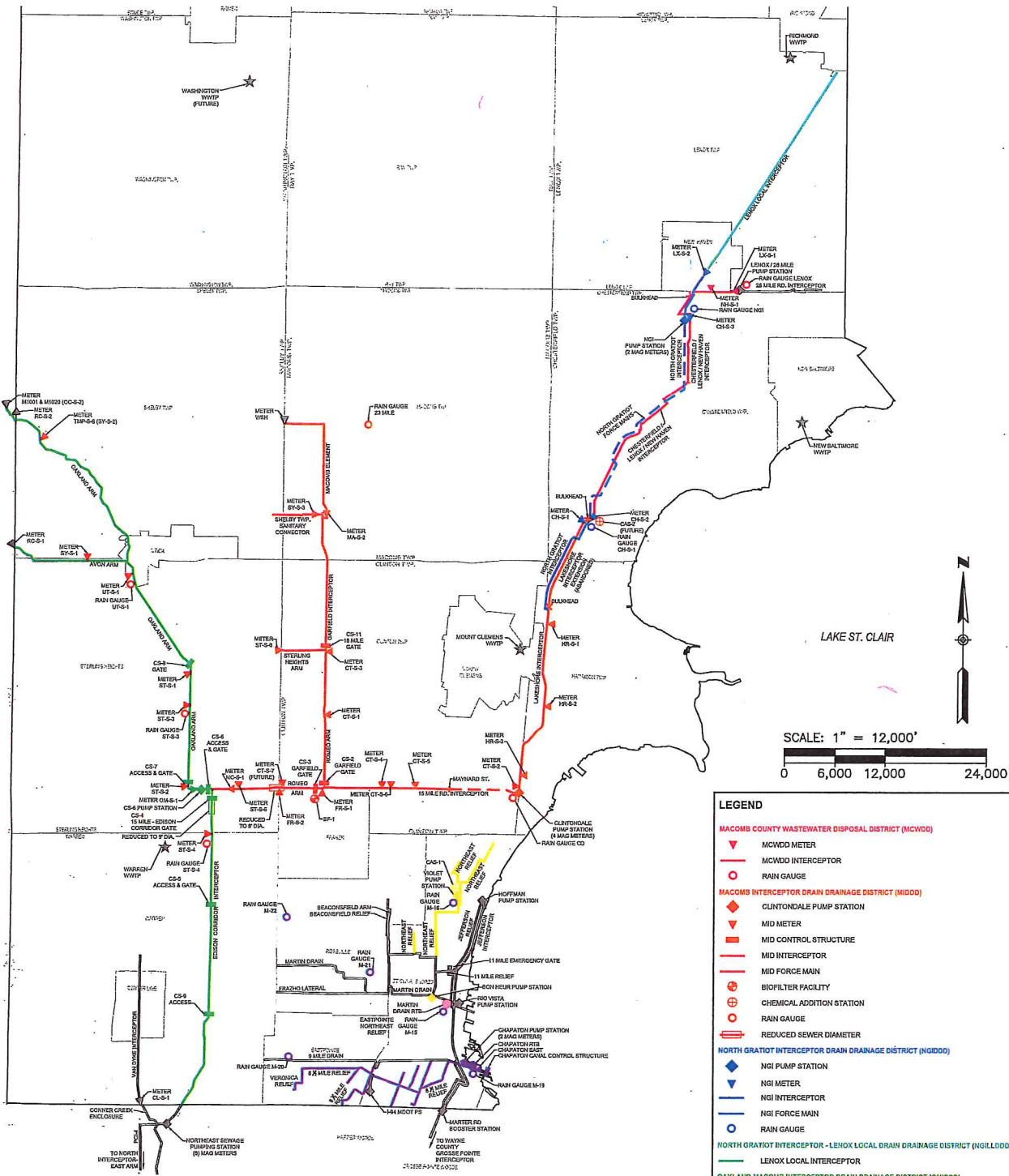


Miller
Santo
Klinefelt

EIGHT AND ONE-HALF MILE RELIEF DRAIN
INTRA-COUNTY DRAINAGE BOARD
JUNE 12, 2017
10:00 A.M.
AGENDA

	Page
1. Call of meeting to order and roll call	
2. Approval of Agenda for June 12, 2017	
3. Approval of Minutes for May 8, 2017	3
4. Public participation	
5. Progress Reports – (5/15/17-5/30/17) – Vincent Astorino	5
6. Motion: Approve purchase of Chapaton System A – Air Accumulator Replacement unit from Gardner-Denver in the amount of \$11,542	9
7. Consideration for approval of invoices (see attached)	13
8. Financial Report – Bruce Manning	27
9. 3-D Modeling Presentation – Vincent Astorino	
10. Adjourn	

MACOMB COUNTY WASTEWATER SYSTEMS



SCALE: 1" = 12,000'

0 6,000 12,000 24,000

LEGEND

MACOMB COUNTY WASTEWATER DISPOSAL DISTRICT (MCWDD)

- ▼ MCWDD METER
- MCWDD INTERCEPTOR
- RAIN GAUGE
- ◆ CLINTONDALE PUMP STATION
- ◇ MID METER
- MID CONTROL STRUCTURE
- MID INTERCEPTOR
- MID FORCE MAIN
- ⊕ BIOFILTER FACILITY
- ⊕ CHEMICAL ADDITION STATION
- RAIN GAUGE
- ⊖ REDUCED SEWER DIAMETER

NORTH GRATIOT INTERCEPTOR DRAIN DRAINAGE DISTRICT (NGIDD)

- ◆ NGI PUMP STATION
- ◇ NGI METER
- NGI INTERCEPTOR
- NGI FORCE MAIN
- RAIN GAUGE

NORTH GRATIOT INTERCEPTOR - LENOX LOCAL DRAIN DRAINAGE DISTRICT (NGILLDD)

- LENOX LOCAL INTERCEPTOR

OAKLAND-MACOMB INTERCEPTOR DRAIN DRAINAGE DISTRICT (OMIDD)

- ◆ CS-6 PUMP STATION
- ◇ OMID METER
- OMID CONTROL STRUCTURE
- OMID INTERCEPTOR
- ⊖ REDUCED SEWER DIAMETER
- ⊖ 8 1/2 MILE RELIEF DRAIN DRAINAGE DISTRICT

8 1/2 MILE RELIEF DRAIN DRAINAGE DISTRICT

- ◆ CHAPATON WEST PUMP STATION
- ◇ CHAPATON RETENTION TREATMENT BASIN
- CHAPATON CANAL CONTROL GATE
- 8 1/2 MILE INTERCEPTOR
- RAIN GAUGE

SOUTHWEST MACOMB COUNTY DRAINAGE TO ORIGINAL SYSTEM ELEMENTS

- ◆ SEMCOWDS PUMP STATION
- ⊕ CHEMICAL ADDITION STATION
- SEMCOWDS INTERCEPTOR

MARTIN SANITARY DIVERSION DRAINAGE DISTRICT (MSDD)

- ⊕ MARTIN DRAIN RETENTION TREATMENT BASIN

OTHER SYSTEMS

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

Candice S. Miller
MACOMB COUNTY PUBLIC WORKS COMMISSIONER



An adjourned meeting of the Intra-County Drainage Board for the **EIGHT AND ONE-HALF MILE RELIEF DRAIN** was held in the Office of the Macomb County Public Works Commissioner, 21777 Dunham, Clinton Township, Michigan, on May 8, 2017, at 10:05 A.M.

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

ALSO PRESENT: Robert Mijac, Joseph Romano, Macomb County Board of Commissioners; Brian Baker, Chief Deputy, Karen Czernel, Deputy, Emily Engleman, Administrative Assistant, Keith Graboske, P.E., Chief Engineer, Dan Heaton, Public Relations Manager, Vincent Astorino, Engineer II, Evans Bantios, Engineer II, Lynne Seymour, Environmental Engineer II, Thomas Stockel, Construction Engineer, Bruce Manning, Acting Financial Manager, Barbara Delecke, Administrative Services, Macomb County Public Works; Joe Nichols, Mayor, Fraser; Sermed Saif, Tri-County Engineering, representing Lenox Township; Benjamin Aloia, Aloia & Associates; Lou Urban, Anderson, Eckstein & Westrick, Inc.; Bryce Huffman, Michigan Radio; Jameson Cook, Macomb Daily; Christine Hall, Detroit Free Press; Amanda York, Representative Sander Levin's Office

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

Minutes of the meeting of April 10, 2017 were presented and approved on a motion by Mr. Santo, supported by Ms. Klinefelt and unanimously carried.

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

Mr. Astorino provided a progress report update on the 8 ½ Mile Relief Drain SAW Grant. The grant mainly consisted of asset management. Once the assets were identified, they were transferred into the NexGen system. Other facets of the grant include 3-D drawings of the facility, green infrastructure, flow metering and operation and maintenance manuals. The grant is 90 percent complete. The entire facility was 3-D scanned out to the discharge points of the facility. The images will be turned into drawings and eventually as-builts will be created for the facility, which can be used for future projects. The entire facility will be able to be viewed through presentations. Mr. Astorino will provide a video presentation for the next meeting. Ms. Klinefelt would like to tour some of the facilities owned by the different drainage districts.

A motion to receive and file the progress report update given by Mr. Astorino was made by Ms. Klinefelt, supported by Mr. Santo and unanimously approved.

The Chair presented the invoices totaling \$74,857.99 to the board for review and approval.

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

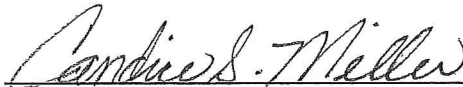
Ayes: Klinefelt, Santo, Miller
Nays: None

Motion approved.

A trial balance sheet was presented to the Board by Mr. Manning. There is approximately \$2.8 million in equity that can be used to pay for maintenance and other projects. Three SRF projects were completed in 2006, 2008 and 2010. The dry flow and stormwater pumps were rehabilitated and solar panels were installed on the basin deck. A project requirement of the SRF is to collect a sum of \$259,000 per year for the life of the loan. At the end of the 20 year cycle, the money will then be on-hand to repair/replace the pumps as needed.

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

The meeting was adjourned at 10:11 a.m. on a motion by Mr. Santo, seconded by Ms. Klinefelt, and unanimously approved.



Candice S. Miller, Chair
Macomb County Public Works Commissioner

STATE OF MICHIGAN
COUNTY OF MACOMB

I certify that the foregoing is a true and correct copy of proceedings taken by the Intra-County Drainage Board for the Drainage District shown on the attached set of minutes, on May 8, 2017, 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: 5/11/17

8703.bd



PROGRESS REPORT

TO: Ms. Candice Miller – Macomb County Public Works Commissioner
Mr. Vincent Astorino – Macomb County Public Works Commissioner’s Office (MCPWCO)

FROM: Erin H. Szczegielniak, PE

DATE: May 15, 2017

PROJECT NO.: 130620

RE: 8 1/2 Mile Relief Drain Drainage District
Stormwater, Asset Management, and Wastewater (SAW)
Asset Management (AM) – Bi-Weekly Progress Report
May 1 – May 12, 2017

Following is a summary of services completed during the past two weeks and the anticipated tasks for the next two weeks:

Items accomplished during the reporting period:

1. Green Infrastructure Study
 - a. Updated the report based on comments from SEMCOG and MCPWCO staff.
 - b. Forwarded request for additional information to Macomb Planning.
2. 3D Diagram and Reference Drawings
 - a. Finalized additional profiles for reference drawings.
3. Preventative Maintenance Program
 - a. Scheduled follow-up training for MCPWCO staff for NEXGEN and how to use the preventative maintenance forms and daily inspection forms.
4. Discharge Protocol
 - a. Analyzed meter data for the March 30th rain event.
5. Final Report
 - a. Finalized internal review of the report.
 - b. Revised the Michigan Department of Environmental Quality (MDEQ) Summary Report in accordance with new guidelines received this week.

Anticipated tasks for the upcoming report period:

1. Asset Management Database
 - a. Work with METCO to place record drawings on MCPWCO server and hyperlink to NEXGEN.
2. Green Infrastructure Study
 - a. Finalize report once information has been received from Macomb Planning.
3. 3D Diagram and Reference Drawings
 - a. Submit electronic copies to MCPWCO staff.
 - b. Schedule meeting with MCPWCO staff to present 3D model.



4. Preventative Maintenance Program
 - a. Hold follow-up training for MCPWCO staff for NEXGEN and how to use the preventative maintenance forms and daily inspection forms.
5. Discharge Protocol
 - a. Continue analyzing meter and supervisory control and data acquisition (SCADA) data as rain events occur.
6. 20-Year Capital Improvements Plan (CIP)
 - a. Meet with MCPWCO staff to review and update 20-Year CIP.
7. Final Report
 - a. Issue Project Certification to MDEQ with Summary Report.
 - b. Submit draft report for MCPWCO review.

Needed Information/Actions from MCPWCO/METCO:

1. Continue forwarding metering data and SCADA data on a regular basis for Discharge Protocol Analysis.
2. Move facility record drawings to MCPWCO server.

nac

By email

cc: Mr. Brian Baker – MCPWCO
Mr. Pete Trombley – MCPWCO
Ms. Maria E. Sedki, PE – FTCH



PROGRESS REPORT

TO: Ms. Candice Miller – Macomb County Public Works Commissioner
Mr. Vincent Astorino – Macomb County Public Works Commissioner’s Office (MCPWCO)

FROM: Erin H. Szczegielniak, PE

DATE: May 30, 2017 **PROJECT NO.:** 130620

RE: 8 1/2 Mile Relief Drain Drainage District
Stormwater, Asset Management, and Wastewater (SAW)
Asset Management (AM) – Bi-Weekly Progress Report
May 15 – May 26, 2017

Following is a summary of services completed during the past two weeks and the anticipated tasks for the next two weeks:

Items accomplished during the reporting period:

1. Green Infrastructure Study
 - a. Finalized report based on information from Macomb Planning.
 - b. Submitted final report.
2. 3D Diagram and Reference Drawings
 - a. Finalized additional profiles for reference drawings and submitted plans to MCPWCO for final review.
 - b. Worked on preparing presentation for Drainage Board.
3. Discharge Protocol
 - a. No work performed during this period.
4. 20-Year Capital Improvements Plan (CIP)
 - a. Met with MCPWCO staff to review and update 20-Year CIP.
 - b. Submitted draft CIP to MCPWCO for review.
5. Final Report
 - a. Completed draft report.

Anticipated tasks for the upcoming report period:

1. Asset Management Database
 - a. Work with METCO to place record drawings on MCPWCO server and hyperlink to NEXGEN.
2. Green Infrastructure Study
 - a. None.
3. 3D Diagram and Reference Drawings
 - a. Submit electronic copies to MCPWCO staff.
 - b. Finalize package and attend Drain Board meeting.
4. Preventative Maintenance Program
 - a. Hold follow-up training for MCPWCO staff for NEXGEN and how to use the preventative maintenance forms and daily inspection forms.



5. Discharge Protocol
 - a. Remove flow meters.
 - b. Finalize meter analysis.
6. 20-Year Capital Improvements Plan (CIP)
 - a. Finalize 20-Year CIP based on MCPWCO review.
7. Final Report
 - a. Incorporate final CIP into report.
 - b. Submit draft report for MCPWCO review.

Needed Information/Actions from MCPWCO/METCO:

1. Forward final metering data and SCADA data for Discharge Protocol Analysis.
2. Move facility record drawings to MCPWCO server.
3. Comment on CIP.

jc2

By email

cc: Mr. Brian Baker – MCPWCO
Mr. Pete Trombley – MCPWCO
Ms. Maria E. Sedki, PE – FTCH



Candice S. Miller

Public Works Commissioner
Macomb County

To: Candice Miller, Macomb County Public Works Commissioner

From: Vincent Astorino, Engineer II – Wastewater Services

Date: June 5, 2017

Subject: Chapaton System A – Air Accumulator Replacement Recommendation

The Chapaton system A air accumulator has failed and needs replacement. This unit has been in service for going on 50 years and controls the operations of the Station Gate, Basin Gates, and the 9 Mile Bypass Influent Gates. This is part of a redundant system but if these were to all completely fail then the station would not be able to properly operate and allow flow in which would in turn likely cause basement backups.

We have solicited pricing for the replacement and rebuild of this unit and below is a summary of those options. Also attached are the original quotes.

- Gardner-Denver Model = \$11,542
- Bauer Compressor = \$13,830
- Ingersoll Rand = \$14,653
- Rebuild of current unit = \$8,021

Initial thinking was to just rebuild the current unit but both systems are expected to be replaced as part of the 2017 Chapaton capital improvement program in the year 2023 and due to the age currently I recommend that we move forward with the Gardner-Denver unit as it is only \$3,500 more for a brand-new system.

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

5209 Air-Cooled Compressor

**Gardner
Denver**

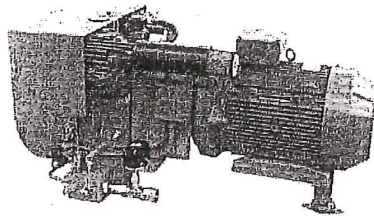
HIGH PRESSURE SOLUTIONS

Compressor: Reavell model 5209 2-Stage, 2-Cylinder, Single-Acting, Air-Cooled, Oil-Lubricated, Vee Configuration, Reciprocating, Air Compressor arranged for Direct Drive via flange mounting with flexible coupling by a 11kW (15HP), 3/60/460, IP55, Electric Motor.

Duty:

- Maximum Operating Pressure 580 psig
- Capacity 23.4 CFM
- Minimum Operating Pressure 232 psig
- Compressor Speed 1760 rpm
- Motor Power 11kW (15HP)

** Performance measurement is generally in accordance with ISO1217: 1996.



Typical 2 stage compressor with direct drive

Scope of Supply includes the following accessories and features:

- Intake suction filter/silencer
- Gauge panel with: Final delivery pressure gauge and high temperature cut-out
- Safety valve on all stages
- Multi-pass tubular inter and after coolers
- Final delivery Oil and moisture separator
- Splash lubrication oil system
- Oil level sight glass
- Electronically operated unloading/drainage system (solenoid valve controlled)
- Non-return valve (Final delivery)
- Controlling air pressure switch (Loose)
- Drive with:
 - Compressor flywheel half coupling
 - Motor half coupling
 - Flexible drive coupling
 - Bell housing
 - Electric Motor, IP55, 3/60/460
- Package anti-vibration mounts

5209 Air-Cooled Compressor

**Gardner
Denver**

HIGH PRESSURE SOLUTIONS

Starter Control Panel: To control the compressor, the proposal includes a Star-Delta starter/control panel, (supplied loose) with an IP55 sheet steel enclosure. Panel suitable for operation with a 60 Hz power supply and will incorporate the following:

- Door Interlocked Isolator
- Control circuit transformer
- Control Circuit Fuse
- Delay to Load Timer.
- Start/Stop Pushbuttons & Reset Pushbutton

The compressor will be arranged for automatic stop/start control by means of a pneumatic air pressure switch working in conjunction with the electrically operated unloading/drainage system fitted.

Painting: The compressor will be finish painted to Gardner Denver's standard finish.

Compressor oil is not included in the proposal with the equipment. GD or approved substitute oils must be used. Gardner Denver can advise approved oils.

This unit is intended for intermittent operation in an indoor, non-hazardous environment.

5209 Air-Cooled Compressor

**Gardner
Denver**

HIGH PRESSURE SOLUTIONS

Price:

Item	Qty.	Description	Unit price	Total Price
1	1	CompAir model 5209 2-Stage, 2-Cylinder, Single-Acting, Air-Cooled, Vee Configuration, Reciprocating, Air Compressor arranged for Direct Drive with 11kW (15HP) motor.	\$11,542.00	\$11,542.00
2	1	STAR DELTA Starter supplied, loose	Included	Included

Dispatch: There is currently one 5209 at 1760 RPM with an 11kW motor in stock at our Princeton, Illinois, USA plant. Subject to prior sales. Otherwise, the lead time 11-13 weeks.

Prices: The prices quoted are NET and ex-works our facility in Princeton, Illinois, USA. Prices quoted do not include for installation or commissioning of the set.

Validity: Offer valid for 30 days from date of quotation.

Payment Terms: This quotation is made in accordance with our Gardner Denver standard conditions of sale.

Conditions of Sale: Gardner Denver conditions of sale shall apply.

Conditions of Offer: This quotation is a proposal and is based upon information, technical or otherwise, provided to us at the time. Full compliance with all enquiry documents must not be assumed unless specifically stated within the quotation. If an order is received that is not a simple acceptance of the quotation, then unless we have specifically confirmed full compliance within the quotation it is to be understood that a contract has not been established until such times as both parties are in full agreement as to governing terms, conditions and specifications.

GENERAL COMMENTS/NOTES

Quality Standards: Gardner Denver / Reavell compressors / booster and modules incorporate manufacturer's standard equipment and selected components in order to manufacture specific packages for the compression of Air and Gases. Reavell design, manufacture, testing is based in general on the following standards:

- 2006/42/EC Machinery Directive
- BS EN292 Safety of Machinery
- BS EN1012-1 Compressors – safety requirements
- 2014/68/EU Pressure Equipment Directive

8 1/2 MILE RELIEF DRAIN - 6/12/17

<u>Funding Source</u>	<u>Apportionment</u>	<u>Manager</u>	<u>Vendor</u>	<u>Amount</u>	<u>Invoice Detail</u>	<u>Project Summary</u>	<u>Project Balance</u>		
8 1/2 Mile Relief	Chapter 20 State of MI - 16.04% County of Macomb - 2.25% Dept. of Roads - 2.25% Eastpointe - 54.33% SAW Grant 1173-01	Astorino	BPH Pump & Equipment, Inc.	6,271.66	Invoice #53996 - 4/27/17	Repair chemical feed transfer pump - Chapaton East			
		Astorino	DTE Energy	\$ 10,144.54	Monthly Electrical - 4/10/17 - 5/7/17	Stormwater Pumps			
		Astorino	Fishbeck, Thompson, Carr & Huber, Inc.	\$ 15,764.20	Invoice #367025 - 5/3/17 Engineering Services - ending 4/2/17	CIP, Metering/Discharge Protocol, 3-D Model, Green Infrastructure, O&M Manual	\$ 332,592.00		
		Astorino	Galloup	\$ 650.60	Invoice #S105841939.001 - 5/25/17	Repair chemical feed transfer pump - Chapaton East			
		Astorino	Jones Chemicals, Inc.	\$ 3,839.69	Invoice #718499 - 4/19/17	Hypochlorite Solution used in disinfection process			
		Astorino	Macomb County Treasurer	\$ 133,880.22	Invoice #AR170353 - 5/12/17	First Quarter Reimbursement - Personnel & Operating Expenses			
		Astorino	Macomb Interceptor Drain	\$ 642.06	Invoice #039-17 - 4/22/17 - 5/19/17	MIDD staff working on 8 1/2 Mile Relief work			
		Astorino	Martin Control Services	\$ 2,600.00	Invoice #10059 - 5/15/17	Chapaton RTB Monitoring - April 2017			
		Astorino	METCO Services, Inc.	\$ 4,203.58	Invoice #1615-3 - 12/6/16 Engineering Services - 10/31/16 - 11/27/16	Chapaton CSO Control Facility Operations Management			
		Astorino	METCO Consulting Engineering	\$ 9,675.58	Invoice #1615-08 - 5/2/17	CSO Facility Operations Management			
		Astorino	NEXGEN Utility Management	\$ 2,500.00	Invoice #1757 - 4/27/17	License, Annual Maintenance & Support			
		Astorino	Shores Auto Clinic	\$ 521.87	Invoice #8889 - 5/9/17	Oil Change, rotors, brake pads			
		Astorino	TestAmerica, Inc.	\$ 966.00	Invoice #19010173 - 5/19/17	Lab analysis of water as required by NPDES Permit - Chapaton RTB			
				Total		\$ 191,660.00			

BPH Pump & Equipment, Inc.

P.O. BOX 755
 MCHENRY, IL 60051-0755
 815-578-0100
 WWW.BPHPUMPS.COM

RECEIVED
 MAY 22 2017
 BY: MH

Invoice

Date	Invoice #
4/27/2017	53996

Bill To
MaComb County Public Works 23001 East Nine Mile Rd St. Clair Shores, MI 48080 Accts Payable

Ship To
MaComb County Public Works 23001 East Nine Mile Rd St. Clair Shores, MI 48080

Tracking Number	P.O. No.	Terms	Due Date	FOB	Rep	Ship Via
1Z762W620356878571	RTB 17-9309	1% 10 Net 30	5/27/2017	YES	HSE	UPS

Item	Description	Ordered	Invoiced	Rate	Amount
IW-SMX-F441RFVYU	1.5" x 1.5" Flanged Teflon Self Priming Magnetic Drive Pump with high purity teflon/alumina ceramic shaft and bearings, and FKM O-Ring. This pump is rated excellent for Sodium hypochlorite because of the all teflon material of the housing and internals. S/N'S: 111606007 011708036	2	2	3,098.55	6197.10
Freight	Freight, Insurance, and Handling Fee PO CHAPATON RTB 17-9309 TRIM FOR 32 GPM AT 20 FT	1	1	74.56	74.56

Chg: 8 1/2 Mile Rd
5-22-17

Thank You for the order.	Date <u>5-22-17</u>
	Chief Deputy <u>[Signature]</u>
	Engineer(s) <u>JA</u>
	Manager(s) _____
	Coordinator(s) <u>SD</u>
	Finance Officer <u>[Signature]</u>

Subtotal	\$6,271.66
Sales Tax (0.0%)	\$0.00
Total	\$6,271.66
Balance Due	\$6,271.66

State 6-6-17
Board 6-12-17

PA036033 93000



Payment Coupon

Account Number	910000053785
Due Date:	May 31, 2017
Total Due:	\$10,144.54

MACOMB COUNTY
 MACOMB COUNTY DRAIN COMM
 21777 DUNHAM RD
 CLINTON TWP MI 48036-1005

17.252
RECEIVED
 MAY 15 2017
 BY: MH



Mail Payments to:
 DTE Energy
 P.O. Box 630795
 Cincinnati OH 45263-0795

Please detach and return coupon with account number on check. Agencies are not authorized to accept payment of this bill.

Account Information

MACOMB COUNTY
 MACOMB COUNTY DRAIN COMM
 21777 DUNHAM RD
 CLINTON TWP, MI 48036

Account Number 9100-0005-3785

DTE-Energy Federal ID No. 38-3217752

Programs you are enrolled in:

How to contact us:

Power Outage See Detail Charges
 Billing Inquiry 1-734-397-4309

Please make any inquiry or complaint about this bill to DTE Energy before the Due Date.
 DTE Energy is regulated by the Michigan Public Service Commission, Lansing, Michigan

Important Information

For the average Michigan residential customer, renewable energy is estimated to avoid \$3.08 per month of new coal-fired generation costs.

Chg: 8 1/2 Mile Ref

Date	<u>5-15-17</u>
Chief Deputy	<u>BS</u>
Engineer(s)	<u>UA</u>
Manager(s)	<u></u>
Coordinator(s)	<u>BD</u>
Finance Officer	<u>BM</u>

PA035962 92300

Staff - 6-6-17
 Board - 6-12-17





Fishbeck, Thompson, Carr & Huber, Inc.
 engineers | scientists | architects | constructors
 Federal I.D. No. 38-1841857 | Incorporated

Payment Options

Remit Wire/ACH payments to Acct: 100094457 ABA: 072413829
 Remit checks to: 1515 Arboretum Drive, SE | Grand Rapids, Michigan 49546

RECEIVED
 MAY 11 2017
 BY: ML

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

Invoice: 367025
Invoice Date: 5/3/2017
Project: 130620
Project Name: Macomb Co PW/Chapaton SAW
Bill Term: 1

For Professional Services Rendered Through 4/21/2017

	<u>Current Billings</u>
CIP - Chapaton SAW - CIP and Final Report	3,654.00
<i>Rate Labor</i>	3,654.00
DP - Chapaton SAW - Metering & Discharge Protocol	473.00
<i>Rate Labor</i>	473.00
DWG - Chapaton SAW - 3D Model & Ref Dwgs	4,357.50
<i>Rate Labor</i>	4,357.50
GI - Chapaton SAW - Green Infrastructure	660.00
<i>Rate Labor</i>	660.00
MN - Chapaton SAW - O&M Manual	5,271.20
<i>Rate Labor</i>	5,156.00
<i>Unit Rate Expense</i>	115.20
PM - Chapaton SAW - Overall Mgmt	1,010.50
<i>Rate Labor</i>	1,010.50
SP - Chapaton SAW - Prevent Maint	338.00
<i>Rate Labor</i>	338.00
AM - Macomb Co Pw/Chapaton Saw Am	0.00
EN - Macomb Co Pw/Chapaton Saw En	0.00
	Current Billings
	<u>15,764.20</u>
	Amount Due This Bill
	<u>15,764.20</u>

SAW 1173-01

Chg: 8 1/2 Mile RW

Date	<u>5-11-17</u>
Chief Deputy	<u>AB</u>
Engineer(s)	<u>JA</u>
Manager(s)	<u></u>
Coordinator(s)	<u>B</u>
Finance Officer	<u>JAM</u>

PA035955 80300

Staff 5.18.17
 Board 6.12.17



GALLOUP/SMITH INSTRUMENT/MERLO
1987 CONCEPT DR
WARREN MI 48091-6013
586-755-3110 Fax 586-755-3255

SOLD TO: 136141

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

Remit To:
GALLOUP
DUNS# 00-653-8516 EIN# 38-2023622
PO BOX 671121
DETROIT MI 48267-1121

www.galloup.com

SHIP TO: 136144

MCPWD-CHAPATON PS
23001 P MILE RD
SAINT CLAIR SHORES MI 48036-1005

INVOICE S105841939.001

RECEIVED
MAY 31 2017
BY: MT

Invoice Date: 05/25/17
Terms: Net Due 30 Days
Customer PO#: 17-5312
Ordered By: BOB B.
Phone: 586-469-5325

Release #:

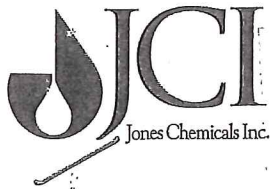


Warehouse	Ship Via	Freight Allowed	Account Manager	Inside Sales Person
PWRN	DIRECT	Out: No In: No	HOUSE SALES ACCOUNT	PETE TRANCHIDA, 5915-PWR
CUST LINE #	ID #	DESCRIPTION	ORDER QTY	SHIP QTY
3429100		RVT100V-PV 1" PLASTOMATIC PVC W/P TFE SHAFT ANGLE PATTERN RELIEF, BY-PASS & BACK PRESSURE VALVE	1	1
3130832		SKRVT100V PLAST-O-MATIC REPAIR KIT FOR 1 INCH RVT100V-CP RELIEF VALVE **** FACTORY STOCK 2-3 DAYS ARO **** FREIGHT NOT INCLUDED	2	2
<p>SAVE TIME \$ SAVE MONEY \$</p> <p>SAVE TIME AND MONEY WITH OUR FREE E-BILLING INVOICING SERVICE! You can now receive invoices much faster with our email or fax bill delivery with email delivery, your invoices are sent once per day in one, easy to open file. You can even download our invoice data directly into your accounting package (such as QuickBooks®). With fax delivery you get all your invoices once per day. To sign up, contact a member of our Credit Department at 269-978-3838 Ext 2700 or email credit@kendallgroup.com</p>			PRICE / UOM	EXT AMOUNT
			452.600E	452.60
			99.000E	198.00
<p>SAVE TIME \$ SAVE MONEY \$</p> <p>ASK OUR CREDIT ANALYST HOW YOU CAN GET YOUR INVOICES ELECTRONICALLY. WE CAN EMAIL DIRECT TO YOU OR YOU CAN LOG ON TO INVOICE GATEWAY ANY TIME OF DAY OR NIGHT. THIS TRANSACTION IS SUBJECT TO THE TERMS OF ANY PRIOR AGREEMENT BETWEEN YOU AND US THAT SPECIFIES THE TERMS THAT APPLY TO ALL SALES THAT WE MAKE TO YOU, REGARDLESS OF ANY DIFFERENT OR ADDITIONAL TERMS ON ANY PURCHASE ORDER OR OTHER DOCUMENT THAT YOU SEND US. IF THERE IS NO SUCH PRIOR AGREEMENT, THEN (1) THIS ORDER IS A REVOCABLE OFFER BY US TO SELL TO YOU, (2) WE RESERVE THE RIGHT TO ACCEPT OR REJECT ANY PRIOR OFFERS MADE BY YOU, (3) OUR STANDARD TERMS AND CONDITIONS OF SALE (AVAILABLE BY CALLING 800-632-5422 OR AT WWW.KENDALLELECTRIC.COM/TANCO-ASP) GOVERN THIS TRANSACTION, AND (4) WE OBJECT TO ANY DIFFERENT OR ADDITIONAL TERMS. RETURNS REQUIRE PRIOR APPROVAL AND MAY BE SUBJECT TO RESTOCKING FEES. FAST DUE INVOICES MAY BE ASSESSED A 1.5% LATE FEE (18% PER ANNUM).</p>			Subtotal	650.60
			S&H Charges	0
			Sales Tax	0.00
			Payments	0.00
			Amount Due	650.60

Thank You - We Appreciate Your Business



Staff 4-4-17
Board 4-12-17



www.jcichemicals.com

INVOICE

APR 21 2017
MH

*** 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

Inv Date	Invoice #
04/19/2017	718499
Date Shipped	Order/BOL #
04/19/2017	527411

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	
VBL PETE TROMBLEY		Destination	Delivered	NORTH	
Release #	Ship Via	Terms	Due Date	Discount Due Date	
	JCI	N 30	05/19/2017	5/19/2017	
Units	Package	Product Name	Total Quantity	Unit Price	Amount
4,499.00	1 Gal Bulk	HYPOCHLORITE SOLUTION, SS150 1201-001 BULK (\$85 Stop Fee) (+ fsc)	4,499.0000/Gal	0.8500 /Gal	3,824.15
General Remarks:		<> EMAIL INVOICE TO: michelle.houvenier@macombgov.org <> OUTSIDE CARRIER: HAROLD MARCUS NET WEIGHT: 45440 FSC			
		Fuel Surcharge			15.54
		<i>Chg: 8 1/2 mile ref</i> Date _____ Chief/Deputy <u>AB</u> Engineer(s) <u>VA</u> Manager(s) _____ Coordinator(s) <u>BD</u> Finance Officer <u>BTM</u> PA 035752 74200		<i># 7817</i> PAID MAY 4 2017	

Staff 5-16-17
Board 6-12-17

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

Total: **3,839.69**

Remit To: JCI Jones Chemicals, Inc.
 PO Box 31542
 Tampa, FL 33631-3542 USA

PLEASE PAY
THIS AMOUNT





Macomb County Finance Department
 120 N. Main Street, 2nd Floor
 Mt. Clemens, MI 48043

RECEIVED
 MAY 17 2017
 BY: MH

**PUBLIC WORKS OFFICE
 ATTN: BRUCE MANNING
 21777 DUNHAM RD
 CLINTON TOWNSHIP, MI 48036**

See Reverse Side For Easy Opening Instructions

Payment Terms:	Invoice Date	Invoice
Due Upon Receipt	05/12/2017	AR170353
REF DATE	DESCRIPTION	AMOUNT
05/12/2017	1ST QTR 17 CHAPOTON-PERSONNEL	129,648.15
05/12/2017	1ST QTR 17 CHAPOTON-OPERATING	4,232.07
05/12/2017	1ST QTR 17 WASTE WTR-PERSONNEL	300,341.76
05/12/2017	1ST QTR 17 WASTE WTR-OPERATING	4,451.96
Charges		438,673.94
Amount Due		438,673.94

Date 5-17-17
 Chief Deputy AB
 Engineer(s) JA
 Manager(s) _____
 Coordinator(s) DD
 Finance Officer btm

Chg: 8 1/2 Mile Rly
 70200 PA036022
 \$133,880.22

***** PLEASE RETURN THIS PORTION WITH YOUR PAYMENT *****

Finance Department Contact Number: (586) 469-5251
 Tax ID # / EIN Number: 38-6004868

Please email any questions about your account to:
 Accounting@MacombGov.Org

Please remit your payment to:
 COUNTY OF MACOMB
 FINANCE DEPARTMENT
 120 NORTH MAIN STREET, 2nd FLOOR
 MOUNT CLEMENS, MI. 48043-5622

Customer Number: DPWK BA
 Invoice Number: AR170353
 Invoice Date: 05/12/2017
 Amount Due: \$438,673.94

Staff 6-6-17
 Board 6-12-17

RECEIVED
MAY 31 2017
BY: mt

MIDDD

Operation, Maintenance & Repair Reimbursement Work Order Project Report

Drain 8 1/2 Mile Relief Drain *#2017* Invoice Period 4/22/17 - 5/19/17
Account # _____ Invoice No. 039-17
Drain # _____ Wismer # _____

DESCRIPTION:
WORK PERFORMED:
Staffing meeting - 4/24/17
data & alarm review - 4/25/17, 4/27/17, 5/1/17, 5/2/17, 5/4/17, 5/8/17, 5/9/17, 5/11/17, 5/15/17, 5/16/17, 5/18/17; temporary data upload, staff meeting regarding projects - 5/10/17; CIP review - 5/17/17

PERSONNEL	STAFF HOURS	1.5 OT HOURS	HOURLY RATE WITH FRINGE	1.5 OT RATE	SUB TOTAL
ASTORINO (4/24, 5/10, 5/17)	7.5		60.77	73.89	455.78
BETZ (4/25, 4/27, 5/1, 5/2, 5/4, 5/8, 5/9, 5/11, 5/15, 5/16, 5/18)	5.5		33.87	0.00	186.29
BANTIOS			52.27	61.14	0.00
CONTESTI			62.04	75.79	0.00
GAPSHES			42.63	46.67	0.00
PIRKOVIC			42.63	46.67	0.00
ROSKOPP			54.50	64.48	0.00
SANTO			53.73	70.93	0.00

TOTAL: \$ 642.06

Date 5-31-17
Chief Deputy AB
Engineer(s) UA
Manager(s) _____
Coordinator(s) 3
Finance Officer BHM

*20200 PA 036081
62600 RV 013679*

*Staff 6-6-17
Board 6-12-17*



**Martin Control
Services**

RECEIVED
MAY 22 2017
BY: _____

Invoice No. 10059

Date: 05/15/2017

23905 Freeway Park Dr.
Farmington Hills, MI 48335
248-476-7660

Billed To: Macomb County Public Works
21777 Dunham Road
Clinton Twp MI 48036

Project: 160929 Chapaton Monitoring

Contact: Vince Astorino

P.O.# Saw #1173-01

Due Date: 06/14/2017

Description	Qty	Rate	Amount
Chapaton Basin Monitoring			
Monitoring Month #7 April 2017	4.000	650.00	2,600.00

Chg: 8 1/2 M de Rly SAW 1173-01

Date	5.22.17
Chief Deputy	AB
Engineer(s)	UA
Manager(s)	
Coordinator(s)	TO
Finance Officer	blm

PRO36080 70100

Non-Taxable Amount:	2,600.00
Taxable Amount:	0.00
Sales Tax:	0.00
Amount Due	2,600.00

Thank you for your prompt payment!

Staff 6-6-17
Board 6-12-17



12835 Stephens Road · Warren · Michigan · 48089 · (586) 920-2620 · Fax (586) 510-4433

RECEIVED
MAY 17 2017
BY: MH

December 6, 2016

Office of Macomb County Public Works Commission
21777 Dunham Road
Clinton Township, MI 48111

Attn: Mr. Vincent Astorino
Acting Chief Engineer - Wastewater Services

RE: Chapaton CSO Control Facility Operations Management

INVOICE #1615-03

Attached please find our Invoice #1615-03 in the amount of \$4,203.58 (Four Thousand Two Hundred Three Dollars and fifty-eight cents only) for Professional Services rendered in connection with the above referenced project for the period October 31, thru November 27, 2016.

Should you need anymore information, please call me at (313) 961-4560.

Very truly yours,

METCO SERVICES, INC.

Rosana Santos
Vice President-Administration

Chg: 8 1/2 Mile Ref

Date	<u>5.17.17</u>
Chief Deputy	_____
Engineer (s)	<u>JA</u>
Manager (s)	_____
Coordinator (s)	<u>JD</u>
Finance Officer	<u>btm</u>

PA035992

80300

16-0006

*Staff 6-6-17
Board 6-12-17*



RECEIVED
MAY 05 2017
MH

12835 Stephenis Road · Warren · Michigan · 48089 · (586) 920-2620 · Fax (586) 510-4433

May 2, 2017

Office of Macomb County Public Works Commission
21777 Dunham Road
Clinton Township, MI 48111

Attn: Mr. Vincent Astorino
Acting Chief Engineer - Wastewater Services

RE: Chapaton CSO Control Facility Operations Management

INVOICE #1615-08

Attached please find our Invoice #1615-08 in the amount of \$9,675.58 (Nine Thousand Six Hundred Seventy-five Dollars and fifty-eight cents only) for Professional Services rendered in connection with the above referenced project for the period April 3, thru April 30, 2017.

Should you need anymore information, please call me at (313) 961-4560.

Very truly yours,

METCO SERVICES, INC.

Rosana Santos
Vice President-Administration

chg: 8 1/2 Mile

Date	5.5.17
Chief Deputy	AS
Engineer (s)	VA
Manager (s)	
Coordinator (s)	JD
Finance Officer	Btm

PA035903 80300

Staff 5.16.17
Board 6.12.17

NEXGEN Utility Management

4010 Lennane Drive
Sacramento, CA 95834

Invoice

RECEIVED
MAY 31 2017
BY: mt

Invoice #: 1757
Invoice Date: 4/27/2017
Due Date: 5/12/2017
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 Annual Maintenance & Support (Oct 1, 2016 - Sep 30, 2017) No Sales Tax	5	1,500.00	AM		7,500.00
			0.00%			0.00

*Chg: MIDDY @ 2500⁰⁰
 8 1/2 Mile @ 2500⁰⁰
 SENCOWDS @ 2500⁰⁰*

Date	5.31.17
Chief Deputy	<u>AB</u>
Engineer(s)	<u>JA</u>
Manager(s)	
Coordinator(s)	
Finance Officer	<u>H/M</u>

PA03646 93000

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

Total	\$7,500.00
Payments/Credits	\$0.00
Balance Due	\$7,500.00

Phone #	E-Mail
916.564.8000	vyee@nexgenam.com

Staff 6-6-17
Board 6-12-17

Shores Auto Clinic
 20500 East 9 Mile Rd
 Saint Clair Shores, MI. 48080
 Phone: 586-879-6475 Fax: 586-552-1457

\$ 521.87 pay
 INVOICE

8889

RECEIVED
 MAY 22 2017
 BY: *mt*

MICHIGAN REGISTRATION: FACILITY# F165010
Proposed completion date: 5/8/2017
Printed date: 05/09/2017

INVOICE

MCOPW - RONALD LUPO
 23001 NINE MILE RD
 Saint Clair Shores, MI 48080
 Home: 586-772-3425 Office: 586-557-9381
 Cust ID : 1527

2013 Ford - F-150 STX - 5L, V8 (302CI) VIN(F)
 Lic # : 064X368 - MI Odometer In : 43379
 Odometer Out : 43389
 VIN # : 1FTFX1EF7 DFD39513

Part Description / Number	Qty	Sale	Ext	Labor Description	Extended
5W-20 Full Synthetic Engine Oil 252	8.00	2.99	23.92	GEORGES rear rotors Turned	50.00
New Oil Filter PO2500	1.00	2.99	2.99	CUSTOMER STATES FRONT BRAKES ARE BAD PLEASE PERFORM A COMPLETE BRAKE INSPECTION OF FRONT AND BACK. PLEASE ADVISE.	170.00
Front Disc Rotors BD126433	2.00	59.99	119.98	front and rear brakes were removed and replaced with new brake shoes, rotors, and brake hardware . new parts work as designed.	
New Front Ceramic Brake Pads QC1414	1.00	69.99	69.99	FULL SERVICE OIL CHANGE ROTATE TIRES, TOP OFF ALL FLUIDS, CHECK SUSPENSION, AND LIGHT CHECK. MAKE SURE YOU PUT A STICKER IN THE WINDOW FOR THE OIL CHANGE. THNAK YOU.	30.00
New Rear Brake Ceramic Pads QC1602	1.00	54.99	54.99	Change engine oil, oil filter, Rotate tires, top off all fluids, Tire pressure check, air filter check, light check, fluid leak check, and suspension check.	

All Parts Installed Are New Parts Unless Specified The Parts Are Used Or Refurbished From The Manufacture. All New Or Refurbished Parts Come With A Standard 12 Month Or 12,000 Mile Warranty Or Which Ever Comes First.

ALL REPAIRS WERE COMPLETED PROPERLY BY A CERTIFIED MECHANIC

Sign Off By A Employee Of Shores Auto Clinic
 M250022 Jason McMann State Master Mechanic

ASE-5336-9380 Anthony Stacey ASE Master Mechanic Level 1 And Level 2

Only The Best Will Work On Your Vehicle Every Time At Shores Auto Clinic.
 Customer has fully inspected car parts, It is his or hers choice, To take old parts or discard old parts when vehicle is picked up after service repairs are made. SHORES AUTO CLINIC, Insures that all are customers see their old parts and are ask if they want to take the old parts with them or throw away their old parts when their vehicle is picked up after service repairs were completed. Only parts that can not be shown or gave back to the customer are core charge parts or too heavy or large parts.

Chg: 8 1/2 mile Ref

Date	<u>5-22-17</u>
Chief Deputy	<u><i>BB</i></u>
Engineer(s)	<u><i>NA</i></u>
Manager(s)	<u></u>
Coordinator(s)	<u><i>BD MT</i></u>
Finance Officer	<u><i>AM</i></u>

PA036031 93001

[Payments -]

State 6-6-17
Board 6-12-17

RECEIVED
MAY 22 2017
BY: mt

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Invoice/Credit No.	19010173	Invoice Date	May 19, 2017
Terms	See Below	Federal Tax ID	23-2919996
Remit to	TestAmerica Laboratories, Inc. PO BOX 204290, Dallas, TX 75320-4290		

Bill to:

Macomb County Public Works Office
Attn: Accounts Payable
23001 9 Mile Road
St Clair Shores, MI 48080

Ship to:

Macomb County Public Works Office
23001 9 Mile Road
St Clair Shores, MI 48080

P.O. Number	W.O. Number	Contract Number	Work Ordered by
Purchase Order not required			Terry Moore
Job Description	Site Name	SDG Number	Invoice Contact
See below			Barb Delecke (accts payable)

Job No.	Job Description	Receipt Date	Quantity	Unit Price	Amount
	Method/Test Description				
J13435-1	Chapaton Rain Event	05/05/2017			
	5210B - CBOD		14.00	20.00	280.00
	SM4500 P E-1999 - Phosphorus		14.00	18.75	262.50
	4500 NH3 C-1997 - Ammonia		14.00	11.25	157.50
	SM 2540D - Total Suspended Solids		14.00	7.50	105.00
	SM 2540E - Volatile Suspended Solids		14.00	10.00	140.00
	Safe and Environmentally Responsible Waste Management (per sample)		14.00	1.50	21.00
<p><i>Chg: 8 1/2 mile off</i></p> <p>Date <u>5-22-17</u></p> <p>Chief Deputy <u>AB</u></p> <p>Engineer(s) <u>UA</u></p> <p>Manager(s) _____</p> <p>Coordinator(s) <u>Ed</u></p> <p>Finance Officer <u>Btm</u></p> <p>PA036028 74100</p> <p><i>Staff 6-6-17</i> <i>Board 6-12-17</i></p>					

Project Number	Client Number	Project Manager	Subtotal	\$966.00
19000006	1407288	Sue Schafer		
Latest Sample Receipt Date	Latest Report Date	Phone Number	Total	\$966.00
05/05/2017	05/19/2017	(810) 229-2763		

For proper credit, please include invoice number on all remittance.

TestAmerica Michigan - 10448 Citation Drive, Suite 200, Brighton, MI 48116

This invoice falls under TestAmerica Laboratories Inc. Standard T&C's of Net 30 Days unless superseded by another valid contract vehicle in place at the time these services were rendered.

Income Statement
8.5 Mile Relief
As of May 31, 2017

	9-30-2016 Total Fund	10-1-16 to 5-31-17 O&M*
Revenues		2,335,788
Expenditures		1,060,962
Equity**	2,884,401	1,274,826

NOTES

Projected Reserves as of Sept 30, 2017	600,000
Projected required SRF repair & replacement reserve balance 9/30/17	1,296,075
Total	1,896,075

* Includes following Projects:

Sewer Rehab(SRF 5579-01)	Revenue	44,087
	Expenditures	37,902
	Net	6,185
	Remaining balance =	29,825

SAW Grant(1173-01)	Revenue	237,997
	Expenditures	301,064
	Net	(63,067)
	Remaining balance =	299,468

Major projects not yet completed in 2017

RTB Blower design
 2 quarters of personnel from county
 9 Mile flow meter
 1st collection of 2 for screen collection improvements
 SCADA wonderware upgrade

** Broken out as follows:

Engineering carryover balance at 9/30/2016	190,000
Repair and Maintenance carryover at 9/30/2016	105,000
Equipment carryover balance at 9/30/2016	45,800
Required SRF repair & replacement reserve balance 9/30/16	1,036,860
Emergency Reserve	600,000
Due from SEMCWWDS included in revenue but not collected	550,000