



A FULL-SERVICE CIVIL ENGINEERING FIRM

C-41136-0000

September 2021

635 Smithfield Street Renovations

635 Smithfield Street
City of Pittsburgh
Allegheny County, PA

PREPARED FOR

Bost Development
112 Hetherton Drive
Pittsburgh, PA 15237

SUBMITTED BY

Shannon L. McCullough, GIP
The Gateway Engineers, Inc.
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Pittsburgh, PA 15205
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PWSA Project No. 20014.43



SEWAGE FACILITIES PLANNING MODULE

EXHIBITS

- EXHIBIT A. Copy of DEP Planning Module Component Letter
- EXHIBIT B. Sewage Facilities Planning Module – Component 3 – Sewage Collection and Treatment Facilities
- EXHIBIT C. PWSA Water and Sewer Availability Letter
- EXHIBIT D. Project Narrative
- EXHIBIT E. U.S.G.S Site Location Map
- EXHIBIT F. Sewage Flow Calculations
- EXHIBIT G. PWSA Water and Sewer Use Approval
- EXHIBIT H. PWSA Tap Allocation Letter
- EXHIBIT I. Existing Sewer Flow Calculations
- EXHIBIT J. Alternatives Analysis
- EXHIBIT K. Sewage Facilities Planning Module – Component 4A – Municipal Planning Agency Review
- EXHIBIT L. Sewage Facilities Planning Module – Component 4C – County of Joint Health Department Review
- EXHIBIT M. Plot Plan

EXHIBIT A.

Copy of DEP Planning Module Component Letter

Shannon L. McCullough, GIP

From: Ryan, Regis <reryan@pa.gov>
Sent: Wednesday, June 2, 2021 9:13 AM
To: Shannon L. McCullough, GIP
Subject: 635 Smithfield Street Sewage Module Submittal
Attachments: Comp3Form.pdf; Comp4A.PDF; comp4bform.pdf; comp4cform.pdf; Resolution.pdf; Transmittal.pdf

Shannon,

Please fill out the attached planning documents for the 635 Smithfield Street Renovations and submit them to DEP via the On Base Application. Below is the link to the web page that contains instructions, the link to the on-line submittal form, and a printable form to submit a paper check for payment. Please use the **DEP# 02001-21-020**

<https://www.dep.pa.gov/DataandTools/Pages/Application-Form-Upload.aspx>

To find the correct document type for submission, search using the DEP form number. If you are unable to locate an applicable form name, you may use "other" and provide a brief description of the uploaded document in the comment field of the on-line submittal form.

Hard copies are not required to be sent in addition to the upload. All documents can be uploaded, including maps.

The only paper submission necessary is the payment form and the paper check. Checks are to be mailed to the appropriate regional office.

As stated earlier, once received we have 10 business days to review the Planning Module for completeness, and then another 60 days (residential) 120 days (Commercial) to review the technical aspect of the project. Please let me know if you have any questions, and be sure to share this information with your group.

Thank you!

-REGIS

Regis M Ryan

Sewage Planning Specialist
Department of Environmental Protection | Clean Water
SouthWest Regional Office
400 Waterfront Drive | Pittsburgh, PA 15222
Phone: 412.442.4052 | Fax: 412.442.5885

DEP is now accepting permit and authorization applications, as well as other documents and correspondence, electronically through the OnBase Electronic Forms Upload tool. Please use the link below to view the webpage, get instructions, and submit documents:

<https://www.dep.pa.gov/DataandTools/Pages/Application-Form-Upload.aspx>

From: Shannon L. McCullough, GIP <smccullough@gatewayengineers.com>
Sent: Tuesday, June 1, 2021 12:39 PM

EXHIBIT B.

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

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 #
02001-21-020				

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 635 Smithfield Street Renovations

2. Brief Project Description Renovation of existing building into a 47 multi-unit apartment complex with the first floor devoted to restaurant/office space.

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

Municipality Name	County	City	Boro	Twp
Pittsburgh	Allegheny	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Municipality Contact Individual - Last Name	First Name	MI	Suffix	Title
Battistone	Martina			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, Suite 4			
Address Last Line -- City	State	ZIP+4		
Pittsburgh	PA	15219		
Area Code + Phone + Ext.	FAX (optional)	Email (optional)		
412-255-2516				

C. SITE INFORMATION (See Section C of instructions)

Site (Land Development or Project) Name

635 Smithfield Street Renovations

Site Location Line 1

635 Smithfield Street

Site Location Line 2

Site Location Last Line -- City

Pittsburgh

State

PA

ZIP+4

15222

Latitude

Longitude

Detailed Written Directions to Site From 376, take Exit 70A. Continue onto Liberty Ave for 0.4 miles. Turn right onto Sixth Avenue and continue for 0.1 miles. Turn left onto Smithfield Street. The project site will be on the left.

Description of Site Renovation of existing building into a 47 multi-unit apartment complex with the first floor devoted to restaurant/office space.

Site Contact (Developer/Owner)

Last Name

Bost

First Name

Thomas

MI

Suffix

Phone

Ext.

Site Contact Title

Principal

FAX

Site Contact Firm (if none, leave blank)

Bost Development

Email

thomas.bost@bostdevelopment.com

Mailing Address Line 1

112 Hetherton Drive

Mailing Address Line 2

Mailing Address Last Line -- City

Pittsburgh

State

PA

ZIP+4

15237

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

Last Name

Galbraith

First Name

Joseph

MI

M

Suffix

P.E.

Title

Project Manager

Consulting Firm Name

The Gateway Engineers, Inc.

Mailing Address Line 1

100 McMorris Road

Mailing Address Line 2

Address Last Line -- City

Pittsburgh

State

PA

ZIP+4

15205

Country

United States

Email

jgalbraith@gatewayengineers.com

Area Code + Phone

412-921-4030

Ext.

x125

Area Code + FAX

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 25

Connections 1

Name of:

existing collection or conveyance system Smithfield Street 18" PWSA Combined Sewer
owner PWSA

existing interceptor Allegheny River Interceptor (A-12)
owner 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

NPDES Permit Number for existing facility PA25984

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
(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 Joseph A. Sparbanic, P. E.

Agent Signature [Signature] Date 7/20/21

(Also see Section I. 4.)

G. PROPOSED WASTEWATER DISPOSAL FACILITIES (Continued)

3. PLOT PLAN

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

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

4. WETLAND PROTECTION

YES NO

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

5. PRIME AGRICULTURAL LAND PROTECTION

YES NO

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

6. HISTORIC PRESERVATION ACT

YES NO

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

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, 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 9780 gpd
2. Total Sewage Flows to Facilities (pathway from point of origin through treatment plant)

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

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

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

	a. Design and/or Permitted Capacity (gpd)		b. Present Flows (gpd)		c. Projected Flows in 5 years (gpd) (2 years for P.S.)	
	Average	Peak	Average	Peak	Average	Peak
Collection	1211937	4241778	0	0	4359	15257
Conveyance		12,100,000	833,000	1,090,000	851,000	1,110,000
Treatment	209,300,000	250,000,000	190,200,000	250,000,000	219,000,000	245,000,000

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. 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 Barry King, PE, PMP

Agent Signature [Signature] Date 7/12/2021

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

c. Conveyance System

Name of Agency, Authority, Municipality ALCOSAN

Name of Responsible Agent Joseph A. Sparbanie, P.E.

Agent Signature [Signature]

Date 7/20/21

4. Treatment Facility

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

YES NO

- a. 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 Joseph A. Sparbanie, P.E.

Agent Signature [Signature]

Date 7/20/21

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.

Joseph M. Galbraith, P.E.

Name (Print)



Signature

Project Manager

Title

06-02-2021

Date

100 McMorris Road, Pittsburgh, PA 15205

Address

412-921-4030 EXT. 125

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 \$1,250 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.

$$\#25 \quad \text{Lots (or EDUs)} \times \$50.00 = \$ 1,250$$

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 C.

PWSA Water and Sewer Availability Letter



WATER AND SEWER AVAILABILITY LETTER REQUEST

All persons planning to perform construction, demolition, or renovation work that will involve water and/or sewer services are recommended to complete this form and submit to PWSA. PWSA will review the request and reply to indicate if PWSA-owned water and/or sewer utilities are present at the site of the proposed work.

This request form is **required** for all of the following types of development. (Please note that the term "sewer" refers to sanitary sewers, combined sewers, and storm sewers.)

1. New water and/or sewer tap(s) for all approved/recorded subdivisions.
2. Change of Use and/or increase in water and/or sewer flows for residential development(s), commercial, industrial and institutional developments (i.e. total project sanitary flow is greater than 799 gallons per day).
3. New water and/or sewer tap(s) for all residential, commercial, industrial, and institutional developments.

Please email the completed form to: permitinfo@pgh2o.com

Information to be submitted by the Applicant:			
Property Owner Name:			
Address of Property:			
Proposed Use of Site:			
Closest street intersection to the property:			
Requester Information			
Name:		Date of Request:	
Address:			
Phone Number:			
Email Address:			
Preferred Method of Delivery:	<input type="checkbox"/> Email	<input type="checkbox"/> Mail	
PWSA Use Only:			
PWSA Water Service Available <input type="checkbox"/> Yes <input type="checkbox"/> No Size / Location: _____			
PWSA Sewer Service Available: <input type="checkbox"/> Yes <input type="checkbox"/> No Size / Location: _____			
Applicant must contact separate agency for water and/or sewer service: <input type="checkbox"/> Yes <input type="checkbox"/> No			
Name of separate agency: _____			
PWSA Approval:	Signature and Date	<i>Wendy M. Dean</i>	
	Name (printed)	_____	
	Title	_____	

Disclaimer: The information provided by PWSA does not guarantee capacity of the PWSA-owned water and/or sewer lines to satisfy the needs of the proposed development. The permit application process required by PWSA evaluates the water demand and sewer flows of the development, as provided by the Applicant, and renders a decision on the capacity of the PWSA facilities.

February 1, 2021

Shannon L. McCullough
100 McMorris Road
Pittsburgh, PA 15205

RE: Water and Sewer Availability
635 Smithfield Street

Dear Ms. McCullough:

In response to your inquiry on 1/28/2021 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) 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.

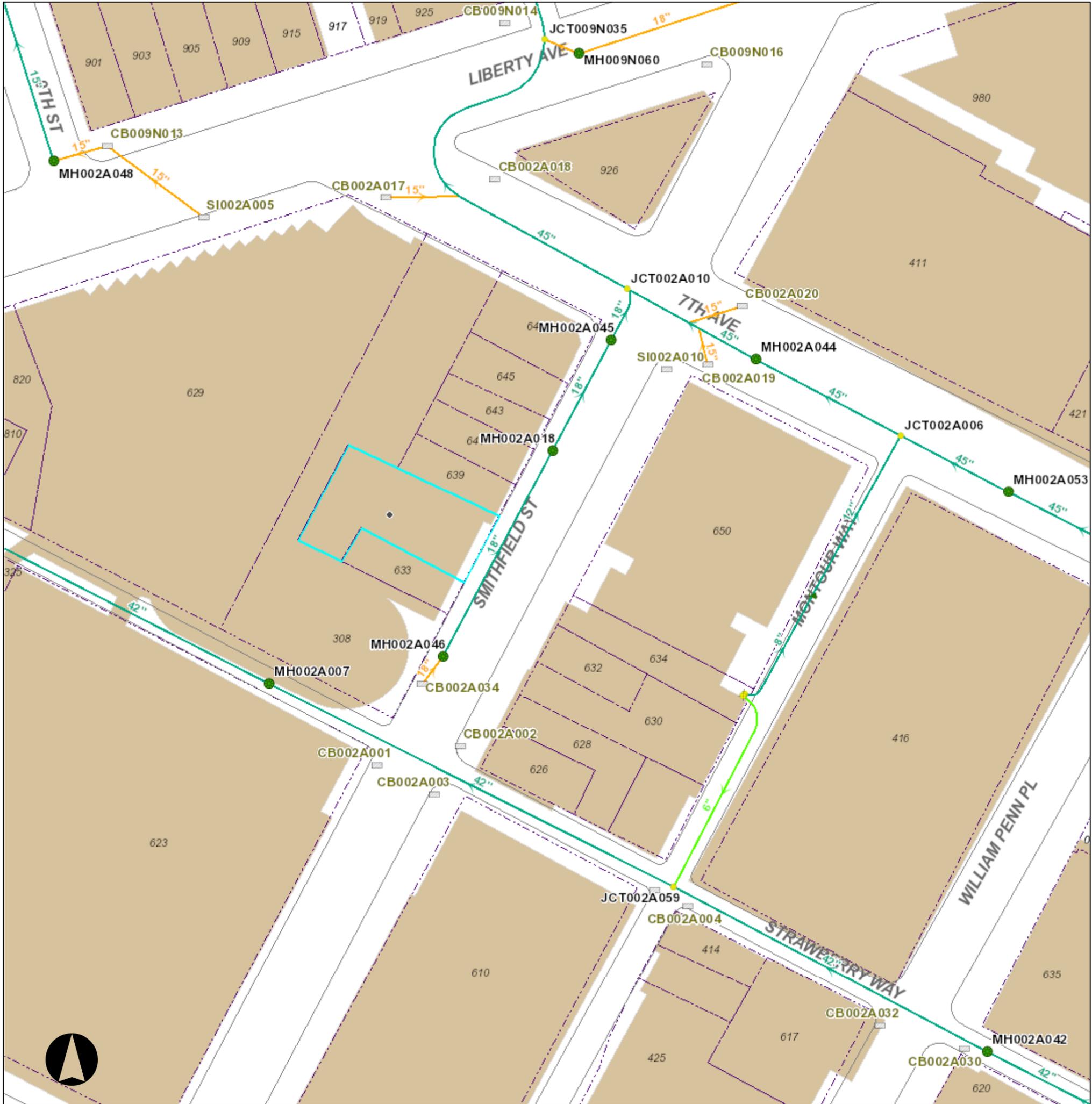
Sincerely,



Wendy M. Dean
Engineering Tech II

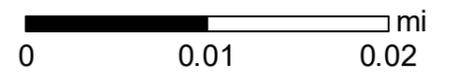
cc: PWSA File

635 Smithfield Street - Sewer



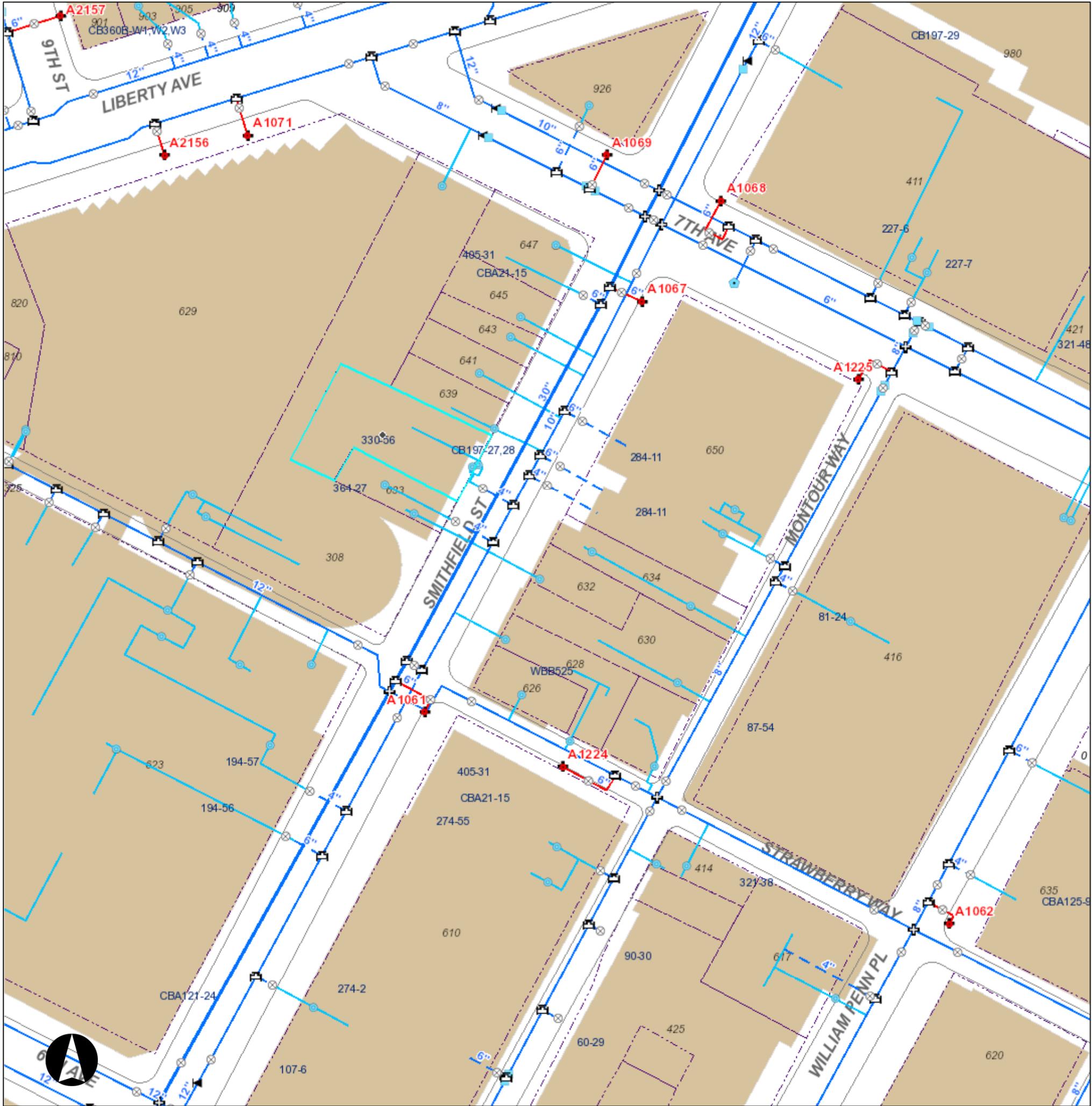
Legend

	SEWER	



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 therefor is assumed by the City or the PWSA.

635 Smithfield Street - Water



Legend

WATER

- Meter
- Curb Box
- Water System Pump
- Hydrant
- System Valve
- Dividing Pressure Valve
- Coupling
- Tee
- Cross
- Reducer
- End Cap
- Wash Out
- Rising Main
- Supply Main
- Transmission Main
- Distribution Main
- Hydrant Branch
- Private Main
- Water Service Line

Pressure Monitoring Station

Water Manhole

Private Inlet

Outfall

End Cap

Sewer Pump Station

Combined Sewer

Sanitary Sewer

Storm Sewer

Regulated Combined Sewer

Overflow Sewer

Interceptor

Sewer Force Main

Private Sewer

Undefined Sewer

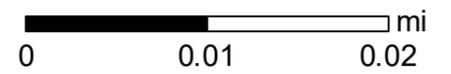
Green Infrastructure Underground Facilities

SEWER

Manhole

Junction

Inlet



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: 2/1/2021

EXHIBIT D.

Project Narrative

Project Narrative

635 Smithfield Street
635 Smithfield Street, 6th Ward, City of Pittsburgh

The proposed 635 Smithfield Street project, owned by Bost Development, involves the development of a 47 multi-unit apartment complex with the first floor devoted to restaurant and office space. The proposed restaurant space was assumed in order to obtain the most conservative flows. The site previously contained four buildings used for a restaurant, technical school, and office space. The buildings currently exist, however, only the restaurant (Parcel 2-A-47) was occupied through at least October of 2019. The project site is a 0.20 acre consolidated lot (Parcels 2-A-47, 2-A-46, 2-A-44, and 2-A-43).

For the purpose of sewage flow/water consumption calculations, the water bills from the previous restaurant were obtained. These bills were used to determine the existing water consumption and sewage flow for the site. The proposed floor plans and peak flows provided in Table 2-1 of PWSA's Developers Manual were utilized to determine the proposed peak sewage flow/water consumption. In the proposed floorplans, the apartment complex will contain 46 one-bedroom apartments, and 1 three-bedroom apartment in addition to the restaurant and office space mentioned totaling to a flow of 14,530 GPD or 37 EDUs. Removing the existing flow seen at the site (4,750 GPD) results in a net flow of 25 EDUs or 9,780 GPD. Refer to the enclosed calculation sheet and floor plans for details regarding the breakdown of the peak sewage flow/water consumption estimates.

The existing storm and sanitary connections on site will be utilized for the proposed development. The existing sanitary and storm laterals tie into the existing PWSA owned 18" combination gravity sewer in Smithfield Street. The sewer connects into the Allegheny River Interceptor (A-12) Sewer and then to ALCOSAN's treatment plant where it receives final treatment.

Flow Calculation Summary

Present Flows – Peak Flow Measurement

Peak flow measurements were completed by Drnach Environmental in MH002A18 to determine the existing average and peak flows present in the sewer of interest. Flow measurements began on 5/21/21 at 6:50AM and ended at 7:50AM. A series of five flow measurements were completed. **Analysis of the received data report yielded a measurement of 0.00 depth for each of the five flow measurements.**

Design Capacity

The existing sewer's average and peak hydraulic capacity were calculated by determining the existing slope of the sewer of interest using the 3RWW Sewer Atlas between the monitoring manhole (MH002A18) and the next upstream manhole (MH002A046), 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 1.212 MGD and the peak hydraulic capacity was calculated to be 4.242 MGD.**

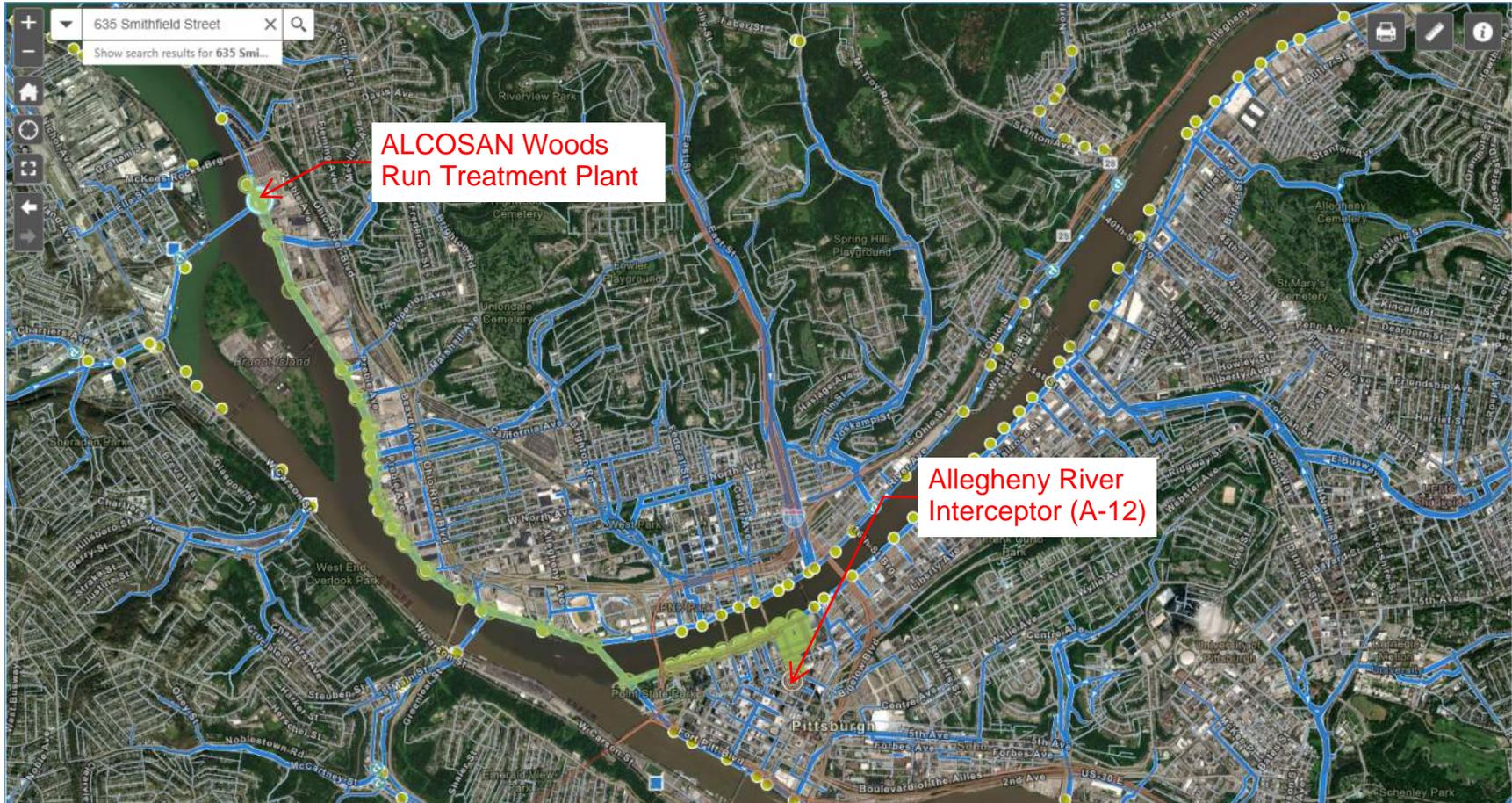
5-Year Projected Flow

Using the equations in the PWSA Developer's Manual, the project flow, 14,530 GPD, was added to the present average and peak flows to determine the projected flow in 5 years. **The projected average flow is estimated to be 0.0044 MGD and the projected peak flow is estimated to be 0.015 MGD.** Since the 5-year flows are less than the calculated design capacity of the sewer, the additional flow due to the construction of 635 Smithfield Street will not overload the sewer.

Sewer Mapping

635 Smithfield Street

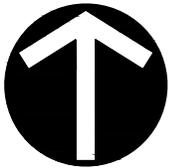
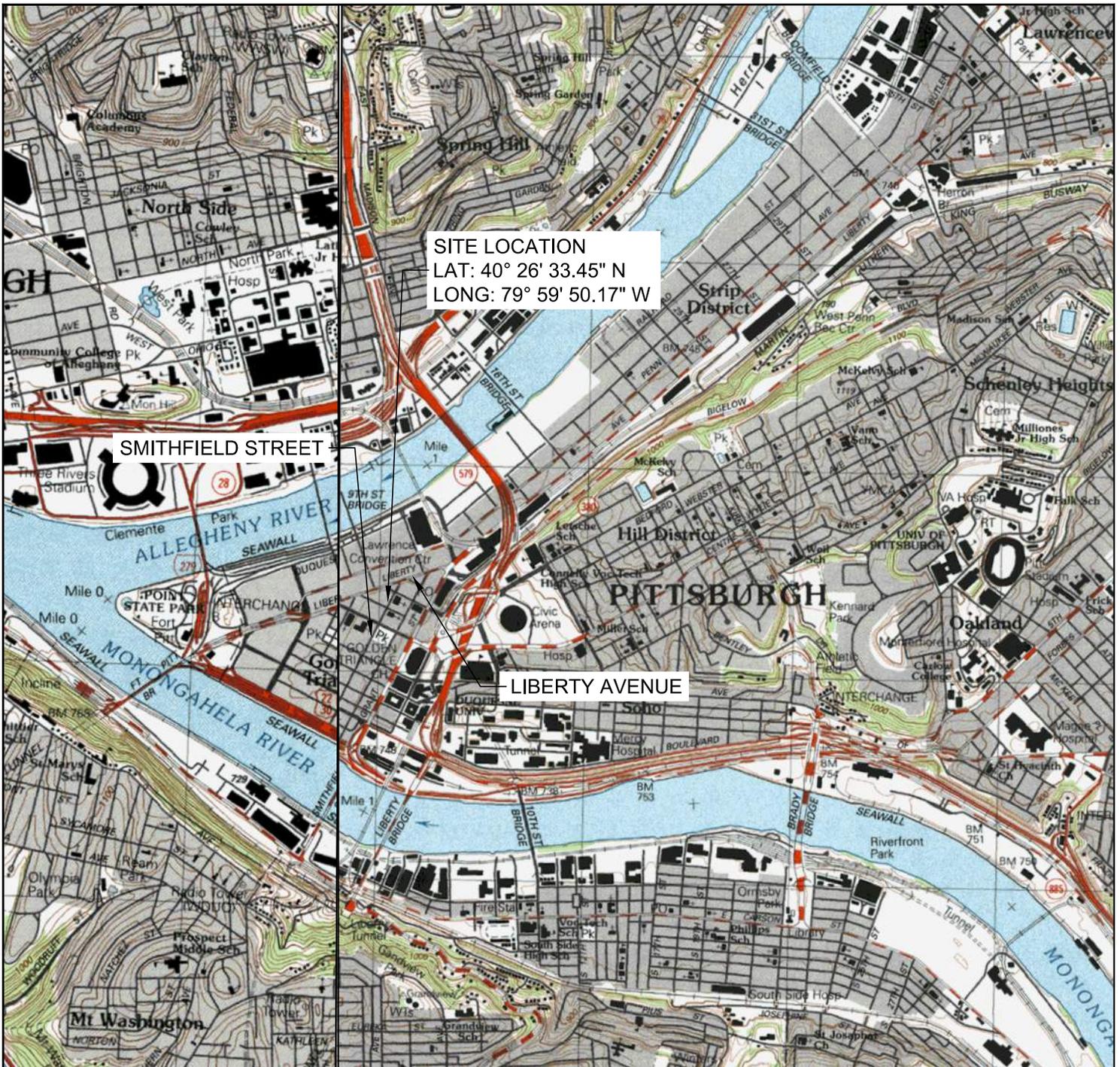
635 Smithfield Street, 6th Ward, City of Pittsburgh



Source: 3RWW Sewer Atlas

EXHIBIT E.

U.S.G.S. Site Location Map



NORTH

USGS SITE LOCATION MAP
PITTSBURGH EAST & PITTSBURGH WEST
QUADRANGLES

USGS SITE LOCATION MAP

635 SMITHFIELD STREET

635 SMITHFIELD STREET
PITTSBURGH, PA 15222

PREPARED FOR:
BOST DEVELOPMENT
112 HETHERTON DRIVE
PITTSBURGH, PA 15237

Date	No	REVISION RECORD
-	01	-
-	02	-
-	03	-
-	04	-
-	05	-
-	06	-
-	07	-
-	08	-

GATEWAY[®]

The Gateway Engineers, Inc.
Full-Service Civil Engineering & Surveying
Pittsburgh, PA
gatewayengineers.com 855-634-9284

Project Number: C-41136-0000
Drawing Scale: 1" = 200'
Data Issued: MARCH 2021
Index Number: _____
Drawn By: SLM
Checked By: JMG
Project Manager: JMG

USGS

EXHIBIT F.

Sewage Flow Calculations

Anticipated Sewage Flow Calculations

635 Smithfield Street
Smithfield Street, 6th Ward, City of Pittsburgh

Peak Existing Flow

633 Smithfield Street, Pittsburgh, PA 15222

Average Consumption = 1,900 GPD
Used 2.5 multiplier to obtain peak flow/consumption
Peak Consumption = (1,900 GPD) x (2.5 multiplier)
Peak Consumption = 4,750 GPD
(Refer to enclosed existing water bill spreadsheet)

Peak Proposed Flow

Total 1 bedroom apartments = 46 units
Total 3 bedroom apartments = 1 unit
Office space = 256 sf
Restaurant space = 5,337 sf

Water Use and Sanitary Flows from Table 1 of Section 3 within the PWSA Developer's Manual¹:

1 bedroom = 150 GPD/unit
3 bedrooms = 400 GPD/unit
Office = 10 GPD/employee
Restaurant/Bar & Cocktail Lounge = 12 GPD/person

Maximum Floor Area Allowances per occupant²: Business areas = 100 sf per occupant

Office Area = 256 sf

Total Number of Employees = 256 sf / 100 sf per occupant = 3 employees

Restaurant occupancy size based off developer's recommendation

Estimated Number of Turnovers per day = 3

Peak Flow Calculation:

$[46 \text{ units} \times (150 \text{ GPD/unit})] + [1 \text{ unit} \times (400 \text{ GPD/unit})] + [3 \text{ employees} \times (10 \text{ GPD/employee})]$
 $+ [200 \text{ occupants} \times (12 \text{ GPD/person}) \times 3 \text{ turnovers}] = 14,530 \text{ GPD}$

Net Flow

Net Sewage Flow = Peak Proposed Flow – Peak Existing Flow

Net Sewage Flow = 14,530 GPD – 4,750 GPD

Net Sewage Flow = 9,780 GPD

Net Sewage Flow = Net Water Use ∴

Net Water Usage = 9,780 GPD (25 EDU's)

Sources:

¹ Table 1, Section 3, PWSA Developer's Manual

² Table 1004.1.2 Maximum Floor Area Allowances per Occupant, 2015 International Building Code and Commentary Vol. 1

EXHIBIT G.

PWSA Water and Sewer Use Approval

April 14, 2021

Shannon McCullough
Gateway Engineers, Inc
100 McMorris Road
Pittsburgh, Pa 15205

Subject: Water and Sewer (W&S) Use Approval
Project Name: 635 Smithfield Street (Project)
PWSA Project No.: 20014.43

Dear Ms. McCullough:

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>	14,530	14,530	-
<i>Existing Flow</i>	4,750	4,750	-
<i>Net Flow</i>	9,780	9,780	

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 x 8898 or ddietrich@pgh2o.com.

Sincerely,

Daniel Dietrich
Associate Project Manager

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)



Water and Sewer (W/S) Use Application Form

Instructions The complete W/S Use Application shall be uploaded via e-builder. To obtain an e-builder project folder, please make a request on our website at www.pgh2o.com/permits. In addition, please refer to the Developer’s Manual for detailed information on application requirements.

- Requirements**
- Application Fee Application Form Narrative
- Flow Calculations Site Plan Floor Plan

Project Info

Project Name: _____

Address: _____

Is the Project located on a lot created prior to May 15, 1972? YES NO

Owner/Developer

Name: _____

Address: _____

Email: _____

Phone Number: _____

Consultant

Firm Name: _____

Address: _____

Contact Name: _____

Email: _____

Phone Number: _____

Flow Data

Type of Flow	Sanitary, gpd	Water, gpd	Storm, cfs
Project Flow			
Existing Flow			
Net Flow			Not Required

Signature

By signing below, I hereby certify, to the best of my knowledge, that the information provided within the Water and Sewer Use Application is true, complete and accurate.

Name, printed: _____

Signature: *Shannon J. McCullough* _____

Date: _____

635 Smithfield MLCS Map



EXHIBIT H.

PWSA Tap Allocation Letter

April 14, 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:	635 Smithfield Street
Project Address:	635 Smithfield Street Pittsburgh, Pa 15222
Net Flow, gpd:	9780
EDU's, 400gpd/EDU:	24.45

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 x 8898 or ddietrich@pgh2o.com.

Sincerely,

Daniel Dietrich
Associate Project Manager

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

EXHIBIT I.

Existing Sewer Flow Calculations

635 Smithfield Street		
Sewage Capacity Calculations		
Pipe Diameter (per Flow Monitoring Report) =	18	in
Upstream Invert Elevation (per 3RWW Sewer Atlas) =	732.84	
Downstream Invert Elevation (per 3RWW Sewer Atlas) =	732.18	
Pipe Length (per 3RWW Sewer Atlas) =	126.57	ft
Slope =	0.52	%
Mannings n =	0.015	(VCP)
Design Capacity		
Sewer Type (Combined/Separate)	Combined	
Peaking Factor	3.5	
Peak Hydraulic Capacity (Using Mannings Equation full-flow)	6.563	cfs
	4,241,778	GPD
Average Hydraulic Capacity (Peak Capacity divided by Peaking Factor)	1,211,937	GPD
Present Flows - MH002A18		
Present Average Flows (Flow data, refer to "Peak Flow" spreadsheet)	0	MGD
	-	GPD
Present Peak Flows (Flow data, refer to "Peak Flow" spreadsheet)	0	MGD
	-	GPD
Project Flow		
Project Flow	14,530	GPD
Projected Flows		
Projected Peak [(Present Peak Flow + Project Flow) x 1.05]	15,257	*GPD
Projected Average (Projected Peak Flow divided by Peaking Factor)	4,359	*GPD

*Projected Flows are less than the Design Capacity

Input
 Output

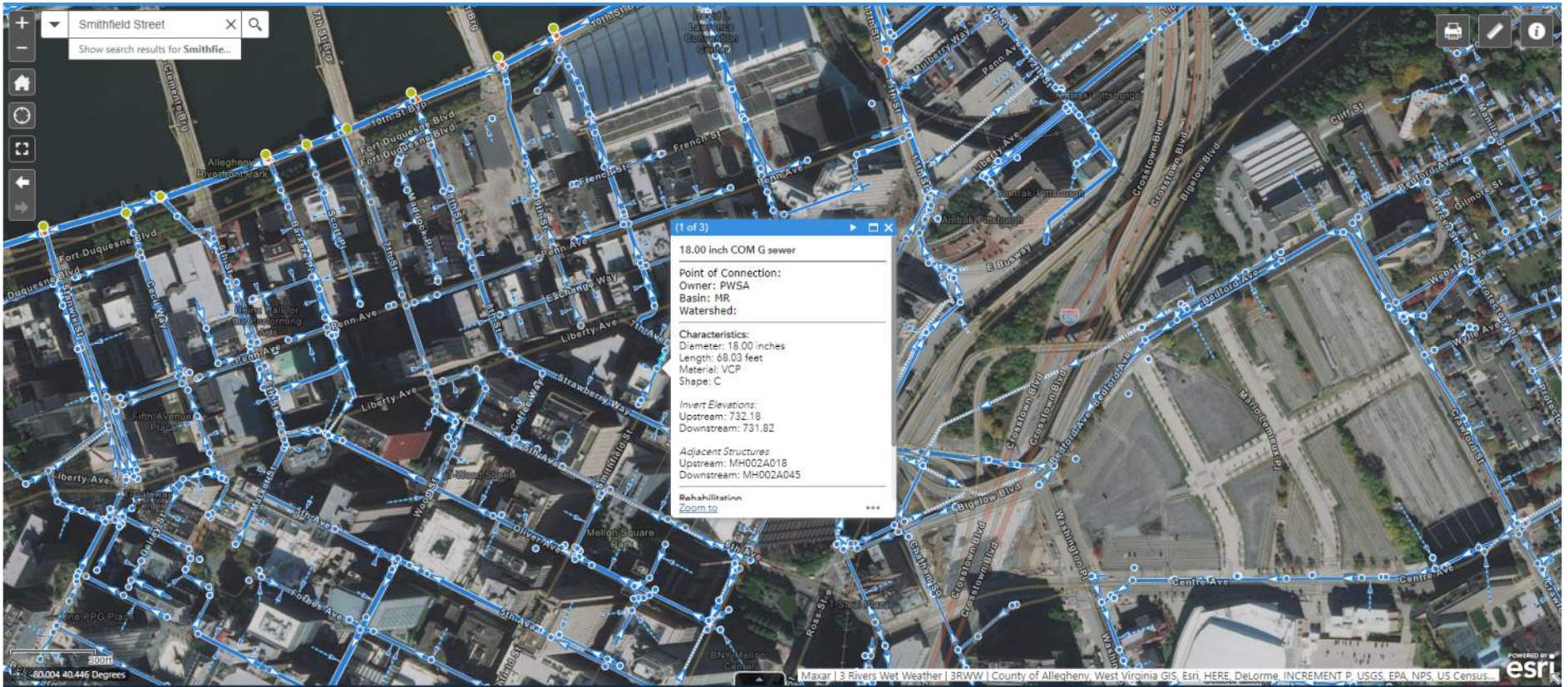


ATTACHMENT 1 – SEWER DATA

Sewer Mapping

635 Smithfield Street

635 Smithfield Street, 6th Ward, City of Pittsburgh



Source: 3RWW Sewer Atlas

ATTACHMENT 2 – CAPACITY CALCULATIONS

Channel Report

Sewer Design Capacity - MH002A18

Circular

Diameter (ft) = 1.50

Invert Elev (ft) = 732.84

Slope (%) = 0.52

N-Value = 0.015

Calculations

Compute by: Known Depth

Known Depth (ft) = 1.50 ← FULL FLOW

Highlighted

Depth (ft) = 1.50

Q (cfs) = 6.563

Area (sqft) = 1.77

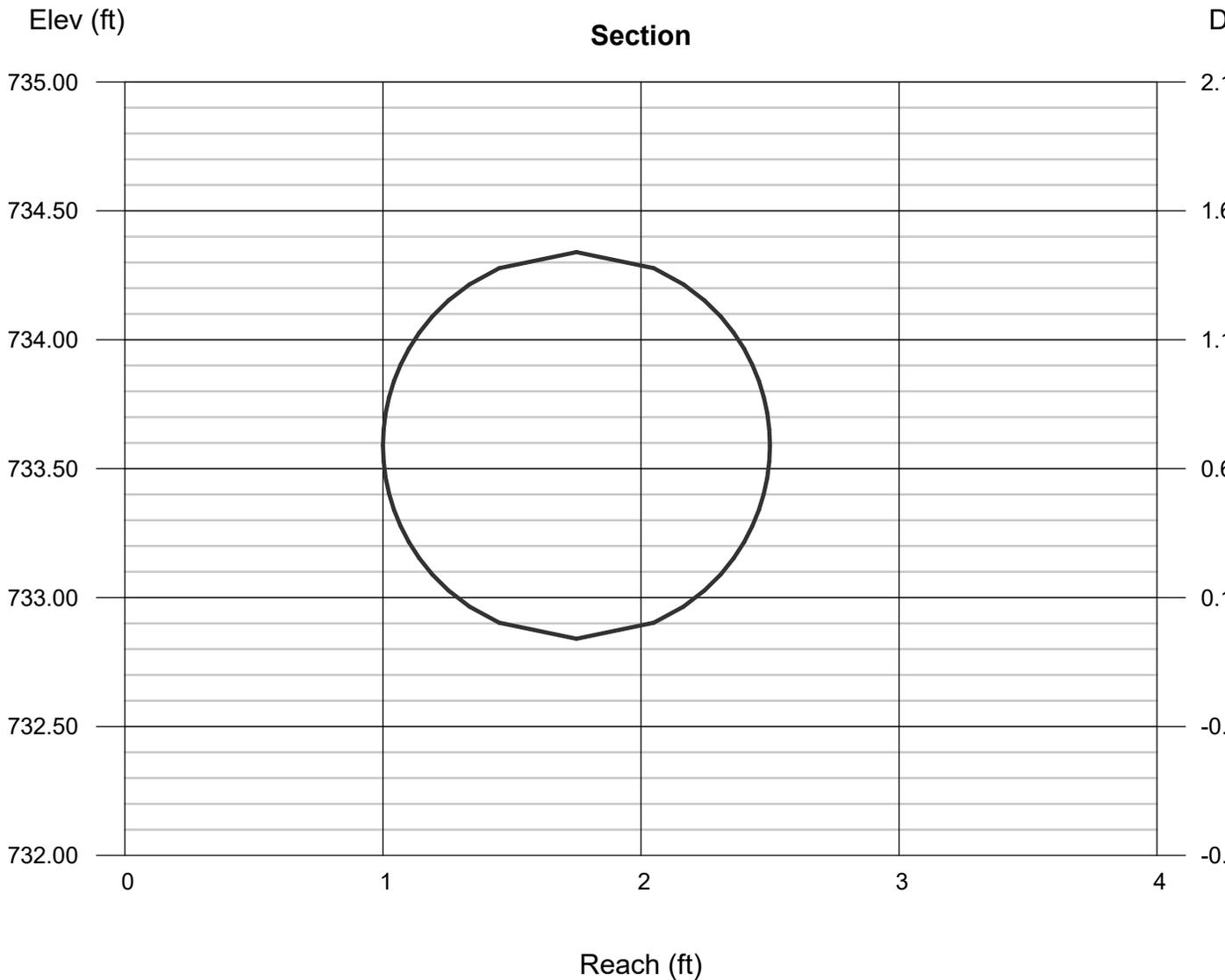
Velocity (ft/s) = 3.71

Wetted Perim (ft) = 4.71

Crit Depth, Yc (ft) = 0.99

Top Width (ft) = 0.00

EGL (ft) = 1.71



July 12, 2021

Shannon L McCullough
The Gateway Engineers, Inc
100 McMorris Road
Pittsburgh, PA 15205

Subject: Sewage Facilities Planning Module (SFPM)
Approval for Collection System Flows
Project Name: 635 Smithfield (Project)
PWSA Project No.: 20014.43

Dear Ms. McCullough:

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 x8898 or ddietrich@pgh2o.com.

Sincerely,



Daniel Dietrich
Associate Project Manager

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)

To: Barry King, P.E. - Director of Engineering and Construction

From: Dan Dietrich

Date: June 22,2021

Subject: Department of Environmental Protection (DEP) - Sewage Facilities
Planning Module (SFPM)

Chapter 94 Consistency Determination

Project Name: 635 Smithfield (Project)

Project Address: 635 Smithfield Street, Pittsburgh, PA 15223

PWSA Project Number: 20014.43

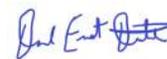
Dear Barry,

The Pittsburgh Water and Sewer Authority (PWSA) received a SFPM application for the aforementioned Project. In accordance with Title 25 of the Pennsylvania Code, the PWSA is required to prepare an annual Wasteload Management Report on the collection and conveyance of wastewater relative to available capacity. Our review of the SFPM was conducted to understand how the Project will impact available dry-weather capacity and whether the proposed flows will contribute to a dry-weather hydraulic overload within the next five (5) years. Please note that a dry-weather hydraulic overload shall require both the denial of the SFPM and the submission of a Corrective Action Plan to the DEP.

We have determined that the Project will not contribute to a dry-weather hydraulic overload within the next five years. Please refer to the enclosed hydraulic calculations for additional information. Upon your approval, please sign and return the enclosed "Section J - Chapter 94 Consistency Determination" page from 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.

Yours truly,



Daniel E Dietrich
Associate Project Manager

Enclosures

cc: Robert Herring, P.E. - PWSA
e-Builder – Filing System

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

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

1. Project Flows 9780 gpd
2. Total Sewage Flows to Facilities (pathway from point of origin through treatment plant)

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

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

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

	a. Design and/or Permitted Capacity (gpd)		b. Present Flows (gpd)		c. Projected Flows in 5 years (gpd) (2 years for P.S.)	
	Average	Peak	Average	Peak	Average	Peak
Collection	1211937	4241778	0	0	4359	15257
Conveyance						
Treatment						

3. Collection and Conveyance Facilities

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

YES NO

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

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

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

b. Collection System

Name of Agency, Authority, Municipality PWSA

Name of Responsible Agent Barry King, PE, PMP

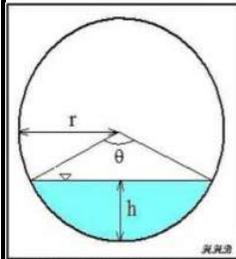
Agent Signature  Date 7/12/2021

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

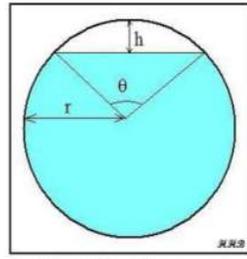
PROJECT NAME: 635 Smithfield Street
 PWSA PROJECT NUMBER: 20014.43
 PWSA REVIEWER: Dan Dietrich
 DATE: June 15, 2021

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 ³	Volumetric flowrate
n	Unitless	Manning Roughness Coeff.
A	ft ²	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 _p	14,530	gpd

Variable	Value	Units
Material	VCP	
n	0.015	unitless
S	0.005	ft/ft
h	0.000	ft
D	1.50	ft
P.F.	3.5	unitless

Section C: Calculations for Design and/or Permitted Capacities

Variable	Description	Definition
Q _{d, avg}	Design Capacity, Average	= full pipe flow conditions / peaking factor
Q _{d, peak}	Design Capacity, Peak	full pipe flow conditions

Design Capacity, Average		
Variable	Value	Unit
Q _{d, avg}	1,226,009	gpd

Design Capacity, Peak		
Variable	Value	Unit
D	1.500	ft
r	0.750	ft
A	1.767	ft ²
P	4.712	ft
R	0.375	ft
Q _{d, peak}	7	cfs
Q _{d, peak}	4,291,030	gpd

Section D: Calculations for Present Flows

Variable	Description	Definition
Q _{ex, avg}	Present Flows, Average	= Q _{ex, peak} / P.F.
Q _{ex, peak}	Present Flows, Peak	existing flow conditions per site investigations

Present Flows, Average		
Variable	Value	Unit
Q _{ex, avg}	0	gpd

Present Flows, Peak		
Variable	Value	Unit
D	1.500	ft
r	0.750	ft
θ	0.03	rad
h/D	6.66667E-05	ft/ft
A	0.00	ft ²
P	0.02	ft
R	0.000	ft
Q _{ex, peak}	0	cfs
Q _{ex, peak}	0	gpd

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

Variable	Description	Definition
Q _{proj, avg}	Projected Flows in Five (5) Years, Average	= Q _{proj, peak} ÷ P.F.
Q _{proj, peak}	Projected Flows in Five (5) Years, Peak	= (Q _{ex, peak} + Q _p) x 1.05

Projected Flow Calculations		
Variable	Value	Unit
Q _{proj, avg}	4,359	gpd
Q _{proj, peak}	15,257	gpd

Section F: Compare Results with Applicant's Submission

Variable	PWSA, gpd	Applicant, gpd	Difference, gpd	Difference, %
Q _{d, avg}	1,226,009	1,211,937	14,072	1%
Q _{d, peak}	4,291,030	4,241,778	49,252	1%
Q _{ex, avg}	0	0	0	0%
Q _{ex, peak}	0	0	0	0%
Q _{proj, avg}	4,359	4,359	0	0%
Q _{proj, peak}	15,257	15,257	0	0%

EXHIBIT J.

Alternatives Analysis

Alternatives Analysis

635 Smithfield Street Renovations 635 Smithfield Street, 6th Ward, City of Pittsburgh

The proposed short-term and long-term ultimate method of sanitary sewage conveyance and treatment of the total 9,780 GPD or 25 EDU peak flow from the existing building will involve the use of adequately design storm and sanitary sewer laterals, owned and maintained by the property owner, connecting into the PWSA owned 18" combination gravity sewer system located in Smithfield Street. This public sewer connects into ALCOSAN's Allegheny River Interceptor (A-12) and sewage flows via gravity to the ALCOSAN Treatment Plant at Woods Run.

The project site is surrounded by commercial buildings. All 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. There are no feasible sewage facilities alternatives because access to the public sewer system is available and the existing building occupies majority of the property.

EXHIBIT K.

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



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

DEP Code #:

**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
635 Smithfield Street

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

1. Date plan received by municipal planning agency July 29, 2021
2. Date review completed by agency July 29, 2021

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?
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?
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?
If yes, describe impacts _____ |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 6. Will any known historical or archaeological resources be impacted by this project?
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?
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?
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? If no, describe the inconsistencies _____
<input checked="" type="checkbox"/>	<input type="checkbox"/>	14. Is this plan consistent with the municipal Official Sewage Facilities Plan? 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? 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? If no, describe the inconsistencies _____
17. Name, title and signature of planning agency staff member completing this section: Name: <u>Martina Wolf Battistone</u> Title: <u>Principal Environmental Planner</u> Signature: <u><i>Martina Wolf Battistone</i></u> Date: <u>July 29, 2021</u> Name of Municipal Planning Agency: <u>City of Pittsburgh Department of City Planning</u> Address <u>200 Ross Street 4th Floor Pittsburgh, PA 15219</u> Telephone Number: <u>(412) 255-2516</u>		

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 L.

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



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

635 Smithfield Street Renovations

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

1. Date plan received by county or joint county health department July 27, 2021Agency name Allegheny County Health Department (ACHD)2. Date review completed by agency July 28, 2021

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 FieldsTitle: Environmental Health Engineer IIISignature: *Freddie Fields*Date: July 28, 2021Name of County Health Department: ACHDAddress: 3901 Penn Avenue, Building #5, Pittsburgh, PA 15224-1318Telephone 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.



INSTRUCTIONS FOR COMPLETING COMPONENT 4C COUNTY OR JOINT HEALTH DEPARTMENT 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

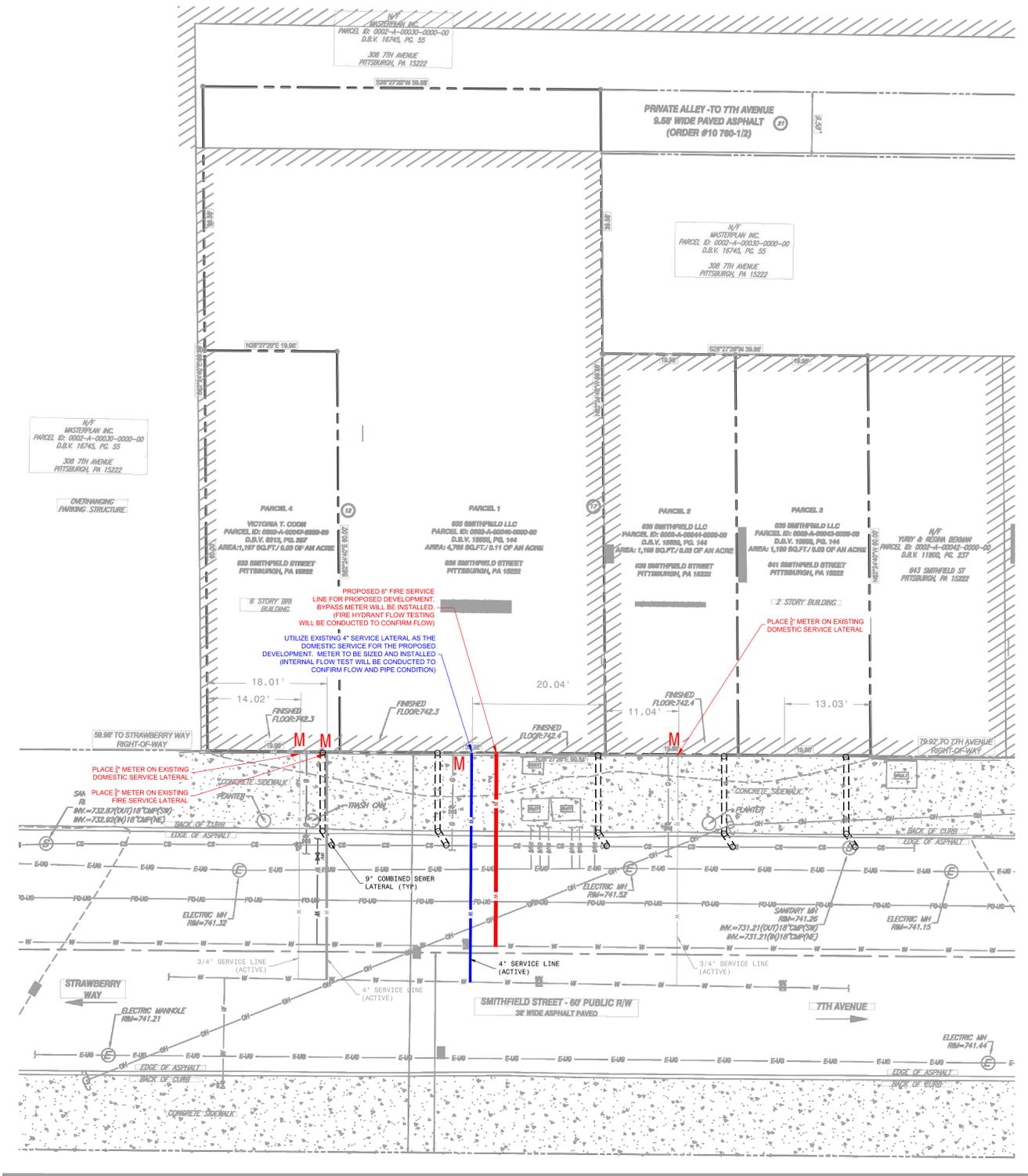
1. Answer the yes/no questions and provide any descriptive information necessary on the lines provided. Attach additional sheets, if necessary.
2. Complete the name, title, and signature block.

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.

EXHIBIT M.

Plot Plan



UTILITY LEGEND

	EXISTING WATERLINE TO BE REUSED
	EXISTING COMBINED SEWER LATERAL TO BE REUSED
	SUBJECT PROPERTY
	PROPERTY ADDOWNER
	ROAD CENTERLINE
	ROAD LEGAL R/W
	MAJOR CONTOUR
	MINOR CONTOUR
	UNDERGROUND ELECTRIC
	ELECTRIC MANHOLE
	ELECTRIC VAULT
	GAS VALVE
	UNDERGROUND FIBER OPTIC
	OVERHEAD LINES
	UTILITY POLE
	SAN-STW COMBO UTILITY
	SANITARY MANHOLE
	WATER UTILITY
	WATER METER
	WATER VALVE
	UNKNOWN MANHOLE
	UNKNOWN VALVE
	UNKNOWN VAULT
	CONCRETE AREA

UTILITY PLAN NOTES:

- THE CONTRACTOR SHALL COMPLY AT ALL TIMES WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, PROVISIONS, AND POLICIES GOVERNING SAFETY AND HEALTH, INCLUDING THE FEDERAL CONSTRUCTION SAFETY ACT (PUBLIC LAW 91-504), FEDERAL REGISTER, CHAPTER XVII, PART 1926 OF TITLE 29 REGULATIONS, OCCUPATIONAL SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION, AND SUBSEQUENT PUBLICATIONS UPDATING THESE REGULATIONS.
- 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 TO MEAN THE CONTRACTOR HAS REVIEWED THE SITE AND IS FAMILIAR WITH CONDITIONS AND CONSTRAINTS OF THE SITE.
- 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 811. 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.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BID AND PERFORM ALL UTILITY WORK IN COMPLIANCE TO APPLICABLE LOCAL AND STATE CODES AND REGULATIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR FEES ASSOCIATED WITH THE INSTALLATION, INSPECTING, TESTING AND FINAL ACCEPTANCE OF PROPOSED UTILITIES CONSTRUCTION.
- 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.
- 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.
- THERE SHALL BE NO CONSTRUCTION OF ELECTRIC TRANSFORMERS, TELEPHONE OR CABLE JUNCTION BOXES, GAS METERS OR SIMILAR DEVICES PLACED OVER ANY OTHER UNDERGROUND UTILITY.
- CONTRACTOR TO PROVIDE SHOP DRAWINGS ON ALL STORM SEWER MANHOLES AND INLETS.
- AN AS-BUILT DRAWING OF NEW UTILITY SERVICES SHALL BE PREPARED BY THE CONTRACTOR AND SUBMITTED TO THE OWNER UPON COMPLETION OF THE PROJECT.
- 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.
- THE CONTRACTOR SHALL ASSURE THAT THERE IS POSITIVE DRAINAGE TO THE EXISTING INLETS UPON PLACEMENT OF NEW PAVEMENT.
- CONTRACTOR TO COORDINATE WITH THE BUILDING PLUMBING AND SITE ELECTRICAL PLANS TO ASSURE ACCURACY OF THE UTILITY CONNECTIONS TO THE BUILDING.
- CONDUIT LOCATIONS TO SITE LIGHT POLES TO BE COORDINATED WITH THE SITE ELECTRICAL PLAN.
- 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.
- THE ROOF COLLECTOR SYSTEM SHALL BE TRAPPED PRIOR TO CONNECTING TO THE SITE STORM SEWER SYSTEM.
- THE WATERLINE SHALL HAVE A MINIMUM OF 48" OF COVER AND BE AT LEAST 1 FOOT ABOVE THE SANITARY SEWER IF WITHIN 10 FEET OF THE HORIZONTAL DISTANCE OF THE SEWER.
- THE EXISTING CONDITIONS SURVEY HAS BEEN PROVIDED BY OTHER. THE CONTRACTOR IS TO CONFIRM SITE CONDITIONS PRIOR TO CONSTRUCTION.

REVISION RECORD

No.	Date	Description
01		
02		
03		
04		
05		
06		
07		
08		

635 SMITHFIELD STREET
 635 SMITHFIELD STREET
 PITTSBURGH, PA 15222
 PREPARED FOR:
BOST DEVELOPMENT
 112 HETHERTON DRIVE
 PITTSBURGH, PA 15237

UTILITY PLAN
 Project Number: C-41136-0000
 Drawing Scale: 1" = 10'
 Date Issued: MARCH 2021
 Index Number: _____
 Drawn By: SLM
 Checked By: JMG
 Project Manager: JMG
C300

