



Sewage Facilities Planning Module

**CICD Development Project
DEP Code No. 1-23013-246-3J**

Prepared for

**Villanova University
800 Lancaster Avenue
Villanova, Pennsylvania 19085
Radnor Township, Delaware County**

**June 30, 2015
Updated: March 15, 2016**

Prepared by

**Associated Engineering Consultants, Inc.
485 Devon Park Drive, Suite 113
Wayne, Pennsylvania 19087
610-688-3980**

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Section 1
Transmittal Letter



**TRANSMITTAL LETTER
 FOR SEWAGE FACILITIES PLANNING MODULE**

DEP USE ONLY				
DEP CODE #	APS ID #	CLIENT ID #	SITE ID #	AUTH. ID #

TO: Approving Agency (DEP or delegated local agency) Date _____
 PA Dept. of Environmental Protection
 2 East Main Street
 Norristown, PA 19401

Dear Sir:

Attached please find a completed Sewage Facilities Planning Module prepared by Brenden Dorley *(Name)*
Project Engineer of Associated Engineering Consultants, Inc. *(Title)* for Villanova University CICD Development Project *(Name)*
 a subdivision, commercial, or industrial facility located in Radnor Township,
Delaware *(City, Borough, Township)* County.

Check one

- (i) The Planning Module, as prepared and submitted by the applicant, is approved by the municipality as a proposed revision supplement for new land development to its "Official Sewage Facilities Plan", and is adopted for submission to the Department of Environmental Protection transmitted to the delegated local agency for approval in accordance with the requirements of Chapter 71 and the Sewage Facilities Act, OR
- (ii) The Planning Module will not be approved by the municipality as a proposed revision or supplement for new land development to its "Official Sewage Facilities Plan" because the project described therein is unacceptable for the reason(s) checked below.

Check Boxes

- Additional studies are being performed by or on behalf of this municipality which may have an effect on the Planning Module as prepared and submitted by the applicant. Attached hereto is the scope of services to be performed and the time schedule for completion of said studies.
- The Planning Module as submitted by the applicant fails to meet limitations imposed by other laws or ordinances, officially adopted comprehensive plans and/or environmental plans (e.g., zoning, land use, Chapter 71). Specific reference or applicable segments of such laws or plans are attached hereto.
- Other (attach additional sheet giving specifics)

Municipal Secretary: Indicate below by checking appropriate boxes which components are being transmitted to the Approving Agency.

- | | | |
|---|---|---|
| <input checked="" type="checkbox"/> Resolution of Adoption | <input checked="" type="checkbox"/> 3. Sewage Collection/Treatment Facilities | <input checked="" type="checkbox"/> 4.A. Municipal Planning Agency Review |
| <input type="checkbox"/> 2. Individual and Community Onlot Disposal of Sewage | <input type="checkbox"/> 3s Small Flow Treatment Facilities | <input checked="" type="checkbox"/> 4.B. County Planning Agency Review |
| <input type="checkbox"/> 2m. Sewage Management Program | | <input type="checkbox"/> 4.C. County or Joint Health Department Review |

Municipal Secretary (print) *Signature* *Date*

Note: Please remove and recycle the Instructions portion of the Sewage Facilities Planning Module prior to mailing the appropriate completed components and supporting documents to the approving agency.

Section 2
Township Resolution



DEP Code No.
1-23013-246-3J

RESOLUTION FOR PLAN REVISION FOR NEW LAND DEVELOPMENT

RESOLUTION OF THE (SUPERVISORS) (COMMISSIONERS) (COUNCILMEN) of Radnor Township
(TOWNSHIP) (BOROUGH) (CITY), Delaware COUNTY, PENNSYLVANIA (hereinafter "the municipality").

WHEREAS Section 5 of the Act of January 24, 1966, P.L. 1535, No. 537, known as the "Pennsylvania Sewage Facilities Act", as Amended, and the rules and Regulations of the Pennsylvania Department of Environmental Protection (Department) adopted thereunder, Chapter 71 of Title 25 of the Pennsylvania Code, require the municipality to adopt an Official Sewage Facilities Plan providing for sewage services adequate to prevent contamination of waters of the Commonwealth and/or environmental health hazards from sewage wastes, and to revise said plan whenever it is necessary to determine whether a proposed method of sewage disposal for a new land development conforms to a comprehensive program of pollution control and water quality management, and

WHEREAS Villanova University has proposed the development of a parcel of land identified as
land developer

Villanova University CICD Development, and described in the attached Sewage Facilities Planning Module, and
name of subdivision

proposes that such subdivision be served by: (check all that apply), sewer tap-ins, sewer extension, new treatment facility, individual onlot systems, community onlot systems, spray irrigation, retaining tanks, other, (please specify). _____

WHEREAS, Radnor Township finds that the subdivision described in the attached
municipality

Sewage Facilities Planning Module conforms to applicable sewage related zoning and other sewage related municipal ordinances and plans, and to a comprehensive program of pollution control and water quality management.

NOW, THEREFORE, BE IT RESOLVED that the (Supervisors) (Commissioners) (Councilmen) of the (Township)

(Borough) (City) of Radnor hereby adopt and submit to the Department of Environmental Protection for its approval as a revision to the "Official Sewage Facilities Plan" of the municipality the above referenced Sewage Facilities Planning Module which is attached hereto.

I _____, Secretary,
(Signature)

Township Board of Supervisors (Borough Council) (City Councilmen), hereby certify that the foregoing is a true copy of the Township (Borough) (City) Resolution # _____, adopted, _____, 20_____.

Municipal Address:

Seal of
Governing Body

Telephone _____

Section 3
Planning Module Component 3



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT

Code No.
1-23013-246-3J

SEWAGE FACILITIES PLANNING MODULE

Component 3. Sewage Collection and Treatment Facilities

(Return completed module package to appropriate municipality)

DEP USE ONLY

DEP CODE #	CLIENT ID #	SITE ID #	APS ID #	AUTH ID #

This planning module component is used to fulfill the planning requirements of Act 537 for the following types of projects: (1) a subdivision to be served by sewage collection, conveyance or treatment facilities, (2) a tap-in to an existing collection system with flows on a lot of 2 EDU's or more, or (3) the construction of, or modification to, wastewater collection, conveyance or treatment facilities that will require DEP to issue or modify a Clean Streams Law permit. Planning for any project that will require DEP to issue or modify a permit cannot be processed by a delegated agency. Delegated agencies must send their projects to DEP for final planning approval.

This component, along with any other documents specified in the cover letter, must be completed and submitted to the municipality with jurisdiction over the project site for review and approval. All required documentation must be attached for the Sewage Facilities Planning Module to be complete. Refer to the instructions for help in completing this component.

REVIEW FEES: Amendments to the Sewage Facilities Act established fees to be paid by the developer for review of planning modules for land development. These fees may vary depending on the approving agency for the project (DEP or delegated local agency). Please see section R and the instructions for more information on these fees.

NOTE: All projects must complete Sections A through I, and Sections O through R. Complete Sections J, K, L, M and/or N if applicable or marked .

A. PROJECT INFORMATION (See Section A of instructions)

1. Project Name Villanova University CICD Development Project

2. Brief Project Description The project will construct dormitories for 1,138 beds, a performing arts center, and retail space along with associated infrastructure, stormwater, parking, and landscaping facilities on an existing parking lot.

B. CLIENT (MUNICIPALITY) INFORMATION (See Section B of instructions)

Municipality Name	County	City	Boro	Twp
Radnor Township	Delaware County	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Municipality Contact Individual - Last Name	First Name	MI	Suffix	Title
Zienkowski	Robert			Township Manager
Additional Individual Last Name	First Name	MI	Suffix	Title
Municipality Mailing Address Line 1	Mailing Address Line 2			
301 Iven Avenue				
Address Last Line -- City	State	ZIP+4		
Wayne	PA	19087		
Area Code + Phone + Ext.	FAX (optional)	Email (optional)		
(610) 688-5600	(610) 688-1279			

C. SITE INFORMATION (See Section C of instructions)

Site (Land Development or Project) Name

Villanova University

Site Location Line 1
800 East Lancaster Avenue

Site Location Line 2

Site Location Last Line -- City
Villanova

State
PA

ZIP+4
19085

Latitude
40.034

Longitude
-75.342

Detailed Written Directions to Site From Exit 13 of I-476 (US 30, St. Davids/Villanova), take Route 30 east for approximately 1 mile. Project area is within large parking lot on the right.

Description of Site Existing educational campus

Site Contact (Developer/Owner)

Last Name	First Name	MI	Suffix	Phone	Ext.
Hildebrand	Steven			(610) 519-4589	

Site Contact Title Site Contact Firm (if none, leave blank)

Director of Engineering & Construction Villanova University

FAX Email
(610) 519-6903 steven.hildebrand@villanova.edu

Mailing Address Line 1 Mailing Address Line 2

800 East Lancaster Avenue

Mailing Address Last Line -- City	State	ZIP+4
Villanova	PA	19085

D. PROJECT CONSULTANT INFORMATION (See Section D of instructions)

Last Name	First Name	MI	Suffix
Dorley	Brenden		J

Title Consulting Firm Name

Project Engineer Associated Engineering Consultants, Inc.

Mailing Address Line 1 Mailing Address Line 2

485 Devon Park Drive Suite 113

Address Last Line -- City	State	ZIP+4	Country
Wayne	PA	19087	USA

Email	Area Code + Phone	Ext.	Area Code + FAX
bdorley@aeceng.net	(610) 688-3980	x119	(610) 688-4566

E. AVAILABILITY OF DRINKING WATER SUPPLY

The project will be provided with drinking water from the following source: (Check appropriate box)

- Individual wells or cisterns.
- A proposed public water supply.
- An existing public water supply.

If existing public water supply is to be used, provide the name of the water company and attach documentation from the water company stating that it will serve the project.

Name of water company: Aqua Pennsylvania

F. PROJECT NARRATIVE (See Section F of instructions)

- A narrative has been prepared as described in Section F of the instructions and is attached.

The applicant may choose to include additional information beyond that required by Section F of the instructions.

Radnor Township Sewer System

G. PROPOSED WASTEWATER DISPOSAL FACILITIES (See Section G of instructions)

Check all boxes that apply, and provide information on collection, conveyance and treatment facilities and EDU's served. This information will be used to determine consistency with Chapter 93 (relating to wastewater treatment requirements).

1. COLLECTION SYSTEM

a. Check appropriate box concerning collection system

- New collection system Pump Station Force Main
 Grinder pump(s) Extension to existing collection system Expansion of existing facility

Clean Streams Law Permit Number _____ **-43,968 GPD at
262.5 gpd/EDU =**

b. Answer questions below on collection system

Number of EDU's and proposed connections to be served by collection system. EDU's -168

Connections 1

Name of:

existing collection or conveyance system Radnor Township

owner Radnor Township

existing interceptor RHM / Springfield Twp / Upper Darby Twp / Darby Creek Jt Auth / DELCORA

owner RHM Sewer Auth / Springfield Twp / Upper Darby Twp / Darby Creek Joint Auth / DELCORA

2. WASTEWATER TREATMENT FACILITY

Check all boxes that apply, and provide information on collection, conveyance and treatment facilities and EDU's served. This information will be used to determine consistency with Chapter(s) 91 (relating to general provisions), 92 (relating to national Pollution Discharge Elimination System permitting, monitoring and compliance) and 93 (relating to water quality standards).

a. Check appropriate box and provide requested information concerning the treatment facility

- New facility Existing facility Upgrade of existing facility Expansion of existing facility

Name of existing facility Philadelphia Southwest WWTP

NPDES Permit Number for existing facility 26671

Clean Streams Law Permit Number _____

Location of discharge point for a new facility. Latitude _____ Longitude _____

b. The following certification statement must be completed and signed by the wastewater treatment facility permittee or their representative.

As an authorized representative of the permittee, I confirm that the Philadelphia Southwest WWTP (Name from above) sewage treatment facilities can accept sewage flows from this project without adversely affecting the facility's ability to achieve all applicable technology and water quality based effluent limits (see Section I) and conditions contained in the NPDES permit identified above.

Name of Permittee Agency, Authority, Municipality _____

Name of Responsible Agent _____

Agent Signature _____ Date _____

(Also see Section I. 4.)

Lower Merion Township: Mill Creek Sewer System

G. PROPOSED WASTEWATER DISPOSAL FACILITIES (See Section G of instructions)

Check all boxes that apply, and provide information on collection, conveyance and treatment facilities and EDU's served. This information will be used to determine consistency with Chapter 93 (relating to wastewater treatment requirements).

1. COLLECTION SYSTEM

a. Check appropriate box concerning collection system

- New collection system Pump Station Force Main
 Grinder pump(s) Extension to existing collection system Expansion of existing facility

Clean Streams Law Permit Number _____

164,011 GPD at
400 gpd/EDU =

b. Answer questions below on collection system

Number of EDU's and proposed connections to be served by collection system. EDU's 410

Connections 1

Name of:

existing collection or conveyance system Lower Merion Township Mill Creek

owner Lower Merion Township

existing interceptor Lower Merion Township Mill Creek

owner Lower Merion Township

2. WASTEWATER TREATMENT FACILITY

Check all boxes that apply, and provide information on collection, conveyance and treatment facilities and EDU's served. This information will be used to determine consistency with Chapter(s) 91 (relating to general provisions), 92 (relating to national Pollution Discharge Elimination System permitting, monitoring and compliance) and 93 (relating to water quality standards).

a. Check appropriate box and provide requested information concerning the treatment facility

- New facility Existing facility Upgrade of existing facility Expansion of existing facility

Name of existing facility _____

NPDES Permit Number for existing facility _____

Clean Streams Law Permit Number _____

Location of discharge point for a new facility. Latitude _____ Longitude _____

b. The following certification statement must be completed and signed by the wastewater treatment facility permittee or their representative.

As an authorized representative of the permittee, I confirm that the _____
(Name from above) sewage treatment facilities can accept sewage flows from this project without adversely affecting the facility's ability to achieve all applicable technology and water quality based effluent limits (see Section I) and conditions contained in the NPDES permit identified above.

Name of Permittee Agency, Authority, Municipality _____

Name of Responsible Agent _____

Agent Signature _____ Date _____

(Also see Section I. 4.)

G. PROPOSED WASTEWATER DISPOSAL FACILITIES (Continued)

3. PLOT PLAN

The following information is to be submitted on a plot plan of the proposed subdivision.

- a. Existing and proposed buildings.
- b. Lot lines and lot sizes.
- c. Adjacent lots.
- d. Remainder of tract.
- e. Existing and proposed sewerage facilities. Plot location of discharge point, land application field, spray field, COLDS, or LVCOLDS if a new facility is proposed.
- f. Show tap-in or extension to the point of connection to existing collection system (if applicable).
- g. Existing and proposed water supplies and surface water (wells, springs, ponds, streams, etc.)
- h. Existing and proposed rights-of-way.
- i. Existing and proposed buildings, streets, roadways, access roads, etc.
- j. Any designated recreational or open space area.
- k. Wetlands - from National Wetland Inventory Mapping and USGS Hydric Soils Mapping.
- l. Flood plains or Flood prone areas, floodways, (Federal Flood Insurance Mapping)
- m. Prime Agricultural Land.
- n. Any other facilities (pipelines, power lines, etc.)
- o. Orientation to north.
- p. Locations of all site testing activities (soil profile test pits, slope measurements, permeability test sites, background sampling, etc. (if applicable).
- q. Soils types and boundaries when a land based system is proposed.
- r. Topographic lines with elevations when a land based system is proposed

4. WETLAND PROTECTION

YES NO

- a. Are there wetlands in the project area? If yes, ensure these areas appear on the plot plan as shown in the mapping or through on-site delineation.
- b. Are there any construction activities (encroachments, or obstructions) proposed in, along, or through the wetlands? If yes, Identify any proposed encroachments on wetlands and identify whether a General Permit or a full encroachment permit will be required. If a full permit is required, address time and cost impacts on the project. Note that wetland encroachments should be avoided where feasible. Also note that a feasible alternative **MUST BE SELECTED** to an identified encroachment on an exceptional value wetland as defined in Chapter 105. Identify any project impacts on streams classified as HQ or EV and address impacts of the permitting requirements of said encroachments on the project.

5. PRIME AGRICULTURAL LAND PROTECTION

YES NO

- Will the project involve the disturbance of prime agricultural lands?
If yes, coordinate with local officials to resolve any conflicts with the local prime agricultural land protection program. The project must be consistent with such municipal programs before the sewage facilities planning module package may be submitted to DEP.
If no, prime agricultural land protection is not a factor to this project.
- Have prime agricultural land protection issues been settled?

6. HISTORIC PRESERVATION ACT

YES NO

- Sufficient documentation is attached to confirm that this project is consistent with DEP Technical Guidance 012-0700-001 *Implementation of the PA State History Code* (available online at the DEP website at www.dep.state.pa.us, select "subject" then select "technical guidance"). As a minimum this includes copies of the completed Cultural Resources Notice (CRN), a return receipt for its submission to the PHMC and the PHMC review letter.

7. PROTECTION OF RARE, ENDANGERED OR THREATENED SPECIES

Check one:

- The "Pennsylvania Natural Diversity Inventory (PNDI) Project Environmental Review Receipt" resulting from my search of the PNDI database and all supporting documentation from jurisdictional agencies (when necessary) is/are attached.
- A completed "Pennsylvania Natural Diversity Inventory (PNDI) Project Planning & Environmental Review Form," (PNDI Form) available at www.naturalheritage.state.pa.us, and all required supporting documentation is attached. I request DEP staff to complete the required PNDI search for my project. I realize that my planning module will be considered incomplete upon submission to the Department and that the DEP review will not begin, and that processing of my planning module will be delayed, until a "PNDI Project Environmental Review Receipt" and all supporting documentation from jurisdictional agencies (when necessary) is/are received by DEP.

Applicant or Consultant Initials _____.

H. ALTERNATIVE SEWAGE FACILITIES ANALYSIS (See Section H of instructions)

- An alternative sewage facilities analysis has been prepared as described in Section H of the attached instructions and is attached to this component.

The applicant may choose to include additional information beyond that required by Section H of the attached instructions.

I. COMPLIANCE WITH WATER QUALITY STANDARDS AND EFFLUENT LIMITATIONS (See Section I of instructions) (Check and complete all that apply.)

1. Waters designated for Special Protection

- The proposed project will result in a new or increased discharge into special protection waters as identified in Title 25, Pennsylvania Code, Chapter 93. The Social or Economic Justification (SEJ) required by Section 93.4c. is attached.

2. Pennsylvania Waters Designated As Impaired

- The proposed project will result in a new or increased discharge of a pollutant into waters that DEP has identified as being impaired by that pollutant. A pre-planning meeting was held with the appropriate DEP regional office staff to discuss water quality based discharge limitations.

3. Interstate and International Waters

- The proposed project will result in a new or increased discharge into interstate or international waters. A pre-planning meeting was held with the appropriate DEP regional office staff to discuss effluent limitations necessary to meet the requirements of the interstate or international compact.

4. Tributaries To The Chesapeake Bay

- The proposed project result in a new or increased discharge of sewage into a tributary to the Chesapeake Bay. This proposal for a new sewage treatment facility or new flows to an existing facility includes total nitrogen and total phosphorus in the following amounts: _____ pounds of TN per year, and _____ pounds of TP per year. Based on the process design and effluent limits, the total nitrogen treatment capacity of the wastewater treatment facility is _____ pounds per year and the total phosphorus capacity is _____ pounds per year as determined by the wastewater treatment facility permittee. The permittee has determined that the additional TN and TP to be contributed by this project (as modified by credits and/or offsets to be provided) will not cause the discharge to exceed the annual total mass limits for these parameters. Documentation of compliance with nutrient allocations is attached.

Name of Permittee Agency, Authority, Municipality _____

Initials of Responsible Agent (See Section G 2.b) _____

See *Special Instructions* (Form 3800-FM-BPNPSM0353-1) for additional information on Chesapeake Bay watershed requirements.

Radnor Township Sewer System

☒ J. CHAPTER 94 CONSISTENCY DETERMINATION (See Section J of instructions)

Projects that propose the use of existing municipal collection, conveyance or wastewater treatment facilities, or the construction of collection and conveyance facilities to be served by existing municipal wastewater treatment facilities must be consistent with the requirements of Title 25, Chapter 94 (relating to Municipal Wasteload Management). If not previously included in Section F, include a general map showing the path of the sewage to the treatment facility. If more than one municipality or authority will be affected by the project, please obtain the information required in this section for each. Additional sheets may be attached for this purpose.

1. Project Flows -43968 gpd Net peak flow removed from system = +120,043 GPD - 164,011 GPD
2. Total Sewage Flows to Facilities (pathway from point of origin through treatment plant)

When providing "treatment facilities" sewage flows, use Annual Average Daily Flow for "average" and Maximum Monthly Average Daily Flow for "peak" in all cases. For "peak flows" in "collection" and "conveyance" facilities, indicate whether these flows are "peak hourly flow" or "peak instantaneous flow" and how this figure was derived (i.e., metered, measured, estimated, etc.).

- a. Enter average and peak sewage flows for each proposed or existing facility as designed or permitted.
- b. Enter the average and peak sewage flows for the most restrictive sections of the existing sewage facilities.
- c. Enter the average and peak sewage flows, projected for 5 years (2 years for pump stations) through the most restrictive sections of the existing sewage facilities. Include existing, proposed (this project) and future project (other approved projects) flows.

To complete the table, refer to the instructions, Section J.

	a. Design and/or Permitted Capacity (gpd)		b. Present Flows (gpd)		c. Projected Flows in 5 years (gpd) (2 years for P.S.)	
	Average	Peak	Average	Peak	Average	Peak
Collection						
Conveyance						
Treatment						

3. Collection and Conveyance Facilities

The questions below are to be answered by the sewer authority, municipality, or agency responsible for completing the Chapter 94 report for the collection and conveyance facilities. These questions should be answered in coordination with the latest Chapter 94 annual report and the above table. The individual(s) signing below must be legally authorized to make representation for the organization.

YES NO

- a. This project proposes sewer extensions or tap-ins. Will these actions create a hydraulic overload within five years on any existing collection or conveyance facilities that are part of the system?

If yes, this sewage facilities planning module will not be accepted for review by the municipality, delegated local agency and/or DEP until all inconsistencies with Chapter 94 are resolved or unless there is an approved Corrective Action Plan (CAP) granting an allocation for this project. A letter granting allocations to this project under the CAP must be attached to the module package.

If no, a representative of the sewer authority, municipality, or agency responsible for completing the Chapter 94 report for the collection and conveyance facilities must sign below to indicate that the collection and conveyance facilities have adequate capacity and are able to provide service to the proposed development in accordance with both §71.53(d)(3) and Chapter 94 requirements and that this proposal will not affect that status.

b. Collection System

Name of Agency, Authority, Municipality _____

Name of Responsible Agent _____

Agent Signature _____ Date _____

3800-FM-BPNPSM0353 Rev. 2/2015
Form

Radnor Township Sewer System

J. CHAPTER 94 CONSISTENCY DETERMINATION (See Section J of instructions)

Projects that propose the use of existing municipal collection, conveyance or wastewater treatment facilities, or the construction of collection and conveyance facilities to be served by existing municipal wastewater treatment facilities must be consistent with the requirements of Title 25, Chapter 94 (relating to Municipal Wasteload Management). If not previously included in Section F, include a general map showing the path of the sewage to the treatment facility. If more than one municipality or authority will be affected by the project, please obtain the information required in this section for each. Additional sheets may be attached for this purpose.

1. Project Flows 43968 gpd Net peak flow removed from system = +120,043 GPD - 164,011 GPD
2. Total Sewage Flows to Facilities (pathway from point of origin through treatment plant)

When providing "treatment facilities" sewage flows, use Annual Average Daily Flow for "average" and Maximum Monthly Average Daily Flow for "peak" in all cases. For "peak flows" in "collection" and "conveyance" facilities, indicate whether these flows are "peak hourly flow" or "peak instantaneous flow" and how this figure was derived (i.e., metered, measured, estimated, etc.).

- a. Enter average and peak sewage flows for each proposed or existing facility as designed or permitted.
- b. Enter the average and peak sewage flows for the most restrictive sections of the existing sewage facilities.
- c. Enter the average and peak sewage flows, projected for 5 years (2 years for pump stations) through the most restrictive sections of the existing sewage facilities. Include existing, proposed (this project) and future project (other approved projects) flows.

RHM Sewer Authority:

To complete the table, refer to the instructions, Section J.

M.G.D.

	a. Design and/or Permitted Capacity (gpd)		b. Present Flows (gpd)		c. Projected Flows in 5 years (gpd) (2 years for P.S.)	
	Average	Peak	Average	Peak	Average	Peak
Collection						
Conveyance	16.8	20.0	6.0	8.0	10.0	15.0
Treatment						

3. Collection and Conveyance Facilities

The questions below are to be answered by the sewer authority, municipality, or agency responsible for completing the Chapter 94 report for the collection and conveyance facilities. These questions should be answered in coordination with the latest Chapter 94 annual report and the above table. The individual(s) signing below must be legally authorized to make representation for the organization.

YES NO

- a. YES NO This project proposes sewer extensions or tap-ins. Will these actions create a hydraulic overload within five years on any existing collection or conveyance facilities that are part of the system?

If yes, this sewage facilities planning module will not be accepted for review by the municipality, delegated local agency and/or DEP until all inconsistencies with Chapter 94 are resolved or unless there is an approved Corrective Action Plan (CAP) granting an allocation for this project. A letter granting allocations to this project under the CAP must be attached to the module package.

If no, a representative of the sewer authority, municipality, or agency responsible for completing the Chapter 94 report for the collection and conveyance facilities must sign below to indicate that the collection and conveyance facilities have adequate capacity and are able to provide service to the proposed development in accordance with both §71.53(d)(3) and Chapter 94 requirements and that this proposal will not affect that status.

b. Collection System

Name of Agency, Authority, Municipality Radnor Township

Name of Responsible Agent _____

Agent Signature _____ Date _____

3800-FM-BPNPSM0353 Rev. 2/2015 Form

J. CHAPTER 94 CONSISTENCY DETERMINATION (See Section J of instructions)

c. Conveyance System

Name of Agency, Authority, Municipality Radnor Haverford Marple Sewer Authority

Name of Responsible Agent David Adams

Agent Signature 

Date 07/15/2015

4. Treatment Facility

The questions below are to be answered by a representative of the facility permittee in coordination with the information in the table and the latest Chapter 94 report. The individual signing below must be legally authorized to make representation for the organization.

YES NO

- a. This project proposes the use of an existing wastewater treatment plant for the disposal of sewage. Will this action create a hydraulic or organic overload within 5 years at that facility?

If yes, this planning module for sewage facilities will not be reviewed by the municipality, delegated local agency and/or DEP until this inconsistency with Chapter 94 is resolved or unless there is an approved CAP granting an allocation for this project. A letter granting allocations to this project under the CAP must be attached to the planning module.

If no, the treatment facility permittee must sign below to indicate that this facility has adequate treatment capacity and is able to provide wastewater treatment services for the proposed development in accordance with both §71.53(d)(3) and Chapter 94 requirements and that this proposal will not impact that status.

- b. Name of Agency, Authority, Municipality _____
- Name of Responsible Agent _____
- Agent Signature _____
- Date _____

K. TREATMENT AND DISPOSAL OPTIONS (See Section K of instructions)

This section is for land development projects that propose construction of wastewater treatment facilities. Please note that, since these projects require permits issued by DEP, these projects may NOT receive final planning approval from a delegated local agency. Delegated local agencies must send these projects to DEP for final planning approval.

Check the appropriate box indicating the selected treatment and disposal option.

- 1. Spray irrigation (other than individual residential spray systems (IRSIS)) or other land application is proposed, and the information requested in Section K.1. of the planning module instructions are attached.
- 2. Recycle and reuse is proposed and the information requested in Section K-2 of the planning module instructions is attached.
- 3. A discharge to a dry stream channel is proposed, and the information requested in Section K.3. of the planning module instructions are attached.
- 4. A discharge to a perennial surface water body is proposed, and the information requested in Section K.4. of the planning module instructions are attached.

L. PERMEABILITY TESTING (See Section L of instructions)

- The information required in Section L of the instructions is attached.

M. PRELIMINARY HYDROGEOLOGIC STUDY (See Section M of instructions)

- The information required in Section M of the instructions is attached.

J. CHAPTER 94 CONSISTENCY DETERMINATION (See Section J of instructions)

Projects that propose the use of existing municipal collection, conveyance or wastewater treatment facilities, or the construction of collection and conveyance facilities to be served by existing municipal wastewater treatment facilities must be consistent with the requirements of Title 25, Chapter 94 (relating to Municipal Wasteload Management). If not previously included in Section F, include a general map showing the path of the sewage to the treatment facility. If more than one municipality or authority will be affected by the project, please obtain the information required in this section for each. Additional sheets may be attached for this purpose.

1. Project Flows -43,968 gpd Net peak flow removed from the system = 120,043 gpd -164,011 gpd
2. Total Sewage Flows to Facilities (pathway from point of origin through treatment plant)

When providing "treatment facilities" sewage flows, use Annual Average Daily Flow for "average" and Maximum Monthly Average Daily Flow for "peak" in all cases. For "peak flows" in "collection" and "conveyance" facilities, indicate whether these flows are "peak hourly flow" or "peak instantaneous flow" and how this figure was derived (i.e., metered, measured, estimated, etc.).

- a. Enter average and peak sewage flows for each proposed or existing facility as designed or permitted.
- b. Enter the average and peak sewage flows for the most restrictive sections of the existing sewage facilities.
- c. Enter the average and peak sewage flows, projected for 5 years (2 years for pump stations) through the most restrictive sections of the existing sewage facilities. Include existing, proposed (this project) and future project (other approved projects) flows.

Springfield Township:

To complete the table, refer to the instructions, Section J.

	a. Design and/or Permitted Capacity (gpd)		b. Present Flows (gpd)		c. Projected Flows in 5 years (gpd) (2 years for P.S.)	
	Average	Peak	Average	Peak	Average	Peak
Collection						
Conveyance	16.8	22.6	13.37	23.37	13.3	22.0
Treatment						

3. Collection and Conveyance Facilities

The questions below are to be answered by the sewer authority, municipality, or agency responsible for completing the Chapter 94 report for the collection and conveyance facilities. These questions should be answered in coordination with the latest Chapter 94 annual report and the above table. The individual(s) signing below must be legally authorized to make representation for the organization.

YES NO

- a. This project proposes sewer extensions or tap-ins. Will these actions create a hydraulic overload within five years on any existing collection or conveyance facilities that are part of the system?

If yes, this sewage facilities planning module will not be accepted for review by the municipality, delegated local agency and/or DEP until all inconsistencies with Chapter 94 are resolved or unless there is an approved Corrective Action Plan (CAP) granting an allocation for this project. A letter granting allocations to this project under the CAP must be attached to the module package.

If no, a representative of the sewer authority, municipality, or agency responsible for completing the Chapter 94 report for the collection and conveyance facilities must sign below to indicate that the collection and conveyance facilities have adequate capacity and are able to provide service to the proposed development in accordance with both §71.53(d)(3) and Chapter 94 requirements and that this proposal will not affect that status.

b. Collection System

Name of Agency, Authority, Municipality _____

Name of Responsible Agent _____

Agent Signature _____ Date _____

J. CHAPTER 94 CONSISTENCY DETERMINATION (Continued)

c. Conveyance System

Name of Agency, Authority, Municipality Springfield Township

Name of Responsible Agent Lee Fulton, Township Manager

Agent Signature *Lee Fulton*

Date 8-5-15

4. Treatment Facility

The questions below are to be answered by a representative of the facility permittee in coordination with the information in the table and the latest Chapter 94 report. The individual signing below must be legally authorized to make representation for the organization.

YES NO

- a. This project proposes the use of an existing wastewater treatment plant for the disposal of sewage. Will this action create a hydraulic or organic overload within 5 years at that facility?

If yes, this planning module for sewage facilities will not be reviewed by the municipality, delegated local agency and/or DEP until this inconsistency with Chapter 94 is resolved or unless there is an approved CAP granting an allocation for this project. A letter granting allocations to this project under the CAP must be attached to the planning module.

If no, the treatment facility permittee must sign below to indicate that this facility has adequate treatment capacity and is able to provide wastewater treatment services for the proposed development in accordance with both §71.53(d)(3) and Chapter 94 requirements and that this proposal will not impact that status.

- b. Name of Agency, Authority, Municipality _____
Name of Responsible Agent _____
Agent Signature _____
Date _____

K. TREATMENT AND DISPOSAL OPTIONS (See Section K of instructions)

This section is for land development projects that propose construction of wastewater treatment facilities. Please note that, since these projects require permits issued by DEP, these projects may NOT receive final planning approval from a delegated local agency. Delegated local agencies must send these projects to DEP for final planning approval.

Check the appropriate box indicating the selected treatment and disposal option.

1. Spray irrigation (other than individual residential spray systems (IRSIS)) or other land application is proposed, and the information requested in Section K.1. of the planning module instructions are attached.
 2. Recycle and reuse is proposed and the information requested in Section K-2 of the planning module instructions is attached.
 3. A discharge to a dry stream channel is proposed, and the information requested in Section K.3. of the planning module instructions are attached.
 4. A discharge to a perennial surface water body is proposed, and the information requested in Section K.4. of the planning module instructions are attached.

L. PERMEABILITY TESTING (See Section L of instructions)

- The information required in Section L of the instructions is attached.

M. PRELIMINARY HYDROGEOLOGIC STUDY (See Section M of instructions)

- The information required in Section M of the instructions is attached.

J. CHAPTER 94 CONSISTENCY DETERMINATION (See Section J of instructions)

Projects that propose the use of existing municipal collection, conveyance or wastewater treatment facilities, or the construction of collection and conveyance facilities to be served by existing municipal wastewater treatment facilities must be consistent with the requirements of Title 25, Chapter 94 (relating to Municipal Wasteload Management). If not previously included in Section F, include a general map showing the path of the sewage to the treatment facility. If more than one municipality or authority will be affected by the project, please obtain the information required in this section for each. Additional sheets may be attached for this purpose.

1. Project Flows -43,968 gpd REMOVED FROM SYSTEM BY REDIRECTION
2. Total Sewage Flows to Facilities (pathway from point of origin through treatment plant)

When providing "treatment facilities" sewage flows, use Annual Average Daily Flow for "average" and Maximum Monthly Average Daily Flow for "peak" in all cases. For "peak flows" in "collection" and "conveyance" facilities indicate whether these flows are "peak hourly flow" or "peak instantaneous flow" and how this figure was derived (i.e., metered, measured, estimated, etc.).

- a. Enter average and peak sewage flows for each proposed or existing facility as designed or permitted.
- b. Enter the average and peak sewage flows for the most restrictive sections of the existing sewage facilities.
- c. Enter the average and peak sewage flows, projected for 5 years (2 years for pump stations) through the most restrictive sections of the existing sewage facilities. Include existing, proposed (this project) and future project (other approved projects) flows.

Upper Darby Township:

To complete the table, refer to the instructions, Section J.

	a. Design and/or Permitted Capacity (gpd)		b. Present Flows (gpd)		c. Projected Flows in 5 years (gpd) (2 years for P.S.)	
	Average	Peak	Average	Peak	Average	Peak
Collection						
Conveyance	16.8 MGD	22.6 MGD	13.4 MGD	23.4 MGD	13.3 MGD	22.0 MGD
Treatment						

3. Collection and Conveyance Facilities

The questions below are to be answered by the sewer authority, municipality, or agency responsible for completing the Chapter 94 report for the collection and conveyance facilities. These questions should be answered in coordination with the latest Chapter 94 annual report and the above table. The individual(s) signing below must be legally authorized to make representation for the organization.

- YES NO
- a. This project proposes sewer extensions or tap-ins. Will these actions create a hydraulic overload within five years on any existing collection or conveyance facilities that are part of the system?

If yes, this sewage facilities planning module will not be accepted for review by the municipality, delegated local agency and/or DEP until all inconsistencies with Chapter 94 are resolved or unless there is an approved Corrective Action Plan (CAP) granting an allocation for this project. A letter granting allocation to this project under the CAP must be attached to the module package.

If no, a representative of the sewer authority, municipality, or agency responsible for completing the Chapter 94 report for the collection and conveyance facilities must sign below to indicate that the collection and conveyance facilities have adequate capacity and are able to provide service to the proposed development in accordance with both §71.53(d)(3) and Chapter 94 requirements and that this proposal will not affect that status.

- b. Collection System
 - Name of Agency, Authority, Municipality _____
 - Name of Responsible Agent _____
 - Agent Signature _____ Date _____

J. CHAPTER 94 CONSISTENCY DETERMINATION (Continued)

c. Conveyance System

Name of Agency, Authority, Municipality Upper Darby Township

Name of Responsible Agent Daniel R. Lutz P.E., Township Engineer

Agent Signature *Daniel R. Lutz*

Date 8/25/15

4. Treatment Facility

The questions below are to be answered by a representative of the facility permittee in coordination with the information in the table and the latest Chapter 94 report. The individual signing below must be legally authorized to make representation for the organization.

YES NO

- a. This project proposes the use of an existing wastewater treatment plant for the disposal of sewage. Will this action create a hydraulic or organic overload within 5 years at that facility?

If yes, this planning module for sewage facilities will not be reviewed by the municipality, delegated local agency and/or DEP until this inconsistency with Chapter 94 is resolved or unless there is an approved CAP granting an allocation for this project. A letter granting allocations to this project under the CAP must be attached to the planning module.

If no, the treatment facility permittee must sign below to indicate that this facility has adequate treatment capacity and is able to provide wastewater treatment services for the proposed development in accordance with both §71.53(d)(3) and Chapter 94 requirements and that this proposal will not impact that status.

- b. Name of Agency, Authority, Municipality _____

Name of Responsible Agent _____

Agent Signature _____

Date _____

K. TREATMENT AND DISPOSAL OPTIONS (See Section K of instructions)

This section is for land development projects that propose construction of wastewater treatment facilities. Please note that, since these projects require permits issued by DEP, these projects may NOT receive final planning approval from a delegated local agency. Delegated local agencies must send these projects to DEP for final planning approval.

Check the appropriate box indicating the selected treatment and disposal option.

1. Spray irrigation (other than individual residential spray systems (IRSIS)) or other land application is proposed, and the information requested in Section K.1. of the planning module instructions are attached.
2. Recycle and reuse is proposed and the information requested in Section K-2 of the planning module instructions is attached.
3. A discharge to a dry stream channel is proposed, and the information requested in Section K.3. of the planning module instructions are attached.
4. A discharge to a perennial surface water body is proposed, and the information requested in Section K.4. of the planning module instructions are attached.

L. PERMEABILITY TESTING (See Section L of instructions)

- The information required in Section L of the instructions is attached.

M. PRELIMINARY HYDROGEOLOGIC STUDY (See Section M of instructions)

- The information required in Section M of the instructions is attached.

Radnor Township Sewer System

J. CHAPTER 94 CONSISTENCY DETERMINATION (See Section J of instructions)

Projects that propose the use of existing municipal collection, conveyance or wastewater treatment facilities, or the construction of collection and conveyance facilities to be served by existing municipal wastewater treatment facilities must be consistent with the requirements of Title 25, Chapter 94 (relating to Municipal Wasteload Management). If not previously included in Section F, include a general map showing the path of the sewage to the treatment facility. If more than one municipality or authority will be affected by the project, please obtain the information required in this section for each. Additional sheets may be attached for this purpose.

- Project Flows 43968 gpd Net peak flow removed from system = +120,043 GPD - 164,011 GPD
- Total Sewage Flows to Facilities (pathway from point of origin through treatment plant)

When providing "treatment facilities" sewage flows, use Annual Average Daily Flow for "average" and Maximum Monthly Average Daily Flow for "peak" in all cases. For "peak flows" in "collection" and "conveyance" facilities, indicate whether these flows are "peak hourly flow" or "peak instantaneous flow" and how this figure was derived (i.e., metered, measured, estimated, etc.).

- Enter average and peak sewage flows for each proposed or existing facility as designed or permitted.
- Enter the average and peak sewage flows for the most restrictive sections of the existing sewage facilities.
- Enter the average and peak sewage flows, projected for 5 years (2 years for pump stations) through the most restrictive sections of the existing sewage facilities. Include existing, proposed (this project) and future project (other approved projects) flows.

To complete the table, refer to the instructions, Section J.

Darby Creek Joint Authority:

	a. Design and/or Permitted Capacity (gpd)		b. Present Flows (gpd)		c. Projected Flows in 5 years (gpd) (2 years for P.S.)	
	Average	Peak	Average	Peak	Average	Peak
Collection						
Conveyance	21699503	29669503	21514966.5	29484966.5	21469225	29439225
Treatment						

3. Collection and Conveyance Facilities

The questions below are to be answered by the sewer authority, municipality, or agency responsible for completing the Chapter 94 report for the collection and conveyance facilities. These questions should be answered in coordination with the latest Chapter 94 annual report and the above table. The individual(s) signing below must be legally authorized to make representation for the organization.

YES NO

- a. YES NO This project proposes sewer extensions or tap-ins. Will these actions create a hydraulic overload within five years on any existing collection or conveyance facilities that are part of the system?

If yes, this sewage facilities planning module will not be accepted for review by the municipality, delegated local agency and/or DEP until all inconsistencies with Chapter 94 are resolved or unless there is an approved Corrective Action Plan (CAP) granting an allocation for this project. A letter granting allocations to this project under the CAP must be attached to the module package.

If no, a representative of the sewer authority, municipality, or agency responsible for completing the Chapter 94 report for the collection and conveyance facilities must sign below to indicate that the collection and conveyance facilities have adequate capacity and are able to provide service to the proposed development in accordance with both §71.53(d)(3) and Chapter 94 requirements and that this proposal will not affect that status.

b. Collection System

Name of Agency, Authority, Municipality _____

Name of Responsible Agent _____

Agent Signature _____ Date _____

J. CHAPTER 94 CONSISTENCY DETERMINATION (See Section J of instructions)

c. Conveyance System

Name of Agency, Authority, Municipality DARBY CREEK JOINT AUTHORITY

Name of Responsible Agent CHARLES J. CATANIA

Agent Signature Charles J. Catania

Date 7/23/15

4. Treatment Facility

The questions below are to be answered by a representative of the facility permittee in coordination with the information in the table and the latest Chapter 94 report. The individual signing below must be legally authorized to make representation for the organization.

YES NO

- a. This project proposes the use of an existing wastewater treatment plant for the disposal of sewage. Will this action create a hydraulic or organic overload within 5 years at that facility?

If yes, this planning module for sewage facilities will not be reviewed by the municipality, delegated local agency and/or DEP until this inconsistency with Chapter 94 is resolved or unless there is an approved CAP granting an allocation for this project. A letter granting allocations to this project under the CAP must be attached to the planning module.

If no, the treatment facility permittee must sign below to indicate that this facility has adequate treatment capacity and is able to provide wastewater treatment services for the proposed development in accordance with both §71.53(d)(3) and Chapter 94 requirements and that this proposal will not impact that status.

- b. Name of Agency, Authority, Municipality _____
Name of Responsible Agent _____
Agent Signature _____
Date _____

K. TREATMENT AND DISPOSAL OPTIONS (See Section K of instructions)

This section is for land development projects that propose construction of wastewater treatment facilities. Please note that, since these projects require permits issued by DEP, these projects may NOT receive final planning approval from a delegated local agency. Delegated local agencies must send these projects to DEP for final planning approval.

Check the appropriate box indicating the selected treatment and disposal option.

1. Spray irrigation (other than individual residential spray systems (IRSIS)) or other land application is proposed, and the information requested in Section K.1. of the planning module instructions are attached.
2. Recycle and reuse is proposed and the information requested in Section K-2 of the planning module instructions is attached.
3. A discharge to a dry stream channel is proposed, and the information requested in Section K.3. of the planning module instructions are attached.
4. A discharge to a perennial surface water body is proposed, and the information requested in Section K.4. of the planning module instructions are attached.

L. PERMEABILITY TESTING (See Section L of instructions)

- The information required in Section L of the instructions is attached.

M. PRELIMINARY HYDROGEOLOGIC STUDY (See Section M of instructions)

- The information required in Section M of the instructions is attached.

Radnor Township Sewer System

☒ J. CHAPTER 94 CONSISTENCY DETERMINATION (See Section J of instructions)

Projects that propose the use of existing municipal collection, conveyance or wastewater treatment facilities, or the construction of collection and conveyance facilities to be served by existing municipal wastewater treatment facilities must be consistent with the requirements of Title 25, Chapter 94 (relating to Municipal Wasteload Management). If not previously included in Section F, include a general map showing the path of the sewage to the treatment facility. If more than one municipality or authority will be affected by the project, please obtain the information required in this section for each. Additional sheets may be attached for this purpose.

1. Project Flows -43968 gpd Net peak flow removed from system = +120,043 GPD - 164,011 GPD
2. Total Sewage Flows to Facilities (pathway from point of origin through treatment plant)

When providing "treatment facilities" sewage flows, use Annual Average Daily Flow for "average" and Maximum Monthly Average Daily Flow for "peak" in all cases. For "peak flows" in "collection" and "conveyance" facilities, indicate whether these flows are "peak hourly flow" or "peak instantaneous flow" and how this figure was derived (i.e., metered, measured, estimated, etc.).

- a. Enter average and peak sewage flows for each proposed or existing facility as designed or permitted.
- b. Enter the average and peak sewage flows for the most restrictive sections of the existing sewage facilities.
- c. Enter the average and peak sewage flows, projected for 5 years (2 years for pump stations) through the most restrictive sections of the existing sewage facilities. Include existing, proposed (this project) and future project (other approved projects) flows.

DELCORA:

To complete the table, refer to the instructions, Section J.

	a. Design and/or Permitted Capacity (gpd)		b. Present Flows (gpd)		c. Projected Flows in 5 years (gpd) (2 years for P.S.)	
	Average	Peak	Average	Peak	Average	Peak
Collection						
<i>(DCPS)</i> Conveyance	30.0	60.0	17.97	38.07	20.33	43.51
Treatment						

3. Collection and Conveyance Facilities

The questions below are to be answered by the sewer authority, municipality, or agency responsible for completing the Chapter 94 report for the collection and conveyance facilities. These questions should be answered in coordination with the latest Chapter 94 annual report and the above table. The individual(s) signing below must be legally authorized to make representation for the organization.

- YES NO
- a. This project proposes sewer extensions or tap-ins. Will these actions create a hydraulic overload within five years on any existing collection or conveyance facilities that are part of the system?

If yes, this sewage facilities planning module will not be accepted for review by the municipality, delegated local agency and/or DEP until all inconsistencies with Chapter 94 are resolved or unless there is an approved Corrective Action Plan (CAP) granting an allocation for this project. A letter granting allocations to this project under the CAP must be attached to the module package.

If no, a representative of the sewer authority, municipality, or agency responsible for completing the Chapter 94 report for the collection and conveyance facilities must sign below to indicate that the collection and conveyance facilities have adequate capacity and are able to provide service to the proposed development in accordance with both §71.53(d)(3) and Chapter 94 requirements and that this proposal will not affect that status.

b. Collection System

Name of Agency, Authority, Municipality _____

Name of Responsible Agent _____

Agent Signature _____ Date _____

J. CHAPTER 94 CONSISTENCY DETERMINATION (See Section J of instructions)

c. Conveyance System

Name of Agency, Authority, Municipality DELCORA

Name of Responsible Agent Mr. Robert J. Willert

Agent Signature *Robert J. Willert*

Date 7-28-15

4. Treatment Facility

The questions below are to be answered by a representative of the facility permittee in coordination with the information in the table and the latest Chapter 94 report. The individual signing below must be legally authorized to make representation for the organization.

YES NO

- a. This project proposes the use of an existing wastewater treatment plant for the disposal of sewage. Will this action create a hydraulic or organic overload within 5 years at that facility?

If yes, this planning module for sewage facilities will not be reviewed by the municipality, delegated local agency and/or DEP until this inconsistency with Chapter 94 is resolved or unless there is an approved CAP granting an allocation for this project. A letter granting allocations to this project under the CAP must be attached to the planning module.

If no, the treatment facility permittee must sign below to indicate that this facility has adequate treatment capacity and is able to provide wastewater treatment services for the proposed development in accordance with both §71.53(d)(3) and Chapter 94 requirements and that this proposal will not impact that status.

- b. Name of Agency, Authority, Municipality _____
Name of Responsible Agent _____
Agent Signature _____
Date _____

K. TREATMENT AND DISPOSAL OPTIONS (See Section K of instructions)

This section is for land development projects that propose construction of wastewater treatment facilities. Please note that, since these projects require permits issued by DEP, these projects may **NOT** receive final planning approval from a delegated local agency. Delegated local agencies must send these projects to DEP for final planning approval.

Check the appropriate box indicating the selected treatment and disposal option.

1. Spray irrigation (other than individual residential spray systems (IRSIS)) or other land application is proposed, and the information requested in Section K.1. of the planning module instructions are attached.
2. Recycle and reuse is proposed and the information requested in Section K-2 of the planning module instructions is attached.
3. A discharge to a dry stream channel is proposed, and the information requested in Section K.3. of the planning module instructions are attached.
4. A discharge to a perennial surface water body is proposed, and the information requested in Section K.4. of the planning module instructions are attached.

L. PERMEABILITY TESTING (See Section L of instructions)

- The information required in Section L of the instructions is attached.

M. PRELIMINARY HYDROGEOLOGIC STUDY (See Section M of instructions)

- The information required in Section M of the instructions is attached.

Lower Merion Township: Mill Creek Sewer System

J. CHAPTER 94 CONSISTENCY DETERMINATION (See Section J of instructions)

Projects that propose the use of existing municipal collection, conveyance or wastewater treatment facilities, or the construction of collection and conveyance facilities to be served by existing municipal wastewater treatment facilities must be consistent with the requirements of Title 25, Chapter 94 (relating to Municipal Wasteload Management). If not previously included in Section F, include a general map showing the path of the sewage to the treatment facility. If more than one municipality or authority will be affected by the project, please obtain the information required in this section for each. Additional sheets may be attached for this purpose.

1. Project Flows 164,011 gpd **Peak flow added to system = +164,011 GPD**
2. Total Sewage Flows to Facilities (pathway from point of origin through treatment plant)

When providing "treatment facilities" sewage flows, use Annual Average Daily Flow for "average" and Maximum Monthly Average Daily Flow for "peak" in all cases. For "peak flows" in "collection" and "conveyance" facilities, indicate whether these flows are "peak hourly flow" or "peak instantaneous flow" and how this figure was derived (i.e., metered, measured, estimated, etc.).

- a. Enter average and peak sewage flows for each proposed or existing facility as designed or permitted.
- b. Enter the average and peak sewage flows for the most restrictive sections of the existing sewage facilities.
- c. Enter the average and peak sewage flows, projected for 5 years (2 years for pump stations) through the most restrictive sections of the existing sewage facilities. Include existing, proposed (this project) and future project (other approved projects) flows.

To complete the table, refer to the instructions, Section J.

	a. Design and/or Permitted Capacity (gpd)		b. Present Flows (gpd)		c. Projected Flows in 5 years (gpd) (2 years for P.S.)	
	Average	Peak	Average	Peak	Average	Peak
Collection						
Conveyance						
Treatment						

3. Collection and Conveyance Facilities

The questions below are to be answered by the sewer authority, municipality, or agency responsible for completing the Chapter 94 report for the collection and conveyance facilities. These questions should be answered in coordination with the latest Chapter 94 annual report and the above table. The individual(s) signing below must be legally authorized to make representation for the organization.

YES NO

- a. This project proposes sewer extensions or tap-ins. Will these actions create a hydraulic overload within five years on any existing collection or conveyance facilities that are part of the system?

If yes, this sewage facilities planning module will not be accepted for review by the municipality, delegated local agency and/or DEP until all inconsistencies with Chapter 94 are resolved or unless there is an approved Corrective Action Plan (CAP) granting an allocation for this project. A letter granting allocations to this project under the CAP must be attached to the module package.

If no, a representative of the sewer authority, municipality, or agency responsible for completing the Chapter 94 report for the collection and conveyance facilities must sign below to indicate that the collection and conveyance facilities have adequate capacity and are able to provide service to the proposed development in accordance with both §71.53(d)(3) and Chapter 94 requirements and that this proposal will not affect that status.

b. Collection System

Name of Agency, Authority, Municipality _____

Name of Responsible Agent _____

Agent Signature _____ Date _____

J. CHAPTER 94 CONSISTENCY DETERMINATION (See Section J of instructions)

c. Conveyance System

Name of Agency, Authority, Municipality _____

Name of Responsible Agent _____

Agent Signature _____

Date _____

4. Treatment Facility

The questions below are to be answered by a representative of the facility permittee in coordination with the information in the table and the latest Chapter 94 report. The individual signing below must be legally authorized to make representation for the organization.

YES NO

- a. This project proposes the use of an existing wastewater treatment plant for the disposal of sewage. Will this action create a hydraulic or organic overload within 5 years at that facility?

If yes, this planning module for sewage facilities will not be reviewed by the municipality, delegated local agency and/or DEP until this inconsistency with Chapter 94 is resolved or unless there is an approved CAP granting an allocation for this project. A letter granting allocations to this project under the CAP must be attached to the planning module.

If no, the treatment facility permittee must sign below to indicate that this facility has adequate treatment capacity and is able to provide wastewater treatment services for the proposed development in accordance with both §71.53(d)(3) and Chapter 94 requirements and that this proposal will not impact that status.

- b. Name of Agency, Authority, Municipality _____

Name of Responsible Agent _____

Agent Signature _____

Date _____

K. TREATMENT AND DISPOSAL OPTIONS (See Section K of instructions)

This section is for land development projects that propose construction of wastewater treatment facilities. Please note that, since these projects require permits issued by DEP, these projects may **NOT** receive final planning approval from a delegated local agency. Delegated local agencies must send these projects to DEP for final planning approval.

Check the appropriate box indicating the selected treatment and disposal option.

1. Spray irrigation (other than individual residential spray systems (IRSIS)) or other land application is proposed, and the information requested in Section K.1. of the planning module instructions are attached.
2. Recycle and reuse is proposed and the information requested in Section K-2 of the planning module instructions is attached.
3. A discharge to a dry stream channel is proposed, and the information requested in Section K.3. of the planning module instructions are attached.
4. A discharge to a perennial surface water body is proposed, and the information requested in Section K.4. of the planning module instructions are attached.

L. PERMEABILITY TESTING (See Section L of instructions)

- The information required in Section L of the instructions is attached.

M. PRELIMINARY HYDROGEOLOGIC STUDY (See Section M of instructions)

- The information required in Section M of the instructions is attached.

N. DETAILED HYDROGEOLOGIC STUDY (See Section N of instructions)

The detailed hydrogeologic information required in Section N. of the instructions is attached.

O. SEWAGE MANAGEMENT (See Section O of instructions)

(1-3 for completion by the developer(project sponser), 4-5 for completion by the non-municipal facility agent and 6 for completion by the municipality)

Yes No

1. Is connection to, or construction of, a DEP permitted, non-municipal sewage facility or a local agency permitted, community onlot sewage facility proposed.

If Yes, respond to the following questions, attach the supporting analysis, and an evaluation of the options available to assure long-term proper operation and maintenance of the proposed non-municipal facilities. If No, skip the remainder of Section O.

2. Project Flows _____ gpd

Yes No

3. Is the use of nutrient credits or offsets a part of this project?

If yes, attach a letter of intent to purchase the necessary credits and describe the assurance that these credits and offsets will be available for the remaining design life of the non-municipal sewage facility;

(For completion by non-municipal facility agent)

4. Collection and Conveyance Facilities

The questions below are to be answered by the organization/individual responsible for the non-municipal collection and conveyance facilities. The individual(s) signing below must be legally authorized to make representation for the organization.

Yes No

- a. If this project proposes sewer extensions or tap-ins, will these actions create a hydraulic overload on any existing collection or conveyance facilities that are part of the system?

If yes, this sewage facilities planning module will not be accepted for review by the municipality, delegated local agency and/or DEP until this issue is resolved.

If no, a representative of the organization responsible for the collection and conveyance facilities must sign below to indicate that the collection and conveyance facilities have adequate capacity and are able to provide service to the proposed development in accordance with Chapter 71 §71.53(d)(3) and that this proposal will not affect that status.

- b. Collection System

Name of Responsible Organization _____

Name of Responsible Agent _____

Agent Signature _____

Date _____

- c. Conveyance System

Name of Responsible Organization _____

Name of Responsible Agent _____

Agent Signature _____

Date _____

5. Treatment Facility

The questions below are to be answered by a representative of the facility permittee. The individual signing below must be legally authorized to make representation for the organization.

Yes No

- a. If this project proposes the use of an existing non-municipal wastewater treatment plant for the disposal of sewage, will this action create a hydraulic or organic overload at that facility?

If yes, this planning module for sewage facilities will not be reviewed by the municipality, delegated local agency and/or DEP until this issue is resolved.

If no, the treatment facility permittee must sign below to indicate that this facility has adequate treatment capacity and is able to provide wastewater treatment services for the proposed development in accordance with §71.53(d)(3) and that this proposal will not impact that status.

- b. Name of Facility _____
Name of Responsible Agent _____
Agent Signature _____
Date _____

(For completion by the municipality)

6. The **SELECTED OPTION** necessary to assure long-term proper operation and maintenance of the proposed non-municipal facilities is clearly identified with documentation attached in the planning module package.

P. PUBLIC NOTIFICATION REQUIREMENT (See Section P of instructions)

This section must be completed to determine if the applicant will be required to publish facts about the project in a newspaper of general circulation to provide a chance for the general public to comment on proposed new land development projects. This notice may be provided by the applicant or the applicant's agent, the municipality or the local agency by publication in a newspaper of general circulation within the municipality affected. Where an applicant or an applicant's agent provides the required notice for publication, the applicant or applicant's agent shall notify the municipality or local agency and the municipality and local agency will be relieved of the obligation to publish. The required content of the publication notice is found in Section P of the instructions.

To complete this section, each of the following questions must be answered with a "yes" or "no". Newspaper publication is required if any of the following are answered "yes".

Yes No


1. Does the project propose the construction of a sewage treatment facility ?
2. Will the project change the flow at an existing sewage treatment facility by more than 50,000 gallons per day?
3. Will the project result in a public expenditure for the sewage facilities portion of the project in excess of \$100,000?
4. Will the project lead to a major modification of the existing municipal administrative organizations within the municipal government?
5. Will the project require the establishment of *new* municipal administrative organizations within the municipal government?
6. Will the project result in a subdivision of 50 lots or more? (onlot sewage disposal only)
7. Does the project involve a major change in established growth projections?
8. Does the project involve a different land use pattern than that established in the municipality's Official Sewage Plan?

P. PUBLIC NOTIFICATION REQUIREMENT cont'd. (See Section P of instructions)

- 9. Does the project involve the use of large volume onlot sewage disposal systems (Flow > 10,000 gpd)?
- 10. Does the project require resolution of a conflict between the proposed alternative and consistency requirements contained in §71.21(a)(5)(i), (ii), (iii)?
- 11. Will sewage facilities discharge into high quality or exceptional value waters?
- Attached is a copy of:
 - the public notice,
 - all comments received as a result of the notice,
 - the municipal response to these comments.
- No comments were received. A copy of the public notice is attached.

Q. FALSE SWEARING STATEMENT (See Section Q of instructions)

I verify that the statements made in this component are true and correct to the best of my knowledge, information and belief. I understand that false statements in this component are made subject to the penalties of 18 PA C.S.A. §4904 relating to unsworn falsification to authorities.

Brenden Dorley, PE	
Name (Print)	Signature
Project Engineer	6/30/15
Title	Date
485 Devon Park Drive, Suite 113, Wayne, PA 19087	6106883980
Address	Telephone Number

R. REVIEW FEE (See Section R of instructions)

The Sewage Facilities Act establishes a fee for the DEP planning module review. DEP will calculate the review fee for the project and invoice the project sponsor **OR** the project sponsor may attach a self-calculated fee payment to the planning module prior to submission of the planning package to DEP. (Since the fee and fee collection procedures may vary if a "delegated local agency" is conducting the review, the project sponsor should contact the "delegated local agency" to determine these details.) Check the appropriate box.

- I request DEP calculate the review fee for my project and send me an invoice for the correct amount. I understand DEP's review of my project will not begin until DEP receives the correct review fee from me for the project.
- I have calculated the review fee for my project using the formula found below and the review fee guidance in the instructions. I have attached a check or money order in the amount of \$_____ payable to "Commonwealth of PA, DEP". Include DEP code number on check. I understand DEP will not begin review of my project unless it receives the fee and determines the fee is correct. If the fee is incorrect, DEP will return my check or money order, send me an invoice for the correct amount. I understand DEP review will NOT begin until I have submitted the correct fee.
- I request to be exempt from the DEP planning module review fee because this planning module creates **only** one new lot and is the **only** lot subdivided from a parcel of land as that land existed on December 14, 1995. I realize that subdivision of a second lot from this parcel of land shall disqualify me from this review fee exemption. I am furnishing the following deed reference information in support of my fee exemption.

County Recorder of Deeds for _____ County, Pennsylvania

Deed Volume _____ Book Number _____

Page Number _____ Date Recorded _____

R. REVIEW FEE (continued)

Formula:

1. For a new collection system (with or without a Clean Streams Law Permit), a collection system extension, or individual tap-ins to an existing collection system use this formula.

$$\# \text{ _____ Lots (or EDUs) X } \$50.00 = \$ \text{ _____}$$

The fee is based upon:

- The number of lots created or number of EDUs whichever is higher.
 - For community sewer system projects, one EDU is equal to a sewage flow of 400 gallons per day.
2. For a surface or subsurface discharge system, use the appropriate one of these formulae.

- A. A new surface discharge greater than 2000 gpd will use a flat fee:

\$ 1,500 per submittal (non-municipal)
\$ 500 per submittal (municipal)

- B. An increase in an existing surface discharge will use:

$$\# \text{ _____ Lots (or EDUs) X } \$35.00 = \$ \text{ _____}$$

to a maximum of \$ 1,500 per submittal (non-municipal) or \$ 500 per submittal (municipal)

The fee is based upon:

- The number of lots created or number of EDUs whichever is higher.
- For community sewage system projects one EDU is equal to a sewage flow of 400 gallons per day.
- For non-single family residential projects, EDUs are calculated using projected population figures

- C. A sub-surface discharge system that requires a permit under The Clean Streams Law will use a flat fee:

\$ 1,500 per submittal (non-municipal)
\$ 500 per submittal (municipal)

Section 4
Component 3 Project Narrative



Sewage Facilities Planning Module

Component 3. Sewage Collection and Treatment Facilities

Section F. Project Narrative

Campus Overview

Villanova University is an existing educational campus located in Radnor Township, Delaware County. Since several local roads and two sets of train tracks pass through the approximate 225-acre campus, Villanova's campus has several distinct areas, which are shown in the attached Figure 1 and further described below. Table 1 lists the buildings identified in Figure 1, their primary uses and the number of beds in each residence hall.

Villanova's 70-acre Main Campus is located north of Lancaster Avenue, and is bounded by Lancaster Avenue to the south, North Ithan Avenue to the east, Amtrak tracks to the north, and Spring Mill Road to the west. Main Campus has a mixture of academic buildings and dormitories.

Villanova's 64-acre West Campus is located west of the Spring Mill Road and County Line Road intersection, and is bounded by the Amtrak tracks to the south, Spring Mill Road to the east, County Line Road to the north, and residences to the west. West Campus is primarily a residence campus, with eight apartment-style dormitory buildings and St. Mary's Hall, which contains standard dorm rooms and some academic space. The eight apartment-style dormitory buildings on West Campus utilize standard fixtures (not low flow devices). These buildings are fully occupied during the school year and partially occupied during the summer for camps.

Villanova's 19-acre South Campus is located south of the Lancaster Avenue and South Ithan Avenue intersection, and is bounded by South Ithan Avenue to the west, SEPTA tracks to the north, and residences to the south and east. Like West Campus, South Campus is a residence campus, containing six dormitory buildings and a dining hall.

Villanova's 21-acre Athletic Campus is located east of the Lancaster Avenue and North Ithan Avenue intersection, and is bounded by Lancaster Avenue to the south, North Ithan Avenue to the west, County Line Road to the north, and residences to the east, many of which are owned by the University. The Athletic Campus contains a fitness center, the football stadium, gymnasiums, and offices. There are no residence halls on the Athletic Campus.

Villanova's 22-acre North Campus is located south of the Spring Mill Road and County Line Road intersection, and is bounded by the Amtrak tracks to the south, Spring Mill Road to the west, County Line Road to the north, and North Ithan Avenue to the east. North Campus contains academic buildings and offices. There are no residence halls on North Campus.

Present Sewage Flow

The majority of the existing sewage from the entire campus flows to two discharge points. First, sewage from the Main and Athletic Campuses is collected and discharged into the Radnor Township sewer system across Lancaster Avenue at a point east of North Ithan Avenue. This

sewage is conveyed to the Philadelphia Southwest Sewage Treatment Plant via the following conveyance systems: Radnor-Haverford-Marple Sewer Authority, Springfield Township, Upper Darby Township, Darby Creek Joint Authority, Delaware County Regional Water Control Authority and the City of Philadelphia. Second, sewage from the North and West Campuses is collected and discharged along County Line Road into the Lower Merion Township sewer system. This sewage is conveyed to the Philadelphia Southwest Sewage Treatment Plant via the Mill Creek Pumping Station in Lower Merion Township. These sewer systems are shown in red and green, respectively, on the attached Figure 2, the Present Conditions sewer plan.

Three areas of the campus are not highlighted on the sewer plan because their sewage flows are not being considered as part of the sewage trade-off. These areas are South Campus (whose sewage connects to the Radnor Township sewer system), a portion of the Athletic Campus (whose sewage flows into County Line Road to the east into the Lower Merion Township sewer system), and a small portion of the Main Campus located near the intersection of Lancaster Avenue and Spring Mill Road (whose sewage flows into a different Radnor Township sewer system).

Sewage flows were monitored at several locations throughout the campus from February 24 to May 31, 2015. The results of the sewage flow monitoring are found in the attached Report for Sanitary Study/Investigation and form the basis for the sewage calculations for the proposed development.

Proposed Development

Villanova University is proposing to construct six dormitories, a restaurant, a performing arts center, and associated retail space on a portion of its Main Campus property located south of Lancaster Avenue.

The total anticipated peak sewage flow from the proposed development project is 120,043 GPD. This peak sewage amount is comprised of:

- 112,378 GPD from the 1,138 dorm beds (using 98.75 gpd/bed peak – refer to attached Report for Sanitary Study/Investigation for calculations);
- 4,800 GPD from the 100 seat restaurant (using 12 gpd/patron, assuming 2 lunches and 2 dinners per seat);
- 250 GPD from the 2,500 SF convenience store (using 0.1 gpd/SF);
- 2,000 GPD from the 400 seat performing arts center (using 5 gpd/seat); and
- 615 GPD from the 6,150 SF retail space (using 0.1 gpd/SF).

Using Radnor Township's definition of 262.5 GPD/EDU, the expected peak sewage flow of 120,043 GPD equates to 458 EDUs. This sewage is proposed to be collected and conveyed to the Radnor Township sewer system that exists southeast of the Lancaster Avenue and South Ltham Avenue intersection.

The proposed dormitories will be apartment-style dormitories and utilize low-flow fixtures. The proposed restaurant and convenience store are for public use. While exact hours of operation for the restaurant have not been established, the restaurant's hours of operation are anticipated to be similar to other restaurants on campus. The restaurant would be open at around 8 am on weekdays and 10 am on weekends. The restaurant would close around 10 pm during the week, but close later on Fridays and Saturdays (around midnight) and close earlier on Sundays (around 8 pm).

Sewage Redirection

The Radnor Township sewer system cannot currently accept this increase in sewage flow due to conveyance issues in the downstream portion of the sewer system. In order to accommodate the sewage flows from this proposed project, sewage from the Main Campus area will be redirected via gravity sewer off the Radnor Township sewer system and onto the existing Lower Merion Township Mill Creek Pumping Station sewer system at County Line Road and North Ithan Avenue. The anticipated peak sewage flow from the proposed development is 120,043 GPD. The measured peak sewage flow being redirected from the Main Campus area is 164,011 GPD. The peak sewage flow to the Radnor Township sewer system will be reduced by 43,968 GPD. Redirecting the Main Campus sewage flow to Lower Merion allows the decommissioning of two existing pumping systems [Driscoll Hall (#38) and Health Services Building (#39)], which will connect by gravity to the redirected sewer.

The Lower Merion Township Mill Creek Pumping Station sewer system has the capacity to accept the 164,011 GPD increase in redirected sewage flow from the Main Campus area.

These sewer systems are shown in red and green, respectively, on the attached Figure 3, the Proposed Conditions sewer plan.

Summary

The anticipated peak sewage flows from the proposed development project are 120,043 GPD, which will be conveyed to the Radnor Township sewer system. To offset this increase to the sewer system that cannot handle the additional flow, Villanova will redirect 164,011 GPD of peak sewage flow from its Main Campus area off the Radnor Township sewer system onto the Lower Merion Township Mill Creek Pumping Station sewer system, which has the capacity to handle the increase in sewage flow.

Table 1. Building Uses

<u>Number</u>	<u>Building Name</u>	<u>Campus</u>	<u>Primary Use</u>	<u>Beds</u>
WEST CAMPUS				
1	Picotte Hall at Dundale	West	Offices	
2	Burns Hall	West	President's Residence	
3	Welsh Hall	West	Residence Hall	154
4	Rudolph Hall	West	Residence Hall	154
5	Moulden Hall	West	Residence Hall	152
6	Klekotka Hall	West	Residence Hall	152
7	St Clare Hall	West	Residence Hall	158
8	Jackson Hall	West	Residence Hall	158
9	Gallen Hall	West	Residence Hall	158
10	Farley Hall	West	Residence Hall	158
11	St Mary's Hall	West	Residence Hall	231
West Campus Subtotal				1,475
NORTH CAMPUS				
12	Garey Hall	North	Academic	
13	Law School	North	Academic	
14	Steam Plant	North	N/A	
15	Facilities Maintenance Building	North	Offices	
16	Structural Engineering Lab	North	Academic	
MAIN CAMPUS				
17	Green House	Main	Academic	
18	Mendel Hall	Main	Academic	
19	Falvey Library	Main	Academic	
20	St Augustine Center	Main	Offices	
21	John Barry Hall	Main	Academic	
22	Chemical Engineering	Main	Academic	
23	White Hall	Main	Academic	
24	Fedigan Hall	Main	Residence Hall	118
25	Tolentine Hall	Main	Academic	
26	St Thomas Monastery	Main	Residence Hall	60
27	St Thomas Church	Main	N/A	
28	St Rita's Hall	Main	Residence Hall	40
29	Alumni Hall	Main	Residence Hall	113
30	Austin Hall	Main	Residence Hall	90
31	Dougherty Hall	Main	Dining Hall	
32	Corr Hall	Main	Residence Hall	55
33	Kennedy Hall	Main	Retail/Offices	
34	Connelly Center	Main	Student Center	
35	Vasey Hall	Main	Academic	
36	Sheehan Hall	Main	Residence Hall	443
37	Sullivan Hall	Main	Residence Hall	425
38	Driscoll Hall	Main	Academic	
39	Health Services Building	Main	Offices	
40	Bartley Hall	Main	Academic	
Main Campus Subtotal				1,344
ATHLETICS CAMPUS				
41	Jake Nevin Field House	Athletics	Athletic	
42	Villanova Stadium	Athletics	Athletic	
43	Galberry Hall	Athletics	Offices	

VILLANOVA UNIVERSITY CAMPUS AREAS PLAN

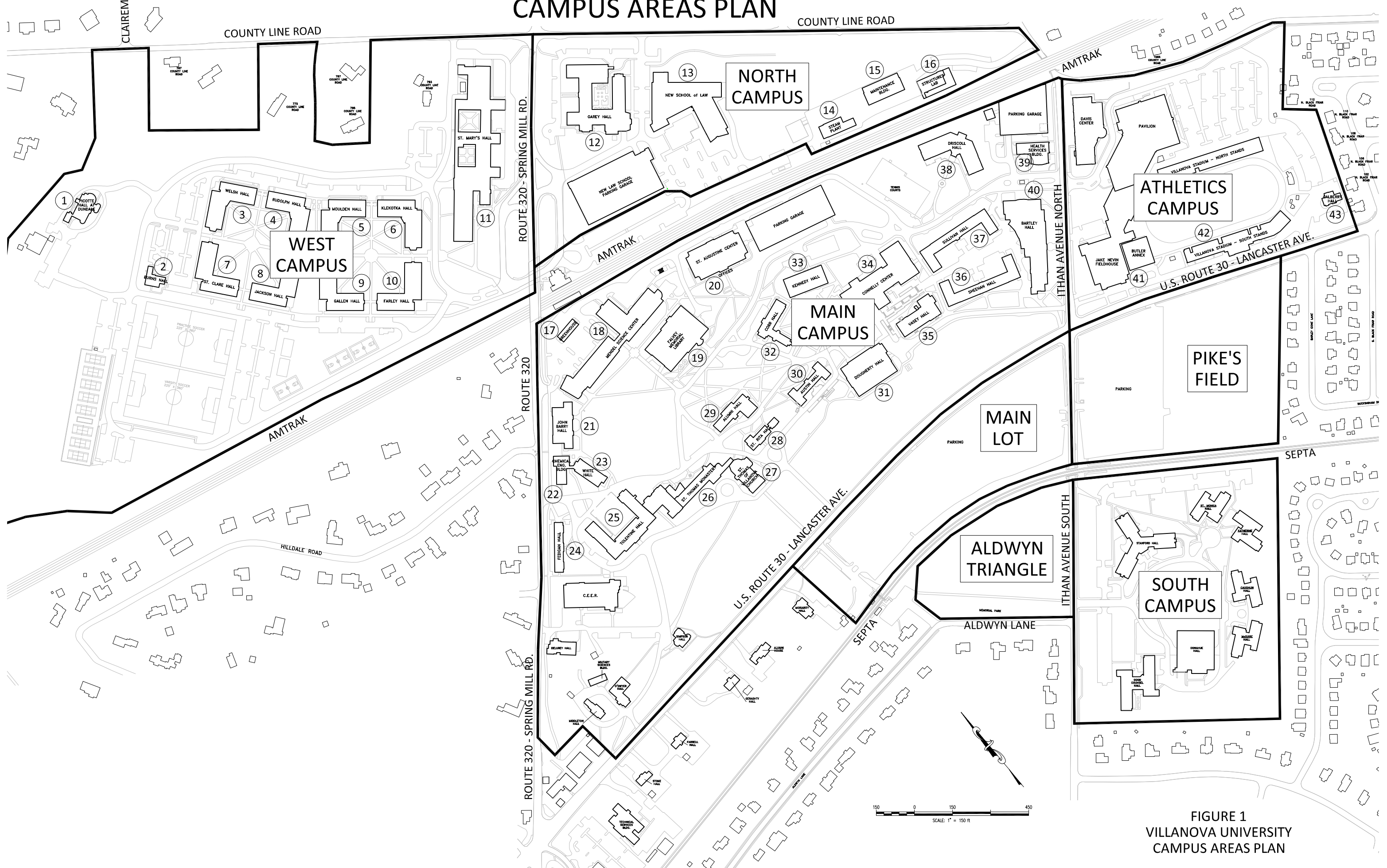


FIGURE 1
VILLANOVA UNIVERSITY
CAMPUS AREAS PLAN

PRESENT CONDITIONS

LOWER MERION TWP:
MILL CREEK PUMPING
STATION



FIGURE 2
PRESENT CONDITIONS
CAMPUS SEWER PLAN

Section 5
Component 3 Alternative Analysis



Sewage Facilities Planning Module Component 3. Sewage Collection and Treatment Facilities

Section H. Alternative Analysis

Proposed Development

Villanova University is proposing to construct six dormitories, a restaurant, a performing arts center, and associated retail space on a portion of its Main Campus property located south of Lancaster Avenue. The anticipated peak sewage flow from the proposed development project is approximately 120,043 GPD (refer to Narrative for additional information).

Alternative #1 – On-lot disposal

For this size project, the on-lot disposal option is not practical. This disposal method for this project is prohibitive due to the amount of land that would be required to dispose of the amount of sewage generated from the proposed development project and the presence of poorly draining soils throughout Villanova University's campus.

Alternative #2 – Connecting to nearest public sewer in Radnor Township

The next option is to collect and discharge the proposed development project's sewage to Radnor Township's sewer system. This option would connect the project's sewer to the nearest public sewer, which is located southeast of the Lancaster Avenue and South Ithan Avenue intersection. Although the location of this Radnor Township sewer is most convenient to the project area, the sewer system downstream does not have the capacity to take the anticipated sewage flow without other action taken, making this option prohibitive.

Alternative #3 - Taking project sewage flow to Lower Merion Township

Another option is to bypass Radnor Township's sewer system entirely by collecting the proposed development project's sewage and disposing it to Lower Merion Township's sewer system. The nearest Lower Merion Township sewer system discharges to Lower Merion's Mill Creek Pumping Station. That conveyance system and pump station doesn't have the capacity to accept the entire flow increase from the project. In addition, the sewage from the project would need to be pumped to connect to the Lower Merion Township sewer system.

Alternative #4 - Sewage Redirection

While the previous options are not practical on their own, combining these options and redirecting sewage between collection systems is a viable alternative. The Radnor Township sewer system cannot currently accept the increase in sewage flow from the project due to conveyance issues in the downstream portion of the system. In order to accommodate the sewage flows from this proposed project, sewage from the Main Campus area will be redirected via gravity sewer off the Radnor Township sewer system and onto the existing Lower Merion Township Mill Creek Pumping Station sewer system at County Line Road and North Ithan

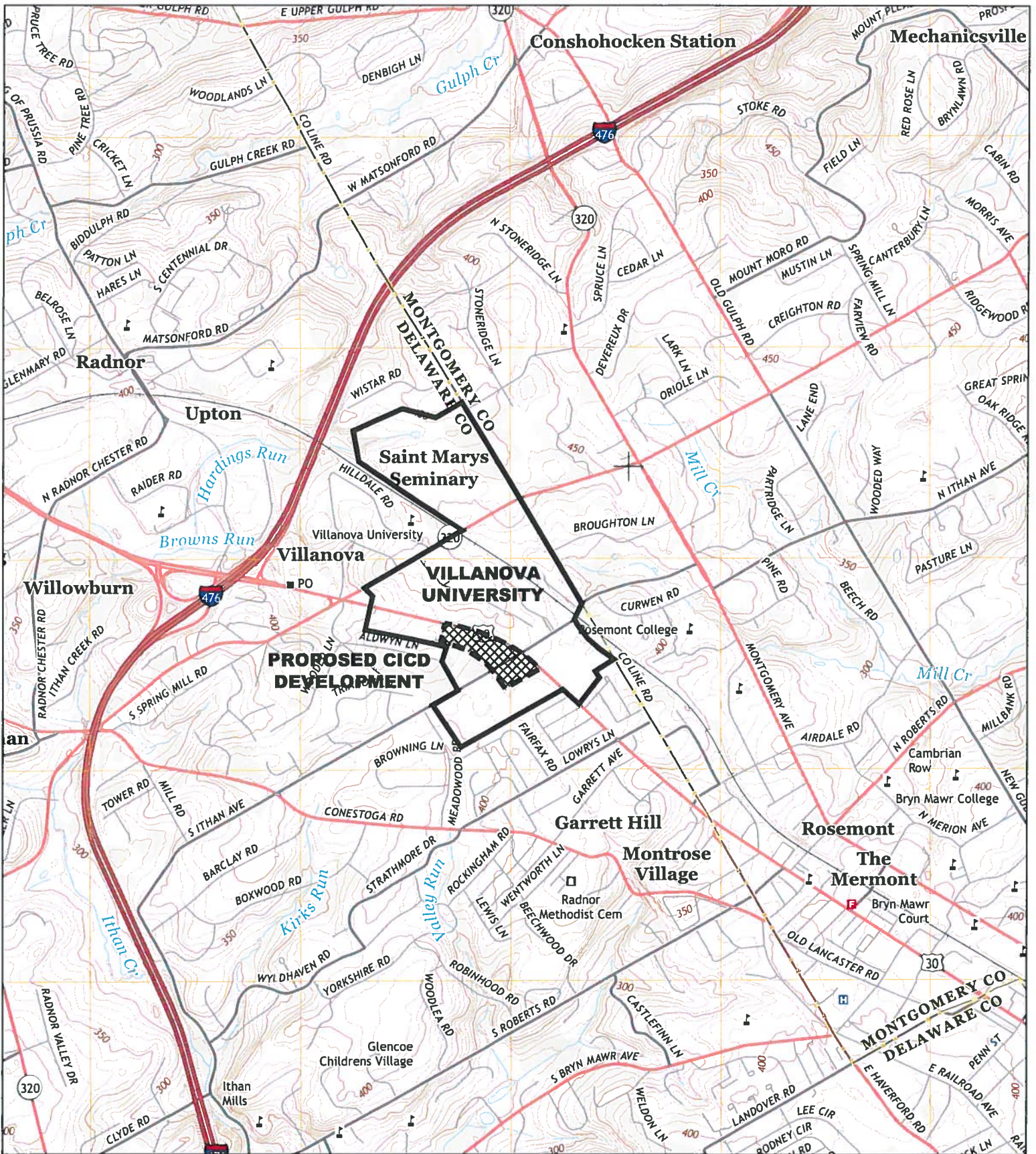
Avenue. The Mill Creek conveyance system and pumping station have the capacity to accept this new increase in sewage flow.

For this alternative, two existing pumps on Villanova's Main Campus will be decommissioned as a result of redirecting the Main Campus sewage flow to the Lower Merion Township Mill Creek system.

Summary

The proposed development project will add approximately 120,043 GPD of peak sewage flow to the Radnor Township sewer system. To offset this increase to the Radnor Township sewer system that cannot handle the additional flow, Villanova will redirect 164,011 GPD of peak sewage flow from its Main Campus area to the Lower Merion Township Mill Creek Pumping Station sewer system, which has the available capacity.

Section 6
Component 3 Supporting Documents



Associated Engineering Consultants Incorporated

485 Devon Park Drive Suite 113 Wayne Pennsylvania 19087 tel 610 688 3980 fax 610 688 4566

Civil | Structural | HVAC | Plumbing | Electrical | Fire Protection

www.aeceng.net

PROJECT TITLE
**VILLANOVA UNIVERSITY
 CID DEVELOPMENT
 NORRISTOWN, PA QUADRANGLE**

DRAWN BY	BJD	PROJECT NO.	0105.133
CHECKED BY	KRM	DATE	JUNE 30, 2015
SCALE	1"=200'	SHEET NO.	1 OF 1

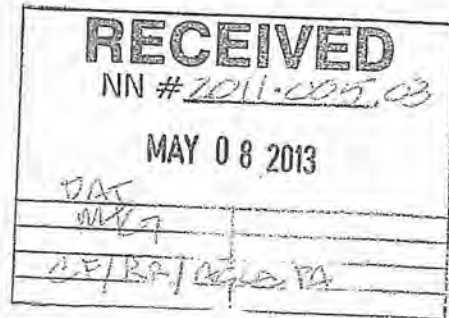
A UA™

Aqua Pennsylvania, Inc.
762.W. Lancaster Avenue
Bryn Mawr, PA 19010

www.aquaamerica.com

May 6, 2013

Maria T. Goman
Nave Newell
357 South Gulph Road, Suite 300
King of Prussia, PA 19406



Re: Water Availability
Villanova University Housing
Radnor Township, Delaware County, Pennsylvania

Dear Ms. Goman:

This letter will serve as confirmation that the above referenced property is situated within Aqua Pennsylvania Inc.'s service territory. Service would be provided in accordance with Aqua Pennsylvania Inc.'s Rules and Regulations.

Please contact Deanne L. Ciotti, Aqua Pennsylvania Inc.'s New Service Representative at 610-541-4160 for further information on service alternatives that will meet your domestic and fire service needs. Ms. Ciotti will provide you with the appropriate service applications.

Please note that if any additional public hydrants are required, or any need to be relocated, for this project that it will be handled separately by me with the issuance of a Fire Hydrant Agreement or Relocation Agreement for execution. If required, please forward a drawing with the hydrant dimensioned in both directions showing any utilities that could be encountered by us in running the hydrant lead pipe. Similarly this also applies for our existing mains on a parcel, except that your firm would be required to prepare a drawing for us.

Flow data information may be obtained from our Production Department so that you may determine the adequacy of our supply for your project needs. Please fax a written request to Lisa Thomas Oliva at 610-645-1162 containing the address, street, cross street and municipality and all pertinent contact information.

If I can be of further assistance, you may contact me at (610) 645-4230.

Sincerely,

Gary J. Horne
New Business Representative



Associated Engineering Consultants Incorporated

485 Devon Park Drive Suite 113 Wayne Pennsylvania 19087 tel 610 688 3980 fax 610 688 4566

TRANSMITTAL

To:	Pennsylvania Historical and Museum Commission	From:	Brenden Dorley
Company:	Bureau of Historic Preservation	Date:	June 26, 2015
Address:	400 North Street, 2 nd Floor	Project Name:	Villanova CICD Development
City, State, Zip:	Harrisburg, PA 17120-0093	Project Number:	0105.133
Phone:		Re:	Cultural Resource Notice

- | | |
|---|--|
| <input checked="" type="checkbox"/> For Your Review & Comment | <input type="checkbox"/> For Your Information & Record |
| <input type="checkbox"/> For Your Use | <input type="checkbox"/> As Requested |

If enclosures are not as noted, please notify us at once.

Quantity	Date	Description
1	6/26/15	Cultural Resource Notice
1		Project Narrative
1		USGS Map
1		Applicant's Checklist

Comments:

DEP USE ONLY
Date Received



CULTURAL RESOURCE NOTICE

Read the instructions before completing this form.

SECTION A. APPLICANT IDENTIFIER

Applicant Name Villanova University

Street Address 800 East Lancaster Avenue

City Villanova State PA Zip 19085

Telephone Number (610) 519-4589

Project Title Villanova University CICD Development

SECTION B. LOCATION OF PROJECT

Municipality Radnor Township County Name Delaware DEP County Code 23

SECTION C. PERMITS OR APPROVALS

Name of Specific DEP Permit or Approval Requested: Act 537 Sewage Planning / Stormwater NPDES

Anticipated federal permits:

Surface Mining 404 Water Quality Permit

Army Corps of Engineers Federal Energy Regulatory Commission

401 Water Quality Certification Other: _____

SECTION D. GOVERNMENT FUNDING SOURCES

State: (Name) _____ Local: (Name) _____

Federal: (Name) _____ Other: (Name) _____

SECTION E. RESPONSIBLE DEP REGIONAL, CENTRAL, DISTRICT MINING or OIL & GAS MGMT OFFICE

DEP Regional Office Responsible for Review of Permit Application Central Office (Harrisburg)

Southeast Regional Office (Norristown) Northeast Regional Office (Wilkes-Barre)

Southcentral Regional Office (Harrisburg) Northcentral Regional Office (Williamsport)

Southwest Regional Office (Pittsburgh) Northwest Regional Office (Meadville)

District Mining Office: _____ Oil & Gas Office: _____

SECTION F. RESPONSIBLE COUNTY CONSERVATION DISTRICT, if applicable.

County Conservation District _____ Telephone Number, if known _____

Delaware County Conservation District (610) 892-9484

SECTION G. CONSULTANT

Consultant, if applicable Associated Engineering Consultants, Inc. c/o Brenden Dorley

Street Address 485 Devon Park Drive, Suite 113

City Wayne State PA Zip 19087

Telephone Number (610) 688-3980 x119

SECTION H. PROJECT BOUNDARIES AND DESCRIPTION

REQUIRED

Indicate the total acres in the property under review. Of this acreage, indicate the total acres of earth disturbance for the proposed activity.

Attach a 7.5' U.S.G.S. Map indicating the defined boundary of the proposed activity.

Attach photographs of any building over 50 years old. Indicate what is to be done to all buildings in the project area.

Attach a narrative description of the proposed activity.


Attach the return receipt of delivery of this notice to the Pennsylvania Historical and Museum Commission.

REQUESTED

Attach photographs of any building over 40 years old.

Attach site map, if available.

SECTION I. SIGNATURE BLOCK

 Applicant's Signature	June 26, 2015 Date of Submission of Notice to PHMC
--	---



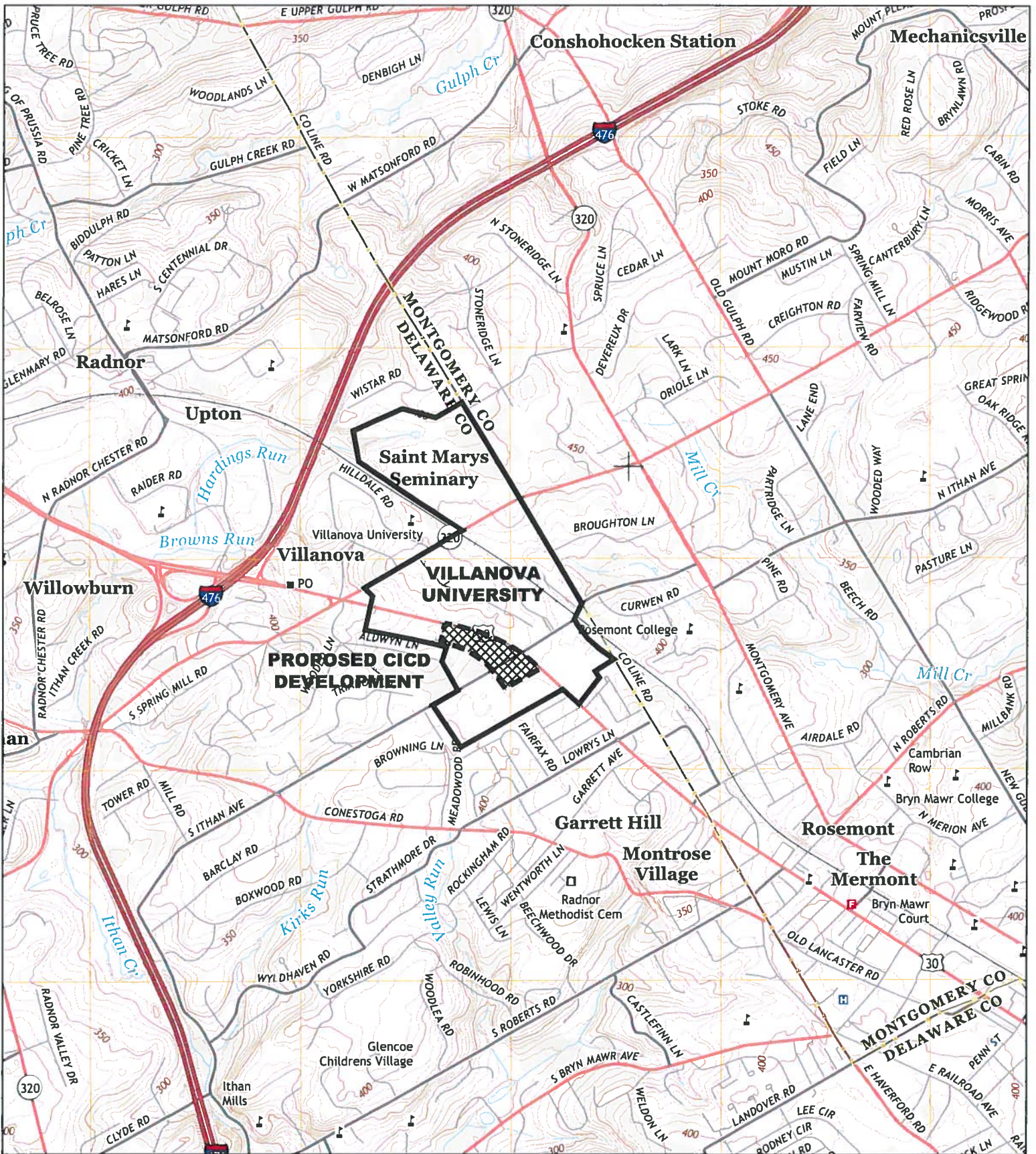
Associated Engineering Consultants Incorporated

485 Devon Park Drive Suite 113 Wayne Pennsylvania 19087 tel 610 688 3980 fax 610 688 4566

Villanova University CICD Development Project Narrative

Villanova University is an existing school located at 800 East Lancaster Avenue, Villanova, PA. This project involves the construction of dormitories for 1,138 beds, a 400 seat performing arts center, restaurant and retail space, and associated site improvements on approximately 13.8 acres of existing parking lot located along East Lancaster Avenue at Ithan Avenue. No alterations to the existing school buildings are proposed. The proposed construction will disturb 13.8 acres of the approximate 225-acre campus.

Attached is a USGS map that shows Villanova University's campus and the proposed CICD Development project area.



Associated Engineering Consultants Incorporated

485 Devon Park Drive Suite 113 Wayne Pennsylvania 19087 tel 610 688 3980 fax 610 688 4566

Civil | Structural | HVAC | Plumbing | Electrical | Fire Protection

www.aeceng.net

PROJECT TITLE		VILLANOVA UNIVERSITY CID DEVELOPMENT NORRISTOWN, PA QUADRANGLE	
DRAWN BY	BJD	PROJECT NO.	0105.133
CHECKED BY	KRM	DATE	JUNE 30, 2015
SCALE	1"=200'	SHEET NO.	1 OF 1



CULTURAL RESOURCE NOTICE

APPLICANT'S ✓ CHECKLIST

Please check the following list to make sure that you have included all the required information. Place a checkmark in the column provided for all items completed and/or provided.

Failure to provide all of the requested information will delay the processing of the application and may result in the application being placed on hold with no action, or will be considered withdrawn and the application file closed.

	Requirement	Check ✓ If Included
1.	Attachments, where appropriate	
	a) Section B - Additional municipality information.	
	b) Section B - Additional county information.	
	c) Section H - 7.5' USGS Map (with defined boundaries of proposed activity).	X
	d) Section H - Narrative description of proposed activity.	X
	e) Section H - Photographs of any buildings over 50 years old. Indicate what is to be done to all buildings in the project area.	
	f) Section H - Total acres in property under review. Of this acreage, total acres of earth disturbance for the proposed activity.	X
	g) Return receipt of delivery of Cultural Resource Notice to the Pennsylvania Historical and Museum Commission.	X
2.	Mailings	
	a) Notice mailed to PHMC on <u>June 26, 2015</u> .	
	b) Received return receipt from PHMC on _____.	
	c) Submitted application to DEP Regional, Central, District Mining or Oil and Gas Mgmt. Office on _____ with copy of return receipt from PHMC as proof of submittal. or	
	d) Submitted application to County Conservation District Office on _____ with copy of Return Receipt from PHMC as proof of submittal.	
	Requests	Check ✓ If Included
3.	Attachments requested, where appropriate	
	a) Section H - Photographs of any buildings over 40 years old.	
	b) Section H - Site maps of the proposed activity, if available.	



Commonwealth of Pennsylvania
Pennsylvania Historical and Museum Commission
Bureau for Historic Preservation
Commonwealth Keystone Building, 2nd Floor
400 North Street
Harrisburg, PA 17120-0093
www.phmc.state.pa.us

17 August 2015

Mr. Brenden Dorley
AEC
485 Devon Park, Suite 113
Wayne, PA 19087

RE: ER No. 2015-1393-045-B
DEP: Villanova University CICD Development
Radnor Township, Delaware County

Dear Mr. Dorley:

Thank you for submitting information concerning the above referenced project. The Bureau for Historic Preservation (the State Historic Preservation Office) reviews projects in accordance with state and federal laws. Section 106 of the National Historic Preservation Act of 1966, and the implementing regulations (36 CFR Part 800) of the Advisory Council on Historic Preservation, is the primary federal legislation. The Environmental Rights amendment, Article 1, Section 27 of the Pennsylvania Constitution and the Pennsylvania History Code, 37 Pa. Cons. Stat. Section 500 et seq. (1988) is the primary state legislation. These laws include consideration of the project's potential effects on both historic and archaeological resources.

Based on the additional information received, in our opinion, the proposed project will have **No Adverse Effect** on the National Register-eligible **Villanova University Campus (Key No. 105136)**.

If you need further information concerning this review, please contact Emma Diehl at emdiehl@pa.gov or (717) 787-9121.

Sincerely,

A handwritten signature in black ink, appearing to read "D. McLearn".

Douglas C. McLearn, Chief
Division of Archaeology and Protection

DCM/ekd

1. PROJECT INFORMATION

Project Name: **Villanova Univ Lancaster Ave Housing**

Date of review: **6/8/2015 11:16:10 AM**

Project Category: **Development, New commercial/industrial development (store, gas station, factory)**

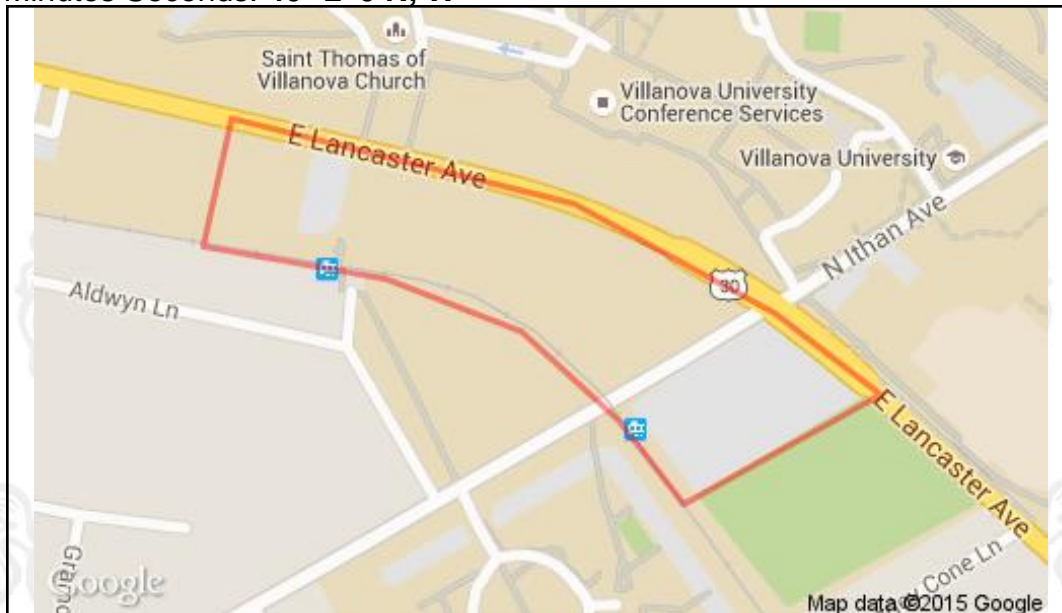
Project Area: **19.0** acres

County: **Delaware** Township/Municipality: **Radnor**

Quadrangle Name: **NORRISTOWN** ~ ZIP Code: **19010,19085**

Decimal Degrees: **40.033578 N, -75.341637 W**

Degrees Minutes Seconds: **40° 2' 0 N, W**



2. SEARCH RESULTS

Agency	Results	Response
PA Game Commission	No Known Impact	No Further Review Required
PA Department of Conservation and Natural Resources	No Known Impact	No Further Review Required
PA Fish and Boat Commission	No Known Impact	No Further Review Required
U.S. Fish and Wildlife Service	No Known Impact	No Further Review Required

As summarized above, Pennsylvania Natural Diversity Inventory (PNDI) records indicate no known impacts to threatened and endangered species and/or special concern species and resources within the project area. Therefore, based on the information you provided, no further coordination is required with the jurisdictional agencies. This response does not reflect potential agency concerns regarding impacts to other ecological resources, such as wetlands.

Note that regardless of PNDI search results, projects requiring a Chapter 105 DEP individual permit or GP 5, 6, 7, 8, 9 or 11 in certain counties (Adams, Berks, Bucks, Carbon, Chester, Cumberland, Delaware, Lancaster, Lebanon, Lehigh, Monroe, Montgomery, Northampton, Schuylkill and York) must comply with the bog turtle habitat screening requirements of the PASPGP.

3. AGENCY COMMENTS

Regardless of whether a DEP permit is necessary for this proposed project, any potential impacts to threatened and endangered species and/or special concern species and resources must be resolved with the appropriate jurisdictional agency. In some cases, a permit or authorization from the jurisdictional agency may be needed if adverse impacts to these species and habitats cannot be avoided.

These agency determinations and responses are **valid for two years** (from the date of the review), and are based on the project information that was provided, including the exact project location; the project type, description, and features; and any responses to questions that were generated during this search. If any of the following change: 1) project location, 2) project size or configuration, 3) project type, or 4) responses to the questions that were asked during the online review, the results of this review are not valid, and the review must be searched again via the PNDI Environmental Review Tool and resubmitted to the jurisdictional agencies. The PNDI tool is a primary screening tool, and a desktop review may reveal more or fewer impacts than what is listed on this PNDI receipt. The jurisdictional agencies **strongly advise against** conducting surveys for the species listed on the receipt prior to consultation with the agencies.

PA Game Commission

RESPONSE: No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

PA Department of Conservation and Natural Resources

RESPONSE: No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

PA Fish and Boat Commission

RESPONSE: No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

U.S. Fish and Wildlife Service

RESPONSE: No impacts to **federally** listed or proposed species are anticipated. Therefore, no further consultation/coordination under the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) is required. Because no take of federally listed species is anticipated, none is authorized. This response does not reflect potential Fish and Wildlife Service concerns under the Fish and Wildlife Coordination Act or other authorities.

4. DEP INFORMATION

The Pa Department of Environmental Protection (DEP) requires that a signed copy of this receipt, along with any required documentation from jurisdictional agencies concerning resolution of potential impacts, be submitted with applications for permits requiring PNDI review. For cases where a "Potential Impact" to threatened and endangered species has been identified before the application has been submitted to DEP, the application should not be submitted until the impact has been resolved. For cases where "Potential Impact" to special

concern species and resources has been identified before the application has been submitted, the application should be submitted to DEP along with the PNDI receipt. The PNDI Receipt should also be submitted to the appropriate agency according to directions on the PNDI Receipt. DEP and the jurisdictional agency will work together to resolve the potential impact(s). See the DEP PNDI policy at <http://www.naturalheritage.state.pa.us>.



5. ADDITIONAL INFORMATION

The PNDI environmental review website is a preliminary screening tool. There are often delays in updating species status classifications. Because the proposed status represents the best available information regarding the conservation status of the species, state jurisdictional agency staff give the proposed statuses at least the same consideration as the current legal status. If surveys or further information reveal that a threatened and endangered and/or special concern species and resources exist in your project area, contact the appropriate jurisdictional agency/agencies immediately to identify and resolve any impacts.

For a list of species known to occur in the county where your project is located, please see the species lists by county found on the PA Natural Heritage Program (PNHP) home page (www.naturalheritage.state.pa.us). Also note that the PNDI Environmental Review Tool only contains information about species occurrences that have actually been reported to the PNHP.

6. AGENCY CONTACT INFORMATION

PA Department of Conservation and Natural Resources
Bureau of Forestry, Ecological Services Section
400 Market Street, PO Box 8552, Harrisburg, PA. 17105-8552
Fax:(717) 772-0271

U.S. Fish and Wildlife Service
Pennsylvania Field Office
110 Radnor Rd; Suite 101, State College, PA 16801
NO Faxes Please.

PA Fish and Boat Commission
Division of Environmental Services
450 Robinson Lane, Bellefonte, PA. 16823-7437
NO Faxes Please

PA Game Commission
Bureau of Wildlife Habitat Management
Division of Environmental Planning and Habitat Protection
2001 Elmerton Avenue, Harrisburg, PA. 17110-9797
Fax:(717) 787-6957

7. PROJECT CONTACT INFORMATION

Name: Brenden Dorley
Company/Business Name: Associated Engineering Consultants, Inc.
Address: 485 Devon Park Drive, Suite 113
City, State, Zip: Wayne, PA 19087
Phone:(610) 688-3980 x119 Fax:(610) 688-4566
Email: bdorley@aeceng.net

8. CERTIFICATION

I certify that ALL of the project information contained in this receipt (including project location, project size/configuration, project type, answers to questions) is true, accurate and complete. In addition, if the project type, location, size or configuration changes, or if the answers to any questions that were asked during this online review change, I agree to re-do the online environmental review.

Brenden Dorley signature and date 6/8/2015
applicant/project proponent signature date

1. PROJECT INFORMATION

Project Name: **Villanova Univ Main Campus Sewer**

Date of review: **6/8/2015 11:12:51 AM**

Project Category: **Waste Transfer, Treatment, and Disposal, Liquid waste/Effluent, Sewer line (new - construction in new location)**

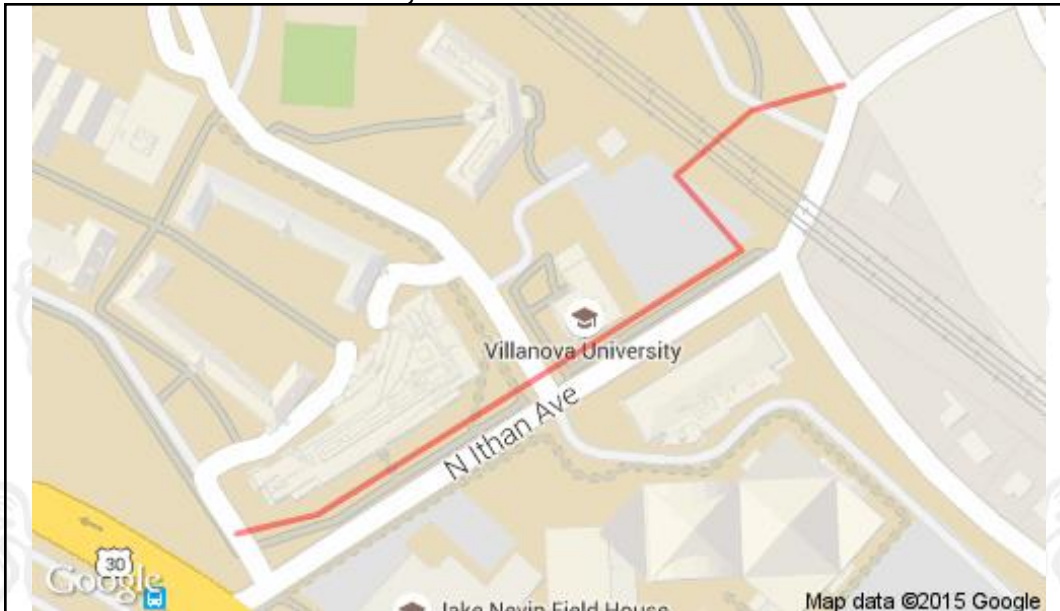
Project Length: **1298.2** feet

County: **Delaware, Montgomery** Township/Municipality: **Radnor, Lower Merion**

Quadrangle Name: **NORRISTOWN** ~ ZIP Code: **19085**

Decimal Degrees: **40.034790 N, -75.337753 W**

Degrees Minutes Seconds: **40° 2' 5 N, W**



2. SEARCH RESULTS

Agency	Results	Response
PA Game Commission	No Known Impact	No Further Review Required
PA Department of Conservation and Natural Resources	No Known Impact	No Further Review Required
PA Fish and Boat Commission	No Known Impact	No Further Review Required
U.S. Fish and Wildlife Service	No Known Impact	No Further Review Required

As summarized above, Pennsylvania Natural Diversity Inventory (PNDI) records indicate no known impacts to threatened and endangered species and/or special concern species and resources within the project area. Therefore, based on the information you provided, no further coordination is required with the jurisdictional agencies. This response does not reflect potential agency concerns regarding impacts to other ecological resources, such as wetlands.

Note that regardless of PNDI search results, projects requiring a Chapter 105 DEP individual permit or GP 5, 6, 7, 8, 9 or 11 in certain counties (Adams, Berks, Bucks, Carbon, Chester, Cumberland, Delaware, Lancaster, Lebanon, Lehigh, Monroe, Montgomery, Northampton, Schuylkill and York) must comply with the bog turtle habitat screening requirements of the PASPGP.

3. AGENCY COMMENTS

Regardless of whether a DEP permit is necessary for this proposed project, any potential impacts to threatened and endangered species and/or special concern species and resources must be resolved with the appropriate jurisdictional agency. In some cases, a permit or authorization from the jurisdictional agency may be needed if adverse impacts to these species and habitats cannot be avoided.

These agency determinations and responses are **valid for two years** (from the date of the review), and are based on the project information that was provided, including the exact project location; the project type, description, and features; and any responses to questions that were generated during this search. If any of the following change: 1) project location, 2) project size or configuration, 3) project type, or 4) responses to the questions that were asked during the online review, the results of this review are not valid, and the review must be searched again via the PNDI Environmental Review Tool and resubmitted to the jurisdictional agencies. The PNDI tool is a primary screening tool, and a desktop review may reveal more or fewer impacts than what is listed on this PNDI receipt. The jurisdictional agencies **strongly advise against** conducting surveys for the species listed on the receipt prior to consultation with the agencies.

PA Game Commission

RESPONSE: No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

PA Department of Conservation and Natural Resources

RESPONSE: No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

PA Fish and Boat Commission

RESPONSE: No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

U.S. Fish and Wildlife Service

RESPONSE: No impacts to **federally** listed or proposed species are anticipated. Therefore, no further consultation/coordination under the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) is required. Because no take of federally listed species is anticipated, none is authorized. This response does not reflect potential Fish and Wildlife Service concerns under the Fish and Wildlife Coordination Act or other authorities.

4. DEP INFORMATION

The Pa Department of Environmental Protection (DEP) requires that a signed copy of this receipt, along with any required documentation from jurisdictional agencies concerning resolution of potential impacts, be submitted with applications for permits requiring PNDI review. For cases where a "Potential Impact" to threatened and endangered species has been identified before the application has been submitted to DEP, the application should not be submitted until the impact has been resolved. For cases where "Potential Impact" to special

concern species and resources has been identified before the application has been submitted, the application should be submitted to DEP along with the PNDI receipt. The PNDI Receipt should also be submitted to the appropriate agency according to directions on the PNDI Receipt. DEP and the jurisdictional agency will work together to resolve the potential impact(s). See the DEP PNDI policy at <http://www.naturalheritage.state.pa.us>.



**Section 7
Public Notice**



Associated Engineering Consultants Incorporated

485 Devon Park Drive Suite 113 Wayne Pennsylvania 19087 tel 610 688 3980 fax 610 688 4566

Public Notice

The Pennsylvania Department of Environmental Protection Rules and Regulations require public notice be given to allow the general public to provide comments regarding the proposed redevelopment of approximately 13.8 acres of land on the existing Villanova University campus in Radnor Township, Delaware County, Pennsylvania. The project, known as Villanova University CICD Development, will be built on an existing parking lot located along East Lancaster Avenue at Ithan Avenue in Villanova. This institutional development project proposes to construct dormitories, a performing arts center, a restaurant, and a “grab and go” retail food store. Sewage flow is expected to increase by 120,043 gallons per day, which is equal to 458 equivalent dwelling units. The development will be served by public water provided by Aqua PA and a public sewerage system with final disposal and treatment of the effluent at the City of Philadelphia Southwest Wastewater Treatment Plant. The publication of this notice is required since the project will disturb more than 10 acres of land and will generate greater than 50,000 gallons per day of sewage flow.

A 30-day comment period has been established to allow the general public an opportunity to comment on the consistencies with applicable laws and acts. The Sewage Facilities Planning Module documents and plans can be viewed at the Radnor Township building, 301 Iven Avenue, Wayne, PA 19087; Monday through Friday from 8 am to 4 pm by appointment. Please address any comments within 30 days of the date of this publication to Radnor Township, Steve Norcini, Public Works Director, at the above address.

Section 8
Planning Module Components 4A & 4B



**COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT**

DEP Code #: 1-23013-246-3J

**SEWAGE FACILITIES PLANNING MODULE
COMPONENT 4A - MUNICIPAL PLANNING AGENCY REVIEW**

Note to Project Sponsor: To expedite the review of your proposal, one copy of your completed planning module package and one copy of this *Planning Agency Review Component* should be sent to the existing local municipal planning agency for their comments.

SECTION A. PROJECT NAME (See Section A of instructions)

Project Name
 Villanova University CICD Development Project

SECTION B. REVIEW SCHEDULE (See Section B of instructions)

1. Date plan received by municipal planning agency. _____
2. Date review completed by agency. _____

SECTION C. AGENCY REVIEW (See Section C of instructions)

Yes	No	
<input type="checkbox"/>	<input type="checkbox"/>	1. Is there a municipal comprehensive plan adopted under the Municipalities Planning Code (53 P.S. 10101, <i>et seq.</i>)?
<input type="checkbox"/>	<input type="checkbox"/>	2. Is this proposal consistent with the comprehensive plan for land use? If no, describe the inconsistencies _____
<input type="checkbox"/>	<input type="checkbox"/>	3. Is this proposal consistent with the use, development, and protection of water resources? If no, describe the inconsistencies _____
<input type="checkbox"/>	<input type="checkbox"/>	4. Is this proposal consistent with municipal land use planning relative to Prime Agricultural Land Preservation?
<input type="checkbox"/>	<input type="checkbox"/>	5. Does this project propose encroachments, obstructions, or dams that will affect wetlands? If yes, describe impacts _____
<input type="checkbox"/>	<input type="checkbox"/>	6. Will any known historical or archaeological resources be impacted by this project? If yes, describe impacts _____
<input type="checkbox"/>	<input type="checkbox"/>	7. Will any known endangered or threatened species of plant or animal be impacted by this project? If yes, describe impacts _____
<input type="checkbox"/>	<input type="checkbox"/>	8. Is there a municipal zoning ordinance?
<input type="checkbox"/>	<input type="checkbox"/>	9. Is this proposal consistent with the ordinance? If no, describe the inconsistencies _____
<input type="checkbox"/>	<input type="checkbox"/>	10. Does the proposal require a change or variance to an existing comprehensive plan or zoning ordinance?
<input type="checkbox"/>	<input type="checkbox"/>	11. Have all applicable zoning approvals been obtained?
<input type="checkbox"/>	<input type="checkbox"/>	12. Is there a municipal subdivision and land development ordinance?

SECTION C. AGENCY REVIEW (continued)

Yes	No	
<input type="checkbox"/>	<input type="checkbox"/>	13. Is this proposal consistent with the ordinance? If no, describe the inconsistencies _____
<input type="checkbox"/>	<input type="checkbox"/>	14. Is this plan consistent with the municipal Act 537 Official Sewage Facilities Plan? If no, describe the inconsistencies _____
<input type="checkbox"/>	<input type="checkbox"/>	15. Are there any wastewater disposal needs in the area adjacent to this proposal that should be considered by the municipality? If yes, describe _____
<input type="checkbox"/>	<input type="checkbox"/>	16. Has a waiver of the sewage facilities planning requirements been requested for the residual tract of this subdivision?
<input type="checkbox"/>	<input type="checkbox"/>	If yes, is the proposed waiver consistent with applicable ordinances?
		17. Name, title and signature of planning agency staff member completing this section: Name: _____ Title: _____ Signature: _____ Date: _____ Name of Municipal Planning Agency: _____ Address _____ Telephone Number: _____

SECTION D. ADDITIONAL COMMENTS (See Section D of instructions)

This Component does not limit municipal planning agencies from making additional comments concerning the relevancy of the proposed plan to other plans or ordinances. If additional comments are desired, attach additional sheets.

The planning agency must complete this Component within 60 days.
This component and any additional comments are to be returned to the project sponsor.



**SEWAGE FACILITIES PLANNING MODULE
 COMPONENT 4B - COUNTY PLANNING AGENCY REVIEW
 (or Planning Agency with Areawide Jurisdiction)**

Note to Project Sponsor: To expedite the review of your proposal, one copy of your completed planning package and one copy of this **Planning Agency Review Component** should be sent to the existing county planning agency or planning agency with areawide jurisdiction for their comments.

SECTION A. PROJECT NAME (See Section A of instructions)

Project Name

Villanova University CICD Development Project

SECTION B. REVIEW SCHEDULE (See Section B of instructions)

1. Date plan received by county planning agency. _____
2. Date plan received by planning agency with areawide jurisdiction _____
 Agency name _____
3. Date review completed by agency _____

SECTION C. AGENCY REVIEW (See Section C of instructions)

- | Yes | No | |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | 1. Is there a county or areawide comprehensive plan adopted under the Municipalities Planning Code (53 P.S. 10101 <i>et seq.</i>)? |
| <input type="checkbox"/> | <input type="checkbox"/> | 2. Is this proposal consistent with the comprehensive plan for land use? |
| <input type="checkbox"/> | <input type="checkbox"/> | 3. Does this proposal meet the goals and objectives of the plan?
If no, describe goals and objectives that are not met _____ |
| <input type="checkbox"/> | <input type="checkbox"/> | 4. Is this proposal consistent with the use, development, and protection of water resources?
If no, describe inconsistency _____ |
| <input type="checkbox"/> | <input type="checkbox"/> | 5. Is this proposal consistent with the county or areawide comprehensive land use planning relative to Prime Agricultural Land Preservation?
If no, describe inconsistencies: _____ |
| <input type="checkbox"/> | <input type="checkbox"/> | 6. Does this project propose encroachments, obstructions, or dams that will affect wetlands?
If yes, describe impact _____ |
| <input type="checkbox"/> | <input type="checkbox"/> | 7. Will any known historical or archeological resources be impacted by this project?
If yes, describe impacts _____ |
| <input type="checkbox"/> | <input type="checkbox"/> | 8. Will any known endangered or threatened species of plant or animal be impacted by the development project? |
| <input type="checkbox"/> | <input type="checkbox"/> | 9. Is there a county or areawide zoning ordinance? |
| <input type="checkbox"/> | <input type="checkbox"/> | 10. Does this proposal meet the zoning requirements of the ordinance?
If no, describe inconsistencies _____ |

Yes	No	SECTION C. AGENCY REVIEW (continued)
<input type="checkbox"/>	<input type="checkbox"/>	11. Have all applicable zoning approvals been obtained?
<input type="checkbox"/>	<input type="checkbox"/>	12. Is there a county or areawide subdivision and land development ordinance?
<input type="checkbox"/>	<input type="checkbox"/>	13. Does this proposal meet the requirements of the ordinance? If no, describe which requirements are not met _____
<input type="checkbox"/>	<input type="checkbox"/>	14. Is this proposal consistent with the municipal Act 537 Official Sewage Facilities Plan? If no, describe inconsistency _____
<input type="checkbox"/>	<input type="checkbox"/>	15. Are there any wastewater disposal needs in the area adjacent to this proposal that should be considered by the municipality? If yes, describe _____
<input type="checkbox"/>	<input type="checkbox"/>	16. Has a waiver of the sewage facilities planning requirements been requested for the residual tract of this subdivision?
<input type="checkbox"/>	<input type="checkbox"/>	If yes, is the proposed waiver consistent with applicable ordinances. If no, describe the inconsistencies _____
<input type="checkbox"/>	<input type="checkbox"/>	17. Does the county have a stormwater management plan as required by the Stormwater Management Act?
<input type="checkbox"/>	<input type="checkbox"/>	If yes, will this project plan require the implementation of storm water management measures?
		18. Name, Title and signature of person completing this section: Name: _____ Title: _____ Signature: _____ Date: _____ Name of County or Areawide Planning Agency: _____ Address: _____ Telephone Number: _____

SECTION D. ADDITIONAL COMMENTS (See Section D of instructions)

This Component does not limit county planning agencies from making additional comments concerning the relevancy of the proposed plan to other plans or ordinances. If additional comments are needed, attach additional sheets.

The county planning agency must complete this Component within 60 days.

This Component and any additional comments are to be returned to the applicant.

Section 9 Checklists

Checklist



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT

Completeness Checklist

The individual completing the component should use the checklist below to assure that all items are included in the module package. The municipality should confirm that the required items have been included within 10 days of receipt, and if complete, sign and date the checklist.

Sewage Collection and Treatment Facilities

- Name and Address of land development project.
- U.S.G.S. 7.5 minute topographic map with development area plotted.
- Project Narrative.
- Letter from water company (if applicable).
- Alternative Analysis Narrative.
- Details of chosen financial assurance method.
- Proof of Public Notification (if applicable).
- Name of existing collection and conveyance facilities.
- Name and NPDES number of existing treatment facility to serve proposed development.
- Plot plan of project with required information.
- Total sewage flows to facilities table.
- Signature of existing collection and/or conveyance Chapter 94 report preparer.
- Signature of existing treatment facility Chapter 94 report preparer.
- Letter granting allocation to project (if applicable).
- Signature acknowledging False Swearing Statement.
- Completed Component 4 (Planning Agency Review) for each existing planning agency and health department.
- Information on selected treatment and disposal option.
- Permeability information (if applicable).
- Preliminary hydrogeology (if applicable).
- Detailed hydrogeology (if applicable).

Municipal Action

- Component 3 (Sewage Collection and Treatment Facilities).
- Component 4 (Planning Agency Comments and Responses).
- Proof of Public Notification.
- Long-term operation and maintenance option selection.
- Comments, and responses to comments generated by public notification.
- Transmittal Letter

Signature of Municipal Official

Date submittal determined complete



pennsylvania
DEPARTMENT OF ENVIRONMENTAL
PROTECTION

January 2, 2015

Ms. Maria Goman
Nave Newell
900 West Valley Road, Suite 1100
Wayne, PA 19087

Re: Application for Planning Modules
Checklist Letter – Component 3
Villanova CICD Development
DEP Code No. 1-23013-246-3J
Radnor Township
Delaware County

Dear Ms. Goman:

In response to your application mailer, this checklist letter outlines what is required to be submitted to the municipality and the Department of Environmental Protection (DEP) as a complete module packet for the proposed development. Your development proposes a 1,135 bed dormitory, performance center, restaurant and retail space that will be served by a connection to public sewer.

Sewage Facilities Planning Module forms are available from our eLibrary as MS Word Form Fields files directly from DEP's website address located in the footer below. In the left-hand column, select the Water heading and then select Water Standards and Facility Regulation. In the right-hand column, select Wastewater Management and then select Act 537. Under Act 537, select Sewage Facilities Planning. Under Planning Forms, select the appropriate forms. The link will take you to the eLibrary location for the form.

Please select the following forms for this project and enter the above-referenced DEP Code Number on the first page of each form:

Sewage Facilities Planning Module Transmittal Letter, Form 3800-FM-BPNPSM0355
Sewage Facilities Planning Module Resolution, Form 3800-FM-BPNPSM0356
Sewage Facilities Planning Module Component 3, Form 3800-FM-BPNPSM0353

- Instructions
- Form

Sewage Facilities Planning Module Component 4

- 4A-Municipal Planning Agency Review, Form 3800-FM-BPNPSM0362A
- 4B-County Planning Agency Review, Form 3800-FM-BPNPSM0362B

Please submit the completed planning modules and supporting information to the municipality or municipalities in which the project is located. DEP must receive 1 copy of the completed planning module. Please answer all questions within the planning module. Do not simply answer "N/A" or "Not Applicable". If you feel a question does not apply, explain all reasons to support that answer. For this project, optional Section J must be completed.

Please refer to the Standard Operating Procedures (SOP) that govern Act 537 sewage facilities planning module reviews. The SOPs can be found on the DEP website at http://www.portal.state.pa.us/portal/server.pt/community/Permit_Decision_Guarantee/21215/SOPs/1294992. Consistent with the SOP, DEP may disapprove an administratively incomplete planning module submission. Please use the checklist provided in this letter below to guide both you and the municipality in providing an administratively complete planning module submission to DEP for review.

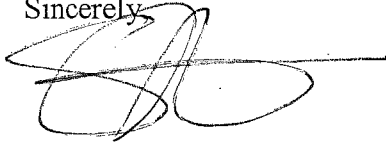
A copy of this letter should be attached to the planning module when submitted through the municipality to DEP. This letter is to be used by the applicant (or the applicant's authorized representative) as a checklist and guide to completing the planning modules and does not supersede the rules and regulations found in Chapter 71. The municipality must submit a complete module package. (See end of letter for applicant and municipal certification statements.)

NOTE: DEP should be notified at least ten days prior to soils testing activities for this project.

In all cases, address the immediate and long range sewage disposal needs of the proposal and comply with 25 Pa. Code, Chapter 71, Subchapter C relating to New Land Development Plan Revisions.

If you have any questions concerning the information required, please contact me at 484.250.5186.

Sincerely,

A handwritten signature in black ink, appearing to read 'Stefanie Rittenhouse', with a horizontal line extending to the right.

Stefanie Rittenhouse
Sewage Planning Specialist 2
Clean Water

cc: Delaware County Planning Department
Radnor Township
Villanova University
RHM
Springfield Township
Upper Darby Township
DCJA
DELCORA
Mr. Ponert-City of Philadelphia Water Department
Planning Section
Re 30(GJE15CLW)002-10

Applicant Checklist (✓ or N/A)	Materials Required to be Included in the Planning Package	DEP Completeness Review
DEP Checklist Letter		
X	DEP checklist letter is attached with items checked off by the applicant (or applicant's authorized representative) as included	
	DEP checklist letter certification statement completed and signed	
Transmittal Letter (Form 3800-FM-BPNPSM0355)		
X	Transmittal Letter is attached, completed and the appropriate boxes in Section (i) are checked.	
	Transmittal Letter is signed by the municipal secretary	
Resolution of Adoption (Form 3800-FM-BPNPSM0356)		
	Resolution of Adoption is attached and completed	
	Resolution of Adoption is signed by the municipal secretary	
	Resolution of Adoption has a visible municipal seal	
Component 4A - Municipal Planning Agency Review (Form 3800-FM-BPNPSM0362A)		
X	Component 4A is attached, completed and signed	
	Municipal Responses to Component 4A comments are included	
Component 4B - County Planning Agency Review (Form 3800-FM-BPNPSM0362B)		
X	Component 4B is attached, completed and signed	
	Municipal Responses to Component 4B comments are included	
Component 4C - County or Joint Health Department Review (Form 3800-FM-BPNPSM0362C)		
	Component 4C is attached, completed and signed	
	Municipal Responses to Component 4C comments are included	
Component 3 Sewage Facilities Planning Module (Form 3800-FM-BPNPSM0353)		
<i>Section A: Project Information</i>		
X	Section A.1. The Project Name is completed	
X	Section A.2. The Brief Project Description is completed	
<i>Section B: Client Information</i>		
X	Client Information is completed	
<i>Section C: Site Information</i>		
X	Site Information is completed	
X	A copy of the 7.5 minute USGS Topographic map is attached with the development site outlined, as required by the instructions and the checklist	
<i>Section D: Project Consultant Information</i>		
X	Project Consultant Information is completed	

<i>Section E: Availability of Drinking Water Supply</i>		
X	The appropriate box is checked in Section E	
X	For existing public water supplies, the name of the company is provided	
X	For public water supplies, the certification letter from the public water company is attached	
<i>Section F: Project Narrative</i>		
X	The Project Narrative is attached	
X	All information required in the module directions has been addressed	
<i>Section G: Proposed Wastewater Disposal Facilities</i>		
X	Section G.1.a. The collection system boxes are checked	
	The Pennsylvania Clean Streams Law (CSL) permit number is provided for existing systems	
X	Section G.1.b. The questions on the collection system are completed	
X	Section G.2.a. The appropriate treatment facility box is checked	
X	For existing treatment facilities, the name is provided	
X	For existing treatment facilities, the NPDES permit number is provided	
	For existing treatment facilities, the CSL permit number is provided	
	For new treatment facilities, the discharge location is provided	
	Section G.2.b. The certification statement has been completed and signed by the wastewater treatment facility permittee or their representative	
X	Section G.3. The plot plan is attached and contains all items in the module instructions under Section G.3	
X	The plot plan will show the proposed sewer facilities, sewer extension and/or point of connection to the existing sewer line or point of discharge	
	Copies of easement(s) or right-of-way(s) are attached	
X	Section G.4. The boxes are checked regarding Wetland Protection	
X	Section G.5. The boxes are checked regarding Primary Agricultural Land	
X	Section G.6. The boxes are checked confirming consistency with the Historic Preservation Act	
X	The Cultural Resources Notice (CRN) (Form 0120-PM-PY0003) is attached	
	A return receipt for its submission to the Pennsylvania Historical and Museum Commission (PHMC) is attached	

<i>Section G: Proposed Wastewater Disposal Facilities</i>		
	The PHMC review letter is attached	
X	Section G.7. The boxes are checked regarding Pennsylvania Natural Diversity Inventory (PNDI)	
X	Pennsylvania Natural Diversity Inventory (PNDI) Project Environmental Review Receipt is attached	
X	PNDI Review Receipt, if no potential impacts identified, is not older than 2 years	
	All supporting resolution documentation from jurisdictional agencies (when necessary) is attached and not older than 2 years	
	A completed PNDI Large Project Form (PNDI Form) (Form 8100-FM-FR0161) is attached with all supplemental materials and DEP is requested to complete the search.	
<i>Section H: Alternative Sewage Facilities Analysis</i>		
X	The Alternative Sewage Facilities Analysis is attached	
X	All information required in the module directions has been addressed	
<i>Section I: Compliance with Water Quality Standards and Effluent Limitations</i>		
	The box is checked regarding Waters Designated for Special Protection	
	The Social or Economic Justification is attached	
	The box is checked regarding Pennsylvania Waters Designated As Impaired	
	The box is checked regarding Interstate and International Waters	
	The box is checked regarding Tributaries to the Chesapeake Bay and the required information is provided	
	The Name of Permittee Agency, Authority, Municipality and the Initials of Responsible Agent are provided	
	If discharge to an intermittent stream, dry swale or manmade ditch is proposed, provide evidence that a certified letter has been sent to each owner of property over which the discharge will flow until perennial conditions are met	
<i>Section J: Chapter 94 Consistency Determination</i>		
X	A map showing the path of the sewage to the treatment facility and the location of the discharge is provided	
X	Section J.1. The Project Flows are provided	
	Section J.2. The permitted, existing, and projected average and peak flows are provided in the table for collection, conveyance and treatment facilities	
	Section J.3.a. The appropriate box is checked indicating capacity in the Collection and Conveyance Facilities	

<i>Section J: Chapter 94 Consistency Determination</i>		
	Section J.3.b. The Collection System information is completed, signed and dated	
	Section J.3.b. The Conveyance System information is completed, signed and dated	
	Section J.4.a. The appropriate box is checked regarding projected overloads at the Treatment Facility	
	Section J.4.b. The Treatment Facility information is completed, signed and dated	
	The Permittee of the wastewater treatment facility has submitted a Chapter 94 Wasteload Management Report, which includes the information for the collection and conveyance system to serve this project	
	An acceptable Wasteload Management Report Corrective Action Plan (CAP) and schedule has been submitted, as well as a connection management plan	
	A letter from the permittee, which grants allocations to the project consistent with the CAP, and a copy of the connection management plan has been submitted	
	Letter indicating the treatment plant is an interim regional treatment facility is attached	
<i>Section K: Treatment and Disposal Options</i>		
	For proposed treatment facilities, the appropriate box is checked indicating the selected Treatment and Disposal Option	
<i>Section L: Permeability Testing</i>		
	The Permeability Testing information is attached	
<i>Section M: Preliminary Hydrogeologic Study</i>		
	The Preliminary Hydrogeologic Study is attached	
	The Preliminary Hydrogeologic Study is signed and sealed by a Professional Geologist	
<i>Section N: Detailed Hydrogeologic Study</i>		
	The Detailed Hydrogeologic Study is attached	
	The Detailed Hydrogeologic Study is signed and sealed by a Professional Geologist	
<i>Section O: Sewage Management</i>		
X	Section O.1. The box is checked indicating municipal or private facilities	
X	If municipal, the remainder of Section O is not applicable	
	If private, the required analysis and evaluation of sewage management options is attached	
	Section O.2. The appropriate box is checked regarding the use of nutrient credits or offsets	

<i>Section O: Sewage Management</i>		
	Section O.3. The Project Flows for the private facilities are provided	
	Section O.4.a. The appropriate box is checked indicating capacity in the existing private Collection and Conveyance Facilities	
	Section O.4.b. The private Collection System information is completed, signed and dated	
	Section O.4.c. The private Conveyance System information is completed, signed and dated	
	Section O.5.a. The appropriate box is checked regarding projected overloads at the private Treatment Facility	
	Section O.5.b. The private Treatment Facility information is completed, signed and dated	
	Section O.6. The box is checked indicating the municipality will assure proper operation and maintenance of the proposed private facilities	
	The required documentation of sewage management is attached	
<i>Section P: Public Notification Requirement</i>		
X	All Public Notification boxes in this section are checked	
X	The public notice is attached, if public notification is necessary	
	All comments received as a result of the notice are attached	
	The municipal responses to these comments are attached	
	The box is checked indicating that no comments were received, if valid	
<i>Section Q: False Swearing Statements</i>		
X	The planning module preparer's false swearing statement is completed and signed	
<i>Section R: Planning Module Review Fee</i>		
	The correct fee has been calculated	
	The correct fee has been paid	
	The request for fee exemption has been checked	
	The deed reference information is provided to support the fee exemption	
<i>Completeness Checklist</i>		
X	The module completeness checklist is included	
	All completeness items have been checked as included by the municipality, as appropriate	
	The Municipal Official has signed and dated the checklist	

CERTIFICATION STATEMENT

I certify that this submittal is complete and includes all requested items. I understand that failure to submit a complete module package may result in a denial of the application.

Signed: Brandon Jordan
Applicant (or Applicant's authorized representative)

Date: 6/30/15

Signed: _____
Municipal Secretary

Date: _____