

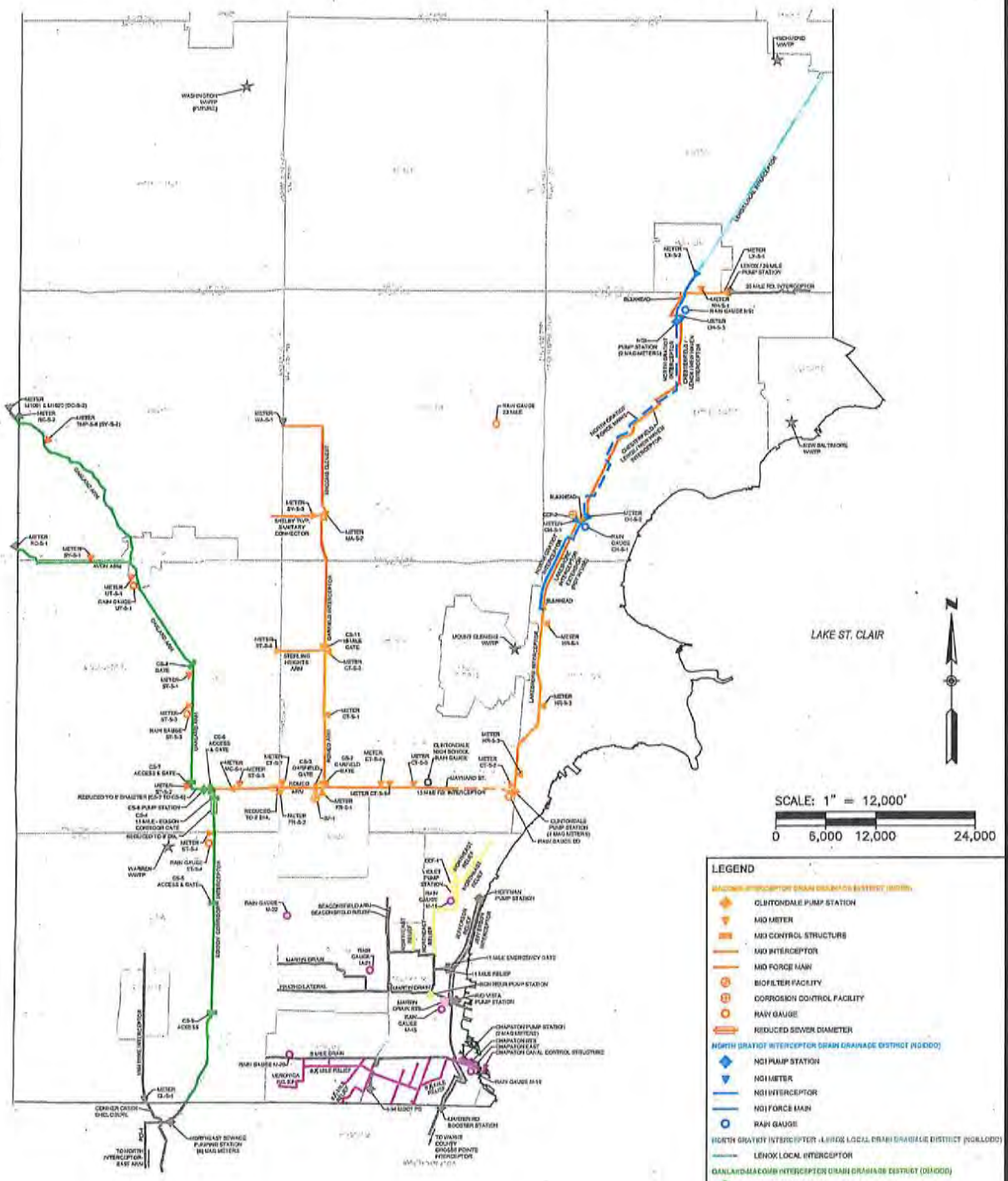
EIGHT AND ONE-HALF MILE RELIEF DRAIN
INTRA-COUNTY DRAINAGE BOARD
AUGUST 10, 2020
10:00 A.M.
AGENDA

NOTE: THIS MEETING WILL BE HELD BY TELECONFERENCE

Call in Number: 1-408-418-9388
Access Code: 129 206 6430

	Page
1. Call of meeting to order and roll call	
2. Approval of Agenda for August 10, 2020	
3. Approval of Minutes for July 13, 2020	3
4. Public Participation	
5. Project Updates - Vince Astorino	
6. Eight and One-Half Mile Relief Drain (Chapaton) Proposed 2020/21 Budget – Brian Baker	5
Motion: To approve the 2020/21 Eight and One-Half Mile Relief Drain budget and revenue requirement for the fiscal year beginning October 1, 2020	
7. Owner Controlled Insurance Program (OCIP) Premiums - Stephen Downing	23
Motion: To authorize the Board Chair to bind the Builder's Risk, Contractor's Pollution Liability, and Owner's Protective Professional Liability insurance for the In-System Storage project through Meadowbrook Insurance Agency for an amount not to exceed \$79,317.	
8. Consideration for approval of invoices (see attached)	65
9. Financial Report – Bruce Manning	118
10. Adjourn	

MACOMB COUNTY WASTEWATER SYSTEMS



- LEGEND**
- OLTONDALE INTERCEPTOR DRAIN GRABAGE DISTRICT (04000)
 - ◆ OLTONDALE PUMP STATION
 - ▽ MD METER
 - MD CONTROL STRUCTURE
 - MD INTERCEPTOR
 - MD FORCE MAIN
 - ⊙ BIO-FILTER FACILITY
 - ⊙ CORROSION CONTROL FACILITY
 - RAIN GAUGE
 - REDUCED SEWER DIAMETER
 - NORTH GRAYLET INTERCEPTOR DRAIN GRABAGE DISTRICT (06000)
 - ◆ NG1 PUMP STATION
 - ▽ NG1 METER
 - NG1 INTERCEPTOR
 - NG1 FORCE MAIN
 - RAIN GAUGE
 - NORTH GRAYLET INTERCEPTOR - LEWIS LOCAL DRAIN GRABAGE DISTRICT (06L000)
 - LEWIS LOCAL INTERCEPTOR
 - ◆ OAKLAND LOCAL INTERCEPTOR DRAIN GRABAGE DISTRICT (08000)
 - ◆ CS-4 PUMP STATION
 - ▽ OMB METER
 - OMB CONTROL STRUCTURE
 - OMB INTERCEPTOR
 - REDUCED SEWER DIAMETER
 - 810 MILE RELAY DRAIN GRABAGE DISTRICT
 - ◆ CHAPATON WEST PUMP STATION
 - ▽ CHAPATON RETENTION TREATMENT BASIN
 - CHAPATON CANAL CONTROL GATE
 - 812 MILE INTERCEPTOR
 - RAIN GAUGE
 - ◆ SEMIWOODS PUMP STATION
 - ▽ CORROSION CONTROL FACILITY
 - SEMIWOODS INTERCEPTOR
 - NORTH GRAYLET INTERCEPTOR - CHAPATON DRAIN GRABAGE DISTRICT (06000)
 - ▽ MARTIN DRAIN RETENTION TREATMENT BASIN
 - OTHER SYSTEMS**
 - ◆ PUMP STATION
 - ▽ METER
 - ★ WWTP
 - INTERCEPTOR

Candice S. Miller
 MACOMB COUNTY PUBLIC WORKS COMMISSIONER



UPDATED: APRIL 2017

An adjourned meeting of the Intra-County Drainage Board for the **EIGHT AND ONE-HALF MILE RELIEF DRAIN** was held via telephone conference per the State of Michigan Executive Order due to the COVID-19 pandemic, on July 13, 2020, at 10:03 A.M.

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

ALSO PRESENT: Marvin Sauger, Harold Haugh, Robert Mijac, Joseph Romano, Macomb County Board of Commissioners; Brian Baker, Chief Deputy, Stephen Downing, Construction & Maintenance Manager, Bruce Manning, Financial Manager, Tom Stockel, Construction Engineer, Jeff Bednar P.E., Environmental Resources Manager, Vince Astorino, Operations & Flow Manager, Kellie Kource, Drain Account Specialist, Macomb County Public Works; Jerry Santoro, Macomb County Planning

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

Adopted: YEAS: 3
NAYS: 0

Minutes of the meeting of June 8, 2020 were presented. A motion was made by Mr. Santo, supported by Ms. Klinefelt to approve the minutes as presented.

Adopted: YEAS: 3
NAYS: 0

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

Mr. Astorino updated the board that the disinfection project design for Chapaton and Martin is scheduled to go out to bid in late July. We did have a discharge at Chapaton and Martin over the past weekend. Chapaton discharged 26.8 million gallons, and we were well under our permit requirement numbers. The pump and screen project is moving along, and the bar screen portion which protects the pumps is complete.

A motion was made by Ms. Klinefelt, supported by Mr. Santo to receive and file the project update by Mr. Astorino.

Adopted: YEAS: 3
NAYS: 0

Mr. Astorino updated the board that the disinfection pumps are from 1978 and are a critical component of the pump station. It allows us to treat the water that comes into the facility, and we cannot treat the water that comes in if they fail. We are expediting the pump purchase in order to have the pumps ready for the workers when they show up on site for the disinfection project.

A motion was made by Ms. Klinefelt, supported by Mr. Santo to approve the quotation from Watson Marlow, Inc. for the fabrication and delivery of the hose pumps for the Chapaton & Martin Retention

Treatment Basin Disinfection Improvement Project for a Lump Sum cost of \$111,182.00 (8.5 Mile share \$79,416).

Adopted: YEAS: 3
NAYS: 0

The Chair presented the invoices totaling \$308,574.21 to the board for review and approval.

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

Adopted: YEAS: 3
NAYS: 0

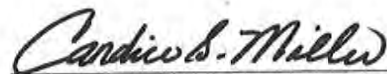
A motion to receive and file the financial report given by Mr. Manning was made by Mr. Santo and supported by Ms. Klinefelt.

Adopted: YEAS: 3
NAYS: 0

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

Adopted: YEAS: 3
NAYS: 0

The meeting was adjourned at 10:16 a.m.



Candice S. Miller, Chair
Macomb County Public Works Commissioner

STATE OF MICHIGAN
COUNTY OF MACOMB

I certify that the foregoing is a true and correct copy of proceedings taking by the Intra-County Drainage Board for the Drainage District shown on the attached set of minutes, on July 13, 2020 the original of which is on file in the Public Works Commissioner's Office. Public notice of the meeting was given pursuant to Act No. 267, Public Acts of Michigan, 1975, including, in the case of a special or rescheduled meeting or a meeting secured for more than 36 hours, notice by posting at least 18 hours prior to the time set for the meeting.



Candice S. Miller, Chair
Macomb County Public Works Commissioner

DATED: 7/13/20

8.5 Mile Relief Drain (Chapaton) 2020/21 Budget Summary

Attached is the proposed 2020/21 Chapaton budget for the fiscal year beginning October 1, 2020. The budget is scheduled to be adopted at the August 10, 2020 Drain Board meeting. The cities of Eastpointe and St. Clair Shores have both received a copy of the proposed budget. The budget includes a detailed explanation for each budget item change.

In summary, the proposed Chapaton budget funds improved operations and maintenance of our aging assets and projects that will further reduce combine sewer overflows and improve water quality. The community contribution (debt and O&M) increase of 4.9% is less than the projected 5% increase provided to the two communities earlier this year and upon which their own budgets were established.

As discussed last year, assessments are increasing due to new NPDES permit requirements and needed maintenance and repairs identified by the SAW grant. The SAW grant identified \$25 million of capital improvement needs over the next 20 years. This budget funds next year's capital needs, establishes a plan for continued needed repairs into the future, and reduces CSO's.

The budget includes:

1. \$1.3 million toward the design of a replacement basin flushing system based on results of a 2020 study (this will be a multi-year collection with a projected \$3.5 million cost).
2. \$750,000 for the design and construction of basin structural repairs based on a 2019 study.
3. \$500,000 for structural repairs to the 9 Mile Bypass pipe.
4. \$100,000 for a replacement overhead equipment hatch crane.
5. Carryover funds for the construction of the disinfection system upgrade, to relocate the laboratory and complete the office space improvements, and the in-system storage project.

The elimination of funding for one time projects for the basin expansion design, the pump and screen project, and a SCADA server update partially offset these new costs.

Other funding changes include increased State NPDES Permit fees, NexGen software renewal fees, the purchase of a scissor lift, lining of a Chlorine storage tank, and paving of the side access road to basin. Savings were achieved in lower chemical, laboratory, and wet well vector cleaning costs.

With likely denial of the EGLE permit for the basin expansion, and the receipt of \$7 million of grant funds, and funds already collected, we anticipate needing only an \$8 million SRF loan will for the in-system storage project. The annual \$500,000 debt for this project will come online in FY 21/22. The budget includes \$1.25 million of one-time projects that will fall off next year, so that there will be more than enough to fund the annual debt costs and remaining basin flushing system costs.

8.5 Mile FY2021 Project Budget Prioritization

Rank	Project	Description	Budget
1	Chapaton Basin Structural Repairs	Structural study was done in 2019 on the Chapaton basin. It was found that there was spalled concrete, leaking wall cracks/joints, leaking ceiling cracks, horizontal cracks in Bay's 19 to 21, and corrosion of reinforcement support chairs throughout the basin ceiling. This is for the design and construction of those repairs.	\$ 750,000
2	9 Mile Bypass Structural Repairs	During the evaluation of this section of pipe, which is still part of the original construction in the mid-1920's, it was found to need significant repairs. 23 PACP Level 4 and 82 PACP Level 5 defects were found. This is an immediate need and the new funding will cover construction of this work. The design has already been completed.	\$ 500,000
3	Flushing System Replacement	The flushing system has reached the end of its useful life and is in need of replacement. A study of this was completed in early 2020 and the recommendation is to replace. This will be a multi year collection and the first year will start the design of this replacement. Projected total cost is 3.5 million	\$ 1,328,480
4	Chlorine Storage Tank #3 Relining	The liner within chlorine storage tank #3 is in need of replacement.	\$ 7,500
5	Equipment Hatch Crane Replacement	This overhead crane which lowers heavy equipment down into the basin for cleaning and repairs has reached the end of its useful life. It is recommended to replace this unit.	\$ 100,000
6	Scissor Lift	Staff have to use a scissor lift within the basin and around the facility to make repairs. This equipment has been rented on numerous occasions to make this happen. This cost could be potentially split 50/50 with this MIDD as this would be useful at the Clintondale PS as well.	\$ 23,000
7	Pave Side Road to Basin	There is a side road that is used by the operators and is currently crushed gravel. This is used frequently by our staff and we are recommending to pave it.	\$ 15,000
Total Budget			\$ 2,723,980

**8.5 MILE COMMUNITIES
TOTAL CHARGES
FY 2020 vs FY 2021**

Cost Category	2019/2020	2020/2021	Difference	% Change	Page #
	Charge	Charge			
1) 8.5 Mile Relief O&M/Charge Required Revenue	4,279,768	4,509,865	230,097	5.4%	2,4
2) Debt	388,986	386,558	(2,428)	-0.6%	3
TOTAL	4,668,754	4,896,423	227,669	4.9%	

Communities	2019/2020	2020/2021	Difference	% Change
	Charge	Charge		
Eastpointe (54.33%)	2,536,740	2,660,442	123,702	4.9%
St. Clair Shores (25.13%)	1,173,198	1,230,408	57,210	4.9%
Michigan (16.04%)	748,722	785,233	36,511	4.9%
Macomb County (2.25%)	105,047	110,170	5,123	4.9%
Dept of Roads (2.25%)	105,047	110,170	5,123	4.9%
TOTAL	4,668,754	4,896,423	227,669	4.9%

**8.5 MILE DRAIN DRAINAGE DISTRICT
2020-2021 CHARGES
EFFECTIVE OCTOBER 1, 2020**

8.5 MILE RELIEF CHARGES	Total Annual	Monthly	Eastpointe	St. Clair Shores	Michigan	Macomb County	Dept of Roads	Total
			54.33%	25.13%	16.04%	2.25%	2.25%	100.00%
8.5 Mile Relief O&M	4,509,865	375,822	204,201	94,439	60,270	8,456	8,456	375,822
		O&M Total	2,450,408	1,133,271	723,241	101,472	101,472	4,509,865
		Debt Total ⁽¹⁾	210,034	97,137	61,992	8,698	8,698	386,558
		Grand Total	2,660,442	1,230,408	785,233	110,170	110,170	4,896,423

NOTE

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

DEBT WORKSHEET

8.5 MILE RELIEF 2020-2021 DEBT WORKSHEET

Not part of O&M invoice. Debt will be invoiced separately every 6 months

No paying agent fees because all SRF bonds

DEBT SERVICE	Principal	Interest	Total	Eastpointe	St. Clair Shores	Michigan	Macomb County	Dept of Roads	Total
SRF 5579-01	20,000	7,960	27,960	15,191	7,026	4,484	629	629	27,960
SRF 5460-01	20,000	6,508	26,508	14,403	6,661	4,251	596	596	26,508
SRF 5393-01	60,000	18,214	78,214	42,497	19,654	12,543	1,760	1,760	78,214
SRF 5306-01	200,000	53,876	253,876	137,943	63,796	40,714	5,712	5,712	253,876
TOTAL	300,000	86,558	386,558	210,034	97,137	61,992	8,698	8,698	386,558

NOTES

- 1) SEMCWWDS and Martin Sanitary are included on separate budget
- 2) Expected new debt in 21/22 for in-system storage and possibly for Canal Expansion.

8.5 MILE RELIEF
Operations Maintenance
Budget to Actual

Description	Page #	Actual 2018/2019	Actual 5/31/2020	Projected 9/30/2020	Budget 2019/2020	Budget 2020/2021	Budget Change	% Change
EXPENSE								
Application/Permit Fee	5	3,000	6,000	6,000	3,000	6,000	3,000	100.0%
Dues, Training, Conf, Subs.	6	10,118	106	12,813	5,750	12,850	7,100	123.5%
Engineering	7	872,729	1,289,332	1,900,252	4,270,000	6,948,990	2,678,990	62.7%
New Equipment	8	72,202	12,261	33,761	23,500	15,500	(8,000)	-34.0%
Office Supplies	9	1,204	362	662	1,000	750	(250)	-25.0%
Operating Supplies	10	55,011	27,413	45,263	74,600	63,700	(10,900)	-14.6%
Other Professional Svcs	11	32,504	28,240	60,740	46,800	46,700	(100)	-0.2%
Personnel Services	12	825,117	431,550	864,438	979,953	1,061,320	81,367	8.3%
Repair & Maintenance	13	238,918	208,497	1,168,497	1,298,500	372,540	(925,960)	-71.3%
Contrib to Reserves(Maint and SCADA)	13 & 14	288,240	288,240	288,240	288,240	288,245	5	0.0%
Scada System	14	179,784	65,378	140,336	214,814	136,680	(78,134)	-36.4%
Utilities	15	304,724	180,633	241,069	273,125	274,100	975	0.4%
Total Expense		2,883,550	2,538,012	4,762,070	7,479,282	9,227,375	1,748,094	23.4%
REVENUE								
Interest Earned	16	94,243	153,177	213,177	80,000	175,000	95,000	118.8%
Other Revenue	16	3,261	792	5,730	5,000	4,000	(1,000)	-20.0%
8.5 O&M/Charge Required Revenue	16	3,898,266	4,279,768	4,279,768	4,279,768	4,509,865	230,097	5.4%
Carryforward	16	752,519	1,302,856	2,632,856	2,960,000	4,522,050	1,562,050	52.8%
Rental Fee	16	15,638	10,977	12,349	16,464	16,460	(4)	0.0%
Use of SCADA Reserve	16	0	53,270	103,271	138,050	0	(138,050)	100.0%
Grants and Bonds	16	6,000,000	738,112	738,112	0	0	0	0.0%
Total Revenue		10,763,927	6,538,952	7,985,263	7,479,282	9,227,375	1,748,094	23.4%

Reserve⁽¹⁾ 11,507,708 12,507,697 3,750,876

Additional Notes

1) Broken out as follows:

Disinfection system upgrade	0	901,625	0
RTB/PS Ventilation Design	120,000	0	0
Chapaton Improvements-Lab Relocation	250,000	166,910	0
Chapaton Improvements-Office Space/HVAC	0	820,000	0
Basin Expansion Design	1,000,000	0	0
In-System Storage Design/Const Admin/Const	500,000	2,250,000	0
Design 9 Mile Bypass	94,975	44,165	0
As Needed Engineering	0	87,810	0
Pumping and Screening Improvements	1,215,808	211,540	0
PLC Replacements at Chapaton East	40,000	40,000	0
Capital Reserve	985,486	1,354,132	1,354,132
Scada Reserve	109,025	34,779	63,809
SRF Replacement Reserve	1,814,505	2,073,720	2,332,935
LSCWWI 04B Transfer	0	738,112	0
Project Contribution from Macomb Cty	2,000,000	2,000,000	0
In System Contribution from SEMSD	1,000,000	1,000,000	0
Expansion Reserve (From State)	2,377,909	784,904	0
	<u>11,507,708</u>	<u>12,507,697</u>	<u>3,750,876</u>

FY 2020-2021
8.5 MILE RELIEF BUDGET DETAIL SHEET
EXPENDITURE REQUEST SHEET

FUND: 0017
 ACTIVITY: Application/Permit Fee

P/Y BUDGET:	\$3,000
REQUEST:	\$6,000
INC/(DEC.):	\$3,000

ACCOUNT EXPLANATION:

DESCRIPTION	20/21	19/20
1) Annual NPDES Permit	6,000	3,000

INCREASE/DECREASE EXPLANATION:

1) 50/50 split with Martin. Increased due to state charging more.

**FY 2020-2021
8.5 MILE RELIEF BUDGET DETAIL SHEET
EXPENDITURE REQUEST SHEET**

FUND: 0017
ACTIVITY: Dues, Training, & Conf

P/Y BUDGET: \$5,750
REQUEST: \$12,850
INC/(DEC.): \$7,100

ACCOUNT EXPLANATION:

DESCRIPTION	20/21	19/20
1) Certification, Licenses, Training	3,000	3,000
2) Professional Dues and Subscriptions	250	250
3) NexGen Renewal	9,600	2,500
Total	12,850	5,750

INCREASE/DECREASE EXPLANATION:

- 1) Operators state certified for RTBs and annual confined space training. _____
- 1-2) Split with Martin and SEMCWWDS. _____
- 3) Annual renewal for the asset management software. Renewal has increased significantly due to an added contractor portal. Cost was split evenly between MIDDD, SEMCWWDS, Martin, and 8.5, however, it is now split 50% MIDDD, the other 50% is split 10% SEMCWWDS, 15% Martin and 25% 8.5 Mile. _____

**FY 2020-2021
8.5 MILE RELIEF BUDGET DETAIL SHEET
EXPENDITURE REQUEST SHEET**

Fund: 0017
Activity: Engineering

P/Y BUDGET: \$4,270,000
REQUEST: \$6,948,990
INC/(DEC.): \$2,678,990

ACCOUNT EXPLANATION:

Proj #	DESCRIPTION	20/21	19/20
1)	Flushing system replacement-Design	1,328,480	0
2)	Basin Structural Repairs-Design & Construction	750,000	0
3)	Equipment hatch crane replacement	100,000	0
4)	9 Mile Bypass Pipe Structural Repairs (already designed)	500,000	0
Total New Projects		2,678,480	0
5)	Disinfection system upgrade (Design and Construction)	901,625	1,000,000
6)	HVAC Improvement	0	200,000
7)	Flushing Study	0	75,000
8)	RTB/PS Ventilation Design	0	120,000
9)	Chapaton Improvements-Lab Relocation	166,910	250,000
10)	Chapaton Improvements-Office Space	820,000	500,000
11)	Basin Expansion Design	0	775,000
12)	In-System Storage-Construction Admin and Construction	2,250,000	1,200,000
13)	9 Mile Bypass-Design	44,165	75,000
14)	As needed Engineering	87,810	75,000
Total Carryover Projects		4,270,510	4,270,000
TOTAL ALL PROJECTS		6,948,990	4,270,000

INCREASE/DECREASE EXPLANATION:

- 1) The flushing system has reached the end of its useful life and is in need of replacement. A study of this was completed in early 2020 and the recommendation is to replace. This will be a multi year collection and the first year will start the design of this replacement. Total project estimated to be \$3.5 million.
 - 2) Structural study was done in 2019 on the Chapaton basin. It was found that there was spalled concrete, leaking wall cracks/joints, leaking ceiling cracks, horizontal cracks in bays 19 to 21 and corrosion of reinforcement support chairs throughout the basin ceiling. This is for the design and construction of those repairs.
 - 3) This overhead crane which lowers heavy equipment down into the basin for cleaning and repairs has reached the end of its useful life. It is recommended to replace this unit.
 - 4) During evaluation of this section of pipe, which is still part of the original construction in the mid-1920's. It was found to need significant repairs. 23 PACP level 4 and 82 PACP level 5 defects were found. This is an immediate need and the new funding will cover construction of this work. The design has already been completed.
 - 5) The current system has reached the end of its useful life. This for design and construction of the complete replacement of the system.
 - 6) The HVAC system has reached the end of its useful life. A 2016 study shows over \$2 million of required replacement costs. This funding has been moved to item # 10, as part of needed HVAC repairs for office renovations.
 - 7) Completed
 - 8) Moved to #10 as part of HVAC project. Ventilation Project will need to be looked at again in future.
 - 9) Relocation of lab to Chapaton East Building.
 - 10) This project entails the conference room, command center, living quarters, office space, HVAC and kitchen area.
 - 11) Project is currently on hold due to denial of EGLE permit. Funds moved to in-system storage(#12). Expenses spent on this project were paid using MEDC grant money.
 - 12) Adds real time control structures within the 8 1/2 Mile Interceptor which will be used to provide additional storage capacity. A study was performed to evaluate different options for the Chapaton RTB and this design project will further expand results from that work. Currently expenses related to this project are being paid for using MEDC state grant. A total of close to \$7 million in grants was secured for this project and the Canal Expansion. Estimated cost of this project is \$15 million. However, with grants and what has been collected through rates, the SRF loan will be estimated between \$7-\$8 million. SRF debt repayment will begin in FY 21/22.
 - 13) Results of SAW grant found tunnel next to Chapaton is in need of repair. 4 and 5 ratings were found during inspection.
 - 14) For unexpected engineering that may arise during the year. This will be bid out to assure we receive best price.
- Amount carried forward from 2019 and 2020 budget.

**FY 2020-2021
8.5 MILE RELIEF BUDGET DETAIL SHEET
EXPENDITURE REQUEST SHEET**

FUND: 0017
ACTIVITY: New Equipment

P/Y BUDGET: \$23,500
REQUEST: \$15,500
INC/(DEC.): (\$8,000)

ACCOUNT EXPLANATION:

DESCRIPTION	20/21	19/20
1) New Pick Up Truck to replace 2009 GMC Sierra	0	19,500
2) Scissor lift (Split with the MIDDD 50/50)	11,500	0
3) Misc(lab equip, bldg instrumentation, etc)	4,000	4,000
Total	15,500	23,500

INCREASE/DECREASE EXPLANATION:

2) Staff have to use a scissor lift within the basin and around the facility to make repairs. This equipment has been rented on numerous occasions during the year. This cost to be split 50/50 with the MIDDD as this would be useful at the ClIntondale PS as well.

FY 2020-2021
8.5 MILE RELIEF BUDGET DETAIL SHEET
EXPENDITURE REQUEST SHEET

FUND: 0017
 ACTIVITY: Office Supplies

P/Y BUDGET: \$1,000
 REQUEST: \$750
 INC/(DEC.): (\$250)

ACCOUNT EXPLANATION:

DESCRIPTION	20/21	19/20
Toner, pens, paper, posters computer supplies, etc	750	1,000

INCREASE/DECREASE EXPLANATION:

**FY 2020-2021
8.5 MILE RELIEF BUDGET DETAIL SHEET
EXPENDITURE REQUEST SHEET**

FUND: 0017
ACTIVITY: Operating Supplies

P/Y BUDGET: \$74,600
REQUEST: \$63,700
INC/(DEC.): (\$10,900)

ACCOUNT EXPLANATION:

DESCRIPTION	20/21	19/20
1) Sodium hypochlorite	50,000	60,000
2) Personal protective equipment	1,000	2,000
3) Clothing for operations staff	1,200	1,000
4) Laboratory supplies required by NPDES permit	4,000	3,000
5) Equipment Rental	3,000	3,500
6) Postage	500	100
7) Fuel	3,000	3,000
8) Misc	1,000	2,000
Total	63,700	74,600

INCREASE/DECREASE EXPLANATION:

1 & 4) Fluctuates depending on number of rain events.

2 & 3) Split with SEMCWWDS and Martin.

5) Bobcat rental will be used to assist with on-going cleaning activities after wet weather events at Chapaton. Planning on renting second piece of equipment twice a year to assist with the cleaning activities until flushing system is replaced.

**FY 2020-2021
8.5 MILE RELIEF BUDGET DETAIL SHEET
EXPENDITURE REQUEST SHEET**

FUND: 0017
ACTIVITY Other Professional Svcs

P/Y BUDGET: \$46,800
REQUEST: \$46,700
INC/(DEC.): (\$100)

ACCOUNT EXPLANATION:

DESCRIPTION	20/21	19/20
1) Contract Laboratory for Permit Overflow	7,500	12,000
2) Legal	5,000	1,500
3) Insurance-Liability	9,200	8,300
4) Insurance-Property	25,000	25,000
	46,700	46,800

INCREASE/DECREASE EXPLANATION:

- 1) Budget is restated based on current usage.

- 2) Increased number of projects happening at Chapaton.

- 3) Drainage Board approved liability insurance for the District.

- 4) Property insurance is covered under the county policy. Property insurance cost billed to this district by the County.

FY 2020-2021
8.5 MILE RELIEF BUDGET DETAIL SHEET
EXPENDITURE REQUEST SHEET

FUND: 0017
 ACTIVITY: Personnel

P/Y BUDGET: \$979,953
 REQUEST: \$1,061,320
 INC/(DEC.): \$81,367

ACCOUNT EXPLANATION:

DESCRIPTION	20/21	19/20
1) Pump Station Operators(6 FT operators and 2 PT)	437,060	426,744
2) Operations Manager	104,650	92,698
3) Assistant Operations Mgr	85,130	73,364
4) Pump Station Standby	8,500	9,000
5) Overtime	52,000	52,000
6) SCADA Manager Support	42,470	41,738
7) SCADA System Specialist (PT)	17,250	16,725
8) Engineering Support	149,730	135,856
9) Senior Asset Mgmt Tech	46,750	25,618
10) Clerical Support	12,240	12,000
11) Accounting	7,140	7,000
12) Administrative	46,890	36,710
13) MIDDD Field Operator Reimbursement	51,510	50,500
Total	<u>1,061,320</u>	<u>979,953</u>

INCREASE/DECREASE EXPLANATION:

1-5) 75% of Chapaton staff is charged to 8.5 Mile Relief District. Remaining 25%
 is split between SEMCWWDS(10%) and Martin(15%).

6-9) These positions will spend 37.5% of their time on 8.5 Mile Relief, 5% at SEMCWWDS,
 and 7.5% at Martin. The remaining 50% is with MIDDD.

8) Three engineers performing 8.5 Mile duties.

9) Position to support Nexgen tasks for Wastewater. Cost split with MIDDD, Martin, SEMCWWDS.
 Prior year budget reflected old position's salary and was budgeted too low.

10-11) 75% of support staff is charged to 8.5 Mile Relief District. Remaining 25%
 is split between SEMCWWDS(10%) and Martin(15%).

12) Cross charge for administrative personnel. 5.25% is charged to 8.5 Mile, the remaining is
 split between SEMCWWDS, Martin, MIDDD, and General.

13) Field Operators from the MIDDD provide training and other assistance
 to the 8.5 Mile Drainage District.

FY 2020-2021
8.5 MILE RELIEF BUDGET DETAIL SHEET
EXPENDITURE REQUEST SHEET

FUND: 0017
 ACTIVITY: Repair & Maintenance

P/Y BUDGET: 1,298,500
 REQUEST: 372,540
 INC/(DEC.): (\$925,960)

ACCOUNT EXPLANATION:

PROJECT #	DESCRIPTION	20/21	19/20
	Annual Items		
	1) Wet well vacator	40,000	55,000
	2) Repair and maintenance	90,000	85,000
	3) Lawn Mowing	8,500	8,500
	Total Annual Items	138,500	148,500
	New Projects		
	4) Pave side road that goes to the basin deck	15,000	0
	5) Chlorine storage tank #3 relining	7,500	0
	Total New Projects	22,500	0
	Carryover Projects		
	6) Design and Construction Pumping and Screening Improvements	211,540	1,150,000
	Total Carryover Projects	211,540	1,150,000
	Grand Total	372,540	1,298,500
	<i>Reserve Replacement Reserve(SRF 5306,5393,5460)-From CTI study</i>	259,215	259,215

INCREASE/DECREASE EXPLANATION:

- 1) Will be done on an annual basis. Cost savings negotiated by staff.
- 2) Increased due to age of equipment.
- 3) Lawn mowing contracted by third party.
- 4) There is a side road that is used by the operators and is currently crushed gravel. This is used frequently by our staff and we are recommending to pave it.
- 5) The liner within chlorine storage tank #3 is in need of replacement.
- 6) The replacement of the bar screen rack in the wet-well where the 8.5 Mile Relief enters the station, and also the addition of a new flow pump. \$250,000 was collected in FY 2017 and \$1,000,000 in FY 2018.

FY 2020-2021
8.5 MILE RELIEF BUDGET DETAIL SHEET
EXPENDITURE REQUEST SHEET

FUND: 0017
ACTIVITY: SCADA

P/Y BUDGET: \$243,839
REQUEST: \$165,710
INC/(DEC.): (\$78,129)

ACCOUNT EXPLANATION:

	DESCRIPTION	20/21	19/20
	1) SCADA as needed	32,250	24,188
	2) UPS battery replacements	250	1,000
	3) Wonderware Software Support	5,860	5,479
	4) Sonicwall Support Renewals	0	0
	5) VMWare support renewal	0	0
	6) VEEAM support renewal	320	293
	7) Dell SANs and DR4100 renewal	0	0
	8) Dell servers and switch renewal	0	0
	9) Comcast Business Service	2,380	2,350
	10) Cell modem service (Sprint) 9 units	100	135
	11) Cell modem service (Verizon) 14 units	700	900
	12) Firewall Hardware Design/Config	12,900	0
	13) Add redundant UPS for headend Network Server Racks	0	2,419
	14) Obsolete Wireless backhaul replacement links	16,120	0
	15) Fiber Optic Improvements	16,130	0
	16) SolarWinds - Network Management Software	9,670	0
	17) SCADA Server Update (Reserves)	0	138,050
	Total Annual Projects	96,680	174,814
	18) PLC Replacements at Chapaton East	40,000	40,000
	Total Carryover Projects	40,000	40,000
	Grand Total-SCADA	136,680	214,814
<i>Reserve</i>	<i>Future costs of Server Upgrade - Life Cycle per year</i>	<i>29,030</i>	<i>29,025</i>

INCREASE/DECREASE EXPLANATION:

- 1) A server maintenance task was built into MIDDD, costs are proportioned out to various districts.
- 4,5,7,8) No renewals are needed this upcoming year.
- 11) Added remote flow metering site per the NPDES permit.
- 12) The existing firewalls are being dual purposed to act as a security appliance and as an OSPF router. The routing capabilities of the existing firewalls are very limited and often times will cause outages simply due to their poor routing capabilities.
- 14) Several critical wireless links utilize 10-year old technology and can no longer be purchased. Since they have reached the end of their useful life, they are in need of replacement
- 15) This will be used to start setting up redundant links for our main SCADA servers. We have had a few issues since the County fiber was installed that when it goes down we completely lose backup abilities between the two servers.
- 16) We currently own the base version of this software. The software support has not been kept up and this is to upgrade the software to a business format. This upgraded platform will help streamline communications support for our staff.

**FY 2020-2021
8.5 MILE RELIEF BUDGET DETAIL SHEET
EXPENDITURE REQUEST SHEET**

FUND: 0017
ACTIVITY: Utilities

P/Y BUDGET: \$273,125
REQUEST: \$274,100
INC/(DEC.): \$975

ACCOUNT EXPLANATION:

DESCRIPTION	20/21	19/20
1) Electric Service	110,000	110,000
2) Consumers Energy	15,000	19,000
3) Water	25,000	23,000
4) Internet Provider	1,500	1,500
5) Waste Hauler	2,000	1,500
6) Weather Radar	2,500	2,200
7) Internal service cost	115,000	110,925
8) Telephone(Cell)	3,100	5,000
Total	274,100	273,125

INCREASE/DECREASE EXPLANATION:

1-3) Budget is restated based on current usage.

6) Split with MIDDD, SEMCWWDS, and Martin.

7 & 8) Split with Martin and SEMCWWDS.

8) Prior year number was budgeted too high.

Revenue Detail

Revenue	2020/2021 BUDGET	2019/2020 BUDGET
Interest Earned	175,000	80,000
Other Revenue	4,000	5,000
Carryforward ⁽¹⁾	4,522,050	2,960,000
8.5 O&M/Charge Required Revenue	4,509,865	4,279,768
Rental Fee (Fishbone's)	16,460	16,464
Use of Scada Reserve	0	138,050
Grants and Bond Proceeds	0	0
Total	9,227,375	7,479,282

NOTES

1) Remaining projects that were charged in prior years that should be completed in 20/21

Disinfection system upgrade	901,625
Chapaton Improvements-Lab Relocation	166,910
Chapaton Improvements-Office Space	820,000
In-System Storage Design	2,250,000
Design 9 Mile Bypass repairs	44,165
As Needed Engineering	87,810
Pumping and Screening Improvements	211,540
PLC Replacements at Chapaton East	40,000
TOTAL	4,522,050



Candice S. Miller
Public Works Commissioner
Macomb County

To: 8 ½ Mile Relief Drain Drainage District Board Members

From: Stephen Downing, Construction & Maintenance Manager

Date: August 6, 2020

Subject: Owner Controlled Insurance Program (OCIP) Premium Recommendation

The Macomb Interceptor Drain Drainage District and 8 ½ Mile Relief Drain engaged with Meadowbrook Insurance Agency (MIA) in February 2020 to provide the services required to procure and manage an Owner Controlled Insurance Program (OCIP) for upcoming CIP projects. MIA has assisted the MCPWO Engineering staff with development of the OCIP specific contract documents for construction projects and have developed a comprehensive insurance program to obtain pricing from insurance carriers. In addition to setting coverage limits for the required coverages, MIA has developed a project specific profile of each project, collecting the required information to solicit premium costs from insurance carriers. To obtain the most competitive premiums, MIA worked extensively with both MCPWO staff Engineers and each of the project's respective lead engineering consultants.

The first of three projects included in this OCIP, MIDDD Segment 5 rehabilitation, is scheduled to start in September 2020. The other two projects, MIDDD Segment 6 Rehabilitation and 8 ½ Mile Relief Drain In-system Storage, are currently slated to start construction in May 2021. This presents a need to split procurement of the General Liability and Excess Liability coverages into separate programs due to the insurance carriers' inability to provide accurate premium cost prior to the prime contractor being selected for the work. The Builder's Risk, Contractor's Pollution Liability and Owner's Protective Professional Liability Indemnity coverages are independent of the prime contractor selected for the work; therefore, these coverages will remain bundled in a single program.

The benefit of procuring the Builder's Risk, Contractor's Pollution Liability and Owner's Protective Professional Liability Indemnity coverages now for the entire program is that the premiums are locked in for the duration of the 42-month program. The premiums for each of these three coverages are a one-time cost. If we wait to bid these coverages for the two projects starting in 2021, we risk the premiums increasing, which is expected in the current market.

MIA provided a proposal summarizing the insurance premiums for each of the coverages required to provide a comprehensive and protective OCIP. The MIA proposal is attached for reference. The deadline to bind coverage for the Segment 5 Rehabilitation is September 1, 2020. MIA will continue negotiating with insurance carriers until August 20th, 2020 to secure the least expensive premium costs. The final proposal will be submitted on August 20th, 2020 for review. The Owner will authorize MIA to bind coverage by August 25th, 2020 to meet the September 1st, 2020 deadline for effective coverage. The final premium costs will be equal to or less than what is presented in the attached proposal. The table below summarizes the current premium cost estimates for each project.

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

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

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

Project		MIDDD Seg 5	MIDDD Seg 6	8 1/2 Mile
Coverage	Premium Estimates			
GL / Excess 25M	\$129,138	\$129,138		
5M x P	\$84,665	\$84,665		
10M x 5M	\$109,038	\$109,038		
10M x 15M	\$71,594	\$71,594		
Subtotal	\$394,434	\$394,434		
Option 25M x 25M	\$157,325	\$157,325		
Total Liability at 50 M Excess	\$551,759	\$551,759		
Cost Allocation / Project		45%	36%	19%
BR	\$228,234	\$102,705	\$82,164	\$43,364
CPL	\$57,254	\$25,764	\$20,611	\$10,878
OPPI	\$131,968	\$59,386	\$47,508	\$25,074
Allocated Subtotal		\$187,856	\$150,284	\$79,317
Total	\$417,456	\$338,140		\$79,317

The recommendation is that the 8 ½ Mile Relief Drain Drainage District Board authorize the Board Chair to authorize Meadowbrook Insurance Agency to bind insurance coverage for Builder's Risk, Contractor's Pollution Liability and Owner's Protective Professional Liability Indemnity for the In-system Storage project for the amount equal to or less than \$79,317.

Attachments: Meadowbrook Insurance Agency Proposal

Macomb County Public Works

Owner Controlled Insurance Program Proposal for Program #1:

MIDD Segment 5 Clean and Reline MIDD Segment 6 Clean and Rehabilitation 8.5 Mile Relief In-System Storage Projects

9/1/2020 to 3/1/2024

(draft 8/5/2020)

Sal Saputo, Executive Vice President
 **MEADOWBROOK**
INSURANCE AGENCY
www.meadowbrookagency.com

Macomb County Public Works

Table of Contents

Title	Page
Meadowbrook	1
> <i>Mission Statement</i>	
> <i>Services & Profile</i>	
> <i>Charity</i>	
> <i>Agency Service Team</i>	
Marketing Summary	8
Client Profile	9
> <i>Named Insured Schedule</i>	
> <i>Project Schedule</i>	
General Liability	10
Excess Liability \$5M x Primary	13
Excess Liability \$10M x \$5M	15
Excess Liability \$10M x \$15M	17
Excess Liability \$25M x \$25M	19
Builder's Risk	21
> <i>Chubb Recommendation</i>	
> <i>Builder's Risk Comparison</i>	
Contractors Pollution Liability	29
Owners Protective Professional Indemnity	31
Premium Summary / Payment Plan Schedule	34
Coverage Recommendations	36

Meadowbrook Insurance Agency

MISSION STATEMENT

Global, Innovative, Architect of Risk Management Solutions for our Clients

MANTRA

Urgency.....Integrity.....Solutions

MEADOWBROOK SERVICES

- Insurance Management and Brokerage Operations -

Meadowbrook insurance operations are made up of seven major areas:

- Program management – Account Servicing
- Insurance Agency Operations
- Reinsurance Intermediaries
- Captive Management
- Management of Insurance Companies
- Claims Management
- Loss Control

- Service Products -

Meadowbrook Agency offers an extensive array of services. Our service product capabilities include the following:

➤ Property/Casualty	➤ Captive Formation & Management
➤ Employee Benefits Counseling	➤ Reinsurance Brokerage
➤ Claims Management	➤ Off Shore Captives
➤ Sales & Marketing	➤ Feasibility Studies
➤ Loss Control	➤ Pool Management
➤ Education & Training	➤ Litigation Management
➤ Risk Management	➤ Rent A Captives
➤ Retail Brokerage	

MEADOWBROOK PROFILE

Meadowbrook was founded in 1955. Since that time, Meadowbrook:

- has grown to become Michigan's largest property casualty agency and ranked 20th nationally
- employs more than 801 associates nationwide in 19 offices nationwide
- is heralded as an innovative pioneer of alternative risk management techniques
- offers both traditional and alternative solutions to client's needs
- core business consists of commercial property, casualty, life, accident and health insurance
- clients range from small to large businesses
- is committed to finding the most cost-effective methods of handling client risks and management needs
- brings a wide range of experience and expertise to their work
- is able to create customized solutions for clients by combining traditional insurance products with progressive risk management alternatives
- Estate Planning

Meadowbrook is committed to servicing our client's needs.

Meadowbrook is proud to be affiliated with the following charitable organizations.



Macomb County Public Works

Meadowbrook Agency Service Team

GENERAL INFORMATION

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switchboard/after hours: 248 / 358-1100
website: www.meadowbrook.com

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e-mail: dave.sheeran@meadowbrook.com

CLAIMS REPORTING

*All claims - except Workers Compensation**

It is our ongoing mission to provide effective, efficient solutions for your claims servicing needs. In keeping with the goal of offering world-class claims service and enhancing your experience, we've established two new, centralized claims reporting contacts.

Telephone:
(888) 965-3527

Email:

Agencyclaims@meadowbrook.com Workers Compensation claims will continue to be reported directly to your insurance company.

Macomb County Public Works

Marketing Summary

Due to permitting issues with EGLE (formerly the DEQ), the Chapaton Canal Upgrade Project has been removed from the OCIP. Accordingly, there will be two programs regarding General Liability and Excess Liability for the OCIP as follows:

General Liability / Excess Liability - two separate programs w/ separate limits - (excess limits options of \$25M and \$50M) (18-month policy term)

- **Program #1** – Effective Date September 1, 2020:
 - Romeo Arm Segment 5 Rehab
- **Program #2** – Effective Date - Projected April-May 2021:
 - 15 Mile Interceptor Segment 6 Rehab
 - 8 ½ Mile Relief In-system Storage

All Other Lines of Coverage (All Projects), 42-month term (36 months plus 6 months)

- **Program #1** – Effective Date September 1, 2020
 - Builder Risk
 - Contractors Pollution Liability
 - Owner's Protective Professional Indemnity

Insurance Markets Approached:	
AWAC	Venture
Hartford	Westchester
AIG	Allianz
Berkley Assurance	Amtrust
Chubb	Arch
Cove	Aspen
C&F	AXA XL
Endurance	Axis
Everest	Capitol Specialty
Houston Casualty	Colony
Hudson	Cover X
Liberty Mutual	Great American
Markel	IAT
Navigators	Ironshore
Pioneer	SCOR Re
Starr	Scottsdale

Macomb County Public Works

9/1/2020 to 3/1/2024

Named Insureds

Macomb County Public Works

Schedule of Projects ...

Project Name	Location	Construction Value (Hard Costs)
Romeo Arm Segment 5 Rehab	12567 15 Mile Road, Sterling Heights, MI 48312	\$25,400,000
15 Mile Interceptor Segment 6 Rehab	15 Mile Road & Garfield Road, Clinton Township, MI 48035	\$15,000,000
8 ½ Mile Relief In-System Storage	Between 8 Mile & 9 Mile Road, West of Lake St. Clair Shores, MI	\$12,000,000

Macomb County Public Works

General Liability

9/1/2020 to 3/1/2022

Carrier: Everest Indemnity Insurance Company - (Best Rating A+ XV)

Projects Covered: Romeo Arm Segment 5 Rahab Only

Form: Occurrence Claims Made

Limits:

\$2,000,000		Each Occurrence
\$4,000,000		General Aggregate
\$4,000,000	<i>aggregate</i>	Products / Completed Operations
\$2,000,000	<i>any one person</i>	Personal Injury / Advertising Injury
\$100,000	<i>any one premises</i>	Damage to Premises Rented to You
\$5,000	<i>any one person</i>	Medical Payments

Defense Costs: Outside

Deductible: \$25,000

Exposure: \$25,400,000 Construction Value / Hard Cost

Additional Coverages:

Blanket Additional Insured	Owners, Lessees, Contractors, State or Governmental Agency, Subdivision or Political Subdivision	Standard
Total Pollution Exclusion with Hostile Fire Exception	Included	Enhanced
Waiver of Rights of Recovery	As required by written contract	Standard
Primary and Non-Contributory	Included	Standard
Professional Means/Methods	No Applicable	
Owner/GC Cross Suits Exception for Property Damage	Cross Suits Exclusion Deleted	Enhanced
Removal of Course of Construction Exclusion	Can be removed upon review of BR quote	Standard
Property Damage Amendment		Standard
Extended Completed Operations	Lesser of 10 Yrs or Statue of Repose for Completed Ops. General Aggregate will re-apply once after 21 Months.	Enhanced

General Liability (continued)

Additional Conditions:

- 25% Minimum Earned Premium
- 100% Fully Earned Premium after 12 Months
- 10 Years Extended Completed Operations
- General Aggregate will reinstate halfway through the policy at 21 Months

Policy Forms, Endorsements, and Exclusions:

Form Title	Form Number	Form Edition Date
Commercial General Liability Coverage Form	CG 00 01	04-13
State Mandatory Endorsements		
Exclusion – Access Or Disclosure Of Confidential Or Personal Information And Data-Related	CG 21 06	05 14
Exclusion – Unmanned Aircraft	CG 21 09	06 15
Employment-Related Practices Exclusion	CG 21 47	12 07
Total Pollution Exclusion Endorsement with hostile fire and HVAC exceptions	CG 21 65	09 99
Exclusion - Exterior Insulation And Finish Systems	CG 21 66	12 04
Silica Or Silica-Related Dust Exclusion	CG 21 96	03 05
Amendment Of Insured Contract Definition	CG 24 26	04 13
Absolute Asbestos Exclusion	ECG 21 510	12 99
Absolute Lead Exclusion	ECG 21 512	12 99
Organic Pathogen, Mold Or Fungus Exclusion	ECG 21 538	07 01
Communicable Disease Exclusion	CG 21 32	05 09
Pollution Changes	EIL 01 510	07 08
Common Policy Conditions	IL 00 17	11 98
Nuclear Energy Liability Exclusion Endorsement (Broad Form)	IL 00 21	09 08
Radioactive Matter Exclusion	ECG 22 550	03 17
Limitation - No Stacking Of Occurrence Limits Of Insurance	ECG 25 511	12 05
Deductible Liability Insurance	CG 03 00	01 96
Primary And Noncontributory – Other Insurance Condition	CG 20 01	04 13
Additional Insured – Owners, Lessees Or Contractors – Scheduled Person Or Organization	CG 20 10	04 13
Additional Insured – Owners, Lessees Or Contractors – Completed Operations	CG 20 37	04 13
As required by written contract		
Exclusion – Contractors – Professional Liability	CG 22 79	04 13
Waiver Of Transfer Of Rights Of Recovery Against Others To Us	CG 24 04	05 09
Additional Insured – Mortgagee, Assignee Or Receiver	CG 20 18	04 13
Additional Insured – Lessor Of Leased Equipment – Automatic Status When Required In Lease	CG 20 34	04 13
Limitation Of Coverage To Designated Premises Or Projects	CG 21 44	07 98
Extended Products-Completed Operations Period - 120 months	ECG 04 760	04 15
Amendment - Definition of Bodily Injury	ECG 04 551	04 02
Amendment - Duties In The Event of Occurrence, Offense, Claim of Suit (Notice of Knowledge of Occurrence)	ECG 24 519	04 02
Amendment - Representations (Unintentional Errors And Omissions)	ECG 24 589	12 13
Exclusion - Damage to the Project During the Course of Construction	ECG 03 619	01 19
Amendment To Damage To Your Product Exclusion	ECG 03 614	01 19
Amendment To Damage To Your Work Exclusion	ECG 03 618	01 19
Amendment To Exclusion J - Property Damage - J1, J2, J5 Deleted	ECG 03 615	01 19
Amendment - Definition of Employee	ECG 03 612	01 19
Sole Representative of Insured	ECG 03 625	01 19
Mutual Defense Form	ECG 03 623	01 19

General Liability *(continued)*

Policy Forms, Endorsements, and Exclusions *(cont.)*:

Policy Period Limits of Insurance (Reinstatement of Aggregate - One (1) time reinstatement of General Aggregate at 21 months)	ECG 03 624	01 19
Annendment of Premium Audit Condition - 25% MEP at inception, 100% M&D Fully Earned at 12 months	ECG 03 613	01 19
Limited Repair Coverage Extension - 120 months	ECG 03 622	01 19
Named Insured Coverage Extension	ECG 03 363	06 19

Premium:

\$ 125,000.00	Policy Premium
500.00	TRIA Premium
3,137.50	Surplus Lines Taxes & Fees
500.00	Regulatory Fee
<hr/>	
\$129,137.50	Total Premium

This insurance has been placed with an insurer that is not licensed by the State of Michigan and does not participate in the State of Michigan Guarantee Fund.

Macomb County Public Works

Excess Liability

9/1/2020 to 3/1/2022

Carrier: Everest Indemnity Insurance Company (Best Rating A+ XV)

Projects Covered: Romeo Arm Segment 5 Rahab Only

Form: Excess - Occurrence

Limits:

\$5,000,000 *Each Occurrence*
\$5,000,000 *General Aggregate*
\$5,000,000 *Products & Completed Operations Aggregate*

Adjustment Period: Annually

Underlying Coverages & Limits:

General Liability

\$2,000,000		Each Occurrence
\$4,000,000		Aggregate
\$4,000,000	<i>aggregate</i>	Products – Completed Operations
\$2,000,000	<i>aggregate</i>	Personal – Advertising Injury

Policy Forms, Endorsements and Exclusions:

<u>Form Number</u>	<u>Form Title</u>
EIL 00 502 03 07	COMPANY SIGNATURE PAGE (EVEREST INDEMNITY INSURANCE COMPANY)
EUM 00 522 02 07	COMMERCIAL EXCESS LIABILITY COVERAGE FORM
CU 02 21 09 00	MICHIGAN CHANGES – CANCELLATION AND NONRENEWAL
CU 24 03 09 00	WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US
EIL 01 510 07 08	POLLUTION CHANGES
EN IL TR 20 01 15	NOTICE - OFFER OF TERRORISM COVERAGE AND DISCLOSURE OF PREMIUM
EUM 01 555 02 07	MICHIGAN CHANGES
MANUSCRIPT	COMPLETED OPERATIONS EXTENSION
EUM 22 809 10 16	DESIGNATED PREMISES OR PROJECT LIMITATION
EUM 21 764 06 06	EXCLUSION – E.R.I.S.A.
EUM 21 767 06 06	EXCLUSION – WAR
EUM 21 874 04 09	EXCLUSION – COVERAGE PROVIDED BY UNDERLYING INSURANCE AT SUB-LIMITS
EUM 24 531 04 09	AMENDMENT OF PREMIUM AUDIT CONDITION – TOTAL COSTS
EUM 24 553 04 09	DEFENSE AMENDATORY ENDORSEMENT – LIMITED DUTY TO DEFEND OTHER INSURANCE – PRIMARY AND NONCONTRIBUTORY FOR ADDITIONAL
EUM 24 562 01 10	INSURED
IL 00 17 11 98	COMMON POLICY CONDITIONS
IL 09 85 01 15	DISCLOSURE PURSUANT TO TERRORISM RISK INSURANCE ACT

Subjectivities:

- Signed Letter confirming GC will comply with all geotechnical recommendations
- Confirmation of Project Architect
- Final Construction Budget
- Quality Control Program
- Site Safety & Security Program
- Confirmation of no blasting or wrecking ball work

Premium:

\$ 80,000.00	Policy Premium
1,600.00	TRIA Premium
2,040.00	Surplus Lines Taxes & Fees
1,025.00	Regulatory Fee
<hr/>	
\$84,665.00	Total Premium

This insurance has been placed with an insurer that is not licensed by the State of Michigan and does not participate in the State of Michigan Guarantee Fund.

Macomb County Public Works

Excess Liability

9/1/2020 to 3/1/2022

Carrier: Capitol Specialty Insurance Corporation - (Best Rating A X)

Projects Covered: Romeo Arm Segment 5 Rahab Only

Form: Excess - Occurrence

Limits:

\$10,000,000	Each Occurrence
\$10,000,000	General Aggregate
\$10,000,000	Products & Completed Operations Aggregate

Underlying Coverages & Limits:

Excess Liability

\$5,000,000	Each Occurrence
\$5,000,000	Aggregate
\$5,000,000	Products Completed Operations Aggregate

General Liability

\$2,000,000	Each Occurrence
\$4,000,000	Aggregate
\$4,000,000	aggregate Products – Completed Operations
\$1,000,000	aggregate Personal – Advertising Injury

Policy Forms, Endorsements and Exclusions:

Form Edition	Form Description
XS 450 11 17	Schedule of Underlying Insurance
XS 507 09 17	Non-Concurrence of Policy Periods – Underlying Ins.
XS 518 09 17	Completed Operations Hazard – Extension of Coverage – Specific Project
XS 528 09 17	Defense Outside the Limits
E09000S 02 17	Service of Suit
XS 025 09 17	Premium and Rate – Minimum Earned Premium 25%

Excess Liability \$10MM x \$5MM (continued)

Special Conditions:

- All Underlying Carriers must be rated A- VI or better
- If TRIA is bound, TRIA must be bound on all underlying layers
- 25% Minimum Earned Premium

Subjectivities:

- Currently Valued GL Loss Runs
- Copy of all underlying policies
- A Signed TRIA Election Form
- Signed and Completed Acord Application
- Confirmation of OCIP Administrator

Premium :

\$ 104,000.00	Policy Premium
1,500.00	TRIA Premium
2,637.50	Surplus Lines Taxes & Fees
900.00	Regulatory Fee
<hr/>	
\$109,037.50	Total Premium

This insurance has been placed with an insurer that is not licensed by the State of Michigan and does not participate in the State of Michigan Guarantee Fund.

Macomb County Public Works

Excess Liability

9/1/2020 to 3/1/2022

Carrier: Starr Surplus Lines Insurance Company - (Best Rating A XV)

Projects Covered: Romeo Arm Segment 5 Rahab Only

Form: Excess - Occurrence

Limits:

\$10,000,000	<i>Each Occurrence</i>
\$10,000,000	<i>General Aggregate</i>
\$10,000,000	<i>Products & Completed Operations Aggregate</i>

Underlying Coverages & Limits:

Excess Liability

\$10,000,000	Each Occurrence
\$10,000,000	Aggregate
\$10,000,000	Products Completed Operations Aggregate

Excess Liability

\$5,000,000	Each Occurrence
\$5,000,000	Aggregate
\$5,000,000	Products Completed Operations Aggregate

General Liability

\$2,000,000	Each Occurrence
\$4,000,000	Aggregate
\$4,000,000	<i>aggregate</i> Products – Completed Operations
\$2,000,000	<i>aggregate</i> Personal – Advertising Injury

Special Conditions:

- All Underlying Carriers must be rated A- VI or better
- If TRIA is bound, TRIA must be bound on all underlying layers
- 25% Minimum Earned Premium

Excess Liability \$10MM x \$15MM (continued)

Policy Forms, Endorsements and Exclusions:

Title:	Form Number:
Claim Reporting Guidelines	CLAIMS RPT
Excess Liability Declarations	SL 101 D (10/08)
Disclosure Pursuant To Terrorism Risk Insurance Act	SSIL-0002 (0115)
U.S. Treasury Department's Office Of Foreign Assets Control (OFAC) Advisory Notice To Policyholders	IL P 001 01 04
Excess Liability Policy Schedule Of Underlying Insurance	SL 102 (10/08)
Excess Liability Policy	SL 100 (10/08)
Michigan Changes - Cancellation and Nonrenewal	SL 301 MI (10/08)
Michigan Changes - Notification of Accidents or Occurrences	SL 309 MI (10/08)
Anti-Stacking Endorsement	SL 107 (04/11)
Residential Construction Exclusion	SL 109 (04/11)
Continuing Or Progressively Deteriorating Damages Endorsement	SL 134 (10/08)
Limitation Of Coverage To Designated Premises Or Project	SL 175 (10/08)
Pollution Exclusion (Total Exclusion)	SL 198 (10/08)
Professional Liability Exclusion	SL 205 (10/08)
Waiver Of Transfer Of Rights Of Recovery Against Others To Us	SL 233 (10/08)
Auto Coverage - Exclusion Of Terrorism	SL 341 (10/08)
Cap On Losses From Certified Acts Of Terrorism	SL 342 (01/15)
Certified Acts Of Terrorism Coverage Excess Of Retained Amount With Cap On Losses	SL 343 (01/15)
Other Insurance-Primary and Noncontributory for Additional Insured Amendatory Endorsement	SL 373 (0219)
Issuance of Excess Liability Policy Prior To Receipt of First Underlying Insurance Policy(ies) Amendatory Endorsement	SL 374 (0219)
Extended Completed Operations Amendatory Endorsement	SL 404 (0219)
Service of Suit Endorsement	SL 704 (08/10)
Reinstatement of Limits Amendatory Endorsement	MANUSCRIPT (06/10)

Subjectivities:

- Confirmation of separate pollution and professional coverage is in place for this project

Premium :

\$ 68,000.00	Policy Premium
1,360.00	TRIA Premium
1,734.00	Surplus Lines Taxes & Fees
500.00	Regulatory Fee
\$71,594.00	Total Premium

This insurance has been placed with an insurer that is not licensed by the State of Michigan and does not participate in the State of Michigan Guarantee Fund.

Macomb County Public Works

Excess Liability

9/1/2020 to 3/1/2022

Carrier: Navigator Specialty Insurance Company - (Best Rating A+ XI)

Projects Covered: Romeo Arm Segment 5 Rahab Only

Form: Excess - Occurrence

Limits:

\$25,000,000 *Each Occurrence*
\$25,000,000 *General Aggregate*
\$25,000,000 *Products & Completed Operations Aggregate*

Underlying Coverages & Limits:

Excess Liability

\$10,000,000 Each Occurrence
\$10,000,000 Aggregate
\$10,000,000 Products Completed Operations Aggregate

Excess Liability

\$10,000,000 Each Occurrence
\$10,000,000 Aggregate
\$10,000,000 Products Completed Operations Aggregate

Excess Liability

\$5,000,000 Each Occurrence
\$5,000,000 Aggregate
\$5,000,000 Products Completed Operations Aggregate

General Liability

\$2,000,000 Each Occurrence
\$4,000,000 Aggregate
\$4,000,000 *aggregate* Products – Completed Operations
\$2,000,000 *aggregate* Personal – Advertising Injury

Excess Liability \$25MM x \$25MM (continued)

Special Conditions:

- All Underlying Carriers must be rated A- VI or better
- If TRIA is bound, TRIA must be bound on all underlying layers
- 25% Minimum Earned Premium

Policy Forms, Endorsements and Exclusions:

Policyholder Disclosure Notice of Terrorism Insurance Coverage	NAV-ML-TERRD
Commercial Excess Liability Coverage Part	NAV-EXC-001
CLAIM REPORTING PROCEDURES	NAV-PHN-200
OFAC Endorsement	NAV-ML-002
Exclusion - Cyber Injury	NAV-EXC-5041
Exclusion - Communicable Disease	NAV-EXC-5050
Residential Work Exclusion	NAV-EXC-306
Exclusion - Exterior Insulation and Finish System	NAV-EXC-311
Exclusion - Rejected Coverage	NAV-EXC-321
Service of Suit Endorsement	NAV-ECD-300
Nuclear Energy Liability Exclusion	NAV-EXC-302
Construction Project Endorsement with Completed Operations and Repair Work Extension	NAV-EXC-504
Cap on Losses from Certified Acts of Terrorism	NAV-ECD-400
Michigan Notice to Exempt Commercial Policyholders Deregulation - Forms & Rates	MI-Notice
Amendment of Conditions Other Insurance Primary and Non-Contributing	NAV-EXC-348A
Waiver of Subrogation	NAV-ECD-6012

Subjectivities:

- Confirmation of no New York construction
- Signed Terrorism Election Form
- Completed and Signed Application

Premium :

\$ 150,000.00	Policy Premium
3,000.00	TRIA Premium
3,825.00	Surplus Lines Taxes & Fees
500.00	Regulatory Fee
<u>\$157,325.00</u>	Total Premium

This insurance has been placed with an insurer that is not licensed by the State of Michigan and does not participate in the State of Michigan Guarantee Fund.

Macomb County Public Works

Builder's Risk 9/1/2020 to 3/1/2024

Carrier: Chubb – ACE American Insurance Company - (Best Rating A+ XV)

Projects Covered: All Scheduled Projects

Limits of Insurance:

\$ 57,640,000 (100%) part of \$ 57,640,000 per OCCURRENCE

The Company will pay no more for direct physical LOSS in any one OCCURRENCE than the above Limit of Insurance. In addition, the Company will not pay for more than its proportionate share (100 %) of the following Sub-limits of Insurance and Annual Aggregate Sub-limits of Insurance, which are part of, and not in addition to, the Limit of Insurance above:

Sub-limits of Insurance

A. Physical LOSS to the INSURED PROJECT	\$ 52,400,000		
B. Delay in Opening (per Form Number ACE0729)	\$ 5,240,000	Period of Indemnity 365 Calendar Days	
Loss of RENTAL INCOME:	NCP	Monthly Limit of Indemnity	N/A
Loss of BUSINESS INCOME:	NCP	Monthly Limit of Indemnity	N/A
SOFT COSTS / ADDITIONAL EXPENSES:	\$ 5,240,400	Monthly Limit of Indemnity	N/A
Interest expense on construction loan(s);	Included	Monthly Limit of Indemnity	N/A
Advertising and promotional expense;	Included	Monthly Limit of Indemnity	N/A
Legal and accounting fees;	Included	Monthly Limit of Indemnity	N/A
Commissions incurred upon the renegotiation of leases;	Included	Monthly Limit of Indemnity	N/A
Fees for licenses and permits;	Included	Monthly Limit of Indemnity	N/A
Insurance premiums for Builders Risk, Workers' Compensation and General Liability Insurance;	Included	Monthly Limit of Indemnity	N/A
Real estate taxes and assessments;	Included	Monthly Limit of Indemnity	N/A
Project administration expense;	Included	Monthly Limit of Indemnity	N/A
C. EXISTING PROPERTY	NCP		
D. Damage to EXISTING PROPERTY – Limited	NCP		
E. Property in Transit per Conveyance	\$ 1,000,000		
F. Temporary Off-site Storage and Off-site Staging Areas, any one location	\$ 1,000,000		

Builder's Risk *(continued)*

G. Expediting and Extra Expenses	20% of the insured physical LOSS, or \$ <u>10,000,000</u> ; whichever is less
H. Debris Removal	25% of the insured physical LOSS, or \$ <u>25,000,000</u> ; whichever is less
I. Trees, Shrubs and Plants	\$ 250,000
J. Protection Service Charges	\$ 250,000
K. Fire Protective Equipment Recharge	\$ 25,000
L. Valuable Papers and Records	\$ 250,000
M. Claim Preparation Expenses	\$ 100,000
N. Protection of Insured Property Pre-LOSS	\$ 100,000
O. Architects and Engineers Fees	\$ 250,000
P. Office and Construction Trailers/Semi-trailers and their Contents	\$ 25,000
Q. Ordinance or Law	\$ 10,000,000
R. TESTING	Included
S. Business Personal Property	\$ 100,000
T. Contract Penalty	\$ 100,000
U. TOWER CRANE Re-Erection Expense	\$ 250,000
V. NAMED WINDSTORM	Included

Annual Aggregate Sub-limits of Insurance

A. FLOOD	Per OCCURRENCE	\$ 10,000,000
	Annual Aggregate	\$ 10,000,000
B. EARTH MOVEMENT	Per OCCURRENCE	\$ 10,000,000
	Annual Aggregate	\$ 10,000,000
C. Pollution or Contamination Clean-Up	Per OCCURRENCE	\$ 100,000
	Annual Aggregate	\$ 100,000
D. Limited Coverage For FUNGUS, Wet Rot, Dry Rot or Bacteria	Per OCCURRENCE	\$ 50,000
	Annual Aggregate	\$ 50,000

Builder's Risk *(continued)*

Escalation Clause

The Sub-limit of Insurance for Physical LOSS to the INSURED PROJECT stated above is considered an estimate. Should any increase in the Estimated Completed Value of the INSURED PROJECT occur, the Sub-limit of Insurance for Physical LOSS to the INSURED PROJECT will automatically increase to reflect the change concurrently, subject to a maximum increase of 10% of the original Sub-limit of Insurance stated above. The Per OCCURRENCE Limit of Insurance stated above will increase by the same amount.

This clause does not apply to other Sub-limits of Insurance, including Delay in Opening, if endorsed to this Policy, nor does it apply to the Annual Aggregate Sub-limits of Insurance.

IV. Deductibles

\$ 25,000 Direct physical LOSS in any one OCCURRENCE except;

- | | |
|--|---------------------------|
| A. LOSS in any one OCCURRENCE caused by or resulting from FLOOD
Subject to a maximum deductible of: | \$ 100,000 or N/A%
N/A |
| B. LOSS in any one OCCURRENCE caused by or resulting from EARTH MOVEMENT
Subject to a maximum deductible of: | \$ 100,000 or N/A%
N/A |
| C. LOSS in any one OCCURRENCE caused by or resulting from WATER DAMAGE
Subject to a maximum deductible of: | \$ 100,000 or N/A%
N/A |
| D. LOSS in any one OCCURRENCE caused by or resulting from NAMED WINDSTORM
Subject to a maximum deductible of: | \$ 25,000 or N/A%
N/A |
| E. LOSS in any one OCCURRENCE caused by or resulting from TESTING | \$ 25,000 or N/A% |

Where a percentage deductible is shown above, the deductible shall be the greater of the dollar amount shown, or the stated percentage of the total insured values at the INSURED PROJECT site or sites at the time and date of the LOSS, unless a maximum deductible is listed.

- | | |
|---|--------------------------------------|
| Delay in Opening – WAITING PERIOD: | 14 Calendar Days, Each DELAY except; |
| A. Each DELAY Caused by or resulting from FLOOD: | 14 Calendar Days |
| B. Each DELAY Caused by or resulting from EARTH MOVEMENT | 14 Calendar Days |
| C. Each DELAY Caused by or resulting from NAMED WINDSTORM | 14 Calendar Days |

Builder's Risk *(continued)*

Extension of Term:

This Policy may be extended for a period not to exceed (30) (thirty) days from the original expiration date shown above, subject to the same terms and conditions in effect at the time of the extension, and subject to a pro-rata additional premium, exclusive of TESTING.

NOTE: Premium rates applicable to coverage during the period of June 1st through November 30th (NAMED WINDSTORM Season) may differ from rates applicable during the period December 1st through May 31st, and additional premium for extensions will reflect those pricing differences.

The TESTING PERIOD may be extended for a period not to exceed (30) (thirty) days from the number of days for TESTING stated above, subject to the same terms and conditions in effect at the time of the extension, and subject to an additional premium based upon the number of days of the extension period.

The NAMED INSURED must request these extensions in writing and receive acceptance from the Company prior to the original expiration date of this Policy. If the NAMED INSURED does not provide the aforementioned written extension request(s), coverage provided hereunder shall terminate on the original expiration date stated in this Policy.

Policy Forms:

ALL-20887 (10/06)	CHUBB Producer Compensation Practices & Policies
MA-608255p (04/15)	Claims Directory Property and Inland Marine
BB-5W58a (09/11)	Common Policy Declarations
ACE0728 (10/15)	Construction Risk Coverage Form
ACE0727 (10/15)	Construction Risk Declarations
Cover Letter	Cover Letter
ACE0729 (10/15)	Delay In Opening Endorsement
TRIA11e (01/15)	Disclosure Pursuant To Terrorism Risk Insurance Act
ACE0974 (04/20)	Exclusion Of Loss Due To Virus, Bacteria Or Microorganism That Induce Physical Distress, Illness Or Disease
CPfs2 (12/10)	Forms Schedule
CM 01 11 (07/01)	Michigan Changes
IL 02 86 (04/17)	Michigan Changes - Cancellation And Nonrenewal
ALL-30463 (08/10)	Michigan Disclaimer Notice Commercial Lines Deregulation
ACE0210 (01/08)	Nuclear, Biological, Chemical, Radiological Exclusion
CC-1K11i (02/18)	Signatures
ALL-21101 (11/06)	Trade or Economic Sanctions Endorsement
IL P 001 (01/04)	U.S. Treasury Departments' Office of Foreign Assets Control ("OFAC") Advisory Notice to Policyholders
ACE0974 (04/20)	

Builder's Risk *(continued)*

Valuation:

- A. Property Under Construction – The cost to repair or replace the insured property lost or damaged with material of like kind and quality, less betterment, including contractor's reasonable profit and overhead not exceeding the percentages in the original contract. If the insured property is not repaired or replaced then direct physical LOSS shall be settled on the basis of ACTUAL CASH VALUE.
- B. EXISTING PROPERTY - The Company will pay the least of the following for direct physical LOSS to EXISTING PROPERTY:
 - 1. The ACTUAL CASH VALUE of the EXISTING PROPERTY;
 - 2. The cost of reasonably restoring the EXISTING PROPERTY to its condition immediately prior to the LOSS;
 - 3. The cost of replacing the EXISTING PROPERTY with substantially identical property unless replacement with substantially identical property is impossible or unnecessary. In such case, FUNCTIONAL REPLACEMENT COST would apply.
- C. Property of Others (Including Items Supplied by the Owner) – If Property of Others is new, the cost to repair or replace the insured property lost or damaged with material of like kind and quality, less betterment. If Property of Others is not new then, the Owner's cost or ACTUAL CASH VALUE, whichever is less.

If the Property of Others is not repaired or replaced then direct physical LOSS shall be settled on the basis of ACTUAL CASH VALUE.

- D. TEMPORARY STRUCTURES – The cost to repair or replace the insured property lost or damaged with material of like kind, quality and condition but in the event the insured property is not repaired or replaced recovery will not exceed the ACTUAL CASH VALUE.
- E. Valuable Papers and Records - The cost to reproduce the insured property with other property of like kind and quality including the cost of gathering or assembling information from back up data if replaced, or if not replaced, at the value of blank material.
- F. ELECTRONIC MEDIA or ELECTRONIC DATA - The cost of the blank media, plus the costs of copying or restoring ELECTRONIC DATA from back-up or from originals of a previous generation, not including research and engineering or the costs or expense of recreating, gathering or assembling such ELECTRONIC DATA.

This Policy does not insure any amount pertaining to the value of such ELECTRONIC DATA to the Named Insured or any other party, even if such ELECTRONIC DATA cannot be recreated, gathered or assembled. If not repaired, replaced or restored, ELECTRONIC MEDIA shall be valued at the cost of the blank media.

- G. Trees, Shrubs and Plants - The cost to replace with property of like kind and quality plus the proper proportion of labor expended if such damage occurs after installation.
- H. Office and Construction Trailers/Semi-trailers and their Contents – If not more than 5 years old as of the expiration date of this Policy, based on the manufacturer's model year, and the NAMED INSURED repairs or replaces the insured property, the least of the following shall apply:

1. The cost to replace the lost or damaged insured property, without deduction for depreciation, with new property of comparable quality and utility;

Builder's Risk *(continued)*

Valuation *(cont.):*

2. The amount the NAMED INSURED actually spends to repair or replace the lost or damaged insured property.

If the insured property is more than 5 years old or the NAMED INSURED does not actually repair or replace the insured property within a reasonable period of time after the date of LOSS, the Company will pay the ACTUAL CASH VALUE

The Company will pay for direct physical LOSS to insured property by determining its REPLACEMENT COST, provided that the NAMED INSURED actually repairs or replaces the lost or damaged insured property, or begins to repair the damaged insured property, within 24 months from the date of direct physical LOSS; otherwise, the Company will pay for direct physical LOSS to insured property by determining its ACTUAL CASH VALUE.

Premium :

\$ 226,214.00	Policy Premium
2,020.00	TRIA Premium
<hr/>	
\$228,234.00	Total Premium

Builder's Risk *(continued)*

Builder's Risk Comparison:

	Chubb	Liberty Mutual	Hartford
Carrier	ACE American	Liberty Mutual	Hartford
AM Best			
Policy term	42 months	42 months	42 months
Hard Costs (CV)	\$52,400,000	\$52,400,000	\$52,400,000
Cancellation (non-pay is 10 days)	90 days	90 days	90 days
Coverages			
Policy Limit -	\$57,640,000	\$57,640,000	\$62,640,000
Soft Costs Limit	\$5,240,000	\$5,240,000	\$10,240,000
Mechanical Breakdown	Incl.	Incl.	Incl.
Debris removal	25% or \$10M w/ is less	\$15M	\$10M
Extra Expense	20% or \$10M w/ less	\$5M	Incl in soft costs
Ordinance or law	\$10M	\$10M	\$2.5M
Flood Limit	\$10M	\$10M	\$10M
Flood zone A	\$10M	\$10M	\$5M
Water Damage (other than flood)	Policy limit	Policy limit	\$25M
Earth Movement	\$10M	\$10M	\$10M
Named Windstorm	Policy Limit	Policy Limit	Policy Limit
Hot Testing	Incl.	Incl.	Incl.
Transit	\$1M	\$5M	\$2.5M
Off-site	\$1M	\$5M	\$2.5M
LEG2 Limit	Policy Limit	Policy Limit	Policy Limit
LEG3 Limit	Policy Limit	Policy Limit	\$1M

Builder's Risk *(continued)*

Builder's Risk Comparison *(cont.)*:

	Chubb	Liberty Mutual	Hartford
Deductibles & Waiting Periods			
Policy Deductible	\$25K	\$50k	\$25k
Earth Movement Deductible	\$100k	\$50k	\$25k
Flood Deductible	\$100k	25% w/ min \$250k	\$100k
Flood Ded Zone A	\$100k	25% w/ min \$250k	\$500k
Named Windstorm Deductible	\$25k	\$50k	\$25k
Water Damage Deductible	\$100k	\$250k	\$100k
LEG3 Deductible	\$100k	\$250k	\$100k
Hot Testing Deductible	\$25k	\$100k	\$25k
Waiting period	14 days	30 days	5 days
Premium Comparison:			
42 Month Premium w/TRIA	\$228,234	\$298,230	\$204,329
Min Premium	\$25k	\$25%	\$10,000
TRIA	\$2,020 (incl above)	\$4,386 (incl above)	\$5,951 (incl above)
LEG-3	\$50,494 (incl above)	\$21,202 (incl above)	Included above
Ave. <u>Annual</u> Rate / Based on <u>Hard Costs</u>	.12444	.16132	.11075

Macomb County Public Works

Contractor's Pollution Liability

9/1/2020 to 3/1/2024

Carrier: AIG Specialty Insurance Company - (Best Rating A XV)

Projects Covered: All Scheduled Projects

Form: Occurrence Claims Made

Limits:

Option:

\$10,000,000	Coverage A – Each Loss Limit
\$10,000,000	Policy Aggregate Limit

Deductible: \$25,000

Exposure Basis: \$52,400,000 *Revenue*

Terms & Conditions:

- Minimum Earned Premium: 25%

Subjectivities:

- Signed AIG COPS, CPO, CPL Application including applicable attachments
- Named Insured's Financial Statements
- Written request to bind
- Completed Surplus Lines Form
- Confirmation of Acceptance or Rejection of TRIA
- Copy of Contract
- Details of Proposed Water Management Protocols
- Locations and Contract Numbers for CPO Project Protect Owner Controlled Endorsement

Premium:

\$55,359.00	Policy Premium
499.00	Terrorism Premium
1,396.45	Surplus Lines Taxes & Fees
<hr/>	
\$57,254.45	Total Premium

Contractor's Pollution Liability *(continued)*

Gaining the Ultimate Value-Added Advantage through AIG Environmental

It is our goal to enhance the coverage of every environmental insurance policy by providing insureds exclusive access to market-leading tools and programs to help manage risk, mitigate environmental losses, conduct loss control, and optimize emergency response:

PIER (Pollution Incident and Environmental Response)[®]

Policyholders have access to a nationwide network of pre-screened emergency response contractors, environmental specialists, or crisis management firms who respond in a timely manner to environmental incidents at pre-negotiated rates, thus helping insureds to minimize or mitigate losses associated with such incidents. Environmental insurance policyholders are automatically enrolled in this program.

- We have the right resources to help you respond to an environmental incident-call 1-877-PIER NOW (743-7669) and speak with a representative or access our PIER mobile website at www.aig.com/pier from your mobile device.

Claims Expertise

Our environmental claims operation, with 60+ claims specialists, is the largest in the industry. The depth and breadth of our operation means we can devote expertise to environmental claims of all types.

- Report your claim by sending a fax to 866-260-0104, emailing SeverityFNOL@aig.com, or log onto our PIER mobile website at www.aig.com/pier, open the Claims accordion, click on Claims Form and follow the instructions.

RiskTool Advantage[®]

RiskTool Advantage[®] provides a unique web-based system that provides clients with access to training, best practices and more, to help improve risk management. The complimentary, web-based system provides:

- the ability to implement a company-wide training program for environmental, health and safety best practices
- create customized training videos using a smartphone or iPad and upload them into RiskTool Advantage[®] for use
- choose from a video library of over 100 titles, many available in languages other than English
- use mobile app to log into account remotely for access to training courses and videos

Register for RiskTool Advantage[®] by contacting a risk consulting representative.

Transportation Loss Control

We provide a number of transportation-related loss control programs for insureds that reinforce positive driving behavior and potential improvements in loss reduction. These programs include driver monitoring and mock Department of Transportation audits.

- To learn more, contact environmental@aig.com

AIG Environmental is committed to the achievement of effective risk management objectives for clients as well as providing them access to incident response assistance with a pollution-release event.

Macomb County Public Works

Owners Protective Professional Indemnity

9/1/2020 to 3/1/2024

Carrier: Berkley Assurance Company - (Best Rating A XV)

Projects Covered: All Scheduled Projects

Form: Occurrence Claims Made

Limits:

Protective Professional Indemnity	
\$10,000,000	<i>each claim</i>
\$10,000,000	<i>aggregate</i>
Protective Contractor's Pollution	
\$10,000,000	<i>each claim</i>
\$10,000,000	<i>aggregate</i>
Third Party Claim Defense & Indemnity	
\$10,000,000	<i>each claim</i>
\$10,000,000	<i>aggregate</i>
\$10,000,000	<i>Combined Policy Aggregate Limit of Liability</i>
Defense Costs Outside the Limit	
\$2,000,000	<i>each claim</i>
\$2,000,000	<i>aggregate</i>

Self-Insured Retention:

Protective Professional Indemnity
 N/A *each claim*
Protective Contractor's Pollution
 N/A *each claim*
Third Party Claim Defense & Indemnity
 \$100,000 *each claim*

Additional Coverages:

Coverage	Limit of Liability <i>(each claim)</i>	Limit of Liability <i>(aggregate)</i>
Litigation Attendance Reimbursement	\$500	\$5,000
Subpoena Defense Expense	\$10,000	\$10,000
ADA and FHA Defense Expense	\$10,000	\$10,000
Corporate Reputation Rehabilitation	\$10,000	\$10,000
Litigation Expense Reimbursement	\$10,000	\$10,000
Building Information Modeling – Extra Expense	\$10,000	\$10,000

Owners Protective Professional Indemnity *(continued)*

Minimal Coverage Requirement:

Entity Name of Description	Professional Liability Limit
FK Engineering Associates	\$5,000,000
Tetra Tech Architects & Engineers	\$1,000,000
All other directly contracted Responsible Professional Entities	\$1,000,000

Retroactive Date: January 1, 2015

Terms & Conditions:

- Annual Policy Period
- Program Type: Project
- 90 Day Notice of Cancellation, except 15 days for Non-Payment of Premium
- 120 Month Extended Reporting Period

Policy Forms, Endorsements and Exclusions:

Endorsements

#	Form ID Number	Form Name
1	BCP-10003 (12-15)	Service of Suit
2	BCP-10005 (07-20)	In Witness-BAC
3	BCP-10007 (12-15)	Fraud Notice
4	BCP-10008 (01-16)	Policyholder Disclosure Notice of Terrorism Insurance Coverage
5	OPUS-10004 (02-16)	Nuclear Energy Liability Exclusion Endorsement
6	OPUS-10005 (01-16)	Terrorism Exclusion Endorsement
7	OPUS-10006 (01-16)	Cap on Losses from Certified Acts of Terrorism Endorsement
8	OPUS-10029 (05-16)	Defense Costs Outside the Limits Endorsement
9	OPUS-10038 (03-16)	Amendment of Section XII, Conditions - Unintentional Failure to Disclose Hazards, Claims Made or Occurrences Existing Endorsement
10	OPUS-10107 (11-17)	Affirmation of Difference in Conditions Applicability Endorsement
11	OPUS-10118 (02-19)	Responsible Entity Waiver of Subrogation Affirmation Endorsement
12	OPUS-11005 (02-16)	Deletion of Specified Coverages Endorsement
13	OPUS-12004 (03-16)	Specified Projects Endorsement
14	OPUS-13001 (05-16)	Dedicated Policy Period for Each Specified Project Endorsement
15	OPUS-13002 (05-16)	Dedicated Extended Reporting Period for Each Specified Project Endorsement
16	OPUS-80001 (12-15)	Claims and Circumstance Reporting Guidelines

Owners Protective Professional Indemnity *(continued)*

Subjectivities:

- Completed, signed and dated Berkley Construction Professional Application
- Copy of the executed agreement between you and the prime contractors performing construction services
- Certificates of Insurance from the entities described in the MIR section of this document evidencing professional and pollution liability insurance.
- Final proposed budget for the Specified Project.
- Final construction schedule for the Specified Project.

Premium:

\$128,750.0	Policy Premium
0	
3,218.75	Surplus Lines Taxes & Fees
<hr/>	
\$131,968.7	Total Premium
5	

Macomb County Public Works Premium Summary

INSURANCE POLICIES	Projects Covered	PROPOSED PREMIUM
General Liability <i>General Indemnity Insurance Co.</i>	- Romeo Arm Segment 5 Rehab	\$129,137.50
Excess Liability \$5M X Primary <i>General Indemnity Insurance Co.</i>	- Romeo Arm Segment 5 Rehab	84,665.00
Excess Liability \$10M X \$5M <i>Central Surety Insurance Co.</i>	- Romeo Arm Segment 5 Rehab	109,037.50
Excess Liability \$10M X \$15M <i>Gen. State Indemnity Co.</i>	- Romeo Arm Segment 5 Rehab	71,594.00
Excess Liability \$25M X \$25M	- Romeo Arm Segment 5 Rehab	157,325.00

Navigators Specialty Insurance Co.		
Builder's Risk <i>Chubb - ACE American</i>	- Romeo Arm Segment 5 Rehab - 15 Mile Interceptor Segment 6 Rehab - 8 ½ Mile Relief In-System Storage	228,234.00
Contractor's Pollution Liability <i>AIG Specialty Insurance Company</i>	- Romeo Arm Segment 5 Rehab - 15 Mile Interceptor Segment 6 Rehab - 8 ½ Mile Relief In-System Storage	57,254.45
Owners Protective Professional Indemnity <i>Swire American Company</i>	- Romeo Arm Segment 5 Rehab - 15 Mile Interceptor Segment 6 Rehab - 8 ½ Mile Relief In-System Storage	131,968.75
TOTAL		\$969,216.20

Option to add \$25M in excess liability limits providing total limits of \$50M (the contract documents state the Owner will provide \$25M limits).

Macomb County Public Works

Premium Payment Plan

9/1/2020 to 3/1/2024

Builder's Risk, General Liability, Excess Liability \$5M x Primary, Excess Liability \$10M x \$5M, Excess Liability \$10M x \$15M, Contractor's Pollution Liability, and Owners Protective Professional Indemnity	<input checked="" type="checkbox"/> Pay in Full <input checked="" type="checkbox"/> Agency Bill
--	--

Proposal Disclosure

This document does not amend, extend, or alter coverage afforded by the policy. For a complete understanding of any insurance you purchase, you must first read your policy, declaration page, and any endorsements and discuss

them with your Meadowbrook agent. A specimen policy may also be available for your review from the insurance company. Actual policy conditions may be amended by endorsement or state law."

Meadowbrook, Inc. strives to place your insurance with financially-sound insurance carriers. There are many financial rating companies who assign credit ratings to participating insurance carriers (i.e., A.M. Best Company). These ratings are the financial rating company's independent opinion about the financial stability of the insurance carrier and, as a result, vary among insurance carriers. Not all insurance carriers choose to be rated by these services. Please be aware of this rating, or lack thereof, for the insurance carrier listed on your proposal. Meadowbrook, Inc. is not responsible for, nor guarantees, the financial solvency of any insurance carrier through which it places your insurance.

We are pleased to present this insurance proposal and thank you for the opportunity. We look forward to serving you in the future.

Macomb County Public Works

Recommendations

2020 - 2024

Directors and Officers Liability		
Directors and Officers Liability insurance provides financial protection for the directors and officers of your company in the event they are sued in conjunction with the performance of their duties as they relate to the company.		<input type="checkbox"/> Obtain Quote <input type="checkbox"/> Decline Coverage <input type="checkbox"/> Coverage In force
Errors and Omissions Liability		
A professional liability insurance that protects companies and individuals against claims made by clients for inadequate work or negligent actions. Errors and omissions insurance often covers both court costs and any settlements up to the amount specified on the insurance contract.		<input type="checkbox"/> Obtain Quote <input type="checkbox"/> Decline Coverage <input type="checkbox"/> Coverage In force
Fiduciary Liability		
Fiduciary liability policies protect companies, their directors, officers and employees and the plans themselves against lawsuits alleging breach of fiduciary duty and administrative errors and omissions in connection with such plans.		<input type="checkbox"/> Obtain Quote <input type="checkbox"/> Decline Coverage <input type="checkbox"/> Coverage In force
Employee Benefits Liability (EBL)		
EBL coverage protects against lawsuits alleging errors and omissions in connection with the administration (e.g. handling of records) of an employee benefit plan. However, EBL coverage almost always excludes coverage for breaches of ERISA's fiduciary duties.		<input type="checkbox"/> Obtain Quote <input type="checkbox"/> Decline Coverage <input type="checkbox"/> Coverage In force

Recommendations *(continued)*

Employee Practices Liability (EPLI)		
Employment Practices Liability Insurance provides employers with protection against many types of employment-related claims, including: wrongful termination, sexual harassment, discrimination and retaliation.		<input type="checkbox"/> Obtain Quote <input type="checkbox"/> Decline Coverage <input type="checkbox"/> Coverage In force
3rd Party Crime Coverage		
The policy provides coverage for employees while working on clients premises. A coverage of special importance to Tech companies this policy would reimburse a client under some circumstances in the event it can be proven that your employee fraudulently transferred funds or stole money, securities, or other property from such client.		<input type="checkbox"/> Obtain Quote <input type="checkbox"/> Decline Coverage <input type="checkbox"/> Coverage In force
ERISA		
ERISA bonds protect employee benefit plans from losses caused by fraud or dishonesty committed by the bonder plan fiduciaries. However, they do not afford coverage to plan fiduciaries for lawsuits brought by third parties such as plan participants or the DOL.		<input type="checkbox"/> Obtain Quote <input type="checkbox"/> Decline Coverage <input type="checkbox"/> Coverage In force
Network Security/ Cyber Liability		
Utilizing <u>on-site servers</u> coverage protects you from losses associated with unauthorized access to or theft of your data or e-business activities, computer viruses, denial of service attacks, as well as alleged unauthorized transactions.		<input type="checkbox"/> Obtain Quote <input type="checkbox"/> Decline Coverage <input type="checkbox"/> Coverage In force
Utilizing “Cloud” coverage protects you from losses associated with unauthorized access to or theft of your data or e-business activities, as well as alleged unauthorized transactions.		

Recommendations *(continued)*

Foreign Liability Coverage		
Coverage is intended to protect you and your employees while traveling outside the United States of America and Canada. It covers General Liability, Automobile Liability and Foreign Voluntary Worker's Compensation. Coverage can also extend to include personal property and blanket accident and health risk.		<input type="checkbox"/> Obtain Quote <input type="checkbox"/> Decline Coverage <input type="checkbox"/> Coverage In force
Kidnap, Ransom or Extortion		
This insurance is used to protect against loss of money, securities, or other property that results from actual, alleged, or threatened kidnapping or extortion.		<input type="checkbox"/> Obtain Quote <input type="checkbox"/> Decline Coverage <input type="checkbox"/> Coverage In force
Ocean Marine Cargo Insurance		
This policy is used to provide coverage for property you ship overseas while within the described territory and for the limits and perils declared on the form.		<input type="checkbox"/> Obtain Quote <input type="checkbox"/> Decline Coverage <input type="checkbox"/> Coverage In force
Pollution Insurance		
This policy covers a business liability arising out of a pollution incident, meaning emission of pollutants into or on land, the atmosphere, or water and causing environmental damage. The broader form of coverage also provides liability for clean-up costs. These policies are generally available on a claims-made basis.		<input type="checkbox"/> Obtain Quote <input type="checkbox"/> Decline Coverage <input type="checkbox"/> Coverage In force
Earthquake and Flood Damage to Property		
The peril of Earthquake and Flood is excluded on the standard property policy, but the coverage can be added back for an additional premium.		<input type="checkbox"/> Obtain Quote <input type="checkbox"/> Decline Coverage <input type="checkbox"/> Coverage In force

Recommendations *(continued)*

Equipment Breakdown Insurance		
<p>This insurance provides coverage for loss arising out of the operation of pressure, mechanical and electrical equipment. It may cover loss to the boiler and machinery itself and may include damage done to other property, as well as, business interruption losses.</p>		<input type="checkbox"/> Obtain Quote <input type="checkbox"/> Decline Coverage <input type="checkbox"/> Coverage In force
Contingent Business Interruption Insurance		
<p>When included, this coverage extends your business income coverage to protect against the breakdown of covered equipment at non-owned scheduled locations that result in a decrease in revenue and extra costs of obtaining services or supplies for your business.</p>		<input type="checkbox"/> Obtain Quote <input type="checkbox"/> Decline Coverage <input type="checkbox"/> Coverage In force
Workers Compensation Repatriation Expenses		
<p>Pays the additional expenses which may be incurred over and above normal transportation costs for returning an injured U.S. employee, including the bodies of such employees fatally injured, from anywhere in the world to the United States; provided that the injured employees return to the U.S. is, in the opinion of medical authorities, necessary.</p>		<input type="checkbox"/> Obtain Quote <input type="checkbox"/> Decline Coverage <input type="checkbox"/> Coverage In force
Social Engineering Fraud		
<p>Social Engineering provides coverage when an employee is intentionally misled into sending or diverting money or securities based on fraudulent information that is provided to them in a written or verbal communication such as an email, fax, letter or phone call.</p>		<input type="checkbox"/> Obtain Quote <input type="checkbox"/> Decline Coverage <input type="checkbox"/> Coverage In force

Client Signature _____

Date _____

EIGHT AND ONE HALF MILE RELIEF DRAIN - 7/14/20 - 7/28/20

Funding Source	Apportionment	Manager	Vendor	Amount	Invoice Detail	Project Summary	Project Balance
8 1/2 Mile Relief	Chapter 20 State of MI - 16.04% County of Macomb - 2.25% Dept. of Roads - 2.25% Eastpointe - 54.33% St. Clair Shores - 25.13%						
		Astorino	De-Cal, Inc.	\$ 1,694.96	Invoice #WO9200668 - 6.23.20	Chapaton HVAC Boiler Testing and Cleaning	
		Astorino	De-Cal, Inc.	\$ 1,485.28	Invoice #WO90019105-4 - 1.1.20	Winter PM	
		Astorino	De-Cal, Inc.	\$ 1,006.80	Invoice #WO90020105-2 - 6.23.20	Chapaton HVAC Repair	
		Astorino	Fishbeck	\$ 4,783.60	Invoice #393305 - 7.20.20	As-Needed Services through 7.10.20 - High	\$ 100,722.41
		Astorino	Green for Life	\$ 715.00	Invoice #45330247 - 7.15.20	Sludge Removal - Bar Screen Cleaning	
		Astorino	HBSCO	\$ 813.72	Invoice #20201317 - 6.29.20	Chapaton Pulsafeeder	
		Astorino	JCI Jones Chemicals Inc.	\$ 3,961.04	Invoice #824936 - 6.30.20	Hypochlorite Solution - 4,388 Gallons	
		Astorino	JCI Jones Chemicals, Inc.	\$ 3,941.08	Invoice #826632 - 7.15.20	Hypochlorite Solution - 4,365 Gallons	
		Astorino	JF Cavanaugh	\$ 521,942.98	Invoice #WO18350 Est. 2	Pump and Screen Improvements - 3.1.20 -	\$ 471,335.36
		Slaneec	Marinos Landscape	\$ 1,445.00	Invoice #9894 - 6.30.20	Mowing	
		Astorino	NexGen	\$ 2,390.62	Invoice #2525 - 7.13.20	License/Support/Contractor Portal - 7.1.20 -	
		Astorino	NexGen	\$ 7,171.85	Invoice #2525 - 7.13.20	License/Support/Contractor Portal - 10.1.20 -	
		Astorino	Tetra Tech, Inc.	\$ 70,565.00	Invoice #51608770 - 7.8.20	In-System Storage Design	\$ 959,729.77
		Astorino	Tetra Tech, Inc.	\$ 15,000.00	Invoice #51608767 - 7.8.20	9 Mile Pump Station Evaluation	\$ 7,000.00
		Total				\$ 636,916.93	



ONESolution

ACCOUNTS PAYABLE CHECK REQUEST
PUBLIC WORKS DIVISION

Mark A. Hackel
County Executive

1. PREPARED BY (Please Type) Michelle Houvener	2. PHONE # 95966	3. DATE 7/10/20
4. SET ID VP200710MD		
5. POST DATE		

PARENT RECORD INFORMATION					
6. VENDOR NAME (Check to be issued to) De-Cal, Inc.	7. VENDOR NUMBER V59694	8. ADDR CODE 01	9. Invoice No (MAX = 16 CHARACTERS) WO9200668	10. Invoice Date 6/23/2020	11. Invoice Amount 1,694.96

CHILD RECORD DETAIL INFORMATION										
Line	12. Org Key	13. Object	14. Job Ledger		16. Work Order Number	17. Secondary Reference (MAX = 16 CHARACTERS)	18. Description (MAX = 30 CHARACTERS)	19. Amount	20. DIV	21. MISC
			Cost Center (CCNT)	15. Object						
A	8210017M	93002	CC0004	93002	WO18006	8 1/2 Mile Relief	Job #9200668, 6/2/20	\$ 1,694.96	GEN	
B										
C										
D										
E										
F										
G										

23. Total: \$ **1,694.96**

REV 09/2016

24. COMMENTS, INSTRUCTIONS OR ADDITIONAL NOTES:

25. Finance Officer:	Bm/mh	30. Drain:	8 1/2 Mile Relief
26. Chief Deputy:		31. Project Balance:	N/A
27. Engineers:		32. Staff Date:	7/14/2020
28. Managers:		33. Board Date:	8/10/2020
29. Coordinator:		34. Select For Pay Date:	



DE-CAL, Inc.
 24659 Schoenherr Rd.
 Warren, MI 48089-4775
 Service Phone: 586-619-0281
 Service Fax: 586-486-5242

Service Invoice

Invoice #: WO9200668

Date: 06/23/2020

Billed To: Macomb County Chapaton
 23001 E. 9 Mile Rd.
 St. Clair Shores MI 48080

Location: Macomb Chapaton Pumping
 23001 E. 9 Mile Rd.
 St. Clair Shores MI 48080

Attn: Accounts Payable

Client PO#:	Employee:	Due Terms: 30DY
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Assembly#	Part#	Description	Quantity	Price	Ext Price	Sales Tax
		See Attached	1.0000	1,694.960000	1,694.96	N

Notes:

See work order for details

Chap HVAC
 Boiler

De-Cal Service Group is a division of De-Cal, Inc.
 Please Make Checks Payable to: De-Cal, Inc.
 Thank you for your prompt payment!

Amount Due: \$ 1,694.96



De - Cal Service Group

Commercial & Industrial HVAC Service, Building Automation

Chillers, Boilers, Piping & Plumbing

24659 Schoenherr Rd.

Warren, MI 48089

Phone: 586-619-0281

www.de-cal.com

Customer Name:	Macomb Chapaton	Date:		De-Cal Job #	9200668
Job Site Location:					
Description Of Work Performed:	Complete CSD1 testing and cleaning on the Lochinvar Boiler	PO #			
		Site Contact:			
LABOR HOURS					
Labor Type	Dates, Technicians	Total Hours	Total		
HVAC Technician		11.0	\$	1,237.50	
Controls Technician			\$		
Boiler Technician			\$		
Chiller Technician			\$		
OT			\$		
DT			\$		
Veh/Tool Allowance		1.0	\$	75.00	
MATERIALS/SUBCONTRACTORS UTILIZED					
Unit #	Material Description	Part #	Quantity	Price	
	Consumables		1.0	\$	20.00
	PPE fee		1.0	\$	10.00
	Misc PVF		1.0	\$	78.06
	Insulation Kit		1.0	\$	30.00
	Air Vent		1.0	\$	222.75
				\$	
				\$	
				\$	
				\$	
				\$	
				\$	
				\$	
				\$	
				\$	
Total Work Order				Material Tax %	\$.21.65
				Sell For	
				TOTAL BILLING:	\$ 1,694.96

Service Report

Service Report No : 9200668-1



Date: June 02, 2020

Client P.O. #: N/A

HVAC Service

Ready to Invoice/Work Complete

Site:

Macomb Chapaton Pumping
23001 E. 9 Mile Rd., St. Clair Shores, MI
48080

Client:

Macomb County Chaption
23001 E. 9 Mile Rd., St. Clair Shores, MI
48080

Reason for Call:

Complete csd-1 testing and cleaning on the Lochinvar boiler.

Description of Service:

Completed the csd-1 testing and annual service on the Lochinvar boiler.

Removed the burner and cleaned. Cleaned the heat exchanger and found the rear insulation baffle was starting to deteriorate. Located a new baffle and installed. Flushed the condensate trap and installed new lime stone in the condensate neutralizing kit. Reinstalled the burner and checked combustion.

Isolated the expansion tanks and the boiler and drained the loop to allow servicing of the leaking air separator and installation of a new ball valve and air separator. Installed a plug into the leaking discharge line of the existing air separator and installed a new ball valve, nipple and air separator. Ran aluminum tubing from the discharge port over the boiler and over top of the floor drain. Refilled the loop and found the make up water was shut off. Upon opening the make up water, the back flow preventer started leaking from the relief valve. Isolated the back flow and removed both check valves, cleaned and reinstalled.

Technician Work

Name	Date	Reg. hrs	Prem. hrs
Rob Murphy	Jun 2, 2020	7	0
Rob Murphy	Jun 3, 2020	4	0

Paperless Productivity™

TSSA#: 000000000000



Mark A. Hackel
County Executive

ONESolution

ACCOUNTS PAYABLE CHECK REQUEST

PUBLIC WORKS DIVISION

1. PREPARED BY (Please Type) Michelle Houvener	2. PHONE # 95966	3. DATE 7/10/20
4. SET ID VP20071010MD		5. POST DATE

PARENT RECORD INFORMATION		
6. VENDOR NAME (Check to be issued to) De-Cal, Inc.	7. VENDOR NUMBER V59694	8. ADDR CODE 01
9. Invoice No (MAX = 15 CHARACTERS) WO90019105-4	10. Invoice Date 10/10/20	11. Invoice Amount 1,485.28

CHILD RECORD DETAIL INFORMATION				20. DIV	21. MISC	22. Sep CK				
General Ledger		Job Ledger	OPTIONAL							
12. Org Key	13. Object	14. Cost Center (CCNT)	15. Object	16. Work Order Number	17. Secondary Reference (MAX = 16 CHARACTERS)	18. Description (MAX = 30 CHARACTERS)	19. Amount			
A	8210017M	93002	93002	WO18006	8 1/2 Mile Relief	Winter PM, 900-19-105	\$ 1,485.28	GEN		
B										
C										
D										
E										
F										
G										

23. Total: \$ **1,485.28**

REV 09/2016

24. COMMENTS, INSTRUCTIONS OR ADDITIONAL NOTES:

25. Finance Officer: **BH/mk**

26. Chief Deputy: _____

27. Engineers: _____

28. Managers: _____

29. Coordinator: _____

30. Drain: **8 1/2 Mile Relief**

31. Project Balance: **N/A**

32. Staff Date: **7/14/2020**

33. Board Date: **8/10/2020**

34. Select For Pay Date: _____



DE-CAL, Inc.
 24659 Schoenherr Rd.
 Warren, MI 48089-4775
 Service Phone: 586-619-0281
 Service Fax: 586-486-5242

Service Invoice

Invoice #: WO90019105-4

Date: 12/23/2019

Billed To: Macomb County Chapaton
 23001 E. 9 Mile Rd.
 St. Clair Shores MI 48080
 Attn: Accounts Payable

Location: Macomb Chapaton Pumping
 23001 E. 9 Mile Rd.
 St. Clair Shores MI 48080

Client PO#:	Employee: Cliff Wilkerson	Due Terms: 30DY
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Assembly#	Part#	Description	Quantity	Price	Ext Price	Sales Tax
		See Attached	1.0000	1,485.280000	1,485.28	N

Notes:
 See work order for details

De-Cal Service Group is a division of De-Cal, Inc.
 Please Make Checks Payable to: De-Cal, Inc.
 Thank you for your prompt payment!

Amount Due: \$ 1,485.28



De - Cal Service Group

Commercial & Industrial HVAC Service, Building Automation
 Chillers, Boilers, Piping & Plumbing
 24659 Schoenherr Rd.
 Warren, MI 48089
 Phone: 586-619-0281
www.de-cal.com

Customer Name:	Macomb Chapton	Date:		De-Cal Job #	900-19-105
Job Site Location:					
Description Of Work Performed:	Winter PM			PO #	
				Site Contact:	
LABOR HOURS					
<i>Labor Type</i>	<i>Dates, Technicians</i>	<i>Total Hours</i>		<i>Total</i>	
HVAC Technician		11.0	\$	1,237.50	
Controls Technician			\$	-	
Boiler Technician			\$	-	
Chiller Technician			\$	-	
OT			\$	-	
DT			\$	-	
Veh/Tool Allowance		1.0	\$	75.00	
MATERIALS/SUBCONTRACTORS UTILIZED					
<i>Unit #</i>	<i>Material Description</i>	<i>Part #</i>	<i>Quantity</i>	<i>Price</i>	
	Consumables		1.0	\$ 20.00	
	Pilot Assembly		1.0	\$ 113.40	
	Thermocouple		1.0	\$ 29.60	
				\$ -	
				\$ -	
				\$ -	
				\$ -	
				\$ -	
				\$ -	
				\$ -	
				\$ -	
				\$ -	
				\$ -	
				\$ -	
				\$ -	
				\$ -	
Total Work Order				Material Tax %	\$ 9.78
				Sell For	\$ -
				TOTAL BILLING:	\$ 1,485.28

Service Report

Service Report No : 900-19-105-1



Date: December 13, 2019

Client P.O. #: N/A

HVAC Service

Ready to Invoice/Work Complete

Site:

Macomb Chapaton Pumping
23001 E. 9 Mile Rd., St. Clair Shores, MI,
48080

Client:

Macomb County Chapton
23001 E. 9 Mile Rd., St. Clair Shores, MI,
48080

Reason for Call:

winter PM

Description of Service:

12-11, 12-12, 12-13 Performed preventive maintenance on HVAC equipment, replaced filters where necessary, checked all belts for wear or damage, replaced if necessary, checked bearings for wear or damage, greased where necessary, checked and verified all gas fired infrared heaters were working properly on mtr floor, checked all battery levels on all stats, checked good.

Checked all gas fired unit heaters in east building, found no pilot on GUH #3 in tank storage area, let Pete know of problem, he said fix it, contacted Grainger for parts due to unit being a Dayton, PO# 19-03906 picked up parts from Grainger in Madison Hgts., returned to site, made repair to unit, had to replace thermo-couple to get pilot to stay on, checked new furnaces, units are operating properly.

Checked gas fired unit heaters in garage area, units are working okay, suggested to Pete about updating heaters to infra-red units, said to get him a quote, met with John from international radiant for building ceiling layout, checked out with Pete, did paperwork

Technician Work

Name	Date	Reg. hrs	Prem. hrs
Cliff Wilkerson	Dec 11, 2019	3	0
Cliff Wilkerson	Dec 12, 2019	6	0
Cliff Wilkerson	Dec 13, 2019	2	0



ONESolution

ACCOUNTS PAYABLE CHECK REQUEST

PUBLIC WORKS DIVISION

Mark A. Hackel
County Executive

1. PREPARED BY (Please Type)	2. PHONE #	3. DATE
Michelle Houvener	95966	7/10/20
4. SET ID		5. POST DATE
VP200710MB		

PARENT RECORD INFORMATION				
6. VENDOR NAME (Check to be Issued to)	7. VENDOR NUMBER	8. ADDR CODE	9. Invoice No (MAX = 16 CHARACTERS)	10. Invoice Date
De-Cal, Inc.	V59694	01	WO90020105-2	6/23/2020
				11. Invoice Amount
				\$ 1,006.80

CHILD RECORD DETAIL INFORMATION										
Line	General Ledger			Job Ledger		OPTIONAL		19. Amount	20. DIV	21. MISC
	12. Org Key	13. Object	14. Cost Center (CCNT)	15. Object	15. Work Order Number	17. Secondary Reference (MAX = 16 CHARACTERS)	18. Description (MAX = 30 CHARACTERS)			
A	8210017M	93002	CC0004	93002	WO18006	8 1/2 Mile Relief	Job #900-20-105-2, HVAC	\$ 1,006.80	GEN	
B										
C										
D										
E										
F										
G										

23. Total: \$ 1,006.80

24. COMMENTS, INSTRUCTIONS OR ADDITIONAL NOTES:

25. Finance Officer:	30. Drain:	8 1/2 Mile Relief
26. Chief Deputy:	31. Project Balance:	N/A
27. Engineers:	32. Staff Date:	7/14/2020
28. Managers:	33. Board Date:	8/10/2020
29. Coordinator:	34. Select For Pay Date:	

BH/mb



DE-CAL, Inc.
 24659 Schoenherr Rd.
 Warren, MI 48089-4775
 Service Phone: 586-619-0281
 Service Fax: 586-486-5242

Service Invoice

Invoice #: WO90020105-2

Date: 06/23/2020

Billed To: Macomb County Chapaton
 23001 E. 9 Mile Rd.
 St. Clair Shores MI 48080

Location: Macomb Chapaton Pumping
 23001 E. 9 Mile Rd.
 St. Clair Shores MI 48080

Attn: Accounts Payable

Client PO#:	Employee:	Due Terms: 30DY
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Assembly#	Part#	Description	Quantity	Price	Ext Price	Sales Tax
		See Attached	1.0000	1,006.800000	1,006.80	N

Notes:
 See work order for details

*Chapaton
 HVAC
 Boiler Service*

De-Cal Service Group is a division of De-Cal, Inc.
 Please Make Checks Payable to: De-Cal, Inc.
 Thank you for your prompt payment!

Amount Due: \$ 1,006.80



De - Cal Service Group

Commercial & Industrial HVAC Service, Building Automation

Chillers, Boilers, Piping & Plumbing

24659 Schoenherr Rd.

Warren, MI 48089

Phone: 586-619-0281

www.de-cal.com

Customer Name:	Macomb Chapaton	Date:		De-Cal Job #	900-20-105-2
Job Site Location:					
Description Of Work Performed:	Summer PM			PO #	
				Site Contact:	
LABOR HOURS					
<i>Labor Type</i>	<i>Dates, Technicians</i>	<i>Total Hours</i>	<i>Total</i>		
HVAC Technician		8.0	\$	900.00	
Controls Technician			\$	-	
Boiler Technician			\$	-	
Chiller Technician			\$	-	
OT			\$	-	
DT			\$	-	
Veh/Tool Allowance		1.0	\$	75.00	
MATERIALS/SUBCONTRACTORS UTILIZED					
<i>Unit #</i>	<i>Material Description</i>	<i>Part #</i>	<i>Quantity</i>	<i>Price</i>	
	Consumables		1.0	\$	20.00
	PPE Fee		1.0	\$	10.00
				\$	-
				\$	-
				\$	-
				\$	-
				\$	-
				\$	-
				\$	-
				\$	-
				\$	-
				\$	-
				\$	-
				\$	-
Total Work Order				Material Tax %	\$ 1.80
				Sell For	
				TOTAL BILLING:	\$ 1,006.80

T&M

Service Report

Service Report No : 900-20-105-2-1

Date: June 11, 2020

Client P.O. #: N/A



HVAC Service

Ready to Invoice/Work Complete

Site:

Macomb Chapaton Pumping
23001 E. 9 Mile Rd., St. Clair Shores , MI ,
48080

Client:

Macomb County Chaption
23001 E. 9 Mile Rd., St. Clair Shores , MI ,
48080

Reason for Call:

Summer PM

Description of Service:

6-11 Performed preventive maintenance on HVAC equipment, cleaned all condensor coils on 3 split system condensers and 1 RTU, flushed all condensate traps and piping, replaced filters, checked all belts, pulleys, sheaves, and bearings for wear/ damage, greased bearings where necessary, checked and verified proper operation, checked equipment at East bldg. replaced filters on furnaces, checked operation of unit hrs. disposed of all trash, checked out with Pete

Technician Work

Name	Date	Reg. hrs	Prem. hrs
Cliff Wilkerson	Jun 11, 2020	8	0

Paperless Productivity™

TSSA#: 000000000000



ONESolution

ACCOUNTS PAYABLE CHECK REQUEST
PUBLIC WORKS DIVISION

Mark A. Hackel
County Executive

1. PREPARED BY (Please Type) Michelle Houvener	2. PHONE # 95966	3. DATE 7/23/20
4. SET ID VP200723MB		
5. POST DATE		

PARENT RECORD INFORMATION	
6. VENDOR NAME (Check to be issued to) Fishbeck	7. VENDOR NUMBER V44063
8. ADDR CODE 01	9. Invoice No (MAX = 16 CHARACTERS) 393305
10. Invoice Date 7/20/2020	11. Invoice Amount 4,783.60

CHILD RECORD DETAIL INFORMATION										
Line	General Ledger			Job Ledger			OPTIONAL			22. Sep CK
	12. Org Key	13. Object	14. Cost Center (CCNT)	15. Object	16. Work Order Number	17. Secondary Reference (MAX = 16 CHARACTERS)	18. Description (MAX = 30 CHARACTERS)	19. Amount	20. DIV	
A	8210017M	80138	CC0004	80138	WO19005	8 1/2 Mile Relief	Pjt #190051 through 7/10/20	\$ 4,783.60	GEN	
B										
C										
D										
E										
F										
G										

REV 09/2018

23. Total: \$ **4,783.60**

24. COMMENTS, INSTRUCTIONS OR ADDITIONAL NOTES:
As Needed Services

25. Finance Officer:	BML/mh	30. Drain:	8 1/2 Mile Relief
26. Chief Deputy:		31. Project Balance:	\$100,722.41
27. Engineers:		32. Staff Date:	7/28/2020
28. Managers:		33. Board Date:	8/10/2020
29. Coordinator:		34. Select For Pay Date:	

**MACOMB COUNTY PUBLIC WORKS OFFICE
ENGINEERING INVOICE COVER SHEET**

WORK ORDER NUMBER	WO19005
PROJECT NUMBER	WWS-2019-001
PROJECT NAME	As-Needed General Engineering Services
DRAINAGE DISTRICT	Eight and One-Half Mile Relief Drain Drainage District
CONSULTANT NAME	Fishbeck
INVOICE DATE	7/20/2020
INVOICE START DATE	6/13/2020
INVOICE END DATE	7/10/2020

ORIGINAL CONTRACT AMOUNT	\$ 151,919.00
CHANGE ORDER TOTAL	\$ 75,000.00
Change Order No. 1	\$ 75,000.00
Change Order No. 2	
Change Order No. 3	
Change Order No. 4	
TOTAL REVISED CONTRACT AMOUNT	\$ 226,919.00
(includes all approved change orders only)	
TOTAL AMOUNT PREVIOUSLY INVOICED	\$ 121,412.99
TOTAL AMOUNT DUE THIS INVOICE	\$ 4,783.60
TOTAL BUDGET REMAINING	\$ 100,722.41
(Includes Total Revised Contract Amount Less Total Invoiced Previously and Total Invoiced Current)	



Payment Options

Remit With ACH payments to Acct. 100094457 ABA. 072413829
 Remit checks to 1515 Arboretum Drive; SE. Grand Rapids, Michigan 49546
 Remittance Advice: accounts_receivable@fishbeck.com
 616.575.3824
 Federal ID No. 38-1841857 | Incorporated

Attention: Mr Vincent Astorino
Macomb County Public Works Commissioner
 21777 Dunham Road
 Clinton Township, MI 48036
 United States

Invoice : 393305
Invoice Date : 7/20/2020
Project : 190051
Project Name : Macomb Co PW/B.5 As-needed
 Engineering
Bill Term : 1

For Professional Services Rendered Through 7/10/2020

WO19005

	Fee	Available	Billings		
			To Date	Previous	Current
1 - Task 1 - Genral As Needed	87,810.49	87,810.49	0.00	0.00	0.00
1.A - Task 1a - Chapaton Structural Study	46,910.34	0.00	46,910.34	46,910.34	0.00
1.B - Task 1b - 9 Mile Pipe Repair (WO19105)	20,816.15	0.00	20,816.15	20,816.15	0.00
1.C - Task 1c - In-System Storage As-Needed	5,250.00	5,250.00	0.00	0.00	0.00
1.D - Task 1d - Office Improvements	21,393.90	0.00	21,393.90	21,393.90	0.00
1.E - Task 1e - Maps	7,500.00	5,678.59	1,821.41	1,821.41	0.00
1.F - Task 1f - Chapaton Sampling Plan	4,065.60	0.00	4,065.60	4,065.60	0.00
1.G - Task 1g - Chapaton Survey	2,084.25	0.00	2,084.25	2,084.25	0.00
1.H - Task 1h - Chapaton Bar Screen Hydraulic Isolation	2,976.75	0.00	2,976.75	2,976.75	0.00
1.I - Task 1i - Chapaton Environmental Study	8,990.72	469.13	8,521.59	8,521.59	0.00
1.j - Task 1j - Chapaton Flow Meter Drawings	2,680.00	0.00	2,680.00	2,680.00	0.00
1.k - Task 1k - Chapaton High Water Protection	4,783.80	4,783.80	4,783.80	0.00	4,783.80
<i>Expenses</i>		4,783.80			
1.l - Task 1l - Chapaton 3D Animation	3,557.00	0.00	3,557.00	3,557.00	0.00
1.M - Task 1m - Chapaton Ground Penetrating Radar	4,600.00	11.00	4,589.00	4,589.00	0.00
1.N - Task 1n - Chapaton Div 01 Specs	3,500.00	1,503.00	1,997.00	1,997.00	0.00
Current Billings					4,783.80
Amount Due This Bill					4,783.80

1.k - Task 1k - Chapaton High Water Protection

Expenses

Account / Vendor

Subconsultant

Applied Science Inc

Cost

Multiplier

Amount

4,556.00

1.05

4,783.80

Total Expenses

4,783.80

Total Project: 190051 - Macomb Co PW/8.5 As-needed Engineering

4,783.80



Mark A. Hackel
County Executive

ONESolution

ACCOUNTS PAYABLE CHECK REQUEST

PUBLIC WORKS DIVISION

1. PREPARED BY (Please Type)	2. PHONE #	3. DATE
Michelle Houvener	95966	7/20/20
4. SET ID	5. POST DATE	
VP200720KUB		

PARENT RECORD INFORMATION

6. VENDOR NAME (Check to be issued to)	7. VENDOR NUMBER	8. ADDR CODE	9. Invoice No (MAX = 16 CHARACTERS)	10. Invoice Date	11. Invoice Amount
Green For Life	V46134	05	45330247	7/15/2020	\$ 715.00

CHILD RECORD DETAIL INFORMATION

Line	General Ledger		Job Ledger		16. Work Order Number	17. Secondary Reference (MAX = 16 CHARACTERS)	18. Description (MAX = 30 CHARACTERS)	19. Amount	20. DIV	21. MISC	22. Sep CK
	12. Org Key	13. Object	14. Cost Center (CCNT)	15. Object							
A	8210017M	92800	CC0004	92800	WO18006	8 1/2 Mile Relief	Ac#001724936, Aug 2020	\$ 715.00	GEN		
B											
C											
D											
OC											
OB											
F											
G											

REV 09/2018

23. Total: \$ 715.00

24. COMMENTS, INSTRUCTIONS OR ADDITIONAL NOTES:

25. Finance Officer:	<i>BW/mh</i>	30. Drain:	8 1/2 Mile Relief
26. Chief Deputy:		31. Project Balance:	N/A
27. Engineers:		32. Staff Date:	7/28/2020
28. Managers:		33. Board Date:	8/10/2020
29. Coordinator:		34. Select For Pay Date:	



GFL ENVIRONMENTAL
 6200 ELMRIDGE DR
 STERLING HEIGHTS, MI 48313-3706

INVOICE

PAYMENT DUE:
08-14-20

SERVICE ADDRESS:
 CHAPATON PUMP STATION
 23001 E MILE RD #9
 ST CLAIR SHORES, MI 48080

INVOICE NUMBER: 0045330247
INVOICE DATE: 07-15-20
SERVICE PERIOD: AUGUST

BILLING CONTACT #:
 (586) 260-4908

ACCOUNT #: 001724936

PREVIOUS BALANCE		1,530.00
CURRENT CHARGES	+	715.00
PAYMENTS/ADJUSTMENTS	-	1,530.00
BALANCE NOW DUE	=	715.00

DATE	DESCRIPTION	QTY X UNIT PRICE	TOTAL
	*** SiteID 00002 - CHAPATON PUMP STATION 23001 E MILE RD #9		
06-29-20	Analytical for manifest/profile - Sludge removal Chapaton Pump Station	1.00	715.00
	Sub Total Services Only:		715.00
	Sub Total Taxes, Oil/Environmental & Fees:		0.00
	Site Sub Total:		715.00
Total New Charges			715.00

IMPORTANT NEWS:

GFL Environmental Offers Pay-By-Phone!
 Call **1-844-464-3587**. Choices. Checking, Visa, American Express and Mastercard are accepted.

For Customer Service and Account Inquiries. Please call (844) 464-3587

Convenience. It's fast! Your statement is online right now. **Control.** You decide how and when to pay. To Enroll: myaccount.gflusa.com

To avoid late fees and service interruption, payments must be received by the due date. Except as may be otherwise provided by written contract, all past due balances will be assessed a 1.5% late fee with a minimum charge of \$5.00. By payment of this invoice, you are expressly confirming your consent to be contacted, with respect to this account, at the Billing Contact # reflected above.

PLEASE DETACH AND RETURN THE BOTTOM PORTION WITH YOUR PAYMENT

BE SURE TO WRITE YOUR INVOICE NUMBER ON YOUR CHECK.
CUSTOMER ACCOUNT #: 001724936
INVOICE NUMBER: 0045330247
PAYMENT DUE: 08-14-20
TOTAL AMOUNT DUE: \$715.00

Amount Enclosed \$

Remit to: www.gflusa.com



GFL ENVIRONMENTAL
 6200 ELMRIDGE DR
 STERLING HEIGHTS, MI 48313-3706

Check note and see reverse for address and phone corrections.

9045139-564-1 1 1 564 1 AV 0.389 2

MACOMB COUNTY PUBLIC WORKS
 21777 DUNHAM RD
 CLINTON TOWNSHIP MI 48036-1005

GFL ENVIRONMENTAL
 PO BOX 791519
 BALTIMORE, MD 21279-1519

0045330247001724936000007150000000715001000

1105295.TIF GFLMI 11/13/19 CMYK 3.58

9045139-564-1-1-1



Mark A. Hackel
County Executive

ONESolution

ACCOUNTS PAYABLE CHECK REQUEST

PUBLIC WORKS DIVISION

1. PREPARED BY (Please Type)	2. PHONE #	3. DATE
Michelle Houvener	95966	6/30/20
4. SET ID		5. POST DATE
VP 200630M4		

6. VENDOR NAME (Check to be Issued to)		7. VENDOR NUMBER	8. ADDR CODE	9. Invoice No (MAX = 16 CHARACTERS)	10. Invoice Date	11. Invoice Amount
HESCO		V66420	02	20201317	6/29/2020	\$ 813.72

CHILD RECORD DETAIL INFORMATION

Line	General Ledger		Job Ledger		16. Work Order Number	OPTIONAL		19. Amount	20. DIV	21. MISC	22. Sep CK
	12. Org Key	13. Object	14. Cost Center (CCNT)	15. Object		17. Secondary Reference (MAX = 16 CHARACTERS)	16. Description (MAX = 30 CHARACTERS)				
A	8210017M	93002	CC0004	93002	WO18006	8 1/2 Mile Relief	Pjt #B20201165 Chapaton Pulsafeeder	\$ 813.72	GEN		
B											
C											
D											
E											
F											
G											

23. Total: \$ 813.72

24. COMMENTS, INSTRUCTIONS OR ADDITIONAL NOTES:

25. Finance Officer: BMI/mh

26. Chief Deputy: _____

27. Engineers: _____

28. Managers: _____

29. Coordinator: _____

30. Drain: 8 1/2 Mile Relief

31. Project Balance: N/A

32. Staff Date: 7/14/2020

33. Board Date: 8/10/2020

34. Select For Pay Date: _____



Knowledgeable • Professional • Attentive • Likeable
 23905 Freeway Park • Farmington Hills, MI 48335
 Phone: 586.978.7200 • Fax: 586.978.2200
 www.hesco-mi.com

Invoice No. 20201317

Date: 06/29/2020

Billed To: Macomb County Public Works Commission
 Finance Dept
 21777 Dunham Rd
 Clinton Twp MI 48036

Project: B20201165 Chapaton Pulsafeeder hydratubes

Contact: P.O.# Verbal Pete Trombley **Salesperson:** Heather Walker **Due Date:** 07/29/2020

Description	Qty	Rate	Amount
W096317-HYP HYDRATUBE	2.000	399.36	798.72
Freight	1.000	15.00	15.00

Thank you for your prompt payment!

Non-Taxable Amount:	813.72
Taxable Amount:	0.00
Sales Tax:	0.00
Amount Due	813.72



ONESolution

ACCOUNTS PAYABLE CHECK REQUEST

PUBLIC WORKS DIVISION

Mark A. Hackel
County Executive

1. PREPARED BY (Please Type) Michelle Houvener	2. PHONE # 95966	3. DATE 6/30/20
4. SET ID V8200710MUA		
5. POST DATE		

PARENT RECORD INFORMATION

6. VENDOR NAME (Check to be Issued to) JCI JONES CHEMICALS INC	7. VENDOR NUMBER V65297	8. ADDR CODE 01	9. Invoice No (MAX = 16 CHARACTERS) 824936	10. Invoice Date 6/30/2020	11. Invoice Amount \$ 3,961.04
--	-----------------------------------	---------------------------	--	--------------------------------------	--

CHILD RECORD DETAIL INFORMATION

Line	General Ledger		Job Ledger		16. Work Order Number	17. Secondary Reference (MAX = 16 CHARACTERS)	18. Description (MAX = 30 CHARACTERS)	19. Amount	20. DIV	21. MISC	22 Sep CK
	12. Org Key	13. Object	14. Cost Center (CCNT)	15. Object							
A	8210017M	72650	CC0004	72650	WO18006	8 1/2 Mile Relief	Order #6190922, 6/30/20	\$ 3,961.04	GEN		
B											
C											
D											
OP											
ED											
F											
G											

REV 09/2016

23. Total: \$ **3,961.04**

24. COMMENTS, INSTRUCTIONS OR ADDITIONAL NOTES:

25. Finance Officer:	Bm/mh	30. Drain:	8 1/2 Mile Relief
26. Chief Deputy:		31. Project Balance:	N/A
27. Engineers:		32. Staff Date:	7/14/2020
28. Managers:		33. Board Date:	8/10/2020
29. Coordinator:		34. Select For Pay Date:	



www.jcichemicals.com

INVOICE

Inv Date	Invoice #
06/30/2020	824936
Date Shipped	Order/BOL #
06/30/2020	610922

*** ORIGINAL ***
 JCI JONES CHEMICALS, INC..
 RIVERVIEW BRANCH LOCATION
 18000 PAYNE AVENUE
 RIVERVIEW, MI 48192
 Phone: (734) 283-0677
 Fax: (734) 283-0979
 email: cs@jci chem.com

Customer Number
 21543215

S MACOMB COUNTY
 O ATTN: ACCTS PAYABLE
 L 23001 9 MILE ROAD
 D Saint Clair Shores , MI 48080-
 T USA
 O

S ID #: 1
 H CHAPATON PUMPING STATION
 I 23001 NINE MILE RD
 P ST CLAIR SHORES , MI 48080-
 T USA
 O

Customer PO #		FOB Remark		Freight Terms		Sales ID
VERBAL-PETE		Destination		Delivered		NORTH
Release #		Ship Via	Terms	Due Date	Discount Due Date	
		Harold Marcu	N 30	07/30/2020	7/30/2020	
Units	Package	Product Name	Total Quantity	Unit Price	Amount	
4,386.00	1 Gal Bulk	HYPOCHLORITE SOLUTION, SS150 1201-001 BULK (\$85 Stop Fee) (+ fsc)	4,388.0000/Gal	0.9000 /Gal	3,949.20	
General Remarks:		<> EMAIL INVOICE TO: michelle.houvener@macombgov.org <> OUTSIDE CARRIER: HAROLD MARCUS NET WEIGHT: 44 240 FSC				
		Fuel Surcharge			11.84	

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

Total: 3,961.04

PLEASE PAY
THIS AMOUNT



Remit To: JCI Jones Chemicals, Inc.
 MSC# 729
 PO BOX 830674
 Birmingham, AL 35283-0674 USA

JCI Welcomes payments via ACH, EFT and WIRE



ONESolution

ACCOUNTS PAYABLE CHECK REQUEST
PUBLIC WORKS DIVISION

Mark A. Hackel
County Executive

1. PREPARED BY (Please Type)	2. PHONE #	3. DATE
Michelle Houvener	95966	7/20/20
4. SET ID		
5. POST DATE		

1P200720403

PARENT RECORD INFORMATION

6. VENDOR NAME (Check to be issued to)	7. VENDOR NUMBER	8. ADDR CODE	9. Invoice No (MAX = 16 CHARACTERS)	10. Invoice Date	11. Invoice Amount
JCI JONES CHEMICALS INC	V65297	01	826632	7/15/2020	\$ 3,941.08

CHILD RECORD DETAIL INFORMATION

Line	General Ledger		Job Ledger		16. Work Order Number	17. Secondary Reference (MAX = 16 CHARACTERS)	18. Description (MAX = 30 CHARACTERS)	19. Amount	20. DIV	21. MISC	22. Sep CK
	12. Org Key	13. Object	14. Cost Center (CCNT)	15. Object							
A	8210017M	72650	CC0004	72650	WO18006	8 1/2 Mile Relief	Order #612303, 7/15/20	\$ 3,941.08	GEN		
B											
C											
D											
E											
F											
G											

REV 09/2018

23. Total: \$ 3,941.08

24. COMMENTS, INSTRUCTIONS OR ADDITIONAL NOTES:

BHL/mh

25. Finance Officer:	30. Drain:	8 1/2 Mile Relief
26. Chief Deputy:	31. Project Balance:	N/A
27. Engineers:	32. Staff Date:	7/28/2020
28. Managers:	33. Board Date:	8/10/2020
29. Coordinator:	34. Select For Pay Date:	



www.jcichemicals.com

INVOICE

*** ORIGINAL ***
 JCI JONES CHEMICALS, INC..
 RIVERVIEW BRANCH LOCATION
 18000 PAYNE AVENUE
 RIVERVIEW, MI 48192
 Phone: (734) 283-0877
 Fax: (734) 283-0979
 email: cs@jcichem.com

Inv Date	Invoice #
07/15/2020	826632
Date Shipped	Order/BOL #
07/15/2020	612303

Customer Number
 21543215

S MACOMB COUNTY
 O ATTN: ACCTS PAYABLE
 L 23001 9 MILE ROAD
 D Saint Clair Shores, MI 48080-
 T USA
 O

S ID #: 1
 H CHAPATON PUMPING STATION
 I 23001 NINE MILE RD
 P ST CLAIR SHORES, MI 48080-
 T USA
 O

Customer PO #		FOB Remark	Freight Terms		Sales ID
VERBAL-PETE		Destination	Delivered		NORTH
Release #	Ship Via	Terms	Due Date	Discount Due Date	
	Harold Marcu	N 30	08/14/2020	8/14/2020	
Units	Package	Product Name	Total Quantity	Unit Price	Amount
4,365.00	1 Gal Bulk	HYPOCHLORITE SOLUTION, SS150 1201-001 BULK (\$85 Stop Fee) (+ fsc)	4,365.0000/Gal	0.9000 /Gal	3,928.50
General Remarks:		<> EMAIL INVOICE TO: michelle.houvener@macombgov.org <> OUTSIDE CARRIER: HAROLD MARCUS NET WEIGHT: 44.080 FSC			
		Fuel Surcharge			12.58

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

Total: 3,941.08

Remit To: JCI Jones Chemicals, Inc.
 MSC# 729
 PO BOX 830674
 Birmingham, AL 35283-0674 USA

PLEASE PAY
 THIS AMOUNT



JCI Welcomes payments via ACH, EFT and WIRE



ONESolution

ACCOUNTS PAYABLE CHECK REQUEST

PUBLIC WORKS DIVISION

Mark A. Hackel
County Executive

1. PREPARED BY (Please Type) Michelle Houvener	2. PHONE # 95966	3. DATE 7/21/20
4. SET ID VP200723MB		
5. POST DATE		

PARENT RECORD INFORMATION	
6. VENDOR NAME (Check to be issued to) JF Cavanaugh	7. VENDOR NUMBER V67460
8. ADDR CODE 01	9. Invoice No (MAX = 16 CHARACTERS) WO18350 Est 2
10. Invoice Date 7/16/2020	11. Invoice Amount \$ 521,942.98

General Ledger		Job Ledger		CHILD RECORD DETAIL INFORMATION							
Line	12. Org Key	13. Object	14. Cost Center (CCNT)	15. Job Ledger Object	15. Work Order Number	17. Secondary Reference (MAX = 16 CHARACTERS)	18. Description (MAX = 30 CHARACTERS)	19. Amount	20. DIV	21. MISC	22. Sep CK
A	8210017M	80126	CC0004	80126	WO18350	8 1/2 Mile Relief	Pump & Screen Imprvmts - 3/1-7/16	\$ 521,942.98	GEN		
B											
C											
D											
E											
F											
G											

23. Total: \$ **521,942.98**

REV 09/2018

24. COMMENTS, INSTRUCTIONS OR ADDITIONAL NOTES:
Record retainage for Est #2 - \$57,993.66 Total retainage to date \$59,493.66

25. Finance Officer:	BMIMH	30. Drain:	8 1/2 Mile Relief
26. Chief Deputy:		31. Project Balance:	\$471,335.36
27. Engineers:		32. Staff Date:	7/28/2020
28. Managers:		33. Board Date:	8/10/2020
29. Coordinator:		34. Select For Pay Date:	

Contractor's Application for Payment

Owner: <u>8 1/2 Mile Relief Drain Drainage District</u>	Owner's Project No.: <u>WWS-2019-022</u>
Engineer: <u>HRC</u>	Engineer's Project No.: <u>20180363</u>
Contractor: <u>J.F. Cavanaugh</u>	Contractor's Project No.: <u>-</u>
Project: <u>Chapaton Pump and Screen Improvements</u>	
Contract: _____	
Application No.: <u>1</u>	Application Date: <u>7/16/2020</u>
Application Period: From <u>3/1/2020</u> to <u>7/16/2020</u>	

1. Original Contract Price	\$ 1,162,472.00
2. Net change by Change Orders	\$ (96,200.00)
3. Current Contract Price (Line 1 + Line 2)	\$ 1,066,272.00
4. Total Work completed and materials stored to date (Sum of Column G Lump Sum Total and Column J Unit Price Total)	\$ 594,936.64
5. Retainage	
a. <u>10%</u> X \$ <u>594,936.64</u> Work Completed	\$ 59,493.66
b. <u>0%</u> X \$ <u>135,998.64</u> Stored Materials	\$ -
c. Total Retainage (Line 5.a + Line 5.b)	\$ 59,493.66
6. Amount eligible to date (Line 4 - Line 5.c)	\$ 535,442.98
7. Less previous payments (Line 6 from prior application)	\$ 13,500.00
8. Amount due this application	\$ 521,942.98
9. Balance to finish, including retainage (Line 3 - Line 4)	\$ 471,335.36

Contractor's Certification

The undersigned Contractor certifies, to the best of its knowledge, the following:

(1) All previous progress payments received from Owner on account of Work done under the Contract have been applied on account to discharge Contractor's legitimate obligations incurred in connection with the Work covered by prior Applications for Payment;

(2) Title to all Work, materials and equipment incorporated in said Work, or otherwise listed in or covered by this Application for Payment, will pass to Owner at time of payment free and clear of all liens, security interests, and encumbrances (except such as are covered by a bond acceptable to Owner indemnifying Owner against any such liens, security interest, or encumbrances); and

(3) All the Work covered by this Application for Payment is in accordance with the Contract Documents and is not defective.

Contractor: J.F. Cavanaugh

Signature: Brian Pass **Date:** 7/16/2020

Recommended by Engineer	Approved by Owner
By: <u>Aaron Uranga</u>	By: _____
Title: <u>Associate</u>	Title: _____
Date: <u>7/16/2020</u>	Date: _____
Approved by Funding Agency	
By: _____	By: _____
Title: _____	Title: _____
Date: _____	Date: _____

Progress Estimate - Unit Price Work

Owner: 8 1/2 Mile Relief Drain Drainage District
 Engineer: HRC
 Contractor: J.F. Cavanagh
 Project: Chapaton Pump and Screen Improvements
 Contract:

Owner's Project No.: WWS-2019-022
 Engineer's Project No.: 20180363
 Contractor's Project No.:

Contractor's Application for Payment

Application No.: 1
 Application Period: From 03/01/20 to 07/16/20
 Application Date: 07/16/20

Bid Item No.	Description	Contract Information		F Value of Bid Item (C X E) (\$)	G Work Completed		H Value of Work Completed to Date (E X G) (\$)	I Materials Currently Stored (not in G) (\$)	J Work Completed and Materials Stored to Date (H + I) (\$)	K % of Value of Item (J / F) (%)	L Balance to Finish (F - J) (\$)
		C Item Quantity	D Units		E Unit Price (\$)	G Estimated Quantity Incorporated in the Work					
1	Bonds, Insurance and Mobilization (10% Max)	1	LS	60,500.00	1.00	60,500.00	60,500.00	-	60,500.00	100%	-
2	Pre-Construction Audio-Visual	1	LS	2,500.00	-	-	-	-	-	0%	2,500.00
3	Flow Diversion During Construction Complete - South Side	1	LS	10,650.00	1.00	10,650.00	10,650.00	-	10,650.00	100%	-
4	Flow Diversion During Construction Complete - North Side	1	LS	10,650.00	1.00	10,650.00	10,650.00	-	10,650.00	100%	-
5	New Stop Logs, Guides and Related Structural Improvements	1	LS	49,950.00	1.00	49,950.00	49,950.00	-	49,950.00	100%	-
6	New Stop Logs, Guides and Related Structural Improvements	1	LS	86,250.00	1.00	86,250.00	86,250.00	-	86,250.00	100%	-
7	Remove Existing Bar Rack and Install New - South Side	1	LS	158,620.00	1.00	158,620.00	158,620.00	-	158,620.00	100%	-
8	Remove Existing Bar Rack and Install New - North Side	1	LS	158,620.00	1.00	158,620.00	158,620.00	-	158,620.00	100%	-
9	Access Hatch Revisions in Screen Room	1	LS	89,433.00	-	-	-	-	-	0%	89,433.00
10	Guardrail Revision in Screen Room	1	LS	16,638.00	-	-	-	-	-	0%	16,638.00
11	I&C Upgrades in Screen Room	1	LS	12,618.00	-	-	-	-	-	0%	12,618.00
12	Core Through Wet Well Wall	1	LS	3,960.00	-	-	-	-	-	0%	3,960.00
13	Concrete Collar in Wet Well	1	LS	13,712.00	-	-	-	-	-	0%	13,712.00
14	Through Wall Pipe Penetration	1	LS	6,203.00	-	-	-	-	-	0%	6,203.00
15	North Dry Well Demolition Work	1	LS	24,863.00	-	-	-	-	-	0%	24,863.00
16	Install new Owner Furnished Pump	1	LS	9,843.00	-	-	-	-	-	0%	9,843.00
17	Electrical Upgrades for Added Pump	1	LS	46,247.00	-	-	-	-	-	0%	46,247.00
18	New Concrete Pump Bases	2	EA	6,953.00	-	-	-	-	-	0%	13,906.00
19	Reconfigure Existing Pump	1	LS	5,200.00	-	-	-	-	-	0%	5,200.00
20	New Piping, valves and fittings, in Wet Well	1	LS	212,044.00	-	-	-	-	-	0%	212,044.00
21	Pressure gauges and assemblies	4	EA	660.00	-	-	-	135,998.64	135,998.64	64%	2,640.00
22	Jib Crane Addition in North Dry Well	1	LS	29,355.00	-	-	-	-	-	0%	29,355.00
23	Electrical Upgrades for Jib Crane	1	LS	3,966.00	-	-	-	-	-	0%	3,966.00
24	Access Stairway	1	LS	48,204.00	-	-	-	-	-	0%	48,204.00
25	New Pressure Manholes at Elevation 551 - Complete	1	LS	11,330.00	0.18	8,586.00	8,586.00	-	8,586.00	18%	3,966.00
26	Core Infill at Elevation 551	1	LS	1,030.00	1.00	1,030.00	1,030.00	-	1,030.00	100%	-
27	Core at Patch Repair Type 1	28	EA	5,600.00	-	-	-	-	-	0%	5,600.00
28	Pressure Injection of Cracks Type 2A (Non-Weeping)	150	LF	7,500.00	-	-	-	-	-	0%	7,500.00
29	Pressure Injection of Cracks Type 2B (Weeping)	50	LF	5,000.00	-	-	-	-	-	0%	5,000.00
30	Concrete Surface Repair Type 3 - Up to 1" Depth	16	SF	6,400.00	-	-	-	-	-	0%	6,400.00
31	Concrete Surface Repair Type 3 - 1" to 3" Depth	30	SF	4,000.00	-	-	-	-	-	0%	4,000.00
32	Concrete Surface Repair Type 3 - Greater than 3"	5	SF	400.00	-	-	-	-	-	0%	400.00
33	Existing Guardrail Removal Repair Type 4	15	EA	3,000.00	-	-	-	-	-	0%	3,000.00
34	Allowance for MCET Work at PLC	1	ALLOW	10,000.00	-	-	-	-	-	0%	10,000.00
35				Original Contract Totals \$			\$ 1,162,472.00	\$ 135,998.64	\$ 691,136.64	59%	\$ 471,335.36

Progress Estimate - Unit Price Work

Contractor's Application for Payment

Owner: 8 1/2 Mile Relief Drain Drainage District
 Engineer: HRC
 Contractor: J.F. Cavanaugh
 Project: Chapaton Pump and Screen Improvements
 Contract:

Owner's Project No.: WWS-2019-022
 Engineer's Project No.: 20180363
 Contractor's Project No.:

Application No.: 1		Application Period: From 03/01/20 to 07/16/20		Application Date: 07/16/20					
Bid Item No.	Description	Contract Information		Work Completed		Materials Currently Stored (not in G) (\$)	Work Completed and Materials Stored to Date (H+I) (\$)	% of Value of Item (J/F) (%)	Balance to Finish (F - J) (\$)
		Item Quantity	Unit Price (\$)	Estimated Quantity Incorporated in the Work	Value of Work Completed to Date (E X G) (\$)				
1	Flash Boards	1.00	LS	40,000.00	40,000.00		40,000.00	100%	-
2	Delete Stop Logs (Items 5 and 6)	1.00	LS	(136,200.00)	(136,200.00)		(136,200.00)	100%	-
		Change Order Totals:		\$	(96,200.00)	\$	(96,200.00)	100%	\$
Original Contract and Change Orders Project Totals: \$ 1,066,272.00 \$ 458,938.00 \$ 135,998.64 \$ 594,936.64 56% \$ 471,335.36									

APPLICATION AND CERTIFICATION FOR PAYMENT

AIA DOCUMENT G702

TO OWNER: PROJECT: APPLICATION NO: APPLICATION DATE: July 16, 2020
 8 1/2 Mile Relief Drain Drainage Distri Chapaton Pump Station Dry Weather Pump CP 2
 FROM CONTRACTOR: VIA ARCHITECT: PERIOD TO: 16-Jul-20
 J.F. Cavanaugh Company Hubbell, Roth and Clark, Inc.
 20750 Sunnydale, Farm. Hls. MI 48336 535 Griswold Street, Suite 1650, Detroit MI 48226
 CONTRACT FOR: Warren WWTP Screen Replacement CONTRACT DATE 16-Jul-20
 DISTRIBUTION TO:
 OWNER:
 ARCHITECT: HRC
 CONTRACTOR: J.F. Cavanaugh Co.

CONTRACTOR'S APPLICATION FOR PAYMENT

The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief the Work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for Work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payment shown herein is now due.

1. ORIGINAL CONTRACT SUM \$ 1,162,472.00
2. Net change by Change Orders \$ (96,200.00)
3. CONTRACT SUM TO DATE (Line 1 + 2) \$ 1,066,272.00
4. TOTAL COMPLETED & STORED TO DATE (Column G on G703) \$ 594,936.64
5. RETAINAGE:
 - a. 10 % of Completed Work \$ 59,493.66
 - b. % of Stored Material \$
 Total Retainage (Lines 5a + 5b of Column F on G703) \$ 59,493.66
6. TOTAL EARNED LESS RETAINAGE (Line 4 Less Line 5 Total) \$ 535,442.98
7. LESS PREVIOUS CERTIFICATES FOR PAYMENT (Line 6 from prior Certificate) \$ 13,500.00
8. CURRENT PAYMENT DUE \$ 521,942.98
9. BALANCE TO FINISH, INCLUDING RETAINAGE (Line 3 less Line 6) \$ 530,829.02

CHANGE ORDER SUMMARY	ADDITIONS	DEDUCTIONS
Total changes approved in previous months by Owner	\$0.00	
Total approved this Month	\$40,000.00	(\$136,200.00)
TOTALS	\$40,000.00	(\$136,200.00)
NET CHANGES by Change Order		(\$96,200.00)

CONTRACTOR:  Date: 7/16/20
 By:  County of: Wayne Ca. K/End
 State of: Michigan Notary Public: Jennifer L. Ellis My Commission Expires: 6-30-25

ARCHITECT'S CERTIFICATE FOR PAYMENT

In accordance with the Contract Documents, based on on-site observations and the data comprising the application, the Architect certifies to the Owner that to the best of the Architect's knowledge, information and belief the Work has progressed as indicated, the quality of the Work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the AMOUNT CERTIFIED.

AMOUNT CERTIFIED: \$
 (Attach explanation if amount certified differs from the amount applied. Initial all figures on this Application and on the Continuation Sheet that are changed to conform with the amount certified.)
 ARCHITECT:

By: _____ Date: _____
 This Certificate is not negotiable. The AMOUNT CERTIFIED is payable only to the Contractor named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this Contract.

Users may obtain validation of this document by requesting a completed AIA Document D401 - Certification of Document's Authenticity from the Licensee.

CONTINUATION SHEET

AIA DOCUMENT G703

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

In tabulations below, amounts are stated to the nearest dollar.

Use Column I on Contracts where variable retainage for line items may apply.

APPLICATION NO: 2

APPLICATION DATE: 16-Jul-20

PERIOD TO: 16-Jul-20

Project: Chapaton Pump Station Dry Weather Pump and Screen Improvements

A ITEM NO.	B DESCRIPTION OF WORK	C UNITS	D UNIT PRICE	E EXTENSION	F WORK COMPLETED		G MATERIALS PRESENTLY STORED	H TOTAL COMPLETED AND STORED TO DATE	I %	J BALANCE TO FINISH	K RETAINAGE (IF VARIABLE RATE)
					FROM PREVIOUS APPLICATION	THIS PERIOD					
1	Bonds, Insurance, Mobilization	1	\$ 60,500.00	\$ 60,500.00	\$ 15,000.00	\$ 45,500.00	\$ -	\$ 60,500.00	100.00%	\$ -	\$ -
2	Pre-Construction Audio Video	1	\$ 2,500.00	\$ 2,500.00	\$ -	\$ -	\$ -	\$ -	0.00%	\$ 2,500.00	\$ -
3	Flow Diversion During Construction - South Side	1	\$ 10,650.00	\$ 10,650.00	\$ -	\$ 10,650.00	\$ -	\$ 10,650.00	100.00%	\$ -	\$ -
4	Flow Diversion During Construction - North Side	1	\$ 10,650.00	\$ 10,650.00	\$ -	\$ 10,650.00	\$ -	\$ 10,650.00	100.00%	\$ -	\$ -
5	New Stop Logs, Guides, Realigned Str - South Side	1	\$ 49,950.00	\$ 49,950.00	\$ -	\$ 49,950.00	\$ -	\$ 49,950.00	100.00%	\$ -	\$ -
6	New Stop Logs, Guides, Realigned Str - North Side	1	\$ 86,250.00	\$ 86,250.00	\$ -	\$ 86,250.00	\$ -	\$ 86,250.00	100.00%	\$ -	\$ -
7	Remove Existing Bar Rack, Install New - South Side	1	\$ 158,620.00	\$ 158,620.00	\$ -	\$ 158,620.00	\$ -	\$ 158,620.00	100.00%	\$ -	\$ -
8	Remove Existing Bar Rack, Install New - North Side	1	\$ 158,260.00	\$ 158,260.00	\$ -	\$ 158,260.00	\$ -	\$ 158,260.00	100.00%	\$ -	\$ -
9	Access Revisions in Screen Room	1	\$ 89,433.00	\$ 89,433.00	\$ -	\$ -	\$ -	\$ -	0.00%	\$ 89,433.00	\$ -
10	Guardrail Revision in Screen Room	1	\$ 16,638.00	\$ 16,638.00	\$ -	\$ -	\$ -	\$ -	0.00%	\$ 16,638.00	\$ -
11	I&C Upgrades in Screen Room	1	\$ 12,618.00	\$ 12,618.00	\$ -	\$ -	\$ -	\$ -	0.00%	\$ 12,618.00	\$ -
12	Core Through Wet Well	1	\$ 3,960.00	\$ 3,960.00	\$ -	\$ -	\$ -	\$ -	0.00%	\$ 3,960.00	\$ -
13	Concrete Collar in Wet Well	1	\$ 13,712.00	\$ 13,712.00	\$ -	\$ -	\$ -	\$ -	0.00%	\$ 13,712.00	\$ -
14	Through Wall Pipe Penetration	1	\$ 6,203.00	\$ 6,203.00	\$ -	\$ -	\$ -	\$ -	0.00%	\$ 6,203.00	\$ -
15	North Dry Well Demolition Work	1	\$ 24,863.00	\$ 24,863.00	\$ -	\$ -	\$ -	\$ -	0.00%	\$ 24,863.00	\$ -
16	Install New Owner Furnished Pump	1	\$ 9,843.00	\$ 9,843.00	\$ -	\$ -	\$ -	\$ -	0.00%	\$ 9,843.00	\$ -
17	Electrical Upgrades for Added Pump	1	\$ 46,247.00	\$ 46,247.00	\$ -	\$ -	\$ -	\$ -	0.00%	\$ 46,247.00	\$ -
18	New Concrete Pump Bases	1	\$ 13,906.00	\$ 13,906.00	\$ -	\$ -	\$ -	\$ -	0.00%	\$ 13,906.00	\$ -
19	Reconfigure Existing Pump	1	\$ 5,200.00	\$ 5,200.00	\$ -	\$ -	\$ -	\$ -	0.00%	\$ 5,200.00	\$ -
20	New Piping, valves, and fittings, in Wet Well	1	\$ 212,044.00	\$ 212,044.00	\$ -	\$ -	\$ 135,998.64	\$ 135,998.64	64.14%	\$ 76,045.36	\$ -
21	Pressure Gauges and Assemblies	1	\$ 2,640.00	\$ 2,640.00	\$ -	\$ -	\$ -	\$ -	0.00%	\$ 2,640.00	\$ -
22	Jib Crane Addition in North Dry Well	1	\$ 29,355.00	\$ 29,355.00	\$ -	\$ -	\$ -	\$ -	0.00%	\$ 29,355.00	\$ -
23	Electrical Upgrade for Jib Crane	1	\$ 3,966.00	\$ 3,966.00	\$ -	\$ -	\$ -	\$ -	0.00%	\$ 3,966.00	\$ -
24	Access Stairway	1	\$ 48,204.00	\$ 48,204.00	\$ -	\$ -	\$ -	\$ -	17.77%	\$ 39,636.00	\$ -
25	Access Platform Revisions	1	\$ 11,330.00	\$ 11,330.00	\$ -	\$ -	\$ -	\$ -	100.00%	\$ -	\$ -
26	New Pressure Manholes at EL. 551 - Complete	1	\$ 32,540.00	\$ 32,540.00	\$ -	\$ -	\$ -	\$ -	0.00%	\$ 32,540.00	\$ -
27	Core Fill at Elevation 551	1	\$ 1,030.00	\$ 1,030.00	\$ -	\$ -	\$ -	\$ -	0.00%	\$ 1,030.00	\$ -
28	Core at Patch Repair Type 1	28	\$ 200.00	\$ 5,600.00	\$ -	\$ -	\$ -	\$ -	0.00%	\$ 5,600.00	\$ -
29	Pressure Inj of Cracks Type 2A (Non-Weeping)	150	\$ 50.00	\$ 7,500.00	\$ -	\$ -	\$ -	\$ -	0.00%	\$ 7,500.00	\$ -
30	Pressure Injection of Cracks Type 2A (Weeping)	50	\$ 50.00	\$ 2,500.00	\$ -	\$ -	\$ -	\$ -	0.00%	\$ 2,500.00	\$ -
31	Concrete Surface Repair Type 3 - Up to 1" Depth	16	\$ 400.00	\$ 6,400.00	\$ -	\$ -	\$ -	\$ -	0.00%	\$ 6,400.00	\$ -
32	Concrete Surface Repair Type 3 - 1" to 3" Depth	10	\$ 400.00	\$ 4,000.00	\$ -	\$ -	\$ -	\$ -	0.00%	\$ 4,000.00	\$ -
33	Concrete Surface Repair Type 3 - Greater than 3" Depth	5	\$ 400.00	\$ 2,000.00	\$ -	\$ -	\$ -	\$ -	0.00%	\$ 2,000.00	\$ -
34	Existing Guardrail Removal Repair Type 4	15	\$ 200.00	\$ 3,000.00	\$ -	\$ -	\$ -	\$ -	0.00%	\$ 3,000.00	\$ -
35	Allowance for MCIIT Work at PLC	1	\$ 10,000.00	\$ 10,000.00	\$ -	\$ -	\$ -	\$ -	0.00%	\$ 10,000.00	\$ -
CO#1	Flashboards	1	\$ 40,000.00	\$ 40,000.00	\$ -	\$ -	\$ -	\$ -	100.00%	\$ -	\$ -
CO#2	Deletion of Stop Logs	1	\$ (136,200.00)	\$ (136,200.00)	\$ -	\$ -	\$ -	\$ (136,200.00)	100.00%	\$ -	\$ -
SUB TOTALS											
\$ 1,066,272.00											
\$ 443,938.00											
\$ 135,998.64											
\$ 594,936.64											
55.80%											
\$ 471,335.36											
\$ -											

Users may obtain validation of this document by requesting of the license a completed AIA Document D401 - Certification of Document's Authenticity
 AIA DOCUMENT G703 - CONTINUATION SHEET 1982 EDITION AIA 01/992
 THE AMERICAN INSTITUTE OF ARCHITECTS, 1735 NEW YORK AVENUE, N.W., WASHINGTON, D.C. 20006-9232

HESCO

Knowledgeable • Professional • Attentive • Likeable
23905 Freeway Park • Farmington Hills, MI 48335
Phone: 586.978.7200 • Fax: 586.978.2200
www.hesco-mi.com

Invoice No. 20201222

Date: 04/22/2020

6/26/20

Billed To: J.F. Cavanaugh Co, Inc.
20750 Sunnydale Ave
Farmington Hills MI 48336

Project: H20201027S Chapaton P.S. Valves

Contact: Jessica George

P.O.# 57677

Due Date: 05/22/2020

Description	Qty	Rate	Amount
ITT Bonneted Knife Gate Valve Fabri C134S 16" w/Manual Operator	1.000	29,704.92	29,704.92
ITT Bonneted Knife Gate Valve Fabri C134S 18" w/Manual Operator	3.000	32,214.84	96,644.52

Thank you for your prompt payment!

Non-Taxable Amount:	126,349.44
Taxable Amount:	0.00
Sales Tax:	0.00
Amount Due	126,349.44

HESCO

Knowledgeable • Professional • Attentive • Likeable
23905 Freeway Park • Farmington Hills, MI 48335
Phone: 586.978.7200 • Fax: 586.978.2200
www.hesco-mi.com

Invoice No. 20201311

Date: 06/26/2020

Billed To: J.F. Cavanaugh Co, Inc.
20750 Sunnydale Ave
Farmington Hills MI 48336

Project: H20201027S Chapaton P.S. Valves

Contact: Jessica George P.O.# 11332-3218 Salesperson: Heather Walker Due Date: 07/26/2020

Description	Qty	Rate	Amount
Swing Check Valve SECTION 15100 - VALVES AND ACTUATORS 2.1 CHECK VALVES A, TYPE C-2: CUSHIONED SWING CHECK BG04A44SWL181-LW-AC 18" Crispin Swing Check Valve with Outside Lever, Weight and Air Cushion, 18" Class 150# Flanged Ends, Ductile Iron Body, 316 Stainless Steel & Buna Seating, Bronze Bushings, Stainless Steel and Bronze Trim, Stainless Steel Bolting, Lined and Coated with 8 +/-4 Mills DFT of Tnemec 141 Epoxy, 250 PSI Maximum Working Pressure	1.000	9,649.20	9,649.20

Thank you for your prompt payment!

Non-Taxable Amount:	9,649.20
Taxable Amount:	0.00
Sales Tax:	0.00
Amount Due	9,649.20

SWORN STATEMENT

STATE OF MICHIGAN)
) SS
 COUNTY OF OAKLAND)

Brian Pass, being duly sworn, deposes and says:

That she makes the Sworn Statement on behalf of J. F. Cavanaugh Co.

_____, who is the (subcontractor)

for an improvement to the following described real property situated in Macomb
 County, Michigan, described as follows: (Insert legal description from Notice of
 Commencement

Chapaton P.S.

That the following is a statement of each subcontractor and supplier and laborer, for
 which laborer the payment of wages or fringe benefits and withholdings is due but unpaid,
 with whom the (contractor) (subcontractor) has (contracted) (subcontracted) for performance
 under the contract with the owner or lessee thereof, and that the amounts due to the persons as
 of the date thereof are correctly and fully set forth opposite their names, as follows:


Name of subcontractor, supplier, or laborer	Type of improvement furnished	Total contract price	Amount already paid	Amount currently owing	Balance to complete (optional)	Amount of laborer wages due but unpaid	Amount of laborer fringe benefits and withholding due but unpaid
All subs, material, labor and fringes are paid in full							
TOTALS							

(Some Columns are not applicable to all persons listed)

That the contractor has not procured material from, or subcontracted with, any person other than those set forth above and owes no money for the improvement.

Deponent further says that he or she makes the foregoing statement as the (contractor) (subcontractor) or as _____ of the (contractor) (subcontractor) for the purpose of representing to the owner or lessee of the above-described premises and his or her agents that the above-described property is free from claims of construction liens, or the possibility of construction liens, except as specifically set forth above and except for claims of construction liens by laborers which may be provided pursuant to section 109 of the construction lien act, Act No. 497 of the Public Acts of 1980, as amended, being section 570.1109 of the Michigan Compiled Laws.

WARNING TO OWNER: AN OWNER OR LESSEE OF THE ABOVE DESCRIBED PROPERTY MAY NOT RELY ON THIS SWORN STATEMENT TO AVOID THE CLAIM OF A SUBCONTRACTOR, SUPPLIER, OR LABORER WHO HAS PROVIDED A NOTICE OF FURNISHING OR A LABORER WHO MAY PROVIDE A NOTICE OF FURNISHING PURSUANT TO SECTION 109 OF THE CONSTRUCTION LIEN ACT TO THE DESIGNEE OR THE OWNER OR LESSEE IF THE DESIGNEE IS NOT NAMED OR HAS DIED.

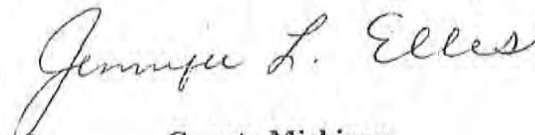


Brian Pass, Project Manager

WARNING TO DEPONENT: A PERSON, WHO WITH INTENT TO DEFRAUD, GIVES A FALSE SWORN STATEMENT IS SUBJECTED TO CRIMINAL PENALTIES AS PROVIDED IN SECTION 110 OF THE CONSTRUCTION LIEN ACT, ACT NO. 497 OF THE PUBLIC ACTS OF 1980, AS AMENDED, BEING SECTION 570.2220 OF THE MICHIGAN COMPLIED LAWS.

Subscribed and sworn to before me this
16th day of July, 2020

Notary Public



Oakland County Michigan

My commission expires: 6/30/2025

THE CONSTRUCTION ASSOCIATION OF MICHIGAN EXPRESSLY DISCLAIMS ANY LIABILITY FOR CHANGES MADE TO THIS FORM BY LEGISLATIVE ENACTMENTS OR JUDICIAL DECISIONS.

NAME	PO NO.	TOTAL CONTRACT	RETAINER	PAID	DUE THIS ESTIMATE	BALANCE TO FINISH
ROTOR ELECTRIC	11336	61,000.00				61,000.00
SIGNATURE CONTR	11335	13,000.00				13,000.00
TIMMER CONST. CO.	11334	53,530.00				53,530.00
TITUS WELDING	11333	525,821.00	20,250.00		182,250.00	323,321.00
HESCO	11332	137,498.64	13,599.86		122,398.78	1,500.00
		790,849.64	33,849.86	0.00	304,648.78	452,351.00

APP#2 JULY 16, 2020



ONESolution

ACCOUNTS PAYABLE CHECK REQUEST

PUBLIC WORKS DIVISION

PREPARED BY Houvéner	PHONE NUMBER 95966	DATE 7/15/2020
SET ID <i>VP00715MB</i>	POST DATE	

PARENT RECORD INFORMATION			
VENDOR NAME	VENDOR NUMBER	ADDR CODE	INVOICE DATE
NexGen	V65304	01	7/13/2020
			INVOICE AMOUNT
			\$ 25,500.00

CHILD RECORD DETAIL INFORMATION						
GENERAL LEDGER		JOB LEDGER				
ORG KEY	OBJECT	COST CENTER	OBJECT	WORK ORDER NUMBER	DRAIN NAME	DESCRIPTION
8210166M	80152	CC0018	80152	WO20041	MIDDD	License/Support/Contractor Portal 7/1-9/30 \$ 3,187.52 GEN
8210017M	80152	CC0004	80152	WO20041	8 1/2 Mile Relief	License/Support/Contractor Portal 7/1-9/30 \$ 2,390.62 GEN
8210072M	80152			WO20041	Martin	License/Support/Contractor Portal 7/1-9/30 \$ 478.13
8713018M	80152			WO20041	SEMCWWVDS	License/Support/Contractor Portal 7/1-9/30 \$ 318.76
8210166M	12302	CC0018	12302	WO20041	MIDDD	License/Support/Contractor Portal 10/1-6/30 \$ 9,562.52
8210017M	12302	CC0004	12302	WO20041	8 1/2 Mile Relief	License/Support/Contractor Portal 10/1-6/30 \$ 7,171.85
8210072M	12302			WO20041	Martin	License/Support/Contractor Portal 10/1-6/30 \$ 1,434.32
8713018M	12302			WO20041	SEMCWWVDS	License/Support/Contractor Portal 10/1-6/30 \$ 956.28

TOTAL: \$ 25,500.00

COMMENTS, INSTRUCTIONS OR ADDITIONAL NOTES:
NEXGEN AM License Maintenance & Support and NEXGEN Contractor Portal 7/1/2020-6/30/2021

Finance Manager:	<i>Bulink</i>	Drain:	Multiple
Chief Engineer:		Project Balance:	N/A
Engineer(s):		Staff Date:	7/28/2020
Manager(s):		Board Date:	8/10/2020
Coordinator:		Select for Pay Date:	

NEXGEN Utility Management

4010 Lennane Drive
Sacramento, CA 95834

Invoice

Invoice #: 2525
Invoice Date: 7/13/2020
Due Date: 7/28/2020
Terms: Net 15
P.O. Number:

Bill To:

Macomb County Public Works
Vincent Astorino
21777 Dunham Road,
Clinton Township, MI 48036

Item	Description	Hours/Qty	Rate	Class	Serviced	Amount
NEXGEN AM License ...	NEXGEN AM License Maintenance & Support Jul 1, 2020 - Jun 30, 2021	5	2,100.00	AM		10,500.00
NEXGEN Contractor Po...	NEXGEN Contractor Portal Jul 1, 2020 - Jun 30, 2021		15,000.00	AM		15,000.00T
	No Sales Tax		0.00%	AM		0.00

Direct Deposit: Bank of America Routing: 121000358 Account: 07031 41840
Send remittances to: vyee@nexgenum.com.

Total	\$25,500.00
Payments/Credits	\$0.00
Balance Due	\$25,500.00

Phone #	E-Mail
916.564.8000	vyee@nexgenam.com



ONESolution

ACCOUNTS PAYABLE CHECK REQUEST
PUBLIC WORKS DIVISION

Mark A. Hackel
County Executive

1. PREPARED BY (Please Type) Michelle Houvener	2. PHONE # 95966	3. DATE 7/10/20
4. SET ID VP200710MB		5. POST DATE

PARENT RECORD INFORMATION	
6. VENDOR NAME (Check to be issued to) Tetra Tech, Inc.	7. VENDOR NUMBER V16060
8. ADDR CODE 02	9. Invoice No (MAX = 16 CHARACTERS) 51608770
10. Invoice Date 7/8/2020	11. Invoice Amount \$ 70,565.00

General Ledger		Job Ledger		CHILD RECORD DETAIL INFORMATION								
Line	12. Org Key	13. Object	14. Cost Center (CCNT)	15. Object	16. Work Order Number	OPTIONAL		18. Description (MAX = 30 CHARACTERS)	19. Amount	20. DIV	21. MISC	22. Sep CK
						17. Secondary Reference (MAX = 16 CHARACTERS)						
A	8210017C	80138	CC0004	80138	WO19004	8 1/2 Mile Relief		Pjt #200-16347-19001 thru 6/26/20	\$ 70,565.00	GEN		
B												
C												
D												
E												
F												
G												

23. Total: \$ **70,565.00** REV 09/2018

24. COMMENTS, INSTRUCTIONS OR ADDITIONAL NOTES:
In-System Storage Devices - MEDC GRANT BALANCE \$1,221,669.10

25. Finance Officer:	Bylmbh	30. Drain:	8 1/2 Mile Relief
26. Chief Deputy:		31. Project Balance:	\$959,729.77
27. Engineers:		32. Staff Date:	7/14/2020
28. Managers:		33. Board Date:	8/10/2020
29. Coordinator:		34. Select For Pay Date:	

**MACOMB COUNTY PUBLIC WORKS OFFICE
ENGINEERING INVOICE COVER SHEET**

WORK ORDER NUMBER	WO19004	
PROJECT NUMBER	WWS-2019-003	(Tetra Tech# 200-16347-19001)
PROJECT NAME	In-System Storage Devices	
DRAINAGE DISTRICT	Eight and One-Half Mile Relief Drain Drainage District	
CONSULTANT NAME	Tetra Tech of Michigan	
INVOICE DATE	7/8/2020 (Invoice 5608770)	
INVOICE START DATE	5/23/2020	
INVOICE END DATE	6/26/2020	

ORIGINAL CONTRACT AMOUNT	\$	481,098.00
CHANGE ORDER TOTAL	\$	949,435.00
Change Order No. 1	\$	949,435.00
Change Order No. 2		
Change Order No. 3		
Change Order No. 4		
TOTAL REVISED CONTRACT AMOUNT	\$	1,430,533.00
(includes all approved change orders only)		
TOTAL AMOUNT PREVIOUSLY INVOICED	\$	400,238.23
TOTAL AMOUNT DUE THIS INVOICE	\$	70,565.00
TOTAL BUDGET REMAINING	\$	959,729.77 ✓
(Includes Total Revised Contract Amount Less Total Invoiced Previously and Total Invoiced Current)		

MEBC GRANT BALANCE 1,221,669.10



Tetra Tech, Inc.
 424 Lewis Hargett Cir.
 Ste. 110
 Lexington, KY 40503
 (859) 223-8000

BILL TO: MACOMB COUNTY
ATTN: FINANCE DEPARTMENT
 OFFICE OF PUBLIC WORKS
 COMMISSIONER
 21777 DUNHAM RD
 PO BOX 808
 CLINTON TOWNSHIP, MI 48036

INVOICE NUMBER: 51608770
INVOICE DATE: 07/08/2020
SERVICES THROUGH: 06/26/2020
FEDERAL TAX ID#: 95-4148514
TERMS: NET 30

ESA dated 10 July 2019

Client Contact: Vince Astorino. Email vincent.astorino@macombgov.org

PROFESSIONAL SERVICES:

Project Number 200-16347-19001 **In-System Storage Devices**
Top Task 01D **Basis of Design**

EMPLOYEE	TITLE	CURRENT LABOR HOURS	LABOR RATE	CURRENT LABOR AMOUNT
Geerlings, Eric P.	Project Engineer 1	5.50	\$155.00	\$852.50
Graf, Mitchell J.	Project Manager 2	3.50	\$200.00	\$700.00
Paison, William A.	Sr Engineer 1	10.00	\$215.00	\$2,150.00
Sissoko, Moussa D.	Sr Engineer 2	3.00	\$200.00	\$600.00
Voss, Justin D.	Project Engineer 1	3.00	\$155.00	\$465.00
TOTAL LABOR		25.00		\$4,767.50
		SUBTOTAL		\$4,767.50

Total Top Task# 01D \$4,767.50

Top Task 02A **Project Management / Design**

EMPLOYEE	TITLE	CURRENT LABOR HOURS	LABOR RATE	CURRENT LABOR AMOUNT
Rubel, Brian M.	Program Manager	25.00	\$225.00	\$5,625.00
TOTAL LABOR		25.00		\$5,625.00
		SUBTOTAL		\$5,625.00

Total Top Task# 02A \$5,625.00

Top Task 02B **Design**

EMPLOYEE	TITLE	CURRENT LABOR HOURS	LABOR RATE	CURRENT LABOR AMOUNT
Geerlings, Eric P.	Project Engineer 1	84.00	\$155.00	\$13,020.00
Kaliman, Roger G.	Sr Engineer 1	100.50	\$180.00	\$18,090.00
Lopez Lopez, Daniela S.	Engineer 3	2.50	\$125.00	\$312.50
Lortz, Thomas J.	CAD Designer	86.00	\$140.00	\$12,040.00
Sissoko, Moussa D.	Sr Engineer 2	1.00	\$200.00	\$200.00
Troppman, Jenna R.	Engineer 3	17.50	\$125.00	\$2,187.50
TOTAL LABOR		291.50		\$45,850.00
		SUBTOTAL		\$45,850.00

Total Top Task# 02B \$45,850.00

BILL TO: MACOMB COUNTY
ATTN: FINANCE DEPARTMENT
 OFFICE OF PUBLIC WORKS
 COMMISSIONER
 21777 DUNHAM RD
 PO BOX 806
 CLINTON TOWNSHIP, MI 48036

INVOICE NUMBER: 51608770
INVOICE DATE: 07/08/2020
SERVICES THROUGH: 06/26/2020
FEDERAL TAX ID#: 95-4148514
TERMS: NET 30

Top Task	02BS_FTCH	Design - Subcontractor FTCH		
SUBCONTRACTOR		TYPE		CURRENT AMOUNT
FISHBECK THOMPSON CARR & HUBER INC		Subcontractor-External		\$1,455.00
TOTAL SUBCONTRACTOR CHARGES				\$1,455.00
			SUBTOTAL	\$1,455.00
		Total Top Task# 02BS_FTCH		\$1,455.00

Top Task	02B_TCI	Design - TCI			
EMPLOYEE		TITLE	CURRENT LABOR HOURS	LABOR RATE	CURRENT LABOR AMOUNT
Fortier, Véronique		Sr Modeler	2.50	\$210.00	\$525.00
Robitaille, Luc		Engineer 3	24.00	\$250.00	\$6,000.00
Tremblay, Simon		Sr Engineer I&C	29.50	\$215.00	\$6,342.50
TOTAL LABOR			56.00		\$12,867.50
			SUBTOTAL		\$12,867.50
		Total Top Task# 02B_TCI			\$12,867.50
		Total Project# 200-16347-19001			\$70,565.00

TOTAL AMOUNT DUE THIS INVOICE: \$70,565.00

Gross Contract Summary	
Contract Amount	\$1,430,533.00
Previously Billed	\$400,238.23
Current Billing	\$70,565.00
Total Billed to Date	\$470,803.23
Contract Balance Remaining	\$959,729.77

REMIT PAYMENT TO:
 TETRA TECH, INC.
 PO BOX 911967
 DENVER, CO 80291-1967

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.

DKP



Engineers | Architects | Scientists | Constructors

ACH

Payment Options

Remit Wire/ACH payments to Acct: 100094457 ABA: 072413829
Remit checks to: 1515 Arborum Drive, SE, Grand Rapids, Michigan, 49546
Remittance Advice: accounts.receivable@fishbeck.com
616.575.3824
Federal I.D. No. 38-1841857 | Incorporated

Attention: Brian Rubel PE
Tetra Tech Mps
710 Avis Drive Suite 100
Ann Arbor, MI 48108
United States

Invoice : 392703
Invoice Date : 6/22/2020
Project : 200732
Project Name : Macomb Co PW/In-system Storage
Design Phase
Bill Term : 1

For Professional Services Rendered Through 6/12/2020

P.O. 1166522:5

1 - Task 1C - 8.5 Mile Utility Survey
Rate Labor 1,455.00

	Fee	Available	To Date	Previous	Current
	96,524.00	96,524.00	1,455.00	0.00	1,455.00

Current Billings 1,455.00
Amount Due This Bill 1,455.00

RECEIVED
JUN 25 2020
TETRA TECH

103976
OK to pay when paid
B. Rubel
6/23/20
200-16347-17001.02BS FTCH
SUB-EXT
200 LEW AA

DKP

1 - Task 1C - 8.5 Mile Utility Survey

Rate Labor Class	Hours	Rate	Amount
Senior Engineer	5.50	130.0000	715.00
	2.00	175.0000	350.00
Total Senior Engineer	7.50		1,065.00
Senior Surveyor	3.00	130.0000	390.00
		Total Rate Labor	1,455.00
Total Bill Task: 1 - Task 1C - 8.5 Mile Utility Survey			1,455.00

Total Project: 200732 - Macomb Co PW/In-system Storage Design Phase

1,455.00



PROJECT STATUS COMMUNICATION

DATE: July 8, 2020

PREPARED BY: Brian Rubel / Eric Geerlings

PROJECT: Macomb Co. In-System Storage Devices

Tt PROJECT NO: 200-16347-19001 CONTACT: Mr. Vince Astorino / Mr. Steve Rozycki
(INVOICE 51608770)

Tasks completed or in-progress since last status communication.

- Held a conference call on June 9th for the RTC/telemetry discussion with MCPWO.
- Compiled a life-cycle cost comparison for fiber optic vs. cellular telemetry.
- Sized the control building and generators, and provided two site plan layout options for the Beaconsfield site.
- Started locating and sizing vents, and held a call with Pete Trombley regarding existing venting at the Chapaton Pump Station.
- Received approval for geotechnical soil borings from both City of Eastpointe, and the City of St. Clair Shores (SCS) Parks Dept.
- Completed soil borings at Welsh Park the week of June 8th and started borings at Beaconsfield the week of July 6th.
- Coordination call with SCS Parks Department was held on June 11. Reviewed conceptual design layout and gathered feedback.
- Obtained guidance from SCS City Planner regarding control building setback distances with the Welsh Park Site.
- Inflatable dam suppliers (Dyrhoff and Mekan Hydro) presented their products directly to MCPWO via video conference calls.
- On July 7th, FKE completed confined space entry with MCPWO at Welsh Park site for concrete strength and wall thickness tests.
- Held multiple progress meetings with MCPWO via video conference calls on May 29th, June 10th, June 24th, and July 8th.
- Held an EGLE Initial Review Meeting via video conference call on July 8th.

Opportunities for cost avoidance or added value.

If the maximum height of water behind the proposed inflatable dam at the Welsh Family Park site can safely be raised to increase in-system storage capacity, then MCPWO could consider removing the Beaconsfield site from the scope of this project to avoid cost.

If spare fiber optic lines are run inside the 8 1/2 Mile Drain for telemetry those spare lines could be leased out to third parties.

Impediments, roadblocks, assistance needed.

Confirmation from Mekan Hydro regarding the maximum height of water that can be stored behind the Welsh Park site dam will impact MCPWO's decision on whether to pursue the Beaconsfield site. This must be resolved before design can proceed for Beaconsfield.

Getting input from communities early on in the design process will be beneficial to help keep the project on schedule. The topics and questions being reviewed with the communities were provided in the agenda for the Design Kickoff Meeting call on May 29th.

Change (or potential change) of scope items or customer concession. (Details on attached Request to Change Authorization)

Macomb has requested Q3 SRF funding which will allow more time for community reviews should those be necessary.

Schedule:

We are on track with the contract schedule which is ahead of Q3 SRF dates.

Next task or action items.

1. Confirm design limits of Mekan Hydro's Expan Gate design for Welsh Park and summarize recommendations.
2. Gather feedback from references provided by Dyrhoff and Mekan Hydro and determine if storing above crown of pipe is feasible.
3. Obtain feedback from SCS Parks Department for location of control building in Welsh Park and whether to request variance.
4. Start working on the 30% design drawings for Welsh Park site in the coming weeks.

Please do not hesitate to contact any member of our Team at any time.

Brian Rubel
Project Manager

Phone: (734) 649-4546

Email: Brian.Rubel@tetratech.com



ONESolution

ACCOUNTS PAYABLE CHECK REQUEST
PUBLIC WORKS DIVISION

Mark A. Hackel
County Executive

1. PREPARED BY (Please Type) Michelle Houvener	2. PHONE # 95966	3. DATE 7/1/20
4. SET ID VP200710MB		5. POST DATE

PARENT RECORD INFORMATION

6. VENDOR NAME (Check to be issued to) Tetra Tech, Inc.	7. VENDOR NUMBER V16060	8. ADDR CODE 02	9. Invoice No (MAX = 16 CHARACTERS) 51608767	10. Invoice Date 7/8/2020	11. Invoice Amount \$ 15,000.00
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CHILD RECORD DETAIL INFORMATION

Line	General Ledger		Job Ledger		16. Work Order Number	OPTIONAL		18. Description (MAX = 30 CHARACTERS)	19. Amount	20. DIV	21. MISC	22. Sep CK
	12. Org Key	13. Object	14. Cost Center (CCNT)	15. Object		17. Secondary Reference (MAX = 16 CHARACTERS)						
A	8210017M	80138	CC0004	80138	WO20027			Pjt #200-16347-20001 thru 7/8/20	\$ 15,000.00	GEN		
B												
C												
D												
E												
F												
G												

23. Total: \$ 15,000.00

REV 09/2018

24. COMMENTS, INSTRUCTIONS OR ADDITIONAL NOTES:

BM/mh

- 26. Finance Officer: _____
- 27. Chief Deputy: _____
- 28. Engineers: _____
- 29. Managers: _____
- 30. Coordinator: _____

- 31. Drain: 8 1/2 Mile Relief
- 32. Project Balance: \$7,000.00
- 33. Staff Date: 7/14/2020
- 34. Board Date: 8/10/2020
- 35. Select For Pay Date: _____

**MACOMB COUNTY PUBLIC WORKS OFFICE
ENGINEERING INVOICE COVER SHEET**

WORK ORDER NUMBER	WO20027
PROJECT NUMBER	WWS-2020-008 (Tetra Tech 200-16347-20001/INV 51608767)
PROJECT NAME	Nine Mile Pump Station Risk & Cost Evaluation
DRAINAGE DISTRICT	
CONSULTANT NAME	Tetra Tech of Michigan
INVOICE DATE	7/8/2020
INVOICE START DATE	5/23/2020
INVOICE END DATE	6/26/2020
ORIGINAL CONTRACT AMOUNT	\$ 31,800.00
CHANGE ORDER TOTAL	\$ -
Change Order No. 1	
Change Order No. 2	
Change Order No. 3	
Change Order No. 4	
TOTAL REVISED CONTRACT AMOUNT	\$ 31,800.00
(includes all approved change orders only)	
TOTAL AMOUNT PREVIOUSLY INVOICED	\$ 9,800.00
TOTAL AMOUNT DUE THIS INVOICE	\$ 15,000.00
TOTAL BUDGET REMAINING	\$ 7,000.00
(Includes Total Revised Contract Amount Less Total Invoiced Previously and Total Invoiced Current)	



Tetra Tech, Inc.
 424 Lewis Hargett Cir.
 Ste. 110
 Lexington, KY 40503
 (859) 223-8000

BILL TO: MACOMB COUNTY
ATTN: FINANCE DEPARTMENT
 OFFICE OF PUBLIC WORKS
 COMMISSIONER
 21777 DUNHAM RD
 PO BOX 806
 CLINTON TOWNSHIP, MI 48036

INVOICE NUMBER: 51608767
INVOICE DATE: 07/08/2020
SERVICES THROUGH: 06/26/2020
FEDERAL TAX ID#: 95-4148514
TERMS: NET 30

Engineering Letter dated April 27, 2020

Client Contact: Vincent Astorino

PROFESSIONAL SERVICES:

Project Number 200-16347-20001 9 Mile Pump Station Risk and Cost Evaluation
 Top Task 001 Cost & Risk Evaluation

EVENT DESCRIPTION	TYPE	CURRENT AMOUNT
Spent to Date	Event	\$15,000.00
TOTAL EVENT		\$15,000.00
	SUBTOTAL	\$15,000.00
	Total Top Task# 001	\$15,000.00
	Total Project# 200-16347-20001	\$15,000.00

TOTAL AMOUNT DUE THIS INVOICE: \$15,000.00

Gross Contract Summary	
Contract Amount	\$31,800.00
Previously Billed	\$9,800.00
Current Billing	\$15,000.00
Total Billed to Date	\$24,800.00
Contract Balance Remaining	\$7,000.00

REMIT PAYMENT TO:
TETRA TECH, INC.
 PO BOX 911967
 DENVER, CO 80291-1967

To ensure accurate posting, please note the invoice number on your check. Interest will be charged on all past-due amounts per contract terms and conditions.



TETRA TECH

710 Avis Drive, Ann Arbor, MI 48108
Telephone: 734.665.6000
Fax: 734.665.2570

PROJECT STATUS COMMUNICATION

DATE: July 8, 2020

PREPARED BY: Brian Rubel / Eric Geerlings

PROJECT: Macomb Co. Nine Mile Pump Station Risk and Cost Evaluation

Tt PROJECT NO: 200-16347-20001 CONTACT: Mr. Vince Astorino
(INVOICE 51608767)

Task completed or in-progress since last status communication.

Completed conceptual opinion of cost for the proposed 9 Mile Pump Station.
Completed multiple SWMM5 modeling scenarios varying the number of Chapaton Pump Station wet weather pumps and lake level.
Reviewed the 2003 Power Reliability Study provided by MCPWO and compared existing electrical system to 10 States Standards.
Completed a risk evaluation of each SWMM5 modeling scenario and estimated potential cost impacts to property.
On July 7th, delivered the letter report memorandum with DRAFT watermark as requested.
On July 8th, held a short call with MCPWO to review initial questions about the analysis and findings presented in the draft memo.

Opportunities for cost avoidance or added value.

None identified at this time.

Impediments, roadblocks, assistance needed.

None.

Change (or potential change) of scope items or customer concession. (Details on attached Request to Change Authorization)

None.

Schedule:

Scope has been completed and we stand ready to discuss the report further upon request.

Next task or action items.

1. Provide SWMM5 model files requested by MCPWO for large storm events.
2. Participate in additional review calls with MCPWO if and when requested.

Please do not hesitate to contact any member of our Team at any time.

Brian Rubel
Project Manager

Phone: (734) 213-4081

Email: Brian.Rubel@tetratech.com

County of Macomb Prod
IFAS DETAIL TRANSACTION HISTORY

03/01/2020 t 06/30/2020

Ledger: GL

Org Key: 8210126M PWM-Sterling Relief
 Object: 66912 GROUNDS RENTALS

Post Date	Reference	Batch ID	2nd Ref	Description	Job #	Debit	Credit	Net	NAME	Entry Date
66912 GROUNDS RENTALS										
03/31/2020	C20 441-3432	CRP200331LC	3/24/20	Lease - April 2020	4835771	0.00	3,902.60		COMCAST	03/30/20
04/30/2020	C20 441-3468	CRP200430LC	4/21/20	Lease-May 2020	4875693	0.00	3,902.60		COMCAST	04/29/20
05/29/2020	C20 441-3511	CRP200529LC	5/19/20	Lease-June 2020	4914614	0.00	3,902.60		COMCAST	05/28/20
06/30/2020	C20 441-3549	CRP200630LC	WIRE 6/23/20	Lease-July 2020 (parking)	4952782	0.00	3,902.60		COMCAST	06/30/20
	Object Total:	66912	GROUNDS RENTALS			0.00	15,610.40	-15,610.40		
72100 SALARY REIMB - LOCAL UNITS										
06/01/2020	20-251	VP200527MA		Personnel Reimb 4/22-4/23	4918714	389.36	0.00		COUNTY OF MACOMB	06/01/20
06/01/2020	20-252	VP200527MA		Personnel Reimb 4/24-4/27	4918714	327.26	0.00		COUNTY OF MACOMB	06/01/20
06/01/2020	20-253	VP200527MA		Personnel Reimb 5/7-5/13	4918714	316.08	0.00		COUNTY OF MACOMB	06/01/20
06/01/2020	20-254	VP200527MA		Personnel Reimb 2/22-4/17	4918714	323.07	0.00		COUNTY OF MACOMB	06/01/20
	Object Total:	72100	SALARY REIMB - LOCAL UNITS			1,355.77	0.00	1,355.77		
80126 CS-CONSTRUCTION MANAGER										
03/11/2020	19-575 CR	VP200310MCR		Reversal of Invoice	4811482	0.00	14,700.00		DTE ENERGY	03/11/20
05/18/2020	20-022	VP200515MA		Sterling Relief Update Video	4900517	100.00	0.00		FLEMING, JOHN	05/18/20
	Object Total:	80126	CS-CONSTRUCTION MANAGER			100.00	14,700.00	-14,600.00		
	Key Total:	8210126M	PWM-Sterling Relief			1,982,361.49	1,982,361.49	-0.00		

Date: 07/09/2020
 Time: 16:59:15

Budget to Actual
8.5 Mile Relief
As of July 31, 2020 = 83%

DESCRIPTION	2020 FINAL BUDGET	ENCUMBERED	ACTUAL	REMAINING BUDGET	PCT UTILIZED
REVENUE ACCOUNTS					
Interest Earned	80,000		156,585	(76,585)	195.7%
Canal Expansion(SMSD and Macomb County)			3,000,000	(3,000,000)	0.0%
Other Revenue	5,000		1,666	3,334	33.3%
State Grant					0.0%
LSCWWI 04B Transfer			738,112	(738,112)	100.0%
8.5 O&M/Charge Required Revenue	4,279,768		4,279,768		100.0%
PY Revenue-Fund Balance	3,098,050		58,090	3,039,960	1.9%
Rental Fee	16,464		10,976	5,488	66.7%
Total Revenue Accounts	7,479,282		8,245,197	(765,915)	110.2%
EXPENSE ACCOUNTS					
Application/Permit Fee	3,000		6,000	(3,000)	200.0%
Dues, Training, Conf, Subs.	5,750		3,440	2,310	59.8%
Engineering					
As needed Engineering	75,000		46,520	28,480	62.0%
Chapaton Improvements-Office Space	500,000		12,647	487,353	2.5%
Disinfection system upgrade (Design and Construction)	1,000,000		66,729	933,271	6.7%
Basin Structural Integrity Study**			14,097	(14,097)	0.0%
Phase 1 TRC Basin Equipment**			20,105	(20,105)	0.0%
Security Fence Structure-Gate Act**			25,150	(25,150)	0.0%
HVAC Design	200,000			200,000	0.0%
Flushing Study	75,000			75,000	0.0%
RTB/PS Ventilation Design	120,000			120,000	0.0%
Chapaton Improvements-Lab Relocation	250,000		70,444	179,556	28.2%
Basin Expansion Design	775,000		596,614	178,386	77.0%
In-System Storage Design(Gates on 8.5 Tunnel)	1,200,000		379,885	820,115	31.7%
9 Mile & 8 1/2 Mile Rehab	75,000		35,691	39,309	47.6%
New Equipment	23,500		12,236	11,264	52.1%
Office Supplies	1,000		362	638	36.2%
Operating Supplies	74,600		33,588	41,012	45.0%
Other Professional Svcs	46,800		38,420	8,380	82.1%
Personnel Services	979,953		438,700	541,253	44.8%
Repair & Maintenance	148,500		137,897	10,603	92.9%
Pumping and screening improvements	1,150,000		684,205	465,795	59.5%
SRF Replacement Reserve	259,215			259,215	0.0%
Scada System	243,839		119,430	124,409	49.0%
Utilities	273,125		197,854	75,271	72.4%
Total Expense Accounts	7,479,282		2,940,014	4,539,268	39.3%

	O&M Balance 9/30/2019	O&M	Total 7/31/2020
Cash - Operating	8,846,231	5,305,183	14,151,414
Accounts Receivable			0
Assets			0
Liabilities			0
Revenues		8,245,197	8,245,197
Expenditures		2,940,014	2,940,014
			0
Equity*	8,846,231		14,151,414

Detail of 2019 Equity*

Disinfection system upgrade (Design and Construction)	100,000	Basin Expansion Design	450,000
RTB/PS Ventilation Design	120,000	Pumping and screening improvements	1,215,000
Chapaton Improvements-Office Space	228,000	PLC Replacements at Chapaton East	40,000
In-System Storage Design (Gates on 8.5 Tunnel)	425,000	SRF Replacement Reserve	1,814,505
9 Mile & 8 1/2 Mile Rehab	67,800	Expansion Reserve (From State)	3,000,000
Scada Reserve	109,025	Capital Reserve	936,901
Phase 1 TRC Basin Equipment**	100,000	Basin Structural Integrity Study**	60,000
As needed Engineering	40,000	Painting interior and garage façade	20,000
HVAC Design	60,000	Security Fence Structure-Gate Act**	60,000

** Project was projected to be completed during 18/19 budget cycle. However it was not completed, so funds designated in 18/19 for this project will be used in 19/20