

**NOTICE OF MEETINGS**  
**DRAINAGE BOARD FOR THE FOLLOWING DRAINS:**

1. Drainage District Policy
2. Clinton River Water Resource Recovery Facility
3. Evergreen-Farmington Sanitary Sewer Drain
4. Acacia Park CSO Drain
5. Birmingham CSO Drain
6. Bloomfield Village CSO Drain
7. George W. Kuhn Drain
8. Augusta Drain
9. Austin Drain
10. Brennan Drain
11. Emily Drain
12. Evergreen Road Storm Drain
13. O'Donoghue Drain
14. Jensen Drain
15. Mainland Drain
16. Northwest Oakland Sanitary Sewer Drain
17. Tribute Drain
18. Varner Relief Drain

NOTICE IS HEREBY GIVEN THAT MEETINGS OF THE DRAINAGE BOARD FOR THE ABOVE-MENTIONED DRAINS WILL COMMENCE IN THE OAKLAND COUNTY PUBLIC WORKS BUILDING, ONE PUBLIC WORKS DRIVE, WATERFORD, MICHIGAN, AND VIA **MICROSOFT TEAMS** AT 2 P.M., ON **TUESDAY, SEPTEMBER 24, 2024**, TO CONDUCT NECESSARY AND APPROPRIATE BUSINESS OF THE DRAINAGE BOARDS. THOSE WHO WISH TO PARTICIPATE REMOTELY MAY FOLLOW THE INSTRUCTIONS ATTACHED TO THIS NOTICE. ALL BOARD MEMBERS WILL BE PARTICIPATING IN-PERSON.

DURING THE MEETING, THERE WILL BE AN AGENDA ITEM FOR PUBLIC COMMENT, DURING WHICH THE PUBLIC MAY PROVIDE INPUT OR ASK QUESTIONS OF THE BOARD. IN THE EVENT A MEMBER OF THE PUBLIC WOULD LIKE TO SUBMIT THEIR INPUT OR QUESTIONS TO BE READ AT THE MEETING BY THE BOARD CHAIRPERSON, PLEASE PROVIDE THE INPUT OR QUESTIONS IN WRITING TO STEPHANIE LAJDZIAK AT [LAJDZIAKS@OAKGOV.COM](mailto:LAJDZIAKS@OAKGOV.COM). PERSONS WITH DISABILITIES WHO NEED ASSISTANCE PARTICIPATING IN THE MEETING SHOULD CONTACT STEPHANIE LAJDZIAK AT [LAJDZIAKS@OAKGOV.COM](mailto:LAJDZIAKS@OAKGOV.COM).

JIM NASH  
Oakland County Water Resources Commissioner  
Telephone: 248-858-0958

# Microsoft Teams meeting

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## **1. Drainage District Policy**

## **AGENDA**

### **DRAINAGE BOARD FOR POLICY MATTERS**

September 24, 2024

1. Call meeting to order
2. Approve minutes of meeting of January 23, 2024
3. Public Comments
4. Gallagher Insurance renewal proposal and approval of invoices
5. Other business
6. Approve pro rata payment to Drainage Board members
7. Adjourn



**MINUTES OF THE MEETING OF THE DRAINAGE BOARD  
FOR POLICY MATTERS**

January 23, 2024

A meeting of the Drainage Board for Policy Matters was held in the office of the Oakland County Water Resources Commissioner, Public Works Building, One Public Works Drive, Waterford, Michigan at 2:00 p.m. on the 23<sup>rd</sup> day of January 2024.

The meeting was called to order by the Chairperson.

PRESENT: Jim Nash, Oakland County Water Resources Commissioner

Gwen Markham, Chairperson of the Finance Committee, Oakland County Board of Commissioners

David Woodward, Chairperson of the Oakland County Board of Commissioners

ABSENT: None.

Minutes of the meeting held October 24, 2023, were presented for consideration. It was moved by Markham, supported by Woodward, that the minutes be approved.

ADOPTED: Yeas - 3  
Nays - 0

Chairperson Nash asked if there were any public comments. There were none.

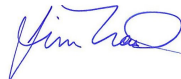
Sal Saputo (Meadowbrook Insurance Group) provided an update regarding property insurance options for the Drainage Districts; it was recommended that the Board renew insurance coverage with Chubb. Mr. Saputo advised that the rate increased by about 6%, which is less of an increase from previous years. Discussion ensued regarding the changes in flood zones. It was moved by Markham, supported by Woodward, to approve the proposal as authored and for the Secretary to sign and approve the invoices for payment.

ADOPTED: Yeas - 3  
Nays - 0

It was moved by Nash, supported by Markham, to certify attendance and authorize pro rata payment of \$25 per day to Ms. Markham and Mr. Woodward.

ADOPTED: Yeas - 3  
Nays - 0

There being no further business, the meeting was adjourned.



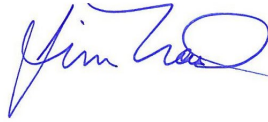
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Jim Nash, Chairperson

STATE OF MICHIGAN                    )  
  )SS.  
COUNTY OF OAKLAND                )

I, the undersigned, do hereby certify that the foregoing is a true and complete copy of the minutes of the Drainage Board for Policy Matters, Oakland County, Michigan, held on the 23<sup>rd</sup> day of January 2024, and that the minutes are on file in the office of the Oakland County Water Resources Commissioner and are available to the public.

I further certify that the notice of the meeting was posted at least 18 hours in advance of the meeting at the office of the Oakland County Water Resources Commissioner which is the principal office of the Drainage Board for Policy Matters.



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Jim Nash, Chairperson

Dated: January 23, 2024



## Proposal of Insurance

# Oakland County Water Resources Commissioner (Intra-County Drains Drainage Districts)

Building 95 West, One Public Works Dr.  
Waterford, MI 48328  
Presentation Date: September 24, 2024

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Arthur J Gallagher Risk Management Services, LLC  
AJG License Nos. IL 100292093 / CA 0D69293



**Gallagher**

Insurance | Risk Management | Consulting

## Your Gallagher Team

Your Gallagher team is a true partner. We have the expertise to understand your business and we're here to service and stay alongside you, every step of the way.

<i>Service Team</i>	<i>Role</i>	<i>Email</i>	<i>Phone</i>
<b>Salvatore Saputo</b> Executive Vice President	Executive Vice President	Salvatore_Saputo@ajg.com	(248) 943-1317 (p)
<b>Phillip Anderson</b> Account Manager	Client Service Manager	Phillip_Anderson@ajg.com	(734) 629-7498 (p)
<b>Patrick Kennedy, CIRS LIC</b> Account Executive	Account Executive	Patrick_Kennedy1@ajg.com	(248) 204-6161 (p)
<b>Jessica Valazza</b> Assistant Account Manager	Client Service Associate	Jessica_Valazza@ajg.com	(248) 204-6134 (p)

## Named Insured Schedule

<i>Named Insured</i>	<i>Environmental Liability</i>	<i>General Liability</i>	<i>Excess Liability</i>	<i>Public Officials Liability</i>
Oakland County Water Resources Commissioner (Intra-County Drains Drainage Districts)	X	X	X	X

**Note:** Any entity not named in this proposal may not be an insured entity. This may include affiliates, subsidiaries, LLCs, partnerships, and joint ventures.



## Market Review

### Historical Summary - Oakland County Water Resources Commissioner (Intra-County Drains)

Prepared September 12th, 2024

	10/01/2021-2022	10/01/2022-2023	10/01/2023-2024	10/01/2024-2025
Term	10/01/2021-2022	10/01/2022-2023	10/01/2023-2024	10/01/2024-2025
Carrier	Lexington	Lexington	Liberty Mutual	Liberty Mutual
Form Type	Occurrence	Occurrence	Occurrence	Occurrence
Primary GL/POL Limit	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
1st Excess Limit	N/A	N/A	\$10,000,000	\$10,000,000
2nd Excess Limit	N/A	N/A	N/A	N/A
Limits of Liability	\$1,000,000 (Each General Liability and Public Officials)	\$1,000,000 (Each General Liability and Public Officials)	\$11,000,000 (Combined General Liability and Public Officials)	\$11,000,000 (Combined General Liability and Public Officials)
Retention	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000
GL/POL Primary Premium	\$ 103,525	\$ 106,702	\$ 94,379	\$ 105,570
1st Excess Premium	\$ -	\$ -	\$ 26,556	\$ 33,092
TPA Fee	\$ 1,500	\$ 1,500	\$ -	\$ -
Pollution Liability Premium	\$ 24,854	\$ 26,044	\$ 27,086	\$ 27,060
Total Program Premium	\$ 129,879	\$ 134,246	\$ 148,021	\$ 165,722
Percentage Change		3.36%	10%	12%
<b>Premium Comparison to 2022 to 2023 Term at \$5M Limit of Liability</b>				
Proposed \$5M Excess Liability Limit (Presented - Not Bound)		\$ 153,750	\$ -	\$ -
Total Premium - If All Layers Bound	\$ 129,879	\$ 287,996	\$ 148,021	\$ 165,722
Percentage Change Compared to 22-23 Term			-48.60%	-42.45%

We approached the following carriers in an effort to provide the most comprehensive and cost effective insurance program.

Line Of Coverage	Insurance Company ** (AM Best Rate/Financial Strength)	Market Response *
Environmental Liability	ACE American Insurance Company	Recommended Quote
General Liability	Liberty Mutual Insurance Company	Recommended Quote
Excess Liability	Liberty Insurance Corporation	Recommended Quote
Public Officials Liability	Liberty Mutual Insurance Company	Recommended Quote

\*If shown as an indication, the actual premium and acceptance of the coverage requested will be determined by the market after a thorough review of the completed application.

\*\*Gallagher companies use AM Best rated insurers and the rating listed above was verified on the date the proposal document was created.

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\*\*\*If coverage placed with a non-admitted carrier, it is doing business in the state as a surplus lines or non-admitted carrier, and is neither subject to the same regulations as an admitted carrier nor do they participate in any state insurance guarantee fund.

Gallagher companies make no representations and warranties concerning the solvency of any carrier, nor does it make any representation or warranty concerning the rating of the carrier which may change.

# Oakland County Water Resources Commissioner (Intra-County Drains Drainage Districts)



## Premium Summary

The estimated program cost for the options are outlined in the following table:

Line of Coverage		Expiring	Proposed
		ACE American Insurance Company	Liberty Mutual Insurance Company
<b>General Liability</b>	Premium	\$33,779	\$38,910
	<b>Estimated Cost*</b>		
	Change (\$)		\$5,131
	Change (%)		15.18%
	Limit of Liability	\$1M/\$2M	\$1M/\$2M
		Liberty Mutual Insurance Company	Liberty Mutual Insurance Company
<b>Public Officials Liability</b>	Premium	\$60,600	\$66,660
	<b>Estimated Cost*</b>		
	Change (\$)		\$6,060
	Change (%)		10%
	Limit of Liability	\$1M/\$2M	\$1M/\$2M
		Liberty Insurance Corporation	Liberty Insurance Corporation
<b>\$10M Excess Liability</b>	Premium	\$26,556	\$33,092
	<b>Estimated Cost*</b>		
	Change (\$)		\$6,536
	Change (%)		24.61%
	Limit of Liability	\$10M/\$10M	\$10M/\$10M
		ACE American Insurance Company	ACE American Insurance Company
<b>Pollution Liability</b>	Premium	\$27,086	\$27,060
	<b>Estimated Cost*</b>		
	Change (\$)		-\$26
	Change (%)		-.09%
	Limit of Liability	\$1M/\$1M	\$1M/\$1M
<b>Total Program Cost**</b>		<b>\$148,021</b>	<b>\$165,722</b>

\*Estimated Cost includes all taxes, fees, surcharges and TRIA premium (if applicable)

\*\* Total Program Premium is increasing by 11.95% over the expiring term.

Premiums are due and payable as billed and may be financed, subject to acceptance by an approved finance company. Following acceptance, completion (and signature) of a premium finance agreement with the specified down payment is required. Note: Unless prohibited by law, Gallagher may earn compensation for this optional value-added service.

Gallagher is responsible for the placement of the following lines of coverage:

- Environmental Liability**
- General Liability**
- Excess Liability**
- Public Officials Liability**

It is understood that any other type of exposure/coverage is either self-insured or placed by another brokerage firm other than Gallagher. If you need help in placing other lines of coverage or covering other types of exposures, please contact your Gallagher representative.



**2. Clinton River Water  
Resource Recovery Facility**

**AGENDA**  
**DRAINAGE BOARD FOR**  
**THE CLINTON RIVER WATER RESOURCE RECOVERY FACILITY**

September 24, 2024

1. Call meeting to order
2. Approve minutes of meeting of August 27, 2024
3. Public Comments
4. Gallagher Insurance renewal proposal and approval of invoices
5. Present Memorandum John Basch, Drainage District Legal Counsel, dated September 24, 2024, requesting the Board authorize the Chairperson to execute the attached consent agreement and accept a payment of \$50,000 as full satisfaction of fines along with any and all reimbursable costs associated with this matter
6. Present Construction Estimate No. 1 for Clark Construction Company for Construction of the Optimization I Project in the amount of \$1,518,256.36 with a transfer to the Oakland County Treasurer in the amount of \$168,695.15
7. Present Construction Estimate No. 2 for Clark Construction Company for Construction of the Optimization I Project in the amount of \$3,189,554.87 with a transfer to the Oakland County Treasurer in the amount of \$354,394.99
8. Present request for Board approval of payment of invoices and/or reimbursement of the Drain Revolving Fund from the Maintenance Fund in the amount of \$400,615.90
9. Present request for Board approval of payment of invoices and/or reimbursement of the Drain Revolving Fund from the Construction Fund in the amount of \$76,650.63
10. Other business
11. Approve pro rata payment to Drainage Board members
12. Adjourn



**MINUTES OF THE MEETING OF THE DRAINAGE BOARD  
FOR THE CLINTON RIVER WATER RESOURCE RECOVERY FACILITY**

August 27, 2024

A meeting of the Drainage Board for the Clinton River Water Resource Recovery Facility was held in the office of the Oakland County Water Resources Commissioner, Public Works Building, One Public Works Drive, Waterford, Michigan at 2:00 p.m. on the 27<sup>th</sup> day of August 2024.

The meeting was called to order by the Chairperson.

PRESENT: Jim Nash, Oakland County Water Resources Commissioner

David Woodward, Chairperson of the Oakland County Board of Commissioners

ABSENT: Gwen Markham, Chairperson of the Finance Committee, Oakland County Board of Commissioners

Minutes of the meeting held July 23, 2024, were presented for consideration. It was moved by Woodward, supported by Nash, that the minutes be approved.

ADOPTED: Yeas - 2  
Nays - 0

Chairperson Nash asked if there were any public comments. There were none.

A memorandum from Razik Alsaigh, P.E., Civil Engineer III, dated August 27, 2024, requesting the Board:

- 1) Approve and authorize the Chairperson to execute the contract assignment with Meadowbrook Inc. to provide owner's insurance coverage for the Optimization Phase I Project was presented. It was moved by Woodward, supported by Nash, to approve and authorize the Chairperson to execute the contract assignment with Meadowbrook Inc. to provide owner's insurance coverage for the Optimization Phase I Project as presented.
  
- 2) Approve and authorize the Chairperson to execute the contract amendment with Gallagher to provide owner's insurance coverage for the Optimization Phase II Project was presented. It was moved by Woodward, supported by Nash, to approve and authorize the Chairperson to execute the contract amendment with Gallagher to provide owner's insurance coverage for the Optimization Phase II Project as presented.

ADOPTED: Yeas - 2  
Nays - 0

Change Order No. 2 for Clark Construction Company for construction of the Optimization Phase I Project for a net increase in the amount of \$8,280.00 was presented. It was moved by Woodward, supported by Nash, to approve Change Order No. 2 for Clark Construction Company for construction of the Optimization Phase I Project for a net increase in the amount of \$8,280.00 as presented.

ADOPTED: Yeas - 2  
Nays - 0

A request for approval of payment of invoices and/or reimbursement of the Drain Revolving Fund from the Maintenance Fund in the amount of \$248,413.32 (as attached) was presented. It was moved by Woodward, supported by Nash, to approve the payment of invoices and/or reimbursement of the Drain Revolving Fund from the Maintenance Fund in the amount of \$248,413.32.

ADOPTED: Yeas - 2  
Nays - 0

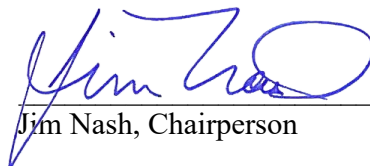
A request for approval of payment of invoices and/or reimbursement of the Drain Revolving Fund from the Construction Fund in the amount of \$61,361.21 (as attached) was presented. It was moved by Woodward, supported by Nash, to approve the payment of invoices and/or reimbursement of the Drain Revolving Fund from the Construction Fund in the amount of \$61,361.21.

ADOPTED: Yeas - 2  
Nays - 0

It was moved by Nash, supported by Woodward, to certify attendance and authorize pro rata payment of \$25 per day to Mr. Woodward.

ADOPTED: Yeas - 2  
Nays - 0

There being no further business, the meeting was adjourned.



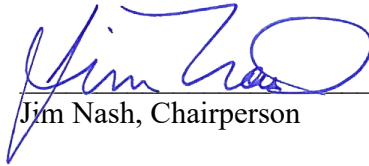
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Jim Nash, Chairperson

STATE OF MICHIGAN                    )  
  )SS.  
COUNTY OF OAKLAND                )

I, the undersigned, do hereby certify that the foregoing is a true and complete copy of the minutes of the Drainage Board for the Clinton River Water Resource Recovery Facility, Oakland County, Michigan, held on the 27<sup>th</sup> day of August 2024, and that the minutes are on file in the office of the Oakland County Water Resources Commissioner and are available to the public.

I further certify that the notice of the meeting was posted at least 18 hours in advance of the meeting at the office of the Oakland County Water Resources Commissioner which is the principal office of the Drainage Board for the Clinton River Water Resource Recovery Facility.

  
\_\_\_\_\_  
Jim Nash, Chairperson

Dated: August 27, 2024



## Proposal of Insurance

# Clinton River Water Resource Recovery Facility Drainage District

One Public Works Drive  
Bldg 95 West  
Waterford, MI 48328  
Presentation Date: September 24, 2024

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Arthur J Gallagher Risk Management Services, LLC  
A/JG License Nos. IL 100292093 / CA 0D69293



**Gallagher**

Insurance | Risk Management | Consulting

## Named Insured Schedule

<i>Named Insured</i>
City of Pontiac Wastewater Treatment Facility Drainage District (COPWWTFDD)
Clinton River Water Resource Recovery Facility Drain District (CRWRRFDD)
County of Oakland, Michigan
Oakland County Water Resources Commissioner

**Note:** Any entity not named in this proposal may not be an insured entity. This may include affiliates, subsidiaries, LLCs, partnerships, and joint ventures.

## Location Schedule

<i>LOC #</i>	<i>LOCATION ADDRESS</i>
1	155 Opdyke, Pontiac, MI 48342
2	274 MLK Blvd, Pontiac, MI 48342



## Market Review

### Historical Summary - Clinton River Water Resource Recovery Facility Drainage District

Prepared September 12th, 2024

Term	10/05/2022-2023	10/05/2023-2024	10/05/2024-2025
Carrier	Lexington/Hudson	Liberty Mutual	Liberty Mutual
Form Type	Occurrence	Occurrence	Occurrence
Primary GL/POL Limit	\$1,000,000	\$1,000,000	\$1,000,000
1st Excess Limit	\$4,000,000	\$10,000,000	\$10,000,000
Limits of Liability	\$5,000,000 (Each General Liability and Public Officials)	\$11,000,000 (Combined General Liability and Public Officials)	\$11,000,000 (Combined General Liability and Public Officials)
Retention/Deductible	\$ 250,000	\$ 250,000	\$ 250,000
GL/POL Primary Premium	\$ 120,950	\$ 232,252	\$ 278,810
1st Excess Premium	\$ 197,010	\$ 16,326	\$ 21,562
TPA Fee	\$ 1,500	\$ -	\$ -
Pollution Liability Premium	\$ 22,370	\$ 23,234	\$ 24,198
Cyber Liability Premium	\$ -	\$ 4,430	\$ 5,130
<b>Total Program Premium</b>	<b>\$ 341,830</b>	<b>\$ 271,812</b>	<b>\$ 329,700</b>
Percentage Change compared to 2022-23 Term		-20%	-4%

We approached the following carriers in an effort to provide the most comprehensive and cost effective insurance program.

Line Of Coverage	Insurance Company ** (AM Best Rate/Financial Strength)	Market Response *
Cyber Liability	State National Insurance Company, Inc.	Recommended Quote
Pollution Liability	ACE American Insurance Company	Recommended Quote
General Liability	First Liberty Insurance Corporation	Recommended Quote
Excess Liability	Liberty Insurance Corporation	Recommended Quote
Public Officials Liability	First Liberty Insurance Corporation	Recommended Quote

\*If shown as an indication, the actual premium and acceptance of the coverage requested will be determined by the market after a thorough review of the completed application.

\*\*Gallagher companies use AM Best rated insurers and the rating listed above was verified on the date the proposal document was created.

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Gallagher companies make no representations and warranties concerning the solvency of any carrier, nor does it make any representation or warranty concerning the rating of the carrier which may change.

Line of Coverage		Expiring	Proposed
		First Liberty Insurance Corporation	First Liberty Insurance Corporation
<b>General Liability</b>	Premium	\$174,572	\$208,902
	<b>Estimated Cost*</b>		
	Change (\$)		\$34,330
	Change (%)		19.66%
	Limit of Liability	\$1M/\$2M	\$1M/\$2M
		First Liberty Insurance Corporation	First Liberty Insurance Corporation
<b>Public Officials Liability</b>	Premium	\$57,680	\$69,908
	<b>Estimated Cost*</b>		
	Change (\$)		\$12,228
	Change (%)		21.19%
	Limit of Liability	\$1M/\$2M	\$1M/\$2M
		Liberty Insurance Corporation	Liberty Insurance Corporation
<b>Excess Liability</b>	Premium	\$16,326	\$21,562
	<b>Estimated Cost*</b>		
	Change (\$)		\$5,236
	Change (%)		32.07%
	Limit of Liability	\$10M/\$10M	\$10M/\$10M
		ACE American Insurance Company	ACE American Insurance Company
<b>Pollution Liability</b>	Premium	\$23,234	\$24,198
	<b>Estimated Cost*</b>		
	Change (\$)		\$964
	Change (%)		4.14%
	Limit of Liability	\$1M/\$1M	\$1M/\$1M
		State National Insurance Company, Inc.	State National Insurance Company, Inc.
<b>Cyber Liability</b>	Premium	\$4,430	\$5,130
	<b>Estimated Cost*</b>		
	Change (\$)		\$700
	Change (%)		15.80%
	Limit of Liability	\$1M/\$1M	\$1M/\$1M
<b>Total Program Cost**</b>		<b>\$276,242</b>	<b>\$329,700</b>

\*Estimated Cost includes all taxes, fees, surcharges and TRIA premium (if applicable)

\*\*Total Premium is increasing by 19.35% over the expiring term.

Gallagher is responsible for the placement of the following lines of coverage:

**General Liability, Public Officials Liability, Excess Liability, Pollution Liability, and Cyber Liability**

It is understood that any other type of exposure/coverage is either self-insured or placed by another brokerage firm other than Gallagher. If you need help in placing other lines of coverage or covering other types of exposures, please contact your Gallagher representative.

Premiums are due and payable as billed and may be financed, subject to acceptance by an approved finance company. Following acceptance, completion (and signature) of a premium finance agreement with the specified down payment is required. Note: Unless prohibited by law, Gallagher may earn compensation for this optional value-added service.

**OAKLAND COUNTY  
WATER RESOURCES COMMISSIONER****MEMORANDUM**

**TO:** Jim Nash, Chairperson, Clinton River Water Resource Recovery Facility Drainage District

**FROM:** John Basch, Drainage District Legal Counsel

**SUBJECT:** Crown Dutton Holdings, LLC., Consent Agreement

**DATE:** September 24, 2024

The attached consent agreement is similar to one authorized by this Board on November 28, 2023. The site to which this agreement applies is unchanged, and the types of violation of Pontiac's Sewer Use Ordinance are substantially similar to those presented nearly a year ago. Only the principals have changed. Since then, the previous owner of the closed landfill on Lapeer Road in Auburn Hills, was RJL Equity Holdings, LLC. RJL Equity Holdings sold its interest in the landfill to Crown Dutton Holdings, LLC. Prior to the sale, RJL had attained full compliance with its permit and had paid all fines, penalties, and reimbursable legal fees assessed by the Drainage District.

Crown Dutton, the new owners, initially indicated that it did not intend to discharge to the Clinton River Water Resource Recovery Facility (CRWRRF), and therefore was not subject to either Pontiac's or Auburn Hills' sewer use ordinances. Rather, its intent is to build a warehouse on the property to facilitate "just in time" trucking deliveries to the nearby General Motors assembly plant and other large commercial entities. However, during a routine inspection of the site, it was discovered that Crown Dutton was, in fact, discharging to the CRWRRF. The amount of the discharge was not large enough to register on the associated flow meter and amounted to about 30 gallons per day. Nevertheless, the sewer use ordinances of both Pontiac and Auburn Hills, subjects violators to a civil fine of \$1,000 per day for each infraction. Applying the \$1,000 per day figure, Crown Dutton's total has grown to more than \$300,000.

After careful consideration and in consultation with CRWRRF staff, including its chief, assistant chief, industrial pretreatment supervisor, and legal counsel, it is recommended that a compromise settlement in the amount of \$50,000 be offered as the total settlement provided Crown Dutton satisfactorily demonstrates a willingness to correct all violations and shall tender full payment within 30 days of the effective date of the consent agreement.

**Requested Action: Authorize the chairperson to execute the attached consent agreement and accept a payment of \$50,000 as full satisfaction of fines along with any and all reimbursable costs associated with this matter.**



Jim Nash, Oakland County Water Resources Commissioner  
Clinton River Water Resource Recovery Facility (CRWRRF) Drainage District  
For Construction of the CRWRRF Optimization I  
City of Pontiac  
Oakland County, Michigan

Construction Estimate No. 1 ✓

Estimate Period: December 1, 2023 to July 31, 2024 ✓

Department No. : 6010101  
Fund No. : 84686  
Project No. : PRJ-17461

PO No. PO 00043820  
Account No. : 731472  
Program No. : 149015  
Activity : FAC  
Vendor No. : 40855  
Contract No. : CON00010566

Contractor :  
Clark Construction Company  
2660 Superior Court  
Auburn Hills, MI 48326

Notice to Proceed : 11/17/2023  
Substantail Completion Date : 11/16/2026  
Final Completion Date : 01/30/2027

Original Contract Amount: \$30,550,434.00

Previous Change Order Numbers (none): \$0.00

Change Orders This Estimate Numbers (none): \$0.00

Total Net Change Orders: \$0.00

Adjusted Contract Amount: \$30,550,434.00

Subtotal To Date: (Sheet 2 of 2 Column 7) \$1,686,951.51

Less Deductions to Date: (Sheet 2 of 2 Column 7) \$0.00

Gross Estimate: (Work in Place) 5.52% \$1,686,951.51

Less Amount Reserved: (10% of Gross Estimate) \$168,695.15

Total Amount Allowed To Date: \$1,518,256.36

Less Previous Estimates: \$0.00 ✓

Net Payment Request To Be Paid To Contractor: \$1,518,256.36

Reserve Payment to Contractor \$0.00

Balance of Contract To Date \$28,863,482.49 ✓ Accounting Auditor: HDG 8/26/24

Less Previous Transfers To Reserve: \$0.00 ✓

Amount of Current Transfer: \$168,695.15

Prepared by: [Signature]  
Razik Alsaigh, P.E. - Project Engineer

Date: 08/26/2024

Recommended by: [Signature]  
Jacobs Consulting Inc - Consulting Engineer

Date: 8/26/2024

Approved by: [Signature]  
Joel Brown, P.E. - Chief Engineer

Date: 9/4/2024

Approved by: [Signature]  
Gary Nigro, P.E. - Manager

Date: 9/5/2024

Approved by Board on: \_\_\_\_\_

JIM NASH  
OAKLAND COUNTY WATER RESOURCES COMMISSIONER

**Jim Nash, Oakland County Water Resources Commissioner**  
**Clinton River Water Resource Recovery Facility (CRWRRF) Drainage District**  
**For Construction of the CRWRRF Optimization I**  
**City of Pontiac**  
**Oakland County, Michigan**

Construction Estimate No. 2 ✓

Estimate Period: August 1, 2023 to August 31, 2024 ✓

Department No. : 6010101  
 Fund No. : 84686  
 Project No. : PRJ-17461


PO No. PO 00043820  
 Account No. : 731472  
 Program No. : 149015  
 Activity : FAC  
 Vendor No. : 40855  
 Contract No. : CON00010566  
 Notice to Proceed : 11/17/2023  
 Substantial Completion Date : 11/16/2026  
 Final Completion Date : 01/30/2027

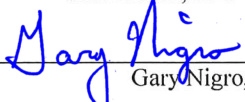
Contractor :  
 Clark Construction Company  
 2660 Superior Court  
 Auburn Hills, MI 48326

Original Contract Amount:	\$30,550,434.00
Previous Change Order Numbers (none):	\$0.00
Change Orders This Estimate Numbers (none):	\$0.00
Total Net Change Orders:	\$0.00
<u>Adjusted Contract Amount:</u>	<u>\$30,550,434.00</u>
Subtotal To Date: (Sheet 2 of 2 Column 7)	\$5,230,901.36
Less Deductions to Date: (Sheet 2 of 2 Column 7)	\$0.00
Gross Estimate: (Work in Place) <span style="float:right">17.12%</span>	\$5,230,901.36
Less Amount Reserved: (10% of Gross Estimate)	\$523,090.14
Total Amount Allowed To Date:	\$4,707,811.22
Less Previous Estimates:	\$1,518,256.36 ✓
Net Payment Request To Be Paid To Contractor:	\$3,189,554.87
Reserve Payment to Contractor	\$0.00
Balance of Contract To Date <span style="float:right">\$25,319,532.64 ✓</span>	Accounting Auditor: <u>H/DG 9/11/24</u>
Less Previous Transfers To Reserve:	\$168,695.15 ✓
<u>Amount of Current Transfer:</u>	<u>\$354,394.99</u>

Prepared by:  Date: 09/11/2024  
 Razik Alsaigh, P.E. - Project Engineer

Recommended by:  Date: 9/11/24  
 Jacobs Consulting Inc - Consulting Engineer

Approved by:  Date: 9/13/2024  
 Joel Brown, P.E. - Chief Engineer

Approved by:  Date: 9/16/2024  
 Gary Nigro, P.E. - Manager

Approved by Board on: \_\_\_\_\_

**JIM NASH**  
**OAKLAND COUNTY WATER RESOURCES COMMISSIONER**

**MEMO TO:** Mr. Jim Nash, Chairman  
of the Drainage Board for the CLINTON RIVER WATER RESOURCE RECOVERY FACILITY DRAIN - (Maintenance)

**FROM:** Shawn Phelps, Chief of Fiscal Services  
OCWRC Accounting

**DATE:** September 24, 2024

**SUBJECT:** Request for Approval of Invoices

The following is a detail of charges paid from the Drain Revolving Fund and Invoices

Payable To	Ref No.	For	Amount
USA Blue Book	PC00039353	Pcard - Lab Supplies # INV00465942	\$ 2,048.57
CSM Mechanical LLC	V # SINV00287973	Invoice # 3724 - Contracted Services	6,120.00
D3W Industries	V # SINV00287977	Invoice # 4727 - Material and Supplies	5,720.00
Davis & Davis Law Offices PLC	V # SINV00287574	Invoice # OCWRC-08-25-24 - Legal Services	7,923.00
D. J. Conley Associates Inc	V # SINV00287974	Invoice # SI-52923-1 - Material and Supplies	6,349.65
Galloup Forberg Smith Merlo Energy	TBP	Invoice # S114405850.001 - Material and Supplies	1,326.00
Haviland Products Company	V # SINV00285518	Invoice # 515224 - Chemical Treatment	7,476.05
Haviland Products Company	V # SINV00283194	Invoice # 515701 - Chemical Treatment	7,487.28
Haviland Products Company	V # SINV00284757	Invoice # 516040 - Chemical Treatment	6,051.00
Haviland Products Company	V # SINV00284758	Invoice # 516106 - Chemical Treatment	7,681.42
Haviland Products Company	V # SINV00285520	Invoice # 516545 - Chemical Treatment	6,051.00
Haviland Products Company	V # SINV00287206	Invoice # 516813 - Chemical Treatment	7,512.68
Haviland Products Company	V # SINV00287207	Invoice # 517001 - Chemical Treatment	3,330.00
Haviland Products Company	V # SINV00287975	Invoice # 517292 - Chemical Treatment	7,508.69
LaSalle Agri Inc	V # SINV00287209	Invoice # 40 - Land Application	37,483.95
LaSalle Agri Inc	V # SINV00287210	Invoice # 43 - Land Application	17,632.30
PVS Technologies Inc	V # SINV00283197	Invoice # 362812 - Chemical Treatment	4,942.08
PVS Technologies Inc	V # SINV00285522	Invoice # 363143 - Chemical Treatment	2,592.48
PVS Technologies Inc	V # SINV00287211	Invoice # 363606 - Chemical Treatment	5,109.72
PVS Technologies Inc	V # SINV00287213	Invoice # 363650 - Chemical Treatment	2,344.32
Polydyne Inc	V # SINV00283196	Invoice # 1859077 - Chemical Treatment	40,196.00
Saber Building Services Inc	V # SINV00285524	Invoice # 45325 - Contracted Services - Sept 2024	1,800.00
United Lawnscape	V # SINV00287216	Invoice # UE 618051 - Contracted Services	5,880.00
United Lawnscape	V # SINV00287217	Invoice # UE 618052 - Contracted Services	3,035.00
Waste Management	V # SINV00288435	Invoice # 8779624 -1714-4 Garbage & Rubbish Disposal	1,496.81
		<b>Subtotal</b>	<b>\$ 205,098.00</b>
Jacobs	V # SINV00287577	Invoice # C6A21702-7 - Engineering & Survey - 8/23/24 - Proj # 1-7515	\$ 8,894.54
MFCI, LLC	V # SINV00288436	Invoice # 1308 - Professional Service - Financial Consultant Proj # 1-7515	\$ 49,336.00
Dickinson Wright PLLC	TBP	Invoice # 9007-447 - Bond Attorney Fees - Proj # 1-7515	\$ 114,430.00
		<b>Subtotal - Project 1-7515</b>	<b>\$ 172,660.54</b>
Jacobs Consultant, Inc	V # SINV00287579	Invoice # C6A19600-16 - Professional Services - 08/23/24 - Proj # 1-7550	\$ 9,586.21
		<b>Subtotal - Project 1-7550</b>	<b>\$ 9,586.21</b>
Tetra Tech, Inc	V # SINV00287215	Invoice # 52297411 - Contracted Services - 08/23/24 - Proj # 1-7549	\$ 2,146.91
		<b>Subtotal - Project 1-7549</b>	<b>\$ 2,146.91</b>
OHM Advisors	V # SINV00287581	Invoice # 79220 - Professional Services - 8/17/24 Proj # 1-7047	\$ 5,531.75
		<b>Subtotal - Project 1-7047</b>	<b>\$ 5,531.75</b>
NTH Consultants Ltd	V # SINV00285521	Invoice # 636907 - Engineering Survey - Proj # 1-7127	\$ 1,141.00
		<b>Subtotal - Project 1-7127</b>	<b>\$ 1,141.00</b>
Actuator Specialties Services	V # SINV00283912	Invoice # 6027 - Contracted Services - Proj # 1-3492	\$ 4,451.49
		<b>Subtotal - Project 1-3492</b>	<b>\$ 4,451.49</b>
		<b>Total</b>	<b>\$ 400,615.90</b>

**MEMO TO:** Mr. Jim Nash, Chairman  
of the Drainage Board for the CLINTON RIVER WATER RESOURCE RECOVERY FACILITY DRAIN - (Construction)

**FROM:** Shawn Phelps, Chief of Fiscal Services  
OCWRC Accounting

**DATE:** September 24, 2024

**SUBJECT:** Request for Board approval of payment of the following invoices:

	Ref No.	For	Amount
Jacobs Consultant, Inc	V # SINV00287582	Invoice # C6A21700-20- Engineering and Survey - 08/23/24 - Proj # 1-7461	\$ 76,650.63
		<b>Total for Project # 1-7461</b>	<b>\$ 76,650.63</b>
		<b>Total</b>	<b>\$ 76,650.63</b>

### **3. Evergreen-Farmington Sanitary Drain**

**AGENDA**

**DRAINAGE BOARD FOR THE  
EVERGREEN-FARMINGTON SANITARY DRAIN  
FIRST MEETING FOR NEW DRAIN PROJECT**

New Drain Project

City of Auburn Hills, Village of Beverly Hills, Village of Bingham Farms, City of Birmingham, Charter Township of Bloomfield, City of Bloomfield Hills, City of Farmington, City of Farmington Hills, Village of Franklin, City of Keego Harbor, City of Lathrup Village, City of Orchard Lake Village, City of Southfield, City of Troy and Charter Township of West Bloomfield

September 24, 2024

1. Call meeting to order.
2. Approve minutes of meeting of August 27, 2024.
3. Public Comments.
4. Present petitions from the City of Farmington Hills and the City of Southfield.
5. Resolution to:
  - A. Acknowledge consideration of petitions.
  - B. Determine that the drain project is necessary for the public health.
  - C. Designate public corporations to be assessed.
    - City of Auburn Hills
    - Village of Beverly Hills
    - Village of Bingham Farms
    - City of Birmingham
    - Charter Township of Bloomfield
    - City of Bloomfield Hills
    - City of Farmington
    - City of Farmington Hills
    - Village of Franklin
    - City of Keego Harbor
    - City of Lathrup Village
    - City of Orchard Lake Village
    - City of Southfield
    - City of Troy
    - Charter Township of West Bloomfield
  - D. Name the drain project and the drainage district.
  - E. Set the time for the first hearing.

- F. Direct that notice be published in The Oakland Press.
  - G. Direct that notice be mailed.
6. Resolution to appoint registered municipal advisor and bond counsel.
  7. Present Memorandum from Lawrence Young, Civil Engineer II, dated September 24, 2024, requesting the Board authorize the purchase of seven ADS ECHO Level Sensors in the amount of \$2,995 per meter for a total of \$20,965
  8. Present Memorandum from Carrie Cox, Special Projects Manager, dated September 24, 2024, requesting the Board authorize staff to confirm the Drainage District's intent to utilize the State of Michigan's Clean Water State Revolving Fund for the Walnut Lake Pump Station No. 1 Corrective Action Plan Improvement Project
  9. Present Memorandum from Scott Schultz, E.I.T, Project Engineer, dated September 24, 2024, requesting the Board:
    1. Award the Southfield Sewer Lining project to SAK Construction. LLC and authorize the Chairperson to sign the agreement for the Southfield Sewer Lining project between the Drainage District and SAK Construction, LLC in the amount of \$7,387,461.00
    2. Approve the updated project cost estimate in the amount of \$9,188,000
  10. Present Construction Estimate No. 30 for Walsh Construction Company II, LLC for the 8 Mile Road Pump Station & SSO Chamber Improvements – Phase 1 in the amount of \$1,299,533.54 with a transfer to the Oakland County Treasurer in the amount of \$16,229.17
  11. Present Construction Estimate No. 12 for Dan's Excavating for Construction of the 8 Mile Road Corrective Action Plan – Phase 2 in the amount of \$458,133.63
  12. Present request for Board approval of payment of invoices from the Evergreen Farmington Sanitary Drain from the Maintenance Fund in the amount of \$74,728.79
  13. Present request for Board approval of payment of invoices from the Evergreen Farmington Sanitary Drain from the Construction Fund in the amount of \$102,960.22
  14. Approve pro rata payment to Drainage Board members.
  15. Adjourn.



**MINUTES OF THE MEETING OF THE DRAINAGE BOARD  
FOR THE EVERGREEN -FARMINGTON SANITARY DRAIN**

August 27, 2024

A meeting of the Drainage Board for the Evergreen-Farmington Sanitary Drain was held in the office of the Oakland County Water Resources Commissioner, Public Works Building, One Public Works Drive, Waterford, Michigan at 2:00 p.m. on the 27<sup>th</sup> day of August 2024.

The meeting was called to order by the Chairperson.

PRESENT: Jim Nash, Oakland County Water Resources Commissioner

David Woodward, Chairperson of the Oakland County Board of Commissioners

ABSENT: Gwen Markham, Chairperson of the Finance Committee, Oakland County Board of Commissioners

Minutes of the meeting held July 23, 2024, were presented for consideration. It was moved by Woodward, supported by Nash, that the minutes be approved.

ADOPTED: Yeas - 2  
Nays - 0

Chairperson Nash asked if there were any public comments. There were none.

A memorandum from Scott Schultz, Project Engineer, dated August 27, 2024, requesting the Board approve a project budget increase of \$600,000 to an overall not to exceed amount of \$2,400,000 for the I-696 Pump Station Rehabilitation Project was presented. It was moved by Woodward, supported by Nash, to approve a project budget increase of \$600,000 to an overall not to exceed amount of \$2,400,000 for the I-696 Pump Station Rehabilitation Project as presented.

ADOPTED: Yeas - 2  
Nays - 0

Construction Estimate No. 29 for Walsh Construction Company II, LLC for the 8 Mile Road Pump Station & SSO Chamber Improvements – Phase 1 in the amount of \$1,608,234.59 with a transfer to the Oakland County Treasurer in the amount of \$178,692.73 was presented. It was moved by Woodward, supported by Nash, to approve Construction Estimate No. 29 for Walsh Construction Company II, LLC for the 8 Mile Road Pump Station & SSO Chamber Improvements – Phase 1 in the amount of \$1,608,234.59 with a transfer to the Oakland County Treasurer in the amount of \$178,692.73 as presented.

ADOPTED: Yeas - 2  
Nays - 0

Construction Estimate No. 11 for Dan’s Excavating for construction of the 8



Mile Road Corrective Action Plan – Phase 2 in the amount of \$210,368.50 was presented. It was moved by Woodward, supported by Nash, to approve Construction Estimate No. 11 for Dan’s Excavating for construction of the 8 Mile Road Corrective Action Plan – Phase 2 in the amount of \$210,368.50 as presented.

ADOPTED: Yeas - 2  
Nays - 0

Construction Estimate No. 1 for Lawrence M. Clarke Inc. for Construction of the I-696 Pump Station Rehabilitation in the amount of \$92,891.37 with a transfer to the Oakland County Treasurer in the amount of \$10,321.26 was presented. It was moved by Woodward, supported by Nash, to approve Construction Estimate No. 1 for Lawrence M. Clarke Inc. for Construction of the I-696 Pump Station Rehabilitation in the amount of \$92,891.37 with a transfer to the Oakland County Treasurer in the amount of \$10,321.26 as presented.

ADOPTED: Yeas - 2  
Nays - 0

A request for approval of payment of invoices from the Evergreen Farmington Sanitary Drain Maintenance Fund in the amount of \$547,661.95 (as attached) was presented. It was moved by Woodward, supported by Nash, to approve the payment of invoices from the Evergreen Farmington Sanitary Drain Maintenance Fund in the amount of \$547,661.95 as presented.

ADOPTED: Yeas - 2  
Nays - 0

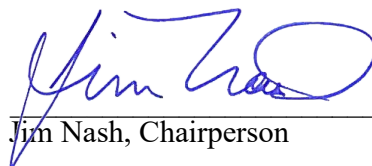
A request for approval of payment of invoices from the Evergreen Farmington Sanitary Drain Construction Fund in the amount of \$127,504.61 (as attached) was presented. It was moved by Woodward, supported by Nash, to approve the payment of invoices from the Evergreen Farmington Sanitary Drain Construction Fund in the amount of \$127,504.61 as presented.

ADOPTED: Yeas - 2  
Nays - 0

It was moved by Nash, supported by Woodward, to certify attendance and authorize pro rata payment of \$25 per day to Mr. Woodward.

ADOPTED: Yeas - 2  
Nays - 0

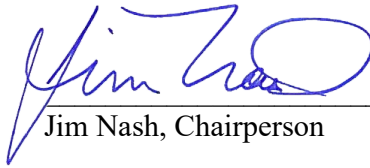
There being no further business, the meeting was adjourned.

  
\_\_\_\_\_  
Jim Nash, Chairperson

STATE OF MICHIGAN                    )  
  )SS.  
COUNTY OF OAKLAND                )

I, the undersigned, do hereby certify that the foregoing is a true and complete copy of the minutes of the Drainage Board for the Evergreen-Farmington Sanitary Drain, Oakland County, Michigan, held on the 27<sup>th</sup> day of August 2024, and that the minutes are on file in the office of the Oakland County Water Resources Commissioner and are available to the public.

I further certify that the notice of the meeting was posted at least 18 hours in advance of the meeting at the office of the Oakland County Water Resources Commissioner which is the principal office of the Drainage Board for the Evergreen-Farmington Sanitary Drain Drainage District.



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Jim Nash, Chairperson

Dated: August 27, 2024

At a regular meeting of the City Council of the City of Farmington Hills, Oakland County, Michigan held on August 12, 2024.

PRESENT: ALDRED, BRIDGES, BRUCE, DWYER, KNOL, AND RICH

ABSENT: BOLEWARE

The following resolution was offered by Councilmember Knol and seconded by Councilmember Aldred:

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF FARMINGTON HILLS, OAKLAND COUNTY, MICHIGAN, as follows:

1. That the City of Farmington Hills make and cause to be filed a petition in form substantially as follows:

PETITION

TO THE DRAINAGE BOARD FOR THE  
HEREINAFTER MENTIONED OAKLAND  
COUNTY, MICHIGAN DRAIN PROJECT


The undersigned public corporation hereby petitions for the location, establishment and construction of an intra-county drain project consisting of extending the Evergreen-Farmington Sanitary Drain by adding a branch to said Drain known as the 10 Mile – Rouge Arm and conducting an assessment of pipe condition, including without limitation closed-circuit televising and cleaning of pipes, which drain project is necessary for the public health, and will be located in the City of Auburn Hills, the Village of Beverly Hills, the Village of Bingham Farms, the City of Birmingham, the Charter Township of Bloomfield, the City of Bloomfield Hills, the City of Farmington, the City of Farmington Hills, the Village of Franklin, the City of Keego Harbor, the City of Lathrup Village, the City of Orchard Lake Village, the City of Southfield, the City of Troy and the Charter Township of West Bloomfield and will serve property located entirely within the limits of the City of Auburn Hills, the Village of Beverly Hills, the Village of Bingham Farms, the City of Birmingham, the Charter Township of Bloomfield, the City of Bloomfield Hills, the City of Farmington, the City of Farmington Hills, the Village of Franklin, the City of Keego Harbor, the City of Lathrup Village, the City of Orchard Lake Village, the City of Southfield, the City of Troy and the Charter Township of West Bloomfield. The Evergreen-Farmington Sanitary Drain carries flow originating in the County of Oakland only.

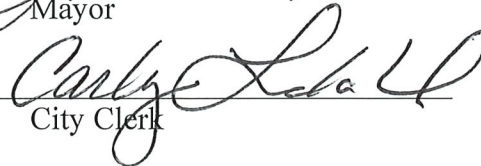
This petition is filed pursuant to the provisions of Chapter 20 of Act No. 40 of the Public Acts of Michigan of 1956, as amended.

It is understood and agreed that the entire cost, if any, of the drain project is to be assessed against public corporations including this petitioner.

A certified copy of the resolution of the governing body of the City of Farmington Hills authorizing execution of this petition is attached hereto.

CITY OF FARMINGTON HILLS

By:   
Mayor

By:   
City Clerk

2. That the Mayor and City Clerk are authorized and directed to execute the petition for and on behalf of the City of Farmington Hills and to file the same with the Water Resources Commissioner of the County of Oakland.

3. That the City Council hereby consents to the assessment of part of the cost, if any, of the drain project, so located, against the City of Farmington Hills and hereby agrees that it will pay its share of all costs, if any, incurred by the Oakland County Water Resources Commissioner or by the Drainage District in the event the drain project, for any reason, is not completed.

4. That all prior resolutions and parts of resolutions insofar as they conflict with the provisions of this resolution are hereby rescinded.

ADOPTED: Yeas - ALDRED, BRIDGES, BRUCE, DWYER, KNOL, AND RICH

Nays - NONE

STATE OF MICHIGAN     )  
  )SS  
COUNTY OF OAKLAND    )

I hereby certify that that foregoing is a true and complete copy of a resolution adopted by the City Council of the City of Farmington Hills, Oakland County, Michigan, at a [regular][special] meeting held on August 12, 2024, the original of which is on file in my office. I certify further that notice of the meeting was given in accordance with the open meetings act.

  
\_\_\_\_\_  
City Clerk  
City of Farmington Hills

# *CITY OF FARMINGTON HILLS*

*CITY CLERK'S OFFICE*

*31555 W. 11 Mile Road, Farmington Hills, MI 48336-1165*

*(248) 871-2410*

R-171-24

## **RESOLUTION**

IT IS RESOLVED, that the City Council of Farmington Hills hereby make and cause to be filed, a petition extending the Evergreen-Farmington Sanitary Drain by adding a branch to the drain.

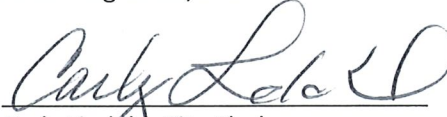
Motion by: KNOL  
Support by: ALDRED

### Roll Call Vote:

Yeas: ALDRED, BRIDGES, BRUCE, DWYER, KNOL, AND RICH  
Nays: NONE  
Absent: BOLEWARE  
Abstentions: NONE

MOTION CARRIED 6-0.

I, Carly Lindahl, the duly authorized City Clerk of the City of Farmington Hills, Oakland County, Michigan, do hereby certify that the foregoing is a true copy of a resolution adopted by the City Council of the City of Farmington Hills at the regular City Council meeting held on August 12, 2024.

  
Carly Lindahl, City Clerk

DATE: August 13, 2024

At a regular meeting of the City Council of the City of Southfield, Oakland County, Michigan held on August 26, 2024.

PRESENT: Banks, Brightwell, Crews, Haynes, Hicks, Hougue, Mandelbaum

ABSENT: None

The following resolution was offered by Crews and seconded by Banks :

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF Southfield, OAKLAND COUNTY, MICHIGAN, as follows:

1. That the City of Southfield make and cause to be filed a petition in form substantially as follows:



PETITION

TO THE DRAINAGE BOARD FOR THE  
HEREINAFTER MENTIONED OAKLAND  
COUNTY, MICHIGAN DRAIN PROJECT

The undersigned public corporation hereby petitions for the location, establishment and construction of an intra-county drain project consisting of extending the Evergreen-Farmington Sanitary Drain by adding a branch to said Drain and conducting an assessment of pipe condition, including without limitation closed-circuit televising and cleaning of pipes, which drain project is necessary for the public health, will be located in the City of Auburn Hills, the Village of Beverly Hills, the Village of Bingham Farms, the City of Birmingham, the Charter Township of Bloomfield, the City of Bloomfield Hills, the City of Farmington, the City of Farmington Hills, the Village of Franklin, the City of Keego Harbor, the City of Lathrup Village, the City of Orchard Lake Village, the City of Southfield, the City of Troy and the Charter Township of West Bloomfield and will serve property located entirely within the limits of the City of Auburn Hills, the Village of Beverly Hills, the Village of Bingham Farms, the City of Birmingham, the Charter Township of Bloomfield, the City of Bloomfield Hills, the City of Farmington, the City of Farmington Hills, the Village of Franklin, the City of Keego Harbor, the City of Lathrup Village, the City of Orchard Lake Village, the City of Southfield, the City of Troy and the Charter Township of West Bloomfield. The Evergreen-Farmington Sanitary Drain carries flow originating in the County of Oakland only.

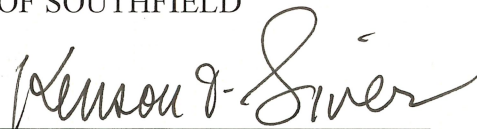
This petition is filed pursuant to the provisions of Chapter 20 of Act No. 40 of the Public Acts of Michigan of 1956, as amended.

It is understood and agreed that the entire cost, if any, of the drain project is to be assessed against public corporations including this petitioner.

A certified copy of the resolution of the governing body of the City of Southfield authorizing execution of this petition is attached hereto.

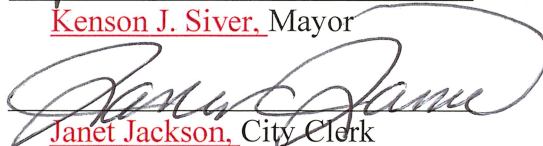
CITY OF SOUTHFIELD

By:



Kenson J. Siver, Mayor

By:



Janet Jackson, City Clerk



2. That the Mayor and City Clerk are authorized and directed to execute the petition for and on behalf of the City of Southfield and to file the same with the Water Resources Commissioner of the County of Oakland.

3. That the City Council hereby consents to the assessment of part of the cost, if any, of the drain project, so located, against the City of Southfield and hereby agrees that it will pay its share of all costs, if any, incurred by the Oakland County Water Resources Commissioner or by the Drainage District in the event the drain project, for any reason, is not completed.

4. That all prior resolutions and parts of resolutions insofar as they conflict with the provisions of this resolution are hereby rescinded.

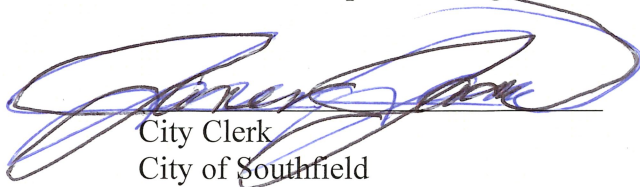
ADOPTED: Yeas - \_\_\_\_\_

\_\_\_\_\_

Nays - \_\_\_\_\_

STATE OF MICHIGAN     )  
  )SS  
COUNTY OF OAKLAND    )

I hereby certify that that foregoing is a true and complete copy of a resolution adopted by the City Council of the City of Southfield, Oakland County, Michigan, at a [regular][special] meeting held on August 26, 2024, the original of which is on file in my office. I certify further that notice of the meeting was given in accordance with the open meetings act.

  
\_\_\_\_\_  
City Clerk  
City of Southfield

DRAINAGE BOARD FOR THE  
EVERGREEN-FARMINGTON SANITARY DRAIN  
FIRST MEETING FOR NEW DRAIN PROJECT

September 24, 2024

The first meeting of the Drainage Board for the hereinafter mentioned Oakland County, Michigan drain project was held at the office of the Oakland County Water Resources Commissioner, Waterford, Michigan, on September 24, 2024.

PRESENT: \_\_\_\_\_

ABSENT: \_\_\_\_\_

The meeting was called to order by the Chairperson.

Minutes of the meeting held \_\_\_\_\_, 2024, were presented for consideration. It was moved by \_\_\_\_\_, supported by \_\_\_\_\_, that the minutes be approved.

ADOPTED: Yeas - \_\_\_\_\_

Nays - \_\_\_\_\_

Chairperson Nash asked if there were any public comments. There were \_\_\_\_\_.

The Chairperson presented to the Drainage Board the petitions referred to in the following resolution, attached to which petitions was a certified copy of each resolution of the respective governing body of the public corporation signing the same, authorizing the execution of the respective petition. The Chairperson stated that the petitions with the attached resolutions were filed in his office on September 12, 2024, by the City of Farmington Hills and on September 13, 2024, by the City of Southfield. After examination and consideration of the petitions, by unanimous consent, they were ordered filed with the Chairperson.

The following resolution was offered by \_\_\_\_\_ and seconded by \_\_\_\_\_:

BE IT RESOLVED BY THE DRAINAGE BOARD FOR THE HEREINAFTER MENTIONED OAKLAND COUNTY, MICHIGAN DRAIN PROJECT, as follows:

1. That this Drainage Board has considered the petitions and attached resolutions filed with the Oakland County Water Resources Commissioner on September 12, 2024, by the City of Farmington Hills and on September 13, 2024 by the City of Southfield, which petitions are as follows:

[Remainder of page intentionally left blank]

2. That this Drainage Board determines that the sanitary wastewater to be carried by the proposed drain project originates in the County of Oakland only; and that the drain project is necessary for the public health.

3. That this Drainage Board tentatively determines that the petitions are sufficient; that the drain project proposed therein is practical; and that the following public corporations be assessed to pay the cost of the project to wit:

- City of Auburn Hills
- Village of Beverly Hills
- Village of Bingham Farms
- City of Birmingham
- Charter Township of Bloomfield
- City of Bloomfield Hills
- City of Farmington
- City of Farmington Hills
- Village of Franklin
- City of Keego Harbor
- City of Lathrup Village
- City of Orchard Lake Village
- City of Southfield
- City of Troy
- Charter Township of West Bloomfield

4. That the name “EVERGREEN-FARMINGTON SANITARY DRAIN CONSOLIDATION PROJECT” is hereby given to the drain project and the name “EVERGREEN-FARMINGTON SANITARY DRAIN DRAINAGE DISTRICT” is confirmed as the drainage district therefor.

5. That this Drainage District shall meet on the \_\_\_\_ day of \_\_\_\_\_, 2024, at \_\_\_\_: \_\_ .m., prevailing Eastern Time at the Office of the Oakland County Water Resources Commissioner, Waterford, Michigan, for the purpose of hearing any objections to the aforementioned drain project, to the petitions therefor, and to the matter of assessing the cost of the drain project to the public corporations above named; that following said hearing this Drainage

Board may issue a Final Order of Determination with respect to the practicability of the aforementioned drain project, the petitions therefor and the matter of assessing the cost of the drain project to the public corporations above named, and that, pursuant to Act 40, Public Acts of Michigan, 1956, as amended (the "Drain Code"), once a Final Order of Determination is issued, no public corporation may be eliminated from or added to those tentatively determined to be assessed, without a rehearing after notice.

6. That a notice of said meeting shall be prepared which notice shall contain the information required by the Drain Code and shall be published twice in The Oakland Press, a newspaper published in the County of Oakland, State of Michigan, the first publication to be not less than twenty (20) days prior to the time of the hearing.

7. That the notice shall be sent by registered or certified mail to the Clerk of each of the City of Auburn Hills, Village of Beverly Hills, Village of Bingham Farms, City of Birmingham, Charter Township of Bloomfield, City of Bloomfield Hills, City of Farmington, City of Farmington Hills, Village of Franklin, City of Keego Harbor, City of Lathrup Village, City of Orchard Lake Village, City of Southfield, City of Troy and Charter Township of West Bloomfield, which mailing shall be made not less than twenty (20) days prior to the time of the hearing.

ADOPTED: Yeas - \_\_\_\_\_

Nays - \_\_\_\_\_

It was moved by \_\_\_\_\_ and supported by \_\_\_\_\_ that the following be appointed to act in the following capacities in connection with the proposed drain project:

Municipal Financial Consultants, Inc., as registered municipal advisor.  
Dickinson Wright PLLC, Troy, Michigan, as bond counsel.

ADOPTED: Yeas - \_\_\_\_\_

Nays - \_\_\_\_\_

It was moved by \_\_\_\_\_, supported by \_\_\_\_\_, to certify attendance and authorize pro rata payment of \$25 per day to Ms. Markham and Mr. Woodward.

ADOPTED: Yeas - \_\_\_\_\_

Nays - \_\_\_\_\_

Upon motion by \_\_\_\_\_, seconded by \_\_\_\_\_ and unanimously adopted, the meeting was adjourned.

\_\_\_\_\_  
Chairperson

September 24, 2024

STATE OF MICHIGAN     )  
  )SS  
COUNTY OF OAKLAND    )

I hereby certify that the foregoing is a true and complete copy of the minutes of a meeting of the Drainage Board for the Evergreen-Farmington Sanitary Drain Consolidation Project, Oakland County, Michigan, held on September 24, 2024, and that the minutes are on file in the offices of the Oakland County Water Resources Commissioner and are available to the public.

I further certify that notice of the meeting was given in accordance with the Open Meetings Act.

\_\_\_\_\_  
Chairperson of the Drainage Board

Dated: September 24, 2024

4857-8717-5140 v1 [12840-447]

**OAKLAND COUNTY  
WATER RESOURCES COMMISSIONER****MEMORANDUM**

**TO:** Jim Nash, Chairperson of the Evergreen-Farmington Sanitary Drain Drainage Board

**FROM:** Lawrence Young, Civil Engineer II

**SUBJECT:** Purchase of ADS ECHO Level Sensors

**DATE:** September 24, 2024

The Board of the Evergreen-Farmington Sanitary Drain Drainage District currently rents ADS ECHO level sensors to assess sewer system performance. The current rental price is \$165 per month, per meter. There also is a purchase option of \$2,995 per meter. The break-even point to purchase versus rent is about 18 months. Due to District being operated under an administrative consent order from the State of Michigan to address sanitary sewer overflows, it is expected that the need for these level sensors will be longer than 18 months. After careful review, it is staff's recommendation that the Board purchase seven level sensors to assess the system's performance.

**Requested Action: Authorize the purchase of seven ADS ECHO Level Sensors in the amount of \$2,995 per meter for a total cost of \$20,965.**

**OAKLAND COUNTY  
WATER RESOURCES COMMISSIONER**

**MEMORANDUM**

**TO:** Jim Nash, Chairperson of the Evergreen-Farmington Sanitary Drain Drainage Board

**FROM:** Carrie Ricker Cox, Special Projects Manager

**SUBJECT:** State of Michigan's Clean Water State Revolving Fund  
Walnut Lake Pump Station No. 1 Corrective Action Plan

**DATE:** September 24, 2024

The Evergreen-Farmington Sanitary Drain Drainage District (EFSDDD) is currently under an administrative consent order from the State of Michigan. This order requires a corrective action plan that addresses the remaining sanitary sewer overflows within the EFSDDD. As part of the corrective action plan, on March 26, 2024 the EFSDDD adopted a resolution to implement the Walnut Lake Pump Station No.1 Corrective Action Plan Improvements Project.

The estimated total project cost is \$21,700,000. A project plan was submitted for the State of Michigan's Clean Water State Revolving Fund (SRF), which offers low interest loans as shown in **Table 1**. The project scored in the fundable range for fiscal year 2025. The Office of the Water Resources Commissioner has used SRF funding in the past and has had great success.

**Requested Action: Authorize WRC staff to confirm EFSDDD's intent to utilize the State of Michigan's Clean Water State Revolving Fund for the Walnut Lake Pump Station No.1 Corrective Action Plan Improvement Project.**

**Table 1**

<b>Term</b>	<b>Applicant Type</b>	<b>Rate</b>
20-year	N/A	2.50 %
30-year	N/A	2.75 %
20-year 30-year	Overburdened	2.00 %
20-year 30-year	Significantly Overburdened	1.00 %
20-year 30-year	Stormwater projects scored solely under the stormwater criteria	0.00% up to \$5M



**OAKLAND COUNTY  
WATER RESOURCES COMMISSIONER****MEMORANDUM**

**TO:** Jim Nash, Chairperson of the Evergreen Farmington Sanitary Drain Drainage Board

**FROM:** Scott Schultz, E.I.T. Project Engineer

**SUBJECT:** Recommendation for Contract Award to SAK Construction, LLC for the EFSDDD Southfield Sewer Area 7 Lining Project and Approval of Revised Cost Estimate

**DATE:** September 24, 2024

On August 6, 2024, three responsive bids for design-build services were received for the EFSDS Southfield Sewer Lining Project. They were as follows:

- SAK Construction, LLC
- Pipeline Management Company, LLC
- DVM Utilities, Inc.

The bids were reviewed for completeness and conformance with the contract documents and evaluated using a qualifications-based selection process as this is a design-build project. Four reviewers were selected to score the bids based on the criteria shown in the attached recommendation of award letter from Fishbeck dated August 29, 2024. SAK Construction, LLC (SAK) was the highest scoring bidder based on the selection criteria shown. It is worthy of nothing that SAK also had the lowest cost amongst the submitted bids. Due to the proximity to schools and homes along this stretch of the interceptor, we will be utilizing SAK's alternate non-styrenated resin bid for a total contract amount of \$7,387,461.

A revised project cost estimate has been developed based on the construction cost and schedule in the amount of \$9,188,000. See the appended project cost sheet for a further breakdown. This project can be paid for through the existing capital reserve funds.

**Requested Action: Award the EFSDDD Southfield Sewer Lining project to SAK Construction, LLC and authorize the EFSDDD Chairperson to sign the Agreement for the Southfield Sewer Lining project between EFSDDD and SAK Construction, LLC in the amount of \$7,387,461.00.**

**Requested Action: Approve the updated project cost estimate in the amount of \$9,188,000.**

**EFSDDD Southfield Sewer Lining Project PRJ17455**  
**ESTIMATE OF TOTAL PROJECT COSTS**  
**REVISED: 09/10/24**

	Project Costs
<b>1) Facility Acquisition</b>	
a Construction Cost	\$ 7,387,461
<b>Subtotal Facility Acquisition</b>	<b>\$ 7,387,000</b>
<b>2) Engineering Consultants</b>	
a Prelim. Engineering (Study) and Design Phase Services	\$ 243,600
b Construction Phase Services Incl. Materials Testing	\$ -
c Scheduling Consultant	\$ -
d Additional Special Services	\$ -
<b>Subtotal Engineering Consultants</b>	<b>\$ 244,000</b>
<b>3) Project Financing &amp; Legal</b>	
a Project Insurance	\$ -
b Bond Issuance (Legal)	\$ 74,677
c Bond Issuance (Financial Consultant)	\$ -
d Wetland Mitigation	\$ -
<b>Subtotal Project Financing &amp; Legal</b>	<b>\$ 75,000</b>
<b>3) Right of Way</b>	
a Easement Fees	\$ 100,000
b Legal Fees	\$ 20,000
c Permits	\$ 30,000
d County Services	\$ 128,921
<b>Subtotal Right of Way</b>	<b>\$ 279,000</b>
<b>4) Exclusive County Services</b>	
a Administration	\$ -
b Engineering	\$ 129,411
c Inspection	\$ 232,884
d Survey	\$ 5,697
e O&M Startup	\$ -
<b>Subtotal Exclusive County Services</b>	<b>\$ 368,000</b>
<b>8) Project Subtotal</b>	<b>\$ 8,353,000</b>
<b>9) Project Contingency (10%)</b>	<b>\$ 835,000</b>
<b>10) Total Project Cost</b>	<b>\$ 9,188,000</b>

I hereby certify the period of usefulness of these facilities to be 20 years and upwards.

By: Scott Schultz  
**Scott Schultz**  
**Project Engineer**

By: Joel Brown  
**Joel Brown, P.E.**  
**Chief Engineer**

August 29, 2024  
Project No. 220950

Scott Schultz, PE  
Oakland County Water Resources Commissioner  
One Public Works Drive, Building 95 West  
Waterford, MI 48328

**Design-Build Proposal Evaluation  
Evergreen Farmington Sanitary Drain Drainage District  
Southfield Sewer Lining Project**

On Tuesday, August 6, 2024, at 2 p.m. the proposal opening for the referenced project occurred at the Oakland County Water Resources Commissioner’s (WRC) Office. There was a total of four proposals submitted. One proposal submittal was missing the required Bid Bond and was considered non-responsive. The three responsive proposals were from the following contractors:

- SAK Construction, LLC
- Pipeline Management Company, LLC
- DVM Utilities, Inc.

This project is being evaluated in a qualification-based selection process. As such, proposal prices were not read at the bid opening.

Each proposal was evaluated separately by review committee members and scored based on:

- Understanding of the Project, Scope, and Duration Schedule – 40 points
- Personnel Assigned to Project – 20 points
- Related Project Experience – 20 points
- Fee – 20 points

Following the preliminary scoring, interviews were held on August 21, 2024, with the two highest scoring proposers: SAK Construction, LLC and DVM Utilities, Inc. Attached is a copy of the final Proposal Review Score Card. Fees from the 3 responsive contractors for both the Base Bid and the Mandatory Alternate Bid are as follows:

Proposer	Base Bid	Mandatory Alternate Bid
SAK Construction, LLC	\$5,733,561.00	\$7,387,461.00
Pipeline Management Company, LLC	\$6,983,224.75	\$9,146,407.20
DVM Utilities, Inc.	\$7,274,620.00	\$9,251,370.00

Based on the information provided during the evaluation process, Fishbeck recommends WRC award the contract to SAK Construction, LLC for the Mandatory Alternate Bid in the amount of \$7,387,461.00; subject to receiving acceptable bonds and insurance in accordance with the Contract Documents.

If you have any questions or require additional information, please contact me at 248.324.1228 or [mesedki@fishbeck.com](mailto:mesedki@fishbeck.com).

Sincerely,

A handwritten signature in black ink, appearing to read "Maria Sedki".

**Maria E. Sedki, PE**

Vice President/Senior Civil Engineer

Attachments

By email

Evergreen Farmington Sanitary Drain Drainage District  
 Southfield Sewer Lining Project  
 Proposal Review Score Card

Design-Build Score					Reviewer 1					Reviewer 2					Reviewer 3					Reviewer 4					Summary							
	Design-Build Team	Base Bid	Alternate Bid	Bid Bond	Forms	Understanding of the Project, Scope, and Duration Schedule	Personnel Assigned to Project	Related Project Experience	Fee	Total Score	Understanding of the Project, Scope, and Duration Schedule	Personnel Assigned to Project	Related Project Experience	Fee	Total Score	Understanding of the Project, Scope, and Duration Schedule	Personnel Assigned to Project	Related Project Experience	Fee	Total Score	Understanding of the Project, Scope, and Duration Schedule	Personnel Assigned to Project	Related Project Experience	Fee	Total Score	Understanding of the Project, Scope, and Duration Schedule	Personnel Assigned to Project	Related Project Experience	Fee	Total Score	Ranking	
		Total Fee	Total Fee	Yes/No	Yes/No	40	20	20	20	100	40	20	20	20	100	40	20	20	20	100	40	20	20	20	100	40	20	20	20	100		
1	<b>SAK Construction, LLC</b> - Anderson, Eckstein & Westrick, Inc. - BARR - Doetsch Environmental Services - RJ&J Enterprises - Advanced Rehabilitation Technologies	\$5,733,561	\$7,387,461	Yes	Yes	38	18	18	20	94	36	18	19	20	93	38	18	18	20	94	36	18	19	20	93	37	18	18.5	20	94	1	
3	<b>Pipeline Management Company, LLC</b> - OHM - Insituform Technologies - Mersino Dewatering - Advanced Rehabilitation Technologies - Pre Construction Media	\$6,983,225	\$9,146,407	Yes	Yes	25	15	18	16	74	30	19	20	16	85	30	15	10	16	71	25	19	19	16	79	27.5	17	16.8	16	77	3	
2	<b>DVM Utilities, Inc.</b> - NTH - Mersino Dewatering - Advanced Rehabilitation Technologies - BARR - Preconstruction Media	\$7,274,620	\$9,251,370	Yes	Yes	36	15	14	15	80	35	20	17	15	87	38	18	15	15	86	37	17	16	15	85	36.5	17.5	15.5	15	85	2	
4	<b>IWPC</b> - FK Engineering - Matteo Engineering - Nowak & Fraus Engineers - Mersino Dewatering - Full Bore Inc. - Advanced Underground - Preconstruction Video	\$11,979,530	\$14,731,030	No	Yes																										N/A	N/A



# CAPABLE EXPERIENCED COMMITTED

*Trust SAK to deliver on time, every time.*

AUG 6 2024



## WATER RESOURCES COMMISSIONER'S OFFICE Design-Build Services for Evergreen Farmington Sanitary Drain Drainage District Southfield Lining Project

Request for Proposal Submittal  
Due Date: August 6, 2024 @ 2 PM ET



**SAK**<sup>TM</sup>

*Pipeline Infrastructure. Solved.<sup>TM</sup>*





SECTION 1  
**UNDERSTANDING OF THE PROJECT,  
SCOPE OF DESIGN-BUILDER SERVICES &  
DURATION SCHEDULE**



# SECTION 1 - UNDERSTANDING OF THE PROJECT, SCOPE OF DESIGN-BUILDER'S SERVICES AND DURATION SCHEDULE

## INTRODUCTION

Oakland County Water Resources Commissioner (WRC) is seeking a design-builder to successfully complete the design, permitting, easement acquisition, and construction for Evergreen-Farmington Sanitary Drain Drainage District's Southfield Sewer Lining project by November 2025. SAK Construction has teamed with Anderson, Eckstein & Westrick (AEW) and multiple specialty subcontractors and subconsultants to provide a team that will work directly with WRC to meet your expectations for on-time completion and within budget.

**Oakland County will reduce the property impacts of the Area 7 Project by selecting SAK's design-build team to rehabilitate the pipe with methodologies requiring fewer and smaller easements and reducing surface impact by 35%**

WRC needs a team with experience working collaboratively, and with technical design and construction expertise, to provide a quality product while minimizing easement acquisition needs for access. SAK and its local design partner AEW, has experience working with you and with the local regulatory agencies and will streamline the permitting and communication process to deliver a successful project on time. Our team offers:

**A technical approach minimizing easement size, construction duration, and disturbances to private properties along the alignment.** We have reduced the easement area required by 35% compared to the original easement plan. Based on average easement acquisition costs, this equates to savings in excess of \$500,000. This was completed by applying these methods:

- Efficient, long-reach CIPP over-the-hole (OTH) install plan that requires **half the number of setups.**
- Careful bypass routing in a **single setup** through the woods to minimize tree cutting and property impact.
- Self-performed CIPP lining and bypass operations for **maximum efficiency and control.**

**Unmatched collaborative-delivery experience in design and construction of large-diameter pipeline CIPP rehabilitation.** In the past 10 years, SAK has installed 1.7 million lineal feet of CIPP of 24-inch or greater diameter pipelines, with over 250,000 linear feet installed using styrene free resin. Much of this experience has been delivered collaboratively, with SAK working alongside designers to verify, revise, and reconfigure installation and bypass plans for the benefit of the owner by minimizing easement area, property disturbances, and environmental impacts while balancing schedule and cost.

**A team with local knowledge, experience with OCWRC, and a history of working together on alternative delivery projects.** SAK has partnered with AEW, Barr Engineering, Doetsch Environmental Services, ART Coatings, and RJ&J Excavating to create a team with extensive local resources and knowledge. SAK, AEW and Doetsch recently partnered to design and build Garfield Interceptor Rehabilitation, a trenchless rehabilitation project awarded **Michigan APWA's Project of the Year.**

**PROJECT OF THE YEAR**



**MICHIGAN APWA 2024**

Garfield 84-In. Interceptor Rehab, Macomb Co., MI

**PROJECT OF THE YEAR**



**MISSOURI APWA 2022**

Box Culvert Rehab, Webster Groves, MO

**PROJECT OF THE YEAR, RUNNER UP**



**TRENCHLESS TECHNOLOGY MAGAZINE 2022**

66-In. Trunk Sewer CIPP Rehab, Napa, CA



## YOUR DESIGN BUILDER TEAM

### SAK - PRIME CONTRACTOR/DB LEAD

SAK is an industry-leading pipe rehabilitation contractor that offers a full range of trenchless and underground construction services. SAK has grown considerably since being launched in 2006, and currently forecasts \$280 million in construction revenue in 2024. SAK’s senior leaders were involved in the early days of CIPP development in the U.S. SAK is now the largest privately held CIPP contractor in the U.S., employing 500+ employees in three U.S. regions. Anthony Aderhold, PE, is your overall Project Manager for the Southfield project. He is a licensed professional engineer and brings design and construction experience to his leadership role.

SAK selected its Design-Build team members based on overall performance, consistency, value, and experience, not solely on low price. WRC is getting a proven team of contractors and engineers that has collaborative procurement experience and an ability to complete long reach cleaning and large-diameter CIPP lining to minimize construction footprints and temporary construction easement needs. Team SAK is comprised of the members shown in Table 1 at right.

Table 2 below shows SAK’s recent awards and recognitions.



Figure 1. In just a few years, SAK has grown into a \$280-million company specializing in CIPP rehabilitation.

**TABLE 1. EFSDDD SOUTHFIELD SEWER LINING PROJECT DB TEAM**

Firm Name	Role	Relationship
<b>SAK Construction, LLC</b>	Prime Contractor/DB Lead	Self
<b>Anderson, Eckstein &amp; Westrick, Inc. (AEW)</b>	Design-Lead	Teaming Agreement
<b>Doetsch Environmental Services (Doetsch)</b>	Cleaning and Televising	Subcontractor
<b>Advanced Rehabilitation Technology (ART)</b>	Manhole Rehabilitation	Subcontractor
<b>R.J. &amp; J. Enterprises, Inc. (RJ&amp;J)</b>	General Excavations	Subcontractor
<b>Barr Engineering (BARR)</b>	Tree Survey/Environmental	Subconsultant

### AEW - DESIGN

AEW is a privately held company incorporated and licensed to operate in Michigan. They have over 160 multidisciplinary design staff members with a wealth of experience in infrastructure rehabilitation, trenchless technology, utility design and master planning, hydrology and hydraulics, wastewater and storm water management, special assessment districts, and more. AEW has experience completing right-of-way and easement documents, recently completing ROW/easement acquisition documents for WRC on a similar project.

AEW’s design lead Frank Varicalli was a pioneer in trenchless technology more than 30 years ago and was instrumental in bringing the CIPP lining methodology to Michigan.

**TABLE 2. SAK AWARDS AND RECOGNITIONS**

AWARD & RECOGNITION	HONORED BY	YEAR
Project of the Year*	Michigan APWA	2024
Superior Safety Performance	Associated General Contractors of American	2021
Top 100 Private Companies	St. Louis Business Journal	2019
CMA Star   Employee Communications	Construction Marketing Association	2018
Corporation of the Year	National Forum for Black Public Administrators	2016

\*Project of the Year - Category of Emergency Responses \$1MM to \$5MM, team members included AEW and Doetsch Environmental Services.

## 1B DETAILED WORK PLAN

### 1) Understanding of the Project

This RFP seeks proposals from qualified and interested parties to provide Design-Build services for the Evergreen Farmington Sanitary Drain Drainage District (“Owner”) for the rehabilitation of the Southfield-Rouge Arm Area 7. Oakland County Water Resources Commissioner is the operations manager of the Evergreen Farmington System and will be referred to as WRC throughout this proposal. The project entails the rehabilitation of a 36-inch and 48-inch sanitary sewer line located west of Lahser Road between 9 and 10 Mile Roads. Due to severe hydrogen sulfide (H<sub>2</sub>S) degradation, the Owner and WRC has decided to use Cured-in-Place Pipe (CIPP) technology. The Design-Builder will be responsible for both the design and construction phases of the project.

WRC has chosen Design-Build procurement methodology because of the difficult access to the project location along the alignment of the sewer interceptor. WRC’s top priority is to reduce easement area. SAK can complete this project successfully, with the least amount of easement acquisition, due to these factors:

- SAK self-performs large-diameter CIPP installations, long-reach over-the-hole (OTH) CIPP shots, and single-setup bypass systems, minimizing setup footprint (see “Figure 8” on page 10 and “Figure 11” on page 11).
- Partnership with long-reach clean and televising contractor, requiring only two setups (see “Figure 6” on page 9).
- Collaborative experience where we form a non-adversarial relationship with Designer and Owner to deliver projects at the highest value, on schedule.

### 2) Historical Understanding

This is the third phase of the Evergreen-Farmington SDDD Rouge Arm interceptor rehabilitation. Phase 1, was procured around October 2019 and included 3,700 linear feet of CIPP lining of 36-inch sanitary sewer and 16 manhole rehabilitations through the Plum Hollow golf course, directly downstream of the scope for this project. Phase 2, was procured around January 2021 and included 2,100 linear feet of CIPP lining of predominately 36-inch diameter sanitary sewer and one segment of 42-inch diameter sanitary sewer. Phase 2 was completed by Pipeline Management Company. SAK submitted subcontractor quotes on Phase 2 and are aware of the intricacies of the system and WRC’s expectations. This proposed segment, directly upstream of the two previous phases, gravity flows to the 8 Mile Lift station and discharges into GLWA’s system. The highlighted segment, as shown in Figure 2 at right, between 9 Mile and 10 Mile is the relevant scope associated with this RFP.



Figure 2. Relevant Scope Map

### 3) Proposed Work Plan

Our work plan is divided into three sections: (1) contractual, (2) design, and (3) construction (see “Figure 3” on page 4). Each section outlines the anticipated order of operations. We also highlight unique planning, management and organizational tools that Team SAK has implemented successfully on previous large-scale projects to control project costs, manage schedule and ensure clear communications.

#### Project Objectives

- Minimize easement acquisition needs
- Install CIPP to rehabilitate 2,600 feet of 48-inch and 3,400 feet of 36-inch RCP
- Rehabilitate 17 manholes as specified in the Project Owner’s Performance Criteria
- Ensure project meets all relevant safety, environmental, and quality standards
- Complete the project within the defined timeline and budget

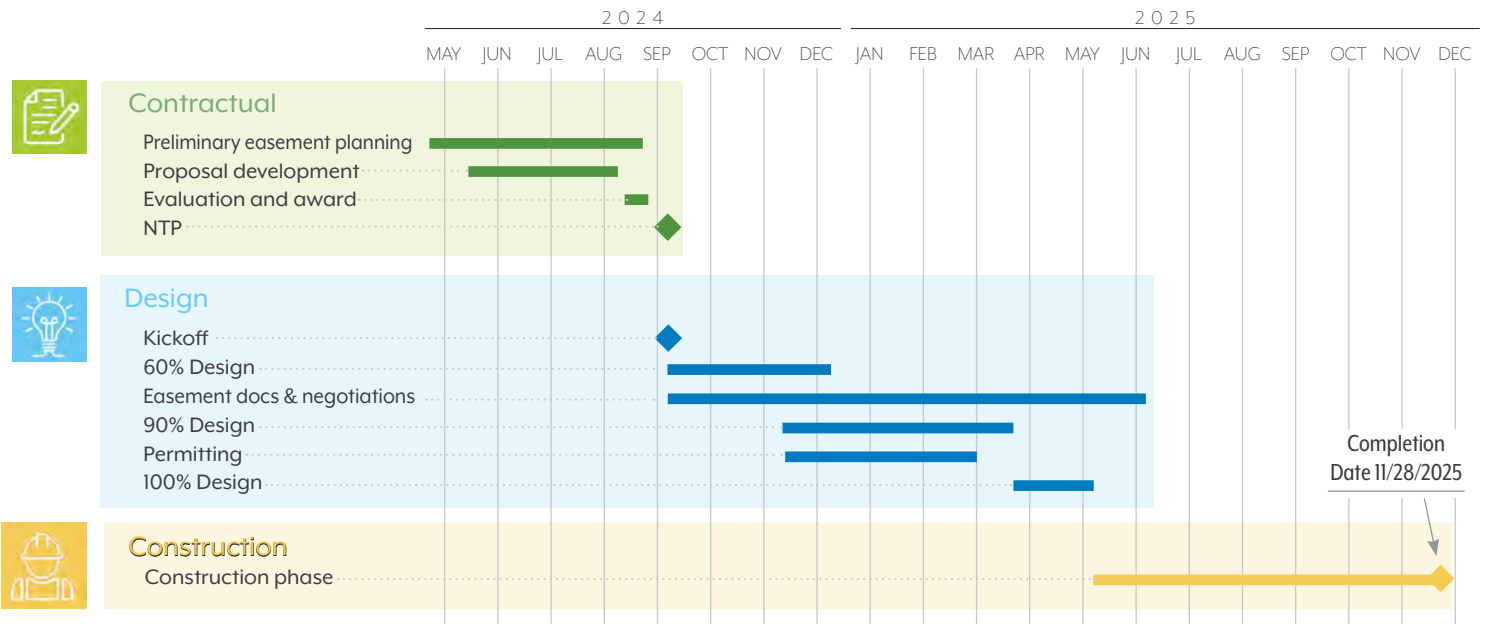


Figure 3. Project Timeline Graphic

**Contractual Phase:**

Team SAK was formed well in advance of the RFP being issued on May 16, 2024, which allowed for immediate site reviews and brainstorming. A management tool we’ve been using and will continue to use throughout the contractual, design, and construction phases is weekly or bi-weekly workshops. These ensure that all action items are being addressed, responsible parties stay on task, and deadlines are met.

Even with the RFP submittal delay by over 30 days, SAK will still deliver the completed project on or before November 28, 2025. Assuming the RFP evaluation, interviews, and NTP will follow the approximate durations from the RFP schedule, we anticipate the project kick-off meeting to be held on September 9, 2024. The project kick-off meeting will be led by SAK and will include WRC staff and project representatives along with the entire SAK Design-Build Team. The intent of the kick-off meeting will be to complete basic introductions, define roles, develop a clear communication process, review the initial schedule and set bi-weekly workshops.

SAK will use Three-Week Lookahead Meetings from NTP of design through construction closeout. Lookahead meetings are held weekly, include subcontractors and subconsultants, and proactively identify issues that could affect quality, schedule, and/or cost. We address personnel or equipment demands, unforeseen site conditions, weather events, material availability, critical design components, and permitting issues. The lookahead meetings are a zoomed-in view of the overall project schedule, providing a more granular level of planning and coordination for the immediate future. Other advantages of these meetings are:

- They provide additional opportunities to mentor partners in project management, risk identification and mitigation, and quality control.
- They are organized by task and by team member. In this way, all aspects of the project are reviewed and any potential risk to the project is identified with time to adapt.
- To maximize the efficiency of specific tasks being completed concurrently, such as completion of 60% design concurrent to easement identification and acquisition, the lookahead meeting will drive the constant updating of the master schedule.

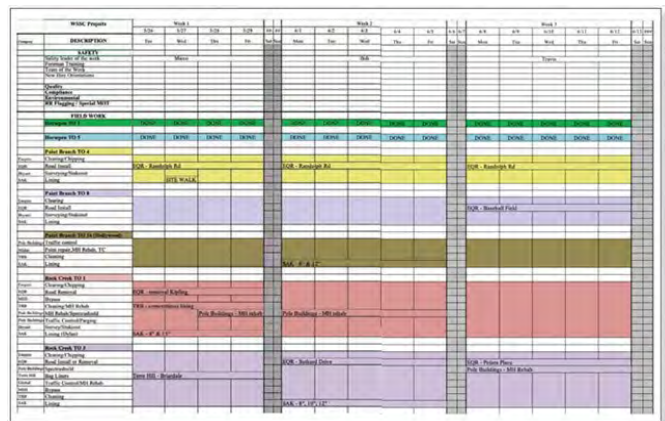


Figure 4. Snapshot of SAK’s Three-Week Lookahead Meeting Agenda By Task.

The most critical project element is to reduce our construction footprint to minimize easement acquisition costs and impact. To meet the scheduled completion date of 11/28/25, easement acquisition needs to begin as early as possible. We have already begun easement planning, and our proposal reduces the easement area by 35% compared to the original easement plan. We will continue to refine this plan after notice to proceed and we will be near finalization of the easement acquisition plan by the start of the design phase.

**Design Phase:**

To successfully complete the project by November 2025, SAK, AEW, Doetsch, ART, and RJ&J have already started collaborating on the design of the project. We’ve conducted multiple joint field visits to identify work areas and easement needs, develop solutions to challenging access or constrained work areas, discuss permitting challenges, and develop our collaborative approach to permitting and design.

This is a rather straightforward design and construction project, except for the site access, which in turn impacts scheduling and permitting. We see opportunities to apply innovations to keep the project on schedule, minimize easement impact, and lower costs. These opportunities are included in Table 3 below.

**TABLE 3. OPPORTUNITIES FOR INNOVATIONS**

OPPORTUNITIES FOR INNOVATIONS	DESCRIPTION	IMPACT
<b>Easement Documentation</b>	Prioritize and complete easement documentation as quickly as possible after NTP to initiate the acquisition process.	Saves time
<b>Evaluations</b>	Complete any time- or season-sensitive evaluations, including wetland delineations and tree surveys as early as possible.	Saves time
<b>Sequence the Design</b>	Sequence the design to simultaneously complete 60% to 90% designs to expedite the permit applications.	Saves time
<b>Single Bypass</b>	A single bypass extending the length of the project minimizes the need for multiple setups	Saves time, reduces impact, lowers cost
<b>OTH Method Installation</b>	OTH method allows long reaches for CIPP installation, minimizing construction footprint by requiring only four setups.	Saves time, reduces impact
<b>Innovation through Upstream/ Downstream Installs</b>	Using a combination of truck installs and OTH installs, we are able to install CIPP upstream and downstream from the same setup (see Figure 3 for more info on truck and OTH installs)	Saves time, reduces impact
<b>Long-Reach Cleaning</b>	Use of long-reach cleaning capabilities for televising and cleaning requires only two setups.	Saves time, reduces impact
<b>Cleaning Under Live Flow</b>	Long-reach cleaning is performed under live flow, eliminating need for bypass during cleaning.	Saves time, lowers cost
<b>In-House CIPP Manufacturing</b>	Using SAK’s Pipenology to supply liners ensures the highest quality liner with no risk of delays	Saves time, reduces risk
<b>Self-Performance of CIPP Install and Bypass</b>	SAK self-performs CIPP Installs and Bypass operations, reducing risk of subcontractor delays	Reduces risk

Easement verification/acquisition coupled with the permitting process is deemed to be the critical path with respect to the Design Phase. The entire team has collaborated on manhole access, laydown areas, and work zones to determine easement needs. With WRC authorization and cooperation, designer AEW will approach the private property owners to negotiate preliminary easements and agreements. Based on preliminary property owner approval, temporary easement documents will be drafted for WRC review and engineering team execution. See easement map (“Figure 16” on page 16) for proposed easements.



**60% Design**

- The 60% design stage is anticipated to begin immediately after contract award and will be initiated by a project kick-off with all team members and WRC staff. The objective for 60% design phase is to complete easement documents as quickly as possible to initiate the easement negotiation process for WRC. By the end of 60% design phase, WRC will be prepared to initiate easement negotiation. This will require title review of existing easements, confirmation of easement needs for the construction process, initial landowner outreach with WRC approval, and preparation of final easement documentation
- Other items included as part of the 60% design phase include:

- Preparation of draft design drawings
  - Design of the bypass pumping will start at the upstream limits of the project with crossing 10 Mile Road. See “Figure 8” on page 10 for a map of the intended bypass pumping based on the anticipated easements. A permit from the Road Commission for Oakland County (RCOC) will be obtained for the work within the 10 Mile Road right-of-way (ROW).
  - Bypass pumping and liner thickness design will be addressed in the Basis of Design with application for the Part 41 EGLE permit.
  - AEW will prepare plan and profile construction drawings showing all aspects of the proposed sewer rehabilitation.
- Preparation of draft specifications
- Soil borings identified (if necessary)
- Land surveys (as necessary)
  - Once the easement plan is identified, our design engineers will proceed with topographic survey, tree tagging, wetland mapping and floodplain impact assessment for the easement areas.
- Completion of wetland identification program and/or delineation as determined by site conditions and initial review with EGLE.
  - Barr will flag wetland boundaries within the project corridor. Barr will use techniques outlined in the U.S. Army Corps of Engineers Wetland Delineation Manual (Environmental Laboratory, 1987 – revised 1997) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual:
    - Northcentral and Northeast Region (Version 2.0, USACE 2012). Barr will provide a sketch showing the approximate wetland boundary locations and flag numbers, and will provide GPS coordinates for wetland boundary flag locations. Barr will prepare a report with written descriptions of site conditions, an opinion of EGLE jurisdiction, and wetland data forms.
- Completion of tree survey and overall property impact survey
  - Barr will conduct the field work to tag and record data (size, species, condition) for trees 6 inches and larger in diameter within the project corridor/easement limits in accordance with the local ordinance. Barr will provide an electronic file of the spreadsheet with the tree data including diameter, common and botanical names, and tree condition, and will provide GPS coordinates for tagged tree locations. Figure 4 above, reflects the estimate of impacted trees per diameter on preliminary project layout.

SAK’s CIPP Lining approach uses a combination of truck installs and over-the-hole (OTH) installs.

A **truck install** is a liner that has been impregnated with resin in an off-site wetout facility. Truck Installs are limited by the weight that the refrigerated truck can legally haul from the wetout facility to the jobsite.

**OTH installs** are wetout onsite, over the insertion manhole. Since OTH liners can be transported dry, they are lighter and much greater install lengths are possible.

Using these techniques to install CIPP liners upstream and downstream, from the same setup, greatly reduces the number of equipment setups.

	30 IN.	33 IN.	36 IN.	42 IN.	48 IN.	54 IN.
Truck Install Length	1,200	1,000	850	750	500	400
OTH Install Length	2,000	2,000	2,000	2,000	2,000	2,000

Figure 5 - SAK uses both truck installs and OTH installs

Table 4. Preliminary Impacted Tree Count

Diameter	Count
6" - 12"	4-5
>12"	1-4

- Barr will complete a State and Federal protected species desktop-based review to facilitate planning for future development. Barr will review the U.S. Fish and Wildlife Service's Information for Planning and Consultation (IPaC), the Michigan Determination Key, the Michigan Natural Features Inventory (MNFI), and aerial photography. The deliverable for the desktop review will include a brief memorandum describing the protected species that may occur on the subject property as listed by the IPaC and MNFI, a preliminary assessment of the likelihood for the project to impact each species, and high-level discussion of potential avoidance or conservation measures that could be available if potential impacts to protected species are identified.
- Updating of preliminary schedule
- Completion of the CIPP design
- Conduct Bi-Monthly Progress Meetings

### **90% Design**

The primary and critical path item for 90% design is permit application submittals.. To expedite the overall schedule, we will initiate these tasks concurrent with the 60% design process. The permit that will require the longest lead time, estimated at six months, is the EGLE Part 41 permit.

- Our approach to permitting is to start early and communicate often. There is limited time available to secure permits and hit construction schedules. AEW and SAK understand the design and construction details needed to support the permit applications and are committed to expediting the preparation of materials that support the permitting efforts. Anticipated permits required include:
  - EGLE Part 41 permit for sanitary sewer rehabilitation
    - Barr will assist AEW with plans and documents required for the EGLE permit application. Barr will assist AEW in preparation of the application form and the written description/alternatives analysis with assistance from WRC. Barr will assist WRC in response to public comments to the EGLE permit application (including attending a public meeting if necessary), and will contact EGLE representatives as appropriate to resolve EGLE questions and concerns as they may arise.
  - Road Commission for Oakland County (RCOC) for work within the road right-of-way (ROW)
  - WRC for sanitary sewer construction
  - WRC for Soil Erosion and Sedimentation Control
- Finalize technical specifications, plans and design calculations.
- Schedule update
- Initiate QA/QC process
- Hold an Owner Workshop
- Complete Bi-monthly progress meetings
- Continue on-going property owner coordination
- Update schedule of value and costs
- Obtain approval from WRC to move to 100% design

### **100% Design**

Moving from 90% to 100% will be seamless. Some of the items will be completed concurrent to 90% Design in order to continue truncating the schedule. As we continue to move forward, will refine and update the schedule as part of the lookahead meeting process. Team SAK will complete the following tasks during the 100% Design Stage:

- Specifications and drawings will be finalized and signed and sealed by a licensed Michigan professional engineer.

- All permits will be secured
- Construction schedule updated based on final schedule of values.
- Finalized schedule of values updated and submitted.
- Continue ongoing bi-monthly progress meetings.
- Obtain notice to proceed from WRC for commencing construction

Collaboration with the WRC will take place throughout the design process to ensure the construction documents are prepared to standard. We will develop the major components of the proposed sanitary sewer system rehabilitation including sewer main sizing and preliminary plans. Once prepared, our team will meet with WRC staff to review the design as part of the preliminary design phase and assist WRC with information related to the proposed plan. Upon completion, the final construction documents, easements, agreements and related information will be submitted for approval and WRC record.

**Construction Phase:**

After completion of design and approval from WRC, the construction phase will commence. First order of business will be to conduct the preconstruction meeting. SAK will conduct both internal and external preconstruction meetings.

<b>Preconstruction Meetings</b>	
<b>Internal Preconstruction Meeting</b>	The purpose of this meeting, like the lookahead meeting, is to ensure all materials, equipment, and labor needs for all team members including subcontractors are available and can meet set schedules.
<b>External Preconstruction Meeting</b>	This meeting will be with WRC staff within 20 days of the notice to proceed and other affected stakeholders including but not limited to utility companies and the authority having jurisdiction (AHJ).

A typical preconstruction meeting agenda prepared by SAK includes:

- Attendance and introductions defining roles
- Applications for payment
- Supporting information and submittals
- Site-specific safety plan measures, including OSHA and MIOSHA confined space entry
- Overall project review including contracts, scope of work, and records
- Construction schedule review highlighting critical path and concurrent activities
- Review of WRC, AHJ, and other stakeholder requirements and permits. This includes review of residence and business impacts and maintenance of operations.
- Quality Assurance and Quality Control Plan
- Subcontractor involvement
- Public and internal communications plan
- Project coordination

The following items will be conducted after the preconstruction meetings:

1. Surveying and marking all permanent and temporary easements and flagging trees to be removed as part of the construction project (see “Table 4” on page 6 for Preliminary Tree Count). These limits will be clearly identified to avoid any encroachment beyond the secured temporary easements by WRC. Team SAK will walk the site to ensure that all team members fully understand the project work items.
2. Installation of any necessary erosion and sediment control measures and traffic control. Traffic control will be installed per the approved maintenance of traffic plans prepared by AEW. Our team has intimate



knowledge of the local services territory and the permitting needs, and we will ensure MUTCD standards are followed and disruptions are minimized.

- Heavy cleaning will be completed by Doetsch Environmental Services (Doetsch). Unique to our team, Doetsch can clean and televise large diameter sewer under active flow, saving WRC bypass expense for the duration of the cleaning process. This process also allows for concurrent operations of bypass set up and testing and access road construction to expedite the project. The set-up locations for long reach cleaning are at MH SOT 109005 and MH SOT 112001. From only these two locations, Doetsch can safely and successfully fully clean and remove all debris from both upstream and downstream locations for the entire length of the project, minimizing easement requirements. See Figure 6 below for cleaning and televising plan.

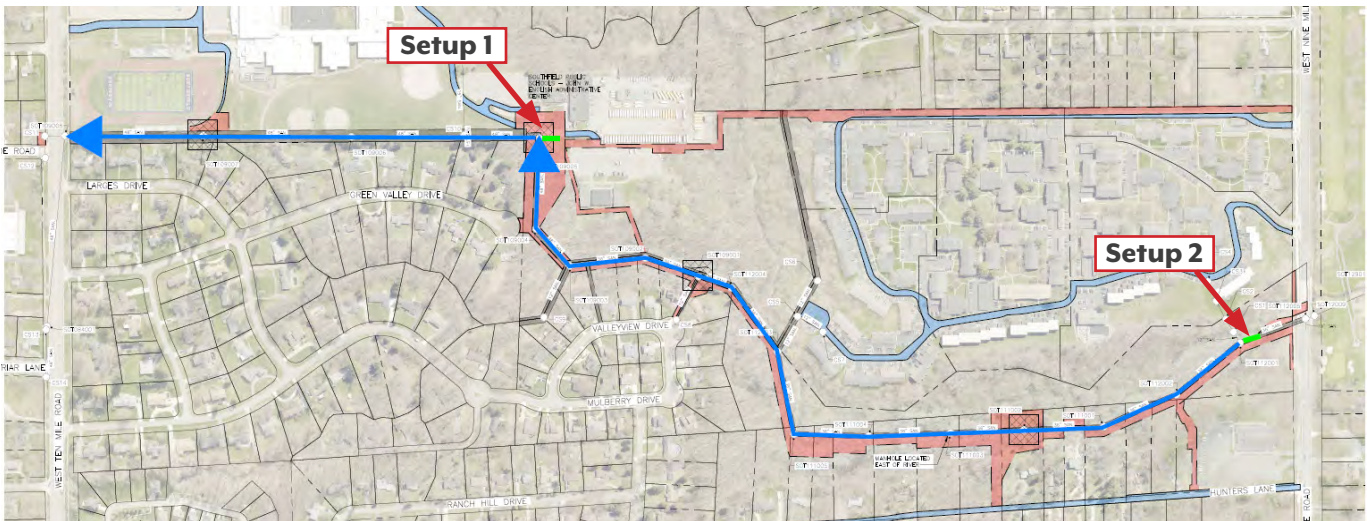


Figure 6 - SAK's long-reach cleaning and televising plan requires only two setups.

- As noted above, clearing and grubbing, access road construction, bypass setup and testing, and frame and casting removals for CIPP installation are completed concurrently during the televising and cleaning process. "Table 4" on page 6 reflects the estimated number of trees to be impacted based on Team SAK's preliminary layout plan. The temporary road will have some areas with challenging grade. SAK proposes to incorporate a mitigation plan to avoid off-camber installation of pads and mats along slopes. If necessary, we will build temporary embankment for leveling and support (see Figure 7 at right).

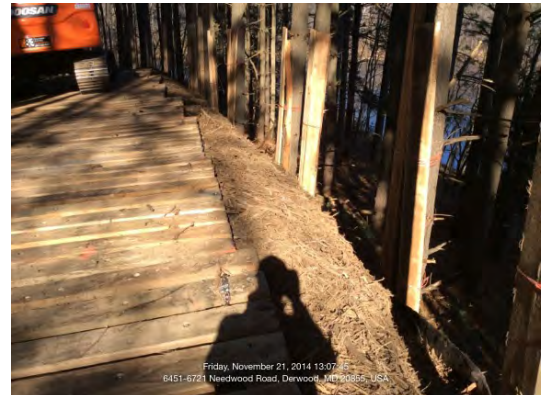


Figure 7. Slopes can be mitigated with temporary embankments.

- The proposed bypass system consists of single setup using 18" HDPE piping with 8" pumps. The system is designed to handle dry and wet weather flows in excess of 7.5 MGD. The system will have pump redundancy with pumps on standby. The alignment of the bypass is proposed to follow the alignment of the Southfield Interceptor with sideline pickups, referred to as temp bypass, incorporated during the CIPP installation of that specific segment impacting the lateral connection. This alignment will require three trenches to bury the bypass pipe and minimize traffic and access impacts at Friar Lane, Ten Mile Road, and at one driveway. After install is complete, all testing approved, and the CIPP installation process commences, SAK will operate and maintain the temporary conveyance 24/7 until no longer needed.

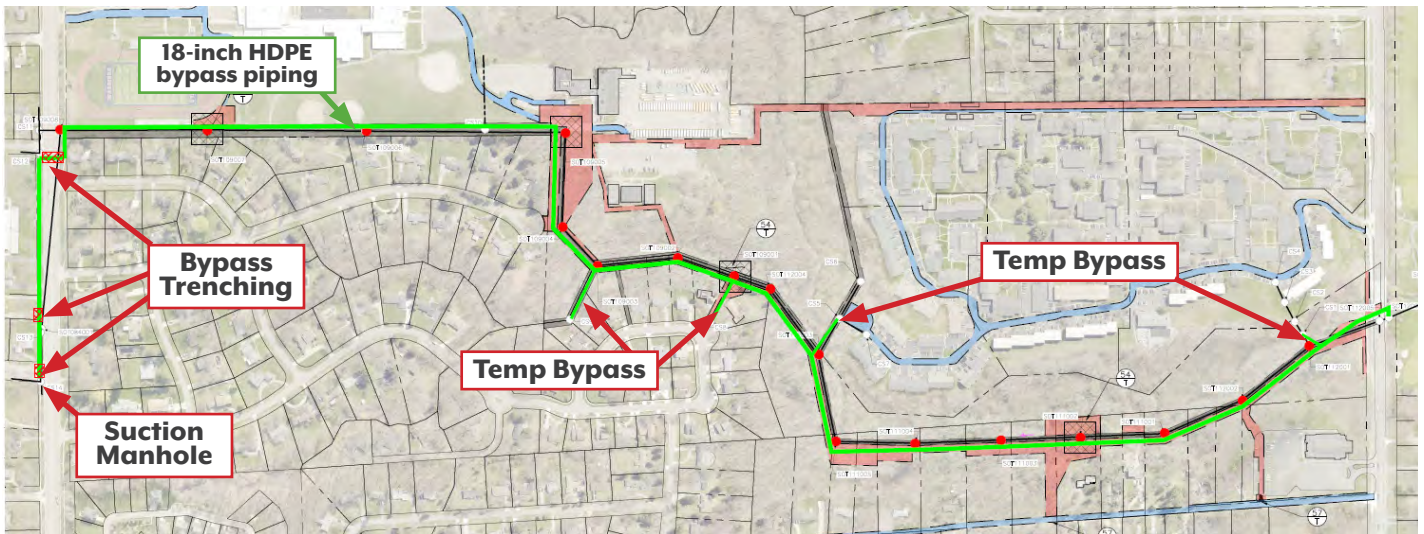


Figure 8. SAK's single-setup bypass plan reduces pump pad footprint and easement impact as well as expedites project schedule.

- Once cleaning and televising is to a point that accurate length and diameter measurements can be confirmed for CIPP shot segments, SAK's construction project manager will develop a material order with Pipenology. Pipenology is SAK's wholly owned ISO-Certified CIPP manufacturer, thus SAK is completely vertically integrated for the CIPP process, reducing risk of delays due to material shortage.

### Pipenology CIPP Liner

The Pipenology CIPP product is a composite structure made of various components of high quality materials that results in a durable, chemically resistant, high-strength liner that will provide a long-term solution to the WRC's infrastructure needs through a minimum liner design life of 50-years. There are essentially two main constituent parts of the Pipenology CIPP liner creating the finished composite. Those parts are Pipenology's Non-Reinforced CIPP Tube and a thermosetting resin. After a successful installation, these two constituent parts make up the finished composite that we call Pipenology CIPP liner.

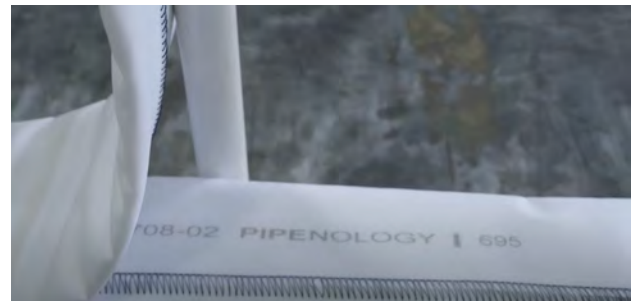


Figure 9. Every Pipenology CIPP liner is stamped with footage markings and an identification number for tracking purposes.

### IN-HOUSE CIPP MANUFACTURER BENEFITS

#### SCHEDULE CONTROL

- To maintain schedule constraints, Pipenology can prioritize manufacturing lines, labor and materials to ensure on-time completion. SAK/Pipenology also utilizes their own shipping logistics for delivery of the materials from the O'Fallon, MO facility to the jobsite location in Southfield, MI.

#### QUALITY ASSURANCE/QUALITY CONTROL

- If a material or installation defect is ever identified throughout the CIPP process, WRC has the comfort level to know that SAK will research the cause and develop a solution to rectify the defect versus playing the blame game between contractor and manufacturer.

- Prior to CIPP material delivery, SAK crews will set up their OTH operation. A typical setup can be compressed into an area 15 to 20 feet wide and 120 to 150 feet in length. The proposed setup locations for OTH installations include:

- SOT 109006 - Bi-Directional Inversion Manhole
  - Install 1 (MH SOT 109006 to MH SOT 109008) - Upstream
  - Install 2 (MH SOT 109006 to MH SOT 109005) - Downstream



- SOT 109005 - Inversion Manhole
  - Install 3 (MH SOT 109005 to MH SOT 109003) - Downstream
- SOT 109112 - Inversion Manhole
  - Shot 5 (MH SOT 112001 to MH SOT 111005) - Upstream

The typical setup of an OTH operation consists of the equipment and placement shown in Figure 10 below:



Figure 10. Over-The-Hole OTH set up with lengths and inversion direction

Not all CIPP installations are proposed to be OTH installations. Install 4 is proposed to be installed as a “trucked” shot as the length and weight of the proposed wet-out liner allows for legal shipping. The inversion manhole proposed for Install 4 is:

- SOT 109005 - Inversion Manhole
  - Install 4 (MH SOT 109003 to MH SOT 111005) - Downstream

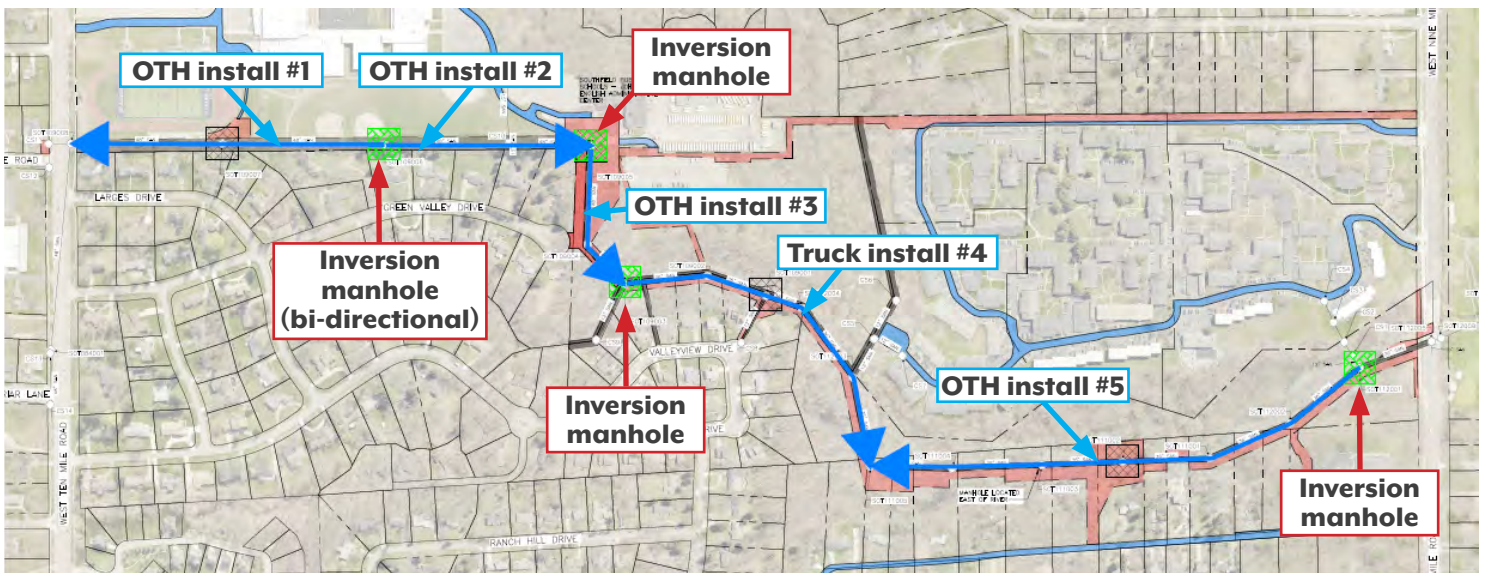


Figure 11. SAK's CIPP install plan reflecting 5 installs and 4 setups. This plan reduces easement area by using OTH installation methodology.

7. After completion of the CIPP and post-televising and material sampling and testing is conducted, the manhole rehabilitation commences. Manhole rehabilitation may be completed concurrently in areas where CIPP lining has been completed to condense the schedule and reduce bypass system operation time.

Advanced Rehabilitation Technology (ART) is a certified installer of OBIC, an approved and specified product. Due to the nature of the polyurea mixing and installation process, an off-road truck with static mixers and pumps will need to be within 300 feet of each manhole. For this reason, an access road will need to be constructed a majority of the length of the project.



Figure 12. ART's offroad installation truck built specifically for applications with difficult access.

An item for WRC to consider is a cementitious underlayment with epoxy topcoat to minimize access road construction and potentially reduce temporary easement acquisition area. The cementitious and epoxy top coat system can be hand applied and mixed on site. While the labor time to complete this installation may be greater, the additional labor costs would be greatly offset by the substantial savings realized by reducing the amount of easement area and temporary roadway required.

ART will complete the manhole rehabilitation to specifications with an estimated duration of 21 to 23 days. The bypass operation will continue to be operated during this time to create an ideal environment for application. If required per specifications, each inversion manhole for CIPP will need to also have the invert rehabilitated with the OBIC material while the intermittent manholes within the long OTH shots will already have CIPP in the invert and the OBIC product will only be installed to bond to the CIPP invert.

After manhole rehabilitation the bypass system will be removed, and the restoration process will begin. This will include pipe removal, patching of any roadways where trenches were installed, pump removal, temporary access road removal, tree replacement, and seeding/sodding any impacted areas. Lastly, Team SAK will conduct a final job walk with WRC representatives to close out the project.

- Other items to note during and prior to installation:
  - Prior to any work commencing, SAK will video the project area to verify proper restoration of surface features after completion of the project.
  - SAK will pre-clean/flush the pipe and televise prior to installation to ensure debris has not built up since Doetsch performed the heavy cleaning. At this time, we will confirm any live service connections with WRC. Any service connections NOT to be reinstated must be noted, approved, and signed off by WRC staff. All other service connections will be reinstated. This is part of SAK's standard operating procedures. Other daily reporting and tracking functions are as follows:
    - Document Control is handled by the eBuilder system and will ensure that the latest revision of a drawing, procedure, or submittal is easily accessible to the project team. Project documents controlled and tracked are correspondence, contract plans and specifications, RFIs, submittals, and amendments. Also tracked are quality records such as technical reports, inspections, test reports, daily reports, and audit reports. The eBuilder system is also used to track revisions and assign a nomenclature that facilitates revision identification.
    - A master set of contract drawings, submittals, and specifications are kept in SAK's Central office and held by the Field Superintendent. These documents

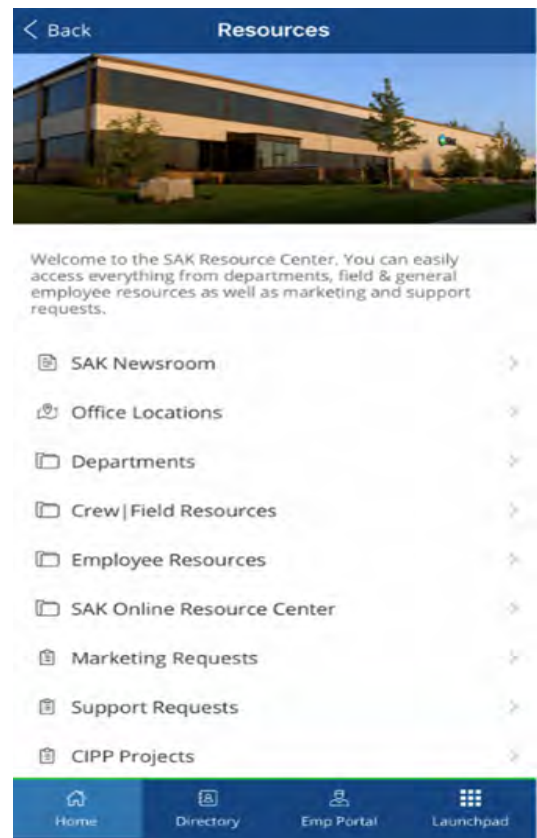


Figure 13. SAK custom online document resource center

will be redlined when formal changes to the contract documents have been made. Redlining can include:

- If a new document is issued, it can be inserted in front of the superseded document in the master set. Changes made on the revised documents shall be marked with a revision cloud in red ink. The superseded document shall be crossed out with a red ink. The date the new document is added to the set shall be marked on the documents in red ink.
- If a new document is not issued (changes via an RFI, or submittal), then the existing document can be marked with changes in red ink. Changes made on the documents shall be marked with a revision cloud in red pen. A note shall be added to the document stating which formal document is governing the change and the date the change to the document was made.
- The project manager checks that documents used in the field are the latest revision.
- Documents requiring tracking are kept in a log that identifies document type (e.g. Submittal, RFI, etc.), subject, specification section or drawing reference, dates of transmission, recipient of document, revision, and status. RFI and Submittal Logs are reviewed in the weekly meeting and status is updated as appropriate.
- Prior to CIPP installation, SAK will also address any infiltration issues that were previously identified during the PACP that were of concern for CIPP installation, including preliner or grouting.
- Standard Operating Procedure for SAK is to use full-length temperature monitoring wire to ensure proper curing for all installed 24” diameter and greater.
- SAK’s culture of “Focus on Safety” will be evidenced by the presence of a full time onsite Safety Manager to ensure that the safety plan is being adhered to.

**Addendum 5, Item C ALTERNATIVE SUGGESTIONS TO CIPP LINING**

Addendum 5 Item C stated that “Design-Builder is permitted to provide alternative suggestions to CIPP lining or other value engineering in this section of their Proposal provided the alternates will decrease cost, easement area, and/or time to complete the project as a part of this section.”

We recently evaluated CIPP, Geopolymer, Sliplining, and SPR as possible solutions on a project similar in size and complexity to the Southfield project and found that CIPP is the best solution. CIPP will provide a structurally sound sewer system with a minimum 50-year operational life that maximizes the hydraulic capacity while limiting construction impacts and streamlining permitting efforts. Most importantly, **CIPP fulfill’s WRC’s objectives at the lowest cost and in the shortest time frame.**

Figure 14 below shows a relative comparison of four trenchless rehabilitation methods.

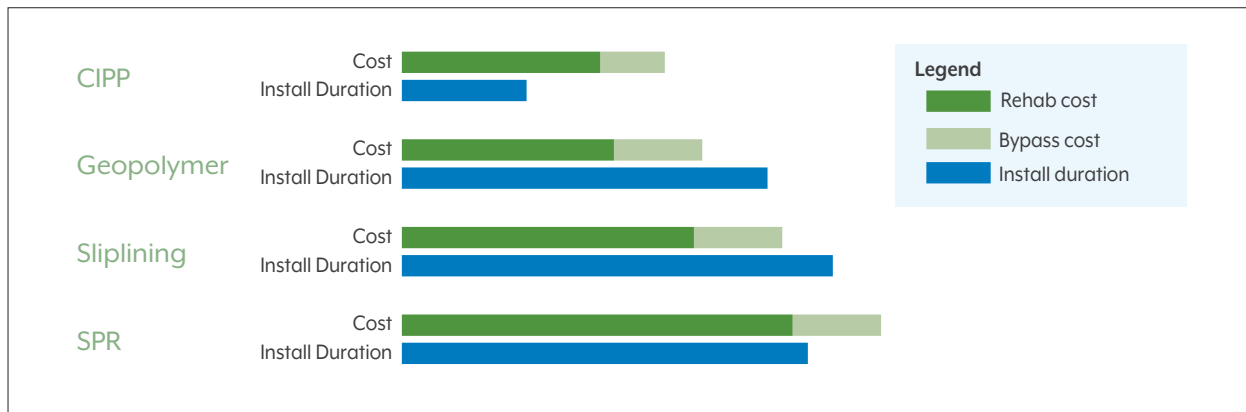


Figure 14. Relative comparison of cost and project duration for four different trenchless rehabilitation methods.



Further, on the evaluation of alternate products, spray on applications are sensitive to infiltration, require full time bypass with a much longer install duration, and vehicular access to each manhole. Sliplining will be the most invasive process due to depth of insertion pits and shear number of pits due to bends in the system. Sliplining will also have a large loss of hydraulic capacity and require bypass for the lateral connections. Spiral wound technology in these diameters will still require bypass for the man entry, require access every 700 lineal feet and due to depth require a grouted system to be considered fully structural causing additional loss of hydraulic capacity. In summary, with SAK's extensive experience with all of these rehabilitation techniques, due to the parameters of the project scope and Owner's goals, CIPP is the recommended solution as outlined and installed per the workplan as outlined in this proposal.

FIGURE 15 PRELIMINARY SCHEDULE

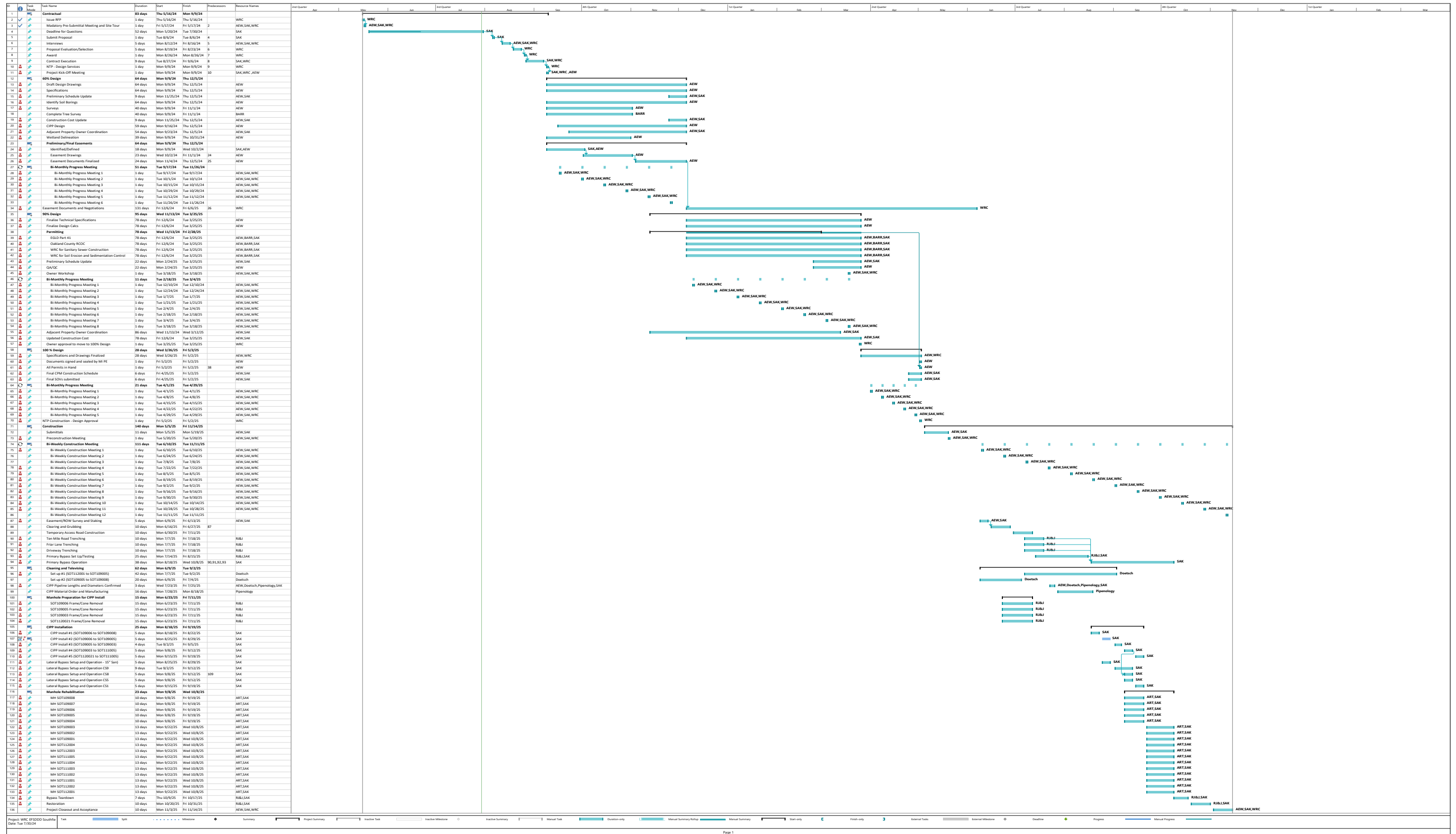
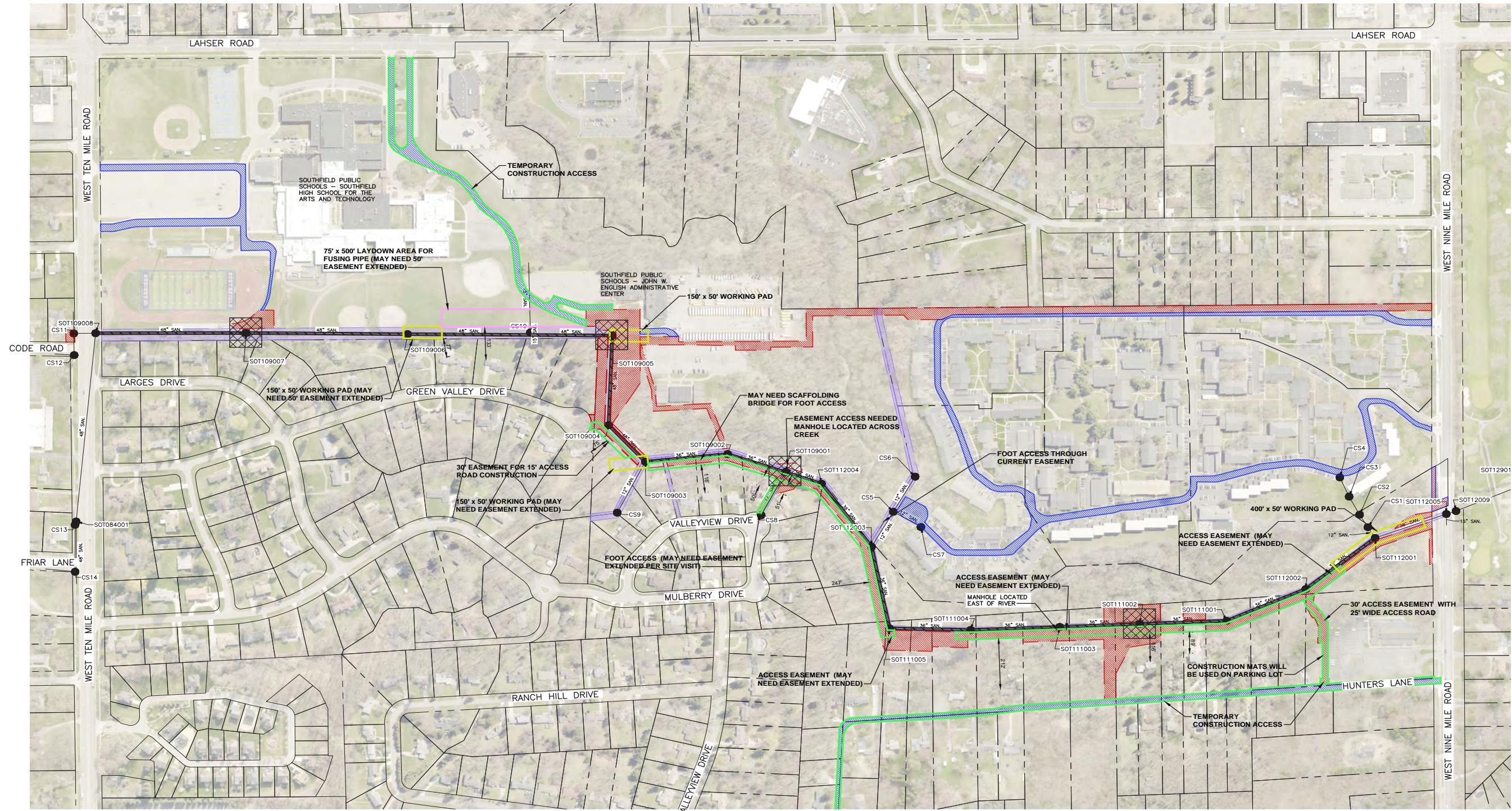




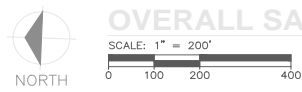
Figure 16 EASEMENT MAP



- NOTES**
- SEE SHEETS 9-20 FOR BYPASS PUMPING PLAN.
  - SEE SHEETS 24-30 FOR EXISTING SANITARY SEWER LINING PLANS.
  - SEWERS TO BE LINED ARE FROM MH SOT109008 TO SOT12001.
  - MANHOLES TO BE REHABILITATED ARE SOT109008, SOT109007, SOT109006, SOT109005, SOT109004, SOT109003, SOT109002, SOT109001, SOT112004, SOT112003, SOT11005, SOT11004, SOT11003, SOT11002, SOT11001, SOT112002, SOT112001.

**LEGEND**

	EXISTING EASEMENT
	TEMPORARY CONSTRUCTION EASEMENT
	TEMPORARY CONSTRUCTION TRAFFIC EASEMENT
	LINING ACCESS MANHOLE
	CLEAN, PACP TELEVISE, AND CIPP LINE SAN. SEWER



**SAK EASEMENT REQUIRED**

	LAYDOWN EASEMENT
	TEMPORARY ACCESS EASEMENT
	TEMPORARY WORKING PAD EASEMENT

**PROPOSED EASEMENTS SUMMARY**  
50 PARCEL AFFECTED BY TEMPORARY EASEMENTS

	ORIGINAL PLAN	PROPOSED SAK
TEMPORARY CONSTRUCTION	379,770 SF	
TEMPORARY CONSTRUCTION TRAFFIC / ACCESS	304,241 SF	233,715 SF
TEMPORARY WORKING PAD		42,500 SF
TEMPORARY LAYDOWN AREA		35,661 SF
<b>TOTAL AREA</b>	<b>481,375 SF</b>	<b>311,876 SF</b>



**Oakland County WRC**  
Oakland County, Michigan  
EFSD Southfield Rouge Arm Area 7  
Sanitary Sewer Lining

REVISIONS

**PRELIMINARY CONCEPTUAL PLANS - NOT FOR CONSTRUCTION**

6/13/2024 | CONCEPTUAL PLAN

Drawn By	JLB
Designer	KRO
Reviewer	
Manager	KRO

Hard copy is intended to be 22"x34" when plotted. Scale(s) indicated and graphic quality may not be accurate for any other size.

PROJECT NO.	220950
SHEET NO.	<b>23</b>
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**Jim Nash, Oakland County Water Resources Commissioner  
 Evergreen Farmington Sanitary Drain Drainage District  
 8 Mile Road CAP 8 Mile Road Pump Station & SSO Chamber Improvements - Phase 1  
 Southfield  
 Oakland County, Michigan**

Construction Estimate No. 30

August 1, 2024 to Aug 31, 2024

Department No. : 6010101  
 Fund No. : FND84410  
 Project No. : PRJ-17452

Account No. : 730352  
 Program No. : PRG149015  
 Activity : FAC  
 Vendor No. : 23191  
 Contract No. : 6628  
 Date of Contract : 2/2/2022  
 Completion Date : 8/13/2027

Contractor :  
 Walsh Construction Company II, LLC  
 3031 W Grand Blvd, Suite 640  
 Detroit, MI 48202

Original Contract Amount: \$0.00

Previous Change Order Numbers: CO Nos. 1 through 9. \$50,512,444.14

Change Orders This Estimate Number: \$0.00

Total Net Change Orders: \$50,512,444.14

Adjusted Contract Amount: \$50,512,444.14 ✓

Subtotal To Date: (Sheet 2 of 3 Column 7) \$26,409,693.09

Less Deductions to Date: (Sheet 2 of 3 Column 7) \$0.00

Gross Estimate: (Work in Place) 52.28% \$26,409,693.09

Less Amount Reserved: (5% of Adjusted Contract Amount) \$2,525,622.21 ✓

Total Amount Allowed To Date: \$23,884,070.88

Less Previous Estimates: \$22,584,537.34

Net Payment Request To Be Paid To Contractor: \$1,299,533.54

Reserve Payment to Contractor \$0.00

Balance of Contract To Date ✓ \$24,102,751.05 Accounting Auditor: BOR 9/10/2024

Less Previous Transfers To Reserve: \$2,509,393.04 ✓

Amount of Current Transfer: \$16,229.17

Prepared by: Charles J. Roarty, Jr.  
 Charles J. Roarty, Jr., P.E. NTH Consultants

Date: 2024 09 03

Recommended by: Joseph C. Siwek  
 Joe Siwek, P.E. - Consulting Engineer (Fishbeck)

Date: 9/3/2024

Recommended by: Evangelos Bantios  
 Evangelos Bantios, P.E. - Project Engineer

Date: 9-13-2024

Approved by: Joel Brown  
 Joel Brown, P.E. - Chief Engineer

Date: 9/16/2024

Approved by Board on: \_\_\_\_\_

**JIM NASH  
 OAKLAND COUNTY WATER RESOURCES COMMISSIONER**

**Jim Nash, Oakland County Water Resources Commissioner  
 Evergreen Farmington Sanitary Drain Drainage District  
 8 Mile Road CAP 8 Mile Road Pump Station & SSO Chamber Improvements - Phase 1  
 Southfield  
 Oakland County, Michigan**

Construction Estimate No. 30		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Contract Item	Bid Quantity	Unit	Unit Price	Quantity This Payment	Total Quantity Previous Estimate	Total Quantity to Date	Total Amount to Date	Total Amount This Payment
1	OCO #1 Elevator (Includes Insurance & OH&P)	1.00	LS	\$285,469.59					
1A	Material down payment			\$66,678.25	0.00	1.00	1.00	\$66,678.25	\$0.00
1B	bulk material fabrication and received			\$66,678.25	0.00	1.00	1.00	\$66,678.25	\$0.00
1C	install progress schedule			\$133,356.50	0.00	1.00	1.00	\$133,356.50	\$0.00
1D	Insurance and OH&P			\$18,756.59	0.00	1.00	1.00	\$18,756.59	\$0.00
2	OCO#2 Generator (Includes Insurance & OH&P)	1.00	LS	\$1,292,538.13					
2A	Approved submittals generator and docking station			\$181,516.80	0.00	1.00	1.00	\$181,516.80	\$0.00
2B	Construction of generator is done less enclosure/factory testing done & submittal with			\$242,022.40	0.00	1.00	1.00	\$242,022.40	\$871.34
2C	Delivery of docking station to job site			\$181,516.80	0.00	1.00	1.00	\$181,516.18	\$652.62
2D	Startup and testing of docking station			\$60,505.60	0.00	1.00	1.00	\$60,505.60	\$218.10
2E	Startup generator/arrive job site(deducted \$2500, add to Rotor 3/6-A)			\$421,039.20	0.00	1.00	1.00	\$421,039.20	\$0.00
2F	Startup & testing of generator			\$84,707.84	0.99	0.01	1.00	\$84,707.84	\$83,732.42
2G	Final O&M, start documentation, training			\$36,303.36	0.97	0.00	0.97	\$35,100.52	\$35,100.52
2H	Insurance and OH&P(deducted \$175, add to Rotor 3/6-36)			\$84,926.13	0.10	0.90	1.00	\$84,507.62	\$8,440.25
3	OCO#3 Electrical Equipment (Includes Insurance & OH&P) - \$1,823,797.41	1.00	LS	see item 3/6					
3/6	Combined OCO # 3 and # 6 - Electrical Equipment and Installation - Rotor Elec.	1.00	LS	\$4,770,661.15					
3/6-01	Coordination Study			\$22,000.00	0.00	0.98	0.98	\$21,500.00	\$0.00
3/6-02	Approved Shop Drawings for all Equipment			\$377,523.00	0.00	1.00	1.00	\$377,523.00	\$0.00
3/6-03	All Equipment Released for Fabrication			\$399,523.00	0.00	1.00	1.00	\$399,523.00	\$0.00
3/6-04	Pad Mount Transformer Delivery			\$243,000.00	0.00	0.00	0.00	\$0.00	\$0.00
3/6-05	Primary Switch Delivery			\$70,000.00	0.00	1.00	1.00	\$70,000.00	\$0.00
3/6-06	Main Switch Board Delivery			\$456,980.00	0.00	1.00	1.00	\$456,980.00	\$0.00
3/6-07	New Pump 1 VFD Delivery			\$60,000.00	0.00	1.00	1.00	\$60,000.00	\$0.00
3/6-08	New Pump 2 VFD Delivery			\$60,000.00	0.00	1.00	1.00	\$60,000.00	\$0.00
3/6-09	New Pump 3 VFD Delivery			\$60,000.00	0.00	1.00	1.00	\$60,000.00	\$0.00
3/6-10	New Pump 4 VFD Delivery			\$60,000.00	0.00	1.00	1.00	\$60,000.00	\$0.00
3/6-11	Motor Control Center Delivery			\$88,709.00	0.00	0.21	0.21	\$18,709.00	\$0.00
3/6-12	Startup & Commissioning			\$61,881.00	0.00	0.24	0.24	\$15,000.00	\$0.00
3/6-13	Training			\$12,000.00	0.67	0.00	0.67	\$8,000.00	\$8,000.00
3/6-14	O & M Manuals & Record Drawings			\$26,000.00	0.00	0.00	0.00	\$0.00	\$0.00
3/6-15	Mobilize			\$219,000.00	0.00	1.00	1.00	\$219,000.00	\$0.00
3/6-16	Submittals Other Than Madison			\$58,000.00	0.00	0.90	0.90	\$52,200.00	\$0.00
3/6-17	Outside Distribution Equipment Condit/Wiring Install			\$148,000.00	0.14	0.37	0.51	\$74,800.00	\$20,000.00
3/6-18	Inside Elect Equip Condit/Wiring Install PCI-970031 - \$11,691.00 Credit			\$152,309.00	0.07	0.82	0.89	\$135,000.00	\$10,000.00
3/6-19	New Pump 1 Conduit/Wiring			\$195,000.00	0.03	0.28	0.31	\$60,000.00	\$5,000.00
3/6-20	New Pump 2 Conduit/Wiring			\$195,000.00	0.00	0.97	0.97	\$190,000.00	\$0.00
3/6-21	New Pump 3 Conduit/Wiring			\$195,000.00	0.03	0.77	0.79	\$155,000.00	\$5,000.00
3/6-22	New Pump 4 Conduit/Wiring			\$195,000.00	0.03	0.77	0.79	\$155,000.00	\$5,000.00
3/6-23	Valve Operators Conduit/Wiring			\$35,000.00	0.14	0.43	0.57	\$20,000.00	\$5,000.00
3/6-24	Motor Control Center Conduit/Wiring PCI-970040 \$7,855.00 credit			\$188,145.00	0.01	0.83	0.84	\$158,145.00	\$2,145.00
3/6-25	Lighting Conduit/Wiring			\$71,000.00	0.14	0.49	0.63	\$45,000.00	\$10,000.00
3/6-26	Newl Vault Conduit/Wiring			\$15,000.00	0.00	0.00	0.00	\$0.00	\$0.00
3/6-27	Cathodic Protection			\$79,000.00	0.00	0.00	0.00	\$0.00	\$0.00
3/6-28	Sequence of Construction / Temporary Power			\$37,000.00	0.00	1.00	1.00	\$37,000.00	\$0.00
3/6-29	SSO Chamber Conduit/Wiring			\$50,000.00	0.00	0.00	0.00	\$0.00	\$0.00
3/6-30	Inverter Delivery			\$22,000.00	0.00	0.00	0.00	\$0.00	\$0.00
3/6-31	Generator Install Conduit/Wiring			\$524,000.00	0.00	1.00	1.00	\$524,000.00	\$0.00
3/6-32	Generator Mechanical Connections			\$18,000.00	0.00	1.00	1.00	\$18,000.00	\$0.00
3/6-33	Gas Detection System Delivery PCI-970022B \$41,898.41 credit			\$2,101.59	1.00	0.00	1.00	\$2,101.59	\$2,101.59
3/6-34	Instrumentation & Control Conduit/Wiring			\$34,500.00	0.13	0.58	0.71	\$24,500.00	\$4,500.00

**Jim Nash, Oakland County Water Resources Commissioner  
Evergreen Farmington Sanitary Drain Drainage District  
8 Mile Road CAP 8 Mile Road Pump Station & SSO Chamber Improvements - Phase 1  
Southfield  
Oakland County, Michigan**

Construction Estimate No. 30		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Contract Item	Bid Quantity	Unit	Unit Price	Quantity This Payment	Total Quantity Previous Estimate	Total Quantity to Date	Total Amount to Date	Total Amount This Payment
3/6-35	Demobilize			\$20,000.00	0.00	0.00	0.00	\$0.00	\$0.00
3/6-A	Walsh internal PCI 98-009 (add transfer \$2500 from Cummins 2E)			\$2,500.00	0.00	1.00	1.00	\$2,500.00	\$0.00
3/6-36	Insurance and OH&P (add transfer \$175 from Cummins 2H)			\$317,489.56	0.02	0.75	0.77	\$243,563.71	\$5,372.26
4	OCO#4 Pumps (Includes Insurance & OH&P)	1.00	LS	\$2,311,820.95					
4A	Shop Drawing Approval			\$324,000.00	0.00	1.00	1.00	\$324,000.00	\$0.00
4B	Delivery of Equipment			\$1,620,000.00	0.00	1.00	1.00	\$1,619,520.64	\$0.00
4C	Startup, Testing, Final O&M, Training			\$215,924.27	0.00	0.31	0.31	\$65,924.27	\$0.00
4D	Insurance and OH&P			\$151,896.68	0.00	0.93	0.93	\$140,754.29	\$0.00
5	OCO#5 Valves & Actuators (Includes Insurance & OH&P)	1.00	LS	\$1,044,145.02					
5A	Shop Drawing Approval - Kennedy			\$122,000.00	0.00	1.00	1.00	\$122,000.00	\$0.00
5B	Delivery of Equipment - Kennedy			\$609,000.00	0.00	1.00	1.00	\$609,000.00	\$0.00
5C	Startup, Testing, Final O&M, Training - Kennedy			\$80,225.00	0.00	0.25	0.25	\$20,000.00	\$0.00
5D	Shop Drawing Approval - System Specialties			\$24,650.00	0.00	1.00	1.00	\$24,650.00	\$0.00
5E	Delivery of Equipment - System Specialties			\$123,200.00	0.00	1.00	1.00	\$123,200.00	\$0.00
5F	Startup, Testing, Final O&M, Training - System Specialties			\$16,465.16	0.00	0.70	0.70	\$11,465.16	\$0.00
5G	Insurance and OH&P			\$68,604.86	0.00	0.93	0.93	\$63,507.28	\$0.00
6	OCO#6 Electrical & Remaining Equip (Includes Ins. & OH&P) - \$3,00,5633.15	1.00	LS	see item 3/6					
7	OCO#7 Construction GMP	1.00	LS	\$4,041,921.00					
8	Cash Allowance - DTE Electrical & Lighting Protection Required by DTE at	1.00	LS	\$60,000.00	0.00	0.64	0.64	\$38,417.72	\$0.00
9	Cash Allowance - Consumers Energy Gas	1.00	LS	\$15,000.00	0.00	0.22	0.22	\$3,239.00	\$0.00
10	Cash Allowance - Comcast Internet	1.00	LS	\$5,000.00	0.00	0.00	0.00	\$0.00	\$0.00
11	Cash Allowance - Purchase & Install Internet Booster	1.00	LS	\$15,000.00	1.00	0.00	1.00	\$15,000.00	\$15,000.00
12	Cash Allowance - AT&T Phone System Relocate	1.00	LS	\$15,000.00	0.00	0.00	0.00	\$0.00	\$0.00
13	Cash Allowance - Security Camera Relocate	1.00	LS	\$15,000.00	1.00	0.00	1.00	\$15,000.00	\$15,000.00
14	Cash Allowance - Unforeseen Utility Relocation	1.00	LS	\$100,000.00	0.00	0.03	0.03	\$2,777.84	\$0.00
15	Cash Allowance per DWGs - Consumers Energy 6" Gas Relocation	1.00	LS	\$100,000.00	0.00	0.00	0.00	\$0.00	\$0.00
16	Cash Allowance per DWGs - Phone System Install	1.00	LS	\$25,000.00	0.40	0.00	0.40	\$10,000.00	\$10,000.00
17	Cash Allowance per DWGs - Internet System Install	1.00	LS	\$25,000.00	0.00	0.16	0.16	\$4,068.15	\$0.00
18	Cash Allowance per DWGs - Boot on Power Lines & Raising AT&T Lines	1.00	LS	\$40,000.00	0.00	0.13	0.14	\$5,546.01	\$180.00
19	Cash Allowance per DWGs - Concrete & Asphalt Paving Work	1.00	LS	\$1,600,000.00	0.00	0.00	0.00	\$7,866.82	\$0.00
20	Cash Allowance per DWGs - Install of Antennas & Wiring at Pump Station & SSO	1.00	LS	\$50,000.00	0.00	0.00	0.00	\$0.00	\$0.00
21	Cash Allowance per DWGs - Bridge Crane Work (7.5 Tons)	1.00	LS	\$625,000.00	0.00	0.54	0.54	\$335,655.98	\$0.00
22	Cash Allowance per DWGs - Switchgear Design Changes	1.00	LS	\$50,000.00	0.00	0.00	0.00	\$0.00	\$0.00
23	Cash Allowance per DWGs - Landscape Allowance - 2026/2027 - Bid	1.00	LS	\$480,000.00	0.00	0.00	0.00	\$0.00	\$0.00
24	Cash Allowance per Meeting - Dewatering	1.00	LS	\$180,000.00	0.05	0.00	0.05	\$9,720.24	\$9,720.24
25	Cash Allowance per Mtg - Permits (\$560,000 less \$150,000, CO 8-4)	1.00	LS	\$410,000.00	0.00	0.84	0.84	\$343,343.17	\$0.00
26	Cash Allowance per Meeting - Summer & Winter Conditions	1.00	LS	\$130,000.00	0.00	0.00	0.00	\$644.48	\$0.00
27	Cash Allowance per Meeting - Traffic Control	1.00	LS	\$479,800.00	0.00	0.08	0.08	\$39,614.04	\$0.00
28	Cash Allowance per Meeting - Vac Truck Services & TV Inspections	1.00	LS	\$480,000.00	0.00	0.10	0.10	\$48,662.78	\$0.00
29	Construction Staking	1.00	LS	\$94,600.00	0.02	0.15	0.17	\$16,304.00	\$1,841.50
30	Security	1.00	LS	\$570,300.00	0.02	0.33	0.35	\$198,400.00	\$12,400.00
31	Temporary Generators & Fuel	1.00	LS	\$155,000.00	0.13	0.71	0.84	\$130,228.29	\$20,216.82
32	Equipment Storage Off Site & Shipping	1.00	LS	\$40,000.00	0.00	0.11	0.11	\$4,586.41	\$0.00
33	Hydraulic Pump at Wet Well for Concrete Work	1.00	LS	\$85,000.00	0.00	0.26	0.26	\$21,941.77	\$0.00
34	Ventilation at Overflow Chamber	1.00	LS	\$40,000.00	0.00	0.50	0.50	\$20,093.39	\$0.00
35	Preconstruction & Final Photos	1.00	LS	\$10,000.00	0.00	0.50	0.50	\$5,000.00	\$0.00
36	Selective Demolition - Blue Star	1.00	LS	\$1,712,485.72					
36A	Deduct for work transferred to BNE (item 48/54A)			(\$1,984.28)	0.00	1.00	1.00	(\$1,984.28)	\$0.00
36-01	Mobilization / Phasing (x5)			\$5,000.00	0.00	0.40	0.40	\$2,000.00	\$0.00
36-02	Bond			\$19,500.00	0.00	1.00	1.00	\$19,500.00	\$0.00

**Jim Nash, Oakland County Water Resources Commissioner  
 Evergreen Farmington Sanitary Drain Drainage District  
 8 Mile Road CAP 8 Mile Road Pump Station & SSO Chamber Improvements - Phase 1  
 Southfield  
 Oakland County, Michigan**

Construction Estimate No. 30		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Contract Item	Bid Quantity	Unit	Unit Price	Quantity This Payment	Total Quantity Previous Estimate	Total Quantity to Date	Total Amount to Date	Total Amount This Payment
36-03	Sheet D101 - ARCH Demo First Floor (EL 646)			\$86,000.00	0.00	0.30	0.30	\$25,800.00	\$0.00
36-04	Sheet D102 - ARCH Demo Roof (EL 660'8")			\$60,000.00	0.00	0.00	0.00	\$0.00	\$0.00
36-05	Sheet D103 - ARCH Demo P1 (EL 636, P2 EL 626, P3 EL 616)			\$30,000.00	0.00	0.50	0.50	\$15,000.00	\$0.00
36-06	Sheet D104 - ARCH Demo P4 (EL 606) P5 (EL591'9")			\$66,500.00	0.00	1.00	1.00	\$66,500.00	\$0.00
36-07	Sheet D105 - ARCH Demo Wet Well (EL 620 & 600)			\$244,000.00	0.00	1.00	1.00	\$244,000.00	\$0.00
36-08	Sheet D110 - STRUC Demo Roof (EL 660'8"), 1ST Fl (EL 646), and P1 (EL 636)			\$40,500.00	0.00	0.10	0.10	\$4,050.00	\$0.00
36-09	Sheet D111 - STRUC Demo P2 (EL 626), P3 (EL 616), P4 (EL 606) & P5 (EL 591'9")			\$400,000.00	0.00	0.70	0.70	\$280,000.00	\$0.00
36-10	Sheet D121 - PROCESS Demo 1st Fl			\$44,000.00	0.00	0.15	0.15	\$6,600.00	\$0.00
36-11	Sheet D122 - PROCESS Demo P1, P2, P3			\$450,000.00	0.00	0.34	0.34	\$155,150.00	\$0.00
36-12	Sheet D123 - PROCESS Demo P4, P5			\$85,000.00	0.00	0.34	0.34	\$29,195.00	\$0.00
36-13	Sheet D131 - PLUMBING Demo 1st Fl. P1			\$30,000.00	0.00	0.50	0.50	\$15,000.00	\$0.00
36-14	Sheet D132 - PLUMBING Demo P2, P3			\$8,500.00	0.00	0.28	0.28	\$2,420.00	\$0.00
36-15	Sheet D133 - PLUMBING Demo P4, P5			\$20,000.00	0.00	0.30	0.30	\$6,000.00	\$0.00
36-16	Sheet D134 - MECH Demo Roof			\$4,500.00	0.00	1.00	1.00	\$4,500.00	\$0.00
36-17	Sheet D135 - MECH Demo 1st Fl. P1			\$12,000.00	0.00	0.50	0.50	\$6,000.00	\$0.00
36-18	Sheet D136 - MECH Demo P2, P3			\$16,000.00	0.00	1.00	1.00	\$16,000.00	\$0.00
36-19	Sheet D137 - MECH Demo P4, P5			\$16,000.00	0.00	0.56	0.56	\$9,000.00	\$0.00
36-20	Sheet D141-D144 - ELEC Demo - 1st Fl. P1, P2, P3, P4, P5			\$30,000.00	0.00	0.17	0.17	\$5,000.00	\$0.00
36-21	Sheet D201 - ARCH Demo Evergreen SSO Chamber			\$4,000.00	0.00	0.00	0.00	\$0.00	\$0.00
36-22	Sheet D230 - MECH Demo Evergreen SSO Chamber			\$15,000.00	0.00	0.00	0.00	\$0.00	\$0.00
36-23	Sheet S100 - STRUC Demo Roof ( EL 660'8")			\$11,500.00	0.00	1.00	1.00	\$11,500.00	\$0.00
36-24	Sheet S102 - STRUC Demo P1 (EL 636)			\$8,500.00	0.00	0.00	0.00	\$0.00	\$0.00
36-25	Sheet S104 - STRUC Demo P1 (EL 636)			\$3,000.00	0.00	0.00	0.00	\$0.00	\$0.00
36-26	Post Bid Adds			\$4,970.00	0.00	0.00	0.00	\$0.00	\$0.00
37	Cast In Place Concrete - Mobilization	1.00	LS	\$50,000.00	0.00	1.00	1.00	\$50,000.00	\$0.00
38	Cast In Place Concrete- Wet Well Shoring, FRP Lower Floor	1.00	LS	\$955,000.00	0.00	1.00	1.00	\$955,000.00	\$0.00
39	Cast In Place Concrete - Wet Well FRP Upper Floor	1.00	LS	\$409,000.00	0.00	1.00	1.00	\$409,000.00	\$0.00
40	Cast In Place Concrete - Yard Pipe Mud Mat & Electrical Ductbanks	1.00	LS	\$210,000.00	0.00	0.67	0.67	\$140,000.00	\$0.00
41	Cast In Place Concrete - Exterior Pads, Bollards, Temp Bulkhead, Building Foundation	1.00	LS	\$163,600.00	0.00	0.76	0.76	\$123,600.00	\$0.00
42	Cast In Place Concrete - Interior Pads, Wall Patching, Floor Infills, Pump & Misc.	1.00	LS	\$220,000.00	0.00	0.69	0.69	\$152,000.00	\$0.00
43	Cast In Place Concrete - Valve Vault	1.00	LS	\$400,000.00	0.21	0.75	0.96	\$385,000.00	\$85,000.00
44	Cast In Place Concrete - Overflow Chamber Gate Structure	1.00	LS	\$400,000.00	0.00	0.00	0.00	\$0.00	\$0.00
45	Cast In Place Concrete - Overflow Chamber Modify Existing Overflow Structure	1.00	LS	\$950,000.00	0.00	0.00	0.00	\$0.00	\$0.00
46	Cast In Place Concrete - Demobilization	1.00	LS	\$25,000.00	0.00	0.00	0.00	\$0.00	\$0.00
47	Hollow Core Planks Fabcon Precast (now StresCore)	1.00	LS	\$28,000.00	0.00	0.14	0.14	\$3,800.00	\$0.00
48	Masonry Work - BNE (\$133,168.00)	1.00	LS	see item 48/54					
48/54	Combined Items 48 & 54 - Masonry & Waterproofing/Joint Sealant - BNE	1.00	LS	\$184,481.28					
48/54A	Work transferred from Blue Star (item 36A)	1.00	LS	\$1,984.28	0.00	1.00	1.00	\$1,984.28	\$0.00
48/54-01	Masonry Bond	1.00	LS	\$2,100.00	0.00	1.00	1.00	\$2,100.00	\$0.00
48/54-02	Interior Masonry	1.00	LS	\$16,750.00	0.00	1.00	1.00	\$16,750.00	\$0.00
48/54-03	Elevator Shaft Masonry	1.00	LS	\$20,117.00	0.00	1.00	1.00	\$20,117.00	\$0.00
48/54-04	Exterior Infills / Tothing In	1.00	LS	\$66,450.00	0.00	1.00	1.00	\$66,450.00	\$0.00
48/54-05	Corner Exterior Wall	1.00	LS	\$27,751.00	0.00	0.00	0.00	\$0.00	\$0.00
48/54-06	Waterproofing/Joint Sealant Bond	1.00	LS	\$900.00	0.00	1.00	1.00	\$900.00	\$0.00
48/54-07	Waterproofing Blind Side	1.00	LS	\$14,100.00	0.00	1.00	1.00	\$14,100.00	\$0.00
48/54-08	Waterproofing Walls - Force Main	1.00	LS	\$5,100.00	0.00	0.00	0.00	\$0.00	\$0.00
48/54-09	Waterproofing SSO Chamber	1.00	LS	\$10,929.00	0.00	0.00	0.00	\$0.00	\$0.00
48/54-10	Joint Sealants - Labor	1.00	LS	\$7,200.00	0.00	0.00	0.00	\$0.00	\$0.00
48/54-11	Building Joint Sealants	1.00	LS	\$6,500.00	0.00	0.00	0.00	\$0.00	\$0.00
48/54-12	Site Concrete EJ Sealant	1.00	LS	\$4,600.00	0.00	0.00	0.00	\$0.00	\$0.00

**Jim Nash, Oakland County Water Resources Commissioner  
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 8 Mile Road CAP 8 Mile Road Pump Station & SSO Chamber Improvements - Phase 1  
 Southfield  
 Oakland County, Michigan**

Construction Estimate No. 30		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Contract Item	Bid Quantity	Unit	Unit Price	Quantity This Payment	Total Quantity Previous Estimate	Total Quantity to Date	Total Amount to Date	Total Amount This Payment
49	Metals - Ross Steel	1.00	LS	\$1,036,000.00					
49-01	Engineering (Detailing)	1.00	LS	\$64,200.00	0.00	1.00	1.00	\$64,200.00	\$0.00
49-02	Field Measuring	1.00	LS	\$48,000.00	0.00	1.00	1.00	\$48,000.00	\$0.00
49-03	Material	1.00	LS	\$360,841.00	0.00	0.90	0.90	\$324,756.90	\$0.00
49-04	Labor	1.00	LS	\$72,000.00	0.00	0.90	0.90	\$64,800.00	\$0.00
49-05	FRP	1.00	LS	\$72,459.00	0.00	1.00	1.00	\$72,459.00	\$0.00
49-06	Erection	1.00	LS	\$233,800.00	0.04	0.71	0.75	\$175,723.00	\$10,443.00
49-07	Stairs, rails, ladders	1.00	LS	\$172,700.00	0.00	0.85	0.85	\$145,956.50	\$0.00
49-08	Bond	1.00	LS	\$12,000.00	0.00	1.00	1.00	\$12,000.00	\$0.00
50	Rough Carpentry - Temp & Final Doors	1.00	LS	\$55,000.00	0.00	0.05	0.05	\$3,000.00	\$0.00
51	Rough Carpentry - Temp Wall for Roof Removal	1.00	LS	\$57,000.00	0.00	0.00	0.00	\$0.00	\$0.00
52	Rough Carpentry - Scaffold Plank at Floor Openings	1.00	LS	\$21,000.00	0.00	0.95	0.95	\$20,000.00	\$0.00
53	Rough Carpentry - Floor Protection	1.00	LS	\$38,700.00	0.00	0.80	0.80	\$30,960.00	\$0.00
54	Waterproofing/Joint Sealant - BNE (\$49,329.00)	1.00	LS	see item 48/54					
55	EPDM Roofing - Royal Roofing	1.00	LS	\$396,900.00					
55-01	Roofing Material	1.00	LS	\$188,000.00	0.00	1.00	1.00	\$188,000.00	\$0.00
55-02	Roofing Labor	1.00	LS	\$125,750.00	0.00	0.70	0.70	\$88,025.00	\$0.00
55-03	Sheet Metal Material	1.00	LS	\$25,500.00	0.00	0.00	0.00	\$0.00	\$0.00
55-04	Sheet Metal Labor	1.00	LS	\$15,550.00	0.00	0.00	0.00	\$0.00	\$0.00
55-05	Roofing Material Escalation	1.00	LS	\$42,100.00	0.00	0.00	0.00	\$0.00	\$0.00
56	Access Doors and Frames	1.00	LS	\$31,392.00	0.00	1.00	1.00	\$31,392.00	\$0.00
57	Overhead Doors - GLDD	1.00	LS	\$21,275.00	0.00	0.84	0.84	\$17,948.00	\$0.00
58	Painting - Signature	1.00	LS	\$427,000.00	0.00	0.50	0.50	\$214,550.00	\$0.00
59	Process Equipment Identifications	1.00	LS	\$5,000.00	0.00	0.00	0.00	\$0.00	\$0.00
60	Metal Canopies & Bike Racks	1.00	LS	\$25,700.00	0.00	0.00	0.00	\$0.00	\$0.00
61	Passenger Elevator	1.00	LS	\$40,000.00	0.00	1.00	1.00	\$40,000.00	\$0.00
62	Heating, Ventilating and Air Conditioning - DeCal (\$751,690.00)	1.00	LS	see item 62/82					
62/82	Combined Items 62 & 82 - HVAC & Process and Plumbing Systems - DeCal	1.00	LS	\$7,257,680.00					
62/82-01	Mobilization	1.00	LS	\$201,761.00	0.00	1.00	1.00	\$201,761.00	\$0.00
62/82-02	Demobilization	1.00	LS	\$65,460.00	0.00	0.00	0.00	\$0.00	\$0.00
62/82-03	General Conditions	1.00	LS	\$437,453.00	0.02	0.36	0.38	\$167,117.00	\$9,113.00
62/82-04	Closeout Documents	1.00	LS	\$2,500.00	0.00	1.00	1.00	\$2,500.00	\$0.00
62/82-05	Owner Training	1.00	LS	\$3,750.00	0.25	0.50	0.75	\$2,812.50	\$937.50
62/82-06	Punchlist	1.00	LS	\$3,750.00	0.00	0.00	0.00	\$0.00	\$0.00
62/82-07	Plumbing for Trailer City	1.00	LS	\$125,000.00	0.00	1.00	1.00	\$125,000.00	\$0.00
62/82-08	Cut/Cap for Demo by Others	1.00	LS	\$50,000.00	0.10	0.50	0.60	\$30,000.00	\$5,000.00
62/82-09	Furnish Ductile Iron Pipe and Fittings	1.00	LS	\$1,200,000.00	0.00	0.37	0.37	\$443,279.86	\$0.00
62/82-10	Furnish Carbon Steel Pipe and Fittings	1.00	LS	\$608,060.00	0.48	0.45	0.93	\$566,036.83	\$292,410.00
62/82-11	Furnish Process Valves	1.00	LS	\$76,000.00	0.25	0.75	1.00	\$76,000.00	\$19,000.00
62/82-12	Furnish Flow Meters	1.00	LS	\$70,000.00	0.00	1.00	1.00	\$70,000.00	\$0.00
62/82-13	Furnish Sump Pump Equipment	1.00	LS	\$35,000.00	0.00	0.00	0.00	\$0.00	\$0.00
62/82-14	Furnish Slide Gate and Stop Logs	1.00	LS	\$101,000.00	1.00	0.00	1.00	\$101,000.00	\$101,000.00
62/82-15	Furnish Plumbing Fixtures	1.00	LS	\$5,000.00	0.00	0.00	0.00	\$0.00	\$0.00
62/82-16	Furnish Nuts, Bolts, and Gaskets	1.00	LS	\$125,000.00	0.00	0.74	0.74	\$92,475.88	\$0.00
62/82-17	Furnish Hangers, Supports, Applicable Penetration Items	1.00	LS	\$161,000.00	0.01	0.50	0.51	\$82,646.00	\$2,146.00
62/82-18	Furnish Misc. Mechanical Couplings and Accessories	1.00	LS	\$150,000.00	0.00	0.94	0.94	\$140,303.24	\$0.00
62/82-19	Relocate Air Compressor	1.00	LS	\$25,000.00	0.00	0.50	0.50	\$12,500.00	\$0.00
62/82-20	Furnish and Install Temporary Piping	1.00	LS	\$415,000.00	0.00	0.30	0.30	\$124,500.00	\$0.00
62/82-21	Remove Bulkheads	1.00	LS	\$50,000.00	0.00	0.00	0.00	\$0.00	\$0.00
62/82-22	Bar Rack Work	1.00	LS	\$50,000.00	0.00	1.00	1.00	\$50,000.00	\$0.00

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 8 Mile Road CAP 8 Mile Road Pump Station & SSO Chamber Improvements - Phase 1  
 Southfield  
 Oakland County, Michigan**

Construction Estimate No. 30		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Contract Item	Bid Quantity	Unit	Unit Price	Quantity This Payment	Total Quantity Previous Estimate	Total Quantity to Date	Total Amount to Date	Total Amount This Payment
62/82-23	Logistics for Sequencing and Storage	1.00	LS	\$75,000.00	0.07	0.43	0.50	\$37,500.00	\$5,000.00
62/82-24	Standby Sluice Gate	1.00	LS	\$60,000.00	0.00	0.93	0.93	\$56,000.00	\$0.00
62/82-25	Furnish and Install Sanitary/Waste/Vent Piping	1.00	LS	\$75,000.00	0.00	0.19	0.19	\$14,000.00	\$0.00
62/82-26	Furnish and Install Domestic Water Piping	1.00	LS	\$100,000.00	0.00	0.67	0.67	\$66,500.00	\$0.00
62/82-27	Furnish and Install Compressed Air Piping PCI-970046 \$3,103.00 credit	1.00	LS	\$36,897.00	0.00	0.46	0.46	\$17,000.00	\$0.00
62/82-28	Furnish and Install Seal Water Piping	1.00	LS	\$15,000.00	0.00	1.00	1.00	\$15,000.00	\$0.00
62/82-29	Furnish and Install Sump Pump Piping PCI-970023 \$11,236.00 credit	1.00	LS	\$13,764.00	0.00	0.45	0.45	\$6,250.00	\$0.00
62/82-30	Furnish and Install Sniffer Tubing for Gas Detection PCI-970022B \$5,671 credit	1.00	LS	\$44,329.00	0.00	1.00	1.00	\$44,329.00	\$0.00
62/82-31	Furnish and Install CS Pipe Weld Joint Wraps	1.00	LS	\$120,000.00	0.00	0.01	0.01	\$1,195.69	\$0.00
62/82-32	Install Pump P1	1.00	LS	\$30,000.00	0.00	0.00	0.00	\$0.00	\$0.00
62/82-33	Install Pump P2	1.00	LS	\$30,000.00	0.00	1.00	1.00	\$30,000.00	\$0.00
62/82-34	Install Pump P3	1.00	LS	\$30,000.00	0.00	0.00	0.00	\$0.00	\$0.00
62/82-35	Install Pump P4	1.00	LS	\$30,000.00	0.00	0.00	0.00	\$0.00	\$0.00
62/82-36	Install P1 Discharge PVF's	1.00	LS	\$125,000.00	0.00	0.00	0.00	\$0.00	\$0.00
62/82-37	Install P2 Discharge PVF's	1.00	LS	\$125,000.00	0.00	1.00	1.00	\$125,000.00	\$0.00
62/82-38	Install P3 Discharge PVF's	1.00	LS	\$125,000.00	0.00	0.00	0.00	\$0.00	\$0.00
62/82-39	Install P4 Discharge PVF's	1.00	LS	\$125,000.00	0.00	0.00	0.00	\$0.00	\$0.00
62/82-40	Install Flow Meters	1.00	LS	\$75,000.00	0.00	0.25	0.25	\$18,750.00	\$0.00
62/82-41	Install Process Yard Piping	1.00	LS	\$400,000.00	0.00	0.03	0.03	\$10,000.00	\$0.00
62/82-42	Install Surge Relief Piping	1.00	LS	\$130,000.00	0.00	0.50	0.50	\$65,000.00	\$0.00
62/82-43	Install ARVs and Piping (4 places)	1.00	LS	\$45,000.00	0.00	1.00	1.00	\$45,000.00	\$0.00
62/82-44	Install Pipe at Discharge MH/OF Chamber	1.00	LS	\$35,000.00	0.00	0.00	0.00	\$0.00	\$0.00
62/82-45	Install Miscellaneous and Ancillary PVFs	1.00	LS	\$40,000.00	0.00	0.13	0.13	\$5,000.00	\$0.00
62/82-46	Install Electric Actuators (FBOs)	1.00	LS	\$75,000.00	0.00	0.75	0.75	\$56,250.00	\$0.00
62/82-47	Install Slide Gate and Stop Logs	1.00	LS	\$125,000.00	0.00	0.00	0.00	\$0.00	\$0.00
62/82-48	Install Sump Pump Equipment	1.00	LS	\$20,000.00	0.00	0.00	0.00	\$0.00	\$0.00
62/82-49	Install Plumbing Fixtures	1.00	LS	\$20,000.00	0.00	0.25	0.25	\$5,000.00	\$0.00
62/82-50	Test Piping (Pressure and Holiday)	1.00	LS	\$90,000.00	0.00	0.13	0.13	\$11,250.00	\$0.00
62/82-51	Insulation	1.00	LS	\$83,000.00	0.27	0.08	0.35	\$29,197.43	\$22,459.50
62/82-52	Furnish Cathodic Protections (Install BO)	1.00	LS	\$100,000.00	0.91	0.09	1.00	\$100,000.00	\$91,069.50
62/82-53	Bonds	1.00	LS	\$78,980.00	0.00	1.00	1.00	\$78,980.00	\$0.00
62/82-54	Submittals and Shop Drawings	1.00	LS	\$58,286.00	0.00	1.00	1.00	\$58,286.00	\$0.00
62/82-55	Mechanical ID	1.00	LS	\$10,000.00	0.10	0.00	0.10	\$1,000.00	\$1,000.00
62/82-56	Install RTU-1	1.00	LS	\$30,000.00	0.00	1.00	1.00	\$30,000.00	\$0.00
62/82-57	Sheetmetal HVAC Duct Material and Equipment	1.00	LS	\$160,850.00	0.00	1.00	1.00	\$160,850.00	\$0.00
62/82-58	Sheetmetal HVAC Installation	1.00	LS	\$125,000.00	0.00	0.70	0.70	\$87,963.76	\$0.00
62/82-59	Refrigeration (Split AC Systems)	1.00	LS	\$87,000.00	0.25	0.75	1.00	\$87,000.00	\$21,750.00
62/82-60	Temperature Controls	1.00	LS	\$72,000.00	0.06	0.00	0.06	\$4,532.00	\$4,532.00
62/82-61	Furnish RTU-1 Rooflop Unit	1.00	LS	\$121,000.00	0.00	1.00	1.00	\$121,000.00	\$0.00
62/82-62	HVAC General Conditions	1.00	LS	\$64,280.00	0.05	0.65	0.70	\$44,719.88	\$3,131.00
62/82-63	HVAC Bond	1.00	LS	\$9,020.00	0.00	1.00	1.00	\$9,020.00	\$0.00
62/82-64	HVAC Submittals and Shop Drawings	1.00	LS	\$10,000.00	0.00	1.00	1.00	\$10,000.00	\$0.00
62/82-65	HVAC Closeout	1.00	LS	\$2,500.00	0.00	1.00	1.00	\$2,500.00	\$0.00
62/82-66	HVAC Owner Training	1.00	LS	\$3,750.00	0.00	0.50	0.50	\$1,875.00	\$0.00
62/82-67	HVAC Punchlist	1.00	LS	\$3,750.00	0.00	0.00	0.00	\$0.00	\$0.00
62/82-68	HVAC Mobilization	1.00	LS	\$35,000.00	0.00	1.00	1.00	\$35,000.00	\$0.00
62/82-69	HVAC Demobilization	1.00	LS	\$7,540.00	0.00	0.00	0.00	\$0.00	\$0.00
62/82-70	Furnish and Install Natural Gas Piping	1.00	LS	\$20,000.00	0.00	0.25	0.25	\$5,000.00	\$0.00
63	Engine Generators & Startup Fuel	1.00	LS	\$25,000.00	0.00	1.00	1.00	\$25,000.00	\$0.00
64	Site Work - Mobilization	1.00	LS	\$100,000.00	0.00	1.00	1.00	\$100,000.00	\$0.00



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 8 Mile Road CAP 8 Mile Road Pump Station & SSO Chamber Improvements - Phase 1  
 Southfield  
 Oakland County, Michigan**

Construction Estimate No. 30		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Contract Item	Bid Quantity	Unit	Unit Price	Quantity This Payment	Total Quantity Previous Estimate	Total Quantity to Date	Total Amount to Date	Total Amount This Payment
65	Site Work - Install Laydown & Excavate & Backfill Temporary Utilities	1.00	LS	\$690,000.00	0.00	1.00	1.00	\$690,000.00	\$0.00
66	Site Work - Dig, Install, Backfill Storm, Water Mains, Fire Hydrant	1.00	LS	\$675,000.00	0.00	0.71	0.71	\$480,000.00	\$0.00
67	Site Work - Dig, Backfill Electrical Ductbanks	1.00	LS	\$36,000.00	0.00	0.92	0.92	\$33,000.00	\$0.00
68	Site Work - Site Demo Pump Station	1.00	LS	\$125,000.00	0.00	0.52	0.52	\$65,000.00	\$0.00
69	Site Work Dig & Backfill Yard Pipe & Precast Manholes & Site CIP Concrete	1.00	LS	\$877,000.00	0.00	0.25	0.25	\$215,000.00	\$0.00
70	Site Work Dig & Backfill Valve Vault	1.00	LS	\$280,000.00	0.34	0.66	1.00	\$280,000.00	\$95,000.00
71	Site Work Demo Overflow Chamber From Grade to -15'	1.00	LS	\$554,200.00	0.00	0.00	0.00	\$0.00	\$0.00
72	Site Work Demo Overflow Chamber From -15' to BOE	1.00	LS	\$370,000.00	0.00	0.00	0.00	\$0.00	\$0.00
73	Site Work Backfill & Road Prep Overflow Chamber	1.00	LS	\$380,000.00	0.00	0.00	0.00	\$0.00	\$0.00
74	Site Work Demo Laydown, Temp Utilities, Restore Pump Station & Laydown	1.00	LS	\$200,000.00	0.00	0.00	0.00	\$0.00	\$0.00
75	Site Work Demobilize	1.00	LS	\$45,000.00	0.00	0.00	0.00	\$0.00	\$0.00
76	Temporary Earth Retention System (Chamber) - EC Korneffel	1.00	LS	\$944,678.00	0.00	0.01	0.01	\$9,450.00	\$0.00
77	Temporary Paving Work - Sidewalks at Trailers	1.00	LS	\$20,000.00	0.00	1.00	1.00	\$20,000.00	\$0.00
78	Temporary Paving Work - Parking Lot Patches	1.00	LS	\$41,000.00	0.00	1.00	1.00	\$41,000.00	\$0.00
79	Temporary Paving Work - Minor 8 Mile Road Patch	1.00	LS	\$20,000.00	0.00	1.00	1.00	\$20,000.00	\$0.00
80	Temporary Paving Work - Approaches, Temp Roads & Crane Pad	1.00	LS	\$50,000.00	0.00	1.00	1.00	\$50,000.00	\$0.00
81	Chain Link Fences and Gates - Future Fence	1.00	LS	\$161,686.00	0.00	0.36	0.36	\$58,229.50	\$0.00
82	Process & Plumbing Systems - DeCal (\$6,526,000.00)	1.00	LS	see item 62/82					
83	Instrumentation and Control for Process Systems - ICS	1.00	LS	\$998,000.00					
83-01	Submittals + OM, Training	1.00	LS	\$75,000.00	0.00	0.83	0.83	\$62,000.00	\$0.00
83-02	Hardware design parts management	1.00	LS	\$100,000.00	0.00	1.00	1.00	\$100,000.00	\$0.00
83-03	Field Devices and Start up, warranty	1.00	LS	\$75,000.00	0.00	1.00	1.00	\$75,000.00	\$0.00
83-04	MCP Start up parts, build, warranty	1.00	LS	\$107,000.00	0.00	1.00	1.00	\$107,000.00	\$0.00
83-05	Software Programming and SCADA	1.00	LS	\$125,000.00	0.02	0.67	0.70	\$87,000.00	\$3,000.00
83-06	OOS Panel, Start up, parts, labor, warranty	1.00	LS	\$65,000.00	0.00	0.92	0.92	\$60,000.00	\$0.00
83-07	Project Management / Support	1.00	LS	\$97,000.00	0.03	0.61	0.64	\$62,000.00	\$3,000.00
83-08	Startup	1.00	LS	\$354,000.00	0.05	0.37	0.42	\$149,000.00	\$19,000.00
84	General Conditions Staffing	1.00	LS	\$6,550,618.00	0.02	0.36	0.37	\$2,456,481.72	\$116,975.32
85	General Requirements- Trailer City Mobilize & Trailer Setup	1.00	LS	\$100,000.00	0.00	1.00	1.00	\$100,000.00	\$0.00
86	General Requirements- Trailer City Trailer Rental & Monthly Expenses	1.00	LS	\$224,310.00	0.02	0.31	0.33	\$73,500.00	\$4,900.00
87	General Requirements- Trailer City Trailer Technology Equipment	1.00	LS	\$35,000.00	0.00	0.55	0.55	\$19,076.56	\$0.00
88	General Requirements- Trailer City Demobilization	1.00	LS	\$25,000.00	0.00	0.00	0.00	\$0.00	\$0.00
89	General Requirements- Temp. Const. Signs, Conc. Brriers, Tool Storage, Storage	1.00	LS	\$99,592.00	0.00	1.00	1.00	\$99,592.00	\$0.00
90	General Requirements- Temp. Const. FE, Fence Maintenance, Snow Fence, Ladders,	1.00	LS	\$73,366.00	0.02	0.33	0.35	\$25,600.00	\$1,600.00
91	General Requirements- Temp. Const. Printing	1.00	LS	\$15,000.00	0.00	0.04	0.04	\$530.00	\$0.00
92	General Requirements- Temp. Const. Skid Steer Rental	1.00	LS	\$10,000.00	0.00	0.21	0.21	\$2,129.67	\$0.00
93	General Requirements- Temp. Const. Remove Storage Compound & Punch List	1.00	LS	\$30,000.00	0.00	0.00	0.00	\$0.00	\$0.00
94	General Requirements- Temp. Utilities & Equipment Hand Washing Station	1.00	LS	\$5,000.00	0.00	1.00	1.00	\$5,000.00	\$0.00
95	General Requirements- Temp. Utilities & Equipment Temp Toilets, Drinking Water,	1.00	LS	\$98,750.00	0.02	0.33	0.35	\$34,400.00	\$2,150.00
96	General Requirements- Temp. Utilities & Equipment-Hydrant Water & Dust Control	1.00	LS	15,500.00	0.00	0.00	0.00	\$0.00	\$0.00
97	General Requirements- Temp. Utilities & Equipment - Telehandler/Equipment with	1.00	LS	88,346.00	0.00	0.32	0.32	\$28,181.73	\$0.00
98	General Requirements- Temp. Utilities & Equipment - Street Sweeping	1.00	LS	62,500.00	0.00	0.03	0.03	\$1,688.72	\$0.00
99	General Requirements- Temp. Utilities & Equipment - Scaffolding for Stair Towers	1.00	LS	50,000.00	0.00	0.26	0.26	\$13,107.61	\$0.00
100	General Requirements- Safety Handrails at Floor & Roof Openings	1.00	LS	27,000.00	0.00	1.00	1.00	\$27,000.00	\$0.00
101	General Requirements- Safety Supplies, Periodic Cleanup, Maintenance	1.00	LS	73,000.00	0.02	0.33	0.35	\$25,600.00	\$1,600.00
102	General Requirements- Safety Snow Removal & Drug Tests	1.00	LS	26,000.00	0.00	0.13	0.13	\$3,283.18	\$0.00
103	General Requirements- Safety Final Cleanup	1.00	LS	40,000.00	0.00	0.00	0.00	\$0.00	\$0.00
104	General Requirements- Labor, Carpenter & Truck	1.00	LS	643,069.00	0.02	0.32	0.34	\$217,000.00	\$14,000.00
105	Performance and Payment Bonds	1.00	LS	378,135.00	0.00	1.00	1.00	\$378,135.00	\$0.00
106	General Liability Insurance - Supplementary to OCIP	1.00	LS	202,100.00	0.03	0.42	0.45	\$91,426.45	\$6,529.00



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Construction Estimate No. 30		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Contract Item	Bid Quantity	Unit	Unit Price	Quantity This Payment	Total Quantity Previous Estimate	Total Quantity to Date	Total Amount to Date	Total Amount This Payment
107	Base Contract Contingency	1.00	LS	1,294,753.00					
107-022A	PCI-970022B - Delete Gas Detection System (Rotor Credit)	1.00	LS	41,898.41					
107-022B	PCI-970022B - Delete Gas Detection System (Decal)	1.00	LS	5,671.00					
107-023B	PCI-970023 - FO # 15 -Drains and Sump changes (Decal)	1.00	LS	11,236.00					
107-31D	PCI-970031 - Electrical Room Steel & N. Wall Opening (Rotor Credit)	1.00	LS	11,691.00					
107-040	PCI-970040 - Change Disconnects - Pumps P1 - P4 Equipment (Rotor Credit)	1.00	LS	7,855.00					
107-046	PCI-970046 - Delete CA to Water Bldg (De-Cal CO#6)	1.00	LS	3,103.00					
<b>107 Rev.</b>	<b>Base Contract Contingency plus Credits</b>			<b>1,376,207.41</b>					
107-Bal	Coningency Balance Remaining	1.00	LS	757,480.81	0.00	0.00	0.00	\$0.00	\$0.00
107-007A	PCI-97007 - Addendum Nos. 5 & 6 (Ross CO #3)	1.00	LS	52,034.00	0.00	1.00	1.00	\$52,034.00	\$0.00
107-007B	PCI-97007 - Addendum Nos. 5 & 6 (Ross CO #3)	1.00	LS	10,069.16	0.00	0.00	0.00	\$0.00	\$0.00
107-008	PCI-970008 - RFI #3 Electrical & Breaker Size to RTU 1-R3 (Rotor CO #1)	1.00	LS	3,678.67	0.00	1.00	1.00	\$3,678.67	\$0.00
107-009A	PCI-970009 - RFI #7 FO #7 Elevator & Wet Well HVAC Changes (Decal)	1.00	LS	30,908.00	0.00	1.00	1.00	\$30,908.00	\$0.00
107-009B	PCI-970009 - RFI #7 FO #7 Elevator & Wet Well HVAC Changes (BNE)	1.00	LS	1,038.43	0.00	0.40	0.40	\$412.62	\$0.00
107-009C	PCI-970009 - RFI #7 FO #7 Elevator & Wet Well HVAC Changes (Royal)	1.00	LS	4,700.00	0.00	0.00	0.00	\$0.00	\$0.00
107-009D	PCI-970009 - RFI #7 FO #7 Elevator & Wet Well HVAC Changes (Walsh)	1.00	LS	2,664.63	0.00	1.00	1.00	\$2,664.63	\$0.00
107-014	PCI-970014 - VFD Changes - Pump Wiring (MASB11)/RFI #29/RFI #47 (Rotor)	1.00	LS	27,997.46	0.00	1.00	1.00	\$27,997.46	\$0.00
107-016	PCI-970016 - Field Order 6 (wiring & MCC bucket changes for PS HVAC (Rotor)	1.00	LS	4,730.00	0.00	1.00	1.00	\$4,730.00	\$0.00
107-018	PCI-970018 - Mag Meter Cable Lengths (Decal)	1.00	LS	3,674.00	0.00	1.00	1.00	\$3,674.00	\$0.00
107-021	PCI-970021 - FO # 13 - MDOT Plan Rev. Pavement & Crossover (Walsh)	1.00	LS	2,200.00	0.00	0.00	0.00	\$0.00	\$0.00
107-023A	PCI-970023 - FO # 15 -Drains and Sump changes (Walsh)	1.00	LS	7,231.07	0.00	1.00	1.00	\$7,231.07	\$0.00
107-025	PCI-970025 - RFI #44 CMU Top of Wall Bracing (BNE)	1.00	LS	1,800.00	0.00	0.84	0.84	\$1,512.92	\$0.00
107-026	PCI-970026 - PrePurchase Pipe / Pump #2 Replace (Decal)	1.00	LS	12,617.00	0.00	1.00	1.00	\$12,617.00	\$0.00
107-028	PCI-970028 - Temporary Generator to Run Existing Pump #5 & New Pump #4	1.00	LS	300,000.00	0.00	0.00	0.00	\$0.00	\$0.00
107-30A	PCI-970030 - WD 02- Masonry/Screen/Vault Ladder (Blue Star CO#3)	1.00	LS	1,236.00	0.00	1.00	1.00	\$1,236.00	\$0.00
107-30B	PCI-970030 - WD 02- Masonry/Screen/Vault Ladder (BnE CO#5)	1.00	LS	14,414.84	0.00	1.00	1.00	\$14,414.84	\$0.00
107-30C	PCI-970030 - WD 02- Masonry/Screen/Vault Ladder (Reickoff)	1.00	LS	14,200.00	0.00	1.00	1.00	\$14,200.00	\$0.00
107-30D	PCI-970030 - WD 02- Masonry/Screen/Vault Ladder (Ross CO#4)	1.00	LS	33,019.00	0.00	1.00	1.00	\$33,019.00	\$0.00
107-30E	PCI-970030 - WD 02- Masonry/Screen/Vault Ladder (Signature CO#1)	1.00	LS	2,300.00	0.00	1.00	1.00	\$2,300.00	\$0.00
107-30F	PCI-970030 - WD 02- Masonry/Screen/Vault Ladder (Walsh SP)	1.00	LS	7,220.76	0.00	1.00	1.00	\$7,220.76	\$0.00
107-31A	PCI-970031 - Electrical Room Steel & N. Wall Opening (Ross CO#4)	1.00	LS	34,310.00	0.00	1.00	1.00	\$34,310.00	\$0.00
107-31B	PCI-970031 - Electrical Room Steel & N. Wall Opening (BnE CO#4)	1.00	LS	16,360.78	0.00	1.00	1.00	\$16,360.78	\$0.00
107-31C	PCI-970031 - Electrical Room Steel & N. Wall Opening (Walsh SP)	1.00	LS	177.79	0.00	1.00	1.00	\$177.79	\$0.00
107-037	PCI-970037 - I&Cs Process Systems-PS & SSO Control Mods for Emergency Control	1.00	LS	11,000.00	0.00	1.00	1.00	\$11,000.00	\$0.00
107-044	PCI-970044 - Crack Injection PS Divider Wall (BnE CO#4)	1.00	LS	10,857.88	0.00	1.00	1.00	\$10,857.88	\$0.00
107-045A	PCI-970045 - Heater in Docking Station (Rotor CO #4)	1.00	LS	2,350.00	1.00	0.00	1.00	\$2,350.00	\$2,350.00
107-045B	PCI-970045 - Heater in Docking Station (Cummins CO #2)	1.00	LS	2,447.11	1.00	0.00	1.00	\$2,447.11	\$2,447.11
107-051	PCI-970051 - Sheet Metal Ceiling Plates (De-Cal CO#7)	1.00	LS	960.30	0.00	1.00	1.00	\$960.30	\$0.00
107-051A	PCI-970051 - Sheet Metal Ceiling Plates (Walsh SP)	1.00	LS	2,529.72	1.00	0.00	1.00	\$2,529.72	\$2,529.72
108	FEE 6.5%	1.00	LS	2,466,394.00	0.03	0.41	0.44	\$1,076,078.27	\$67,173.03
109									
110									

**Jim Nash, Oakland County Water Resources Commissioner  
 Evergreen Farmington Sanitary Drain Drainage District  
 8 Mile Road CAP 8 Mile Road Pump Station & SSO Chamber Improvements - Phase 1  
 Southfield  
 Oakland County, Michigan**

Construction Estimate No. 30		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Contract Item	Bid Quantity	Unit	Unit Price	Quantity This Payment	Total Quantity Previous Estimate	Total Quantity to Date	Total Amount to Date	Total Amount This Payment

**Change Orders:**

8-1	PCI-970015 - Asbestos Gasket Abatement (Bluestar + Walsh OH&P/Ins)	1.00	LS	22,747.46	0.00	0.48	0.48	\$10,945.23	\$0.00
8-2	PCI-970017 - Field Order 8 Elevator Fire Alarm System (Rotor + Walsh OH&P/Ins)	1.00	LS	98,530.91	0.04	0.96	1.00	\$98,530.91	\$4,024.37
8-3A	PCI-970024 - Remove / Replace Pump #2 suction pipe (Decal)	1.00	LS	16,102.00	0.00	1.00	1.00	\$16,102.00	\$0.00
8-3B	PCI-970024 - Remove / Replace Pump #2 suction pipe (BlueStar)	1.00	LS	80,406.44	0.00	1.00	1.00	\$80,406.44	\$0.00
8-3C	PCI-970024 - Remove / Replace Pump #2 suction pipe (Walsh)	1.00	LS	48,179.00	0.00	1.00	1.00	\$48,179.00	\$0.00
8-4	Reduce Building Permit Allowance by \$150,000 (see SOV #25)	1.00	LS	0.00					
9-1A	PCI-970034 - WRC Generator (Rotor CO#5)	1.00	LS	118,920.78	0.00	0.21	0.21	\$25,000.00	\$0.00
9-1B	PCI-970034 - WRC Generator (Decal CO#5)	1.00	LS	10,609.00	0.00	0.57	0.57	\$6,000.00	\$0.00
9-1C	PCI-970034 - WRC Generator (Ross CO#5)	1.00	LS	3,192.00	0.00	1.00	1.00	\$3,192.00	\$0.00
9-1D	PCI-970034 - WRC Generator (Walsh)	1.00	LS	77,249.48	0.00	0.74	0.74	\$57,249.48	\$0.00
9-2	PCI-970038 - P5 floor chipping (Blue Star CO #4 + Walsh OH&P/Ins)	1.00	LS	8,624.34	0.00	1.00	1.00	\$8,624.34	\$0.00
9-3	PCI-970041 - Asbestos Gasket (Blue Star CO #4 + Walsh OH&P/Ins)	1.00	LS	882.48	0.00	1.00	1.00	\$882.48	\$0.00

**Stored Material:**

						0.00	0.00	\$0.00	\$0.00

**Deductions:**

						0.00	0.00	\$0.00	\$0.00

Total Amount to Date	\$26,054,581.21
Total Amount This Estimate	\$1,311,738.34
Change Orders to Date	\$355,111.88
Change Orders This Estimate	\$4,024.37
Stored Materials to Date	\$0.00
Stored Materials This Estimate	\$0.00
Subtotal to Date	\$26,409,693.09
Subtotal This Estimate	\$1,315,762.71
Deductions to Date	\$0.00
Deductions This Estimate	\$0.00
Payment This Estimate	\$1,315,762.71
Less Transfer to Reserve	\$16,229.17
Net Payment	\$1,299,533.54

**Jim Nash, Oakland County Water Resources Commissioner  
Evergreen Farmington Sanitary Drain Drainage District  
For Construction of 8 Mile Road CAP Phase 2 - 8 Mile Pump Station 54-Inch Relief Forcemain  
Southfield, Michigan**

Construction Estimate No. 12

August 1, 2024 to Aug 31, 2024

Department No. : 6010101  
Fund No. : FND84410  
Project No. : PRJ-17452

Account No. : 730352  
Program No. : PRG149015  
Activity : FAC  
Vendor No. : 40260  
Contract No. : 10305  
Date of Contract : 7/17/2023  
Completion Date : 1/12/2025

Contractor :  
Dan's Excavating, Inc.  
12955 23 Mile Road  
Shelby Township, MI 48315

Original Contract Amount:		\$10,381,154.00
Previous Change Order Numbers: CO Nos. 1 and 2		\$214,293.91
Change Orders This Estimate Number:		\$0.00
Total Net Change Orders:		\$214,293.91
<u>Adjusted Contract Amount:</u>		<u>\$10,595,447.91</u>
Subtotal To Date: (Sheet 2 of 2 Column 7)		\$10,514,306.25
Less Deductions to Date: (Sheet 2 of 2 Column 7)		\$0.00
Gross Estimate: (Work in Place)	99.23%	\$10,514,306.25
Less Amount Reserved: (5% of Adjusted Contract Amount)		\$529,772.40
Total Amount Allowed To Date:		\$9,984,533.85
Less Previous Estimates:		\$9,526,400.22
Net Payment Request To Be Paid To Contractor:		\$458,133.63
Reserve Payment to Contractor		\$0.00
<u>Balance of Contract To Date</u>	<u>\$81,141.66</u>	<u>Accounting Auditor:</u>
Less Previous Transfers To Reserve:		\$529,772.40
<u>Amount of Current Transfer:</u>		<u>\$0.00</u>

Prepared by: Charles J. Roarty, Jr.  
Charles J. Roarty, Jr., P.E. - NTH Consultants

Date: 2024 09 20

Recommended by: Joe Siwek  
Joe Siwek, P.E. - Consulting Engineer (Fishbeck)

Date: 9/20/2024

Recommended by: Evangelos Bantios  
Evangelos Bantios, P.E. - Project Engineer

Date: 9/20/2024

Approved by: \_\_\_\_\_  
Joel Brown, P.E. - Chief Engineer

Date: \_\_\_\_\_

Approved by Board on: \_\_\_\_\_

**JIM NASH  
OAKLAND COUNTY WATER RESOURCES COMMISSIONER**

CONSTRUCTION ESTIMATE

**Jim Nash, Oakland County Water Resources Commissioner  
Evergreen Farmington Sanitary Drain Drainage District  
For Construction of 8 Mile Road CAP Phase 2 - 8 Mile Pump Station 54-Inch Relief Forcemain  
Southfield, Michigan**

Construction Estimate No. 12		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Contract Item	Bid Quantity	Unit	Unit Price	Quantity This Payment	Total Quantity Previous Estimate	Total Quantity to Date	Total Amount to Date	Total Amount This Payment
1	Bonds, Insurance, and Initial Setup Expense (5% maximum)	1	LS	\$450,000.00	0.00	1.00	1.0	\$450,000.00	\$0.00
2	Preconstruction Audio-Video Documentation	1	LS	\$5,000.00	0.00	1.00	1.0	\$5,000.00	\$0.00
3	Traffic Maintenance and Control	1	LS	\$182,800.00	0.02	0.98	1.0	\$182,800.00	\$3,656.00
4	Soil Erosion and Sedimentation Control	1	LS	\$20,000.00	0.01	0.99	1.0	\$20,000.00	\$200.00
5	Dewatering	1	LS	\$10,000.00	0.00	1.00	1.0	\$10,000.00	\$0.00
6	Tree Removal	10	EA	\$1,200.00	0.00	10.00	10.0	\$12,000.00	\$0.00
7	Storm Sewer Removal	1	LS	\$60,000.00	0.00	1.00	1.0	\$60,000.00	\$0.00
8	Pavement Removal	1	LS	\$35,000.00	0.00	1.00	1.0	\$35,000.00	\$0.00
9	Concrete Removal	1	LS	\$140,000.00	0.00	1.00	1.0	\$140,000.00	\$0.00
10	Sanitary Sewer, Force Main, 54 inch, Furnished	6,123	LF	\$480.00	0.00	6,120.49	6,120.49	\$2,937,835.20	\$0.00
11	Sanitary Sewer, Force Main, 54 inch, Installed	6,043	LF	\$432.00	0.00	6,028.84	6,028.84	\$2,604,458.88	\$0.00
12	Air Release Valve and Manhole	2	EA	\$75,000.00	0.00	2.00	2.0	\$150,000.00	\$0.00
13	Sanitary Sewer, Force Main, 54 inch, Couplings	2	EA	\$27,500.00	0.00	3.00	3.0	\$82,500.00	\$0.00
14	Dr Structure, 48 inch dia	35	EA	\$1,800.00	0.00	22.00	22.0	\$39,600.00	\$0.00
15	Sewer, CI III, 12 inch, Tr Det B	623	LF	218.00	0.00	904.00	904.0	\$197,072.00	\$0.00
16	Sewer, CI IV, 15 inch, Tr Det B	119	LF	223.00	0.00	212.00	212.0	\$47,276.00	\$0.00
17	Sewer, CI IV, 18 inch, Tr Det B	35	LF	235.00	0.00	54.00	54.0	\$12,690.00	\$0.00
18	Sewer, CI IV, 30 inch, Tr Det B	55	LF	279.00	0.00	69.00	69.0	\$19,251.00	\$0.00
19	Trench Undercut and Backfill	500	CYD	50.00	0.00	0.00	0.0	\$0.00	\$0.00
20	Non-Hazardous Contaminated Material Handling and Disposal	2,000	TON	26.00	0.00	0.00	0.0	\$0.00	\$0.00
21	Grading and Roadbed	1	LS	1,100,000.00	0.00	1.00	1.0	\$1,100,000.00	\$0.00
22	HMA, 2EMH	2,850	TON	121.00	1,118.60	1,731.40	2,850.00	\$344,850.00	\$135,350.60
23	HMA, 3EMH	1,923	TON	130.00	633.32	1,289.68	1,923.00	\$249,990.00	\$82,331.60
24	HMA, 4EMH	1,374	TON	127.00	283.62	1,090.38	1,374.00	\$174,498.00	\$36,019.74
25	HMA, 5EMH	1,178	TON	139.00	531.41	646.59	1,178.00	\$163,742.00	\$73,865.99
26	HMA, 2EMH, High Stress	2,474	TON	130.00	0.00	2,474.00	2,474.00	\$321,620.00	\$0.00
27	HMA, 3EMH, High Stress	1,912	TON	136.00	0.00	1,912.00	1,912.00	\$260,032.00	\$0.00
28	HMA, 4EMH, High Stress	1,364	TON	146.00	0.00	1,364.00	1,364.00	\$199,144.00	\$0.00
29	HMA, 5EMH, High Stress	1,095	TON	162.00	56.85	1,038.15	1,095.00	\$177,390.00	\$9,209.70
30	Concrete Curbs and Gutters	4,687	LF	33.00	0.00	4,467.00	4,467.00	\$147,411.00	\$0.00
31	Concrete Sidewalk	1,832	SFT	27.50	0.00	618.25	618.3	\$17,001.88	\$0.00
32	Lahser Road Pedestrian Signal Modifications	1	LS	17,500.00	0.00	0.00	0.0	\$0.00	\$0.00
33	Permanent Striping and Signage Removal and Replacement	1	LS	90,000.00	0.85	0.00	0.9	\$76,500.00	\$76,500.00
34	Site Restoration	1	LS	82,000.00	0.50	0.50	1.0	\$82,000.00	\$41,000.00
35						0.0	0.0	\$0.00	\$0.00

CONSTRUCTION ESTIMATE

**Jim Nash, Oakland County Water Resources Commissioner**  
**Evergreen Farmington Sanitary Drain Drainage District**  
**For Construction of 8 Mile Road CAP Phase 2 - 8 Mile Pump Station 54-Inch Relief Forcemain**  
**Southfield, Michigan**

Construction Estimate No. 12		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Contract Item	Bid Quantity	Unit	Unit Price	Quantity This Payment	Total Quantity Previous Estimate	Total Quantity to Date	Total Amount to Date	Total Amount This Payment

**Change Orders:**

1-1	Additional Pavement Removal	1	LS	42,893.91	0.00	1.00	1.0	\$42,893.91	\$0.00
1-2	Allowance for Temporary Paving	1	LS	157,000.00	0.00	0.87	0.9	\$137,350.38	\$0.00
2-1	Additional Tree Removal	4	EA	1,200.00	0.00	4.00	4.0	\$4,800.00	\$0.00
2-2	Added Tree Trimming	24	EA	400.00	0.00	24.00	24.0	\$9,600.00	\$0.00

**Stored Material:**


**Deductions:**

						0.0	0.0	\$0.00	\$0.00

Total Amount to Date	\$10,319,661.96
Total Amount This Estimate	\$458,133.63
Change Orders to Date	\$194,644.29
Change Orders This Estimate	\$0.00
Stored Materials to Date	\$0.00
Stored Materials This Estimate	\$0.00
Subtotal to Date	\$10,514,306.25
Subtotal This Estimate	\$458,133.63
Deductions to Date	\$0.00
Deductions This Estimate	\$0.00
Payment This Estimate	\$458,133.63
Less Transfer to Reserve	\$0.00
Net Payment	\$458,133.63

**MEMO TO:** Mr. Jim Nash, Chairman  
of the Drainage Board for the Evergreen Farmington Sanitary Drain Ch20 (Maintenance)

**FROM:** Shawn Phelps, Chief of Fiscal Services   
OCWRC Accounting

**DATE:** September 24, 2024

**SUBJECT:** Request for Approval of Invoices

The following is a detail of charges paid from the Evergreen Farmington Sanitary Drain Ch20 and Invoices

Payable To	Ref No.	For	Amount
DLZ Michigan Inc	SINV00284733	Inv #000401623 - Professional Services - Proj #17456	1,010.00
		<b>Subtotal - Project #17456</b>	<b>1,010.00</b>
DLZ Michigan Inc	SINV00284764	Inv #000401628 - Engineering Services - Proj #17554	1,754.21
		<b>Subtotal - Project #17554</b>	<b>1,754.21</b>
DLZ Michigan Inc	SINV00284760	Inv #000401627 - Engineering Services - Proj #17555	2,199.19
		<b>Subtotal - Project #17555</b>	<b>2,199.19</b>
Fishbeck	SINV00287159	Inv #442008 - Contracted Services - Proj #17579	2,755.50
		<b>Subtotal - Project #17579</b>	<b>2,755.50</b>
Fishbeck	SINV00287159	Inv #442008 - Contracted Services - Proj #17580	3,782.00
		<b>Subtotal - Project #17580</b>	<b>3,782.00</b>
Orchard Hiltz and McCliment Inc	SINV00283937	Inv #78182 - Contracted Services - Proj #17581	1,447.00
		<b>Subtotal - Project #17581</b>	<b>1,447.00</b>
Applied Science Inc	SINV00283780	Inv #8834 - Contracted Services	7,805.93
Applied Science Inc	SINV00283932	Inv #8833 - Contracted Services	5,590.00
D Angelo Brothers	SINV00285896	Inv #114524-02 - Material and Supplies	6,766.69
ICS Integration Services LLC	SINV00284747	Inv #3069 - Contracted Services	1,072.00
ICS Integration Services LLC	SINV00284751	Inv #3067 - Contracted Services	3,263.76
Kotz Sangster Wysocki PC	SINV00282969	Inv #604508 - Legal Services	9,432.50
Kotz Sangster Wysocki PC	SINV00287927	Inv #607253 - Legal Services	7,237.50
MacAllister Machinery Co Inc	SINV00286126	Inv #SD16461774 - Contracted Services	1,739.17
Orchard Hiltz and McCliment Inc	SINV00283297	Inv #78177 - Professional Services	1,958.34
Orchard Hiltz and McCliment Inc	SINV00283936	Inv #78176 - Contracted Services	3,192.50
Pipeline Management Company LLC	SINV00283993	Inv #23-00376 - Contracted Services	13,722.50
		<b>Subtotal</b>	<b>61,780.89</b>
		<b>Total</b>	<b>74,728.79</b>

**MEMO TO:** Mr. Jim Nash, Chairman  
of the Drainage Board for the Evergreen Farmington Sanitary Drain Ch20 (Construction)

**FROM:** Shawn Phelps, Chief of Fiscal Services  
OCWRC Accounting

*SP for Shawn Phelps*

**DATE:** September 24, 2024

**SUBJECT:** Request for Approval of Invoices

The following is a detail of charges paid from the Evergreen Farmington Sanitary Drain Ch20 and Invoices

<u>Payable To</u>	<u>Ref No.</u>	<u>For</u>	<u>Amount</u>
Hubbell Roth and Clark Inc	SINV00283200	Inv #0219127 - Engineering Services - Proj #17449	4,182.18
Hubbell Roth and Clark Inc	SINV00287930	Inv #0219799 - Engineering Services - Proj #17449	5,596.04
		<b>Subtotal - Project #17449</b>	<b>9,778.22</b>
Hubbell Roth and Clark Inc	SINV00284734	Inv #0219041 - Engineering Services - Proj #17450	9,464.88
Hubbell Roth and Clark Inc	SINV00284737	Inv #0219682 - Engineering Services - Proj #17450	6,766.80
		<b>Subtotal - Project #17450</b>	<b>16,231.68</b>
Fishbeck	SINV00283198	Inv #440897 - Engineering Services - Proj #17452	25,089.15
Fishbeck	SINV00287962	Inv #442002 - Engineering Services - Proj #17452	21,562.69
Neyer Tiseo & Hindo Ltd	SINV00284740	Inv #636827 - Engineering Services - Proj #17452	15,817.98
Neyer Tiseo & Hindo Ltd	SINV00285550	Inv #636909 - Engineering Services - Proj #17452	11,228.50
PMA Consultants LLC	SINV00283202	Inv #04582.00-1.0-19 - Professional Services - Proj #17452	3,252.00
		<b>Subtotal - Project #17452</b>	<b>76,950.32</b>
		<b>Total</b>	<b>102,960.22</b>



## **4. Acacia Park CSO**

## **AGENDA**

### **DRAINAGE BOARD FOR THE ACACIA PARK CSO DRAIN**

September 24, 2024

1. Call meeting to order
2. Approve minutes of meeting of August 27, 2024
3. Public Comments
4. Present request for Board approval of payment of invoices and/or reimbursement of the Drain Revolving Fund in the amount of \$11,853.49
5. Other business
6. Approve pro rata payment to Drainage Board members
7. Adjourn

**MINUTES OF THE MEETING OF THE DRAINAGE BOARD  
FOR THE ACACIA PARK CSO DRAIN**

August 27, 2024

A meeting of the Drainage Board for the Acacia Park CSO Drain was held in the office of the Oakland County Water Resources Commissioner, Public Works Building, One Public Works Drive, Waterford, Michigan at 2:00 p.m. on the 27<sup>th</sup> day of August 2024.

The meeting was called to order by the Chairperson.

PRESENT: Jim Nash, Oakland County Water Resources Commissioner

David Woodward, Chairperson of the Oakland County Board of Commissioners

ABESENT: Gwen Markham, Chairperson of the Finance Committee, Oakland County Board of Commissioners

Minutes of the meeting held July 23, 2024, were presented for consideration. It was moved by Woodward, supported by Nash, that the minutes be approved.

ADOPTED: Yeas - 2  
Nays - 0

Chairperson Nash asked if there were any public comments. There were none.

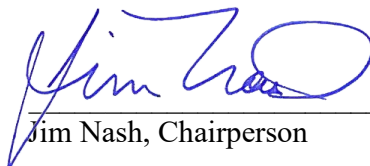
A request for approval of payment of invoices and/or reimbursement of the Drain Revolving Fund in the amount of \$39,113.04 (as attached) was presented. It was moved by Woodward, supported by Nash, to approve the payment of invoices and/or reimbursement of the Drain Revolving Fund in the amount of \$39,113.04.

ADOPTED: Yeas - 2  
Nays - 0

It was moved by Nash, supported by Woodward, to certify attendance and authorize pro rata payment of \$25 per day to Mr. Woodward.

ADOPTED: Yeas - 2  
Nays - 0

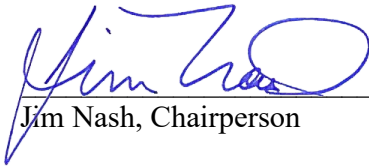
There being no further business, the meeting was adjourned.

  
\_\_\_\_\_  
Jim Nash, Chairperson

STATE OF MICHIGAN                    )  
  )SS.  
COUNTY OF OAKLAND                )

I, the undersigned, do hereby certify that the foregoing is a true and complete copy of the minutes of the Drainage Board for the Acacia Park CSO Drain, Oakland County, Michigan, held on the 27<sup>th</sup> day of August 2024, and that the minutes are on file in the office of the Oakland County Water Resources Commissioner and are available to the public.

I further certify that the notice of the meeting was posted at least 18 hours in advance of the meeting at the office of the Oakland County Water Resources Commissioner which is the principal office of the Drainage Board for the Acacia Park CSO Drain Drainage District.

  
\_\_\_\_\_  
Jim Nash, Chairperson

Dated: August 27, 2024

MEMO TO: Mr. Jim Nash, Chairman  
of the Drainage Board for the ACACIA PARK CSO DRAIN

FROM: Shawn Phelps, Chief of Fiscal Services  
OCWRC Accounting

*HP for Shawn Phelps*

DATE: September 24, 2024

SUBJECT: Request for Approval of Invoices

The following is a detail of Maintenance charges paid from the Drain Revolving Fund and Invoices  
for the period ending September 17, 2024

G/L Date	Ref No.	Paid To	For	Amount
9/9/2024	V # SINV00286222	ICS Integration Services LLC	Invoice # 3078 - Contracted Services	\$ 1,563.33
			<b>Total</b>	<b>\$ 1,563.33</b>
9/5/2024	V # SINV00285528	Shaw Service & Maintenance	Invoice # 910011906 - Contracted Services - Proj 1-7329	\$ 7,593.39
			<b>Project # 1-7329 Total</b>	<b>\$ 7,593.39</b>
9/5/2024	V # SINV00285525	Shaw Service & Maintenance	Invoice # 910011346 - Contracted Services - Proj 1-6104	\$ 2,696.77
			<b>Project # 1-6104 Total</b>	<b>\$ 2,696.77</b>
			<b>Grand Total</b>	<b>\$ 11,853.49</b>



## **5. Birmingham CSO**

## **AGENDA**

### **DRAINAGE BOARD FOR THE BIRMINGHAM CSO DRAIN**

September 24, 2024

1. Call meeting to order
2. Approve minutes of meeting of August 27, 2024
3. Public Comments
4. Present Memorandum from Lawrence Young, Civil Engineer II, dated September 24, 2024, requesting the Board authorize the purchase of an ADS ECHO Level Sensor in the amount of \$2,995
5. Present request for Board approval of payment of invoices and/or reimbursement of the Drain Revolving Fund in the amount of \$12,756.28
6. Other business
7. Approve pro rata payment to Drainage Board members
8. Adjourn

**MINUTES OF THE MEETING OF THE DRAINAGE BOARD  
FOR THE BIRMINGHAM CSO DRAIN**

August 27, 2024

A meeting of the Drainage Board for the Birmingham CSO Drain was held in the office of the Oakland County Water Resources Commissioner, Public Works Building, One Public Works Drive, Waterford, Michigan at 2:00 p.m. on the 27<sup>th</sup> day of August 2024.

The meeting was called to order by the Chairperson.

PRESENT: Jim Nash, Oakland County Water Resources Commissioner

David Woodward, Chairperson of the Oakland County Board of Commissioners

ABSENT: Gwen Markham, Chairperson of the Finance Committee, Oakland County Board of Commissioners

Minutes of the meeting held July 23, 2024, were presented for consideration. It was moved by Woodward, supported by Nash, that the minutes be approved.

ADOPTED: Yeas - 2  
Nays - 0

Chairperson Nash asked if there were any public comments. There were none.

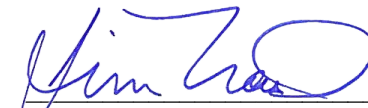
A request for approval of payment of invoices and/or reimbursement of the Drain Revolving Fund in the amount of \$28,102.06 (as attached) was presented. It was moved by Woodward, supported by Nash, to approve the payment of invoices and/or reimbursement of the Drain Revolving Fund in the amount of \$28,102.06.

ADOPTED: Yeas - 2  
Nays - 0

It was moved by Nash, supported by Woodward, to certify attendance and authorize pro rata payment of \$25 per day to Mr. Woodward.

ADOPTED: Yeas - 2  
Nays - 0


There being no further business, the meeting was adjourned.

  
\_\_\_\_\_  
Jim Nash, Chairperson

STATE OF MICHIGAN                    )  
  )SS.  
COUNTY OF OAKLAND                )

I, the undersigned, do hereby certify that the foregoing is a true and complete copy of the minutes of the Drainage Board for the Birmingham CSO Drain, Oakland County, Michigan, held on the 27<sup>th</sup> day of August 2024, and that the minutes are on file in the office of the Oakland County Water Resources Commissioner and are available to the public.

I further certify that the notice of the meeting was posted at least 18 hours in advance of the meeting at the office of the Oakland County Water Resources Commissioner which is the principal office of the Drainage Board for the Birmingham CSO Drain Drainage District.

  
\_\_\_\_\_  
Jim Nash, Chairperson

Dated: August 27, 2024

**OAKLAND COUNTY  
WATER RESOURCES COMMISSIONER**

**MEMORANDUM**

**TO:** Jim Nash, Chairperson of the Birmingham CSO Drain Drainage Board

**FROM:** Lawrence Young, Civil Engineer II

**SUBJECT:** Purchase of one ADS ECHO Level Sensor

**DATE:** September 24, 2024

The Board of Birmingham CSO Drain Drainage District currently rents one ADS ECHO level sensor to assess combined sewer system performance. The current rental price is \$165 per meter, per month. There also is a purchase option of \$2,995 per meter. The break-even point to purchase versus rent is about 18 months. It is expected that the need for this level sensors will be longer than 18 months. After careful review, it is staff's recommendation that the Board purchase a level sensor to assess the system's performance.

**Requested Action: Authorize the purchase an ADS ECHO Level Sensor in the amount of \$2,995.**



MEMO TO: Mr. Jim Nash, Chairman  
of the Drainage Board for the BIRMINGHAM CSO DRAIN

FROM: Shawn Phelps, Chief of Fiscal Services  
OCWRC Accounting

*HP for Shawn Phelps*

DATE: September 24, 2024

SUBJECT: Request for Approval of Invoices

The following is a detail of Maintenance charges paid from the Drain Revolving Fund and Invoices for the period ending September 17, 2024

G/L Date	Ref No.	Paid To	For	Amount
9/9/2024	V # SINV00286222	ICS Integration Services LLC	Invoice # 3078 - Contracted Services	\$ 1,563.33
8/23/2024	V # SINV00282938	Brehob Corporation	Invoice # I-00008750 - Contracted Services	2,980.00
			<b>Total</b>	<b>\$ 4,543.33</b>
9/5/2024	V # SINV00285530	Shaw Service & Maintenance	Invoice # 910011907 - Contracted Services - Proj 1-7330	\$ 7,676.95
			<b>Project # 1-7330 Total</b>	<b>\$ 7,676.95</b>
	TBP	ICS Integration Services LLC	Invoice # 3075 - Contracted Services - Proj 1-3196	\$ 536.00
			<b>Project # 1-3196 Total</b>	<b>\$ 536.00</b>
			<b>Grand Total</b>	<b>\$ 12,756.28</b>

## **6. Bloomfield Village CSO**

## **AGENDA**

### **DRAINAGE BOARD FOR THE BLOOMFIELD VILLAGE CSO DRAIN**

September 24, 2024

1. Call meeting to order
2. Approve minutes of meeting of August 27, 2024
3. Public Comments
4. Present request for Board approval of payment of invoices and/or reimbursement of the Drain Revolving Fund in the amount of \$21,507.56
5. Other business
6. Approve pro rata payment to Drainage Board members
7. Adjourn

**MINUTES OF THE MEETING OF THE DRAINAGE BOARD  
FOR THE BLOOMFIELD VILLAGE CSO DRAIN**

August 27, 2024

A meeting of the Drainage Board for the Bloomfield Village CSO Drain was held in the office of the Oakland County Water Resources Commissioner, Public Works Building, One Public Works Drive, Waterford, Michigan at 2:00 p.m. on the 27<sup>th</sup> day of August 2024.

The meeting was called to order by the Chairperson.

PRESENT: Jim Nash, Oakland County Water Resources Commissioner

David Woodward, Chairperson of the Oakland County Board of Commissioners

ABSENT: Gwen Markham, Chairperson of the Finance Committee, Oakland County Board of Commissioners

Minutes of the meeting held July 23, 2024, were presented for consideration. It was moved by Woodward, supported by Nash, that the minutes be approved.

ADOPTED: Yeas - 2  
Nays - 0

Chairperson Nash asked if there were any public comments. There were none.

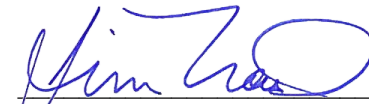
A request for approval of payment of invoices and/or reimbursement of the Drain Revolving Fund in the amount of \$24,444.25 (as attached) was presented. It was moved by Woodward, supported by Nash, to approve the payment of invoices and/or reimbursement of the Drain Revolving Fund in the amount of \$24,444.25.

ADOPTED: Yeas - 2  
Nays - 0

It was moved by Nash, supported by Woodward, to certify attendance and authorize pro rata payment of \$25 per day to Mr. Woodward.

ADOPTED: Yeas - 2  
Nays - 0

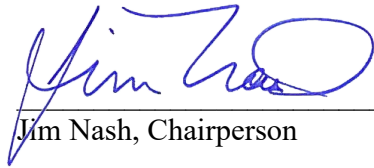
There being no further business, the meeting was adjourned.

  
\_\_\_\_\_  
Jim Nash, Chairperson

STATE OF MICHIGAN                    )  
  )SS.  
COUNTY OF OAKLAND                )

I, the undersigned, do hereby certify that the foregoing is a true and complete copy of the minutes of the Drainage Board for the Bloomfield Village CSO Drain, Oakland County, Michigan, held on the 27<sup>th</sup> day of August 2024, and that the minutes are on file in the office of the Oakland County Water Resources Commissioner and are available to the public.

I further certify that the notice of the meeting was posted at least 18 hours in advance of the meeting at the office of the Oakland County Water Resources Commissioner which is the principal office of the Drainage Board for Bloomfield Village CSO Drain Drainage District.



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Jim Nash, Chairperson

Dated: August 27, 2024

MEMO TO: Mr. Jim Nash, Chairman  
of the Drainage Board for the BLOOMFIELD VILLAGE CSO DRAIN

FROM: Shawn Phelps, Chief of Fiscal Services  
OCWRC Accounting

*HP for Shawn Phelps*

DATE: September 24, 2024

SUBJECT: Request for Approval of Invoices

The following is a detail of Maintenance charges paid from the Drain Revolving Fund and Invoices  
for the period ending September 17, 2024

<u>G/L Date</u>	<u>Ref No.</u>	<u>Paid To</u>	<u>For</u>	<u>Amount</u>
9/9/2024	V # SINV00286222	ICS Integration Services LLC	Invoice # 3078 - Contracted Services	\$ 1,563.34
			Total	<u>\$ 1,563.34</u>
9/5/2024	V # SINV00285531	Shaw Service & Maintenance	Invoice # 910011908 - Contracted Services - Proj # 1-7331	\$ 7,944.22
			Total Project 1-7331	<u>\$ 7,944.22</u>
8/28/2024	V # SINV00283915	Systems Specialties	Invoice # 62620 - Material and Supplies - Proj 1-3552	\$ 12,000.00
			Total Project 1-3552	<u>\$ 12,000.00</u>
			Total	<u>\$ 21,507.56</u>



## **7. George W. Kuhn Drain**

## AGENDA

### DRAINAGE BOARD FOR THE GEORGE W. KUHN DRAIN

September 24, 2024

1. Call meeting to order
2. Approve minutes of meeting of August 27, 2024
3. Public Comments
4. Present Memorandum from Lesli Maes, P.E., Operations Engineer, dated September 24, 2024, requesting the Board:
  1. Authorize staff to issue notice to proceed to AECOM Technical Services of Michigan Inc.
  2. Authorize staff to amend its existing contract to add an amount not-to-exceed \$45,300
  3. Authorize staff to extend the contract expiration date for one additional year
  4. Authorize funding the work from the Drainage District's Major Maintenance Reserves
5. Present Construction Estimate No. 3 for Rolls Mechanical for Construction of the HomeGuard Program in the amount of \$29,181.68
6. Present Construction Estimate No. 4 for Pipeline Management Company for Construction of the 2024 GWK Sewer Cleaning and Inspection in the amount of \$164,863.69 with a transfer to the Oakland County Treasurer in the amount of \$8,931.19
7. Present request for Board approval of payment of invoices and/or reimbursement of the Drain Revolving Fund in the amount of \$66,725.05
8. Other business
9. Approve pro rata payment to Drainage Board members
10. Adjourn

**MINUTES OF THE MEETING OF THE DRAINAGE BOARD  
FOR THE GEORGE W. KUHN DRAIN**

August 27, 2024

A meeting of the Drainage Board for the George W. Kuhn Drain was held in the office of the Oakland County Water Resources Commissioner, Public Works Building, One Public Works Drive, Waterford, Michigan at 2:00 p.m. on the 27<sup>th</sup> day of August 2024.

The meeting was called to order by the Chairperson.

PRESENT: Jim Nash, Oakland County Water Resources Commissioner

David Woodward, Chairperson of the Oakland County Board of Commissioners

ABSENT: Gwen Markham, Chairperson of the Finance Committee, Oakland County Board of Commissioners

Minutes of the meeting held July 23, 2024, were presented for consideration. It was moved by Woodward, supported by Nash, that the minutes be approved.

ADOPTED: Yeas - 2  
Nays - 0

Chairperson Nash asked if there were any public comments. There were none.

A memorandum from George Nichols. P.E., Assistant Chief Engineer, dated August 27, 2024, requesting the Board authorize the Fiscal Services Manager to sign the Self-Certification of Financial Capability document on behalf of the Board for the Drainage District and authorize the allocation of \$95,000 from the GWK Sewage Disposal Fund was presented. It was moved by Woodward, supported by Nash, to authorize the Fiscal Services Manager to sign the Self-Certification of Financial Capability document on behalf of the Board for the Drainage District and authorize the allocation of \$95,000 from the GWK Sewage Disposal Fund as presented.

ADOPTED: Yeas - 2  
Nays - 0

A memorandum from George Nichols. P.E., Assistant Chief Engineer, dated August 27, 2024, requesting the Board retain the services of Hubbell, Roth, & Clark, Inc. to proceed with establishing plans and specifications for the 2025 GWK Sewer Cleaning and Inspection Project for the not-to-exceed amount of \$90,840 and authorize the Chairperson to execute the proposal on behalf of the Board was presented. It was moved by Woodward, supported by Nash, to retain the services of Hubbell, Roth, & Clark, Inc. to proceed with establishing plans and specifications for the 2025 GWK Sewer Cleaning and Inspection Project for the not-to-exceed amount of \$90,840 and authorize the Chairperson to execute the proposal on behalf of the Board as presented.

ADOPTED: Yeas - 2

Nays - 0

Change Order No. 1 for TSP Services Inc. for construction of the GWK Parking Lot and Green Infrastructure Project for a net increase in the amount of \$1,970.60 was presented. It was moved by Woodward, supported by Nash, to approve Change Order No. 1 for TSP Services Inc. for construction of the GWK Parking Lot and Green Infrastructure Project for a net increase in the amount of \$1,970.60 as presented.

ADOPTED: Yeas - 2  
Nays - 0

Construction Estimate No. 3 for TSP Services Inc. for construction of the GWK Parking Lot and Green Infrastructure – Phase 1 in the amount of \$202,716.24 with a transfer to the Oakland County Treasurer in the amount of \$7,636.09 was presented. It was moved by Woodward, supported by Nash, to approve Construction Estimate No. 3 for TSP Services Inc. for construction of the GWK Parking Lot and Green Infrastructure – Phase 1 in the amount of \$202,716.24 with a transfer to the Oakland County Treasurer in the amount of \$7,636.09 as presented.

ADOPTED: Yeas - 2  
Nays - 0

Construction Estimate No. 2 for Rolls Mechanical for construction of the HomeGuard Program in the amount of \$54,561.50 was presented. It was moved by Woodward, supported by Nash, to approve Construction Estimate No. 2 for Rolls Mechanical for construction of the HomeGuard Program in the amount of \$54,561.50 as presented.

ADOPTED: Yeas - 2  
Nays - 0

Construction Estimate No. 3 for Pipeline Management Company for construction of the 2024 GWK Sewer Cleaning and Inspection in the amount of \$49,376.93 with a transfer to the Oakland County Treasurer in the amount of \$7,846.56 was presented. It was moved by Woodward, supported by Nash, to approve Construction Estimate No. 3 for Pipeline Management Company for construction of the 2024 GWK Sewer Cleaning and Inspection in the amount of \$49,376.93 with a transfer to the Oakland County Treasurer in the amount of \$7,846.56 as presented.

ADOPTED: Yeas - 2  
Nays - 0


A request for approval of payment of invoices and/or reimbursement of the Drain Revolving Fund in the amount of \$110,129.06 (as attached) was presented. It was moved by Woodward, supported by Nash, to approve the payment of invoices and/or reimbursement of the Drain Revolving Fund in the amount of \$110,129.06.

ADOPTED: Yeas - 2  
Nays - 0

It was moved by Nash, supported by Woodward, to certify attendance and authorize pro rata payment of \$25 per day to Mr. Woodward.

ADOPTED: Yeas - 2  
Nays - 0

There being no further business, the meeting was adjourned.



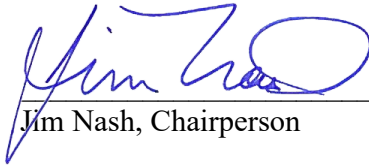
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Jim Nash, Chairperson

STATE OF MICHIGAN                    )  
  )SS.  
COUNTY OF OAKLAND                )

I, the undersigned, do hereby certify that the foregoing is a true and complete copy of the minutes of the Drainage Board for the George W. Kuhn Drain, Oakland County, Michigan, held on the 27<sup>th</sup> day of August 2024, and that the minutes are on file in the office of the Oakland County Water Resources Commissioner and are available to the public.

I further certify that the notice of the meeting was posted at least 18 hours in advance of the meeting at the office of the Oakland County Water Resources Commissioner which is the principal office of the Drainage Board for George W. Kuhn Drain Drainage District.

  
\_\_\_\_\_  
Jim Nash, Chairperson

Dated: August 27, 2024



**OAKLAND COUNTY  
WATER RESOURCES COMMISSIONER****MEMORANDUM**

**TO:** Jim Nash, Chairperson  
George W. Kuhn Drain Drainage Board

**FROM:** Lesli Maes, P.E., Operations Engineer

**SUBJECT:** I-75 Tunnel Dewatering Pump Station Water Quality Pilot Study

**DATE:** September 24, 2024

The Michigan Department of Transportation's I-75 pump station, located at the George W. Kuhn retention treatment basin site, has been completed and is now in operation. This pump station dewateres the 14-foot, 25-million-gallon stormwater storage and drainage tunnel located along the west side of I-75 between 8 Mile Road and 12 Mile Road. WRC operators control the direction of the discharge from the pump station. First flush runoff can be directed to the inlet of the retention treatment basin to receive treatment. Alternatively, the discharge can be directed to the local storm drain instead of the combined sewer system once the first flush runoff has passed.

AECOM Technical Services of Michigan, Inc. has submitted a proposal to perform a first flush water quality pilot study as requested by staff. Attached is a copy of the proposal. The study will include collecting samples from the pump station during wet weather operations and analyzing the samples for multiple water quality parameters. The results of this study will be used to refine operation of the discharge from the pump station.

**Requested Actions: Authorize staff to 1.) issue notice to proceed to AECOM Technical Services of Michigan, Inc., 2.) amend its existing contract to add an amount not-to-exceed \$45,300, 3.) extend the expiration date for one additional year, and 4.) authorize funding the work from GWK Major Maintenance Reserves.**

August 1, 2024

Lesli Maes, P.E.  
Chief Engineer  
Oakland County Water  
Resources Commission  
(OCWRC)  
One Public Works Drive  
Building 95W  
Waterford, MI 48328-1907

**Proposal to Perform a Pilot Study for Identifying the First Flush from the New Michigan Department of Transportation (MDOT) I-75 Pump Station Via Acoustic Water Quality Device**

Dear Ms. Maes,

The MDOT hired the Oakland Corridor Partners (OCP) to design, build, and maintain a 65 cfs stormwater pumping station at the Oakland County Water Resource Commission's (OCWRC's) GWK RTB site. This pump station was recently completed and is used to dewater a 14-foot diameter stormwater storage and drainage tunnel which receives and stores stormwater from the I-75 roadway and associated service drives between about 8-Mile Road and 12-Mile Road. The original design required a single gravity sewer to convey pump station discharge to the GWK RTB inlet weir structure located on the west side of I-75, just north of 12-Mile Road.

OCWRC and MDOT had negotiated an operational plan which will allow the new tunnel dewatering pump station to discharge stormwater into the inlet weir structure at a rate as high as 65 cfs during storm events and will allow dewatering of the new storage tunnel in a timely manner. However, in lieu of the proposed MDOT pump station discharging the tunnel's entire contents of all storm events to the inlet weir structure, the OCWRC contracted AECOM Technical Services of Michigan, Inc. (AECOM) in 2019 to analyze the feasibility of other pump station discharge alternatives and provided recommendations through a Basis of Design report (BODR) in 2020.

Based on the results, it was recommended that first flush runoff from the proposed pump station be conveyed to and discharged into the GWK RTB inlet weir structure, upstream of the weir, such that the first flush will be treated by flowing through the GWK RTB. After the first flush is treated, the additional MDOT storm water runoff pumped from the tunnel can be conveyed to the South Bypass Drain up to the 50-year storm event.

The first flush volume calculated during design followed Chapter 8 of the MDOT Drainage Manual to determine the required capacity in the South Bypass Drain. The Michigan Department of Environment, Great Lakes, and Energy (EGLE) Compliance Assistance Document<sup>1</sup> requires the post-construction site to achieve an 80% TSS removal rate, as compared with uncontrolled runoff, or a discharge concentration of TSS that does not exceed 80 mg/L. Discussions with OCWRC

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<sup>1</sup> [https://www.michigan.gov/documents/deq/wrd-storm-MS4-ComplianceAssistance\\_470350\\_7.pdf](https://www.michigan.gov/documents/deq/wrd-storm-MS4-ComplianceAssistance_470350_7.pdf)

resulted in the desire to develop a monitoring system capable of providing operation control of the first flush storm water capture based on the water quality guidelines proved by EGLE.

To accomplish this, AECOM recommended installation of a permanent water quality sensor within the pump station shaft. As there is little/no precedent in measuring TSS in this type of setting with reagentless sensors that can be utilized in the expected harsh environment, a sensor was identified and coordinated with the manufacturer to attempt this. As this application is not proven for the sensor, a pilot study prior to permanent installation was recommended, where monitoring equipment is deployed over a relatively short duration (i.e., year or less). The benefits of a pilot program include accurately correlating sensor output to Suspended Solids Concentration (SSC), Total Suspended Solids (TSS), or other water quality parameters. Also, the pilot program will provide a better understanding of which water quality parameter(s) should be monitored in order to provide the desired level of control. Finally, water quality data can be tracked at different times during storm events to determine the timing of water quality improvements. This will all be useful in either setting up parameters within the installed device or allowing for alternate criteria to be used to shift flows to the South Bypass Drain.

The installed device is a Nortek Aquadopp acoustic profiler that can measure sediment. These devices are extremely robust and have been used extensively in rivers and deep ocean applications. The primary use of these devices is to measure stream flows/ocean currents but the device accomplishes this by tracking particles within the field of its acoustic signal and therefore is also able to determine the strength of the “particle” signal (amplitude) which is believed to correlate well to sediment load. The acoustic profiler has been placed in the bottom of the suction well, which provides adequate water volume where data collection would likely be most effective, and negative influences by turbulence, entrained air, or other factors might be best controlled. The MDOT I-75 pump station design was modified based on these recommendations. With the construction of the MDOT I-75 pump station completed and the Aquadopp amplitude conveyed and logged, OCWRC has requested AECOM prepare a proposal to perform the pilot study as described.

## Work Plan

### Task 1 – Data Collection/Aquadopp setup

AECOM will provide guidance in the setup of the Aquadopp unit. Based on existing communication protocol differences, the Aquadopp unit’s data is currently received by the PLC but not in a readable format. AECOM will diagnose this problem, coordinate with the unit’s manufacturer and the system integrator (Motor City Electric) and provide programming revisions necessary to resolve this. Once the initial profiler data is available and AECOM has had a chance to review, a kickoff meeting will be scheduled with OCWRC. AECOM will present its initial data observations and refine recommendation regarding the selection of an automatic sampler and sampling frequency. If purchasing an automatic sampler is agreed upon, AECOM will assist OCWRC with the procurement and setup. Once the sampler is installed, the acoustic profiler will collect data for a duration of one year. Samples will be analyzed for 12 events through the pilot year. What qualifies as an “event” will be discussed with OCWRC at the kickoff. If insufficient data is obtained during the year, an extension to the collection period will be discussed with OCWRC.

The automatic sampler will obtain grab samples of the storm water from the pump station effluent channel during rain events at the agreed upon sampling frequency. After each rain event, AECOM will collect the samples and deliver them to the nearest Paragon Laboratories, Inc. location for analysis. The sample bottles taken for analysis shall be replaced immediately. The collected samples will be analyzed for various water quality parameters, including but not limited to TSS, hydrocarbons, E. Coli, total nitrogen, and soluble materials such as road salts.

## Task 2 – Data Calibration

During the first three months of the pilot period, AECOM will analyze the Aquadopp profiler amplitude data in relation to the water quality data collected and calibrate the profiler based on the results of the grab samples. We will assess the correlation between amplitude with the water quality data and make adjustments to the Aquadopp device settings as required if an improvement in data quality is expected.

AECOM will review the data with the intention to develop a total suspended solids (TSS) curve and first flush trigger point. Developing and understanding these unique system characteristics could potentially be an alternative to a permanently installed device as operation control could be tied to flow rates based upon the collected data. If insufficient data has been acquired during the calibration period, AECOM will discuss an extension to this period.

## Task 3 – Process Control Memorandum

Once equipment calibration is complete, AECOM will continue delivering collected samples to the lab after each qualifying rain event and will periodically compare the Aquadopp amplitude data to the water quality results for anomalies. If enough viable data has been collected during the one-year pilot study, AECOM will propose a methodology to use the amplitude data in deciding on a valid control scheme to divert flows to the South Bypass Drain. The proposed methodology will be provided through a Process Control Memorandum detailing the trigger points along the established suspended sediment curve.

## Proposed Fee

AECOM proposes to perform the pilot study and provide a final design as outlined above for a lump sum fee of \$45,300. Note that \$27,900 of this total is for laboratory testing costs for State of Michigan certified labs through Paragon Laboratories online pricing. Should OCWRC have thoughts on alternatives to this or have better pricing, we can further discuss alternatives to the proposed lab testing to potentially save on those costs.

## Anticipated Schedule

- A. Kickoff meeting – September 2, 2024
- B. Equipment setup finalization, begin data collection – October 14, 2024
- C. Equipment calibration complete – January 13, 2025
- D. Data collection complete – October 17, 2025
- E. Data analysis complete – November 14, 2025
- F. Process control memorandum – December 31, 2025

## Terms and Conditions of Service

AECOM will perform this work using the existing Contract No. 8806 between OCWRC and AECOM. We respectfully request an extension of the contract termination date to accommodate this task schedule.

## Assumptions

- 1. 12 storm events will be sampled to collect data over the one year pilot. Additional sampling over the one year has not been included in this proposal.

2. Up to 72 total water quality samples ( average of 6 per storm event with potentially more sampling in earlier events before analyzing initial data)
3. OCWRC will be invoiced directly from the lab for the sample analyses through an existing contract between OCWRC and Paragon Laboratories, Inc.
4. The purchase cost for the automatic sampler and associated supplies is not included in this proposal.
5. No additional survey is proposed.
6. No additional geotechnical investigation is proposed.
7. No hazardous materials or environmental surveys are proposed.
8. No modeling will be performed.
9. No structural modifications will be made to the pump station.

Yours sincerely,



Ryan Wagar, P.E.  
Project Manager  
AECOM  
M: 734-755-8117  
E: ryan.wagar@aecom.com



Molly E. Page, PE  
Vice President, US West Water  
AECOM  
M: 216-633-2026  
E: molly.page@aecom.com

August 1, 2024

Lesli Maes, P.E.  
Chief Engineer  
Oakland County Water  
Resources Commission  
(OCWRC)  
One Public Works Drive  
Building 95W  
Waterford, MI 48328-1907

**Proposal to Perform a Pilot Study for Identifying the First Flush from the New Michigan Department of Transportation (MDOT) I-75 Pump Station Via Acoustic Water Quality Device**

Dear Ms. Maes,

The MDOT hired the Oakland Corridor Partners (OCP) to design, build, and maintain a 65 cfs stormwater pumping station at the Oakland County Water Resource Commission's (OCWRC's) GWK RTB site. This pump station was recently completed and is used to dewater a 14-foot diameter stormwater storage and drainage tunnel which receives and stores stormwater from the I-75 roadway and associated service drives between about 8-Mile Road and 12-Mile Road. The original design required a single gravity sewer to convey pump station discharge to the GWK RTB inlet weir structure located on the west side of I-75, just north of 12-Mile Road.

OCWRC and MDOT had negotiated an operational plan which will allow the new tunnel dewatering pump station to discharge stormwater into the inlet weir structure at a rate as high as 65 cfs during storm events and will allow dewatering of the new storage tunnel in a timely manner. However, in lieu of the proposed MDOT pump station discharging the tunnel's entire contents of all storm events to the inlet weir structure, the OCWRC contracted AECOM Technical Services of Michigan, Inc. (AECOM) in 2019 to analyze the feasibility of other pump station discharge alternatives and provided recommendations through a Basis of Design report (BODR) in 2020.

Based on the results, it was recommended that first flush runoff from the proposed pump station be conveyed to and discharged into the GWK RTB inlet weir structure, upstream of the weir, such that the first flush will be treated by flowing through the GWK RTB. After the first flush is treated, the additional MDOT storm water runoff pumped from the tunnel can be conveyed to the South Bypass Drain up to the 50-year storm event.

The first flush volume calculated during design followed Chapter 8 of the MDOT Drainage Manual to determine the required capacity in the South Bypass Drain. The Michigan Department of Environment, Great Lakes, and Energy (EGLE) Compliance Assistance Document<sup>1</sup> requires the post-construction site to achieve an 80% TSS removal rate, as compared with uncontrolled runoff, or a discharge concentration of TSS that does not exceed 80 mg/L. Discussions with OCWRC

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<sup>1</sup> [https://www.michigan.gov/documents/deq/wrd-storm-MS4-ComplianceAssistance\\_470350\\_7.pdf](https://www.michigan.gov/documents/deq/wrd-storm-MS4-ComplianceAssistance_470350_7.pdf)



resulted in the desire to develop a monitoring system capable of providing operation control of the first flush storm water capture based on the water quality guidelines proved by EGLE.

To accomplish this, AECOM recommended installation of a permanent water quality sensor within the pump station shaft. As there is little/no precedent in measuring TSS in this type of setting with reagentless sensors that can be utilized in the expected harsh environment, a sensor was identified and coordinated with the manufacturer to attempt this. As this application is not proven for the sensor, a pilot study prior to permanent installation was recommended, where monitoring equipment is deployed over a relatively short duration (i.e., year or less). The benefits of a pilot program include accurately correlating sensor output to Suspended Solids Concentration (SSC), Total Suspended Solids (TSS), or other water quality parameters. Also, the pilot program will provide a better understanding of which water quality parameter(s) should be monitored in order to provide the desired level of control. Finally, water quality data can be tracked at different times during storm events to determine the timing of water quality improvements. This will all be useful in either setting up parameters within the installed device or allowing for alternate criteria to be used to shift flows to the South Bypass Drain.

The installed device is a Nortek Aquadopp acoustic profiler that can measure sediment. These devices are extremely robust and have been used extensively in rivers and deep ocean applications. The primary use of these devices is to measure stream flows/ocean currents but the device accomplishes this by tracking particles within the field of its acoustic signal and therefore is also able to determine the strength of the “particle” signal (amplitude) which is believed to correlate well to sediment load. The acoustic profiler has been placed in the bottom of the suction well, which provides adequate water volume where data collection would likely be most effective, and negative influences by turbulence, entrained air, or other factors might be best controlled. The MDOT I-75 pump station design was modified based on these recommendations. With the construction of the MDOT I-75 pump station completed and the Aquadopp amplitude conveyed and logged, OCWRC has requested AECOM prepare a proposal to perform the pilot study as described.

## Work Plan

### Task 1 – Data Collection/Aquadopp setup

AECOM will provide guidance in the setup of the Aquadopp unit. Based on existing communication protocol differences, the Aquadopp unit's data is currently received by the PLC but not in a readable format. AECOM will diagnose this problem, coordinate with the unit's manufacturer and the system integrator (Motor City Electric) and provide programming revisions necessary to resolve this. Once the initial profiler data is available and AECOM has had a chance to review, a kickoff meeting will be scheduled with OCWRC. AECOM will present its initial data observations and refine recommendation regarding the selection of an automatic sampler and sampling frequency. If purchasing an automatic sampler is agreed upon, AECOM will assist OCWRC with the procurement and setup. Once the sampler is installed, the acoustic profiler will collect data for a duration of one year. Samples will be analyzed for 12 events through the pilot year. What qualifies as an “event” will be discussed with OCWRC at the kickoff. If insufficient data is obtained during the year, an extension to the collection period will be discussed with OCWRC.

The automatic sampler will obtain grab samples of the storm water from the pump station effluent channel during rain events at the agreed upon sampling frequency. After each rain event, AECOM will collect the samples and deliver them to the nearest Paragon Laboratories, Inc. location for analysis. The sample bottles taken for analysis shall be replaced immediately. The collected samples will be analyzed for various water quality parameters, including but not limited to TSS, hydrocarbons, E. Coli, total nitrogen, and soluble materials such as road salts.

## Task 2 – Data Calibration

During the first three months of the pilot period, AECOM will analyze the Aquadopp profiler amplitude data in relation to the water quality data collected and calibrate the profiler based on the results of the grab samples. We will assess the correlation between amplitude with the water quality data and make adjustments to the Aquadopp device settings as required if an improvement in data quality is expected.

AECOM will review the data with the intention to develop a total suspended solids (TSS) curve and first flush trigger point. Developing and understanding these unique system characteristics could potentially be an alternative to a permanently installed device as operation control could be tied to flow rates based upon the collected data. If insufficient data has been acquired during the calibration period, AECOM will discuss an extension to this period.

## Task 3 – Process Control Memorandum

Once equipment calibration is complete, AECOM will continue delivering collected samples to the lab after each qualifying rain event and will periodically compare the Aquadopp amplitude data to the water quality results for anomalies. If enough viable data has been collected during the one-year pilot study, AECOM will propose a methodology to use the amplitude data in deciding on a valid control scheme to divert flows to the South Bypass Drain. The proposed methodology will be provided through a Process Control Memorandum detailing the trigger points along the established suspended sediment curve.

## Proposed Fee

AECOM proposes to perform the pilot study and provide a final design as outlined above for a lump sum fee of \$45,300. Note that \$27,900 of this total is for laboratory testing costs for State of Michigan certified labs through Paragon Laboratories online pricing. Should OCWRC have thoughts on alternatives to this or have better pricing, we can further discuss alternatives to the proposed lab testing to potentially save on those costs.

## Anticipated Schedule

- A. Kickoff meeting – September 2, 2024
- B. Equipment setup finalization, begin data collection – October 14, 2024
- C. Equipment calibration complete – January 13, 2025
- D. Data collection complete – October 17, 2025
- E. Data analysis complete – November 14, 2025
- F. Process control memorandum – December 31, 2025

## Terms and Conditions of Service

AECOM will perform this work using the existing Contract No. 8806 between OCWRC and AECOM. We respectfully request an extension of the contract termination date to accommodate this task schedule.

## Assumptions

1. 12 storm events will be sampled to collect data over the one year pilot. Additional sampling over the one year has not been included in this proposal.

2. Up to 72 total water quality samples ( average of 6 per storm event with potentially more sampling in earlier events before analyzing initial data)
3. OCWRC will be invoiced directly from the lab for the sample analyses through an existing contract between OCWRC and Paragon Laboratories, Inc.
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6. No additional geotechnical investigation is proposed.
7. No hazardous materials or environmental surveys are proposed.
8. No modeling will be performed.
9. No structural modifications will be made to the pump station.

Yours sincerely,



Ryan Wagar, P.E.  
Project Manager  
AECOM  
M: 734-755-8117  
E: ryan.wagar@aecom.com



Molly E. Page, PE  
Vice President, US West Water  
AECOM  
M: 216-633-2026  
E: molly.page@aecom.com



**Jim Nash, Oakland County Water Resources Commissioner  
 GWK Drain Drainage District  
 For Construction of the HomeGuard Program  
 City of Berkley  
 Oakland County, Michigan**

<b>Construction Estimate No. 1</b>		<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>	<b>(7)</b>
	<b>Contract Item - Address</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Quantity This Payment</b>	<b>Total Quantity Previous Estimate</b>	<b>Total Quantity to Date</b>	<b>Total Amount to Date</b>	<b>Total Amount This Payment</b>
1	Home Inspection	EA	\$ 225.00	11.0	25.0	36.0	\$8,100.00	\$2,475.00
2	Televise Sewer Lead	EA	\$ 350.00	11.0	21.0	32.0	\$11,200.00	\$3,850.00
3	Mobilize/Site Preparation	EA	\$ 450.00	3.0	5.0	8.0	\$3,600.00	\$1,350.00
4	Automatic Submersible Sump, 3/10 HP	EA	\$ 340.00	1.0	4.0	5.0	\$1,700.00	\$340.00
5	Automatic Submersible Sump, 1/2 HP	EA	\$ 460.00	1.0	0.0	1.0	\$460.00	\$460.00
6	Sump Pump Installation Including 30 LF Discharge Piping	EA	\$ 5,600.00	2.00	4.0	6.00	\$33,600.00	\$11,200.00
7	Additional Sump Pump Discharge	LF	\$ 11.00	5.0	0.0	5.0	\$55.00	\$55.00
8	Backwater Valve Installation	EA	\$ 1,500.00	5.0	10.0	15.0	\$22,500.00	\$7,500.00
9	Project Site Clean Up Restoration	EA	\$ 700.00	3.0	5.0	8.0	\$5,600.00	\$2,100.00
10	Additional General Site-Specific Work	\$	\$ 1.00	0.0	840.0	840.0	\$840.00	\$0.00
11	Permit Fees	\$	\$ 1.00	151.7	285.0	436.7	\$436.66	\$151.68

**Change Orders:**

					0.0	0.0	\$0.00	\$0.00

**Deductions:**

	Homeowner Participation Fee	EA	\$ 100.00	3.0	5.0	8.0	\$800.00	\$300.00
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**ATTACHMENTS:**

HomeGuard Cost Sheets from COG  
 Contractor's Payment Request  
 Contractor's Declaration/Affidavit

Total Amount to Date	\$88,091.66
Total Amount This Estimate	\$29,481.68
Change Orders to Date	\$0.00
Change Orders This Estimate	\$0.00
Deductions to Date	\$800.00
Deductions This Estimate	\$300.00
Payment This Estimate	\$29,181.68

WRC HomeGuard Program  
Quantities Export  
As of 8/31/2024

Applicant Address	Inspection Result	Inspection Date	Install Approval	Home Install Date	Home Inspection	Televise Sewer Lead	Site Preparation	Auto Sump Third HP	Auto Sump Half HP	Sump Install	Add Sump Piping LF	Valve Install	Site Cleanup	Misc Desc	Misc Price	Bid Items - Grand Total
2152 Cass Blvd, Berkley, MI, 48072, USA	Pass	6/28/2024	7/24/2024	8/12/2024	1	1	1	0	0			1	1			\$ 3,225.00
699 Princeton Rd	Pass	7/2/2024	7/5/2024	8/19/2024	1	1	1	1		1		2	1			\$ 10,665.00
1325 Columbia Rd, Berkley, MI, 48072, USA	Pass	7/25/2024	7/30/2024	8/5/2024	1	1	1		1	1	5	2	1			\$ 10,840.00
1250 11 Mile Rd, Berkley, MI, 48072, USA	Pending	8/6/2024			1	1										\$ 575.00
1271 Columbia Rd, Berkley, MI, 48072, USA	Fail	8/6/2024			1	1										\$ 575.00
1059 Cambridge Rd.	Fail	8/8/2024			1	1										\$ 575.00
983 Larkmoor Blvd	Fail	8/15/2024			1	1										\$ 575.00
1339 Columbia	Fail	8/20/2024			1	1										\$ 575.00
871 Cambridge Road	Fail	8/28/2024			1	1										\$ 575.00
1022 Larkmoor Blvd, Berkley, MI, 48072, USA	Fail	8/28/2024			1	1										\$ 575.00
1573 Columbia Rd, Berkley, MI, 48072, USA	Fail	8/29/2024			1	1										\$ 575.00
<b>Sub Totals To Date</b>					<b>11</b>	<b>11</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>5</b>	<b>5</b>	<b>3</b>			<b>\$ 29,330.00</b>
Unit Price					\$ 225.00	\$ 350.00	\$ 450.00	\$ 340.00	\$ 460.00	\$ 5,600.00	\$ 11.00	\$ 1,500.00	\$ 700.00			
Sub Total Approved Work					\$ 2,475.00	\$ 3,850.00	\$ 1,350.00	\$ 340.00	\$ 460.00	\$ 11,200.00	\$ 55.00	\$ 7,500.00	\$ 2,100.00			\$ 29,330.00

**Notes**  
Pay Request for Work Ending July 31, 2024 \$ 29,330.00  
Permit Fees \$ 152.52  
Deducts \$ (300.00)





# ROLLS MECHANICAL

1490 Torrey Road  
Fenton MI 48430  
810-629-7752

## INVOICE

**Invoice#:** 31560  
**Date:** 08/30/2024  
**Due Date:** 09/30/2024  
**Cust PO#:** 20220384

**Billed To:** OAKLAND COUNTY  
2100 Pontiac Lake Rd.  
Bldg. 41W  
Waterford MI 48328-0462

**Project Name:** Berkley - HomeGuard Program (Pilot)  
**Project Location:** 2100 Pontiac Lake Rd  
41W  
Waterford MI 48328-2762  
**Project Description:** August Invoice

Description	Quantity	Amount
699 Princeton Rd		
#1 Home Inspection	1.0000	225.00
#2 Televiser Sewer Lead	1.0000	350.00
#3 Mobilize/Site Preparation	1.0000	450.00
#4 Automatic Sump, 3/10 HP	1.0000	340.00
#6 Sump Pump Install	1.0000	5,600.00
#8 Backwater Valve Install	2.0000	3,000.00
#9 Clean Up & Restoration	1.0000	700.00
Deduct \$100 Deposit	-1.0000	-100.00
1325 Columbia Rd		
#1 Home Inspection	1.0000	225.00
#2 Televiser Sewer Lead	1.0000	350.00
#3 Mobilize/Site Preparation	1.0000	450.00

*A service charge of 0.00 % per annum will be charged on all amounts overdue on regular statement dates.*

*Thank you for your prompt payment!*

Subtotal:	29,181.68
Payment/Credit Applied:	0.00
<b>Amount Due</b>	<b>\$29,181.68</b>

***If you would like future documents emailed or have any questions, please contact [ap-ar@jrolls.com](mailto:ap-ar@jrolls.com)***

Contract Invoice

Continued...

Invoice#: 31560

Date: 08/30/2024

<b>Description</b>	<b>Quantity</b>	<b>Amount</b>
#5 Automatic Sump, 1/2 HP	1.0000	460.00
#6 Sump Pump Install	1.0000	5,600.00
#7 Additional Discharge Piping	5.0000	55.00
#8 Backwater Valve Install	2.0000	3,000.00
#9 Clean Up & Restoration	1.0000	700.00
Deduct \$100 Deposit	-1.0000	-100.00
2152 Cass Blvd		
#1 Home Inspection	1.0000	225.00
#2 Televiser Sewer Lead	1.0000	350.00
#3 Mobilize/Site Preparation	1.0000	450.00
#8 Backwater Valve Install	1.0000	1,500.00
#9 Clean Up & Restoration	1.0000	700.00
Deduct \$100 Deposit	-1.0000	-100.00
1271 Columbia Rd		
#1 Home Inspection	1.0000	225.00
#2 Televiser Sewer Lead	1.0000	350.00
983 Larkmore Blvd		
#1 Home Inspection	1.0000	225.00
#2 Televiser Sewer Lead	1.0000	350.00

Contract Invoice

Continued...

Invoice#: 31560

Date: 08/30/2024

<b>Description</b>	<b>Quantity</b>	<b>Amount</b>
1059 Cambridge Rd		
#1 Home Inspection	1.0000	225.00
#2 Televisе Sewer Lead	1.0000	350.00
1250 11 Mile Rd		
#1 Home Inspection	1.0000	225.00
#2 Televisе Sewer Lead	1.0000	350.00
1339 Columbia Rd		
#1 Home Inspection	1.0000	225.00
#2 Televisе Sewer Lead	1.0000	350.00
871 Cambridge Rd		
#1 Home Inspection	1.0000	225.00
#2 Televisе Sewer Lead	1.0000	350.00
1022 Larkmore Blvd		
#1 Home Inspection	1.0000	225.00
#2 Televisе Sewer Lead	1.0000	350.00
1573 Columbia Rd		
#1 Home Inspection	1.0000	225.00
#2 Televisе Sewer Lead	1.0000	350.00

Contract Invoice  
Continued...

Invoice#: 31560  
Date: 08/30/2024

Description	Quantity	Amount
#10 Permit Fees (3 Installed Residences)	1.0000	151.68

**Jim Nash, Oakland County Water Resources Commissioner  
For Construction of the 2024 GWK Sewer Cleaning and Inspection  
George W. Kuhn Drain Drainage District  
Oakland County, Michigan**

Construction Estimate No. 4

August 2, 2024 to August 24, 2024

Department No. : 6010101  
Fund No. : 58510  
Project No. : PRJ-17409

Account No. : 730373  
Program No. : 149127  
Activity : FAC  
Contract No. : 10919

Contractor :  
Pipeline Management Company  
2673 E. Maple Road  
Milford, MI 48381

Date of Contract : April 8, 2024  
Completion Date : February 2, 2025

Original Contract Amount: \$510,552.20

Previous Change Order Numbers (none): \$0.00

Change Orders This Estimate Numbers (none): \$0.00

Total Net Change Orders: \$0.00

Adjusted Contract Amount: \$510,552.20

Subtotal To Date: (Sheet 2 of 2 Column 7) \$339,759.07

Less Deductions to Date: (Sheet 2 of 2 Column 7) \$0.00

Gross Estimate: (Work in Place) 66.55% \$339,759.07

Less Amount Reserved: (5% of Adjusted Contract Amount) \$25,527.61

Total Amount Allowed To Date: \$314,231.46

Less Previous Estimates: \$149,367.78

Net Payment Request To Be Paid To Contractor: \$164,863.69

Reserve Payment to Contractor \$0.00

Balance of Contract To Date  \$170,793.13 Accounting Auditor: BCR 9/17/2024

Less Previous Transfers To Reserve: \$16,596.42

Amount of Current Transfer: \$8,931.19

Prepared by: George P. Nichols  
George P. Nichols, P.E., Assistant Chief Engineer

Date: 09/16/24

Recommended by: Matthew Hughes  
Matthew Hughes, P.E., Hubbell, Roth & Clark

Date: 09/16/2024

Approved by: \_\_\_\_\_  
Evangelos Bantios, P.E., Chief Engineer

Date: \_\_\_\_\_

Approved by: \_\_\_\_\_  
Gary Nigro, P.E., Manager

Date: \_\_\_\_\_

Approved by Board on: \_\_\_\_\_

## CONSTRUCTION ESTIMATE

Jim Nash, Oakland County Water Resources Commissioner  
 For Construction of the 2024 GWK Sewer Cleaning and Inspection  
 George W. Kuhn Drain Drainage District  
 Oakland County, Michigan

Construction Estimate No. 4		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Contract Item		Bid Quantity	Unit	Unit Price	Quantity This Payment (AGM Length)	Total Quantity Previous Estimate	Total Quantity to Date	Total Amount to Date	Total Amount This Payment
<b>Royal Oak Main Drain</b>									
1	Mobilization (5% Max)	1	LS	2,000.00	0.0	0.0	0.0	\$0.00	\$0.00
2	Project Management	1	LS	1.00	0.0	0.0	0.0	\$0.00	\$0.00
3	Permit Allowance	200	DLR	1.00	0.0	0.0	0.0	\$0.00	\$0.00
4	Clean and Telesive, PACP Reporting, 132" Combined Sewer	2,985	LFT	4.15	0.0	0.0	0.0	\$0.00	\$0.00
5	Clean and Telesive, PACP Reporting, 150" Combined Sewer	4,115	LFT	4.15	0.0	0.0	0.0	\$0.00	\$0.00
6	Clean and Telesive, PACP Reporting, 180" Combined Sewer	180	LFT	4.15	0.0	0.0	0.0	\$0.00	\$0.00
7	Clean and Telesive, PACP Reporting, Horseshoe, Combined Sewer	2,528	LFT	4.15	0.0	0.0	0.0	\$0.00	\$0.00
8	Locate and Expose Manhole, As Required	1	EA	1.00	0.0	0.0	0.0	\$0.00	\$0.00
9	Maintaining Traffic	1	LS	1,000.00	0.0	0.0	0.0	\$0.00	\$0.00
10	Restoration	1	LS	1.00	0.0	0.0	0.0	\$0.00	\$0.00
<b>Allen Branch</b>									
11	Mobilization (5% Max)	1	LS	7,000.00	0.0	1.0	1.0	\$7,000.00	\$0.00
12	Project Management	1	LS	10,000.00	0.0	1.0	1.0	\$10,000.00	\$0.00
13	Permit Allowance	1,000	DLR	1.00	0.0	0.0	0.0	\$0.00	\$0.00
14	Clean and Telesive, PACP Reporting, 8" Combined Sewer	37	LFT	4.15	0.0	16.0	16.0	\$66.40	\$0.00
15	Clean and Telesive, PACP Reporting, 10" Combined Sewer	109	LFT	4.15	0.0	32.0	32.0	\$132.80	\$0.00
16	Clean and Telesive, PACP Reporting, 12" Combined Sewer	109	LFT	4.15	0.0	30.0	30.0	\$124.50	\$0.00
17	Clean and Telesive, PACP Reporting, 15" Combined Sewer	0	LFT	4.15	0.0	15.0	15.0	\$62.25	\$0.00
18	Clean and Telesive, PACP Reporting, 18" Combined Sewer	161	LFT	4.15	0.0	155.0	155.0	\$643.25	\$0.00
19	Clean and Telesive, PACP Reporting, 24" Combined Sewer	73	LFT	4.15	0.0	20.0	20.0	\$83.00	\$0.00
20	Clean and Telesive, PACP Reporting, 30" Combined Sewer	1,690	LFT	4.15	0.0	1707.0	1707.0	\$7,084.05	\$0.00
21	Clean and Telesive, PACP Reporting, 36" Combined Sewer	2,969	LFT	4.15	0.0	3005.0	3005.0	\$12,470.75	\$0.00
22	Clean and Telesive, PACP Reporting, 48" Combined Sewer	1,294	LFT	4.15	0.0	1290.0	1290.0	\$5,353.50	\$0.00
23	Clean and Telesive, PACP Reporting, 54" Combined Sewer	3,107	LFT	4.15	11.5	1586.0	1597.5	\$6,629.63	\$47.73
24	Clean and Telesive, PACP Reporting, 60" Combined Sewer	1,952	LFT	4.15	0.0	1959.0	1959.0	\$8,129.85	\$0.00
25	Clean and Telesive, PACP Reporting, 66" Combined Sewer	1,778	LFT	4.15	6.9	2161.0	2167.9	\$8,996.79	\$28.64
26	Clean and Telesive, PACP Reporting, 84" Combined Sewer	3,466	LFT	4.15	3.0	3511.0	3514.0	\$14,583.10	\$12.45
27	Clean and Telesive, PACP Reporting, 90" Combined Sewer	4,445	LFT	4.15	2.0	4430.0	4432.0	\$18,392.80	\$8.30
28	Clean and Telesive, PACP Reporting, 108" Combined Sewer	4,389	LFT	4.15	0.0	2391.0	2391.0	\$9,922.65	\$0.00
29	Clean and Telesive, PACP Reporting, 114" Combined Sewer	5,986	LFT	4.15	0.0	5701.0	5701.0	\$23,659.15	\$0.00
30	Clean and Telesive, PACP Reporting, 120" Combined Sewer	3,826	LFT	4.15	0.0	3892.0	3892.0	\$16,151.80	\$0.00
31	Clean and Telesive, PACP Reporting, 126" Combined Sewer	997	LFT	4.15	0.0	1020.0	1020.0	\$4,233.00	\$0.00
32	Locate and Expose Manhole, As Required	1	EA	1.00	0.0	0.0	0.0	\$0.00	\$0.00
33	Maintaining Traffic	1	LS	2,000.00	0.0	1.0	1.0	\$2,000.00	\$0.00
34	Restoration	1	LS	1.00	0.0	1.0	1.0	\$1.00	\$0.00
<b>Hubbard Branch</b>									
34	Mobilization (5% Max)	1	LS	5,000.00	1.0	0.0	1.0	\$5,000.00	\$5,000.00
35	Project Management	1	LS	1.00	1.0	0.0	1.0	\$1.00	\$1.00
36	Permit Allowance	200	DLR	1.00	0.0	0.0	0.0	\$0.00	\$0.00
37	Clean and Telesive, PACP Reporting, 24" Combined Sewer	323	LFT	4.15	0.0	0.0	0.0	\$0.00	\$0.00
38	Clean and Telesive, PACP Reporting, 36" Combined Sewer	3,476	LFT	4.15	0.0	0.0	0.0	\$0.00	\$0.00
39	Clean and Telesive, PACP Reporting, 54" Combined Sewer	4,871	LFT	4.15	4884.0	0.0	4884.0	\$20,268.60	\$20,268.60
40	Clean and Telesive, PACP Reporting, 66" Combined Sewer	2,708	LFT	4.15	2736.0	0.0	2736.0	\$11,354.40	\$11,354.40
41	Clean and Telesive, PACP Reporting, 72" Combined Sewer	1,411	LFT	4.15	1437.0	0.0	1437.0	\$5,963.55	\$5,963.55
42	Clean and Telesive, PACP Reporting, 78" Combined Sewer	2,487	LFT	4.15	2491.0	0.0	2491.0	\$10,337.65	\$10,337.65
43	Clean and Telesive, PACP Reporting, 84" Combined Sewer	3,670	LFT	4.15	1746.0	0.0	1746.0	\$7,245.90	\$7,245.90
44	Clean and Telesive, PACP Reporting, 96" Combined Sewer	1,489	LFT	4.15	0.0	0.0	0.0	\$0.00	\$0.00
45	Clean and Telesive, PACP Reporting, 108" Combined Sewer	4,023	LFT	4.15	0.0	0.0	0.0	\$0.00	\$0.00
46	Locate and Expose Manhole, As Required	5	EA	1.00	0.0	0.0	0.0	\$0.00	\$0.00
47	Maintaining Traffic	1	LS	1,000.00	1.0	0.0	1.0	\$1,000.00	\$1,000.00
48	Restoration	1	LS	1.00	1.0	0.0	1.0	\$1.00	\$1.00
<b>East Clawson Drain</b>									
49	Mobilization (5% Max)	1	LS	3,000.00	0.0	0.0	0.0	\$0.00	\$0.00
50	Project Management	1	LS	1.00	0.0	0.0	0.0	\$0.00	\$0.00
51	Permit Allowance	200	DLR	1.00	0.0	0.0	0.0	\$0.00	\$0.00
52	Clean and Telesive, PACP Reporting, 10" Combined Sewer	1,291	LFT	4.15	0.0	0.0	0.0	\$0.00	\$0.00
53	Clean and Telesive, PACP Reporting, 36" Combined Sewer	2,246	LFT	4.15	0.0	0.0	0.0	\$0.00	\$0.00
54	Clean and Telesive, PACP Reporting, 42" Combined Sewer	894	LFT	4.15	0.0	0.0	0.0	\$0.00	\$0.00
55	Clean and Telesive, PACP Reporting, 54" Combined Sewer	2,304	LFT	4.15	0.0	0.0	0.0	\$0.00	\$0.00
56	Clean and Telesive, PACP Reporting, 60" Combined Sewer	748	LFT	4.15	0.0	0.0	0.0	\$0.00	\$0.00
57	Clean and Telesive, PACP Reporting, 66" Combined Sewer	2,578	LFT	4.15	0.0	0.0	0.0	\$0.00	\$0.00
58	Clean and Telesive, PACP Reporting, 72" Combined Sewer	669	LFT	4.15	0.0	0.0	0.0	\$0.00	\$0.00
59	Clean and Telesive, PACP Reporting, 78" Combined Sewer	656	LFT	4.15	0.0	0.0	0.0	\$0.00	\$0.00
60	Clean and Telesive, PACP Reporting, 90" Combined Sewer	2,620	LFT	4.15	0.0	0.0	0.0	\$0.00	\$0.00
61	Locate and Expose Manhole, As Required	4	EA	1.00	0.0	0.0	0.0	\$0.00	\$0.00
62	Maintaining Traffic	1	LS	2,500.00	0.0	0.0	0.0	\$0.00	\$0.00
63	Restoration	1	LS	1.00	0.0	0.0	0.0	\$0.00	\$0.00
<b>Ferndale Nine Mile Drain</b>									
64	Mobilization (5% Max)	1	LS	400.00	1.0	0.0	1.0	\$400.00	\$400.00
65	Project Management	1	LS	1.00	1.0	0.0	1.0	\$1.00	\$1.00
66	Permit Allowance	500	DLR	1.00	0.0	0.0	0.0	\$0.00	\$0.00
67	Clean and Telesive, PACP Reporting, 12" Combined Sewer	12	LFT	4.15	2.0	0.0	2.0	\$8.30	\$8.30
68	Clean and Telesive, PACP Reporting, 24" Combined Sewer	1,087	LFT	4.15	1081.0	0.0	1081.0	\$4,486.15	\$4,486.15
69	Clean and Telesive, PACP Reporting, 30" Combined Sewer	800	LFT	4.15	787.0	0.0	787.0	\$3,266.05	\$3,266.05
70	Locate and Expose Manhole, As Required	1	EA	1.00	0.0	0.0	0.0	\$0.00	\$0.00
71	Maintaining Traffic	1	LS	1,000.00	1.0	0.0	1.0	\$1,000.00	\$1,000.00
72	Restoration	1	LS	1.00	1.0	0.0	1.0	\$1.00	\$1.00
<b>McClain Drain</b>									
73	Mobilization (5% Max)	1	LS	1,500.00	1.0	0.0	1.0	\$1,500.00	\$1,500.00
74	Project Management	1	LS	1.00	1.0	0.0	1.0	\$1.00	\$1.00
75	Permit Allowance	200	DLR	1.00	0.0	0.0	0.0	\$0.00	\$0.00
76	Clean and Telesive, PACP Reporting, 33" Combined Sewer	372	LFT	4.15	380.0	0.0	380.0	\$1,577.00	\$1,577.00
77	Clean and Telesive, PACP Reporting, 36" Combined Sewer	600	LFT	4.15	602.0	0.0	602.0	\$2,498.30	\$2,498.30
78	Clean and Telesive, PACP Reporting, 54" Combined Sewer	1,014	LFT	4.15	1008.0	0.0	1008.0	\$4,183.20	\$4,183.20
79	Clean and Telesive, PACP Reporting, 60" Combined Sewer	998	LFT	4.15	1003.0	0.0	1003.0	\$4,162.45	\$4,162.45
80	Clean and Telesive, PACP Reporting, 66" Combined Sewer	1,888	LFT	4.15	1895.0	0.0	1895.0	\$7,864.25	\$7,864.25
81	Clean and Telesive, PACP Reporting, 72" Combined Sewer	2,128	LFT	4.15	2135.0	0.0	2135.0	\$8,860.25	\$8,860.25
82	Clean and Telesive, PACP Reporting, 78" Combined Sewer	1,300	LFT	4.15	1280.0	0.0	1280.0	\$5,312.00	\$5,312.00
83	Locate and Expose Manhole, As Required	1	EA	1.00	0.0	0.0	0.0	\$0.00	\$0.00
84	Maintaining Traffic	1	LS	1,500.00	1.0	0.0	1.0	\$1,500.00	\$1,500.00
85	Restoration	1	LS	1.00	1.0	0.0	1.0	\$1.00	\$1.00



CONSTRUCTION ESTIMATE

Jim Nash, Oakland County Water Resources Commissioner  
 For Construction of the 2024 GWK Sewer Cleaning and Inspection  
 George W. Kuhn Drain Drainage District  
 Oakland County, Michigan

Construction Estimate No. 4	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Contract Item	Bid Quantity	Unit	Unit Price	Quantity This Payment (AGM Length)	Total Quantity Previous Estimate	Total Quantity to Date	Total Amount to Date	Total Amount This Payment
<b>Shaberman Drain</b>								
86 Mobilization (5% Max)	1	LS	1,000.00	1.0	0.0	1.0	\$1,000.00	\$1,000.00
87 Project Management	1	LS	1.00	1.0	0.0	1.0	\$1.00	\$1.00
88 Permit Allowance	200	DLR	1.00	0.0	0.0	0.0	\$0.00	\$0.00
89 Clean and Televis, PACP Reporting, 12" Combined Sewer	171	LFT	4.15	112.0	0.0	112.0	\$464.80	\$464.80
90 Clean and Televis, PACP Reporting, 90" Combined Sewer	4,649	LFT	4.15	4664.0	0.0	4664.0	\$19,355.60	\$19,355.60
91 Locate and Expose Manhole, As Required	1	EA	1.00	0.0	0.0	0.0	\$0.00	\$0.00
92 Maintaining Traffic	1	LS	1,000.00	1.0	0.0	1.0	\$1,000.00	\$1,000.00
93 Restoration	1	LS	1.00	1.0	0.0	1.0	\$1.00	\$1.00
<b>Schubiner Drain</b>								
94 Mobilization (5% Max)	1	LS	2,500.00	0.0	1.0	1.0	\$2,500.00	\$0.00
95 Project Management	1	LS	1.00	0.0	1.0	1.0	\$1.00	\$0.00
96 Permit Allowance	200	DLR	1.00	0.0	0.0	0.0	\$0.00	\$0.00
97 Clean and Televis, PACP Reporting, 10" Combined Sewer	88	LFT	4.15	68.0	0.0	68.0	\$282.20	\$282.20
98 Clean and Televis, PACP Reporting, 12" Combined Sewer	4,110	LFT	4.15	2659.0	1407.0	4066.0	\$16,873.90	\$11,034.85
99 Clean and Televis, PACP Reporting, 15" Combined Sewer	1,089	LFT	4.15	1107.0	0.0	1107.0	\$4,594.05	\$4,594.05
100 Clean and Televis, PACP Reporting, 18" Combined Sewer	304	LFT	4.15	315.0	0.0	315.0	\$1,307.25	\$1,307.25
101 Clean and Televis, PACP Reporting, 24" Combined Sewer	288	LFT	4.15	294.0	0.0	294.0	\$1,220.10	\$1,220.10
102 Clean and Televis, PACP Reporting, 30" Combined Sewer	288	LFT	4.15	295.0	0.0	295.0	\$1,224.25	\$1,224.25
103 Clean and Televis, PACP Reporting, 36" Combined Sewer	297	LFT	4.15	296.0	0.0	296.0	\$1,228.40	\$1,228.40
104 Clean and Televis, PACP Reporting, 42" Combined Sewer	1,418	LFT	4.15	1441.0	0.0	1441.0	\$5,980.15	\$5,980.15
105 Clean and Televis, PACP Reporting, 54" Combined Sewer	741	LFT	4.15	739.0	0.0	739.0	\$3,066.85	\$3,066.85
106 Clean and Televis, PACP Reporting, 66" Combined Sewer	382	LFT	4.15	383.0	0.0	383.0	\$1,589.45	\$1,589.45
107 Clean and Televis, PACP Reporting, 72" Combined Sewer	2,618	LFT	4.15	2660.0	0.0	2660.0	\$11,039.00	\$11,039.00
108 Clean and Televis, PACP Reporting, 84" Combined Sewer	366	LFT	4.15	365.0	0.0	365.0	\$1,514.75	\$1,514.75
109 Locate and Expose Manhole, As Required	1	EA	1.00	0.0	0.0	0.0	\$0.00	\$0.00
110 Maintaining Traffic	1	LS	2,000.00	0.0	1.0	1.0	\$2,000.00	\$0.00
111 Restoration	1	LS	1.00	0.0	1.0	1.0	\$1.00	\$0.00

Change Orders:								
					0.0	0.0	\$0.00	\$0.00

Stored Material:								
					0.0	0.0	\$0.00	\$0.00

Deductions:								
					0.0	0.0	\$0.00	\$0.00

Total Amount to Date	\$339,759.07
Total Amount This Estimate	\$173,794.87
Change Orders to Date	\$0.00
Change Orders This Estimate	\$0.00
Stored Materials to Date	\$0.00
Stored Materials This Estimate	\$0.00
Subtotal to Date	\$339,759.07
Subtotal This Estimate	\$173,794.87
Deductions to Date	\$0.00
Deductions This Estimate	\$0.00
Payment This Estimate	\$173,794.87
Less Transfer to Reserve	\$8,931.19
Net Payment	\$164,863.68

**APPLICATION FOR PAYMENT**

**INVOICE NO. 24-0002**

To: **OCWRC**  
**One Public Works Drive**  
**Waterford, MI 48328**  
 Attn: **Mr. George Nichols, P.E.**

Project: **2024 GWK Drain Sewer Cleaning & Inspection**  
 Owner: **OCWRC**

Application No.: **Four**  
 Period From: **8/2/2024**  
 Period To: **8/24/2024**

Contractor: **Pipeline Mangagement Company, Inc.**  
**2673 E. Maple Road, Milford, MI., 48381**

**CONTRACTOR'S APPLICATION FOR PAYMENT**

Application is made for Payment, as shown below, in connection with the Contract.  
 Continuation Sheet, AIA Document G703, is attached.

Change Order Summary		
Change Orders approved in previous months by Owner	ADDITIONS	DEDUCTIONS
	\$ -	
TOTAL	\$ -	\$ -
Approved this Month		
Number	Date Approved	
TOTALS	\$ -	\$ -
Net Change by Change Orders		\$ -

1. ORIGINAL CONTRACT SUM	\$ 510,552.20
2. Net change by Change Orders	-
3. CONTRACT SUM TO DATE (Line 1 + 2)	\$ 510,552.20
4. TOTAL COMPLETED & STORED TO DATE	339,759.06
5. RETAINAGE:	
a. <u>10%</u> of Completed Work Until 50% Then 0%	\$ 25,527.61
b. _____ % of Stored Material	-
TOTAL RETAINAGE	\$ 25,527.61
6. TOTAL EARNED LESS RETAINAGE (Line 4 less Line 5 Total)	314,231.45
7. LESS PREVIOUS CERTIFICATES FOR PAYMENT	149,367.78
<b>8. CURRENT PAYMENT DUE</b>	<b>\$ 164,863.67</b>
9. BALANCE TO FINISH, PLUS RETAINAGE	\$ 170,793.14

CONTRACTOR: PIPELINE MANAGEMENT COMPANY, INC.

By: David Lusky \_\_\_\_\_ Date: 08/24/24

AIA Document G702, APPLICATION AND CERTIFICATE FOR PAYMENT, containing Contractor's signed Certification is attached.

In tabulations below, amounts are stated to the nearest dollar. Use Column 1 on Contracts where variable retainage for line items may apply.

Period From: **8/2/2024**  
 Period To: **8/24/2024**

CONTRACT NAME: 2024 GWK Drain Sewer Cleaning & Inspection

Item No.	Description of Work	Contract Information			Work Completed Previous/This Period						Total to Date Completed		% Comp. (\$)	Balance To Finish \$ Amount
		Quantity	U/M	Unit Price	Contract \$ Amount	Previous \$ Amount	Previous Quantity	Previously Invoiced	This Period Quantity	This Period \$ Amount	Total Qty.	To Date \$ Amount		
<b>Base Contract</b>														
<b><u>Division 1- Royal Oak Drain Main Branch</u></b>														
1	Mobilization (5% Max)	1	LS	2,000.00	2,000.00	-	\$ -	-	-	-	-	-	0%	2,000.00
2	Project Management	1	LS	1.00	1.00	-	\$ -	-	-	-	-	-	0%	1.00
3	Permit Allowance	200	DLR	1.00	200.00	-	\$ -	-	-	-	-	-	0%	200.00
4	Clean and Televis, PACP Reporting, 132" Combined Sewer	2985	LFT	4.15	12,387.75	-	\$ -	-	-	-	-	-	0%	12,387.75
5	Clean and Televis, PACP Reporting, 150" Combined Sewer	4115	LFT	4.15	17,077.25	-	\$ -	-	-	-	-	-	0%	17,077.25
6	Clean and Televis, PACP Reporting, 180" Combined Sewer	180	LFT	4.15	747.00	-	\$ -	-	-	-	-	-	0%	747.00
7	Clean and Televis, PACP Reporting, Horseshoe 180- inch, Combined Sewer	2528	LFT	4.15	10,491.20	-	\$ -	-	-	-	-	-	0%	10,491.20
8	Locate and Expose Manhole, As Required	1	EA	1.00	1.00	-	\$ -	-	-	-	-	-	0%	1.00
9	Maintaining Traffic	1	LS	1,000.00	1,000.00	-	\$ -	-	-	-	-	-	0%	1,000.00
10	Restoration	1	LS	1.00	1.00	-	\$ -	-	-	-	-	-	0%	1.00
<b><u>Division 2- Allen Branch</u></b>														
11	Mobilization (5% Max)	1	LS	7,000.00	7,000.00	1.00	\$ 7,000.00	-	-	-	1.00	7,000.00	100%	-
12	Project Management	1	LS	10,000.00	10,000.00	1.00	\$ 10,000.00	-	-	-	1.00	10,000.00	100%	-
13	Permit Allowance	1000	DLR	1.00	1,000.00	-	\$ -	-	-	-	-	-	0%	1,000.00
14	Clean and Televis, PACP Reporting, 8" CombinedSewer	37	LFT	4.15	153.55	16.00	\$ 66.40	-	-	-	16.00	66.40	43%	87.15
15	Clean and Televis, PACP Reporting, 10" Combined Sewer	109	LFT	4.15	452.35	32.00	\$ 132.80	-	-	-	32.00	132.80	29%	319.55
16	Clean and Televis, PACP Reporting, 12" CombinedSewer	109	LFT	4.15	452.35	45.00	\$ 186.75	-	-	-	45.00	186.75	41%	265.60
17	Clean and Televis, PACP Reporting, 18" Combined Sewer	161	LFT	4.15	668.15	155.00	\$ 643.25	-	-	-	155.00	643.25	96%	24.90
18	Clean and Televis, PACP Reporting, 24" CombinedSewer	73	LFT	4.15	302.95	20.00	\$ 83.00	-	-	-	20.00	83.00	27%	219.95
19	Clean and Televis, PACP Reporting, 30" Combined Sewer	1690	LFT	4.15	7,013.50	1,707.00	\$ 7,084.05	-	-	-	1,707.00	7,084.05	101%	(70.55)
20	Clean and Televis, PACP Reporting, 36" CombinedSewer	2969	LFT	4.15	12,321.35	3,005.00	\$ 12,470.75	-	-	-	3,005.00	12,470.75	101%	(149.40)
21	Clean and Televis, PACP Reporting, 48" Combined Sewer	1294	LFT	4.15	5,370.10	1,290.00	\$ 5,353.50	-	-	-	1,290.00	5,353.50	100%	16.60
22	Clean and Televis, PACP Reporting, 54" CombinedSewer	3107	LFT	4.15	12,894.05	1,586.00	\$ 6,581.90	11.50	47.73	1,597.50	6,629.63	51%	6,264.43	
23	Clean and Televis, PACP Reporting, 60" Combined Sewer	1952	LFT	4.15	8,100.80	1,959.00	\$ 8,129.85	-	-	1,959.00	8,129.85	100%	(29.05)	
24	Clean and Televis, PACP Reporting, 66" CombinedSewer	1778	LFT	4.15	7,378.70	2,161.00	\$ 8,968.15	6.90	28.64	2,167.90	8,996.79	122%	(1,618.09)	
25	Clean and Televis, PACP Reporting, 84" Combined Sewer	3466	LFT	4.15	14,383.90	3,511.00	\$ 14,570.65	3.00	12.45	3,514.00	14,583.10	101%	(199.20)	
26	Clean and Televis, PACP Reporting, 90" CombinedSewer	4445	LFT	4.15	18,446.75	4,430.00	\$ 18,384.50	2.00	8.30	4,432.00	18,392.80	100%	53.95	
27	Clean and Televis, PACP Reporting, 108" Combined Sewer	4389	LFT	4.15	18,214.35	2,391.00	\$ 9,922.65	-	-	2,391.00	9,922.65	54%	8,291.70	
28	Clean and Televis, PACP Reporting, 114" CombinedSewer	5986	LFT	4.15	24,841.90	5,701.00	\$ 23,659.15	-	-	5,701.00	23,659.15	95%	1,182.75	
29	Clean and Televis, PACP Reporting, 120" Combined Sewer	3826	LFT	4.15	15,877.90	3,892.00	\$ 16,151.80	-	-	3,892.00	16,151.80	102%	(273.90)	
30	Clean and Televis, PACP Reporting, 126" CombinedSewer	997	LFT	4.15	4,137.55	1,020.00	\$ 4,233.00	-	-	1,020.00	4,233.00	102%	(95.45)	
31	Locate and Expose Manhole, As Required	1	EA	1.00	1.00	-	\$ -	-	-	-	-	-	0%	1.00
32	Maintaining Traffic	1	LS	2,000.00	2,000.00	1.00	\$ 2,000.00	-	-	-	1.00	2,000.00	100%	-
33	Restoration	1	LS	1.00	1.00	1.00	\$ 1.00	-	-	-	1.00	1.00	100%	-
<b><u>Division 3- Hubbard Branch</u></b>														
34	Mobilization (5% Max)	1	LS	5,000.00	5,000.00	-	\$ -	1.00	5,000.00	1.00	5,000.00	100%	-	
35	Project Management	1	LS	1.00	1.00	-	\$ -	1.00	1.00	1.00	1.00	1.00	100%	-
36	Permit Allowance	200	DLR	1.00	200.00	-	\$ -	-	-	-	-	-	0%	200.00
37	Clean and Televis, PACP Reporting, 24" CombinedSewer	323	LFT	4.15	1,340.45	-	\$ -	-	-	-	-	-	0%	1,340.45
38	Clean and Televis, PACP Reporting, 36" Combined Sewer	3476	LFT	4.15	14,425.40	-	\$ -	-	-	-	-	-	0%	14,425.40
39	Clean and Televis, PACP Reporting, 54" CombinedSewer	4871	LFT	4.15	20,214.65	-	\$ -	4,884.00	20,268.60	4,884.00	20,268.60	100%	(53.95)	
40	Clean and Televis, PACP Reporting, 66" Combined Sewer	2708	LFT	4.15	11,238.20	-	\$ -	2,736.00	11,354.40	2,736.00	11,354.40	101%	(116.20)	
41	Clean and Televis, PACP Reporting, 72" CombinedSewer	1411	LFT	4.15	5,855.65	-	\$ -	1,437.00	5,963.55	1,437.00	5,963.55	102%	(107.90)	
42	Clean and Televis, PACP Reporting, 78" Combined Sewer	2487	LFT	4.15	10,321.05	-	\$ -	2,491.00	10,337.65	2,491.00	10,337.65	100%	(16.60)	
43	Clean and Televis, PACP Reporting, 84" CombinedSewer	3670	LFT	4.15	15,230.50	-	\$ -	1,746.00	7,245.90	1,746.00	7,245.90	48%	7,984.60	

44	Clean and Televis, PACP Reporting, 96" Combined Sewer	1489	LFT	4.15	6,179.35	-	\$ -	-	-	-	0%	6,179.35	
45	Clean and Televis, PACP Reporting, 108" CombinedSewer	4023	LFT	4.15	16,695.45	-	\$ -	-	-	-	0%	16,695.45	
46	Locate and Expose Manhole, As Required	5	EA	1.00	5.00	-	\$ -	-	-	-	0%	5.00	
47	Maintaining Traffic	1	LS	1,000.00	1,000.00	-	\$ -	1.00	1,000.00	1.00	1,000.00	100%	-
48	Restoration	1	LS	1.00	1.00	-	\$ -	1.00	1.00	1.00	1.00	100%	-
	<b><i>Division 4- East Clawson Drain</i></b>												
49	Mobilization (5% Max)	1	LS	3,000.00	3,000.00	-	\$ -	-	-	-	0%	3,000.00	
50	Project Management	1	LS	1.00	1.00	-	\$ -	-	-	-	0%	1.00	
51	Permit Allowance	200	DLR	1.00	200.00	-	\$ -	-	-	-	0%	200.00	
52	Clean and Televis, PACP Reporting, 10" Combined Sewer	1291	LFT	4.15	5,357.65	-	\$ -	-	-	-	0%	5,357.65	
53	Clean and Televis, PACP Reporting, 36" Combined Sewer	2246	LFT	4.15	9,320.90	-	\$ -	-	-	-	0%	9,320.90	
54	Clean and Televis, PACP Reporting, 42" Combined Sewer	894	LFT	4.15	3,710.10	-	\$ -	-	-	-	0%	3,710.10	
55	Clean and Televis, PACP Reporting, 54" Combined Sewer	2304	LFT	4.15	9,561.60	-	\$ -	-	-	-	0%	9,561.60	
56	Clean and Televis, PACP Reporting, 60" Combined Sewer	748	LFT	4.15	3,104.20	-	\$ -	-	-	-	0%	3,104.20	
57	Clean and Televis, PACP Reporting, 66" Combined Sewer	2578	LFT	4.15	10,698.70	-	\$ -	-	-	-	0%	10,698.70	
58	Clean and Televis, PACP Reporting, 72" Combined Sewer	669	LFT	4.15	2,776.35	-	\$ -	-	-	-	0%	2,776.35	
59	Clean and Televis, PACP Reporting, 78" Combined Sewer	656	LFT	4.15	2,722.40	-	\$ -	-	-	-	0%	2,722.40	
60	Clean and Televis, PACP Reporting, 90" Combined Sewer	2620	LFT	4.15	10,873.00	-	\$ -	-	-	-	0%	10,873.00	
61	Locate and Expose Manhole, As Required	4	EA	1.00	4.00	-	\$ -	-	-	-	0%	4.00	
62	Maintaining Traffic	1	LS	2,500.00	2,500.00	-	\$ -	-	-	-	0%	2,500.00	
63	Restoration	1	LS	1.00	1.00	-	\$ -	-	-	-	0%	1.00	
	<b><i>Division 5- Ferndale Nine Mile Drain</i></b>												
64	Mobilization (5% Max)	1	LS	400.00	400.00	-	\$ -	1.00	400.00	1.00	400.00	100%	-
65	Project Management	1	LS	1.00	1.00	-	\$ -	1.00	1.00	1.00	1.00	100%	-
66	Permit Allowance	500	DLR	1.00	500.00	-	\$ -	-	-	-	0%	500.00	
67	Clean and Televis, PACP Reporting, 12" Combined Sewer	12	LFT	4.15	49.80	-	\$ -	2.00	8.30	2.00	8.30	17%	41.50
68	Clean and Televis, PACP Reporting, 24" Combined Sewer	1087	LFT	4.15	4,511.05	-	\$ -	1,081.00	4,486.15	1,081.00	4,486.15	99%	24.90
69	Clean and Televis, PACP Reporting, 30" Combined Sewer	800	LFT	4.15	3,320.00	-	\$ -	787.00	3,266.05	787.00	3,266.05	98%	53.95
70	Locate and Expose Manhole, As Required	1	EA	1.00	1.00	-	\$ -	-	-	-	-	0%	1.00
71	Maintaining Traffic	1	LS	1,000.00	1,000.00	-	\$ -	1.00	1,000.00	1.00	1,000.00	100%	-
72	Restoration	1	LS	1.00	1.00	-	\$ -	1.00	1.00	1.00	1.00	100%	-
	<b><i>Division 6- McClain Drain</i></b>												
73	Mobilization (5% Max)	1	LS	1,500.00	1,500.00	-	\$ -	1.00	1,500.00	1.00	1,500.00	100%	-
74	Project Management	1	LS	1.00	1.00	-	\$ -	1.00	1.00	1.00	1.00	100%	-
75	Permit Allowance	200	DLR	1.00	200.00	-	\$ -	-	-	-	-	0%	200.00
76	Clean and Televis, PACP Reporting, 33" Combined Sewer	372	LFT	4.15	1,543.80	-	\$ -	380.00	1,577.00	380.00	1,577.00	102%	(33.20)
77	Clean and Televis, PACP Reporting, 36" CombinedSewer	600	LFT	4.15	2,490.00	-	\$ -	602.00	2,498.30	602.00	2,498.30	100%	(8.30)
78	Clean and Televis, PACP Reporting, 54" Combined Sewer	1014	LFT	4.15	4,208.10	-	\$ -	1,008.00	4,183.20	1,008.00	4,183.20	99%	24.90
79	Clean and Televis, PACP Reporting, 60" CombinedSewer	998	LFT	4.15	4,141.70	-	\$ -	1,003.00	4,162.45	1,003.00	4,162.45	101%	(20.75)
80	Clean and Televis, PACP Reporting, 66" Combined Sewer	1888	LFT	4.15	7,835.20	-	\$ -	1,895.00	7,864.25	1,895.00	7,864.25	100%	(29.05)
81	Clean and Televis, PACP Reporting, 72" CombinedSewer	2128	LFT	4.15	8,831.20	-	\$ -	2,135.00	8,860.25	2,135.00	8,860.25	100%	(29.05)
82	Clean and Televis, PACP Reporting, 78" Combined Sewer	1300	LFT	4.15	5,395.00	-	\$ -	1,280.00	5,312.00	1,280.00	5,312.00	98%	83.00
83	Locate and Expose Manhole, As Required	1	EA	1.00	1.00	-	\$ -	-	-	-	-	0%	1.00
84	Maintaining Traffic	1	LS	1,500.00	1,500.00	-	\$ -	1.00	1,500.00	1.00	1,500.00	100%	-
85	Restoration	1	LS	1.00	1.00	-	\$ -	1.00	1.00	1.00	1.00	100%	-
	<b><i>Division 7- Shaberman Drain</i></b>												
86	Mobilization (5% Max)	1	LS	1,000.00	1,000.00	-	\$ -	1.00	1,000.00	1.00	1,000.00	100%	-
87	Project Management	1	LS	1.00	1.00	-	\$ -	1.00	1.00	1.00	1.00	100%	-
88	Permit Allowance	200	DLR	1.00	200.00	-	\$ -	-	-	-	-	0%	200.00
89	Clean and Televis, PACP Reporting, 12" CombinedSewer	171	LFT	4.15	709.65	-	\$ -	112.00	464.80	112.00	464.80	65%	244.85
90	Clean and Televis, PACP Reporting, 90" Combined Sewer	4649	LFT	4.15	19,293.35	-	\$ -	4,664.00	19,355.60	4,664.00	19,355.60	100%	(62.25)
91	Locate and Expose Manhole, As Required	1	EA	1.00	1.00	-	\$ -	-	-	-	-	0%	1.00
92	Maintaining Traffic	1	LS	1,000.00	1,000.00	-	\$ -	1.00	1,000.00	1.00	1,000.00	100%	-
93	Restoration	1	LS	1.00	1.00	-	\$ -	1.00	1.00	1.00	1.00	100%	-
	<b><i>Division 8- Schubiner Drain</i></b>												
94	Mobilization (5% Max)	1	LS	2,500.00	2,500.00	1.00	\$ 2,500.00	-	-	1.00	2,500.00	100%	-



**CONTRACTOR'S DECLARATION**

The undersigned, on behalf of PIPELINE MANAGEMENT COMPANY, LLC. ("Contractor"), hereby declares that the Contractor has not, during the period commencing with the start of the Work which is the subject of the Contract defined below to following date: June 1, 2024, performed any Work, furnished any material, sustained any loss, damage or delay for any reason, including soil conditions encountered or created, or otherwise done anything for which Contractor shall ask, demand, sue for, or claim compensation from the ~~Oakland County Water Resources Commissioner, County Agency for the County of Oakland County~~ or GEORGE W. KUHN Drain Drainage District [strike one] ("Owner"), or its agents, in addition to the original scope of Work specified in Oakland County Purchasing Contract Number 10919 and , on this 10th day of September, 2024 between Contractor and Owner, and in the Change Orders for additional or extra Work issued by the Owner, in writing, as provided thereunder and/or extension of time, except as set forth on the itemized statement attached hereto.

There  is  is not an itemized statement attached.

Date: 9/10/2024

Contractor: Pipeline Management Company, LLC

Signature: David Lusky  Digitally signed by David Lusky  
Date: 2024.09.10 12:23:53 -04'00'

Name: David Lusky

Title: Owner / VP / GM

**MEMO TO:** Mr. Jim Nash, Chairman  
of the Drainage Board for the GEORGE W. KUHN DRAIN

**FROM:** Shawn Phelps, Chief of Fiscal Services  
OCWRC Accounting

*HP for Shawn Phelps*

**DATE:** September 24, 2024

**SUBJECT:** Request for Board approval of payment of the following invoices:

Payable To	Ref No.	For	Amount
ICS Integration Services LLC	SINV00285315	Invoice # 3080 - Contracted Services	\$ 1,206.00
		<b>Total</b>	<b>\$ 1,206.00</b>
Michigan Lawn Maintenance, Inc	SINV00287186	Invoice # 109972 - Contracted Services - Proj 1-3484	\$ 22,862.31
		<b>Project 1-3484</b>	<b>\$ 22,862.31</b>
ICS Integration Services LLC	SINV00286137	Invoice # 3062 - Contracted Services - Proj 1-2847	\$ 8,282.40
		<b>Project 1-2847</b>	<b>\$ 8,282.40</b>
Shaw Service & Maintenance	SINV00287187	Invoice # 910011629 - Contracted Service - Proj 1-7155	\$ 6,755.85
Shaw Service & Maintenance	SINV00287188	Invoice # 910011864 - Contracted Service - Proj 1-7155	16,113.61
		<b>Project 1-7155</b>	<b>\$ 22,869.46</b>
NTH Consultants, Ltd	SINV00286155	Invoice # 636945 - Contracted Service - 08/23/24 - Proj 1-7664	\$ 755.88
		<b>Project 1-7664</b>	<b>\$ 755.88</b>
Center For Watershed Protection	TBP	Invoice # W-22-037a 6 - Contracted Service - Proj 1-7235	\$ 1,235.00
		<b>Project 1-7235</b>	<b>\$ 1,235.00</b>
ICS Integration Services LLC	SINV00286139	Invoice # 3079 - Contracted Service - Proj 1-7689	\$ 9,514.00
		<b>Project 1-7689</b>	<b>\$ 9,514.00</b>
		<b>Total</b>	<b>\$ 66,725.05</b>



## **8. Augusta Drain**

## **AGENDA**

### **DRAINAGE BOARD FOR THE AUGUSTA DRAIN**

September 24, 2024

1. Call meeting to order
2. Approve minutes of meeting of August 27, 2024
3. Public Comments
4. Present Construction Estimate No. 2 for T.R. Pieprzak Co., Inc., for Construction of the Augusta Drain Norton Street Innovation Project in the amount of \$158,922.74 with a transfer to the Oakland County Treasurer in the amount of \$17,658.08
5. Present Maintenance Assessment Recommendation and Special Assessment Roll in the amount of \$173,400
6. Other business
7. Approve pro rata payment to Drainage Board members
8. Adjourn

**MINUTES OF THE MEETING OF THE DRAINAGE BOARD  
FOR THE AUGUSTA DRAIN**

August 27, 2024

A meeting of the Drainage Board for the Augusta Drain was held in the office of the Oakland County Water Resources Commissioner, Public Works Building, One Public Works Drive, Waterford, Michigan at 2:00 p.m. on the 27<sup>th</sup> day of August 2024.

The meeting was called to order by the Chairperson.

PRESENT: Jim Nash, Oakland County Water Resources Commissioner

David Woodward, Chairperson of the Oakland County Board of Commissioners

ABSENT: Gwen Markham, Chairperson of the Finance Committee, Oakland County Board of Commissioners

Minutes of the meeting held June 25, 2024, were presented for consideration. It was moved by Woodward, supported by Nash, that the minutes be approved.

ADOPTED: Yeas - 2  
Nays - 0

Chairperson Nash asked if there were any public comments. There were none.

Construction Estimate No. 1 for T.R. Pieprzak Co., Inc., for construction of the Augusta Drain Norton Street Innovation Project in the amount of \$62,154.45 with a transfer to the Oakland County Treasurer in the amount of \$6,906.05 was presented. It was moved by Woodward, supported by Nash, to approve Construction Estimate No. 1 for T.R. Pieprzak Co., Inc., for construction of the Augusta Drain Norton Street Innovation Project in the amount of \$62,154.45 with a transfer to the Oakland County Treasurer in the amount of \$6,906.05 as presented.

ADOPTED: Yeas - 2  
Nays - 0

A Maintenance Assessment Recommendation and Special Assessment Roll in the amount of \$94,087 for the Augusta Drain (as attached) were presented. It was moved by Woodward, supported by Nash, to adopt the Maintenance Assessment Recommendation and Special Assessment Roll in the amount of \$94,087 as presented.

ADOPTED: Yeas - 2  
Nays - 0

A request for approval of payment of invoices and/or reimbursement of the Drain Revolving Fund in the amount of \$106,252.49 (as attached) was presented. It was moved by Woodward, supported by Nash, to approve the payment of invoices and/or reimbursement of the Drain Revolving Fund in the amount of \$106,252.49.

ADOPTED: Yeas - 2  
Nays - 0

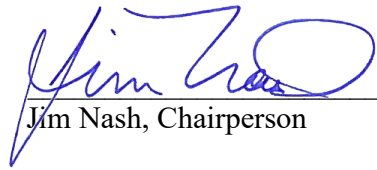
A request for approval of payment of invoices and/or reimbursement of the Drain Revolving Fund from the Construction Fund in the amount of \$62,460.62 (as attached) was presented. It was moved by Woodward, supported by Nash, to approve the payment of invoices and/or reimbursement of the Drain Revolving Fund from the Construction Fund in the amount of \$62,460.62.

ADOPTED: Yeas - 2  
Nays - 0

It was moved by Nash, supported by Woodward, to certify attendance and authorize pro rata payment of \$25 per day to Mr. Woodward.

ADOPTED: Yeas - 2  
Nays - 0

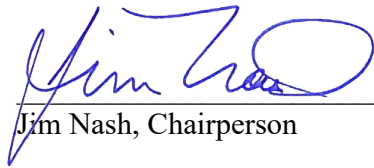
There being no further business, the meeting was adjourned.

  
\_\_\_\_\_  
Jim Nash, Chairperson

STATE OF MICHIGAN                    )  
  )SS.  
COUNTY OF OAKLAND                )

I, the undersigned, do hereby certify that the foregoing is a true and complete copy of the minutes of the Drainage Board for the Augusta Drain, Oakland County, Michigan, held on 27<sup>th</sup> day of August 2024, and that the minutes are on file in the office of the Oakland County Water Resources Commissioner and are available to the public.

I further certify that the notice of the meeting was posted at least 18 hours in advance of the meeting at the office of the Oakland County Water Resources Commissioner which is the principal office of the Drainage Board for the Augusta Drain Drainage District.

  
\_\_\_\_\_  
Jim Nash, Chairperson

Dated: August 27, 2024

Jim Nash, Oakland County Water Resources Commissioner  
Augusta Drain Drainage District  
For Construction of the Augusta Drain Norton Street Innovation Project  
City of Pontiac  
Oakland County, Michigan

Construction Estimate No.: 2 8/1/2024 to 8/31/2024  
Department No.: 6010101 Account No.: 730373  
Fund No.: FND82495 Program No.: 149015  
Project No.: PRJ-17215 Activity: STD  
Vendor No.: 41244  
Contractor: T.R. Pieprzak Co., Inc. Contract No.: CON00011041  
6267 St. Clair Highway Date of Contract: 7/1/2024  
China Twp., MI 48054 Completion Date: 6/30/2025

Table with 2 columns: Description and Amount. Rows include Original Contract Amount (\$852,612.88), Adjusted Contract Amount (\$852,612.88), Subtotal To Date (\$245,641.32), and Balance of Contract To Date (\$606,971.56).

Prepared By: Jen Cook, P.E. - Project Engineer (WRC) Date: 9/12/2024  
Recommended By: John V. Balint, P.E. - Consulting Engineer (HRC) Date: 9/12/2024  
Approved By: Joel Brown, P.E. - Chief Engineer (WRC) Date:  
Approved By: Steven Korth, P.E. - Chief Manager (WRC) Date:

Approved by Board on:

JIM NASH  
OAKLAND COUNTY WATER RESOURCES COMMISSIONER

**Jim Nash, Oakland County Water Resources Commissioner**  
**Augusta Drain Drainage District**  
**For Construction of the Augusta Drain Norton Street Innovation Project**  
**City of Pontiac**  
**Oakland County, Michigan**

Construction Estimate No. 02		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Contract Item	Bid Quantity	Unit	Unit Price	Quantity This Payment	Total Quantity Previous	Total Quantity To Date	Total Amount To Date	Total Amount This Payment
1	Permit Allowance	5,000	Dlr	\$ 1.00				\$ -	\$ -
2	Mobilization (Max 5%)	1	Lsum	\$ 55,000.00	0.5	0.5	1.0	\$ 55,000.00	\$ 27,500.00
3	Tree, Rem, Less than 6 inch	3	Ea	\$ 250.00		3	3	\$ 750.00	\$ -
4	Tree, Rem, 6 inch to 18 inch	16	Ea	\$ 600.00		18	18	\$ 10,800.00	\$ -
5	Tree, Rem, 19 inch to 36 inch	12	Ea	\$ 1,300.00		18	18	\$ 23,400.00	\$ -
6	Curb and Gutter, Rem	80	Ft	\$ 35.00				\$ -	\$ -
7	Spillway, Rem	1	Ea	\$ 840.00	2		2	\$ 1,680.00	\$ 1,680.00
8	Retaining Wall, Rem	1	Lsum	\$ 1,400.00	1		1	\$ 1,400.00	\$ 1,400.00
9	Structures, Rem Portions (Foundation Walls)	500	Cyd	\$ 23.60	80		80	\$ 1,888.00	\$ 1,888.00
10	Site Grading	1.89	Ac	\$ 102,436.00	1.00		1.00	\$ 102,436.00	\$ 102,436.00
11	Excavation, Earth	150	Cyd	\$ 37.50	150		150	\$ 5,625.00	\$ 5,625.00
12	Erosion Control, Silt Fence	1,252	Ft	\$ 2.30		1,275	1,275	\$ 2,932.50	\$ -
13	Erosion Control, Inlet Protection, Fabric Drop	15	Ea	\$ 143.00	5	6	11	\$ 1,573.00	\$ 715.00
14	Erosion Control, Gravel Access, Approach	1	Ea	\$ 2,730.00				\$ -	\$ -
15	Aggregate Base, 6 inch (Path)	1,380	Syd	\$ 26.30				\$ -	\$ -
16	Aggregate Surface Cse, 4 inch	1,105	Syd	\$ 20.00				\$ -	\$ -
17	Sewer, Cl A, 12 inch, Tr Det A	137	Ft	\$ 81.00	65		65	\$ 5,265.00	\$ 5,265.00
18	Sewer End Sect, HDPE, 12 inch	2	Ea	\$ 407.00				\$ -	\$ -
19	Trench Undercut and Backfill (As Needed)	5	Cyd	\$ 95.00				\$ -	\$ -
20	Outlet Control Structure, HDPE, 24 inch dia.	2	Ea	\$ 4,150.00	1		1	\$ 4,150.00	\$ 4,150.00
21	Curb Cut Inlet	8	Ea	\$ 980.00				\$ -	\$ -
22	Fence, Protective (As Needed)	100	Ft	\$ 7.00				\$ -	\$ -
23	Minor Traffic Devices and Traf Regulator Control	1	Lsum	\$ 10,830.00				\$ -	\$ -
24	Riprap, Plain	22	Syd	\$ 140.00				\$ -	\$ -
25	One-Year Vegetation Maintenance and Guarantee	1	Lsum	\$ 88,938.00				\$ -	\$ -
26	Respreding of Existing Soils, 4 inch	731	Cyd	\$ 23.00				\$ -	\$ -
27	Compost for Amended In-Place Soils	206	Cyd	\$ 48.00				\$ -	\$ -
28	Shrubs, Deciduous	259	Ea	\$ 94.00				\$ -	\$ -
29	Trees, 2.5 inch caliper, Deciduous Canopy	29	Ea	\$ 552.00				\$ -	\$ -

**JIM NASH**

OAKLAND COUNTY WATER RESOURCES COMMISSIONER



**Jim Nash, Oakland County Water Resources Commissioner  
 Augusta Drain Drainage District  
 For Construction of the Augusta Drain Norton Street Innovation Project  
 City of Pontiac  
 Oakland County, Michigan**

Construction Estimate No. 02		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Contract Item	Bid Quantity	Unit	Unit Price	Quantity This Payment	Total Quantity Previous	Total Quantity To Date	Total Amount To Date	Total Amount This Payment
30	Trees, 2 inch caliper, Ornamental	16	Ea	\$ 404.00				\$ -	\$ -
31	Perennial Mix (Quart), 18 inches o.c.	2,111	Ea	\$ 4.88				\$ -	\$ -
32	Ledge Rock	29.5	Ton	\$ 800.00				\$ -	\$ -
33	Cobbles, 12 inch to 18 inch (Gravel Bands)	66	Ton	\$ 400.00				\$ -	\$ -
34	Washed Stone, 5 inch (Gravel Bands)	36	Ton	\$ 350.00				\$ -	\$ -
35	Flagstone (Creek Bed)	5,105	Sft	\$ 17.72				\$ -	\$ -
36	Weed Barrier Control	2,052	Syd	\$ 1.50				\$ -	\$ -
37	Seeded Turf Lawn	3,508	Syd	\$ 2.40				\$ -	\$ -
38	Sedge and Grass Seed Mix	1,808	Syd	\$ 8.67				\$ -	\$ -
39	Stormwater Native Seed Mix	2,135	Syd	\$ 9.30				\$ -	\$ -
40	Prairie Seed Mix	5,687	Syd	\$ 1.60				\$ -	\$ -
41	Clearing and Grubbing	301	Cyd	\$ 14.10		200	200	\$ 2,820.00	\$ -
42	Sewer, 4-inch HDPE	42	Ft	\$ 39.07	22		22	\$ 859.54	\$ 859.54
43	Sewer, 4-inch HDPE Perforated with Sock (Backfill w/ 2NS Sand)	849	Ft	\$ 41.34	442		442	\$ 18,272.28	\$ 18,272.28
44	Cleanout, 4-inch HDPE	4	Ea	\$ 545.00	2		2	\$ 1,090.00	\$ 1,090.00
45	Imported Soil (As Needed)	150	Cyd	\$ 38.00	150		150	\$ 5,700.00	\$ 5,700.00
46	Concrete Foundation, End Section	2	Ea	\$ 4,000.00				\$ -	\$ -
47	Seal Wall at Overflow (Painted-On Concrete Sealer)	2	Ea	\$ 1,250.00				\$ -	\$ -

Change Orders:


Stored Materials:


Deductions:


**JIM NASH**  
 OAKLAND COUNTY WATER RESOURCES COMMISSIONER

**Jim Nash, Oakland County Water Resources Commissioner  
 Augusta Drain Drainage District  
 For Construction of the Augusta Drain Norton Street Innovation Project  
 City of Pontiac  
 Oakland County, Michigan**

Construction Estimate No. 02	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Contract Item	Bid Quantity	Unit	Unit Price	Quantity This Payment	Total Quantity Previous	Total Quantity To Date	Total Amount To Date	Total Amount This Payment

Total Amount To-Date: \$ 245,641.32  
 Total Amount This Estimate: \$ 176,580.82  
  
 Change Orders To-Date: \$ -  
 Change Orders This Estimate: \$ -  
  
 Stored Materials To-Date: \$ -  
 Stored Materials This Estimate: \$ -  
  
 Subtotal To-Date: \$ 245,641.32  
 Subtotal This Estimate: \$ 176,580.82  
  
 Deductions To-Date: \$ -  
 Deductions This Estimate: \$ -  
  
 Payment This Estimate: \$ 176,580.82  
 Less Transfer to Reserve: \$ 17,658.08  
  
 Net Payment: \$ 158,922.74

**OAKLAND COUNTY WATER RESOURCES COMMISSIONER**  
**PROJECT ASSESSMENT RECOMMENDATION FOR THE**  
**Augusta Drain**

Assessment for the Augusta Drain Norton Street Project

Date last assessment approved: 08/27/24  
 Last Assessment: \$94,087

Expenditure History:	Fiscal Year	Amount
	2018	\$37,184
	2019	\$38,020
	2020	\$16,078
	2021	\$19,320
	2022	\$18,026
	2023	\$41,930
	2024 YTD	\$74,820

**Recommended Assessment:**

Norton Street Project (PRJ-17215) Expenses \$173,400

**TOTAL RECOMMENDED ASSESSMENT \$173,400**

Prepared by: Andrea Craft Date: 09/13/2024  
 Andrea Craft - Senior Engineering Systems Coordinator

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_  
 Geoff Wilson, P.E. - Chief Engineer

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_  
 Gary Nigro, P.E. - Manager

Note: Current Available Cash as of July 31, 2024, Fiscal Services Division Report.

**SPECIAL ASSESSMENT ROLL FOR THE AUGUSTA DRAIN  
NORTON STREET PROJECT**

<b>Public Corporation</b>	<b>*Percentage of Apportionment</b>	<b>Total Amount of Assessment</b>	<b>Payment #1</b>	<b>Payment #2</b>	<b>Payment #3</b>
City of Pontiac	98.3810%	\$ 170,592.65	\$ 170,592.65	-	-
State of Michigan	1.6190%	\$ 2,807.35	\$ 2,807.35	-	-
<b>Total</b>	<b>100.000%</b>	<b>\$ 173,400.00</b>	<b>\$ 173,400.00</b>	<b>\$ -</b>	<b>\$ -</b>

\*Apportionment based on Final Order of Apportionment dated 1/20/1970.

Assessment Payment Due Date(s): Payment #1 10/31/2024

I hereby certify that I have prepared the Special Assessment Roll for the Augusta Drain Norton Street Project, in accordance with the direction of the Drainage Board and the statutory provisions applicable thereto.

\_\_\_\_\_  
Jim Nash  
Chairman of the Drainage Board for the Augusta Drain

The foregoing Special Assessment Roll for the Augusta Drain Norton Street Project was approved by the Drainage Board on \_\_\_\_\_.

\_\_\_\_\_  
Jim Nash  
Chairman of the Drainage Board for the Augusta Drain

## **9. Austin Drain**

## **AGENDA**

### **DRAINAGE BOARD FOR THE AUSTIN DRAIN**

September 24, 2024

1. Call meeting to order
2. Approve minutes of meeting of October 26, 2021
3. Public Comments
4. Present Maintenance Assessment Recommendation and Special Assessment Roll in the amount of \$21,642
5. Other business
6. Approve payment to Drainage Board Members
7. Adjourn

**MINUTES OF THE MEETING OF THE DRAINAGE BOARD  
FOR THE AUSTIN DRAIN**

October 26, 2021

A meeting of the Drainage Board for the Austin Drain was held in the office of the Oakland County Water Resources Commissioner, Public Works Building, One Public Works Drive, Waterford, Michigan at 2:00 p.m. on the 26<sup>th</sup> day of October, 2021.

The meeting was called to order by the Chairperson.

PRESENT: Jim Nash, Oakland County Water Resources Commissioner

Gwen Markham, Chairperson of the Finance Committee, Oakland County Board of Commissioners

ABSENT: David Woodward, Chairperson of the Oakland County Board of Commissioners

Minutes of the meeting held November 27, 2018 were presented for consideration. It was moved by Markham, supported by Nash, that the minutes be approved.

ADOPTED: Yeas - 2  
Nays - 0

Chairperson Nash asked if there were any public comments. There were none.


A Maintenance Assessment Recommendation and Special Assessment Roll in the amount of \$14,628 for the Austin Drain (as attached) were presented. It was moved by Markham, supported by Nash, to adopt the Maintenance Assessment Recommendation and Special Assessment Roll in the amount of \$14,628 as presented.

ADOPTED: Yeas - 2  
Nays - 0

It was moved by Nash, supported by Markham, to certify attendance and authorize pro rata payment of \$25 per day to Ms. Markham.

ADOPTED: Yeas - 2  
Nays - 0

There being no further business, the meeting was adjourned.



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Jim Nash, Chairperson



STATE OF MICHIGAN                    )  
  )SS.  
COUNTY OF OAKLAND                )

I, the undersigned, do hereby certify that the foregoing is a true and complete copy of the minutes of the Drainage Board for the Austin Drain, Oakland County, Michigan, held on the 26<sup>th</sup> day of October, 2021, and that the minutes are on file in the office of the Oakland County Water Resources Commissioner and are available to the public.

I further certify that the notice of the meeting was posted at least 18 hours in advance of the meeting at the office of the Oakland County Water Resources Commissioner which is the principal office of the Drainage Board for the Austin Drain Drainage District.



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Jim Nash, Chairperson

Dated: October 26, 2021

**OAKLAND COUNTY WATER RESOURCES COMMISSIONER**  
**MAINTENANCE ASSESSMENT RECOMMENDATION FOR THE**  
**Austin Drain**

Assessment for current fund deficit and estimated maintenance expenses for fiscal years: 2025 through 2027

Date last assessment approved:	10/26/21	
Last Assessment:		\$14,628
Current Available Cash:		(\$6,942)

Expenditure History:	Fiscal Year	Amount
	2017	\$944
	2018	\$4,169
	2019	\$8,875
	2020	\$2,881
	2021	\$4,292
	2022	\$6,398
	2023	\$7,255
	2024 YTD	\$2,496

Estimated Expenditures:	Year	Amount
	2025	\$4,900
	2026	\$4,900
	2027	\$4,900
	<b>Total</b>	<b>\$14,700</b>

**Recommended Assessment:**

Current Cash Deficit	\$6,942
Total Anticipated Expenses 2025 - 2027	\$14,700

**TOTAL RECOMMENDED ASSESSMENT \$21,642**

Prepared by: Andrea Craft Date: 09/13/2024  
 Andrea Craft - Engineering Systems Coordinator

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_  
 Geoff Wilson, P.E. - Chief Engineer

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_  
 Gary Nigro, P.E. - Manager

Note: Current Available Cash as of July 31, 2024, Fiscal Services Division Report.

**SPECIAL ASSESSMENT ROLL FOR THE MAINTENANCE  
OF THE AUSTIN DRAIN**

<b>Public Corporation</b>	<b>*Percentage of Apportionment</b>	<b>Total Amount of Assessment</b>	<b>Payment #1</b>	<b>Payment #2</b>	<b>Payment #3</b>
City of Southfield	91.3449%	\$ 19,768.86	\$ 19,768.86	-	-
Road Commission for County of Oakland on account of drainage to county highways	8.6551%	\$ 1,873.14	\$ 1,873.14	-	-
<b>Total</b>	<b>100.000%</b>	<b>\$ 21,642.00</b>	<b>\$ 21,642.00</b>	<b>\$ -</b>	<b>\$ -</b>

\*Apportionment based on Final Order of Apportionment dated 6/9/1964.

Assessment Payment Due Date(s): Payment #1 10/31/2024

I hereby certify that I have prepared the Special Assessment Roll for the Maintenance of the Austin Drain for the fiscal years 2025- 2027 in accordance with the direction of the Drainage Board and the statutory provisions applicable thereto.

\_\_\_\_\_  
Jim Nash  
Chairman of the Drainage Board for the Austin Drain

The foregoing Special Assessment Roll for the maintenance of the Austin Drain was approved by the Drainage Board on \_\_\_\_\_.

\_\_\_\_\_  
Jim Nash  
Chairman of the Drainage Board for the Austin Drain

## **10. Brennan Drain**

## **AGENDA**

### **DRAINAGE BOARD FOR THE BRENNAN DRAIN**

September 24, 2024

1. Call meeting to order
2. Approve minutes of meeting of October 26, 2021
3. Public Comments
4. Present Maintenance Assessment Recommendation and Special Assessment Roll in the amount of \$6,000
5. Other business
6. Approve pro rata payment to Drainage Board members
7. Adjourn

**MINUTES OF THE MEETING OF THE DRAINAGE BOARD  
FOR THE BRENNAN DRAIN**

October 26, 2021

A meeting of the Drainage Board for the Brennan Drain was held in the office of the Oakland County Water Resources Commissioner, Public Works Building, One Public Works Drive, Waterford, Michigan at 2:00 p.m. on the 26<sup>th</sup> day of October, 2021.

The meeting was called to order by the Chairperson.

PRESENT: Jim Nash, Oakland County Water Resources Commissioner

Gwen Markham, Chairperson of the Finance Committee, Oakland County Board of Commissioners

ABSENT: David Woodward, Chairperson of the Oakland County Board of Commissioners

Minutes of the meeting held November 26, 2019 were presented for consideration. It was moved by Markham, supported by Nash, that the minutes be approved.

ADOPTED: Yeas - 2  
Nays - 0

Chairperson Nash asked if there were any public comments. There were none.

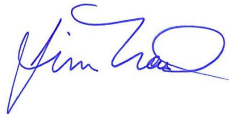
A Maintenance Assessment Recommendation and Special Assessment Roll in the amount of \$6,365 for the Brennan Drain (as attached) were presented. It was moved by Markham, supported by Nash, to adopt the Maintenance Assessment Recommendation and Special Assessment Roll in the amount of \$6,365 as presented.

ADOPTED: Yeas - 2  
Nays - 0

It was moved by Nash, supported by Markham, to certify attendance and authorize pro rata payment of \$25 per day to Ms. Markham.

ADOPTED: Yeas - 2  
Nays - 0

There being no further business, the meeting was adjourned.



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Jim Nash, Chairperson

STATE OF MICHIGAN                    )  
  )SS.  
COUNTY OF OAKLAND                )

I, the undersigned, do hereby certify that the foregoing is a true and complete copy of the minutes of the Drainage Board for the Brennan Drain, Oakland County, Michigan, held on the 26<sup>th</sup> day of October, 2021, and that the minutes are on file in the office of the Oakland County Water Resources Commissioner and are available to the public.

I further certify that the notice of the meeting was posted at least 18 hours in advance of the meeting at the office of the Oakland County Water Resources Commissioner which is the principal office of the Drainage Board for the Brennan Drain Drainage District.



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Jim Nash, Chairperson

Dated: October 26, 2021



**OAKLAND COUNTY WATER RESOURCES COMMISSIONER**  
**MAINTENANCE ASSESSMENT RECOMMENDATION FOR THE**  
**Brennan Drain**

Assessment for estimated maintenance expenses for fiscal years: 2025 through 2027

Date last assessment approved:	10/26/21	
Last Assessment:		\$6,365
Current Available Cash:		\$1,494

Expenditure History:	Fiscal Year	Amount
	2017	\$1,799
	2018	\$1,131
	2019	\$1,732
	2020	\$2,447
	2021	\$1,787
	2022	\$1,488
	2023	\$1,354
	2024 YTD	\$465

Estimated Expenditures:	Year	Amount
	2025	\$2,000
	2026	\$2,000
	2027	\$2,000
	<b>Total</b>	<b>\$6,000</b>

**Recommended Assessment:**

Total Anticipated Expenses 2025 - 2027	\$6,000
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<b>TOTAL RECOMMENDED ASSESSMENT</b>	<b>\$6,000</b>
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Prepared by: Andrea Craft Date: 09/16/2024  
 Andrea Craft - Senior Engineering Systems Coordinator

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_  
 Geoff Wilson, P.E. - Chief Engineer

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_  
 Gary Nigro, P.E. - Manager

Note: Current Available Cash as of July 31, 2024, Fiscal Services Division Report.

**SPECIAL ASSESSMENT ROLL FOR THE MAINTENANCE  
OF THE BRENNAN DRAIN**

<b>Public Corporation</b>	<b>*Percentage of Apportionment</b>	<b>Total Amount of Assessment</b>	<b>Payment #1</b>	<b>Payment #2</b>	<b>Payment #3</b>
City of Southfield	100.0000%	\$ 6,000.00	\$ 6,000.00	-	-
<b>Total</b>	<b>100.000%</b>	<b>\$ 6,000.00</b>	<b>\$ 6,000.00</b>	<b>\$ -</b>	<b>\$ -</b>

\*Apportionment based on Final Order of Apportionment dated 1/14/1976.

Assessment Payment Due Date(s): Payment #1 10/31/2024

I hereby certify that I have prepared the Special Assessment Roll for the Maintenance of the Brennan Drain for the fiscal years 2025- 2027 in accordance with the direction of the Drainage Board and the statutory provisions applicable thereto.

\_\_\_\_\_  
Jim Nash  
Chairman of the Drainage Board for the Brennan Drain

The foregoing Special Assessment Roll for the maintenance of the Brennan Drain was approved by the Drainage Board on \_\_\_\_\_.

\_\_\_\_\_  
Jim Nash  
Chairman of the Drainage Board for the Brennan Drain

**Chapter 20 Drainage Board Meeting**  
Regular Meeting – Tuesday, September 24, 2024

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**11. Emily Drain**

## **AGENDA**

### **DRAINAGE BOARD FOR THE EMILY DRAIN**

September 24, 2024

1. Call meeting to order
2. Approve minutes of meeting of October 26, 2021
3. Public Comments
4. Present Maintenance Assessment Recommendation and Special Assessment Roll in the amount of \$8,400
5. Other business
6. Approve pro rata payment to Drainage Board members
7. Adjourn

**MINUTES OF THE MEETING OF THE DRAINAGE BOARD  
FOR THE EMILY DRAIN**

October 26, 2021

A meeting of the Drainage Board for the Emily Drain was held in the office of the Oakland County Water Resources Commissioner, Public Works Building, One Public Works Drive, Waterford, Michigan at 2:00 p.m. on the 26<sup>th</sup> day of October, 2021.

The meeting was called to order by the Chairperson.

PRESENT: Jim Nash, Oakland County Water Resources Commissioner

Gwen Markham, Chairperson of the Finance Committee, Oakland County Board of Commissioners

ABSENT: David Woodward, Chairperson of the Oakland County Board of Commissioners

Minutes of the meeting held February 26, 2019 were presented for consideration. It was moved by Markham, supported by Nash, that the minutes be approved.

ADOPTED: Yeas - 2  
Nays - 0

Chairperson Nash asked if there were any public comments. There were none.

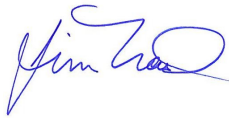
A Maintenance Assessment Recommendation and Special Assessment Roll in the amount of \$8,759 for the Emily Drain (as attached) were presented. It was moved by Markham, supported by Nash, to adopt the Maintenance Assessment Recommendation and Special Assessment Roll in the amount of \$8,759 as presented.

ADOPTED: Yeas - 2  
Nays - 0

It was moved by Nash, supported by Markham, to certify attendance and authorize pro rata payment of \$25 per day to Ms. Markham.

ADOPTED: Yeas - 2  
Nays - 0

There being no further business, the meeting was adjourned.



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Jim Nash, Chairperson

STATE OF MICHIGAN                    )  
  )SS.  
COUNTY OF OAKLAND                )

I, the undersigned, do hereby certify that the foregoing is a true and complete copy of the minutes of the Drainage Board for the Emily Drain, Oakland County, Michigan, held on the 26<sup>th</sup> day of October, 2021, and that the minutes are on file in the office of the Oakland County Water Resources Commissioner and are available to the public.

I further certify that the notice of the meeting was posted at least 18 hours in advance of the meeting at the office of the Oakland County Water Resources Commissioner which is the principal office of the Drainage Board for the Emily Drain Drainage District.



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Jim Nash, Chairperson

Dated: October 26, 2021

**OAKLAND COUNTY WATER RESOURCES COMMISSIONER**  
**MAINTENANCE ASSESSMENT RECOMMENDATION FOR THE**  
**Emily Drain**

Assessment for estimated maintenance expenses for fiscal years: 2025 through 2027

Date last assessment approved:	10/26/21	
Last Assessment:		\$8,759
Current Available Cash:		\$2,349

Expenditure History:	Fiscal Year	Amount
	2017	\$891
	2018	\$2,262
	2019	\$1,517
	2020	\$3,517
	2021	\$2,626
	2022	\$2,544
	2023	\$1,454
	2024 YTD	\$480

Estimated Expenditures:	Year	Amount
	2025	\$2,800
	2026	\$2,800
	2027	\$2,800
	<b>Total</b>	<b>\$8,400</b>

**Recommended Assessment:**

Total Anticipated Expenses 2025 - 2027	\$8,400
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<b>TOTAL RECOMMENDED ASSESSMENT</b>	<b>\$8,400</b>
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Prepared by: Andrea Craft Date: 09/13/2024  
 Andrea Craft - Senior Engineering Systems Coordinator

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_  
 Geoff Wilson, P.E. - Chief Engineer

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_  
 Gary Nigro, P.E. - Manager

Note: Current Available Cash as of July 31, 2024, Fiscal Services Division Report.

**SPECIAL ASSESSMENT ROLL FOR THE MAINTENANCE  
OF THE EMILY DRAIN**

<b>Public Corporation</b>	<b>*Percentage of Apportionment</b>	<b>Total Amount of Assessment</b>	<b>Payment #1</b>	<b>Payment #2</b>	<b>Payment #3</b>
City of Southfield	100.0000%	\$ 8,400.00	\$ 8,400.00	-	-
<b>Total</b>	<b>100.000%</b>	<b>\$ 8,400.00</b>	<b>\$ 8,400.00</b>	<b>\$ -</b>	<b>\$ -</b>

\*Apportionment based on Final Order of Apportionment dated 8/21/1972.

Assessment Payment Due Date(s): Payment #1 10/31/2024

I hereby certify that I have prepared the Special Assessment Roll for the Maintenance of the Emily Drain for the fiscal years 2025- 2027 in accordance with the direction of the Drainage Board and the statutory provisions applicable thereto.

\_\_\_\_\_  
Jim Nash  
Chairman of the Drainage Board for the Emily Drain

The foregoing Special Assessment Roll for the maintenance of the Emily Drain was approved by the Drainage Board on \_\_\_\_\_.

\_\_\_\_\_  
Jim Nash  
Chairman of the Drainage Board for the Emily Drain



## **12. Evergreen Road Storm Drain**

## **AGENDA**

### **DRAINAGE BOARD FOR THE EVERGREEN ROAD STORM DRAIN**

September 24, 2024

1. Call meeting to order
2. Approve minutes of meeting of October 26, 2021
3. Public Comments
4. Present Maintenance Assessment Recommendation and Special Assessment Roll in the amount of \$9,900
5. Other business
6. Approve pro rata payment to Drainage Board members
7. Adjourn

**MINUTES OF THE MEETING OF THE DRAINAGE BOARD  
FOR THE EVERGREEN ROAD STORM DRAIN**

October 26, 2021

A meeting of the Drainage Board for the Evergreen Road Storm Drain was held in the office of the Oakland County Water Resources Commissioner, Public Works Building, One Public Works Drive, Waterford, Michigan at 2:00 p.m. on the 26<sup>th</sup> day of October, 2021.

The meeting was called to order by the Chairperson.

PRESENT: Jim Nash, Oakland County Water Resources Commissioner

Gwen Markham, Chairperson of the Finance Committee, Oakland County Board of Commissioners

ABSENT: David Woodward, Chairperson of the Oakland County Board of Commissioners

Minutes of the meeting held February 26, 2019 were presented for consideration. It was moved by Markham, supported by Nash, that the minutes be approved.

ADOPTED: Yeas - 2  
Nays - 0

Chairperson Nash asked if there were any public comments. There were none.

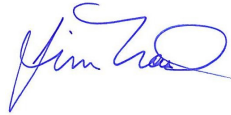
A Maintenance Assessment Recommendation and Special Assessment Roll in the amount of \$13,645 for the Evergreen Road Storm Drain (as attached) were presented. It was moved by Markham, supported by Nash, to adopt the Maintenance Assessment Recommendation and Special Assessment Roll in the amount of \$13,645 as presented.

ADOPTED: Yeas - 2  
Nays - 0

It was moved by Nash, supported by Markham, to certify attendance and authorize pro rata payment of \$25 per day to Ms. Markham.

ADOPTED: Yeas - 2  
Nays - 0

There being no further business, the meeting was adjourned.



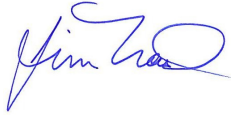
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Jim Nash, Chairperson

STATE OF MICHIGAN                    )  
  )SS.  
COUNTY OF OAKLAND                )

I, the undersigned, do hereby certify that the foregoing is a true and complete copy of the minutes of the Drainage Board for the Evergreen Road Storm Drain, Oakland County, Michigan, held on the 26<sup>th</sup> day of October, 2021, and that the minutes are on file in the office of the Oakland County Water Resources Commissioner and are available to the public.

I further certify that the notice of the meeting was posted at least 18 hours in advance of the meeting at the office of the Oakland County Water Resources Commissioner which is the principal office of the Drainage Board for the Evergreen Road Storm Drain Drainage District.



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Jim Nash, Chairperson

Dated: October 26, 2021

**OAKLAND COUNTY WATER RESOURCES COMMISSIONER**  
**MAINTENANCE ASSESSMENT RECOMMENDATION FOR THE**  
**Evergreen Road Storm Drain**

Assessment for estimated maintenance expenses for fiscal years: 2025 through 2027

Date last assessment approved: 10/26/21  
 Last Assessment: \$13,645  
 Current Available Cash: \$1,595

<b>Expenditure History:</b>	<b>Fiscal Year</b>	<b>Amount</b>
	2017	\$3,210
	2018	\$2,418
	2019	\$2,449
	2020	\$11,106
	2021	\$5,114
	2022	\$1,962
	2023	\$2,760
	2024 YTD	\$547

<b>Estimated Expenditures:</b>	<b>Year</b>	<b>Amount</b>
	2025	\$3,300
	2026	\$3,300
	2027	\$3,300
	<b>Total</b>	<b>\$9,900</b>

**Recommended Assessment:**

Total Anticipated Expenses 2025 - 2027 \$9,900

**TOTAL RECOMMENDED ASSESSMENT \$9,900**

Prepared by: Andrea Craft Date: 09/13/2024  
 Andrea Craft - Senior Engineering Systems Coordinator

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_  
 Geoff Wilson, P.E. - Chief Engineer

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_  
 Gary Nigro, P.E. - Manager

Note: Current Available Cash as of July 31, 2024, Fiscal Services Division Report.

**SPECIAL ASSESSMENT ROLL FOR THE MAINTENANCE  
OF THE EVERGREEN ROAD STORM DRAIN**

<b>Public Corporation</b>	<b>*Percentage of Apportionment</b>	<b>Total Amount of Assessment</b>		<b>Payment #1</b>	<b>Payment #2</b>	<b>Payment #3</b>	
City of Southfield	95.38516%	\$	9,443.13	\$	9,443.13	-	-
Road Commission for County of Oakland on account of drainage to county highways	1.29971%	\$	128.67	\$	128.67	-	-
Village of Beverly Hills	3.31513%	\$	328.20	\$	328.20	-	-
<b>Total</b>	<b>100.000%</b>	<b>\$</b>	<b>9,900.00</b>	<b>\$</b>	<b>9,900.00</b>	<b>\$</b>	<b>-</b>

\*Apportionment based on Final Order of Apportionment dated 5/31/1967.

Assessment Payment Due Date(s): Payment #1 10/31/2024

I hereby certify that I have prepared the Special Assessment Roll for the Maintenance of the Evergreen Road Storm Drain for the fiscal years 2025- 2027 in accordance with the direction of the Drainage Board and the statutory provisions applicable thereto.

\_\_\_\_\_  
Jim Nash  
Chairman of the Drainage Board for the Evergreen Road Storm Drain

The foregoing Special Assessment Roll for the maintenance of the Evergreen Road Storm Drain was approved by the Drainage Board on \_\_\_\_\_.

\_\_\_\_\_  
Jim Nash  
Chairman of the Drainage Board for the Evergreen Road Storm Drain

## **13. O'Donoghue Drain**

## **AGENDA**

### **DRAINAGE BOARD FOR THE O'DONOGHUE DRAIN**

September 24, 2024

1. Call meeting to order
2. Approve minutes of meeting of October 26, 2021
3. Public Comments
4. Present Maintenance Assessment Recommendation and Special Assessment Roll in the amount of \$7,200
5. Other business
6. Approve pro rata payment to Drainage Board members
7. Adjourn



**MINUTES OF THE MEETING OF THE DRAINAGE BOARD  
FOR THE O'DONOGHUE DRAIN**

October 26, 2021

A meeting of the Drainage Board for the O'Donoghue Drain was held in the office of the Oakland County Water Resources Commissioner, Public Works Building, One Public Works Drive, Waterford, Michigan at 2:00 p.m. on the 26<sup>th</sup> day of October, 2021.

The meeting was called to order by the Chairperson.

PRESENT: Jim Nash, Oakland County Water Resources Commissioner

Gwen Markham, Chairperson of the Finance Committee, Oakland County Board of Commissioners

ABSENT: David Woodward, Chairperson of the Oakland County Board of Commissioners

Minutes of the meeting held May 19, 2020 were presented for consideration. It was moved by Markham, supported by Nash, that the minutes be approved.

ADOPTED: Yeas - 2  
Nays - 0

Chairperson Nash asked if there were any public comments. There were none.

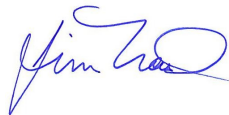
A Maintenance Assessment Recommendation and Special Assessment Roll in the amount of \$10,400 for the O'Donoghue Drain (as attached) were presented. It was moved by Markham, supported by Nash, to adopt the Maintenance Assessment Recommendation and Special Assessment Roll in the amount of \$10,400 as presented.

ADOPTED: Yeas - 2  
Nays - 0

It was moved by Nash, supported by Markham, to certify attendance and authorize pro rata payment of \$25 per day to Ms. Markham.

ADOPTED: Yeas - 2  
Nays - 0

There being no further business, the meeting was adjourned.



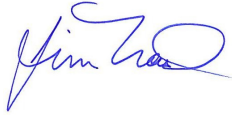
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Jim Nash, Chairperson

STATE OF MICHIGAN                    )  
  )SS.  
COUNTY OF OAKLAND                )

I, the undersigned, do hereby certify that the foregoing is a true and complete copy of the minutes of the Drainage Board for the O'Donoghue Drain, Oakland County, Michigan, held on the 26<sup>th</sup> day of October, 2021, and that the minutes are on file in the office of the Oakland County Water Resources Commissioner and are available to the public.

I further certify that the notice of the meeting was posted at least 18 hours in advance of the meeting at the office of the Oakland County Water Resources Commissioner which is the principal office of the Drainage Board for the O'Donoghue Drain Drainage District.



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Jim Nash, Chairperson

Dated: October 26, 2021

**OAKLAND COUNTY WATER RESOURCES COMMISSIONER**  
**MAINTENANCE ASSESSMENT RECOMMENDATION FOR THE**  
**O'Donoghue Drain**

Assessment for estimated maintenance expenses for fiscal years: 2025 through 2027

Date last assessment approved:	10/26/21	
Last Assessment:		\$10,400
Current Available Cash:		\$2,380

Expenditure History:	Fiscal Year	Amount
	2017	\$1,717
	2018	\$1,066
	2019	\$1,411
	2020	\$2,059
	2021	\$1,314
	2022	\$3,655
	2023	\$2,570
	2024 YTD	\$1,189

Estimated Expenditures:	Year	Amount
	2025	\$2,400
	2026	\$2,400
	2027	\$2,400
	<b>Total</b>	<b>\$7,200</b>

**Recommended Assessment:**

Total Anticipated Expenses 2025 - 2027	\$7,200
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<b>TOTAL RECOMMENDED ASSESSMENT</b>	<b>\$7,200</b>
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Prepared by: Andrea Craft Date: 09/16/2024  
 Andrea Craft - Senior Engineering Systems Coordinator

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_  
 Geoff Wilson, P.E. - Chief Engineer

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_  
 Gary Nigro, P.E. - Manager

Note: Current Available Cash as of July 31, 2024, Fiscal Services Division Report.

**SPECIAL ASSESSMENT ROLL FOR THE MAINTENANCE  
OF THE O'DONOGHUE DRAIN**

<b>Public Corporation</b>	<b>*Percentage of Apportionment</b>	<b>Total Amount of Assessment</b>	<b>Payment #1</b>	<b>Payment #2</b>	<b>Payment #3</b>
City of Southfield	85.8320%	\$ 6,179.90	\$ 6,179.90	-	-
Road Commission for County of Oakland on account of drainage to county highways	14.1680%	\$ 1,020.10	\$ 1,020.10	-	-
<b>Total</b>	<b>100.000%</b>	<b>\$ 7,200.00</b>	<b>\$ 7,200.00</b>	<b>\$ -</b>	<b>\$ -</b>

\*Apportionment based on Final Order of Apportionment dated 9/1/1971.

Assessment Payment Due Date(s): Payment #1 10/31/2024

I hereby certify that I have prepared the Special Assessment Roll for the Maintenance of the O'Donoghue Drain for the fiscal years 2025- 2027 in accordance with the direction of the Drainage Board and the statutory provisions applicable thereto.

\_\_\_\_\_  
Jim Nash  
Chairman of the Drainage Board for the O'Donoghue Drain

The foregoing Special Assessment Roll for the maintenance of the O'Donoghue Drain was approved by the Drainage Board on \_\_\_\_\_.

\_\_\_\_\_  
Jim Nash  
Chairman of the Drainage Board for the O'Donoghue Drain

## **14. Jensen Drain**

## **AGENDA**

### **DRAINAGE BOARD FOR THE JENSEN DRAIN**

September 24, 2024

1. Call meeting to order
2. Approve minutes of meeting of July 23, 2024
3. Public Comments
4. Present request for Board approval of payment of invoices and/or reimbursement of the Drain Revolving Fund in the amount of \$11,992.30
5. Other business
6. Approve pro rata payment to Drainage Board members
7. Adjourn

**MINUTES OF THE MEETING OF THE DRAINAGE BOARD  
FOR THE JENSEN DRAIN**

July 23, 2024

A meeting of the Drainage Board for the Jensen Drain was held in the office of the Oakland County Water Resources Commissioner, Public Works Building, One Public Works Drive, Waterford, Michigan at 2:00 p.m. on the 23<sup>rd</sup> day of July 2024.

The meeting was called to order by the Chairperson.

PRESENT: Jim Nash, Oakland County Water Resources Commissioner

Gwen Markham, Chairperson of the Finance Committee, Oakland County Board of Commissioners

ABSENT: David Woodward, Chairperson of the Oakland County Board of Commissioners

Minutes of the meeting held February 28, 2023, were presented for consideration. It was moved by Markham, supported by Nash, that the minutes be approved.

ADOPTED: Yeas - 2  
Nays - 0

Chairperson Nash asked if there were any public comments. There were none.


A request for approval of payment of invoices and/or reimbursement of the Drain Revolving Fund in the amount of \$1,285.60 (as attached) was presented. It was moved by Markham, supported by Nash, to approve the payment of invoices and/or reimbursement of the Drain Revolving Fund in the amount of \$1,285.60.

ADOPTED: Yeas - 2  
Nays - 0

It was moved by Nash, supported by Markham, to certify attendance and authorize pro rata payment of \$25 per day to Ms. Markham.

ADOPTED: Yeas - 2  
Nays - 0


There being no further business, the meeting was adjourned.

  
\_\_\_\_\_  
Jim Nash, Chairperson

STATE OF MICHIGAN                    )  
  )SS.  
COUNTY OF OAKLAND                )

I, the undersigned, do hereby certify that the foregoing is a true and complete copy of the minutes of the Drainage Board for the Jensen Drain, Oakland County, Michigan, held on the 23<sup>rd</sup> day of July 2024, and that the minutes are on file in the office of the Oakland County Water Resources Commissioner and are available to the public.

I further certify that the notice of the meeting was posted at least 18 hours in advance of the meeting at the office of the Oakland County Water Resources Commissioner which is the principal office of the Drainage Board for the Jensen Drain Drainage District.

  
\_\_\_\_\_  
Jim Nash, Chairperson

Dated: July 23, 2024



**MEMO TO:** Mr. Jim Nash, Chairman  
of the Drainage Board for the JENSEN DRAIN

**FROM:** Shawn Phelps, Chief of Fiscal Services  
OCWRC Accounting

**DATE:** September 24, 2024

**SUBJECT:** Request for Board approval of payment of the following invoices:

<u>Date</u>	<u>Ref No.</u>	<u>Paid To</u>	<u>For</u>	<u>Amount</u>
9/9/2024	V # SINV00286227	Detroit Pump Mfg Co / H & P Technologies	Invoice # 1083728 - Material and Supplies	\$11,992.30
			Total	<u>\$11,992.30</u>

## **15. Mainland Drain**

## **AGENDA**

### **DRAINAGE BOARD FOR THE MAINLAND DRAIN**

September 24, 2024

1. Call meeting to order
2. Approve minutes of meeting of August 27, 2024
3. Public Comments
4. Present request for Board approval of payment of invoices and/or reimbursement of the Drain Revolving Fund in the amount of \$40,619.12
5. Other business
6. Approve pro rata payment to Drainage Board members
7. Adjourn

**MINUTES OF THE MEETING OF THE DRAINAGE BOARD  
FOR THE MAINLAND DRAIN**

August 27, 2024

A meeting of the Drainage Board for the Mainland Drain was held in the office of the Oakland County Water Resources Commissioner, Public Works Building, One Public Works Drive, Waterford, Michigan at 2:00 p.m. on the 27<sup>th</sup> day of August 2024.

The meeting was called to order by the Chairperson.

PRESENT: Jim Nash, Oakland County Water Resources Commissioner

David Woodward, Chairperson of the Oakland County Board of Commissioners

ABSENT: Gwen Markham, Chairperson of the Finance Committee, Oakland County Board of Commissioners

Minutes of the meeting held July 23, 2024, were presented for consideration. It was moved by Woodward, supported by Nash, that the minutes be approved.

ADOPTED: Yeas - 2  
Nays - 0

Chairperson Nash asked if there were any public comments. There were none.

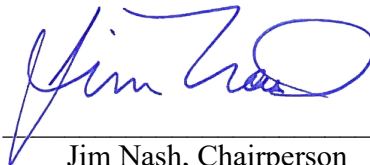
A request for approval of payment of invoices and/or reimbursement of the Drain Revolving Fund in the amount of \$60,220.88 (as attached) was presented. It was moved by Woodward, supported by Nash, to approve the payment of invoices and/or reimbursement of the Drain Revolving Fund in the amount of \$60,220.88.

ADOPTED: Yeas - 2  
Nays - 0

It was moved by Nash, supported by Woodward, to certify attendance and authorize pro rata payment of \$25 per day to Mr. Woodward.

ADOPTED: Yeas - 2  
Nays - 0

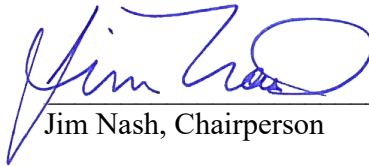
There being no further business, the meeting was adjourned.

  
\_\_\_\_\_  
Jim Nash, Chairperson

STATE OF MICHIGAN                    )  
  )SS.  
COUNTY OF OAKLAND                )

I, the undersigned, do hereby certify that the foregoing is a true and complete copy of the minutes of the Drainage Board for the Mainland Drain, Oakland County, Michigan, held on the 27<sup>th</sup> day of August 2024, and that the minutes are on file in the office of the Oakland County Water Resources Commissioner and are available to the public.

I further certify that the notice of the meeting was posted at least 18 hours in advance of the meeting at the office of the Oakland County Water Resources Commissioner which is the principal office of the Drainage Board for the Mainland Drain Drainage District.



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Jim Nash, Chairperson

Dated: August 27, 2024

MEMO TO: Mr. Jim Nash, Chairman  
of the Drainage Board for the MAINLAND DRAIN (Construction Fund)

FROM: Shawn Phelps, Chief of Fiscal Services  
OCWRC Accounting

*HP for Shawn Phelps*

DATE: September 24, 2024

SUBJECT: Request for Board approval of payment of the following invoices:

<u>Date</u>	<u>Ref No.</u>	<u>Paid To</u>	<u>For</u>	<u>Amount</u>
9/12/2024	# SINV00287228	GEI Consultants Inc	Invoice #025022679 - Contracted Services - 06/29/24- 07/26/24 - Proj 1-7640	\$ 40,619.12
			<b>TOTAL Project 1-7640</b>	<b>\$ 40,619.12</b>

## **16. Northwest Oakland Sanitary Sewer Drain**

## **AGENDA**

### **DRAINAGE BOARD FOR THE NORTHWEST OAKLAND SANITARY SEWER DRAIN**

September 24, 2024

1. Call meeting to order
2. Approve minutes of meeting of June 25, 2024
3. Public Comments
4. Present request for Board approval of payment of invoices and/or reimbursement of the Drain Revolving Fund in the amount of \$22,165.00
5. Other business
6. Approve pro rata payment to Drainage Board members
7. Adjourn



**MINUTES OF THE MEETING OF THE DRAINAGE BOARD  
FOR THE NORTHWEST OAKLAND SANITARY SEWER DRAIN**

June 25, 2024

A meeting of the Drainage Board for the Northwest Oakland Sanitary Sewer Drain was held in the office of the Oakland County Water Resources Commissioner, Public Works Building, One Public Works Drive, Waterford, Michigan at 2:00 p.m. on the 25<sup>th</sup> day of June 2024.

The meeting was called to order by the Chairperson.

PRESENT: Jim Nash, Oakland County Water Resources Commissioner

David Woodward, Chairperson of the Oakland County Board of Commissioners

ABSENT: Gwen Markham, Chairperson of the Finance Committee, Oakland County Board of Commissioners

Minutes of the meeting held March 26, 2024, were presented for consideration. It was moved by Woodward, supported by Nash, that the minutes be approved.

ADOPTED: Yeas - 2  
Nays - 0

Chairperson Nash asked if there were any public comments. There were none.

A memorandum from Sara Rubino, Government Policy Attorney, dated June 25, 2024, requesting the Board approve the Congressional Community Project grant agreement and authorize Oakland County to administer the grant pursuant to its terms was presented. It was moved by Woodward, supported by Nash, to approve the Congressional Community Project grant agreement and authorize Oakland County to administer the grant pursuant to its terms as presented.

ADOPTED: Yeas - 2  
Nays - 0

A memorandum from Jen Cook, P.E., Project Engineer, dated June 25, 2024, requesting the Board authorize the Chairperson to execute the engineering contract with ROWE for a not-to-exceed price of \$998,920 was presented. It was moved by Woodward, supported by Nash, to authorize the Chairperson to execute the engineering contract with ROWE for a not-to-exceed price of \$998,920 as presented.

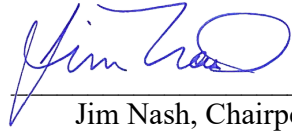
ADOPTED: Yeas - 2  
Nays - 0

It was moved by Nash, supported by Woodward, to certify attendance and authorize pro rata payment of \$25 per day to Mr. Woodward.

ADOPTED: Yeas - 2

Nays - 0

There being no further business, the meeting was adjourned.




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Jim Nash, Chairperson

STATE OF MICHIGAN                    )  
  )SS.  
COUNTY OF OAKLAND                )

I, the undersigned, do hereby certify that the foregoing is a true and complete copy of the minutes of the Drainage Board for the Northwest Oakland Sanitary Sewer Drain, Oakland County, Michigan, held on the 25<sup>th</sup> day of June 2024, and that the minutes are on file in the office of the Oakland County Water Resources Commissioner and are available to the public.

I further certify that the notice of the meeting was posted at least 18 hours in advance of the meeting at the office of the Oakland County Water Resources Commissioner which is the principal office of the Drainage Board for the Northwest Oakland Sanitary Sewer Drain Drainage District.

  
\_\_\_\_\_  
Jim Nash, Chairperson

Dated: June 25, 2024

**MEMO TO:** Mr. Jim Nash, Chairman  
of the Drainage Board for the NORTHWEST OAKLAND SANITARY DRAIN

**FROM:** Shawn Phelps, Chief of Fiscal Services  
OCWRC Accounting

**DATE:** September 24, 2024

**SUBJECT:** Request for Board approval of payment of the following invoices:

<u>Date</u>	<u>Ref No.</u>	<u>Paid To</u>	<u>For</u>	<u>Amount</u>
9/19/2024	SINV00287967	Rowe Professional Services Company	Invoice # 2400273 - Engineering Survey - 07/31/24 - Proj 1-7469	\$ 22,165.00
			<b>Total</b>	<b>\$ 22,165.00</b>

## **17. Tribute Drain**

## **AGENDA**

### **DRAINAGE BOARD FOR THE TRIBUTE DRAIN**

September 24, 2024

1. Call meeting to order
2. Approve minutes of meeting of August 27, 2024
3. Public Comments
4. Present request for Board approval of payment of invoices and/or reimbursement of the Drain Revolving Fund in the amount of \$84,500.00
5. Other business
6. Approve pro rata payment to Drainage Board members
7. Adjourn

**MINUTES OF THE MEETING OF THE DRAINAGE BOARD  
FOR THE TRIBUTE DRAIN**

August 27, 2024

A meeting of the Drainage Board for the Tribute Drain was held in the office of the Oakland County Water Resources Commissioner, Public Works Building, One Public Works Drive, Waterford, Michigan at 2:00 p.m. on the 27<sup>th</sup> day of August 2024.

The meeting was called to order by the Chairperson.

PRESENT: Jim Nash, Oakland County Water Resources Commissioner

David Woodward, Chairperson of the Oakland County Board of Commissioners

ABSENT: Gwen Markham, Chairperson of the Finance Committee, Oakland County Board of Commissioners

Minutes of the meeting held June 25, 2024, were presented for consideration. It was moved by Woodward, supported by Nash, that the minutes be approved.

ADOPTED: Yeas - 2  
Nays - 0

Chairperson Nash asked if there were any public comments. There were none.

A Maintenance Assessment Recommendation and Special Assessment Roll in the amount of \$279,203 for the Tribute Drain (as attached) were presented. It was moved by Woodward, supported by Nash, to adopt the Maintenance Assessment Recommendation and Special Assessment Roll in the amount of \$279,203 as presented.

ADOPTED: Yeas - 2  
Nays - 0

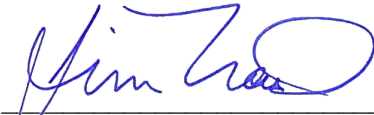
A request for approval of payment of invoices and/or reimbursement of the Drain Revolving Fund in the amount of \$129,016.16 (as attached) was presented. It was moved by Woodward, supported by Nash, to approve the payment of invoices and/or reimbursement of the Drain Revolving Fund in the amount of \$129,016.16.

ADOPTED: Yeas - 2  
Nays - 0

It was moved by Nash, supported by Woodward, to certify attendance and authorize pro rata payment of \$25 per day to Mr. Woodward.

ADOPTED: Yeas - 2  
Nays - 0

There being no further business, the meeting was adjourned.



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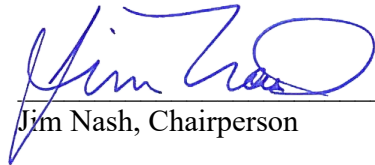
Jim Nash, Chairperson



STATE OF MICHIGAN                    )  
  )SS.  
COUNTY OF OAKLAND                )

I, the undersigned, do hereby certify that the foregoing is a true and complete copy of the minutes of the Drainage Board for the Tribute Drain, Oakland County, Michigan, held on 27<sup>th</sup> day of August 2024, and that the minutes are on file in the office of the Oakland County Water Resources Commissioner and are available to the public.

I further certify that the notice of the meeting was posted at least 18 hours in advance of the meeting at the office of the Oakland County Water Resources Commissioner which is the principal office of the Drainage Board for the Tribute Drain Drainage District.

  
\_\_\_\_\_  
Jim Nash, Chairperson

Dated: August 27, 2024

**MEMO TO:** Mr. Jim Nash, Chairman  
of the Drainage Board for the TRIBUTE DRAIN

**FROM:** Shawn Phelps, Chief of Fiscal Services *Ⓜ for Shawn Phelps*  
OCWRC Accounting

**DATE:** September 24, 2025

**SUBJECT:** Request for Reimbursement of Drain Revolving Fund

The following is a detail of Maintenance charges paid from the Drain Revolving  
for the period ending September 18, 2024.

<u>G/L Date</u>	<u>Ref No.</u>	<u>Paid To</u>	<u>For</u>	<u>Amount</u>
9/12/2024	# SINV00287218	DVM Utilities Inc	Invoice # 1 Storm Conduit - Contracted Services - Proj # 1-7661	\$ 84,500.00
			<b>Subtotal - Project 1-7661</b>	<b>\$ 84,500.00</b>
			<b>Total</b>	<b>\$ 84,500.00</b>

## **18. Varner Relief Drain**

## **AGENDA**

### **DRAINAGE BOARD FOR THE VARNER RELIEF DRAIN**

September 24, 2024

1. Call meeting to order
2. Approve minutes of meeting of November 28, 2023
3. Public Comments
4. Present request for Board approval of payment of invoices and/or reimbursement of the Drain Revolving Fund in the amount of \$15,750.00
5. Other business
6. Approve pro rata payment to Drainage Board members
7. Adjourn

**MINUTES OF THE MEETING OF THE DRAINAGE BOARD  
FOR THE VARNER RELIEF DRAIN**

November 28, 2023

A meeting of the Drainage Board for the Varner Relief Drain was held in the office of the Oakland County Water Resources Commissioner, Public Works Building, One Public Works Drive, Waterford, Michigan at 2:00 p.m. on the 28<sup>th</sup> day of November 2023.

The meeting was called to order by the Chairperson.

PRESENT: Jim Nash, Oakland County Water Resources Commissioner

Gwen Markham, Chairperson of the Finance Committee, Oakland County Board of Commissioners

ABSENT: David Woodward, Chairperson of the Oakland County Board of Commissioners

Minutes of the meeting held February 25, 2020, were presented for consideration. It was moved by Markham, supported by Nash, that the minutes be approved.

ADOPTED: Yeas - 2  
Nays - 0

Chairperson Nash asked if there were any public comments. There were none.

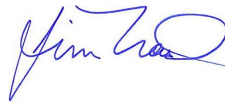
A Maintenance Assessment Recommendation and Special Assessment Roll in the amount of \$14,831 for the Varner Relief Drain (as attached) were presented. It was moved by Markham, supported by Nash, to adopt the Maintenance Assessment Recommendation and Special Assessment Roll in the amount of \$14,831 as presented.

ADOPTED: Yeas - 2  
Nays - 0

It was moved by Nash, supported by Markham, to certify attendance and authorize pro rata payment of \$25 per day to Ms. Markham.

ADOPTED: Yeas - 2  
Nays - 0

There being no further business, the meeting was adjourned.



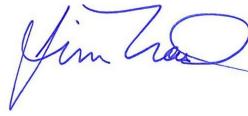
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Jim Nash, Chairperson

STATE OF MICHIGAN                    )  
  )SS.  
COUNTY OF OAKLAND                )

I, the undersigned, do hereby certify that the foregoing is a true and complete copy of the minutes of the Drainage Board for the Varner Relief Drain, Oakland County, Michigan, held on the 28<sup>th</sup> day of November 2023, and that the minutes are on file in the office of the Oakland County Water Resources Commissioner and are available to the public.

I further certify that the notice of the meeting was posted at least 18 hours in advance of the meeting at the office of the Oakland County Water Resources Commissioner which is the principal office of the Drainage Board for the Varner Relief Drain Drainage District.



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Jim Nash, Chairperson

Dated: November 28, 2023

**MEMO TO:** Mr. Jim Nash, Chairman  
of the Drainage Board for the VARNER RELIEF DRAIN

**FROM:** Holly Conforti, Chief of Fiscal Services  
OCWRC Accounting

*Ⓟ for Shawn Phelps*

**DATE:** September 24, 2024

**SUBJECT:** Request for Reimbursement of Drain Revolving Fund

The following is a detail of Maintenance charges paid from the Drain Revolving Fund for the period ending July 08, 2014.

<u>Date</u>	<u>Ref No.</u>	<u>Paid To</u>	<u>For</u>	<u>Amount</u>
8/23/2024	V # SINV00282971	Duke's Root Control Inc	Invoice # 25039 - Inspection	\$ 15,750.00
				<u>\$ 15,750.00</u>