

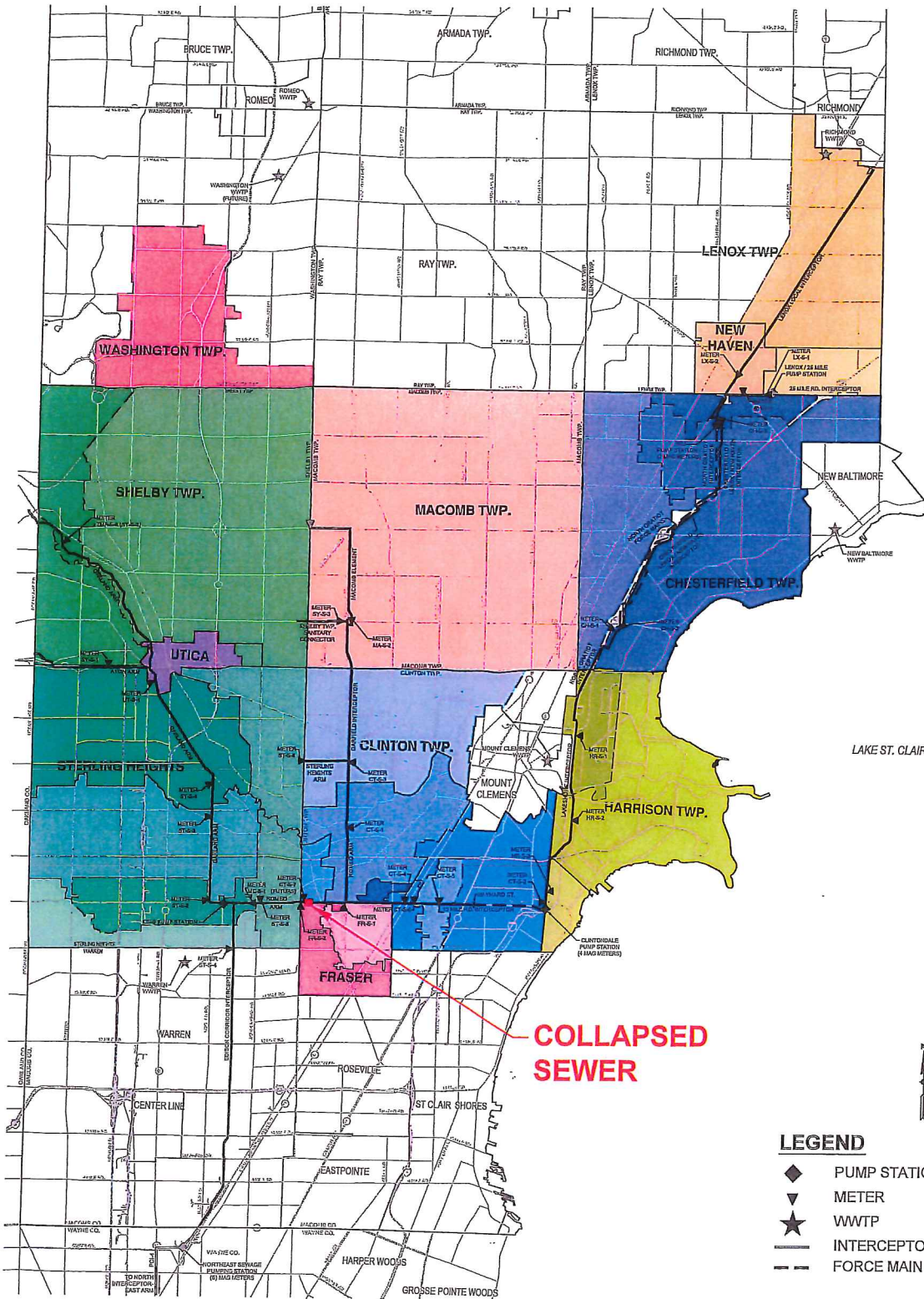
MACOMB INTERCEPTOR DRAIN  
NOVEMBER 13, 2017  
10:30 A.M.  
AGENDA

	Page
1. Call of meeting to order and roll call	
2. Approval of Agenda for November 13, 2017	
3. Approval of Minutes for October 16, 2017	3
4. Public participation	
5. 15 Mile Interceptor Repair Project Update – Evans Bantios	
6. Interceptor Inspection Update – Vince Astorino	
7. Motion: Approve Change Order No. 6 from Dan’s Excavating, Inc. for rehabilitation of Control Structure 2 and Control Structure 3 steel gates and installation of a 2.5” thick shotcrete spray on liner for the 8’ diameter PCI-12A Interceptor for an increase of \$340,868.62 – Evans Bantios	6
8. Motion: Approve Changer Order No. 7 from Dan’s Excavating, Inc. for pavement restoration for an increase of \$14,571.46 – Evans Bantios	8
9. Motion: Approve Ghadys proposal for technical services relating to the development of a Web Application to process Macomb County Public Works Office wastewater flow metering data at a not-to-exceed amount of \$100,000 – Vince Astorino	10
10. Motion: Approve amended agreement with Hamlett Engineering Sales Company d/b/a HESCO for sewerage meter maintenance contract originally signed with Martin Control Services on October 24, 2016 – Vince Astorino	16
11. Motion: Approve payment of invoices on attached spreadsheet, as presented – Brian Baker	20
12. MIDD Financial Report – Bruce Manning	23
13. Old Business	
14. New Business	
15. Adjourn	

Next Regular Meeting

*Please note the meeting has been changed from Monday, December 11, 2017 to*  
**Tuesday, December 12, 2017** at the Office of the Macomb County Public Works Commissioner,  
21777 Dunham Road, Clinton Township, Michigan 48036 at 11:00 a.m.

# MACOMB INTERCEPTOR DRAIN DRAINAGE DISTRICT



**COLLAPSED SEWER**

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



**Candice S. Miller**  
 MACOMB COUNTY PUBLIC WORKS COMMISSIONER

**fitch**  
 UPDATED: FEBRUARY 2017



An adjourned meeting of the Intra-County Drainage District for the **MACOMB INTERCEPTOR DRAIN DRAINAGE DISTRICT** was held in the Office of the Macomb County Public Works Commissioner, 21777 Dunham Road, Clinton Township, Michigan, on October 16, 2017 at 10:45 A.M.

PRESENT: Candice Miller, Chair  
Bryan Santo, Member  
Robert Smith, Acting Member

ALSO PRESENT: Veronica Klinefelt, Kathy Tocco, Macomb County Board of Commissioners; Brian Baker, Chief Deputy, Karen Czernel, Deputy, Keith Graboske, P.E., Chief Engineer, Vincent Astorino, Operations & Flow Manager, Evans Bantios, P.E., Construction and Maintenance Manager, Jeff Bednar, P.E., Environmental Engineer II, Tom Stockel, Construction Engineer, Bruce Manning, Financial Manager, Stephen Downing, Engineer II, Steven Rozycki, Engineer II, Tamara Keskeny, Property Manager, Barbara Delecke, Administrative Services, Macomb County Public Works; Ben Aloia, Aloia & Associates; Jared Beaudoin, City of Sterling Heights; Chris Dilbert, Village of New Haven

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

Minutes of the meeting of September 11, 2017 were presented and approved on a motion by Mr. Santo, supported by Mr. Smith and unanimously carried.

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

Mr. Bantios gave an update on the sinkhole project. The excavation area is almost to grade and local sanitary flow has been restored to Fraser. Once the watermain is cleared for bacteria, restoration of the sinkhole area can begin. The intersection of 15 Mile and Utica Roads was closed this past weekend for removal of the pipe under the road. The goal is to have 15 Mile Road repaved by the end of November.

The surplus piece of property on the northwest corner of Garfield and M-59 has to be surveyed before it can be sold. Fishbeck, Thompson, Carr & Huber, Inc. submitted the lowest bid of three proposals.

A motion to approve the Fishbeck, Thompson, Carr & Huber, Inc. proposal for professional services to perform a boundary survey on the parcel of land located at 45325 Garfield Road, Macomb, MI for a not to exceed amount of \$3,400 was made by Mr. Santo and supported by Mr. Smith.

Ayes: Santo, Smith, Miller  
Nays: None

Motion approved.

Mr. and Mrs. Raimondi provided a right-of-entry in March to allow access to the property for demolition. The settlement is based on the acquisition of land, plus 25% because it is a total take. The Raimondi's total compensation, which includes all costs, interest and attorney fees, is \$275,116.88. A complete release of all claims was negotiated.

When the sinkhole project is completed, the aforementioned piece of property will be for sale and the proceeds returned to the MIDD.

A motion to approve Offer to Purchase and Statement of Final Just Compensation totaling \$275,116.88, as a full and final resolution of all claims relating to the Raimondi family, and authorize Aloia & Associates, P.C. to proceed to finalize the transaction was made by Mr. Smith and supported by Mr. Santo.

Ayes: Smith, Santo, Miller  
Nays: None

Motion approved.

The Chair presented the invoices totaling \$5,130,697.86 to the board for review and approval.

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

Ayes: Santo, Smith, Miller  
Nays: None

Motion approved.

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

Mr. Dilbert was given a synopsis of the sinkhole project by Mr. Bantios.

The next regular meeting will be held on November 13, 2017, 11:00 a.m. at the Macomb County Public Works Office.

The meeting was adjourned at 11:05 p.m. on a motion by Mr. Smith, seconded by Mr. Santo, and unanimously approved.



Candice S. Miller  
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 District shown on the attached set of minutes, on October 16, 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  
Macomb County Public Works Commissioner

DATED: 10/18/17

8969.bd

OFFICE OF THE MACOMB COUNTY PUBLIC WORKS COMMISSIONER  
CANDICE S. MILLER

CHANGE ORDER FORM

Change Order No. Six

Owner: Macomb Interceptor Drain Drainage District (MIDDD)

21777 Dunham Rd., Clinton Twp., MI 48036

Contractor: **Dan's Excavating, Inc. (DEI)**

12955 23 Mile Road  
Shelby Twp., MI 48315

Project: PCI-12A 15 Mile Road Interceptor Repair – Recovery Shaft

The Contract is modified as follows upon execution of this Change Order:

			Date: <u>09/28/17</u>
Previous Change Orders:	Change Order # 1, 2, 3, 4 & 5	Net Change from Previous Change Orders:	<u>0</u>
Contract Times Net Change to Substantial Completion this Change Order:	<u>0 Days</u>	Contract Times Net Change to Final Completion this Change Order:	<u>0 Days</u>
Substantial Completion Date with All Approved Change Orders:	<u>10-30-17</u>	Final Completion Date with All Approved Change Orders:	<u>12-29-17</u>

**Adjustments to the Recovery Shaft Contract for:**

Change Order No. 006 is issued to account for compensation to DEI for incorporating additional work into the "Recovery Shaft" Contract. The following descriptions and attached documents detail those changes:

**Description:**

**6.1 Rehabilitation of the Control Structure 2 (CS-2) and Control Structure 3 (CS-3) steel gates.**

Dan's Excavating has been issued Work Directive 005 to furnish labor, equipment, materials and specialized Subcontractor support to refurbish and reinstall the fabricated steel bulkhead gates for Control Structure 2 (CS-2) and Control Structure 3 (CS-3). These gates were removed from their respective structures during the initial stages of the PCI-12A emergency effort and were stored temporarily in the Contractor's laydown yard at 15 Mile Rd and Hayes for re-conditioning and re-installation.

This task required positioning of the gates in the storage yard to facilitate cleaning, removal of the hydraulic operators, hydraulic hoses and related accessories for short term storage, blast cleaning and re-coating of the gates with a protective coating system, re-assembly of the hydraulic components, transportation to, and installation in, their respective gate structures, and lastly hydraulic system checkout, repairs, and final adjustments as necessary.

The cost for this Additional work is as follows: **ADD \$157,412.62**

The adjustment to the Contract Time is as follows: No Change

Attachments: Work Change Directive 005

*MIDDD 17A Pst Fund*

Date 9.30.17  
 Chief Engineer \_\_\_\_\_  
 Engineer ele  
 Manager \_\_\_\_\_  
 Controller BD  
 Finance ben

*Staff 11-7-17  
Board 11-13-17*

OFFICE OF THE MACOMB COUNTY PUBLIC WORKS COMMISSIONER  
CANDICE S. MILLER

CHANGE ORDER FORM

Change Order No. Six

**Description:**

**Installation of a 2.5" thick shotcrete spray on liner for the 8' diameter PCI-12A interceptor**

Dan's Excavating has been issued Work Change Directive No. 006 (WCD#6) to DEI to incorporate the application of a 2.5" thick shotcrete "Permacast PL-8000" spray on liner from the termination of the Hobas liner at station 83+27 downstream 140 lineal feet to the temporary structural bulkhead into the "Recovery Shaft" Contract. This work includes the preparation of the full diameter of the 8' diameter concrete interceptor surface in accordance with the manufacturer's recommendations, sealing of cracks using urethane grout injected per manufacturers recommendations, installation of a non-woven geotextile fabric placed over the cracks and the installation of the 2.5" thick shotcrete "Permacast PL-8000" full circumference spray on liner.

The cost for this Additional work is as follows: ADD \$183,456.00

The adjustment to the Contract Time is as follows: No Change

**Attachments:** Work Change Directive 006

The Cost adjustment to the *Contract Price* for this Change Order No. 6 is as follows:

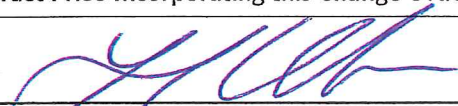
Total Cost adjustment to the "Recovery Shaft" Contract, per this Change Order 6 is: **ADD \$340,868.62**

The adjustment to the "Recovery Shaft" *Contract Time*, per this Change Order 6 is: 0 Days

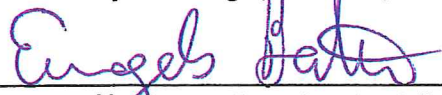
The "Recovery Shaft" Contract Substantial Completion date, remains: October 30, 2017.

The "Recovery Shaft" Contract Final Completion, remains: December 29, 2017

Contract Price Prior to this Change Order:	\$ 39,339,711.26
<b>Net Change of This Change Order:</b>	<b>\$ 340,868.62</b>
Contract Price Incorporating this Change Order:	\$ 39,680,579.80

  
Recommended by Engineer: Louis Urban, PE  
Senior Project Manager, Anderson, Eckstein & Westrick, Inc.

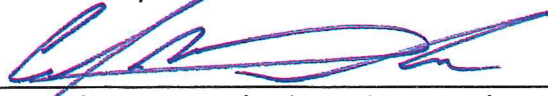
10/6/17  
Date

  
Accepted by Owner: Evans Bantios, P.E.  
Manager of Construction and Maintenance,  
Macomb County Public Works

10/6/17  
Date

Owner Authorization: Candice S. Miller  
Macomb County Public Works Commissioner

Date

  
Contractor's Acceptance (Authorized Signature):  
Dan's Excavating, Inc.

2017/10/09  
Date



**RECEIVED**  
 NOV 02 2017  
 MH

OFFICE OF THE MACOMB COUNTY PUBLIC WORKS COMMISSIONER  
 CANDICE S. MILLER

MIDDD 17A Pst fund

CHANGE ORDER FORM

Change Order No. Seven

Owner: Macomb Interceptor Drain Drainage District (MIDDD)  
 21777 Dunham Rd., Clinton Twp., MI 48036

Contractor: Dan's Excavating, Inc. (DEI)  
 12955 23 Mile Road  
 Shelby Twp., MI 48315

Project: PCI-12A 15 Mile Road Interceptor Repair – Recovery Shaft

Date	11-2-17
Chief Engineer	
Engineer(s)	<i>[Signature]</i>
Materials	
Coordinator	SD
Finance Officer	<i>[Signature]</i>

The Contract is modified as follows upon execution of this Change Order:

Previous Change Orders:	Change Order # 1 thru 6	Net Change from Previous Change Orders:	Date: 11/2/17
Contract Times Net Change to Substantial Completion this Change Order:	0 Days	Contract Times Net Change to Final Completion this Change Order:	0
Substantial Completion Date with All Approved Change Orders:	10-30-17	Final Completion Date with All Approved Change Orders:	0 Days
			12-29-17

**Adjustments to the Recovery Shaft Contract for:**

Change Order No. 007 is issued to account for compensation to DEI for incorporating changes to the work into the "Recovery Shaft" Contract. The following descriptions and attached documents detail those changes:

**Description:**

The Engineer has directed changes to the pavement restoration work in compliance with Macomb County Department of Roads (MDoR) requirements. Specifically, the MDoR will not permit installation of integral curb and gutter on 15 Mile Road within their jurisdiction. Elimination of integral curb and gutter results in a reduced quantity of Non-reinforced 9 inch Pavement and an increased quantity of separately poured concrete curb and gutter. The impacted items of work are detailed below.

- 7.1 CO#5 Conc Pavt, with Integral Curb, Nonreinf, 9 inch      **DEDUCT 11,541 SY at \$55.20/SY**  
 The cost for this Change in work is as follows: DEDUCT \$637,063.20  
 The adjustment to the Contract Time is as follows: No Change
- 7.2 CO#7 Conc Pavt, Nonreinf, 9 inch      **ADD 9,854 SY at \$60.67/SY**  
 The cost for this Change in work is as follows: ADD \$597,842.18  
 The adjustment to the Contract Time is as follows: No Change
- 7.3 CO#5 Curb and Gutter, Conc, Det F6      **DEDUCT 480 FT at \$25.00/FT**  
 The cost for this Change in work is as follows: DEDUCT \$12,000.00  
 The adjustment to the Contract Time is as follows: No Change
- 7.4 CO#7 Curb and Gutter, Conc, Det F5      **ADD 2,692 FT at \$24.44/FT**  
 The cost for this Change in work is as follows: ADD \$65,792.48  
 The adjustment to the Contract Time is as follows: No Change

Attachments: DEI Quote and Correspondence

OFFICE OF THE MACOMB COUNTY PUBLIC WORKS COMMISSIONER  
CANDICE S. MILLER

CHANGE ORDER FORM

Change Order No. Seven

The Cost adjustment to the *Contract Price* for this Change Order No. 7 is as follows:

Total Cost adjustment to the "Recovery Shaft" Contract, per this Change Order 6 is: ADD \$14,571.46

The adjustment to the "Recovery Shaft" *Contract Time*, per this Change Order 6 is: 0 Days


The "Recovery Shaft" Contract Substantial Completion date, remains: October 30, 2017.

The "Recovery Shaft" Contract Final Completion, remains: December 29, 2017

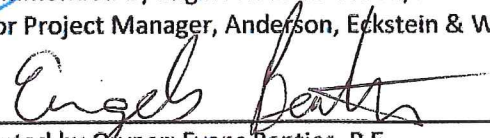
---

Contract Price Prior to this Change Order:	\$	39,680,579.88
Net Change of This Change Order:	\$	14,571.46
Contract Price Incorporating this Change Order:	\$	39,695,151.34

---

  
Recommended by Engineer: Louis Urban, PE  
Senior Project Manager, Anderson, Eckstein & Westrick, Inc.

11/2/17  
Date

  
Accepted by Owner: Evans Bantios, P.E.  
Manager of Construction and Maintenance,  
Macomb County Public Works

11/2/17  
Date

Owner Authorization: Candice S. Miller  
Macomb County Public Works Commissioner

Date

**Clint J. McDonald**

Digitally signed by Clint J. McDonald  
Date: 2017.11.02 14:22:28 -04'00'

Contractor's Acceptance (Authorized Signature):  
Dan's Excavating, Inc.

Date

**Candice S. Miller**

Public Works Commissioner  
Macomb County

## MEMORANDUM

**To:** Candice Miller – Public Works Commissioner

**CC:** Brian Baker – Chief Deputy

**From:** Vince Astorino – Operation & Flow Manager  
Steve Rozycki – Engineer II

**Project:** Bluewater Data Analytics Software

**Subject:** Phase II Recommendation

**Date:** October 23, 2017

---

Ghadys has recently submitted a proposal for technical services relating to the development of a Web Application to process Macomb County Public Works Office (MCPWO) Wastewater flow metering data at the not-to-exceed limit of **\$100,000**.

Ghadys previously developed the Bluewater data analytics software for MCPWO. This proposal is for the Phase II development of the Bluewater software. This phase will include integrating this software with the MCPWO NEXGEN and SCADA software.

As part of this proposal, Ghadys will perform the following tasks.

- Project management, coordination of user and data requirements, and coordination with Johnson & Anderson, Inc. (J&A) for engineering support.
- Gather user requirements.
- Develop smart notifications based on data/pattern anomalies. Engineering tools required to identify pattern anomalies to be developed by J&A.
- Develop notification system to issue alerts to multiple devices including text and email notifications.
- Integration of Bluewater with any external database including SCADA and NEXGEN to visualize and chart any type of time-series data. Currently the software is designed to chart only flow meter and rain gauge data.



- Evaluate future implementation of predictive data analysis and identify deviations from trending models using big data analytics and tools.

After reviewing the proposal submitted by Ghadys for the development of the Web Application for the Macomb County Wastewater data, I recommend moving forward with this work. The total not-to-exceed limit for all of this work will be at **\$100,000** and will be invoiced for on a time and material basis.



July 5, 2017

Office of Macomb County Public Works Commissioner  
21777 Dunham Road  
Clinton Township, MI 48036

Attn: Mr. Vincent Astorino  
Engineer II

Re: Phase II – Development of Macomb County Wastewater Data Analytics Software –  
BLUEWATER

Dear Mr. Astorino:

Ghadys, LLC. is pleased to submit this proposal for providing necessary technical services relating to the development of Phase II of the Bluewater Web Application to process Macomb County Wastewater flow metering data for Office of Macomb County Public Works Commissioner (OMCPWC).

**BACKGROUND**

OMCPWC has retained Ghadys, LLC. to develop a web based application to analyze and report sanitary flow metering data that is being collected from several meters owned and operated by Macomb County Wastewater Disposal District. The custom developed software named BlueWater, consists of a customizable dashboard (powered by MyDa2) with powerful data visualization, analysis, editing, and reporting tools. The system was developed to work on cloud or local servers with powerful user management tools with access control so the visualization and analytics features of the software can be utilized by the servicing communities. The County intends to further improve its use of the BlueWater software to develop and send smart notifications or alerts based on data anomalies, integrate with non-flowmeter related SCADA data, and perform live data analytics. It is OMCPWC's objective to develop a comprehensive application that can better leverage the existing data and information to allow managers to make informed decisions around managing meter data, and custom generated notifications.

OMCPWC has currently contracted with Ghadys and Johnson & Anderson, Inc. (J&A) to develop and manage the BlueWater system. We understand that OMCPWC intends to use J&A to provide engineering support required to implement the Phase II portion of the application development. Phase II of this work will incorporate a lot of the innovative engineering tools



being developed by J&A and integrate BlueWater with SCADA and NEXGEN to make it a fully integrated software.

### **SCOPE OF SERVICES**

The following general scope of work is proposed for Phase II development and implementation of Bluewater Application.

- Project management, coordination of user and data requirements, and coordination with J&A for engineering support.
- Gather user requirements.
- Develop smart notifications based on data/pattern anomalies. Engineering tools required to identify pattern anomalies to be developed by J&A.
- Develop notification system to issue alerts to multiple devices including text and email notifications.
- Integration of Bluewater with any external database including SCADA and NEXGEN to visualize and chart any type of time-series data. Currently the software is designed to chart only flow meter and rain gauge data.
- Evaluate future implementation of predictive data analysis and identify deviations from trending models using big data analytics and tools.

### **FEE**

Our estimated level of efforts to perform the above services is \$100,000 to be billed on a Time & Material basis. We estimate our fee for the above SCOPE not to exceed the costs without prior approval of the OWNER. Services beyond the scope of this agreement, if needed and authorized by the OWNER, shall also be at the actual rates and charges in accordance with the rate schedule attached in Exhibit A.

### **ACCEPTANCE**

This Agreement and the attached exhibit represent the entire understanding between us regarding this project and may only be modified by the mutual consent of authorized parties. If the terms of the Agreement are acceptable to you, please sign and return one copy, which will serve as our contract and authorization to proceed.

We thank you for this opportunity and we look forward to continuing assisting your office with the development of BlueWater Application.



---

## GHADYS, LLC.

### FEE SCHEDULE

<u>EMPLOYEE CLASSIFICATION</u>	<u>HOURLY RATE CHARGE</u>	o
Project Principal	\$ 150.00	Rate
Principal Architect	\$ 100.00	s are
Systems Analyst	\$ 100.00	base
Sr. Developer/Programmer	\$ 85.00	d on
Developer/Programmer	\$ 70.00	a
Administrative Assistant	\$ 50.00	nor
		mal
		eigh
		t
		hour

work day per calendar day.

- o One and one-half times the hourly rate will prevail for any time worked over eight hours on a given day.
- o One and one-half times the hourly rate will prevail for work on any *Saturday*.
- o Two times the hourly rate will prevail for *Sundays*.
- o Three times the hourly rate will prevail for *Holidays*.
- o Travel time is to be paid by the client, and will be billed at the above rates.
- o For projects requiring an overnight stay, additional charges will be incurred for meals and lodging.
- o These rates are effective **JUNE 1, 2016**.

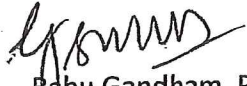


---

In the meantime, please give us a call at (248) 982-4466 if you have any questions.

Sincerely,

GHADYS, LLC.

  
Babu Gandham, PMP  
Principal

Acknowledged and Accepted by:

Macomb County Public Works Commissioner

Name: \_\_\_\_\_

Candice S. Miller, Commissioner  
Macomb County Public Works

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



**Candice S. Miller**

Public Works Commissioner  
Macomb County

## MEMORANDUM

**To:** Candice Miller – Public Works Commissioner  
**CC:** Brian Baker – Chief Deputy  
**From:** Vince Astorino – Operation & Flow Manager  
**Project:** Sewage Meter Maintenance Contract Project No. 09-0014.45  
**Subject:** Amendment Agreement Recommendation  
**Date:** October 27, 2017

On October 24, 2016, the Macomb County Public Works Office (MCPWO) entered an agreement with Martin Control Services, Inc. (MCS) to service and maintain the vast flow metering network across the different drainage districts. This project was competitively bid and ultimately awarded to the lowest and highest qualified bidder that was MCS.

As of October 1, 2017, MCS has agreed to sell, transfer, and assign to Hamlett Engineering Sales Company d/b/a Hesco Group, Inc. (HESCO) substantially all of MCS's assets, including this service agreement. When this work was competitively bid there were two bidders for this work and the other was HESCO.

We have worked well in the past with HESCO and all MCS employees are going to stay in place, so our service should not be impacted. I recommend keeping this contract going which ends in 2019 and using the services of HESCO/MCS for it.

Our lawyers also recommended making some other minor changes to this contract while we have this opportunity. One is properly assigning work to the correct drainage districts. The second is removing Giffels Webster as the Engineer for this project as MCPWO Engineering staff is handling this work. I recommend both of these options as well.



**CONSENT TO ASSIGNMENT OF SEWAGE METER MAINTENANCE CONTRACT  
AND AMENDMENT AGREEMENT**

- A. Effective October 24, 2016, Martin Control Services, Inc. ("MCS") entered into a Sewage Meter Maintenance Contract (the "Agreement") with the Macomb County Wastewater Disposal District ("MCWDD") to provide services (the "Services") to: (1) Macomb Interceptor Drain Drainage District; (2) Martin Sanitary Diversion Drain Drainage District; (3) 8.5 Mile Relief Drain Drainage District; and (4) Macomb County, under Act 342, with respect to the Southeast Macomb County Wastewater Disposal System. The entities referenced in (1) – (4) are referred to collectively herein as the "OWNERS."
- B. The MCWDD no longer acts as contracting agent for the OWNERS. Therefore, the OWNERS wish to effectuate this amendment to place the Agreement in the name of the OWNERS, as to their respective portions of the Services.
- C. Giffels Webster is identified in the Agreement as the "Engineer" and is given various responsibilities. Giffels Webster currently performs no services related to the Agreement, and the OWNERS wish to substitute the engineering staff of the Macomb County Department of Public Works as the "Engineer" in the Agreement.
- D. Pursuant to an Asset Purchase Agreement dated September 28, 2017, with an effective date of October 1, 2017 (the "APA"), MCS agreed to sell, transfer, and assign to Hamlett Engineering Sales Company d/b/a Hesco Group, Inc. ("HESCO") substantially all of MSC's assets, including the Agreement.
- E. The OWNERS have agreed to consent to the assignment of the Agreement from MCS to HESCO, pursuant to the terms and conditions of this Consent to Assignment of Sewage Meter Maintenance Contract and Amendment Agreement ("Consent and Amendment Agreement").

WHEREFORE, in consideration of the promises stated herein, the adequacy of which all parties acknowledge, the OWNERS, the MCWDD, MCS, and HESCO agree as follows:

- 1. The effective date of this Consent and Amendment Agreement is October 1, 2017.
- 2. The Agreement is hereby amended as follows:
  - a. The MCWDD is removed as a party and the OWNERS are substituted in its place, each to the extent of the Services performed for the benefit of the respective OWNERS and not jointly. HESCO shall bill each of the OWNERS separately, and only as to each respective OWNER'S responsibility for the Services.
  - b. Giffels Webster is hereby removed as the "Engineer" and the engineering staff of the Macomb County Department of Public Works, as directed by the Macomb County Public Works Commissioner, shall be fulfill all duties of the "Engineer."

c. All terms and conditions of the Agreement not amended hereby shall remain in place.

3. The OWNERS consent to the assignment of the Agreement from MCS to HESCO. HESCO assumes any and all of MCS's duties and obligations under the Agreement.

**MACOMB COUNTY, by its Public Works Commissioner  
as County Agency under Act 342, acting for the MCWDD  
and the SEMCWDS**

---

By: Candice S. Miller  
Its: Public Works Commissioner

**MACOMB INTERCEPTOR DRAIN DRAINAGE DISTRICT**

---

By: Candice S. Miller  
Its: Board Chairperson

**MARTIN SANITARY DIVERSION DRAIN DRAINAGE DISTRICT**

---

By: Candice S. Miller  
Its: Board Chairperson

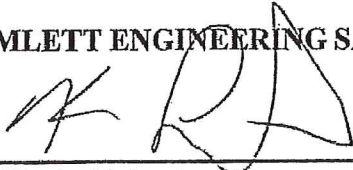
**8.5 MILE RELIEF DRAIN DRAINAGE DISTRICT**

---

By: Candice S. Miller  
Its: Board Chairperson

**[Signatures Continue on Following Page]**

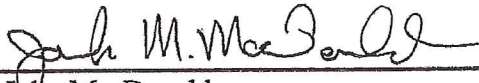
**HAMLETT ENGINEERING SALES COMPANY**



---

By: Kevin Livingston  
Its: President

**MARTIN CONTROL SERVICES, INC.**



---

By: John MacDonald  
Its: President



Macomb Interceptor Drain - 11/13/17

Funding Source	Apportionment	Manager	Vendor	Amount	Invoice Detail	Project Summary	Project Balance
Macomb Interceptor Drain Administration	Chapter 20 Chesterfield - 7.06912% Clinton - 21.19453% Fraser - 4.20779% Harrison - 5.83288% Lenox - .76183% Macomb - 13.78561% New Haven - .80870% Shelby - 9.87770% Sterling Heights - 31.74642%	Baker	Aloia & Associates, P.C.	\$ 641.25	Invoice #16439 - 9/1/17 Legal Services - ending 8/31/17	Sterling Heights v. MIDDD	
		Baker	Aloia & Associates, P.C.	\$ 959.50	Invoice #16522 - 10/1/17 Legal Services ending 9/30/17	MIDDS vs. Inland Waters, et al	
		Baker	Aloia & Associates, P.C.	\$ 741.00	Invoice #16524 - 10/1/17 Legal Services - 9/30/17	Sterling Heights vs. MIDDD	
		Baker	Viviano Law	\$ 2,684.00	Invoice #19334 - 10/4/17 Legal Services - ending 9/30/17	Sterling Heights v. MIDDD	
		Baker	Viviano Law	\$ 551.00	Invoice #19336 - 10/4/17 Legal Services - ending 9/30/17	OMID Litigation	
		Baker	Viviano Law	\$ 6,007.70	Invoice #19399 - 11/2/17 Legal Services - ending 10/31/17	Sterling Heights vs. MIDDD	
		Astorino	Belle Tire	\$ 777.80	Invoice #30369269 - 10/6/17 4 Tires	2015 F250 Truck - 064X351 - Pirkovic	
		Astorino	DTN, LLC	\$ 679.13	Invoice #5200670 - 10/20/17	Storm Sentry Subscription	
		Manning	Equipment Revolving Fund	\$ 1,580.58	Invoice #7652-2017 - 10/17/17	Reimbursement for furniture - Rozycki	
		Astorino	Fishbeck, Thompson, Carr & Huber, Inc.	\$ 3,914.40	Invoice #370223 - 10/16/17 Engineering Services - ending 10/6/17	GLWA Assistance	
		Astorino	Giffels Webster	\$ 3,905.00	Invoice #112972 - 1/16/17 Engineering Services - ending 12/31/16	Due Diligence-As-needed Engineering Services	
	SAW 1128-01 (closing date 11/27/19)	Astorino	Giffels Webster	\$ 70,378.00	Invoice #114892 - 10/16/17 Engineering Services - ending 9/23/17	Inspection Program & Grant Management MID	\$ 1,042,042.00
		Astorino	Johnson & Anderson	\$ 2,225.00	Invoice #40958 - 10/16/17	Sewer Inspection Work - RedZone	\$ 10,670.00
		Astorino	Macomb County Treasurer	\$ 1,834.37	Invoice #7648-2017 - 10/13/17	Conversion of MCMARS to Blewater	
		Astorino	City of Mount Clemens	\$ 18,593.34	Invoice #12039 - 10/9/17	Cell phone charged to wrong account	
		Astorino	Sprint	\$ 1,242.15	Invoice #578736375-072 - 8/24/17 - 9/23/17	Sewage Flow Billing - 8/19/17 - 9/23/17	
		Astorino	Sprint	\$ 1,338.03	Invoice #578736375 - 9/24/17 - 10/23/17	Monthly Cell Phone Service	
Clintondale P.S.		Astorino	Clinton Township	\$ 734.45	Monthly Water - 8/21/17 - 9/25/17	Monthly cell phone service	
		Astorino	Clinton Township	\$ 578.90	Monthly Water - 9/25/17 - 10/23/17		
		Astorino	Cummins Bridgeway	\$ 702.90	Invoice #006-52320 - 10/19/17	Repair loose data connection for generator	

Macomb Interceptor Drain - 11/13/17

<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>
Clintondale P.S. (Continued)		Astorino	DE-CAL, Inc.	\$ 3,915.25	Invoice #W017000912 - 10/20/17	HVAC Maintenance	
		Astorino	DTE Energy	\$ 649.02	Monthly Electrical - 8/24/17 - 9/22/17		
		Astorino	DTE Energy	\$ 10,666.62	Monthly Electrical - 9/23/17 - 10/23/17		
		Manning	Huntington National Bank	\$ 557,500.00	Debt Service Payment		Series 2011
		Astorino	Motor City Electric Technologies, Inc.	\$ 1,683.00	Invoice #91204 - 8/10/17		Camera Issues/Emergency Service
		Astorino	Motor City Electric Technologies, Inc.	\$ 2,442.93	Invoice #91255 - 10/6/17		Security camera installation and programming
		Astorino	National Industrial Maintenance	\$ 1,000.00	Invoice #30084 - 9/30/17		Yactor Wet Well
		Baker	Aloia & Associates, P.C.	\$ 2,730.77	Invoice #16438 - 9/1/17 Legal Services - ending 8/31/17		Sinkhole
		Baker	Aloia & Associates, P.C.	\$ 6,864.75	Invoice #16523 - 10/1/17 Legal Services ending 9/30/17		Sinkhole Repair
		Baker	Viviano Law	\$ 2,448.43	Invoice #19333 - 10/4/17 Legal Services - ending 9/30/17		Sinkhole
		Baker	Viviano Law	\$ 923.70	Invoice #19398 - 11/2/17 Legal Services ending - 10/31/17		Sinkhole
		Bantios	Anderson, Eckstein & Westrick, Inc.	\$ 4,019.65	Invoice #0114921 - 8/16/17 Engineering Services - 6/26/17 - 7/23/17		Paving Restoration
		Bantios	Anderson, Eckstein & Westrick, Inc.	\$ 2,620.75	Invoice #0114932 - 8/16/17 Engineering Services - 6/26/17 - 7/23/17		Sewer Lining
		Bantios	Anderson, Eckstein & Westrick, Inc.	\$ 18,702.39	Invoice #0114956 - 8/17/17 Engineering Services - 6/26/17 - 7/23/17		Sinkhole Repair
		Bantios	Anderson, Eckstein & Westrick, Inc.	\$ 484,310.03	Invoice #0114959 - 8/17/17 Engineering Services - 6/26/17 - 7/23/17		Recovery Shaft
Bantios	Anderson, Eckstein & Westrick, Inc.	\$ 18,998.74	Invoice #0115182 - 9/13/17 Engineering Services - 7/24/17 - 8/20/17		Sinkhole Repair		
Bantios	Anderson, Eckstein & Westrick, Inc.	\$ 838.75	Invoice #0115193 - 9/13/17 Engineering Services - 7/24/17 - 8/20/17		Sewer Lining		
Bantios	Anderson, Eckstein & Westrick, Inc.	\$ 19,087.65	Invoice #0115194 - 9/13/17 Engineering Services - 7/24/17 - 8/20/17		Paving Restoration		
Bantios	Anderson, Eckstein & Westrick, Inc.	\$ 483,208.13	Invoice #0115232 - 9/13/17 Engineering Services - 7/24/17 - 8/20/17		Recovery Shaft		
Bantios	Anderson, Eckstein & Westrick, Inc.	\$ 6,499.98	Invoice #0115502 - 10/11/17 Engineering Services - 8/21/17 - 9/17/17		Sinkhole Repair		
Bantios	Anderson, Eckstein & Westrick, Inc.	\$ 5,640.96	Invoice #0115503 - 10/11/17 Engineering Services - 8/21/17 - 9/17/17		Sewer Lining		
Bantios	Anderson, Eckstein & Westrick, Inc.	\$ 1,588.25	Invoice #0115504 - 10/11/17 Engineering Services - 8/21/17 - 9/17/17		Paving Restoration		
Bantios	Anderson, Eckstein & Westrick, Inc.	\$ 51,677.85	Invoice #0115606 - 10/13/17 Engineering Services - 8/21/17 - 9/17/17		Soil Boring Investigation		
Bantios	Anderson, Eckstein & Westrick, Inc.	\$ 468,908.63	Invoice #0115607 - 10/13/17 Engineering Services - 8/21/17 - 9/17/17		Recovery Shaft		

15 Mile Sinkhole

Macomb Interceptor Drain - 11/13/17

Funding Source	Apportionment	Manager	Vendor	Amount	Invoice Detail	Project Summary	Project Balance
15 Mile Sinkhole (Continued)		Bantios	Dan's Excavating, Inc.	\$ 4,738,285.35	Construction Estimate #6 - 10/6/17	Recovery Shaft	
		Bantios	Dan's Excavating, Inc.	\$ 3,377,833.71	Construction Estimate #7 - 11/1/17	Recovery Shaft	
		Astorino	DTE Energy	\$ 5,721.70	Monthly Electrical - 8/24/17 - 9/22/17		
		Astorino	DTE Energy	\$ 775.71	Monthly Electrical - 9/23/17 - 10/23/17		
		Astorino	EJ USA, Inc.	\$ 1,880.36	Invoice #110170095430 - 10/24/17	10 catch basin covers/10 frames	
		Astorino	EJ USA, Inc.	\$ 2,637.74	Invoice #110170095735 - 10/24/17	10 catch basin covers/10 frames	
		Bantios	Fraser Senior Housing (City of Fraser)	\$ 635.00	Invoice #7486-2017 - 11/1/17	Lease Payment - George & Lillian Raimondi	
		Manning	Huntington National Bank	\$ 2,217,557.08	Debt Service Payment	Series 2017A	
		Manning	Omar Malik	\$ 1,950.00	Invoice #7284-2017 - 11/1/17	Lease Payment - Tammetrice Smith & Salam Tobiya	
		Bantios	Michigan CAT	\$ 3,900.00	Invoice #ER7776862 - 8/4/17	Generator Rental - 6/15/17 - 7/12/17	
		Bantios	Michigan CAT	\$ 525.00	Invoice #ER7938233 - 9/22/17	Trystar Cable - Generator	
		Bantios	Michigan CAT	\$ 12,800.00	Invoice #ER7938338 - 9/22/17	Generator Rental	
		Bantios	Michigan CAT	\$ 19,500.00	Invoice #ER7938350 - 9/22/17	Generator Rental	
		Bantios	Michigan CAT	\$ 3,900.00	Invoice #ER7956139 - 9/28/17	Generator Rental	
		Bantios	Michigan CAT	\$ 13,011.00	Invoice #ER7962561 - 9/29/17	Generator Rental - 9/18/17 - 9/27/17	
		Bantios	Michigan CAT	\$ 3,900.00	Invoice #ER7974728 - 10/4/17	Generator Rental - 9/7/17 - 9/28/17	
		Bantios	Michigan CAT	\$ 3,900.00	Invoice #ER7974751 - 10/4/17	Generator Rental - 9/7/17 - 10/3/17	
		Bantios	Motor City Electric Technologies, Inc.	\$ 1,299.00	Invoice #91204 - 8/10/17	Add Contractors to WIN-911, calibrate Hydroranger	
		Bantios	R.S. Thomas & Associates, Inc.	\$ 1,900.00	Appraisal of Real Property - Albert Gair	16610 15 Mile Road, Fraser, MI	
Lenox/26 Mile Road		Baker	Viviano Law	\$ 646.00	Invoice #19335 - 10/4/17	Ric-Man vs. MIDD	
		Baker	Viviano Law	\$ 1,216.00	Legal Services - ending 9/30/17		
				\$ 1,216.00	Invoice #19400 - 11/2/17	Ric-Man vs. MIDD	
				\$ 1,216.00	Legal Services - ending 10/31/17		
Meters		Astorino	HESCO (f/k/a Martin Controls)	\$ 2,350.00	Invoice #10137 - 10/9/17	MID Meter Repair	\$ 491,790.00
		Astorino	HESCO (f/k/a Martin Controls)	\$ 14,250.00	Application #11 - 10/11/17	MID Meter Maintenance	\$ 246,841.15
NGI SAW 1406-01 (Closing date 10/2017)		Astorino	Anderson, Eckstein & Westrick, Inc.	\$ 16,643.20	Invoice #0115579 - 10/12/17	Condition Assessment	
		Astorino	Chesterfield Township	\$ 6,997.52	Engineering Services - 8/21/17 - 9/17/17		
				\$ 6,997.52	Manpower/Water used by Chesterfield Twp. for Forcemain Cleanout - 9/20/2017		
		Astorino	Cummins Bridgeway	\$ 1,641.79	Invoice #006-50063 - 9/14/17	Install new batteries/clean cables	
		Astorino	DE-CAL, Inc.	\$ 1,622.00	Invoice #WO17000848 - 10/11/17	Maintenance - ARVs 37 & 38	
		Astorino	DTE Energy	\$ 1,036.02	Monthly Electrical - 8/30/17 - 9/28/17		
		Astorino	DTE Energy	\$ 1,014.80	Monthly Electrical - 9/29/17 - 10/27/17		
		Bantios	Giffels Webster	\$ 18,092.50	Invoice #113789 - 5/9/17	21 Mile Road and I-94	\$ 222,853.20
				\$ 18,092.50	Engineering Services - ending 4/22/17		
		Astorino	National Industrial Maintenance	\$ 875.00	Invoice #30118 - 9/30/17	Vactor Rock Basket	
OMID		Astorino	Oakland County Treasurer	\$ 4,331,353.33	Invoice #SDS0005337 - 10/2/17	Sewerage Disposal Charges - September 2017	
		Astorino	Oakland County Treasurer	\$ 4,331,353.33	Invoice #SDS0005387 - 11/1/17	Sewerage Disposal Charges - October 2017	

Total \$ 21,417,997.87



Income Statement  
MIDDD  
As of October 31, 2017

	30-Jun-17	7-1-17 to 10-31-17
Revenues		O&M*
Expenditures		18,718,015
Equity	31,041,699	29,494,173

**NOTES**

Projected reserve at 6/30/2018 is

\* Includes following Projects:

Dec 2016 Sinkhole

9,500,000

70,000,000  
5,050,000  
131,735

2017A Bond  
State Grant  
Clinton Twp share of AEW invoice

Revenue 75,181,735  
Expenditures 60,257,203  
Net 14,924,532

4 SAW Grants

Revenue 935,515  
Expenditures 1,798,308  
Net (862,793)

Sewage Metering(SRF 5487-01)

Revenue 1,158,091  
Expenditures 1,027,404  
Net 130,687