

3. If the DEP Chapter 94 Spreadsheet was not used to determine projections, discuss the basis for the hydraulic and organic projections. In all cases, include a description of the time needed to expand the plant to meet the load projections, if necessary, and data used to support the projections should be included in an appendix to this report. (25 Pa. Code § 94.12(a)(3))

**Hydraulic loading to Stottsville Pump Station included in Attachment 1.**

4. Attach a map showing all sewer extensions constructed within the past calendar year, sewer extensions approved or exempted in the past year in accordance with Act 537 and Chapter 71, but not yet constructed, and all known proposed projects which require public sewers but are in the preliminary planning stages. The map must be accompanied by a list summarizing each extension or project and the population to be served by the extension or project. If a sewer extension approval or proposed project includes schedules describing how the project will be completed over time, the listing should include that information and the effect this build-out-rate will have on populations served. (25 Pa. Code § 94.12(a)(4))

**Check the appropriate boxes:**

- Map showing sewer extensions constructed, approved/exempted but not yet constructed, and proposed projects attached (**Attachment 1**)
- List summarizing each extension or project attached (**Attachment** )
- Schedules describing how each project will be completed over time and effects attached (**Attachment** )

**Comments:**

5. Discuss the permittee's program for sewer system monitoring, maintenance, repair and rehabilitation, including routine and special activities, personnel and equipment used, sampling frequency, quality assurance, data analyses, infiltration/inflow monitoring, and, where applicable, maintenance and control of combined sewer regulators during the past year. Attach a separate sheet if necessary. (25 Pa. Code § 94.12(a)(5))

**Sewer System Flow Monitoring:**

Pennsylvania American Water Company (PAWC) was under contract with Sadsbury Township to monitor the Pump Station and Meters on a regular basis throughout 2016. The Township Engineer monitors flows on a regular basis. Currently, flow meter readings are obtained from a Mag Meter located along the force main discharge from the pumps at the Pump Station (effluent flow), as well as the newly installed influent meter. It is required by Chapter 94 to report on influent flow to evaluate Pump Station hydraulic loading and for determining peaking factors for projected flows. The influent meter began recording flow in May of 2015. PAWC records flow data while performing regular station maintenance. There is the ability to record and monitor flow remotely. However, telecommunications have not been completed to allow this to occur in 2016. It is anticipated to be functional in 2017. Influent meter flows were compared to Mag Meter flows in this report. Assumptions were made for projected flows. Using the discharge flow readings would yield inaccurately high peaking factors and falsely indicate hydraulic overloading of the pump station, which is a fairly new station. As part of the construction contract for the influent meter, the Township made improvements to reduce I&I. The Township is in the process of evaluating possible Stottsville Pump Station upgrades to meet future demands while at the same time identifying sources of I&I.

**Sewer System Maintenance:**

For 2016 Sadsbury Township contracted with PAWC for Pump Station maintenance. The Township will contract out with local contractors for major repairs.

**Sewer System I&I Program:**

The Township and PAWC reviews flows on a regular basis in order to keep a watchful eye on potential I&I. The Township Road Crew is available on a continual basis for routine repairs. Major repairs will be performed by local contractors as the need arises.

Currently, the Lincoln Crest Mobile Home Park has been identified as a source of inflow as well as several manholes along Route 372 due to the relocation of a storm sewer line by PennDOT. Another source of inflow is from the manholes adjacent to Bucks Run along Greenbelt Drive. The Township is monitoring the flows from the Lincoln Crest Mobile Home Park on a regular basis and is working with the owner of the mobile home park to identify and remedy an apparent infiltration and inflow issue. Flows from the mobile home park continue to spike during rainfall events greater than one (1) inch. Lincoln Crest has received Conditional Final Land Development approval from the Township to expand the park with an additional 50 units. The park currently has 125 existing connections. Improvements associated with the expansion should curtail inflow issues. The timing of the mobile home expansion is uncertain at this juncture due to litigation. In addition, the Township is in the process of investigating another possible source of additional inflow that may be attributed to users within the Bellaire Business Park. The Township is in the process of monitoring their sewage flow and water usage to determine if there is an inflow issue.

The Township has obtained portable flow meters to isolate and study areas of the Township Sewer System to determine potential sources of I&I. There were no reported Sanitary Sewer Overflows (SSO) during 2016.

6. Discuss the condition of the sewer system including portions of the system where conveyance capacity is being exceeded or will be exceeded in the next 5 years and portions where rehabilitation or cleaning is needed or is underway to maintain the integrity of the system and prevent or eliminate bypassing, CSOs, SSOs, excessive infiltration and other system problems. Attach a separate sheet if necessary. (25 Pa. Code § 94.12(a)(6))

**Check the appropriate boxes:**

- System experienced capacity-related bypassing, SSOs or surcharging during the report year. On a separate sheet, list the date, location, and reason for each bypass, SSO or surcharge event.
- System did not experience capacity-related bypassing, SSOs or surcharging during the report year.

**Comments:**

**The Sanitary Sewer System Is in Good Working Condition and no exceedances are anticipated in the next five years.**

**The Township is in the process of evaluating the possible need to upgrade the Stottsville Pump Station in order to provide for a capacity increase for flows from developments within West Cain Township.**

7. Attach a discussion on the condition of sewage pumping (pump) stations. Include a comparison of the maximum pumping rate with present maximum flows and the projected 2-year maximum flows for each station. (25 Pa. Code § 94.12(a)(7))

**Check the appropriate boxes:**

- The collection system does not contain pump stations
- The collection system does contain pump stations (Number – 1)
- Discussion of condition of each pump station attached (**Attachment 1**)

8. If the sewage collection system receives industrial wastes (i.e., non-sanitary wastes), attach a report with the information listed below. (25 Pa. Code § 94.12(a)(8))

- a. A copy of any ordinance or regulation governing industrial waste discharges to the sewer system or a copy of amendments adopted since the initial submission of the ordinance or regulation under Chapter 94, if it has not previously been submitted.
- b. A discussion of the permittee's or municipality's program for surveillance and monitoring of industrial waste discharges into the sewer system during the past year.
- c. A discussion of specific problems in the sewer system or at the plant, known or suspected to be caused by industrial waste discharges and a summary of the steps being taken to alleviate or eliminate the problems. The discussion shall include a list of industries known to be discharging wastes which create problems in the plant or in the sewer system and action taken to eliminate the problem or prevent its recurrence. The report may describe pollution prevention techniques in the summary of steps taken to alleviate current problems caused by industrial waste dischargers and in actions taken to eliminate or prevent potential or recurring problems caused by industrial waste dischargers.

**Check the appropriate boxes:**

- Industrial waste report as described in 8 a., b. and c. attached (**Attachment** )
- Industrial pretreatment report as required in an NPDES permit attached (**Attachment** )

9. Existing or Projected Overload.

**Check the appropriate boxes:**

- This report demonstrates an existing hydraulic overload condition.
- This report demonstrates a projected hydraulic overload condition.
- This report demonstrates an existing organic overload condition.
- This report demonstrates a projected organic overload condition.

If one or more boxes above have been checked, attach a Corrective Action Plan (CAP) to reduce or eliminate present or projected overloaded conditions under §§ 94.21 and/or 94.22 (relating to existing overload and projected overload).  
(25 Pa. Code § 94.12(a)(9))

- Corrective Action Plan attached (**Attachment** )

10. Where required by the NPDES permit, attach a Sewage Sludge Management inventory that demonstrates a mass balance of solids coming in and leaving the facility over the previous calendar year.

- Sewage Sludge Management Inventory attached (**Attachment** )

11. For facilities with CSOs and where required by the NPDES permit, attach an Annual CSO Report (including satellite combined sewer systems).

- Annual CSO Report attached (**Attachment** )

12. For POTWs, attach a calibration report documenting that flow measuring, indicating and recording equipment has been calibrated annually. (25 Pa. Code § 94.13(b))

- Flow calibration report attached (**Attachment** )

**RESPONSIBLE OFFICIAL CERTIFICATION**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowledge of violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

**Linda Shank, Township Secretary**

Name of Responsible Official

Signature

**610-857-9503**

Telephone No.

Date

**PREPARER CERTIFICATION**

I certify under penalty of law that this document and all attachments were prepared by me or otherwise under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowledge of violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

**James W. MacCombie, P.E., P.L.S.**

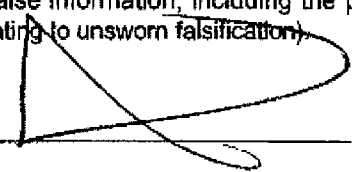
Name of Preparer

Signature

610-356-9550

Telephone No.

Date

  
3/29/17

Facility Name: Sadsbury Two Wastewater Collection System and Pump Station

Permit No.:                     

Persons/EDU: 3.5

Existing Hydraulic Design Capacity: 0.41075 MGD  
 Upgrade Planned in Next 5 Years?                      Year:                       
 Future Hydraulic Design Capacity:                      MGD

Existing Organic Design Capacity:                      lbs BOD5/day  
 Upgrade Planned in Next 5 Years?                      Year:                       
 Future Organic Design Capacity:                      lbs BOD5/day

Monthly Average Flows for Past Five Years (MGD)

Month	2012	2013	2014	2015	2016
January	0.175	0.192	0.182	0.185	0.142
February	0.151	0.2	0.202	0.188	0.158
March	0.161	0.17	0.207	0.246	0.132
April	0.163	0.154	0.211	0.19	0.168
May	0.18	0.155	0.243	0.159	0.169
June	0.16	0.21	0.18	0.161	0.159
July	0.138	0.173	0.18	0.174	0.135
August	0.162	0.177	0.155	0.158	0.13
September	0.157	0.153	0.166	0.146	0.144
October	0.171	0.14	0.223	0.163	0.154
November	0.157	0.134	0.162	0.161	0.155
December	0.169	0.167	0.176	0.175	0.163

Annual Avg 0.16    0.17    0.191    0.175    0.151  
 Max 3-Mo Avg 0.168    0.187    0.22    0.208    0.165  
 Max : Avg Ratio 1.04    1.10    1.15    1.19    1.09  
 Existing EDUs                       
 Flow/EDU (GPD)                       
 Flow/Capita (GPD)                       
 Exlat. Overload? NO    NO    NO    NO    NO

Projected Flows for Next Five Years (MGD)

	2017	2018	2019	2020	2021
New EDUs	12.0	45.0	49.0	65.0	49.0
New EDU Flow	0.0029378	0.011016	0.0119852	0.015912	0.0117504
Proj. Annual Avg	0.172	0.18302	0.19501	0.21092	0.22267
Proj. Max 3-Mo Avg	0.192	0.204	0.217	0.235	0.248
Proj. Overload?	NO	NO	NO	NO	NO

Show Precipitation Data on Hydraulic Graph?

Total Monthly Precipitation for Past Five Years (Inches)

Month	2012	2013	2014	2015	2016
January	2.59	3.34	3.55	4.52	2.63
February	1.64	2.12	5.12	2.36	4.38
March	0.79	2.42	4.23	5.52	2.01
April	2.55	2.32	6.69	3.58	1.75
May	3.35	2.33	2.91	1.19	6.65
June	2.94	10.56	5.48	8.88	1.87
July	1.48	13.25	4.3	3.16	3.88
August	5.37	5.91	3.55	0.69	1.7
September	5.48	3.26	1.69	6.27	3.52
October	4.08	2.45	2.53	3.76	2.06
November	1.05	2.73	4.07	1.99	2.17
December	4.42	6.2	3.27	5.14	2.72

Monthly Average BOD5 Loads for Past Five Years (lbs/day)

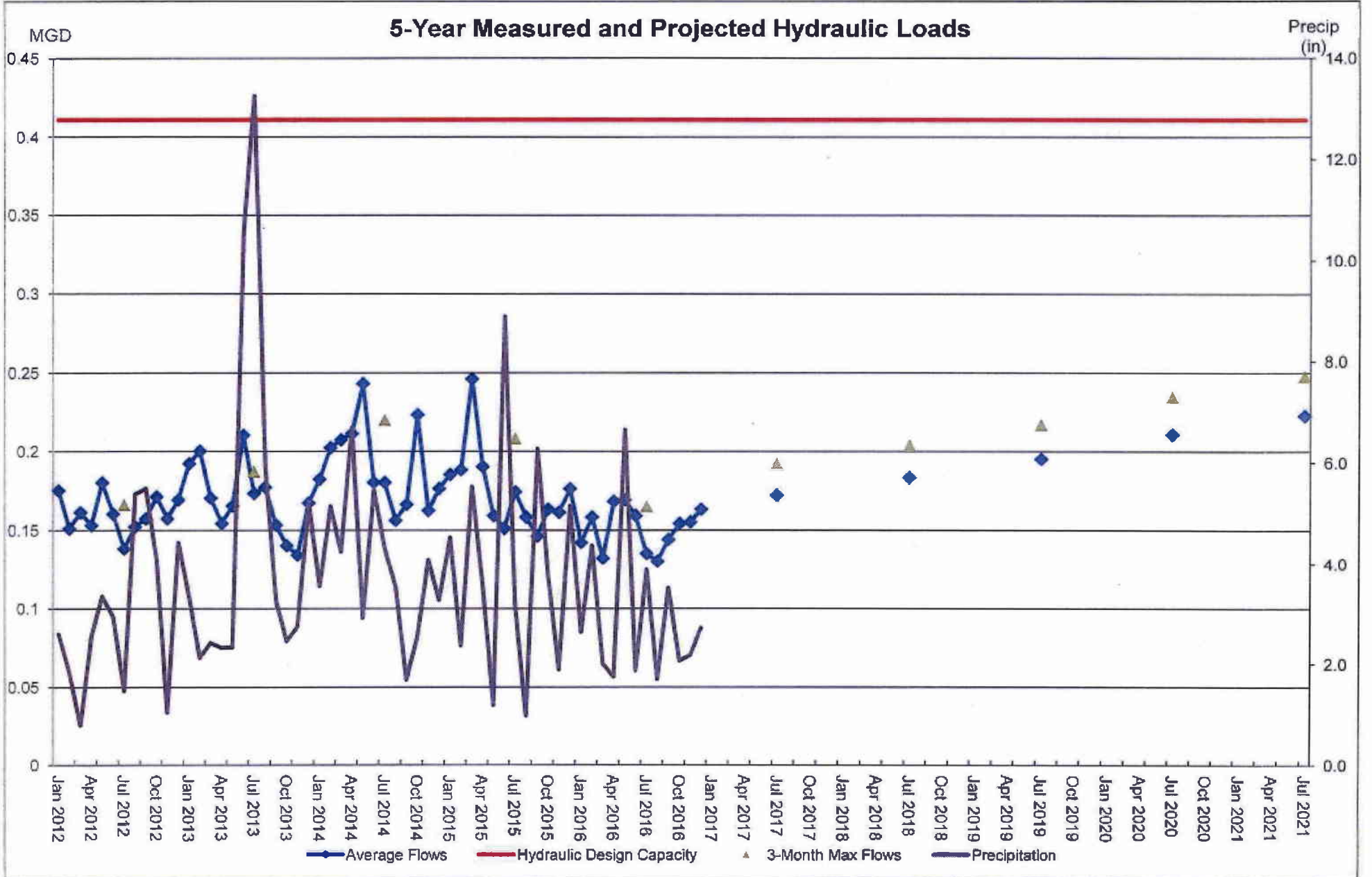
Month	2012	2013	2014	2015	2016
January					
February					
March					
April					
May					
June					
July					
August					
September					
October					
November					
December					

Annual Avg                       
 Max Mo Avg                       
 Max : Avg Ratio                       
 Existing EDUs                       
 Load/EDU                       
 Load/Capita                       
 Exlat. Overload?                     

Projected BOD5 Loads for Next Five Years (lbs/day)

	2017	2018	2019	2020	2021
New EDUs	12	45	49	65	49
New EDU Load					
Proj. Annual Avg					
Proj. Max Avg					
Proj. Overload?					

### 5-Year Measured and Projected Hydraulic Loads



PENNSYLVANIA-AMERICAN WATER COMPANY  
COATESVILLE DISTRICT  
2016 WASTELOAD MANAGEMENT REPORT SURVEY

Municipality: **SADSBURY TOWNSHIP**

Information Furnished By:

Date: March 29, 2017

Municipality / Engineering Company: Herbert E. MacCombie, Jr. P.E.  
Consulting Engineers and Surveyors, Inc.

Name: James W. MacCombie, P.E., P.L.S.

Address: P.O. Box 118  
Broomall, PA 19008

Phone: 610-356-9550 Fax: 610-356-5032

E-Mail Address: hem.engineers@verizon.net

1. Total Present Number of EDU's connected to PAWC system:

Residential	1,027
Commercial	92
Industrial	0

2. Total EDU's connected to PAWC system during 2016

Residential	8
Commercial	0
Industrial	0

3. Projections for future additional EDU's to be connected to PAWC system. These projections should reflect what is actually anticipated to be constructed and placed in service:

Year	Residential	Commercial	Industrial	Total EDU's
2017	12	0	0	12
2018	45	0	0	45
2019	55	37	0	92
2020	72	70	0	142
2021	49	54	0	103
Beyond 2021	167	58	5	230
Total	1,427	311	5	1,743

4. Sewer extensions constructed during 2016 that contributed flows to PAWC system:

Project / Development Name	Length & Diameter of Sewer Completed	Length and Diameter of Sewer Remaining	Total EDU's Completed	Total EDU's Remaining

5. Proposed Projects which shall require sewer extensions that will contribute flows to PAWC system but are not yet constructed.

Project / Development Name	Length & Diameter of Sewer Proposed	Total EDU's Proposed	Start of Construction (Year)
Sadsbury Commons	Combination Gravity & Forcemain	234	2018
Lafayette Square	Gravity	85	2018

6. Please provide discussion on the following:

a.) Sewer System Flow Monitoring:

Pennsylvania American Water Company (PAWC) was under contract with Sadsbury Township to monitor the Pump Station and Meters on a regular basis throughout 2016. The Township Engineer monitors flows on a regular basis. Currently, flow meter readings are obtained from a Mag Meter located along the force main discharge from the pumps at the Pump Station (effluent flow), as well as the newly installed influent meter. It is required by Chapter 94 to report on influent flow to evaluate Pump Station hydraulic loading and for determining peaking factors for projected flows. The influent meter began recording flow in May of 2015. PAWC records flow data while performing regular station maintenance. There is the ability to record and monitor flow remotely. However, telecommunications have not been completed to allow this to occur in 2016. It is anticipated to be functional in 2017. Influent meter flows were compared to Mag Meter flows in this report. Assumptions were made for projected flows. Using the discharge flow readings would yield inaccurately high peaking factors and falsely indicate hydraulic overloading of the pump station, which is a fairly new station. As part of the construction contract for the influent meter, the Township made improvements to reduce I&I. The Township is in the process of evaluating possible Stottsville Pump Station upgrades to meet future demands while at the same time identifying sources of I&I.

b.) Sewer System Maintenance:

For 2016 Sadsbury Township contracted with PAWC for Pump Station maintenance. The Township will contract out with local contractors for major repairs.

c.) Sewer System I&I Program:

The Township and PAWC reviews flows on a regular basis in order to keep a watchful eye on potential I&I. The Township Road Crew is available on a continual basis for routine repairs. Major repairs will be performed by local contractors as the need arises.

Currently, the Lincoln Crest Mobile Home Park has been identified as a source of inflow as well as several manholes along Route 372 due to the relocation of a storm sewer line by PennDOT. Another suspected sourced of inflow is from the manholes adjacent to Buck Run along Greenbelt Drive. The Township is monitoring the flows from the Lincoln Crest Mobile Home Park on a regular basis and is working with the owner of the mobile home park to identify and remedy an apparent inflow issue. Flows from the mobile home park continue to spike during rainfall events greater than one (1) inch. Lincoln Crest has received Conditional Final Land Development approval from the Township to expand the park with additional 50 units. The park currently has 125 existing connections. Improvements associated with the expansion should curtail inflow issues. The timing of the mobile home expansion is uncertain at this juncture due to litigation. In Addition, the Township is in the process of investigating another possible source of additional inflow that may be attributed to users within the Bellaire Business Park. The Township is in the process of monitoring their sewage flow and water usage to determine if there is an inflow issue.

The Township has obtained portable flow meters to isolate and study areas of the Township Sewer System to determine potential sources of I&I. There were no reported Sanitary Sewer Overflows (SSO) during 2016.

7. Please provide discussion of the condition of your sewer system:

a.) Portions where conveyance capacity is being exceeded or will be exceeded in the next 5 years:

The Sanitary Sewer System is in Good Working Condition and no exceedances are anticipated in the next five years.

b.) Proposed projects to increase conveyance capacity, i.e. repair, rehabilitation, new construction:

As stated in 6(a), the Township is in the process of evaluating the possible need to upgrade the Stottsville Pump Station in order to provide for a capacity increase for flows from developments within West Caln Township.

8. Please provide data and discussion of your sewer flow:

Metering Point or Pump Station Name	Agreement or Rated Capacity <sup>1</sup> (gpm)	2016 Average Daily Flow (gpm)*	2018 Projected Average Daily Flow (gpm)*	2021 Projected Average Daily Flow (gpm)*
Stottsville Pump Station	1,008,000 gpd (700 gpm)	150,693 gpd (105 gpm)	164,647 gpd (114 gpm)	204,304 gpd (142 gpm)

\* Based on Average Annual Flow

1. Excluding Capacity of Backup Pump = Maximum Pump Rate

a.) Other discussion or information:

The existing Stottsville Pump Station has two (2) alternating pumps with a rated capacity of 700 gpm each. The pump station is in good condition and is more than capable of handling the projected 5-year flow of 142 gpm. Comparison of rainfall events greater than one (1) inch and flow at the pump station seem to indicate a direct correlation at times, yet at other times the station appears to be unaffected by significant rainfall events.

The Township anticipates completing their "Act 537" update in 2017. The Western Sewer District Component 3m Planning Module (DEP Code No. 1-15947-121-3m) is anticipated to be approved in 2017 as well.

**THIS SECTION IS NOT APPLICABLE TO SADBURY TOWNSHIP**

9. Please provide a discussion of the industrial waste discharged into your system:

a.) Date of adoption of the ordinance or regulation governing industrial waste discharges into your system:

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b.) Discussion of program for the surveillance and monitoring of the industrial waste discharges into your system:

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c.) Discussion of specific problems in your sewer system, known or suspected to be caused by industrial waste discharges within the past 5 years:

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PAWC Municipal Flows 2016

Line #	January	February	March	April	May	June	July	August	September	October	November	December	Total	GPD/365
<b>Sadsbury Township</b>														
Pump Station	4,394,145	4,428,167	4,089,647	5,048,984	5,238,215	4,765,673	4,198,875	4,030,307	4,334,256	4,763,435	4,652,424	5,058,923	55,003,051	150,693
Sadsbury Crossing/Valley Rd.	140,364	124,182	145,894	167,785	141,050	170,000	151,373	152,334	129,636	133,300	127,267	129,619	1,712,804	4,693
Sandy Hill	(1,098,187)	(1,303,431)	(1,041,986)	(980,502)	(1,037,563)	(883,343)	(886,032)	(824,750)	(749,001)	(773,887)	(741,573)	(854,838)	(11,175,093)	
Total	3,436,322	3,248,918	3,193,555	4,236,267	4,341,702	4,052,330	3,464,216	3,357,891	3,714,891	4,122,848	4,038,118	4,333,704	45,540,762	
GPD	110,849	112,032	103,018	141,209	140,055	135,078	111,749	108,319	123,830	132,995	134,604	139,797		124,769

**Pump Station**

	<b>Volume (Gallons)</b>	<b>ADF (GPD)</b>
<b>Jan-16</b>	4,394,145	141,747
<b>Feb-16</b>	4,428,167	158,149
<b>Mar-16</b>	4,089,647	131,924
<b>Apr-16</b>	5,048,984	168,299
<b>May-16</b>	5,238,215	168,975
<b>Jun-16</b>	4,765,673	158,856
<b>Jul-16</b>	4,198,875	135,448
<b>Aug-16</b>	4,030,307	130,010
<b>Sep-16</b>	4,334,256	144,475
<b>Oct-16</b>	4,763,435	153,659
<b>Nov-16</b>	4,652,424	155,081
<b>Dec-16</b>	5,058,923	163,191
<b>TOTAL</b>	<b>55,003,051</b>	<b>150,693 GPD</b>
		<b>104.6 GPM</b>

<b>150,693</b>	GPD - Annual Average Daily Flow (ADF)
<b>6,278.9</b>	GPH - Annual Average Hourly Flow (AHF)
<b>104.6</b>	GPM - Annual Average Flow per Minute (AFM)

**382,067** GPD - Maximum Daily Flow (MDF)

<b>2.54</b>	Current MDF Peaking Factor = (MDF/ADF)
<b>3.00</b>	Current Instantaneous Flow Peaking Factor = (PIF/AFM)

**313.9** GPM - Peak Instantaneous Flow (PIF)

**Sadsbury Township 2015 Chapter 94 Annual Report  
Projection of EDU Connections and Flows (gpd)**

Project Name	Proposed Use	Location	Plan Status	Current EDUs	Remaining EDUs	TOTAL EDUs	Prior to 2016	2016	2017	2018	2019	2020	2021
Constable LD	4 SFDUs on Lg. Lots - ON LOT Sewage Disposal	Limestone Road	Approved Mar. 2009	N.A.	N.A.	N.A.							
Sadsburyville Fire Company	Fire Station Expansion	Old Wilmington Rd.	ON HOLD - NO EDUs	N.A.	N.A.	N.A.							
Chester County Airport		Rt 30 & Washington Ln	Pending Approval										
Art Herling	2 Existing Residential EDUs; 1 Proposed	Maple Avenue	Planning Module Approved - 2 Existing Connected 27 W. Maple Ave Connected 11/17/14	3	0	3	3						
Valley View Business Center Lots 2 & 3 (National Guard)	National Guard Armory	Waverly Blvd. & Washington Ln.	Connected & Occupied	3	0	3	3						
Vietri (Lot 2 Independence Way)	3 EDUs	103 Independence Way	Connected & Occupied 2015	3	0	3	3						
Witmer Fire Store (Lot 5 Independence Way)	30,000 s.f. Building Expansion	Independence Way	Approved Feb. 2009 - BUILT										
York Equity (Lot 6 Independence Way)	Office Building	Morris Farm/ Independence Way	Vacant - ON HOLD										
Lafayette Square - Phase 1	4 Bldgs (40 Units) of Total 13 Bldgs (125 Units)	Old Wilmington Rd North of Rt 30	Approved Oct 2010 - Construction Complete (4 Bldgs Complete @ 10 Units EA)	40	0	40	40						
Lafayette Square - Phase 2	7 Bldgs (65 Units) of Total 13 Bldgs (125 Units)	Old Wilmington Rd North of Rt 30	Approved Oct 2010 - Not Started	0	65	65	0			25	40		
Lafayette Square - Phase 3	2 Bldgs (20 Units) of Total 13 Bldgs (125 Units)	Old Wilmington Rd North of Rt 30	Approved Oct 2010 - Not Started	0	20	20	0					20	
Lincoln Crest Mobile Home Park*	50 Unit Expansion of 125 Existing Unit Park	Rt.30 & Sharon Ln	Conditional Final Approval - Awaiting Posting of Escrow*	0	50	50	0						
Sadsbury Park - Phase 2A	67 EDUs (52 SFD, 15 SFA)+ 2 EDUs for Cabana = 69 TOTAL EDUs	Old Wilmington Rd south of Rt 30	Approved & Under Construction	54	15	69	50	4	5	10			
Sadsbury Park - Phase 4C	48 Townhouse Units (SFA) - Including 6 from Phase 2B	Old Wilmington Rd south of Rt 30	Approved & Under Construction	34	14	48	31	3	3	6	5		
Sadsbury Park - Phase 1	41 EDUs (All SFD)	Old Wilmington Rd south of Rt 30	Not submitted	0	41	41	0					41	
Sadsbury Park - Phase 2B	132 EDUs (88 SFD, 88 SFA+ 6 SFA Accounted for in Ph 4C)	Old Wilmington Rd south of Rt 30	Not submitted	0	126	126	0						44
Sadsbury Park - Phase 3A	42 EDUs (All SFD)	Old Wilmington Rd south of Rt 30	Not submitted	0	42	42	0						
Sadsbury Park - Phase 3B	46 EDUs (14 SFD, 32 SFA)	Old Wilmington Rd south of Rt 30	Not submitted	0	46	46	0						
Sadsbury Park - Phase 4A	57 EDUs (All SFD)	Old Wilmington Rd south of Rt 30	Not submitted	0	57	57	0						
Sadsbury Park - Phase 4B	12 EDUs (All SFD)	Old Wilmington Rd south of Rt 30	Not submitted	0	12	12	0						
Sadsbury Township - Phase 1 Sewers	Existing Residence	28 Chestnut Street	Connected	1	0	1	1						
Sadsbury Township - Phase 1 Sewers	Existing Residence	32 Chestnut Street	Connected 2015	1	0	1	1						
Sadsbury Township - Phase 2A Sewers	Existing Residence	784 Old Wilmington Road	Connected 2016	1	0	1	1						
Sadsbury Township - Phase 3A Sewers	House and Apartment (2 EDUs)	31 Morris Lane	Connected	2	0	2	2						
Sadsbury Township - Phase 3A Sewers	Existing Residence	2907 Lincoln Highway	Connected	1	0	1	1						
Sadsbury Township - Phase 3A Sewers	Existing Residence	2915 Lincoln Highway	Connected 2015	1	0	1	1						
Sadsbury Township - Phase 3A Sewers	Existing Residence	2919 Lincoln Highway	Connected 2015	1	0	1	1						
Sadsbury Township - Phase 4 Sewers	Existing Residential EDUs	Valley Road	Phase 4 Sewer Construction Complete - Not all EDUs connected	14	66	80	13	1	4	4	4	4	4
		2054 Virginia Avenue	Connected 2016					1					
Sadsbury Township Misc	Existing Residence	Renovated Farmhouse at Sads Park Development	Completed & Connected	1	0	1	1						
Sadsbury Township Misc	Existing Residence	2931 Lincoln Highway	Connected	1	0	1	1						
Sadsbury Township Misc	Existing Residence	913 Old Wilmington Rd	Connected 2015	1	0	1	1						
Sadsbury Township Misc (Zing Sushi Restaurant)	Existing Commercial	2952 Lincoln Highway	Existing Lateral retrofitted with Grease Trap	1	0	1	1						

**Sadsbury Township 2015 Chapter 94 Annual Report  
Projection of EDU Connections and Flows (gpd)**

Project Name	Proposed Use	Location	Plan Status	Current EDUs	Remaining EDUs	TOTAL EDUs	Prior to 2016	2016	2017	2018	2019	2020	2021
<b>Western Sewer District (WSD)</b>	Total WSD Flow 57,010 gpd (234 EDUs)		Special Study Component 3m Sewage Facilities Planning Module Pending PADEP Approval (DEP Code No. 1-15947-121-3m)	0	234	234	0				43	77	55
WSD - Sadsbury Commons (43,407 gpd)	500,000 s.f. Shopping Center	Rt 30 & Rt 10	Pending WSD Approval & Act 537 Plan Update	0	178	178	0				25	50	50
WSD - Sadsbury Commons Medical Office Building (736 gpd)	40,000 sf Medical Office Facility - ON LOT Sewage Disposal	Rt 10 Across from WalMart	Approved & Occupied - Currently On-lot Disposal pending approval of WSD Special Study & Act 537 Plan Approval	0	3	3	0				3		
WSD - Sadsbury Commons Reserve (698 gpd)				0	3	3	0						
WSD - Sadsbury Commons Misc. Flow (6,272 gpd)	Existing and Future Residential and Commercial Uses	Tax Parcel #37-1-30 (400 gpd), Hershey Motors (400 gpd), Hershey Homestead (245 gpd), Tractor Supply Store (400 gpd), Hershey Farm Market (1,000 gpd), Tax Parcel #37-3-1.1 (400 gpd), Hershey Lane Residences (14) (3,427 gpd)	Pending WSD Approval & Act 537 Plan Update	0	26	26	0				13	7	3
WSD - CVS Total Development (5,897 gpd)	CVS (400 gpd), Restaurant Pad (5,030 gpd), Building "A" Retail (264 gpd), Building "B" Retail (203 gpd)	NE Corner of Rt 10 & Rt 30	Pending WSD Approval & Act 537 Plan Update	0	24	24	0				2	20	2
* - Improvements should curtail Inflow													
<b>TOTAL EDUs</b>				163	<b>788</b>	951	155	9	12	45	92	142	103
<b>TOTAL FLOW (GPD) @ 244.8 GPD/EDU</b>				39,902	192,902	232,805	37,944	2,203	2,938	11,016	22,522	34,762	25,214
<b>TOTAL EDUs (To Stottsville PS)</b>				163	<b>554</b>	717	155	9	12	45	49	65	48
<b>TOTAL FLOW (GPD) @ 244.8 GPD/EDU (To Stottsville PS)</b>				39,902	135,619	175,522	37,944	2,203	2,938	11,016	11,995	15,912	11,750

	Sandy Hill (W Caln)		Sandy Hill Percentage	
	Volume (Gallons)	ADF (GPD)	of Stottsville PS Flow	
Jan-16	1,098,187	35,425	4,394,145	25.0%
Feb-16	1,303,431	46,551	4,428,167	29.4%
Mar-16	1,041,986	33,612	4,089,647	25.5%
Apr-16	980,502	32,683	5,048,984	19.4%
May-16	1,037,563	33,470	5,238,215	19.8%
Jun-16	883,343	29,445	4,765,673	18.5%
Jul-16	886,032	28,582	4,198,875	21.1%
Aug-16	824,750	26,605	4,030,307	20.5%
Sep-16	749,001	24,967	4,334,256	17.3%
Oct-16	773,887	24,964	4,763,435	16.2%
Nov-16	741,573	24,719	4,652,424	15.9%
Dec-16	854,838	27,575	5,058,923	16.9%
<b>TOTAL</b>	<b>11,175,093</b>	<b>30,617 GPD</b>	<b>55,003,051</b>	<b>20.3%</b>
		<b>21.3 GPM</b>		

<b>30,617</b>	GPD - Annual Average Daily Flow (ADF)
<b>1,275.7</b>	GPH - Annual Average Hourly Flow (AHF)
<b>21.3</b>	GPM - Annual Average Flow per Minute (AFM)

<b>87,952</b>	GPD - Maximum Daily Flow (MDF) February 3, 2016
<b>7,427</b>	GPH - Peak Hourly Flow (PHF) February 24, 2016 between 8:00 PM and 9:00 PM
<b>2,428</b>	GPM - Peak Instantaneous Flow (PIF) February 24, 2016 @8:30 PM

<b>2.87</b>	Current MDF Peaking Factor = (MDF/ADF)
<b>5.82</b>	Current PHF Peaking Factor = (PHF/AHF)
<b>114.19</b>	Current Instantaneous Flow Peaking Factor = (PIF/AFM)

JANUARY 2016						
Date	Sadsbury P.S. Average Flow (gpm)	Sadsbury P.S. TOTAL Flow (Gallons)	Sandy Hill P.S. Average Flow (gpm)	Sandy Hill P.S. TOTAL Flow (Gallons)	Rainfall (in)	Snowfall (in)
1/1/2016	1,796.3	170,475	402.0	38,588	0.00	
1/2/2016	1,765.2	167,227	368.5	35,253	0.00	
1/3/2016	2,078.8	199,565	416.3	39,963	0.00	
1/4/2016	1,897.3	180,976	347.9	33,399	0.00	
1/5/2016	1,817.3	174,327	345.4	33,161	0.00	
1/6/2016	1,649.2	156,177	350.6	32,775	0.00	
1/7/2016	1,722.2	164,396	341.3	32,760	0.00	
1/8/2016	1,617.1	153,856	322.6	30,965	0.00	
1/9/2016	1,730.9	166,052	363.9	33,933	0.00	
1/10/2016	2,735.4	<b>260,443</b>	739.0	<b>70,134</b>	0.63	
1/11/2016	1,539.0	145,738	381.2	36,331	0.00	
1/12/2016	1,408.6	133,452	365.6	35,099	0.00	
1/13/2016	1,338.4	127,080	343.2	32,949	0.00	
1/14/2016	1,360.9	129,613	351.1	33,701	0.00	
1/15/2016	1,401.9	132,808	338.6	32,504	0.16	
1/16/2016	1,369.7	131,491	393.4	37,771	0.20	
1/17/2016	1,459.2	139,324	374.2	35,927	0.04	0.5
1/18/2016	1,379.1	132,389	387.1	37,157	0.00	
1/19/2016	941.6	89,537	328.0	31,455	0.00	
1/20/2016	934.0	89,614	327.1	31,399	0.00	
1/21/2016	1,079.5	103,633	323.6	30,721	0.00	
1/22/2016	1,180.6	113,340	322.3	30,942	0.20	3
1/23/2016	1,390.5	132,882	364.1	34,952	1.40	19.4
1/24/2016	1,509.6	144,143	370.1	35,529	0.00	
1/25/2016	1,499.0	142,918	344.2	32,350	0.00	
1/26/2016	1,305.2	125,192	339.4	32,546	0.00	
1/27/2016	1,113.6	106,903	360.9	33,681	0.00	
1/28/2016	1,098.1	104,704	340.7	32,711	0.00	
1/29/2016	1,148.7	110,275	306.1	28,991	0.00	
1/30/2016	1,206.4	115,513	350.3	33,625	0.00	
1/31/2016	1,299.1	124,711	431.0	40,434	0.00	
Peak/Max		260,443		70,134	1.40	
1/10/2016 12:15	5,535.1					
1/10/2016 7:30			1,764.5			

- Water Equivalent of Snowfall

FEBRUARY 2016						
Date	Sadsbury P.S. Average Flow (gpm)	Sadsbury P.S. TOTAL Flow (Gallons)	Sandy Hill P.S. Average Flow (gpm)	Sandy Hill P.S. TOTAL Flow (Gallons)	Rainfall (in)	Snowfall (in)
2/1/2016	1,330.0	127,680	507.6	48,245	0.10	
2/2/2016	1,098.9	105,473	482.2	46,287	0.00	
2/3/2016	3,070.6	294,776	916.2	87,952	0.46	
2/4/2016	3,119.1	296,963	872.2	81,979	0.01	
2/5/2016	1,450.2	139,215	477.0	44,837	0.40	1.2
2/6/2016	1,266.5	119,464	435.3	41,144	0.00	
2/7/2016	1,408.2	135,183	443.8	42,606	0.00	
2/8/2016	1,191.4	113,106	378.2	35,488	0.01	0.2
2/9/2016	1,258.6	120,812	411.3	38,640	0.05	0.3
2/10/2016	1,212.5	116,398	392.6	37,690	0.04	0.4
2/11/2016	1,011.0	97,045	355.8	34,158	0.00	
2/12/2016	1,096.5	105,253	344.5	32,132	0.01	0.2
2/13/2016	1,167.4	112,073	364.5	34,991	0.00	
2/14/2016	1,189.2	114,161	392.1	36,913	0.00	
2/15/2016	1,330.1	127,681	381.3	36,397	0.40	1
2/16/2016	3,295.5	316,174	637.6	61,187	0.56	
2/17/2016	1,340.4	128,680	447.3	42,441	0.00	
2/18/2016	1,072.6	101,949	372.7	35,775	0.00	
2/19/2016	1,077.4	103,435	335.3	32,190	0.00	
2/20/2016	1,098.6	105,453	384.7	36,926	0.00	
2/21/2016	1,247.0	119,704	421.1	39,500	0.03	
2/22/2016	923.2	88,630	370.1	34,601	0.00	
2/23/2016	1,117.3	107,250	398.4	38,244	0.28	
2/24/2016	3,311.0	317,859	801.3	76,923	1.91	
2/25/2016	4,086.5	382,067	646.4	60,754	0.09	
2/26/2016	1,658.5	157,100	394.4	37,864	0.00	
2/27/2016	1,322.2	126,936	417.4	40,072	0.00	
2/28/2016	1,379.3	132,403	433.4	41,257	0.00	
2/29/2016	996.9	95,700	363.0	34,431	0.01	
Peak/Max		382,067		87,952	1.91	
2/24/2016 22:15	10,287.4					
2/24/2016 20:30			2,427.9			

= Water Equivalent of Snowfall

MARCH 2016						
Date	Sadsbury P.S. Average Flow (gpm)	Sadsbury P.S. TOTAL Flow (Gallons)	Sandy Hill P.S. Average Flow (gpm)	Sandy Hill P.S. TOTAL Flow (Gallons)	Rainfall (in)	Snowfall (In)
3/1/2016	898.2	85,989	361.0	34,654	0.00	
3/2/2016	831.2	79,792	369.9	35,506	0.26	
3/3/2016	720.0	69,129	358.7	34,438	0.02	0.1
3/4/2016	891.8	85,608	356.5	34,220	0.06	0.9
3/5/2016	879.3	84,415	396.9	38,101	0.00	
3/6/2016	1,134.5	108,912	402.0	39,507	0.00	
3/7/2016	854.5	82,032	346.7	32,365	0.00	
3/8/2016	843.8	81,007	337.7	32,416	0.00	
3/9/2016	654.0	62,778	329.1	32,518	0.00	
3/10/2016	756.5	72,710	335.2	31,258	0.00	
3/11/2016	736.8	70,868	323.5	31,053	0.00	
3/12/2016	876.3	83,914	371.8	36,609	0.00	
3/13/2016	1,079.6	103,638	411.3	38,569	0.07	
3/14/2016	1,228.8	117,962	439.1	43,056	1.02	
3/15/2016	1,422.2	137,944	356.7	33,337	0.01	
3/16/2016	1,857.2	178,253	339.8	32,891	0.01	
3/17/2016	1,803.4	172,941	341.4	32,511	0.02	
3/18/2016	1,800.0	173,040	314.0	30,140	0.00	
3/19/2016	1,857.7	178,443	340.9	32,725	0.01	
3/20/2016	2,007.8	192,605	374.6	36,873	0.07	
3/21/2016	1,806.7	173,311	313.4	29,172	0.00	
3/22/2016	1,720.3	165,212	327.2	31,406	0.00	
3/23/2016	1,726.2	165,752	303.1	29,094	0.00	
3/24/2016	1,736.0	166,710	326.3	31,326	0.00	
3/25/2016	1,735.2	166,644	335.3	32,187	0.00	
3/26/2016	1,872.0	179,900	357.9	35,276	0.00	
3/27/2016	1,805.2	172,832	367.0	34,315	0.02	
3/28/2016	1,912.4	182,654	370.1	35,525	0.44	
3/29/2016	1,752.1	169,232	305.3	30,215	0.00	
3/30/2016	1,731.2	166,278	325.3	30,325	0.00	
3/31/2016	1,669.4	158,904	316.6	30,398	0.00	
<b>Peak/Max</b>		<b>192,605</b>		<b>43,056</b>	<b>1.02</b>	
<b>3/21/2016 20:00</b>	<b>4,187.6</b>					
<b>3/16/2016 8:45</b>			<b>1,918.2</b>			

APRIL 2016					
Date	Sadsbury P.S. Average Flow (gpm)	Sadsbury P.S. TOTAL Flow (Gallons)	Sandy Hill P.S. Average Flow (gpm)	Sandy Hill P.S. TOTAL Flow (Gallons)	Rainfall (in)
4/1/2016	1,634.4	157,273	330.5	32,279	0.05
4/2/2016	1,841.8	176,869	380.5	35,980	0.14
4/3/2016	1,973.4	189,303	388.7	37,320	0.00
4/4/2016	1,693.8	162,537	328.6	31,544	0.28
4/5/2016	1,738.7	165,952	318.7	30,598	0.00
4/6/2016	1,714.1	165,442	315.0	30,240	0.00
4/7/2016	1,873.3	179,928	361.7	35,512	0.19
4/8/2016	1,707.6	163,922	326.6	31,102	0.00
4/9/2016	1,873.3	180,052	401.4	38,431	0.39
4/10/2016	2,006.4	<b>192,315</b>	405.8	38,525	0.00
4/11/2016	1,695.4	162,808	309.0	30,236	0.00
4/12/2016	1,761.7	169,064	348.4	33,072	0.31
4/13/2016	1,686.9	161,968	305.3	29,742	0.00
4/14/2016	1,707.5	164,037	319.0	29,989	0.00
4/15/2016	1,652.0	158,713	303.9	29,178	0.00
4/16/2016	1,766.3	169,517	325.1	31,264	0.00
4/17/2016	1,909.1	183,114	375.7	36,014	0.00
4/18/2016	1,725.6	165,649	348.9	33,491	0.00
4/19/2016	1,666.2	159,970	330.9	31,770	0.00
4/20/2016	1,714.2	164,459	336.3	32,289	0.00
4/21/2016	1,667.2	160,123	324.3	31,136	0.00
4/22/2016	1,725.9	165,960	324.1	32,018	0.00
4/23/2016	1,806.8	173,387	381.6	35,729	0.11
4/24/2016	1,903.2	182,522	402.4	<b>38,634</b>	0.00
4/25/2016	1,722.2	165,286	336.5	32,303	0.00
4/26/2016	1,739.1	167,052	326.7	32,265	0.19
4/27/2016	1,663.1	159,496	310.7	28,923	0.00
4/28/2016	1,675.8	161,022	316.7	30,415	0.09
4/29/2016	1,635.9	157,141	291.4	28,856	0.00
4/30/2016	1,712.6	163,056	338.9	31,647	0.00
Peak/Max		192,315		38,634	0.39
4/24/2016 19:45	4,372.0				
4/5/2016 8:00			1,294.3		

0.3

MAY 2016					
Date	Sadsbury P.S. Average Flow (gpm)	Sadsbury P.S. TOTAL Flow (Gallons)	Sandy Hill P.S. Average Flow (gpm)	Sandy Hill P.S. TOTAL Flow (Gallons)	Rainfall (in)
5/1/2016	2,022.9	193,972	381.0	36,577	0.61
5/2/2016	1,736.2	167,199	360.1	34,571	0.27
5/3/2016	1,755.6	168,246	363.9	34,930	0.34
5/4/2016	1,698.7	162,938	335.9	32,434	0.02
5/5/2016	1,678.9	161,175	320.3	30,565	0.00
5/6/2016	2,086.0	200,793	518.3	50,501	1.15
5/7/2016	2,142.3	205,551	487.2	46,824	0.08
5/8/2016	1,995.7	191,116	415.6	39,095	0.05
5/9/2016	1,805.4	173,491	333.0	31,969	0.00
5/10/2016	1,785.0	171,334	328.2	31,507	0.02
5/11/2016	1,723.9	165,427	318.0	30,523	0.00
5/12/2016	1,707.4	163,967	322.3	31,852	0.00
5/13/2016	1,639.9	157,333	326.1	30,388	0.20
5/14/2016	1,748.2	167,975	342.8	32,910	0.10
5/15/2016	1,933.6	185,515	387.5	37,201	0.00
5/16/2016	1,701.9	163,335	325.0	31,200	0.00
5/17/2016	1,631.8	156,576	321.9	30,900	0.12
5/18/2016	1,644.9	157,891	307.8	30,451	0.00
5/19/2016	1,601.8	153,865	307.5	29,544	0.00
5/20/2016	1,572.0	151,051	314.2	29,231	0.00
5/21/2016	1,738.5	167,053	365.1	35,048	1.96
5/22/2016	1,969.9	188,829	402.7	38,655	0.11
5/23/2016	1,698.0	162,908	317.1	30,439	0.08
5/24/2016	1,672.7	160,752	307.1	29,483	0.03
5/25/2016	1,672.9	160,492	328.5	31,532	0.00
5/26/2016	1,660.6	159,594	316.9	30,424	0.00
5/27/2016	1,677.8	161,207	306.2	30,313	0.00
5/28/2016	1,675.6	160,687	336.8	31,423	0.00
5/29/2016	1,650.5	158,563	315.6	31,210	0.59
5/30/2016	1,865.2	178,853	388.8	37,318	0.92
5/31/2016	1,671.1	159,177	306.7	28,545	0.00
Peak/Max		205,551		50,501	1.96
5/1/2016 12:30	4,339.1				
5/6/2016 10:00			1,236.7		

JUNE 2016					
Date	Sadsbury P.S. Average Flow (gpm)	Sadsbury P.S. TOTAL Flow (Gallons)	Sandy Hill P.S. Average Flow (gpm)	Sandy Hill P.S. TOTAL Flow (Gallons)	Rainfall (in)
6/1/2016	1,710.8	164,461	315.3	29,365	0.00
6/2/2016	1,644.5	157,598	304.5	29,236	0.00
6/3/2016	1,760.9	169,299	339.1	32,558	0.12
6/4/2016	1,706.2	163,678	330.2	31,698	0.00
6/5/2016	1,922.5	<b>184,532</b>	367.1	<b>36,143</b>	0.44
6/6/2016	1,717.8	164,853	303.8	29,164	0.00
6/7/2016	1,650.9	158,251	304.9	28,372	0.00
6/8/2016	1,605.7	154,224	303.6	30,044	0.13
6/9/2016	1,664.7	159,991	301.7	28,060	0.00
6/10/2016	1,602.5	153,862	302.3	29,020	0.00
6/11/2016	1,691.6	162,440	330.2	31,701	0.00
6/12/2016	1,744.6	167,390	341.9	32,823	0.00
6/13/2016	1,660.5	159,454	304.9	29,266	0.00
6/14/2016	1,664.4	159,767	279.6	26,842	0.00
6/15/2016	1,638.5	157,255	280.1	26,892	0.01
6/16/2016	1,767.9	169,620	328.4	31,522	0.38
6/17/2016	1,646.7	158,230	293.3	29,071	0.00
6/18/2016	1,603.7	154,022	327.1	30,487	0.00
6/19/2016	1,687.9	161,951	304.2	30,097	0.00
6/20/2016	1,675.4	160,862	291.5	27,086	0.00
6/21/2016	1,615.7	155,178	282.4	28,006	0.00
6/22/2016	1,602.4	153,782	280.9	26,967	0.00
6/23/2016	1,644.8	157,712	318.7	29,689	0.16
6/24/2016	1,626.2	156,283	288.8	27,722	0.00
6/25/2016	1,610.9	154,730	284.2	28,048	0.00
6/26/2016	1,795.0	172,017	329.4	30,860	0.00
6/27/2016	1,574.7	151,337	300.8	28,881	0.56
6/28/2016	1,464.1	140,574	292.0	28,031	0.07
6/29/2016	1,442.8	138,458	291.5	27,985	0.00
6/30/2016	1,498.2	142,545	279.3	26,811	0.00
<b>Peak/Max</b>		<b>184,532</b>		<b>36,143</b>	<b>0.56</b>
6/23/2016 19:15	4,567.2				
6/23/2016 11:00			1,233.3		

JULY 2016					
Date	Sadsbury P.S. Average Flow (gpm)	Sadsbury P.S. TOTAL Flow (Gallons)	Sandy Hill P.S. Average Flow (gpm)	Sandy Hill P.S. TOTAL Flow (Gallons)	Rainfall (in)
7/1/2016	1,411.7	135,510	280.0	26,878	0.00
7/2/2016	1,453.3	139,274	293.9	28,219	0.00
7/3/2016	1,420.3	136,202	284.2	27,288	0.00
7/4/2016	1,559.5	150,006	298.5	28,937	0.29
7/5/2016	1,459.6	139,896	294.4	27,985	0.08
7/6/2016	1,349.6	129,565	269.1	26,278	0.00
7/7/2016	1,337.9	128,416	256.3	24,158	0.00
7/8/2016	1,438.6	138,301	262.1	25,161	0.00
7/9/2016	1,534.5	147,280	324.9	31,190	0.01
7/10/2016	1,584.1	150,996	324.0	31,105	0.00
7/11/2016	1,399.3	135,348	285.4	28,298	0.00
7/12/2016	1,365.7	131,275	273.8	25,384	0.00
7/13/2016	1,434.6	136,959	309.6	30,633	0.12
7/14/2016	1,382.3	133,319	349.9	32,682	0.03
7/15/2016	1,297.1	123,902	295.3	28,351	0.00
7/16/2016	1,322.8	126,642	305.7	29,343	0.10
7/17/2016	1,410.3	137,148	322.6	30,970	0.00
7/18/2016	1,367.9	131,193	294.6	28,278	0.58
7/19/2016	1,479.2	141,186	282.5	27,120	0.00
7/20/2016	1,336.7	129,629	274.3	26,331	0.00
7/21/2016	1,281.7	120,840	274.6	26,360	0.00
7/22/2016	1,243.2	119,451	272.7	26,176	0.00
7/23/2016	1,308.1	125,477	274.9	26,389	0.00
7/24/2016	1,283.6	123,224	287.9	27,643	0.00
7/25/2016	1,263.7	122,658	294.4	28,267	1.68
7/26/2016	1,243.3	118,016	262.8	25,229	0.00
7/27/2016	1,203.2	115,505	259.3	24,894	0.00
7/28/2016	1,523.8	148,473	298.8	28,688	0.33
7/29/2016	1,550.5	147,519	316.9	30,425	0.39
7/30/2016	1,840.9	176,386	414.7	39,802	0.27
7/31/2016	1,651.5	158,021	391.4	37,571	0.00
<b>Peak/Max</b>		<b>176,386</b>		<b>39,802</b>	<b>1.68</b>
7/28/2016 12:45	6,497.4				
7/30/2016 17:30			1,213.8		

AUGUST 2016					
Date	Sadsbury P.S. Average Flow (gpm)	Sadsbury P.S. TOTAL Flow (Gallons)	Sandy Hill P.S. Average Flow (gpm)	Sandy Hill P.S. TOTAL Flow (Gallons)	Rainfall (in)
8/1/2016	1,531.1	145,717	297.1	29,206	0.00
8/2/2016	1,367.2	132,318	303.0	28,401	0.00
8/3/2016	1,337.7	129,423	292.6	28,085	0.00
8/4/2016	1,264.9	119,361	282.6	28,045	0.00
8/5/2016	1,208.0	115,970	279.3	26,803	0.00
8/6/2016	1,294.0	124,222	313.2	29,159	0.00
8/7/2016	1,342.6	128,887	341.9	<b>32,818</b>	0.00
8/8/2016	1,320.7	128,190	304.5	29,229	0.00
8/9/2016	1,238.7	117,790	281.6	27,038	0.00
8/10/2016	1,190.9	114,311	281.6	27,030	0.00
8/11/2016	1,184.6	115,536	269.4	25,873	0.31
8/12/2016	1,173.7	111,057	261.0	25,048	0.00
8/13/2016	1,189.7	115,669	275.9	26,492	0.00
8/14/2016	1,366.8	129,289	282.7	27,136	0.03
8/15/2016	1,277.8	122,670	260.2	24,979	0.00
8/16/2016	1,326.8	129,357	261.5	25,107	0.00
8/17/2016	1,427.8	135,617	262.3	25,188	0.57
8/18/2016	1,544.6	148,043	249.7	23,975	0.19
8/19/2016	1,585.4	151,916	248.4	23,845	0.00
8/20/2016	1,460.9	140,246	283.7	27,235	0.00
8/21/2016	1,617.9	<b>156,372</b>	308.9	29,651	0.60
8/22/2016	1,451.9	138,333	262.7	25,218	0.00
8/23/2016	1,312.2	125,976	260.8	25,926	0.00
8/24/2016	1,325.3	127,233	262.7	25,240	0.00
8/25/2016	1,339.4	130,434	260.2	24,078	0.00
8/26/2016	1,286.5	123,663	262.1	25,158	0.00
8/27/2016	1,348.9	127,488	284.2	27,287	0.00
8/28/2016	1,577.9	151,515	299.0	28,702	0.00
8/29/2016	1,361.9	130,711	254.8	24,465	0.00
8/30/2016	1,365.1	133,002	252.3	24,224	0.00
8/31/2016	1,361.1	128,718	251.1	24,104	0.00
<b>Peak/Max</b>		<b>156,372</b>		<b>32,818</b>	<b>0.60</b>
8/18/2016 19:45	3,441.6				
8/29/2016 19:15			1,185.3		

SEPTEMBER 2016					
Date	Sadsbury P.S. Average Flow (gpm)	Sadsbury P.S. TOTAL Flow (Gallons)	Sandy Hill P.S. Average Flow (gpm)	Sandy Hill P.S. TOTAL Flow (Gallons)	Rainfall (in)
9/1/2016	1,335.7	128,379	239.7	23,004	0.47
9/2/2016	1,325.9	129,073	249.4	24,768	0.00
9/3/2016	1,453.1	137,558	261.2	24,255	0.00
9/4/2016	1,487.0	142,754	271.5	26,063	0.00
9/5/2016	1,585.1	154,147	299.8	29,124	0.00
9/6/2016	1,396.2	133,915	248.5	23,511	0.00
9/7/2016	1,375.3	130,167	239.4	22,985	0.00
9/8/2016	1,389.3	133,372	230.8	23,052	0.00
9/9/2016	1,445.0	140,672	238.3	21,980	0.00
9/10/2016	1,479.3	140,311	263.2	25,270	0.00
9/11/2016	1,650.7	159,484	297.1	28,515	0.00
9/12/2016	1,412.3	134,315	240.0	23,036	0.00
9/13/2016	1,409.0	137,188	229.0	21,987	0.00
9/14/2016	1,515.0	143,514	248.2	23,825	0.00
9/15/2016	1,367.9	133,198	217.0	20,831	0.00
9/16/2016	1,336.6	126,435	225.7	21,668	0.00
9/17/2016	1,487.8	144,785	262.0	25,149	0.00
9/18/2016	1,621.9	153,743	289.7	27,809	0.00
9/19/2016	1,652.9	158,680	277.1	26,603	1.29
9/20/2016	1,477.9	141,876	240.5	23,083	0.00
9/21/2016	1,438.2	138,070	238.1	22,856	0.00
9/22/2016	1,428.4	137,129	227.9	21,878	0.00
9/23/2016	1,396.4	134,054	225.1	21,613	0.00
9/24/2016	1,452.9	141,624	249.3	23,929	0.00
9/25/2016	1,670.3	160,090	302.7	29,055	0.00
9/26/2016	1,414.3	133,887	231.3	22,204	0.00
9/27/2016	1,422.9	138,493	231.7	22,239	0.12
9/28/2016	1,435.0	135,868	240.7	23,990	0.09
9/29/2016	1,693.6	163,603	316.7	30,497	0.78
9/30/2016	2,592.7	247,873	470.8	44,219	0.77
Peak/Max		247,873		44,219	1.29
9/30/2016 3:30	6,392.7				
9/30/2016 5:15			1,413.2		

OCTOBER 2016					
Date	Sadsbury P.S. Average Flow (gpm)	Sadsbury P.S. TOTAL Flow (Gallons)	Sandy Hill P.S. Average Flow (gpm)	Sandy Hill P.S. TOTAL Flow (Gallons)	Rainfall (in)
10/1/2016	1,694.8	162,701	314.8	29,308	0.00
10/2/2016	1,858.2	<b>178,497</b>	332.6	<b>31,926</b>	0.02
10/3/2016	1,636.3	156,594	273.4	26,248	0.00
10/4/2016	1,563.9	150,506	268.7	25,794	0.00
10/5/2016	1,558.9	148,015	249.4	23,939	0.00
10/6/2016	1,502.7	145,964	246.8	23,692	0.00
10/7/2016	1,515.3	143,955	236.3	22,684	0.00
10/8/2016	1,615.1	156,516	284.0	27,954	0.26
10/9/2016	1,806.2	173,252	321.1	30,133	0.89
10/10/2016	1,663.3	159,838	262.8	25,370	0.00
10/11/2016	1,527.7	144,974	251.5	24,000	0.00
10/12/2016	1,512.3	146,757	257.6	24,730	0.00
10/13/2016	1,522.4	146,183	250.3	24,029	0.00
10/14/2016	1,451.2	137,711	216.8	20,812	0.00
10/15/2016	1,589.6	154,408	270.0	25,919	0.00
10/16/2016	1,811.6	172,104	299.3	28,735	0.00
10/17/2016	1,546.7	150,053	240.4	23,079	0.00
10/18/2016	1,583.0	150,401	232.1	22,285	0.00
10/19/2016	1,538.6	149,290	250.8	24,074	0.00
10/20/2016	1,557.9	149,568	231.8	22,255	0.00
10/21/2016	1,499.4	143,960	230.5	22,126	0.00
10/22/2016	1,604.6	154,044	262.8	25,230	0.19
10/23/2016	1,812.4	173,969	303.0	29,085	0.00
10/24/2016	1,581.4	151,848	232.3	22,305	0.00
10/25/2016	1,534.4	147,341	237.0	23,163	0.00
10/26/2016	1,500.2	143,996	235.7	22,222	0.00
10/27/2016	1,568.8	150,362	246.6	23,676	0.48
10/28/2016	1,528.4	147,001	231.3	22,205	0.00
10/29/2016	1,606.4	154,187	264.4	26,291	0.00
10/30/2016	1,824.8	175,105	283.0	26,574	0.22
10/31/2016	1,502.7	142,687	244.3	23,138	0.00
<b>Peak/Max</b>		<b>178,497</b>		<b>31,926</b>	<b>0.89</b>
10/27/2016 20:00	3,718.2				
10/4/2016 9:45			1,577.2		

NOVEMBER 2016					
Date	Sadsbury P.S. Average Flow (gpm)	Sadsbury P.S. TOTAL Flow (Gallons)	Sandy Hill P.S. Average Flow (gpm)	Sandy Hill P.S. TOTAL Flow (Gallons)	Rainfall (in)
11/1/2016	1,520.8	146,063	247.5	23,761	0.00
11/2/2016	1,497.3	143,507	236.7	22,718	0.00
11/3/2016	1,491.4	143,379	237.1	22,761	0.01
11/4/2016	1,503.8	142,787	229.2	22,003	0.00
11/5/2016	1,622.7	156,697	258.3	24,860	0.00
11/6/2016	1,752.6	168,772	303.3	29,055	0.00
11/7/2016	1,531.3	147,383	234.1	23,382	0.00
11/8/2016	1,533.6	147,163	247.7	22,875	0.00
11/9/2016	1,513.8	145,301	244.4	23,463	0.38
11/10/2016	1,563.2	148,821	235.4	22,595	0.00
11/11/2016	1,486.8	142,233	232.4	22,310	0.00
11/12/2016	1,624.7	156,919	258.4	24,803	0.00
11/13/2016	1,813.7	174,952	292.6	28,086	0.00
11/14/2016	1,541.1	147,847	223.8	21,484	0.00
11/15/2016	1,529.6	146,761	266.5	25,579	0.00
11/16/2016	1,482.4	142,472	227.1	21,797	0.00
11/17/2016	1,547.2	148,065	224.2	22,442	0.00
11/18/2016	1,487.4	141,487	221.0	20,295	0.00
11/19/2016	1,618.2	157,100	245.6	23,577	0.03
11/20/2016	1,804.4	173,191	291.8	28,013	0.00
11/21/2016	1,649.7	157,580	235.6	22,619	0.00
11/22/2016	1,604.2	154,954	250.1	24,006	0.00
11/23/2016	1,691.4	162,275	263.5	25,301	0.00
11/24/2016	1,764.1	169,343	306.4	29,419	0.00
11/25/2016	1,608.6	154,439	244.8	23,504	0.00
11/26/2016	1,655.8	158,922	268.7	25,798	0.00
11/27/2016	1,825.0	175,177	293.7	29,110	0.00
11/28/2016	1,583.6	150,998	229.0	21,126	0.00
11/29/2016	1,773.1	171,287	328.3	32,391	1.02
11/30/2016	1,841.3	175,013	347.6	32,442	0.73
<b>Peak/Max</b>		175,177		32,442	1.02
11/30/2016 23:30	5,808.4				
11/22/2016 9:00			1,503.7		

DECEMBER 2016					
Date	Sadsbury P.S. Average Flow (gpm)	Sadsbury P.S. TOTAL Flow (Gallons)	Sandy Hill P.S. Average Flow (gpm)	Sandy Hill P.S. TOTAL Flow (Gallons)	Rainfall (in)
12/1/2016	1,941.5	184,227	318.5	29,940	0.03
12/2/2016	1,569.9	149,969	230.7	22,146	0.00
12/3/2016	1,666.8	159,546	265.7	25,505	0.00
12/4/2016	1,823.2	174,860	302.6	29,959	0.00
12/5/2016	1,579.0	152,954	264.4	24,478	0.13
12/6/2016	1,748.8	167,848	349.2	33,526	0.74
12/7/2016	1,703.0	163,305	297.2	28,532	0.04
12/8/2016	1,583.8	150,567	256.3	24,607	0.00
12/9/2016	1,553.7	150,846	233.4	23,327	0.00
12/10/2016	1,691.8	161,264	278.5	26,737	0.00
12/11/2016	1,804.7	174,539	312.7	29,089	0.00
12/12/2016	1,799.9	172,844	311.7	29,920	0.42
12/13/2016	1,646.1	156,387	256.4	24,611	0.00
12/14/2016	1,628.7	157,012	253.3	24,320	0.00
12/15/2016	1,580.6	151,834	242.2	23,249	0.01
12/16/2016	1,550.1	148,579	221.6	21,275	0.00
12/17/2016	1,795.4	173,325	352.4	33,828	0.72
12/18/2016	1,973.3	<b>189,628</b>	428.1	<b>42,034</b>	0.02
12/19/2016	1,695.3	162,554	285.3	26,448	0.00
12/20/2016	1,635.6	157,091	266.1	25,547	0.00
12/21/2016	1,616.8	155,368	262.7	25,217	0.00
12/22/2016	1,637.4	156,084	256.9	25,221	0.00
12/23/2016	1,671.2	161,261	283.2	27,552	0.00
12/24/2016	1,899.1	182,269	387.2	36,248	0.39
12/25/2016	1,735.1	166,793	323.6	31,064	0.00
12/26/2016	1,782.5	170,086	288.1	27,655	0.00
12/27/2016	1,670.1	161,280	274.5	26,350	0.03
12/28/2016	1,660.6	159,456	261.5	25,106	0.00
12/29/2016	1,617.1	155,156	273.7	26,273	0.19
12/30/2016	1,668.0	160,374	274.0	26,305	0.00
12/31/2016	1,768.2	167,778	293.1	28,135	0.00
Peak/Max		<b>189,628</b>		<b>42,034</b>	<b>0.74</b>
12/30/2016 14:00	<b>6,153.7</b>				
12/6/2016 20:00			<b>1,283.2</b>		

0.2

0.1

= Water Equivalent of Snowfall

	Sadsbury PS Max		Sandy Hill Max	
2/24/2016 22:15	10,287.4			
2/24/2016 20:30			2,427.9	
Max GPD (2/25)		382,067		
Max GPD (2/3)				87,952

**COMPARISON OF INFLUENT METER FLOWS WITH MAG METER FLOWS**

	<b>INFLUENT METER FLOW (GPD)</b>	<b>MAG METER FLOW (GPD)</b>	<b>TOTAL RAINFALL (IN)</b>
<b>JAN</b>	134,040	141,747	2.63
<b>FEB</b>	171,574	158,149	4.36
<b>MAR</b>	135,588	131,924	2.01
<b>APR</b>	171,152	168,299	1.75
<b>MAY*</b>		168,975	6.65
<b>JUN</b>	142,055	158,856	1.87
<b>JUL</b>	134,478	135,448	3.88
<b>AUG</b>	130,937	130,010	1.70
<b>SEPT</b>	145,504	144,475	3.52
<b>OCT</b>	152,092	153,659	2.06
<b>NOV</b>	145,816	155,081	2.17
<b>DEC</b>	161,421	163,191	2.72
<b>AVG</b>	147,696	150,818	35.32
<b>MAX</b>	171,574	168,975	6.65

\* No influent readings provided for May 2016

## NOAA Local Climatological Data - 2016 for Philadelphia International Airport

### Summary of Hourly Data

Date	Water Equivalent of Snowfall											
	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16
1	0.00	0.10	0.00	0.05	0.61	0.00	0.00	0.00	0.47	0.00	0.00	0.03
2	0.00	0.00	0.26	0.14	0.27	0.00	0.00	0.00	0.00	0.02	0.00	0.00
3	0.00	0.46	0.02	0.00	0.34	0.12	0.00	0.00	0.00	0.00	0.01	0.00
4	0.00	0.01	0.06	0.28	0.02	0.00	0.29	0.00	0.00	0.00	0.00	0.00
5	0.00	0.40	0.00	0.00	0.00	0.44	0.08	0.00	0.00	0.00	0.00	0.13
6	0.00	0.00	0.00	0.00	1.15	0.00	0.00	0.00	0.00	0.00	0.00	0.74
7	0.00	0.00	0.00	0.19	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.04
8	0.00	0.01	0.00	0.00	0.05	0.13	0.00	0.00	0.00	0.26	0.00	0.00
9	0.00	0.05	0.00	0.39	0.00	0.00	0.01	0.00	0.00	0.89	0.38	0.00
10	0.63	0.04	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.00	0.00	0.00	0.00
12	0.00	0.01	0.00	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42
13	0.00	0.00	0.07	0.00	0.20	0.00	0.12	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	1.02	0.00	0.10	0.00	0.03	0.03	0.00	0.00	0.00	0.00
15	0.16	0.40	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01
16	0.20	0.56	0.01	0.00	0.00	0.38	0.10	0.00	0.00	0.00	0.00	0.00
17	0.04	0.00	0.02	0.00	0.12	0.00	0.00	0.57	0.00	0.00	0.00	0.72
18	0.00	0.00	0.00	0.00	0.00	0.00	0.58	0.19	0.00	0.00	0.00	0.02
19	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	1.29	0.00	0.03	0.00
20	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.03	0.00	0.00	1.96	0.00	0.00	0.60	0.00	0.00	0.00	0.00
22	0.20	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.19	0.00	0.00
23	1.40	0.28	0.00	0.11	0.08	0.16	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	1.91	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.39
25	0.00	0.09	0.00	0.00	0.00	0.00	1.68	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.02	0.00	0.00	0.56	0.00	0.00	0.12	0.48	0.00	0.03
28	0.00	0.00	0.44	0.09	0.00	0.07	0.33	0.00	0.09	0.00	0.00	0.00
29	0.00	0.01	0.00	0.00	0.59	0.00	0.39	0.00	0.78	0.00	1.02	0.19
30	0.00	0.00	0.00	0.00	0.92	0.00	0.27	0.00	0.77	0.22	0.73	0.00
31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>TOTAL</b>	<b>2.63</b>	<b>4.36</b>	<b>2.01</b>	<b>1.75</b>	<b>6.65</b>	<b>1.87</b>	<b>3.88</b>	<b>1.70</b>	<b>3.52</b>	<b>2.06</b>	<b>2.17</b>	<b>2.72</b>
<b>MAX</b>	<b>1.40</b>	<b>1.91</b>	<b>1.02</b>	<b>0.39</b>	<b>1.96</b>	<b>0.56</b>	<b>1.68</b>	<b>0.60</b>	<b>1.29</b>	<b>0.89</b>	<b>1.02</b>	<b>0.74</b>
<b>MAX 24HR</b>	<b>1.60</b>	<b>2.19</b>	<b>1.09</b>	<b>0.39</b>	<b>2.07</b>	<b>0.63</b>	<b>1.68</b>	<b>0.76</b>	<b>1.29</b>	<b>1.15</b>	<b>1.75</b>	<b>0.87</b>

**CHAPTER 94**  
**MUNICIPAL WASTELOAD MANAGEMENT**  
**2015 ANNUAL REPORT**  
**SADSBURY TOWNSHIP, CHESTER COUNTY, PA**  
**FOR THE**  
**PENNSYLVANIA AMERICAN WATER COMPANY**  
**COATESVILLE SEWERAGE SYSTEM**

**FEBRUARY 2016**

**Prepared By:**

**Herbert E. MacCombie, Jr., P.E.**  
**Consulting Engineers and Surveyors, Inc.**  
**P.O. Box 118**  
**Broomall, PA 19008**



## CHAPTER 94 MUNICIPAL WASTELOAD MANAGEMENT ANNUAL REPORT

For Calendar Year: 2015

- Permittee is owner and/or operator of a POTW or other sewage treatment facility  
 Permittee is owner and/or operator of a collection system tributary to a POTW not owned/operated by permittee

### GENERAL INFORMATION

Permittee Name:	Township of Sadsbury	Permit No.:	N/A
Mailing Address:	2920 Lincoln Highway	Effective Date:	N/A
City, State, Zip:	Sadsburyville, PA 19369	Expiration Date:	N/A
Contact Person:	Linda Shank	Renewal Due Date:	N/A
Title:	Township Secretary	Municipality:	Township of Sadsbury
Phone:	610-857-9503	County:	Chester
Email:	sadsburytownship@comcast.net	Consultant Name:	Herbert E. MacCombie, Jr, PE, Consulting Engineers & Surveyors, Inc.

### CHAPTER 94 REPORT COMPONENTS

1. Attach to this report a line graph depicting the monthly average flows (expressed in MGD) for each month for the past 5 years and projecting the flows for the next 5 years. The graph must also include a line depicting the hydraulic design capacity per the WQM permit. (25 Pa. Code § 94.12(a)(1))

Check the appropriate boxes:

- Line graph for flows attached (Attachment )  
 DEP Chapter 94 Spreadsheet used (Attachment )  
 Section 1 is not applicable (report is for a collection system).

2. Attach to this report a line graph depicting the monthly average organic loads (express as lbs BOD5/day) for each month for the past 5 years and projecting the organic loads for the next 5 years. The graph must also include a line depicting the organic design capacity of the treatment plant per the WQM permit. (25 Pa. Code § 94.12(a)(2))

Check the appropriate boxes:

- Line graph for organic loads attached (Attachment )  
 DEP Chapter 94 Spreadsheet used (Attachment )  
 Section 2 is not applicable (report is for a collection system).

3. If the DEP Chapter 94 Spreadsheet was not used to determine projections, discuss the basis for the hydraulic and organic projections. In all cases, include a description of the time needed to expand the plant to meet the load projections, if necessary, and data used to support the projections should be included in an appendix to this report. (25 Pa. Code § 94.12(a)(3))

Hydraulic loading to Stottsville Pump Station included in Attachment 1.

4. Attach a map showing all sewer extensions constructed within the past calendar year, sewer extensions approved or exempted in the past year in accordance with Act 537 and Chapter 71, but not yet constructed, and all known proposed projects which require public sewers but are in the preliminary planning stages. The map must be accompanied by a list summarizing each extension or project and the population to be served by the extension or project. If a sewer extension approval or proposed project includes schedules describing how the project will be completed over time, the listing should include that information and the effect this build-out-rate will have on populations served. (25 Pa. Code § 94.12(a)(4))

Check the appropriate boxes:

- Map showing sewer extensions constructed, approved/exempted but not yet constructed, and proposed projects attached (Attachment 1)
- List summarizing each extension or project attached (Attachment )
- Schedules describing how each project will be completed over time and effects attached (Attachment )

Comments:

5. Discuss the permittee's program for sewer system monitoring, maintenance, repair and rehabilitation, including routine and special activities, personnel and equipment used, sampling frequency, quality assurance, data analyses, infiltration/inflow monitoring, and, where applicable, maintenance and control of combined sewer regulators during the past year. Attach a separate sheet if necessary. (25 Pa. Code § 94.12(a)(5))

**Sewer System Flow Monitoring:**

Pennsylvania American Water Company (PAWC) was under contract with Sadsbury Township to monitor the Pump Station and Meters on a regular basis throughout 2015. The Township Engineer monitors flows on a regular basis. Currently, flow meter readings are obtained from a Mag Meter located along the force main discharge from the pumps at the Pump Station (effluent flow), as well as the newly installed Influent meter. It is required by Chapter 94 to report on influent flow to evaluate Pump Station hydraulic loading and for determining peaking factors for projected flows. The Influent meter began recording flow in May of 2015. PAWC records flow data while performing regular station maintenance. There is the ability to record and monitor flow remotely. However, telecommunications have not been completed to allow this to occur in 2015. It is anticipated to be functional in 2016. Influent meter flows were compared to Mag Meter flows in this report. Assumptions were made for projected flows. Using the discharge flow readings would yield inaccurately high peaking factors and falsely indicate hydraulic overloading of the pump station, which is a fairly new station. As part of the construction contract for the Influent meter, the Township made improvements to reduce I&I. The Township is in the process of evaluating possible Stottsville Pump Station upgrades to meet future demands while at the same time identifying sources of I&I.

**Sewer System Maintenance:**

For 2015 Sadsbury Township contracted with PAWC for Pump Station maintenance. The Township will contract out with local contractors for major repairs.

**Sewer System I&I Program:**

The Township and PAWC reviews flows on a regular basis in order to keep a watchful eye on potential I&I. The Township Road Crew is available on a continual basis for routine repairs. Major repairs will be performed by local contractors as the need arises.

Currently, the Lincoln Crest Mobile Home Park has been identified as a source of inflow as well as several manholes along Route 372 due to the relocation of a storm sewer line by PennDOT. Another source of inflow is from the manholes adjacent to Bucks Run along Greenbelt Drive. The Township is monitoring the flows from the Lincoln Crest Mobile Home Park on a regular basis and is working with the owner of the mobile home park to identify and remedy an apparent inflow issue. Flows from the mobile home park continue to spike during rainfall events greater than one (1) inch. Lincoln Crest has received Conditional Final Land Development approval from the Township to expand the park with additional 50 units. The park currently has 125 existing connections. Improvements associated with the expansion should curtail inflow issues. The timing of the mobile home expansion is uncertain at this juncture due to litigation. In addition, the Township is in the process of investigating another possible source of additional inflow that may be attributed to users within the Bellaire Business Park. The Township is in the process of monitoring their sewage flow and water usage to determine if there is an inflow issue.

The Township is making an effort to obtain portable flow meters to isolate and study areas of the Township Sewer System to determine potential sources of I&I. There were no reported Sanitary Sewer Overflows (SSO) during 2015.

6. Discuss the condition of the sewer system including portions of the system where conveyance capacity is being exceeded or will be exceeded in the next 5 years and portions where rehabilitation or cleaning is needed or is underway to maintain the integrity of the system and prevent or eliminate bypassing, CSOs, SSOs, excessive infiltration and other system problems. Attach a separate sheet if necessary. (25 Pa. Code § 94.12(a)(6))

**Check the appropriate boxes:**

- System experienced capacity-related bypassing, SSOs or surcharging during the report year. On a separate sheet, list the date, location, and reason for each bypass, SSO or surcharge event.
- System did not experience capacity-related bypassing, SSOs or surcharging during the report year.

**Comments:**

The Sanitary Sewer System is in Good Working Condition and no exceedances are anticipated in the next five years.

The Township is in the process of evaluating the possible need to upgrade the Stottsville Pump Station in order to provide for a capacity increase for flows from developments within West Cain Township.

7. Attach a discussion on the condition of sewage pumping (pump) stations. Include a comparison of the maximum pumping rate with present maximum flows and the projected 2-year maximum flows for each station. (25 Pa. Code § 94.12(a)(7))

**Check the appropriate boxes:**

- The collection system does not contain pump stations
- The collection system does contain pump stations (Number - 1)
- Discussion of condition of each pump station attached (Attachment 1)

8. If the sewage collection system receives industrial wastes (i.e., non-sanitary wastes), attach a report with the information listed below. (25 Pa. Code § 94.12(a)(8))

- a. A copy of any ordinance or regulation governing industrial waste discharges to the sewer system or a copy of amendments adopted since the initial submission of the ordinance or regulation under Chapter 94, if it has not previously been submitted.
- b. A discussion of the permittee's or municipality's program for surveillance and monitoring of industrial waste discharges into the sewer system during the past year.
- c. A discussion of specific problems in the sewer system or at the plant, known or suspected to be caused by industrial waste discharges and a summary of the steps being taken to alleviate or eliminate the problems. The discussion shall include a list of industries known to be discharging wastes which create problems in the plant or in the sewer system and action taken to eliminate the problem or prevent its recurrence. The report may describe pollution prevention techniques in the summary of steps taken to alleviate current problems caused by industrial waste dischargers and in actions taken to eliminate or prevent potential or recurring problems caused by industrial waste dischargers.

**Check the appropriate boxes:**

- Industrial waste report as described in 8 a., b. and c. attached (Attachment )
- Industrial pretreatment report as required in an NPDES permit attached (Attachment )

9. Existing or Projected Overload.

**Check the appropriate boxes:**

- This report demonstrates an existing hydraulic overload condition.
- This report demonstrates a projected hydraulic overload condition.
- This report demonstrates an existing organic overload condition.
- This report demonstrates a projected organic overload condition.

If one or more boxes above have been checked, attach a Corrective Action Plan (CAP) to reduce or eliminate present or projected overloaded conditions under §§ 94.21 and/or 94.22 (relating to existing overload and projected overload). (25 Pa. Code § 94.12(a)(9))

- Corrective Action Plan attached (Attachment )

10. Where required by the NPDES permit, attach a Sewage Sludge Management inventory that demonstrates a mass balance of solids coming in and leaving the facility over the previous calendar year.

- Sewage Sludge Management Inventory attached (Attachment )

11. For facilities with CSOs and where required by the NPDES permit, attach an Annual CSO Report (including satellite combined sewer systems).

- Annual CSO Report attached (Attachment )

12. For POTWs, attach a calibration report documenting that flow measuring, indicating and recording equipment has been calibrated annually. (25 Pa. Code § 94.13(b))

- Flow calibration report attached (Attachment )

**RESPONSIBLE OFFICIAL CERTIFICATION**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowledge of violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Linda Shank, Township Secretary

Name of Responsible Official

Signature

610-857-9503

Telephone No.

Date

**PREPARER CERTIFICATION**

I certify under penalty of law that this document and all attachments were prepared by me or otherwise under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowledge of violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

**James W. MacComble, P.E., P.L.S.**

Name of Preparer

Signature

610-356-9550

Telephone No.

Date

PENNSYLVANIA-AMERICAN WATER COMPANY  
COATESVILLE DISTRICT  
2015 WASTELOAD MANAGEMENT REPORT SURVEY

Municipality: **SADSBURY TOWNSHIP**

Information Furnished By:

Date: February 25, 2016

Municipality / Engineering Company: **Herbert E. MacCombie, Jr. P.E.  
Consulting Engineers and Surveyors, Inc.**

Name: **James W. MacCombie, P.E., P.L.S.**

Address: **P.O. Box 118  
Broomall, PA 19008**

Phone: **610-356-9550** Fax: **610-356-5032**

E-Mail Address: **hem.engineers@verizon.net**

1. Total Present Number of EDU's connected to PAWC system:

Residential	1,019
Commercial	92
Industrial	0

2. Total EDU's connected to PAWC system during 2015

Residential	11
Commercial	3
Industrial	0

3. Projections for future additional EDU's to be connected to PAWC system. These projections should reflect what is actually anticipated to be constructed and placed in service:

Year	Residential	Commercial	Industrial	Total EDU's
2015	19	0	0	19
2016	52	36	0	88
2017	56	70	0	126
2018	66	54	0	120
2019	48	33	0	81
Beyond 2019	167	26	5	198
Total	1,427	311	5	1,743

4. Sewer extensions constructed during 2015 that contributed flows to PAWC system:

Project / Development Name	Length & Diameter of Sewer Completed	Length and Diameter of Sewer Remaining	Total EDU's Completed	Total EDU's Remaining

5. Proposed Projects which shall require sewer extensions that will contribute flows to PAWC system but are not yet constructed.

Project / Development Name	Length & Diameter of Sewer Proposed	Total EDU's Proposed	Start of Construction (Year)
Sadsbury Commons	Combination Gravity & Forcemain	234	2017
Lafayette Square	Gravity	85	2016

6. Please provide discussion on the following:

a.) Sewer System Flow Monitoring:

Pennsylvania American Water Company (PAWC) was under contract with Sadsbury Township to monitor the Pump Station and Meters on a regular basis throughout 2015. The Township Engineer monitors flows on a regular basis. Currently, flow meter readings are obtained from a Mag Meter located along the force main discharge from the pumps at the Pump Station (effluent flow), as well as the newly installed influent meter. It is required by Chapter 94 to report on influent flow to evaluate Pump Station hydraulic loading and for determining peaking factors for projected flows. The influent meter began recording flow in May of 2015. PAWC records flow data while performing regular station maintenance. There is the ability to record and monitor flow remotely. However, telecommunications have not been completed to allow this to occur in 2015. It is anticipated to be functional in 2016. Influent meter flows were compared to Mag Meter flows in this report. Assumptions were made for projected flows. Using the discharge flow readings would yield inaccurately high peaking factors and falsely indicate hydraulic overloading of the pump station, which is a fairly new station. As part of the construction contract for the influent meter, the Township made improvements to reduce I&I. The Township is in the process of evaluating possible Stottsville Pump Station upgrades to meet future demands while at the same time identifying sources of I&I.

b.) Sewer System Maintenance:

For 2015 Sadsbury Township contracted with PAWC for Pump Station maintenance. The Township will contract out with local contractors for major repairs.

c.) Sewer System I&I Program:

The Township and PAWC reviews flows on a regular basis in order to keep a watchful eye on potential I&I. The Township Road Crew is available on a continual basis for routine repairs. Major repairs will be performed by local contractors as the need arises.

Currently, the Lincoln Crest Mobile Home Park has been identified as a source of inflow as well as several manholes along Route 372 due to the relocation of a storm sewer line by PennDOT. Another suspected sourced of inflow is from the manholes adjacent to Buck Run along Greenbelt Drive. The Township is monitoring the flows from the Lincoln Crest Mobile Home Park on a regular basis and is working with the owner of the mobile home park to identify and remedy an apparent inflow issue. Flows from the mobile home park continue to spike during rainfall events greater than one (1) inch. Lincoln Crest has received Conditional Final Land Development approval from the Township to expand the park with additional 50 units. The park currently has 125 existing connections. Improvements associated with the expansion should curtail inflow issues. The timing of the mobile home expansion is uncertain at this juncture due to litigation. In Addition, the Township is in the process of investigating another possible source of additional inflow that may be attributed to users within the Bellaire Business Park. The Township is in the process of monitoring their sewage flow and water usage to determine if there is an inflow issue.

The Township is making an effort to obtain portable flow meters to isolate and study areas of the Township Sewer System to determine potential sources of I&I. There were no reported Sanitary Sewer Overflows (SSO) during 2015.

7. Please provide discussion of the condition of your sewer system:

a.) Portions where conveyance capacity is being exceeded or will be exceeded in the next 5 years:

The Sanitary Sewer System is in Good Working Condition and no exceedances are anticipated in the next five years.

b.) Proposed projects to increase conveyance capacity, i.e. repair, rehabilitation, new construction:

As stated in 6(a), the Township is in the process of evaluating the possible need to upgrade the Stottsville Pump Station in order to provide for a capacity increase for flows from developments within West Caln Township.

8. Please provide data and discussion of your sewer flow:

Metering Point or Pump Station Name	Agreement or Rated Capacity <sup>1</sup> (gpm)	2015 Average Daily Flow (gpm)*	2016 Projected Average Daily Flow (gpm)*	2020 Projected Average Daily Flow (gpm)*
Stottsville Pump Station	1,008,000 gpd (700 gpm)	174,801 gpd (121 gpm)	179,452 gpd (125 gpm)	230,126 gpd (160 gpm)

\* Based on Average Annual Flow

1. Excluding Capacity of Backup Pump = Maximum Pump Rate

a.) Other discussion or information:

The existing Stottsville Pump Station has Two (2) alternating pumps with a rated capacity of 700 gpm each. The pump station is in good condition and is more than capable of handling the projected 5-year flow of 160 gpm. Comparison of rainfall events greater than one (1) inch and flow at the pump station seem to indicate a direct correlation at times, yet at other times the station appears to be unaffected by significant rainfall events.

The Township anticipates completing their "Act 537" update in Spring 2016. The Western Sewer District Component 3m Planning Module (DEP Code No. 1-15947-121-3m) is anticipated to be approved in Spring 2016 as well.

**THIS SECTION IS NOT APPLICABLE TO SADBURY TOWNSHIP**

9. Please provide a discussion of the industrial waste discharged into your system:

a.) Date of adoption of the ordinance or regulation governing industrial waste discharges into your system:

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b.) Discussion of program for the surveillance and monitoring of the industrial waste discharges into your system:

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c.) Discussion of specific problems in your sewer system, known or suspected to be caused by industrial waste discharges within the past 5 years:

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Sadsbury Township 2013	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	GPD	
Pump Station	6,744,812	5,258,415	7,625,701	5,708,818	-4,920,350	4,538,320	5,392,853	4,896,261	4,594,646	5,044,789	4,827,395	5,460,583	63,802,443	174,801
Sadsbury Crossing/Valley Rd.	185,900	122,700	140,700	143,600	-159,300	131,100	137,100	146,900	134,800	145,800	139,800	138,200	1,726,500	4,727
Sandy Hill	(1,052,803)	(923,650)	(1,341,110)	(1,007,692)	(943,566)	(323,928)	(953,159)	(798,002)	(740,405)	(863,365)	(790,550)	(1,001,962)	(11,340,182)	
Total	4,877,909	4,457,465	6,425,291	4,844,526	-4,136,082	3,745,494	4,576,794	4,245,159	3,778,041	4,327,224	4,176,445	4,595,821	64,187,761	
GPD	167,342	166,195	207,267	161,484	133,422	134,850	147,533	136,641	126,661	139,588	139,215	148,285		148,480
Pump Station GPD	185,307	187,901	245,660	190,267	168,721	151,277	173,963	167,944	148,166	182,736	160,913	176,148		

**Stottsville Pump Station**

	<b>Volume (Gallons)</b>	<b>ADF (GPD)</b>
<b>Jan-15</b>	5,744,512	185,307
<b>Feb-15</b>	5,258,415	187,801
<b>Mar-15</b>	7,625,701	245,990
<b>Apr-15</b>	5,708,618	190,287
<b>May-15</b>	4,920,350	158,721
<b>Jun-15</b>	4,538,320	151,277
<b>Jul-15</b>	5,392,853	173,963
<b>Aug-15</b>	4,896,261	157,944
<b>Sep-15</b>	4,384,646	146,155
<b>Oct-15</b>	5,044,789	162,735
<b>Nov-15</b>	4,827,395	160,913
<b>Dec-15</b>	5,460,583	176,148
<b>TOTAL</b>	<b>63,802,443</b>	<b>174,801 GPD</b>
		<b>121.4 GPM</b>

<b>174,801</b>	GPD - Annual Average Daily Flow (ADF)
<b>7,283</b>	GPH - Annual Average Hourly Flow (AHF)
<b>121</b>	GPM - Annual Average Flow per Minute (AFM)

<b>468,922</b>	GPD - Maximum Daily Flow (MDF) March 14, 2015
<b>36,319</b>	GPH - Peak Hourly Flow (PHF) June 27, 2015 between 8:45 PM and 9:45 PM
<b>610</b>	GPM - Peak Instantaneous Flow (PIF) June 27, 2015 @ 9:00 PM

<b>2.68</b>	Current MDF Peaking Factor = (MDF/ADF)
<b>4.99</b>	Current PHF Peaking Factor = (PHF/AHF)
<b>5.03</b>	Current Instantaneous Flow Peaking Factor = (PIF/AFM)

**Sadsbury Township 2015 Chapter 94 Annual Report  
Projection of EDU Connections and Flows (gpd)**

Project Name	Proposed Use	Location	Plan Status	Current EDUs	Remaining EDUs	TOTAL EDUs	Prior to 2015	2015	2016	2017	2018	2019	2020
Constable LD	4 SPDUs on Lg. Lots - ON LOT Sewage Disposal	Limestone Road	Approved Mar. 2009	N.A.	N.A.	N.A.							
Sadsburyville Fire Company	Fire Station Expansion	Old Wilmington Rd	ON HOLD - NO EDUs	N.A.	N.A.	N.A.							
Chester County Airport		Rt-30 & Washington Ln	Pending Approval										
Art Hoiling	2 Existing Residential EDUs, 1 Proposed	Maple Avenue	Planning Module Approved - 2 Existing Connected 27 W. Maple Ave Connected 11/17/24	3	0	3	3						
Valley View Business Center Lots 2 & 3 (National Guard)	National Guard Armory	Waverly Blvd. & Washington Ln.	Connected & Occupied	3	0	3	3						
Vietri (Lot 2 Independence Way)				3	0	3	0	3					
Witmer Fire Store (Lot 5 Independence Way)	30,000 s.f. Building Expansion	Independence Way	Approved Feb. 2009 - BUILT										
York Equity (Lot 6 Independence Way)	Office Building	Morris Farm/ Independence Way	Vacant - ON HOLD										
Lafayette Square - Phase 1				40	0	40	40						
Lafayette Square - Phase 2	7 Bldgs (86 Units) of Total 13 Bldgs (125 Units)	Old Wilmington Rd North of Rt 30	Approved Oct 2010 - Not Started	0	65	65	0			25	40		
Lafayette Square - Phase 3	2 Bldgs (20 Units) of Total 13 Bldgs (125 Units)	Old Wilmington Rd North of Rt 30	Approved Oct 2010 - Not Started	0	20	20	0					20	
Lincoln Crest Mobile Home Park*	60 Unit Expansion of 126 Existing Unit Park	Rt 30 & Sharon Ln	Conditional Final Approval - Awaiting Posting of Escrow	0	50	50	0						
Sadsbury Park - Phase 2A				50	19	69	43	7	9	10			
Sadsbury Park - Phase 4C				31	17	48	31		6	6	5		
Sadsbury Park - Phase 1	61 EDUs (All SFD)	Old Wilmington Rd south of Rt 30	Not submitted	0	41	41	0					41	
Sadsbury Park - Phase 2B	137 EDUs (138 SFD, 88 SBA+ 6 SFA Accounted for in Ph 4C)	Old Wilmington Rd south of Rt 30	Not submitted	0	126	126	0						44
Sadsbury Park - Phase 3A	42 EDUs (All SFD)	Old Wilmington Rd south of Rt 30	Not submitted	0	42	42	0						
Sadsbury Park - Phase 3B	46 EDUs (4 SFD, 32 SFA)	Old Wilmington Rd south of Rt 30	Not submitted	0	46	46	0						
Sadsbury Park - Phase 4A	57 EDUs (All SFD)	Old Wilmington Rd south of Rt 30	Not submitted	0	57	57	0						
Sadsbury Park - Phase 4B	12 EDUs (All SFD)	Old Wilmington Rd south of Rt 30	Not submitted	0	12	12	0						
Sadsbury Township - Phase 1 Sewers	Existing Residence	28 Chestnut Street	Connected	1	0	1	1						
Sadsbury Township - Phase 1 Sewers	Existing Residence	2991 Lincoln Highway	Connected	1	0	1	0	1					
Sadsbury Township - Phase 3A Sewers	House and Apartment (2 EDUs)	31 Morris Lane	Connected	2	0	2	2						
Sadsbury Township - Phase 3A Sewers	Existing Residence	2907 Lincoln Highway	Connected	1	0	1	1						
Sadsbury Township - Phase 3A Sewers	Existing Residence	2907 Lincoln Highway	Connected	1	0	1	0	1					
Sadsbury Township - Phase 3A Sewers	Existing Residence	2907 Lincoln Highway	Connected	1	0	1	0	1					
Sadsbury Township - Phase 4 Sewers	Existing Residential EDUs	Valley Road	Phase 4 Sewer Construction Complete - Not all EDUs connected	13	67	80	13		4	4	4	4	4
Sadsbury Township Misc	Existing Residence	Renovated Farmhouse at Sads Park Development	Completed & Connected	1	0	1	1						
Sadsbury Township Misc	Existing Residence	2931 Lincoln Highway	Connected	1	0	1	1						
Sadsbury Township Misc	Existing Residence	2931 Lincoln Highway	Connected	1	0	1	0	1					
Sadsbury Township Misc (Zing Sushi Restaurant)	Existing Commercial	2952 Lincoln Highway	Existing Lateral retrofitted with Grease Trap	1	0	1	1						

**Sadsbury Township 2015 Chapter 94 Annual Report  
Projection of EDU Connections and Flows (gpd)**

Project Name	Proposed Use	Location	Plan Status	Current EDUs	Remaining EDUs	TOTAL EDUs	Prior to 2015	2015	2016	2017	2018	2019	2020
Western Sewer District (WSD)	Total WSD Flow 57,010 gpd (234 EDUs)		Special Study Component 3m Sewage Facilities Planning Module Pending RADEP Approval (DEP Code No. 1-15947-121-3m)	0	234	234	0			43	77	55	33
WSD - Sadsbury Commons (43,407 gpd)	500,000 sq. ft. Shopping Center	Rt 30 & Rt 10	Pending WSD Approval & Act 537 Plan Update	0	178	178	0			25	50	50	30
WSD - Sadsbury Commons Medical Office Building (736 gpd)	40,000 sq. ft. Medical Office Facility - ON LOT Sewage Disposal	Rt 10 Across from WalMart	Approved & Occupied - Currently On-lot Disposal pending approval of WSD Special Study & Act 537 Plan Approval	0	3	3	0			3			
WSD - Sadsbury Commons Reserve (698 gpd)				0	3	3	0						
WSD - Sadsbury Commons Misc. Flow (6,272 gpd)	Existing and Future Residential and Commercial Uses	Tax Parcel #87-1-30 (400 gpd), Hershey Motors (400 gpd), Hershey Homestead (245 gpd), Tractor Supply Store (400 gpd), Hershey Farm Market (3,000 gpd), Tax Parcel #37-B-1-1 (400 gpd), Hershey Lane Residences (1A) (3,427 gpd)	Pending WSD Approval & Act 537 Plan Update	0	26	26	0			13	7	3	3
WSD - CVS Total Development (5,897 gpd)	CVS (400 gpd), Restaurant Pad (5,090 gpd), Building "A" Retail (264 gpd), Building "B" Retail (203 gpd)	NE Corner of Rt 30 & Rt 30	Pending WSD Approval & Act 537 Plan Update	0	24	24	0			2	20	2	
* - Improvements should curtail Inflow													
<b>TOTAL EDUs</b>				<b>194</b>	<b>796</b>	<b>950</b>	<b>140</b>	<b>14</b>	<b>19</b>	<b>88</b>	<b>125</b>	<b>120</b>	<b>81</b>
<b>TOTAL FLOW (GPD) @ 244.8 GPD/EDU</b>				<b>37,699</b>	<b>194,861</b>	<b>232,560</b>	<b>34,272</b>	<b>3,427</b>	<b>4,651</b>	<b>21,542</b>	<b>30,845</b>	<b>29,376</b>	<b>19,829</b>
<b>TOTAL EDUs (To Stottsville PS)</b>				<b>154</b>	<b>562</b>	<b>716</b>	<b>140</b>	<b>14</b>	<b>19</b>	<b>45</b>	<b>45</b>	<b>65</b>	<b>48</b>
<b>TOTAL FLOW (GPD) @ 244.8 GPD/EDU (To Stottsville PS)</b>				<b>37,699</b>	<b>137,578</b>	<b>175,277</b>	<b>34,272</b>	<b>3,427</b>	<b>4,651</b>	<b>11,016</b>	<b>11,995</b>	<b>15,912</b>	<b>11,750</b>
<b>STOTTSVILLE PUMP STATION 2-YR PROJECTION (GPD) - Note WSD Flow Not Tributary to Stottsville PS</b>								<b>174,801</b>	<b>175,452</b>	<b>150,468</b>	<b>202,463</b>	<b>218,375</b>	<b>230,126</b>

Sandy Hill (W Caln)			Sandy Hill Percentage of Stottsville PS Flow	
	Volume (Gallons)	ADF (GPD)		
Jan-15	1,052,803	33,961	5,744,512	18.3%
Feb-15	923,650	32,988	5,258,415	17.6%
Mar-15	1,341,110	43,262	7,625,701	17.6%
Apr-15	1,007,692	33,590	5,708,618	17.7%
May-15	943,568	30,438	4,920,350	19.2%
Jun-15	923,926	30,798	4,538,320	20.4%
Jul-15	953,159	30,747	5,892,853	17.7%
Aug-15	798,002	25,742	4,896,261	16.3%
Sep-15	740,405	24,580	4,384,646	16.9%
Oct-15	863,365	27,850	5,044,789	17.1%
Nov-15	790,550	26,352	4,827,395	16.4%
Dec-15	1,001,962	32,321	5,460,583	18.3%
<b>TOTAL</b>	<b>11,340,192</b>	<b>31,069 GPD</b>	<b>63,802,443</b>	<b>17.8%</b>

**21.6 GPM**

<b>31,069</b>	GPD - Annual Average Daily Flow (ADF)
<b>1,294.5</b>	GPH - Annual Average Hourly Flow (AHF)
<b>21.6</b>	GPM - Annual Average Flow per Minute (AFM)

<b>78,451</b>	GPD - Maximum Daily Flow (MDF) March 14, 2015
<b>4,982</b>	GPH - Peak Hourly Flow (PHF) April 20, 2015 between 6:15 AM and 7:15 AM
<b>148</b>	GPM - Peak Instantaneous Flow (PIF) February 17, 2015 @ 9:15 AM

<b>2.53</b>	Current MDF Peaking Factor = (MDF/ADF)
<b>3.85</b>	Current PHF Peaking Factor = (PHF/AHF)
<b>6.86</b>	Current Instantaneous Flow Peaking Factor = (PIF/AFM)

JANUARY 2015						
Date	Sadsbury P.S. Average Flow (gpm)	Sadsbury P.S. TOTAL Flow (Gallons)	Sandy Hill P.S. Average Flow (gpm)	Sandy Hill P.S. TOTAL Flow (Gallons)	Rainfall (in)	Snowfall (in)
1/1/2015	121.4	174,766	23.5	33,826	0.00	
1/2/2015	123.0	177,072	22.0	31,687	0.00	
1/3/2015	122.7	176,669	24.7	35,607	0.72	
1/4/2015	151.5	218,089	33.8	48,689	0.37	
1/5/2015	123.7	178,078	22.4	32,261	0.00	
1/6/2015	118.1	170,049	21.8	31,423	0.12	1.5
1/7/2015	121.7	175,219	20.9	30,130	0.00	
1/8/2015	119.1	171,573	21.5	30,998	0.00	
1/9/2015	119.1	171,444	19.9	28,657	0.01	
1/10/2015	126.2	181,720	23.0	33,086	0.00	
1/11/2015	139.4	200,673	26.4	38,079	0.00	
1/12/2015	137.9	198,614	27.5	39,594	0.59	
1/13/2015	124.3	179,007	21.1	30,412	0.00	
1/14/2015	123.2	177,416	21.1	30,318	0.00	
1/15/2015	120.3	173,164	20.8	30,011	0.00	
1/16/2015	116.9	168,283	20.0	28,780	0.00	
1/17/2015	127.0	182,861	23.5	33,852	0.00	
1/18/2015	152.9	220,107	28.1	40,459	1.84	
1/19/2015	142.5	205,134	24.9	35,880	0.00	
1/20/2015	122.1	175,891	21.8	31,372	0.00	
1/21/2015	122.3	176,060	22.5	32,433	0.06	0.5
1/22/2015	119.9	172,695	21.1	30,444	0.03	
1/23/2015	114.8	165,368	21.4	30,843	0.16	0.6
1/24/2015	151.4	217,992	32.6	46,951	0.55	0.4
1/25/2015	154.2	222,066	30.1	43,388	0.00	
1/26/2015	134.2	193,220	23.6	34,040	0.00	0.4
1/27/2015	136.2	196,181	24.1	34,719	0.07	0.8
1/28/2015	126.9	182,695	22.1	31,860	0.00	
1/29/2015	126.0	181,435	21.2	30,553	0.00	
1/30/2015	122.0	175,702	20.8	29,980	0.00	0.1
1/31/2015	128.5	183,101	22.5	32,471	0.00	
Peak/Max		222,066		48,689	1.84	
1/18/2015 13:00	320.6					
1/4/2015 19:15			56.3			

 = Water Equivalent of Snowfall

FEBRUARY 2015						
Date	Sadsbury P.S. Average Flow (gpm)	Sadsbury P.S. TOTAL Flow (Gallons)	Sandy Hill P.S. Average Flow (gpm)	Sandy Hill P.S. TOTAL Flow (Gallons)	Rainfall (in)	Snowfall (in)
2/1/2015	139.3	200,635	26.8	38,552	0.06	0.7
2/2/2015	158.4	228,110	29.7	42,735	0.93	0.1
2/3/2015	134.8	194,156	23.4	33,694	0.00	
2/4/2015	129.1	185,936	22.2	31,910	0.00	
2/5/2015	128.8	185,493	22.4	32,193	0.00	
2/6/2015	124.2	178,897	21.4	30,797	0.00	
2/7/2015	133.6	192,429	24.4	35,112	0.00	
2/8/2015	143.1	206,035	26.3	37,869	0.00	
2/9/2015	123.7	178,129	21.8	31,343	0.03	
2/10/2015	124.3	179,043	22.6	32,556	0.00	
2/11/2015	122.0	175,619	22.9	32,925	0.00	
2/12/2015	124.0	178,525	22.0	31,664	0.00	
2/13/2015	122.8	176,841	20.6	29,646	0.00	
2/14/2015	128.4	184,950	24.0	34,562	0.04	1.3
2/15/2015	137.0	197,212	24.8	35,698	0.00	
2/16/2015	142.1	204,670	23.4	33,755	0.02	0.3
2/17/2015	132.3	190,514	24.3	34,991	0.24	3.4
2/18/2015	123.6	178,004	21.9	31,525	0.00	
2/19/2015	126.8	182,600	20.8	29,947	0.00	
2/20/2015	127.6	183,695	19.4	27,982	0.00	
2/21/2015	133.2	191,823	23.4	33,719	0.76	4.8
2/22/2015	146.3	210,730	26.7	38,429	0.28	
2/23/2015	125.1	180,165	20.5	29,557	0.00	
2/24/2015	128.1	184,400	20.2	29,039	0.00	
2/25/2015	125.5	180,765	21.6	31,046	0.00	
2/26/2015	121.4	174,772	20.5	29,574	0.00	
2/27/2015	115.7	166,596	20.3	29,284	0.00	
2/28/2015	128.9	185,620	23.0	33,085	0.00	
Peak/Max		228,110		42,735	0.93	
2/1/2015 11:30	235.7					
2/17/2015 10:00			61.9			

☐ = Water Equivalent of Snowfall

MARCH 2015						
Date	Sadsbury P.S. Average Flow (gpm)	Sadsbury P.S. TOTAL Flow (Gallons)	Sandy Hill P.S. Average Flow (gpm)	Sandy Hill P.S. TOTAL Flow (Gallons)	Rainfall (in)	Snowfall (in)
3/1/2015	139.6	201,069	25.2	36,334	0.52	0.4
3/2/2015	139.9	201,511	23.6	34,040	0.00	
3/3/2015	123.3	177,618	20.0	28,730	0.61	0.1
3/4/2015	188.2	270,993	29.7	42,698	0.49	
3/5/2015	182.9	263,392	31.0	44,582	0.78	7.5
3/6/2015	132.3	190,502	24.1	34,638	0.00	
3/7/2015	132.6	190,932	24.8	35,666	0.00	
3/8/2015	163.7	235,800	30.1	43,365	0.00	
3/9/2015	177.7	255,828	31.5	45,312	0.00	
3/10/2015	229.9	331,121	40.0	57,589	0.71	
3/11/2015	259.1	373,049	44.9	64,717	0.00	
3/12/2015	176.9	254,805	32.9	47,401	0.00	
3/13/2015	148.7	214,182	27.8	40,023	0.08	
3/14/2015	325.6	468,922	54.5	78,451	0.95	
3/15/2015	206.1	296,760	34.3	49,340	0.00	
3/16/2015	167.8	241,607	28.4	40,953	0.00	
3/17/2015	155.3	223,689	26.9	38,771	0.00	
3/18/2015	143.2	206,143	24.6	35,494	0.00	
3/19/2015	134.3	193,406	23.3	33,499	0.00	
3/20/2015	142.8	205,699	26.4	38,047	0.70	3.9
3/21/2015	150.3	216,467	28.0	40,261	0.00	
3/22/2015	156.6	225,565	28.9	41,575	0.00	
3/23/2015	140.0	201,644	22.4	32,272	0.00	
3/24/2015	134.3	193,460	22.4	32,247	0.00	
3/25/2015	137.9	198,615	21.5	30,964	0.05	0.4
3/26/2015	147.1	211,861	26.5	38,203	0.34	
3/27/2015	210.6	303,209	37.8	54,364	0.20	
3/28/2015	161.2	232,164	27.1	39,050	0.00	
3/29/2015	162.9	234,586	27.7	39,922	0.00	
3/30/2015	142.7	205,551	23.0	33,140	0.03	0.1
3/31/2015	134.0	192,894	22.2	31,943	0.06	
Peak/Max		468,922		78,451	0.95	
3/14/2015 11:30	541.5					
3/14/2015 9:45			89.9			

APRIL 2015					
Date	Sadsbury P.S. Average Flow (gpm)	Sadsbury P.S. TOTAL Flow (Gallons)	Sandy Hill P.S. Average Flow (gpm)	Sandy Hill P.S. TOTAL Flow (Gallons)	Rainfall (in)
4/1/2015	132.4	190,662	22.3	32,116	0.00
4/2/2015	138.2	199,055	22.6	32,531	0.00
4/3/2015	131.7	189,691	23.7	34,190	0.12
4/4/2015	143.3	206,310	25.8	37,191	0.00
4/5/2015	133.2	191,858	24.7	35,563	0.00
4/6/2015	140.2	201,903	23.3	33,493	0.00
4/7/2015	130.1	187,409	22.2	31,937	0.24
4/8/2015	128.3	184,749	21.8	31,400	0.03
4/9/2015	127.5	183,607	21.6	31,075	0.02
4/10/2015	126.9	182,786	20.8	29,980	0.07
4/11/2015	131.9	189,884	24.1	34,735	0.00
4/12/2015	141.2	203,365	26.8	38,604	0.00
4/13/2015	128.2	184,554	22.4	32,307	0.00
4/14/2015	127.6	183,722	21.1	30,318	0.12
4/15/2015	151.9	218,771	22.2	31,951	0.00
4/16/2015	139.6	201,091	20.8	29,911	0.00
4/17/2015	133.3	191,950	21.7	31,288	0.15
4/18/2015	132.4	190,717	24.0	34,568	0.00
4/19/2015	147.9	213,019	25.0	36,062	0.00
<b>4/20/2015</b>	<b>151.6</b>	<b>218,364</b>	<b>31.9</b>	<b>45,938</b>	<b>2.01</b>
4/21/2015	143.8	207,000	30.2	43,420	0.82
4/22/2015	126.4	182,007	22.9	32,957	0.00
4/23/2015	125.8	181,094	21.2	30,569	0.00
4/24/2015	120.9	174,057	21.1	30,336	0.00
4/25/2015	126.0	181,490	23.7	34,172	0.00
4/26/2015	138.5	199,434	26.0	37,509	0.00
4/27/2015	117.0	168,434	21.0	30,186	0.00
4/28/2015	120.4	173,419	21.3	30,660	0.00
4/29/2015	122.9	177,008	21.6	31,158	0.00
4/30/2015	115.5	166,348	21.9	31,569	0.00
<b>Peak/Max</b>		<b>218,771</b>		<b>45,938</b>	<b>2.01</b>
4/20/2015 8:00	298.8				
4/20/2015 7:15			83.0		

MAY 2015					
Date	Sadsbury P.S. Average Flow (gpm)	Sadsbury P.S. TOTAL Flow (Gallons)	Sandy Hill P.S. Average Flow (gpm)	Sandy Hill P.S. TOTAL Flow (Gallons)	Rainfall (in)
5/1/2015	114.2	164,434	22.1	31,850	0.00
5/2/2015	116.8	168,250	23.1	33,198	0.00
5/3/2015	127.8	183,989	26.1	37,544	0.00
5/4/2015	117.3	168,879	21.4	30,764	0.00
5/5/2015	116.5	167,713	20.3	29,952	0.00
5/6/2015	114.7	165,190	21.4	30,858	0.00
5/7/2015	115.5	166,384	22.3	32,105	0.00
5/8/2015	112.7	162,220	20.3	29,276	0.00
5/9/2015	122.6	176,501	24.5	35,331	0.03
5/10/2015	121.1	174,324	26.0	37,394	0.00
5/11/2015	113.1	162,819	21.8	31,341	0.00
5/12/2015	108.7	156,564	21.1	30,336	0.00
5/13/2015	111.4	160,396	21.3	30,725	0.00
5/14/2015	109.8	158,154	12.0	17,338	0.00
5/15/2015	110.1	158,543	18.2	26,153	0.00
5/16/2015	108.9	156,887	22.6	32,519	0.33
5/17/2015	121.4	174,874	24.7	35,568	0.01
5/18/2015	110.9	159,661	21.2	30,578	0.03
5/19/2015	107.1	154,240	20.5	29,577	0.01
5/20/2015	106.7	153,637	19.8	28,547	0.00
5/21/2015	102.5	147,554	19.6	28,234	0.18
5/22/2015	101.9	146,680	19.1	27,434	0.00
5/23/2015	100.0	143,982	21.6	31,080	0.00
5/24/2015	99.2	142,823	21.9	31,489	0.00
5/25/2015	108.5	156,195	23.5	33,871	0.00
5/26/2015	106.3	153,040	19.6	28,203	0.00
5/27/2015	100.8	145,210	18.2	26,242	0.60
5/28/2015	104.9	151,004	19.4	27,953	0.00
5/29/2015	96.0	138,265	18.1	26,115	0.00
5/30/2015	101.6	146,275	21.8	31,383	0.00
5/31/2015	107.8	155,199	21.7	31,310	0.00
Peak/Max		183,989		37,544	0.60
5/3/2015 21:45	219.7				
5/13/2015 21:45			56.9		

JUNE 2015					
Date	Sadsbury P.S. Average Flow (gpm)	Sadsbury P.S. TOTAL Flow (Gallons)	Sandy Hill P.S. Average Flow (gpm)	Sandy Hill P.S. TOTAL Flow (Gallons)	Rainfall (in)
6/1/2015	120.9	174,165	23.6	33,954	1.96
6/2/2015	107.4	154,626	23.2	33,383	0.30
6/3/2015	99.5	143,309	20.4	29,310	0.01
6/4/2015	96.8	139,332	19.1	27,522	0.00
6/5/2015	95.4	137,423	19.1	27,501	0.13
6/6/2015	101.0	145,427	22.4	32,217	0.05
6/7/2015	103.7	149,393	23.4	33,673	0.00
6/8/2015	101.3	145,912	21.3	30,663	0.88
6/9/2015	102.4	147,446	23.1	33,318	0.02
6/10/2015	95.0	136,816	19.5	28,089	0.00
6/11/2015	97.4	140,256	19.1	27,457	0.00
6/12/2015	95.4	137,407	19.3	27,852	0.00
6/13/2015	90.1	129,768	19.8	28,520	0.00
6/14/2015	99.0	142,576	22.1	31,796	0.09
6/15/2015	97.1	139,882	19.2	27,706	0.00
6/16/2015	91.1	131,195	19.0	27,341	0.00
6/17/2015	92.2	132,712	18.9	27,210	0.00
6/18/2015	111.9	161,143	25.1	36,118	0.65
6/19/2015	98.3	141,489	21.6	31,037	0.27
6/20/2015	96.0	138,219	21.4	30,873	0.48
6/21/2015	103.6	149,183	23.9	34,433	0.30
6/22/2015	99.6	143,483	19.7	28,303	0.00
6/23/2015	93.4	134,469	17.8	25,635	0.55
6/24/2015	66.6	95,900	15.4	22,167	0.00
6/25/2015	104.4	150,315	21.3	30,672	0.13
6/26/2015	101.1	145,521	19.9	28,698	0.00
6/27/2015	171.2	246,535	28.3	40,751	1.34
6/28/2015	165.4	238,113	32.0	46,132	0.22
6/29/2015	117.1	168,662	21.7	31,273	0.00
6/30/2015	136.1	196,017	21.1	30,324	1.50
Peak/Max		246,535		46,132	1.96
6/27/2015 21:45	605.3				
6/27/2015 21:45			58.3		

JULY 2015					
Date	Sadsbury P.S. Average Flow (gpm)	Sadsbury P.S. TOTAL Flow (Gallons)	Sandy Hill P.S. Average Flow (gpm)	Sandy Hill P.S. TOTAL Flow (Gallons)	Rainfall (in)
7/1/2015	156.2	224,917	26.0	37,461	0.08
7/2/2015	123.3	177,613	21.1	30,330	0.02
7/3/2015	117.5	169,191	21.8	31,330	0.00
7/4/2015	113.1	162,931	21.5	31,024	0.02
7/5/2015	116.1	167,243	22.2	31,948	0.00
7/6/2015	116.5	167,711	21.9	31,558	0.00
7/7/2015	124.0	178,525	21.4	30,865	0.00
7/8/2015	114.9	165,513	22.8	32,802	0.00
7/9/2015	127.7	183,824	22.4	32,218	0.76
7/10/2015	117.6	169,399	22.8	32,901	0.00
7/11/2015	121.9	175,500	22.8	32,771	0.00
7/12/2015	130.9	188,541	23.9	34,487	0.00
7/13/2015	119.8	172,536	20.5	29,504	0.00
7/14/2015	118.3	170,332	20.5	29,480	0.58
7/15/2015	125.6	180,805	22.1	31,769	0.69
7/16/2015	114.7	165,173	19.7	28,352	0.00
7/17/2015	112.0	161,287	21.0	30,275	0.00
7/18/2015	118.4	170,475	22.8	32,884	0.00
7/19/2015	121.8	175,345	25.5	36,717	0.00
7/20/2015	115.3	166,054	21.4	30,798	0.03
7/21/2015	118.5	170,689	19.8	28,458	0.00
7/22/2015	119.9	172,587	19.4	27,947	0.00
7/23/2015	117.1	168,668	19.7	28,320	0.00
7/24/2015	105.1	151,280	19.8	28,516	0.00
7/25/2015	106.9	153,980	21.5	30,932	0.00
7/26/2015	116.9	168,394	22.8	32,834	0.00
7/27/2015	125.5	180,697	19.8	28,459	0.47
7/28/2015	135.3	194,851	18.9	27,219	0.00
7/29/2015	130.0	187,154	18.5	26,592	0.00
7/30/2015	125.6	180,916	18.9	27,187	0.51
7/31/2015	116.6	167,965	18.6	26,787	0.00
Peak/Max		224,917		37,461	0.76
7/1/2015 13:00	334.7				
7/9/2015 20:45			48.6		

AUGUST 2015					
Date	Sadsbury P.S.	Sadsbury P.S. TOTAL Flow (Gallons)	Sandy Hill P.S.	Sandy Hill P.S.	Rainfall (in)
	Average Flow (gpm)		Average Flow (gpm)	TOTAL Flow (Gallons)	
8/1/2015	114.8	165,345	19.6	28,272	0.00
8/2/2015	116.6	167,886	19.9	28,618	0.00
8/3/2015	111.0	159,828	17.8	25,675	0.00
8/4/2015	117.5	169,179	17.8	25,657	0.01
8/5/2015	117.2	168,797	17.2	24,699	0.00
8/6/2015	111.5	160,545	17.2	24,797	0.08
8/7/2015	108.4	156,113	17.0	24,422	0.00
8/8/2015	103.6	149,174	19.8	28,563	0.00
8/9/2015	116.2	167,323	21.0	30,170	0.00
8/10/2015	123.1	177,311	17.9	25,808	0.04
8/11/2015	118.0	169,866	18.8	27,084	0.72
8/12/2015	108.8	156,628	17.9	25,719	0.00
8/13/2015	105.6	152,015	16.6	23,870	0.00
8/14/2015	107.5	154,766	17.5	25,224	0.00
8/15/2015	107.3	154,472	17.6	25,306	0.00
8/16/2015	118.5	170,602	19.4	27,866	0.00
8/17/2015	119.5	172,029	17.1	24,559	0.00
8/18/2015	116.0	167,056	16.8	24,163	0.00
8/19/2015	113.1	162,886	16.1	23,175	0.00
8/20/2015	113.1	162,870	18.3	26,397	0.13
8/21/2015	99.9	143,809	16.4	23,674	0.00
8/22/2015	101.2	145,663	16.7	24,052	0.00
8/23/2015	108.3	155,927	19.5	28,038	0.00
8/24/2015	101.3	145,906	16.7	24,014	0.00
8/25/2015	100.2	144,296	16.6	23,952	0.00
8/26/2015	99.2	142,889	16.0	23,079	0.00
8/27/2015	102.0	146,897	16.6	23,894	0.00
8/28/2015	103.4	148,888	16.5	23,728	0.00
8/29/2015	101.2	145,720	18.2	26,213	0.00
8/30/2015	115.3	166,091	21.2	30,575	0.00
8/31/2015	99.7	143,574	17.9	25,781	0.00
Peak/Max		177,311		30,575	0.72
8/11/2015 21:45	224.6				
8/31/2015 20:30			48.3		

SEPTEMBER 2015					
Date	Sadsbury	Sadsbury P.S. TOTAL Flow (Gallons)	Sandy Hill	Sandy Hill	Rainfall (In)
	P.S. Average Flow (gpm)		P.S. Average Flow (gpm)	P.S. TOTAL Flow (Gallons)	
9/1/2015	105.4	151,808	18.6	26,799	0.00
9/2/2015	106.4	153,240	15.4	22,132	0.00
9/3/2015	103.0	148,274	16.6	23,967	0.00
9/4/2015	98.0	141,146	16.6	23,970	0.00
9/5/2015	93.4	134,496	17.0	24,536	0.00
9/6/2015	94.3	135,811	16.3	23,451	0.00
9/7/2015	109.0	156,891	19.5	28,136	0.00
9/8/2015	99.8	143,686	16.4	23,631	0.00
9/9/2015	97.6	140,588	15.5	22,273	0.00
9/10/2015	103.3	148,710	19.5	28,025	4.76
9/11/2015	94.7	136,315	15.3	22,020	0.01
9/12/2015	105.4	151,733	20.8	30,006	0.02
9/13/2015	114.7	165,203	22.0	31,613	0.00
9/14/2015	98.7	142,172	17.5	25,192	0.00
9/15/2015	96.6	139,072	15.9	22,871	0.00
9/16/2015	93.1	134,065	15.9	22,857	0.00
9/17/2015	93.3	134,420	15.7	22,659	0.00
9/18/2015	89.4	128,774	14.6	20,971	0.00
9/19/2015	98.3	141,545	16.5	23,729	0.00
9/20/2015	108.4	156,163	20.5	29,539	0.00
9/21/2015	99.7	143,560	14.8	21,369	0.00
9/22/2015	97.8	140,809	14.9	21,501	0.00
9/23/2015	89.9	142,483	15.3	22,011	0.00
9/24/2015	102.9	148,124	16.4	23,663	0.00
9/25/2015	101.4	145,989	13.9	20,005	0.00
9/26/2015	99.6	143,366	16.8	24,203	0.00
9/27/2015	115.4	166,184	20.3	29,211	0.00
9/28/2015	101.0	145,478	16.8	24,139	0.00
9/29/2015	100.0	143,932	16.2	23,320	1.21
9/30/2015	124.2	178,846	22.6	32,591	0.27
Peak/Max		178,846		32,591	4.76
9/30/2015 2:30	216.7				
9/27/2015 20:15			47.3		

OCTOBER 2015					
Date	Sadsbury P.S. Average Flow (gpm)	Sadsbury P.S. TOTAL Flow (Gallons)	Sandy Hill P.S. Average Flow (gpm)	Sandy Hill P.S. TOTAL Flow (Gallons)	Rainfall (in)
10/1/2015	115.9	166,864	20.0	28,843	0.49
10/2/2015	121.9	175,580	24.5	35,307	1.80
10/3/2015	133.3	191,903	31.8	45,784	0.01
10/4/2015	127.3	183,279	26.4	37,990	0.00
10/5/2015	112.4	161,862	19.6	28,247	0.00
10/6/2015	107.8	155,249	19.8	28,523	0.00
10/7/2015	109.7	157,906	19.3	27,837	0.00
10/8/2015	111.5	160,626	19.1	27,476	0.00
10/9/2015	114.6	164,993	19.6	28,233	0.29
10/10/2015	121.3	174,618	19.9	28,592	0.00
10/11/2015	122.0	175,700	19.9	28,682	0.00
10/12/2015	113.0	162,752	18.9	27,219	0.00
10/13/2015	100.3	144,403	16.4	23,627	0.00
10/14/2015	106.1	152,753	16.5	23,755	0.00
10/15/2015	107.9	155,346	16.3	23,475	0.00
10/16/2015	103.5	148,980	15.1	21,737	0.00
10/17/2015	109.8	158,061	19.3	27,796	0.00
10/18/2015	122.3	176,178	21.8	31,358	0.00
10/19/2015	107.3	154,578	16.6	23,910	0.00
10/20/2015	106.1	152,822	16.9	24,327	0.00
10/21/2015	105.9	152,488	15.1	21,689	0.00
10/22/2015	102.3	147,327	16.8	24,208	0.00
10/23/2015	97.4	140,207	16.7	24,026	0.00
10/24/2015	105.2	151,446	17.9	25,729	0.00
10/25/2015	125.1	180,110	20.8	29,961	0.00
10/26/2015	107.3	154,530	15.6	22,445	0.00
10/27/2015	108.3	156,008	15.9	22,842	0.00
10/28/2015	130.1	187,358	23.3	33,590	0.58
10/29/2015	122.5	176,458	23.0	33,182	0.59
10/30/2015	109.0	156,922	16.4	23,563	0.00
10/31/2015	115.9	166,844	20.4	29,412	0.00
Peak/Max		191,903		45,784	1.80
10/4/2015 21:15	223.7				
10/4/2015 20:00			54.5		

NOVEMBER 2015					
Date	Sadsbury P.S. Average Flow (gpm)	Sadsbury P.S. TOTAL Flow (Gallons)	Sandy Hill P.S. Average Flow (gpm)	Sandy Hill P.S. TOTAL Flow (Gallons)	Rainfall (In)
11/1/2015	124.5	179,318	21.2	30,459	0.00
11/2/2015	113.6	163,647	17.4	25,114	0.00
11/3/2015	110.3	158,777	16.8	24,217	0.00
11/4/2015	103.8	149,501	16.7	24,005	0.00
11/5/2015	108.0	155,537	17.5	25,242	0.10
11/6/2015	106.9	153,939	16.4	23,676	0.02
11/7/2015	110.8	159,520	18.5	26,605	0.01
11/8/2015	125.9	181,333	20.5	29,502	0.00
11/9/2015	109.1	157,112	15.9	22,871	0.00
11/10/2015	114.5	164,927	19.8	28,526	0.65
11/11/2015	111.5	160,623	19.0	27,296	0.01
11/12/2015	111.9	161,202	17.7	25,491	0.13
11/13/2015	107.9	155,420	16.3	23,462	0.00
11/14/2015	115.2	165,902	19.4	27,940	0.00
11/15/2015	118.5	170,645	21.0	30,204	0.00
11/16/2015	105.3	151,589	16.5	23,760	0.00
11/17/2015	103.3	148,807	15.6	22,419	0.00
11/18/2015	100.1	144,113	15.9	22,832	0.00
<b>11/19/2015</b>	<b>122.0</b>	<b>175,707</b>	<b>22.9</b>	<b>32,956</b>	<b>0.82</b>
11/20/2015	110.0	158,382	17.2	24,785	0.00
11/21/2015	113.8	163,902	18.9	27,158	0.00
11/22/2015	127.5	183,632	21.1	30,383	0.00
11/23/2015	109.3	157,448	16.8	24,251	0.00
11/24/2015	104.7	150,738	17.1	24,670	0.00
11/25/2015	111.3	160,298	17.9	25,748	0.00
<b>11/26/2015</b>	<b>114.7</b>	<b>165,099</b>	<b>20.8</b>	<b>29,965</b>	<b>0.00</b>
11/27/2015	101.5	146,223	17.9	25,747	0.00
11/28/2015	108.4	156,110	18.4	26,526	0.01
11/29/2015	121.5	174,999	21.3	30,688	0.12
11/30/2015	104.7	150,733	16.7	24,052	0.02
Peak/Max		183,632		32,956	0.82
<b>11/26/2015 12:15</b>	<b>251.6</b>				
<b>11/19/2015 19:00</b>			<b>54.1</b>		

DECEMBER 2015					
Date	Sadsbury P.S. Average Flow (gpm)	Sadsbury P.S. TOTAL Flow (Gallons)	Sandy Hill P.S. Average Flow (gpm)	Sandy Hill P.S. TOTAL Flow (Gallons)	Rainfall (in)
12/1/2015	126.8	182,568	26.2	37,773	0.70
12/2/2015	118.0	169,866	23.7	34,148	0.16
12/3/2015	109.2	157,293	19.9	28,628	0.00
12/4/2015	104.4	150,337	17.1	24,646	0.00
12/5/2015	113.4	163,357	20.5	29,540	0.00
12/6/2015	126.8	182,554	23.1	33,209	0.00
12/7/2015	111.6	160,687	18.2	26,225	0.00
12/8/2015	109.0	156,966	17.9	25,824	0.00
12/9/2015	101.6	146,235	17.2	24,756	0.00
12/10/2015	106.1	152,803	16.9	24,376	0.00
12/11/2015	107.3	154,550	16.8	24,248	0.00
12/12/2015	125.8	181,132	18.8	27,025	0.00
12/13/2015	139.0	200,091	21.7	31,301	0.00
12/14/2015	124.4	179,181	18.2	26,153	0.09
12/15/2015	123.5	177,776	18.3	26,307	0.09
12/16/2015	123.1	177,320	16.8	24,206	0.00
12/17/2015	134.5	193,697	22.4	32,211	0.92
12/18/2015	117.4	168,985	18.4	26,449	0.00
12/19/2015	125.8	181,169	20.7	29,839	0.00
12/20/2015	135.4	194,915	23.0	33,158	0.00
12/21/2015	115.8	166,763	20.0	28,822	0.00
12/22/2015	115.6	166,400	18.1	26,037	0.15
<b>12/23/2015</b>	<b>149.8</b>	<b>215,708</b>	29.2	42,037	<b>1.55</b>
12/24/2015	143.2	206,207	28.3	40,758	0.06
12/25/2015	116.2	167,268	26.9	38,732	0.32
12/26/2015	117.6	169,351	25.5	36,723	0.00
12/27/2015	133.9	192,821	29.1	41,868	0.04
12/28/2015	120.2	173,101	26.6	38,340	0.05
<b>12/29/2015</b>	152.2	219,195	<b>41.0</b>	<b>59,077</b>	0.84
12/30/2015	124.1	178,692	27.3	39,355	0.17
12/31/2015	118.7	170,994	27.9	40,190	0.00
<b>Peak/Max</b>		<b>219,195</b>		<b>59,077</b>	<b>1.55</b>
<b>12/23/2015 21:15</b>	<b>285.2</b>				
<b>12/29/2015 9:45</b>			<b>65.6</b>		

= Water Equivalent of Snowfall

	Sadsbury PS Max		Sandy Hill Max	
6/27/2015 21:45	605.3			
3/14/2015 9:45			89.9	
Max GPD (3/14)		468,922		
Max GPD (3/14)				78,451

COMPARISON OF INFLUENT METER FLOWS WITH MAG METER FLOWS

	INFLUENT METER FLOW (GPD)	MAG METER FLOW (GPD)	TOTAL RAINFALL (IN)
May-15	236,560	158,721	1.19
Jun-15	142,993	151,277	8.88
Jul-15	177,768	173,963	3.16
Aug-15	162,286	157,944	0.98
Sep-15	146,828	146,155	6.27
Oct-15	162,567	162,735	3.76
Nov-15	160,856	160,913	1.89
Dec-15	174,692	176,148	5.14
TOTAL	1,364,548	1,287,856	31.27
MAX	236,560	176,148	8.88

## NOAA Local Climatological Data - 2015 for Philadelphia International Airport

Summary of Hourly Data

Days >1" Rainfall

Water Equivalent of Snowfall

Date	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15
1	0.00	0.06	0.52	0.00	0.00	1.96	0.08	0.00	0.00	0.49	0.00	0.70
2	0.00	0.93	0.00	0.80	0.00	0.30	0.02	0.00	0.00	1.80	0.00	0.16
3	0.72	0.00	0.61	0.12	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00
4	0.37	0.00	0.49	0.00	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.00
5	0.00	0.00	0.78	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.10	0.00
6	0.12	0.00	0.00	0.00	0.00	0.05	0.00	0.08	0.00	0.00	0.02	0.00
7	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
8	0.60	0.00	0.00	0.03	0.00	0.88	0.00	0.00	0.00	0.00	0.00	0.00
9	0.01	0.03	0.00	0.02	0.03	0.02	0.76	0.00	0.00	0.29	0.00	0.00
10	0.00	0.00	0.71	0.07	0.00	0.00	0.00	0.04	4.76	0.00	0.65	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.72	0.01	0.00	0.01	0.00
12	0.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.13	0.00
13	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.04	0.95	0.12	0.00	0.09	0.58	0.00	0.00	0.00	0.00	0.09
15	0.00	0.00	0.00	0.00	0.00	0.00	0.69	0.00	0.00	0.00	0.00	0.09
16	0.00	0.92	0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.24	0.00	0.15	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.92
18	1.84	0.00	0.00	0.00	0.03	0.65	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.01	0.27	0.00	0.00	0.00	0.00	0.82	0.00
20	0.00	0.00	0.70	2.01	0.00	0.48	0.03	0.13	0.00	0.00	0.00	0.00
21	0.06	0.76	0.00	0.82	0.18	0.30	0.00	0.00	0.00	0.00	0.00	0.00
22	0.03	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15
23	0.16	0.00	0.00	0.00	0.00	0.55	0.00	0.00	0.00	0.00	0.00	1.55
24	0.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06
25	0.00	0.00	0.05	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.32
26	0.00	0.00	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.20	0.00	0.60	1.34	0.47	0.00	0.00	0.00	0.00	0.04
28	0.07	0.80	0.00	0.00	0.00	0.22	0.00	0.00	0.09	0.58	0.01	0.05
29	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00	1.21	0.59	0.12	0.84
30	0.00	-	0.03	0.00	0.00	1.50	0.51	0.00	0.27	0.00	0.02	0.17
31	0.00	-	0.06	-	0.00	-	0.00	0.00	-	0.00	-	0.00
<b>TOTAL</b>	<b>4.52</b>	<b>2.36</b>	<b>5.52</b>	<b>3.58</b>	<b>1.19</b>	<b>8.88</b>	<b>3.16</b>	<b>0.98</b>	<b>6.27</b>	<b>3.76</b>	<b>1.89</b>	<b>5.14</b>
<b>MAX</b>	<b>1.84</b>	<b>0.93</b>	<b>0.95</b>	<b>2.01</b>	<b>0.60</b>	<b>1.96</b>	<b>0.76</b>	<b>0.72</b>	<b>4.76</b>	<b>1.80</b>	<b>0.82</b>	<b>1.55</b>
<b>MAX 24HR</b>	<b>1.84</b>	<b>1.04</b>	<b>1.04</b>	<b>2.01</b>	<b>0.60</b>	<b>1.96</b>	<b>1.23</b>	<b>0.76</b>	<b>4.77</b>	<b>1.80</b>	<b>0.82</b>	<b>1.60</b>

W.G. MALDEN

P.O. BOX 196, EAST EARL, PA 17519  
PHONE: (717) 768-0800 FAX: (717) 768-0802

\*\*\*SERVICE REPORT\*\*\*

HERB MCCOMBY  
SADSBURY SEWER-CHESTER CO.  
P.O. BOX 261  
SADSBURYVILLE, PA 19369

SERVICE DATE: 3/23/2015  
METER#: C8099 AA  
LOCATION: SADSBURY  
SERIAL #: 00W011634/883533-0003  
MANUFACTURER: F & P/PARTLOW  
RECORDER: MRC 5000  
TRANSMITTER: 50XM13NXAB20AABC229  
PRIMARY: MAGMETER  
MAXIMUM CAPACITY: 2500 GPM  
SERVICE CONTRACT: QUARTERLY

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\*WORK PERFORMED\*

CLEANED EQUIPMENT: X      PRIMARY: X

**\*RECORDER CALIBRATION\***      CHECKED AT: 0, 50, 100%  
ERROR: %      CORRECTED ACCURACY:  $\pm 1\%$

**\*TOTALIZER CALIBRATION\***      CHECKED AT: OPERATING RATE  
ERROR: %      CORRECTED ACCURACY:  $\pm 1\%$

**\*TRANSMITTER CALIBRATION\***  
VOLUMETRIC DRAWDOWN CALIBRATION  
ERROR: %      CORRECTED ACCURACY:  $\pm 1\%$

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COMMENT: COULD NOT CALIBRATE METER AT THIS TIME. PROBLEMS WITH PUMP STATION.

SERVICE REPRESENTATIVE: DENNIS  
copies:

PERSON SEEN: HAVE CODE



W.G. MALDEN

P.O. BOX 196, EAST EARL, PA 17319  
PHONE: (717) 768-0800 FAX: (717) 768-0802

\*\*\*SERVICE REPORT\*\*\*

HERB MCCOMBY  
SADSBURY SEWER-CHESTER CO.  
P.O. BOX 261  
SADSBURYVILLE, PA 19369

SERVICE DATE: 9/4/2015  
METER#: C8099 AA  
LOCATION: SADSBURY  
SERIAL #: 00W011634/883533-0003  
MANUFACTURER: F & P/PARTLOW  
RECORDER: MRC 5000  
TRANSMITTER: 50XM13NXAB20AABC229  
PRIMARY: MAGMETER  
MAXIMUM CAPACITY: 2500 GPM  
SERVICE CONTRACT: QUARTERLY

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\*WORK PERFORMED\*

CLEANED EQUIPMENT: X      PRIMARY: X

**\*RECORDER CALIBRATION\***      CHECKED AT: 0, 50, 100%  
ERROR: 0%      CORRECTED ACCURACY: ± 1%

**\*TOTALIZER CALIBRATION\***      CHECKED AT: OPERATING RATE  
ERROR: 0%      CORRECTED ACCURACY: ± 1%

**\*TRANSMITTER CALIBRATION\***  
VOLUMETRIC DRAWDOWN CALIBRATION  
ERROR: 0%      CORRECTED ACCURACY: ± 1%

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COMMENT: PERFORMED QUARBERLY CALIBRATION. LEFT EQUIPMENT OPERATING PROPERLY.

SERVICE REPRESENTATIVE: DENNIS  
copies:

PERSON SEEN: HAVE CODE

**W.G. MALDEN**

P.O. BOX 196, EAST EARL, PA 17519  
PHONE: (717) 768-0800 FAX: (717) 768-0802

**\*\*\*SERVICE REPORT\*\*\***

HERB MCCOMBY  
SADSBURY SEWER-CHESTER CO.  
P.O. BOX 261  
SADSBURYVILLE, PA 19369

SERVICE DATE: 12/7/2015  
METER#: C8099 AA  
LOCATION: SADSBURY  
SERIAL #: 00W011634/883533-0003  
MANUFACTURER: F & P/PARTLOW  
RECORDER: MRC 5000  
TRANSMITTER: 50XM13NXAB20AABC229  
PRIMARY: MAGMETER  
MAXIMUM CAPACITY: 2500 GPM  
SERVICE CONTRACT: QUARTERLY

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**\*WORK PERFORMED\***

CLEANED EQUIPMENT: X      PRIMARY: X

**\*RECORDER CALIBRATION\*** CHECKED AT: 0, 50, 100%  
ERROR: 0%      CORRECTED ACCURACY:  $\pm 1\%$

**\*TOTALIZER CALIBRATION\*** CHECKED AT: OPERATING RATE  
ERROR: 0%      CORRECTED ACCURACY:  $\pm 1\%$

**\*TRANSMITTER CALIBRATION\***

VOLUMETRIC DRAWDOWN CALIBRATION  
ERROR: 0% CORRECTED ACCURACY:  $\pm 1\%$

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COMMENT: PERFORMED QUARTERLY CALIBRATION. LEFT EQUIPMENT OPERATING PROPERLY.

SERVICE REPRESENTATIVE: JACOB  
copies:

PERSON SEEN: HAVE KEY

**TheMeterGuy, LLC.**

5758 GLEN OAKS DRIVE NARVON, PA 17555  
PHONE: (717) 948-1987

**\*\*\*SERVICE REPORT\*\*\***

JIM KELLY  
PENNSYLVANIA AMERICAN WATER  
100 CHESHIRE COURT  
COATESVILLE, PA 19320

SERVICE DATE: 6/18/2015  
METER#: C8317 AE  
LOCATION: SANDYHILL PS  
SERIAL #: M073281304/ UR3030-001  
MANUFACTURER: SPARLING/CHELSEL  
RECORDER: 392  
TRANSMITTER: TIGERMAG FM626  
PRIMARY: 4" MAG  
MAXIMUM CAPACITY: 1182 GPM  
SERVICE CONTRACT: QUARTERLY

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**\*WORK PERFORMED\***

CLEANED EQUIPMENT: X      PRIMARY: X

**\*RECORDER CALIBRATION\*** CHECKED AT: 0, 25, 50, 75, & 100%  
ERROR: 0%      CORRECTED ACCURACY: ±1%

**\*TOTALIZER CALIBRATION\*** CHECKED AT: OPERATING RATE  
ERROR: 0%      CORRECTED ACCURACY: ±1%

**\*TRANSMITTER CALIBRATION\*** VOLUMETRIC CALIBRATION  
ERROR: 0%      CORRECTED ACCURACY: ± 5%

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COMMENTS: LEFT EQUIPMENT OPERATING PROPERLY.

SERVICE REPRESENTATIVE: J CHRIS CALLAHAN      PERSON SEEN:  
copies:



**FIRST ADDENDUM TO SEWAGE TREATMENT AGREEMENT**

THIS FIRST ADDENDUM TO SEWAGE TREATMENT AGREEMENT, made this 9<sup>th</sup> day of April, 2014, between Sadsbury Township, 2920 Lincoln Highway, Sadsburyville, PA19369, and the Pennsylvania-American Water Company, 800 W. Hershey Park Drive, Hershey, PA17033.

**WITNESSETH**

WHEREAS, Sadsbury Township, (hereinafter referred to as "Township"), owns and operates a sewage collection and conveyance system in Sadsbury Township, Chester County, Pennsylvania; and

WHEREAS, Pennsylvania-American Water Company, (hereinafter referred to as "Pennsylvania-American"), is a regulated public utility, organized and existing under the laws of the Commonwealth of Pennsylvania; and

WHEREAS, the Township is a township of the second class, organized and existing under the laws of the Commonwealth of Pennsylvania, providing sewage collection service to residential, commercial and institutional users within Sadsbury Township; and

WHEREAS, Pennsylvania-American owns and operates a sewage treatment plant and a collection and conveyance system, providing public sewer services to various municipalities in and near Chester County, Pennsylvania, which sewage treatment plant was previously owned and operated by the City of Coatesville Authority (the "Treatment Plant"); and

WHEREAS, Sadsbury Township entered into a Sewage Treatment Agreement (hereinafter referred to as the "Sewage Treatment Agreement"), dated July 7, 1997 with the City of Coatesville Authority (hereinafter referred to as "CCA") which provided for the treatment of sewage from the Township at the Treatment Plant; and

WHEREAS, the Treatment Plant and CCA's sewage treatment and collection systems were acquired by Pennsylvania-American on March 21, 2001, along with all of CCA's rights and obligations under the July 7, 1997 Sewage Treatment Agreement; and

WHEREAS, it is in the public's best interest that Pennsylvania-American and the Township reach an agreement to provide for the treatment of additional sewage from Sadsbury Township at the Pennsylvania-American Treatment Plant; and

WHEREAS, such agreements for original sewage flows reached on July 7, 1997, provided the terms, conditions and considerations for the treatment of the Township's sewage waste at Pennsylvania-American's Treatment Plant, and allocated an average daily flow of 410,750 gallons into Pennsylvania-American's Treatment Plant; and

WHEREAS, the Township anticipates a need for a greater average daily flow than contemplated in the aforementioned agreements, and Pennsylvania-American is amenable to accommodating this additional need; and

WHEREAS, Pennsylvania-American and the Department of Environmental Protection ("DEP") entered into a Consent Order & Agreement ("CO&A") on November 30, 2005, requiring, among other matters, that Pennsylvania-American would upgrade/expand its sewage treatment plant and would only commit capacity at its sewage treatment plant and/or allocate, approve, and allow connections to the plant in accordance with the schedule provided in Table A2 of the most current DEP-approved Connection Management Plan, consistent with DEP-approved Act 537 planning; and

WHEREAS, DEP has directed that sewer connections would be allowed only in those sewer service areas of the Act 537 Plan approved by DEP on March 15, 2001 and the

developments proposed in areas outside the 2001 service area would not be approved until after the sewage treatment plant expansion; and

WHEREAS, Pennsylvania-American has completed the Treatment Plant expansion; and

WHEREAS, pursuant to the Joint Petition for Settlement of All Issues in Rate Proceeding approved by Order of the Pennsylvania Public Utility Commission, Pennsylvania-American has amended its tariff for the City of Coatesville Division at Supplement No. 2 to Tariff Wastewater – PA P.U.C. No. 15 1<sup>st</sup> Revised Page No. 4C effective January 1, 2014, regarding the payment of capacity reservation fees for capacity available after the expansion of the Treatment Plant, as follows: "Sadsbury Township will be charged \$525 per EDU for not more than 100 EDUs of post-expansion capacity under any future agreement it may enter into with PAWC for additional post-expansion capacity"; and

WHEREAS, the Township has prepared an "Act 537 Plan Update Special Study for Western Sanitary Sewer District", (hereinafter referred to as "Western Sewer District") to Pennsylvania-American in which the Township will request DEP approval to serve these developments which are outside the 2001 DEP approved service area, requesting additional sewer flows above its current capacity of 410,750 gallons per day ("GPD"); and

WHEREAS, the Township has identified 54,000 gallons per day ("GPD") of additional sewer flow from identified needs including capacity allocated to both the Lancaster General Hospital medical office building and Sadsbury Commons shopping center projects and other parcels within the Western Sewer District (as more fully described in the Western Sanitary Sewer District Special Study) for inclusion in Pennsylvania-American's expanded facilities and that DEP approval of the Western Sewer District Special Study would enable the Township and

Pennsylvania-American to execute a revised sewage capacity agreement for additional post-plant expansion sewer capacity, subject to obtaining all necessary approvals from DEP, and

NOW THEREFORE, this First Addendum witnesseth that for in consideration of the respective covenants and agreements of the parties hereinafter set forth, the parties hereto, intending to be legally bound hereby, do covenant, contract and agree as follows:

#### ARTICLE 1 – PREVIOUS AGREEMENTS

The previous agreement between Pennsylvania-American (then the City of Coatesville Authority) and the Authority (then Sadsbury Township) dated July 7, 1997 is incorporated in this Agreement by reference.

#### ARTICLE II – DEFINITIONS

Section 1. Article 1, of the Sewage Treatment Agreement, providing for the definition of the term “Average Daily Flow”, is hereby amended to read as follows:

*“Average Daily Flow or “ADF” – Average number of gallons per day of sanitary sewer determined by taking the total quantity of flow delivered to all points of connection during a “rolling” twelve (12) month period divided by the total number of days in that period.”*

Section 2. Article 1, of the Sewage Treatment Agreement, providing for the definition of terms, is hereby amended to add the following definitions:

*“Conveyance System” – Existing sanitary sewage collection and conveyance facilities, together with other appurtenances and any additions, modifications and/or improvements thereto, which are owned and operated by Pennsylvania-American and which are utilized for collection and conveyance of sanitary sewage originating from the Township's connection and others through Pennsylvania-American's certificated sanitary sewage system to Pennsylvania-American's sewage treatment plant”*

*“Maximum Monthly Flow” – The total number of gallons per day of sanitary wastewater determined by multiplying the average daily flow rate (ADF) by a peaking factor of 1.2.*

*“Maximum Daily Flow” or “MDF” – The total number of gallons per day of sanitary wastewater determined by multiplying the average daily flow rate (ADF) by a peaking factor or 2.5.*

*“Peak Hourly Flow” or “PHF” – The total number of gallons per day of sanitary wastewater determined by multiplying the average daily flow rate (ADF) by a peaking factor or 3.5.*

ARTICLE III – FURTHER AMENDMENTS TO ORIGINAL  
SEWAGE TREATMENT AGREEMENT

Section 1 – Article III, Section 2 of the original Sewage Treatment Agreement is amended to incorporate the following and shall now read as follows:

*“Section 2 – Pennsylvania-American hereby grants additional capacity of 100 EDUs @ \$525 per EDU and 140 EDUs @ \$4,000 per EDU to the Township for the Western Sewer District<sup>1</sup> and agrees to convey, treat and dispose of such sewage in a manner approved by the Pennsylvania Department of Environmental Protection and in accordance with Pennsylvania-American’s tariff and the terms and provisions set forth herein such that 100 EDUs of capacity granted pursuant to this First Addendum shall be a rate of \$525 per EDU and 140 EDUs of capacity granted pursuant to this First Addendum shall be at a rate of \$4,000 per EDU. Based on a projected usage of 225 gallons per day (gpd) per EDU<sup>2</sup>, the*

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<sup>1</sup>Pursuant to Sadsbury Township Resolution No. 2012-04 adopted May 23, 2011, the Township has agreed to allocate six(6) EDUs of capacity to the Lancaster General Hospital medical office building from the 100 EDUs of capacity at a rate of \$525 per EDU subject to the terms of said resolution. Subject to the terms of a sewer extension agreement satisfactory to the Township between the Township and Sadsbury Commons, L.P, a Pennsylvania limited partnership, pursuant to which Sadsbury Commons, L.P. will construct a sewer extension to allow flows from the Western Sewer District to Pennsylvania-American facilities, the Township will allocate up to 94 EDUs of the remaining 100 EDUs of capacity at a rate of \$525 per EDU to the Sadsbury Commons Development subject to the terms of said sewer extension agreement.

<sup>2</sup>The projected use of 225 gpd per EDU is based upon the August 2, 2006 DEP approval allowing a reduced design capacity for residential dwelling units based upon a sewerage flow study prepared by Pennsylvania-American for its treatment plant. The Township, however, uses the flow of 244.8 gpd per EDU for connections to its collection system based upon the calculations of the Township engineer pursuant to Section 607(d)(24)(i)(C)(IV)(e) of the

*equivalent projected flow increase for the Western Sewer District amounts to an average daily flow (ADF) increase of (240 EDUs) 54,000gpd. The existing and projected equivalent flows for Average Daily Flow, Maximum Daily Flow, Maximum Monthly Flow, and Peak Hourly Flow based on previously defined peaking factors are as follows:*

<i>Flow Measure</i>	<i>Existing Base Flow</i>		<i>After First Addendum Total Flow</i>
<i>ADF</i>	<i>410,750</i>		<i>464,750</i>
<i>MDF</i>	<i>410,750</i>		<i>1,161,875</i>
<i>MMF</i>	<i>N/A</i>		<i>16,731,000<sup>(1)</sup></i>
<i>PHF</i>	<i>N/A</i>		<i>1,626,625</i>

*(1) Amount indicated in gallons is based on a 30-day month. Actual will vary depending on number of days in the month. See definition for maximum monthly flow.*

*The Equivalent Dwelling Units (EDUs) herein referenced below are granted only after DEP has approved all necessary Act 537 planning. EDUs are transferrable, subject to a) planning approval and concurrence by DEP and b) approval by Pennsylvania-American via a signed planning module which must identify where the transferred EDUs originate from.*

*This reservation of capacity will be available for a period of 10 years after the later to occur of: (a) the date on which the Pennsylvania Public Utility Commission ("PaPUC") shall approve this First Addendum; or (b) DEP shall approve the Western Sewer District Special Study, after which any remaining unused EDUs will be forfeited.*

*By way of illustration, Exhibit A, made a part hereof and incorporated fully herein, sets forth 5 examples depicting full or partial allocation of EDUs granted with this First Addendum to the Sewage Treatment Agreement in conjunction with the average daily flow capacity of 410,750 gpd allocated under the July 7, 1997 Treatment Agreement, under an actual flow condition of 420,000 gpd by the tenth or eleventh year after the execution of this First Addendum. Example 5 depicts a situation wherein high base flows by year 10 have exceeded the capacity amounts contracted for under the July 7, 1997 sewage treatment agreement ("original"). To prevent such an occurrence, a safeguard will be utilized wherein the total equivalent flow allocation of 464,750 gpd (original 410,750 gpd plus 240 EDUs @ 225 gpd/EDU) less the total actual flows should*

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Municipality Authorities Act, as amended by Act 57 of 2003, P.L. 404, No. 57, as affirmed by the Opinion and Order of the Honorable David F. Bortner of the Chester County Court of Common Pleas filed December 30, 2009 in the case docketed as *Sadsbury Arcadia Associates, L.P. v. Board of Supervisors of Sadsbury Township* at No. 2009-01154-LU.

*always be greater than or equivalent to the remaining unused allocation associated with this First Addendum.*

Section 2 – Article VII, Section 8 of the original Sewage Treatment Agreement is hereby deleted and shall now read as follows:

*“Section 8 – A. In the event either the Maximum Daily Flow or the Peak Hourly Flow is exceeded in any billing period, the Township shall begin an investigation to determine why such flows were exceeded. In the event the aforesaid mentioned peaking factors for the PHF, MDF, or MMF are exceeded in respect to the then current ADF, the Township shall perform an Infiltration and Inflow evaluation and take necessary corrective actions to reduce the peaking factor. (For example, the current ADF equals 150,000 gpd, and a given day during that period is greater than 375,000 gpd, the MDF peaking factor of 2.5 has been exceeded). If peaking factors are exceeded for three consecutive months, PAWC may cease signing any future planning modules. The Township shall provide a written report to Pennsylvania-American within ten (10) days of the third exceedence explaining the probable reason for the exceedence and how the Township proposes to decrease the flow back within limits.*

*B. In the event quantity of flow from the Township exceeds the allowable Maximum Monthly Flow during any billing period, the Township shall pay two times the current tariff rate effective at the time, for discharges in excess of the Average Daily Flow times a peaking factor of 1.2 during the billing period. (For example, the Maximum Monthly Flow would be 464,750 GPD times 30 days in the billing period times 1.2 peaking factor equals 16,731,000 gallons. The Township, at current tariff rates, would pay \$8.664 per 1,000 gallons up to 16,731,000 gallons. For any flows in excess of that amount, the Township, at current rates, would pay \$17.328 per 1,000 gallons. Should a second billing period exceed the Maximum Monthly Flow within any rolling twelve (12) month period, Pennsylvania-American, at its discretion, may refuse to approve any additional sewage planning modules until the Township determines and removes any extraneous flows and/or it purchases additional capacity in the sewage treatment plant if such capacity is available. It is the intent of that Pennsylvania-American will not treat any extraneous, non-sewer flows where it can be prevented.”*

ARTICLE IV – ADDITIONAL STIPULATIONS

Section 1. (A) Pennsylvania-American shall test the sewage discharged from the Township on a quarterly basis. Such tests shall include, but not be limited to pH; Carbonaceous Biochemical Oxygen Demand (CBOD); Total Suspended Solids (TSS); Ammonia, Phosphorus, Copper, Mercury, Silver, etc.; and other tests of discharge substances as provided in Pennsylvania-American's Sewage Rules and Regulations as set forth in the PaPUC present or future approved tariff or the Industrial Pretreatment Program (IPP). A copy of the test results shall be provided to the Township as soon as they are completed.

In the event the test results indicate that the various discharge parameters of the Sewage Rules and Regulations have been exceeded, the Township shall be charged an additional surcharge fee in accordance with the applicable section of the Sewage Rules and Regulations.

(B) – The Township shall provide to Pennsylvania-American a map showing the Township's own sewer collection and conveyance system for informational purposes only.

Section 2. – The parties understand and agree that the capacity reservation fees and other terms and conditions associated with the first addendum expansion capacity commitment shall be governed by Pennsylvania-American's PaPUC approved tariff. Capacity Reservation Fees paid to Pennsylvania-American shall be due and payable within thirty (30) days after the time the planning module is fully executed by Pennsylvania-American, the relevant municipality, and DEP.

Section 3. – The Township will not discharge sanitary sewer flows to Pennsylvania-American's Conveyance System, and Pennsylvania-American will have the right to refuse to accept flows in excess of 410,750 GPD (ADF) (or, as applicable, in excess of such greater flows for which the Township has previously paid capacity fees) until the Township pays to

Pennsylvania-American the per EDU capacity reservation fee as set forth in Article III, Section 1 of this First Addendum and DEP shall have issued all regulatory approvals and permits associated with such flows.

Section 4. – The parties recognize and expressly agree that (except as to Article IV, Section 5 of this First Addendum, which is and shall be effective immediately) this First Addendum of the Sewage Treatment Agreement is conditioned upon (a) the approval of the PaPUC; and (b) the approval by DEP of the Western Sewer District Special Study including amendments thereto.

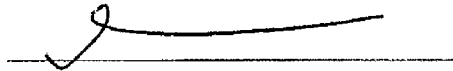
Section 5. – Pennsylvania-American acknowledges receipt of the Western Sanitary Sewer District Special Study as prepared by Evans Mill Environmental, LLC. Immediately upon execution of the First Addendum by the Township and transmittal of same to Pennsylvania-American, Pennsylvania-American shall commence its technical and substantive review of the Western Sewer District Special Study and provide to the Township any and all information requested or required by the Township in order to permit the Township to make necessary revisions thereto or to provide to DEP information necessary to permit DEP to review and act upon the Western Sewer District Special Study. Within thirty (30) days of full execution of this First Addendum and approval of same by PaPUC to the extent such approval had not already been obtained, Pennsylvania-American shall complete all steps which Pennsylvania-American must take in order to permit DEP to approve the Western Sewer District Special Study, subject to any regulatory or other matters outside of Pennsylvania-American's control.

Section 6. – All other terms and conditions of the Sewage Treatment Agreement shall be and remain in effect, and the Sewage Treatment Agreement is only amended as set forth in this First Addendum.

Section 7. – In the event that the DEP, or any other regulatory body or governmental agency having jurisdiction, shall fail or refuse to issue any permit or approval for the increase in capacity set forth in Article III, Section 1 of this First Addendum or shall fail or refuse to approve the Western Sewer District Special Study revision which is required for the implementation of this First Addendum within thirty-six (36) months of the date of this First Addendum, the parties shall be relieved from further compliance with the terms of this First Addendum.

IN WITNESS WHEREOF, the parties hereto have caused this First Addendum Agreement to be executed by their appropriate officers and their respective seals to be hereunto affixed on the day and year first written above.

ATTEST:



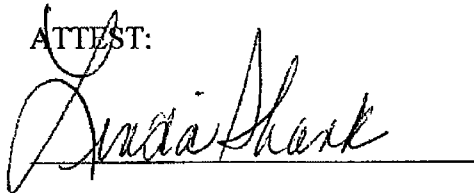
**PENNSYLVANIA-AMERICAN WATER  
COMPANY**



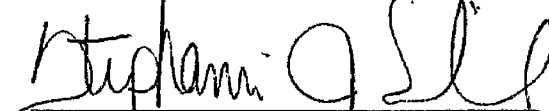
Name:

Title:

ATTEST:



**SADSBURY TOWNSHIP**



Name: Stephanie J Silvernail

Title: Chairman

**EXHIBIT A  
WESTERN SEWER DISTRICT FLOW ALLOCATIONS**

- 1.) Full allocation of Addendum #1 EDUs by Year 10 – Actual Flow of 420,000 gpd  
(240 EDUs @ 225 gpd/EDU = 54,000 gpd)

	Original	Addendum #1	TOTAL
Allocation	410,750 gpd	54,000 gpd	464,750 gpd
Flows	366,000 gpd	54,000 gpd	420,000 gpd
Remaining	44,750 gpd	0 gpd	44,750 gpd

Result – 44,750 gpd remaining under original agreement

- 2) Partial Allocation of Addendum #1 EDUs – Actual Flow by Year 10 of 420,000 gpd  
(80EDUs @ 225gpd/EDU)

	Original	Addendum #1	TOTAL
Allocation	410,750 gpd	54,000 gpd	464,750 gpd
Flows	402,000 gpd	18,000 gpd	420,000 gpd
Remaining	8,750 gpd	36,000 gpd	44,750 gpd

Result – Allocation of 36,000 gpd (160 EDUs) remaining under Addendum #1  
- 8,750 gpd remaining under original agreement

- 3.) Partial Allocation of Addendum #1 EDUs – Actual Flow in Year 11 of 420,000 (80 EDUs @ 225gpd/EDU)

	Original	Addendum #1	TOTAL
Allocation	410,750 gpd	54,000 gpd	464,750 gpd
Flows	402,000 gpd	18,000 gpd	420,000 gpd
Remaining	8,750 gpd	0 gpd	44,750 gpd

Result – 8,750 gpd remaining under original Agreement  
- 0 allocation remaining under Addendum #1. Unused flow forfeited

**EXHIBIT A  
WESTERN SEWER DISTRICT FLOW ALLOCATIONS**

4.) Full allocation of Addendum #1 EDUs in Year 11 – Actual Flow of 420,000 gpd (Same as example 1)

	Original	Addendum #1	TOTAL
Allocation	410,750 gpd	54,000 gpd	464,750 gpd
Flows	366,000 gpd	54,000 gpd	420,000 gpd
Remaining	44,750 gpd	0 gpd	44,750 gpd

Result - 44,750 gpd remaining under original agreement

5.) Example of High Base Flow under original agreement and partial allocation of Addendum #1 EDUs  
(20 EDUs @ 225 gpd/EDU) – Actual Flow by Year 10 of 420,000 gpd

	Original	Addendum #1	TOTAL
Allocation	410,750 gpd	54,000 gpd	464,750 gpd
Flows	415,500 gpd	4,500 gpd	420,000 gpd
Remaining	(4,750) gpd	49,500 gpd	44,750 gpd

Results - 44,750 gpd remaining, however, unable to satisfy remaining allocation amounts under addendum #1 of 49,500 gpd  
(20 EDUs @ 225 gpd/EDU)

Safeguard →

Total allocation of 464,750 gpd less total actual flow should always be greater than or equal to the remaining unused allocation associated with Addendum #1

**ADDENDUM TO SEWAGE TREATMENT AGREEMENT**  
**SADSBURY TOWNSHIP**

THIS ADDENDUM, dated this \_\_\_\_ day of \_\_\_\_\_, 2001, by and between the CITY OF COATESVILLE AUTHORITY ("CCA"), Chester County, Pennsylvania, and SADSBURY TOWNSHIP, Chester County, Pennsylvania ("Sadsbury").

WITNESSETH:

WHEREAS, CCA and Sadsbury entered into a Sewage Treatment Agreement dated July 7, 1997 (the "Original Agreement"), providing for the conveyance of sanitary sewage from within Sadsbury to the CCA treatment plant and for treatment and disposal of those wastes; and

WHEREAS, pursuant to the Original Agreement, Sadsbury designated the area within its corporate limits as the wastewater service area for Sadsbury Township, as well as the parties designated a certain single point of connection for conveyance of sanitary sewage from the Sadsbury service area to the CCA wastewater treatment system; and

WHEREAS, the Original Agreement further provided that, in the event circumstances or issues exist with respect to connections between the Sadsbury service area and CCA's wastewater treatment system which are not addressed in the Original Agreement, a separate agreement would be arrived at between the parties setting forth the terms and conditions for such service; and

WHEREAS, a new subdivision, known as the Carr Subdivision, has been planned for development at the westernmost border of Sadsbury Township adjacent to the Borough of Parkesburg, which is part of the Sadsbury service area; and

WHEREAS, the Carr Subdivision, consisting of eighteen (18) or nineteen (19) units located inside the Sadsbury service area would connect to the CCA system at a point separate and apart from the existing connection point between the Sadsbury service area and CCA's wastewater treatment system; and

WHEREAS, Sadsbury has granted conditional use approval of the Carr Subdivision, subject to strict and complete compliance with certain specified conditions contained in Sadsbury's Decision and Order dated November 6, 2000, one of the certain specified conditions being that the conditional use Applicant shall pay to Sadsbury the standard Sadsbury Township tapping fee per e.d.u. for each lot in addition to any charges imposed for connection to the Parkesburg Borough sewer system presently owned by CCA and, further, if required by CCA or its successor, the Applicant shall install a flow meter and manhole at the point of connection with the Parkesburg

sewer system at such location and at such specifications as acceptable to the Township engineer; and

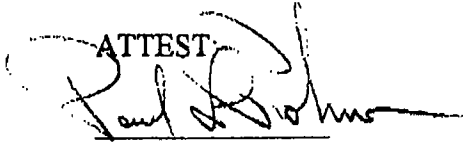
WHEREAS, Sadsbury and CCA desire to enter into this Addendum to provide for the terms and conditions of connecting the Carr Subdivision to the CCA wastewater treatment system.

NOW, THEREFORE, intending to be legally bound hereby, CCA and Sadsbury Township agree as follows:

1. The parties agree that the recitals hereinbefore set forth are incorporated herein.
2. Sadsbury shall provide sewage collection service to the Carr Subdivision. Sadsbury shall own all sewage facilities constructed in connection with the Carr Subdivision.
3. CCA agrees to receive and treat and dispose of sewage originating from the Carr Subdivision; the Carr Subdivision will be connected to the CCA treatment system at a point of connection located in the Borough of Parkesburg, the specific location of the point of connection to be determined by CCA.
4. At or before the commencement of actual sewage conveyance from the Carr Subdivision to the CCA treatment system, Sadsbury shall provide and install a sewage meter, of the type installed at the point of connection under the Original Agreement and of a size appropriate to the amount of flow and as determined by CCA, at the Carr Subdivision point of connection.
5. Sadsbury shall pay to CCA all applicable rates, fees and charges in accordance with the published rate and fee schedule of CCA prevailing at the time such rates, fees and charges are incurred. Sadsbury acknowledges and agrees that the effluent emanating from the Carr Subdivision will flow through the pump station financed and constructed by CCA in the Borough of Parkesburg; as a result, in addition to all other applicable rates, fees and charges, Sadsbury shall incur and pay to CCA a tapping fee for each unit, consisting of a conveyance capacity fee component, a treatment capacity fee component and a lateral connection fee, at the time of its connection to the system.
6. The sewage treatment and conveyance capacity necessary to service the Carr Subdivision is part of, and not in addition to, the capacity reserved to Sadsbury pursuant to the Original Agreement.
7. All terms and conditions in the Original Agreement which are not inconsistent herewith shall continue in full force and effect and shall apply to the Carr Subdivision as part of the Sadsbury service area.
8. The terms and provisions of this Addendum shall inure to the benefit of and be binding upon the parties and their successors and assigns.

IN WITNESS WHEREOF, the City of Coatesville Authority and the Township of Sadsbury, through their duly authorized officers, have caused this Addendum to be executed on the day and year first above written.

ATTEST:

  
\_\_\_\_\_

CITY OF COATESVILLE AUTHORITY

By:   
\_\_\_\_\_ Chairman

ATTEST:

\_\_\_\_\_

SADSBURY TOWNSHIP

By: \_\_\_\_\_  
Chairman

MEMORANDUM

WHEREAS, All County Partnership (hereinafter referred to as "Developer"), is the owner in fee of a 79.996 acre parcel of land (hereinafter referred to as the "Property"), located at the intersection of Sandy Hill Road and Coffroath Road, in West Caln Township, Chester County, Pennsylvania, and known as Chester County Tax Parcel Numbers 28-5-102, 28-5-106- and 28-5-14, the legal description of which is attached hereto as Exhibit "A"; and

WHEREAS, on September 16, 2003, Developer did enter into a Wastewater Conveyance Agreement by and among Pennsylvania-American Water Company ("PAWC"), Sadsbury Township, Chester County, Pennsylvania ("Township"), All County Partnership and Calnshire Estates, LLC; and

WHEREAS, Article VI, Section 2 of the Wastewater Conveyance Agreement provides that prior to commencement of discharge of PAWC wastewater into the Township system, the Developer shall pay to the Township, at the Township municipal office, all Capacity Fees and Reimbursement Fees owed to the Township and SSC based on EDU's connected to the PAWC System and which will produce flows into the Township system; and further provides that once discharge of PAWC wastewater into the Township system commences, and, thereafter, Developer shall, prior to connecting to PAWC's wastewater system, pay to the Township Capacity Fees and Reimbursement Fees for each connection which will provide flows through the Point of Connection; and

WHEREAS, pursuant to Article I of the Wastewater Conveyance Agreement, the Capacity Fee charged by the Township is \$1,141.15 per equivalent dwelling unit (EDU), and the Reimbursement Fee is \$1,178.00 per equivalent dwelling unit (EDU); and

WHEREAS, Article VII, Section 8 of the Wastewater Conveyance Agreement provides that the provisions of the Conveyance Agreement and the respective rights and obligations of the Developer thereunder shall be binding upon, and shall inure to the benefit of, its respective successors, grantees and assigns, who shall accept the terms and obligations of the Conveyance Agreement in writing prior to any party being released from their obligations pursuant to this Agreement; and

WHEREAS, Article VII, Section 9 of the Wastewater Conveyance Agreement provides for the recordation of a memorandum setting forth the obligation and terms of payment of the Capacity Fees and Reimbursement Fees to the Township under the Conveyance Agreement, against all lands comprising the Development, in the Office of Recorder of Deeds for Chester County.

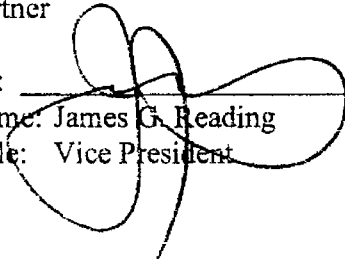
NOW, this 16th day of September, 2003, Developer, for itself, and its successors and assigns, in consideration of the sum of One Dollar (\$1.00), receipt of which is hereby acknowledged, does hereby covenant and agree to accept the obligations and terms of payment of the Capacity Fees and Reimbursement Fees set forth in the Wastewater Conveyance Agreement, as they apply to the Property as described in Exhibit "A".

2003 SEP 17 PM 11:16  
RECORDED IN THE OFFICE OF THE RECORDER OF DEEDS  
CHESTER COUNTY, PENNSYLVANIA

IN WITNESS WHEREOF, Developer has set its hand and seal the date above written.

ALL COUNTY PARTNERSHIP

BY: ALL COUNTY PROPERTIES, INC.,  
Partner

By:   
Name: James G. Reading  
Title: Vice President

COMMONWEALTH OF PENNSYLVANIA

COUNTY OF *Chester*

SS.

On this, the 16th day of September, 2003, before me, a Notary Public in and for the Commonwealth and County aforesaid, the undersigned officer, personally appeared James G. Reading, who acknowledged himself to be the Vice President of ALL COUNTY PROPERTIES, INC., a corporation, being a Partner of All County Partnership, a Pennsylvania general partnership, and that as such officer, being authorized to do so, executed the foregoing instrument for the purposes therein contained by signing the name of the Partnership by himself as Vice President of the Corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and official seal.

*Joseph E. Schaeffer*  
Notary Public

NOTARIAL SEAL  
JOSEPH E. SCHAEFFER, Notary Public  
Wyomissing Boro., Berks County  
My Commission Expires February 27, 2007

ALL THAT CERTAIN tract of land situate in West Caln Township, Chester County, Pennsylvania as shown on a plan entitled "Final Subdivision Plan of Sandy Hill", prepared by Commonwealth Engineers, Inc., Downingtown, PA, Dwg. No.E-200041-2 dated February 8, 2001, Revision #4 dated 12/06/01, and being more fully described as follows, to wit:

BEGINNING at a point formed by the intersection of the title line in Coffroath Road (T 427, proposed 41.5 foot wide R/W) with the title line in North Sandy Hills Road (T-443, proposed 50 foot wide R/W), said point being the southwesterly corner of lands now or formerly of Doris E. Hagehgans per Record Book 751 Page 234 and the southeasterly corner of lands now or formerly of Francesco A. Chilla and Margaret E. Chilla per Record Book 1251 Page 89, and from said point of BEGINNING running along said title line of Coffroath Road the five (5) following courses and distances:

- 1) along the southerly line of said lands of Hagehgans S 86° 47' 32" E 16.49 feet to a point;
- 2) continuing along the southerly line of said Hagehgans N 74° 49' 59" E 147.04 feet to a point;
- 3) continuing along said lands of Hagehgans and also along the southerly line of lands now or formerly of Thomas C. Reynolds per Record Book 4115 Page 1420, lands now or formerly of G. Wayne Fite and Patsy E. Fite per Deed Book I-60 Page 7, land now or formerly of Betty DiBonaventure and Regina Morris per Record Book 3925 page 1154, lands now or formerly of Domenic F. Sala and Winifred M. Sala per Record Book 4793 page 144, lands now or formerly of Richard D. Barbeau and Marguerite M. Barbeau per Record Book 2719 Page 349, S 64° 00' 01" E 561.00 feet to a point at the southwesterly corner of lands now or formerly of John M. Pelet and Marie C. Pelet per Deed Book E-57, Page 66;
- 4) along said lands of Pelet S 63° 26' 55" E 1196.25 feet to a twin spruce tree found on the westerly line of lands now or formerly of Hays Todd Pfitzenmeyer, Jr. per Deed Book Q-41 Page 326;
- 5) along said lands of Pfitzenmeyer S 02° 23' 36" E 288.75 feet to the base of a bent iron pipe found at the northwesterly corner of lands now or formerly of Federal National Mortgage Association per Record Book 4802 page 1965, and the northeasterly corner of lands now or formerly of Catharine J. Wanner per Deed Book I-37 Page 849;

thence, along the northerly line of said lands of Warner S 89° 26' 42" W 1754.26 feet to an iron pin found at the easterly corner of lands now or formerly of Michael Kowal, Jr. and Phyllis A. Kowal per Record Book 89, Page 78; thence, along the northerly line of said lands of Kowal N 65° 32' 37" W, crossing the easterly right-of-way line of said North Sandy Hills Road, 450.57 feet to a point on the title line in the same, said point being on the easterly line of lands now or formerly of Ronald J. Kowal and Joyce E. Kowal per Record Book 995 Page 73;

thence, along said title line in North Sandy Hills Road, being said easterly line of Ronald J. Kowal and Joyce E. Kowal and also along the easterly line of lands now or formerly of Rickie A. Conrad and Kathryn

M. Conrad per Record Book 1907 Page 31, N 24° 29' 29" E 356.25 feet to a point being the northeasterly corner of said lands of Conrad; thence along the northerly line of said lands of Conrad S 85° 58' 10" W 859.35 feet to an iron pin found;

thence, along the westerly line of said lands of Conrad and also along the westerly line of said lands of Ronald J. Kowal and Joyce E. Kowal and lands now or formerly of John F. Beiler, Jr. and Edna Mai Beiler per Record Book 4009 Page 1823, S 00° 24' 14" W 460.72 feet to a point on the northerly line of lands of Catherine J. Wanner;

thence along the same S 89° 30' 39" W 1192.48 feet to an iron pipe found at the northeasterly corner of lands now or formerly of George R. Brookover and Kathleen M. Brookover per Deed Book I-51 Page 49; thence along the northerly line of said lands of Brookover S 89° 52' 10" W 123.76 feet to a concrete monument found at the southeasterly corner of lands now or formerly of Daniel R. McDaniel per Deed Book L-65, page 478;

thence, along the easterly line of said lands of McDaniel and also along the easterly line of lands now or formerly of R.G. Wheatcroft per Deed Book K-40 page 777 N 00° 58' 54" W 471.60 feet to an iron pipe found at the southeasterly corner of lands now or formerly of Glenn Leroy Welsh per Deed Book H-56 Page 33;

thence, along the easterly line of said lands of Welsh N 12° 50' 57" E 94.09 feet to an iron pin found at the southeasterly corner of lands now or formerly of Leon Stewart, Jr. per Deed Book 1679 Page 584; thence, N 07° 49' 17" E 252.96 feet to a point being the southwesterly corner of lands now or formerly of William C. Rau, Jr. and Helen Sue Rau per Deed Book 1118 Page 36;

thence, along the southerly line of said lands of Rau N 42° 20' 49" E 46.01 feet to a point at the southwesterly corner of lands now or formerly of Teresa Weber per Deed Book X-49 Page 93; thence, along the southerly and easterly line of said lands of Weber and the three (3) following courses and distances:

1) S 85° 52' 50" E 237.47 feet to an iron pipe found;

2) N 04° 07' 10" E, crossing the southerly right-of-way line of said Coffroath Road 214.34 feet to an iron pin found near the south side of the cartway thereof;

3) along a line partially through said right-of-way of Coffroath Road, N 13° 13' 16" E 14.64 feet to a point at the southeasterly corner of lands now or formerly of Robert R. Moore and Janice F. Moore per Deed Book R-40 page 1062;

thence, along the southerly and easterly line of said lands of Moore the two (2) following courses and distances:

1) N 02° 02' 43" W 132.09 feet to a concrete monument found;

2) S 86° 35' 03" E 231.37 feet to a point on the title line in Coffroath Road near the north right-of-way thereof, said point being at the southwesterly corner of lands now or formerly of Nathan J. Stoltzfus and Vivian R. Stoltzfus, said point being located S 00° 54' 08" W 4.37 feet from an iron pin found on the west line of lands of Stoltzfus;

thence, along the title line in Coffroath Road the two (2) following courses and distances:

1) along the southerly line of said lands of Stoltzfus and also along the southerly line of lands now or formerly of Robert H. Hodge and Elizabeth W. Hodge, lands now or formerly of Kenneth R. Hoffman and Katherine M. Hoffman per Record Book 6 page 70, lands now or formerly of Michael Oteri and Ruth Oteri per Deed Book U-26 Page 142, S 86° 31' 24" E 1350.14 feet to a point at the southwesterly corner of lands now or formerly of said lands of Francesco A. Chilla and Margaret E. Chilla;

2) along the southerly line of said lands of Chilla S 87° 16' 18" E 541.38 feet to the point and place of BEGINNING.

CONTAINING 79.996 Acres of land be the same more or less.

EXCEPTING AND RESERVING THEREOUT AND THEREFROM ALL THAT CERTAIN parcel of land situate in West Cain Township, Chester County, Pennsylvania being shown as Parcel B on a Title Plan, Final Subdivision Plan of Sandy Hill dated February 8, 2001, last revised June 18, 2002 prepared by Commonwealth Engineers, Inc., Downingtown, PA and being more fully described as follows, to wit:

BEGINNING at an interior point at a corner of Lot 41, on the east line of land Daniel R. McDaniel (Deed Book L-65, Page 478), said point of beginning is measured along the line dividing said Lot 41 and land of McDaniel, north 00 degrees 58 minutes 54 seconds West 76.59 feet from a concrete monument found marking a common corner of Lot 41, Lot 40 and said land of Daniel R. McDaniel, which concrete monument found is also on the north line of land of George R. McDaniel, which concrete monument found is also on the north line of land of George R. and Kathleen M. Brookover and is located approximately 32 feet (scaled) east of the center line of Cambridge Road T-358; thence from the point of beginning along the east line of land of Daniel R. McDaniel North 00 degrees 58 minutes 54 seconds West 196.97 feet to a corner of Lot 42; thence along Lot 42 the two (2) following courses and distances:

1) North 89 degrees 01 minute 06 seconds East 23.49 feet to a point;  
2) South 51 degrees 43 minutes 34 seconds East 40.69 feet to a common corner of Lot 42 and Lot 41; thence along Lot 41 the two (2) following courses and distances:

(1) South 00 degrees 58 minutes 54 seconds East 29.31 feet to a point;  
(2) South 20 degrees 12 minutes 10 seconds West 152.20 feet to the point of beginning.

CONTAINING 0.150 acres of land be the same more or less.

BEING TAX PARCEL NUMBER:  
Part of Parcel UPI No. 28-5-102

Parcel UPI No. 28-5-106

Parcel UPI No. 28-5-14

BEING THE SAME PREMISES WHICH Douglas J. Hurlock and Paul Trego, Co-Executors of the Estate of Ethel I. Kowal, a/k/a Ethel Irene Kowal, deceased by Deed dated 4/9/2003 and recorded in the office for the Recording of Deeds in and for the County of Chester on 4/16/2003 in Record Book 5653 page 800, granted and conveyed unto All County Partnership, a Pa. General Partnership, in Fee.

**SECOND AGREEMENT FOR THE CONVEYANCE OF WASTEWATER FROM  
WEST CALN TOWNSHIP THROUGH SADBURY TOWNSHIP**

**THIS AGREEMENT** is made on the *9<sup>th</sup>* day of *August*, 2013, among **PENNSYLVANIA-AMERICAN WATER COMPANY ("PAWC"), SADBURY TOWNSHIP**, Chester County, Pennsylvania ("Sadsbury Township"), **WEST CALN TOWNSHIP**, Chester County, Pennsylvania ("West Caln Township") and **LAWRENCE DEVELOPERS, L.P. a/k/a Lawrence Development ("Developer")**.

**RECITALS**

A. PAWC is a public utility corporation, organized and existing under the laws of the Commonwealth of Pennsylvania, and owns and operates a wastewater treatment plant for service providing public wastewater service to various municipalities in Chester County, Pennsylvania.

B. Sadsbury Township is a municipal corporation, organized and existing under the laws of the Commonwealth of Pennsylvania, and provides wastewater collection service to residential, commercial and industrial users within the Township, connecting its collection system to PAWC's conveyance system and wastewater treatment plant so that wastewater and industrial wastes discharged by said users may be received in said plant for treatment and disposal.

C. West Caln Township is a municipal corporation, organized and existing under the laws of the Commonwealth of Pennsylvania, bordering Sadsbury Township, with certain residential type wastewater disposal needs.

D. Developer has undergone a land development plan approval proceeding in West Caln Township for a residential development to be located there known as the Lawrence Development ("Development") which Development is intended to be served with public wastewater service by PAWC.

E. PAWC's predecessor, the City of Coatesville Authority ("CCA"), and Sadsbury entered into a Sewage Treatment Agreement dated July 7, 1997 ("Sewage Treatment Agreement"), which Sewage Treatment Agreement has been assigned to PAWC upon its purchase of substantially all of the assets of CCA, and which Sewage Treatment Agreement provides, among other things, that should PAWC desire to convey wastewater from points outside of Sadsbury Township into and through the Sadsbury's wastewater collection system and conveyance system to a point of connection to the existing PAWC wastewater collection system, Sadsbury Township and PAWC will enter into a separate agreement setting forth the terms and conditions governing such conveyance.

F. PAWC and Sadsbury Township along with the developers of two existing residential developments located in West Caln Township, entered into a Wastewater Conveyance Agreement dated September 16, 2003 ("Wastewater Conveyance Agreement") providing for, among other things, the construction by PAWC of a force main carrying flows limited to the said two developments, connecting to the Sadsbury wastewater collection system and conveying

waste from the two developments through the Sadsbury system to a point of reconnection to the PAWC collection and treatment system.

G. Sadsbury Township and PAWC desire to set forth the terms and conditions providing for the conveyance of flows limited to a third residential development located in West Caln Township, the Lawrence Development, to be connected to the existing force main constructed by PAWC in West Caln Township, and thence connecting through the Sadsbury Township system to a point of reconnection to the PAWC collection and treatment system.

H. In addition to the connection of the three West Caln Township residential developments, Sadsbury Township, PAWC and West Caln Township further desire to set forth the terms and conditions providing for the future conveyance of flows from certain failing on-lot residential type sewage systems to be connected to the existing force main constructed by PAWC in West Caln Township, and thence through the Sadsbury system to a point of reconnection to the PAWC collection and treatment system, and otherwise governing wastewater conveyance through Sadsbury Township to serve said properties.

**NOW, THEREFORE**, in consideration of the foregoing and the mutual covenants set forth herein, and intending to be legally bound, the parties agree as follows:

#### **ARTICLE I - DEFINITIONS.**

The terms defined in this Article, wherever used or referred to in this Agreement, shall have the following respective meanings unless a difference clearly appears from the context.

Average Daily Flow - Average number of gallons per day of wastewater determined by taking the total quantity of flow delivered to a point during a calendar year, and dividing by three hundred sixty five (365) days.

Capacity Fee - The onetime Sadsbury Township charge for conveyance into and through Sadsbury Township's wastewater collection system to a point of connection to the existing PAWC wastewater collection system, on a per unit basis. The capacity fee charged by Sadsbury Township equals the prevailing tapping fee imposed by Section 101-13.A. of the Sadsbury Sewer Use Ordinance at the time of application for a connection.

Conveyance - For purposes of this Agreement, a term defined as the transportation of wastes in and through Sadsbury Township owned collection lines and other wastewater facilities from the Point of Connection to the Treatment Plant.

Domestic Waste - Customary wastes from residential type dwellings or small commercial uses which include kitchens, water closets, lavatories and laundries, but excluding industrial waste, hazardous waste and waste determined to be qualitatively inimical to the safe and efficient operation of the sewage treatment plant or wastewater conveyance facilities.

PAWC Forcemain – The existing sewage forcemain owned by PAWC in West Caln Township as shown on the plans prepared by Commonwealth Engineers, Inc. titled “Sanitary Sewer Forcemain Plan for Lawrence Development, Calnshire West & Sandy Hill Subdivisions,” dated 12-03-2001, last revised 06-10-03, which connects to the Sadsbury system at the Point of Connection.

Point of Connection - Point approved by Sadsbury Township at which PAWC connects to the Sadsbury Township system to convey wastewater from the Development through Sadsbury’s system for treatment or disposal, this point being Sanitary Sewer Manhole Number 4 (SSMH No. 4) at station 9+00 on Sheet 2 of 13 as shown on the plans prepared by Commonwealth Engineers, Inc. titled “Sanitary Sewer Forcemain Plan for Lawrence Development, Calnshire West & Sandy Hill Subdivisions,” dated 12-03-2001, last revised 06-10-03.

Sewer Use Charge – A charge reflecting the share of conveyance cost of jointly used sewage facilities in Sadsbury Township attributable to waste flow from the Development and the West Caln Connections, as determined in accordance with the formula set forth in Article V, Section 1 of this Conveyance Agreement, including all costs incident to the operation of wastewater collection lines, pumping stations and other wastewater facilities and appurtenances which are jointly used by the parties for the conveyance of wastewater from and by Sadsbury Township as well as the conveyance of domestic waste through Sadsbury Township from West Caln Township. Specifically, such costs shall include the cost of all maintenance, labor, repairs as may be necessary, all utilities, taxes, engineering, legal and superintendence expenses and casualty and other insurance premiums actually paid and documented.

Treatment Plant - Existing wastewater treatment plant and facilities owned and operated by PAWC, together with any additions, modifications and/or improvements thereto.

West Caln Sewage – Domestic Waste emanating from West Caln Connections to be connected to the PAWC Forcemain.

West Caln Connections – Residences with failing on-lot residential sewage systems located within the West Caln Sewage Management Area to be connected to the PAWC Forcemain.

West Caln Sewage Management Area – The sewage management service area located within West Caln Township shown on the plan entitled West Caln Existing and Proposed Sewer Service Areas prepared by the Chester County Health Department and dated 10-5/2011, approved by West Caln Township on November 12, 2012 and attached hereto as Exhibit “A” and incorporated herein by reference. The sewage management service area shall be limited to the highlighted proposed areas adjacent to Old Wilmington Road, Ash Road, Route 340, North Sandy Hill Road and Hill Road tributary to the Point of Connection.

## ARTICLE II - STATEMENT OF INTENT

The introductory recital paragraphs "A" through "H" are hereby incorporated by reference herein as if they were set forth within the body of this Agreement. The parties hereto agree that it is the intent of this Agreement to provide for the conveyance of Domestic Waste only from the PAWC Forcemain, to serve the Development and the West Caln Sewage Management Area, through a portion of Sadsbury Township's wastewater system to the PAWC wastewater system in Pomeroy, and from there to the Treatment Plant for treatment and disposal of those wastes, in common with other wastes flowing through the PAWC system, and to provide for payment to Sadsbury Township of Capacity Fees and Sewer Use Charges for the jointly used conveyance facilities of Sadsbury Township. It is the intention of the parties that the discharge of any wastewater emanating from outside the Development and the West Caln Sewage Management Area into Sadsbury Township's wastewater system will be the subject of a separate agreement between PAWC and Sadsbury Township. It is further the intention of the parties that the additional flow from the Development and the West Caln Sewage Management Area will be subject to the limitation of flows at the Point of Connection as set forth in the Wastewater Conveyance Agreement, and additional flow to be discharged by PAWC to Sadsbury Township's system beyond the maximum average daily flow provided for in the Wastewater Conveyance Agreement will likewise be the subject of a separate agreement.

## ARTICLE III - TERMS OF AGREEMENT

Section 1. This Agreement shall be effective as of the date specified in Article VI, Section 5 of this Agreement and shall continue for an indefinite period from said date, provided, however, that the Sewage Treatment Agreement now existing between Sadsbury Township and PAWC shall affect this Agreement in that, should PAWC terminate the Sewage Treatment Agreement, this Agreement between PAWC and Sadsbury shall be subject to renegotiation at the time of such termination, but Sadsbury Township shall have no obligation to continue this Agreement. Should the Sadsbury Township terminate the existing Sewage Treatment Agreement, this Agreement between PAWC and Sadsbury Township shall continue in full force and effect.

Section 2. Sadsbury Township hereby specifically grants to PAWC the right to connect the Development and West Caln Connections to the PAWC Forcemain and to discharge Domestic Waste emanating from the Development and West Caln Connections at the Point of Connection within the maximum Average Daily Flow limitation set forth in the Wastewater Conveyance Agreement of 110,000 gallons, and to convey wastewater through Sadsbury Township's wastewater system in accordance with the Wastewater Conveyance Agreement. At no time shall the maximum flow rate at the Point of Connection exceed 418,000 gallons per day or 290 gallons per minute. Sadsbury Township's agreement to permit PAWC's conveyance of wastewater through Sadsbury Township shall be limited under this Agreement to flows emanating from the Development and the West Caln Connections and shall be subject to the payment of the fees and charges as set forth and described in Article V of this Agreement, to Sadsbury Township to provide for the conveyance and operation and maintenance of the jointly used wastewater facilities as provided herein. Wastewater flows conveyed through the Sadsbury

Township system from the Development and West Caln Connections, shall be deducted from, and not included in, metered flow used for PAWC's billing of Sadsbury Township pursuant to the Sewage Treatment Agreement. Such PAWC flows conveyed through Sadsbury Township shall have no impact upon Sadsbury Township's right or limitation on Sadsbury Township's right to discharge wastewater as provided in the parties' Sewage Treatment Agreement.

Section 3. It is hereby agreed that once the Development and the West Caln Connections are connected to the Sadsbury Township system, no flow emanating from such connections shall thereafter be disconnected from and then diverted by PAWC from the Point of Connection unless West Caln Township officially revises its Act 537 Plan, subject, however, to the terms of Section 1 hereof.

Section 4. The flow meter required by Article III, Section 2 of the Wastewater Conveyance Agreement at the Point of Connection shall be installed by PAWC as shown on the plans prepared by Commonwealth Engineers, Inc. titled "Sanitary Sewer Forcemain Plan for Lawrence Development, Calnshire West & Sandy Hill Subdivisions," dated 12-03-2001, last revised 06-10-03, which shall be used for the purpose of determining the quantity of wastewater conveyed from PAWC's system through the Sadsbury wastewater system. The flow meter shall be installed and operational prior to the first connection from either the Development or the West Caln Connections, whichever shall first occur. The expense of procurement, installation and maintenance thereof shall be borne by PAWC. Said meter shall employ a data logger flow recording device, shall be capable of recording electronically the instantaneous flow and daily flow totals which Sadsbury Township shall have access to, and shall be subject to the following:

A. The meter shall be inspected and calibrated and tested for accuracy on a semi-annual basis by a person or entity competent in the inspection and testing of such devices. Reports of such inspections shall be mailed directly to Sadsbury Township. The cost of such inspection and the cost of any repair or replacement shall be borne by PAWC. All repairs of meters of any type shall be accomplished within thirty (30) calendar days of receipt of the inspection company's report attesting to the meter's malfunction.

B. In the event of faulty meter registration or other malfunction resulting in missing flow records, an estimate of flows will be made for the purposes of determining volume of wastewater discharged. This estimate will be based on an evaluation of past flow records, bearing in mind conditions existing at the time of the estimate which would typically have an effect on flows, such estimate to be reviewed and agreed upon by the engineers for both PAWC and Sadsbury Township.

C. Meter records and the meter installation shall be made available and accessible to Sadsbury Township. The record of wastewater flow through recording meters operated and maintained by PAWC will be read by PAWC on or about the first days of January, April, July and October, showing the total sewage flows discharged during the previous three-month period.

Section 5. PAWC and Sadsbury Township have adopted rules and regulations for making of connections and use of their respective wastewater systems in conformity with the parties' Sewage Treatment Agreement. PAWC agrees that such rules and regulations shall apply

to the wastewater connections contemplated in West Caln Township. PAWC also agrees to enforce the provisions of its rules and regulations at all necessary times, and PAWC and West Caln Township agree that Sadsbury Township or its duly authorized representative shall have the right, at all times, to inspect sewage systems connected to Sadsbury Township for conveyance and to, as otherwise legally permitted, compel the discontinuation of any connection which it finds to be in violation of this Agreement.

Section 6. The parties hereto agree to comply with all applicable present and future Pennsylvania or federal laws, as well as any rules, regulations, permits, orders and requirements lawfully made by any governmental body having jurisdiction and all applicable grant agreements, unless the same are being contested in good faith by appropriate proceedings.

#### **ARTICLE IV - MAINTENANCE, SAVE HARMLESS AGREEMENT, INSURANCE**

Section 1. PAWC and Sadsbury Township agree, in regard to their respective collection systems, to operate continuously and keep and maintain the same at all times in first-class repair and order, and in good and efficient operating condition, and to meet the standards prescribed by the Pennsylvania Department of Environmental Protection or of any other governmental authority having jurisdiction thereof.

Section 2. Sadsbury Township agrees to indemnify to the fullest extent permitted by law and save harmless PAWC against all losses, costs or damages on account of any injury to persons or property occurring in the performance of this Agreement because of the negligence of Sadsbury Township, its servants, agents or employees, or resulting from the failure of the Treatment Plant and lines leading thereto to function properly because of such negligence. Nothing herein contained shall be construed to waive governmental immunity or limitation of liability otherwise provided by law.

Section 3. PAWC agrees to indemnify to the fullest extent permitted by law and save harmless Sadsbury Township against all losses, costs or damages on account of any injury to persons or property occurring in the performance of this Agreement because of the negligence of PAWC, its servants, agents or employees, or resulting from the failure of the Treatment Plant and lines leading thereto to function properly because of such negligence. Nothing herein contained shall be construed to waive governmental immunity or limitation of liability otherwise provided by law.

Section 4. The Developer, its successors and assigns, jointly and severally, agrees to indemnify to the fullest extent permitted by law and save harmless PAWC and Sadsbury Township against all losses, costs or damages on account of any injury to persons or property occurring in the performance of this Agreement because of the negligence of Developers, their servants, agents or employees. Nothing herein contained shall be construed to waive limitation of liability otherwise provided by law. This indemnity shall terminate upon the later of (i) the connection of all units within the residential Development identified in the recital section above at paragraph D to the PAWC wastewater system; (ii) the cessation of Developer's ownership of property within the Development; or (iii) the cessation of Developer's control of the Development.

Section 5. PAWC and Sadsbury Township shall insure or cause to be insured their respective facilities (i.e., including but not limited to the Treatment Plant, capital additions and interceptors) in a responsible company or companies authorized and qualified to do business under the laws of the Commonwealth of Pennsylvania against loss or damage by fire and against such other risks in such amounts as customarily are carried upon, or with respect to, like property in Pennsylvania. Immediately after any loss or damage to either parties' facilities or any part thereof, the affected party will commence and duly prosecute the repair, replacement or reconstruction of the damaged or destroyed portion of its facilities, all according to the provisions as previously defined. Both parties will also maintain liability insurance against any loss or injury to third persons or property of third persons as a result of fire, explosion and other risk and casualty occurring to their respective facilities.

**ARTICLE V - CHARGES AND PAYMENTS.**

Section 1. Sadsbury Township shall bill PAWC for a quarterly Sewer Use Charge for the cost of conveyance of wastewater from the Development and West Caln Connections through Sadsbury Township's wastewater system. Billings shall be delivered by Sadsbury to PAWC on or about the twenty-fifth day of January, April, July and October of each year and shall be payable to the office of Sadsbury Township by the twenty-fifth day of the month following delivery of bills. The quarterly bills shall be calculated by multiplying the annual Sewer Use Charge by the actual quarterly flow.

A. At the conclusion of each calendar year, Sadsbury Township shall determine the Sewer Use Charge for the upcoming year based upon actual costs incurred and flows metered during the calendar year just concluded and by applying such data to the following formula:

$$\text{Sewer Use Charge} = \{[(\text{OM}_{\text{collection}} + \text{Administrative Cost}) L_1/L_2]F_1/F_2 + \text{OM}_{\text{pump station}} \times F_1/F_2\}/F_1 = \$ \_ / \text{gallon}$$

Where:

$\text{OM}_{\text{collection}}$  is the annual cost of operation and maintenance for the prior calendar year for wastewater collection facilities in Sadsbury Township.

$\text{OM}_{\text{pump station}}$  is the annual cost for the prior calendar year of utilities and pump station operation and maintenance for the facility located on Valley Road.

$F_1$  is the annual volume of flow for the prior calendar year into Sadsbury Township as metered by PAWC at the Point of Connection.  $F_1$  shall be determined by PAWC meter readings.

$F_2$  is the annual total flow for the prior calendar year in the commonly used lines.  $F_2$  shall be calculated by Sadsbury Township, such calculation subject to review and approval by PAWC, using, where appropriate, metering records at the downstream Sadsbury Township Point of Connection with the PAWC system.

$L_1$  is the total length of commonly used lines.

$L_2$  is the total length of all wastewater collection lines in Sadsbury Township.

$L_1$  and  $L_2$  shall be determined from the mapping of Sadsbury Township wastewater system.

Administrative Cost is the annual administrative cost for the prior calendar year for wastewater collection facilities in Sadsbury Township, which shall include, without limiting the generality of the foregoing, recurring or customary administrative costs associated with Sadsbury Township wastewater collection facilities but shall, in no event, include administrative costs associated with discrete capital projects or matters such as developers' collection system administrative costs or matters of litigation associated with the Sadsbury Township wastewater collection facilities.

B. Promptly upon each end of year determination of the annual Sewer Use Charge, Sadsbury Township shall submit its determination and copies of any and all records and documents used by Sadsbury in arriving at the amount of the annual Sewer Use Charge to PAWC. Quarterly Sewer Use Charges will be invoiced to PAWC in the amount determined by multiplying the annual Sewer Use Charge by the actual quarterly flow.

C. In the event of a dispute as to the annual Sewer Use Charge or of any amount billed to PAWC, the parties may resolve any disputed annual amount or portion of a bill pursuant to the dispute resolution provisions of Article VI, Section 7 of this Agreement. PAWC shall pay any portion of any bill not in dispute, pending resolution of the disputed amount.

Section 2. In addition to the annual Sewer Use Charge, PAWC will be responsible to pay to Sadsbury Township PAWC's proportionate share ( $F_1/F_2$ ) of capital costs, including without limitation, engineering, legal and administrative costs, incurred by Sadsbury Township for capital upgrades and/or replacement of the commonly used wastewater facilities at such time in the future as such replacement shall be necessary. The sole exception being the capital costs necessary to correct an overload condition at the pump station located at Valley Road if the Development is connected to the PAWC wastewater system at the time the capital cost is incurred. It is further understood that the Sadsbury Township wastewater conveyance system is subject to the 25 Pa. Code, Chapter 94 Municipal Wasteload Management Regulations, and specifically, 25 Pa. Code §94.12 requiring the submittal of Annual Reports. It is therefore further agreed that in the event an Annual Report discloses an existing or future overload condition at the pump station located at Valley Road, and it is determined that such overload condition would not exist in the absence of flows emanating in whole or in part from the Development, Developer will be responsible to pay to Sadsbury the total capital costs, including without limitation, engineering, legal and administrative costs, incurred by Sadsbury Township for capital upgrades and/or expansion of said pump station as necessary to correct the overload condition, less Sadsbury Township's proportionate share of said costs to the extent of any increase in capacity in said pump station to accommodate new and previously unplanned future

capacity requirements of Sadsbury Township. Developer shall, prior to connecting to PAWC's wastewater system deposit financial security with Sadsbury reasonably acceptable to Sadsbury Township to secure its financial obligations for the above costs. Developer shall provide proof to PAWC and West Caln Township of the deposit of financial security with Sadsbury Township, prior to PAWC and West Caln Township allowing any connection by Developer of the Development to the PAWC Forcemain.

Section 3. Developer shall, prior to connecting to PAWC's wastewater system, pay to Sadsbury Capacity Fees for each connection from the Development which will provide flows through the Point of Connection. It is agreed Developer may pay the Sadsbury Capacity Fees for the connection of the Development on a phase by phase basis prior to connecting the applicable phase.

Section 4. West Caln Township shall, prior to permitting any connection in the West Caln Sewage Management Area to PAWC's wastewater system, pay to Sadsbury Capacity Fees for each connection from the West Caln Sewage Management Area which will provide flows through the Point of Connection. Neither PAWC nor Sadsbury Township shall permit any connection in the West Caln Township Sewage Management Area to PAWC's wastewater system without the prior written approval of West Caln Township. Notwithstanding the foregoing, it is agreed West Caln's required capacity fees are separate from the Developer's payment of capacity fees. Developer shall be entitled to connect to PAWC's wastewater system upon payment of the Developer's capacity fees for each phase notwithstanding West Caln's requirement herein.

Section 5. The Developer shall provide proof to West Caln Township of payment of all Sadsbury Capacity Fees due under this Conveyance Agreement at the time of application for building permits for residences in the Development. West Caln Township shall not issue any building permit in connection with the Development except upon proof provided that all such Sadsbury Township fees and charges under this Agreement have been paid. West Caln Township shall not allow any connection within the West Caln Sewage Management Area until and unless such Sadsbury Township fees and charges under this Agreement have been caused to be paid to Sadsbury Township and proof of payment provided to West Caln Township. Further, all applications submitted to PAWC for water or wastewater service to units in the Development and the West Caln Connections shall be accompanied by proof of payment to Sadsbury Township of all applicable Capacity Fees. PAWC agrees that, if a unit within the Development or the West Caln Sewage Management Area is connected to the Sadsbury Township system without payment of a Capacity Fee, PAWC shall pay such unpaid fee(s) directly to Sadsbury within thirty (30) days of written notice from Sadsbury Township of nonpayment. Developer, with respect to the Development, and West Caln Township, with respect to the West Caln Sewage Management Area, agree to: (i) reimburse PAWC for payment of Capacity Fees under this Section, and (ii) indemnify and save harmless PAWC from any and all claims, including all costs and reasonable attorneys' fees, arising out of service withheld because of nonpayment of Capacity Fees under this section. With respect to West Caln Township, nothing herein contained shall be construed to waive governmental immunity or limitation of liability otherwise provided by law.

Section 6. The Developer agrees to pay to Sadsbury Township all engineering and legal fees incurred in connection with this Agreement and review of plans hereunder. Developer shall make payment to Sadsbury Township within ten (10) days of delivery of an invoice from Sadsbury Township to the Developer.

Section 7. Notwithstanding any payments by the Developer and West Caln Township to Sadsbury Township under this Agreement, the Developer, its successors and assigns, and the residential users served by West Caln Connections shall be and remain at all times the direct customers of PAWC.

#### **ARTICLE VI - MISCELLANEOUS**

Section 1. The failure of any party hereto to insist upon strict performance of this Agreement or any of the terms or conditions thereof shall not be construed as a waiver of any of its rights hereunder.

Section 2. This writing constitutes the entire Agreement between the parties, and there are no other representations or agreements, verbal or written, other than those contained herein.

Section 3. Whenever a notice is required to be given by mail, the following addresses shall be used unless a different address is specifically called for:

Pennsylvania-American Water Company  
800 West Hershey Park Drive  
Hershey, PA 17033

Sadsbury Township  
P.O. Box 261  
Sadsburyville, PA 19369

West Caln Township  
P.O. Box 175  
Wagontown, PA 19376

Lawrence Developers, L.P.  
c/o Lawrence A. Goldberg, Esquire  
213 W. Miner Street  
West Chester, PA 19382

Section 4. This Agreement may be executed in any number of counterparts and by the different parties on separate counterparts. Each such counterpart shall be deemed to be an original, but all such counterparts shall together constitute one and the same Agreement. This Agreement shall be deemed to have been executed when counterparts have been executed by all parties listed on the signature lines below.

Section 5. This Agreement shall become effective thirty (30) days after PAWC has filed a copy thereof with the Pennsylvania Public Utility Commission or, in the event that the said Commission institutes an investigation, at such time as the said Commission grants its approval thereof.

Section 6. In the event that the Pennsylvania Department of Environmental Protection, or any other regulatory body or governmental agency shall fail or refuse to issue any permits for conveyance which may be necessary to accomplish the intent and purpose of this Agreement, the parties shall be relieved from further compliance with the terms of this Agreement until such time when such permit or permits shall be issued.

Section 7. In the event that any disputes shall arise relative to the interpretation and/or application of the terms of this Agreement, the parties hereto do hereby agree to the following procedure to settle such matters:

A. The parties, operators and/or managers will attempt to discuss and solve the problem.

B. If Step "A" does not prove satisfactory, a joint committee comprised of three members, one selected by PAWC, one selected by Sadsbury Township, and one selected by the other two, will meet to attempt to solve the problem.

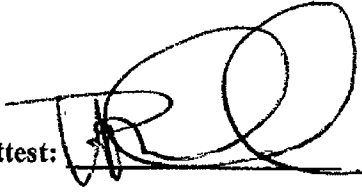

C. If neither step "A" nor "B" proves satisfactory, neither party shall be precluded from asserting any or all legal and/or equitable rights and remedies available to it in the Chester County Court of Common Pleas and as permitted by the regulations of the Pennsylvania Public Utility Commission.

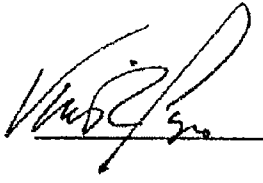
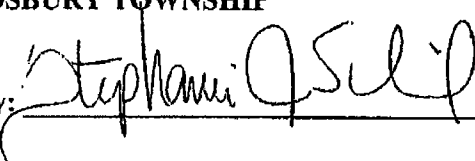
Section 8. The provisions of this Agreement and the respective rights and obligations of the Developer, PAWC, Sadsbury Township and West Cain Township hereunder shall be binding upon, and shall inure to the benefit of, their respective successors, grantees and assigns. With respect to the Developer, any successor, grantee or assignee of the Developer shall accept the terms and obligations of this Agreement in writing prior to the Developer being released from its obligations pursuant to this Agreement.

Section 9. The Developer expressly agrees to the recordation of a memorandum setting forth the obligation and terms of payment of the Capacity Fees and Reimbursement Fees to Sadsbury Township under this Conveyance Agreement, against all lands comprising the Developments, in the Office of Recorder of Deeds for Chester County. The Developer may record a separate memorandum regarding the payment of the capacity and reimbursement fees for each phase of the Development, which memorandum must be recorded at the time of recording of the phase but not later than prior to connection to the PAWC wastewater system. The memoranda (memorandum) shall terminate automatically upon the payment in full of the capacity fees and reimbursement fees to Sadsbury Township for the particular phase.


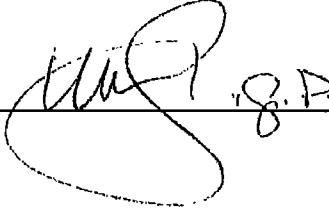
Section 10. Nothing set forth in this Agreement shall be deemed to amend, modify, supersede or abrogate the terms of the Wastewater Conveyance Agreement.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their appropriate officers and their respective seals to be hereunto affixed on the day and year first above written.

Attest:  PENNSYLVANIA-AMERICAN WATER COMPANY  
By: 

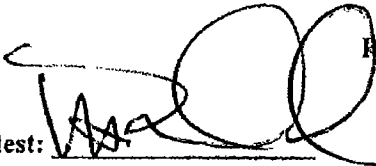

Witness:  SADBURY TOWNSHIP  
By: 

WEST CALN TOWNSHIP  
Witness: \_\_\_\_\_ By: \_\_\_\_\_

LAWRENCE DEVELOPERS, L.P.  
Witness:  By: 

Section 10. Nothing set forth in this Agreement shall be deemed to amend, modify, supersede or abrogate the terms of the Wastewater Conveyance Agreement.


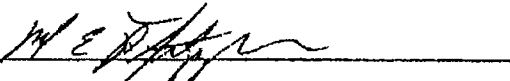
IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their appropriate officers and their respective seals to be hereunto affixed on the day and year first above written.

Attest:  PENNSYLVANIA-AMERICAN WATER COMPANY  
By: 

**SADSBURY TOWNSHIP**

Attest: \_\_\_\_\_ By: \_\_\_\_\_

**WEST CALN TOWNSHIP**

Witness:  By:   
LAWRENCE DEVELOPERS, L.P.

Witness: \_\_\_\_\_ By: \_\_\_\_\_

**EXHIBIT A**

[Being the plan entitled West Cain Existing and Proposed Sewer Service Areas prepared by the  
Chester County Health Department and dated 10-5-11]

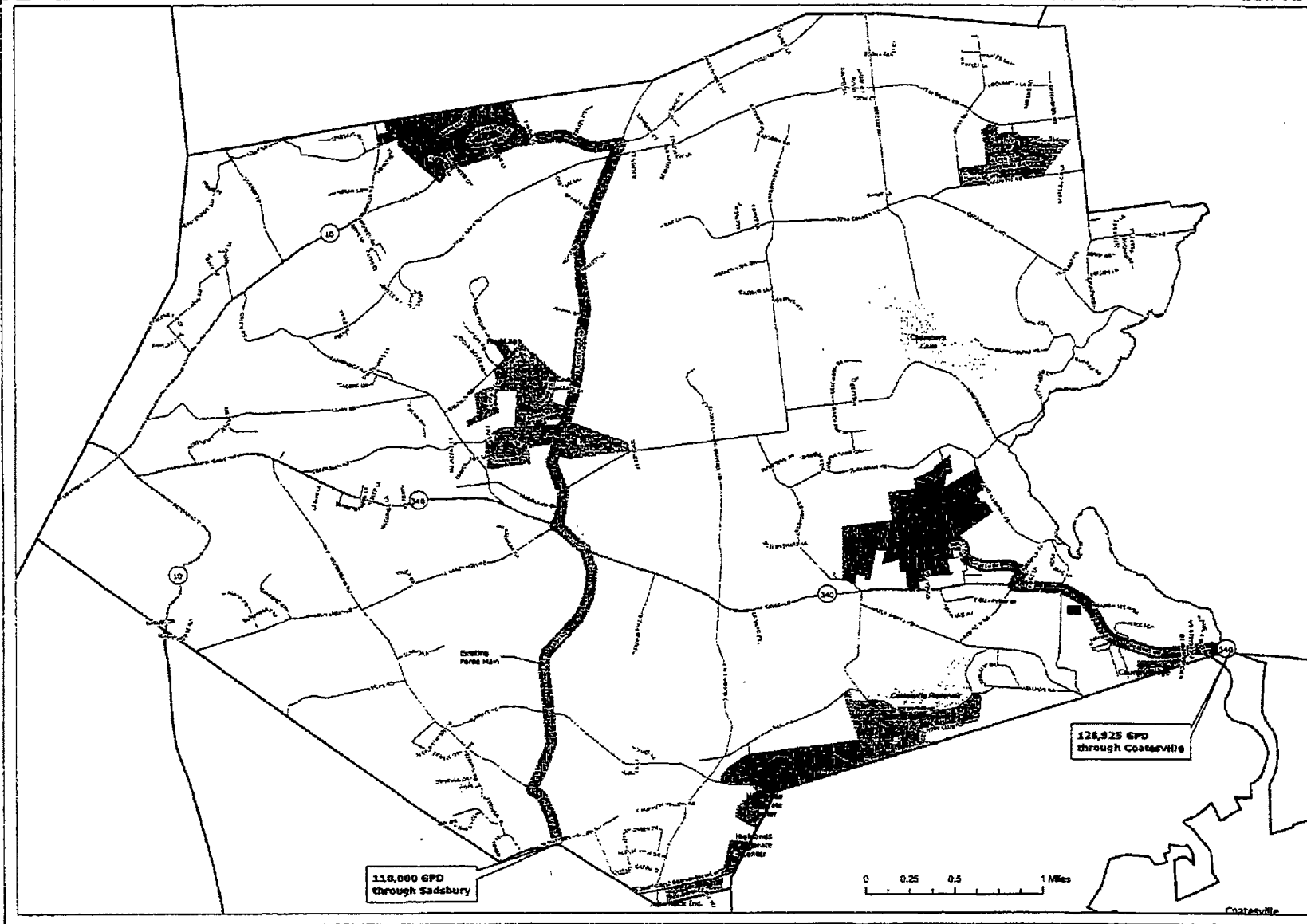
**West Cain District and Proposed Sewer Service Areas**

- Street Profiles**
- Paved Street
  - Proposed Paved Street
  - Unimproved Existing Paved Street
- Street Service Areas**
- Existing
  - Proposed



Map Created By:  
 CD-0 10/5/2011  
 Data Sources:  
 CD-0, CD-05

Division of Land and Water  
 State of Ohio, Department  
 of Public Safety  
 Division of Land and Water  
 1500 East Broad Street  
 Columbus, Ohio 43260  
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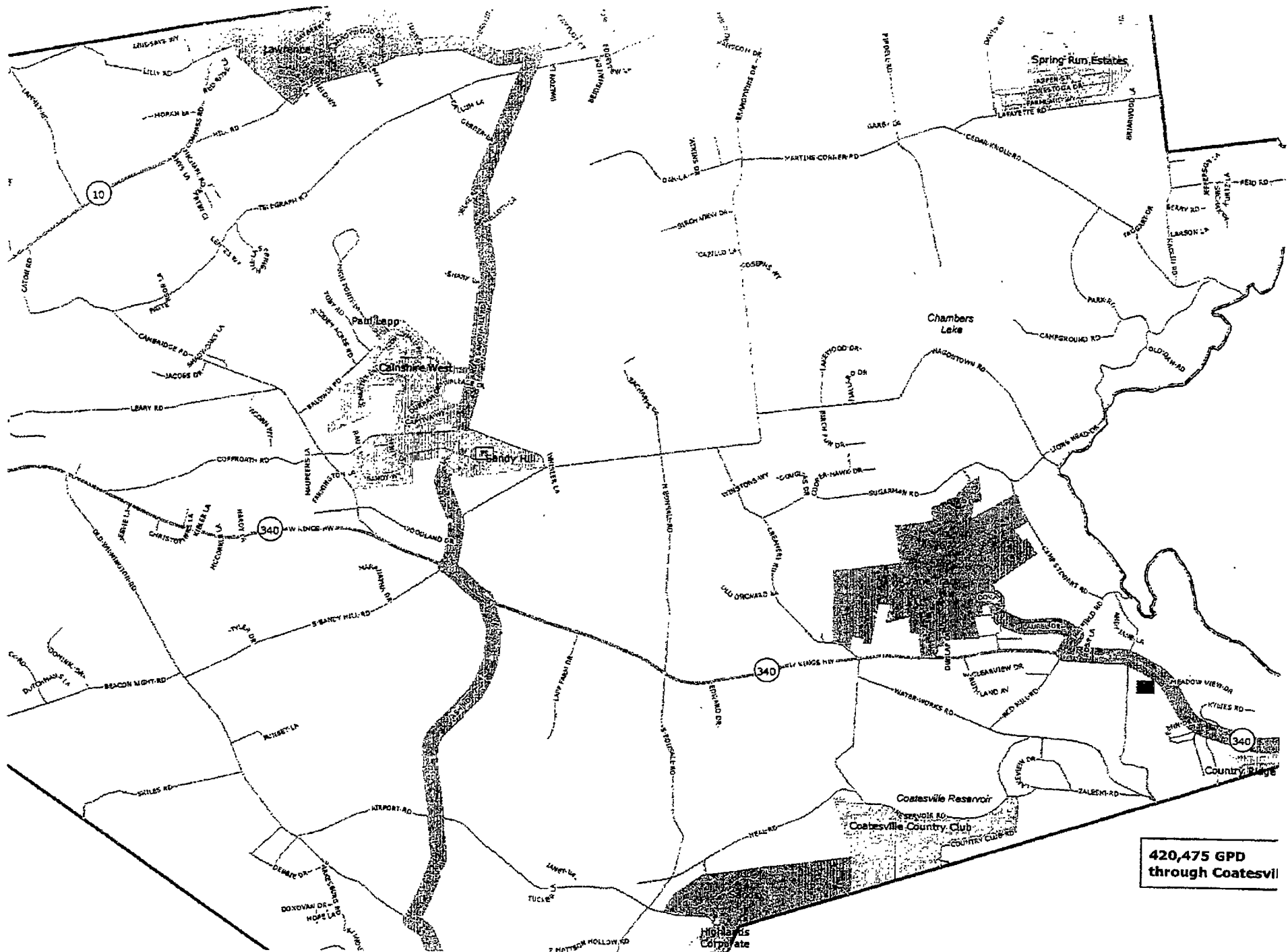


**118,000 GPD  
 Through Sadsbury**

**128,925 GPD  
 through Coatesville**

0 0.25 0.5 1 Miles

Coatesville



420,475 GPD  
through Coatesvil

Alan J. Jarvis, Esquire  
Highlands Corporate Center  
495 Highlands Boulevard, S-109  
Coatesville, PA 19320  
610-384-1151  
610-380-1392/Fax

Solicitor, Valley Township  
Attorney's I.D. 16134

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### AGREEMENT

**WHEREAS**, Valley Township ("Valley"), is a Township of the Second Class, with Offices at 890 West Lincoln Highway, Coatesville, Pennsylvania 19320; and

**WHEREAS**, Sadsbury Township ("Sadsbury"), is a Township of the Second Class with Offices at 2920 Lincoln Highway, Sadsburyville, Pennsylvania 19369; and

**WHEREAS**, on November 1, 2011, Sadsbury, acting through its Board of Supervisors, enacted its Ordinance No. 2011-02 authorizing the assignment by Sadsbury to Valley of 2800 West Lincoln Highway, Sadsbury Township, Chester County, Pennsylvania (Tax Parcel No. 37-2-77), as a sanitary sewage customer; and

**WHEREAS**, on November 1, Valley, acting through its Board of Supervisors, enacted its Ordinance No. 2011-08 authorizing the acceptance of the assignment by Sadsbury of 2800 West Lincoln Highway, Sadsbury Township, Chester County, Pennsylvania (Tax Parcel No. 37-2-77) to Valley as a sanitary sewage customer.

**NOW, THEREFORE, BE IT AGREED**, this 15 day of November, 2011, by and between Valley and Sadsbury as follows:

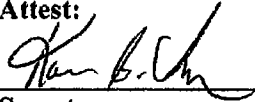
- (1) Sadsbury hereby assigns to Valley as a sanitary sewage customer the property at 2800 West Lincoln Highway, Sadsbury Township, Chester County, Pennsylvania (Tax Parcel No. 37-2-77), it being expressly understood that this assignment is subject to, and conditioned upon approval by the Commonwealth of Pennsylvania, Department of Environmental Protection.
- (2) Valley hereby accepts Sadsbury's assignment to it as a sanitary sewage customer the property at 2800 West Lincoln Highway, Sadsbury Township, Chester County, Pennsylvania (Tax Parcel No. 37-2-77); it being expressly understood that this acceptance is subject to, and conditioned upon, approval by the Commonwealth of Pennsylvania, Department of Environmental Protection.
- (3) It is further expressly understood by Sadsbury and Valley that the aforesaid assignment/acceptance is conditioned upon the reimbursement to the municipalities by the owners of 2800 West Lincoln Highway, Sadsbury Township, Chester County, Pennsylvania (Tax Parcel No. 37-2-77), of all engineering and legal fees and costs, including the costs of amending their Act 537 Plans.

IN WITNESS WHEREOF, the parties hereto have set forth their hands and seals the date above written.


**VALLEY TOWNSHIP**

By:   
Chairman, Board of Supervisors

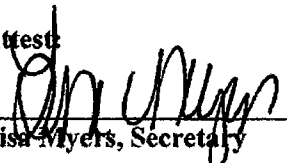
Attest:

  
Secretary

**SADSBURY TOWNSHIP**

By:   
Stephanie Silvernail  
Chairman, Board of Supervisors

Attest:

  
Lisa Myers, Secretary

Township: ASSIGNMENT-ACCEPTANCE AGREEMENT WITH SADSBURY TOWNSHIP

received  
5/17/00



## Pennsylvania-American Water Company

800 West Hershey Park Drive • P.O. Box 888 • Hershey, PA 17033-0888

(717) 533-5000 • FAX: (717) 531-3252

e-mail: [vredmond@pawc.com](mailto:vredmond@pawc.com)

Velma A. Redmond  
Vice President, Corporate Counsel  
and Secretary

May 16, 2000

Via UPS Overnight Delivery

Vincent M. Pompo, Esquire  
Lamb, Windle & McErlane, PC  
24 East Market Street  
Box 565  
West Chester, PA 19381-0565

Re: Sadsbury Township

Dear Mr. Pompo:

Enclosed please find one fully executed copy of the Settlement Agreement and twenty (20) copies of the revised map and service territory description. We will file an Amendment to the Application to reflect the changes to the map and service territory description.

Again, thank you for all your assistance in this matter.

Sincerely,

Velma A. Redmond

blg

Enclosures



**LAMB, WINDLE & McERLANE, P.C.**

24 EAST MARKET STREET, BOX 565, WEST CHESTER, PA 19381-0565

Vincent M. Pompo  
Voice 610-430-8000  
Fax 610-692-6210  
vpompo@chescolaw.com

May 15, 2000

Velma A. Redmond, Esquire  
Vice President, Corporate Counsel and Secretary  
Pennsylvania-American Water Company  
800 West Hershey Park Drive  
P.O. Box 888  
Hershey, PA 17033-0888

Re: Pennsylvania Public Utility Commission Application Nos. A-212285F0071  
(Water) and A-230073F0002 (Sewer)

Dear Ms. Redmond:

This firm serves as Solicitor to the Board of Supervisors of Sadsbury Township Chester County ("Sadsbury"). Sadsbury has filed Protests to the above-referenced Applications of Pennsylvania-American Water Company ("PAWC") now pending before the Pennsylvania Public Utility Commission pertaining to the acquisition of the water and sewer facilities owned by the City of Coatesville Authority ("CCA"). The following will confirm the various issues which we have discussed regarding the pending Applications, and my understanding of PAWC's agreement as to their resolution. As part of Sadsbury's consideration and settlement of the Protests, Sadsbury has requested and PAWC has agreed to the following commitments:

Application No. A-230073F0002 (Sewer)

1. Capacity Fee. The July 7, 1997 Bulk Sewer Agreement between CCA and Sadsbury (the "Agreement") sets forth the terms under which Sadsbury is a bulk sewer customer of CCA. The Agreement sets forth a capacity fee related to sewage treatment disposal costs of \$1.27 per gallon per day times a 1.4 peak load factor for a total of \$1.78 per gallon per day. PAWC agrees that this capacity fee will remain in place for at least three years following the date of acquisition of the CCA sewer assets by PAWC.

2. Parkesburg Interceptor. The Agreement includes a certain formula for calculating Sadsbury's pro rata share of the initial capital construction cost of the Parkesburg interceptor, to be charged to each connecting user on a per edu basis upon connection to the Sadsbury sewer system. The calculation of the Sadsbury's pro rata

Velma A. Redmond, Esquire  
May 15, 2000  
Page 2

share includes the costs incurred by CCA associated with the design, permitting, and construction of the facility. These costs, of course, have been fixed and PAWC agrees that they will remain unchanged as a result of the acquisition by PAWC. There is also a component for CCA's bond interest which is presently calculated based upon CCA's seventeen-year tax exempt bond amortization schedule. PAWC agrees that, notwithstanding other financial arrangements that PAWC may incur with respect to the retirement or assumption of CCA's debt for this facility, or other financial arrangements for the same, the maximum interest component of the calculation under the Agreement will remain fixed in place based upon the seventeen year, tax exempt bond amortization schedule, for all future connections by Sadsbury customers in accordance with the Agreement, unless PAWC's actual weighted average cost of the capital component in its most recent fully litigated rate case during the term of the Agreement is less or is zero, in which case the lesser weighted average cost of capital component shall apply.

3. Other Sewer Charges, Fees, etc. PAWC agrees that all other sewer related charges by PAWC for properties/customers within Sadsbury will be frozen for three years following the date of acquisition of the sewer assets by PAWC from CCA. These charges include the bulk rate of \$2.13 per 1000 gallons for the costs for operating and maintaining the conveyance system and treatment plant. Should Sadsbury purchase additional conveyance and treatment capacity from PAWC within three years following the date of acquisition of the sewer assets by PAWC from CCA, PAWC agrees that the conveyance, capacity and treatment charges will also remain frozen for three years following said date of acquisition of the sewer assets.

4. Meter Readings. PAWC agrees to provide quarterly water meter readings for water customers within Sadsbury served by the Sadsbury sewer system, at the rate of 10 cents per billing unit, with a minimum fee of \$25.00 per quarter. If requested by Sadsbury, upon forty-five (45) days notice, PAWC will provide billing services for the period requested, but for not less than one year, on behalf of Sadsbury for sewer service provided by Sadsbury, at the billing fee of 70 cents per billing unit. If requested by Sadsbury, PAWC will provide sewer billing service to Sadsbury sewer customers with metered well water supplies, at the same rate, provided that Sadsbury provides these meter readings at its expense to PAWC. PAWC agrees that the above rates will be frozen for three years following the date of acquisition of the sewer assets by PAWC from CCA.

5. Franchise Area. The PAWC certificated sewer franchise area within Sadsbury will be restricted to the point of connection of the Sadsbury sewer system to the PAWC system as a bulk sewer customer. PAWC agrees that it will not seek, nor voluntarily accept, any other certificated sewer franchise area within Sadsbury without the prior written consent and approval of Sadsbury first had and obtained.



Velma A. Redmond, Esquire  
May 15, 2000  
Page 3

6. Valley Road Extension Flow Meter. PAWC agrees that the planned Valley Road sewer extension to serve Sadsbury customers in the vicinity of the south side of Valley Road shall not require the installation, maintenance or operation by Sadsbury of a sewage flow meter, and that instead, sewage flows from this service area for all purposes shall be based upon water meter readings of all of the Sadsbury units connected to this sewer extension, provided that the total number of Sadsbury connections to this sewer extension does not exceed thirty (30) connections, and the Valley Road extension is maintained in a manner that minimizes inflow and infiltration.

Application No. A-212285F0071 (Water)

1. Water Rates, Charges, etc. PAWC agrees that all water rates, charges and fees for PAWC customers within Sadsbury will remain frozen in place for a period of at least three years from the date of acquisition of the CCA water system assets by PAWC.

2. Franchise Area. The pending application includes all of Sadsbury Township within the proposed PAWC certificated water franchise area. PAWC agrees to reduce the certificated water franchise area to the area marked in orange on the Sadsbury zoning map attached hereto and incorporated herein as Exhibit "A", and as described in the narrative legal description attached hereto and incorporated herein as Exhibit "B". PAWC agrees that it will not seek, nor voluntarily accept, any additional certificated water franchise area in Sadsbury without the prior written consent and approval of Sadsbury first had and obtained.

3. Route 10 Water Line. If a water main is extended from PAWC's system to the vicinity of Route 10 and Route 30, PAWC agrees that such main extension shall be located from the Village of Sadsburyville along Business Route 30, and not located along Route 10 from Parkesburg. It being understood that PAWC makes no commitment to fund any portion of such main extension other than in accordance with the provisions of PAWC's Tariff.

4. Village of Pomeroy Construction. PAWC understands that Sadsbury is presently constructing a new sanitary sewer system in the Village of Pomeroy, and said construction has resulted in the excavation of certain public streets within Pomeroy. PAWC further understands that the installation and/or upgrade of certain water facilities along Middle Street and Spruce Street contemporaneous with the Sadsbury sewer project, and prior to the resurfacing of these streets by Sadsbury, is in the best interests of PAWC and Sadsbury, as well as existing and future PAWC customers. These improvements consist of the installation of a water main from Spruce Street along



Velma A. Redmond, Esquire  
May 15, 2000  
Page 4

Church Alley to Middle Street; the installation of a water main along Middle Street to serve existing houses including taking the curb stops to the property lines; and the relocation of curb stops in Spruce Street to the property lines (the "Improvements"). However, it is anticipated that the resurfacing of these streets will be necessary prior to the acquisition of the CCA water system assets by PAWC. CCA has agreed to install the Improvements prior to the resurfacing, so long as PAWC agrees to reimburse CCA for the cost of the Improvements. Accordingly, PAWC agrees to reimburse CCA for the reasonable cost of the Improvements, provided the Improvements are installed prior to acquisition by PAWC of the water system assets.

5. Future Water Sources and Facilities. PAWC agrees not to develop any future water supply sources, including but not limited to, any new groundwater sources or any surface water withdrawals, or any new aboveground water storage tanks, within Sadsbury, without the prior written consent and approval of Sadsbury first had and obtained, provided that PAWC may repair, refurbish or replace the existing aboveground water storage tank located within a perpetual easement area in the Airport Industrial Mall, and may add no more than one additional aboveground storage tank within said easement area.

Sadsbury, upon PAWC's agreement to the foregoing, agrees to withdraw the Protests filed in the above applications, with prejudice, and will support the above applications, and any future applications by PAWC to extend service in Sadsbury, consistent with the terms of this Agreement.

Please kindly confirm that the above accurately reflects your agreement with the foregoing by counter signing below.

Very truly yours,

LAMB, WINDLE & MCERLANE, P.C.

By: 

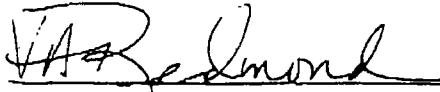
Vincent M. Pompo

VMP/jen



Velma A. Redmond, Esquire  
May 15, 2000  
Page 5

On behalf of Pennsylvania American Water Company,  
I am duly authorized to sign and agree to the  
foregoing terms of agreement.



---

Velma A. Redmond, Esquire  
Vice President, Corporate Counsel and Secretary  
Pennsylvania American Water Company

mun/vmp/st/sewer-Redmondltr5/15/00



## WASTEWATER CONVEYANCE AGREEMENT

THIS AGREEMENT is made on the 12 day of September, 2003, among PENNSYLVANIA-AMERICAN WATER COMPANY ("PAWC"), SADS BURY TOWNSHIP, Chester County, Pennsylvania ("Township"), ALL COUNTY PARTNERSHIP AND CALNSHIRE ESTATES, LLC (together sometimes hereinafter referred to as the "Developers").

WHEREAS, PAWC is a public utility corporation, organized and existing under the laws of the Commonwealth of Pennsylvania, and owns and operates a wastewater treatment plant for service providing public wastewater service to various municipalities in Chester County, Pennsylvania; and

WHEREAS, the Township is a municipal corporation, organized and existing under the laws of the Commonwealth of Pennsylvania, and provides wastewater collection service to residential, commercial and industrial users within the Township, connecting its collection system to PAWC's wastewater treatment plant so that wastewater and industrial wastes discharged by said users may be received in said plant for treatment and disposal; and

WHEREAS, All County Partnership and Calnshire Estates, LLC have each undergone a land development plan approval proceeding in West Caln Township, Chester County, Pennsylvania for developments to be located there (together hereinafter sometimes referred to as the "Developments") which Developments are intended to be served with public wastewater service by PAWC; and

WHEREAS, PAWC's predecessor, the City of Coatesville Authority ("CCA"), and the Township entered into a Sewage Treatment Agreement dated July 7, 1997 ("Sewage Treatment Agreement"), which Sewage Treatment Agreement has been assigned to PAWC upon its purchase of substantially all of the assets of CCA, and which Sewage Treatment Agreement provides, among other things, that should PAWC desire to convey wastewater from points outside of the Township into and through the Township's wastewater collection system to a point of connection to the existing PAWC wastewater collection system, the Township and PAWC will enter into a separate agreement setting forth the terms and conditions governing such conveyance; and

WHEREAS, in order to most expeditiously provide wastewater service to the Developments, PAWC will construct a force main carrying flows from the Developments which will connect to the Township wastewater collection system and convey waste from the Developments through the Township system to a point of reconnection to the PAWC collection and treatment system; and

WHEREAS, the Township and PAWC desire to set forth the terms and conditions herein governing wastewater conveyance through the Township to serve the Developments.

NOW, THEREFORE, intending to be legally bound, the parties agree as follows:

#### ARTICLE I - DEFINITIONS.

The terms defined in this Article, wherever used or referred to in this Agreement, shall have the following respective meanings unless a difference clearly appears from the context.

Average Daily Flow - Average number of gallons per day of wastewater determined by taking the total quantity of flow delivered to a point during a calendar year, and dividing by three hundred sixty five (365) days.

Capacity Fee - The onetime Township charge for conveyance into and through the Township's wastewater collection system to a point of connection to the existing PAWC wastewater collection system. The capacity fee charged by the Township is \$1,141.15 per equivalent dwelling unit (EDU).

Conveyance - For purposes of this Agreement, a term defined as the transportation of wastes in and through Township owned collection lines and other wastewater facilities from the Point of Connection to the Treatment Plant.

Domestic Waste - Customary wastes from residential dwellings which include kitchens, water closets, lavatories and laundries, but excluding industrial waste, hazardous waste and waste determined to be qualitatively inimical to the safe and efficient operation of the sewage treatment plant or wastewater conveyance facilities.

Industrial Waste - The liquid waste or liquid borne waste resulting from the processing employed by an industrial user, whether treated or untreated, and discharged into the wastewater facilities and Treatment Plant.

Point of Connection - Point at which PAWC connects to the Township system to convey wastewater from the Developments through Sadsbury's system for treatment or disposal, this point being Sanitary Sewer Manhole Number 4 (SSMH No. 4) at station 9+00 on Sheet 2 of 13 as shown on the plans prepared by Commonwealth Engineers, Inc. titled "Sanitary Sewer Forcemain Plan for Lawrence Development, Calnshire West & Sandy Hill Subdivisions," dated 12-03-2001, last revised 06-10-03

Reimbursement Fee - The one time charge for conveyance into and through the Township's wastewater collection system to a point of connection to the existing PAWC wastewater collection system for the purpose of reimbursing the Sadsbury Sewer Corporation (SSC) for a portion of SSC's cost for the construction of the Township's wastewater collection system,

pursuant to a certain Agreement dated July 7, 1997, by and between the Township and SSC. The reimbursement fee is \$1,178.00 per equivalent dwelling unit (EDU).

Sanitary Sewage (Wastewater) - All water-carried domestic waste from residences, offices, hotels, stores, restaurants, commercial, industrial and institutional establishments and similar users within the Township.

Sewer Use Charge – A charge reflecting the share of conveyance cost of jointly used sewage facilities in the Township attributable to waste flow from the Developments, as determined in accordance with the formula set forth in Article VI, Section 1 of this Conveyance Agreement, including all costs incident to the operation of wastewater collection lines, pumping stations and other wastewater facilities and appurtenances which are jointly used by the parties for the conveyance of wastewater from and by the Township as well as the conveyance of wastewater through the Township from the Developments. Specifically, such costs shall include the cost of all maintenance, labor, repairs as may be necessary, all utilities, taxes, engineering, legal and superintendence expenses and casualty and other insurance premiums actually paid and documented.

Treatment Plant - Existing wastewater treatment plant and facilities owned and operated by PAWC, together with any additions, modifications and/or improvements thereto.

## ARTICLE II - STATEMENT OF INTENT

The parties hereto agree that it is the intent of this Agreement to provide for the conveyance of domestic waste from a wastewater conveyance system operated by PAWC, to serve the Developments, through a portion of the Township's wastewater system to the PAWC wastewater system in Pomeroy, and from there to the Treatment Plant for treatment and disposal of those wastes, in common with other wastes flowing through the PAWC system, and to provide for payment to the Township of Capacity Fees, Reimbursement Fees and Sewer Use Charges for the jointly used conveyance facilities of the Township. It is the intention of the parties that the discharge of any waste emanating from outside the Developments in West Caln Township through the Township's wastewater system will be the subject of a separate agreement between PAWC and the Township. It is further the intention of the parties that additional flow to be discharged by PAWC to the Township's system beyond the maximum average daily flow provided for in this Conveyance Agreement will likewise be the subject of a separate agreement.

## ARTICLE III - TERMS OF AGREEMENT

Section 1 - This Agreement shall be effective as of the date specified in Article VII, Section 5 of this Conveyance Agreement and shall continue for an indefinite period from said date, provided, however, that the Sewage Treatment Agreement now existing between the Township and PAWC shall affect this Agreement in that, should PAWC terminate the Sewage Treatment Agreement,

this Conveyance Agreement between PAWC and the Township shall be subject to renegotiation at the time of such termination, but the Township shall have no obligation to continue this Conveyance Agreement. Should the Township terminate the existing Sewage Treatment Agreement, this Conveyance Agreement between PAWC and the Township shall continue in full force and effect.

Section 2 - The Township hereby specifically grants to PAWC the right to connect a sanitary sewer line emanating from West Caln Township to the existing Township system at a Point of Connection approved by the Township and to discharge an Average Daily Flow of domestic waste of 110,000 gallons at the Point of Connection, and to convey wastewater through the Township wastewater system in accordance with plans prepared by Commonwealth Engineers, Inc. and dated 12-03-2001, last revised 06-10-03, approved by the Township and attached hereto as Exhibit "A" and incorporated herein by reference (the "Plans"). The Township's agreement to permit PAWC's conveyance of wastewater through the Township shall be limited under this Agreement to flows emanating from the Developments and shall be subject to the Developers' agreement to pay Capacity Fees, Reimbursement Fees and Sewer Use Charges as set forth and described in Article VI, Sections 1 and 2 of this Agreement, to the Township to provide for the conveyance and operation and maintenance of the jointly used wastewater facilities as provided herein. Wastewater flows conveyed through the Township system from the Developments, shall be deducted from, and not included in, metered flow used for PAWC's billing of the Township pursuant to the Sewage Treatment Agreement. Such PAWC flows conveyed through the Township shall have no impact upon the Township's right or limitation on the Township's right to discharge wastewater as provided in the parties' Sewage Treatment Agreement. A flow meter shall be installed as shown on the Plans at the pump station, which shall be used for the purpose of determining the quantity of wastewater conveyed from PAWC's system through the Township wastewater system. Maintenance of such a meter and responsibility for determining the flows registered on the meter shall be as provided hereinafter.

It is hereby agreed that once the Developments' sewer line is connected to the Township system, no flow emanating from the Developments shall thereafter be disconnected from and then diverted by PAWC from the Point of Connection unless mutually agreed upon in writing, subject, however, to the terms of Section 1 hereof.

Section 4 - Subject to the terms of the Sewage Treatment Agreement, if the Township, at any future time, shall transfer title to its wastewater system to any municipality or authority organized and existing under the Pennsylvania Municipality Authorities Act, by deed or otherwise, it shall assign all its rights and interests in and under this Agreement to its assignee and the assignee shall be subject to all obligations and entitled to receive all the rights and benefits of this Agreement. In the event of transfer of title of the Township system to a private, non-municipal party, in addition to the requirements stated above, such transfer shall be subject to the express written approval of PAWC. This Agreement shall be binding upon and inure to the benefit of the successors and assigns of any party to this Agreement.

Section 5 - PAWC and the Township have adopted rules and regulations for making of connections and use of their respective wastewater systems in conformity with the parties' Sewage Treatment Agreement. PAWC agrees that such rules and regulations shall apply to the wastewater connections contemplated in West Caln Township. PAWC also agrees to enforce the provisions of its rules and regulations at all necessary times, and PAWC agrees that the Township or its duly authorized representative shall have the right, at all times, to inspect sewage systems connected to the Township for conveyance and to, as otherwise legally permitted, compel the discontinuation of any connection which it finds to be in violation of this Agreement.

Section 6 - The parties hereto agree to comply with all applicable present and future Pennsylvania or federal laws, as well as any rules, regulations, permits, orders and requirements lawfully made by any governmental body having jurisdiction and all applicable grant agreements, unless the same are being contested in good faith by appropriate proceedings.

#### ARTICLE IV - CONSTRUCTION OF COLLECTION AND CONVEYANCE FACILITIES - INTERCONNECTION

Section 1 - The parties hereto understand and agree that it will be necessary for PAWC to design, lay out and cause to be constructed sanitary sewers within the PAWC certificated service territory in West Caln Township as well as in the Township, as shown on the Plans.

Section 2 - The sanitary sewer line from the Sadsbury Township/West Caln Township line through Sadsbury Township shall be constructed or caused to be constructed by PAWC in accordance with the Plans. This sanitary sewer line constructed from the Sadsbury Township/West Caln Township line to the Point of Connection shall be owned by PAWC and the remaining gravity sewer main will be owned by the Township. Prior to commencement of work within the Township, PAWC will obtain a grading permit from the Township for all such work to be performed. The construction of the gravity sewer main within Sadsbury Township shall be subject to the inspection of the Township Engineer to assure construction according to the Plans, and PAWC agrees to reimburse the Township the reasonable costs of such inspections. Said gravity sewer main shall be subject to a continuing offer of dedication to Sadsbury Township. Prior to activation of the gravity sewer main within Sadsbury Township, PAWC shall submit to the Township the formal offer of dedication in a form acceptable to the Township Solicitor, for acceptance by Sadsbury Township.

Section 3 - At or before the commencement of actual sewage disposal service under this Conveyance Agreement, PAWC shall cause to have installed and thereafter at all times maintain the flow meter referred to in Section 2, Article III above. The expense of procurement, installation and maintenance thereof shall be borne by PAWC. Said meter shall employ a flow recorder using seven-day charts, shall be capable of recording electronically the instantaneous flow and daily flow totals to a seven day circular chart recorder/totalizer which the Township shall have access to.

A. The meter shall be inspected and calibrated and tested for accuracy on an annual basis by a person or entity competent in the inspection and testing of such devices. Reports of such inspections shall be mailed directly to the Township. The cost of such inspection and the cost of any repair or replacement shall be borne by PAWC. All repairs of meters of any type shall be accomplished within thirty (30) calendar days of receipt of the inspection company's report attesting to the meter's malfunction.

B. In the event of faulty meter registration or other malfunction resulting in missing flow records, an estimate of flows will be made for the purposes of determining volume of wastewater discharged. This estimate will be based on an evaluation of past flow records, bearing in mind conditions existing at the time of the estimate which would typically have an effect on flows, such estimate to be reviewed and agreed upon by the engineers for both PAWC and the Township.

C. Meter records and the meter installation shall be made available and accessible to the Township. The record of wastewater flow through recording meters operated and maintained by PAWC will be read by PAWC on or about the first days of January, April, July and October, showing the total sewage flows discharged during the previous three-month period.

Section 4 - Maximum flow rates at the Point of Connection shall not exceed 4.0 times the average daily flow rate at any time. Maximum flow rates equal to 4.0 times the average daily flow rate shall be limited to a duration of not more than 60 consecutive minutes.

#### ARTICLE V - MAINTENANCE, SAVE HARMLESS AGREEMENT, INSURANCE

Section 1 - PAWC and the Township agree, in regard to their respective collection systems, to operate continuously and keep and maintain the same at all times in first-class repair and order, and in good and efficient operating condition, and to meet the standards prescribed by the Pennsylvania Department of Environmental Protection or of any other governmental authority having jurisdiction thereof.

Section 2 - The Township agrees to indemnify to the fullest extent permitted by law and save harmless PAWC against all losses, costs or damages on account of any injury to persons or property occurring in the performance of this Agreement because of the negligence of the Township, its servants, agents or employees, or resulting from the failure of the Treatment Plant and lines leading thereto to function properly because of such negligence. Nothing herein contained shall be construed to waive governmental immunity or limitation of liability otherwise provided by law.

Section 3 - PAWC agrees to indemnify to the fullest extent permitted by law and save harmless the Township against all losses, costs or damages on account of any injury to persons or property occurring in the performance of this Agreement because of the negligence of PAWC, its servants, agents or employees, or resulting from the failure of the Treatment Plant and lines leading thereto

to function properly because of such negligence. Nothing herein contained shall be construed to waive governmental immunity or limitation of liability otherwise provided by law

Section 4 - The Developers, jointly and severally, agree to indemnify to the fullest extent permitted by law and save harmless PAWC and the Township against all losses, costs or damages on account of any injury to persons or property occurring in the performance of this Agreement because of the negligence of Developers, their servants, agents or employees. Nothing herein contained shall be construed to waive limitation of liability otherwise provided by law

Section 5 - PAWC and the Township shall insure or cause to be insured their respective facilities (i.e., including but not limited to the Treatment Plant, capital additions and interceptors) in a responsible company or companies authorized and qualified to do business under the laws of the Commonwealth of Pennsylvania against loss or damage by fire and against such other risks in such amounts as customarily are carried upon, or with respect to, like property in Pennsylvania. Immediately after any loss or damage to either parties' facilities or any part thereof, the affected party will commence and duly prosecute the repair, replacement or reconstruction of the damaged or destroyed portion of its facilities, all according to the provisions as previously defined. Both parties will also maintain liability insurance against any loss or injury to third persons or property of third persons as a result of fire, explosion and other risk and casualty occurring to their respective facilities.

#### ARTICLE VI - CHARGES AND PAYMENTS.

Section 1 – Sewer Use Charge (Developers) - Upon execution of this Agreement, the Developers shall pay to the Township the sum of \$26,000 00, representing total Sewer Use Charges for the cost of conveyance of wastewater from the Developments through the Township's wastewater system from the effective date of this Agreement through December 31, 2006. The amount of \$10,738.00 shall be paid by All County Partnership and the amount of \$15,262.00 shall be paid by Calnshire Estates, LLC.

Sewer Use Charge (PAWC) - For all quarters after December 31, 2006, the Township shall bill PAWC for a quarterly Sewer Use Charge for the cost of conveyance of wastewater from the Developments through the Township's wastewater system. Billings shall be delivered by the Township to PAWC on or about the twenty-fifth day of January, April, July and October of each year and shall be payable to the office of the Township by the twenty-fifth day of the month following delivery of bills. The quarterly bills shall be calculated by multiplying the annual Sewer Use Charge by the actual quarterly flow.

At the conclusion of each calendar year beginning December 31, 2006, the Township shall determine the Sewer Use Charge for the upcoming year based upon actual costs incurred and

flows metered during the calendar year just concluded and by applying such data to the following formula:

$$\text{Sewer Use Charge} = [(OM_{\text{collection}} + \text{Administrative Cost}) L_1/L_2] F_1/F_2 + OM_{\text{pump station}} \times F_1/F_2 = \$ \_ / \text{gallon}$$

$OM_{\text{collection}}$  is the annual cost of operation and maintenance for the prior calendar year for wastewater collection facilities in Sadsbury Township.

$OM_{\text{pump station}}$  is the annual cost for the prior calendar year of utilities and pump station operation and maintenance for the facility located on Valley Road.

$F_1$  is the annual volume of flow for the prior calendar year into Sadsbury Township from the Developments as metered by PAWC.  $F_1$  shall be determined by PAWC meter readings.

$F_2$  is the annual total flow for the prior calendar year in the commonly used lines.  $F_2$  shall be calculated by the Township, such calculation subject to review and approval by PAWC, using, where appropriate, metering records at the downstream Township Point of Connection with the PAWC system.

$L_1$  is the total length of commonly used lines.

$L_2$  is the total length of all wastewater collection lines in Sadsbury Township.

$L_1$  and  $L_2$  shall be determined from the mapping of the Township wastewater system

Administrative Cost is the annual administrative cost for the prior calendar year for wastewater collection facilities in Sadsbury Township, which shall include, without limiting the generality of the foregoing, recurring or customary administrative costs associated with the Township wastewater collection facilities but shall, in no event, include administrative costs associated with discrete capital projects or matters such as developers' collection system administrative costs or matters of litigation associated with the Township wastewater collection facilities.

Promptly upon each end of year determination of the annual Sewer Use Charge, the Township shall submit its determination and copies of any and all records and documents used by the Township in arriving at the amount of the annual Sewer Use Charge to PAWC. Quarterly Sewer Use Charges will be invoiced in the amount of one-fourth of the total annual Sewer Use Charge to PAWC.

In the event of a dispute as to the annual Sewer Use Charge or of any amount billed to PAWC, the parties may resolve any disputed annual amount or portion of a bill pursuant to the dispute resolution provisions of ARTICLE VII, Section 6 of this Conveyance Agreement. PAWC shall pay any portion of any bill not in dispute, pending resolution of the disputed amount.

In addition to the annual Sewer Use Charge, PAWC will be responsible to pay to the Township PAWC's proportionate share of capital costs, including without limitation, reasonable engineering, legal and administrative costs, incurred by the Township for capital upgrades and/or replacement of the commonly used wastewater facilities at such time in the future as such replacement shall be necessary.

Section 2 – Prior to commencement of discharge of PAWC wastewater into the Township system, the Developers shall pay to the Township, at the Township municipal office, all Capacity Fees and Reimbursement Fees owed to the Township and SSC based on EDU's connected to the PAWC System and which will produce flows into the Township system. The Township shall, thereafter, forthwith pay the Reimbursement Fees collected from the Developers to SSC. Once discharge of PAWC wastewater into the Township system commences, and, thereafter, Developers shall, each for its respective Development, prior to connecting to PAWC's wastewater system, pay to the Township Capacity Fees and Reimbursement Fees for each connection which will provide flows through the Point of Connection. The Township shall forthwith pay the Reimbursement Fees collected from the Developers to SSC.

Section 3 – The Developers acknowledge and agree that the Developers shall provide proof to West Caln Township of payment of all Sadsbury Township Capacity Fees and Reimbursement Fees due under this Conveyance Agreement at the time of application for building permits for residences in the Developments, and that no building permits will be issued by West Caln Township in connection with the Developments except upon proof provided that all such Sadsbury Township fees and charges under this Conveyance Agreement have been paid. A letter to such effect issued by West Caln Township is attached hereto as Exhibit "B". Further, all applications submitted to PAWC for water or wastewater service to units in the Developments shall be accompanied by proof of payment to the Township of all applicable Capacity Fees and Reimbursement Fees. PAWC agrees that, if a unit within the Developments is connected to the Sadsbury system without payment of a Capacity Fee and/or Reimbursement Fee, as applicable, PAWC shall pay such unpaid fee(s) directly to the Township within thirty (30) days of written notice from the Township of nonpayment. The Township shall forthwith pay any Reimbursement Fee(s) collected from PAWC to SSC. The Developers agree to indemnify and save harmless PAWC from any and all claims, including all costs and reasonable attorneys' fees, arising out of actions taken by PAWC or service withheld under this section.

Section 4 – The Developers agree to pay to the Township all engineering and legal fees incurred in connection with this Conveyance Agreement and review of Plans hereunder. Developers shall make payment to the Township within ten (10) days of delivery of an invoice from the Township to the Developers. Calnshire Estates, LLC shall pay 58.7% of such fees; All County Partnership shall pay 41.3% of such fees.

Section 5 – The Developers, PAWC and the Township agree that notwithstanding any payments by the Developers to the Township under this Conveyance Agreement, the Developers, their successors and assigns, shall be and remain at all times the direct customers of PAWC.

ARTICLE VII - MISCELLANEOUS

Section 1 - The failure of any party hereto to insist upon strict performance of this Agreement or any of the terms or conditions thereof shall not be construed as a waiver of any of its rights hereunder.

Section 2 - This writing constitutes the entire Agreement between the parties, and there are no other representations or agreements, verbal or written, other than those contained herein.

Section 3 - Whenever a notice is required to be given by mail, the following addresses shall be used unless a different address is specifically called for:

Pennsylvania-American Water Company  
4 Wellington Boulevard  
Wyomissing, PA 19610

Sadsbury Township  
P.O. Box 261  
Sadsburyville, PA 19369

All County Partnership  
2500 High Street  
Suite 610  
Pottstown, PA 19464

Calnshire Estates, LLC  
476 West Street Road  
Warminster, PA 18974

Section 4 - This Agreement may be executed in any number of counterparts and by the different parties on separate counterparts. Each such counterpart shall be deemed to be an original, but all such counterparts shall together constitute one and the same Agreement. This Agreement shall be deemed to have been executed when counterparts have been executed by all parties listed on the signature lines below.

Section 5 - This Agreement shall become effective thirty (30) days after PAWC has filed a copy thereof with the Pennsylvania Public Utility Commission or, in the event that the said Commission institutes an investigation, at such time as the said Commission grants its approval thereof.

Section 6 - In the event that the Pennsylvania Department of Environmental Protection, or any other regulatory body or governmental agency shall fail or refuse to issue any permits for conveyance which may be necessary to accomplish the intent and purpose of this Agreement, the parties shall be relieved from further compliance with the terms of this Agreement until such time when such permit or permits shall be issued.

Section 7 - In the event that any disputes shall arise relative to the interpretation and/or application of the terms of this Agreement, the parties hereto do hereby agree to the following procedure to settle such matters:

A. The parties, operators and/or managers will attempt to discuss and solve the problem.

B. If Step "A" does not prove satisfactory, a joint committee comprised of three members, one selected by PAWC, one selected by the Township, and one selected by the other two, will meet to attempt to solve the problem. C. If neither step "A" nor "B" proves satisfactory, neither party shall be precluded from asserting any or all legal and/or equitable rights and remedies available to it in the Chester County Court of Common Pleas and as permitted by the regulations of the Pennsylvania Public Utility Commission.

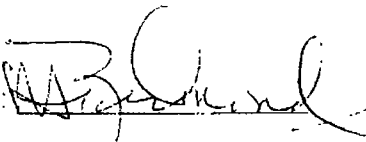
Section 8 - The provisions of this Conveyance Agreement and the respective rights and obligations of the Developers, PAWC and Township hereunder shall be binding upon, and shall inure to the benefit of, their respective successors, grantees and assigns. Any successor, grantee or assignee of Developers shall accept the terms and obligations of this Agreement in writing prior to the Developer's being released from its obligations under the Agreement.

Section 9 - The Developers expressly agree to the recordation of a memorandum of this Agreement setting forth the obligation and terms of payment of the Capacity Fees and Reimbursement Fees to Sadsbury Township, against all lands comprising the Developments, in the Office of Recorder of Deeds for Chester County.

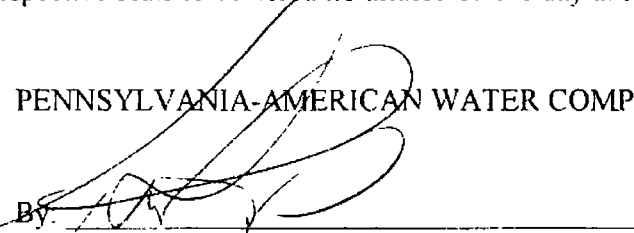
IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their appropriate officers and their respective seals to be hereunto affixed on the day and year first above written.

PENNSYLVANIA-AMERICAN WATER COMPANY

Attest:

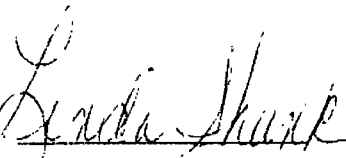


By:

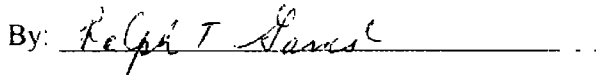


SADSBURY TOWNSHIP

Attest:



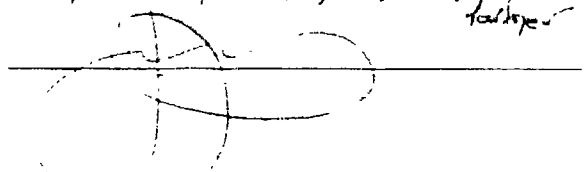
By:



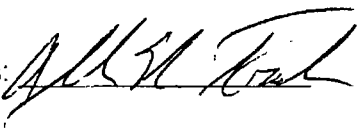
ALL COUNTY PARTNERSHIP


by All County, ~~Richmond~~, etc. *for the*

Witness: 

By: 

CALNSHIRE ESTATES, LLC

Witness: 

By:   
Member

**WEST CALN TOWNSHIP  
BOARD OF SUPERVISORS  
CHESTER COUNTY**

721 West Kings Highway  
P.O. Box 175  
Wagontown, Pa. 19376

Phone: 610 384-5643  
Fax: 610 384-9035

September 10, 2003

Pennsylvania American Water Co.  
100 Chesire Court  
Cokesville, Pa. 19320

Sadsbury Township Board of Supervisors  
P.O. Box 261  
Sadsburyville, Pa. 19369

Re: Force Main Extension  
Sandy Hill LP Subdivision and Calshire West Subdivisions  
West Caln Township, Chester County, Pa.

Gentlepersons:

This letter is to advise you that West Caln Township will not issue Building Permits in the above captioned subdivisions unless proof of payment of all fees relating to the connection of the force main due to Pennsylvania American Water Co and Sadsbury Township is provided to Township by the Builder.

Sincerely,

  
Gary K. Dunlap  
Township Manager

GLD

EXHIBIT "B"

SEWAGE TREATMENT AGREEMENT

THIS AGREEMENT is made on 7<sup>th</sup> day of July, 1997 between the CITY OF COATESVILLE AUTHORITY, Chester County, Pennsylvania (CCA), and SADBURY TOWNSHIP, Chester County, Pennsylvania (Sadsbury).

WHEREAS, CCA is a municipal corporation, organized and existing under the laws of the Commonwealth of Pennsylvania, and owns and operates a sewage treatment plant for service providing public sewer service to various municipalities in and near the City of Coatesville; and

WHEREAS, Sadsbury is also a municipal corporation, organized and existing under the laws of the Commonwealth of Pennsylvania, and desires to provide sewage collection service to residential, commercial, industrial and institutional users within Sadsbury and to connect its collection system to CCA's sewage treatment system so that sanitary sewage wastes discharged by said users may be received in said CCA's sewage treatment plant for treatment and disposal; and

WHEREAS, Sadsbury has entered into a separate agreement dated on even date herewith with the Sadsbury Sewer Corporation (SSC), a Pennsylvania corporation whose shareholders are property owners in Sadsbury Township. This agreement sets forth the rights and responsibilities of Sadsbury and SSC with respect to the construction of the sewage facilities to connect Sadsbury to the CCA collection system as well as the allocation, as between SSC and Sadsbury, of capacity gained by the connection; and

WHEREAS, it is in the public interest of both CCA and Sadsbury that an agreement to provide for the treatment of sewage from Sadsbury at the CCA treatment facilities be reached; and

NOW, THEREFORE, intending to be legally bound hereby, CCA and Sadsbury agree as follows;

**ARTICLE I - DEFINITIONS**

The terms defined in this Article, wherever used or referred to in this Agreement, shall have the following respective meanings unless a different meaning clearly appears from the context.

Sewer Use Charge - the costs for operating and maintaining the CCA conveyance system and treatment plant. (The current published bulk rate of \$2.13/1000 gallons plus a \$5.59 billing charge.)

Capacity Fee - the one time charge for treatment plant capacity and conveyance to the CCA Treatment Plant. (The current published bulk rate of \$1.27 per gallon per day (average daily flow) times a 1.4 peak load factor for a total of \$1.78 per gpd (ADF)).

Average Daily Flow - Average number of gallons per day of wastewater, determined by taking the total quantity of flow delivered to a point during a thirty (30) day period of time, divided by thirty (30) days.

Domestic Waste - Customary wastes from residential dwellings which include kitchens, water closets, lavatories and laundries, but excluding hazardous waste and waste determined to be qualitatively inimical to the safe and efficient operation of the sewage treatment plant.

Point of Connection - Point or points at which CCA receives and conveys wastewater from Sadsbury's system to a point for treatment or disposal.

Sanitary Sewage - All water-carried domestic waste from residences, offices, hotels, stores, restaurants, commercial, industrial and institutional establishments, and similar users within Sadsbury.

Slug - Any discharge of wastewater (sewage) having a concentration of pollutants or flow greater than five (5) times that of the average 24-hour discharge from a user, over the immediately preceding calendar quarter, which is discharged continuously for a period longer than five (5) minutes.

Treatment Plant - Existing sewage treatment plant facility which is owned and operated by CCA, and specifically to be utilized for treatment of wastewater originating from Sadsbury Township, together with any additions, modifications and/or improvements thereto.

Conveyance Facilities - The gravity portion of the sanitary sewer main and associated appurtenances owned by the CCA which is intended to convey wastewater from the Borough of Parkesburg, Sadsbury Township and environs to CCA's existing sanitary sewer system, and treatment plant (also referred to as the Parkesburg interceptor).

Conveyance Costs - All expenses incurred by CCA associated with design, permitting, financing, and construction of the Conveyance Facilities.

Pro-rata share - the Conveyance Costs divided by the ADF "as-built" capacity of the Conveyance Facilities (resulting in a cost per 1000 gallons per day), multiplied by the difference between the 410,750 gallons ADF and the SSC's reserve capacity as described in the Protocol, plus CCA's bond interest for the same portion of Conveyance Costs for the period of time between the effective date of this agreement and the time of payment.

ADF "as-built" capacity - the peak hydraulic capacity of the constructed gravity portion of the Parkesburg Interceptor divided by a peaking factor of 2.5.

## **ARTICLE II - STATEMENT OF INTENT**

The parties hereto agree that it is the intent of this Agreement to provide for the conveyance and treatment of sanitary sewage from within Sadsbury to a treatment plant owned by CCA for treatment and disposal of those wastes in common with other wastes flowing from and through the CCA system.

### ARTICLE III - TERMS OF AGREEMENT

Section 1 - This Agreement shall be effective as of the effective date hereinafter defined in Article VII, Section 9 and shall continue for a period of thirty (30) years from said date and thereafter it shall continue until either party shall have given the other party five years written notice of intention to terminate this Agreement. During the thirty (30) year period provided for herein Sadsbury shall have a right to terminate the agreement upon five (5) years written notice of termination.

Section 2 - CCA hereby grants to Sadsbury the right to discharge sanitary sewage up to 410,750 gallons average daily flow of treatment and conveyance capacity (based, for tapping fee computation only, on 1,643 equivalent dwelling units (EDU's) at 250 gallons per day per EDU) at a peak flow rate not to exceed 713 gallons per minute, subject to the limitations and payment of charges set forth in this Agreement. This Agreement includes provision for the sewer service to properties in Sadsbury which shall constitute the Sadsbury area of service. CCA agrees to receive and treat and dispose of such sewage originating from the Sadsbury service area in a manner approved by the Pennsylvania Department of Environmental Protection (PADEP) and in accordance with the terms and provisions set forth herein. The Sadsbury service area, for purposes of this Agreement, shall be deemed the corporate limits of Sadsbury Township.

Section 3 - It is agreed that, once connection has been made from the Sadsbury area of service, which results in sanitary sewage being delivered to the point of connection to the CCA conveyance system, and from there to the CCA treatment plant for final disposition, no sanitary sewage originating from the Sadsbury area of service shall thereafter be disconnected from and then diverted by Sadsbury from this connection unless mutually agreed upon in writing, subject however to the terms of Section 1 hereof.

Section 4 - Sadsbury agrees that it will not offer sewage service to customers or other municipalities beyond its borders. Any request for sewage service originating outside Sadsbury borders shall be directed to CCA. Should CCA desire to convey sewage through the Sadsbury system, Sadsbury and CCA will enter into a separate agreement to set forth the terms and conditions governing such conveyance.

Section 5 - If Sadsbury, at any future time, transfers title of its sewage system to any municipality or authority by deed or otherwise, it shall assign all its rights and interests in and under this Agreement to said municipality or authority and, upon such assignment, the assignee shall be subject to all obligations and entitled to receive all the rights and benefits of this Agreement, and Sadsbury thereafter, to the extent not otherwise determined in an instrument of assignment, shall cease to be a party to this Agreement. In the event of transfer of title of the sewage system to a private, non-municipal party, in addition to the requirements stated above, such transfer shall be subject to the express written approval of CCA. Further, upon transfer to a private non-municipal party, all capacity fees, conveyance costs and bond interest reimbursement owed by Sadsbury to CCA shall be payable to CCA by Sadsbury or Sadsbury's transferee upon transfer. This Agreement shall also be binding upon and inure to the successors and assigns of CCA or Sadsbury. However, any such transfer by Sadsbury other than to a municipal authority as

contemplated by this Agreement, shall not be made without six months advance written notice to CCA. After such six (6) months advance written notice, CCA shall have a right of first refusal to accept transfer of title to the Sadsbury sewage system, upon terms and conditions agreeable to the parties.

Section 6 - Sadsbury agrees that, prior to any connection to the system, it will adopt an ordinance or ordinances establishing rules and regulations consistent with CCA's current Rules and Regulations for the making of connections and use of the sewage system in conformance with this Agreement. Sadsbury also agrees to enforce the provisions of such ordinance or ordinances at all times, and Sadsbury agrees that CCA or its duly authorized representative shall have the right, at all reasonable times, to inspect the said sewage system connections, and Sadsbury agrees to discontinue any connection which CCA finds to be in violation of this Ordinance.

Section 7 - It is acknowledged that CCA has adopted Rules and Regulations for making connections and use of the sewage system in conformance with this Agreement. CCA agrees to enforce the provisions of such Rules and Regulations at all times. Insofar as the Rules and Regulations adopted by the requirements of this section and Section 6 above apply to the use of the sanitary sewer system, the parties agree that the provisions of said Rules and Regulations shall be the same for both parties and agree to enforce the provisions of such Rules and Regulations at all times. Whenever CCA intends to adopt a change in its Rules and Regulations, it shall notify Sadsbury of its intent and provide Sadsbury a period of comment on the proposed change thirty days (30) prior to adoption of the change; thereafter, Sadsbury shall likewise adopt an identical change to its Rules and Regulations within sixty (60) days of notification of the CCA change. This section shall only regulate changes in quality of effluent. The changes herein contemplated shall not impair the integrity of this Agreement nor shall they impair its implementation.

Section 8 - The parties hereto agree to comply with all applicable present and future Pennsylvania or United States laws, rules, regulations, permits, orders and requirements lawfully made by any governmental body having jurisdiction and all applicable grant agreements, unless the same are being contested in good faith by appropriate proceedings.

Section 9 - It is understood and agreed by both parties that the rights and responsibilities of the respective parties under the provisions of this Agreement are not in any way contingent upon the execution of other agreements between CCA and other municipalities; moreover, Sadsbury understands and agrees that CCA may find it prudent and necessary to enter into sewage treatment agreements with other municipalities; it is further agreed by Sadsbury that such other agreements may differ materially from the provisions of this Agreement. Subject to the provisions of Article III, the parties agree that CCA has entered into and may enter into in the future agreements with other municipalities which agreements differing materially from the terms and provisions of this Agreement. Said differences shall not in any way affect or alter the rights, duties and obligations of either party under this Agreement.

**ARTICLE IV - CONSTRUCTION OF COLLECTION FACILITIES INTERCONNECTION.**

Section 1 - CCA and Sadsbury understand and agree it is and will be necessary for Sadsbury to design, finance, and construct sanitary sewers and pumping stations within Sadsbury as needed to provide service to parties in Sadsbury's area of service as defined in Article III, Section 3. Said sewers will be owned by Sadsbury and will be the sole responsibility of Sadsbury. CCA shall have the right to review the plans and specifications for the project prior to construction and shall be provided copies of the plans and specifications for this purpose.

Section 2 - Sadsbury covenants to use its best efforts to obtain the necessary approvals and financing and thereafter to use its best efforts to construct its sanitary sewers and pumping stations, as needed, all in accordance with plans and specifications prepared by its consulting engineer at its own cost and approved by the PADEP .

Section 3 - Sanitary sewage from the Sadsbury sewage collection system shall be conveyed to the CCA system at one or more points of connection approved by CCA. It is anticipated that there will be a point of connection at the intersection of Newport Avenue and Valley Road. Other connections are contemplated by the parties and shall be governed by this Agreement. The parties agree that, to the extent that circumstances or issues exist with respect to such other connections which are not addressed herein, said circumstances or issues shall be addressed by a separate agreement.

Section 4 - No future increase in flow, beyond the capacity herein committed, or significant change in the nature of waste will be approved at the point of connection if, in the determination of CCA, based on CCA's engineer's determination and pursuant to CCA Rules and Regulations, the proposed discharge will overload the conveyance or treatment facilities, unless arrangements are made through a revised agreement or amendment to this agreement concerning the compensation due to CCA for the corrective measures necessary to make the conveyance or treatment facilities adequate for the proposed discharge. Sadsbury shall bear the responsibility for all costs to CCA for necessary corrective measures related to its discharge overload.

Section 5 - Sadsbury shall secure all necessary easements, rights of way, and permits as may be required to deliver sewage to the point of connection to the CCA sewage collection system. CCA shall have the right to approve the plans and to inspect the manner of the making of such connections between CCA and the Sadsbury system; the connection shall not be used until such time as CCA receives written notice that the construction of such connection has been accomplished in accordance with the approved plans and specifications relating thereto. CCA will not unnecessarily delay approval.

Section 6 - At or before the commencement of actual sewage disposal service, Sadsbury shall provide and install a sewage meter at the point of connection or at a mutually acceptable location. Said meter shall employ a flow recorder using seven-day charts, shall be capable of recording electronically the instantaneous flow and daily flow totals to a seven day circular chart recorder/totalizer located at the Sadsbury Township facilities, and shall be subject to the approval of SSC and Sadsbury Township.

The expense of procurement and installation of the meter shall be borne by Sadsbury. CCA shall read the meter on the first day of each month. Sadsbury shall keep a record of sewage flows through the meter showing the total of sewage flows discharged during the previous month and said record shall be available and accessible to CCA. Sadsbury shall have the meter calibrated by a certified technician on a semi-annually basis. The cost of such calibration inspections and the cost of any repairs or replacement shall be borne by Sadsbury. CCA shall be notified in advance of such semi-annual calibration, shall have the right to observe the semi-annual calibration, and shall receive a copy of the calibration report. CCA shall have the right at any time upon written request to perform a calibration check of the meter to determine its accuracy. If results of such requested calibrations show that the meter was malfunctioning by variations from actual flow of less than five (5) percent, then all costs of the requested calibration will be paid by CCA. If results of such requested calibrations show that the meter was malfunctioning by variations from actual flow of five (5) percent or more, then all costs of the requested calibration will be paid by Sadsbury.

Section 7 - In the case of missing flow records due to faulty meter registration or otherwise, an estimate of flows will be made for the purposes of determining volume of sewage discharged. This estimate will be based on an evaluation of past flow records as applied to present conditions, as reviewed and approved by the engineers for both CCA and Sadsbury.

Section 8 - The maximum combined flow rate from all points of connection shall not exceed the peak flow rate identified in Article III, Section 2. No slugs shall be discharged.

#### ARTICLE V - TREATMENT PLANT

Section 1 - The parties hereto understand and agree that in order to attain and maintain the quality of sewage effluent required by CCA's NPDES permit, it may become necessary for CCA to modify the treatment plant and to make additions and improvements thereto. To accomplish the purposes herein contemplated, the parties agree that additions, improvements and/or modifications to the treatment plant shall be undertaken and shall be the sole responsibility of CCA. The existing treatment plant and any additions thereto shall be maintained exclusively by CCA.

Section 2 - CCA covenants and agrees to acquire and construct or cause to be acquired and constructed, from time to time, such additions, improvements, and/or modifications to the sewage treatment plant, if determined by CCA to be financially feasible, provided the capacity reserved unto Sadsbury Township shall not be impaired.

The determination of the need for such additions, improvements, and/or modifications shall be made solely by CCA after which Sadsbury shall be notified in writing. In the event the construction of additional facilities is necessitated by a change in the degree of treatment as required by the PADEP or other regulatory body, the rates provided for in Article VII hereof and charged by CCA for receipt and treatment of sewage may be increased, including those charged to Sadsbury, to reflect Sadsbury's portion of the additional capital expenditures of CCA. In the event the construction of additional facilities is

necessitated by an increase in demand or by the necessity to treat either additional wastes or wastes requiring specialized treatment emanating:

- A. exclusively from Sadsbury, Sadsbury shall pay the full cost thereof under conditions of an amendment to this Agreement. Sadsbury shall have the right of engineering review and audit of construction costs at Sadsbury's sole expense.
- B. partially from Sadsbury, then Sadsbury shall pay its proportionate share thereof under conditions of an amendment to this Agreement or construction of a pre-treatment facility in accordance with the applicable Rules and Regulations. CCA shall have the right of engineering review and audit of construction costs at CCA's sole expense.
- C. for the benefit of CCA or customers other than Sadsbury, Sadsbury shall not be required to participate in the cost of expansion.

Section 3 - CCA shall apply for and accept any grants or contributions available and known to CCA from any federal, state, or local government having such funds at their disposal for projects of this type. Sadsbury shall receive a pro rata share of credits received using a credit or other equitable method of determining Sadsbury's share.

#### **ARTICLE VI - MAINTENANCE, SAVE HARMLESS AGREEMENT, INSURANCE**

Section 1- CCA and Sadsbury agree, in regard to their respective systems, to operate continuously and keep and maintain the same at all times in first-class repair and order, and in good and efficient operating condition, and to meet the standards prescribed by the PADEP or of any other governmental authority having jurisdiction thereof..

Section 2 - Sadsbury agrees to indemnify to the fullest extent permitted by law and save harmless CCA against all losses, costs, or damages on account of any injury to persons or property occurring in the performance of this Agreement because of the negligence of Sadsbury, its respective servants, agents, or employees, or resulting from the failure of the treatment plant and lines leading thereto to function properly because of such negligence. Nothing herein contained shall be construed to waive governmental immunity or limitation of liability otherwise provided by law.

Section 3 - CCA agrees to indemnify to the fullest extent permitted by law and save harmless Sadsbury against all losses, costs, or damages on account of any injury to persons or property occurring in the performance of this Agreement because of the negligence of CCA, its respective servants, agents, or employees, or resulting from the failure of the treatment plant and lines leading thereto to function properly because of such negligence. Nothing herein contained shall be construed to waive governmental immunity or limitation of liability otherwise provided by law.

Section 4 - In the event of damage to the CCA sewage treatment or conveyance facilities resulting from the discharge of improper sewage from the sewage collection system of Sadsbury into the sewage treatment or conveyance facilities of CCA, the discharge of improper sewage to be determined in accordance with the

Rules and Regulations of CCA and Sadsbury, Sadsbury agrees to act in concert with CCA in enforcing their respective Rules and Regulations to cause the abatement of the violation and to require reimbursement to CCA for the full cost of damage done to CCA's sewage treatment or conveyance facilities by the offending user. To resolve any dispute as to improper sewage having been or so being discharged, the procedure set forth under Article XI, Section 6 of this Agreement shall be used.

Section 5 - CCA and Sadsbury shall insure or cause to be insured their respective facilities (i.e., including but not limited to treatment plant, capital additions and interceptors) in a responsible company or companies authorized and qualified to do business under the laws of the Commonwealth of Pennsylvania against loss or damage by fire and against such other risks in such amounts as usually are carried upon, or with respect to, like property in Pennsylvania. Immediately after any loss or damage to either parties' facilities or any part thereof, the affected party will commence and duly prosecute the repair, replacement, or reconstruction of the damaged or destroyed portion of its facilities, all according to the provisions as previously defined. Both parties will also maintain liability insurance against any loss or injury to third persons or property of third persons as a result of fire, explosion, and other risk and casualty occurring to their respective facilities.

#### **ARTICLE VII - CHARGES AND PAYMENTS**

Section 1 - In all instances where fees are required or use rates are applicable (including the capacity fees established pursuant to this Agreement in Section 9 of this Article VII), these rates and fees shall be as are provided in the published rate and fee schedule of CCA prevailing at the time. CCA agrees that such fees and rates shall be uniform and shall represent the costs of operation and financing the treatment plant costs.

Section 2 - Sewer use charges to be paid by Sadsbury shall be based upon readings taken at the meter provided under Section 7 of Article IV, plus other flows emanating from other points of connection (the metering and/or the method of computing flow totals for the other points of connection shall be agreed to by the Engineers of CCA and Sadsbury), irrespective of the source of such flows, excluding pass through flows emanating from other municipalities.

Section 3 - Monthly billings to Sadsbury under this Agreement for the conveyance and treatment of sewage shall commence upon the first discharge into the CCA system. Said billings will be based on the total gallonage of wastewater discharged by Sadsbury, as measured by the flow meter.

Section 4 - Bills shall be delivered by CCA to Sadsbury on or about the twenty-fifth day of each month, reflecting the appropriate charges for the preceding month, said charges being in accordance with CCA's Rules and Regulations and Rate Structure then in effect.

Section 5 - Bills shall be payable to the office of CCA by the twenty-fifth day of the month following the month in which the bill is issued and delivered. There shall be assessed the penalty and interest specified in CCA's Rules and Regulations and Rate Structure on bills remaining unpaid after the close of the twenty-fifth day of the month in which the bill is due.

Section 6 - If sewer rentals or charges imposed upon other bulk users of CCA facilities are increased or decreased, the rates provided in Section 1 hereof shall be increased or decreased in accordance with the same percentage as the percentage of increase or decrease of the sewer rentals or charges imposed upon other bulk users of CCA facilities. Such increase or decrease shall take effect concurrently with increase or decrease of sewer rentals or charges imposed upon bulk users of CCA facilities subject to Section 1 of this Article VII.

Section 7 - Before Sadsbury permits connection to Sadsbury's collection system of any single sewer user who has an average anticipated daily sanitary sewage flow greater than ten (10) percent of Sadsbury's allocation, Sadsbury shall notify CCA ninety days (90) in advance of such potential connection.

Section 8 - Per Article III, Section 3 of this Agreement, Sadsbury is permitted to discharge a maximum average daily flow of sewage of 410,750 gallons. If the aforementioned allotment is exceeded by Sadsbury, CCA shall give written notice to Sadsbury. Sadsbury, in turn, will have thirty (30) days from the date of such notice to commence investigations and ninety (90) days thereafter to correct the causes of such excess flow. Sadsbury may request and CCA may grant approval of the use of additional treatment capacity, subject to Section 9 of this Article VII, or an extension of time for compliance with the Agreement. If Sadsbury does not comply within the time limitations above, or any extension thereof, CCA shall have the right to bill for and collect an additional treatment capacity fee in accordance with Section 9 of this Article, the amount of such fee to be determined by CCA's Rules and Regulations and Rate Structure then in effect. In the event of request for additional treatment capacity, CCA shall have the right, for proper cause, to deny such additional treatment capacity.

Section 9 - Sadsbury shall pay to CCA its pro-rata share of capacity fees and conveyance costs associated with construction of facilities by CCA directly related to Sadsbury's connection with the CCA system. Sadsbury shall further reimburse CCA the pro rata share of bond interest paid by CCA but attributable to costs of constructing CCA's facilities for connection to Sadsbury. Sadsbury shall make such payments to CCA on a per connection basis. That is, upon each individual dwelling unit connection in the Sadsbury area of service, (with the exception of the connections reserved for SSC, the rights and obligations of SSC being now fully set forth in the Protocol attached hereto and into which this Agreement is incorporated by reference), Sadsbury shall collect a lump sum representing capacity fee, and pro rata share of conveyance costs and bond interest owed by Sadsbury to CCA. The sum collected by Sadsbury shall thereafter be transmitted by Sadsbury to CCA within ten (10) days of Sadsbury's receipt. Bond interest owed by Sadsbury to CCA shall accrue as of the effective date of this Agreement and shall end upon the payment of fees for substantially all existing Sadsbury customers within the district. A list of existing Sadsbury customers within the sewer district is attached hereto as Exhibit "A". The effective date of this Agreement shall be the date that the Parkesburg interceptor is placed into service. The Parkesburg interceptor shall be deemed to be placed into service upon engineering certification that it is substantially complete.

Section 10 - CCA hereby covenants that rates for sewage treatment, fees and charges, and the capacity portion of capacity fees imposed hereunder will be in conformity with its schedule of rates, fees and charges, and capacity fees charged in other similar areas throughout its system, and will not be greater

than the rates, fees and charges, and the capacity fees charged similar customers under similar circumstances in CCA's system. Likewise, with respect to rules and regulations of CCA which affect Sadsbury, CCA covenants that said rules and regulations will be the same that are imposed upon other uses throughout its system, and the same shall be applied to Sadsbury as they are applied to other users throughout the CCA system.

Section 11 - Sadsbury and CCA agree that certain of the facilities of the Sadsbury sewer system are intended to be designed, financed, constructed and installed by SSC. To secure performance of the work to be performed by SSC, as set forth in the attached Protocol, Sadsbury shall contract with SSC to provide security, in the form of a bond or other security acceptable to Sadsbury and CCA. The terms of such security shall provide for enforcement by Sadsbury. If, within sixty (60) days of notification by CCA to Sadsbury and SSC of SSC's failure to perform, Sadsbury, for whatever reason, fails to promptly commence and diligently pursue the enforcement of such security, (or such sooner time as may be necessary to avoid the expiration or termination of such security) CCA shall have a right to enforce the security to complete design, financing, construction and installation of the SSC facilities. Sadsbury shall secure the necessary terms and conditions of security to perfect this right of enforcement in CCA.

#### **ARTICLE VIII - INFILTRATION AND INDUSTRIAL WASTES**

Section 1 - Sadsbury and CCA agree that the sewage and wastes discharged by any user into either of their collection system shall not contain stormwater, roof, subsurface drainage, surface drainage or industrial wastes. Both CCA's and Sadsbury's sewer construction specifications shall require infiltration, exfiltration, and/or air pressure tests made at the time of construction. The infiltration or exfiltration of the sewer system at the time of the test shall not exceed 100 gallons, per one-inch diameter of pipe per mile in 24 hours. Air test results for acceptance shall be in accordance with techniques for new pipe systems current at the time of construction.

Section 2 - Sadsbury shall enact rules and regulations and/or ordinances consistent with CCA Rules and Regulations currently in effect, prior to the CCA's acceptance of effluent. Such rules and regulations and/or ordinances shall, inter alia, prohibit the construction, installation, or use of any facility which causes surface and/or subsurface stormwater or groundwater to be discharged to the sanitary sewer system. Facilities prohibited shall include, but not be limited to, sump pumps, area drains, yard drains, perimeter drains, foundation drains, roof leaders, downspouts, street inlets, storm sewers, cross connections, etc.

Restrictions contained within the ordinances enacted through Sadsbury shall be equal to or stricter than those enacted by CCA.

Section 3 - No establishment or discrete portion thereof from which untreated industrial waste is or may be discharged into Sadsbury's collection system shall be permitted to connect to Sadsbury's system except as hereinafter provided. Sadsbury shall strictly enforce this provision. Industrial waste shall be pretreated to meet standards required by CCA Rules and Regulations.

Section 4 - Whenever an existing or new user of Sadsbury sewer system proposes to introduce industrial waste into the sewer system, CCA shall be so notified in writing by Sadsbury and the user shall comply with all CCA and Sadsbury Rules and Regulations pertaining to the discharge of industrial waste. Such discharge shall not occur prior to the issuance of applicable permits by CCA. No discharge shall be made unless permitted by CCA. All other potential users of the Sadsbury Sewer System, with the exception of residential users, shall be referred by Sadsbury to CCA for review of application and issuance of permits. Sadsbury shall ensure reimbursement to CCA for CCA's costs incurred in connection with such review and issuance of permits to Sadsbury users.

#### **ARTICLE IX - PARTICULAR COVENANTS OF SADSBUURY**

Upon the execution of this Agreement, Sadsbury covenants as follows:

- A. To design and construct its sewage collection system within PADEP guidelines so as to contain no stormwater therein or subsurface drainage whatsoever beyond the limits set forth in section 1 of Article VIII of this Agreement.
- B. To maintain its collection system in good repair and operating condition and to operate it continuously as provided in other sections of this Agreement.
- C. To take any and all action by ordinance, or in any otherwise necessary and appropriate manner, to fulfill the provisions of this Agreement.

#### **ARTICLE X - PARTICULAR COVENANTS OF CITY OF COATESVILLE AUTHORITY**

Upon the execution of this Agreement, CCA covenants as follows:

- A. To maintain the interceptor, sewers, and treatment facilities in good repair and operating condition and to operate them continuously in accordance with applicable Rules and Regulations and in a manner sufficient to fulfill the CCA's obligations under this Agreement.
- B. To accept and treat up to 410,750 gallons average daily flow of treatment and conveyance capacity, at a peak flow rate of 713 gallons per minute of sewage entering CCA's sewage treatment system from Sadsbury subject to the provisions of this Agreement.

#### **ARTICLE XI - MISCELLANEOUS**

Section 1- The failure of any party hereto to insist upon strict performance of this Agreement or any of the terms or conditions thereof shall not be construed as a waiver of any of its rights hereunder.

Section 2 - This writing constitutes the entire Agreement between the parties, and there are no other representations or agreements, verbal or written, other than those contained herein.