

EIGHT AND ONE-HALF MILE RELIEF DRAIN
INTRA-COUNTY DRAINAGE BOARD
AUGUST 14, 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**

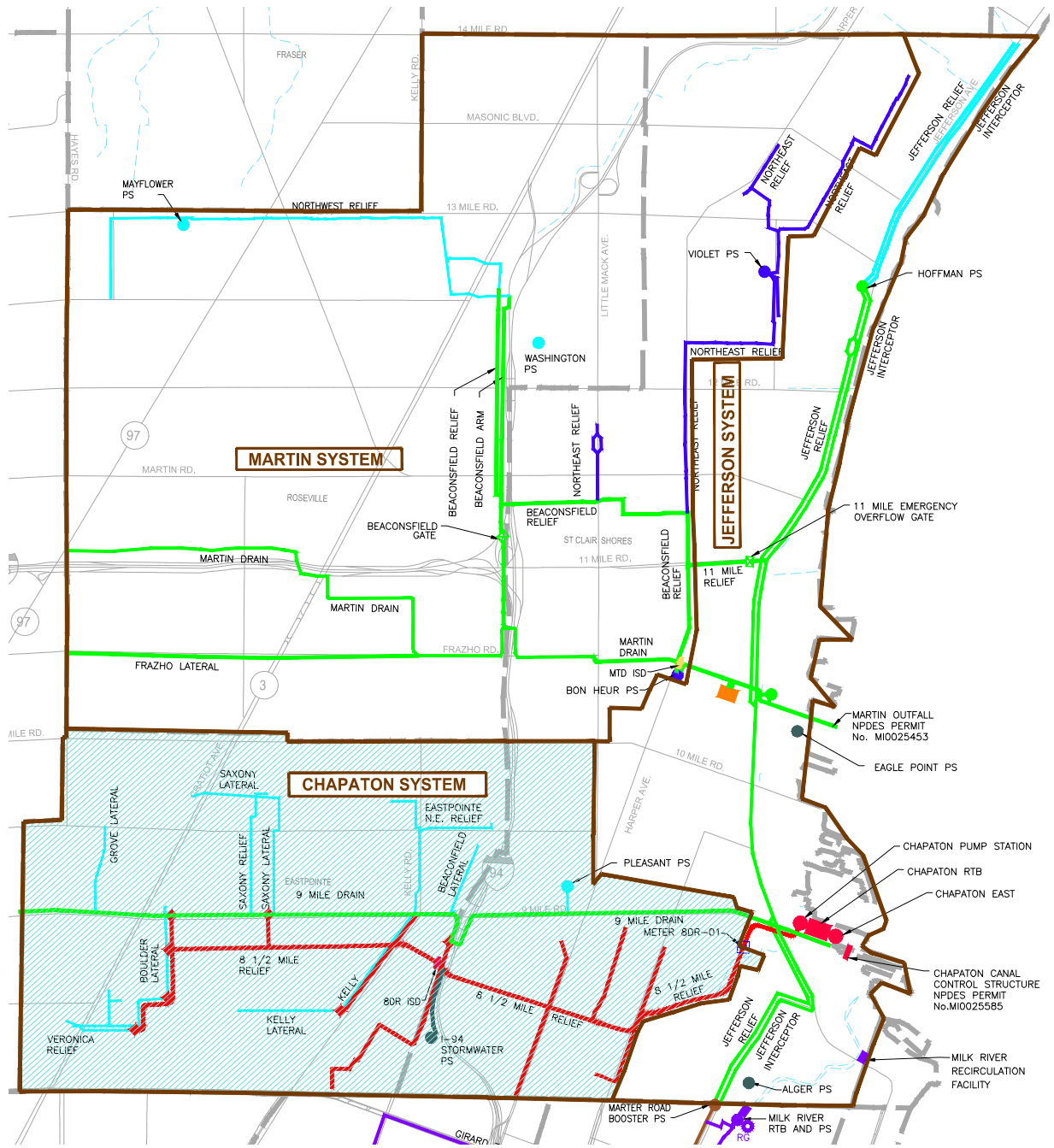
	Page
1. Call of meeting to order and roll call	
2. Approval of Agenda for August 14, 2023	
3. Approval of Minutes for July 10, 2023	3
4. Public Participation	
5. Project & Operational Updates – Vince Astorino	5
6. \$18.3 million County ARPA Subrecipient Agreement – In System Storage and Electrical Upgrade Projects – Brian Baker	30
Motion: To approve and authorize the Drain Board Chair to sign the \$18.3 million County ARPA Subrecipient Agreement.	
7. Eight and One-Half Mile Relief Drain (Chapaton) Proposed 2023/24 Budget – Brian Baker	38
Motion: To approve the 2023/24 Eight and One-Half Mile Relief Drain budget and revenue requirement for the fiscal year beginning October 1, 2023	
8. Consideration for approval of invoices (see attached)	57
9. Financial Report – Bruce Manning	58
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 July 10, 2023, at 10:07 A.M.

PRESENT: Candice S. Miller, Chair
Sarah Lucido, Member
Bryan Santo, Member

ALSO PRESENT: Daniel Acciavatti, Deputy Government Relations; Vince Astorino, Operations & Flow Manager; Brian Baker, Chief Deputy; Stephen Downing, Construction and Maintenance Manager; Norb Franz, Communications Manager; Bruce Manning, Finance Manager; Pam Sonnenberg, Administrative Assistant; Don VanSyckel, Board of Commissioners

PRESENT VIA TELECONFERENCE: Mary Shepherd, Environmental and Safety Services Supervisor City of Sterling Heights

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

Adopted: YEAS: 3
NAYS: 0

Minutes of the meeting of June 12, 2023, were presented. A motion was made by Ms. Lucido, supported by Mr. Santo 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 said there were no wet weather events for the past month. The Chapaton In-System Storage project is progressing. We are working on the venting sites at Kelly and Gaukler. Eastpointe has been out and working on the watermain in conjunction with us. He presented pictures of the Odor Control Vent Pipe excavation. The work is continuing at Beaconsfield. They are nearing completion of the bypass platform floor and then will start to frame the walls.

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

Adopted: YEAS: 3
NAYS: 0

Mr. Astorino presented on the Chapaton Electrical upgrades stating that Tetra Tech, the company that was awarded the design for this project completed the design and was well under budget. Of the \$225,000 in design costs, they will have approximately \$70,000 remaining. The construction contract was awarded to Rotor Electric for \$14,650,000. Instead of bringing the CCA recommendation at that time, MCPWO wanted to meet with Tetra Tech and Rotor Electric to review the contractor's schedule so a more defined CCA proposal could be provided. Tetra Tech has provided a NTE proposal amount of \$714,080 which is approximately 5% of the construction contract. Because the design was under

budget, the estimated \$70,000 will be deducted from the \$714,080, which will bring the proposed Change Order #1 to \$644,080.

A motion was made by Ms. Lucido, supported by Mr. Santo to approve the proposal from Tetra Tech for an amount not to exceed \$714,080 for construction contract administration services for the Canal Electrical upgrades project and approve Change Order #1 for \$644,080.

Adopted: YEAS: 3
NAYS: 0

The Chair presented the invoices totaling \$167,352.04 to the board for review and approval.

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

Adopted: YEAS: 3
NAYS: 0

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

Adopted: YEAS: 3
NAYS: 0

There being no further business, it was moved by Mr. Santo, supported by Ms. Lucido, 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 10:20 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 July 10, 2023, 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: 07/10/23



Candice S. Miller

Public Works Commissioner
Macomb County

To: 8 ½ Mile Relief Drain Drainage District Board Members

CC: File

From: Vincent Astorino, Operations Director

Date: August 14, 2023

Subject: Construction Projects Status Updates for the August 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 for the 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 construction sites.
 - Continued Beaconsfield site vibration and sensor monitoring and documentation during construction as required.
 - Continued dewatering and maintaining adequate working conditions within the interior of the Beaconsfield shaft as necessary.

- Removed temporary support timbers under middle section of 11ft tunnel between east and west footings and placed low strength concrete fill as required.
- Set concrete wall forms in place on west tunnel foundation and installed reinforcing steel, dowels, and water stop as designed to be encased in concrete wall within Beaconsfield shaft.
- Poured in place 4 sides of high strength concrete walls on west foundation of 11ft tunnel at inside the Beaconsfield construction shaft as required.
- Set emergency bypass gate thimbles in place to be encased in concrete at the east side of the 11ft tunnel as designed.
- Layout and set in place concrete base forms and installed reinforcing steel, dowels, and water stop for 11ft tunnel emergency bypass within the Beaconsfield shaft as designed.
- Poured in place high strength concrete emergency bypass base slab adjacent to 11ft tunnel connecting East and West sections of 11ft tunnel within the Beaconsfield construction shaft as required.
- Removed concrete forms from west wall concrete placement as required at the Beaconsfield site.
- Excavated and installed ventilation pipe for Carbon Odor Control Unit at Kelly Rd worksite as required.
- Placed low strength concrete fill between metal shaft and precast access riser as designed at the Kelly and Gaukler Road work sites.
- Began excavation and load out spoils at Gaukler Rd worksite for new access drive as designed.

3. Construction Look Ahead:

- Continue deliveries of construction materials along Beaconsfield greenbelt.
- Continue Beaconsfield site vibration monitoring & documentation.
- Set in place concrete wall forms for 11ft tunnel west walls and bypass walls at Beaconsfield construction shaft.
- Install required reinforcing steel, dowels, and water stop within west and bypass walls at Beaconsfield work site.
- Pour in place high strength concrete bypass and west walls as designed in the Beaconsfield shaft work site.
- Complete installation of required lamp-post vents and necessary components for carbon odor control unit at the Kelly Road worksite.
- Continue to excavate and place access drive subgrade at the Gaukler worksite.
- Finish installing odor pipe fittings, vents at the Gaukler Road work site as designed.
- Install CMU block and brick veneer for the proposed inflatable dam Control Building at Beaconsfield as required.

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 - 16	\$5,325,258.64
Remaining Budget		\$4,887,274.34

Figure 1 – Placing Concrete Fill for Access Riser @ Kelly Rd.



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 – Placing Concrete Fill for Access Riser @ Gaukler St.



Figure 3 – Excavating for New Access Drive @ Gaukler St.



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Figure 4 – Installing Reinforcing Steel @ West Wall of Beaconsfield Shaft



Figure 5 – Installing Reinforcing Steel @ West Wall of Beaconsfield Shaft



Figure 6 – Installed Concrete Wall Forms @ West Wall of Beaconsfield Shaft



Figure 7 – New Concrete Walls @ West Side of Beaconsfield Shaft



Figure 8 – Installed Reinforcing Steel for Bypass Adjacent to Tunnel @ Beaconsfield Shaft



Figure 9 – Placing Concrete Bypass Base Slab via Pump @ Beaconsfield Shaft



Figure 10 – Placing Concrete Around Gate Thimbles via Pump @ East End of Beaconsfield Shaft

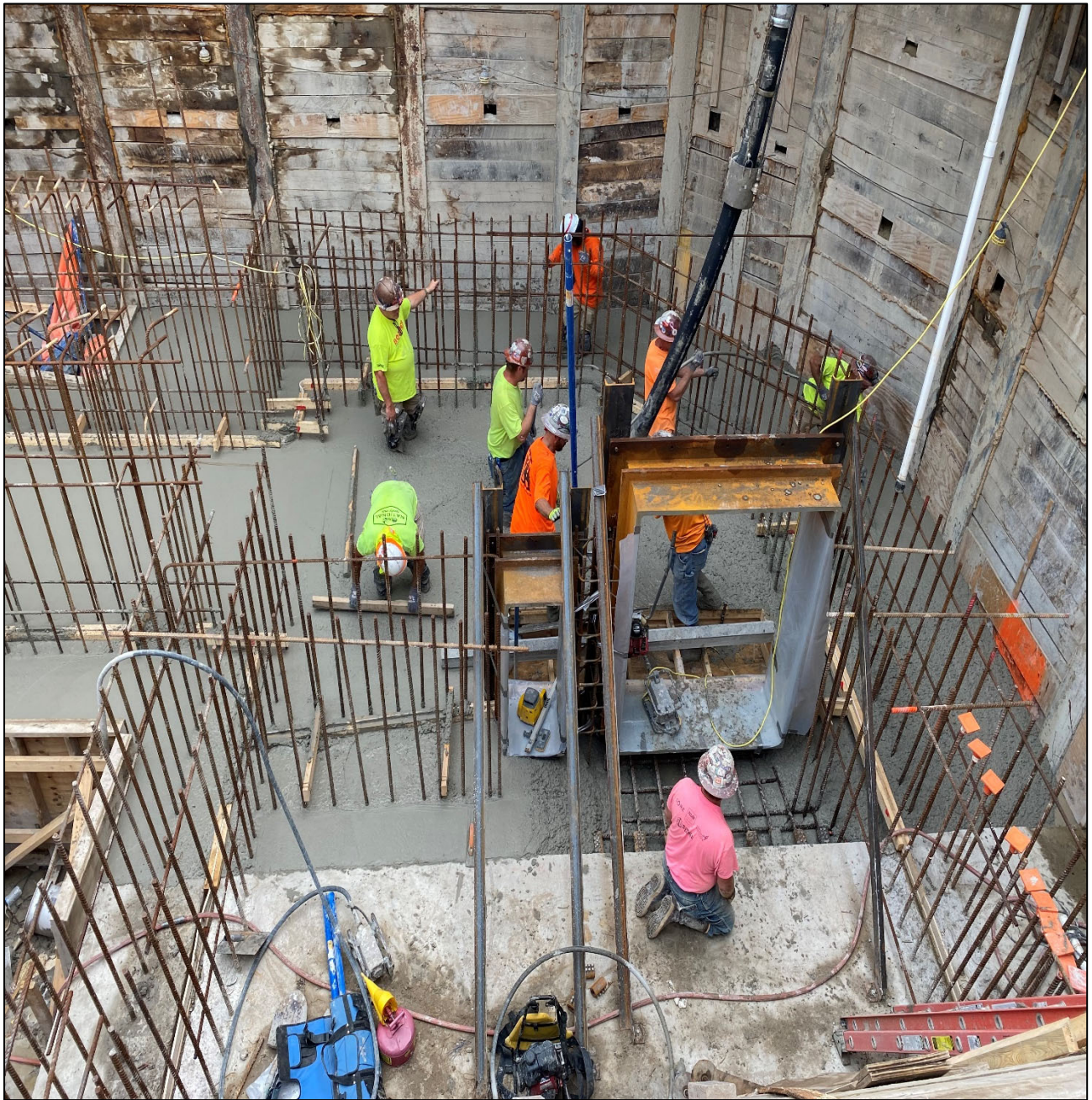


Figure 11 – Drone Aerial at 100 FT



Chapaton RTB Canal Rehabilitation Project

Contractor: Z Contractors

Engineering Consultant: Wade Trim

Project Description:

The primary focus of the project is to rehabilitate the Chapaton Treatment Canal which was last rehabilitated in the early 2000s, replace the Chapaton Canal Control Structure gates and associated building and electrical components, and raise the top of the Chapaton Treatment Canal above the 500-year flood elevation. This will provide flood resiliency for the surrounding area and will improve the water quality of Lake St. Clair by capturing more CSO and discharging fewer times per year. Additional project components include a direct process pipe to the lake to reduce treatment costs by using less water, proper abandonment of a portion of the 100-year-old 9-Mile Drain, and an 11-acre sewer separation along 9-Mile Road.

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:
 - Owen Tree Service removed the trees on the North side berm.
 - The fence North of the canal and South of the existing road has been taken down and poles removed.
 - Crane mats delivered and installed on the RTB which will allow the contractor to safely traverse across the RTB.
 - Soil erosion measures have been installed on the North side of the canal.
 - Excavation has begun on the berm North of the canal.
3. Construction Look Ahead:
 - Job trailers are scheduled to arrive on site the week of August 7th and be powered up.
 - The contractor will be building a road down into the canal from the North side.
 - Owen Tree Service to come back out to the site once the road into the canal is completed to remove the trees on the South side of the canal.
 - Excavation to continue within the north side berm area to be used for construction staging.

Construction Costs:

	Date (if applicable)	Amount
Original Contract Amount		\$27,374,710.00
Total Spent to Date	Pay Apps. #	\$0.00
Remaining Budget		\$27,374,710.00

Figure 12 – Crane Mats Being Installed Across the RTB



Figure 13 – Excavation work starting at the North Berm.



Figure 14 – Interior Fencing Removed



Figure 15 – Drone Aerial at 100 FT Facing East (Baseline)



Figure 16 – Drone Aerial at 100 FT Facing East (8/8/23)



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2023 Interceptor Inspection Program

Contractor: Taplin

Engineering Consultant: NTH

Project Description:

The 2023 sewer inspection program was awarded to Taplin in March 2023. The inspection program includes inspection of approximately 24 miles of sanitary sewer ranging from 2-feet to 12-feet in diameter and 152 manholes across the MIDDD and 8.5 Mile Districts.

The inspection interval for the entire system is based on a 3-year cycle, where non-reinforced concrete pipe is inspected every 3 years and reinforced concrete pipe is inspected every 6 years. The 8.5 Mile, due to being a combined sewer and mostly stormwater, is on a 10-year schedule. This may be adjusted pending the results of the current inspection.

Significant project tasks that have occurred over the past month:

1. Inspection is 95% complete and ahead of schedule. The only remaining segment is from Malvern to the Chapaton Pump Station.
2. Sample videos have been sent to NTH and MCPWO for review. Official inspection data has not been sent yet.

Construction Costs:

	Date (if applicable)	
Original Contract Amount	4/10/23	\$403,919.38
Total Spent to Date		\$0.00
Remaining Budget		\$403,919.38

***This Table reflects the 8.5 Mile costs only.**

Chapaton Electrical Upgrades

Contractor: Rotor Electric

Engineering Consultant: Tetra Tech

Project Description:

The project consists of installing three 2 MW generators and all associated synchronous gear, new motor starters for each of the three stormwater pumps, new 15 kV switchgear, and a complete motor rebuild for storm pump 2. This project will increase the electrical resiliency of the Chapaton Pump Station.

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:
 - No construction activities at this time. On-site work is currently not planned until 2025.

Construction Costs:

	Date (if applicable)	Amount
Original Contract Amount		\$14,650,000.00
Total Spent to Date	Pay Apps. #	\$0.00
Remaining Budget		\$14,650,000.00

LOCAL NEWS

Project expected to reduce sewage overflows into Lake St. Clair and basements

Chapaton Canal rehabilitation, major electrical upgrades underway in St. Clair Shores



Macomb County Public Works Commissioner Candice Miller announces \$43 million in new projects at the Chapaton Pump Station and Retention Treatment Basin to reduce combined sewer overflows and reduce the risk of basement flooding, during a press conference held Wednesday, Aug. 9, 2023. Also speaking to reporters were, from left, state Sen. Kevin Hertel, Macomb County Board of Commissioners Chairman Don Brown and St. Clair Shores Mayor Kip Walby. GINA JOSEPH – THE MACOMB DAILY

By **GINA JOSEPH** | gjoseph@medianewsgroup.com | Macomb Daily
PUBLISHED: August 9, 2023 at 5:41 p.m. | UPDATED: August 9, 2023 at 6:20 p.m.



Fixing decades of Macomb County infrastructure decline is proving to be a daunting task but Wednesday’s announcement of two new major projects to prevent sewage discharges into Lake St. Clair and in the process reduce the risk of basement flooding brings the county one step closer to its ultimate goal: To protect our natural resources and our quality of life.

“We’re doing this one bite at a time,” said Macomb County Public Works Commissioner Candice Miller, during a media event at the Chapaton Pump Station and Retention Basin in St. Clair Shores that was built in 1968.

“This was great back in the day,” she said, adding it no longer serves the needs of the county.

“We are going to be creating additional storage so that after a big rain — and once the water is treated — we’ll be able to store it before sending it to Detroit instead of discharging it into the lake.”

That has happened many times in recent years, most recently on April 29. Miller said doing so is not illegal. In fact, it is permitted in order to keep the water from backing up into basements but that still doesn’t make it right.

One of the two projects in the works is a \$27 million rehabilitation of the canal at the Chapaton Pump Station and Retention Treatment Basin. An engineer’s rendering of the excavation project shows the expansion of the existing canal and the installation of metal sheeting to raise the sides of the basin. Once completed it will be able to hold 13 million gallons of combined stormwater and sanitary flow when needed during large rain events.

“It won’t have any odors and the neighbors in the area understand we need to stop discharging into the lake,” Miller said.

Once complete, the work is expected to reduce combined sewage overflows (CSO) by nearly 40%.

Additional upgrades will also be made to the outdated outfall gates, which will

When there's a heavy downpour of rain, as has been seen in the past few weeks, water from the street along with trash floating in it gets sent down the pipe. Upgrades will include a device that will collect items like plastic water bottles that end up in the lake.

The work on the pump station and basin will be paid using \$25 million in American Rescue Plan Act funds, plus a \$2 million allocation from the state last year.



A photo of the engineer's rendering of the completed rehabilitation of the Chapaton Canal in St. Clair Shores. GINA JOSEPH – THE MACOMB DAILY

Joining Miller for the announcement and applauding the projects in the works were state Sen. Kevin Hertel, Macomb County Board of Commissioners Chairman Don Brown and St. Clair Shores Mayor Kip Walby.

“This is where my family spends a great deal of their time,” said Hertel, while looking out toward Lake St. Clair and noting that besides the enjoyment that it provides to his family and other Michiganders it is a resource that generates \$1.6 billion for the state's economy and a source of drinking water for 4 million people.

“We need to do whatever we can to protect that resource,” he added.

The second project announced Wednesday involves the extensive upgrade of the electrical systems at the pump station. This includes adding three, 2-megawatt generators to provide power redundancy to the giant pumps, and replacement of electrical components that are also more than 50 years old.

“When there’s a big storm the power goes out,” Miller said.

Miller cited the example of the disaster in Detroit a few years ago when the power was knocked out after a major storm and homes in the city and surrounding communities such as Grosse Pointe were all flooded. The backup of water in Wayne County also led to overflows in Macomb County.

“This project is needed to prevent station failure that would result in sewage backing up into basements and neighborhoods,” she said.

The funding for this \$16 million project will be paid using \$9.5 million in American Rescue Plan Act funding allocated by the Macomb County Board of Commissioners, and \$6 million in ARPA funding from the state.

“It’s a great day,” Brown said, noting the projects illustrate the commitment that the Macomb County Board of Commissioners and other county officials have in giving the public works department the right tools to improve water quality for generations to come.

“Macomb County is leading by example once again.”

Mayor Kip Walby concurred.

“St. Clair Shores will always remain synonymous with Lake St. Clair, so reducing combined sewer overflows and improving infrastructure, especially as we all experience large rain events with increasing frequency, is vital for our city to remain a very desirable place to live and play for generations to come.”

“I applaud our county and state officials for having the vision and determination to design, fund and construct projects such as these,” Wahby said.

Both of these projects will not result in an increase to ratepayers.

Tags: [lifestyle](#)



Macomb County Board of Commissioners

RESOLUTION NO. 2023-10443

Adopted: July 20, 2023

A RESOLUTION APPROVING THE CORONAVIRUS STATE AND LOCAL FISCAL RELIEF FUNDS SUBRECIPIENT AGREEMENT

The Macomb County Board of Commissioners offers the following Resolution:

WHEREAS, the County has entered into a Coronavirus State and Local Fiscal Relief Funds (SLFRF) (ALN 21,027) Subrecipient Agreement with the County of Macomb as the Grantee and the "District," known as the Subrecipient a copy of which is attached as Exhibit A; and

WHEREAS, an agreement made with a District through the SLFRF Subrecipient Agreement is to provide funding totaling the following amounts:

8 ½ Mile Relief Drain Drainage District (Chapaton)

Total Proposed ARPA Funding: \$18,300,000

Martin Sanitary Diversion District (Jefferson)

Total Proposed ARPA Funding: \$20,000,000

Southeast Macomb County Wastewater Disposal System (Bon Heur)

Total Proposed ARPA Funding: \$1,700,000

WHEREAS, the Commission wishes to approve the form of the Coronavirus State and Local Fiscal Relief Funds (SLFRF) (ALN 21.027)) Subrecipient Agreement for each of the subrecipients without approving each individual SLFRF Subrecipient Agreement as might otherwise be required by the Macomb County Charter.

THEREFORE BE IT RESOLVED that the form and substance of the SLFRF Subrecipient Agreement as attached as Exhibit A is hereby approved.

BE IT FURTHER RESOLVED that the SLFRF Subrecipient Agreements between Macomb County and each of the subrecipients in the amounts stated above are hereby approved in the form and substance attached as Exhibit A, subject only to such changes as are needed to fill in the blanks applicable to each agreement and with no other changes. If any other changes are made, the particular SLFRF Subrecipient Agreement in which such changes are made shall require Commission approval.

Don Brown

DON BROWN, Board Chair

Anthony G. Forlini

ANTHONY G. FORLINI, Clerk/Register of Deeds

CORONAVIRUS STATE AND LOCAL FISCAL RELIEF FUNDS (SLFRF) (ALN 21.027)
SUBRECIPIENT AGREEMENT

This agreement is entered into by and between the County of Macomb, a Michigan constitutional corporation (herein called the "Grantee") and the 8 ½ Mile Relief Drain Drainage District (the "District"), with offices located at 21177 Dunham Rd, Clinton Twp, MI. 48036 and whose UEI number is ZJDYV9CL9DF4, herein called the "Subrecipient" as defined by 2 CFR 200.330. The Grantee is designated as a Prime Recipient under the Coronavirus State and Local Fiscal Relief Funds (SLFRF, ALN 21.027) program contained within the American Rescue Plan Act of 2021. As a Prime Recipient, the grantee has elected to distribute funds to the District for the purpose of aiding the District in covering costs related to necessary improvements to the wastewater and stormwater infrastructure within the District, primarily for the purpose of reducing combined sewer overflows into Lake St Clair. The following statements and provisions are acknowledged and agreed upon by and between parties.

- 1. Time of Performance** – This agreement between the Grantee and the Subrecipient shall go into effect on the day that SLFRF funds are made available to the Subrecipient for expenditure and will remain in effect until December 31, 2026. Eligible expenditures under the SLFRF program will be reimbursed under the program provided that they were obligated between March 3, 2021 and December 31, 2024 and expended in accordance with generally accepted accounting principles no later than December 31, 2026.

Reporting of all expenditures requested to be reimbursed with SLFRF funds shall be reported to the Grantee monthly by no later than the tenth (10th) of each month. A final report shall be reported to the Grantee by no later than February 28, 2027. Unused budgeted SLFRF distributions can be recaptured by the Grantee for other eligible projects if needed.

- 2. Scope of Work** – The Subrecipient will use funds for eligible SLFRF expenditures, which will be pre-approved by the Grantee.
- 3. Amendments** – The Grantee or Subrecipient may amend this Agreement at any time provided that such amendments make specific reference to this Agreement, and are executed in writing, signed by a duly authorized representative of each organization, and are approved by the Grantee. Such amendments shall not invalidate the terms and conditions reflected in this Agreement not otherwise altered or impacted by the amendment, nor relieve or release the Grantee or Subrecipient from its obligations under this Agreement, except to the extent those obligations are altered by amendment.

The Grantee may, at its discretion, amend this Agreement to conform with Federal, State, or Local governmental guidelines, policies, and available funding amounts, or for other reasons. If such amendments result in a change in the funding, scope of services, or schedule of the activities to be undertaken as part of this Agreement, such modifications will be incorporated only by a written amendment signed by both the Grantee and Subrecipient. In the event such amendments are made for the purpose of conforming with Federal, State, or Local governmental guidelines, policies, and availability of funding, Subrecipient shall have no claim or cause of action against the Grantee.

SPECIAL CONDITIONS: The following special conditions apply:

4. **Compensation and Method of Payment** – Grantee will pay to the Subrecipient on a reimbursement basis, funds available under this Agreement based upon information submitted by the Subrecipient and consistent with any approved budget and Grantee policy concerning payment. **Payments will be made for eligible expenses incurred by the Subrecipient, not to exceed the total budgeted distribution of SLFRF funds of \$18,300,000.** (see attached schedule) Subrecipient will submit a Reimbursement Request Voucher, as provided by the Grantee, to the Grantee, along with support documentation, to obtain payment for costs incurred under this Agreement. The Grantee will use the documentation to review and validate requests for payment, and otherwise monitor performance under this agreement. Based on monthly reporting results, Subrecipients which are projected to significantly underspend their awarded CRF distribution will be subject to the funding being reallocated for other purposes by the Grantee.

Indirect cost rate for the Federal award: *N/A*

5. **Records, Reports, Monitoring and Audits** – The Subrecipient shall maintain all records required by the Federal regulations specified in 2 CFR 200 and the SLFRF Compliance and Reporting Guidance. Such records shall include but not be limited to: records providing a full description of each activity undertaken; records required to determine eligibility of activities and records required to document acquisition, including financial records.

All Subrecipient records with respect to any matters covered by this Agreement shall be made available to the Grantee, Comptroller General of the United States, the Office of the Inspector General of the United States Treasury, or any of their authorized representatives, at any time, as deemed necessary, to audit, examine, and make excerpts or transcripts of all relevant data. Any deficiencies noted in audit reports must be fully cleared by the Subrecipient within 30 days after receipt by the Subrecipient. Failure of the Subrecipient to comply with the above audit requirements will constitute a violation of this contract and may result in withholding of future payments. The Subrecipient hereby agrees to have an annual agency audit conducted in accordance with the audit requirements set forth in 2 CFR 200, Subpart F - Audit Requirements.

6. **Grant Administration** – the Subrecipient will comply with Uniform Administrative Requirements, Cost Principles, and Audit Requirements as defined by 2 CFR 200.
7. **Program Income** – the Subrecipient is not expected to receive Program Income as defined at 2 CFR 200.80. Should that occur, Subrecipient will report and remit the income received to the Grantee.
8. **Other Requirements** – the Subrecipient must comply with each of the following:
 - a. Anti-Discrimination/Affirmative Action and Equal Employment Opportunity – Subrecipient will comply with President's Executive Order 11246 of September 24, 1965.
 - b. Grant Monitoring – In accordance with 2 CFR 200.331, Subrecipient monitoring will be required. In addition, the Grantee reserves rights to perform additional procedures or may impose additional specific award conditions as determined are necessary by the Grantee per 2 CFR 200.207.

9. Suspension or Termination for Cause: In accordance with 2 CFR part 200, subpart D, the Subrecipient's failure to fulfill the terms of this Agreement, or Subrecipient's violation of its covenants, agreements or stipulations, may result in full or partial suspension or termination of this Agreement by Grantee. Upon termination, if applicable, the Subrecipient will provide all expenditures not yet submitted for reimbursement as of the date of suspension or termination. Expenditures occurring after the date of suspension or termination will not be eligible for reimbursement. Suspension or termination would not relieve the Subrecipient of its obligations under this agreement, including Reversions of Assets, Record Retention, Monitoring, or Audits for activity occurring before suspension or termination. Final payments under the grant may be withheld until the amount of damages is determined. Contract termination will not nullify the Subrecipient's cooperation agreement with the Grantee.

10. Termination for Convenience: Either party may terminate this Agreement by giving written notice to the other party at least thirty days prior to termination. Upon termination, Subrecipient would be paid for permissible services rendered under this Agreement up to the date of termination. Contract termination will not, however, nullify the Subrecipient's cooperation agreement with the Grantee.

11. Record Retention: Per 2 CFR 200.333, the Subrecipient shall retain all financial records, supporting documents, statistical records, and all other records pertinent to the Agreement for a period of three (3) years. If there is litigation, claims, audits, negotiations or other actions that involve any of the records cited and that have started before the expiration of the three (3) year period, such records must be retained until completion of the actions and resolutions of all issues, or the expiration of the three (3) year period, whichever is greater.

All records are public to the extent allowed by State and Federal Freedom of Information law, unless protected by Federal and State privacy law. Personal income, address, individual and family names, and payroll information (including but not limited to names, addresses and social security numbers of payees) may not therefore be released unless such identifiers have been removed to the extent required by law.

12. Reversion of Assets - The use and disposition of real property and equipment under this Agreement shall be in compliance with the requirements of the SLFRF program, with the applicability and cross reference to 2 CFR 200 and the ~~U.S. Treasury CRF FAQ memo dated August 10, 2020,~~ which include but are not limited to the following:

- a. The Subrecipient shall transfer to the Grantee any SLFRF funds on hand and any accounts receivable attributable to the use of funds under this Agreement at the time of expiration, cancellation, or termination of this Agreement.
- b. Real property under the Subrecipient's control that was acquired or improved, in whole or in part, with SLFRF funds under this Agreement, shall remain the property of the Subrecipient at the time of expiration, cancellation, or termination of this Agreement.
- c. In all cases in which equipment acquired, in whole or in part, with funds under this Agreement is sold on or before December 31, 2026, such proceeds must be reverted back to the Grantee.
- d. In all cases in which equipment acquired, in whole or in part, with funds under this Agreement is sold after December 31, 2026, such proceeds shall be retained by the Subrecipient.

13. Legal Indemnity - Subrecipient will indemnify, defend, and hold harmless Grantee, its officials, volunteers, boards, commissions, and agents against any and all expense and liability arising from any act, omission, or negligence of the Subrecipient. Subrecipient will immediately notify Grantee of any threatened or actual litigation related to activities under this agreement, or the CRF program. Grantee may enter into such litigation to protect its interests as they may appear.

In the instance of expense and liability arising from non-compliance with Federal Regulations, the Subrecipient's financial liability under this section of the agreement shall not exceed the cumulative amount of CRF funds expended for the benefit of the project or activity for which the act of program or regulation noncompliance occurs.

If the act of non-compliance is on the part of the Subrecipient, the Subrecipient is fully responsible for all legal and financial expense and liability, which may include, but is not limited to, any fines or penalties imposed by the U.S Treasury or other government agencies resulting from the act of non-compliance.

14. Relationship of Grantee and Subrecipient - Subrecipient and Grantee are two independent entities. No partnership, association, or joint enterprise exists between them because of this agreement except as specified in the Cooperation Agreement executed between Subrecipient and Grantee. This agreement, moreover, will not be construed as making an employee of the Subrecipient an agent or employee of Grantee.

15. Conflict of Interest - The Subrecipient agrees to abide by the provisions of 2 CFR 200.318, which includes (but is not limited to the following):

- a. The Subrecipient shall maintain a written code of standards of conduct that shall govern the performance of its officers, employees, or agents engaged in the award and administration of contracts supported by Federal Funds.
- b. No employee, officer or agent of the Subrecipient shall participate in the selection, or in the award, or administration of, a contract supported by Federal funds if a conflict of interest, real or apparent, would be involved.
- c. The officers, employees, and agent of the Subrecipient may neither solicit nor accept gratuities, favors, or anything of monetary value from contractors or parties to subcontracts. However, the Subrecipient may set standards for situations in which the financial interest is not substantial or the gift is an unsolicited item of nominal value. The standards of conduct must provide for disciplinary actions to be applied for violations of such standards by officers, employees, or agents of the Subrecipient.

16. Notification of Legal Action - Subrecipient will provide written notice to Grantee should it intend to pursue a claim against the Grantee for breach of any terms of this Agreement. Subrecipient will wait for at least 90 days before filing suit and, at the request of Grantee, will meet with an appointed Grantee representative to attempt to resolve the dispute.

17. Remedies for noncompliance - As described in 2 CFR 200.338, if the Subrecipient fails to comply with Federal statutes, regulations or the terms and conditions of a Federal award, the Federal awarding agency or Grantee may impose additional conditions, as described in 2 CFR 200.207 Specific conditions. If the Federal awarding agency or Grantee determines that noncompliance cannot be remedied by imposing additional conditions, the Federal awarding agency or pass-through entity may take one or more of the following actions, as appropriate in the circumstances:

- a. Temporarily withhold cash payments pending correction of the deficiency by the non-Federal entity or more severe enforcement action by the Federal awarding agency or pass-through entity.
- b. Disallow (that is, deny both use of funds and any applicable matching credit for) all or part of the cost of the activity or action not in compliance.
- c. Wholly or partly suspend or terminate the Federal award.
- d. Initiate suspension or debarment proceedings as authorized under 2 CFR part 180 and Federal awarding agency regulations (or in the case of a pass-through entity, recommend such a proceeding be initiated by a Federal awarding agency).
- e. Withhold further Federal awards for the project or program.
- f. Take other remedies that may be legally available.

18. Severability - If any provision of this Agreement is held invalid, the remainder of the Agreement shall not be affected and all other parts of this Agreement shall remain in full force and effect.

19. Code of Federal Regulations: The subrecipient may view the entire Code of Federal Regulations (CFR) at <http://www.ecfr.gov>

20. Equal Access - The subrecipient will comply with the equal access requirements at 24 CFR 5.106.

21. National Policy Requirements: The subrecipient will comply with the Statutory and national policy requirements at 2 CFR 200.300.

IN WITNESS WHEREOF, the authorized representatives of Grantee and Subrecipient have signed this agreement below, and agree to abide by all terms as set forth herein.

County of Macomb by



Mark F. Deldin
Chief Deputy County Executive

Date: 7/20/2023

Candice S. Miller
Chair, 8½ Mile Relief Drain Drainage District

Date: _____

Witnessed by:



Date: 7/20/2023

Witnessed by:

Date: _____

Public Works Projects Clean Water Projects – \$40 million County ARPA Funds

Chapaton In-System Storage

The Chapaton In-System Storage project entails the construction of an access shaft and installation of an inflatable bladder within the 12-foot diameter 8 ½ Mile tunnel in Eastpointe to temporarily store 3.5 million gallons of excess combined sewer flows during rain events. These flows will be retained and stored until after the rain event and then sent to GLWA for full treatment rather than discharged to Lake St. Clair. This project along with several others will reduce combined sewer overflows at Chapaton into Lake St. Clair by 70%.

Proposing to use \$8.8 million of County ARPA funds to offset the total \$12.4 million project cost.

Construction started in January 2022 and will be completed by spring 2024.

Chapaton Electrical/Generator Upgrades

The Chapaton Electrical Upgrades project replaces the original 55 year old electrical components at the pump station and will provide 5 backup generators to fully power the station. The station has had several small electrical fires and is at risk of not operating during critical times. The current single generator only provides house power and is unable to power the three large storm pumps. The project includes new motor starters for the three storm pumps, new 15kV switchgear to replace the existing obsolete units, and a motor rebuild for one of the pumps.

Proposing to use \$9.5 million of County ARPA funds to offset the total \$22.0 million project cost.

The project is currently out for construction bids for contract award in June 2023.

Jefferson Interceptor Relief Sewer

The Jefferson Interceptor Relief project consists of installing 1.5 miles of 72” sewer from 9 Mile to Bon Brae in St. Clair Shores, Locations north and south on Jefferson have dual mains, so flows here are bottlenecked, which result in unnecessary CSO discharges. This project will reduce CSO discharges by approximately 50% from the Martin RTB district and will assist in preventing basement backups. Coupled with the Martin In-System Storage and Bon Heur rehabilitation projects, we will be able to reduce CSOs into Lake St. Clair by 70% at Martin. SEMSD will partner with the County on this project.

Proposing to use \$20 million of County ARPA funds to offset the \$25 million project cost.

The project is currently in the planning phase and will be ready to construct by early 2024.

Bon Heur Pump Station Rehabilitation

The Bon Heur Pump Station is 45 years old and is in need of rehabilitation. This project includes the replacements of the 4 existing Archimedes Screw Pumps (40,000 gallons per minute) which have reached the end of their useful life. The pumps are at risk of failure which would put thousands of upstream residents at risk of basement backups. The new energy efficient and operationally flexible pumps will also work to reduce combined sewer overflows for the Martin RTB by utilizing upstream pipe capacity. This project also includes sluice gate, electrical replacements, and odor control improvements.

Proposing to use \$1.7 million of County ARPA fund to offset the \$9.5 million project cost.

Design for this project will be completed by September 2023 for bidding in the fall and construction to start in early 2024.

Macomb County, Michigan

List of ARPA Subrecipients – Water & Sewer Infrastructure Projects

<u>Drainage District Name</u>	<u>Total Estimated Cost</u>	<u>Proposed ARPA Funding</u>
8 ½ Mile Relief Drain Drainage District (Chapaton)	\$34.4M	\$18.3M
Martin Sanitary Diversion District (Jefferson)	\$25.0M	\$20.0M
Southeast Macomb County Wastewater Disposal System (Bon Heur)	<u>\$ 9.5M</u>	<u>\$ 1.7M</u>
Totals	\$68.9M	\$40.0M

8.5 Mile Relief Drain (Chapaton) 2023/24 Budget Summary

Attached is the proposed 2023/24 8½ Mile budget for the fiscal year beginning October 1, 2023. The budget is scheduled to be adopted at the August 14, 2023 Drain Board meeting. The cities of Eastpointe and St. Clair Shores have received a copy of the proposed budget which includes a detailed explanation for each item.

The proposed budget funds improved operations and maintenance of our aging assets and construction projects to further reduce combine sewer overflows and improve system redundancy. The community contribution (debt and O&M) increase of 4.9% is slightly less than the projected 5% increase provided to the two communities and upon which their own budgets were established.

The budget includes:

1. \$47.0 million in grant funding for the In-System Storage, Canal Rehabilitation, and Electrical/Generator projects. No increased community assessment is needed for these projects as we have received Federal, State and County funds to fully cover the costs.
2. \$4.9 million for the replacement or rehabilitation of the gates, hydraulic lines and actuators for the 9 Mile Bypass, retention basin, wet well, basin dewatering system, and Jefferson diversion.
3. \$4.9 million to replace the basin flushing system.
4. \$881,420 for the structural rehabilitation of the 9 Mile emergency bypass pipe.
5. \$750,000 to vent the Pump Station's main floor to prevent the storm pump motors from overheating.
6. \$275,000 to develop a computerized SCADA model to allow staff to maximize the use of existing and new assets and operations logic to reduce treated CSOs and to better train staff by simulating different size wet weather events.
7. \$250,000 to re-line the three Chlorine Storage tanks and \$200,000 for painting the Pump Station inside walls.
8. \$80,000 to purchase a used Backhoe to replace a 1976 model and \$30,750 for the district's share to replace an 11-year-old Pick Up Truck used by station operators.

Personnel costs rose by \$115,590 based on County's wage schedule and the district's share of cost for an additional Pump Station Operator position needed to help operate and maintain the additional assets. The amount budgeted for sodium hypochlorite increased by \$13,000 due to rising chemical costs. SCADA costs declined by \$117,340 with the completion of several one-time projects in the current year.

8.5 MILE COMMUNITIES
TOTAL CHARGES
FY 2023 vs FY 2024

Cost Category		2022/2023 Charge	2023/2024 Charge	Difference	% Change	Page #
1)	8.5 Mile Relief O&M/Charge Required Revenue	5,003,220	5,260,440	257,220	5.1%	2,4
2)	Debt	387,180	394,120	6,940	1.8%	3
TOTAL		5,390,400	5,654,560	264,160	4.9%	

Communities	2022/2023 Charge	2023/2024 Charge	Difference	% Change
Eastpointe (54.33%)	2,928,853	3,072,390	143,537	4.9%
St. Clair Shores (25.13%)	1,354,532	1,420,910	66,378	4.9%
Michigan (16.04%)	864,447	906,820	42,373	4.9%
Macomb County (2.25%)	121,284	127,220	5,936	4.9%
Dept of Roads (2.25%)	121,284	127,220	5,936	4.9%
TOTAL	5,390,400	5,654,560	264,160	4.9%

**8.5 MILE DRAIN DRAINAGE DISTRICT
2023-2024 CHARGES
EFFECTIVE OCTOBER 1, 2023**

	Total Annual	Monthly					Total	
			Eastpointe	St. Clair Shores	Michigan	Macomb County		Dept of Roads
8.5 MILE RELIEF CHARGES			54.33%	25.13%	16.04%	2.25%	2.25%	100.00%
8.5 Mile Relief O&M	5,260,440	438,370	238,187	110,156	70,301	9,863	9,863	438,370
		O&M Total	2,858,244	1,321,872	843,612	118,356	118,356	5,260,440
		Debt Total ⁽¹⁾	214,144	99,036	63,204	8,868	8,868	394,120
		Grand Total	<u>3,072,388</u>	<u>1,420,908</u>	<u>906,816</u>	<u>127,224</u>	<u>127,224</u>	<u>5,654,560</u>

NOTE

1) The debt will be invoiced separate from the O&M. Generally it will be billed in February and August.

DEBT WORKSHEET

8.5 MILE RELIEF 2023-2024 DEBT WORKSHEET⁽¹⁾

Not part of O&M invoice. Debt will be invoiced separately every 6 months
 No paying agent fees because all SRF bonds

DEBT SERVICE	Principal	Interest	Total	Eastpointe	St. Clair Shores	Michigan	Macomb County	Dept of Roads	Total
SRF 5306-01	225,000	35,624	260,624	141,609	65,490	41,796	5,864	5,864	260,624
SRF 5393-01	65,000	12,590	77,590	42,158	19,497	12,443	1,746	1,746	77,590
SRF 5460-01	25,000	4,696	29,696	16,135	7,462	4,762	668	668	29,696
SRF 5579-01	20,000	6,210	26,210	14,241	6,586	4,203	590	590	26,210
TOTAL	335,000	59,120	394,120	214,144	99,036	63,204	8,868	8,868	394,120

NOTES

1) SEMCWWDS and Martin Sanitary are included on separate budget

8.5 MILE RELIEF
Operations Maintenance
Budget to Actual

Description	Page #	Actual	Actual	Projected	Budget	Budget	Budget	% Change
		2021/2022	4/30/2023	9/30/2023	2022/2023	2023/2024	Change	
EXPENSE								
Application/Permit Fee	5	6,608	6,000	6,000	6,000	6,000	0	0.0%
Dues, Training, & Licenses	6	16,146	12,530	16,910	17,010	17,400	390	2.3%
Engineering/Projects & Construction	7	4,823,985	3,767,907	5,865,160	12,334,690	62,088,360	49,753,670	403.4%
Equipment	8	26,105	0	3,000	3,000	113,750	110,750	3691.7%
Office Supplies	9	504	0	500	500	500	0	0.0%
Operating Supplies	10	56,849	56,324	90,830	81,800	96,450	14,650	17.9%
Other Professional Services	11	38,364	36,052	61,200	42,500	56,500	14,000	32.9%
Personnel Services	12	1,039,000	614,053	1,174,880	1,135,790	1,251,350	115,560	10.2%
Repair & Maintenance	13	109,049	0	44,000	246,000	614,500	368,500	149.8%
Contrib to Reserves (Maint and SCADA)	13 & 14	288,245	288,240	288,240	288,240	288,240	0	0.0%
Scada System	14	107,169	29,271	122,420	199,390	82,050	(117,340)	-58.8%
Utilities	15	286,741	213,049	271,430	290,000	288,200	(1,800)	-0.6%
Total Expense		6,798,764	5,023,425	7,944,569	14,644,920	64,903,300	50,258,380	343.2%
REVENUE								
Interest Earned	16	51,253	142,200	367,200	20,000	275,000	255,000	1275.0%
Other Revenue	16	3,447	157,237	158,240	5,000	5,000	0	0.0%
Carryforward	16	0	342,890	342,890	4,412,010	11,372,850	6,960,840	157.8%
8.5 O&M/Charge Required Revenue	16	4,748,520	5,003,220	5,003,220	5,003,220	5,260,440	257,220	5.1%
Use of Reserve from prior contributions	16	147,950	118,580	118,580	3,738,110	0	(3,738,110)	-100.0%
Use of Reserve	16	0	134,508	247,210	350,000	270,560	(79,440)	-22.7%
Use of SCADA Reserve	16	0	15,700	25,700	64,750	0	(64,750)	-100.0%
Use of Surplus from past collections	16	0	0	0	1,051,830	0	(1,051,830)	-100.0%
Reimbursement from St. Clair Shores	16	0	0	0	0	710,000	710,000	100.0%
Grants	16	0	582,382	7,415,250	0	47,009,450	47,009,450	100.0%
Total Revenue		4,951,170	6,496,716	13,678,290	14,644,920	64,903,300	50,258,380	343.2%

Reserve⁽¹⁾ 9,767,458 16,405,940 5,346,330

1) Broken out as follows:

Sluice and Dewatering Gates Rehab/Replace Project	2,025,660	3,931,180	0
Flushing	0	3,758,950	0
9 Mile Emergency Bypass Structural Rehab	0	881,420	0
9 Mile Bypass Pipe Structural Repairs	0	50,000	0
As Needed Engineering	34,934	45,960	0
Chlorine storage tank relining	7,500	7,500	0
Painting	25,000	25,000	0
East Building Server	30,000	30,000	0
SRF Replacement Reserve (Ends 32/33)	2,592,140	2,851,350	3,110,560
Project Contribution from Macomb Cty ⁽²⁾	2,000,000	0	0
Capital Reserve	1,386,758	2,048,270	2,048,270
Contribution from SEMSD ⁽³⁾	772,216	0	0
LSCWWI 04B Transfer ⁽⁴⁾	738,110	0	0
In System Storage ⁽⁵⁾	0	2,617,840	0
Scada Reserve	155,140	158,470	187,500
	<u>9,767,458</u>	<u>16,405,940</u>	<u>5,346,330</u>

Non Committed Reserve(Excludes life cycle and carryover) 3,978,898 4,899,620 5,158,830

Notes

- 2) Moved to Flushing
- 3) Moved to In System Storage
- 4) Moved to 9 Mile Emergency Bypass Structural Rehab.
- 5) District & SEMSD portion of the In System Storage project.

**FY 2023-2024
8.5 MILE RELIEF BUDGET DETAIL SHEET
EXPENDITURE REQUEST SHEET**

FUND:	0017	P/Y BUDGET:	\$6,000
ACTIVITY:	Application/Permit Fee	REQUEST:	\$6,000
		INC/(DEC.):	\$0

ACCOUNT EXPLANATION:

DESCRIPTION	23/24	22/23
96901 1) Annual NPDES Permit	6,000	6,000

INCREASE/DECREASE EXPLANATION:

1) 100% 8.5. Martin billed separately.

**FY 2023-2024
8.5 MILE RELIEF BUDGET DETAIL SHEET
EXPENDITURE REQUEST SHEET**

FUND:	0017	P/Y BUDGET:	\$17,010
ACTIVITY:	Dues, Training, & Licenses	REQUEST:	\$17,400
		INC/(DEC.):	\$390

ACCOUNT EXPLANATION:

DESCRIPTION	23/24	22/23
95901 1) Certification, Licenses, & Training	5,100	5,100
82201 2) Professional Dues and Subscriptions	800	800
WO20041 3) NexGen Renewal	11,500	11,110
Total	17,400	17,010

INCREASE/DECREASE EXPLANATION:

1) Operators state certified for RTBs and annual confined space training.

1-2) Split with Martin and SEMCWWDS.

3) Annual renewal for the asset management software.

Cost is split 50% MIDDD, the other 50% is split 10% SEMCWWDS, 15% Martin and 25% 8.5 Mile. IT covers a portion of the cost.

FY 2023-2024
8.5 MILE RELIEF BUDGET DETAIL SHEET
EXPENDITURE REQUEST SHEET

Fund: 0017
 Activity: Engineering/Projects & Construction

P/Y BUDGET: \$12,334,690
 REQUEST: \$62,088,360
 INC/(DEC.): \$49,753,670

ACCOUNT EXPLANATION:

Proj #	DESCRIPTION	23/24	22/23
TBD	1) Chapaton PS Main Floor Ventilation	750,000	0
WO22027	2) 8.5 Mile Inspection Project	0	500,000
WO22028	3) 9 Mile Drain & Dewater Accusonic Flow Meters	0	350,000
TBD	4) Digital Twin Model Pilot Project	275,000	0
WO22026	5) Sluice and Dewatering Gates Rehab/Replace Project-New Money	981,220	0
WO22030	6) Flushing-New Money	1,104,340	0
	7) General Construction/Engineering Contingency-All projects	567,500	
WO18072	8) As needed Engineering	115,500	0
	Total New Projects	3,793,560	850,000
WO18072	9) As needed Engineering	45,960	39,110
WO22026	10) Sluice and Dewatering Gates Rehab/Replace Project	3,931,180	4,000,000
WO18025	11) Cost Share Army Corp Grant-Green Infrastructure Project	0	162,500
WO22030	12) Flushing	3,758,950	1,895,660
WO22029	13) 9 Mile Emergency Bypass Structural Rehab	881,420	3,000,000
WO21008	14) 9 Mile Bypass Pipe Structural Repairs	50,000	308,010
WO19082	15) Chapaton Improvements-Office Space Downstairs	0	100,000
WO21022	16) In-System Storage-Construction Admin and Construction	2,617,840	1,659,410
3323003	17) In-System Storage-Construction Admin and Construction (County ARPA)	2,150,250	0
4023003	18) Electrical Rehab (State & County ARPA)	15,369,930	0
3723003	19) Canal Rehab (State ARPA)	29,489,270	320,000
	Total Carryover Projects	58,294,800	11,484,690
	TOTAL ALL PROJECTS	62,088,360	12,334,690

See notes on page 7A and 7B

Notes

- 1) Over the past few years, MCPWO staff have identified that the storm pump motors have been overheating faster than anticipated in wet weather events. Further investigation has identified that the previous administration has made changes to the facility that has negatively impacted airflow within the main floor of the pump station. MCPWO staff are proposing a ventilation project to minimize temperatures within that space. Working with our as-needed engineering we have been able to identify project costs for this at \$750,000 to fully complete this work. This work will prolong the useful life of the pump motors and help stabilize them during wet weather events.
 - 2) Complete. Next inspections will take place in 5 years.
 - 3) Complete
 - 4) MCPWO staff has developed a comprehensive master plan to reduce CSO's within the SE Macomb district. Many of the projects are progressing into the design/construction phase. The digital twin will leverage our existing SCADA system and sensors, hydraulic model, and weather forecasting tools to better optimize wet weather operations by maximizing all existing and new infrastructure. This tool will not only help to reduce treated CSO's but will also provide MCPWO a training tool for operators to simulate different size wet weather events. This pilot will be used to demonstrate the effectiveness within the Chapaton district.
- 5 & 10) To be used for Sluice & Dewatering Gate project. Estimated cost is \$5 million.

Funding for Sluice and Dewatering Gate

Amount Collected in 21/22 Budget for 9 Mile Pump Station. Net of Expenses	2,044,440
Amount Collected in 22/23 Budget	1,974,340
Amount Collected in 23/24 Budget	710,660
Use of 23/24 Reserves	270,560
Total Funding	5,000,000

23/24 Carryover Breakout:

Collected in 21/22 Budget for 9 Mile PS	2,044,440
Amount Collected in 22/23 Budget	1,974,340
Projected to spend thru Sept 30, 2023	(87,600)
Estimated Carryover	3,931,180

There are several sluice gates around the Chapaton RTB that control operations that are critical to the proper operations of the facility. If any of these gates were to fail then the resulting impacts could cause significant impacts to the upstream collection system. This replacement project will include either rehab or complete replacement of the following gates, hydraulic lines, and actuators.

- 9 Mile Emergency Bypass Influent Gates (2) which are used for the gravity emergency bypass.
- 9 Mile RTB Basin Gates (2) which are used to fill the RTB via gravity until the RTB has reached a level of 6 feet.
- Station Gate (1) which diverts flow from 9 Mile to the Chapaton Wet Well.
- RTB Dewater Gate (1) which is used to drain the RTB after filling.
- Jefferson Diversion Gate (1) which is used to regulate levels in the Jefferson Interceptor.
- 9 Mile Dewatering Gate (1) which is currently used to dewater the canal after being filled.

22/23 Gates Carryforward Breakout:

	22/23 Budget-New Money	1,974,340
Projected higher expenses in last year's budget.	22/23 Budget-Carryforward	2,025,660
	Total Carryforward	4,000,000

- 6 & 12) The Chapaton Flushing System has reached the end of its useful life and is in need of replacement. This funding will be used for design and construction. The flushing system is a NPDES requirement as part of our discharge permit. Project estimated cost is \$5 million.

Funding for Flushing

Moved from 9 Mile Emergency Bypass Structural Rehab(#13)	2,000,000
Use of Reserve from prior contributions	(2,000,000)
County Contribution	2,000,000
Collected in 22/23 budget	1,895,660
Collected in 23/24 budget	1,104,340
Total Funding	5,000,000

Carryover:

County Contribution	2,000,000
Collected in 22/23 budget	1,895,660
Projected spending through 9/30/23	(136,710)
Estimated Carryover	3,758,950

- 7) Contingency for possible overages for the numerous on going projects.
- 8 & 9) Engineering support for MCPWO staff for various smaller projects that come up during the year. Multiple small projects coming in the future that can be supported with as-needed engineers. Carryover is higher as we projected more to be expensed in 21/22 budget.

Notes

- 11) Project cancelled. Will now be part of Canal Rehab project.
- 13) Approximately 1,860 lf of structural rehabilitation is required on the existing 9 Mile Drain from the emergency bypass chamber to the canal. This is a double box sewer so each box is approximately 930 lf. This was proposed to be abandoned but now that it is staying and, as is original to 1926, it will require structural rehabilitation. New estimated cost is \$1 million.

Funding for 9 Mile Emergency Bypass Structural Rehab

Collected in 22/23 Budget	3,000,000	
Use of Reserve from prior contributions	(738,110)	
LSCWWI 04B Transfer	738,110	
Surplus funds collected	(2,000,000)	Moved to Flushing
Total Funding	0	

Carryover:

Collected in 22/23 Budget	3,000,000
Moved to Flushing	(2,000,000)
Projected Exp through 9/30/23	(118,580)
Estimated Carryover	881,420

- 14) Main work completed. One-year inspection of work will be happening soon. Will carryforward \$50,000 to cover possible repair work found during inspection.

- 15) Complete

- 16 & 17) Adds real time control structures within the 8 1/2 Mile Interceptor which will be used to provide additional storage capacity.

Funding for In System Storage

Source	CCA-Tetra Tech ^(a)	Const-Weiss	Other	Total
Budget 2021		2,250,000		2,250,000
Use of Surplus from past collections		(632,160)		(632,160)
SEMSD Contribution	926,374		73,626	1,000,000
County ARPA Funds	98,600	8,551,400	134,280	8,784,280
Total	1,024,974	10,242,866	134,280	11,402,120

a) MEDC grant covered design

Carryover

Budget 2021	2,250,000
SEMSD Contribution	1,000,000
Use of Surplus from past collections	(632,160)
Total-District Funds	2,617,840

Projected ARPA Remaining 9/30/23

County ARPA Funds	8,784,280
Projected Expenses 9/30/23	(6,634,030)
Remaining County ARPA	2,150,250

- 18) **FUNDING for ELECTRICAL**

Source	Tetra Tech- (Design) ^(b)	Const-Rotor Electric	CCA-Tetra Tech	Other	Total
County ARPA		9,500,000			9,500,000
State ARPA	155,000	5,150,000	714,080	21,550	6,040,630
Total	155,000	14,650,000	714,080	21,550	15,540,630

b) Contract was for \$225,000 but is projected to be under budget by \$70,000 Savings will be used for CCA.

The Chapaton Electrical Upgrades project replaces the original 55 year old electrical components at the pump station and will provide 3 backup generators to fully power the station. The current single generator only provides house power and is unable to power the three large storm pumps. The project includes new motor starters for the three storm pumps, new 15kV switchgear to replace the existing obsolete units, and a motor rebuild for one of the pumps. Long lead time for parts so project will not start immediately.

Total ARPA Funds	15,540,630
Less Projected Spending through 9/30/2023	(170,700)
Amount Budgeted for 23/24	15,369,930

- 19) **FUNDING for CANAL REHAB**

Source	Wade Trim (Design)	Const-Z Contractors	CCA-Wade Trim	Other	Total
State/EGLE Grant			2,000,000		2,000,000
MEDC Grant	279,784			(4)	279,780
Federal Earmark		2,374,710		125,290	2,500,000
2022 Budget	320,000				320,000
State ARPA		25,000,000			25,000,000
Total	599,784	27,374,710	2,000,000	125,286	30,099,780

The Chapaton Treatment Canal which was last rehabilitated in the early 2000s, replacing the Chapaton Canal Control Structure gates and associated building and electrical components, and raising the top of the Chapaton Treatment Canal above the 500-year flood elevation. This project shall provide flood resiliency for the area surrounding the canal and reduce treated CSO's to Lake St. Clair. Additionally, this project proposes to complete a storm sewer separation of approximately 11-acres.

St Clair Shores is paying \$710,000 of the construction of water main project, which is reflected in revenue.

Total Funds Collected	30,099,780
Less Projected Spending through 9/30/2023	(610,510)
Amount Budgeted for 23/24	29,489,270

**FY 2023-2024
8.5 MILE RELIEF BUDGET DETAIL SHEET
EXPENDITURE REQUEST SHEET**

FUND: 0017
ACTIVITY: Equipment

P/Y BUDGET: \$3,000
REQUEST: \$113,750
INC/(DEC.): \$110,750

ACCOUNT EXPLANATION:

DESCRIPTION	23/24	22/23
1) Backhoe (Used)	80,000	0
2) F-150 Pickup Truck	30,750	0
3) Misc (lab equip, bldg instrumentation, etc)	3,000	3,000
Total	113,750	3,000

INCREASE/DECREASE EXPLANATION:

- 1) The current 1976 backhoe at Chapaton was purchased used in 1996.
This backhoe is used for various activities around the facility and has been a very useful asset.
It has reached the end of its useful life and is becoming more difficult to find parts to repair.
MCPWO would like to replace this current backhoe with a newer used model and
use the existing unit as a trade in.
\$100,000 total cost less \$20,000 trade in value.
- 2) Vehicle fleet continues to get older. This F150 truck will replace the 2013 pool truck
currently in use. Split with Martin and SEMCWWDS.
Most recent purchase of a F150 Super cab was \$40,300 so used \$41,000 for budget purposes.

FY 2023-2024
8.5 MILE RELIEF BUDGET DETAIL SHEET
EXPENDITURE REQUEST SHEET

FUND: 0017
ACTIVITY: Office Supplies

P/Y BUDGET:	\$500
REQUEST:	\$500
INC/(DEC.):	\$0

ACCOUNT EXPLANATION:

<u>DESCRIPTION</u>	<u>23/24</u>	<u>22/23</u>
72624 Toner, pens, paper, posters computer supplies, etc	500	500

INCREASE/DECREASE EXPLANATION:

**FY 2023-2024
8.5 MILE RELIEF BUDGET DETAIL SHEET
EXPENDITURE REQUEST SHEET**

FUND: 0017
ACTIVITY: Operating Supplies

P/Y BUDGET: \$81,800
REQUEST: \$96,450
INC/(DEC.): \$14,650

ACCOUNT EXPLANATION:

DESCRIPTION	23/24	22/23
72650 1) Sodium hypochlorite	78,000	65,000
96804 2) Personal protective equipment	3,500	2,250
75001 3) Clothing for operations staff	1,500	1,500
72621 4) Laboratory supplies required by NPDES permit	4,500	4,500
82403 5) Equipment Rental	4,000	4,600
72901 6) Postage	100	200
96104 7) Fuel	4,480	3,250
72699 8) Misc	370	500
Total	96,450	81,800

INCREASE/DECREASE EXPLANATION:

- 1) Increased cost for sodium hypochlorite.
- 2) Higher costs of PPE.
- 1 & 4) Fluctuates depending on number of rain events.
- 2, 3 & 7) Split with SEMCWWDS and Martin.
- 5) Bobcat rental used to assist with on-going cleaning activities after wet weather events at Chapaton. Have been renting second piece of equipment twice a year to assist with the cleaning activities within retention basin.
- 7) Increase in fuel usage due to number of construction project inspections.

FY 2023-2024
8.5 MILE RELIEF BUDGET DETAIL SHEET
EXPENDITURE REQUEST SHEET

FUND: 0017	P/Y BUDGET:	\$42,500
ACTIVITY Other Professional Svcs	REQUEST:	\$56,500
	INC/(DEC.):	\$14,000

ACCOUNT EXPLANATION:

DESCRIPTION	23/24	22/23
80131 1) Contract Laboratory for Permit Overflow	7,500	7,500
80139 2) Legal	14,000	14,000
3) Insurance-Liability	25,000	11,000
4) Insurance-Property	10,000	10,000
	56,500	42,500

INCREASE/DECREASE EXPLANATION:

- 1) Fluctuates depending on number of rain events. Used for testing discharges per the NPDES permit.
- 3) Drainage Board approved liability insurance for the District. Due to increased construction projects, the district share of insurance has risen.
- 4) Property insurance is covered under the county policy. Property insurance cost billed to this district by the County.

FY 2023-2024
8.5 MILE RELIEF BUDGET DETAIL SHEET
EXPENDITURE REQUEST SHEET

FUND: 0017
ACTIVITY: Personnel

P/Y BUDGET: \$1,135,790
REQUEST: \$1,251,350
INC/(DEC.): \$115,560

ACCOUNT EXPLANATION:

DESCRIPTION	23/24	22/23
1) Pump Station Operators (7 FT operators and 2 PT)	544,660	454,370
2) Operations Manager	112,830	108,410
3) Assistant Operations Mgr	71,650	72,290
4) Pump Station Standby	8,000	7,500
5) Overtime	65,000	65,000
6) SCADA Manager Support	53,420	47,580
7) SCADA System Specialist (FT)	39,940	39,240
8) Engineering Support	208,030	199,900
9) Senior Asset Mgmt Tech	42,210	38,140
Clerical Support		0
10) Accounting	9,360	9,000
11) Administrative	41,070	41,300
12) MIDD Field Operator Reimbursement	55,180	53,060
Total	1,251,350	1,135,790

INCREASE/DECREASE EXPLANATION:

- 1-5) 75% of Chapaton staff is charged to 8.5 Mile Relief District. Remaining 25% is split between SEMCWWDS(10%) and Martin(15%).
- 1) New assets are being added to system operations and therefore will require one additional pump station operator to manage maintenance. Some of those assets are as follows:
Chapaton In-System StorageStorage(all new assets, PM tasks on bladder and all equipment in Building)-Spring 2024,
Chapaton Canal (more PM tasks with gate structure, canal cleaning, stormwater trash capture, etc.) - 2025 online, Chapaton Electrical (generators and outdoor switchgear maintenance) - 2026 online, Bon Heur (new odor control system) - 2025 online,
Chapaton Main Floor Ventilation - 2024
Some of the assets are a couple years out but the understanding is that it will take time to bring on a new member and get them trained. The current maintenance program has maxed out the time for existing staff so by adding a new staff member we will be in a better position to handle the new assets coming online.
- 2,7,8,10,12) Increase relates to 3% raise and slight increase in fringe benefits.
- 3) Incorrectly, used higher salary for 22/23 budget
- 6-9) These positions will spend 37.5% of their time on 8.5 Mile Relief, 5% at SEMCWWDS, and 7.5% at Martin. The remaining 50% is with MIDD.
- 6) Increase due to new County Wage schedule.
- 7) Incorrectly overstated fringe benefits and salary in 22/23 budget.
- 8) Four engineers performing 8.5 Mile duties.
- 9) Position support for Nexgen tasks for Wastewater. Cost split between MIDD, 8.5 Mile, Martin, SEMCWWDS. Increase due to new County Wage schedule.
- 10) 75% of support staff is charged to 8.5 Mile Relief District. Remaining 25% is split between SEMCWWDS(10%) and Martin(15%).
- 11) Cross charge for administrative personnel. Incorrectly overstated fringe benefits in 22/23.
- 12) Field Operators from the MIDD provide training and other assistance to the 8.5 Mile Drainage District.

**FY 2023-2024
8.5 MILE RELIEF BUDGET DETAIL SHEET
EXPENDITURE REQUEST SHEET**

FUND: 0017
ACTIVITY: Repair & Maintenance

P/Y BUDGET: 246,000
REQUEST: 614,500
INC/(DEC.): \$368,500

ACCOUNT EXPLANATION:

PROJECT #	DESCRIPTION	23/24	22/23
	Annual Items		
WO19115	1) Wet well/Basin vactor	35,000	40,000
93001	2) Repair and maintenance	96,000	96,000
92900	3) Lawn Mowing	8,500	8,500
	4) Chlorine storage tank relining	242,500	
new wo	5) In-System Storage (Half year) O&M costs	25,000	0
	Total Annual Items	407,000	144,500
	New Projects		
WO22031	6) East building ceiling tiles	0	4,000
WO22032	7) Diversion gate chamber ladder & grating	0	40,000
WO22033	8) Painting	150,000	0
	Total New Projects	150,000	44,000
	Carryover Projects		
	9) Painting	50,000	50,000
WO22034	10) Chlorine storage tank relining	7,500	7,500
	Total Carryover Projects	57,500	57,500
	Grand Total	614,500	246,000

Reserve Replacement Reserve(SRF 5306,5393,5460)-From CTI study 259,210 259,210

INCREASE/DECREASE EXPLANATION:

- 1) Annual cleaning of wet well.
- 3) Lawn mowing contracted by third party.
- 4 & 10) Estimated cost is \$250,000 to spray line all three tanks at Chapaton.
- 5) The in-system storage site and venting sites will be online by early 2024. Funds are being included within the budget to cover all O&M costs such as utilities, SCADA, and maintenance including generator, level sensors, sluice gates, air compressors, and HVAC systems.
- 6 & 7) Projected to be completed before 9/30/23.
- 8 & 9) This task is for the painting within the Chapaton Pump Station. These funds will be used to paint in the basement and then working our way up to the motor room floor. There are a total of 5 floor that require paint. Price for painting is \$200,000.

FY 2023-2024
8.5 MILE RELIEF BUDGET DETAIL SHEET
EXPENDITURE REQUEST SHEET

FUND: 0017
ACTIVITY: SCADA

P/Y BUDGET: \$199,390
REQUEST: \$82,050
INC/(DEC.): (\$117,340)

ACCOUNT EXPLANATION:

		23/24	22/23
DESCRIPTION			
WO18077	1) SCADA as needed	32,250	35,000
WO19010	2) UPS battery replacements	0	250
WO22004	3) SCADA Server Replacement	0	64,750
WO19011	4) Wonderware Software Support	7,500	6,450
WO19015	5) VMWare Support	4,510	3,900
WO19012	6) VEEAM Support	1,290	870
001492111	7) Comcast Business Service	5,600	2,500
001492104	8) Cell modem service (Verizon) 14 units	900	850
Total Annual Projects		52,050	114,570
WO22014	9) Firewall Hardware Design/Config	0	12,900
WO22015	10) Storm Pump PLC Replacement	0	30,000
WO22016	11) Obsolete Wireless backhaul replacement links	0	16,120
WO22017	12) Fiber Optic Improvements	0	16,130
WO22018	13) SolarWinds - Network Management Software	0	9,670
TBD	14) East Building Server	30,000	0
Total Carryover Projects		30,000	84,820
Grand Total-SCADA		82,050	199,390
Reserve	Future costs of Server Upgrade - Life Cycle per year	29,030	29,030

INCREASE/DECREASE EXPLANATION:

- 2) Moved to SCADA As Needed line item.
- 3) Project Complete
- 4) Cost is split 50% MIDDD, the other 50% is split 10% SEMCWWDS, 15% Martin and 25% 8.5 Mile
- 4,5 & 6) Increase in amount charged from vendor.
- 7) Includes future cost of service at Beaconsfield (In System Storage Project).
- 9,11,12, & 13) Projects completed by 9/30/2023.
- 10) The Storm Pump PLC was part of the server upgrade project so funds will now be used for server at the East Building (#14).
- 14) Repurposing the air conditioned server rack that was in the Chapaton PS and which was replaced with the SCADA server project. This server rack will be installed in the East Building to house the MCPWO & IT security and communication switches. Those switches within the East Building are currently not in a temperature controlled environment which have limited their useful life.

FY 2023-2024
8.5 MILE RELIEF BUDGET DETAIL SHEET
EXPENDITURE REQUEST SHEET

FUND:	0017	P/Y BUDGET:	\$290,000
ACTIVITY:	Utilities	REQUEST:	\$288,200
		INC/(DEC.):	(\$1,800)

ACCOUNT EXPLANATION:

	DESCRIPTION	23/24	22/23
92101	1) Electric Service	125,000	120,000
92102	2) Consumers Energy	23,000	22,000
92103	3) Water	6,200	6,200
	4) Internet Provider	1,800	1,800
	5) Waste Hauler	2,200	2,200
92113	6) Weather Radar	2,500	2,500
	7) Internal service cost	124,000	132,000
001792104	8) Telephone (Cell)	3,500	3,300
	Total	288,200	290,000

INCREASE/DECREASE EXPLANATION:

- 1, 2 & 3) Weather dependent so number will fluctuate.
- 6) Split with MIDDD, SEMCWWDS, and Martin.
- 7) Current charges based on amount invoiced from County. Examples include use of IT Department, phones, Treasurer's Office.
Prior year budget is overstated. Current year is more in alignment with true cost.
- 7 & 8) Split with Martin and SEMCWWDS.

Revenue Detail

Revenue	2023/2024 BUDGET	2022/2023 BUDGET
Interest Earned ⁽¹⁾	275,000	20,000
Other Revenue	5,000	5,000
Carryforward ⁽²⁾	11,372,850	4,412,010
8.5 O&M/Charge Required Revenue	5,260,440	5,003,220
Use of Reserve from prior contributions	0	3,738,110
Use of Reserve ⁽³⁾	270,560	350,000
Use of SCADA Reserve	0	64,750
Use of Surplus from past collections	0	1,051,830
Reimbursement from St. Clair Shores ⁽⁴⁾	710,000	0
Grants ⁽⁵⁾	47,009,450	0
Total	64,903,300	14,644,920

NOTES

1) Significantly higher interest rates.		
2) Remaining projects that were charged in prior years that should be completed in 23/24		
Chlorine storage tank relining	7,500	
Painting	50,000	
As needed Engineering	45,960	
Sluice and Dewatering Gates Rehab/Replace Project	3,931,180	
Flushing	3,758,950	
9 Mile Emergency Bypass Structural Rehab	881,420	
9 Mile Bypass Pipe Structural Repairs	50,000	
In System Storage	2,617,840	
East Building Server	30,000	
TOTAL	11,372,850	

3) Used for the Sluice and Dewatering Gate project.		
4) St. Clair Shores reimbursement for a water main project as part of the Canal Rehab Project.		
5) Electrical, Canal Rehab and ISS projects will be covered by Federal, State, and County ARPA funds.		
Canal Rehab	29,489,270	
Electrical Upgrade	15,369,930	
ISS	2,150,250	
TOTAL Projected for 23/24 Budget	47,009,450	

Canal Rehab	610,520	
Electrical Upgrade	170,700	
ISS	6,634,030	
TOTAL Projected 9/30/23	7,415,250	

EIGHT AND ONE-HALF MILE RELIEF
07/05/2023 - 08/08/2023

<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>		
8 1/2 Mile Relief	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	Anderson, Eckstein & Westrick	\$ 7,884.05	Invoice #144821 - 07.11.23	Chapaton Basin Gate Replacement - 06.05.23 - 06.30.23	\$ 35,916.20		
		Astorino	City of St. Clair Shores Treasurer	\$ 1,577.71	Invoice #23-400 - 07.05.23	Monthly Utilities - 03.15.23 - 06.15.23			
		Astorino	Colville Electric	\$ 683.85	Invoice #23393 - 07.30.23	Chapaton Storm Pump Inspection			
		Astorino	De-Cal Inc.	\$ 766.70	Invoice #WO9231436 - 07.14.23	AC Wall Unit Repair			
		Astorino	De-Cal Inc.	\$ 1,141.20	Invoice #WO90023105-2 - 07.12.23	2nd Quarter HVAC Preventative Maintenance			
		Astorino	De-Cal Inc.	\$ 1,061.20	Invoice #WO9231598 - 07.27.23	AC Repair - East Building			
		Astorino	DTE Energy	\$ 577.77	Invoice #23-420 - 06.30.23	Monthly Electric - 06.01.23 - 06.30.23			
		Astorino	DTE Energy	\$ 8,889.32	Invoice #23-435 - 07.19.23	Monthly Electric 06.08.23 - 07.10.23			
		Astorino	HESCO	\$ 1,458.65	Invoice #231649 - 07.21.23	Pressure Transducer			
		Astorino	JCI Jones Chemicals Inc	\$ 9,482.00	Invoice #918937 - 07.24.23	Hypochlorite Solution			
		Downing	Marino's Landscape	\$ 1,156.00	Invoice #22746 - 06.30.23	Lawn Care - June 2023			
		Astorino	NTH Consultants, Ltd	\$ 1,082.64	Invoice #633249 - 07.07.23	9 Mile Emergency Bypass Rehab - Design	\$ 98,303.53		
		Astorino	NTH Consultants, Ltd	\$ 8,544.25	Invoice #633250 - 07.07.23	2023 Interceptor Inspection Program - Design	\$ 39,026.47		
		Astorino	NTH Consultants Ltd.	\$ 14,113.29	Invoice #633519 - 08.04.23	2023 Interceptor Inspection Program CCA	\$ 24,913.18		
		Astorino	OHM Advisors	\$ 5,591.50	Invoice #65171 - 07.19.23	PS Ventilation Study	\$ 83,753.00		
		Astorino	Project Team	\$ 6,700.00	Invoice #10770 - 06.27.23	Canal Rehab/Chapaton Electrical - CCA Software			
		Astorino	Q-Mation	\$ 6,649.50	Invoice #105587 - 07.13.23	Wonderware Renewal - 10.01.23 - 09.30.24			
		Astorino	Swan Analytical Instruments	\$ 1,440.00	Invoice #CD10008242 - 06.30.23	TRC Testing Agents			
		Astorino	Tetra Tech, Inc.	\$ 43,307.50	Invoice #52091505 - 07.06.23	In-System Storage CCA 05.27.23 - 06.30.23	\$ 422,152.18		
		Astorino	Tetra Tech, Inc.	\$ 11,468.29	Invoice #52091516 - 07.06.23	Chapaton Electrical/Generator - Design / CCA	\$ 103,162.00		
		Astorino	W.F. Betz	\$ 1,455.00	Invoice #9307 - 07.25.23	Boat Launch Closed Signs			
		Astorino	Wade Trim	\$ 23,096.65	Invoice #2028115 - 08.03.23	Chapaton RTB Flushing Improvements - Design	\$ 247,253.35		
		Astorino	Wade Trim	\$ 28,130.97	Invoice #2028129 - 08.03.23	Chapaton RTB Canal Rehabilitation - CCA	\$ 1,988,667.27		
		Astorino	Weiss Construction	\$ 473,005.26	Invoice #WWS-2021-006 APP 15 - 06.23.23	In-System Storage through 06.23.23	\$ 5,121,774.34		
		Astorino	Weiss Construction	\$ 234,500.00	Invoice #WWS-2021-006 APP 16 - 07.21.23	In-System Storage App 16 through 07/21/23	\$ 4,887,274.34		
		Total				\$ 893,763.30			

Budget to Actual
8.5 Mile Relief
As of July 31, 2023 =83%

DESCRIPTION	2023		ACTUAL	REMAINING BUDGET	PCT UTILIZED
	FINAL BUDGET	ENCUMBERED			
REVENUE ACCOUNTS					
Interest Earned	20,000		216,556	(196,556)	1082.8%
Other Revenue	5,000		158,836	(153,836)	3176.7%
State Grant-Electrical and Canal Rehab	-		681,023	-	100.0%
8.5 O&M/Charge Required Revenue	5,003,220		5,003,220	-	100.0%
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%
Total Revenue Accounts	14,644,920	-	6,059,635	9,266,308	41.4%
EXPENSE ACCOUNTS					
Application/Permit Fee	6,000		6,000	-	100.0%
Dues, Training, Conf, Subs.	17,010		1,590	15,420	9.3%
Engineering					
Sluice & Dewatering Gates Rehab/Replacement Project	1,974,340		23,561	1,950,779	1.2%
Canal Rehab Design	320,000		274,029	45,971	85.6%
8.5 Mile Inspection Project	500,000		28,536	471,464	5.7%
9 Mile Drain & Dewater Accusonic Flow Meters	350,000		247,208	102,792	70.6%
9 Mile Emergency Bypass Structural Rehab	3,000,000		18,784	2,981,216	0.6%
Flushing	1,895,660		1,534	1,894,126	0.1%
Chapaton Electrical Upgrades (ARPA Funds)	-		125,187	(125,187)	100.0%
Canal Rehab (ARPA Funds)	-		158,288	(158,288)	100.0%
As needed Engineering	39,110		27,511	11,599	70.3%
Sluice and Dewatering Gates Rehab/Replace Project (Was 9 Mile PS)	2,025,660		75,622	1,950,038	3.7%
Cost Share Army Corp Grant-Green Infrastructure Project	162,500			162,500	0.0%
9 Mile Bypass Pipe Structural Repairs-Construction/CA	308,010		1,491	306,519	0.5%
Chapaton Improvements-Office Space Downstairs	100,000		1,231	98,769	1.2%
In-System Storage-Construction Admin and Construction (County ARPA)	1,659,410		2,880,969	(1,221,559)	173.6%
New Equipment	3,000			3,000	0.0%
Office Supplies	500			500	0.0%
Operating Supplies	81,800		63,738	18,062	77.9%
Other Professional Svcs	42,500		32,964	9,536	77.6%
Personnel Services	1,135,790		614,093	521,697	54.1%
Repair & Maintenance	246,000		68,376	177,624	27.8%
Contribution to Reserve	288,240			288,240	0.0%
Scada System	199,390		41,514	157,876	20.8%
Utilities	290,000		245,060	44,940	84.5%
Total Expense Accounts	14,644,920	-	4,937,286	9,707,634	33.7%

	O&M Balance 9/30/2022	O&M	Total 7/31/2023
Cash - Operating	9,802,509	1,122,349	10,924,858
Accounts Receivable			0
Assets			0
Liabilities			0
Revenues		6,059,635	6,059,635
Expenditures		4,937,286	4,937,286
			0
Equity*	9,802,509		10,924,858

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		