understanding that this initiative was completed in the 1980s.

Since, continued flooding occurs in the west portion of the City of Midland near the Sturgeon and Snake Creeks. The USACE study mentioned flood reduction options for this area, but nothing was implemented. The MBA asked this area be reviewed again and a concept for a flood reduction project be revisited, to improve reliability and confidence for residents and businesses and to reduce damage and loss during floods.

Note that flooding can occur from both high river levels, as well as high precipitation that overwhelms storm drain and sanitary sewer systems. The flood reduction project summarized in this letter is to address river flooding. Flooding that occurred as the result of the Edenville and Sanford Dam failures in 2020 was a special case. This project is intended to provide protection against natural flooding, not catastrophic dam failure. This project is intended to be a local infrastructure project that would not remove structures from the 100-year floodplain, rather provide a level of flood protection for smaller and more frequent flood events.

### **PROJECT OVERVIEW AND LEVEL OF SERVICE**

Recent flood events have resulted in significant inundation and damage in the western Main Street area adjacent to the Sturgeon Creek and the Snake Creek. Flood maps show the extent of flooding (i.e floodplains) extend significantly up those creeks, extending outward in the relatively low areas, encompassing over 800 acres for the 100-yr event. While some flooding could be attributed to overwhelmed drainage systems and localized high stream flows of the creeks themselves, much of this flooding is the result of Tittabawassee River floodwaters backing up the Creeks and overflowing their banks.

This project will reduce the frequency of river flooding by constructing a system of flood protection walls, berms, flood gates, and pump stations for the Sturgeon Creek area (including Northwood University) and the Snake Creek area.

The floodwalls and flood protection berms included in the conceptual engineering have elevations set to 0.3 feet below the 100-year flood elevation, protecting homes and businesses from floodwaters for water depths above the 50-year flood yet below the 100-year flood. Flood elevations were obtained from the most recent Federal Emergency Management Agency (FEMA) flood insurance study. Currently, the USACE is updating hydraulic models, and the final design elevations for this project will be adjusted to incorporate their findings.

The current published 100-year flood elevations range from 615.0 to 615.4 feet in the vicinity of the Sturgeon and Snake Creeks. For historical comparison, the 1986 flood stage was measured as 1.8 feet above the expected 100-year flood stage at the USGS gage in Midland and the 2017 crested approximately at the 100-yr elevation. It is estimated that this project will provide flood protection for a large portion of the flood events that have been experienced in recent history but currently would not provide protection for the 100-year flood.

*The level of service outlined in this letter was initially selected based on "affordability and expediency". Should this flood reduction project move forward, additional analysis of an increased level of service and coordination with EGLE regarding floodplains, must be completed.*

Stream flow of Sturgeon and Snake Creeks would be conveyed through new flood gates. The new flood gates would be installed near the mouth of the Creeks and flood gates would be in the open position when Tittabawassee River is not flooding. Flood gates included in the conceptual engineering were sized to pass 100-year flows of the Creeks, which are 1,900 cubic feet per second (cfs) and 1,100 cfs for Sturgeon and Snake, respectively, based on hydrologic data available from the State of Michigan.

When Tittabawassee River is flooding, the flood gates would be closed, and stream flow would be conveyed by new pumps. Typically, the 100-year stream flow in the Creeks will not occur at the same time as the 100-year peak flow in the river. These specific peak elevations and flows will be determined with further modeling. Initially, stream flows in the range of the 10- to 25-year events are assumed for pump station sizing for

conceptual purposes. The 10- and 25-year flows of Sturgeon Creek are 1,100 and 1,400 cfs, respectively. For Snake Creek, the 10-year flow is 400 cfs and the 25-year flow is 700 cfs. Stream flows used in the development of this concept are based on data obtained from the Michigan Department of Environment, Great Lakes, and Energy *Flood Discharge Database*. The USACE is currently performing more detailed hydrologic and hydraulic modeling of the Tittabawassee River in the Midland area, which will be incorporated as the project develops.

As more detailed engineering and modeling is completed, the capacities of the flood gates and the pump stations would be updated to reflect optimized hydraulic capacities based on a cost-benefit analysis centered around the modeling results. Similarly, flood protection wall and berm elevations would be revised, as well.

### **ENGINEERING SUMMARY**

1. Sturgeon Creek Area: To prevent floodwaters from backing up Sturgeon Creek, this portion of the project includes flood gates situated at the mouth of Sturgeon Creek, upstream of Main Street. The gates would remain open much of the time and be closed during high water stages on the Tittabawassee River following large storm events. Modifications to the culverts crossing under Main Street will be required to connect to the floodgate system. A pump station will be located near the Main Street crossing to provide an outlet for stream flow while floodgates are closed. The capacity of the pump station must be sufficient to handle flows occurring in the creek at the time that the Tittabawassee River is peaking and the flood gate is closed.

The concept plans include a floodwall extending northwest along the Pere Marquette Rail Trail to prevent floodwaters from extending from the river overland. The flood wall would be steel sheet piling extending from higher ground at University Avenue southeast past the mouth of Sturgeon Creek, for a total distance of about 2,500 feet. The sheet piling would extend up to about 4 feet above the ground surface and driven into the ground for sufficient stability. Ends of the floodwall would tie into adequately high features, such as the Main Street embankment. Because the elevation of Main Street south of the crossing is close to that required to protect from the floodwaters, its elevation would be raised for approximately 800 feet of roadway, in lieu of using a sheet pile floodwall.

Flooding of the low areas around Northwood University occurs due to direct overbank flooding from the Tittabawassee River, instead of backwater from Sturgeon Creek. A series of surrounding berms would intercept this flow and prevent it from inundating the university property. Approximately 3,500 feet of earthen berms averaging 3 feet high would be constructed on the east, south and west sides of campus. The berms will be terminated into adjacent high ground.

Other ancillary items will be required for the project, including land acquisition, soil erosion and sediment control (SESC) measures, utility coordination and relocation, clearing, and restoration, as well as permitting, engineering, and program management costs.

2. Snake Creek Area: Mitigation measures on Snake Creek will be similar to those for Sturgeon Creek. Flood gates would be located near its crossing with Main Street along with a pump station. The pump station could be located in the northwest quadrant of the crossing.

As Main Street is largely situated above flood level, except for a sag near the creek, flood walls are not included here. Rather, Main Street would be raised for approximately 400 feet to act as a flood barrier. Reconstruction of the Orchard Drive/Emerson Park Road intersection would be necessary due to the change in grade of Main Street. Land acquisition, clearing, SESC, restoration, culvert modifications, and utility adjustments would also be required. Permitting, engineering and program management efforts would be required as well.

### **CONSTRUCTION COSTS AND STRUCTURES PROTECTED**

Construction costs are estimated based on recent bid prices for similar work. Total costs shown include construction, land acquisition, engineering, and permitting costs, along with a contingency. Construction costs include required restoration and utility relocations. The structural, mechanical, and electrical aspects of the proposed flood gate and pump stations would require on-going operation and maintenance costs. These ongoing maintenance costs are not included in our preliminary estimate of construction costs.

The number of structures protected in each area is estimated based on City of Midland GIS structure data, differentiated by land use, and reflects a count of structures within the protection area that would otherwise be within the bounds of the floodplain.

Also, a regional/watershed study to identify feasible flood reduction improvement projects and practices for the Tittabawassee River watershed is needed for long term regional flood reduction planning and long-term sustainability. This regional study would identify and provide planning level estimates for feasible projects and practices that can be implemented over a period of several years as future funding allows. Funding to develop this regional watershed study and flood reduction capital improvement plan is included as a project cost in the table below.

Project Component	Project Cost	Estimated Structures Protected	
		Residential	Commercial
Sturgeon Creek Area	\$73,000,000	340	30
Snake Creek	\$34,000,000	260	20
Regional Flood Reduction Study	\$10,000,000	To be determined	
Total Project Cost	\$117,000,000		

To conclude, flood protection projects at the Sturgeon and Snake Creeks appear technically feasible and possible to design, permit, and construct in a reasonable timeframe. Also, a regional study to identify feasible flood reduction improvement projects and practices for the Tittabawassee River watershed is needed for long term regional flood reduction planning.

We expect that this information meets your needs at this time. Please let us know if you have any questions or need additional information.

Sincerely,



**Nils W. Lindwall, P.E.**  
Senior Project Manager



**Nicholas D. Czerwinski, P.E.**  
Senior Associate

**SPICER GROUP, INC.**  
230 S. Washington Avenue  
Saginaw, MI 48607  
Office: (989) 754-4717  
Cell: (231) 758-2893

Attachments:  
Flood Protection Concept Maps  
Planning Level Estimates of Cost

q:\proj2021\131599sg2021 - tittabawassee river flood study\reports\2022-10-05 submittal\20221005\_mba\_tittabawassee river flood protection summary\_v4.docx



**PLANNING LEVEL ESTIMATE OF COST  
TITTABAWASSEE RIVER FLOOD PROTECTION  
PREPARED FOR MIDLAND BUSINESS ALLIANCE**

September 30, 2022

Item No.	Estimated Quantity	Unit	Description	Unit Price	Total Amount
<b><u>STURGEON CREEK AREA</u></b>					
1.	2,500.00	Lin. Ft.	Flood Protection Wall Construction Steel Sheetpile Wall Estimated Elevation set at 0.3' Below 100 HGL	\$580.00	\$1,450,000.00
2.	3,500.00	Lin. Ft.	Flood Protection Berm Construction 15' Wide Top, 2.5 to 1 Side Slopes Estimated Elevation set at 0.3' Below 100 HGL	\$150.00	\$525,000.00
3.	1.00	Lump Sum	Stormwater Pump Station 25-Year Storm ~ 1400 cfs	Lump Sum	\$35,000,000.00
4.	1.00	Lump Sum	Flood Gate System 100-Year Storm ~ 1900 cfs	Lump Sum	\$5,000,000.00
5.	1.00	Lump Sum	Bridge Modifications on Main Street/Rail Trail	Lump Sum	\$1,000,000.00
6.	800.00	Lin. Ft.	Road Modication on Main Street	\$650.00	\$520,000.00
7.	20.00	Acre	Site Clearing	\$12,000.00	\$240,000.00
8.	1.00	Lump Sum	Storm Drain System Modifications	Lump Sum	\$50,000.00
9.	40.00	Acre	Restoration	\$50,000.00	\$2,000,000.00
10.	1.00	Lump Sum	SESC Measures	Lump Sum	\$200,000.00
11.	4.00	Acre	Wetland Mitigation	\$150,000.00	\$600,000.00
12.	5.00	Acre	Land Acquisition	\$25,000.00	\$125,000.00
13.	1.00	Lump Sum	Utility Relocation	Lump Sum	\$1,200,000.00
14.	1.00	Lump Sum	Power Service	Lump Sum	\$100,000.00
15.	1.00	Lump Sum	Traffic Control	Lump Sum	\$100,000.00
16.	1.00	Lump Sum	Mobilization	Lump Sum	\$4,500,000.00
SUB TOTAL CONSTRUCTION COST-----					\$52,610,000.00
Survey, Engineering, and Design (8%)-----					\$4,208,800.00
Permitting-----					\$75,000.00
Construction Administration and Staking (7%)-----					\$3,682,700.00
Program Management (5%)-----					\$2,630,500.00
SUB TOTAL -----					\$63,207,000.00
Contingency (15%+/-)-----					\$9,793,000.00
TOTAL CONSTRUCTION ESTIMATE OF COST -----					\$73,000,000.00

**PLANNING LEVEL ESTIMATE OF COST  
TITTABAWASSEE RIVER FLOOD PROTECTION  
PREPARED FOR MIDLAND BUSINESS ALLIANCE**

September 30, 2022

Item No.	Estimated Quantity	Unit	Description	Unit Price	Total Amount
<b><u>SNAKE CREEK AREA</u></b>					
1.	1	Lump Sum	Stormwater Pump Station 25-Year Storm ~ 700 cfs	Lump Sum	\$18,000,000.00
2.	1	Lump Sum	Flood Gate System 100-Year Storm ~ 1100 cfs	Lump Sum	\$3,000,000.00
3.	1	Lump Sum	Bridge Revision on Main Street/Rail Trail	Lump Sum	\$500,000.00
4.	500	Lin. Ft.	Road Modification on Main Street/Orchard	\$650.00	\$325,000.00
5.	2	Acre	Site Clearing	\$10,000.00	\$20,000.00
6.	4	Acre	Restoration	\$15,000.00	\$60,000.00
7.	1	Lump Sum	SESC Measures	Lump Sum	\$60,000.00
8.	1	Acre	Wetland Mitigation	\$150,000.00	\$150,000.00
9.	4	Acre	Land Acquisition	\$25,000.00	\$100,000.00
10.	1	Lump Sum	Utility Relocation	Lump Sum	\$25,000.00
11.	1	Lump Sum	Power Service	Lump Sum	\$50,000.00
12.	1	Lump Sum	Traffic Control	Lump Sum	\$25,000.00
13.	1	Lump Sum	Mobilization	Lump Sum	\$2,000,000.00
SUB TOTAL CONSTRUCTION COST-----					\$24,315,000.00
Survey, Engineering, and Design (8%)-----					\$1,945,200.00
Permitting-----					\$50,000.00
Construction Administration and Staking (7%)-----					\$1,702,050.00
Program Management (5%)-----					\$1,215,750.00
<b>SUB TOTAL -----</b>					<b>\$29,228,000.00</b>
Contingency (15%+/-)-----					\$4,772,000.00
<b>TOTAL CONSTRUCTION ESTIMATE OF COST -----</b>					<b>\$34,000,000.00</b>



# COUNTY OF SAGINAW

OFFICE OF COUNTY CONTROLLER

EXECUTIVE

111 SOUTH MICHIGAN AVENUE  
SAGINAW, MICHIGAN 48602

November 17, 2022

**ROBERT V. BELLEMAN**  
*Controller/Chief Administrative Officer*  
[rbelleman@saginawcounty.com](mailto:rbelleman@saginawcounty.com)

Commissioner Carl E. Ruth, Chairman  
Board of Commissioners  
County of Saginaw  
111 S. Michigan Avenue  
Saginaw, MI 48602

11-22-28

RECEIVED  
SAGINAW COUNTY  
BOARD OF COMMISSIONERS  
2022 NOV 17 P 3:58

**RE: REQUEST TO AMEND FY2023 GENERAL FUND BY \$6,500**


Dear Chairman Ruth:

I am requesting the Executive Committee recommend the Board of Commissioners approve amending the FY 2023 General Fund budget by appropriating an additional \$6,500 for architectural/engineering services associated with the Board/Controller Office Relocation project. I have requested Kibbe & Associates undertake some additional design work involving the main entrance (\$5,000) to the Board/Controller's office building and design work ensuring adequate data drops (\$1,500) in each of the offices, conference room, and board meeting spaces. I am enclosing Kibbe's proposal for your review.

The Board of Commissioners had previously approved \$136,825 for all three phases of the Board/Controller, Clerk, Treasurer Office Relocation project.

I will be attending the special Executive Session on November 22, 2022 to answer any questions you or other Committee members may have regarding this budget amendment.

Sincerely,

  
Robert V. Belleman  
Controller/CAO

C: Koren Thurston, Finance Director

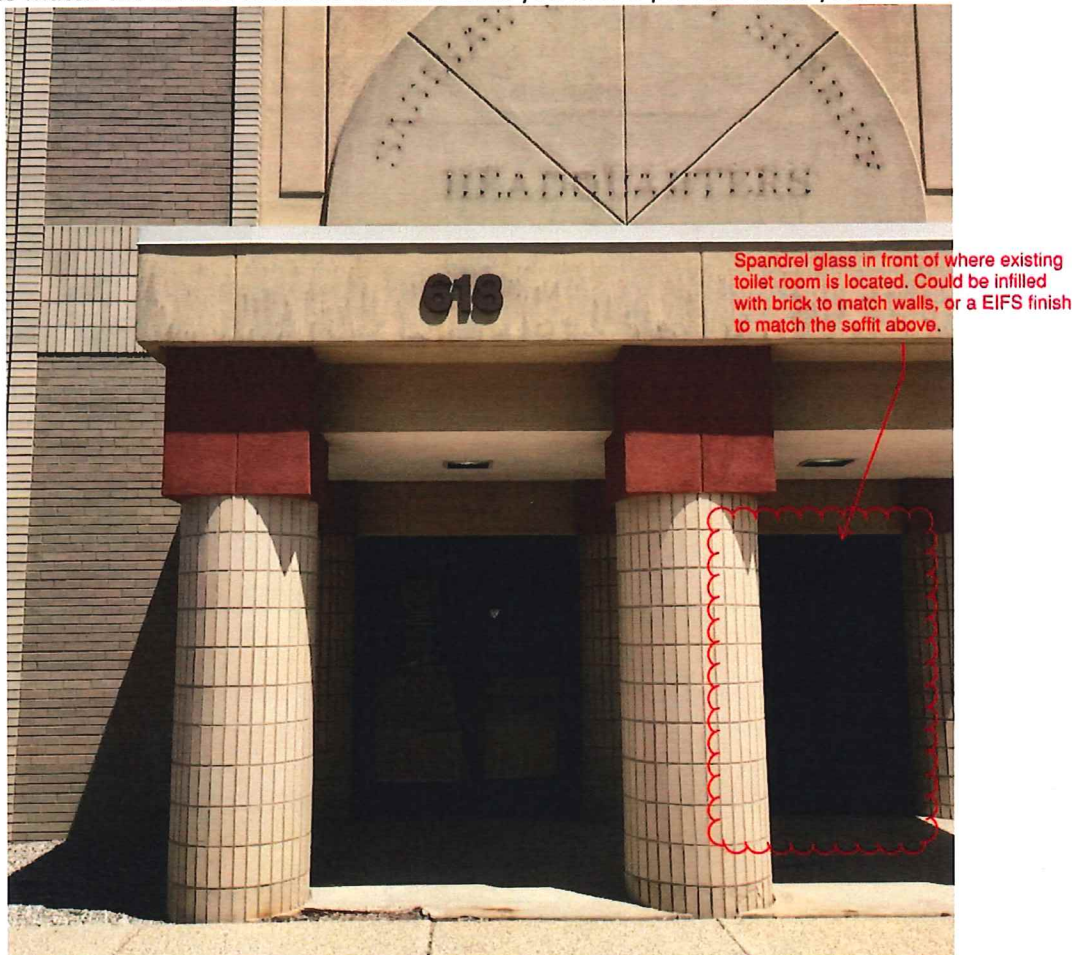
## Ceja, Jaime

---

**From:** Tracy Sovey <tsovey@kibbe.com>  
**Sent:** Tuesday, November 1, 2022 11:29 AM  
**To:** Belleman, Robert; Ceja, Jaime  
**Subject:** RE: Controller/BOC relocation - Renovation questions

Robert and Jaime,

At the front entrance, there is existing aluminum storefront with spandrel glass in front of where the existing toilet room is. It would not be necessary to replace that section of storefront to save costs. That area could be infilled with brick or EIFS finish to match the soffit. Please let us know what you would prefer. Thank you.



Tracy Sovey

**WILLIAM A. KIBBE & ASSOCIATES, INC.**

---

**From:** Ceja, Jaime <jceja@saginawcounty.com>  
**Sent:** Tuesday, November 1, 2022 10:53 AM  
**To:** Tracy Sovey <tsovey@kibbe.com>  
**Cc:** Belleman, Robert <rbelleman@saginawcounty.com>  
**Subject:** RE: Controller/BOC relocation - Renovation questions





**WILLIAM A. KIBBE & ASSOCIATES, INC.**  
ENGINEERS | ARCHITECTS | SURVEYORS

## PROJECT CHANGE NOTICE

Date: 11-10-22

Project Name: Saginaw County Admin.-BOC Building Renovation

WAK Project Number: 22-0462-0097 WAK Office: Saginaw/ GR

Project Change Notice Number.: 1 PO Number / Change Number: 1

Document Title: PCN#1 RFI Reference Number: NA

**Reason for Change:**

Owner requested additional design services to rework existing main [Cass Street] building entry for more user-friendly public access. Current conditions create a dark, cave-like appearance unsuitable for the proposed new usage.

**Affected Documents:**

*Drawings, Specifications, Etc.*

TBD.

**Change Description:**

*Attach additional sheets if necessary*

Several design options will be prepared for Owner's review/ approval of a new entrance design.

**Implementation Plan and Schedule (note anticipated completion date):**

*Attach additional sheets if necessary*

Design drawings will be developed within 2-weeks of approval to proceed.

	Yes	No
Cost Impact	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Schedule Impact	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Description/Estimate: NTE \$5000.

Description/Estimate: \_\_\_\_\_

**ORIGINATOR**

Name: Ivars "Buzz" Dzimis

Signature: 

**APPROVAL SIGNATURE**

Project Manager: Ivars "Buzz" Dzimis

Signature: 



**WILLIAM A. KIBBE & ASSOCIATES, INC.**  
ENGINEERS | ARCHITECTS | SURVEYORS

### PROJECT CHANGE NOTICE

Date: 11-10-22

Project Name: Saginaw County Admin.-BOC Building Renovation

WAK Project Number: 22-0462-0097 WAK Office: Saginaw/ GR

Project Change Notice Number.: 2 PO Number / Change Number: 2

Document Title: PCN#2 RFI Reference Number: NA

**Reason for Change:**

Owner requested assistance with coordination of low-voltage/ IT-related infrastructure needs for building renovations, furniture, fixtures and equipment [FFE].

**Affected Documents:**

*Drawings, Specifications, Etc.*  
TBD.

**Change Description:**

*Attach additional sheets if necessary*

Fee increase to cover 2-coordination meetings w/ Owner's IT Staff and implement necessary updates to construction documents.

**Implementation Plan and Schedule (note anticipated completion date):**

*Attach additional sheets if necessary*

2-Meetings, scheduling of same TBD.

	Yes	No
Cost Impact	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Schedule Impact	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Description/Estimate: \$1500.

Description/Estimate: \_\_\_\_\_

**ORIGINATOR**

Name: Erio Marter, Electrical Engineer Signature: 

**APPROVAL SIGNATURE**

Project Manager: Ivars "Buzz" Dzirnīs Signature: 

**Koepplinger, Suzy**

---

**From:** Belleman, Robert  
**Sent:** Wednesday, November 16, 2022 11:02 AM  
**To:** Wendling, Brian  
**Cc:** Ceja, Jaime; Thurston, Koren; Koepplinger, Suzy  
**Subject:** RE: Sarle & Bement Drains

11-22-29

**Importance:** High

Brian:

The Board of Commissioners, at its Committee of the Whole meeting yesterday afternoon, has referred your request to approve the use \$120,000 of the \$1 million in ARPA funding set aside for the Little Eagle Creek towards the Sarle & Bement Drain projects, to the Executive Committee for recommendation to the Board of Commissioners. The Executive Committee will meet at 4:00 p.m. on November 22<sup>nd</sup> and the Board of Commissioners will meet at 5:00 p.m. on November 22<sup>nd</sup>. The Committee of the Whole voted 10-0 to support your request.

Robert

---

**From:** Wendling, Brian <bwendling@saginawcounty.com>  
**Sent:** Tuesday, November 8, 2022 4:15 PM  
**To:** Belleman, Robert <rbelleman@saginawcounty.com>  
**Subject:** Sarle & Bement Drains

Robert,

As discussed during our phone call earlier today, I am providing information for the Sarle Drain and Bement Drain regarding the possibility of utilizing some of the ARPA funds that have been approved for a drain project. The scope of both projects is Right-of-Way clearing, channel excavation, and some culvert replacement.

To summarize our conversation: Even though relatively inexpensive by comparison to many other projects, both are very expensive on a per parcel/acre cost due to the small district size and a number of parcels within the districts that are un-assessable. If at all possible, \$60,000 per project would make both projects buildable and alleviate continuous nuisance flooding for many properties.

## Sarle Drain

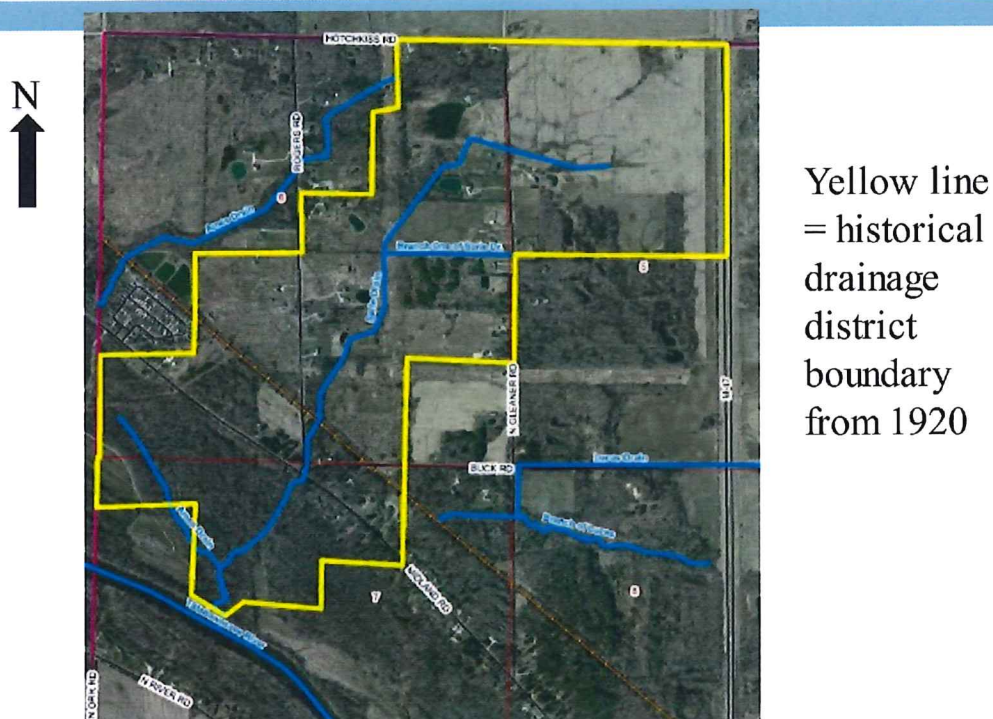
See attached computation of cost after bidding S1460-COC-Draft-2022



# Drain Facts Continued

- Location of Sarle Drain
  - ▣ See Map
  - ▣ Approximately 10,080 feet long ( 1.9 miles)
  - ▣ Watershed area: Approx. 620 acres
- What is the drainage district?
  - ▣ Lands that contributes storm water to drain
  - ▣ Drainage District serves as the special assessment district
  - ▣ Sarle Drain Drainage District includes:
    - ▣ Tittabawassee Township
    - ▣ Michigan Department of Transportation
    - ▣ Saginaw County
    - ▣ Landowners – Approximately 67 parcels

## Drainage District Map





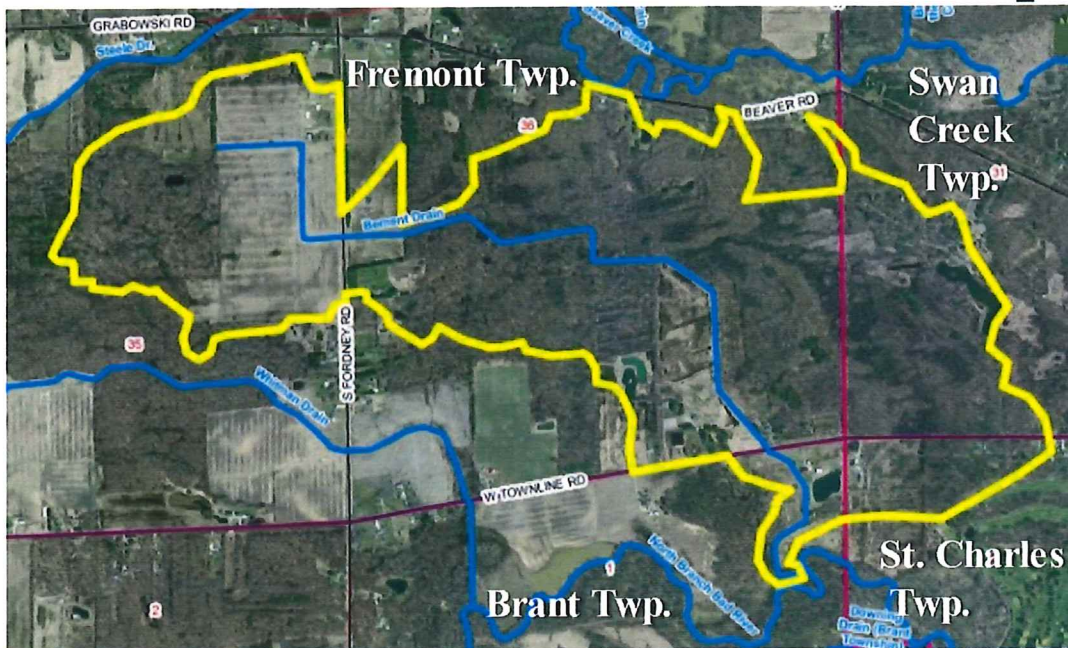
## **Bement Drain**

See attached computation of cost after bidding B1400-COC-Draft-2022

# Drain Facts Continued

- Location of Bement Drain
  - ▣ See Map
  - ▣ Approximately 11,192 feet long ( 2.1 miles)
  - ▣ Watershed area: Approx. 596 acres
- What is the drainage district?
  - ▣ Lands that contributes storm water to drain
  - ▣ Drainage District serves as the special assessment district
  - ▣ Bement Drain Drainage District includes:
    - Fremont Township
    - Swan Creek Township
    - St. Charles Township
    - Brant Township
    - Saginaw County
    - Landowners – Approximately 48 parcels

# Drainage District Map



*Brian J. Wendling*

**Saginaw County Public Works Commissioner**

111 S. Michigan Avenue

Saginaw, MI 48602-2086

PH: 989-790-5258

Fax: 989-790-5259

[bwendling@saginawcounty.com](mailto:bwendling@saginawcounty.com)

November 14, 2022

Carl E. Ruth, Chairman  
Saginaw County Board of Commissioners  
111 S. Michigan Avenue  
Saginaw, MI 48602

11-22-30

RECEIVED  
SAGINAW COUNTY  
BOARD OF COMMISSIONERS  
2022 NOV 21 A 10:00

**RE: OPTIONS TO RELOCATE MOSQUITO ABATEMENT FACILITY**

I will be attending the November 16, 2022 Committee of Whole meeting to share Facility Design options and estimated costs related to June 2022 Board decisions. These decisions include the property transaction with the School District of the City of Saginaw, funding assessment and facility design associated with 705 Towerline, Buena Vista, as well as the inclusion of facility funding within the 2022 Mosquito Abatement Millage.

The selection and approval of a facility design will allow for the construction of a facility that captures current Mosquito Abatement needs, while supporting future functionality.

The results of the assessment and facility design process has yielded two options (layouts attached); New Construction or Partial Renovation option. Accompanying each option is the current total cost estimate, which includes property acquisition, design and construction documents, construction, and relocation costs. The options and estimates to date are as follows:

Option 1 – New Construction - New facility with one building for entire operations, \$10,956,973

Option 2 – Partial Renovation - two buildings, renovation of existing administration building (office workflows) and a new building (operational needs) - \$10,714,924

Further definition of the above cost estimates are included within the accompanying cost estimate sheets. Some costs have yet to be determined and are noted. Any updates in cost will be shared at the meeting. The cost estimate materials include:

- “Summary of Overall Project Cost” captures costs related to design and construction.
- “Facility Total Estimated Cost” accounts for the total estimated costs inclusive of additional costs associated with property acquisition, relocation, and additional identified county costs.

This information was shared with the SCMAC Board of Trustees during a November 9, 2022 Committee of the Whole meeting. The SCMAC Board is recommending Option 1, New Construction based on the following:

- Comparable cost and timeframe

- Less unknowns
- Access
- Efficiencies
- Operational Fit and Location
- Security and Safety

I, along with members of this facility project, will be in attendance at the November 16, 2022 Committee of the Whole Meeting to answer any questions related to this matter.

Respectfully,



William W. Stanuszek, Director

C: Robert Belleman, Controller/CAO  
SCMAC Board of Trustees

Encl: Saginaw Mosquito Facility Total Estimated Cost – SCMAC  
Summary of Overall Project Cost - Spence Brothers  
Facility Layout Options - W.A. Kibbe & Associates



## Saginaw Mosquito Facility Total Estimated Cost

Saginaw County Board of Commissioners Committee of the Whole Meeting – 11/16/22

Category	Description	Option 1 – New Construction	Option 2 – Partial Renovation
<b>Acquisition</b>	Property Transaction Costs	TBD	TBD
<b>Design Fees</b>	<i>See Summary of Project Cost</i>	\$739,939	\$724,905
<b>Construction Costs</b>	<i>See Summary of Project Cost</i>	\$9,170,562	\$8,955,789
<b>Owner Costs</b>	<i>See Summary of Project Cost</i>	\$789,222	\$776,980
	Furniture	\$118,000	same
	Fuel Island Relocation	\$68,250	same
	Utilities (During Construction)	\$26,000	same
	Additional Data Cabling (IT)	\$25,000	same
<b>Relocation Costs</b>	Moving Services	TBD	TBD
	Temporary Accommodations (if necessary)	\$20,000	same
<b>Total Est. Cost*</b>		\$10,956,973	\$10,714,924
	Cost Difference		Less \$242,049

\*Total cost does not reflect use of \$4,000,000 from City of Saginaw Schools

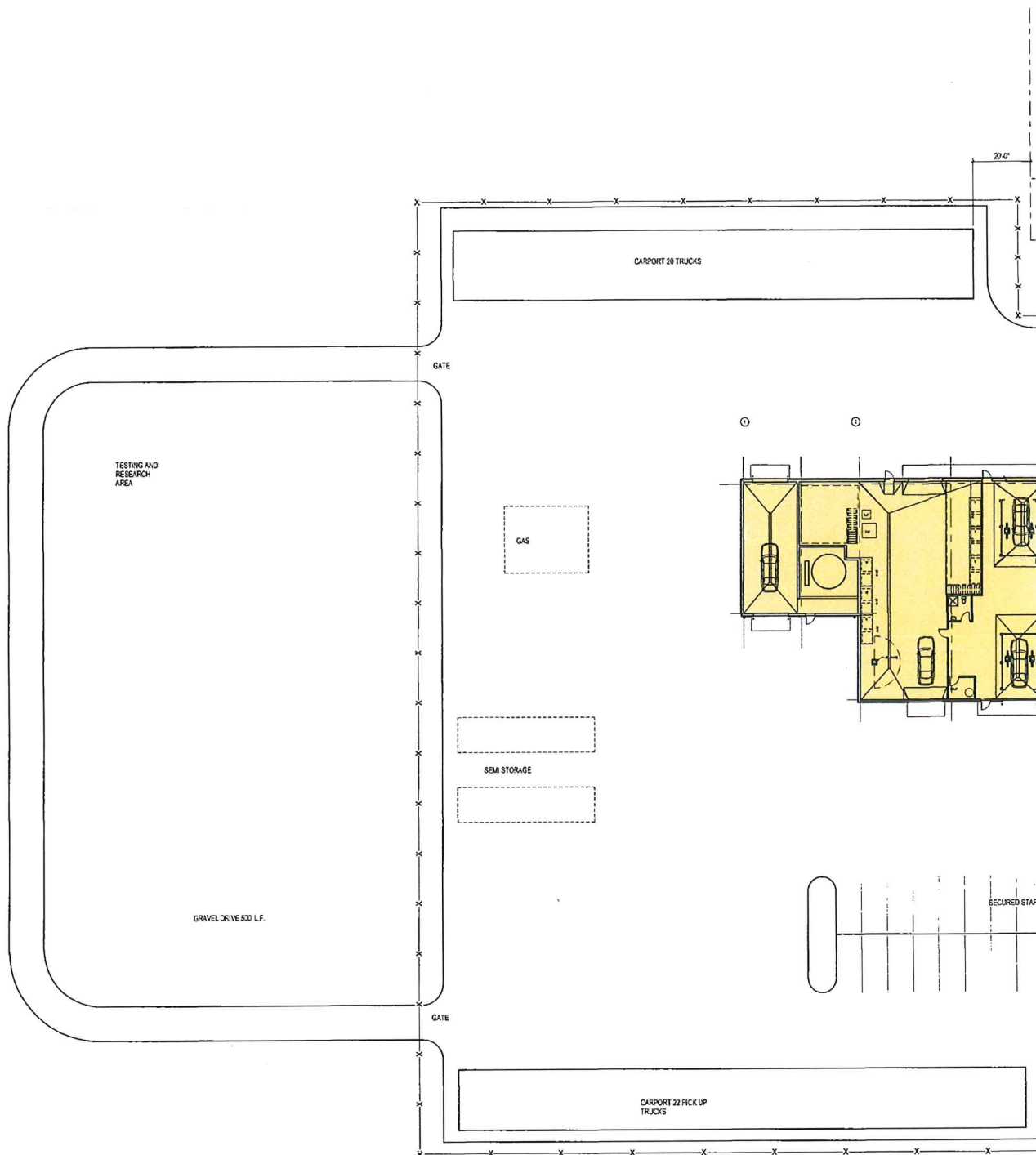
Updated 11/09/22

## Summary of Overall Project Cost SCMAC - BV CAMPUS PLAN



		OPTION #1 COST ESTIMATE 11/7/2022		OPTION #2B COST ESTIMATE 11/7/2022	
Category	Description				
Construction Costs			\$9,170,562		\$8,955,789
	Construction Building Costs (See Attached)	\$6,105,316	\$ -	\$6,057,793	\$ -
	Construction Site Costs (See Attached)	\$3,065,246	\$ -	\$2,897,996	\$ -
	Design & Estimating Contingency	Incl. above		Incl. above	
	Contractor/CM Costs	Incl. above		Incl. above	
Design Fees			\$ 739,939		\$ 724,905
	Architect Fees (7%)	\$ 641,939		\$ 626,905	
	Schematic Fee	\$ 58,000		\$ 58,000	
	MEP Design	incl. above		incl. above	
	Design Reimbursables, Misc.	incl. above		incl. above	
	Civil Engineering Design	\$ 40,000		\$ 40,000	
Owner Costs			\$ 789,222		\$ 776,980
	Surveys and Site Investigations	\$ 6,500		\$ 6,500	
	Quality Control Testing	\$ 100,000		\$ 100,000	
	Soil Borings	\$ 10,000		\$ 10,000	
	Data Cabling, Equipment	\$ 25,000		\$ 25,000	
	AV Systems	\$ 5,000		\$ 5,000	
	Security/Card Access System	\$ 40,000		\$ 40,000	
	Builders Risk Insurance (0.20%)	\$ 18,341		\$ 17,912	
	Building Permit, Fees (0.5%)	\$ 45,853		\$ 44,779	
	Hazardous Material Abatement	\$ 25,000		\$ 25,000	
	Furniture, Equipment (Chairs, Tables, Desks)	TBD		TBD	
	Relocate Tank and Pumps	Not Included		Not Included	
	Vehicle Lifts (2 New)	\$ 30,000		\$ 30,000	
	Pressure Washer System	Existing Eq		Existing Eq	
	Other Equipment	TBD		TBD	
	Municipal (water, storm, san) Utility Connection Fees	\$ 10,000		\$ 10,000	
	Fiber Optic to Building(s)	\$ 5,000		\$ 5,000	
	Electric Service Connection Fees	\$ 10,000		\$ 10,000	
	Project/Owner Contingency (5%)	\$ 458,528		\$ 447,789	
Estimated Total Project Costs:			\$10,699,724		\$10,457,674
Project Budget:					
Under / (OVER) Budget:					

NOTES: ALL DIMENSIONS IN FEET. THIS SITE PLAN AND ALL INFORMATION HEREON ARE THE PROPERTY OF THE U.S. DEPARTMENT OF JUSTICE. NO INFORMATION SHALL BE RELEASED OR DISCLOSED TO ANY OTHER PARTY WITHOUT THE WRITTEN PERMISSION OF THE U.S. DEPARTMENT OF JUSTICE.



©2020 ALL RIGHTS RESERVED THIS DOCUMENT AND ITS CONTENTS ARE THE PROPERTY OF ARMY. NO INFORMATION AND/OR TRANSMISSION OF ANY KIND IS PERMITTED TO BE RELEASED

