

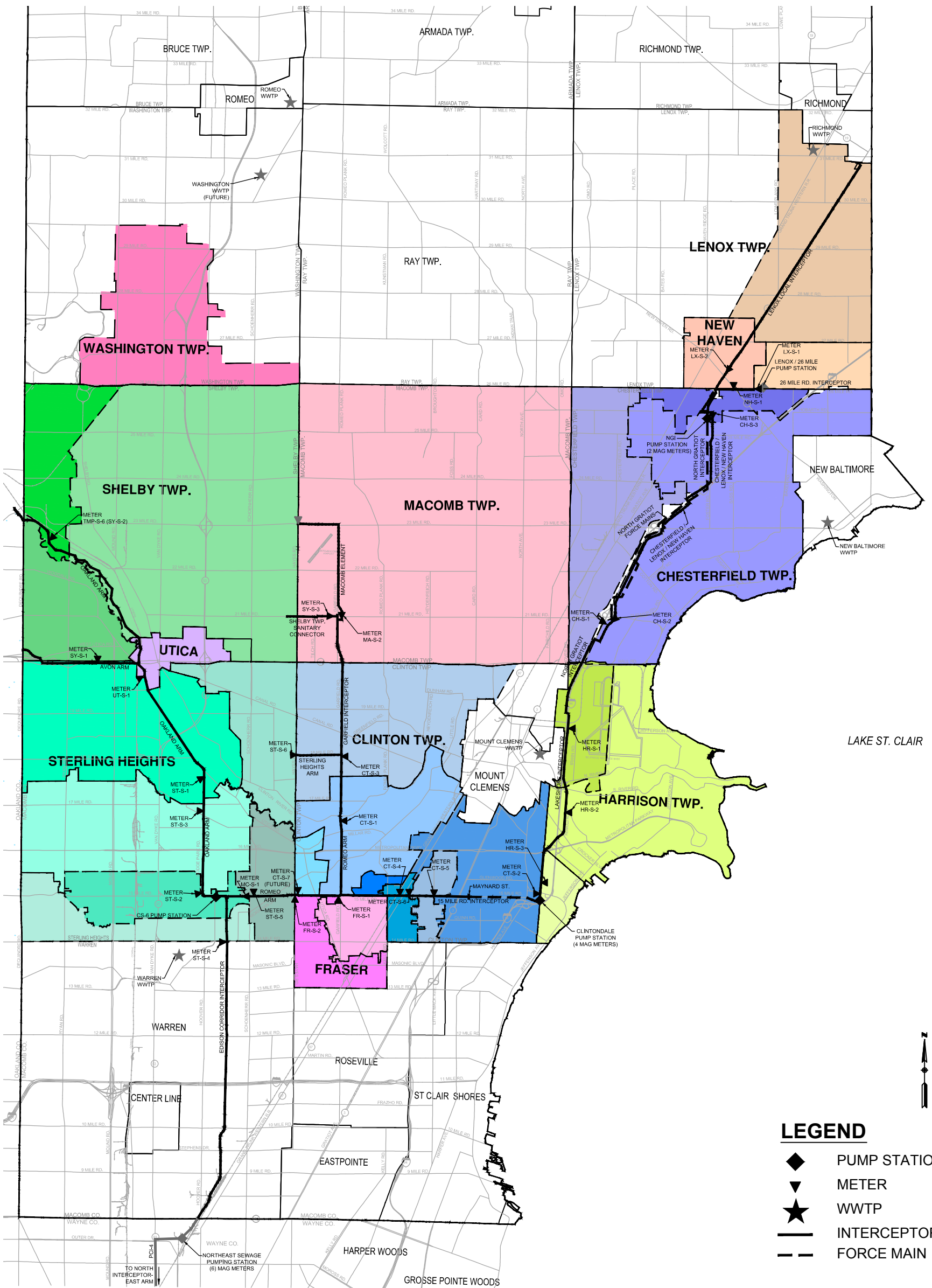
MACOMB INTERCEPTOR DRAIN
INTRA-COUNTY DRAINAGE BOARD
APRIL 12, 2021
10:45 A.M.
AGENDA

NOTE: THIS MEETING WILL BE HELD BY TELECONFERENCE

Call in Number: 1-409-420-6499
Access Code: 208 258 729

	Page
1. Call of meeting to order and roll call	
2. Approval of Agenda for April 12, 2021	
3. Approval of Minutes for March 8, 2021	3
4. Public Participation	
5. Project Updates – Stephen Downing	6
6. MIDD 2021 Report	12
7. Insurance Policy Renewal – Bruce Manning/Stephen Saph	20
Motion: To approve the Chapter 20 General Liability Insurance coverage renewal with Argonaut Insurance Company in the amount of \$197,864 (MIDD share \$185,797.22)	
8. Segment 6 – Construction Bid– Stephen Downing	25
Motion: To award the bid for the rehabilitation of Segment 6 to Ric-Man Construction for the bid amount of \$13,541,545.	
9. Proposed 2021/2022 MIDD Budget – Brian Baker	33
Motion: To approve the 2021/2022 Macomb Interceptor Drainage District (MIDD) budget and charges.	
10. Resolution Regarding Electronic and Telephonic Meeting Procedures – Brian Baker	59
11. Consideration for approval of invoices (see attached)	64
12. Financial Report – Bruce Manning	66
13. Adjourn	

MACOMB INTERCEPTOR DRAIN DRAINAGE DISTRICT



LEGEND

- ◆ PUMP STATION
- ▼ METER
- ★ WWTP
- INTERCEPTOR
- - - FORCE MAIN



Candice S. Miller

MACOMB COUNTY PUBLIC WORKS COMMISSIONER

frch

UPDATED: FEBRUARY 2017

An adjourned meeting of the Intra-County Drainage Board for the **MACOMB INTERCEPTOR DRAIN** was held via telephone conference per the State Public Act 254 of 2020 due to the COVID-19 pandemic, on March 8, 2021, at 11:37 A.M.

PRESENT: Candice S. Miller, Chair
Location: Clinton Township, MI

Don VanSyckel, Member
Location: Sterling Heights, MI

Bryan Santo, Member
Location: Mt. Clemens, MI

ALSO PRESENT: Barbara Zinner, Don Brown, Macomb County Board of Commissioners; Brian Baker, Chief Deputy, Karen Czernel, Deputy, Stephen Downing, Construction & Maintenance Manager, Bruce Manning, Financial Manager, Tom Stockel, Construction Engineer, Vince Astorino, Operations & Flow Manager, Kellie Kource, Drain Account Specialist, Emily Engelmann, Administrative Assistant, Norb Franz, Communications Manager, Macomb County Public Works

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

Adopted: YEAS: 3
NAYS: 0

Minutes of the meeting of February 8, 2021 were presented. A motion was made by Mr. Santo, supported by Mr. VanSyckel 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. Downing updated the board that this month we completed the upper temporary retention system and the lower system is now under construction for the Segment 5 rehab project with the project remaining on target. This month we will start the cleaning operations in the eastern section of the project near Fontana which is targeted to start on March 27th. The pipe will be cleaned and inspected for any further needed repairs.

The Phase 2 grouting project is moving along well. Once the area of Garfield is complete, we will move over to the Lakeshore to continue hitting all points of the interceptor. We are focusing on the interceptors as they affect all parts of the system and when not lined properly can cause major damage. We are also in the design stage for the odor & corrosion facilities.

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

Adopted: YEAS: 3
NAYS: 0

Mr. Astorino updated the board regarding the Segment 6 project focusing on the 15 Mile interceptor and Romeo Arm. There are 4 key components to this project which include lining the interceptor along the downstream of the interceptor, lining from control structure #3 to control structure #2 in the Romeo Arm, FRS 1 meter connection point will be spray lined, and a new air duct line which will handle a lot of the odor issues. A new control structure will be built on the east end of the 15 Mile interceptor. That will give us a point to install pipe going west and will install a new control structure to facilitate storing flow upstream from this point to complete the work in the Romeo Arm curve and manhole downstream. It will also give us another storage location. Manhole #1 off Garfield will be rehabbed and debris removal through the interceptor will happen during the project. The Romeo Arm curve itself will be slip lined consistent with Segment 5 rehab. The CS2 structure setup is not typical so we came up with a way to lower the pipe down vertically and spin it to put into the curve and complete the lining. We will use a liner used at our other facilities for the FRS 1 sewer that is holding up very well, will put on an epoxy liner that hydrogen sulfide will not attach to, along with as needed grouting through the area.

This project will be run through an owner's control insurance program like Segment 5 and funded through SRF funding. A construction bid award recommendation to the board is expected at the April board meeting.

A motion was made by Mr. VanSyckel, supported by Mr. Santo to receive and file the Segment 6 project update by Mr. Astorino.

Adopted: YEAS: 3
NAYS: 0

Mr. Baker updated the board that we have a resolution for the MIDD to finance Segment 6 through the State SRF program and to authorize our staff to close on financing. The resolution also provides a security that the MIDD communities are paying the debt cost and a secondary security through Macomb County to continue their full faith and credit pledge on the bond.

A motion was made by Mr. VanSyckel, supported by Mr. Santo to approve the resolution authorizing the issuance of State low interest financing bonds to fund the Segment 6 construction project.

Adopted: YEAS: 3
NAYS: 0

The Chair presented the invoices totaling \$5,735,476.84 to the board for review and approval.

A motion was made by Mr. VanSyckel, 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. Manning was made by Mr. Santo and supported by Mr. VanSyckel.

Adopted: YEAS: 3
NAYS: 0

There being no further business, it was moved by Mr. VanSyckel, supported by Mr. Santo, that the meeting of the Macomb Interceptor Drain Board be adjourned.

Adopted: YEAS: 3
NAYS: 0

The meeting was adjourned at 12:29 p.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 taking by the Intra-County Drainage Board for the Drainage District shown on the attached set of minutes, March 8, 2021 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: 3/8/21



Candice S. Miller

Public Works Commissioner
Macomb County

To: Macomb Interceptor Drain Drainage District Board Members

CC: File

From: Stephen Downing, Construction & Maintenance Manager

Date: April 7, 2021

Subject: Construction Projects Status Updates for April 2021 Board Meeting

The following provides a status update for construction work completed within the Macomb Interceptor Drain Drainage District for the previous month.

Segment 5 Rehabilitation

Contractor: Oscar Renda

Engineering Consultant: FK Engineering

Project Description:

The Segment 5 reach of the Romeo Arm Interceptor is approximately 8,300 linear feet; it runs along 15 Mile Road starting at the ITC Corridor and extends east to approximately Hayes Road. The first 7,000 linear feet is 11-foot diameter non-reinforced concrete pipe, and the next 1,300 linear feet is 8-foot diameter steel reinforced concrete pipe. The rehabilitation consists of debris removal, cleaning, and inspection of the pipe's invert. Next, HOBAS pipe will be used to slip line 7,000 linear feet of the 11-foot diameter sewer and the 1,300 linear feet section of 8-foot diameter pipe will be coated with a corrosion resistant geopolymer spray applied coating. To facilitate this work, a new control structure and access shaft is under construction in the ITC Corridor. The new control structure will provide the contractor access to the sewer to facilitate the work and will also serve as a dewatering pump station to draw down the upstream water level in the sewer.

Significant project tasks that have occurred over the past month:

1. The secant pile drilling activity continued this month with a total of 44 out of 60 piles installed at the time of this report.
2. Continued development, review, and approval of the required construction submittals.
3. Conducted a manned entry to assess the amount of debris present in the PCI-37 reach of the Interceptor.

Construction Costs:

	Date (if applicable)	
Original Contract Amount	9/21/2020	\$28,245,500.00
Total Spent to Date	4/1/2021	\$6,150,601.67
Remaining Budget	4/1/2021	\$22,656,898.33

Figure 1 – April 2021 Site View



Figure 3 – Drilling Rig Head



Figure 2 – Drilling Head

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

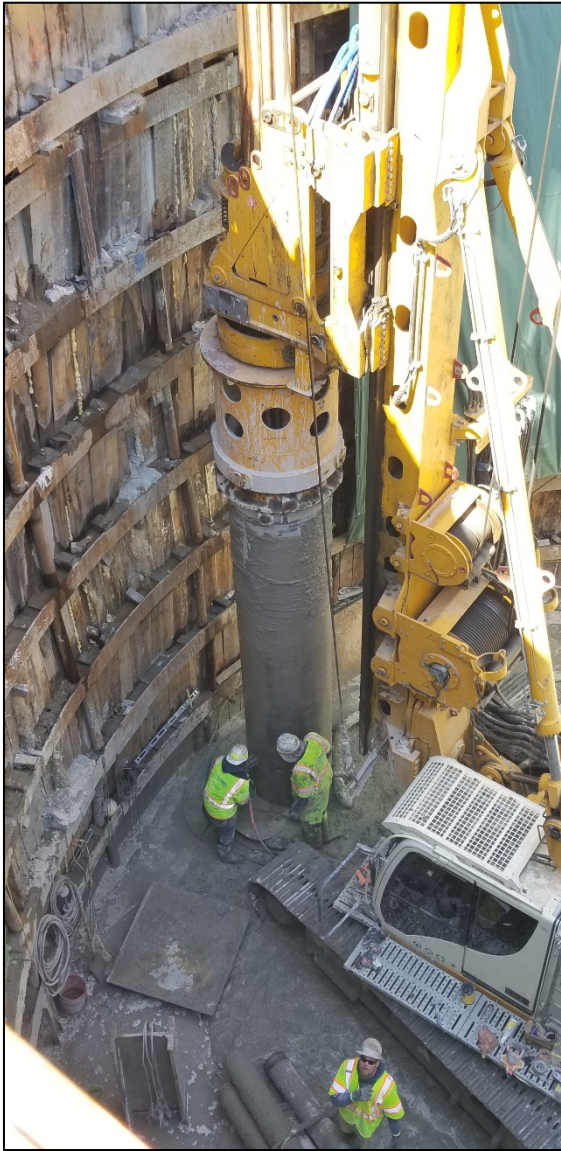


Figure 5 - Secant Pile Drilling Operation

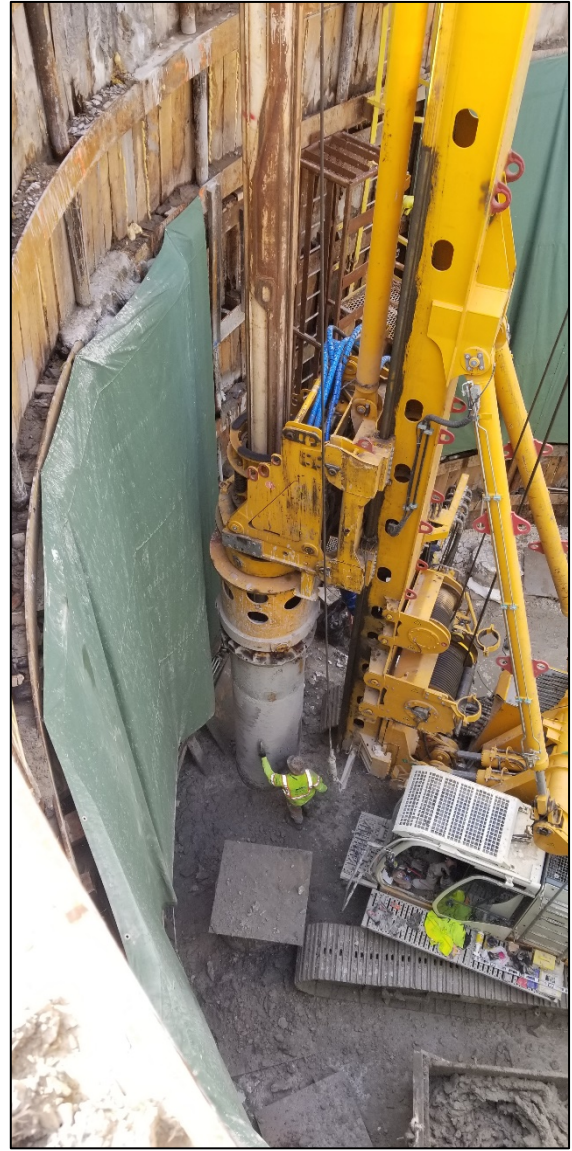


Figure 4 - Secant Pile Drilling Operation

Phase II Grouting

Contractor: Doetsch Environmental Services, Inc.

Engineering Consultant: AEW

Project Description:

The Phase II Grouting project was awarded to Doetsch Environmental during summer 2020. The work includes chemical grouting of the sewer and manholes where infiltration is present. The work is planned in all reaches of the system not included in the Segment 5 or portion of the Romeo Arm rehabilitated during the 2016 Interceptor Collapse. The main areas of work include the Romeo Arm along Garfield Road between 15 Mile and Clinton River Roads, the Garfield Interceptor between Clinton River and 21 Mile Roads, and the Lakeshore Interceptor between the Clintondale Pump Station at 15 Mile and Union Lake and Joy Boulevard in Harrison Township. The chemical grouting is aimed to stop all active infiltration within the system in advance of future rehabilitation and maintenance projects.

Significant project tasks that have occurred over the past month:

1. Completed grouting operations in the Garfield Interceptor at Garfield and Hall Road working south to address all noted and observed infiltration.
2. Starting work in the Garfield Interceptor at Canal Road on April 12, 2021.

Construction Costs:

	Date (if applicable)	
Original Contract Amount	6/24/2020	\$3,000,000.00
Total Spent to Date		\$1,048,975.72
Remaining Budget		\$1,951,024.28



Figure 1 - Grouting Equipment



Figure 2 - Ventilation Equipment





2021 Report to the MIDD Communities

Macomb Interceptor Drain Drainage District
Candice S. Miller, Macomb County Public Works Commissioner

Excavation underway at Segment 5 on 15 Mile Road

A construction firm continues to make progress as it digs a 65-foot-deep shaft along 15 Mile Road in the ITC Corridor, just west of Schoenherr Road in Sterling Heights, to reach the Macomb Interceptor that carries the waste flushed by more than 500,000 people.

That section of the Interceptor, west of the location of the Christmas Eve 2016 sinkhole in Fraser, is also known as Segment 5. It's the last major stretch of unreinforced, large diameter concrete pipe on 15 Mile that needs to be lined.

A dewatering pump station has been placed at the construction site as excavation continues. After reaching and entering the 11-foot diameter tunnel, the sewer will be cleaned and debris removed. It will be lined with glass fiber reinforced polymer pipe for 7,000 lineal feet.

Heading east from there, 1,300 lineal feet of 8-foot diameter

pipe will be spray-lined with a geopolymer coating.

"Making sure this part of the Interceptor is secure could even be more important than what we repaired in 2017 because Segment 5 runs under the ITC corridor where all these transmission towers are, and it runs under the Red Run Drain," Macomb County Public Works Commissioner Candice S. Miller said while monitoring the construction progress in person. "I promised we're never going to have another sinkhole in the Interceptor."

The project is expected to be completed in mid-2022. Little traffic disruption is expected.

The \$28 million project will not require an increase in sewer rates for the MIDD communities. It is being paid for in part with a \$12.5 million lawsuit settlement paid in November 2020 to the MIDD after the board chaired by Miller sued three contractors whose mistakes while working in the Oakland-Macomb Interceptor sewer to the west caused conditions that eventually led to the 2016 sinkhole. Approximately \$6



million of the Segment 5 project is being paid from reserves. The remainder will be financed via bonds with payments spread across a 20-year period.

The contract for the project was competitively bid and was awarded to Oscar Renda Contracting. The company's bid was \$7.7 million less than the next-lowest bid.

This annual report of the Macomb Interceptor Drainage District is presented by Macomb County Public Works Commissioner Candice S. Miller, Chairman of the MIDD.

\$12.5M settlement received in sinkhole lawsuit

The insurance company for three contractors whose mistakes led to the Christmas Eve 2016 sinkhole on 15 Mile Road in Fraser has paid a \$12.5 million settlement to the MIDD.

Terms of the settlement were announced in late September 2020 following approval by the MIDD board. It's the largest settlement that a Macomb County government body has ever obtained. Some outside observers had said the MIDD wouldn't collect anything.

The sinkhole – about 50 feet wide, 260 feet long and 65 feet deep (approximately the size of a football field) occurred on 15 Mile near Eberlein Drive, between Utica Road and Hayes Road, on Dec. 24, 2016. Twenty-three homes were evacuated. Three houses were condemned, including two that were eventually demolished. An emergency sewage bypass system was installed.

In the MIDD

The MIDD communities are: Fraser, New Haven, Sterling Heights, Utica and Chesterfield, Clinton, Harrison, Lenox, Macomb, Shelby and Washington townships.

Continued on next page

Sinkhole lawsuit settlement (continued)

Experts hired by the MIDD board analyzed sewer flow data and determined flow release protocols weren't followed multiple times during sewer rehab work in the Oakland-Macomb Interceptor (OMID) sewer system to the west. In one particular instance in May 2014, sewage that should have been released back into the sewer over a period of two to three hours, was fully released into the massive pipe in a total of seven minutes. That created a tsunami of sewage flow, known as a "water hammer," that lifted a concrete manhole structure near Eberlein and opened a crack in the pipe. The crack allowed silty sand to seep into the pipe and over 2 ½ years created a void, leading to the ultimate collapse of the

sewer. "People told me it would take three years and cost \$150 million. We got it completed in less than 12 months, for \$75 million and without a single safety incident," Miller said.

The MIDD board filed an insurance claim against the OMIDD board and ultimately sued the three contractors in April 2019. The settlement payment was made by Illinois National Insurance Company, a member of AIG.



The settlement eliminated the risk of potential statute of limitation challenges, plus staff time and ongoing legal costs that would have reached into the millions. Furthermore, it allows the MIDD to continue to invest in aging infrastructure.

Drop shaft rehab prevents major problems

Six drop shafts around Macomb County are nearing completion for rehabilitation repairs to prevent the failure of sewer pipes.

Inside sewers, hydrogen sulfide gas corrodes the concrete, which can lead to exposure of steel reinforcement and weaken the structural integrity of a pipe. Left unmaintained, the pipes would collapse.

In the rehab process, deep concrete loss is patched and then sprayed with a cement-and-plastics mixture. The spray liner adheres to the pipe very well, providing a corrosive-resistant barrier.

We also are exploring options to reduce the amount of hydrogen sulfide generated within select sites.



A before-and-after look at a drop shaft in Harrison Township that underwent spray lining to preserve the sewer.

Water bills assistance program rules changed

The Great Lakes Water Authority Board of Directors approved an exception to its Water Residential Assistance Program (WRAP) to assist participants financially impacted by the COVID-19 pandemic. The exception allowed those enrolled in WRAP who are unable to make partial monthly payments on time due to issues related to COVID-19, to remain in the program and maintain eligibility to continue receiving monthly bill credits and arrearage payments.

GLWA board members also approved changing the income eligibility under WRAP. Previously, households earning up to 150% percent of the federal poverty level could qualify. Now, households can earn up to twice the poverty level and still receive assistance in paying their water & sewer bills. For example, a family of four with up to \$52,400 in combined income now qualifies

to participate, an increase from the previous \$36,450 income level.

WRAP provides qualifying customers with help in paying current and past-due water bills. Eligible customers receive a \$25 monthly credit toward current water bills with any arrearage suspended for 12-24 months. Participants are also eligible to receive a bill credit of up to \$700 toward any past due amounts.

GLWA board members also voted recently to increase conservation and plumbing repair spending per eligible household from \$1,000 to an average of \$1,500 -- with a cap of \$2,000 -- per customer. Eligible rental households also are now able to take advantage of conservation and plumbing repairs offered through WRAP to help reduce their water consumption, if the same landlord agrees not to increase rent for 12 months. For more information, call 586-469-6999.



Grouting repairs continue

Grouting in the interceptors is continuing. As inspectors spot leakers and gushers, a contractor has used a chemical to plug those leaks to prevent the infiltration of groundwater and migration of surrounding soils.

As part of the Segment 5 pre-work, extensive grouting was performed beneath 15 Mile Road between the ITC corridor in Sterling Heights and Fontana Drive. Inspection and grouting there cost approximately \$3 million between August 2019 and April 2020.

Phase 2 grouting contracts were awarded in January 2020 to Doetsch Environmental Services at a cost not to exceed \$3 million, and with engineering firm Anderson, Eckstein & Westrick for \$438,000. Last summer, a crew sealed infiltration beneath northbound Garfield Road, near Clinton River Road, in Clinton Township. Grouting work is continuing in the remaining sections of the Garfield and Lakeshore interceptors.



OMIDD update

Sixty-five million dollars in bonds were sold at historically low interest rates by the Oakland-Macomb Interceptor Drain Drainage District to fund needed upgrades at two locations: the Northeast Sewage Pumping Station, located near Eight Mile Road and Van Dyke Avenue in Detroit and which handles sewage for 23 communities in Macomb and Oakland counties, and a 7-mile-long segment of pipe that is part of the interceptor sewer downstream.

The pipe, formally known as the Northeast Interceptor-East Arm, is up to 17 feet in diameter, more than 60 feet underground and carries all the sanitary sewage from the 23 communities that comprise OMIDD. The sewage is transported via the pump station and the pipe to the Great Lakes Water Authority's Water Resource Recovery Facility (WRRF) wastewater treatment plant in Detroit.

The bonds, to be paid off over a period of 20 years, were sold at a 1.7% interest rate due to the outstanding credit ratings of both Macomb and Oakland counties. Bond interest costs came in 21% lower than amounts previously budgeted, saving the 11 communities in the MIDD \$570,000.

The bonds are being paid for with \$8 million in annual savings achieved by Oakland and Macomb counties taking over ongoing work and improvements of the pumping station under an agreement negotiated with the Great Lakes Water Authority, which leases and operates that facility. In total, \$100 million worth of maintenance and upgrades will be performed and paid for by the savings from GLWA. A second bond sale to fund the remaining portion of the upgrades is expected in a couple of years. The work is scheduled to continue through early 2023.

Comprehensive sewer inspection program launched

The cost to conduct the most sweeping infrastructure inspection program in the history of the Macomb County Public Works Office will be much less than expected.

A \$421,254 contract to inspect 26 miles of sanitary sewers was awarded to Doetsch Environmental Services on Dec. 14, 2020. The sewer lines range in size from the giant 11-foot-diameter Macomb Interceptor, to some that are 12 inches across.

As part of the project, the Warren-based company also will inspect 363 manholes and a dozen drop shafts under MCPWO's jurisdiction. Considering the scope of the unprecedented program, officials initially estimated the project, expected to start in early 2021, would cost approximately \$2.2 million. Public Works officials carefully reviewed each element of the firm's bid and concluded it was thorough and with no hidden costs.

Reinforced concrete pipes will be inspected every six years, and non-reinforced concrete pipes will be checked every three years.



Sewage tested for COVID-19 in three communities

Automated sampling of sanitary sewage across Clinton Township continued into 2021 to determine the true extent of COVID-19 infection in the community.

The pulling of sewage samples, and subsequent laboratory tests to detect the level of the coronavirus, started as a pilot program in Clinton Township in summer 2020 with a \$1 million allocation from the federal CARES Act funding allocated to Macomb County by the federal government. The goal was to assist the Macomb County Health Department with contact tracing and other efforts to reduce the spread of the highly infectious virus.

At one point, analysis of lab results showed the level of COVID-19 in Clinton Township was approximately 5 times higher than what clinical

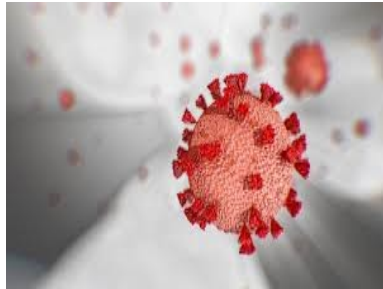
reporting data showed.

The pilot project became a leading edge program in Michigan, drawing interest from the Michigan Department of Environment, Great Lakes and Energy. EGLE and the Michigan Department of Health and Human Services offered a total of \$10 million in grants to get similar projects started across the state for testing through December 2020. MCPWO and its partners obtained a grant of more than \$400,000 to expand the testing to all of Sterling Heights and a portion of Lenox Township – including the Michigan Regional Correctional Facility prison on 26 Mile Road.

Each community could monitor their data via an online portal updated by contractor Aquasight. Testing in

Sterling Heights and Lenox Township wrapped up at the end of December.

“It shows that beyond our everyday efforts at the Public Works Office to protect the environment, it’s another way that we’re positioned to offer another critical component to detect other disease outbreaks,” Miller said.



To view board meeting agendas including archived agendas going back to 2017, visit publicworks.macombgov.org/PublicWorks-MeetingsAgenda

Projects in the works and on the horizon

Work has started on newer projects and others are on the horizon.

MIDD:

Segment 6: With Segment 5 construction well underway, the next rehabilitation project within the Macomb Interceptor is Segment 6. It will feature the structural lining of

approximately 2,100 feet of the 5-foot diameter pipe along 15 Mile, east from Garfield Road, and a new access shaft at the eastern end of the project. That will be followed by the lining of a

1,200-foot curved portion of the 11-foot diameter Romeo Arm Interceptor. There will also be an installation of an “air-jumper” to the

intersection of 15 Mile and Garfield which will be connected to the existing biofilter. This will help to improve the odor issues that have been prevalent in that area for years. The project was deemed necessary following in-system inspections. Construction is tentatively scheduled to begin in late summer 2021 and be completed by spring 2023. It will be funded using EGLE’s State Revolving Fund low-interest loan program. The proceeds from the settlement of the Fraser sinkhole lawsuit greatly reduced the amount of necessary funds budgeted for the Segment 5 project, allowing that money to be allocated instead to Segment 6.



Odor and corrosion control: To reduce the presence of hydrogen sulfide which causes corrosion of concrete pipe and also odors, vapor-phase treatment systems will be constructed at the corner of Garfield and 21 Mile roads and at the Clintondale Pump Station in Clinton Township. Additionally, a liquid-phase treatment system will be installed at the North Gratiot Interceptor Pump Station. Improvements to the Fraser

bio-filter system will include a humidification chamber and the installation of carbon media within the bio-filter beds which will improve the effectiveness of the facility. The design bid for the project was awarded in February 2021 and construction could begin by the end of 2021.



Meter facility rehabilitations: Meter facilities are the point of transition of sewage flow from the local systems into MIDD interceptors. Each provides the data required to allocate the billing apportionment for each of the MIDD communities. Two in Shelby Township

have reached the end of their usefulness and need to be rehabbed. That includes removal of old concrete to be replaced; cleaning and spray-lining of the influent and effluent connecting sewers; rehabbing manholes; improving access and safety features;

and replacing electrical systems. A third meter facility to undergo rehabilitation work serves Washington Township. The construction contract was awarded to Weiss Construction. The work is scheduled to begin this spring.

Projects (continued)

OMIDD:

In 2018, the Oakland-Macomb Interceptor Drain Drainage District reached agreement with the Great Lakes Water Authority to take over capital improvements and maintenance of the Northeast Sewage Pump Station (NESPS), located in Detroit on State Fair near Outer Drive, and a 7-mile stretch of the North Interceptor-East Arm sewer that carries OMIDD sewage flow only. The cost of the OMIDD construction activities will total approximately \$100 million, but there will be no net cost to the public or increase in rates for these projects due to the savings OMIDD achieved from GLWA.



Major overhaul continues at the NESPS: The facility was built by the Detroit Water and Sewerage Department in the late 1960s to provide sewer service for the growing population in Macomb and Oakland counties. The overhaul to mechanical and electrical equipment includes removal and replacement of four existing pumps, and the

installation of a new pump into an open slot. The OMIDD board awarded the construction contract to Walsh Construction. The massive project is slated to be completed in June 2023.

North Interceptor-East Arm sewer: Almost 1,600 lineal feet will be lined. Debris will be removed, an access shaft

will be constructed and grout will be used to stop leaks in the sewer. Construction is expected to begin in

early spring 2021 and take 18 months to complete.

Bio-Trickling Filter at the NESPS: Construction was completed in fall 2020. The facility, believed to be the first of its kind in Michigan, is known for its upright vessel measuring 38 feet high and 14 feet in diameter. The bio-filter uses a series of exhaust fans and ductwork to extract odors from the wet

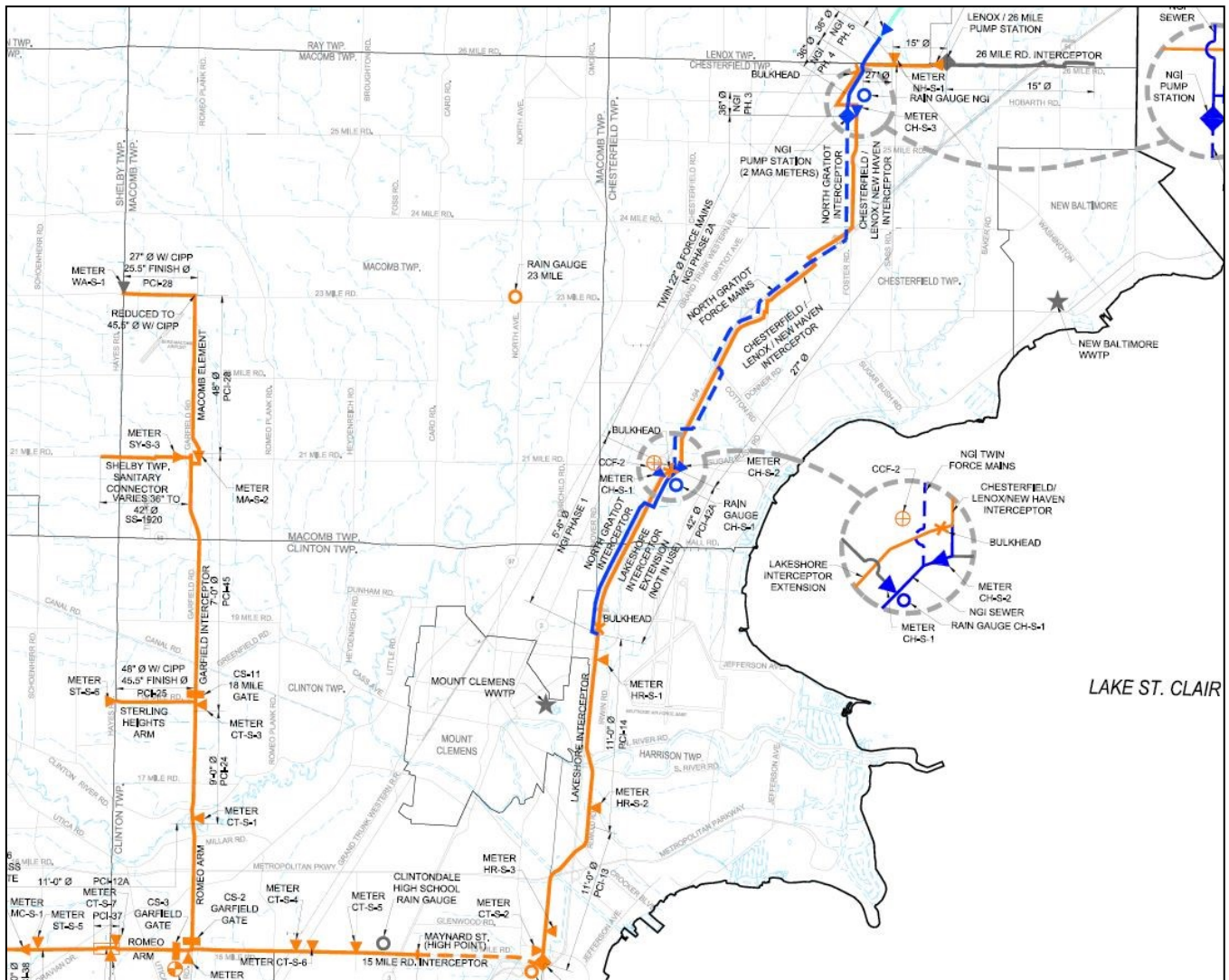
well and the discharge chamber. It also removes hydrogen sulfide vapors that corrode sewer pipes, wet wells and other concrete.





'We are investing in maintaining our interceptor so we never have another sinkhole like we did in 2017, one of the largest infrastructure disasters in our state's history' — Macomb County Public Works Commissioner Candice S. Miller, while monitoring construction of the access shaft of Segment 5, on 15 Mile Road in Sterling Heights.

Macomb Interceptor Drain Drainage District



Macomb County Public Works 24-hour hotline: 877-679-4337



NICKEL & SAPH, INC.

INSURANCE SINCE 1929

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MT. CLEMENS, MI 48043
(586) 463-4573 • (810) 765-8887
1-800-657-7373 • FAX: (586) 463-3135
www.nickelsaph.com

April 5, 2021

Mr. Brian Baker
Macomb County Intra-County Drains &
Drainage Districts
21777 Dunham Road
Clinton Twp., MI 48036

Dear Mr. Baker:

Please accept the following renewal proposal of certain liability coverages are have been secured for the Intra-County drains and drainage districts.

Carrier: Argonaut Insurance Company
A. M. Best Rating: A- XIV, Stable. Admitted by the State of Michigan.

General Liability

Aggregate Limit: \$2,000,000
Occurrence Limit: \$1,000,000
Personal and Advertising Injury: \$1,000,000
Products/Completed Operations Aggregate: \$2,000,000
Deductible per Occurrence: \$100,000

Policy terms include Blanket Additional Insured. Broadcasting, Publishing, and Telecasting offenses are covered under Personal Injury. The Pollution exclusion does not apply to: Hostile Fire, Emergency Operations, Mobile Equipment, Pesticides and/or Herbicides, Water Treatment, Above Ground Tanks, and Water and/or Sewer operations.

Automobile Liability

Occurrence Limit: \$1,000,000
Deductible: \$100,000

Coverage is afforded for non-owned and rented autos only. No aggregate limitation applies.

Public Officials' Liability

Aggregate Limit: \$2,000,000
Per Wrongful Act Limit: \$1,000,000
Deductible each Wrongful Act: \$100,000

Claims Made Policy Form
Prior Acts/Retroactive Date: April 26, 2021

Excess Liability

Each Occurrence or Wrongful Act:	\$10,000,000
Annual Aggregate:	\$10,000,000
Annual Premium:	\$192,691
Optional Terrorism Risk Insurance:	\$5,173
Total Annual Premium:	\$197,864

The expiring annual premium was \$194,471. The renewal offering has increased \$3,393 or 1.74%. Last year, Terrorism Risk Insurance was included (optional coverage). Premium is not subject to annual audit.

Afforded liability limits are separate from each other. Payment of claims for one line of coverage will not affect or reduce the limits dedicated to the remaining lines of coverage. Please refer to policy forms for terms, definitions, conditions, and exclusions.

The deductibles apply to both the payment of claim adjustment expenses and third-party damage payments. Once the deductible is exhausted, the specific limit is dedicated to the payment of third party damages alone; claim expenses are outside of the afforded limits. Argonaut requires the continued third-party administrator (TPA) relationship with the ASU Group or other approved TPA.

Argonaut has include their proprietary Water Plus 360 endorsed which adds the following coverage enhancements: Under General Liability: Pollution exceptions for water operations; removal of Inverse Condemnation exclusion; Insured contract definition adds sidetrack agreements; watercraft extended for non-owned to under 100 feet and owned up to 300 h.p; and dams are scheduled by endorsement. Under Public Officials': Removal of Inverse Condemnation exclusion and coverage added for Wrongful Acts related to the distribution, treatment, discharge, testing, monitoring, or extraction of water or wastewater.

In anticipation of the renewal this year, we approached the marketplace in an effort to obtain alternatives for the renewal. Enclosed, please find a summary of our efforts.

While we are recommending Argonaut as the renewal carrier for the upcoming year, Argonaut has made some changes to their offering: 1) In lieu of the single policy format affording the total \$11,000,000 limits of liability, Argonaut is now presenting a traditional underlying and excess policy format. No impact on the afforded coverages: same carriers (underlying and excess), same claims and underwriting staff, and same occurrence limit of liability - \$11,000,000. 2) In lieu of a \$250,000 retention applicable to covered claims, covered claims will now be subject to a \$100,000 deductible. 3) The Public Officials' liability coverage is now offered on a Claims Made policy form in lieu of an Occurrence form. A retroactive date of April 26, 2021 will apply to covered claims. 4) The excess liability policy will not afford excess automobile liability coverage; the proposed policy affords \$1,000,000 Hired & Non-owned Automobile Liability. The coverage is afforded by way of a Combined (Bodily Injury and Property Damage) Single Limit formant (as before). The afforded limit is provided per Occurrence with no aggregate restrictions (again, same as before). 5) The combined aggregate limit of

liability for covered General Liability and Public Officials' Liability claims is now \$11,000,000 in lieu of \$12,000,000.

In addition to securing the afforded liability coverages, we continue to monitor additions or improvements to the districts' physical assets. We have been advised that no measurable changes occurred over the past year. You will recall that all property insurance is secure under Macomb County's property insurance policy.

Please review this information and contact me with any questions or concerns. I plan to attend the meeting on Monday, April 12, 2021. Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read "Stephen R. Saph Jr.", written in a cursive style.

Stephen R. Saph Jr., LIC
Agent

Enclosure

2021 Marketing Efforts

Argonaut – presented a renewal proposal.
Chubb/ACE – declined
BRIT – declined
A.I.G. (American International Group) – declined
Glatfelter Public Practice (broker) – declined
Travelers Companies – declined
Intact (formerly One Beacon) – declined
Genesis – declined
Munich (AAIC) – declined
Berkley Insurance Co. – declined
Old Republic International – declined
Hudson Insurance – cannot provide requested limits of liability.
Liberty Mutual –
Houston Casualty Co. –
Allied Public Risk (broker) - declined
Markel - declined
Genesis - declined
Hallmark - declined

Stephen R. Saph, Jr.
Nickel & Saph, Inc. Insurance Agency
stephenjr@nickelsaph.com
586-463-4573
586-463-3135 – FAX
586-747-9315 – Cell
April 5, 2021

Chapter 20
Insurance Cost Breakdown
April 26, 2021 Renewal

DRAIN NAME	2021 PERCENT	PORTION OF INSURANCE
Eight Half Mile Relief	5.436%	\$ 10,756.03
Martin Sanitary Diversion	0.662%	\$ 1,310.75
MIDDD	93.901%	\$ 185,797.22

Insurance bill	\$ 197,864.00
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*** After an analysis of the 2020 expenses, other drain's portions were minimal and insignificant

MIDDD Costs	
Liability	\$ 185,797.22
Third-Party Administrator	\$ 1,500.00
Underground Infrastructure	<u>\$ 17,800.00</u>
MIDDD Total Cost	\$ 205,097.22



Candice S. Miller

Public Works Commissioner
Macomb County

To: Macomb Interceptor Drain Drainage District Board Members

CC: FILE

From: Stephen Downing, Construction & Maintenance Manager

Date: April 12, 2021

Subject: Segment 6 Rehabilitation Award Recommendation

The Macomb County Public Works Office (MCPWO) solicited bids on the Michigan Inter-governmental Trade Network (MITN) for the rehabilitation of the Segment 6 reach of interceptor along 15 Mile Road and Garfield. The rehabilitation work includes debris removal, 1200-feet of slip-lining of the 11-foot diameter interceptor under the intersection of 15 Mile and Garfield, slip-lining the 5-foot diameter interceptor along 15 Mile from Garfield to the east approximately 2200 feet, installation of a new access structure with a gate, installation of an air jumper to connect the 5-foot diameter sewer to the existing Bio-Filter and rehabilitation of CS-2, CS-3 and FR-S-1.

The Request for Bid (RFB) was issued on MITN from 2-8-21 to 3-25-21. A total of 102 vendors downloaded the project documents. A total of three Addendums were issued during the open bid period. On 3-25-21 bids were received from Ric-Man Construction Oscar Renda Contracting and L. D'Agostini & Sons. A summary of the bid results is shown in the table below. The design engineer, FK Engineering and their subconsultants, have reviewed each of the bids. The design team discussed the bid tabulation with the apparent low bidder, Ric-Man Construction, to verify the full scope of services was considered in the bid. FK Engineering has confirmed the bid is reasonable for the scope of services described in the construction drawings and specifications. The most recent Engineer's opinion of probable cost is \$21,509,000.

The MIDDD has secured a State Revolving Fund (SRF) loan for up to \$28,000,000 at an interest rate of 1.875% over 20 years. There will be a change order to FK Engineering to cover the cost for Construction Contact Administration (CCA) services presented at the May Board meeting. The design-engineering, and CCA services are being funded with capital funds included in the 2020-2021 and 2021-2022 budgets.

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

Description	Engineer's Opinion of Probable Cost	Ric-Man Construction	L. D'Agostini & Sons	Oscar Renda Contracting
Bid Items 1 through 4 – General items	\$3,114,000	\$678,000	\$964,642	\$550,000
Bid Items 5a through 5d – CS-13	\$3,600,000	\$2,674,000	\$3,461,577	\$2,350,000
Bid Items 6a & 6b – 15MI-MH-001	\$1,250,000	\$420,000	\$493,298	\$420,000
Bid Item 7 – Debris removal	\$1,300,000	\$1,380,000	\$1,254,000	\$180,000
Bid Items 8 through 10 – Host pipe surface prep and slip-lining	\$6,000,000	\$4,490,045	\$4,864,365	\$13,273,000
Bid Items 11 & 12 – Spray lining	\$2,250,000	\$1,205,400	\$1,372,337	\$1,380,000
Bid Item 13 – Foul Air Duct	\$1,500,000	\$1,300,000	\$756,363	\$1,250,000
Bid Item 14 – Flow control and bypass pumping	Added to bid after estimate development	\$353,000	\$54,928	\$200,000
Bid Item 15 – CS-13 electrical	Added to bid after estimate development	\$74,000	\$61,031	\$250,000
Contingency/Other Items	\$1,845,000	n/a	n/a	n/a
Allowance Items 1 through 7	\$650,000	\$467,100	\$586,460	\$429,000
TOTAL	\$21,509,000	\$13,541,545	\$14,561,094¹	\$21,132,000¹

¹ These numbers represent the sum of values as provided per bid item. Total base bids provided by contractor varied from this sum.

The action is that the Macomb Interceptor Drain Drainage District Board accept the bid and enter an agreement with Ric-Man Construction to rehabilitate the Segment 5 reach of interceptor for the bid amount of \$13,541,545.00.

Attachments: FK Engineering Bid Comparison Memo

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



Memorandum

TO: Stephen Downing, MCPWO **DATE:** April 6, 2021

FROM: N. Bassett, P.E., Z. Carr, P.E. **PROJECT NO.:** 20-058

CC: V. Astorino, S. Wagner – MCPWO; F. Klingler, P.E. – FKE; K. Ridgway – ASI, and C. Frayer – AEW

SUBJECT: MCPWO Segment 6 Rehabilitation – Contractor Bid Comparison

The following memorandum presents our comparison and assessment of the Contractor Bids received for Contract No. WWS-2021-002 on March 25, 2021 at 2:00pm.

Bids were received from three Contractors:

- Ric-Man Construction, Inc. (hardcopy, hand delivered)
- L. D'Agostini & Sons, Inc. (virtually followed by hard copy)
- Oscar Renda Contracting (virtually followed by hard copy)

The apparent low bidder is Ric-Man Construction at \$13,541,545.00. The attached table at the end of this memorandum provides the full bid tab for each Bidder along with our Engineer's Opinion of Probable Cost for comparison purposes.

Bid Tab Breakdown

On the following page is a condensed table of the submitted bid forms and Engineer's Opinion of Probable Cost with some items grouped for comparison. The groupings for the table are as follows:

- Bid Items 1 through 4 – General Items
 - Mobilization
 - Utility relocation/coordination
 - Traffic control
 - Site civil and site restoration work
- Bid Items 5a through 5d – Control Structure 13
 - Temporary Earth Retention System
 - Permanent control structure
 - Flow control gate
 - Groundwater dewatering
- Bid Items 6a and 6b – 15MI-MH-001 Reconstruction
 - Temporary Earth Retention System
 - New manhole structure
- Bid Item 7 – Removal and disposal of sludge, debris, and sediment
- Bid Items 8 through 10 – Host pipe surface preparation and slip-lining
- Bid Items 11 and 12 – Spray lining
- Bid Item 13 – Foul Air Duct

- Bid Item 14 – Flow control and bypass pumping
- Bid item 15 – Control Structure 13 electrical
- Contingency/other items (Engineer’s Opinion of Probable Cost Only)
- Allowance Items 1 through 7
 - Chemical grouting
 - Cement grouting outside existing host pipe
 - Cement packer installation
 - SCADA integration
 - Laydown/Easement Acquisition
 - Permit allowance
 - DTE allowance

Description	Engineer’s Opinion of Probable Cost	Ric-Man Construction	L. D’Agostini & Sons	Oscar Renda Contracting
Bid Items 1 through 4 – General items	\$3,114,000	\$678,000	\$964,642	\$550,000
Bid Items 5a through 5d – CS-13	\$3,600,000	\$2,674,000	\$3,461,577	\$2,350,000
Bid Items 6a & 6b – 15MI-MH-001	\$1,250,000	\$420,000	\$493,298	\$420,000
Bid Item 7 – Debris removal	\$1,300,000	\$1,380,000	\$1,254,000	\$180,000
Bid Items 8 through 10 – Host pipe surface prep and slip-lining	\$6,000,000	\$4,490,045	\$4,864,365	\$13,273,000
Bid Items 11 & 12 – Spray lining	\$2,250,000	\$1,205,400	\$1,372,337	\$1,380,000
Bid Item 13 – Foul Air Duct	\$1,500,000	\$1,300,000	\$756,363	\$1,250,000
Bid Item 14 – Flow control and bypass pumping	Added to bid after estimate development	\$353,000	\$54,928	\$200,000
Bid Item 15 – CS-13 electrical	Added to bid after estimate development	\$74,000	\$61,031	\$250,000
Contingency/Other Items	\$1,845,000	n/a	n/a	n/a
Allowance Items 1 through 7	\$650,000	\$467,100	\$586,460	\$429,000
TOTAL	\$21,509,000	\$13,541,545	\$14,561,094¹	\$21,132,000¹

¹ These numbers represent the sum of values as provided per bid item. Total base bids provided by contractor varied from this sum.

General Bid Comments

We offer the following general comments comparing the Contractor bids and identifying incomplete items from the Contractors' Bid packages:

Ric-Man Construction, Inc. (Ric-Man)

- Ric-Man was the apparent low bidder at \$13,541,545. This is \$7,967,455 lower than the Engineer's Opinion of Probable Cost.
- Bid Item 3 – Traffic control is about half of the next lowest bid.
- Bid Item 5a – CS-13 TERS is about \$1.0M higher than the next lowest bid, but about \$200,000 lower than the Engineer's estimate.
- Bid Item 5c – Flow control gate is about \$400,000 less than the next lowest bidder and \$220,000 less than the Engineer's estimate.
- Missing subcontractor Marra Services, Inc. OCIP paperwork – Form A, OCIP Acknowledgement form, Certificate of Insurance.
- Suppliers were not provided, though HydroGate (flow control gate supplier) is noted in their subcontractors form and bid values indicate they are using specified GFRPMP pipe.
- An EMR rating was provided for the past three years; however, these numbers are not certified. The project record will require this information.
- Good Faith Efforts provided but did not complete the worksheets for each discipline.

L. D'Agostini & Sons, Inc. (LDS)

- LDS had the second lowest bid at \$14,563,094.00. This is \$6,947,906 lower than the Engineer's Opinion of Probable Cost.
- Bid Item 5b – 15MI-MH-001 permanent structure is approximately \$1.3M higher than the other bids and \$820,000 higher than the Engineer's estimate.
- Bid Item 13 – FAD is nearly \$500,000 lower than the next lowest bid and \$750,000 lower than the Engineer's estimate.
- Suppliers were not provided, though Hobas (GFRPMP supplier) is noted in their subcontractors form. Did not provide list of proposed other suppliers.
- Did not provide evidence of authority to do business in Michigan (though they are a Michigan-based business).
- Good Faith Efforts provided but did not complete the worksheets for each discipline.
- 00 45 13 Article 5 – financial information not provided.
- 00 45 13 Article 9 – Cert. of Safety Performance / financial statements not provided.
- OCIP acknowledgement form included but no OCIP Form A or associated attachments for both themselves and subcontractors (Timmer Construction Co. and Nationwide Fence).
- Under Article 8, noted that they were a party to currently pending litigation or arbitration. No details provided in separate attachment.
- Value of base bid differs from separately derived summation of pay items by \$2,000.

Oscar Renda Contracting (ORC)

- ORC had the highest base bid at \$17,382,000 (corrected to \$21,132,000). This was \$4,127,000 (corrected to \$377,000) lower than the Engineer's Opinion of Probable Cost.
- Bid Item 4 – Site Civil and Site Restoration work is about \$250,000 less than the other bidders and about \$500,000 less than the Engineer's estimate.
- Bid Item 5c – Flow control gate is more than \$300,000 higher than the next highest bid and \$500,000 higher than the Engineer's estimate.
- Bid Item 7 – Debris removal is more than \$1M lower than the next lowest bid and the Engineer's estimate.
- Bid Item 9 – 15MI slip-lining is more than \$4.5M higher than the next highest bid and \$4.4M higher than the Engineer's estimate.
- Bid Item 10 – Romeo Arm Curve slip-lining is more than \$3.8M higher than the next highest bid and \$3.25M higher than the Engineer's estimate.
- No OCIP paperwork (Form A, OCIP Acknowledgement form, Certificate of Insurance, General Liability) for both themselves and subcontractors.
- Under Article 8, in litigation with the City of Corpus Christi for previous work (no other info provided).
- Value of base bid differs from separately derived summation of pay items by \$3,375,000.

Tentative Award Recommendation

Based on a review of the bids provided, we have the following comments regarding the lowest bidder, Ric-Man Construction. In general, significantly lower bid item values compared to Engineer's Opinion of Probable Cost include:

- Traffic control (Item 3) Bid Item 3 – Traffic control is around 10% of the Engineer's Opinion of Probable Cost (Estimate was \$1M) and half of other bids.
- 15MI-MH-001 TERS (Item 6a) is 73% lower than the Engineer's Opinion of Probable Cost, however, the bid value is in line with one of the other bidders.
- Flow control gate (Item 5c) is 44% less than the Engineer's Opinion of Probable Cost and lower than the other bids.
- Romeo Arm slip-lining (Item 10) is \$27% less than the Engineer's Opinion of Probable Cost (about \$1M lower); however, their bid is in line with one of the other bidders.
- Manhole and control structure spray lining (Item 11) is less than half of the Engineer's Opinion of Probable Cost, though it is generally in-line with the other bids.

Though this bid is overall substantially lower than the Engineer's Opinion of Probable Cost, it is within 10% of the next lowest bidder. In general, we find the lowest bidder's proposal to be responsive and complete. Therefore, we recommend Ric-Man Construction, Inc. as Contractor for the MCPWO Segment 6 Rehabilitation project. This award is contingent upon successful approval through EGLE regarding the SRF program requirements and satisfying the OCIP requirements.

WWS-2021-002														Average Bid Amount
Unit Price Bids														
			Engineer's Opinion of Probable Cost	Ric-Man			L. D'Agostini & Sons, Inc.			Oscar Renda Contracting				
	Unit	Estimated Quantity		Unit Bid Price	Bid Amount	Difference from Engineer's OPC	Unit Bid Price	Bid Amount	Difference from Engineer's OPC	Unit Bid Price	Bid Amount	Difference from Engineer's OPC		
1	Mobilization / Demobilization (5%)	LS	1	\$1,214,000		\$500,000	(\$714,000)		\$692,093	(\$521,907)		\$850,000	(\$364,000)	\$680,698
2	Utility Relocation / Coordination	LS	1	\$150,000	\$73,000	\$73,000	(\$77,000)	\$174,643	\$174,643	\$24,643	\$100,000	\$100,000	(\$50,000)	\$115,881
3	Traffic Control	LS	1	\$1,000,000	\$105,000	\$105,000	(\$895,000)	\$233,865	\$233,865	(\$766,135)	\$200,000	\$200,000	(\$800,000)	\$179,622
4	Site Civil and Site Restoration Work	LS	1	\$750,000	\$500,000	\$500,000	(\$250,000)	\$556,134	\$556,134	(\$193,866)	\$250,000	\$250,000	(\$500,000)	\$435,378
Item 1-4 Subtotal				\$3,114,000		\$678,000	(\$2,436,000)		\$964,642	(\$2,149,359)		\$550,000	(\$2,564,000)	\$730,881
5	Control Structure 13 (CS-13)													
5a	Temporary Earth Retention System	LS	1	\$2,000,000	\$1,800,000	\$1,800,000	(\$200,000)	\$807,719	\$807,719	(\$1,192,281)	\$750,000	\$750,000	(\$1,250,000)	\$1,119,240
5b	Permanent Control Structure	LS	1	\$1,000,000	\$550,000	\$550,000	(\$450,000)	\$1,826,909	\$1,826,909	\$826,909	\$500,000	\$500,000	(\$500,000)	\$958,970
5c	Flow Control Gate	LS	1	\$500,000	\$280,000	\$280,000	(\$220,000)	\$674,884	\$674,884	\$174,884	\$1,000,000	\$1,000,000	\$500,000	\$651,628
5d	Groundwater Dewatering	LS	1	\$100,000	\$44,000	\$44,000	(\$56,000)	\$152,065	\$152,065	\$52,065	\$100,000	\$100,000	\$0	\$98,688
CS-13 Subtotal				\$3,600,000		\$2,674,000	(\$926,000)		\$3,461,577	(\$138,423)		\$2,350,000	(\$1,250,000)	\$2,828,526
6	15 Mile Interceptor 15MI-MH-001 Reconstruction													
6a	Temporary Earth Retention System	LS	1	\$1,000,000	\$275,000	\$275,000	(\$725,000)	\$378,709	\$378,709	(\$621,291)	\$270,000	\$270,000	(\$730,000)	\$307,903
6b	New Manhole (structure for 15MI-MH-001)	LS	1	\$250,000	\$145,000	\$145,000	(\$105,000)	\$114,589	\$114,589	(\$135,411)	\$150,000	\$150,000	(\$100,000)	\$136,530
MH-001 Subtotal				\$1,250,000		\$420,000	(\$830,000)		\$493,298	(\$756,702)		\$420,000	(\$830,000)	\$444,433
7	Removal and Disposal of Sludge, Debris, and Sediments	TON	1200	\$1,300,000	\$1,150	\$1,380,000	\$80,000	\$1,045	\$1,254,000	(\$46,000)	\$150	\$180,000	(\$1,120,000)	\$938,000
8	Mile Interceptor Surface Preparation	LS	1	\$500,000	\$330,000	\$330,000	(\$170,000)	\$364,173	\$364,173	(\$135,827)	\$100,000	\$100,000	(\$400,000)	\$264,724
9	15 Mile Interceptor MH-001 to CS-13 Slip-Lining with GFRPMP	LF	2141	\$2,000,000	\$745	\$1,595,045	(\$404,955)	\$762	\$1,631,442	(\$368,558)	\$3,000	\$6,423,000	\$4,423,000	\$3,216,496
10	Romeo Arm Curve Slip-Lining with GFRPMP	LF	1350	\$3,500,000	\$1,900	\$2,565,000	(\$935,000)	\$2,125	\$2,868,750	(\$631,250)	\$5,000	\$6,750,000	\$3,250,000	\$4,061,250
11	Manhole and Control Structure Spray Lining	LS	1	\$2,000,000	\$790,000	\$790,000	(\$1,210,000)	\$989,177	\$989,177	(\$1,010,823)	\$760,000	\$760,000	(\$1,240,000)	\$846,392
12	Epoxy Spray Lining FR-S-1 Sewer Connection	LF	310	\$250,000	\$1,340	\$415,400	\$165,400	\$1,236	\$383,160	\$133,160	\$2,000	\$620,000	\$370,000	\$472,853
13	Foul Air Duct (FAD)	LS	1	\$1,500,000	\$1,300,000	\$1,300,000	(\$200,000)	\$756,363	\$756,363	(\$743,637)	\$1,250,000	\$1,250,000	(\$250,000)	\$1,102,121
14	Flow Control and Bypass Pumping	LS	1		\$353,000	\$353,000	\$353,000	\$54,928	\$54,928	\$54,928	\$200,000	\$200,000	\$200,000	\$202,643
15	CS-13 Electrical	LS	1		\$74,000	\$74,000	\$74,000	\$61,031	\$61,031	\$61,031	\$250,000	\$250,000	\$250,000	\$128,344
Miscellaneous Items				\$1,845,000		N/A			N/A			N/A		
Unit Price Subtotal				\$20,859,000		\$13,074,445	(\$7,784,555)		\$13,976,634 (1)	(\$6,882,366)		\$16,953,300 (1)	(\$3,905,700)	\$14,668,126

(1) Values do not reflect summation of individual bid items

Allowance Items														Average Bid Amount
				Ric-Man			L. D'Agostini & Sons, Inc.			Oscar Renda Contracting				
	Unit	Estimated Quantity	Engineer's Opinion of Probable Cost	Unit Bid Price	Bid Amount	Difference from Engineer's OPC	Unit Bid Price	Bid Amount	Difference from Engineer's OPC	Unit Bid Price	Bid Amount	Difference from Engineer's OPC		
1	Chemical Grouting	GAL	500	50,000	\$100	\$50,000	\$0	\$200	\$100,000	\$50,000	\$100	\$50,000	\$0	\$66,667
2	Cement Grouting Outside Existing Host Pipe	CFT	500	100,000	\$224	\$112,000	\$12,000	\$359	\$179,500	\$79,500	\$170	\$85,000	(\$15,000)	\$125,500
3	Cement Packer Installation	EA	30	25,000	\$670	\$20,100	(\$4,900)	\$732	\$21,960	(\$3,040)	\$300	\$9,000	(\$16,000)	\$17,020
4	SCADA Integration (Motor City Electric Technologies)	LS	1	100,000	\$35,000	\$35,000	(\$65,000)	\$35,000	\$35,000	(\$65,000)	\$35,000	\$35,000	(\$65,000)	\$35,000
5	Laydown / Easement Acquisition	SF	200000	300,000	\$1	\$100,000	(\$200,000)	\$1	\$100,000	(\$200,000)	\$1	\$100,000	(\$200,000)	\$100,000
6	Permit Allowance	LS	100000	75,000	\$1	\$100,000	\$25,000	\$1	\$100,000	\$25,000	\$1	\$100,000	\$25,000	\$100,000
7	DTE Allowance	LS	1		\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Allowance Subtotal				650,000		\$467,100	(\$182,900)		\$586,460	(\$63,540)		\$429,000	(\$221,000)	\$494,187
Total Base Bid Price				21,509,000		\$13,541,545	(\$7,967,455)		\$14,563,094 (1)	(\$6,947,906)		\$17,382,000 (1)	(\$4,127,000)	\$15,162,213

(1) Values do not reflect summation of individual bid items

Macomb Interceptor Drain Drainage District

FY 2022 Budget & Charges

Executive Summary

April 12, 2021

The proposed Macomb Interceptor Drainage District (MIDD) budget for the fiscal year beginning July 1, 2021 totals \$90.5 million. The budget increased only \$2.2 million or 2.5%. For the third consecutive year, average charge adjustments have remained less than 3%. The past three-year minor inflationary adjustments have been the lowest increases over the past 10 years and well below the average 15% annual increases experienced from 2010-2016.

The Great Lakes Water Authority (GLWA) and Oakland Macomb Interceptor District (OMID) have approved their budgets and charges which account for two-thirds of the total MIDD budget. Continued savings from the maintenance agreement with GLWA allows OMID to fund \$96 million of repairs to the Northeast Pump Station (NESPS) and Northeast Interceptor East Arm (NIEA). Debt payments on the 2019 one-time payment to the GLWA are scheduled to decline next year. The second and final \$12 million OMID bond debt to complete the repairs is budgeted.

The MIDD-only costs are one-third of the total budget. With several one-time project costs dropping off (Segment 5 for \$3 million and Phase II grouting for \$1.5 million), next year's budget provides funding toward several needed MIDD projects including:

- \$6.0 million for the construction of odor and corrosion control facilities.
- \$3.2 million for additional interceptor maintenance grouting repairs (Phase III).
- \$1.5 million for Segment 6 contract administration and inspection costs.

There is no increase in charges for Segment 5 and 6 SRF debt payments, as funds collected and dedicated will be sufficient next year as the \$12.5 million sinkhole lawsuit proceeds will reduce the amount of financing needed.

The average sewer charge adjustment to the 11 MIDD communities is 2.5%. There is a slight charge variability among the communities due to routine updated sewer flow volumes. The variability however has been reduced, as MIDD is shifting from a 5-year to a 7-year average flow volume to match that now used by GLWA. As both GLWA and OMID are moving to a 10-year average flow, we plan to add a year annually in order to match their sewer charge methodologies.

Attached is a more detailed budget and charge information which will explain the expenditures by cost center. Should you have any questions, please do not hesitate to contact the Macomb County Public Works Office.

**MIDD Budget
Total Sewer Charges**

Cost Category	2020/2021 Budget	2021/2022 Budget	Change	% Change	% of Total
GLWA-OMID	46,276,093	46,272,712	(3,381)	0.0%	51.1%
GLWA CSO Program	986,900	1,011,713	24,813	2.5%	1.1%
Total GLWA	47,262,993	47,284,425	21,432	0.0%	52.2%
OMID Capital	577,334	536,806	(40,528)	-7.0%	0.6%
OMID O&M	3,251,653	3,290,209	38,556	1.2%	3.6%
OMID New Debt (NESPS & NIEA)	0	262,850	262,850	100.0%	0.3%
OMID Existing Debt	9,367,521	8,328,958	(1,038,563)	-11.1%	9.2%
Total OMID	13,196,508	12,418,823	(777,685)	-5.9%	13.7%
Subtotal GLWA and OMID	60,459,501	59,703,248	(756,253)	-1.3%	66.0%
MIDD Existing Debt	14,377,834	14,346,755	(31,079)	-0.2%	15.8%
MIDDD New Debt (Seg 5 & 6 Included in rates)	0	0	0	0.0%	0.0%
MIDDD O&M/Charge Required Revenue	13,476,199	16,476,210	3,000,011	22.3%	18.2%
Total MIDDD	27,854,033	30,822,965	2,968,932	10.7%	34.0%
Total Budget	88,313,534	90,526,213	2,212,679	2.5%	100%

**MIDDD COMMUNITIES
PRIOR YEAR COMPARISON**

<u>Cost Category</u>	<u>2020/2021 Charge</u>	<u>2021/2022 Charge</u>	<u>Difference</u>	<u>% Change</u>	<u>Page #</u>
1) GLWA-OMID	46,276,093	46,272,712	(3,381)	0.0%	2
2) GLWA CSO Program	986,900	1,011,713	24,813	2.5%	2
3) <i>Sub Total GLWA</i>	47,262,993	47,284,425	21,432	0.0%	
4) OMID Capital Improvements	577,334	536,806	(40,528)	-7.0%	2
5) OMID O&M	3,251,653	3,290,209	38,556	1.2%	2
6) <i>Sub Total OMID</i>	3,828,987	3,827,015	(1,972)	-0.1%	
7) MIDDD O&M/Charge Required Revenue	13,548,089	16,476,210	2,928,121	21.6%	2,4
8) Use of Reserve ⁽¹⁾	(71,890)	0	71,890	-100.0%	
9) <i>Sub Total</i>	64,568,179	67,587,650	2,947,581	4.7%	
10) OMID Existing Debt	9,367,521	8,328,958	(1,038,563)	-11.1%	3
11) OMID New Debt (NESPS & NIEA)	0	262,850	262,850	100.0%	4
12) MIDDD Seg 5 & 6 Debt (Included in rates)	0	0	0	0.0%	3
13) MIDDD Existing Debt	14,377,834	14,346,755	(31,079)	-0.2%	3
14) <i>Sub Total Debt(See page 3)</i>	23,745,355	22,938,563	(806,792)	-3.4%	
TOTAL	88,313,534	90,526,213	2,212,679	2.5%	

<u>Communities</u>	<u>2020/2021 Charge</u>	<u>2021/2022 Charge</u>	<u>Difference</u>	<u>% Change</u>
Chesterfield Twp	6,997,945	7,235,290	237,345	3.4%
Clinton Twp	17,942,585	18,755,018	812,433	4.5%
Fraser	3,608,059	3,737,303	129,244	3.6%
Harrison Twp	5,558,569	5,647,905	89,336	1.6%
Lenox Twp	1,571,297	1,581,946	10,649	0.7%
Macomb Twp	11,657,829	12,149,270	491,441	4.2%
New Haven	1,083,318	1,111,950	28,632	2.6%
Shelby Twp	8,509,924	8,596,608	86,684	1.0%
Sterling Heights	27,441,916	27,687,687	245,771	0.9%
Utica	1,430,080	1,482,196	52,116	3.6%
Wash Twp	2,512,012	2,541,040	29,028	1.2%
TOTAL	88,313,534	90,526,213	2,212,679	2.5%

NOTE

1) Use of reserves as Sterling Heights is paying half of MIDDD costs to defend Sterling Heights sinkhole lawsuit.

**MACOMB INTERCEPTOR DRAIN DRAINAGE DISTRICT
2021-2022 SEWER CHARGES
Effective July 1, 2021**

	Total Annual	% Macomb County	Allocated to Macomb Cty	Monthly	Seven Year Rolling Average per actual consumption 7/1/2013-6/30/2020											
					Chesterfld Twp	Clinton Twp	Fraser	Harrison Twp	Lenox Twp	Macomb Twp	New Haven	Shelby Twp	Sterling Heights	Utica	Wash Twp	Total
OMIDD Charges to MIDD					7.3432%	21.3460%	4.1370%	6.4221%	1.0652%	13.9284%	0.8271%	9.7757%	30.7833%	1.6268%	2.7451%	100.00%
GLWA-OMID	68,038,100	68.01%	46,272,712	3,856,059	283,159	823,115	159,526	247,641	41,076	537,087	31,893	376,957	1,187,022	62,730	105,853	3,856,059
GLWA CSO Program	1,671,700	60.52%	1,011,713	84,309	6,191	17,997	3,488	5,414	898	11,743	697	8,242	25,953	1,372	2,314	84,309
<i>GLWA Sub Total</i>	69,709,800		47,284,425	3,940,368	289,350	841,112	163,014	253,055	41,974	548,830	32,590	385,199	1,212,975	64,102	108,167	3,940,368
OMID Capital Improvements	802,400	66.90%	536,806	44,734	3,284	9,548	1,851	2,873	477	6,231	370	4,373	13,771	728	1,228	44,734
OMID O&M	4,837,830	68.01%	3,290,209	274,184	20,135	58,527	11,343	17,608	2,921	38,189	2,268	26,803	84,403	4,460	7,527	274,184
<i>OMID Sub Total</i>	5,640,230		3,827,015	318,918	23,419	68,075	13,194	20,481	3,398	44,420	2,638	31,176	98,174	5,188	8,755	318,918
<i>Total GLWA and OMID Charges(see Exhibit A)</i>	75,350,030		51,111,440	4,259,286	312,769	909,187	176,208	273,536	45,372	593,250	35,228	416,375	1,311,149	69,290	116,922	4,259,286
Stormwater Pump Station O&M	91,000	100.00%	91,000	7,583	1,916	1,500	0	2,500	0	0	0	0	1,667	0	0	7,583
Segment 5 and Segment 6 SRF Debt(Pg 17)	1,000,000	100.00%	1,000,000	83,332	6,088	17,756	3,418	5,351	887	11,618	688	8,190	25,694	1,344	2,298	83,332
MIDD O&M/Charge Required Revenue(pg 4)	15,385,210	100.00%	15,385,210	1,282,101	94,148	273,678	53,041	82,338	13,657	178,576	10,604	125,334	394,673	20,857	35,195	1,282,101
<i>MIDD Sub Total</i>	16,476,210		16,476,210	1,373,016	102,152	292,934	56,459	90,189	14,544	190,194	11,292	133,524	422,034	22,201	37,493	1,373,016
Total	91,826,240		67,587,650	5,632,302	414,921	1,202,121	232,667	363,725	59,916	783,444	46,520	549,899	1,733,183	91,491	154,415	5,632,302
				O&M Total	4,979,055	14,425,455	2,792,007	4,364,703	718,994	9,401,330	558,242	6,598,790	20,798,198	1,097,894	1,852,982	67,587,650
				Debt Total	2,256,235	4,329,563	945,296	1,283,202	862,952	2,747,940	553,708	1,997,818	6,889,489	384,302	688,058	22,938,563
				Grand Total	7,235,290	18,755,018	3,737,303	5,647,905	1,581,946	12,149,270	1,111,950	8,596,608	27,687,687	1,482,196	2,541,040	90,526,213

**DEBT WORKSHEET
OMID and MIDD**

MIDD 2021-2022 DEBT WORKSHEET

Not Part of Monthly Invoice. Will be invoiced separately every 6 months
Does not include paying or calculation agent fees

MIDD DEBT SERVICE(FIXED BASED ON ORIGINAL FLOW)	Principal	Interest	Interest Rebate	Total	Chesterfld					Macomb		Shelby		St. Hgts	Utica	Wash Twp	Total
					Twp.	Clinton Twp	Fraser	Harr Twp	LnX Twp	Twp	New Haven	Twp					
OMI CWRP #5368-01 26,076,000	672,075	188,748	-	860,823	65,914	187,974	38,844	50,170	4,211	112,901	8,991	79,632	275,632	15,527	21,027	860,823	
OMI 2019(\$4,510,000) Refund of Series 2010B	187,975	36,968	-	224,943	17,225	49,120	10,151	13,110	1,100	29,502	2,349	20,809	72,025	4,057	5,495	224,943	
OMI 2014A	228,636	105,245	-	333,881	25,567	72,908	15,066	19,459	1,633	43,790	3,487	30,886	106,907	6,022	8,156	333,881	
OMI-2011 \$25,530,000 SRF 5368-02	584,142	213,409	-	797,551	78,663	224,332	46,357	59,874	5,025	0	10,730	0	328,945	18,530	25,095	797,551	
OMI-2013 SRF 5368-03	1,482,030	458,441	-	1,940,471	163,730	466,925	96,488	124,622	10,459	280,446	22,334	0	684,667	38,568	52,232	1,940,471	
OMI 2020 NESPS and NIEA(\$57,215,000)	1,187,967	1,603,670	-	2,791,637	152,772	601,432	115,738	176,584	26,996	400,892	23,265	282,534	884,189	46,894	80,341	2,791,637	
OMI 2019(\$5,205,000) Acquisition rights & contribution to GLWA	903,589	33,791	-	937,380	0	0	67,249	102,601	15,685	0	0	164,164	513,752	27,248	46,681	937,380	
OMI SAW Loan Project 2001-01	305,085	137,187	-	442,272	0	144,049	29,767	38,446	0	0	6,890	0	211,222	11,898	0	442,272	
OMI 2022 NESPS and NIEA(\$13,000,000)-PROJECTED	-	262,850	-	262,850	19,303	56,108	10,874	16,880	2,800	36,611	2,174	25,695	80,914	4,276	7,215	262,850	
Refunded Clintondale Pump Station Rehab	1,125,000	719,250	-	1,844,250	141,215	402,722	83,222	107,485	9,022	241,884	19,261	170,604	590,521	33,265	45,049	1,844,250	
NGI 2015 Refunding District Apportionment 37.9992%	370,492	212,401	-	582,893	44,631	127,284	26,303	33,972	2,852	76,450	6,088	53,921	186,640	10,514	14,238	582,893	
NGI Bond Series 2010 \$16.965 million District Appt 4.6529%	29,546	31,405	(12,169)	48,782	3,735	10,652	2,201	2,843	239	6,398	509	4,513	15,620	880	1,192	48,782	
MIDDD 2017A Sinkhole Bond	1,560,000	2,617,600	-	4,177,600	295,320	885,422	175,786	243,676	31,826	575,907	33,784	416,828	1,326,238	75,535	117,278	4,177,600	
MIDDD SRF 5624-01-Macomb Element	160,000	52,310	-	212,310	15,528	46,510	9,417	12,138	1,206	28,877	1,996	20,527	66,526	4,017	5,568	212,310	
MIDDD SRF 5659-03 Segment 5	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0	
MIDDD SRF Segment 6 Projected(5693-01)	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0	
MIDDD-2017 Refunding(2010) Appt 87.2903%	2,487,774	2,339,555	-	4,827,329	369,628	1,054,125	217,833	281,342	23,615	633,133	50,417	446,557	1,545,691	87,071	117,917	4,827,329	
Totals-Fixed	11,284,311	9,012,830	(12,169)	20,284,972	1,393,231	4,329,563	945,296	1,283,202	136,669	2,466,791	192,275	1,716,670	6,889,489	384,302	547,484	20,284,972	

INDIVIDUAL DEBT SERVICE(NEGOTIATED)	Principal	Interest	Interest Rebate	Total	Chesterfld					Macomb		Shelby		St. Hgts	Utica	Wash Twp	Total
					Twp.	Clinton Twp	Fraser	Harr Twp	LnX Twp	Twp	New Haven	Twp					
NGI 2015 Refunding Remaining Apportionment 62.0008%	604,508	346,561	-	951,069	606,371	-	-	-	222,345	-	122,353	-	-	-	-	-	951,069
NGI Bond Series 2010 Remaining Apportionment 95.3471%	605,454	643,557	(249,360)	999,651	256,633	-	-	-	503,938	-	239,080	-	-	-	-	-	999,651
MIDDD-2017 Refunding(2010) Remaining Appt 12.7097%	362,226	340,645	-	702,871	-	-	-	-	-	281,149	-	281,148	-	-	140,574	702,871	
Totals-Negotiated	1,572,188	1,330,763	(249,360)	2,653,591	863,004	0	0	0	726,283	281,149	361,433	281,148	0	0	140,574	2,653,591	
TOTAL by COMMUNITY					2,256,235	4,329,563	945,296	1,283,202	862,952	2,747,940	553,708	1,997,818	6,889,489	384,302	688,058	22,938,563	

1) Total OMID and MIDD

OMID	8,591,808
MIDD	14,346,755
	<u>22,938,563</u>

INFORMATIONAL ONLY-NOT INCLUDED IN MIDD BUDGET CALCULATION

	Principal	Interest	Interest Rebate	Total	Chesterfld					Macomb		Shelby		St. Hgts	Utica	Wash Twp	Total
					Twp.	Clinton Twp	Fraser	Harr Twp	LnX Twp	Twp	New Haven	Twp					
NGI Lenox Local Refunding	555,000	355,000	-	910,000	-	-	-	-	910,000	-	-	-	-	-	-	-	910,000
Refunded NGI 2006-Phase 5	115,000	82,250	-	197,250	-	-	-	-	132,308	-	64,942	-	-	-	-	197,250	
Totals-Informational	670,000	437,250	-	1,107,250	-	-	-	-	1,042,308	-	64,942	-	-	-	-	1,107,250	
Total									1,905,260	-	618,650	-	-	-	-	2,523,910	

**MIDDD
Operations Maintenance
Budget to Actual**

Description	Page #	Actual 2019/2020	Actual 1/31/2021	Projected 6/30/2021	Budget 2020/2021	Budget 2021/2022	Budget Change	% Change
EXPENSE								
Public Works Wastewater Personnel Cost	5	1,469,604	661,182	1,451,730	1,942,127	1,702,960	(239,167)	-12.3%
Office Operations/Insurance	6	334,854	234,883	344,260	309,925	332,250	22,325	7.2%
SCADA	7	86,548	29,207	77,890	268,889	280,490	11,601	4.3%
Sewer Systems Projects/Studies/Eng. Design	8	5,607,706	4,181,475	8,052,470	14,126,307	19,669,030	5,542,723	39.2%
Legal Services	9	273,114	31,399	75,000	250,000	150,000	(100,000)	-40.0%
Clintondale PS O&M	10	424,733	145,793	339,800	639,500	580,000	(59,500)	-9.3%
NGI O&M	11	92,149	50,381	92,390	230,000	225,000	(5,000)	-2.2%
Meters O&M	12	190,343	42,373	214,010	253,470	190,970	(62,500)	-24.7%
CS-3 O&M	13	6,640	0	15,000	226,000	216,000	(10,000)	-4.4%
Biofilter O&M	14	129,726	8,578	26,000	22,500	26,000	3,500	15.6%
Contribution Life Cycle Reserve	7,10,11,13,14	171,700	171,700	171,700	171,700	171,700	0	0.0%
Interceptor Inspections	15	61,555	0	200,000	1,900,000	1,738,450	(161,550)	-8.5%
Stormwater Pump Stations	16	65,800	136,646	234,250	234,250	91,000	(143,250)	-61.2%
Sewage Disposal Charges - Mt. Clemens		202,597	74,858	180,000	200,000	200,000	0	0.0%
Debt Service -SRF and Revenue Bonds	17	546,242	1,040,972	1,784,520	1,784,523	1,680,170	(104,353)	-5.8%
Total		9,663,311	6,809,447	13,259,020	22,559,191	27,254,020	4,694,829	20.8%

REVENUE								
Reimbursements	18	315,717	99,058	199,058	225,000	200,000	(25,000)	-11.1%
Detroit Bankruptcy Settlement	18	0	0	0	100,000	100,000	0	100.0%
Sinkhole/Other Settlement	18	529,626	12,500,000	12,500,000	0	0	0	0.0%
Washington Twp Meter Project	18	0	0	0	47,475	47,470	(5)	0.0%
Grants SRF Funding	18	422,001	359,318	359,318	0	0	0	0.0%
MIDDD O&M/Charge Required Revenue	2	10,688,006	7,684,697	13,548,089	13,548,089	16,476,210	2,928,121	21.6%
Carryforward	18	0	0	0	8,388,627	10,370,340	1,981,713	23.6%
Interest		297,151	28,249	60,000	250,000	60,000	(190,000)	-76.0%
Total		12,252,501	20,671,322	26,666,465	22,559,191	27,254,020	4,694,829	20.8%

Total Reserve⁽¹⁾ 24,073,074 32,804,442 15,946,143 10,724,482

Additional Notes

1) Broken out as follows:

SCADA Life Cycle	181,668		213,771	220,100	252,471
Clintondale PS Life Cycle	375,000		450,000	450,000	525,000
NGI Life Cycle	150,000		180,000	180,000	210,000
CS-3 Life Cycle	10,000		15,000	15,000	20,000
Biofilter Life Cycle	115,000		138,000	138,000	161,000
Life Cycle Sub-Total	831,668		996,771	1,003,100	1,168,471
Surplus MIDDD Acquisition(2010 Bond)-Use for Segment 5	407,123		-	408,000	-
Surplus 2016 sinkhole project(Used for Segment 5)	3,652,874		-	2,379,738	-
Emergency Reserve	7,402,957		8,937,331	12,155,305	9,556,011
Carryforward	11,778,452	see page 18	22,870,340	8,388,627	22,870,340
Spending of Carryforward				(8,388,627)	(22,870,340)
TOTAL RESERVES	24,073,074		32,804,442	15,946,143	10,724,482
Non Committed Reserve(Excludes life cycle and carryover)	11,462,954		8,937,331	14,943,043	9,556,011

**Public Works Wastewater Disposal Division
Personnel Cost**

Position	Number of Positions	BUDGET 2020/2021	BUDGET 2021/2022
Operation & Flow Manager	1	95,376	97,280
50% Charged to other drainage districts ⁽¹⁾			(48,640)
Construction and Maint Manager	1	95,376	97,280
Wastewater Engineer II/Construction Engineer	3	211,260	257,180
50% charged to other drainage districts (Wagner and Rozycki) ⁽¹⁾			(84,670)
Wastewater Field Supervisor	1	71,251	71,360
SCADA System Manager	1	81,071	80,480
SCADA Part Time	0.5	37,527	37,380
50% charged to other drainage districts(Welser and Betz)-SCADA ⁽¹⁾			(58,930)
Senior Asset Mgmt Technician-Hockman ⁽¹⁾	0.5	35,650	32,270
GIS Technician Senior-Contesti	1	71,300	72,760
Community Wastewater Services Manager-McKee	1	59,160	61,900
GIS Specialist/Engineering Tech-Vacant ⁽²⁾	0.5	26,436	26,190
Wastewater Field Operator	3	153,624	151,270
Drain Account Specialist	1	45,091	47,250
Incentive Pay, P.E.		2,400	2,400
1/3 Admin support from GF(Candice,Karen, Brian,Norb,Ken)	1.65	170,744	176,340
	16.15	1,156,266	1,019,100
Overtime		125,000	125,000
Standby Pay		22,000	22,000
Longevity		1,000	2,400
	Subtotal	148,000	149,400
Fringe Benefits		614,861	586,200
50% charged to other drainage districts ⁽¹⁾			(75,240)
Net Fringe Benefits	Subtotal	614,861	510,960
	Subtotal	1,919,127	1,679,460
Accounting Support Staff		23,000	23,500
		1,942,127	1,702,960

NOTES:

- 1) MIDDD is responsible for 50% of the cost. The remaining 50% is charged to the other drainage districts.
- 2) MIDDD is responsible for 50%, and the other 50% is shared with the general fund.

**MIDDD
Office Operations**

MIDDD OFFICE OPERATIONS	BUDGET 2020/2021	BUDGET 2021/2022	NOTES
Bank Fees	200	100	Wire fees for incoming deposits and payment of various invoices
Command Center	1,000	500	
Dues, Membership & Subscriptions	4,500	4,500	
Equipment Repair & Maintenance	10,000	10,000	
Equipment	7,650	37,650	Truck(\$30,000) needed due to staff turnover
Gasoline(County)	12,000	12,000	
Internal Service Cost(County)	25,000	25,000	Cross charge from county for telephone, car insurance, and building insurance
Insurance	210,000	210,000	Liability and underground coverage
Office Supplies	1,000	600	
Operating Supplies	2,000	2,000	
Parking & Mileage	75	0	
Personnel-Non WWS Employees	9,000	9,000	Charge for Chapaton personnel working on MIDDD assets
Postage & Shipping	500	100	
Training	6,000	5,000	
Uniforms	2,000	1,800	
Weather Radar	3,000	3,000	
Telephone	12,000	7,000	Had SCADA costs included in office cell phone budget
Vehicle Maintenance	4,000	4,000	
Total	309,925	332,250	

SCADA

SCADA	2020/2021 BUDGET	2021/2022 BUDGET
SCADA as needed	40,000	32,250
MIDDD/OMID battery replacements for 4 of the billing meter sites	1,700	620
MIDD Billing Meter Battery Replacements - 6 sites @ \$180	0	1,080
Spare parts for MIDDD control panels	10,000	7,500
VMWare Software Support Renewal ⁽¹⁾	0	5,130
Wonderware Software Support Renewals September 2021 ⁽²⁾	8,000	11,200
VEEAM support renewal (1 year extension) ⁽²⁾	430	1,540
Comcast Business Service ⁽²⁾	4,100	11,590
Cell modem service (Verizon) 6 units ⁽²⁾	2,400	8,640
Cell modem service (Sprint) 9 units ⁽²⁾	720	1,680
Dell Hardware Support Renewals ⁽³⁾	0	7,720
Total New Projects	67,350	88,950
Obsolete Wireless backhaul replacement links ⁽⁴⁾	21,500	21,500
3.6GHz Replacement Radios at MPSCS2705 ⁽⁵⁾	93,439	93,440
SolarWinds - Network Management Software ⁽⁶⁾	12,900	12,900
Fiber Optic Improvements ⁽⁷⁾	21,500	21,500
Security Servers replacement in MIDD ⁽⁸⁾	20,000	20,000
Firewall Hardware Design/Config ⁽⁹⁾	17,200	17,200
Training - Radios/Switches/VMWare ⁽¹⁰⁾	5,000	5,000
Security Camera Replacement at NGI and CPS	10,000	0
Total Carryover Projects	201,539	191,540
TOTAL ALL PROJECTS	268,889	280,490
Future costs of upgrade-Life Cycle ⁽¹¹⁾	38,700	38,700

NOTES

- 1) Renewed every three years. Last renewal was in 18/19
- 2) Prior budget amounts did not reflect OMID portion of the expense. The amount OMID reimburses us is shown on page 18
- 3) Two year warranty extension of Dell SCADA server components. The "lifecyle" equipment is still in good shape so it is more cost effective to extend the warranty rather than replacement.
This comes with 24x7 support and free component replacement in the event of hardware failure. After two years it will be determined if another warranty extension or equipment replacement is best.
- 4) Several critical wireless links utilize 10-year old technology and can no longer be purchased. Since they have reached the end of their useful life, they are in need of replacement
- 5) License for existing radios will be expiring.
- 6) We currently own the base version of this software. The software support has not been kept up and this is to upgrade the software to a business format. This upgraded platform will help streamline communications support for our staff.
- 7) This will be used to start setting up redundant links for our main SCADA servers. We have had a few issues since the County fiber was installed that when it goes down we completely lose backup abilities between the two servers.
- 8) Security camera servers have reached the end of their useful life and are in need of replacement
- 9) The existing firewalls are being dual purposed to act as a security appliance and as an OSPF router. The routing capabilities of the existing firewalls are very limited and often times will cause outages simply due to their poor routing capabilities.
- 10) Training for SCADA personnel as recommended by the Tetra Tech evaluation
- 11) Used for future server upgrades

SYSTEM PROJECTS/STUDIES/CONSULTING

Project #	System Projects/Studies/Consulting	2020/2021 BUDGET	2021/2022 BUDGET
	Replenish reserve from CPS refunding ⁽¹⁾	618,680	618,680
	FKE Rehab analysis phase 2 ⁽²⁾	84,000	0
	GLWA Assistance	40,000	40,000
	Repair work stemming from inspection repair program/Phase III Grouting ⁽³⁾	0	~ 3,200,000
	Segment 6 Construction Administration ⁽⁴⁾	0	~ 1,500,000
	Odor & Corrosion Construction ⁽⁵⁾	0	6,000,000
	General Construction/Engineering Contingency-All projects ⁽⁶⁾	0	~ 225,000
	Aquasight-On going improvements to program ⁽⁷⁾	0	~ 175,000
	Total New Projects	742,680	11,758,680
	As Needed Applied Science	25,000	25,000
	As Needed FK Engineering	75,000	60,000
	As Needed FTCH	75,000	50,000
	As Needed Metco	125,000	90,000
	As Needed Odor and Corrosion-Jacobs(Split with St Hts)	75,000	0
	As Needed Wade Trim	75,000	70,000
	Drop Shaft Repairs(MA-S-2),CT-S-2, HR-S-2,ST-S-5,UT-S-1) ⁽⁸⁾	0	0
	Level Sensors/Pressure/H2S-Meters ⁽⁹⁾	250,000	214,200
	Meter Dye Testing	100,000	38,600
	Odor and Control-Construction ⁽⁵⁾	1,000,000	1,000,000
	Odor and Corrosion Design ⁽¹⁰⁾	750,000	375,260
	Phase II Grouting ⁽¹¹⁾	3,500,000	2,000,000
	Phase III Grouting ⁽¹²⁾	325,000	325,000
	Seg 5 Construction/Construction Admin ⁽¹³⁾	2,974,557	0
	Segment 6 15 Mile Interceptor East of Garfield-Design ⁽¹⁴⁾	371,440	0
	Segment 6 Construction Administration ⁽¹⁵⁾	1,128,560	1,503,560
	SY-S-1, SY-S-2, & WA-S-1 Meter Const Admin/Rehab ⁽¹⁶⁾	1,134,070	1,804,590
	SY-S-1,SY-S-2, WA-S-1 Construction Admin ⁽¹⁷⁾	250,000	0
	Washington Township meter ⁽¹⁷⁾	500,000	0
	Wastewater Master Plan/Contract Capacity	400,000	330,050
	Data Review-Aquasight ⁽¹⁸⁾	250,000	24,090
	Total Carryover Projects	13,383,627	7,910,350
	TOTAL ALL PROJECTS	14,126,307	19,669,030

**SYSTEM PROJECTS/STUDIES/CONSULTING
NOTES**

- 1) Replacing the \$3,093,401 in reserves over five years.
- 2) FKE is performing a value engineering risk analysis of all of the remaining proposed SRF repair segments which include Segments 3,4,7,8,9, and 10. A similar analysis was performed on Segment 5.
- 3) Continued grouting within the Lakeshore, Romeo Arm, and Garfield Interceptors. We may also have some grouting work that will be required after the 2020 inspection is complete within the North Gratiot Interceptor, Macomb Element, Shelby Sanitary Connector, and Sterling Heights Arm.
- 4) Additional funds for Segment 6 construction administration that is not covered by SRF.
- 5) We already have \$1 million collected for this. There are 4 components to this project (NGI, CPS, Biofilter, and 21 Mile & Garfield). NGI will be paid for out of remaining Phase 2 funds. 21 Mile and Garfield is projected at \$2.5 million, Biofilter at \$2 million, and CPS \$2.5 million.
- 6) Contingency for possible overages for any of the many projects we have on going.
- 7) Additional improvements and maintenance of the new data review platform. Examples of these improvements include the ability to edit and provide rain gauge data and reports, data export improvements, improved analytics for data review, and improved alerting features for anomaly detection. This will also include a public web portal for rain gauge data.
- 8) Was projected to be completed in 19/20 but work will be finished in 20/21
- 9) Work is planning to be performed in 21/22. Currently the MIDD system only has one flow meter (MC-S-1) and therefore there is a lack of control from an operational stand point. This work would include installing seven flow meters for flow control throughout the system. These sites would also have air pressure and H2S sensors to help monitor corrosion and pressure concerns and would be connected to SCADA.
- 10) Design of the recommendations provided by the system-wide odor and corrosion evaluation. MIDD portion originally budgeted for \$750,000. See below for awarded amount.

Tetra Tech	574,756	MIDDD
Tetra Tech	<u>224,194</u>	NGI portion to be paid by NGI
TOTAL	<u>798,950</u>	

- 11) Savings from drop shaft project(note 8) was put toward the total project cost of \$4,000,000. Phase II grouting is the Romeo Arm (North of 15 Mile), Garfield Interceptor, and Lakeshore Interceptor
- 12) Collecting of funds for phase III of chemical grouting in the MID interceptors.
- 13) Funds to pay for the costs of Segment 5 repairs and engineering. Expected to be expensed by June 30, 2021.

	<u>COST</u>
Grouting	3,223,941
Engineering Design & CCA	3,302,907
Construction	<u>28,245,500</u>
TOTAL	<u>34,772,348</u>

FUNDING for SEG 5				
<u>Source</u>	<u>Grouting</u>	<u>Eng</u>	<u>Const</u>	<u>Total</u>
Settlement		1,676,847	10,823,153	12,500,000
Budget 2019		1,000,000		1,000,000
Budget 2020	3,223,941	626,060		3,850,001
Budget 2021			1,150,000	1,150,000
SRF			12,204,347	12,204,347
2017 Bond			3,660,000	3,660,000
2010 Bond			408,000	408,000
Total	3,223,941	3,302,907	28,245,500	34,772,348

- 14) Awarded to FKE
- 15) Construction Administration of Segment 6 (15 Mile Road East of Garfield).

2020 Budget	1,000,000
Design Award to FKE	<u>(371,440)</u>
NET	<u>628,560</u>
2021 Budget	875,000
Total for 2022 Budget	<u>1,503,560</u>

- 16) Design and construction cost for meter pits.

HRC	65,850	Design(complete)
Weiss	857,159	Construction
HRC	<u>149,200</u>	CA
TOTAL	<u>1,072,209</u>	

There are two components for this project that were not included and that is the drop shafts for SY-S-1 and SY-S-2. Those are being inspected soon and if it is found that they are in need of repair then we are going to need a change order. The contractor is already on site to get them taken care of. The savings of about \$730,000 will be put towards the possible change order relating to the drop shafts.

- 17) Combined these two projects with note 16
- 18) Project is two phases with annual payments. Used money designated from past budgets for McMars and Bluewater 20/21 total did not take into consideration amount collected for McMars and Bluewater. Estimating final payment will be in 21/22 fiscal year.

MIDDD LEGAL SERVICES

Legal Services	2020/2021 BUDGET	2021/2022 BUDGET
MIDDD Legal Services ⁽¹⁾	250,000	150,000
Total	250,000	150,000

NOTE:

- 1) Budget reduced to reflect continued legal savings.

**CLINTONDALE PUMP STATION
OPERATIONS and MAINTENANCE**

Project #	Clintondale Pump Station O & M	2020/2021 BUDGET	2021/2022 BUDGET
	O&M	125,000	115,000
	Spare Parts	45,000	25,000
	Pump Room Air Filter System	7,500	0
	Screening Room Trash Bin Repairs	5,000	0
	Wet Well Gate Valve Hand Actuator Tool	7,000	0
	Utilities	250,000	240,000
	Total New Projects	439,500	380,000
	Drain Valve For Force Main ⁽¹⁾	100,000	100,000
	Clintondale Generator Switchgear Replacement ⁽²⁾	100,000	100,000
	Total Carryover Projects	200,000	200,000
	TOTAL ALL PROJECTS	639,500	580,000
	Life Cycle/Future repairs ⁽³⁾	75,000	75,000

NOTES

- 1) Conversion of the manually operated drain valve to be operated within SCADA. The current setup creates a safety risk for MCPWO when opening manually due to the high levels of H2S that are created while opening.
- 2) Replace the switchgear for the generator.
- 3) Future replacement cost for impeller, pump shaft, discharge header, diffuser bowl, etc.

**NORTH GRATIOT INTERCEPTOR
OPERATIONS and MAINTENANCE**

Project #	NGI O & M	2020/2021 BUDGET	2021/2022 BUDGET
	O&M	50,000	47,000
	Spare Parts	5,000	3,000
	Pigging	25,000	25,000
	Utilities	20,000	20,000
	Total New Projects	100,000	95,000
	Move Hydrant connection closer ⁽¹⁾	10,000	10,000
	Replace pressure transducers-sensors ⁽²⁾	100,000	100,000
	Repave Parking Lot ⁽³⁾	20,000	20,000
	Total Carryover Projects	130,000	130,000
	TOTAL ALL PROJECTS	230,000	225,000
	Life Cycle/Future repairs ⁽⁴⁾	30,000	30,000

NOTES

- 1) Needed to improve pigging operation. Will have long term cost savings.
- 2) Sensors near end of useful life and the installation of new equipment.
- 3) Repave existing pavement areas. Starting to develop large cracks.
- 4) Future replacement cost for pumps, HVAC, force main, odor control

**METERS
OPERATION and MAINTENANCE**

Project #	METERS O & M	2020/2021 BUDGET	2021/2022 BUDGET
	Meter Maintenance (2nd yr of 3 yr contract)	163,470	163,470
	Utilities ⁽¹⁾	15,000	7,500
	As Needed	50,000	20,000
	Total New Projects	228,470	190,970
	Replace Underground Light Fixtures	25,000	0
	Total Carryover Projects	25,000	0
	TOTAL ALL PROJECTS	253,470	190,970

NOTE

1) Reduced due to lower actual costs

**CS-3
OPERATION and MAINTENANCE**

Project #	CS-3 O&M	2020/2021 BUDGET	2021/2022 BUDGET
	O&M	25,000	15,000
	Spare Parts	1,000	1,000
	Total	26,000	16,000
	Improvement to Hydraulic Cylinder ⁽¹⁾	200,000	200,000
	Total Carryover Projects	200,000	200,000
	TOTAL ALL PROJECTS	226,000	216,000
	Life Cycle	5,000	5,000

Notes:

This is a recent asset that was previously maintained by OMID.

During OMI construction Oakland County maintained this asset. With OMI construction completed, Macomb County will now handle O&M.

- 1) Replacing the hydraulic cylinders (end of useful life and safety concerns)

**BIOFILTER
OPERATIONS and MAINTENANCE**

Project #	BIOFILTER O & M	2020/2021 BUDGET	2021/2022 BUDGET
	O&M	20,000	15,000
	Spare Parts	1,000	1,000
	Water ⁽¹⁾	1,500	10,000
	Total New Projects	22,500	26,000
	Life Cycle ⁽²⁾	23,000	23,000

NOTES

- 1) Increased watering during summer months. The new media needs to use more water. Keeping media moist helps to minimize the odor.
- 2) Future replacement cost for media bed filter material, centrifugal fan, driveway, flow conditioner, etc.

**INTERCEPTOR
OPERATIONS and MAINTENANCE**

Project #	Interceptor	2020/2021 BUDGET	2021/2022 BUDGET
	Annual Inspection Program ⁽¹⁾	1,000,000	0
	Total New Projects	1,000,000	0
	As needed for 2022 inspections and to help fund 2023 inspections ⁽¹⁾	900,000	1,738,450
	Total Carryover Project	900,000	1,738,450
	TOTAL ALL PROJECTS	1,900,000	1,738,450

NOTES

1) See below for inspection schedule

2022

Nothing planned at this time outside of as-needed inspections and warranty inspections of dropshafts being fixed now.

2023

Romeo Arm, 15 Mile Interceptor, Lakeshore Interceptor, Garfield Interceptor

Drop Shafts

CT-S-7 (if not repaired or inspected during segment 5)

FR-S-2 (if not repaired or inspected during segment 5)

ST-S-3

CT-S-4

CT-S-5

CT-S-6

CH-S-1

CH-S-2

CH-S-3

LX-S-2

NH-S-1

HR-S-1

Project came in under budget. Remaining funds will be used for 2022 and 2023 inspections

Budget 2020	1,000,000
Budget 2021	1,000,000
Expenses 2020 for design-FTCH	(61,550)
Projected 2021 inspection expenses-Doetsch	(200,000)
TOTAL	1,738,450

Repairs found during inspections funded on page 8

**PUMP STATIONS-STORMWATER
OPERATIONS and MAINTENANCE**

Chapter	Community	Various Pump Stations	2020/2021 BUDGET	2021/2022 BUDGET
4	Chesterfield	Schmidt ⁽²⁾	40,000	23,000
4	Clinton Twp	Bridgewood ⁽²⁾	42,500	18,000
4	Sterling Heights	Hildebrandt ⁽²⁾	99,250	20,000
4	Harrison Twp	Murdock Ballard ^(1 & 2)	52,500	30,000
		Total	234,250	91,000

NOTES

- 1) \$10,000 in 20/21 budget for repairs to the impellers of the two large storm pumps.
Problems were identified by Kennedy.
\$10,000 for divers to inspect and repair the tide flex valves. This keeps the lake water out of the pump station.
- 2) If power fails we are unable to operate pumps. Trailer mounted generator was purchased in 2021 budget year so 2022 budget reflects only O&M costs.
Cost of generator was split evenly among the four pump stations.

**Revenue Bond
and
Projected SRF Calculation**

Payment Date	2020/2021 BUDGET	2021/2022 BUDGET
Fall ⁽¹⁾	201,472	195,610
Spring ⁽¹⁾	480,422	484,560
Projected Seg 5 SRF(5659-03) Debt ⁽²⁾	1,160,396	400,000
Projected Seg 6 SRF(5693-01) Debt ⁽³⁾	0	600,000
Less Cash on Hand Rev Bonds	(57,767)	0
Total	1,784,523	1,680,170

NOTE

- 1) SRF 5540-01 and 5487-01 are classified as revenue bonds so they must be included in the rate calculation on page 4, unlike the debt shown on page 3
 - 2) Segment 5 SRF loan closed in July of 2020. Will collect the funds over a 12 month period instead of the semi annual basis due to the uncertainty of the amount that will be drawn. Will be using all proceeds from lawsuit settlement and surplus sinkhole funds towards Segment 5 construction to lower the amount of SRF funds required. Included estimated new SRF amount (\$12,204,347). Principal payments begin in 22/23.
 - 3) Segment 6 SRF(\$26 million) is projected to close in Summer of 2021. Will collect the funds over a 12 month period instead of the semi annual basis due to the uncertainty of the amount that will be drawn. Principal payments estimated to start in 23/24.
- Segment 5 & 6 funds will be earmarked for debt payment, when debt is known in order to stabilize impact on charges. Need funds on hand to pay debt twice a year, as cash is only collected once a month. Segment 5 and 6 will be allocated using the below percentages. Based on average flow when each SRF project begins.

Fall 2021	
5540-01(Biofilter) Interest	15,600
5540-01(Biofilter) Principal	105,000
5487-01(Meter Rehab) Interest	75,010
Total	195,610
Spring 2022	
5540-01(Biofilter) Interest	14,550
5487-01(Meter Rehab) Principal	395,000
5487-01(Meter Rehab) Interest	75,010
Total	484,560

Debt #	Projected Debt Reserve 6/30/22			
	7/1/2021	Funded	Payment	6/30/2022
SRF 5540-01	27,366	195,610	(195,610)	27,366
SRF 5487-01	109,463	484,560	(484,560)	109,463
SRF 5659-03	1,144,942	400,000	(100,000)	1,444,942
SRF 5693-01	-	600,000	(30,000)	570,000
TOTAL	1,281,771	1,680,170	(810,170)	2,151,771

	SRF	Chester Twp	Clinton Twp	Fraser	Harrison Twp	Lenox Twp	Macomb Twp	New Haven	Shelby Twp	St Hts	Utica	Wash Twp	Total
Seg 5 (20/21)		7.2499%	21.2506%	4.0512%	6.4207%	1.0638%	13.9606%	0.8226%	9.9057%	30.9081%	1.5918%	2.7751%	100.00%
Seg 6 (21/22)		7.3432%	21.3460%	4.1370%	6.4221%	1.0652%	13.9284%	0.8271%	9.7757%	30.7833%	1.6268%	2.7451%	100.00%
TOTAL		73,059	213,078	41,027	64,215	10,646	139,413	8,253	98,277	308,332	16,128	27,571	999,999

Revenue Detail

Revenue	2020/2021 BUDGET	2021/2022 BUDGET
Reimbursements ⁽¹⁾	225,000	200,000
Detroit Bankruptcy Settlement ⁽²⁾	100,000	100,000
Carryforward ⁽³⁾	8,388,627	10,370,340
MIDDD O&M/Charge Required Revenue	13,548,089	16,476,210
Washington Twp Meter Project	47,475	47,470
Interest	250,000	60,000
Total	22,559,191	27,254,020

NOTES

- 1) Reimbursement from OMID for personnel, SCADA, other and engineering. Also from other drainage districts for SCADA and engineering assistance
- 2) As part of the bankruptcy settlement, MIDDD as part of class 14 has been issued Class B notes that mature in 2044. Settlement amount should be deposited in about 6 months. There was a delay in settling with other claimants.
- 3) Remaining projects that were charged in prior years and need to be carried forward for completion in 21/22

Obsolete Wireless backhaul replacement links	SCADA	21,500
3.6GHz Replacement Radios at MPSCS2705	SCADA	93,440
SolarWinds - Network Management Software	SCADA	12,900
Fiber Optic Improvements	SCADA	21,500
Security Servers replacement in MIDD	SCADA	20,000
Firewall Hardware Design/Config	SCADA	17,200
Training - Radios/Switches/VMWare	SCADA	5,000
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As Needed FTCH	Eng	50,000
As Needed Metco	Eng	90,000
As Needed Wade Trim	Eng	70,000
Level Sensors/Pressure/H2S-Meters	Eng	214,200
Meter Dye Testing	Eng	38,600
Odor and Control-Construction	Eng	1,000,000
Odor and Corrosion Design	Eng	375,260
Phase II Grouting	Eng	2,000,000
Phase III Grouting	Eng	325,000
Segment 6 Construction Administration	Eng	1,503,560
SY-S-1, SY-S-2, & WA-S-1 Meter Const Admin/Rehab	Eng	1,804,590
Wastewater Master Plan/Contract Capacity	Eng	330,050
Data Review-Aquasight	Eng	24,090
Drain Valve For Force Main	CPS	100,000
Clintondale Generator Switchgear Replacement Study	CPS	100,000
Move Hydrant connection closer	NGI	10,000
Replace pressure transducers-sensors	NGI	100,000
Repave Parking Lot	NGI	20,000
Improvement to Hydraulic Cylinder	CS-3	200,000
Inspection Program	Intercept	1,738,450
TOTAL		10,370,340
Additional Funds from Sinkhole Lawsuit to be used for Segment 5 Engineering		1,676,847
Additional Funds from Sinkhole Lawsuit to be used for Segment 5 Construction		10,823,153
		53
		<u>22,870,340</u>



Oakland-Macomb Interceptor Drain Drainage District

TO: Mike Gregg, Chairman
Oakland-Macomb Interceptor Drain Drainage District (OMIDDD)

FROM: Brian Coburn, Chief Engineer WRC
Stephen Downing, Construction & Maintenance Manager MCPWO

SUBJECT: Rate Year (RY) 2021/22 Budget Recommendation

DATE: March 17, 2021

Staff of the Macomb County Public Works Commissioner's Office and the Oakland County Water Resources Commissioner's Office recently met to discuss the budget, cost allocation, and capital improvement plan for the upcoming rate year. Staff recommends that the Board approve the proposed sewer charges contained herein for the rate year beginning July 1, 2021.

The main elements of the proposed budget and sewer charges are as follows:

- 1) The Great Lakes Water Authority (GLWA) is proposing an increase of 0.1% in sewer charges to OMIDDD.
- 2) The proposed operation and maintenance budget includes a decrease of 0.1% (see Exhibit A)
- 3) The proposed revenue requirement for FY22 will remain the same as FY21.
- 4) The method for determining the split between Oakland and Macomb was approved on March 20, 2019 and will remain in place through RY 2024/25 unless the Board decides to modify the methodology identified below:
 - a. GLWA common-to-all and OMIDDD operations and maintenance costs are allocated based on the nine-year rolling average as shown in Exhibit B. This year's allocation is 31.99% Clinton Oakland Sewage Disposal System (COSDS) and 68.01% to the Macomb Interceptor Drain Drainage District (MIDDD).
 - b. GLWA's Combined Sewage Overflow Program is allocated 39.48% to COSDS and 60.52% to MIDDD per the 1999 Rate Settlement Agreement.
 - c. Capital Improvement Reserve contributions are allocated based on the current GLWA Contract Capacity split of 33.10% for the COSDS and 66.90% for the MIDDD.
- 5) The budget proposes to fund \$750,000 of major maintenance work and \$9,000,000 of capital improvements from the OMIDDD operation and maintenance fund, in addition to projects that are not revenue financed (see Exhibit C).

Recommended Action: Approve the proposed operating budget (Exhibit A), cost allocation (Exhibit B), and the Capital Improvement Program (Exhibit C) for the rate year beginning July 1, 2021, as presented.

Effective July 1, 2021

Exhibit A

Annual Operating Charges

	Current 2021	2022	COSDS	MIDD	Annual		Monthly	
	Budget	Budget	%	%	COSDS	Macomb	COSDS	MIDD
GLWA								
Common-to-all and OMIDDD Charges		\$ 68,038,100	31.99%	68.01%	\$ 21,765,388	\$ 46,272,712		
CSO Program		1,671,700	39.48%	60.52%	659,987	1,011,713		
Total	69,703,800	69,709,800			22,425,375	47,284,425	\$ 1,868,781.25	\$ 3,940,368.75
OMIDDD								
Operations and Maintenance Expense								
Sewer System Maintenance	1,583,750	1,078,400	31.99%	68.01%	344,980	733,420		
Sewer System Engineering	15,360	52,210	31.99%	68.01%	16,702	35,508		
Pump Maintenance Unit	1,767,270	2,191,860	31.99%	68.01%	701,176	1,490,684		
Systems Control Unit	110	260	31.99%	68.01%	83	177		
Mapping Unit	1,900	2,070	31.99%	68.01%	662	1,408		
Miss Dig	370	360	31.99%	68.01%	115	245		
General and Administrative	124,240	63,090	31.99%	68.01%	20,182	42,908		
Subtotal	3,493,000	3,388,250			1,083,900	2,304,350	90,325.00	192,029.17
Non Operating	-	-	31.99%	68.01%	-	-	-	-
Major Maintenance	1,000,000	1,150,000	31.99%	68.01%	367,885	782,115	30,657.08	65,176.25
Emergency Maintenance	500,000	500,000	31.99%	68.01%	159,950	340,050	13,329.17	28,337.50
Capital Improvement	862,980	802,400	33.10%	66.90%	265,594	536,806	22,132.83	44,733.83
Subtotal	2,362,980	2,452,400			793,429	1,658,971		
O&M Non-Rate Revenue	(209,750)	(200,420)	31.99%	68.01%	(64,114)	(136,306)	(5,342.83)	(11,358.83)
FY 2022 Total Fixed Charges	\$ 75,350,030	\$ 75,350,030			\$ 24,238,590	\$ 51,111,440	2,019,882.50	4,259,286.67

Capital Improvements are defined as investments that are made to assets that exceed \$5,000 and increase the useful life of assets by five years or more.

Debt Service*		
2010A mfa 5368-02	1,673,375	1,671,500
2010B	-	-
2011A mfa 5368-02	1,624,125	1,624,750
2013A mfa 5368-03	3,954,200	3,954,400
2014A	469,694	468,344
2015A mfa 2001-01	542,750	543,625
2019 refunding	433,848	437,280
2019 revenue	2,291,947	1,069,018
2020A	2,574,684	3,278,650
2022 Issuance Projected Debt**	-	392,900
Total Debt Service	13,564,623	13,440,466
Total OMIDDD Related Revenue Requirements	88,914,653	88,790,496

* Estimated annual debt service from 20/21 budget updated March 2021

** 2022 Issuance Projected Debt assumes half a year of debt service recovery in 2022 (\$12,250,000 principal, 20 years, 2.5% interest rate)

Effective July 1, 2021

Exhibit B

Flow Data

Year	Fiscal Year	OMID FMWG Flows		DWSD Rate Simplification Flows		OMIDDD Allocation Flows	
		COSDS (cfs)	Macomb (cfs)	COSDS (cfs)	Macomb (cfs)	COSDS (cfs)	Macomb (cfs)
1	FY1112	33.25	71.00	32.44	68.00	32.85	69.50
2	FY1213	29.89	62.82	NA	NA	29.89	62.82
3	FY1314	30.74	64.80	NA	NA	30.74	64.80
4	FY1415	29.74	64.76	NA	NA	29.74	64.76
5	FY1516	29.36	65.08	NA	NA	29.36	65.08
6	FY1617	30.63	66.50	NA	NA	30.63	66.50
7	FY1718	34.05	69.60	NA	NA	34.05	69.60
8	FY1819	34.05	69.60	NA	NA	34.05	69.60
9	FY1920	32.51	70.79	NA	NA	32.51	70.79
9-Yr Average						31.54	67.05
Percent						31.99%	68.01%

1. All annual flows are based on the average of 12 months of flow (the average is not proportioned based on the actual days of each month)
2. COSDS Flows for fiscal years FY1112 thru FY1415 include a 30% adjustment to account for diversion to Pontiac WWTP. COSDS Flows for fiscal years FY1516 & FY1617 are based on measured flow which includes actual diversion to Pontiac
3. Due to a catastrophic failure at the Clinton River Water Resource Recovery Facility (COSDS's non-OMID outlet), COSDS delivered more than 70% of its flow to OMID in FY1718. For the FY1920 calculations, the actual FY1718 COSDS-to-OMID flow was replaced with a COSDS-to-OMID flow adjusted to equal 70% of the total COSDS flow. The adjustment was made to reflect the intent to deliver 70% of COSDS flow and minimize rate volatility. In FY1819, COSDS offset the high FY1718 COSDS-to-OMID flow with a low FY1819 COSDS-to-OMID flow. With the actual flows from these two years paired, volatility is minimized and the intent to deliver 70% of COSS flow is reflected. Therefore, the FY1718 actual COSDS-to-OMID flow is used for the FY2021 calculations instead of the FY1718 adjusted COSDS-to-OMID flow.
4. In FY1718 and FY1819, there was volatility in the flow delivered from COSDS to OMID (see note 3 for details). When paired, these two years offset each other and the volatility is mitigated. The OMID rates are based on a rolling 9-year average flow rate. In Rate Years 2829 and 2930, these volatile years will roll off the average, which will create volatility in the average. To reduce this future volatility, the COSDS-to-OMID flows and MIDDD flows for FY1718 (COSDS = 37.74 cfs, MIDDD = 67.29 cfs) and FY1819 (COSDS = 30.35 cfs, MIDDD = 71.90 cfs) have both been replaced with the average for these two years (COSDS = 34.045 cfs, Macomb = 69.595 cfs).

EXHIBIT C
OAKLAND MACOMB INTERCEPTOR DRAIN DRAINAGE DISTRICT
PLANNED CAPITAL AND MAJOR MAINTENANCE WORK
March 17, 2021

Maintenance Reserve (Fund 82912)

Project No.	Project Description	2020 Actual	2021 Projected and Expended	2022 Proposed
Beginning Maintenance Reserve Balance			\$3,311,542	\$1,231,542
Total Maintenance Reserve Revenue		\$700,000	\$1,000,000	\$1,150,000
1-2842	NESPS Operational Transition	\$113,816	\$200,000	\$0
1-3014	NESPS Emergency Contingencies Project	\$5,163	\$180,000	\$0
1-3015	OMID Immediate Repairs Project	\$47,278	\$2,300,000	\$0
N/A	CCTV Inspection	\$0	\$250,000	\$250,000
N/A	PLC Replacement at NESPS Generator	\$0	\$150,000	\$0
N/A	NEXGEN (Asset Management) Implementation	\$0	\$0	\$0
N/A	Generator Tank Paint/Gas Line Modifications	\$0	\$0	\$0
NEW	Wet Well Cleaning	\$0	\$0	\$500,000
Total Maintenance Reserve Expenses		\$166,258	\$3,080,000	\$750,000
Ending Maintenance Reserve Balance		\$3,311,542	\$1,231,542	\$1,631,542

Capital Reserve (Fund 82912)

Project No.	Project Description	2020 Actual	2021 Projected and Expended	2022 Proposed
Beginning Capital Reserve Balance			\$2,277,657	\$8,108,521
Total Capital Reserve Revenue		\$5,981,197	\$862,980	\$756,400
1-3016	OMID Flow Control Improvements	\$300,734	\$500,000	\$1,500,000
1-3017	NESPS Security Upgrades	\$7,708	\$0	\$0
1-3018	NESPS Drywell Elevator Upgrades	\$91,957	\$175,000	\$0
1-3019	OMID NIEA Sewer Rehabilitation Design	\$2,156,941	(\$2,236,913)	\$0
1-3020	NESPS Mechanical and Electrical Upgr/Design	\$3,740,101	(\$3,905,972)	\$0
N/A	OMID PCI-7 Bypass Feasibility Analysis	0	\$0	\$450,000
N/A	Pipe Lining PCI-7	0	\$0	\$1,000,000
N/A	Hydrogen Sulfide Mitigation in OMID/NI-EA	0	\$500,000	\$5,500,000
NEW	MIDDD Segment 5-OMID Portion	0	\$0	\$562,500
Total Capital Reserve Expenses		\$5,297,441	(\$4,967,884)	\$9,012,500
Ending Capital Reserve Balance		\$2,277,657	\$8,108,521	(\$147,579)

Emergency Maintenance (Fund 82912)

Project No.	Project Description	2020 Actual	2021 Projected and Expended	2022 Proposed
Beginning Emergency Reserve Balance			\$125,000	\$625,000
Total Emergency Reserve Revenue		\$125,000	\$500,000	\$500,000
No Planned Work				
Total Emergency Reserve Expenses		\$0	\$0	\$0
Ending Emergency Reserve Balance		\$125,000	\$625,000	\$1,125,000

Summary of Reserve Balances (Fund 82912)

Reserve	2020 Actual	2021 Projected and Expended	2022 Proposed
Undesignated	\$10,681,685	\$10,681,685	\$10,681,685
Major Maintenance	\$3,311,542	\$1,231,542	\$1,631,542
Emergency Maintenance	\$125,000	\$625,000	\$1,125,000
Capital	\$2,277,657	\$8,108,517	(\$147,583)
Net Position	\$16,395,884	\$20,646,744	\$13,290,644
<i>30% of the Operations and Maintenance Budget</i>		<i>\$21,959,040</i>	<i>\$21,943,215</i>

Current Construction Funds 2/18/21

Project No.	Project Description	Construction Fund	Committed for Capital Projects (In-progress)
1-2892	Odor Corrosion Study	84912-Segment 1	\$0
1-1557	Interceptor Segment 3	84914-Segment 3	\$0
1-1913	Interceptor Segement 4	84915-Segment 4	\$159,794
1-2041	NESPS Pump Install	84915-Segment 4	\$7,979
1-2232	NESPS Gatehouse	84915-Segment 4	\$26,798
1-2708	NESPS Odor/Corrosion Project	84915-Segment 4	\$11,610
Total Remaining Expense in Construction Funds			\$206,181

Current and Future Bonded Projects Through 2022

Project No.	Project Description	Bond Timing	Project Estimate
1-3308	NESPS Mechanical and Electrical Construction	Fall 2020	\$54,086,000
1-3309	NIEA Phase I/II First Bond	Fall 2020	\$28,395,600
1-3308&1-3309	NESPS-NI-EA Related Additional Scope	Fall 2020	\$1,518,400
NEW	NIEA Phase II Bond	Fall 2021	\$7,000,000
NEW	Pump 4 VFD Replacement	Fall 2021	\$1,200,000
NEW	25 ton Crane Roof/Upgrades	Fall 2021	\$1,500,000
NEW	New OMID NESPS Gate controls	Fall 2021	\$50,000
NEW	NESPS Wet Well Elevator	Fall 2021	\$1,000,000
NEW	NESPS Wet Well Divider Gate	Fall 2021	\$1,000,000
NEW	NESPS Wet Well Gas Heaters	Fall 2021	\$500,000
Total Future 2020-2021 Bonded Projects			\$96,250,000

MACOMB INTERCEPTOR DRAIN BOARD

ELECTRONIC AND TELEPHONIC MEETING PROCEDURES

Rules and procedures adopted by the Macomb Interceptor Drain Board (“Drainage Board”) to protect health, safety, and welfare by establishing meeting procedures for the Drainage Board in compliance with the Michigan Open Meetings Act, Act 267 of 1976, *et seq* (“OMA”).

THE DRAINAGE BOARD DECLARES AS FOLLOWS:

Section I. Title. These rules and procedures may be cited as the Macomb Interceptor Drain Board Electronic and Telephonic Open Meetings Act Procedures (“Procedures”).

Section II. Purpose. It is the policy of the Drainage Board to establish these Procedures in compliance with Sections 3 and 3a of the OMA, for fully-electronic or telephonic meetings of the Drainage Board or in which there exists the absence of a member or members of the Drainage Board, and which may minimize the possibility of disruptions during such electronic or telephonic meetings.

Section III. Electronic and Telephonic Meetings Authorization

A. Authorization to hold remote electronic and telephonic meetings. Sections 3 and 3a of the OMA provide that a physical place is not required for meetings held, in whole or in part, electronically by telephonic or video conferencing, in the following circumstances:

- A. Before March 31, 2021, under any circumstance;
- B. On or after March 31, 2021 through December 31, 2021, only in circumstances in which there is an absence of a member(s) of the public body due to:
 - a. Military duty;
 - b. A medical condition; or
 - c. A statewide or local state of emergency or state of disaster declared pursuant to law or charter by the Governor or a local official or local governing body that would risk the personal health or safety of members of the public or the public body if the meeting was held in person.
 - i. For the purpose of permitting an electronic meeting due to a local state of emergency or state of disaster, only to permit the electronic attendance of a member of the public body who resides in the affected area or to permit the electronic meeting of a public body that usually holds its meetings in the affected area.
- C. After December 31, 2021, only in circumstances requiring accommodation of members absent due to military duty.

B. Physical Presence. At a meeting that accommodates members absent due to military duty or a medical condition, only those members absent due to military duty or a medical condition may participate electronically. Any other member must be physically present at the meeting.

C. Notice of Needed Accommodation. Members of the Drainage Board that must meet electronically, on account of the member's military duty or medical condition, shall file a Notice of Needed Accommodation with the Macomb County Public Works ("MCPW") Commissioner or commissioner-designated deputy that serves as chairperson of the Drainage Board ("Commissioner"). Copies of the Notice of Needed Accommodation will be available through the Commissioner's office and shall be submitted seventy-two (72) hours in advance of the first meeting the member will participate in electronically on account of their medical condition or military duty. Once filed, the Notice of Needed Accommodation will remain in effect until it is withdrawn by the member or until the Drainage Board can no longer accommodate the member's electronic participation under the OMA. It is a member's sole responsibility to withdraw a Notice of Needed Accommodation if they cease to have a medical condition or no longer have military duty obligations that enable their electronic participation. A Notice of Needed Accommodation filed with the Commissioner only applies to this Drainage Board. A separate Notice of Needed Accommodation must be filed for any other public body overseen by the Commissioner for which electronic attendance is sought.

D. Attendance at Meetings Held Electronically In-Part. Members of the Drainage Board or members of the public participating electronically in a meeting held pursuant to these Procedures that occurs in a physical space in-part are to be considered present and in attendance at the meeting for all purposes.

E. Meetings Held Fully Electronically. When a statewide or local state of emergency has been declared within the jurisdiction of the Drainage Board, meetings of the Drainage Board shall, except as otherwise provided in this section, be held fully electronically for both the members of the Drainage Board and the public. When a meeting of the Drainage Board is scheduled pursuant to the Drain Code, the Commissioner shall ensure that the meeting is conducted as an electronic meeting when a statewide or local emergency is in place. In the event that a fully electronic meeting is scheduled due to a statewide or local state of emergency and the state of emergency is rescinded prior to the date of the meeting, the Commissioner shall take such action as necessary to reschedule the meeting in compliance with the OMA.

Notwithstanding the provisions of this section, the Drainage Board may decide, if legally permissible and agreed to by the Commissioner, to conduct in-person meetings during a statewide or local state of emergency when deemed appropriate by the Drainage Board.

F. Participation Requirement. A meeting of the Drainage Board held electronically must be conducted in a manner that permits two-way communication so that members of the Drainage Board can hear and be heard by other members of the Drainage Board, and so that public participants can hear members of the Drainage Board and can be heard by members of the Drainage Board and other participants during a public comment period. The Drainage Board may use technology to facilitate typed public comments that may be read to or shared with members of the Drainage Board and other participants.

Section IV. Notice Requirements

A. Notice Requirements. Notices of any electronic meeting shall be posted on a portion of MCPW's website fully accessible to the public at least 18 hours before the meeting. The public notice on the website must be included on either the homepage or on a separate webpage dedicated to public notices for non-regularly scheduled or electronic meetings that is accessible through a prominent and conspicuous link on the website's homepage that clearly describes its purpose for public notification of non-regularly scheduled or electronic public meetings. The public notice shall contain the following information:

1. Why the Drainage Board is meeting electronically;
2. Which member(s) of the Drainage Board will be participating in the meeting electronically;
3. How members of the public may participate in the meeting electronically, including a telephone number, internet address, or both;
4. How members of the public may contact members of the Drainage Board to provide input or ask questions on any business that will come before the Drainage Board at the meeting; and
5. How persons with disabilities may participate in the meeting.

B. Agendas. If an agenda exists for a meeting held pursuant to these Procedures, the Commissioner shall make the agenda available to the general public through MCPW's website at least two (2) hours before the meeting begins.

Section V. Electronic and Telephonic Meeting Procedures. Consistent with the authority to establish reasonable rules under the OMA and the obligation of public bodies to establish procedures for electronic meetings authorized by the OMA, such meetings shall be conducted in accordance with the following:

A. Use of Electronic Service. Drainage Board members and the public may participate in electronic meetings through software or interface using electronic conferencing and telephone as facilitated by the Drainage Board.

B. Muting. During the meeting, each participant shall be permitted to mute or unmute themselves to the extent it does not create any distractions or disruptions of the meeting. To the extent necessary, a meeting host may mute or unmute participants to facilitate effective two-way communication.

C. Public Comment. Members of the public shall speak only when called upon. The Drainage Board will then designate an opportunity for each member of the public to be heard. Members of the public not speaking should remain muted unless and until called upon to provide

comment or shall not otherwise cause disruptions. The Drainage Board shall make reasonable rules at a meeting to facilitate public comment in an orderly manner.

D. Public Announcement. For any member of the Drainage Board attending electronically, the member must make a public announcement at the outset of the meeting, to be included in the meeting minutes, that the member is in fact attending the meeting electronically. If the member is attending electronically for any other purpose other than for military duty, they shall identify their location by stating the city/township/village, county, and state from which they are attending.

E. Contacting Absent Members. Members of the public shall be noticed of the absence of a member of a Drainage Board through the notice required in Section IV of these Procedures. The public may contact those absent members prior to the meeting to provide input on any business that will come before the Drainage Board by emailing or calling the Drainage Board with information provided in the notice. The Commissioner shall compile the input and transmit it to the absent member in advance of the meeting. "Absent member" is defined as any member authorized to participate in a meeting electronically.

F. Roll Call. During the electronic and telephonic meeting, members of the Drainage Board will vote by roll call to avoid any questions about how each member of the Drainage Board votes. Each member of the Drainage Board must be asked how they vote, and their name and vote must be recorded in the meeting minutes.

G. Right to Record. The right of a person to participate in an electronic meeting includes the right to tape-record, to videotape, to broadcast live on radio, and to telecast live on television the proceedings of the meeting. The exercise of this right does not depend on the prior approval of the Drainage Board. However, individuals shall at a minimum provide written or oral notice to the Drainage Board prior to the start of an electronic meeting of their intent to tape-record, videotape, broadcast, or telecast the meeting.

H. Registration. The Drainage Board may not require a person participating in an electronic meeting to register or otherwise provide his or her name or other information or otherwise to fulfill a condition precedent to attendance, other than mechanisms necessary to permit the person to participate in the public comment period of the meeting.

I. Breach of Peace. A person must be permitted to address the Drainage Board during an electronic meeting under these Procedures, provided that no specific rules by order of the Drainage Board are needed to address specific circumstances or technical issues that arise during the meeting. A person must not be excluded from an electronic meeting otherwise open to the public except for a breach of the peace committed during the meeting.

J. Closed Session. Members of the general public participating in an electronic meeting may be excluded from participation in an electronic closed session of the Drainage Board if the closed session is convened and held in compliance with the requirements of the OMA.

K. Discussion, Deliberation, and Voting. The Drainage Board's electronic meeting will effectuate as fully as possible, the purposes of the OMA, which include promoting government accountability and fostering openness in government to enhance responsible decision-making. Except as it relates to closed sessions, the full discussions and deliberations of the Drainage Board, not just the voting, must still be done with public access.

L. Additional Rules. The chair or host of an electronic meeting has the authority to ensure that the meeting is conducted in an orderly manner. This includes the ability to institute additional rules and procedures reasonably necessary to further the requirements of the OMA.

Section VI. Review of Procedures. The Commissioner shall review these Procedures if any substantive changes are made to the current provisions of the Michigan Open Meetings Act, Act 267 of 1976, *et seq*, and present any proposed revisions to the Drainage Board for re-approval as necessary.

Section VII. Validity and Severability. If any part of these Procedures are declared by any court of competent jurisdiction to be invalid, that declaration does not affect the validity of the remainder of the Procedures.

Section VIII. Repealer. While in effect, these Procedures supersede all policies (or parts of policies) of the Drainage Board that conflict with these Procedures.

Section IX. Effective Date. These Procedures are effective immediately.

Adopted by the Macomb Interceptor Drain Board on 4-12-2021.

MACOMB INTERCEPTOR DRAIN - 3/16/21 - 4/6/21

<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>
Macomb Interceptor Drain	Chapter 20 Chesterfield – 7.2499% Clinton – 21.2506% Fraser – 4.0512% Harrison – 6.4207% Lenox – 1.0638% Macomb – 13.9606% New Haven – .8226% Shelby – 9.9057% Sterling Heights – 30.9081% Utica – 1.5918% Washington – 2.7751%						
		Astorino	Access Interactive LLC	\$ 1,726.45	Invoice #INV000105599 - 3.22.21	Microsoft Windows Server License	
		Astorino	Access Interactive LLC	\$ 810.55	Invoice #INV000105701 - 3.29.21	SCADA Maintenance	\$ 19,286.25
		Baker	Aloia & Associates, P.C.	\$ 959.50	Invoice #21643 - 3.1.21	Garfield Property Sale	
		Astorino	Anderson, Eckstein & Westrick	\$ 8,450.30	Invoice #130238 - 3.3.21	Drop Shaft & Connecting Sewer Rehab	\$ 38,080.10
		Astorino	Anderson, Eckstein & Westrick	\$ 4,197.45	Invoice #130240 - 3.3.21	Engineering Oversight - Grouting	\$ 251,178.35
		Downing	Anderson, Eckstein & Westrick	\$ 26,162.85	Invoice #130432 - 3.23.21	Phase II Grouting - Engineering Oversight	\$ 225,015.50
		Astorino	City of Mt. Clemens	\$ 13,982.63	Invoice #28002172 - 2.26.21	January 2021 Utilities	
		Astorino	DTE Energy	\$ 1,163.24	Invoice #RB43Y-5H8TM - 3.3.21	Monthly Electric - 1.30.21 - 3.2.21	
		Astorino	Fishbeck	\$ 1,650.00	Invoice #398911 - 2.24.21	GLWA Assistance through 2.19.21	\$ 18,889.37
		Astorino	Fishbeck	\$ 3,786.00	Invoice #398936 - 2.24.21	Segment 6 & OMID Flow Work Group	\$ 76,260.88
		Astorino	Fishbeck	\$ 4,454.50	Invoice #399653 - 3.24.21	Wastewater Master Plan through 3.19.21	\$ 439,327.45
		Astorino	FK Engineering Associates	\$ 13,000.00	Invoice #20-042-005 - 3.4.21	Segment 3,4, 7-10 Sewer Rehab Analysis	\$ 11,500.00
		Astorino	FK Engineering Associates	\$ 52,909.78	Invoice #20-058-009 - 2.23.21	Segment 6 Rehabilitation - Design	\$ 11,293.25
		Downing	FK Engineering Associates	\$ 124,283.16	Invoice #20-152-003 - 2.24.21	Segment 5 CCA	\$ 2,179,656.34
		Astorino	FK Engineering Associates	\$ 6,500.00	Invoice #20-042-06 - 3.18.21	Sewer Rehab Segments 3, 4, 7-10	\$ 5,000.00
		Downing	FK Engineering Associates	\$ 68,156.68	Invoice #20-152-004 - 3.18.21	Segment 5 CCA	\$ 2,114,839.68
		Astorino	Hubbell, Roth & Clark, Inc.	\$ 5,346.50	Invoice #186254 - 3.8.21	SY-S-1 and 2 Meter Rehab - Washington Township	\$ 110,572.94
		Baker	KHVPPF, PLC	\$ 4,019.00	Invoice #46129 - 3.1.21	General Matters - Contracts	
		Astorino	Novalynx Corporation	\$ 1,322.61	Invoice #57002 - 3.2.21	Rain Gauges - (50% CT)	
		Astorino	Novalynx Corporation	\$ 7,900.59	Invoice #56864 - 1.19.21	Rain Gauges - (50% CT)	
		Sucharski	Verizon	\$ 1,082.91	Invoice #9876174842 - 3.23.21	Monthly Cellular - 2.24.21 - 3.23.21 (Eq. Fund)	
		Sucharski	Verizon	\$ 829.11	Invoice #9876174842 - 3.23.21	Monthly Cellular - 2.24.21 - 3.23.21	
		Sucharski	Verizon	\$ 1,085.30	Invoice #9874030644 - 2.23.21	Monthly Cell - 1.24.21 - 2.23.21 (Equipment Fund)	
		Sucharski	Verizon	\$ 828.19	Invoice #9874030644 - 2.23.21	Monthly Cell - 1.24.21 - 2.23.21	
		Astorino	Weingartz	\$ 651.00	Invoice #10646550-00 - 3.15.21	Repair Vehicle Wiring for Plow - F250	
		<u>CPS</u>					
		Astorino	Clinton Township Treasurer	\$ 2,355.57	Invoice #21-062 - 2.28.21	Monthly Utilities - 1.26.21 - 2.23.21	
		Astorino	Crane 1 Services, Inc.	\$ 948.75	Invoice #I22-06382 - 3.9.21	Annual Crane Inspection	
		Astorino	Cummins Sales & Service	\$ 537.60	Invoice #S6-64914 - 3.17.21	Coolant Leak Repair	
		Astorino	DTE Energy	\$ 22,355.74	Invoice #RB43Y-58L7Q - 3.1.21	Monthly Electric - 2.2.21 - 3.1.21	
		Astorino	Grainger	\$ 712.30	Invoice #9820323518 - 3.1.21	Hand Crank Hose Reel	
		Astorino	Wade Trim	\$ 502.50	Invoice #2020544 - 3.24.21	As-Needed Engineering Services through 3.19.21	\$ 74,352.43

MACOMB INTERCEPTOR DRAIN - 3/16/21 - 4/6/21

<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>
<u>15 Mile</u>		Downing	Anderson, Eckstein, & Westrick	\$ 2,173.50	Invoice #130237 - 3.3.21	Recovery Shaft Warranty Repairs	\$ 12,866.15
		Downing	Anderson, Eckstein & Westrick	\$ 5,952.35	Invoice #130427 - 3.23.21	Warranty Inspection	\$ 6,913.80
<u>Meters</u>		Astorino	DTE Energy	\$ 572.11	Invoice #R9G1L-34TQJ - 2.19.21	Monthly Electric - 12.23.21 - 1.21.21	
		Astorino	DTE Energy	\$ 558.57	Invoice #RB43Y-5FCKP - 2.25.21	Monthly Electric - 1.22.21 - 2.19.21	
<u>NGI</u>		Astorino	Cummins Sales & Service	\$ 1,551.08	Invoice #S6-64128 - 3.5.21	Generator Full Service Oil/Filter/Inspection	
		Astorino	Fishbeck	\$ 3,938.00	Invoice #398878 - 2.24.21	2020 Inspection Program	\$ 260,270.00
		Astorino	Wade Trim	\$ 906.25	Invoice #2020544 - 3.24.21	As-Needed Engineering Services through 3.19.21	\$ 74,352.43
<u>OMID</u>		Downing	Colville Electric Co., LLC	\$ 2,812.76	Invoice #210135 - 3.13.21	SCADA Interface Panel	
		Downing	Oakland County	\$ 4,257,665.09	Invoice #SDS0007625-Feb	Sewer February 2021	
		Downing	Oakland County	\$ 4,257,665.09	Invoice #SDS0007632-March - 4.1.21	Monthly Utilities - March 2021	
Total				\$ 8,916,465.56			

Budget to Actual
MIDD
As of Mar 31, 2021 = 75%

DESCRIPTION	2021 FINAL BUDGET	ENCUMBERED	ACTUAL	REMAINING BUDGET	PCT UTILIZED
REVENUE ACCOUNTS					
GLWA-OMID	47,262,993		35,452,829	11,810,164	75.0%
OMID O&M	3,828,987		2,871,740	957,247	75.0%
Settlement	100,000		12,500,000	(12,400,000)	12500.0%
EGLE Testing Grant	-		366,128	-	0.0%
SRF 5659-03			2,505,992	-	9.6%
Reimbursements	225,000		126,594	98,406	56.3%
PY Revenue-Fund Balance	8,388,627			8,388,627	0.0%
Washington Twp Meter Project	47,475			47,475	0.0%
Reimb-Local Communities	13,548,089		10,161,067	3,387,022	75.0%
Interest	250,000		38,163	211,837	15.3%
<i>Total Revenue Accounts</i>	73,651,171	-	64,022,513	12,500,778	86.9%
EXPENSE ACCOUNTS					
GLWA-OMID	47,262,993		35,452,829	11,810,164	75.0%
OMID O&M	3,828,987		2,871,740	957,247	75.0%
Public Works Wastewater Disposal Division	1,942,127		306,780	1,635,347	15.8%
Office Operations/Insurance	309,925		165,519	144,406	53.4%
SCADA	268,889		32,406	236,483	12.1%
Engineering					
Meter Dye Testing 2 year contract new this year	100,000		25,300	74,700	25.3%
Data Review-Aquasight	250,000		92,990	157,010	37.2%
Replenish reserve from CPS refunding	618,680			618,680	0.0%
Design Odor and Corrosion	750,000		3,420	746,580	0.5%
Construction Project for Odor and Control	1,000,000			1,000,000	0.0%
SY-S-1,SY-S-2, WA-S-1 Construction Admin	250,000		44,354	205,646	17.7%
FKE Rehab analysis phase 2	84,000		27,000	57,000	32.1%
Seg 5 Construction	1,150,000		1,686,452	(536,452)	146.6%
Seg 5 Lining SRF(\$26 Million)	-		4,068,275	-	15.6%
Phase II Grouting	3,825,000		1,196,625	2,628,375	31.3%
GLWA Assistance	40,000		8,700	31,300	21.8%
Drop Shaft	-		1,372,179	(1,372,179)	100.0%
As Needed FTCH	75,000		16,608	58,392	22.1%
As Needed FK Engineering	75,000		6,898	68,102	9.2%
As Needed Wade Trim	75,000		5,346	69,654	7.1%
As Needed Metco	125,000		14,879	110,121	11.9%
As Needed Applied Science	25,000			25,000	0.0%
As Needed Odor and Corrosion	75,000		53,366	21,634	71.2%
Seg 5 Engineering Design	374,557		373,945	612	99.8%
Contribution to Segment 5/Grouting	1,450,000		717,270	732,730	49.5%
15 Mile Inter Design East of Garfield (Segment 6)/Const Admin	1,500,000		370,778	1,129,222	24.7%
SY-S-1 & SY-S-2 Meter Design/Rehab	1,134,070			1,134,070	0.0%
Level Sensors/Pressure/H2S-Meters	250,000			250,000	0.0%
Wastewater Master Plan/Contract Capacity	400,000		56,441	343,559	14.1%
EGLE Testing Grant	-		330,304	-	0.0%
Washington Township meter	500,000			500,000	0.0%
Legal Services	250,000		21,272	228,728	8.5%
Clintondale PS O&M	639,500		186,753	452,747	29.2%
NGI O&M	230,000		80,398	149,602	35.0%
Meters O&M	253,470		185,832	67,638	73.3%
CS-3 O&M	226,000			226,000	0.0%
Biofilter O&M	22,500		9,121	13,379	40.5%
Contribution Life Cycle Reserve	171,700			171,700	0.0%
Interceptor O&M	1,900,000		11,653	1,888,347	0.6%
Stormwater Pump Stations	234,250		175,688	58,563	75.0%
Sewage Disposal Charges - Mt. Clemens	200,000		105,725	94,275	52.9%
Debt Service - Revenue Bonds	1,784,523		1,338,392	446,131	75.0%
<i>Total Expense Accounts</i>	73,651,171	-	51,415,238	26,634,512	69.8%

	O&M Balance 6/30/2020	O&M	Total 3/31/2021
Cash - Operating	24,226,346	12,607,275	36,833,621
Accounts Receivable			0
Assets			0
Liabilities			0
Revenues		64,022,513	64,022,513
Expenditures		51,415,238	51,415,238
Equity*	24,226,346		36,833,621

Detail of 2020 Equity*

Projected reserve at 6/30/2020	6,818,887
Projected Engineering Reserve	12,920,000
Projected Sinkhole Surplus	3,656,059
Life Cycle Reserve	831,440