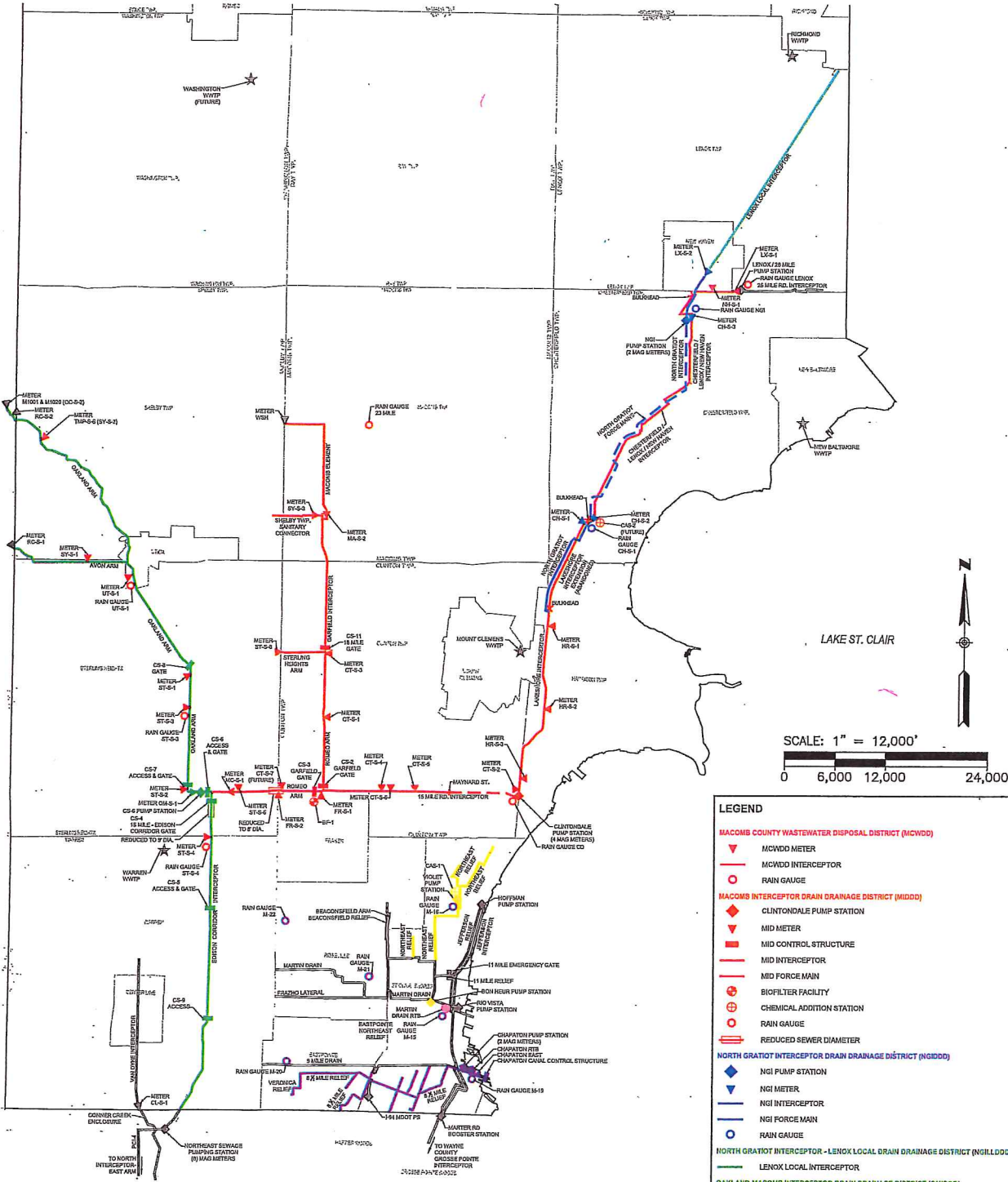


EIGHT AND ONE-HALF MILE RELIEF DRAIN
INTRA-COUNTY DRAINAGE BOARD
APRIL 9, 2018
10:15 A.M.
AGENDA

	Page
1. Call of meeting to order and roll call	
2. Approval of Agenda for April 9, 2018	
3. Approval of Minutes for March 12, 2018	3
4. Public participation	
5. Recommendation to Purchase Permanent Flow Meters – Vince Astorino	5
Motion: To approve the sole source purchase and installation of flow metering equipment from HESCO at a cost not to exceed \$37,478 and award the proposal from Motor City Electronic Technologies, Inc. at a cost not to exceed \$103,919 for related SCADA electrical work for a total cost of \$141,397	
6. Liability Insurance Coverage Proposal – Stephen Saph (presentation)	16
7. Consideration for approval of invoices (see attached)	25
8. Financial Report – Bruce Manning	35
9. Adjourn	

MACOMB COUNTY WASTEWATER SYSTEMS



LEGEND

- MACOMB COUNTY WASTEWATER DISPOSAL DISTRICT (MCWDD)**
 - ▼ MCWDD METER
 - MCWDD INTERCEPTOR
 - RAIN GAUGE
- MACOMB INTERCEPTOR DRAIN DRAINAGE DISTRICT (MIDD)**
 - ◆ 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
- DAKLAND-MACOMB INTERCEPTOR DRAIN DRAINAGE DISTRICT (DMIDD)**
 - ◆ CS-6 PUMP STATION
 - ▼ DMID METER
 - DMID CONTROL STRUCTURE
 - DMID INTERCEPTOR
 - ▭ REDUCED SEWER DIAMETER
- 1/2 MILE RELIEF DRAIN DRAINAGE DISTRICT**
 - ◆ CHAPATON WEST PUMP STATION
 - ◆ CHAPATON RETENTION TREATMENT BASIN
 - CHAPATON CANAL CONTROL GATE
 - 1/2 MILE INTERCEPTOR
 - RAIN GAUGE
- TO THOMAS MACOMB COUNTY WEST WATER DISPOSAL DISTRICT (THOMAS)**
 - ◆ SICHWDS PUMP STATION
 - ⊕ CHEMICAL ADDITION STATION
 - SICHWDS 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 March 12, 2018, at 10:02 A.M.

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

ALSO PRESENT: Robert Leonetti, Kathleen Tocco, Macomb County Board of Commissioners; Brian Baker, Chief Deputy, Karen Czernel, Deputy, Vincent Astorino, Operations & Flow Manager, Evans Bantios, P.E., Construction and Maintenance Manager, Jeff Bednar, P.E. Environmental Engineer, Dan Heaton, Public Relations Manager, Bruce Manning, Financial Manager, Barbara Delecke, Administrative Services, Macomb County Public Works

The meeting was called to order by the Chair, Candice Miller. The agenda was approved as presented.

Minutes of the meeting of February 12, 2018 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.

The Chair presented the invoices totaling \$416,672.89 to the board for review and approval.

Mr. Astorino explained that Kone, Inc. will remain under contract for the quarterly maintenance until December 2018. Lardner Elevator will perform any repairs on the elevators at the Chapaton West and Violet Pump Stations.

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

Adopted: YEAS: 3
NAYS: 0

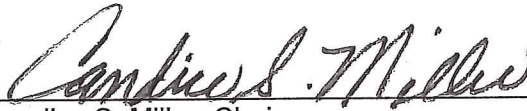
A motion to receive and file the financial report given by Mr. Manning was made by Ms. Klinefelt and supported by Mr. Santo.

Adopted: YEAS: 3
NAYS: 0

There being no further business, it was moved by Mr. Santo, supported by Ms. Klinefelt, 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 10:07 a.m.



Candice S. Miller, Chair
Macomb County Public Works Commissioner

STATE OF MICHIGAN
COUNTY OF MACOMB

I certify that the foregoing is a true and correct copy of proceedings taken by the Intra-County Drainage Board for the Drainage District shown on the attached set of minutes, on March 12, 2018 the original of which is on file in the Public Works Commissioner's Office. Public notice of the meeting was given pursuant to Act No. 267, Public Acts of Michigan, 1975, including, in the case of a special or rescheduled meeting or a meeting secured for more than 36 hours, notice by posting at least 18 hours prior to the time set for the meeting.



Candice S. Miller, Chair
Macomb County Public Works Commissioner

DATED: 3/12/18

9163.bd



Candice S. Miller

Public Works Commissioner
Macomb County

To: Candice Miller, Macomb County Public Works Commissioner

CC: Brian Baker, Chief Deputy

From: Vincent Astorino, Operations & Flow Manager

Date: April 2, 2018

Subject: 8 ½ Mile Permanent Flow Meters Recommendation

The Chapaton Pump Station and Retention Basin is currently in talks with the Michigan Department of Environmental Quality (MDEQ) to update that district's National Pollutant Discharge Elimination System permit. The current permit for that district expired in 2014 and the Macomb County Public Works Office (MCPWO) has been waiting for an updated permit from the MDEQ since that time. As part of the new permit, the MDEQ is changing the sampling protocols during discharge events which will require the MCPWO to add flow meters into the system for flow-based sampling instead of the current time-based sampling.

During the budget planning process for Fiscal Year 17/18, the MCPWO budgeted **\$150,000** for the flow metering portion of this work. In an effort to keep costs down, the MCPWO is also designing and handling procurement and construction oversight for this work. This office has reached out to our flow metering contractor (Hesco) and SCADA contractor (Motor City Electric Technologies) to request quotes for this work. The flow metering equipment and installation has come back at **\$37,478**. The SCADA and electrical portion has come in at **\$103,919**. The total for work is **\$141,397** which is under our projected budget.

Both quotes are attached and for this work both are being sole sourced. As mentioned above, both contractors are our approved contractors for this office. Hesco is the state representative for the preferred type of metering equipment for this project and Motor City Electric Technologies is our trusted SCADA provider.

I recommend moving forward with both quotes in the total amount of **\$141,397**.

Attachments: Hesco Quote – 3/23/18
Motor City Electric Technologies Quote – 3/28/18



Knowledgeable • Professional • Attentive • Likeable

28838 Van Dyke • Warren, MI 48093
Phone: 586.978.7200 • Fax: 586.978.2200
www.hesco-mi.com

Friday, March 23, 2018

Vince Astorino
21777 Dunham Road
Clinton Township, MI 48036

RE: 8.5 Mile Relief Drain Flow Meters

Vince,

Here is our quotation for the metering equipment and the related installation services. The Signature Base Transmitter and Battery Back up will be turned over to Motor City so that they can put it inside their panel. HESCO will install the meter sensors, and run the cables back to the cabinets in the conduit installed by Rotor. By using the signature platform you are saving about \$7,000 because you do not need an individual meter transmitter for each sensor.

Best regards,

Kevin Livingston

Kevin Livingston, P.E.
HESCO
E-mail: Kevin@hesco-mi.com
Tel: (586)978-7200
Fax: (586)978-2200



Knowledgeable • Professional • Attentive • Likeable

28838 Van Dyke • Warren, MI 48093
Phone: 586.978.7200 • Fax: 586.978.2200
www.hesco-mi.com

Friday, March 23, 2018

To:	Macomb County Public Works Commissioner Vince Astorino 21777 Dunham Road Clinton Township, MI 48036	RFQ #:	Verbal
		Quote #:	0669753828KSL Please refer to this number when ordering
Phone:	586-469-5325		
Fax:			
E-mail:	Vincent Astorino <vincent.astorino@macombgov.org>		

**PRICE QUOTE
8.5 Mile Relief Drain Flow Meters**

Item	Description	Qty	Unit Price	Subtotal
1.00	<p data-bbox="302 205 467 231">Teledyne Isco</p> <p data-bbox="302 264 451 289">68-4300-000</p> <p data-bbox="302 323 646 348">Signature Meter-Malvern Ave</p> <p data-bbox="302 382 932 810">The Isco Signature® Base Station system excludes a flow measurement technology but retains the configurable interface support, communication options, and flash memory data storage. Stored data can be viewed from the 320 by 240 pixel display, or retrieved from the front panel USB port or transmitted via communication options such as an internal cellular modem or Ethernet. Flowlink software (5.10.6 or newer) is recommended if data analysis and advanced reporting is required. This TIENet™-capable device can be expanded with up to nine TIENet devices such as redundant measurement devices, water quality parameter sensors, sampler interfaces, and analog outputs.</p> <p data-bbox="302 844 938 961">68-4300-000 -Signature® Base Station system. Includes base station and configured options. Includes instruction manual, pocket guide, and coupon for Isco Open Channel Flow Meter Handbook.</p> <p data-bbox="302 995 792 1020">Configured Options included in this meter:</p> <p data-bbox="302 1054 909 1482">68-4307-015 Battery Backup Power Supply 60-4307-016 Ethernet Communication 60-4314-005 TIENet Ultrasonic Level Sensor 32' cable length 60-4354-014 TIENet Area Velocity Sensor 75' cable length 68-4360-061 TIENet LaserFlow Sensor w/ submergence kit 75' Cable Length ISCO3113 60-3004-196 AV Sensor mounting plate 60-4364-003 Laser Flow permanent wall mount bracket 60-3468-020 Horizontal ultrasonic mount bracket 1" U-Guard w/stainless anchors (35')</p>	1 LS	\$16,557.00	\$16,557.00

Item	Description	Qty	Unit Price	Subtotal
2.00	<p data-bbox="300 199 467 226">Teledyne Isco</p> <p data-bbox="300 262 451 289">68-4300-000</p> <p data-bbox="300 325 878 380">Signature Meter-9 mile bypass & Retention Basin Outlet</p> <p data-bbox="300 415 932 835">The Isco Signature® Base Station system excludes a flow measurement technology but retains the configurable interface support, communication options, and flash memory data storage. Stored data can be viewed from the 320 by 240 pixel display, or retrieved from the front panel USB port or transmitted via communication options such as an internal cellular modem or Ethernet. Flowlink software (5.10.6 or newer) is recommended if data analysis and advanced reporting is required. This TIENet™-capable device can be expanded with up to nine TIENet devices such as redundant measurement devices, water quality parameter sensors, sampler interfaces, and analog outputs.</p> <p data-bbox="300 871 935 989">68-4300-000 -Signature® Base Station system. Includes base station and configured options. Includes instruction manual, pocket guide, and coupon for Isco Open Channel Flow Meter Handbook.</p> <p data-bbox="300 1024 792 1052">Configured Options included in this meter:</p> <p data-bbox="300 1087 906 1360">68-4307-015 Battery Backup Power Supply 60-4307-016 Ethernet Communication 60-4357-018 TIENet Network Expansion Box with Dessicator (Qty 2) 60-4354-014 TIENet Area Velocity Sensor 75' cable length (Qty 3) 60-3004-196 AV Sensor mounting plate (Qty 3) 60-4304-050 TIENet Bulk Cable (150') 1" U-Guard w/stainless anchors (60')</p>	1 LS	\$9,871.00	\$9,871.00
3.00	<p data-bbox="300 1409 396 1436">HESCO</p> <p data-bbox="300 1472 428 1499">Installation</p> <p data-bbox="300 1535 646 1562">Flowmeter Installation Service</p> <p data-bbox="300 1598 911 1736">HESCO will utilize factory certified and trained technicians to install the flow meters and provide appropriate confined space entry equipment and personnel to install the metering equipment included in this quotation.</p>	1 LS	\$10,800.00	\$10,800.00

	Subtotal	\$37,228.00
	Taxable Subtotal	\$0.00
	Sales Tax [0.0000%]	\$0.00
	Misc. Charge	\$0.00
	Shipping & Handling Best Way	\$250.00
	Grand Total	\$37,478.00

Terms & Conditions	
Proposed Shipping Date 4-6 Weeks After Approval of Drawings	Payment Terms Net 30
Shipping Method Best Way	Shipping Terms Prepaid and Added to Invoice
F.O.B. Factory	This Quotation is valid until 4/22/2018.

If favored with an Order, please make the Purchase Order out to:
HESCO
28838 Van Dyke
Warren, MI 48093
and fax it to (586) 978-2200 for order entry and processing
Thank you for your inquiry!



Motor City Electric Technologies Inc.

A Subsidiary of Motor City Electric Co.

9440 Grinnell St.
Detroit, MI 48213-1151
TEL: (313) 921-5300
FAX: (313) 921-5310
www.mceco.com

March 28, 2018

Macomb County Public Works
Office of Candice S. Miller, Commissioner
21777 Dunham Road
Clinton Township, MI 48036

Attention: Mr. Vince Astorino

Subject: Macomb County Public Works
8 ½ Mile Permanent Flow Metering Sites
Motor City Electric Technologies Proposal No. 18-1489

Dear Mr. Astorino:

Motor City Electric Technologies is pleased to offer our proposal for electrical engineering services, control panel fabrication, electrical installation and supply of related start-up services necessary for the implementation of the new Laser Flow Metering Stations for the 8 ½ Mile Relief Drain.

SCOPE OF SERVICES

Motor City Electric Technologies will provide electrical engineering, layouts, detail design drafting, necessary calculations, programming, control panel fabrication, and field material as outlined in the Scope of Services section of this bid document.

A. Electrical engineering will include the following as required:

1. Electrical schematics
2. Panel door and back plate layouts with bill of materials
3. AutoCAD drawings
4. Interconnect and cabling diagrams
5. PLC/SCADA program logic and documentation
6. Cellular Modem Communications Design and Commissioning
7. Network and Switching Layouts, Programming and Commissioning
8. Submittals, O&M manuals and documentation (Electronic Only)
9. Training and training manuals (two (2) manuals)
10. Start-up/Debug/Calibration/Commissioning
11. Update electrical drawings to "as-built" condition per marked up drawings provided by the field installation contractor

Motor City Electric Technologies Inc.

Page 2 of 5

12. One (1) set of 11"x17" bond drawings will be submitted for approval processing
13. Two (2) sets of AutoCAD files on CD

B. Our proposal is based on furnishing the following material and services:

CONTROLS AND INSTRUMENTATION

Malvern Avenue Location

- Furnish new NEMA 3R Aluminum meter enclosure
- Furnish new panel UPS unit
- Furnish new Heater/Thermostat and Cooling Fan
- Furnish Allen Bradley PLC unit, Network Switch, circuit breakers, terminals, intrinsically safety barriers, wireless cellular modem, etc.
- Furnish engineering CAD meter panel drawings.
- Furnish engineering to develop PLC/DIGI programming and SCADA screens.
- Furnish engineering to debug meter panel and commission field devices

Chapaton Location

- Furnish new NEMA 4X Stainless Steel 2 Door enclosure to match and fit in place of existing enclosure. New enclosure will have additional depth to accommodate new ISCO equipment
- Furnish new panel UPS unit
- Furnish new Heater/Thermostat and Cooling Fan
- Furnish Allen Bradley PLC unit, Network Switch, circuit breakers, terminals, intrinsically safety barriers, etc.
- Furnish engineering CAD meter panel drawings.
- Furnish engineering to develop PLC programming and SCADA screens.
- Furnish engineering to debug meter panel and commission field devices
- Furnish new Hydromanger Transmitter and Transducer

C. Our proposal includes the following electrical installation services:

A. Malvern Avenue:

1. Furnish and install an underground two inch (2") PVC conduit from the utility pole South of the proposed Control Panel for DTE Energy electric service.
2. Furnish and install the DTE meter Socket and the N. 3R Fused Service Entrance Disconnect Switch, which will be mounted on the side of the Control Panel.
3. Furnish and install the Concrete Pad.

Motor City Electric Technologies Inc.

Page 3 of 5

4. Install the Control Panel on the Concrete Pad.
5. Furnish and install a three inch (3") PVC conduit from the Control Panel to the Manhole.
6. Furnish and install a three inch (3") Rigid Galvanized Steel PVC Coated conduit in the Manhole down to the Sewer. Explosion Proof Junction Box and explosion proof conduit fittings are included as shown.
7. Furnish and install a new Manhole Cover.
8. Coordination with DTE Energy for the electric service.
9. Electrical Permit.

B. Chapaton Pump Station/CSO:

1. Remove and replace the existing Control Panel including pulling out and pulling back in the existing wiring to rework the existing conduits as required.
2. Furnish and install a 2 inch (2") PVC Conduit from the Control Panel to the manhole to the Retention Basin Outlet.
3. Furnish and install a two inch (2") Rigid Galvanized Steel PVC Coated conduit in the Manhole down to the Sewer. Explosion Proof Junction Box and explosion proof conduit fittings are included as shown.
4. Intercept and extend the existing 2 inch (2") PVC conduit into the Manhole at the 9 Mile Emergency Bypass Sewer to create a path from the Control Panel to the Sewer.
5. Furnish and install two (2) two inch (2") Rigid Galvanized Steel PVC Coated conduit in the Manhole down to the Sewer. Explosion Proof Junction Boxes and explosion proof conduit fittings are included as shown.
6. Using an existing underground conduit from the Control Panel to the Garage, extend the conduit into the Pump Station/CSO Basin Control Room and install a communication cable. An existing conduit must be available either one that is presently empty or one that can be evacuated of the existing wiring.

PRICING

The Total Lump Sum for engineering, control panels and start-up/debug services as specified herein by Motor City Electric Technologies is One Hundred Three Thousand Nine Hundred Nineteen and 00/100 (**\$103,919.00**) Dollars.

Controls/Instrumentation Material and Shop Fabrications	\$22,770.00
Controls Engineering/PLC/Wireless and SCADA programming	\$13,800.00
Electrical Installation Services	\$67,349.00

SCHEDULE

In accordance with the above, it is Motor City Electric Technologies' intention to begin work on this project immediately upon receipt of order and complete all work within a mutually agreed upon time frame.

TERMS AND CONDITIONS

1. All prices shall remain in effect subject to your acceptance for 60 days.
2. Our terms of payment are thirty (30) days net from date of invoice. We will invoice the last working day of each month for all engineering performed that month. We will invoice for field equipment upon shipment of equipment.

Our price includes shipping to the jobsite.

3. Our controls price does not include the following:
 - ISCO Laser Meter equipment or installation of those devices
 - Telog Logger
 - Macomb Department of Roads Right of Way "Line of Sight" drawings or Right of Way permits
 - DTE Charges
 - Field Painting
 - Spare Parts
 - Taxes (Macomb County Public Works is tax exempt)
4. The above costs are based on the equipment being completely wired and tested for wiring correctness before start-up debug services begin. Any delays due to additional changes to the system and/or omissions of others will be charged as additional work.
5. Once start-up has begun it is required that at least one (1) electrician will be available to assist each Motor City Electric Technologies engineer involved in the start-up process.
6. Motor City Electric Technologies will not be responsible for correctness or accuracy of any information supplied by others or the subsequent errors resulting from such incorrect information.
7. We will use our best judgment and accepted design practices in the development of our engineering and drafting, and thereby limit

Motor City Electric Technologies Inc.

Page 5 of 5

responsibility solely to the correction of errors and/or omission in the documents, drawings and panel fabrication to provide a workable system.

8. Motor City Electric Technologies will not be held liable for any schedule delays due to drawing approval delays and/or errors or omissions of others. Control panel fabrication will begin only after approved design drawings have been returned to Motor City Electric Technologies.
9. Back charges for any field additions, deletions, modifications or "corrections" authorized and implemented without our knowledge and consent will not be accepted.

Thank you for the opportunity to quote these services. We look forward to working with you on this project. Should you have any questions regarding our proposal, please do not hesitate to call.

Sincerely,

Brent Welser
Lead SCADA/Controls Engineer

/re

Chapter 20
Expenses 10/1/20016 - 9/30/2017
Insurance Cost Breakdown

DRAIN NAME	PERCENT	PORTION OF INSURANCE
Eight Half Mile Relief	2.000%	\$ 3,647.04
MIDDD	98.000%	\$ 178,704.96

Insurance bill	\$ 182,352.00
----------------	---------------

*** After an anylisis of the 2017 expenses, other drain's portions were minimal and insignificant

II. Responding Insurance Carrier Proposals

ACE American Insurance Company Proposal

This proposal reflects an occurrence limit of \$10,000,000. The \$10,000,000 limit is assembled by way of an underlying excess policy (ACE) and a separate excess layer.

Primary Layer

ACE American Insurance Company (Chubb)

Rating – A++ XV Stable, Admitted

General Liability afforded on an Occurrence basis excess of a retained limit.

Public Officials' and Employment Practices Liability afforded on a Claims Made basis excess of a retained limit. As a Claims Made policy form, a Retroactive Date reflecting the first date that coverage is secured will be afforded.

Separate limits afforded for the general liability (including the sewage backup) and the public officials' (including the employment practices liability).

Excludes Automobile Liability. Includes a specific Sewage Backup Endorsement (full limits). The retained limit is applicable to both defense costs and the payment of third-party damages.

Defense costs will be applied to the afforded coverage limit for the general liability and sewage backup coverages (payment of defense costs reduces the available limits of liability).

Defense costs are outside of the carrier afforded limits of liability for the public officials' and employment practices liability (payment of defense costs will not reduce the available limits of liability).

Each Occurrence Limit –	5,000,000
Aggregate Limit –	5,000,000
Retained Limit -	250,000

Excess Layer

Hallmark Specialty Insurance Company

Rating – A- VIII Stable, Non-Admitted

Each Occurrence Limit –	5,000,000
Aggregate Limit –	5,000,000

Annual Premium

Primary Layer -	178,985.00
Excess Layer -	67,015.00
Surplus Lines Tax & Regulatory Fee -	1,675.38
Annual Premium (excluding Terrorism) -	247,675.38
Additional Premium for Terrorism -	9,873.50

II. Responding Insurance Carrier Proposals

Trident Public Risk Solutions Proposal

Argonaut Insurance Company
Rating – A XIII Stable, Admitted

General Liability, Non-Owned Automobile Liability, and Public Officials' Liability – all afforded on an Occurrence basis excess of a retained limit.

The retained limit is applicable to both defense costs and the payment of third-party damages.

Defense expenses are outside of the limits of liability afforded by the carrier (payment of defense expenses will not reduce the available limits of liability).

An aggregate does not apply to the Automobile Liability coverage.

Excludes Employment Practices Liability.

Separate limits are afforded for each line of coverage (general liability, public officials', and automobile liability). Payment of damages for one line of coverage will not impact or reduce the limits available and dedicated to the remaining lines of coverage.

Option One

Each Occurrence Limit –	11,000,000
Aggregate Limit –	12,000,000
Retained Limit -	250,000
Annual Premium (excluding Terrorism) -	182,352
Additional Premium for Terrorism -	4,910

Option Two

Each Occurrence Limit –	11,000,000
Aggregate Limit –	12,000,000
Retained Limit –	500,000
Annual Premium (excluding Terrorism) -	166,264
Additional Premium for Terrorism -	4,471

III. Third-Party Administrator Proposal

The insurance proposals as presented include self-insured retentions (SIR) that must be satisfied by the insured before the carrier responds. With this manner of coverage, the carrier treats the named insured as an underlying carrier with regard to the responsibilities for the administration and payment of claims within the SIR. To assure appropriate claims administration, claim history record keeping, and proper notice to the excess carrier, the services of a third-party administrator (TPA) are required.

Included with this proposal you will find a separate, detailed proposal from the ASU Group for TPA services. Section 8 of the proposal defines hourly rates and an annual Administration Fee.

In speaking with an ASU representative, we have been advised that the average claim takes approximately eight hours (one full day) to complete. Using the hourly time and expense rate of \$79, the estimated cost per claim would be \$632. This is an expense that would be paid by the insured. All expenses paid to the TPA are applicable to the SIR.

A representative from ASU is available to meet with representatives from the Public Works Department to discuss their proposal and services in greater detail.

Macomb County Infrastructure Property Insurance Proposal

Carrier – Affiliated FM Insurance Co. Parent Company – Factory Mutual Insurance Co.

A. M. Best Rating – A+ XV, Stable. Admitted Carrier.

Term of Policy – July 1, 2017 to July 1, 2018

Coverage - Covers property declared in the policy (scheduled locations) against all risks of physical loss or damage, except the following exclusions:

- Nuclear reaction, radiation, or contamination.
- War
- Dishonest acts by an insured.
- Seepage or influx of water from natural underground sources.
- Wear and tear, deterioration, depletion, rust, corrosion, erosion, inherent vice, or latent defect.
- Faulty workmanship, material, construction, or design.
- Settling, cracking, shrinking, bulging or expansion of: foundations, walls, floors, roofs, and ceilings.
- Insect, animal, or vermin damage.

Limits:

- \$25,000,000 per occurrence
- \$50,000,000 annual aggregate

Sub-limits:

- Earth Movement - \$5,000,000
- Flood - \$5,000,000
- Expediting Expenses - \$250,000
- Land and Water Cleanup - \$50,000

Deductible - \$250,000 (Buildings, contents, etc. subject to a \$100,000 deductible.)

Valuation - Cost to repair or cost to rebuild or replace.

Rate - \$0.03 per \$100 of value.

Rateable Exposure and Premium –

- | | |
|--------------------------------------|----------------|
| • Inventory dated February 6, 2018 - | \$394,844,620 |
| • Less deletions – | (\$51,548,356) |
| • TIV - | \$343,296,264 |

Annual Premium - \$102,989 (Premium would be pro-rate for the 1st yr.)

Estimates (in addition to values and premium reported above) for MSDDD* - \$100,000,000 exposure; \$30,000 annual premium. NGIDDD* - \$50,000,000 exposure; \$15,000 annual premium.

*Not included in February valuation report.

Coverage Examples:

- **Sinkhole or Earthquake** - Sinkhole related to surrounding soil conditions, not structural failure of infrastructure.
- **Water Pressure** - Either from surface water flooding or water from burst water transmission lines.
- **Gas Explosion**
- **???**

Please refer to the actual policy forms for terms, conditions, definitions, and exclusions. Coverage examples are meant as illustrative and not based upon any known or actual occurrences.

Stephen R. Saph Jr.

Nickel & Saph Inc. Insurance Agency

586-463-4573

586-463-3135 – FAX

586-747-9315 – CELL

stephenjr@nickelsaph.com

March 1, 2018

Macomb County Infrastructure Property Insurance Proposal

Revised to reflect coverage only for the Romeo Arm CS-2 and CS-3

Carrier – Affiliated FM Insurance Co. Parent Company – Factory Mutual Insurance Co.

A. M. Best Rating – A+ XV, Stable. Admitted Carrier.

Term of Policy – July 1, 2017 to July 1, 2018

Coverage - Covers property declared* in the policy (scheduled locations) against all risks of physical loss or damage, except the following exclusions:

*Romeo Arm CS-2/CS-3 (Map on Schedule)

- Nuclear reaction, radiation, or contamination.
- War
- Dishonest acts by insured.
- Seepage or influx of water from natural underground sources.
- Wear and tear, deterioration, depletion, rust, corrosion, erosion, inherent vice, or latent defect.
- Faulty workmanship, material, construction, or design.
- Settling, cracking, shrinking, bulging or expansion of: foundations, walls, floors, roofs, and ceilings.
- Insect, animal, or vermin damage.

Limits:

- **\$25,000,000** each occurrence
- .
- **\$40,000,000** annual aggregate

Sub-limits:

- Earth Movement - \$5,000,000
- Flood - \$5,000,000
- Expediting Expenses - \$250,000
- Land and Water Cleanup - \$50,000

Deductible - \$250,000 (Buildings, contents, etc. subject to a \$100,000 deductible.)

Valuation – Actual Cash Value.

Annual Premium - **\$12,000** (Premium would be pro-rated for the first year.)

Coverage Examples:

- **Sinkhole or Earthquake** - Sinkhole related to surrounding soil conditions, not structural failure of infrastructure.
- **Water Pressure** - Either from surface water flooding or water from burst water transmission lines.
- **Gas Explosion**
- **???**

Please refer to the actual policy forms for terms, conditions, definitions, and exclusions.

Coverage examples are meant as illustrative and not based upon any known or actual occurrences.

Stephen R. Saph Jr.

Nickel & Saph Inc. Insurance Agency

586-463-4573

586-463-3135 – FAX

586-747-9315 – CELL

stephenjr@nickelsaph.com

March 13, 2018

**8.5 Mile Relief Drain Drainage District and
Martin Sanitary Diversion Drainage District**

Responding Insurance Carrier Proposal:

Carrier - Indian Harbor Insurance Company

Rating – A XV, non-admitted

Proposed Coverages - **Pollution and Remediation Legal Liability**

Options:

Limits of Liability:

Each Occurrence -	\$1,000,000	\$3,000,000	\$5,000,000
Aggregate -	\$1,000,000	\$3,000,000	\$5,000,000
<u>Retention Each Occurrence:</u>	\$25,000	\$25,000	\$25,000

Premiums:

One Year Term -	\$11,306	\$18,431	\$22,933
Three Year Term -	\$22,357	\$36,444	\$45,346

Coverage Form and Summary:

Claims Made with Retroactive Date matching first date coverage is secured.

Terrorism is not included. Coverage can be secured by adding an amount equal to three (3) percent of the premium selected.

Surplus Lines fees as required by the State of Michigan in an amount equal to two and a half (2.5) percent must be added to the premium selected. Indian Harbor is not admitted by the State of Michigan. In case of carrier insolvency, payment of claims or refund of unearned premium may not be guaranteed by the State.

For multi-year policies, policy limits do not annually reinstate. Disaster Response Expense - \$500,000 each occurrence and in the annual aggregate. Includes Contractor's Pollution Legal Liability.

Pollution Liability – Loss and related legal expenses resulting from any Pollution Condition on, at, under or migrating from any covered location which the insured has or will become legally obligated.

Remediation Legal Liability – Coverage for expenses caused by a Pollution Condition and incurred to investigate, assess, remove, dispose or abate, contain, treat or neutralize a Pollution Condition.

Stephen R. Saph Jr., **Nickel & Saph, Inc. Insurance Agency**
586-463-4573 – office; 586-463-3135 – FAX; 586-747-9315 – cell
stephenjr@nickelsaph.com
March 22, 2018

8 1/2 MILE RELIEF DRAIN - 4/9/18

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%	Astorino	Cintas	\$ 1,703.90	Invoice #0D26554451 - 1/11/18	Annual Fire Extinguisher Inspections		
		Astorino	DE-CAL, Inc.	\$ 1,829.87	Invoice #WO18380131 - 2/28/18	Recirculating Pump for Boiler System		
		Astorino	DTE Energy	\$ 1,440.69	Monthly Electric - 10/10/17 - 11/7/17	Adjusted Bill		
		Astorino	DTE Energy	\$ 12,415.50	Monthly Electric - 2/8/18 - 3/7/18	Stormwater Pumps		
		Astorino	Grainger	\$ 700.45	Invoice #9733322789 - 3/20/18	Pump used to change oil in SWPs		
		Astorino	TestAmerica	\$ 967.50	Invoice #19012042 - 3/5/18	Lab analysis of water as required by NPDES Permit		
		Astorino	Urban Land Consultants, LLC	\$ 1,950.00	Invoice #13714 - 3/28/18	Retainer to survey Pointe at Chapaton RTB		
		Total			\$ 21,007.91			

\$1,703.90

RECEIVED
MAR 08 2018
BY:



*** INVOICE CUSTOMER COPY ***

Location : CINTAS FIRE PROTECTION

Invoice # : 0D26554451 Inv Date : 1/11/2018
Customer : 440 Loc : D26
Type : CHG-S Route : 01
PO Number : Acct # : 00440
WO Number : Acct Zip : 48080
Service Visit : 4800338

Remit to:
CINTAS FIRE 636525
P.O. BOX 636525
CINCINNATI, OH 452636525
(248)817-3800

Bill to:
MACOMB COUNTY / CHAPATON
23001 E 9 MILE RD
MACOMB COUNTY PUBLIC WORK
SAINT CLAIR SHORES, MI 48080

Serviced:
MACOMB COUNTY / CHAPATON
23001 E 9 MILE RD
MACOMB COUNTY PUBLIC WORK
SAINT CLAIR SHORES, MI 48080

Item	Qty	Description	Unit Price	Net Amount	Tx
B216158	1	EXTINGUISHER, 10# ABC, HIGH FLOW	365.73	365.73	Y
CO210	1	RECHARGE, CO2 10#	32.23	32.23	N
CO25	1	RECHARGE, CO2 5#	27.55	27.55	N
CONT	27	CONTINUITY TEST, CO2 HOSE	4.93	133.11	N
DC10	2	RECHARGE, 10# DRY CHEMICAL	32.23	64.46	N
EEOR	5	O RING ASSEMBLY	5.51	27.55	Y
EESEAL	66	FLAG SEAL/TAMPER INDICATOR	.52	34.32	Y
EEVSC	5	VERIFICATION SVC COLLAR	3.23	16.15	Y
EEVSTEM	3	VALVE STEM ASSEMBLY	14.10	42.30	Y
H2O2	1	RECHARGE, H2O 2.5 GAL	26.49	26.49	N
HST	3	HYDROTEST	23.31	69.93	N
HSTCO2	2	HYDROTEST, CO2 PORTABLE	33.24	66.48	N

Chg: 8 1/2 Mile

Date: 3.8.18
 Chief Deputy: [Signature]
 Engineer(s):
 Manager: [Signature]
 Coordinator(s): [Signature]
 Finance Officer: [Signature]

PRF 038774 77500

White: Bill Copy Yellow: File Copy Pink: Customer Copy

TERMS NET 10

FIRE-INV-3PT

Staff 3-2018
Board 4-9-18



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

RECEIVED
 MAR 14 2018
 BY: MH

Service Invoice

Invoice #: WO18380131

Date: 02/28/2018

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: Rob Ketterer	Due Terms: 30DY
--------------------	-------------------------------	------------------------

Assembly#	Part#	Description	Quantity	Price	Ext Price	Sales Tax
		See Attached	1.0000	1,829.870000	1,829.87	N

Notes:

See work order for details

Chg: 8 1/2 Mile

Date 3-14-18
 Chief Deputy AB
 Engineer(s) _____
 Manager(s) JA
 Coordinator(s) B
 Finance Officer BM

PA038810 93000

Staff 3-20-18
 Board 4-9-18

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: \$ 1,829.87

Account Information

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

18-110

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 Relief

Date	3.6.18
Chief Deputy	AB
Engineer (s)	
Manager (s)	JA
Coordinator (s)	
Finance Officer	BGM

PA 038749 92300



Service Charge						11.20
Distribution:						
Distribution Energy	46,720	KWH	@ \$	0.0392000	Per Total KWH	1,831.42
Surcharges:						
Transitional Recovery Mechanism	46,720	KWH	@ \$	0.0013560	Per Total KWH	63.35
U-18255 IS	46,720	KWH	@ \$	0.0032520	Per Total KWH	151.93
Nuclear Surcharge	46,720	KWH	@ \$	0.0007280	Per Total KWH	34.01
U-18014 SIR	46,720	KWH	@ \$	-0.0045020	Per Total KWH	- 210.33
Energy Waste Reduction	2	MTR	@ \$	29.9900000		59.98
LIEAF Factor	2	MTR	@ \$	0.9300000		1.86
Sub Total:						1,943.47
Special Facilities Charge						2,500.00
Invoice Subtotal						7,952.14
Michigan State Sales Tax On Taxable Portion						0.00
Invoice Total						\$7,952.14

Stat 3-20-18
 Board 4.9-18



Account Information

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

RECEIVED
MAR 20 2018
M4

Account Number 9100-0005-3785

DTE-Energy Federal ID No. 38-3217752

Programs you are enrolled in:

18-126

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

Date	3.20.18
Chief Deputy	MB
Engineer(s)	
Manager(s)	VA
Coordinator(s)	3D
Finance Officer	WAm

PA 03 8837 92300



Staff 4-3-18
Boara 4-9-18



charges

Number 9100-0005-3785

Previous Balance as of 02/09/2018	8,741.10
Payment(s) and Credit(s)	- 7,300.41
Remaining Balance	1,440.69

Current Charges

Service Location	Item	Service Type	Rate	Bill Period	Amount
23001 E 9 Mile Rd	7004376662	General Service Municipal Pumping-Net Metering	EFCND3_WP	02/08 - 03/07/18	12,415.50
		Taxes			0.00
		Miscellaneous Charges			0.00
		Current Bill			\$12,415.50

Amount Due on or before Due Date of 04/03/2018 \$13,856.19

Your current charges are due on April 3, 2018. A 2% late payment charge will be applied if paid after the due date.

Staff 4-3-18
Board 4-9-18

25940 GROESBECK HWY.
WARREN, MI 48089-4144
www.grainger.com



GRAINGER ACCOUNT NUMBER 803170893
INVOICE NUMBER 9733322789
INVOICE DATE 03/20/2018
DUE DATE 04/19/2018
AMOUNT DUE 700.45

PO NUMBER: CHAPATON RTB
CALLER: BOB BUGAMELLI
CUSTOMER PHONE: (586) 772-3434
ORDER NUMBER: 1316344161
INCO TERMS: FOB ORIGIN

BILL TO
MDG2018 00002072 1 AB 0408

ATTN AP
MACOMB COUNTY PUBLIC WORKS
21777 DUNHAM RD
CLINTON TWP, MI 48036-1005



Pay invoices online at:
www.grainger.com/invoicing
Sign up for paperless invoicing at:
www.grainger.com/paperlessinvoicing

THANK YOU!

FEI NUMBER 36-1150280

FOR ANY QUESTIONS ABOUT THIS INVOICE OR ACCOUNT **CALL 1-800-472-4643**

PO LINE #	ITEM #	DESCRIPTION	QUANTITY	UNIT PRICE	TOTAL
	3ABZ4	The following items were for: MACOMB COUNTY PUBLIC WORKS 23001 E 9 MILE RD SAINT CLAIR SHORES MI 48080-1576 PUMP, BRONZE, 1/3 HP, 115/230V, 9.4/4.7 AMPS MANUFACTURER # 3ABZ4 Delivery# 6390770027 Date: 03/20/2018 Carrier: UPS GROUND No. of pkgs: 0 Wt: 25.00 Trk#: 123018W70369210777 SHIPPED FROM: DC MACEDONIA, OH - 935 8211 BAVARIA ROAD MACEDONIA OH 44056-2259	1	700.45	700.45
<p><i>Chg: 8 1/2 Mile</i></p> <p>Cal. <u>3.26.18</u></p> <p>Chief Deputy <u>AB</u></p> <p>Engineer (s) _____</p> <p>Manager (s) <u>UA</u></p> <p>Coordinator (s) <u>30</u></p> <p>Finance Officer <u>km</u></p> <p>PA 038887 97600</p>					
<p>THIS PURCHASE IS GOVERNED EXCLUSIVELY BY GRAINGER'S TERMS OF SALE, INCLUDING: (i) DISPUTE RESOLUTION REMEDIES, AND (ii) CERTAIN WARRANTY AND DAMAGES LIMITATIONS AND DISCLAIMERS IN EFFECT AT THE TIME OF THE ORDER, WHICH ARE INCORPORATED BY REFERENCE HEREIN. GRAINGER'S TERMS OF SALE ARE AVAILABLE AT WWW.GRAINGER.COM. PRODUCT RETURN INSTRUCTIONS ARE AVAILABLE AT WWW.GRAINGER.COM/RETURNS.</p>					INVOICE SUB TOTAL 700.45

Staff 4-3-18
Board 4-9-18

These items are sold for domestic consumption. If exported, purchaser assumes full responsibility for compliance with US export controls. Diversion contrary to US law prohibited.

PAY THIS INVOICE; NO STATEMENT WILL BE SENT. PAYMENT TERMS NET 30 DAYS IN U.S. DOLLARS.

AMOUNT DUE 700.45

PLEASE DETACH THIS PORTION AND RETURN WITH YOUR PAYMENT.

BILL TO:
ATTN AP
MACOMB COUNTY PUBLIC WORKS
21777 DUNHAM RD
CLINTON TWP, MI 48036-1005

REMIT TO:
GRAINGER
DEPT. 803198225
PALATINE, IL 60038-0001

803198225973332278910000700451000000010000000100000018041920

X ACCOUNT NUMBER 803170893 DATE 03/20/2018 INVOICE NUMBER 9733322789 AMOUNT DUE 700.45

FOR COMMENTS OR CHANGE OF ADDRESS, ENTER INFORMATION ON REVERSE SIDE.

RECEIVED
MAR 05 2018
 BY: **MH**

Invoice/Credit No.	19012042	Invoice Date	March 05, 2018
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 Rd
 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					
J15590-1	Chapaton Rain Event	02/21/2018			
	5210 B-2011 - CBOD		14.00	20.00	280.00
	SM4500 P E-2011 - Phosphorus		14.00	18.75	262.50
	4500 NH3 C-2011 - Ammonia		14.00	11.25	157.50
	2540 D-2011 - Total Suspended Solids		14.00	7.50	105.00
	2540E-2011 - Volatile Suspended Solids		14.00	10.00	140.00
	Safe and Environmentally Responsible Waste Management (per sample)		15.00	1.50	22.50

Chg: 8 1/2 Mile Ref

Date: 3.5.18

Chief Deputy: AB

Engineer(s): _____

Manager(s): UA

Coordinator(s): BD

Finance Officer: btm

PA 038739 74100

Project Number	Client Number	Project Manager	Subtotal	\$967.50
19000006	1407288	Sue Schafer		
Latest Sample Receipt Date	Latest Report Date	Phone Number	Total	\$967.50
02/21/2018	03/05/2018	(810) 229-2763		

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

Staff 3-20-18
 Board 4-9-18

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.



**Civil Engineers
Land Surveyors
GPS Consultants
Planners**

RECEIVED
MAR 28 2018
BY: MH

**8800 Twenty Three Mile Road
Shelby Township, MI 48316-4516
Phone: (586) 731-8030
Fax: (586) 731-2605
Email: info@urban-land.com**

Macomb County Public Works
Attn: Tamara Keskeny
21777 Dunham Road
Clinton Twp., MI 48036

Invoice

Date
3/28/2018

Invoice #
13714

Project	180359 - NW 1/4, Sec. 35, SCS
---------	-------------------------------

Terms	
-------	--

Description	Amount												
Retainer Fee	1,950.00												
NOTE: The remainder owed is \$1950.00 Additional points not to exceed 4 hours or \$600.00													
<p><i>Chg: 8 1/2 Mile Rly</i></p> <table border="1"> <tr><td>Date</td><td><u>3.28.18</u></td></tr> <tr><td>Chief Deputy</td><td><u>AS</u></td></tr> <tr><td>Engineer(s)</td><td>_____</td></tr> <tr><td>Manager(s)</td><td><u>JIC</u></td></tr> <tr><td>Coordinator(s)</td><td><u>BD</u></td></tr> <tr><td>Finance Officer</td><td><u>HAM</u></td></tr> </table> <p>PA038914 80300</p>	Date	<u>3.28.18</u>	Chief Deputy	<u>AS</u>	Engineer(s)	_____	Manager(s)	<u>JIC</u>	Coordinator(s)	<u>BD</u>	Finance Officer	<u>HAM</u>	
Date	<u>3.28.18</u>												
Chief Deputy	<u>AS</u>												
Engineer(s)	_____												
Manager(s)	<u>JIC</u>												
Coordinator(s)	<u>BD</u>												
Finance Officer	<u>HAM</u>												

Please remit to above address.	Total	\$1,950.00
--------------------------------	--------------	------------

*Staff 4-3-18
Board 4-9-18*

Income Statement
8.5 Mile Relief
As of March 31, 2018

	9-30-2017 Total Fund	10-1-17 to 3-31-18 O&M
Revenues		1,329,619
Expenditures		578,931
Equity**	3,105,754	750,688

NOTES

Reserves as of Sept 30, 2017	600,000
Required SRF repair & replacement reserve balance 9/30/17	1,308,558
Total	1,908,558

** Broken out as follows:

Engineering carryover balance at 9/30/2017	356,050
Repair and Maintenance carryover at 9/30/2017	422,000
SCADA reserve at 9/30/2017	40,000
Equipment carryover balance at 9/30/2017	131,800
Required SRF repair & replacement reserve balance 9/30/17	1,308,558
Emergency Reserve	600,000