

EIGHT AND ONE-HALF MILE RELIEF DRAIN  
INTRA-COUNTY DRAINAGE BOARD  
JANUARY 9, 2023  
10:15 A.M.  
AGENDA

**NOTE: THIS MEETING WILL BE HELD IN PERSON WITH TELECONFERENCE  
OPTION FOR PUBLIC**

**Call in Number: 1-224-990-0182  
Access Code: 927 405 823**

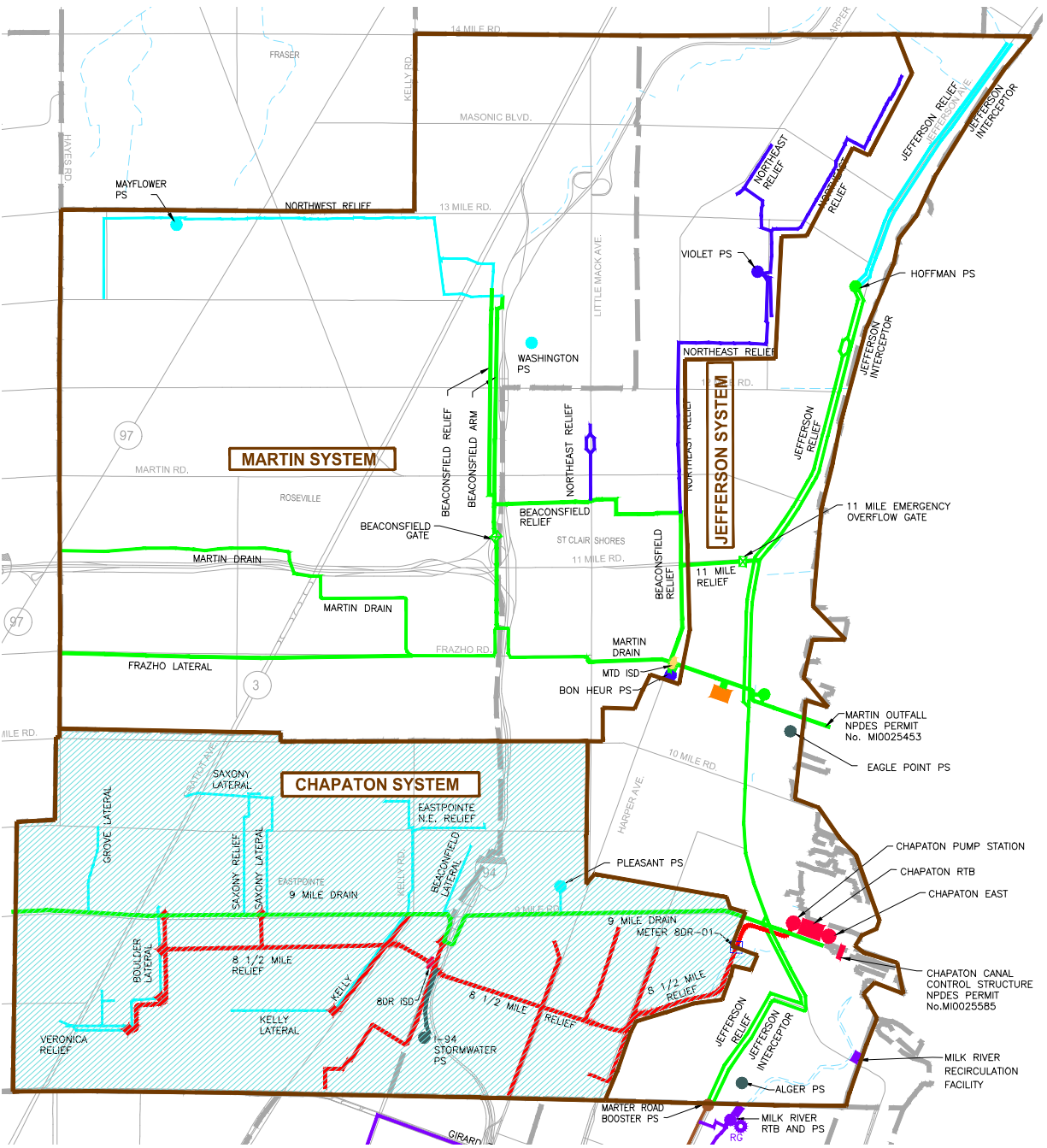
	Page
1. Call of meeting to order and roll call	
2. Approval of Agenda for January 9, 2023	
3. Approval of Minutes for December 12, 2022	3
4. Public Participation	
5. Project & Operational Updates – Vince Astorino	5
6. 9 Mile Emergency Bypass Rehabilitation Project – Engineering Services Recommendation – Vince Astorino	14
Motion: To approve the proposal from NTH Consultants, Ltd. for a not to exceed amount of \$118,578 for inspection, planning, and contract administration services for the 9 Mile Emergency Bypass Rehabilitation project.	
7. Construction Project Safety Manager - Meadowbrook Insurance - Stephen Downing	21
Motion: To approve the proposal from Meadowbrook Insurance for the addition of a temporary Construction Project Safety Manager for a 9-month period with an estimated 8.5 Mile cost of \$34,920	
8. Consideration for approval of invoices (see attached)	29
9. Financial Report – Bruce Manning	30
10. Adjourn	

Hard copy is intended to be 8.5"x11" when plotted. Scale(s) indicated and graphic quality may not be accurate for any other size.

# CHAPATON SYSTEM MAP

Macomb County, MI

## Southeast Macomb Sanitary District Wastewater Master Plan



### SYSTEM LEGEND

(AS OF DATE OF PUBLICATION)

- SYSTEM BOUNDARY

### DISTRICT LEGEND

(AS OF DATE OF PUBLICATION)

- 8 1/2 MILE RELIEF DRAIN DRAINAGE DISTRICT
- SOUTHEAST MACOMB COUNTY WASTEWATER DISPOSAL SYSTEM
- MARTIN SANITARY DIVERSION DISTRICT
- SOUTHEAST MACOMB SANITARY DISTRICT
- NORTHEAST SEWAGE DISPOSAL SYSTEM
- MILK RIVER INTERCOUNTY DRAIN DRAINAGE DISTRICT
- LOCAL MUNICIPALITY
- OTHER

### ASSET LEGEND

- PUMP STATION
- ⊠ FLOW CONTROL STRUCTURE
- RTB
- ▬ GRAVITY INTERCEPTOR
- IN-SYSTEM STORAGE DEVICE
- ◆ OVERFLOW POINT
- ⊕ LEVEL SENSOR
- ⊙ RAIN GAUGE
- Ⓜ FLOW METER

PROJECT NO.

181053

# 3.6

An adjourned meeting of the Intra-County Drainage Board for the **EIGHT AND ONE-HALF MILE RELIEF DRAIN** was held in the Office of the Macomb County Public Works Commissioner, 21777 Dunham Clinton Township, Michigan on December 12, 2022, at 10:05 A.M.

PRESENT: Candice S. Miller, Chair  
Bryan Santo, Member  
Veronica Klinefelt, Member

ALSO PRESENT: Vince Astorino, Operations & Flow Manager; Brian Baker, Chief Deputy; Stephen Downing, Construction and Maintenance Manager; Norb Franz, Communications Manager; Pam Sonnenberg, Administrative Assistant; Tom Stockel, Construction Supervisor; Harold Haugh Macomb County Board of Commissioners; Don VanSyckel, Macomb County Board of Commissioners

PRESENT VIA TELECONFERENCE: Sarah Lucido, Newly elected Board of Commissioner

The meeting was called to order by the Chair, Candice S. Miller. A motion was made by Ms. Klinefelt, supported by Mr. Santo to approve the agenda as presented.

Adopted: YEAS: 3  
NAYS: 0

Minutes of the meeting of November 14, 2022 were presented. A motion was made by Mr. Santo, supported by Ms. Klinefelt to approve the minutes as presented.

Adopted: YEAS: 3  
NAYS: 0

The meeting was opened to public participation, then closed, there being no comments from the public.

Mr. Astorino presented that there were no wet weather events this month. Chapaton In-System Storage project is progressing well. He then presented some photos of the work being performed there. Ms. Miller mentioned how fantastic the 6 homeowners have been while this work is being performed. Mr. Astorino said that we are still looking at mid-winter to start the mass concrete pours, providing we will be able to get cement because of the current shortage.

A motion was made by Ms. Klinefelt supported by Mr. Santo to receive and file project updates.

Adopted: YEAS: 3  
NAYS: 0

Mr. Astorino presented on As-Needed Engineering Services contracts with firms. Applied Science, Inc., Anderson, Eckstein, & Westrick, Fishbeck, FK Engineering, Hubbell, Roth & Clark, METCO Services, NTH Consultants, Ltd., OHM Advisors, Testing Engineers and Consultants, Tetra Tech, and Wade Trim Associates. The only one that we are not recommending is Testing Engineers and Consultants because they do a lot of testing type work, which we can get covered through a couple of the other firms if we really need it. OHM is the only new one and we've worked with the rest of the proposers before.

A motion was made by Mr. Santo, supported by Ms. Klinefelt to authorize the Board Chair to execute As- Needed Engineering Services contracts with the noted 10 firms and engage the firms as needed and within budgeted amounts, subject to obtaining prior board approval for tasks exceeding \$35,000.

Adopted: YEAS: 3  
NAYS: 0

The Chair presented the invoices totaling \$1,290,904.04 to the board for review and approval.

A motion was made by Ms. Klinefelt, supported by Mr. Santo to approve the invoices as presented.

Adopted: YEAS: 3  
NAYS: 0

A motion to receive and file the financial report given by Mr. Baker was made by Mr. Santo and supported by Ms. Klinefelt.

Adopted: YEAS: 3  
NAYS: 0

Ms. Miller took a moment to thank Ms. Klinefelt for her work and contribution as a member of the Drain Board, and congratulate her on her new position. She also said that she is looking forward to working with Sara Lucido, the newly elected Commissioner.

There being no further business, it was moved by Ms. Klinefelt, supported by Mr. Santo, that the meeting of the Eight and One-Half Mile Relief Drain Board be adjourned.

Adopted: YEAS: 3  
NAYS: 0

The meeting was adjourned at 10:25 A.M.

  
\_\_\_\_\_  
Candice S. Miller, Chair  
Macomb County Public Works Commissioner

STATE OF MICHIGAN  
COUNTY OF MACOMB

I certify that the foregoing is a true and correct copy of proceedings taken by the Intra-County Drainage Board for the Drainage District shown on the attached set of minutes, on December 12, 2022 the original of which is on file in the Public Works Commissioner's Office. Public notice of the meeting was given pursuant to Act No. 267, Public Acts of Michigan, 1975, including, in the case of a special or rescheduled meeting or a meeting secured for more than 36 hours, notice by posting at least 18 hours prior to the time set for the meeting.

  
\_\_\_\_\_  
Candice S. Miller, Chair  
Macomb County Public Works Commissioner

DATED: 12/12/22



**Candice S. Miller**

Public Works Commissioner  
Macomb County

To: 8 ½ Mile Relief Drain Drainage District Board Members

CC: File

From: Vincent Astorino, Operations & Flow Manager

Date: January 9, 2022

Subject: Construction Projects Status Updates for the January 2023 Board Meeting

The following provides a status update for construction work completed within the 8 ½ Mile Relief Drain Drainage District (8MRDDD) for the previous month.

### Wet Weather Operations

No wet weather events this past month.

### Chapaton In-System Storage Project

**Contractor:** Weiss Construction

**Engineering Consultant:** Tetra Tech

#### **Project Description:**

The primary focus of the project is the construction of an access shaft and installation of the In-System Storage Device at Beaconsfield and Oak in Eastpointe. This project will achieve an additional 3.5 million gallons of storage within the 8.5 Mile Relief tunnel.

#### **Significant project tasks that have occurred over the past month:**

1. Submittals are being received and processed by the engineering team.
2. Construction activities per Update Period:
  - Continued staging construction materials delivered & stored along Beaconsfield greenbelt.
  - Maintained secured work site with swing gates and privacy fence screening at Beaconsfield construction site.

- Continued Beaconsfield site vibration and sensor monitoring and documentation during pier installation and shaft construction as required.
- Continued excavating interior of shaft approximately **25ft** below grade.
- Exposed topside of 11.5ft tunnel within the excavation shaft at the Beaconsfield site.
- Continued installing timber lagging retaining walls around interior of Beaconsfield shaft as required.
- Finished installing steel shaft bracing for the mid-level tier elevation and began installation of the lower-level tier steel shaft bracing at the Beaconsfield construction site as designed.
- Continued applying grout to fill voids behind timber lagging from over-excavation as required.

3. Construction look ahead:

- Continue deliveries of construction materials along Beaconsfield greenbelt.
- Ongoing excavation surrounding the exposed 11.5ft tunnel at Beaconsfield and remove spoils offsite as planned.
- Continue to install shaft interior timber lagging retaining walls as required.
- Continue lower-level shaft bracing and support installation per plans at the Beaconsfield construction site.
- Install supports and bracing for the exposed 11.5ft tunnel with required material and methods as required.
- Place flow fill grout to fill voids behind shaft lagging and seal timber walls as necessary.
- Continue site vibration monitoring & documentation.
- DTE to provide power for Beaconsfield construction site mid-January.

**Construction Costs:**

	Date (if applicable)	Amount
Original Contract Amount		\$9,673,200.00
Change Order #1	9/15/22	\$269,666.49
Revised Contract Amount		\$9,942,866.49
Total Spent to Date	Pay Apps. #1 - 9	\$3,112,045.69
Remaining Budget		\$6,830,820.80

*Figure 1 – Grouting Voids Behind Timber Retaining Wall*



**OFFICE LOCATION:** 21777 Dunham Road, Clinton Township, Michigan 48036 • Phone: 586-469-5325 • Fax: 586-469-5933  
**ENGINEERING** • Phone: 586-469-5910 • Fax: 586-469-7693 ♦ **SOIL EROSION** • Phone: 586-469-5327 • Fax 586-307-8264

*Figure 2 – Excavating South Side of 11.5FT Tunnel*





*Figure 3 – Exposed Tunnel Excavated to Approx. 25FT*



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*Figure 4 – Welding Lower Level Shaft Support I-Beams*



Figure 7 – Drone Aerial at 100 FT





## Chapaton District Overview

- Located at 23001 9 Mile Road at Jefferson, St. Clair Shores, MI 48080
- Constructed in 1964 as a 28 Million Gallon Combined Sewer Overflow (CSO) Facility
- 700,000 gallons per minute pumping capacity
- Flushing and Disinfection Systems added in 1978
- Outfall Structure and Aeration added in Early 2000's; expanding storage to 31 MG
- Disinfection System adds Sodium Hypochlorite to Discharged CSO's
- Screened Discharge for Sanitary Trash Removal
- Services Approximately 44,782 Residents in the Following Communities:
  - Eastpointe
  - St. Clair Shores
- Annual Operation & Maintenance Budget of \$5,390,400



## 2022 LOOK BACK

During the 2022 calendar year, Chapaton Retention Treatment Basin (RTB) had one (1) Combined Sewer Overflow (CSO) event which was the lowest number of treated events in more than 20 years. This event was in compliance with the existing EGLE permits and all sampling for e-coli, total suspended solids (TSS), Carbonaceous Biochemical Oxygen Demand (CBOD), ammonia, nitrogen, phosphorous, pH, dissolved oxygen (DO), and total residual chlorine (TRC) met or exceeded the EGLE standards.

The Chapaton District recently completed an updated wastewater master plan (WWMP). This WWMP has established a path forward for prioritizing asset replacements along with new projects to focus on reducing CSO's.

The Chapaton In-System Storage project has begun construction and will reduce CSO's within the district. This project consists of installing an inflatable bladder within the 11.5-foot tunnel to assist with capturing 3.5 million gallons (MG) per event representing an 11% reduction in annual overflow volumes. The total project cost is \$10 million and is being covered by ARPA funds received by MCPWO.

Operational changes have been implemented at the Chapaton Pump Station which have yielded 8.59 MG in additional storage. This also equates to a 26% average annual volume reduction. This storage has been in use since 2021 and has now prevented five (5) events which, in the past, would have resulted in a CSO.

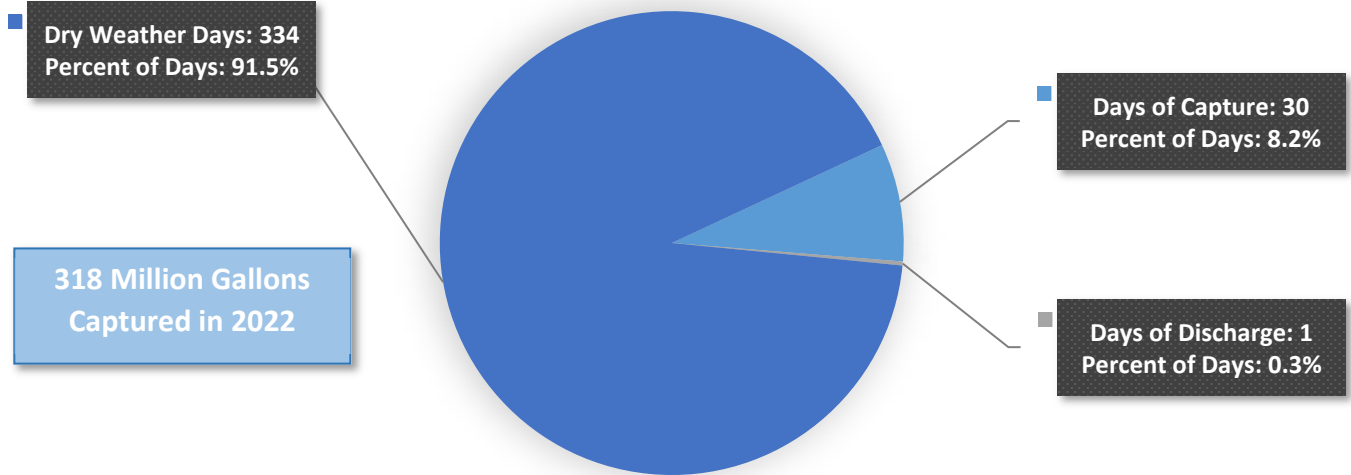
## MOVING FORWARD

The Chapaton district is scheduled to have several improvement studies and projects during 2023. The following projects are intended to increase the level of service at the RTB and to improve upon the existing operations and maintenance efforts.

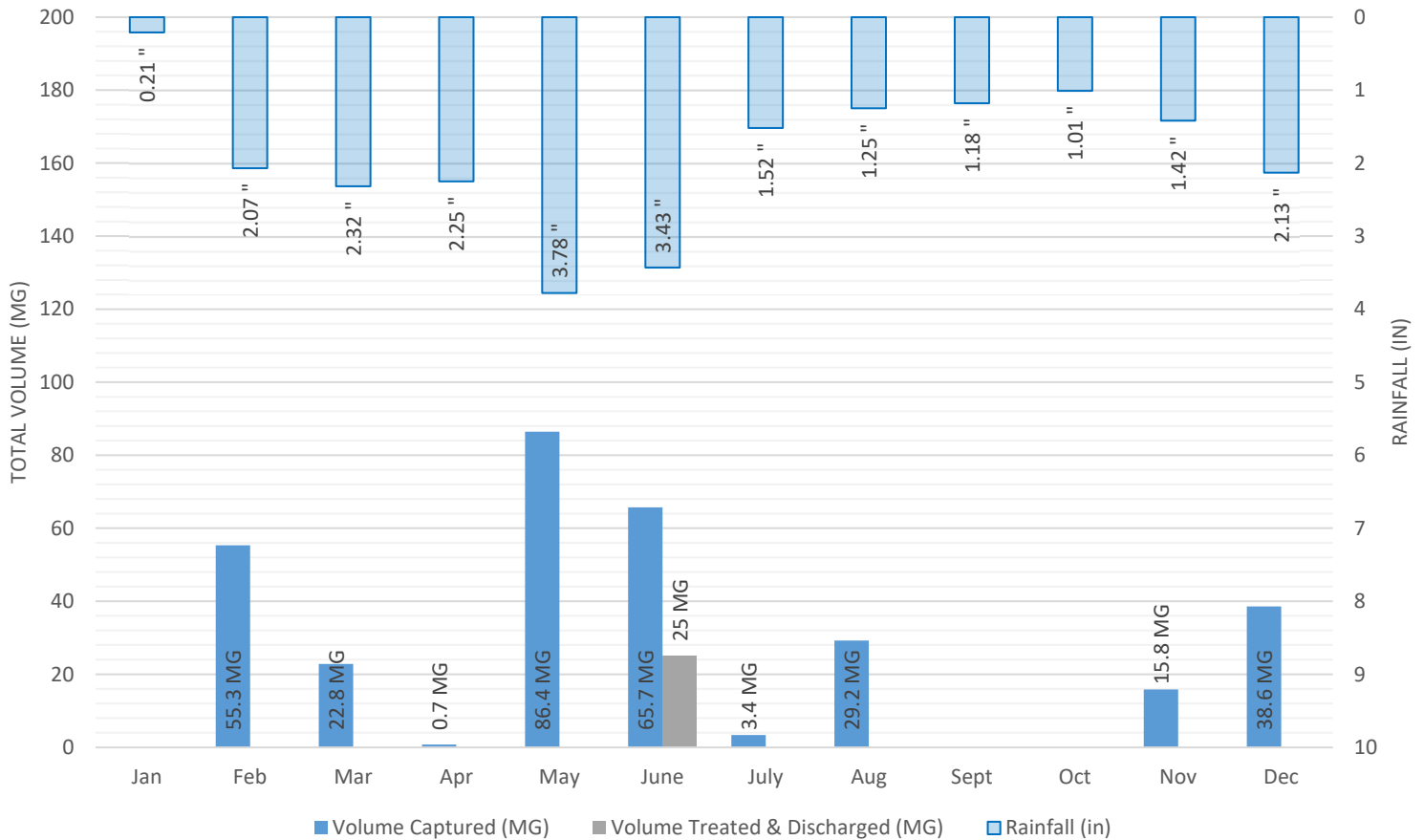
- **Canal Rehabilitation Project:** Expand the existing capacity of the canal to minimize CSO's as well as stabilize canal banks and seawall to protect against higher lake levels. This project will reduce CSO's by 40% by adding 13 MG of storage.
- **Electrical System Replacement:** The existing 4800 volt electrical system is being replaced due to being at the end of its useful life. Backup generators are also being added to the facility to provide additional power redundancy.
- **Sluice Gate Replacements:** The existing gates within Chapaton facility have reached the end of their useful life and are in need of rehab/replacement.
- **Flushing System Replacement:** Replacement of the existing flushing system which has reached the end of its useful life. This system is used after every wet weather storage event and is used to clear solids that have settled within the Chapaton RTB.



**CHAPATON RTB 2022 DAILY STATISTICS**



**CHAPATON RTB 2022 VOLUME STATISTICS**





**Candice S. Miller**

Public Works Commissioner  
Macomb County

To: Eight and One-Half Mile Relief Drain Drainage District Board Members

From: Vincent Astorino, Operations & Flow Manager

Date: January 9, 2023

Subject: 9-Mile Emergency Bypass Rehabilitation Project – Consultant Recommendation

Macomb County Public Works Office (MCPWO), on behalf of the Eight and One-Half Mile Relief Drain Drainage District, has requested consultant proposals to administer the 9-Mile Emergency Bypass (9EB) Rehabilitation Project. The 9EB is generally described as a 7'-2" x 8'-6" concrete double-box culvert adjacent to the Chapaton Retention Treatment Basin and between the 9EB Influent Gates and the Chapaton Treatment Canal. The original construction of this box culvert dates back to the 1920's. Various improvements throughout the years have occurred adjacent to or within this pipe including the construction of the Chapaton RTB (1960's), Chapaton Treatment Canal (1970's), and the Bypass Screening Chamber (2000's).

This asset was most recently inspected in 2016 but, given the uncertainty of whether this reach of pipe would remain, repairs were not immediately made as it was thought to be incorporated into other upcoming projects. Below are a couple of images showing some of the defects within those box culverts.



MCPWO staff identified two firms, FK Engineering and NTH Consultants, which both have intimate knowledge of the Chapaton facility and are well-suited to provide the professional services needed for this project. Formal technical proposals were not requested since a) the credentials of the firms were already known and b) there was little opportunity for creative design ideas to be presented. The general scope of work requested of the proposers was to perform an in-pipe inspection and prepare a recommendation memorandum, prepare bidding documents, and provide construction contract administration through completion of the project.

On December 29, 2022, MCPWO received proposals from both firms with the cost proposals summarized as follows:

Firm	Task 1 - Inspection	Task 2 - Design	Task 3 - CCA	Total
FKE	\$33,323	\$75,601	\$138,573	\$247,497
NTH	\$10,648	\$21,014	\$86,916	\$118,578
<b>Budgeted (Design &amp; Const)</b>				\$3,000,000

While the proposed fees varied considerably, MCPWO staff believes both proposers understood the objectives of the project. Only a short 1-2 page cover letter was requested of the proposers and nothing contained within those letters were deemed significant enough to justify proceeding with the higher cost firm. The evaluation of the cover letters was done merely as a cursory review of the firm credentials and no formal scoring matrix was prepared. The recommendation presented below is purely cost-based.

**MCPWO staff is recommending the following action:**

**That the 8MRDDD Board award the contract to NTH Consultants, Ltd. in the total not-to-exceed amount of \$118,578 to inspect, prepare plans, bid, and administer the 9-Mile Emergency Bypass Rehabilitation Project.**

Attachments: NTH Consultants, Ltd. Proposal Letter Dated 12-29-22

Mr. Steve Wagner  
Engineer II  
Macomb County Public Works Office  
21777 Dunham Road  
Clinton Township, Michigan 48036

December 29, 2022  
NTH Proposal No. OP22000718

**RE: 8-1/2 Mile Relief Drain Drainage District  
9-Mile Emergency Bypass Sewer Rehabilitation Project  
MCPWO Project Number WWS-2022-014  
Macomb County, Michigan**

Dear Mr. Wagner:

At your request, NTH Consultants, Ltd. (NTH) has prepared this proposal to provide professional engineering services for the 8-1/2 Mile Relief Drain Drainage District 9-Mile Emergency Bypass Sewer (9EB Sewer) Rehabilitation Project. The services will include inspection, design, plan preparation, bidding assistance, and construction contract administration services as outlined in the Request for Proposal dated November 28, 2022, and Addendum Number 1, dated December 9, 2022.

The following sections present our proposed scope of services, assumptions and limitations associated with our proposed scope of services, and the estimated professional fees.

## **SCOPE OF SERVICES**

NTH will provide field and office support for the requested services for the sewer section from the 9 Mile Bypass Influent Gates to the discharge into the Chapaton Treatment Canal. This will involve inspection of the double-box culvert to confirm the defects, development of plans and specifications, bidding assistance and construction contract administration. Our personnel will coordinate with the staff from the Macomb County Public Works Office (MCPWO) and act as their representatives in the field.

More specifically, we will perform the following tasks:

### **1) Inspection and Document Review**

- We will review the historical information and perform an in-pipe sewer inspection using a PACP certified inspector and a 360-degree Rhino sewer camera.
- We will compare the current inspection to past inspections and prepare a post-inspection memorandum with repair recommendations.



## **2) Contract Documents and Bidding**

- We will prepare a complete Bid Package including drawings and specifications. The specifications will incorporate the MCPWO Division 00 specs including the Agreement and General Conditions.
- The documents will be submitted at 60%, 90% and 100% (issued for bid) for MCPWO review and comment. The 100% IFB documents will incorporate all comments from MCPWO.
- We will assist MCPWO in preparing the necessary permit applications, conduct a pre-bid meeting, answer bidder questions, review bids, interview bidders, verify references, and provide bid award recommendations.

## **3) Construction Contract Administration**

- We will facilitate a pre-construction conference, including preparation of a meeting agenda and meeting minutes.
- We will review the contractor's submittals for conformance with the contract documents, and review and respond to the contractor's Request for Information (RFI) requests.
- We will provide field observation to review and document the contractor's repair operations including documenting proper surface preparation, repair dimensions, locations, materials, and quantities of unit price items. NTH field observations will be recorded on Daily Field Reports to be transmitted to MCPWO for record.
- We will review and provide comments on the contractor's monthly applications for payment. Field observations made during the repairs will be reviewed to confirm the payment amounts.
- We will conduct and provide meeting minutes for monthly construction progress meetings. Two meetings per month (one virtual, one in person) will be conducted.
- We will prepare record drawings of the repairs performed during the construction phase.
- We will assist with the contract close out including development of punch lists and documentation of final completion activities.

## **ASSUMPTIONS AND LIMITATIONS**

The estimated professional fees described below are based on the following assumptions and limitations:

- The inspection will be limited to the 9-Mile Emergency Bypass between the influent gates and the discharge.
- Support for the inspection operation, consisting of Lock-Out/Tag-Out and access will be provided by Macomb County. The MCPWO emergency rescue personnel will be available during the inspection such that an outside firm will not be required.
- We have included up to 10 contractor submittals in the estimated professional fee described below.
- We have included up to 5 contractor RFIs in the estimated professional fee described below.
- We have included 10 one-hour monthly construction meetings in the estimated professional fee described below, including the preconstruction and progress meetings.
- We have based our estimated professional fees on construction observation for 8 hours per day (including travel to and from the site) for a total of 60 days, over a 4-month duration.
- Field observation services will be performed under the Contractor's confined space entry permit and utilizing the contractor's entry equipment. We will provide our own personal protection equipment.
- We have included 2 one-half day visits by a project engineer to resolve unforeseen field issues.
- The estimated professional fee described below does not include investigation of contractor claims, differing conditions, or negotiation of resulting change orders.
- Fees for post-construction warranty inspection is not included in our estimated professional fees. If needed, we can prepare a proposal to perform or observe a warranty inspection at a later date.

John Kosnak, P.E. will be the NTH Project Manager, assisted by Joel Schanne, P.E. Field personnel will consist of PACP certified and experienced staff. NTH will coordinate our activities with MCPWO staff as necessary. We will utilize the same procedures for communication and documentation as those used during our recent successful completion of the repairs to the Chapaton Basin and the 9EB Sewer from Jefferson Avenue to the Influent Gates. Project documents will be uploaded to the MCPWO Drop Box site.

## **PROFESSIONAL FEES**

We propose to perform the scope of services presented above for an estimated total professional fee of **\$118,578**. The fees for each task are estimated as follows:


1) Inspection and Document Review	\$10,648.00
2) Contract Documents and Bidding	\$21,014.00
3) Construction Contract Administration	<u>\$86,916.00</u>
<b>Total Estimated Fees</b>	<b>\$118,578.00</b>

Refer to the attached matrix for our estimated hours and rates for each of the tasks. Our services will be performed in accordance with the terms and conditions listed in the Sample Contract referenced in the Request for Proposal.

Thank you for the opportunity to continue to assist you with this project. Please contact us if you have any questions or require additional information.

Sincerely,


NTH Consultants, Ltd.

DocuSigned by:  
  
08D80029F4504E2...

John R. Kosnak, P. E.  
Principal Engineer

JRK/CJR/mlk  
by e-mail

Attachment

DocuSigned by:  
  
1B505E3681BF483...

Charles J. Roarty, Jr., P.E.  
Senior Vice President

**NTH Consultants, Ltd.**

Proj. No.: PROP OP22000718 Proj. Name: MCO 9-Mile Emergency Bypass Rehabilitation Project Prep. By: John Kosnak		Work Package #: _____ Work Package Name: _____ Date: 12/29/2022							Labor Discount Markup: 5% Project Duration (weeks): _____		
Task	Detailed List of Steps or Tasks Required To Complete The Scope of Services	Initials of Team Members, Classifications, and Fee Schedule Rates							Labor Cost	Cost Estimate	
		NTH Expenses	Sr. Pr	JRK PM	JS SR. PE	PP	SSP/AP	SB CADD			WP
			\$ 220.00	\$ 192.00	\$ 170.00	\$ 154.00	\$ 137.00	\$ 93.00			\$ 65.00
<b>1</b>	<b>Subtask 1 Inspection, Historical Doc Review and Recommendation Memo</b>								\$ -	\$ -	
1.1	Project Management			4.0				1.0	\$ 833.00	\$ 833.00	
1.2	field inspection - assume 1 day at 10 hours per day (CSE Trailer and Rhino Camera)	\$800				10.0	20.0		\$ 4,280.00	\$ 5,080.00	
1.3	Historical Document review					8.0			\$ 1,232.00	\$ 1,232.00	
1.4	Post-Inspection Memo		1.0	2.0	4.0	4.0		2.0	\$ 2,030.00	\$ 2,030.00	
1.5	Meetings (assume 2 at 2 hours each)	\$25		4.0	4.0				\$ 1,448.00	\$ 1,473.00	
1.6									\$ -	\$ -	
1.7									\$ -	\$ -	
1.8									\$ -	\$ -	
	<b>Subtotal</b>	\$825	1.0	10.0	8.0	22.0	20.0	3.0	\$ 9,823.00	\$ 10,648.00	
<b>2</b>	<b>Subtask 2 - Contract Documents and Bidding</b>								\$ -	\$ -	
2.1	Project Management			4.0					\$ 768.00	\$ 768.00	
2.2	Project Drawings			2.0			8.0	32.0	\$ 4,456.00	\$ 4,456.00	
2.3	Project Specifications			4.0	4.0		16.0	2.0	\$ 3,770.00	\$ 3,770.00	
2.4	submittals (60%, 90% and IFB (100%))			8.0	8.0		8.0	4.0	\$ 4,996.00	\$ 4,996.00	
2.5	Prepare Permit Applications				2.0		8.0		\$ 1,436.00	\$ 1,436.00	
2.6	Pre-Bid Meeting	\$50		4.0	4.0			1.0	\$ 1,513.00	\$ 1,563.00	
2.7	Review Bids, verify references, conduct interviews, recommend award			4.0	6.0			1.0	\$ 1,853.00	\$ 1,853.00	
2.8	review meetings (assume 3 at 2-hours each)			6.0	6.0				\$ 2,172.00	\$ 2,172.00	
2.9									\$ -	\$ -	
2.10									\$ -	\$ -	
	<b>Subtotal</b>	\$50		32.0	30.0		40.0	40.0	\$ 20,964.00	\$ 21,014.00	
<b>3</b>	<b>Subtask 3 - Construction Contract Administration</b>								\$ -	\$ -	
3.1	Project Management			10.0					\$ 1,920.00	\$ 1,920.00	
3.2	Meetings - Kick off and monthly Progress (assume 3 hours / Month /4 months plus kick off)	\$200		15.0	3.0		12.0		\$ 5,034.00	\$ 5,234.00	
3.3	Review Submittals / RFIs			6.0		20.0			\$ 4,232.00	\$ 4,232.00	
3.4	Review Contractor Pay Apps			2.0			4.0		\$ 932.00	\$ 932.00	
3.5	Construction Observation - 60 days at 8 hours per day	\$1,600		15.0	8.0		480.0	4.0	\$ 70,260.00	\$ 71,860.00	
3.6	As-Built Drawings / Project Closeout			4.0			8.0	2.0	\$ 2,738.00	\$ 2,738.00	
3.7									\$ -	\$ -	
3.8									\$ -	\$ -	
3.9									\$ -	\$ -	
3.10									\$ -	\$ -	
	<b>Subtotal</b>	\$1,800		52.0	11.0	20.0	504.0	8.0	\$ 85,116.00	\$ 86,916.00	
	<b>Subtotals:</b>	\$2,675	1.0	94.0	49.0	42.0	564.0	48.0	\$ 115,903.00	\$ 118,578.00	
	<i>CADD supplies Surcharge</i>										
	<i>Project Manager Oversight</i>										
	<i>QA Reviewer Time</i>										
	<b>Totals:</b>	\$2,963	1.0	94.0	49.0	42.0	564.0	48.0	\$115,903	\$118,578	



**Candice S. Miller**

Public Works Commissioner  
Macomb County

**To: Eight & One-Half Mile Relief & Macomb Interceptor Drain Drainage District Board Members**

**From: Stephen Downing, Construction & Maintenance Manager**

**Date: January 9, 2023**

**Subject: Meadowbrook Insurance Agency Contract Amendment – Safety Manager**

The Macomb County Public Works Office (MCPWO) is currently overseeing several significant infrastructure projects. These projects are complex in nature, each presenting their own set of unique circumstances in terms of scope, location, etc. I recently conducted a safety review of our active construction projects and our upcoming projects that will start this year. Additionally, I have had discussions with other MCPWO personnel regarding job-site safety. I have concluded that during this very active time our office would benefit from the addition of a Safety Manager that is specifically dedicated to the overall safety of our job sites. This is something that was considered prior to the start of these projects and at the time was determined to not be necessary but we would re-evaluate the need on a regular basis.

Below is a Table that summarizes the current and upcoming projects that would directly benefit from the addition of a temporary Safety Manager.

Project Name	Project Owner	Project Status
Segment 5 Rehab	MIDDD	Active - Expected Completion September 2023
Segment 6 Rehab	MIDDD	Active - Expected Completion June 2023
Odor & Corrosion Control Facilities	MIDDD	Active - Expected Completion June 2024
In-System Storage	8 ½ Mile Relief	Active - Expected Completion February 2024
Chapaton Canal Upgrades	8 ½ Mile Relief	Expected Start Late 2023
Chapaton Electrical Upgrades	8 ½ Mile Relief	Expected Start Late 2023
Chapaton Sluice Gate Rehab	8 ½ Mile Relief	Expected Start Late 2023
9 Mile Emergency By-pass Rehab	8 ½ Mile Relief	Expected Start Late 2023

This is a temporary measure that will provided an added layer of job-site safety oversight on many of our active projects. The team at Meadowbrook Insurance Agency (MIA) has identified an extremely suitable candidate to fill this temporary position. This Safety Manager will be a 40-hour a week position billed at an hourly rate of \$97.00 per hour in accordance with the terms outlined in the MIA Contract Amendment No.2.

It is recommended that this temporary position be retained for a minimum of 9-months. The MCPWO will assess the need to maintain this position on a regular basis. Based on the current active project schedule the cost allocation for the 9 month period will be 75% MID and 25% 8 ½ Mile Relief. This correlates to an estimated MID cost of \$104,760 and 8 ½ Mile Relief cost of \$34,920 for the initial 9 month period.

**OFFICE LOCATION:** 21777 Dunham Road, Clinton Township, Michigan 48036 • Phone: 586-469-5325 • Fax: 586-469-5933

**MAILING ADDRESS:** P. O. Box 806, Mt. Clemens, Michigan 48046-0806

**ENGINEERING** • Phone: 586-469-5910 • Fax: 586-469-7693 ♦ **SOIL EROSION** • Phone: 586-469-5327 • Fax 586-307-8264

The action is that the Macomb Interceptor Drain Drainage District Board authorize the Board Chair to execute the contract amendment with Meadowbrook Insurance Agency for the addition of a temporary Safety Manager.

Attachments: Meadowbrook Insurance Agency Contract Amendment No. 2

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**Contract for Insurance Consultant and Agency Services Macomb County  
Wastewater Capital Improvement Program OCIP  
Amendment 2**

Amendment 2 is effective December \_\_, 2022 and is attached to and made part of the Contract for Insurance Consultant and Agency Services Macomb County Wastewater Capital Improvement Program OCIP ("Agreement") effective February 10th, 2020 by and between Meadowbrook, Inc. ("MIA") and Macomb Interceptor Drain Drainage District and Eight and One-Half Mile Drainage District ("OWNER"). This Amendment may refer to MIA and Owner individually as Party and collectively as Parties.

In consideration of the mutual covenants in this Amendment, the Parties agree the following paragraphs of the Agreement are amended as follows:

1. The following definitions are added to the Agreement:

12. **Construction Safety Consultant ("CSC").** The authorized Full-time representative of MIA assigned to coordinate and promote construction safety and health at the Project Sites during construction. The CSC will be MIA's agent or employee and under MIA's supervision. As used herein, the term CSC includes any assistants of CSC agreed to by OWNER. The duties and responsibilities of the CSC are set forth in Exhibit A hereto.

13. **Safety Plan.** General Contractor's safety plan for this project.

2. Section A -Consultant and Agency Services:

Section A is modified by adding the following language to the bottom of subsection "Item No. 1 Services Provided:"

1.8 Furnish a full time Construction Safety Consultant to assist MIA in providing loss control presence on the OCIP Project Site. The CSC will be in charge of all phases of the Project as it relates to safety and available at all times the project is in progress. The CSC shall be a competent person and must be approved by the Owner. The duties and responsibilities of the CSC are fully described in Exhibit A. While the CSC shall be responsible for coordination among all employers at the project sites to provide a safe and healthful worksite, it is the responsibility of the Contractors to take all necessary and prudent measures and precautions and institute all programs necessary to ensure the safety of the public and of Contractor's workers performing the Work on the Project, and to prevent accidents or injury to any persons on, about or adjacent to the Sites.

3. Section C – Compensation for Consulting Services and Term of Projects

Section C is modified by adding the following language to the bottom of subsection “1. Compensation”:

MIA shall be compensated for the Construction Safety Consultant services contemplated in Exhibit 1 – Duties, Responsibilities, and Limitations of Construction Safety Consultant, on a time and material basis. MIA shall be paid by Owner each quarter in advance for providing the Services. Owner shall pay MIA for a guaranteed minimum of 40 hours of work each week at a standard rate of \$97 per hour for the Services. On each bill for the Services, MIA shall bill Owner for the expenses incurred in the previous three (3) months in addition to the advanced payment for the next three (3) months of Services. On each bill, MIA shall also bill Owner at the standard rate per hour for any work exceeding the guaranteed minimum of 40 hours a week. Upon execution of this Amendment, Owner shall pay for the initial 3 months of CSC Services.

Thereafter, MIA will bill Owner every three months beginning after the execution of Amendment #2.

The Services are to be provided until Owner provides ninety (90) days advanced written notice or terminates the Agreement. After receipt of this notice, final fees will be pro-rata based on the actual usage period. Every year after the effective date of this Amendment, MIA is entitled to increase the standard rate by an additional 5%.

On-Site services will require the establishment of an office, office equipment, and other necessary appurtenances, all of which shall be provided as follows:

- MIA will provide a computer, printer, other office equipment and office supplies.
- Owner will provide an office, internet connection, office furniture and utilities for the duration of the project.
- Owner also agrees to reimburse MIA for providing telephone (office and cellular), employee parking, mileage as set by the Internal Revenue Service, and other site expenses of MIA including any required safety equipment, supplies and gear appropriate to the site.



**Exhibit "1"**

**Duties, Responsibilities, and Limitations of Authority of Construction Safety Consultant**

MIA shall furnish a Construction Safety Consultant (CSC) to provide a loss control presence on the Project Site. The CSC will be in charge of all phases of the Project as it relates to safety and available at all times the Projects is in progress, **but** not to exceed five days per week, Monday through Friday except holidays and personal time off. The CSC must be approved by the OWNER.

The duties and responsibilities of the CSC are specifically described as follows:

1. General
  - A. CSC, MIA's agent for the Projects, will act as directed by and under the supervision of MIA, and will confer with MIA regarding CSC's actions. CSC's dealings in matters pertaining to the Projects shall in general be with MIA, Engineer(s), Contractor(s) and Subcontractor(s), keeping OWNER advised as necessary. CSC shall generally communicate with OWNER and Engineer(s), with the knowledge of and under the direction of MIA.
2. Duties and Responsibilities of CSC
  - A. Assist the Contractor(s) in developing, maintaining, and coordinating a comprehensive accident prevention program. The safety program shall be specifically designed to control the hazards posed by the Contractor's operations on the Project. It must address methods and procedures to be followed that are specific to the Project. No additional work will start on the Project until the Owner and/or Engineer has approved in writing the Safety Program. A copy of the Safety Program will be maintained by the CSC at the Project Site.
  - B. Monitor the compliance of Engineer(s), Contractor(s), and Subcontractor(s) with the Safety Program
  - C. Assist Contractor in developing, coordinating and conducting weekly safety meetings of not less than ten minutes duration to be attended by all Engineer(s), Contractor(s), and Subcontractor(s), CSC shall keep and circulate the minutes of such meetings that will include the subjects discuss and persons attending.

Safety Meeting topics should include but not be limited to the following:

    - A monthly safety report, including an analysis of accident causes, frequency and severity, with appropriate recommendations relating to the Safety Program effectiveness.
    - All accident investigation reports no more than three working days after occurrence, including a summary of first aid treatment.
    - Weekly safety meeting reports shall be submitted on a monthly basis. Four or five safety meeting reports shall be received at the start of each

- month.
  - A summary of alleged MIOSHA safety violations within four working days of the alleged occurrence.
- D. Perform daily onsite safety inspections.
- E. Advise Owner when work orders should be issued to Contractor(s) and Subcontractor(s) performing work to reduce the likelihood of serious or willful safety violations.
- F. Obtain from Contractor(s) and/or Subcontractor(s) copies of all investigative reports relative to safety and/or health accidents on the Projects. Monitor Contractor's actions to prevent reoccurrence of safety and/or health accidents on Projects.
- G. Discuss problems relating to safety with Engineer(s), Contractor(s), and Subcontractor(s) and issue deficiency notices to same when work performed is not in compliance with the requirements of the Safety Program. Maintain a record of safety deficiency notices on-site and make records available for inspection by Owner's representatives.
- H. Establish an appropriate safety committee if approved by Owner. Attend the safety committee meetings and prepare and circulate copies of minutes thereof.
- I. Provide Owner and Engineer(s) with copies of the insurance company reports that are issued periodically.
- J. Oversee confined space operations and other work activities as needed to ensure conformance with applicable standards.
- K. Identify any safety issues that arise. Work with the Owner, Engineer(s), Contractor(s), and Subcontractor(s) to resolve any safety issues
- L. Review safety documentation to ensure conformance with applicable regulations
- M. Liaison:
- Serve as MIA's liaison with Contractor(s) and Engineer(s), working principally through Contractor's superintendent and/or Engineer's Resident Project Representative and assist in understanding the intent of the Project Safety Program.
  - Assist in obtaining from Owner additional details or information when required for proper execution of work.
- N. Report to MIA when clarifications and interpretations of the Contract Documents as they pertain to safety are needed and transmit to Owner, Engineer(s), and Contractor(s) clarifications and interpretations as issued to MIA.
- O. Prepare a daily report or keep a diary or log-book, recording hours on the job site,

weather conditions, data relative to questions of compliance with life safety and property conservation issues.

- P. Ensure all personnel at the Project Site are properly badged. Issue visitor badges as needed for temporary personnel and keep a record of all visitors to the site. Manage removal of any personnel not properly badged.

4. Limitations of Authority by CSC:

- A. Shall not authorize any deviation from the Contract Documents unless authorized by MIA and approved by Owner.
- B. Shall not exceed limitations of MIA's authority as set forth in the Agreement or the Contract Documents.
- C. Shall not undertake any of the responsibilities of Engineer(s), Contractor(s), Subcontractor(s), Suppliers, or Contractor's superintendent.

5. Authority of CSC:

- A. Coordinate and promote safety precautions and programs in connection with the Work. If CSC observes and recognized a life-threatening situation arising from Work, as MIA's representative, CSC shall have the authority to stop the progress of the Work to protect the safety of any persons, or to protect against property damage. MIA shall not be responsible for any Contractor delay claims as a result of issuing such directive(s), unless such claims arise out of or relate to a grossly negligent act, error, or omission of MIA or its CSC.

SIGNATURE PAGE FOLLOWS

IN WITNESS WHEREOF, the parties hereto have executed this Amendment as of the day and year first referenced in this Amendment.

WITNESSES:

Meadowbrook, Inc.

Macomb County Drain Drainage District

---

By: David Sheeran

---

By: Candice S. Miller

Its: President

Its: Chair

Eight and One-Half Mile Drainage District

---

By: Candice S. Miller

Its: Chair

WITNESSES:

Meadowbrook, inc.

Macomb County Drain Drainage District

---

By: Phillip Anderson

---

By: Emily Engelmann

Its: Account Manager

Its: Administrative Assistant

<u>Funding Source</u>	<u>Apportionment</u>	<u>Manager</u>	<u>Vendor</u>	<u>Amount</u>	<u>Invoice Detail</u>	<u>Project Summary</u>	<u>Project Balance</u>		
<b>8 1/2 Mile Relief</b>	Chapter 20 State of MI – 16.04% County of Macomb – 2.25% Dept. of Roads – 2.25% Eastpointe – 54.33% St. Clair Shores – 25.13%								
		Astorino	Access Interactive LLC	\$ 3,311.25	Invoice #INV000110783 - 11.15.22	SCADA Maintenance			
		Astorino	Consumers Energy	\$ 684.95	Invoice #206613820704 - 12.07.22	Monthly Utilities - 11.05.22 - 12.07.22			
		Astorino	Consumers Energy	\$ 571.75	Invoice #202698520300 - 12.07.22	Monthly Utilities - 11.05.22 - 12.07.22			
		Astorino	De-Cal, Inc.	\$ 556.20	Invoice #WO90022105-4 - 12.23.22	4th Quarter HVAC Preventive Maintenance			
		Astorino	Department of Roads	\$ 581.93	Invoice #302300 - 10.31.22	Fleet Fuel - October 2022			
		Astorino	DTE Energy	\$ 5,996.72	Invoice #22-405 - 11.29.22	Monthly Electric - 10.10.22 - 11.7.22			
		Astorino	DTE Energy	\$ 576.36	Invoice #22-438 - 11.30.22	Monthly Electric - 11.01.22 - 11.30.22			
		Astorino	DTE Energy	\$ 7,175.82	Invoice #22-441 - 12.13.22	Monthly Electric - 11.08.22 - 12.06.22			
		Astorino	Fishbeck	\$ 3,039.20	Invoice #418660 - 12.28.22	Chapaton Basin Joint Repairs	\$ 49,941.01		
		Baker	KHVPPF	\$ 1,125.00	Invoice #48966 - 11.01.22	Weiss Contract			
		Baker	KHVPPF	\$ 4,005.00	Invoice #49019 - 12.01.22	Weiss Contract			
		Downing	Macomb County Treasurer	\$ 942.20	Invoice #22-440 - 08.23.22	Dropbox Licenses			
		Astorino	NTH Consultants, Ltd	\$ 2,817.00	Invoice #631399 - 12.05.22	2023 Interceptor Inspection Program - Design	\$ 62,176.75		
		Astorino	Tetra Tech, Inc.	\$ 19,045.00	Invoice #51992567 - 12.02.22	Chapton Electrical/Generator Design	\$ 197,965.00		
		Astorino	TREMCO/Weatherproofing Tech	\$ 2,317.50	Invoice #96883461 - 11.21.22	Roof Warranty			
		Astorino	Wade Trim	\$ 95,850.01	Invoice #2026147 - 12.22.22	Chapaton RTB Canal Rehab - Design	\$ 145,261.74		
		Astorino	Weiss Construction	\$ 387,616.06	Invoice #WWS-2021-006 #9 - 12.16.22	In-System Storage through 12.16.22	\$ 6,830,820.80		
				<b>Total</b>		\$ 536,211.95			

**Budget to Actual**  
**8.5 Mile Relief**  
**As of December 31, 2022 = 25%**

DESCRIPTION	2023 FINAL BUDGET	ENCUMBERED	ACTUAL	REMAINING BUDGET	PCT UTILIZED
<b>REVENUE ACCOUNTS</b>					
Interest Earned	20,000		13,364	6,636	66.8%
Other Revenue	5,000		301	4,699	6.0%
8.5 O&M/Charge Required Revenue	5,003,220		2,501,610	2,501,610	50.0%
PY Revenue-Fund Balance	4,412,010			4,412,010	0.0%
Use of Reserve from prior contributions	3,738,110			3,738,110	0.0%
Use of Reserve(Flow Meters)	350,000			350,000	0.0%
Use of SCADA Reserve	64,750			64,750	0.0%
Use of Surplus from past collections	1,051,830		-	1,051,830	0.0%
<b>Total Revenue Accounts</b>	<b>14,644,920</b>	<b>-</b>	<b>2,515,275</b>	<b>12,129,645</b>	<b>17.2%</b>
<b>EXPENSE ACCOUNTS</b>					
Application/Permit Fee	6,000		6,000	-	100.0%
Dues, Training, Conf, Subs.	17,010		165	16,845	1.0%
<b>Engineering</b>					
Sluice & Dewatering Gates Rehab/Replacement Project	1,974,340			1,974,340	0.0%
Canal Rehab Design	320,000		91,435	228,565	28.6%
8.5 Mile Inspection Project	500,000		5,385	494,615	1.1%
9 Mile Drain & Dewater Accusonic Flow Meters	350,000			350,000	0.0%
9 Mile Emergency Bypass Structural Rehab	3,000,000			3,000,000	0.0%
Flushing	1,895,660		464	1,895,196	0.0%
Chapaton Electrical Upgrades(ARP Funds)	-		19,045	(19,045)	100.0%
As needed Engineering	39,110		7,190	31,920	18.4%
Sluice and Dewatering Gates Rehab/Replace Project(Was 9 Mile PS)	2,025,660		49,250	1,976,410	2.4%
Cost Share Army Corp Grant-Green Infrastructure Project	162,500			162,500	0.0%
9 Mile Bypass Pipe Structural Repairs-Construction/CA	308,010			308,010	0.0%
Chapaton Improvements-Office Space Downstairs	100,000			100,000	0.0%
In-System Storage-Construction Admin and Construction	1,659,410		855,045	804,365	51.5%
New Equipment	3,000			3,000	0.0%
Office Supplies	500			500	0.0%
Operating Supplies	81,800		2,162	79,638	2.6%
Other Professional Svcs	42,500		16,053	26,447	37.8%
Personnel Services	1,135,790			1,135,790	0.0%
Repair & Maintenance	246,000		12,943	233,057	5.3%
Contribution to Reserve	288,240			288,240	0.0%
Scada System	199,390		14,090	185,300	7.1%
Utilities	290,000		28,767	261,233	9.9%
<b>Total Expense Accounts</b>	<b>14,644,920</b>	<b>-</b>	<b>1,107,994</b>	<b>13,536,926</b>	<b>7.6%</b>

	O&M Balance 9/30/2022	O&M	Total 12/31/2022
<b>Cash - Operating</b>	9,802,509	1,407,281	11,209,790
<b>Accounts Receivable</b>			0
<b>Assets</b>			0
<b>Liabilities</b>			0
<b>Revenues</b>		2,515,275	2,515,275
<b>Expenditures</b>		1,107,994	1,107,994
			0
<b>Equity*</b>	9,802,509		11,209,790

**Detail of 2022 Equity\***

9 Mile Bypass Struct Rprs-Const/CA	292,264	Capital Reserve	953,047
As-Needed Engineering	48,544	Contribution from Macomb Cty	2,000,000
Chapaton Improvements-Lab/Office Space	173,347	In System Contrib from SEMSD	1,351,239
Chlorine storage tank #3 relining	7,500	LSCWWI 04B Transfer	738,112
Cost Share Army corp Grant-Green Infrastructure Project	162,500	SCADA Reserve	155,140
Fiber Optic Improvements	16,130	SRF Replacement Reserve	2,592,140
Firewall Hardware Design/Config	12,900	Painting	25,000
In-System Storage Design/Const Admin/Const	116,276	SolarWind -Network Mgmt Softwar	9,670
Obsolete Wireless backhaul replacement links	16,120	Storm PLC Replacments	30,000
Sluice & Dewatering Gates Rehab/Replace Proj(Was 9 Mile PS)	1,102,581		