



# GATEWAY

On Call. On Time. On Target.

C-4187-0019

August 2022

## University of Pittsburgh Hillman Library Expansion

3960 Forbes Ave  
City of Pittsburgh  
Allegheny County, PA

### PREPARED FOR

University of Pittsburgh  
Facilities Management  
3400 Forbes Avenue, Suite 5  
Pittsburgh, PA 15213

### SUBMITTED BY

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SEWAGE FACILITIES  
PLANNING MODULE



A FULL-SERVICE CIVIL ENGINEERING FIRM

## **EXHIBITS**

- EXHIBIT A. Sewage Facilities Planning Module – Component 3 – Sewage Collection and Treatment Facilities
- EXHIBIT B. Sewage Facilities Planning Module – Component 3 – Sewage Collection and Treatment Facilities – PWSA Approval
- EXHIBIT C. Sewage Facilities Planning Module – Component 3 – Sewage Collection and Treatment Facilities – ALCOSAN Approval
- EXHIBIT D. PWSA Water and Sewer Availability Letter
- EXHIBIT E. PWSA Water and Sewer Use Approval Letter
- EXHIBIT F. Project Narrative and Flow Map
- EXHIBIT G. Plot Plan
- EXHIBIT H. Flow Calculations (Signed and Sealed)
- EXHIBIT I. PWSA Tap Allocation Letter
- EXHIBIT J. Alternatives Analysis
- EXHIBIT K. Pennsylvania Natural Diversity Inventory (PNDI) Environmental Review
- EXHIBIT L. Sewage Facilities Planning Module – Component 4A – Municipal Planning Agency Review
- EXHIBIT M. Sewage Facilities Planning Module – Component 4C – County or Joint Health Department Review

**EXHIBIT A.**

**Sewage Facilities Planning Module – Component 3 – Sewage Collection  
and Treatment Facilities**

Code No.
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COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT

## 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 Hillman Library Expansion

2. Brief Project Description The Hillman Library Expansion project involves the construction of an addition, interior renovations, exterior renovations, and site improvements to the Hillman Library.

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

Municipality Name	County	City	Boro	Twp
City of Pittsburgh, 4 <sup>th</sup> Ward	Allegheny	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Municipality Contact Individual - Last Name	First Name	MI	Suffix	Title
Prendergast	Kyla			Senior Environmental Planner
Additional Individual Last Name	First Name	MI	Suffix	Title

Municipality Mailing Address Line 1	Mailing Address Line 2		
Department of City Planning	200 Ross Street, 4 <sup>th</sup> Floor		
Address Last Line -- City	State	ZIP+4	
Pittsburgh	PA	15219	
Area Code + Phone + Ext.	FAX (optional)	Email (optional)	
412-255-2516		kyla.prendergast@pittsburghpa.gov	

**C. SITE INFORMATION** (See Section C of instructions)

**Site (Land Development or Project) Name**

Hillman Library Expansion

Site Location Line 1

3960 Forbes Ave

Site Location Line 2

Site Location Last Line -- City

Pittsburgh

State

PA

ZIP+4

15213

Latitude

Longitude

Detailed Written Directions to Site From downtown Pittsburgh, head southwest on Grant St. toward Oliver Ave. Take a slight right to merge onto I-376 E toward Monroeville. Take exit 72 A to merge onto Forbes Ave toward Oakland. Continue straight to stay on Forbes until you reach the Hillman Library at the intersection of Forbes Ave and Schenley Dr.

Description of Site

**Site Contact (Developer/Owner)**

Last Name

Dubnicay

First Name

Anastasia

MI

Suffix

Phone

412-624-9545

Ext.

Site Contact Title

Site Contact Firm (if none, leave blank)

University of Pittsburgh, Facilities Management

FAX

Email

AND191@pitt.edu

Mailing Address Line 1

3400 Forbes Avenue #5

Mailing Address Line 2

Mailing Address Last Line -- City

Pittsburgh

State

PA

ZIP+4

15213

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

Last Name

Donnelly

First Name

Sean

MI

Suffix

M

P.E.

Title

Project Manager

Consulting Firm Name

The Gateway Engineers, Inc.

Mailing Address Line 1

100 McMorris Rd

Mailing Address Line 2

Address Last Line -- City

Pittsburgh

State

PA

ZIP+4

15205-9401

Country

USA

Email

sdonnelly@gatewayengineers.com

Area Code + Phone

412-921-4030

Ext.

146

Area Code + FAX

412-921-9960

**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: Pittsburgh Water and Sewer Authority (PWSA)

**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.

**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 \_\_\_\_\_

b. Answer questions below on collection system

Number of EDU's and proposed connections to be served by collection system. EDU's 2.3

Connections 2

Name of:

existing collection or conveyance system Sennott Street (Former ROW) - 18" PVC Combination Sewer

owner Pittsburgh Water and Sewer Authority (PWSA)

existing interceptor Monongahela River

owner Allegheny County Sanitary Authority (ALCOSAN)

**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 ALCOSAN Woods Run WWTP

NPDES Permit Number for existing facility PA0025984

Clean Streams Law Permit Number \_\_\_\_\_

Location of discharge point for a new facility. Latitude 40°28'34" N Longitude 80°02'44" W

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 ALCOSAN Woods Run (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 ALCOSAN

Name of Responsible Agent Shawn P. McWilliams, EIT

Agent Signature Shawn P. McWilliams Date 07/08/2022

(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](http://www.dep.state.pa.us), select "subject" then select "technical guidance"). As a minimum this includes copies of the completed Cultural Resources Notice

**EXEMPT PER  
0120-PM-PY0003A**

(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](http://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.



**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 925 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
<b>Collection</b>	2255237	7893330	16611	58138	17719	62016
<b>Conveyance</b>						
<b>Treatment</b>						

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 PWSA

Name of Responsible Agent Robert Herring

Agent Signature  Robert Herring 2022.06.01 11:16:34 -04'00' Date 6/1/2022

**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 925 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
<b>Collection</b>						
<b>Conveyance</b>	---	44,900,000	5,380,000	6,830,000	5,430,000	6,900,000
<b>Treatment</b>	---	250,000,000	191,500,000	250,000,000	228,342,000	295,000,000

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 ALCOSAN

Name of Responsible Agent Shawn P. McWilliams, EIT

Agent Signature *Shawn P. McWilliams*

Date 07/08/2022

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 \*ALCOSAN IS UNDER A CONSENT DECREE TO ADDRESS WET WEATHER OVERFLOWS.

- a.  YES  NO 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 ALCOSAN

Name of Responsible Agent Shawn P. McWilliams, EIT

Agent Signature *Shawn P. McWilliams*

Date 07/08/2022

**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?

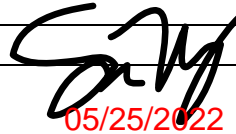
**P. PUBLIC NOTIFICATION REQUIREMENT cont'd.** (See Section P of instructions)

- 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.

Sean M. Donnelly, P.E.



Name (Print)

Signature

Project Manager

05/25/2022

Title

Date

100 McMorris Road, Pittsburgh, PA 15205

4129214030

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 \$115 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.

$$\#2.3 \quad \text{Lots (or EDUs)} \times \$50.00 = \$ 115$$

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:

$$\# \quad \text{Lots (or EDUs)} \times \$35.00 = \$$$

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)

**EXHIBIT B.**

**Sewage Facilities Planning Module – Component 3 – Sewage Collection  
and Treatment Facilities – PWSA Approval**



June 2, 2022

Katherine Laub  
Gateway Engineers  
100 McMorris Rd.  
Pittsburgh, PA 15205

Subject: Sewage Facilities Planning Module (SFPM)  
Approval for Collection System Flows  
Project Name: Hillman Library (Project)  
PWSA Project No.: 20014.19

Dear Katherine:

Pursuant to your request, we have reviewed the SFPM and determined that the Project will not create a dry-weather hydraulic overload within the next five (5) years for any collection facility owned by the Pittsburgh Water and Sewer Authority (PWSA). We have enclosed for your use the electronically signed "Section J – Chapter 94 Consistency Determination". Please be advised that this approval is limited to the collection system portion of the SFPM.

Our review was based on information provided by others under the assumption that this information was accurate and complete. Should you have any questions, please do not hesitate to contact me directly at x9996 or [mbridges@pgh2o.com](mailto:mbridges@pgh2o.com).

Sincerely,

Midori Bridges  
Cooperative Education Intern

Enclosures

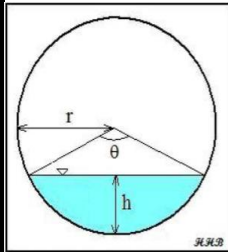
cc: Barry King, P.E. – PWSA (via email)  
Kate Mechler, P.E. – PWSA (via email)  
Robert Herring, P.E. – PWSA (via email)  
Thomas Flanagan – DEP (via email)  
eBuilder – Filing System (via email)

**Sewage Facilities Planning Module**  
**Chapter 94 Consistency Determination**  
**Hydraulic Calculations Spreadsheet for Peak Flow Depth Measurements**

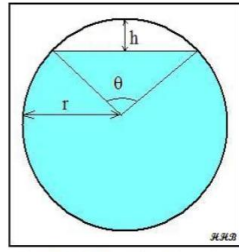
**PROJECT NAME:** Hillman Library  
**PWSA PROJECT NUMBER:** 20014.19  
**PWSA REVIEWER:** Midori Bridges  
**DATE:** May 31, 2022

**LEGEND:** Input Data Output Data

**Section A: Manning Equation for Partially Filled Pipes**



Partially Full Pipe Flow Parameters  
(Less Than Half Full)



Partially Full Pipe Flow Parameters  
(More Than Half Full)

Variable	Units	Description
Q	ft <sup>3</sup>	Volumetric flowrate
n	Unitless	Manning Roughness Coeff.
A	ft <sup>2</sup>	Cross-Sectional Area of Flow
R	ft	Hydraulic Radius
S	ft/ft	Slope of Hydraulic Grade Line
P	ft	Wetted Perimeter of "A"
r	ft	Radius
h	ft	Depth of Flow or Headspace
θ	radians	Central Angle

$$Q = \left(\frac{1.49}{n}\right) \times A \times R^{2/3} \times S^{1/2} \qquad R = \frac{A}{P} \qquad \theta = 2 \times \cos^{-1} \left(\frac{r-h}{r}\right)$$

$$A_{<50\% Full} = \frac{r^2(\theta - \sin \theta)}{2} \qquad \text{OR} \qquad A_{>50\% Full} = \pi \times r^2 \times \frac{r^2(\theta - \sin \theta)}{2}$$

$$P_{<50\% Full} = r \times \theta \qquad P_{>50\% Full} = (2 \times \pi \times r) - (r \times \theta)$$

**Section B: Data for Calculations**

Peaking Factor, P.F.	
Sanitary Sewers	3
Combined Sewers	3.5

Proposed Project Flows		
Variable	Value	Units
Q <sub>p</sub>	925	gpd

Variable	Value	Units
Material	PVC	
n	0.01	unitless
S	0.012	ft/ft
h	0.092	ft
D	1.50	ft
P.F.	3.5	unitless

**Section C: Calculations for Design and/or Permitted Capacities**

Variable	Description	Definition
Q <sub>d, avg</sub>	Design Capacity, Average	= full pipe flow conditions / peaking factor
Q <sub>d, peak</sub>	Design Capacity, Peak	full pipe flow conditions

Design Capacity, Average

Design Capacity, Peak

Variable	Value	Unit
Q <sub>d, avg</sub>	2,745,452	gpd

Variable	Value	Unit
D	1.500	ft
r	0.750	ft
A	1.767	ft <sup>2</sup>
P	4.712	ft
R	0.375	ft
Q <sub>d, peak</sub>	15	cfs
Q <sub>d, peak</sub>	9,609,082	gpd

#### Section D: Calculations for Present Flows

Variable	Description	Definition
Q <sub>ex, avg</sub>	Present Flows, Average	= Q <sub>ex, peak</sub> / P.F.
Q <sub>ex, peak</sub>	Present Flows, Peak	existing flow conditions per site investigations

Present Flows, Average		
Variable	Value	Unit
Q <sub>ex, avg</sub>	20,378	gpd

Present Flows, Peak		
Variable	Value	Unit
D	1.500	ft
r	0.750	ft
θ	1.00	rad
h/D	0.061333333	ft/ft
A	0.04	ft <sup>2</sup>
P	0.75	ft
R	0.060	ft
Q <sub>ex, peak</sub>	0	cfs
Q <sub>ex, peak</sub>	71,323	gpd

#### Section E: Calculations for Projected Flows in Five (5) Years

Variable	Description	Definition
Q <sub>proj, avg</sub>	Projected Flows in Five (5) Years, Average	= Q <sub>proj, peak</sub> ÷ P.F.
Q <sub>proj, peak</sub>	Projected Flows in Five (5) Years, Peak	= (Q <sub>ex, peak</sub> + Q <sub>p</sub> ) x 1.05

Projected Flow Calculations		
Variable	Value	Unit
Q <sub>proj, avg</sub>	21,674	gpd
Q <sub>proj, peak</sub>	75,860	gpd

#### Section F: Compare Results with Applicant's Submission

Variable	PWSA, gpd	Applicant, gpd	Difference, gpd	Difference, %
Q <sub>d, avg</sub>	2,745,452	2,255,237	490,215	18%
Q <sub>d, peak</sub>	9,609,082	7,893,330	1,715,752	18%
Q <sub>ex, avg</sub>	20,378	16,611	3,767	18%
Q <sub>ex, peak</sub>	71,323	58,138	13,185	18%
Q <sub>proj, avg</sub>	21,674	17,719	3,955	18%
Q <sub>proj, peak</sub>	75,860	62,016	13,844	18%

**EXHIBIT C.**

**Sewage Facilities Planning Module – Component 3 – Sewage Collection  
and Treatment Facilities – ALCOSAN Approval**



July 8, 2022

**Members of the Board**

Sylvia C. Wilson  
*Chair Person*

Shannah Tharp-Gilliam, Ph.D.

Harry Readshaw

Corey O'Connor

Jack Shea

Emily Kinkead

Paul Klein

Arletta Scott Williams  
*Executive Director*

Douglas A. Jackson, P.E.  
*Director  
Operations & Maintenance*

Michelle M. Buys, P.E.  
*Director  
Environmental Compliance*

Kimberly N. Kennedy, P.E.  
*Director  
Engineering & Construction*

Karen Fantoni, CPA, CGMA  
*Director  
Finance*

Michael Lichte, P.E.  
*Director  
Regional Conveyance*

Jeanne K. Clark  
*Director  
Governmental Affairs*

Joseph Vallarian  
*Director  
Communications*

Julie Motley-Williams  
*Director  
Administration*

Mr. Sean M. Donnelly, P.E.  
The Gateway Engineers, Inc.  
100 McMorris Road  
Pittsburgh, PA 15205-9401

**Re: University of Pittsburgh Hillman Library Expansion  
City of Pittsburgh – 4<sup>th</sup> Ward, Allegheny County  
PA DEP Sewage Facilities Planning Module  
ALCOSAN Regulator Structure M-29-00**

Dear Mr. Donnelly:

We have reviewed the Component 3 Planning Module for the referenced project to be located in the City of Pittsburgh, 4<sup>th</sup> Ward. The project will generate a combined peak flow of 925 gpd in the ALCOSAN Monongahela River Interceptor and Woods Run Treatment Plant.

The capacity of the ALCOSAN M-29-00 Regulator Structure is approximately 44.9 MGD. The monitored peak dry weather flow is approximately 6.83 MGD. Dry weather capacity exists for this connection. However, the ALCOSAN Monongahela River Interceptor and the Woods Run Treatment Plant do not have the capacity for the flows generated by tributary communities during wet weather periods. This limitation will be addressed as ALCOSAN implements its Clean Water Plan.

ALCOSAN requests that this letter be made part of the planning module submission. The signed Component 3 Planning Module is attached. The sewers in this project are to be designed as separated sanitary and storm sewers. If you have any questions regarding this matter, please contact me at 412-732-8053.

Sincerely,

**ALLEGHENY COUNTY SANITARY AUTHORITY**

Shawn P. McWilliams, EIT  
Civil Engineer

**Attachment**

cc: Christina Dean (w/o attachment)  
Dan Thornton (w/o attachment)  
Michael Lichte (w/o attachment)

Barry King/ PWSA (w/o attachment)  
Thomas Flanagan/ PADEP (w/o attachment)  
Fred Fields/ ACHD (w/o attachment)

EXHIBIT D.

**PWSA Water and Sewer Availability Letter**

August 24, 2020

Katherine Laub  
Gateway Engineers  
100 McMorris Road  
Pittsburgh, PA 15205

**RE: Water and Sewer Availability**  
3960 Forbes Avenue

Dear Ms. Laub:

In response to your inquiry on 8/20/2020 concerning water and sewer availability for the area referenced above, please be advised that both water and sewers are available near the site, and water and sewer service will be provided in accordance with the policies and procedures of the Pittsburgh Water and Sewer Authority.

We wish to advise you that, if it is your desire to tap our water and sewer mains for service, your plans and Water and Sewer Use Application must be approved by the Authority, complete with detail showing the type of connection, meter, and backflow device before any work is performed.

Please note that the Authority in no way guarantees that the available lines have the capacity or pressure adequate for your project's needs. It is the responsibility of the project developer, design consultant, and/or architects to determine, at their expense, the adequacy of the existing water system to fulfill their needs.

If you plan to make modifications to the water or sewer system, please submit design drawings to The Pittsburgh Water and Sewer Authority for approval.

**Refer to the Pittsburgh Water and Sewer Authority (PWSA) website ([www.pgh2o.com](http://www.pgh2o.com)) for the complete "Procedure Manual for Developers". All tap in plans and applications must be submitted according to the manual.**

If you have any questions, please feel free to contact me at (412) 255-8800 x 8030. Thank you.

Sincerely,



Wendy M. Dean  
Engineering Tech II

cc: PWSA File

EXHIBIT E.

**PWSA Water and Sewer Use Approval Letter**



January 29, 2021

Kelly R. Harrington  
The Gateway Engineers, Inc.  
100 McMorris Rd.  
Pittsburgh, PA 15205

Subject: Water and Sewer (W&S) Use Approval  
Project Name: Hillman Library  
PWSA Project No.: 20014.19

Dear Kelly:

The W&S Use Application for the Project has been approved, as summarized below:

Type of Flow	Sanitary, gpd	Water, gpd	Storm, cfs
<i>Project Flow</i>	47,110	47,110	13.27
<i>Existing Flow</i>	46,185	46,185	13.27
<i>Net Flow</i>	925	925	

The PWSA shall request the Department of Environmental Protection (DEP) to issue a Final Determination on the Need for Sewage Planning. If sewage planning is required, we have enclosed for your use the location of the most limited capacity sewer (MLCS). The hydraulic capacity of the MLCS shall be determined via the following method:

- Peak Flow Depth Measurements (Sanitary Net Flow  $\leq$  2,000 gpd)
- Flow Monitoring (Sanitary Net Flow  $>$  2,000 gpd)

Our review was based on information provided by others under the assumption that this information was accurate and complete. Should you have any questions, please do not hesitate to contact me directly at 412-255-8800 x9996 or mbridges@pgh2o.com.

Sincerely,



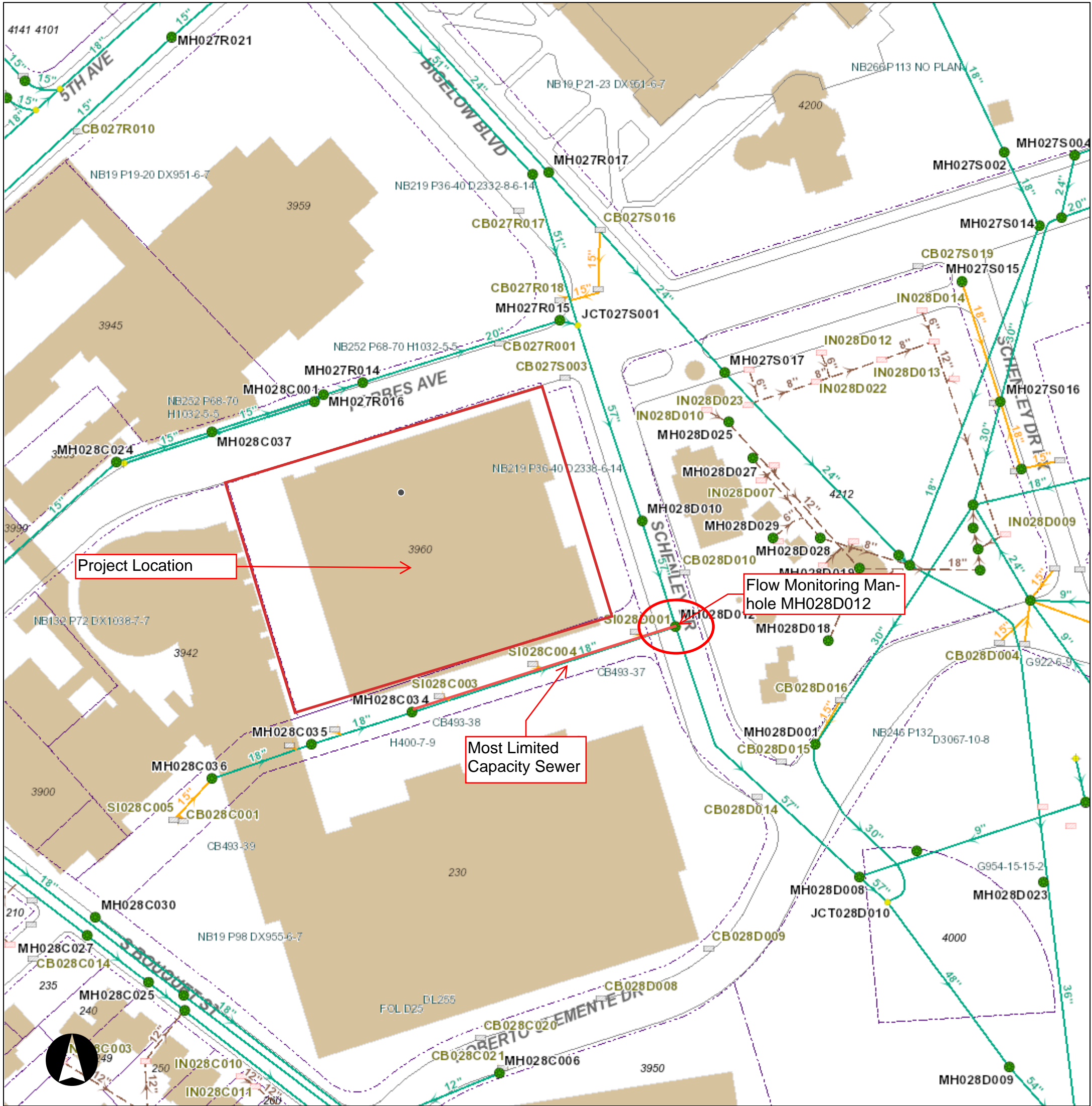
Digitally signed by Midori Bridges  
DN: cn=Midori Bridges, c=US,  
o=PWSA, ou=Engineering,  
email=mbridges@pgh2o.com  
Reason: I am approving this document  
Date: 2021.02.01 08:35:54 -05'00'

Midori Bridges  
Cooperative Education Intern

Enclosure(s)

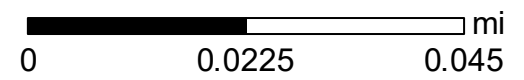
cc: Barry King, PE, PMP – PWSA (via email)  
Kate Mechler, PE – PWSA (via email)  
Robert Herring, PE, PMP – PWSA (via email)  
eBuilder – Filing System (via email)

# Hillman Library



## Legend

	Meter		Water Manhole		Private Inlet
	Curb Box		Rising Main		Outfall
	Water System Pump		Supply Main		End Cap
	Hydrant		Transmission Main		Sewer Pump Station
	System Valve		Distribution Main		Combined Sewer
	Dividing Pressure Valve		Hydrant Branch		Sanitary Sewer
	Coupling		Private Main		Storm Sewer
	Tee		Water Service Line		Regulated Combined Sewer
	Cross				Overflow Sewer
	Reducer				Interceptor
	End Cap				Sewer Force Main
	Wash Out				Private Sewer
					Undefined Sewer
					Green Infrastructure Underground Facilities



Neither the City of Pittsburgh nor the PWSA guarantees the accuracy of any of the information hereby made available, including but not limited to information concerning the location and condition of underground structures, and neither assumes any responsibility for any conclusions or interpretations made on the basis of such information. COP and PWSA assume no responsibility for any understanding or representations made by their agents or employees unless such understanding or representations are expressly set forth in a duly authorized written document, and such document expressly provides that responsibility therefore is assumed by the City or the PWSA.

Date: 1/29/2021

**Most Limited Capacity Sewer (MLCS) Spreadsheet**

<b>PROJECT NAME:</b>	Hillman Library
<b>PWSA PROJECT NUMBER:</b>	20014.19
<b>PWSA REVIEWER:</b>	Midori Bridges
<b>DATE:</b>	January 29, 2021

<b>LEGEND:</b>	Output Data
	Input Data
	Questionable Data
	Hydraulically Limited Sewer

Upstream MH	Downstream MH		Downstream Invert	Length, ft	Diam., in.	Material	n	Area, sf	Wetted P, ft	Slope	Flow, gpd
MH028C034	MH028D012	890.90	855.54	300.00	18	PVC	0.01	1.77	4.712	11.79%	30,382,291
MH028D012	MH028D008	882.40	880.04	160.32	57	Brick	0.016	17.72	14.923	1.47%	145,113,154
MH028D008	JCT028D010	878.04	873.34	40.79	57	Brick	0.016	17.72	14.923	11.52%	405,991,283
JCT028D010	MH028D009	830.18	806.92	222.25	48	Brick	0.016	12.57	12.566	10.47%	244,684,028
MH028D009	JCT028D002	802.79	801.31	113.85	54	Brick	0.016	15.90	14.137	1.30%	118,057,265
JCT028D002	MH028D011	800.63	798.83	59.82	54	Brick	0.016	15.90	14.137	3.01%	179,614,513
MH028D011	MH028H029	798.83	794.33	146.52	60	Brick	0.016	19.63	15.708	3.07%	240,328,986
MH028H029	RD028H001	794.27	788.49	196.94	60	Brick	0.016	19.63	15.708	2.93%	234,933,692
RD028H001	MH028H031	786.87	784.63	119.48	66	Brick	0.016	23.76	17.279	1.87%	242,105,830
MH028H031	JCT028H007	783.97	782.44	83.41	66	Brick	0.016	23.76	17.279	1.83%	239,477,933
JCT028H007	FD028H001	782.44	781.42	59.20	75	Brick	0.016	30.68	19.635	1.72%	326,373,047

EXHIBIT F.

**Project Narrative and Flow Map**

## **Project Narrative**

### University of Pittsburgh – Hillman Library Expansion 3960 Forbes Ave, 4<sup>th</sup> Ward, City of Pittsburgh

The Hillman Library Expansion project involves the construction of an addition, interior renovations, exterior renovations, and site improvements to the Hillman Library. The library is located on Lot 120 of Block 28-C which is approximately 1.95 acres in size, owned by the Commonwealth of Pennsylvania, is part of the University of Pittsburgh. Adjacent parcels are owned by the University of Pittsburgh and house campus buildings.

The Hillman Library will experience an increase in water consumption and sanitary flow due to interior renovations and the change in use of areas throughout the facility. These revisions are mostly programmatic in nature and will not create a significant increase in sewage flows as a similar occupancy count is projected for the future. One new 8” sanitary lateral is proposed on the southeast side of the building. The existing library experiences a total peak sanitary flow and water consumption of 46,185 GPD. It is estimated that the library in proposed conditions will experience a total peak sanitary flow and water consumption of 47,110 GPD; therefore, the project sees a net increase in sanitary flow and water consumption of approximately 925 GPD (2.3 EDUs). Refer to the enclosed calculation and occupancy count for additional detail.

The existing 6” lateral on the southwestern side of the building will be re-used for sanitary flows from the café area. The proposed 8” sanitary sewer lateral will connect into the 18” PVC PWSA owned sewer located to the south of the Hillman Library. The PWSA sewer flows to the Monongahela River Interceptor (M-29) and then to ALCOSAN’s treatment plant where the sewage receives final treatment.

### **Flow Calculation Summary**

#### Present Flows -Peak Flow Depth Measurements

Peak flow depth measurements were taken by Drnach Environmental in MH028D012 to determine the existing average and peak flows present in the sewer of interest. Five (5) peak flow depth measurements were conducted on May 13, 2022 in 15-minute increments between 6:00 AM and 7:00 AM. The maximum recorded flow depth was 1.10 inches, measured at 6:30 AM. **Analysis of the received data reports an existing average flow of 0.017 MGD and a peak of 0.058 MGD.**

#### Design Capacity

The existing sewer's average and peak hydraulic capacity were calculated by determining the existing slope of the sewer of interest using flow line elevation data from the 3RWW Sewer Atlas for the monitoring manhole (MH028D012) and the next upstream manhole (MH028C034), as well as the horizontal distance between the identified manhole lid locations. The sewer was analyzed under full flow conditions, and a peaking factor of 3.5 (combined sewer) was applied to obtain the peak hydraulic capacity per the PWSA Developer's Manual. **The average hydraulic capacity was calculated to be 2.255 MGD and the peak hydraulic capacity was calculated to be 7.893 MGD.**

#### 5-Year Projected Flow

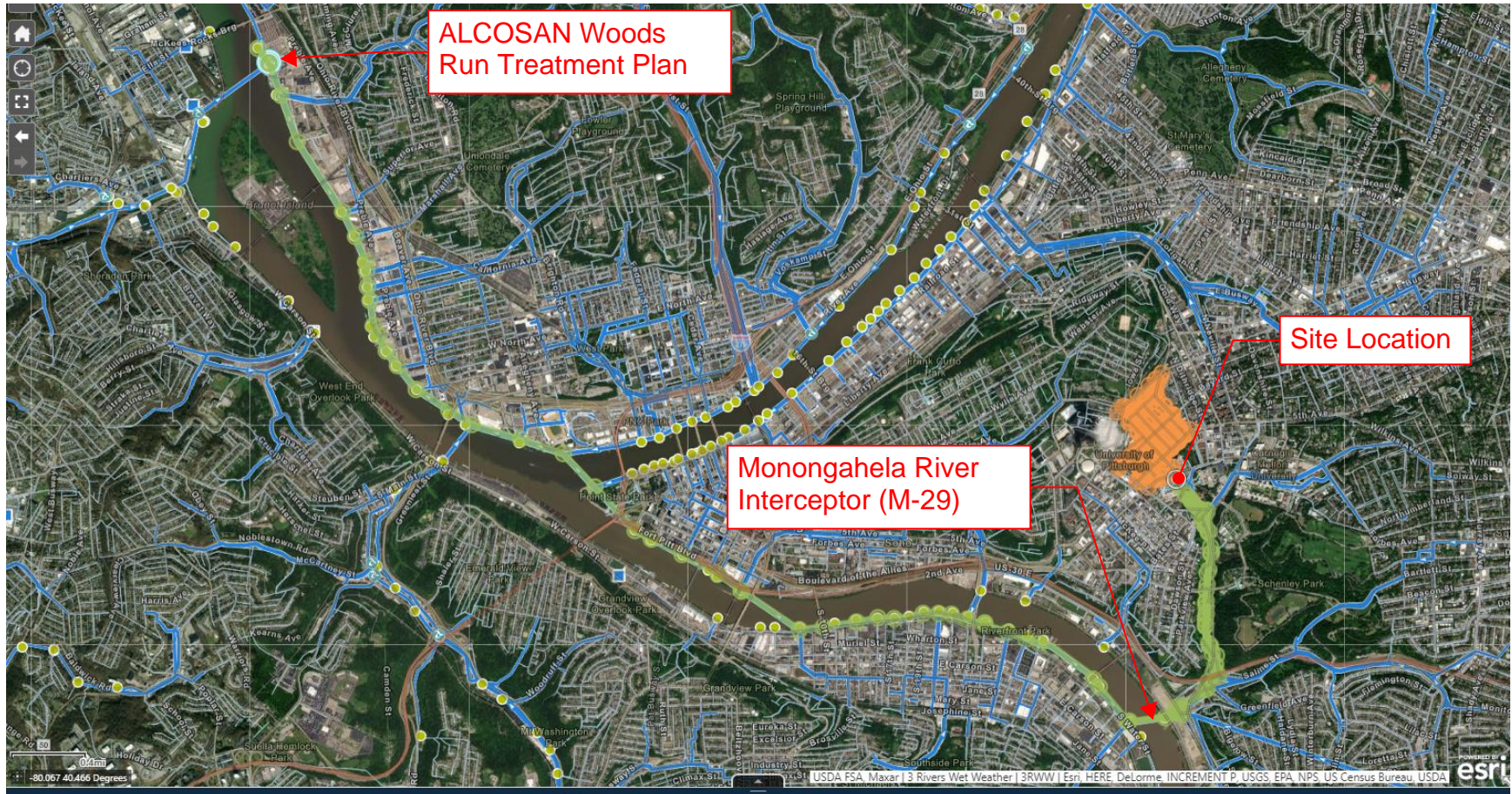
Using the equations provided in the PWSA Developer's Manual, the project flow, 47,110 GPD, was added to the present peak flow multiplied by a factor of 1.05 to determine the projected peak flow in 5 years. **The projected average flow in 5 years is estimated to be 0.018 MGD and the**

**projected peak flow in 5 years is estimated to be 0.062 MGD.** Since the 5-year projected flows are less than the calculated design capacity of the sewer, the additional flow due to the construction of the Hillman Library Expansion will not overload the sewer.

# Sewer Mapping

University of Pittsburgh – Hillman Library Expansion

4<sup>th</sup> Ward, City of Pittsburgh, Allegheny County, PA

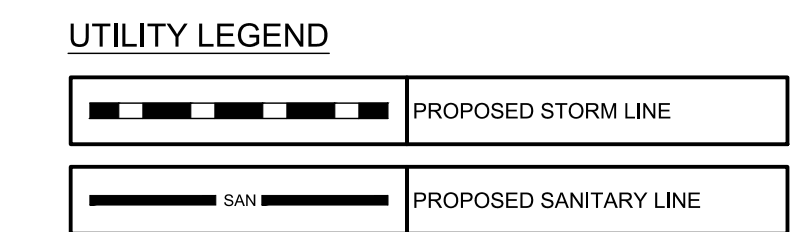
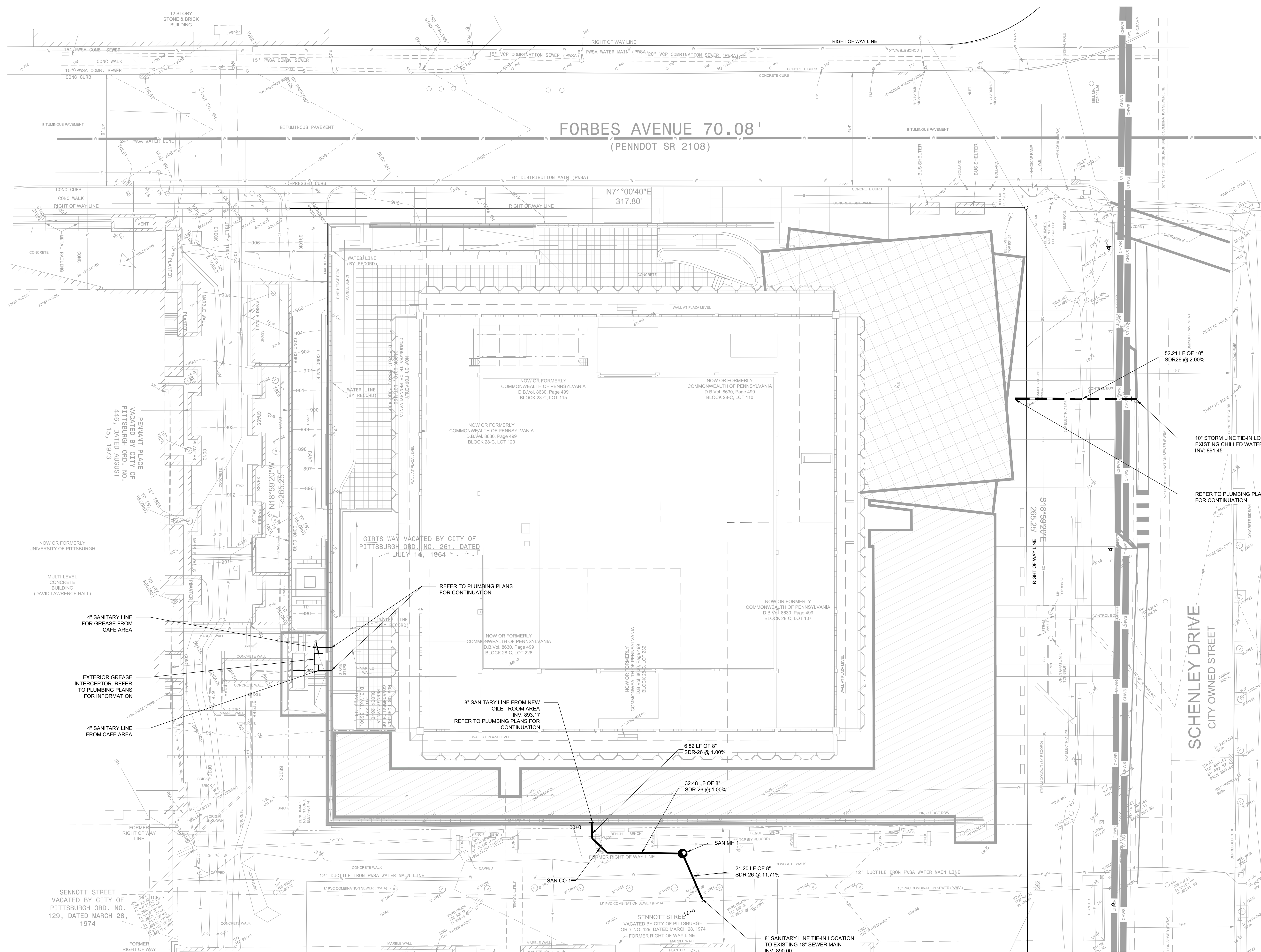


Source: 3RWW Sewer Atlas



EXHIBIT G.

**Plot Plan**



**UTILITY ABBREVIATIONS**

STM	STORM
SAN	SANITARY
MH	MANHOLE
OS	OUTLET STRUCTURE
CD	CLEANOUT
RD	ROOF DRAIN
HW	HEADWALL
EW	ENDWALL

- UTILITY PLAN NOTES:**
1. THE CONTRACTOR SHALL COMPLY AT ALL TIMES WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, PROVISIONS, AND POLICES GOVERNING SAFETY AND HEALTH, INCLUDING THE FEDERAL CONSTRUCTION SAFETY ACT (PUBLIC LAW 91-54), FEDERAL REGISTER CHAPTER XVII PART 1708 OF TITLE 29 REGULATIONS, OCCUPATIONAL SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION, AND SUBSEQUENT PUBLICATIONS UPDATING THESE REGULATIONS.
  2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR EXAMINING THE AREAS AND CONDITIONS UNDER WHICH THE PROJECT IS TO BE CONSTRUCTED PRIOR TO THE SUBMISSION OF A BID. SUBMISSION OF A BID SHALL BE CONSIDERED AN ACKNOWLEDGMENT THAT THE CONTRACTOR HAS REVIEWED THE SITE AND IS FAMILIAR WITH CONDITIONS AND CONSTRAINTS OF THE SITE.
  3. BEFORE EXCAVATION, ALL UNDERGROUND UTILITIES SHALL BE LOCATED IN THE FIELD BY THE PROPER AUTHORITIES. THE CONTRACTOR SHALL CONTACT PENNSYLVANIA ONE CALL SYSTEMS, INC. AT 8-1-1. THE LOCATION OF UTILITIES AND UNDERGROUND STRUCTURES ARE APPROXIMATE AND MAY NOT ALL BE SHOWN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXISTENCE AND EXACT LOCATION OF ALL UTILITIES AND UNDERGROUND STRUCTURES.
  4. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BID AND PERFORM ALL UTILITY WORK IN COMPLIANCE TO APPLICABLE LOCAL AND STATE CODES AND REGULATIONS.
  5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FEES ASSOCIATED WITH THE INSTALLATION, INSPECTING, TESTING AND FINAL ACCEPTANCE OF PROPOSED UTILITIES CONSTRUCTION.
  6. UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE RESPECTIVE UTILITY COMPANY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE UTILITIES ARE INSTALLED CORRECTLY TO MEET PROJECT REQUIREMENTS WHETHER PERFORMED BY THE CONTRACTOR OR NOT.
  7. ALL CABLE, ELECTRIC, GAS, STORM AND SANITARY SEWER, TELEPHONE AND WATER SERVICE LINE TRENCHES LOCATED UNDER PROPOSED PAVEMENT AREAS SHALL BE BACKFILLED WITH 100% STONE MATERIAL TO THE PROPOSED PAVING SECTION IN ACCORDANCE WITH THE DETAIL SHOWN ON THE CONSTRUCTION DETAIL SHEETS.
  8. CONTRACTOR TO PROVIDE SHOP DRAWINGS ON ALL STORM SEWER MANHOLES.
  9. AN AS-BUILT DRAWING OF NEW UTILITY SERVICES SHALL BE PREPARED BY THE CONTRACTOR AND SUBMITTED TO THE OWNER UPON COMPLETION OF THE PROJECT.
  10. ALL STORM PIPE SHALL BE HDPE, SMOOTH INTERIOR, CORRUGATED POLYETHYLENE PIPE UNLESS OTHERWISE NOTED. ALL STORM SEWER CONSTRUCTION MATERIALS AND METHODS SHALL BE IN ACCORDANCE WITH PENNDOT SPECIFICATIONS. ALL JOINTS SHALL BE WATERTIGHT.
  11. THE CONTRACTOR SHALL ASSURE THAT THERE IS POSITIVE DRAINAGE TO THE EXISTING INLETS UPON PLACEMENT OF NEW PAVEMENT.
  12. CONTRACTOR TO COORDINATE WITH THE BUILDING PLUMBING TO ASSURE ACCURACY OF THE UTILITY CONNECTIONS TO THE BUILDING.
  13. THE ALLEGHENY COUNTY HEALTH DEPARTMENT SHALL BE CONTACTED FOR INSPECTION OF ALL PRIVATE SANITARY SEWERS, WATER LINES, AND STORM SEWER LINES WHERE THEY CONNECT TO A PUBLIC SEWER SYSTEM. ALL WATER AND SEWER LINES MUST BE INSTALLED BY A REGISTERED PLUMBER.
  14. THE ROOF COLLECTOR SYSTEM SHALL BE TRAPPED PRIOR TO CONNECTING TO THE SITE STORM SEWER SYSTEM.
  15. THE WATERLINE SHALL HAVE A MINIMUM OF 48\"/>

ISSUED FOR  
DESIGN DEVELOPMENT



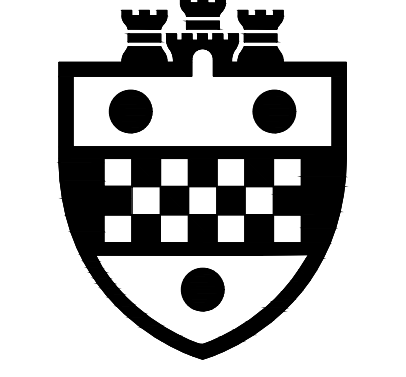
**Project Architect**  
**GBBN Architects Inc.**  
 5411 PENN AVENUE  
 PITTSBURGH, PA 15221  
 v 412.345.5005  
 f 412.345.5006  
 http://www.gbbn.com  
 GBBN JOB #13137.05

**MEP/FP**  
 C.J.L. ENGINEERING  
 1555 CORAPOLIS HEIGHTS RD, STE 4200  
 MOON TOWNSHIP, PA 15108  
 V. 412.262.1220

**STRUCTURAL**  
 BUROHAPPOLD ENGINEERING  
 535 MISSION STREET, STE 1771  
 SAN FRANCISCO, CA 94105  
 V. 415.778.2797

**CIVIL**  
 GATEWAY ENGINEERS  
 100 McHARRIS ROAD  
 PITTSBURGH, PA 15205  
 V. 412.921.4030

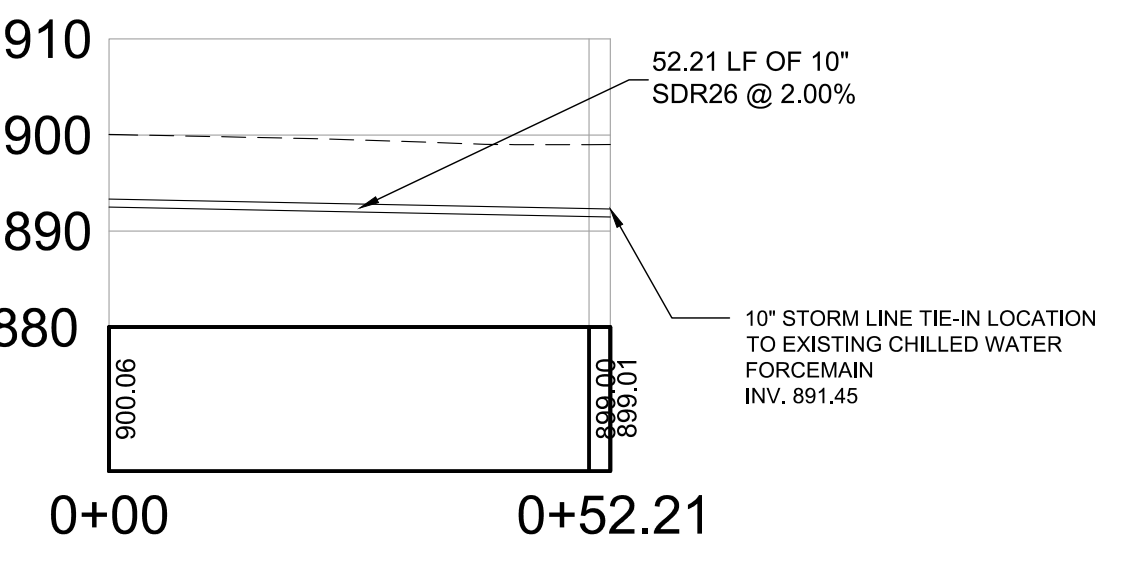
**University of Pittsburgh**  
 FACILITIES MANAGEMENT



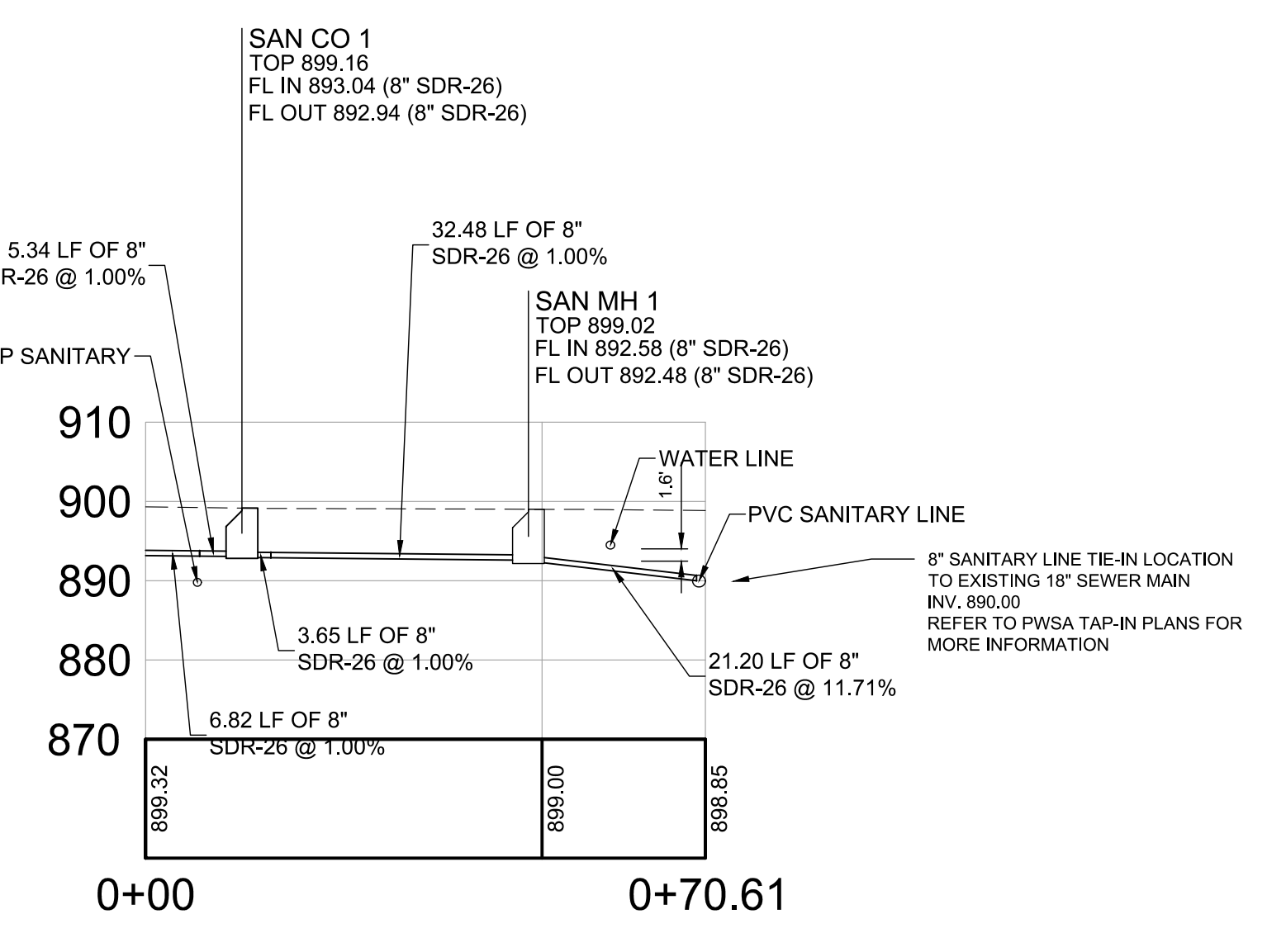
DGS 1103-67  
**HILLMAN LIBRARY RENOVATIONS | PHASE 4**  
 X7002  
 13 MAY 2022

**UTILITY PLAN**

13137.01\_Hillman\_R20.rvt  
 11154 PH4-C300  
 RRR  
 0



**PROPOSED STORMWATER PROFILE**  
 HORIZONTAL SCALE: 1" = 20'  
 VERTICAL SCALE: 1" = 20'



**SANITARY PROFILE**  
 HORIZONTAL SCALE: 1" = 20'  
 VERTICAL SCALE: 1" = 20'

EXHIBIT H.

**Flow Calculations (Signed and Sealed)**

# Sewage Flow Calculation

Hillman Library Renovations  
3960 Forbes Ave, 4<sup>th</sup> Ward, City of Pittsburgh

The increase in water consumption and sewage flow of the Hillman Library in post-renovation conditions was estimated using provided occupancy counts from the project's architect. In review of PA Code Title 25, Chapter 73, Section 17, the most relatable institutional sewage flow to this site is defined as a school without a cafeteria, gym, or shower.

## Proposed Sewage Flow

The Level 1 terrace occupancy, 716, was removed from the occupancy count below as it is not included as part of the architect's calculation for existing conditions. Furthermore, this terrace will be smaller in proposed conditions than it is in existing conditions.

The Level 3 terrace, which has an occupancy of 60, is included in the proposed sewage flow calculations as this is a new usable area and is not comparable to the existing conditions.

$$\text{Proposed Occupancy Count} = 3,856.65 - 716 = 3,140.65 \text{ occupants}$$

PA Code Title 25, Chapter 73, Section 17: Schools, day (without cafeterias, no gym or shower, per student and employee) = 15 GPD

$$\text{Calculations: } (3,140.65 \text{ occupants}) \times (15 \text{ GPD/occupant}) = 47,109.8 \text{ GPD}$$

$$\text{Proposed Sewage Flow} = 47,110 \text{ GPD}$$

$$\text{Proposed Flow} = \text{Project Sewage Flow}$$

$$\text{Project Sewage Flow} = \mathbf{47,110 \text{ GPD}}$$

## Existing Sewage Flow

$$\text{Existing Occupancy Count} = 3,078.98 \text{ occupants}$$

PA Code Title 25, Chapter 73, Section 17: Schools, day (without cafeterias, no gym or shower, per student and employee) = 15 GPD

$$\text{Calculations: } (3,078.98 \text{ occupants}) \times (15 \text{ GPD/occupant}) = 46,185 \text{ GPD}$$

$$\text{Existing Sewage Flow} = \mathbf{46,185 \text{ GPD}}$$

## Net Sewage Flow

$$\text{Net Sewage Flow} = \text{Project Flow} - \text{Existing Flow}$$

$$\text{Net Sewage Flow} = 47,110 \text{ GPD} - 46,185 \text{ GPD} = 925 \text{ GPD}$$

$$\text{Net Sewage Flow} = \mathbf{925 \text{ GPD or } 925 \text{ GPD} / 400 \text{ GPD} = \mathbf{2.3 \text{ EDU}}$$

## Water Consumption

$$\text{Existing Water Consumption} = \text{Existing Sewage Flow} = 46,185 \text{ GPD}$$

$$\text{Project Water Consumption} = \text{Project Sewage Flow} = 47,110 \text{ GPD}$$

$$\text{Net Water Consumption} = \text{Net Sewage Flow} = 925 \text{ GPD}$$

# Peak Flow Measurement

# DE

Date: 5/13/2022 Manhole ID: MH028D012

Location: middle of road Street Name: Schenley Drive

Latitude: 40° 26' 32.42" N Longitude: 79° 57' 11.51" W

Surveyor: Don Withers



Measured Readings		
Time	Recorded Depth (in)	
6:00 AM	0.90	
6:15 AM	0.82	
6:30 AM	1.10	
6:45 AM	0.85	
7:00 AM	0.76	

Line Size (in): 18 Material: TerraCotta

Drnach Environmental, Inc.  
471 Weigles Hill Road  
Elizabeth PA 15037  
phone: 412 - 384 - 5400



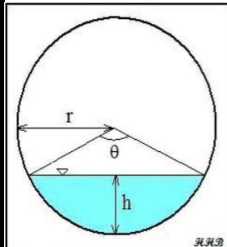


**Sewage Facilities Planning Module**  
**Chapter 94 Consistency Determination**  
**Hydraulic Calculations Spreadsheet for Peak Flow Depth Measurements**

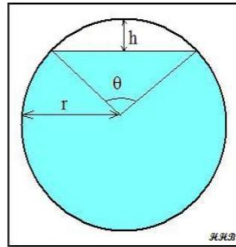
**PROJECT NAME:** Hillman Library Expansion  
**PWSA PROJECT NUMBER:** 20014.19  
**PWSA REVIEWER:**  
**DATE:** May 20, 2022

**LEGEND:** Input Data Output Data

**Section A: Manning Equation for Partially Filled Pipes**



Partially Full Pipe Flow Parameters  
(Less Than Half Full)



Partially Full Pipe Flow Parameters  
(More Than Half Full)

Variable	Units	Description
Q	ft <sup>3</sup>	Volumetric flowrate
n	Unitless	Manning Roughness Coeff.
A	ft <sup>2</sup>	Cross-Sectional Area of Flow
R	ft	Hydraulic Radius
S	ft/ft	Slope of Hydraulic Grade Line
P	ft	Wetted Perimeter of "A"
r	ft	Radius
h	ft	Depth of Flow or Headspace
θ	radians	Central Angle

$$Q = \left(\frac{1.49}{n}\right) \times A \times R^{2/3} \times S^{1/2} \qquad R = \frac{A}{P} \qquad \theta = 2 \times \cos^{-1} \left( \frac{r-h}{r} \right)$$

$$A_{<50\% \text{ Full}} = \frac{r^2(\theta - \sin \theta)}{2} \qquad \text{OR} \qquad A_{>50\% \text{ Full}} = \pi \times r^2 \times \frac{r^2(\theta - \sin \theta)}{2}$$

$$P_{<50\% \text{ Full}} = r \times \theta \qquad P_{>50\% \text{ Full}} = (2 \times \pi \times r) - (r \times \theta)$$

**Section B: Data for Calculations**

Peaking Factor, P.F.	
Sanitary Sewers	3
Combined Sewers	3.5

Proposed Project Flows		
Variable	Value	Units
Q <sub>p</sub>	925	gpd

Variable	Value	Units
Material	VCP	
n	0.015	unitless
S	0.018	ft/ft
h	0.092	ft
D	1.50	ft
P.F.	3.5	unitless

**Section C: Calculations for Design and/or Permitted Capacities**

Variable	Description	Definition
Q <sub>d, avg</sub>	Design Capacity, Average	= full pipe flow conditions / peaking factor
Q <sub>d, peak</sub>	Design Capacity, Peak	full pipe flow conditions

Design Capacity, Average

Design Capacity, Peak

Variable	Value	Unit
Q <sub>d, avg</sub>	2,255,237	gpd

Variable	Value	Unit
D	1.500	ft
r	0.750	ft
A	1.767	ft <sup>2</sup>
P	4.712	ft
R	0.375	ft
Q <sub>d, peak</sub>	12	cfs
Q <sub>d, peak</sub>	7,893,330	gpd

#### Section D: Calculations for Present Flows

Variable	Description	Definition
Q <sub>ex, avg</sub>	Present Flows, Average	= Q <sub>ex, peak</sub> / P.F.
Q <sub>ex, peak</sub>	Present Flows, Peak	existing flow conditions per site investigations

Present Flows, Average		
Variable	Value	Unit
Q <sub>ex, avg</sub>	16,611	gpd

Present Flows, Peak		
Variable	Value	Unit
D	1.500	ft
r	0.750	ft
θ	1.00	rad
h/D	0.061111333	ft/ft
A	0.04	ft <sup>2</sup>
P	0.75	ft
R	0.059	ft
Q <sub>ex, peak</sub>	0	cfs
Q <sub>ex, peak</sub>	58,138	gpd

#### Section E: Calculations for Projected Flows in Five (5) Years

Variable	Description	Definition
Q <sub>proj, avg</sub>	Projected Flows in Five (5) Years, Average	= Q <sub>proj, peak</sub> ÷ P.F.
Q <sub>proj, peak</sub>	Projected Flows in Five (5) Years, Peak	= (Q <sub>ex, peak</sub> + Q <sub>p</sub> ) x 1.05

Projected Flow Calculations		
Variable	Value	Unit
Q <sub>proj, avg</sub>	17,719	gpd
Q <sub>proj, peak</sub>	62,016	gpd

#### Section F: Compare Results with Applicant's Submission

Variable	PWSA, gpd	Applicant, gpd	Difference, gpd	Difference, %
Q <sub>d, avg</sub>	2,255,237		2,255,237	100%
Q <sub>d, peak</sub>	7,893,330		7,893,330	100%
Q <sub>ex, avg</sub>	16,611		16,611	100%
Q <sub>ex, peak</sub>	58,138		58,138	100%
Q <sub>proj, avg</sub>	17,719		17,719	100%
Q <sub>proj, peak</sub>	62,016		62,016	100%

EXHIBIT I.

**PWSA Tap Allocation Letter**



February 1, 2021

Mr. Thomas Flanagan  
PA Department of Environmental Protection  
Clean Water Program  
400 Waterfront Drive  
Pittsburgh, PA 15222

Subject: Tap Allocation Authorization Letter

Dear Mr. Flanagan:

Please be advised that the Pittsburgh Water and Sewer Authority (PWSA) authorizes the tap allocations associated with the following Project:

Project Name:	Hillman Library
Project Address:	3960 Forbes Ave. Pittsburgh, PA 15260
Net Flow, gpd:	925
EDU's, 400gpd/EDU:	2.3125

Our review is based on information provided by others under the assumption that this information was accurate and complete. Should you have any questions, please do not hesitate to contact me directly at 412-255-8800 x9996 or [mbridges@pgh2o.com](mailto:mbridges@pgh2o.com).

Sincerely,

Midori Bridges  
Cooperative Education Intern

cc: Barry King, P.E. – PWSA (via email)  
Kate Mechler, P.E. – PWSA (via email)  
Robert Herring, P.E. – PWSA (via email)  
The Gateway Engineers– Applicant (via email)  
Regis Ryan – DEP (via email)  
eBuilder – Filing System (via email)

EXHIBIT J.

**Alternatives Analysis**

## **Alternative Analysis**

University of Pittsburgh – Hillman Library Expansion  
3960 Forbes Ave, 4<sup>th</sup> Ward, City of Pittsburgh

The proposed short-term and long-term ultimate method of sanitary sewage conveyance and treatment from the proposed Hillman Library Expansion project involves the use of adequately designed storm and sanitary sewer laterals, owned and maintained by the property owner, connecting into the PWSA owned 18” PVC combination sewer system located to the south of the Hillman Library building. This public sewer connects into the ALCOSAN Monongahela River Interceptor (M-29) and sewage flows via gravity through the interceptor sewer to the ALCOSAN Treatment Plant at Woods Run.

The project site is located within the Educational/Medical Institution (EMI) zoning district and is surrounded by academic buildings and greenspace. Adjacent properties utilize the existing public sewer system as their ultimate sewage disposal conveyance system and the ALCOSAN Treatment Plant as their ultimate sewage treatment method. Additionally, 3960 Forbes Ave in its existing conditions ties into the existing public sewer system and uses the ALCOSAN Treatment Plant as its ultimate sewage treatment method.

There are no feasible sewage disposal alternatives because access to the public sewer system is available, and the proposed building and a required PWSA easement encompass most of the 1.95-acre lot. If public sewers were not available, sewage could be temporarily stored using on-site holding tanks and trucked to an off-site facility; however, this alternative is not permissible as a long term disposal solution according to 25 Pa. Code §71.63(c) because the proposed flow exceeds 800 GPD.

**EXHIBIT K.**

**Pennsylvania Natural Diversity Inventory (PNDI) Environmental  
Review**

## 1. PROJECT INFORMATION

Project Name: **Hillman Library Expansion**

Date of Review: **5/7/2022 11:40:04 AM**

Project Category: **Development, Additions/maintenance to existing development facilities**

Project Area: **2.89 acres**

County(s): **Allegheny**

Township/Municipality(s): **PITTSBURGH**

ZIP Code:

Quadrangle Name(s): **PITTSBURGH EAST**

Watersheds HUC 8: **Lower Monongahela**

Watersheds HUC 12: **Streets Run-Monongahela River**

Decimal Degrees: **40.442547, -79.954000**

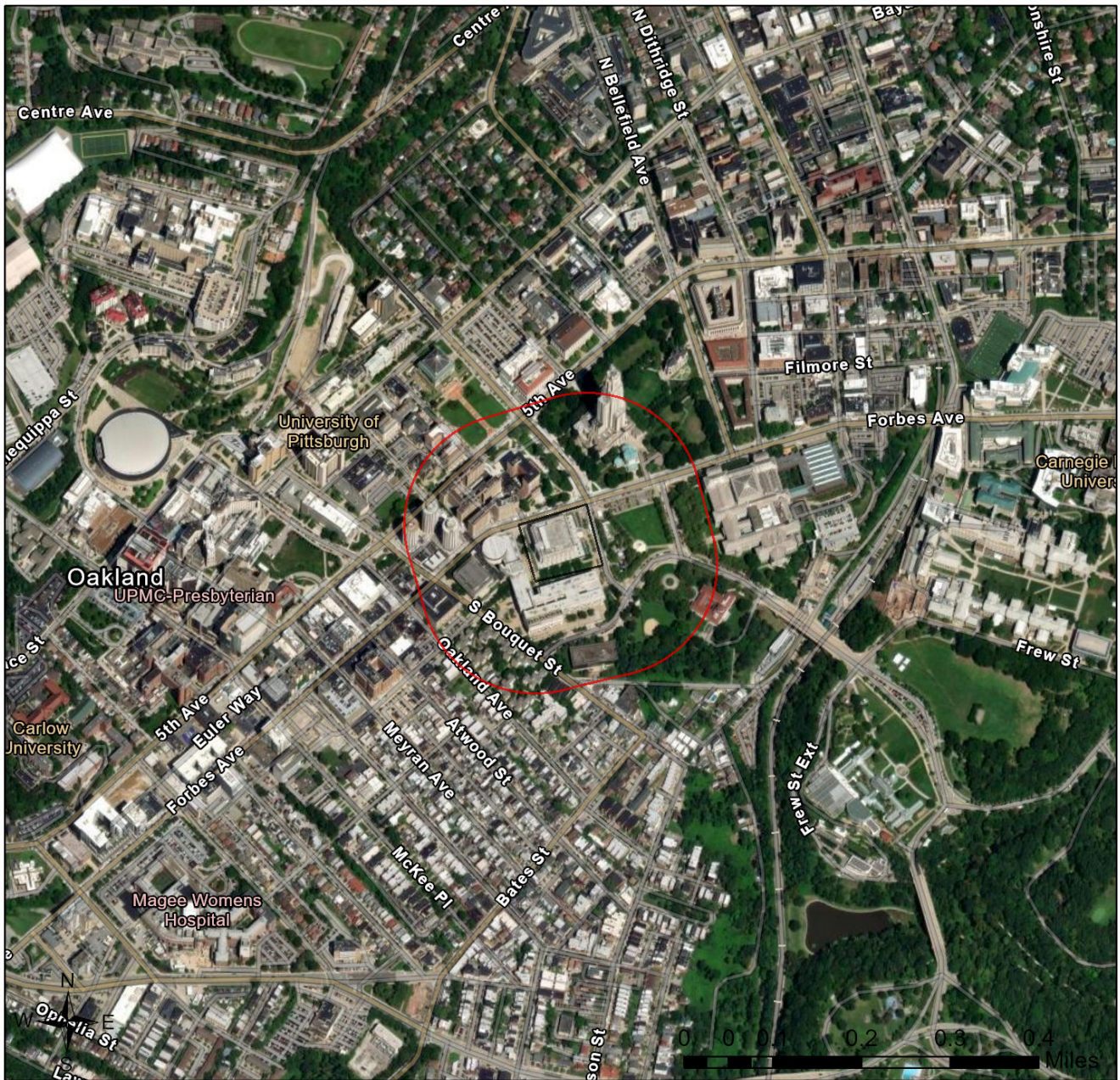
Degrees Minutes Seconds: **40° 26' 33.1695" N, 79° 57' 14.3993" W**


## 2. SEARCH RESULTS

Agency	Results	Response
PA Game Commission	<b>Potential Impact</b>	<b>FURTHER REVIEW IS REQUIRED, See Agency Response</b>
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 there may be potential impacts to threatened and endangered and/or special concern species and resources within the project area. If the response above indicates "No Further Review Required" no additional communication with the respective agency is required. If the response is "Further Review Required" or "See Agency Response," refer to the appropriate agency comments below. Please see the DEP Information Section of this receipt if a PA Department of Environmental Protection Permit is required.

# Hillman Library Expansion

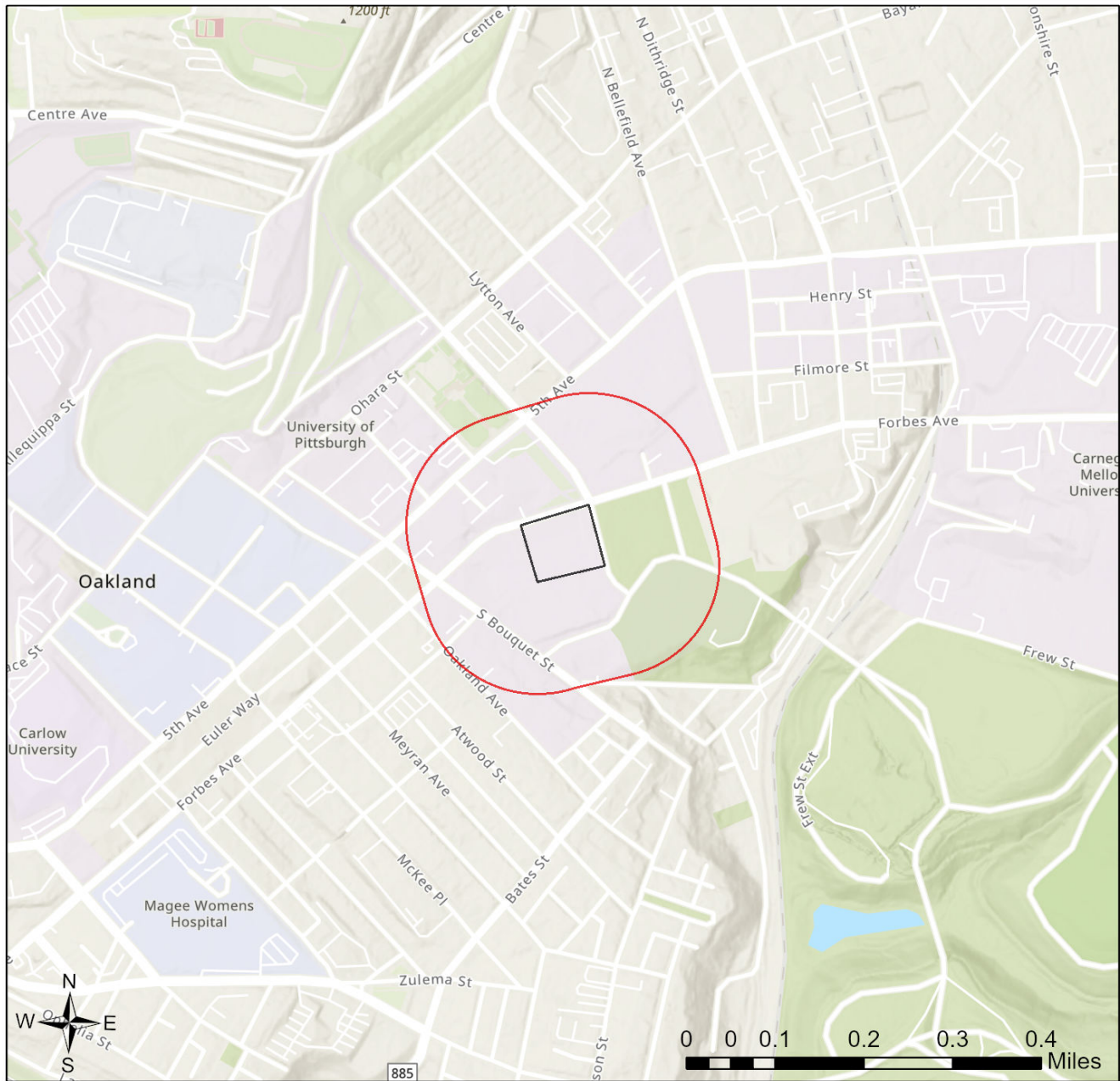




-  Buffered Project Boundary
-  Project Boundary



Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

### Hillman Library Expansion



-  Buffered Project Boundary
-  Project Boundary



Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

### 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:

Further review of this project is necessary to resolve the potential impact(s). Please send project information to this agency for review (see WHAT TO SEND).

**PGC Species:** (Note: The Pennsylvania Conservation Explorer tool is a primary screening tool, and a desktop review may reveal more or fewer species than what is listed below.)

Scientific Name	Common Name	Current Status
Falco peregrinus	Peregrine Falcon	Special Concern Species*

#### 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.

\* Special Concern Species or Resource - Plant or animal species classified as rare, tentatively undetermined or candidate as well as other taxa of conservation concern, significant natural communities, special concern populations (plants or animals) and unique geologic features.

\*\* Sensitive Species - Species identified by the jurisdictional agency as collectible, having economic value, or being susceptible to decline as a result of visitation.



## WHAT TO SEND TO JURISDICTIONAL AGENCIES

If project information was requested by one or more of the agencies above, upload\* or email the following information to the agency(s) (see AGENCY CONTACT INFORMATION). Instructions for uploading project materials can be found [here](#). This option provides the applicant with the convenience of sending project materials to a single location accessible to all three state agencies (but not USFWS).

\*If information was requested by USFWS, applicants must email, or mail, project information to [IR1\\_ESPenn@fws.gov](mailto:IR1_ESPenn@fws.gov) to initiate a review. USFWS will not accept uploaded project materials.

### Check-list of Minimum Materials to be submitted:

\_\_\_ Project narrative with a description of the overall project, the work to be performed, current physical characteristics of the site and acreage to be impacted.

\_\_\_ A map with the project boundary and/or a basic site plan (particularly showing the relationship of the project to the physical features such as wetlands, streams, ponds, rock outcrops, etc.)

**In addition to the materials listed above, USFWS REQUIRES the following**

\_\_\_ **SIGNED** copy of a Final Project Environmental Review Receipt

### The inclusion of the following information may expedite the review process.

\_\_\_ Color photos keyed to the basic site plan (i.e. showing on the site plan where and in what direction each photo was taken and the date of the photos)

\_\_\_ Information about the presence and location of wetlands in the project area, and how this was determined (e.g., by a qualified wetlands biologist), if wetlands are present in the project area, provide project plans showing the location of all project features, as well as wetlands and streams.

## 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. Two review options are available to permit applicants for handling PNDI coordination in conjunction with DEP's permit review process involving either T&E Species or species of special concern. Under sequential review, the permit applicant performs a PNDI screening and completes all coordination with the appropriate jurisdictional agencies prior to submitting the permit application. The applicant will include with its application, both a PNDI receipt and/or a clearance letter from the jurisdictional agency if the PNDI Receipt shows a Potential Impact to a species or the applicant chooses to obtain letters directly from the jurisdictional agencies. Under concurrent review, DEP, where feasible, will allow technical review of the permit to occur concurrently with the T&E species consultation with the jurisdictional agency. The applicant must still supply a copy of the PNDI Receipt with its permit application. The PNDI Receipt should also be submitted to the appropriate agency according to directions on the PNDI Receipt. The applicant and the jurisdictional agency will work together to resolve the potential impact(s). See the DEP PNDI policy at <https://conservationexplorer.dcnr.pa.gov/content/resources>.

## 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](http://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  
Email: [RA-HeritageReview@pa.gov](mailto:RA-HeritageReview@pa.gov)

### PA Fish and Boat Commission

Division of Environmental Services  
595 E. Rolling Ridge Dr., Bellefonte, PA 16823  
Email: [RA-FBPACENOTIFY@pa.gov](mailto:RA-FBPACENOTIFY@pa.gov)

### U.S. Fish and Wildlife Service

Pennsylvania Field Office  
Endangered Species Section  
110 Radnor Rd; Suite 101  
State College, PA 16801  
Email: [IR1\\_ESPenn@fws.gov](mailto:IR1_ESPenn@fws.gov)  
NO Faxes Please

### PA Game Commission

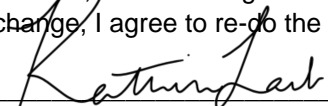
Bureau of Wildlife Management  
Division of Environmental Review  
2001 Elmerton Avenue, Harrisburg, PA 17110-9797  
Email: [RA-PGC\\_PNDI@pa.gov](mailto:RA-PGC_PNDI@pa.gov)  
NO Faxes Please

## 7. PROJECT CONTACT INFORMATION

Name: Katherine M. Laub, E.I.T.  
Company/Business Name: The Gateway Engineers, Inc.  
Address: 100 McMorris Road  
City, State, Zip: Pittsburgh, PA 15205  
Phone: ( 412 ) 409-2374 Fax: ( 412 ) 921-9960  
Email: klaub@gatewayengineers.com

## 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.

  
\_\_\_\_\_  
applicant/project proponent signature

5/7/2022  
\_\_\_\_\_  
date



COMMONWEALTH OF PENNSYLVANIA

# PENNSYLVANIA GAME COMMISSION

2001 Elmerton Avenue  
Harrisburg, PA 17110-9797

Wildlife Management  
(717) 787-5529

May 11, 2022

Katherine Laub  
The Gateway Engineers, Inc.  
100 McMorris Road  
Pittsburgh, PA 15205  
[klaub@gatewayengineers.com](mailto:klaub@gatewayengineers.com)

PNDI Receipt File: *project\_receipt\_hillman\_library\_expansion\_716768\_FINAL\_1.pdf*

Re: Hillman Library Extension

City of Pittsburgh; Allegheny County, Pennsylvania

Dear Katherine,

Thank you for submitting Pennsylvania Natural Diversity Inventory (PNDI) Environmental Review Receipt *project\_receipt\_hillman\_library\_expansion\_716768\_FINAL\_1.pdf* for review. The Pennsylvania Game Commission (PGC) screened this project for potential impacts to species and resources of concern under PGC responsibility, which includes birds and mammals only.

### **No Impact Anticipated**

PNDI records indicate species or resources of concern are located within the vicinity of the project. However, based on the information you submitted concerning the nature of the project, the immediate location, and our detailed resource information, the PGC has determined that no impact is likely. Therefore, no further coordination with the PGC will be necessary for this project at this time.

This response represents the most up-to-date summary of the PNDI data files and is valid for two (2) years from the date of this letter. An absence of recorded information does not necessarily imply actual conditions on site. Should project plans change or additional information on listed or proposed species become available, this determination may be reconsidered.

Should the proposed work continue beyond the period covered by this letter, please resubmit the project to this agency as an "Update" (including an updated PNDI receipt, project narrative and accurate map). If the proposed work has not changed and no additional information concerning listed species is found, the project will be cleared for PNDI requirements under this agency for two additional years.

This finding applies to impacts to birds and mammals only. To complete your review of state and federally-listed threatened and endangered species and species of special concern, please be sure that the U.S. Fish and Wildlife Service, the PA Department of Conservation and Natural Resources, and/or the PA Fish and Boat Commission have been contacted regarding this project as directed by the online PNDI ER Tool found at [www.naturalheritage.state.pa.us](http://www.naturalheritage.state.pa.us).

Sincerely,



**Sue Guers**  
Wildlife Biologist / Environmental Review Lead  
Bureau of Wildlife Management  
Phone: 717-787-4250, Extension 73412  
Fax: 717-787-6957  
E-mail: [suguers@pa.gov](mailto:suguers@pa.gov)

A PNHP Partner



Pennsylvania Natural Heritage Program

SLG/slg

**EXHIBIT L.**

**Sewage Facilities Planning Module – Component 4A – Municipal  
Planning Agency Review**



## INSTRUCTIONS FOR COMPLETING COMPONENT 4A MUNICIPAL PLANNING AGENCY REVIEW

*Remove and recycle these instructions prior to mailing component to the approving agency.*

### Background

This component, Component 4, is used to obtain the comments of planning agencies and/or health departments having jurisdiction over the project area. It is used in conjunction with other planning module components appropriate to the characteristics of the project proposed.

### Who Should Complete the Component?

The component should be completed by any existing municipal planning agency, county planning agency, planning agency with areawide jurisdiction, and/or health department having jurisdiction over the project site. It is divided into sections to allow for convenient use by the appropriate agencies.

The project sponsor must forward copies of this component, along with supporting components and data, to the appropriate planning agency(ies) and health department(s) (if any) having jurisdiction over the development site. These agencies are responsible for responding to the questions in their respective sections of Component 4, as well as providing whatever additional comments they may wish to provide on the project plan. After the agencies have completed their review, the component will be returned to the applicant. The agencies have 60 days in which to provide comments to the applicant. If the agencies fail to comment within this 60 day period, the applicant may proceed to the next stage of the review without the comments. The use of registered mail or certified mail (return receipt requested) by the applicant when forwarding the module package to the agencies will document a date of receipt.

After receipt of the completed Component 4 from the planning agencies, or following expiration of the 60 day period without comments, the applicant must submit the entire component package to the municipality having jurisdiction over the project area for review and action. If approved by the municipality, the proposed plan, along with the municipal action, will be forwarded to the approving agency (Department of Environmental Protection or delegated local agency). The approving agency, in turn, will either approve the proposed plan, return it as incomplete, or disapprove the plan, based upon the information provided.

### *Instructions for Completing Planning Agency and/or Health Department Review Component*

#### **Section A. Project Name**

Enter the project name as it appears on the accompanying sewage facilities planning module component (Component 2, 2m, 3, 3s or 3m).

#### **Section B. Review Schedule**

Enter the date the package was received by the reviewing agency, and the date that the review was completed.

#### **Section C. Agency Review**

1. Answer the yes/no questions and provide any descriptive information necessary on the lines provided. Attach additional sheets, if necessary.
2. Complete the name, title, and signature block.

#### **Section D. Additional Comments**

The Agency may provide whatever additional comment(s) it deems necessary, as described in the form. Attach additional sheets, if necessary.

## 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 local municipal planning agency for their comments.

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

Project Name

Hillman Library Expansion

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

1. Date plan received by municipal planning agency 7/20/20222. Date review completed by agency 7/29/2022

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

- | Yes                                 | No                                  |   |
|-------------------------------------|-------------------------------------|---|
| <input type="checkbox"/>            | <input checked="" 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"/> N/A        | <input type="checkbox"/>            | 2. Is this proposal consistent with the comprehensive plan for land use?<br>If no, describe the inconsistencies _____                     |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 3. Is this proposal consistent with the use, development, and protection of water resources?<br>If no, describe the inconsistencies _____ |
| <input checked="" 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 checked="" type="checkbox"/> | 5. Does this project propose encroachments, obstructions, or dams that will affect wetlands?<br>If yes, describe impacts _____            |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 6. Will any known historical or archaeological resources be impacted by this project?<br>If yes, describe impacts _____                   |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 7. Will any known endangered or threatened species of plant or animal be impacted by this project?<br>If yes, describe impacts _____      |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 8. Is there a municipal zoning ordinance?   |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 9. Is this proposal consistent with the ordinance?<br>If no, describe the inconsistencies _____   |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 10. Does the proposal require a change or variance to an existing comprehensive plan or zoning ordinance?                                 |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 11. Have all applicable zoning approvals been obtained?   |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 12. Is there a municipal subdivision and land development ordinance?  |

**SECTION C. AGENCY REVIEW (continued)**

- | Yes                                 | No                                  |  |
|-------------------------------------|-------------------------------------|--|
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 13. Is this proposal consistent with the ordinance?<br>If no, describe the inconsistencies _____   |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 14. Is this plan consistent with the municipal Official Sewage Facilities Plan?<br>If no, describe the inconsistencies _____                               |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 15. Are there any wastewater disposal needs in the area adjacent to this proposal that should be considered by the municipality?<br>If yes, describe _____ |
| <input type="checkbox"/>            | <input checked="" 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?<br>If no, describe the inconsistencies<br>_____                                      |

17. Name, title and signature of planning agency staff member completing this section:  
 Name: Kyla Prendergast  
 Title: Senior Environmental Planner  
 Signature: *Kyla Prendergast*  
 Date: 7/29/2022  
 Name of Municipal Planning Agency: City of Pittsburgh Department of City Planning  
 Address 200 Ross St, 4<sup>th</sup> Floor, Pittsburgh, PA 15219  
 Telephone Number: 412-255-2676

**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 needed, 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 applicant.



**EXHIBIT M.**

**Sewage Facilities Planning Module – Component 4C – County or Joint  
Health Department Review**

COUNTY OF



ALLEGHENY

**RICH FITZGERALD**  
COUNTY EXECUTIVE

July 21, 2022

Katherine M. Laub, E.I.T.  
The Gateway Engineers, Inc.  
100 McMorris Road  
Pittsburgh, PA 15205

**RE: SEWAGE FACILITIES PLANNING MODULE; ALLEGHENY COUNTY  
HILLMAN LIBRARY EXPANSION, CITY OF PITTSBURGH, ALLEGHENY COUNTY**

Dear Ms. Laub:

Enclosed is a signed copy of Component 4C, County or Joint County Health Department Review, for the above-referenced development. This Planning Module Component was received on July 20, 2022. The project proposes the following:

Project Description:	Hillman Library Expansion. Proposing the construction of an addition, interior renovations, exterior renovations, and site improvements to the University of Pittsburgh Hillman Library located at 3960 Forbes Avenue in the City of Pittsburgh, Allegheny County.
Sewage Flow:	925 GPD
Conveyance:	The flow from this site will be conveyed to the Pittsburgh Water and Sewer Authority (PWSA) collection system to the ALCOSAN POC M-49 to the Monongahela River Interceptor and then to the ALCOSAN Treatment Plant at Woods Run.
Sewer's Owner:	PWSA (collection) and ALCOSAN (interceptor)
Name of Sewage Treatment Plant:	ALCOSAN

Please be advised that a permit must be obtained from the Allegheny County Health Department's (ACHD) Plumbing Section prior to commencing any plumbing work for the proposed project. Plumbing work for which an ACHD Plumbing Permit must be obtained includes any plumbing work done on the site and any sewers, which will not be owned and operated by a municipality or a sewer authority.



DEBRA BOGEN, MD, FAAP, FABM, DIRECTOR  
**ALLEGHENY COUNTY HEALTH DEPARTMENT**

**WATER POLLUTION CONTROL & SOLID WASTE MANAGEMENT**  
3901 PENN AVENUE • BUILDING 5 • PITTSBURGH, PA 15224-1318  
PHONE: 412.578.8040 • FAX: 412.578.8053  
[WWW.ALLEGHENYCOUNTY.US/HEALTHDEPARTMENT](http://WWW.ALLEGHENYCOUNTY.US/HEALTHDEPARTMENT)



In addition, it should be noted that the approval of this sewage facilities planning module does not include approval of pipe size and/or type. Approval for pipe size and/or type must be obtained by filing a specific plumbing plan with the ACHD's Plumbing Section. If you should have any questions relative to ACHD's plumbing requirements, you can contact Drew Grese, Acting Plumbing Chief at 412-578-8055.

The ACHD has no objection to the approval of this project. If you have any questions, please call me at 412-578-8046.

Sincerely,

A handwritten signature in cursive script, appearing to read "Freddie Fields".

Freddie Fields, M.B.A.  
Environmental Health Engineer III  
Water Pollution Control & Solid Waste Management

FF/cb  
Enclosure

cc: Thomas Flanagan, PA Department of Environmental Protection w/attachment (electronically)  
Drew Grese, ACHD w/attachment (electronically)



## INSTRUCTIONS FOR COMPLETING COMPONENT 4C COUNTY OR JOINT HEALTH DEPARTMENT REVIEW

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*Remove and recycle these instructions prior to mailing component to the approving agency.*

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### **Background**

This component, Component 4, is used to obtain the comments of planning agencies and/or health departments having jurisdiction over the project area. It is used in conjunction with other planning module components appropriate to the characteristics of the project proposed.

### **Who Should Complete the Component?**

The component should be completed by any existing municipal planning agency, county planning agency, planning agency with areawide jurisdiction, and/or health department having jurisdiction over the project site. It is divided into sections to allow for convenient use by the appropriate agencies.

The project sponsor must forward copies of this component, along with supporting components and data, to the appropriate planning agency(ies) and health department(s) (if any) having jurisdiction over the development site. These agencies are responsible for responding to the questions in their respective sections of Component 4, as well as providing whatever additional comments they may wish to provide on the project plan. After the agencies have completed their review, the component will be returned to the applicant. The agencies have 60 days in which to provide comments to the applicant. If the agencies fail to comment within this 60 day period, the applicant may proceed to the next stage of the review without the comments. The use of registered mail or certified mail (return receipt requested) by the applicant when forwarding the module package to the agencies will document a date of receipt.

After receipt of the completed Component 4 from the planning agencies, or following expiration of the 60 day period without comments, the applicant must submit the entire component package to the municipality having jurisdiction over the project area for review and action. If approved by the municipality, the proposed plan, along with the municipal action, will be forwarded to the approving agency (Department of Environmental Protection or delegated local agency). The approving agency, in turn, will either approve the proposed plan, return it as incomplete, or disapprove the plan, based upon the information provided.

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### *Instructions for Completing Planning Agency and/or Health Department Review Component*

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#### **Section A. Project Name**

Enter the project name as it appears on the accompanying sewage facilities planning module component (Component 2, 2m, 3, 3s or 3m).

#### **Section B. Review Schedule**

Enter the date the package was received by the reviewing agency, and the date that the review was completed.

#### **Section C. Agency Review**

1. Answer the yes/no questions and provide any descriptive information necessary on the lines provided. Attach additional sheets, if necessary.
2. Complete the name, title, and signature block.

#### **Section D. Additional Comments**

The Agency may provide whatever additional comment(s) it deems necessary, as described in the form. Attach additional sheets, if necessary.

**SEWAGE FACILITIES PLANNING MODULE  
 COMPONENT 4C - COUNTY OR JOINT HEALTH DEPARTMENT 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 county or joint county health department for their comments.

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

Project Name

Hillman Library Expansion

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

1. Date plan received by county or joint county health department July 20, 2022

Agency name Allegheny County Health Department (ACHD)

2. Date review completed by agency July 21, 2022

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

Yes No

1. Is the proposed plan consistent with the municipality's Official Sewage Facilities Plan?

If no, what are the inconsistencies? \_\_\_\_\_

2. Are there any wastewater disposal needs in the area adjacent to this proposal that should be considered by the municipality?

If yes, describe \_\_\_\_\_

3. Is there any known groundwater degradation in the area of this proposal?

If yes, describe \_\_\_\_\_

4. The county or joint county health department recommendation concerning this proposed plan is as follows: ACHD recommends approval. See attached letter.

5. Name, title and signature of person completing this section:

Name: Freddie Fields

Title: Environmental Health Engineer III

Signature: 

Date: July 21, 2022

Name of County Health Department: ACHD

Address: 3901 Penn Avenue, Building #5, Pittsburgh, PA 15224-1318

Telephone Number: 412-578-8046

**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.