Athens Township Authority  
June 11, 2012

Meeting was called to order by Vice Chairman, Terry Cockcroft at 5:38 p.m. Members also present were Bob Blauvelt and Jack Walter. Also attending was Authority Solicitor, Mark Smith, resident Doug Williams, T & M Associate, P.E. Mark Ambrose and Project Manager, Brian Huckabee.

Motion by Walter, seconded by Blauvelt to approve the minutes of the May 21, 2012 meeting as written.

FINANCIAL

Motion by Walter, seconded by Blauvelt to approve the payment of the following bills that total $14,835.25 as presented. Motion was unanimous.

Clarity Connect $49.95
EFP Rotenberg, LLP $3,000.00
Gannon Associates $1,551.00
IRS (payroll taxes) $565.76
Line Systems, Inc. $316.02
Niemiec, Smith & Pellinger $879.00
Pa. Dept. of Revenue (payroll taxes) $83.50
Pa. One Call $15.20
Penelec $1,057.89
Quill $214.96
Susquehanna Software $1,200.00
The Morning Times $20.56
Time Warner Cable $42.11
Triple V Electric $75.00
Valley Energy $190.05
Valley Joint Sewer Authority $5,574.25

TOTAL $14,835.25

The bill was received from Flow Assessment for the 6 flow meters for 6.5 weeks that was placed in the manholes for the flow determination was received. We had to have the flow meters installed for additional 2 weeks because when they were first installed, the area did not have any rain and we needed to see the flows with rain. Bill from 4/12/12 to 5/29/12 is for $20,930.00. Since this time, 3 of the meters have been placed in 3 manholes on the Wilawana line to Queen Esther Estates and have shown that there is I & I, so T & M Associates suggest we have them pull when they come out to take the readings. Motion by Blauvelt, seconded by Walter to approve the payment to Flow Assessment for $20,930.00. Motion was unanimous.

A trail OmniSite web based cellular monitoring device was installed at pump station #1. The device monitors 7 digital alarm contacts. ATA connects to the site via internet and can see the flows, alarms, pump hours, and if there is a problem with a pump – the alarm stays on until the pump has been fixed and taken care of it. The alarms come in over telephone to phones or beeper and also the office receives all alarm notifications through email. Reports were reviewed that shows the flows for the day and also hourly, which can determine during rain the I & I and also the pump hours so you can see if one pump is running
more or less. ATA discussed having these placed on our major stations, #1, #6, #2 and #4. The installer also show secretary Huckabee a small alarm that will read the pump hours and flows and call out for alarms for about $800 and a $6 a month fee. The quote is for $9,719.00 which also includes a back up float alarm if all the alarms should fail. Motion by Walter, seconded by Blauvelt to purchase the additional 3 meters as proposed. Motion was unanimous. Motion by Walter, seconded by Blauvelt to try 1 of the smaller alarm system on Station #5, Gateway Industrial Park. Motion was unanimous. If it works well there, then we will purchase for the remaining stations. Motion was unanimous.

ENGINEER REPORT

The following report was given by T & M Associates and discussed.

System Observations From Study with Flow Assessment:

T&M will provide data received from Flow Assessment related to the capacity of the collection system later in this report however during the installation and monitoring of the flow meters we have noticed a few problems needing attention/correction to the physical system (non-capacity issues).

1. While installing a flow meter to document flows entering the ATA system from the Nomac Housing facility on Lamoka Road we detected a large amount of sand/silt in MH CHK#3 located near the entrance to the housing facility. Flow Assessment had to install the flow meter in MH CHK#2 along Lamoka Road where a fair amount of sand/silt was also observed. T&M will check out additional manholes downstream to determine the limits of the impacts.

2. ATA MH# 9 on Bressler Street has experienced two (2) incidents where the manhole cover will not stay in the frame as it should. On the first situation Bob replaced the manhole cover with a similar sized cover from a non-traffic location and this seemed to resolve the problem. On June 6, 2012, the Township either received another complaint, or observed a problem with the same manhole cover. Coincidently, we were on our way to that specific manhole with the guys from Flow Assessment for an unrelated observation. We removed the cover and observed the frame that the cover normally sits in. The frame was not in good condition from all of the wear and tear caused by the tires hitting the cover which became loose over time. The cover did not properly fit into the frame anymore. It appeared that the frame was too large for the cover. You could actually see right down into the manhole while the cover was in place. T&M believed that the Authority faced a serious liability situation unless this condition was immediately addressed and called Terry Cockcroft to explain the situation and to see if Vacri Construction might have a steel plate the Authority could borrow or rent to cover the manhole until a repair could occur. Vacri is doing the waterline project on Pennsylvania Ave. Vacri was able to borrow a steel plate from Aqua PA to place on the manhole. As requested, Vern at Vacri immediately prepared a cost estimate for the Authority in the amount of $1,950 to replace the frame and cover of MH #9 on Bressler St., including roadway restoration. The cover Vacri will be installing will be a bolt down cover to avoid a similar situation from re-occurring.
3. ATA appears to have a potential source of I&I in the pipe(s) immediately adjacent to the wetwell at PS#6. T&M strongly suggests that ATA have this short section (ATA MH AA-1 to wetwell and ATA MH A-11 to wetwell or connection point with other inflow pipe) camera so a determination can be made to explain the repair work done at this location a few years ago. Cockcroft stated he spoke with Vacri Construction and the person who actually installed the manholes and lines and he explained there is only 1 line going to #6. Cockcroft and Vacri are going to go over the area with Vacri drawings to show him exactly what is there.

**Pump Station #6 Pumps**

With all the work ATA has recently performed at PS#6, and with the data being provided by the flow meter, T&M has determined that the existing pumps are only performing at approximately 75% of the design efficiency. The typical flow shows that the pumps are generating around 240 gpm as opposed to the 310 gpm intended.

After much investigation, T&M has determined that the current pumps at PS#6 cannot provide the designed output with the existing, present conditions.

**Short history:**
During the construction of the Wilawana Road Phase 1 project to provide sewage service to the then Mills Pride facility we encountered a serious amount of water while installing the pump station in the vicinity of the Township Boat Launch along Wilawana Rd. preventing the pump station from being located at that location. The pump station was then relocated to its current location adjacent to the then Road “B” utility corridor, currently King Lane. This relocation required an additional 2,900 +/- LF of 3” and 6” forcemain to reach the designed outfall at ATA MH#200 in the mobile home park behind the Dandy Mini-mart near Elmira Street and Cole Street. It appears that this additional 2,900 LF was never factored into the sizing of the pumps for PS#6. The length of the forcemain is a critical factor in sizing pumps as the length contributes to the “head” that must be overcome to pump sewage from point A to point B. When T&M corrects the actual length of forcemain into the pump sizing equation the calculated flow reflects the current 240+/- gpm we are experiencing vs. the design 310 gpm. It also appears that this oversight was repeated during the design of the Wilawana Road Phase 2 that included substantial upgrades to PS#6. The additional 2,900+/- LF of forcemain was again overlooked.

After determining that the original design parameters cannot be satisfied by increasing the size of the impeller of the existing pumps T&M is evaluating the correct size pump that needs to be installed, as well as the other impacts to the pump station created by the increased horsepower the pumps will require. We suspect that pump station #6 will require 25 HP pumps compared to the 15 HP pumps currently in use. Walter asked if it causing problems and T & M stated you have higher electric bills because the pumps have to run more and causes more wear and tear on pumps. T & M stated that once they get the flows from the flow meters with actually flow numbers, they are suspecting about a 25 HP pump is needed. T & M was asked for a proposal to see where and what we could do with the 3 pumps we have at #6 to be able to use them at #1 or #4 stations. Also a proposal to modify the station, pumps and control panel for 25 HP pumps. Also, ATA will be writing Sweetland Engineering asking for their calculations for the design for the location of the station. Walter stated we need the station ready and capable of pumping when Chesapeake comes on line. The current EDU count includes all of Chesapeake as the moment.

**ATA Rules and Regulations – Policy - Articles 7 and Article 13**

We recently submitted revisions to Article 7 (floor drains), and Article 13 (grease traps) to the Authority for review and comments. As soon as we receive any comments we will incorporate them into the policies and get them formatted for inclusion in the ATA Rules & Regs. ATA discussed the revisions that Attorney Smith had. Tabled to next meeting.
**XR50 Cellular Sewage Lift Station Monitor**

On May 31, 2012, a representative of Envirep TLC installed the XR50 OmniSite monitoring device at ATA PS#1 on a 60 day trial basis. If the trial is satisfactory, this device will be replacing the previous alarm systems at PS#1, PS#2, PS#4, and PS#6. Besides providing alarms for the various conditions these pump stations experience this device also provides an abundance of additional information/data to the Authority and the information is sent directly to the OmniSite. With the proper password, the Board, Valerie, and T&M Associates can all look at this data whenever we have a need. So far it appears to be a major improvement over the alarm system that was replaced and is still in operation at the other pump stations.

During the installation of the XR50 at PS#1 the Envirep TLC Service Manager also provided a good deal of troubleshooting of the existing alarm wiring at the pump station. What was anticipated as being a 3 to 4 hour process resulted in a long day. We did not complete the installation until 10:00 PM however the Board now receives an alarm when the generator starts, for the first time since the original pump station alarms were installed.

**ATA System-wide Inventory & Maintenance Info**

T&M Associates is continuing with the establishment of a system-wide inventory & maintenance recording spreadsheet. The purpose is to record all equipment data including all service agreements and document service providers and maintenance schedules so the Authority can take a more proactive approach to maintaining the system.

To date we have visited PS#6 and PS#2 and we are currently formulating the inventory spreadsheet. We visualize having a master spreadsheet for the entire ATA system as well as a similar spreadsheet for each pump station. A copy of the individual pump station spreadsheets will be posted in the pump station. We also anticipate preparing a specific pump station “Checklist” with all items the operator should check including any settings on equipment such as the chlorine feed pumps.

These spreadsheets will be submitted to the Board soon, in “draft” form, so the Board can review and make suggestions to make these spreadsheets as beneficial to the Board as possible.

During our review of PS#2 and PS#6 we discovered that the chlorine feed systems at both stations were unplugged. At PS#2 the chlorine tubing was cracked and had to be cut to allow the chlorine to be fed to the wetwell. This was done. At PS#6 the chlorine pump had to be primed and we were having difficulty with the pump maintaining the prime. Further work is needed to repair faulty suction and feed tubing.

Also, while at PS#2, we observed the condition of the wetwell and questioned Bob, who arrived while we were on site to cut the weeds down, when the last time was that the wetwell had been vacuumed and pressure washed. He indicated it had been several months (fourth quarter of 2011). The wetwell was full of debris and it also had a substantial grease build-up at the upper level of the standing influent.

We strongly suggested to Bob that he get the vac truck out to PS#2 ASAP to remove the debris and wash out the grease build-up. We suggested that that pump station should be cleaned out every other month for a period of time. In time, it may be possible to decrease the frequency of cleaning to every 3 months depending on the amount of debris that accumulates. We forwarded our recommendation on to the ATA office.

**Capacity Study and Spreadsheet Review/Updates**

The sewer capacity study is being updated based on flow data received from Flow Assessment. The spreadsheet has not been updated in the last month because T&M has not had a chance to review that data prepared by Flow Assessment that we received late last week.
Flow Study, Capacity Confirmation, Remediation Alternatives

Flow Assessment has removed the six original flow meters that were installed in the area of Elmira Street and is in the process of reviewing the data and preparing the final report of the findings to ATA.

Based on the preliminary results from the original flow monitoring period T&M and Flow Assessment relocated three meters to the collection area tributary to PS#6 to locate potential sources of I&I. Preliminary field reports from Flow Assessment regarding these meters indicate that groundwater and inflow are entering the system. However, no processed data has been sent to T&M.

T&M suggests that ATA have these meters removed the week of June 18th during data acquisition.

Should the data support the "over capacity condition", we will utilize the data in our evaluations of alternate methods or remediation. We have already contacted PennDOT (at Dr. Musto’ suggestion) to determine the viability of rerouting PS#6 forcemain along the SR220 right of way, to avoid Elmira Street. After several in-house discussions, PennDOT determined that this alternate would not be acceptable to PennDOT.

LEGAL

We have 6 hearings at District Magistrate for delinquent sewer fees and the closing on our property should take place any time now.

MAINTENANCE

Blauvelt said he went with Code Inspector’s and Ed Reid to Mt. View Manor and counted apartments and there are 45 apartments. Secretary Huckabee stated that she saw the address list of the post office and there were 50 and the list included the names of the residents also. She was also told by the mailman that there are no vacancies available. Blauvelt said he counted 45. Huckabee asked what is ATA going to use?

As there was a supervisor’s meeting scheduled for 7:00 p.m., meeting had to adjourn at 7:05 p.m.

Respectfully submitted,

Valorie Huckabee
Secretary