

**POCONO TOWNSHIP BOARD OF COMMISSIONERS
MEETING AGENDA**

**May 16, 2016
6:00 P.M.**

- 1) Pledge of Allegiance
- 2) Roll Call
- 3) Announcements
- 4) Approval of Minutes
 - a. Commissioners Sewer Meeting, May 2, 2016
- 5) Public Comment

Comments are for any item NOT on the agenda. Comments on agenda items will be taken after each item is discussed by the Board of Commissioners, but before formal action is taken. (Please limit individual comments to 3 minutes to allow time for others wishing to speak and direct all questions and comments to the President)

- 6) Current Business
 - a. PACT Two Change Order – Force Main and Station Redesign
 - b. Marona Payment Application No 4
 - c. Pump Station #2 Analysis and Pump Replacement
 - d. Depue Plaza EDU Appeal 2989 & 2997 RT 611
 - e. Glenwood Hall Apts EDU Appeal 103 Kenny Way
 - f. Fancy Nails EDU Appeal 2799 RT 611
 - g. Harley-Davidson EDU Appeal RT 715
 - h. 197 Learn Road EDU Appeal
 - i. Chester's Restorative Work Proposal
 - j. Sanofi Feed Station
- 7) Unfinished Business
 - a. Sewer Service at 213 Lower Scot Run Drive
 - b. Sewer Hump Repair
 - c. Sewer Procedures Manual
 - d. Pump Stations 1 and 2 Evaluation
 - e. DCNR Connection
 - f. Service Lateral North of Serfas Road

- 8) Adjournment

Next Sewer meeting – June 6, 2016 (6:00 p.m.)

CONTRACT CHANGE ORDER

PROJECT: SR0611 - Pocono & Hamilton Twps
Sewerage System
Contract No. 11

CHANGE ORDER NUMBER: PCO#2

DATE: April 25, 2016

CONTRACTOR: PACT Two, LLC

ENGINEER'S PROJECT NUMBER: POCO0140

CONTRACT DATE: July 13, 2011

The Contract is changed as follows:

This Change Order includes improvements to the existing sewage conveyance system to improve reliability and reduce the possibility of system failure. The proposed work will be completed at Pumping Stations 3, 4, & 5; Valve Stations 1 & 2; and at the identified Air and Vacuum Relief Valve Locations. A detailed description of the Work to be completed at each location is provided in the attached "Proposed Project Summary of Work" with Contract Plans and Specifications to be issued for Construction upon project approval. The cost to complete the proposed Work shall be determined as identified in the "Contract No. 11 - 2016 Scope Budget Pricing" correspondence to Pocono Township dated April 4, 2016 (copy attached). Upon the final acceptance of this Change Order by all parties the Contractor shall provide updated applicable Bond Documents and Certificate of Liability Insurance reflecting the proposed changes to the Contract.

The Original Contract Amount was	\$ 3,539,773.00
The net change by previously authorized Change Orders	\$ 56,207.38
The Contract Amount prior to this Change Order was	\$ 3,595,980.38
The Contract Amount will be Increased by this Change Order in the amount of	\$ 1,590,437.00
The new Contract Amount, including this Change Order, will be	\$ 5,186,417.38
The Contract Time will be increased by	(431) days
The date of Substantial Completion as of the date of this Change Order, therefore, is	May 31, 2017
The date of Final Completion as of the date of this Change Order, therefore, is	June 30, 2017

NOTE: This Change Order does not include changes in the Contract Amount or Contract Time that have not been authorized by Construction Change Directive until the cost and time have been agreed upon by both the Owner and Contractor, in which case a Change Order is executed to supersede the Construction Change Directive.

NOT VALID UNTIL SIGNED BY THE ENGINEER, CONTRACTOR AND OWNER

_____ T&M Associates ENGINEER	_____ PACT Two, LLC. CONTRACTOR	_____ Pocono Township OWNER
_____ BY (Signature)	_____ BY (Signature)	_____ BY (Signature)
_____ (Printed Name)	_____ (Printed Name)	_____ (Printed Name)
_____ DATE	_____ DATE	_____ DATE

PACT TWO, LLC

P.O. BOX 74, RINGOES, NJ 08551

PHONE 908-788-1985

FAX 908-788-5780

April 4, 2016

Mr. Jeffry Clapper
Public Work Director
Pocono Township

Reference: S.R. 0611 Pocono and Hamilton Townships Sewage System Project
Contract No. 11 - 2016 Scope Budget Pricing

Dear Mr. Clapper:

We are pleased to provide Budget Pricing for the 2016 Scope Changes to the above referenced project. The pricing is based on drawing and specifications prepared by T&M Associates, dated February 15, 2016

Electrical Work (Two quotes Hoffman \$89,450, Brennan \$233,000)*	\$ 160,000
Controls Work (Trijay)*	\$ 196,250
Control Valves*	\$ 80,000
Material, Pipe, and Misc Subs*	\$ 310,000
Labor, Equipment, General Conditions**	\$ 365,000
Contingency	\$ 150,000
Profit and Overhead (15%)***	\$ 189,187
Mobilization/Settlement****	\$ 140,000
Not to Exceed Total Budget Price	\$1,590,437

* Will be billed per actual invoices provided

** Will be billed per the attached spreadsheet. Prevailing Wage Labor and FHWA Equip Rates

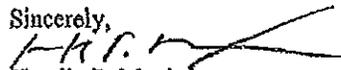
*** Will be billed at 15% of all actual costs as defined above

**** Balance of previously agreed upon settlement agreement that will be billed at mobilization

We assume that a change order will be issued to our current contract to correctly document a mutually agreed upon scope, timeframe, and terms and conditions.

If you have any further questions, feel free to contact me.

Sincerely,



Henrik P. Maxian
Manager / Executive Director

PACT TWO, LLC

PROPOSED PROJECT SUMMARY OF WORK

Pocono's Sewer System conveys raw sewage about 8 miles through a force main to a treatment plant. This project makes improvements to the existing sewage conveyance system to improve reliability and reduce the possibility of failure. We have determined that the current reliability of the system warrants these improvements be considered as an emergency repair. This portion of the system includes three pump stations and two valve stations. The work at each facility shall be as summarized hereafter:

1. **Pump Station 5** is the largest pump station in this project and is the point at which the force main starts. The station includes a screen, mixers and chemical feed system which are not part of this upgrade. This upgrade includes:
 - a. Installation of a new 1000 gallon surge tank enclosed in an Insulated shed.
 - i. New shed will have double doors to allow tank removal.
 1. It will have lighting and power outlets
 2. Township owns two unit heaters which will be installed by the contractor to provide heat.
 3. System will allow stored water to enter the force main when pressure drops below a setpoint and then fill from a potable water connection protected by a new Reduced Pressure Principal Backflow Preventer.
 4. Control valves will be used to fill and drain surge tank.
 - ii. New surge control panel shall be installed. Along with instrumentation to control surge tank
 - iii. Surge anticipator panel shall also be moved from one of the valve stations to this shed and installed as required to provide control surge and vacuum relief valve. As an alternate contractor may choose to include surge and vacuum relief functionality in the main PLC program and provide all ancillary devices needed in new Surge control panel. Thus eliminating need to connect existing surge anticipator panels.
 - b. Install new instrumentation and controls including
 - i. Ultrasonic level sensor, and backup floats sensor in wetwell
 - ii. Pressure transmitter on pump station discharge header
 - iii. New PLC control program and Operator interface screens with new operating setpoints as described in process control description.
 - iv. New communication system and Internet SCADA.
 - c. A project alternative is replace with new all Pumps, Motors, Variable Frequency Drives and Breakers according to the new size. Wiring may remain the same due to reduced current. Township shall determine whether to exercise this option based on cost.
 - d. Install new UPS and connect station instrumentation, controls, communication, security and motor protection relays to it.
 - e. Install new air compressor with 60 gallon vertical tank.
 - i. Install new pipe to new surge tank and surge vault
 - ii. Install new filter and dryer at surge vault

2. **Pump Station 4** has the lowest elevation pump station in this project and is connected to the force main just before the first steep hill rise. This upgrade includes:
 - a. Installation of a new 100 gallon surge tank in the building. The tank will be repurposed from valve Station 2.
 - i. Surge tank system will allow potable water to enter the force main when pressure drops below a setpoint and then fill from a potable water connection protected by a new Reduced Pressure Principal Backflow Preventer.
 - ii. New surge control panel will be installed. Along with instrumentation to control surge tank
 - iii. Surge anticipator panel will also be moved from one of the valve stations and installed as required to provide control surge and vacuum relief valve. As an alternate contractor may choose to include surge and vacuum relief functionality in the main PLC program and provide all ancillary devices needed in new Surge control panel. Thus eliminating need to connect existing surge anticipator panel.
 - b. Install new air compressor providing with 60 gallon vertical.
 - i. Install new air pipe to new surge tank and surge vault
 - ii. Install new air filter and dryer at surge vault
 - c. Install new instrumentation and controls including
 - i. Ultrasonic level sensor, and backup floats sensor in wetwell
 - ii. Pressure transmitter on pump station discharge header
 - iii. New PLC control program and Operator Interface screens with new operating setpoints as described in process control description.
 - iv. New communication system and internet SCADA
 - d. As an alternative replace with new all Pumps, Motors, Variable Frequency Drives and breakers according to the new size. Wiring may remain the same due to reduced current. Township shall determine whether to exercise this option based on cost.
 - e. Install new UPS and connect station Instrumentation, controls, communication, security and motor protection relays to it.
 - f. Install new rail mounted Debris Basket with all Stainless steel components. Install new hatches and hoists systems to allow for basket retrieval and emptying. Replace existing hatch and wetwell concrete cover as needed to fit new hatches over 8 foot diameter wetwell and allow for pumps and baskets removal.
 - g. Install new air pipe to as well as filter and dryer at surge vault
3. **Pump Station 3** is the highest elevation pump station in this project and is connected to the force main between Pump Stations 5 and 4. This upgrade includes:
 - a. Installation of a new surge relief vault. Extend the discharge piping and installing a new surge vent discharge back to wetwell.

- i. Repurposing the surge relief valve from Valve Station 1 and installing in the new vault.
 - ii. Installing new air supply and electrical wiring.
 - iii. Adding surge and vacuum relief functionality in the main PLC program and providing all ancillary devices needed to control solenoid in new local control panel.
 - b. Install new instrumentation and controls per section 13300 including
 - i. Ultrasonic level sensor, and backup floats sensor in wetwell
 - ii. Pressure transmitter on pump station discharge header
 - iii. New local control panel outdoor which includes surge relief valve
 - iv. New PLC control program and OIT screens with new operating setpoints as described in process control description provided
 - v. New communication system and Internet SCADA
 - c. As an alternative replace with new all Pumps, Motors, Variable Frequency Drives and breakers according to the new size. Wiring may remain the same due to reduced current. Township shall determine whether to exercise this option based on cost.
 - d. Install new UPS and connect station Instrumentation, controls, communication, security and motor protection relays to it.
 - e. Install two new rail mounted Screen Baskets of all Stainless steel components as manufactured by Halliday products. Openings shall be ½ inch and provide flow through in all directions. Install new hatches and hoists systems to allow for basket retrieval and emptying. Replace existing hatch and wetwell concrete cover as needed to fit new hatches over 8 foot diameter wetwell and allow for pumps and baskets removal. Hatch orientation may be modified by contractor as needed to allow access to all baskets and pump
 - f. Install air compressor with 60 gallon vertical.
 - i. Install new pipe to new surge vault
 - ii. Install new filter and dryer at surge vault
- 4. **Valve Station 2** is at the lowest point of the forcemain and immediately upstream of the discharge point at the plant headworks. This upgrade includes:
 - a. Installation of two new back pressure sustain control valves similar to manufactured by Hartman. The valves will be supported to the bottom of the vault. In addition the valve vault will have the following
 - i. Replace valve vault piping to accommodate new valves.
 - ii. Install new flange adaptors and anchor through the vault wall.
 - iii. Install new isolation valves on all piping associated with vault (inside and outside) to accommodate new 200 psi operating pressure. All connections to accommodate higher pressure rating.
 - iv. Install new thrust blocks and flowable fill pipe support.
 - v. Install new power supply to new electric actuators. Utilize existing buried hydraulic tubing pipe to run wire. Add new conduits if buried existing sizes or condition are insufficient to meet NEC code.

- b. Install new instrumentation and controls per section 13300 including:
 - i. Four new pressure transmitters on each side of each pressure control valve in vaults
 - ii. New local control panel indoor which includes new PLCs and controls as detailed in specs
 - iii. New PLC control program and OIT screen with new operating strategy and setpoints as described in process control description provided
 - iv. New communication system and internet SCADA
- c. Install new UPS and connect station all instrumentation, controls and communication to it.
- d. Install new air compressor with 60 gallon vertical tank similar.
 - i. Install new pipe to surge vault
 - ii. Install new filter and dryer at surge vault

5. Valve Station 1 Decommissioning.

Valve station 1 will be decommissioned. Refer to original design drawings by others for location. Do not affect or otherwise render inoperable the adjacent existing Biocide feed or flow measurement system. The work includes:

- a. Removal of:
 - i. All above ground enclosures and panels
 - ii. All valves and pipe spool pieces in valve vault.
 - iii. Surge relief valve and isolation valve.
 - iv. All equipment, instrumentation and control equipment in vault, above ground enclosure or panels
 - v. Removal of valve vault concrete cover
 - vi. Remove exposed pipe and conduit ends at above ground enclosures to a depth of 12 inches.
 - vii. Remove and properly dispose of all glycol and debris. All valves and equipment in this and other station to be removed may be selected by the Director to be kept by the Township as spares.
- b. Installation of:
 - i. New pipe piece and pipe sleeves to replace valve in vault and render pipe suitable for direct bury.
 - ii. Fill vault with flowable fill to top of pipe then fill with soil similar to surrounding area. Slope vault perimeter with soil to cover all concrete walls.
 - iii. Cap end of surge relief connection with ductile iron blind flange and 304 SS nuts and bolts in a manner suitable for direct bury.
 - iv. Fill surge relief vault with flowable fill to top of pipe then fill with soil similar to surrounding area. Slope vault perimeter with soil to cover all concrete walls.

6. Air and Vacuum Relief Valves

The following table is based on stations as described in original forcemain design drawings by others. Valves must be replaced to accommodate higher pressure rating. Also replace air relief valves with combination air/vacuum relief valves removed from other locations on force main.

Segment	ID In	Station	Air Vacuum Valve Comments
I	12	405+05	Remove and Cap End
H	12	387+90	Replace with New Rated for 200 psig
H to G1	16	374+84	Remove and Cap End
G1	20	351+30	Replace with New Rated for 200 psig
G1 to G	20	335+57	Remove and Cap End
G1 to G	20	319+00	Replace with New Rated for 200 psig
G	20	307+00	Replace with New Rated for 200 psig
F to E	20	278+68	Replace with New Rated for 200 psig
F to E	20	259+51	Keep
E	12	254+90	AR replace with existing AV removed from elsewhere
C	20	148+07	AR replace with existing AV removed from elsewhere



May 9, 2016

Mr. Jeffery Clapper
Public Works Director
Pocono Township
P.O. Box 197
Tannersville, PA 18372

Re: **T&M Proposal for Professional Services
Construction Administration and Engineering Support Services
Pocono Sewer System Modifications
Project No. POCO00090**

Dear Mr. Clapper:

Pursuant to the Township's directive, T&M Associates, (T&M) has prepared this Proposal to address the professional services required to assist Pocono Township with Construction Engineering Services associated with Change Order No. 2 proposed by PACT Two, LLC for modifications to the Pocono Sewer System. Should the Change Order be approved, this work will be completed under Contract #11. Specifically, T&M will provide the following services:

SCOPE OF SERVICES

Construction Engineering Support

- Review and approval of manufacturer's/shop drawing submittals
- Response to contractor's requests for information
- Provide on-site assistance with equipment testing and operations
- Provide on-site assistance with verification of programmable logic controllers
- Provide oversight to systems startup operations and debugging program
- Review manufacturer's operation manual to ensure information is provided

Construction Administration

- Assist with the processing of the change order
- Coordination with BCRA and Pocono Twp. sewer systems operator
- Coordination with the Township Solicitor
- Provide construction administration services, i.e. payment request processing and recommendations
- Provide periodic updates to the Commissioners regarding the progress of construction



- Provide substantial and final completion punch lists
- Review as-built drawings of completed improvements
- Process final payment request
- Close out services for the overall PACT Two, LLC Contract 11

Construction Inspection Services

- Provide Periodic inspections equating to 8hrs/week for 16 weeks

ADDITIONAL SERVICES

T&M has not included the following additional services within this scope of work. Should any of these services be required, we will provide an estimated cost for authorization by the Board of Commissioners.

- Full time monitoring of construction
- Assistance with funding agency criteria for financial reimbursement
- Supplemental designs if and when necessary
- Review and processing of additional change orders

FEE FOR SERVICES

T&M proposes to provide the services outlined under the SCOPE OF SERVICES for the following Lump Sum Fees (including expenses):

Construction Support Engineering.....	\$74,700.00
Construction Administration.....	\$ 7,800.00
Construction Inspection.....	\$13,700.00

TOTAL \$96,200.00

If you have any questions regarding this proposal, please contact me at 610-625-2999.

Very truly yours,
T and M Associates

Russell Benner V.P.
Municipal Services



AUTHORIZATION TO PROCEED

As T&M's authorization to proceed, please have the appropriate authorized Township official sign and date below.

Printed Name

Date

Signature

CC: Pam Finkbeiner, Interim Pocono Twp. Mgr.
Sami Sarrouh, P.E, T&M
Mark Ambrose, P.E.,T&M



| YOUR GOALS. OUR MISSION.

April 28, 2016

Mr. Gregg Schuster
Pocono Township Manager
112 Township Drive
Tannersville, PA 18372

SUBJECT: PAYMENT APPLICATION NO. 4
ROUTE 611 SANITARY SEWER REPLACEMENT PROJECT
OUR PROJECT NUMBER: POCO00040

Dear Mr. Schuster:

T&M received Application for Payment request #4 on April 26, 2016 for the above referenced sanitary sewer project submitted by Marona Construction Company; dated April 25, 2016. This request is for work completed from March 5, 2016 to April 22, 2016.

T&M has verified that the work completed in this Application Period for the installation of four (4) manholes and 50 lineal feet of 24-inch PVC sanitary sewer main pipe has been installed in accordance with the requirements of the Contract Documents (Plans and Specifications) for work visible during construction observations. This Application includes charges associated with previously approved Project Change Orders #2 and #4 in the amount of \$85,466.36. PCO #2 was associated with the relocation of the 12-inch water main and PCO #4 was associated with the work performed in the area of the existing sewer main crossing Bulger's Run.

In summary, the *Original Contract Sum* for this project is \$2,625,000. The *Contract Sum to Date*, including Change Orders, is \$2,710,466.36 and the total amount of the project *Completed and Stored to Date* (Less Retainage) is \$2,308,943.04. The total amount of *Previous Payments* is \$2,109,000. Based on this information T&M recommends a *Current Payment Due* to Marona Construction in the amount of **\$199,943.04** (\$2,308,943.04 - \$2,109,000) and a *Total Project Retainage* of \$121,523.32 at this time. This leaves a *Balance to Finish (including Retainage)* of \$401,523.32 (\$280,000 + \$121,523.32).

If you have any questions about this correspondence or the accompanying documents, please contact me at (610) 301-6736.

Very truly yours,

Mark Ambrose, P.E.
Principal Engineer
T&M Associates

Cc: Stephen Saloma, P.E., Marona Construction

PARTIAL/FINAL PAYMENT

TO OWNER:
 POCONO TOWNSHIP
 112 TOWNSHIP DRIVE
 TANNERSVILLE, PA 18972
 ATTN: GREG SCHUSTER

FROM CONTRACTOR:
 Maroon Construction Company
 PO Box 283
 3191 Trevigtown Road
 Colmar, PA 18915
 Project Manager: Steve Saloma, P. E.

PROJECT:
 ROUTE 611 SANITARY SEWER REPLACEMENT PROJECT
CONTRACT NO.: ONE GENERAL CONSTRUCTION

ENGINEER:
 TRM ASSOCIATES, INC.
 74 WEST BROAD STREET
 BETHLEHEM, PA 18018
 ATTN: MARK AMBROSE, P. E.

APPLICATION/INVOICE NO.: 004
PERIOD: FROM 3/15/2016 TO 4/22/2016
APPLICATION DATE: 4/25/2016
MARONA JOB# 166

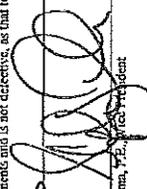
CONTRACTOR'S APPLICATION FOR PAYMENT

1. ORIGINAL CONTRACT SUM 2,625,000.00
2. NET CHANGE BY CHANGE ORDERS \$ 35,466.36
3. CONTRACT SUM TO DATE \$ 2,710,466.36
4. TOTAL COMPLETED & STORED TO DATE (Column F) 2,430,466.36
5. RETAINAGE:
 - a. 5 % of Completed Work 121,523.32 (Column F)
 - b. 0 % of Stored Material 0
 - c. Total \$ 121,523.32
6. TOTAL EARNED LESS RETAINAGE \$ 2,308,943.04
 (Line 4 Less 5e Total)
7. LESS PREVIOUS PAYMENT (Paid to-date) \$ 2,109,000.00
8. CURRENT PAYMENT DUE (Line 6 - Line 7) \$ 199,943.04
9. BALANCE TO FINISH (Line 3 - Line 4) 280,000.00

CHANGE ORDER SUMMARY	NUMBER	AMOUNT
Total changes approved in previous months by Owner	142	\$ 50,000.00
	143	\$ -
	144	\$ -
Total approved this Month		\$ 35,466.36
TOTALS (Line 2)		\$ 35,466.36

CONTRACTORS CERTIFICATION

The undersigned Contractor certifies that (1) all previous progress payments received from Owner(s) on account of work done under the Contract have been applied to Discharge in full all obligations of Contractor incurred in connection with Work covered by prior Applications for Payment number 1 through 3 inclusive; (2) Bid to all materials and equipment incorporated in said Work or otherwise listed under covered by this Application for Payment will pass to the Owner at the time of payment, free and clear of all liens, claims, security interests and encumbrances (except such as covered by Bid acceptable to Owner indemnifying Owner again such lien, claim, security interest, or encumbrances); and (3) all Work covered by the Application for Payment is in accordance with the Contract Documents and is not defective, as that term is defined in the Contract Documents.

Date: 4/25/16 2016
 By:  Stephen J. Saloma, P. E., Project President

Approved Payment Amount \$ 199,943.04
 Dated: April 28 2016
 For: TRM Associates
 By:  Mark Ambrose, P. E.

CONTINUATION SHEET

Owner: POCOMO TOWNSHIP
 112 TOWNSHIP DRIVE
 TANNERSVILLE, PA 18372
 ATTN: GREG SCHUSTER

Project: ROUTE 611 SANITARY SEWER REPLACEMENT PROJECT
 MCC JOB# 166

Invoice No: 004
 Invoice Date: 4/25/2016
 Period To: 4/22/2016

Contractor: Maropa Construction Co.
 PO Box 283
 3161 Trebletown Road
 Conar, PA 18915

A Item No.	B Description	C Scheduled Value			D From Previous Application (F)		E Work Completed This Period		F Work Completed To Date (D + E)		G Balance To Finish (C - F)		H Remaining This Period			
		Unit	Quant.	Unit Price	Total Price	Quant.	Amount	Quant.	Amount	Quant.	Amount	Quant.		Amount	%	
1	Part A - Sewer Bends and Insurance	LS	1	\$40,000.00	\$40,000.00	1	\$40,000.00		\$0.00	1	\$40,000.00	0	\$0.00	100%	\$0.00	
2	Mobilization & Demobilization	LS	1	\$300,000.00	\$300,000.00	0.8	\$240,000.00		\$0.00	0.8	\$240,000.00	0.2	\$60,000.00	80%	\$0.00	
3	Traffic Control	LS	1	\$50,000.00	\$50,000.00	1	\$50,000.00		\$0.00	1	\$50,000.00	0	\$0.00	100%	\$0.00	
4	Demolition & Removal of Existing Pipe	LF	270	\$100.00	\$27,000.00	0	\$0.00		\$0.00	0	\$0.00	270	\$27,000.00	0%	\$0.00	
5	F&I 28" HDPE Sewer Pipe via Microtunneling	LF	800	\$2,180.00	\$1,880,000.00	800	\$1,880,000.00		\$0.00	800	\$1,880,000.00	0	\$0.00	100%	\$0.00	
6	F&I Sewer Manholes, Complete, All Depths	EA	5	\$26,000.00	\$125,000.00	0	\$0.00		\$100,000.00	4	\$100,000.00	1	\$25,000.00	80%	(\$5,000.00)	
7	F&I 28" HDPE Sewer Via Open Cut	LF	320	\$500.00	\$160,000.00	0	\$0.00		\$25,000.00	50	\$25,000.00	270	\$135,000.00	15%	(\$1,250.00)	
8	Township Roadway Paving, Including Temporary and Permanent Paving	L.S.	1	\$20,000.00	\$20,000.00	0	\$0.00		\$0.00	0	\$0.00	1	\$20,000.00	0%	\$0.00	
9	F&I 4" Lateral to Sewer Main	LS	1	\$13,000.00	\$13,000.00	0	\$0.00		\$0.00	0	\$0.00	1	\$13,000.00	0%	\$0.00	
rev.																
					\$2,625,000.00	\$2,220,000.00	\$125,000.00	\$2,345,000.00	\$280,000.00	-\$6,250.00						

CONTINUATION SHEET

Owner: **POCONO TOWNSHIP**
 112 TOWNSHIP DRIVE
 TANNERSVILLE, PA 18372
 ATTN: GREG SCHUSTER

Contractor: **Maroon Construction Co.**
 PO Box 283
 3191 Treiglestown Road
 Conowingo, PA 18615

Project: **ROUTE 611 SANITARY SEWER REPLACEMENT PROJECT**

MCC JOB# **156**

Invoice No: **004**
 Invoice Date: **4/25/2016**
 Period To: **4/22/2016**

A Item No.	B Description	C Scheduled Value			D Work Completed		E This Period		F Work Completed To Date and Stored to Date		G Balance To Finish (C - F)		H Retainage This Period	
		Unit	Quant.	Unit Price	Total Price	From Previous Application (F)	Amount	Quant.	Amount	Quant.	Amount	Quant.	Amount	%
CO-1	CHANGE ORDERS				\$0.00									
CO-2	RELOCATE BCRA 12" WATER MAIN	LS	1	\$50,000.00	\$50,000.00									
CO-3	CONTRACT TIME EXTENSION	LS	1	\$0.00	\$0.00									
CO-4	RECONNECT EX 24" HOPE TO MH #2	LS	1	\$35,466.36	\$35,466.36									
	Original Purchase Order													
	Subtotal Part A				\$2,625,000.00			\$125,000.00	\$2,345,000.00			\$280,000.00		
	Change Order 1				\$0.00			\$0.00	\$0.00			\$0.00		
	Change Order 2				\$50,000.00			\$50,000.00	\$50,000.00			\$0.00		
	Change Order 3				\$0.00			\$0.00	\$0.00			\$0.00		
	Change Order 4				\$35,466.36			\$35,466.36	\$35,466.36			\$0.00		
rev.	GRAND TOTALS				\$2,710,466.36			\$2,220,000.00	\$2,430,466.36			\$280,000.00		90%

Jeffry Clapper

From: Sami Sarrouh <SSarrouh@tandmassociates.com>
Sent: Tuesday, April 19, 2016 2:44 PM
To: Jeffry Clapper
Cc: Mark Ambrose(T&M); Russell G. Benner Jr.
Subject: Pump Station 2 Hydraulic Evaluation per our telephone conversation today.

Jeff

Per our telephone conversation I am sending you this as a cost to only do the hydraulic analysis and pump sizing for pump station two. This will result in providing you a pump versus system curve and an opinion to either approve or modify the pump selection and size, already made by Pocono, based on how it fits within in the system.

This effort does not include any investigation beyond pump size such as it:

- Does not include any investigation of the pump station Instrumentation and controls. Per prior phone calls I got by your electrician and you there were some issues in the speed settings when he looked at it. There may be other problems since they were done by the same people who did the other facilities.
- Does not include any electric power evaluation. Judging from the over 30 violations in the other facilities and since were designed by and done by the same people I fear that the same mistakes would be repeated here.
- Does not include any modification to the pump control logic or interlocks. Hence the unsafe and unstable level and flow operation seen elsewhere may still be present.
- Does not include any specifications, drawings or other contract documents
- Does not include any technical reports or memoranda, trips, meetings, presentations or extended conference calls
- DOES NOT INCLUDE ANY STATED OR IMPLIED RESPONSIBILITY AS IT RELATES TO THE OPERATION OF THE FACILITY OR PERFORMANCE OF THE PUMPS AS A RESULT OF THIS EFFORT. The facility does not meet Hydraulic Institute standards not to mention the remaining inadequate controls. Since proper operation depends on a lot of factors more than pump size this effort is insufficient for proper operation and does not meet standard of care for a properly functioning pump station.

I apologize for the emphasis but I didn't want to held responsible for other peoples mistakes because a decision was made to conduct a partial analysis. The pump sizing effort as described above will take about a week of work. As such the fee will be 40 hrs@ \$285/hr= \$ 11,400 + minor admin costs to a total of no more than \$12,000.

Please let me know if you have any questions.



SAMI SARROUH, PE
SENIOR TECHNICAL ENVIRONMENTAL ENGINEER
600 Superior Avenue East, Suite 1300, Cleveland, OH 44114

POCONO TOWNSHIP AND HAMILTON TOWNSHIP REGIONAL SEWER SYSTEM
SEWER SERVICE INQUIRY

RECEIVED
MAY 8 2013

The purpose of this form is to aid Pocono Township in addressing the questions and concerns of its sewer users. The form should be filled out with as much information as possible by the PROPERTY OWNER. Attach additional supporting information (such as water usage data or an existing NPDES Permit) to assist the Township to address your concerns. You may attach additional sheets if needed. Please print or type forms.

Once submitted, Pocono Township will review the information provided and place the inquiry on the agenda at the Township's Commissioners meeting, where a decision may be rendered. All Township Meetings are open to the public.

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PROPERTY TAX MAP ID: 12637204545295 DATE: 5/6/2016

PROPERTY INFORMATION: POCONO TWP. HAMILTON TWP.
 PROPERTY OWNER NAME: Teresa Kramer
 BUSINESS NAME: _____
 SEWER SERVICE ADDRESS: 2989 + 2997
Rt 611
Tannersville Pa
 *Provide a specific property name, if applicable (Example XYZ Plaza)

PROPERTY OWNER'S CONTACT INFORMATION
 MAILING ADDRESS: _____

 PHONE NUMBER: _____

PROPERTY OWNER'S REPRESENTATIVE'S CONTACT INFORMATION:
 PERSON CALLING: Joe Zbylcki MAILING ADDRESS: 256 Stadden Rd
 RELATIONSHIP TO OWNER: Manager Tannersville Pa
 PHONE NUMBER: 570-954-2771

INQUIRY: Provide as much detail as to the nature of the inquiry as possible. (Attach supporting information)
We believe that water usage is much less than amount of Edu's assigned to property

PROPERTY USE: Provide information regarding all the existing uses of the property in question. (for example, if the property in question is several business's, please provide the name and description of each business. If the existing use is a multifamily residence, provide number of apartments.)
1 Office 4 Apartments
4 Retail
1 Restaurant

WATER SUPPLIER: Is the property served by public water system: YES NO (Check one) IF PUBLIC: BCRA PIJWA (Check one)

TOWNSHIP USE ONLY	
ESTIMATED ASSIGNED FLOW:	TABLE NO.
ESTIMATED ASSIGNED EDU'S:	ESTIMATED USER RATE:
HOW WAS FLOW DETERMINED?	ESTIMATED TAPPING FEE:
COMMENTS:	

Jeffry Clapper

From: Jeffry Clapper
Sent: Monday, May 9, 2016 10:38 AM
To: Pam Finkbeiner
Subject: EDU Appeal for DepuePlaza
Attachments: 20160509090159953.pdf

Pam-

Attached is the EDU appeal and supporting water usage record for the referenced property. I support reducing the assigned EDU's from 7 EDU'S to 4 EDU"s based upon the water records from BCRA.

Jeff

**POCONO TOWNSHIP AND HAMILTON TOWNSHIP REGIONAL SEWER SYSTEM
SEWER SERVICE INQUIRY**

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PROPERTY TAX MAP ID: _____

DATE: _____

PROPERTY INFORMATION: POCONO TWP. _____ HAMILTON TWP. _____

PROPERTY OWNER NAME: JOHN PROHART

BUSINESS NAME: PROHART LLC. HONEYBAR

SEWER SERVICE ADDRESS: 103 KENNEDY WAY

*Provide a specific property name, if applicable (Example XYZ Plaza)

PROPERTY OWNER'S CONTACT INFORMATION

MAILING ADDRESS: PO BOX 834
TANNERSVILLE PA
18372

PHONE NUMBER: 570-242-7414

PROPERTY OWNER'S REPRESENTATIVE'S CONTACT INFORMATION:

PERSON CALLING: JOHN PROHART

RELATIONSHIP TO OWNER: SON

PHONE NUMBER: 570 242 7414

MAILING ADDRESS: PO BOX 834
TANNERSVILLE PA
18372

INQUIRY: Provide as much detail as to the nature of the inquiry as possible. (Attach supporting information)

① MISCALCULATION OF TOWNSHIP ASSESSMENT OF EDU USAGE, BASED ON WATER METER READING THAT FEELS 4 BUILDINGS, ONLY, ONE OF WHICH IS REQUIRED TO CONNECT TO SEWER.

② REQUEST MORE TIME BE GIVEN TO CONNECT TO SEWER. DUE TO FINANCIAL HARDSHIP.

PROPERTY USE: Provide information regarding all the existing uses of the property in question. (for example, if the property in question as several business's, please provide the name and description of each business. If the existing use is a multifamily residence, provide number of apartments.)

PROPERTY CONSISTS OF: 8 APARTMENTS, FOWIE BAR, 3 APARTMENT COTTAGE, WORKSHOP BARN, AND A MAIN HOUSE.

WATER SUPPLIER: Is the property served by public water system: YES NO _____ (Check one) IF PUBLIC: BCRA _____, PJIWA _____ (Check one)

TOWNSHIP USE ONLY	
ESTIMATED ASSIGNED FLOW:	TABLE NO.
ESTIMATED ASSIGNED EDU'S:	ESTIMATED USER RATE:
HOW WAS FLOW DETERMINED?	ESTIMATED TAPPING FEE:
COMMENTS:	

Jeffrey Clapper

To: Pam Finkbeiner
Subject: EDU Appeal Glenwood Hall Apartments, 103 Kenny Way
Attachments: 20160509131806362.pdf

Pam-

Please find attached the EDU appeal for the referenced property. Included in the attached information are the water usage records for the property. The Highest Quarter results in 5.2 EDUs. The Annual Quarterly Average results in 4.5 EDUs. I recommend reducing the assigned EDUs for the property from 6 EDUs down to 5 EDUs.

This person is also asking for additional time to connect due to financial hardship.

Jeff

HUONGVO3@VERIZON.NET

POCONO TOWNSHIP AND HAMILTON TOWNSHIP REGIONAL SEWER SYSTEM
SEWER SERVICE INQUIRY

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PROPERTY TAX MAP ID:

DATE:

PROPERTY INFORMATION: POCONO TWP. X HAMILTON TWP. _____
PROPERTY OWNER NAME: HUONG VO
BUSINESS NAME: FANCY NAILS
SEWER SERVICE ADDRESS: 2799 ROUTE 611
TANNERSVILLE, PA. 18372
*Provide a specific property name, if applicable (Example XYZ Plaza)

PROPERTY OWNER'S CONTACT INFORMATION
MAILING ADDRESS: _____
SAME
PHONE NUMBER: _____

PROPERTY OWNER'S REPRESENTATIVE'S CONTACT INFORMATION:
PERSON CALLING: _____ MAILING ADDRESS: _____
RELATIONSHIP TO OWNER: SAME
PHONE NUMBER: _____

INQUIRY: Provide as much detail as to the nature of the inquiry as possible. (Attach supporting information)
MY EDU ASSIGNMENT IS 1 EDU. WHEN LOOKING AT CURRENT water usage, it shows my highest quarter is slightly over than which requires an additional EDU. However all other quarters are way below 1 EDU. I request that I only be charged for 1 EDU

PROPERTY USE: Provide information regarding all the existing uses of the property in question. (for example, if the property in question as several business's, please provide the name and description of each business. If the existing use is a multifamily residence, provide number of apartments.)

WATER SUPPLIER: Is the property served by public water system: YES NO _____ (Check one) IF PUBLIC: BCRA _____, PJWA _____ (Check one)

TOWNSHIP USE ONLY	
ESTIMATED ASSIGNED FLOW:	TABLE NO.
ESTIMATED ASSIGNED EDU'S:	ESTIMATED USER RATE:
HOW WAS FLOW DETERMINED?	ESTIMATED TAPPING FEE:
COMMENTS:	

Jeffry Clapper

From: Jeffry Clapper
Sent: Tuesday, May 3, 2016 9:57 AM
To: Pam Finkbeiner
Cc: 'huongvo3@verizon.net'
Subject: EDU Appeal for 2799 Rt 611, Fancy Nails
Attachments: 20160503094840566.pdf

Pam-

Please place this topic on the next sewer meeting agenda. Attached is her EDU reduction request and the property water usage records. In conformance with the current connection regulations she will have to purchase an additional EDU due to her usage in a quarter being at 1.1 EDUs. However, when you look at the entire year she averages less than 1 EDU. Her current assignment is 1 EDU. When she came in to discuss her sewer connection the usage figures presented were realized.

Jeff

Jeffry D. Clapper
Pocono Township
Public Works Director
484-553-3336 cell
570-629-1922 x 217 office



YOUR GOALS. OUR MISSION.

RECEIVED
APR 28 2016

POCONO TOWNSHIP

April 21, 2016

Gregg Schuster, Manager
Pocono Township
Pocono Township Municipal building
P.O. Box 197
Tannersville, Pa. 18372

Re: DEP Sewage Exemption Request for Schller Motorcycle Dealership
T&M file #POCO R0530

Dear Mr. Schuster:

The engineer on behalf of the Developer has submitted a sewage exemption request for their project located at State Road 715/Hill Motor lodge Road. They are requesting 5 EDUs for a total of 1200 GPD.

T&M has reviewed water consumption data proposed for the facility and find it reasonable. The project is located in the Township's Act 537 service area and a planning module is not necessary. The Township sewer system is capable of conveying the sewage to BCRA's WWTP. The Township has sewage allocation available to serve this project.

By executing (signing) the exemption this form will be forward to DEP for their review and concurrence.

This is a planning document affiliated with the Land Development process. It is not a guarantee of sewage capacity. The Developer/Owner will need to either reserve or purchase outright the necessary sewage conveyance and treatment capacity before they can connect to the sewage system.

If the Commissioners have any questions about this request, please call me.

Very truly yours,
T&M Associates

Russ Benner, P.E.
Township Engineer

Cc: Board of Commissioners
Leo DeVito, Township Solicitor

1. Development Information

Name of Development Pocono Mountain Harley Davidson

Developer Name Jimmy Schiler

Address P.O. Box 466, Tannersville, PA 18372

Telephone # _____

2. Location of Development

a. County Monroe

b. Municipality Pocono Township

c. Address or Coordinates 108 Hill Motor Lodge Road, Tannersville, PA 18372

d. USGS Quad Name Mount Pocono

Inches up 7.3 over 8.9 from bottom right corner of map.

3. Type of Development Proposed

(check appropriate box)

Residential Multi-Residential

Describe _____

Commercial Institutional

Describe Dealership for sales and service of new and used motorcycles.

Brownfield Site Redevelopment

Other (specify) _____

4. Size

a. # of lots 1 # of EDUs 4.45 round to 5

247 gal/day = 1 EDU

b. # of lots since 6/15/72 1

c. Plot Plan Attached

d. Development Acreage 2.6

e. Remaining Acreage 0

5. Sewage Flows 1500 Reg. gpd

6. Proposed Sewage Disposal Method

(check appropriate boxes)

a. Sewerage System

Existing (connection only) New (extension)

Public Private

Pump Station(s)/Force Main Gravity

Name of existing system being extended

Pocono/Hamilton Township Joint Sewer System

Interceptor Name 611 Interceptor

Treatment Facility Name Brodhead Creek Regional Authority - Sewage Treatment Plant

b. Construction of Treatment Facility

With Stream Discharge

With Land Application (not including IRSIS)

Other

Repair?

Name of waterbody where point of discharge is proposed (if stream discharge)

c. Onlot Sewage Disposal Systems

(check appropriate box)

Individual onlot system(s) (including IRSIS)

Community onlot system

Large-Volume onlot system

d. Retaining tanks

Number of Holding Tanks _____

Number of Privies _____

7. Request Sewage Facilities Planning Module forms in electronic format

8. Request for Planning Exemption

a. Onlot Disposal Systems

(1) I certify that the Official Plan shows this area as an onlot service area.

_____/_____
(Signature of Municipal Official) Date

_____/_____
Name (Print) Title

Municipality (must be same as in 2.b.)

Telephone # _____

(2) I certify that each lot in this subdivision has been tested and is suitable for both a primary and replacement sewage disposal system.

_____/_____
(Signature of SEO) Date

_____/_____
Name (Print) Certification #

Telephone # _____

(3) I certify that each lot in this subdivision is at least 1 acre in size

_____/_____
(Signature of Project Applicant/Agent) Date

b. Public Sewerage Service (i.e., ownership by municipality or authority)

Based upon written documentation, I certify that the facilities proposed for use have capacity and that no overload exists or is projected within 5 years. (Attach documents.)

_____/_____
(Signature of Municipal Official) Date

_____/_____
Name (Print) Title

Municipality (must be same as in 2.b.)

Telephone # _____

**POCONO TOWNSHIP AND HAMILTON TOWNSHIP REGIONAL SEWER SYSTEM
SEWER SERVICE INQUIRY**

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PROPERTY TAX MAP ID: 12637204546465 ^{PIN} DATE: 4/12/16

PROPERTY INFORMATION: POCONO TWP. HAMILTON TWP.

PROPERTY OWNER NAME: Tannersville Inn Inc.

BUSINESS NAME: Tannersville Inn

SEWER SERVICE ADDRESS: 197 Leann Rd
Tannersville PA
18372

*Provide a specific property name, if applicable (Example XYZ Plaza)

PROPERTY OWNER'S CONTACT INFORMATION

MAILING ADDRESS: Stephen Jakubowitz
2977 Route 611
Tannersville, PA
18372

PHONE NUMBER: 570 856-9748 cell

PROPERTY OWNER'S REPRESENTATIVE'S CONTACT INFORMATION:

PERSON CALLING: _____ MAILING ADDRESS: _____

RELATIONSHIP TO OWNER: _____

PHONE NUMBER: _____

INQUIRY: Provide as much detail as to the nature of the inquiry as possible. (Attach supporting information)

Connection Notice lists property as 10 EDU's, Should be 1 EDU. Possible data entry typo.

PROPERTY USE: Provide information regarding all the existing uses of the property in question. (for example, if the property in question as several business's, please provide the name and description of each business. If the existing use is a multifamily residence, provide number of apartments.)

Property is single family 3 bedroom 1 bath residence @ 1400 sqft. located on corner of Leann Rd & Cherry Ln.

WATER SUPPLIER: Is the property served by public water system: YES _____ NO (Check one) IF PUBLIC: BCRA _____, PJJWA _____ (Check one)

TOWNSHIP USE ONLY	
ESTIMATED ASSIGNED FLOW:	TABLE NO.
ESTIMATED ASSIGNED EDU'S:	ESTIMATED USER RATE:
HOW WAS FLOW DETERMINED?	ESTIMATED TAPPING FEE:
COMMENTS:	

Jeffry Clapper

From: Jeffry Clapper
Sent: Tuesday, May 10, 2016 1:21 PM
To: Pam Finkbeiner
Subject: EDU Reduction 197 Learn Road

Pam-

This property is at the SW corner of Learn Road and Cherry Lane road directly behind Depue Plaza. It has been assigned 10 EDUS however there is only a single family house on the site. I believe this to be an error and the assignment should be reduced to 1 EDU based upon current usage.

Jeff

Jeffry D. Clapper
Pocono Township
Public Works Director
484-553-3336 cell
570-629-1922 x 217 office



108 Learn Road | Tannersville, PA. 18372 | (570) 629-4537 | FAX (570) 629-8655 | PA 024830 | www.ffpave.com

AGREEMENT

Proposal submitted to: Pocono Township
Address: 112 Township Dr. Tannersville, PA 18372
Re: Learn Road Sewer Improvements – Chester’s Parking Lot
Attn: Jeffrey Clapper
Phone - 570-629-1922 ext. 217
Job Location: Tannersville, PA

Date: 5/5/16

Estimator: Rob Felins - 570-656-2039

*BASED ON SITE MEETING WITH TOWNSHIP ENGINEER AND PUBLIC WORKS DIRECTOR ON MONDAY 5.2.16

We hereby submit specifications:

POCONO TWP. IMPROVEMENTS				
8300	SF	1 ½" RESURFACE PARKING LOT	\$1.65	\$13,695.00
1	LS	TACK COAT	\$705	\$705.00
67	TN	INSTALL AASHTO NO.1 (#4)	\$30	\$2,010.00
18	CY	TOPSOIL/STABILIZE RT.611 SLOPE	\$25	\$450.00
90	CY	EXCAVATE/REGRADE CHESTER’S YARD	\$39	\$3,510.00
TOTAL				\$20,370.00

NOTES:

- Above pricing does not include traffic control it is assumed the existing traffic control to remain until completion of asphalt restoration.
- Work assumed to be completed at the same time as R.O.W improvements for Marona Construction sewer rehabilitation.
- Prices and areas of improvements listed above are based on site meeting with township engineer and public works director from 5/2/16.
- Price does not included the costs associated with any inspections, permits fees, etc.
- A leveling course over the existing concrete and asphalt drive at Chester’s is incidental to the 1 ½" resurface.
- Costs associated with line striping the parking lot and paving the additional stone area (1,350 SF) along the existing asphalt to be responsibility of Chester's Barber shop.

Made this 5th day of MAY, 2016 BETWEEN Pocono Township hereinafter referred to as Owner and F & F Paving & Excavating, Inc., hereinafter referred to as paving contractor. For services in connection with the previously described project: the Owner and Contractor agree as follows:

- The lump sum price of the project is \$ 20,370.00, payable as follows: **BALANCE DUE DAY OF COMPLETION**
- All change requests from the original project which owner has made shall be acknowledged by contractor with a bill. Said bill shall contain a description of the change requested and the additional price of said change.
- Contractor will use diligence to complete the project in a timely fashion; however, Contractor will not be responsible for delays caused by unforeseeable site conditions, weather conditions, or delays caused by other contractors.
- Any additional materials or labor needed, due to unforeseen conditions, shall be billed accordingly, including but not limited to: i.e. additional machine work, labor, trucking and materials.



April 29, 2016

Mr. Jeff Clapper
Public Works Director
Pocono Township
112 Township Drive
Tannersville, PA 18372
Phone: (570) 6291922
Email: jclapper@poconopa.gov

**RE: Sanofi Pump Station Bioxide Demo
Hydrogen Sulfide Odor & Corrosion Control
Pocono Township, PA
CRM Quote #: 2016-139027**

Dear Jeff:

Evoqua Water Technologies LLC is pleased to submit the following proposal to demonstrate the effectiveness of Bioxide for controlling odors in your collection system. By applying Bioxide at the Sanofi Pump Station, odor and corrosion control can be achieved at the forcemain discharge as well as downstream through the Township trunk sewer line. Bioxide is a proven, non-hazardous solution that is capable of reducing hydrogen sulfide to extremely low levels. Bioxide also does not require any special handling or freeze protection, making it ideal for use in our part of the country.

DEMONSTRATION OBJECTIVES

- To reduce hydrogen sulfide levels at the Sanofi Pump Station Outfall to less than 0.2 mg/l dissolved and less than 5 ppm average atmospheric H₂S levels. .

Due to the chronic nature of hydrogen sulfide, a data logger/monitor will be utilized at 5-minute intervals during the demonstration period. This monitor will measure and record atmospheric levels of hydrogen sulfide and will be utilized in the conveyance system as required to accomplish the defined goals of this demonstration.

- To establish Bioxide solution dosage rates and associated costs to accomplish these levels of treatment.

DEMONSTRATION DESCRIPTION

Evoqua Water Technologies will provide a temporary demonstration system complete with the following:

- 950 Gallon Double Walled Storage Tank with Mechanical Level Indication
- Stainless steel 2 pump 2 timer chemical feed system with bellows metering pumps
- Miscellaneous piping, fittings, etc.

Evoqua personnel will delivery and install the temporary system on site at the pump station location on the Sanofi Pasteur property. Initial modeling estimates that feed rates will run between 20 and 25 gallons per day to achieve treatment goals. Bioxide will be delivered per Pocono Township's existing chemical pricing. Evoqua will plan on sending shorter, non-articulating delivery trucks to the Sanofi location due to the limited space onsite. There will be a minimum delivery quantity of 500 gallons for this demonstration.

Evoqua personnel will monitor the reduction in hydrogen sulfide during the demonstration period and adjust feed rates accordingly to meet the treatment objectives described above. For the purpose of continuity to previous data collection, the vapor phase H₂S data will be collected at the Discovery Drive Manhole. A survey report will be provided upon completion of the Bioxide demo. It is understood that review of the treatment results in a fairly quick timeframe is desired, so Evoqua will provide at least one full data run with vapor phase H₂S as well as liquid sampling within the first 15 days.

DEMONSTRATION COST

Evoqua will provide analytical supplies, piping, and the BIOXIDE® treatment solution required for the demonstration.

One time Mobilization Fee: \$5,100.00

Bioxide (contract price): \$2.145 per gallon FOB

The Bioxide demo can be continued beyond the initial period with an equipment rental fee of \$600 per month plus the cost of the Bioxide delivered. The equipment supplied shall remain the property of Evoqua Water Technologies.

Terms of payment are NET 30 days from date of invoice. These prices do not include any applicable taxes.

The purchase of BIOXIDE® from Evoqua constitutes an implied license to practice the process of "Removal of Dissolved Hydrogen Sulfide and Reduction of Sewage BOD in Sewers and Other Waste Systems," as described in United States Patents Re #36,651 and Re #37,181.

The attached Evoqua Water Technologies Terms and Conditions are considered part of this proposal and shall prevail.

Evoqua can begin this Bioxide odor control demo within 4-6 weeks of authorization to proceed.

Should a purchase order result from this proposal please return the entire proposal, signed where indicated below, and address the order to:

Evoqua Water Technologies LLC
2650 Tallevast Road
Sarasota, FL 34243
E-Mail: Sheri.whalen@evoqua.com

Evoqua is committed to providing the highest standard of product quality and technical services in the industry. If the above proposal does not meet your application requirements I would appreciate the opportunity to discuss alternatives with you. If you have any questions, please do not hesitate to contact me at (302) 275-4068.

Sincerely,

Evoqua Water Technologies LLC

Seth Hepner

Seth Hepner
Technical Sales Representative

**RE: Sanofi Pump Station Bioxide Demo
Hydrogen Sulfide Odor Control
Pocono Township, PA
CRM Quote #: 2016-139027**

Evoqua Water Technologies will process your order when we receive acceptance of this proposal by signing below and returning.

Accepted by:

Company Name: _____

This ____ day of _____ Month _____ Year

By: _____

Title: _____

P.O. Number _____