
DEP Code No.: TBD

SEWAGE FACILITIES PLANNING MODULE

for

**3500 FORBES AVENUE
Pittsburgh, PA 15213**

Prepared For:

**CA Ventures
130 East Randolph Street
Chicago, IL 60601**

Prepared By:

**Langan Engineering and Environmental Services, Inc.
2400 Ansys Drive, Suite 403
Canonsburg, Pennsylvania 15317**

LANGAN

**January 2021
250084602**

TABLE OF CONTENTS

APPENDIX	DESCRIPTION
A	Transmittal Letter and Correspondence
B	Resolution for Plan Revision for New Land Development
C	Component 3, Narrative Description of Project, Supporting Documentation
D	Alternative Sewage Facilities Analysis
E	Public Notice
F	USGS Map and Plot Plans
G	Cultural Resource Notice
H	PNDI Search Results
I	Component 4A
J	Component 4C
K	Completeness Checklist

APPENDIX A

Transmittal Letter and Correspondence



TRANSMITTAL LETTER FOR SEWAGE FACILITIES PLANNING MODULE

DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) USE ONLY				
DEP CODE #	CLIENT ID #	SITE ID #	APS ID #	AUTH. ID #

TO: Approving Agency (DEP or delegated local agency)
PA DEP Southwest Regional Office
400 Waterfront Drive
Pittsburgh, PA 15222-4745

Date _____

Dear Sir/Madam:

Attached please find a completed sewage facilities planning module prepared by _____
(Name)

Langan Engineering and Environmental Services, Inc. _____ for 3500 Forbes Avenue
(Title) (Name)

a subdivision, commercial, or industrial facility located in the City of Pittsburgh _____

Allegheny _____ County.
(City, Borough, Township)

Check one

- ☒ (i) The planning module, as prepared and submitted by the applicant, is approved by the municipality as a proposed ☒ revision ☐ supplement for new land development to its Official Sewage Facilities Plan (Official Plan), and is ☒ adopted for submission to DEP ☐ transmitted to the delegated LA for approval in accordance with the requirements of 25 Pa. Code Chapter 71 and the *Pennsylvania Sewage Facilities Act* (35 P.S. §750),

OR

- ☐ (ii) The planning module will not be approved by the municipality as a proposed revision or supplement for new land development to its Official Plan because the project described therein is unacceptable for the reason(s) checked below:

Check Boxes

- ☐ Additional studies are being performed by or on behalf of this municipality which may have an effect on the planning module as prepared and submitted by the applicant. Attached hereto is the scope of services to be performed and the time schedule for completion of said studies.
- ☐ The planning module as submitted by the applicant fails to meet limitations imposed by other laws or ordinances, officially adopted comprehensive plans and/or environmental plans (e.g., zoning, land use, 25 Pa. Code Chapter 71). Specific reference or applicable segments of such laws or plans are attached hereto.
- ☐ Other (attach additional sheet giving specifics).

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

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

Municipal Secretary (print)

Signature

Date

CORRESPONDENCE

COUNTY OF



ALLEGHENY

February 26, 2021

Rachel McCune
Langan Engineering and Environmental Services, Inc.
2400 Ansys Drive, Suite 403
Canonsburg, PA 15317

**RE: SEWAGE FACILITIES PLANNING MODULE; ALLEGHENY COUNTY
3500 Forbes Avenue, City of Pittsburgh**

Dear Ms. McCune:

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 February 24, 2021. The project proposes the following:

Project Description:	3500 Forbes Avenue. Proposing to redevelop approximately 1.51 acres on Parcels 28-F-322, 28-F-330, 28-F-360, 28-F-354, and 28-F-356 to construct an 398,500 gross square foot multi-story residential building (replace the existing gas station) to mainly serve as housing for University of Pittsburgh students and will include impervious pedestrian walkways, a service driveway, parking garage access, tree pits, landscaping, stormwater management facilities, and associated site features located in the City of Pittsburgh, Allegheny County
Sewage Flow:	81,465 GPD
Conveyance:	The flow from this site will be conveyed to the Pittsburgh Water and Sewer Authority (PWSA) collection system to ALCOSAN POC M-19W 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



DEBRA BOGEN, MD, 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



sewers, which will not be owned and operated by a municipality or a sewer authority. 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 Ivo Miller, Plumbing Program Manager at 412-578-8393.

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 blue ink that reads "Freddie Fields". The signature is written in a cursive, flowing style.

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)
Ivo Miller, ACHD w/attachment (electronically)

Rachel McCune

From: Battistone, Martina <martina.battistone@pittsburghpa.gov>
Sent: Tuesday, March 9, 2021 2:51 PM
To: Rachel McCune
Cc: Paul Ceriani
Subject: Re: SFPM 3500 Forbes Avenue
Attachments: 3500 Forbes Ave. Comp. 4A.pdf

Great, thanks!
Please see attached for the completed Component 4A.

Best,
Marti

From: Rachel McCune <rmccune@langan.com>
Date: Tuesday, March 9, 2021 at 7:52 AM
To: Martina Wolf <martina.battistone@pittsburghpa.gov>
Cc: Paul Ceriani <pceriani@Langan.com>
Subject: RE: SFPM 3500 Forbes Avenue

Morning Marti!

Here is a new link and I also attached the 4A component.
<https://clients.langan.com/Sharing/filessharing/ViewPosted?transactionHash=1697428820>

Let me know if there is anything additional you need from us for this!

Thanks!
Rachel

Rachel McCune
Senior Staff Engineer

LANGAN

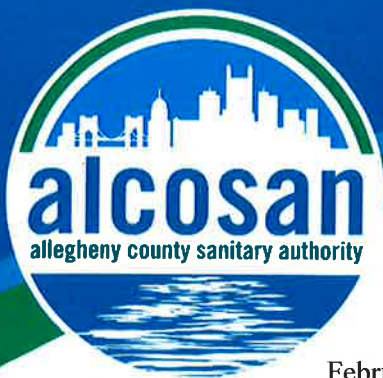
Direct: 724.514.5145
Mobile: 724.972.3781
[File Sharing Link](#)
www.langan.com

PENNSYLVANIA NEW JERSEY NEW YORK CONNECTICUT MASSACHUSETTS WASHINGTON, DC
VIRGINIA OHIO FLORIDA TEXAS ARIZONA COLORADO WASHINGTON CALIFORNIA
ATHENS CALGARY DUBAI LONDON PANAMA

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From: Battistone, Martina <martina.battistone@pittsburghpa.gov>
Sent: Monday, March 8, 2021 6:27 PM



February 9, 2021

Paul Ceriani, P.E.
Langan Engineering & Environmental Services, Inc.
2400 Ansys Drive, Suite 403
Canonsburg, PA 15317

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Chair Person

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Communications*

**Re: 3500 Forbes Ave
3500 Forbes Avenue, Pittsburgh, PA 15213
PA DEP Sewage Facilities Planning Module
ALCOSAN Regulator Structure M-19W-00**

Dear Mr. Ceriani:

We have reviewed the Component 3 Planning Module for the referenced project to be located in the City of Pittsburgh, 4th Ward. The project will generate a peak flow of 81,465 GPD in the ALCOSAN Monongahela River Interceptor and Woods Run Treatment Plant.

The capacity of the ALCOSAN M-19W-00 Diversion Structure is approximately 2.83 MGD. The peak dry weather flow is approximately 1.61 MGD. Sufficient 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 the tributary communities during wet weather periods. This limitation will be addressed as ALCOSAN implements its Clean Water Plan.

ALCOSAN has completed and signed the sections required in the Component 3 module and requests that this letter be made part of the planning module submission. If you have any questions regarding this matter, please contact me at 412-732-8046.

Sincerely,

ALLEGHENY COUNTY SANITARY AUTHORITY

Joseph A. Sparbanie, P.E.
Civil Engineer

Attachment

cc: T. Dean (w/o attachment) B. King/ PWSA (w/o attachment)
D. Thornton (w/o attachment) T. Flanagan/ PaDEP (w/o attachment)
M. Lichte (w/o attachment) F. Fields/ ACHD (w/o attachment)

2400 Ansys Drive, Suite 403 Canonsburg, PA 15317 T: 724.514.5100 F: 724.514.5101

To:

ATTN: Jillian Sanchioli
Administrative Secretary – Regional
Conveyance

Allegheny County Sanitary Authority
3300 Preble Avenue
Pittsburgh, PA 15233

Phone No:

412-732-8052

Date:

January 28, 2021

Project No.

250084602

Re:

3500 Forbes Avenue
Sewage Facilities Planning
Module

Via:

- ☐ Fed Ex: ☐ Priority ☐ Standard ☐ 2-Day
☐ UPS: ☐ Priority ☐ Standard ☐ 2-Day
☐ 1st Class Mail ☒ Hand Delivery ☐ Eastern Delivery (Inter-Office)

Items:

- ☐ Prints ☐ Letter ☐ Other
☐ Sepia ☐ Drawings ☐ Reports
☒ Other **Sewage Facilities Planning Module**

Copies:**Dwg. No.:****Description:**

1

Sewage Facilities Planning Module for 3500 Forbes Avenue
(dated January 2021)

RECEIVED
1/28/21

- ☐ For Your Information ☐ For Your Use ☐ As Requested By:
☒ For Review and Comment ☒ For Approval ☐ Other:

Remarks:

Please find enclosed the Sewage Facilities Planning Module for the 3500 Forbes Avenue project to be reviewed and approved by ALOCSAN. We ask that you please review the module and complete Component 3 in Appendix C of the module, and return to my attention when complete. If you have any questions or comments, please feel free to contact me at 724-514-5167, or email me at pceriani@langan.com.

Copies To:**From:**

Paul J. Ceriani

Paul Ceriani, PE
Senior Project Manager



PITTSBURGH WATER AND SEWER AUTHORITY

WATER AND SEWER AVAILABILITY LETTER REQUEST FORM

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.

Information to be submitted by the Applicant:			
Property Owner Name:	CA Ventures		
Address of Property:	3500 Forbes Avenue, Pittsburgh PA 15213		
Proposed Use of Site:	Residential		
Closest street intersection to the property:	Forbes Avenue & McKee Place		
Requestor Name:	Paul Ceriani	Date of Request:	02/21/2020
Requestor Address:	2400 Ansys Drive, Suite 403 Canonsburg, PA 15317-9540		
Requestor Phone Number:	724.514.5167		

Please submit the completed form to:

Pittsburgh Water and Sewer Authority
Engineering and Construction Division
1200 Penn Avenue
Pittsburgh, PA 15222
Attn: Ms. Michelle Carney (mcarney@pgh2o.com)

PWSA Use Only:	
PWSA Water Service Available:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
PWSA Sewer Service Available:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Applicant must contact separate agency for water service:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Name of separate agency:	
PWSA Approval Authority:	Signature and Date: <u>[Signature]</u> <u>3-2-2020</u>
	Name (printed): <u>Wendy M. Dean</u>
	Title: <u>Engineering Tech II</u>

Handwritten notes: 4" McKee Pl., 6" Forbes Ave, 8" Sample St., 36" McKee Pl, 24" Forbes Ave, 8" Sample St.

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.



Pittsburgh
Water & Sewer
Authority

March 2, 2020

Paul Ceriani
2400 Ansys Drive, Suite 403
Canonsburg, PA 15317

RE: Water and Sewer Availability
3500 Forbes Avenue

Dear Mr. Ceriani:

In response to your inquiry on 2/21/2020 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 (PSWA) 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.

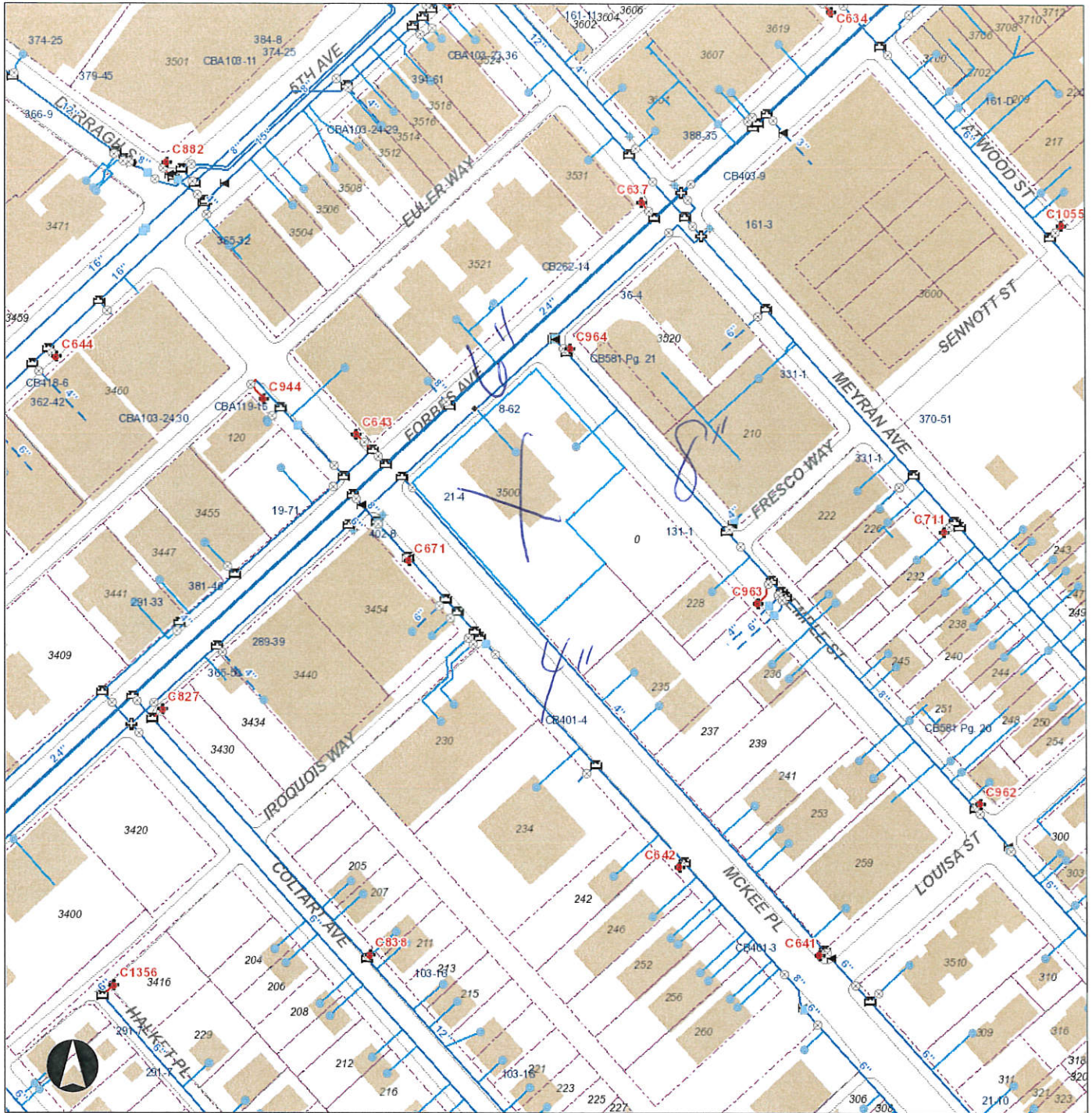
Sincerely,

A handwritten signature in blue ink, appearing to read 'Wendy M. Dean'.

Wendy M. Dean
Engineering Tech II

cc: PWSA File

3500 Forbes Avenue - Water



Legend

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

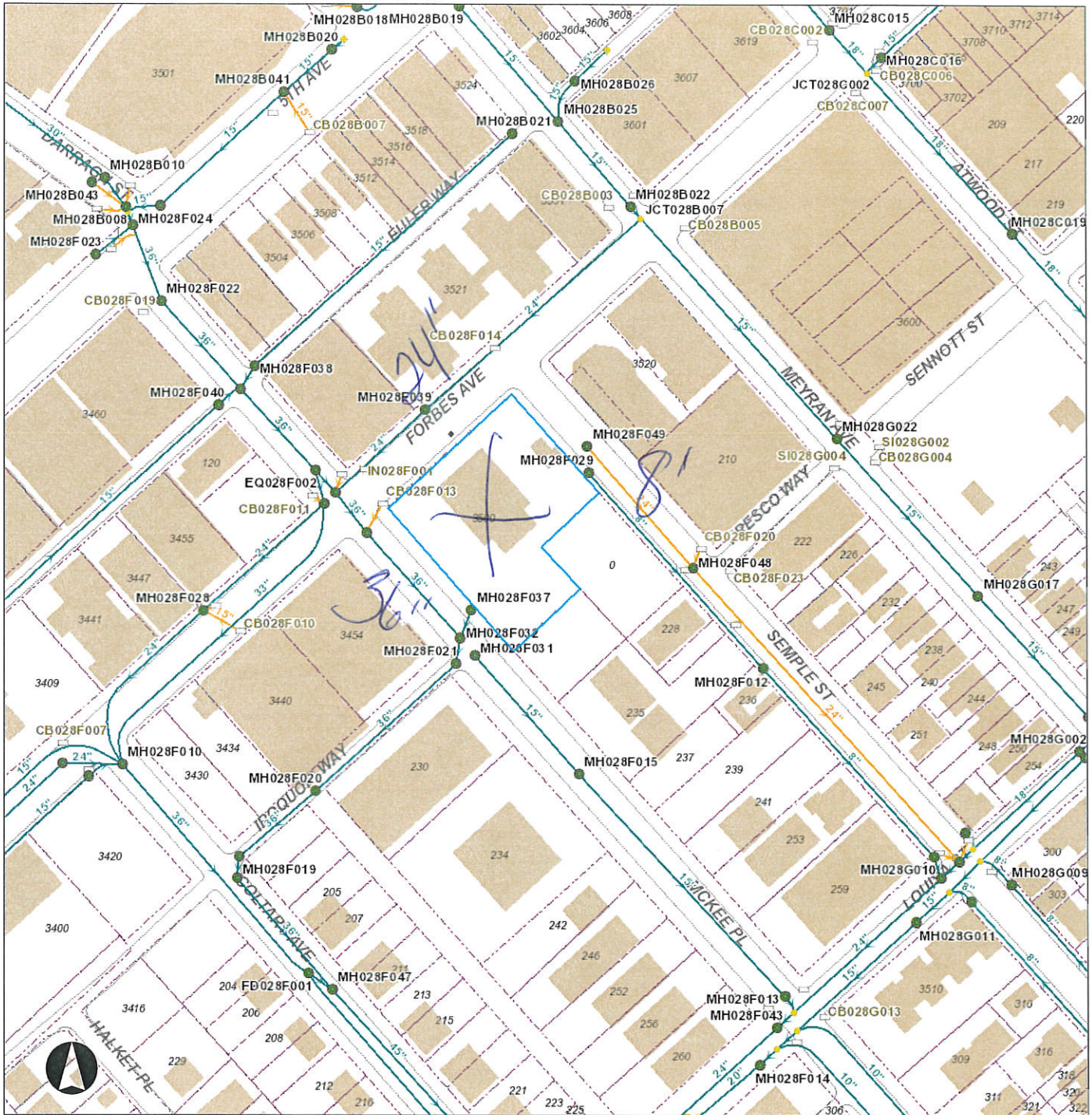
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Neither the City of Pittsburgh nor the PWSA guarantees the accuracy of any of the information hereby made available, including but not limited to information concerning the location and condition of underground structures, and neither assumes any responsibility 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: 2/27/2020

3500 Forbes Avenue - Sewer



Legend

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

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Date: 2/27/2020



Hydrant Permit – Form HYD

Permit Number: #20-0223
(PWSA Use Only)

To be completed by Applicant:

1. Property Owner's Name CA Ventures
Customer's Name (if different) Paul Ceriani, P.E., Langan Engineering & Environmental Services, Inc.
Lateral/Service Address 3500 Forbes Avenue
City Pittsburgh State PA Zip 15213
Contact Mailing Address (if different) 2400 Ansys Drive, Suite 403
City Canonsburg State PA Zip 15317
Contact Phone Number (724) 514-5167
Contact Email pceriani@langan.com

2. Allegheny County Block and Lot No(s). 28-F-322, 28-F-330, 28-F-360, 28-F-354, and 28-F-356 (to be consolidated) Ward No. 4

3. Nature of Development: Residential ☐ Multi-Unit ☒ Commercial ☐ Institutional ☐

4. Type of Permit (check one):

HYDRANT FLOW TEST ☒ HYDRANT WITH METER ☐

5. If requesting a hydrant flow test, please provide the street name of the tap location

Sample Street - 8 inch main

Applicant has read and understands the general requirements on Page 3.

False Swearing Statement

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

Paul J. Ceriani

Property Owner's Signature

7/9/2020

Date



Hydrant Permit – Form HYD

Permit Number: # 20-0223
(PWSA Use Only)

1. ☒ HYDRANT FLOW TEST: \$500

NOTE: PWSA DOES NOT PROVIDE GAUGES, MUST USE YOUR OWN

Date Requested: Pending Time Requested: _____ AM / PM

PWSA will determine the applicable flow hydrant and residual hydrant for testing.

	FLOW HYDRANT	PRESSURE HYDRANT
Hydrant Number:	C963	C964
Location:	Fresco Way & Semple St	Forbes Ave & Semple St
Static Pressure (psi)		55 psi
Residual Pressure		23 psi
Flow Observed	800 gpm @ 22 psi	

2. ☐ HYDRANT WITH METER (CONSTRUCTION/TEMPORARY USE): \$500 + meter cost

Date Requested: _____ Time Requested: _____ AM / PM

Fire Hydrant No.: _____ Location: _____

- Meter for hydrant use: ☐ 5/8" or 5/8" x 3/4" \$680.00
☐ 3/4" \$780.00
☐ 1" \$960.00
☐ 2 1/2" meter \$1,039.50

AMOUNT DUE = \$500.00

PAYMENT PRIOR TO WORK: All charges shall be paid prior to performance of the applicable work.

COMPUTATION: Fees shall be computed on the basis of prevailing costs incurred by the PWSA and taking into account wages paid, fringe benefits, overhead and other costs that might accrue. The PWSA shall issue regulations listing such charges and shall update them as necessary.

EFFECTIVE DATE: All standard charges shall become effective on the day they are filed with the PWSA.

Make Check Payable to: **The Pittsburgh Water and Sewer Authority or PWSA**

Payment Received Date: 8-27-2020 Check Number: 54635 Check Amount: \$500.00


PWSA Permit Clerk Signature

8-27-2020
Date



Hydrant Permit – Form HYD

Permit Number:

20-0222

(PWSA Use Only)

To be completed by Applicant:

1. Property Owner's Name CA Ventures
Customer's Name (if different) Paul Ceriani, P.E., Langan Engineering & Environmental Services, Inc.
Lateral/Service Address 3500 Forbes Avenue
City Pittsburgh State PA Zip 15213
Contact Mailing Address (if different) 2400 Ansys Drive, Suite 403
City Canonsburg State PA Zip 15317
Contact Phone Number (724) 514-5167
Contact Email pceriani@langan.com

2. Allegheny County Block and Lot No(s). 28-F-322, 28-F-330, 28-F-360, 28-F-354, and 28-F-356 (to be consolidated) Ward No. 4

3. Nature of Development: Residential ☐ Multi-Unit ☒ Commercial ☐ Institutional ☐

4. Type of Permit (check one):

HYDRANT FLOW TEST ☒ HYDRANT WITH METER ☐

5. If requesting a hydrant flow test, please provide the street name of the tap location

Forbes Ave - 6 inch main

Applicant has read and understands the general requirements on Page 3.

False Swearing Statement

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

Paul J. Ceriani

Property Owner's Signature

7/9/2020

Date



Hydrant Permit – Form HYD

Permit Number: [#] 20-0222

(PWSA Use Only)

1. ☒ HYDRANT FLOW TEST: \$500

NOTE: PWSA DOES NOT PROVIDE GAUGES, MUST USE YOUR OWN

Date Requested: Pending Time Requested: _____ AM / PM

PWSA will determine the applicable flow hydrant and residual hydrant for testing.

	FLOW HYDRANT	PRESSURE HYDRANT
Hydrant Number:	C827	C964
Location:	Forbes Ave & Coltar Ave	Forbes Ave & Semple St
Static Pressure (psi)		58 psi
Residual Pressure		57 psi
Flow Observed	1120 gpm @ 47 psi	

2. ☐ HYDRANT WITH METER (CONSTRUCTION/TEMPORARY USE): \$500 + meter cost

Date Requested: _____ Time Requested: _____ AM / PM

Fire Hydrant No.: _____ Location: _____

Meter for hydrant use: ☐ 5/8" or 5/8" x 3/4" \$680.00
☐ 3/4" \$780.00
☐ 1" \$960.00
☐ 2 1/2" meter \$1,039.50

AMOUNT DUE = \$500.00

PAYMENT PRIOR TO WORK: All charges shall be paid prior to performance of the applicable work.

COMPUTATION: Fees shall be computed on the basis of prevailing costs incurred by the PWSA and taking into account wages paid, fringe benefits, overhead and other costs that might accrue. The PWSA shall issue regulations listing such charges and shall update them as necessary.

EFFECTIVE DATE: All standard charges shall become effective on the day they are filed with the PWSA.

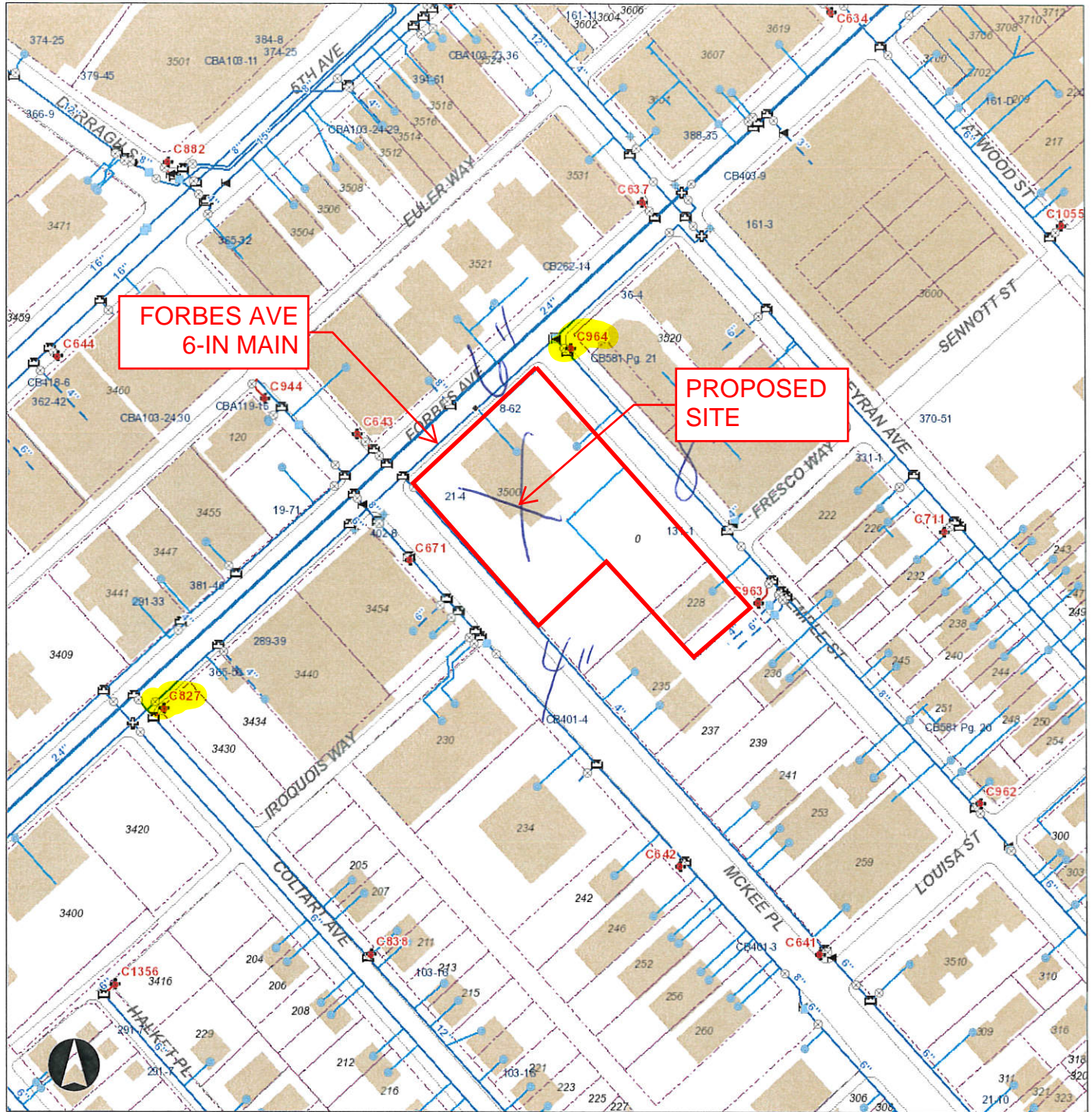
Make Check Payable to: The Pittsburgh Water and Sewer Authority or PWSA

Payment Received Date: 8-27-20 Check Number: 54634 Check Amount: \$500.00


PWSA Permit Clerk Signature

8-27-2020
Date

3500 Forbes Avenue - Water



Legend

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

0 0.02 0.04 mi

PGH₂O

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: 2/27/2020

November 25, 2020

Paul Ceriani, P.E.
Langan Engineering & Environmental Services, Inc.
2400 Ansys Drive, Suite 403
Canonsburg, PA 15317

Subject: Water and Sewer (W/S) Use Approval
Project Name: 3500 Forbes Avenue
PWSA Project No.: 20013.75

Dear Paul:

Pursuant to your request, we have reviewed the W/S Use Application (Application) for the aforementioned Project. This letter shall serve as confirmation that the Application has been approved. Please see below for the approved flows:

Type of Flow	Sanitary, gpd	Water, gpd	Storm, cfs
<i>Project Flow</i>	95,659	89,648	9.64
<i>Existing Flow</i>	14,194	14,194	8.70
<i>Net Flow</i>	81,465	75,454	

Please be advised that the need for sewage planning shall be determined by the Department of Environmental Protection (DEP). After issuance of this letter, the PWSA shall email the Preliminary Determination on the Need for Sewage Planning Letter to the DEP. Typically, the DEP will respond via email with the Final Determination on the Need for Sewage Planning. In the event that sewage planning is required, we have enclosed for your use the location of the most limited capacity sewer.

Our review was based on information provided by the Applicant 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 x5523 or SConnell@pgh2o.com.

Sincerely,



Shannon Connell
Engineering Co-Op

Enclosure(s)

cc: Barry King, P.E. – PWSA (via email)
Kate Mechler, P.E. – PWSA (via email)
Robert Herring, P.E. – 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: 3500 Forbes Ave
Address: 3500 Forbes Avenue
Pittsburgh, PA 15213

Owner/Developer

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

Name: CA Ventures
Address: 130 East Randolph Street, Suite 2100
Chicago, IL 60601

Email: jsugiyama@ca-ventures.com
Phone Number: 312-994-0870

Consultant

Firm Name: Langan Engineering & Environmental Services, Inc.
Address: 2400 Ansys Drive, Suite 403
Canonsburg, PA 15317


Contact Name: Paul Ceriani, P.E.
Email: pceriani@langan.com
Phone Number: 724-514-5167

Flow Data

Type of Flow	Sanitary, gpd	Water, gpd	Storm, cfs
Project Flow	95,659	89,648	9.64
Existing Flow	14,194	14,194	8.70
Net Flow	81,465	75,454	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: Paul Ceriani, P.E.
Signature: 
Date: 11/13/2020

3500 Forbes Avenue



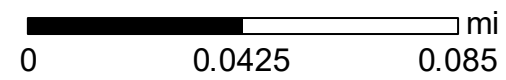
Legend

WATER

- Meter
- Curb Box
- Water System Pump
- Hydrant
- System Valve
- Dividing Pressure Valve
- Coupling
- Tee
- Cross
- Reducer
- End Cap
- Wash Out

- Pressure Monitoring Station
- Water Manhole
- Rising Main
- Supply Main
- Transmission Main
- Distribution Main
- Hydrant Branch
- Private Main
- Water Service Line
- Manhole
- Junction
- Inlet

- 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



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: 10/23/2020

Most Limited Capacity Sewer (MLCS) Spreadsheet

PROJECT NAME: 3500 Forbes Ave
PWSA PROJECT NUMBER: 20013.75
PWSA REVIEWER: Shannon Connell
DATE: October 23, 2020

LEGEND:

Output Data
Input Data
Questionable Data
Hydraulically Limited Sewer

Connection to 15" Sewer

Converging Point

Upstream MH	Downstream MH	Upstream Invert	Downstream Invert	Length, ft	Diam., in.	Material	n	Area, sf	Wetted P, ft	Slope	Flow, gpd
MH028F031	MH028F015	885.00	884.99	155.04	15	VCP	0.015	1.23	3.927	0.01%	291,381
MH028F015	MH028F013	884.99	882.50	315.25	15	VCP	0.015	1.23	3.927	0.79%	3,227,688
MH028F013	JCT028G013	882.50	881.25	18.99	15	VCP	0.015	1.23	3.927	6.58%	9,308,427
JCT028G013	MH028F043	881.25	880.00	23.45	24	VCP	0.015	3.14	6.283	5.33%	29,335,082
MH028F043	MH028K002	880.00	855.00	293.80	24	VCP	0.015	3.14	6.283	8.51%	37,063,619
MH028K002	JCT028K003	857.00	856.00	20.68	24	VCP	0.015	3.14	6.283	4.84%	27,940,132
JCT028K003	JCT028K004	855.99	855.19	6.48	54	Concrete	0.013	15.90	14.137	12.35%	447,777,738
JCT028K004	MH028L018	855.19	851.97	376.83	54	Concrete	0.013	15.90	14.137	0.85%	117,804,046
MH028L018	MH028L020	852.01	844.05	574.39	54	Concrete	0.013	15.90	14.137	1.39%	150,023,090
MH028L020	MH028R014	843.49	839.13	357.20	54	Concrete	0.013	15.90	14.137	1.22%	140,796,717
MH028R014	JCT028R016	839.03	836.94	45.21	42	Brick	0.016	9.62	10.996	4.62%	113,902,262
JCT028R016	MH028P003	836.94	783.09	675.11	39	Concrete	0.013	8.30	10.210	7.98%	151,123,795
MH028P003	JCT028P008	783.04	780.69	38.28	39	Brick	0.016	8.30	10.210	6.14%	107,720,560
JCT028P008	MH029B055	780.69	755.74	309.46	39	Concrete	0.013	8.30	10.210	8.06%	151,935,857
MH029B055	JCT029B004	755.64	746.18	126.26	39	Concrete	0.013	8.30	10.210	7.49%	146,467,053
JCT029B004	MH029B061	746.18	741.07	66.96	39	Concrete	0.013	8.30	10.210	7.63%	147,818,910
MH029B061	MH029B016	738.39	737.09	45.21	39	Concrete	0.013	8.30	10.210	2.88%	90,736,430
MH029B016	ADC029BM19C	737.04	733.30	57.90	39	Concrete	0.013	8.30	10.210	6.46%	135,995,264

Connection to 36" Sewer

Converging point

Upstream MH	Downstream MH	Upstream Invert	Downstream Invert	Length, ft	Diam., in.	Material	n	Area, sf	Wetted P, ft	Slope	Flow, gpd
MH028F034	MH028F033	893.77	892.99	51.77	36	Concrete	0.013	7.07	9.425	1.51%	53,056,248
MH028F033	MH028F032	892.81	891.05	144.84	36	Concrete	0.013	7.07	9.425	1.22%	47,647,530
MH028F032	MH028F021	890.83	890.11	27.00	36	Concrete	0.013	7.07	9.425	2.67%	70,585,043
MH028F021	MH028F020	890.07	887.62	194.71	36	Concrete	0.013	7.07	9.425	1.26%	48,486,097
MH028F020	MH028F018	887.61	881.44	104.03	36	Concrete	0.013	7.07	9.425	5.93%	105,266,843
MH028F018	MH028F019	881.35	879.75	21.66	36	Concrete	0.013	7.07	9.425	7.39%	117,478,686
MH028F019	MH028F047	879.28	862.45	150.97	36	Concrete	0.013	7.07	9.425	11.15%	144,319,510
MH028F047	MH028K001	862.45	856.48	314.99	45	Concrete	0.013	11.04	11.781	1.90%	107,893,132
MH028K001	JCT028K003	856.48	855.99	31.13	54	Concrete	0.013	15.90	14.137	1.57%	159,887,123
JCT028K003	JCT028K004	855.99	855.19	6.48	54	Concrete	0.013	15.90	14.137	12.35%	447,777,738
JCT028K004	MH028L018	855.19	851.97	376.83	54	Concrete	0.013	15.90	14.137	0.85%	117,804,046
MH028L018	MH028L020	852.01	844.05	574.39	54	Concrete	0.013	15.90	14.137	1.39%	150,023,090
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JCT028P008	MH029B055	780.69	755.74	309.46	39	Concrete	0.013	8.30	10.210	8.06%	151,935,857
MH029B055	JCT029B004	755.64	746.18	126.26	39	Concrete	0.013	8.30	10.210	7.49%	146,467,053
JCT029B004	MH029B061	746.18	741.07	66.96	39	Concrete	0.013	8.30	10.210	7.63%	147,818,910
MH029B061	MH029B016	738.39	737.09	45.21	39	Concrete	0.013	8.30	10.210	2.88%	90,736,430
MH029B016	ADC029BM19C	737.04	733.30	57.90	39	Concrete	0.013	8.30	10.210	6.46%	135,995,264

November 25, 2020

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

Subject: Preliminary Determination on the Need for Sewage Planning
Project Name: 3500 Forbes Avenue
PWSA Project No.: 20013.75

Dear Mr. Flanagan:

Please be advised that the Pittsburgh Water and Sewer Authority has approved the Water and Sewer (W/S) Use Application for the aforementioned Project. We have enclosed the W/S Use Approval Letter and the supporting documentation. The approved sanitary flows are summarized below:

Type of Sanitary Flow	Definition	Flow, gpd
Project Flow	Peak daily flow associated with the Project	95,659
Existing Flow	Peak daily flow within the past five years	14,194
Net Flow	= Project Flow – Existing Flow	81,465

Please see below for our Preliminary Determination on the Need for Sewage Planning:

- ☒ Yes, we believe the Project requires sewage planning
☐ No, we believe the Project does not require sewage planning

Based on the foregoing, please provide a Final Determination on the Need for Sewage Planning.

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 x5523 or SConnell@pgh2o.com.

Sincerely,



Shannon Connell
Engineering Co-Op

Enclosure(s)

cc: Barry King, P.E. – PWSA (via email)
Kate Mechler, P.E. – PWSA (via email)
Robert Herring, P.E. – PWSA (via email)
Paul Ceriani, P.E. – Applicant (via email)
eBuilder – Filing System (via email)

November 25, 2020

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:	3500 Forbes Avenue
Project Address:	3500 Forbes Avenue Pittsburgh, PA 15213
Net Flow, gpd:	81,465
EDU's, 400gpd/EDU:	203.66

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 x5523 or SConnell@pgh2o.com.

Sincerely,



Shannon Connell
Engineering Co-Op

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

January 27, 2021

Paul Ceriani, P.E.
Langan Engineering & Environmental Services, Inc.
2400 Ansys Drive, Suite 403
Canonsburg, PA 15317

Subject: Sewage Facilities Planning Module (SFPM)
Approval for Collection System Flows
Project Name: 3500 Forbes Avenue (Project)
PWSA Project No.: 20013.75

Dear Paul,

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 x5523 or SConnell@pgh2o.com.

Sincerely,



Shannon Connell
Engineering Co-Op

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: Shannon Connell

Date: January 25, 2021

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

Chapter 94 Consistency Determination

Project Name: 3500 Forbes Avenue (Project)

Project Address: 3500 Forbes Avenue, Pittsburgh, PA 15213

PWSA Project Number: 20013.75

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,


Shannon Connell
Engineering Co-Op

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 81,465 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	33470698	117147443	617000	1383000	439340	1537688
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 1/25/2021

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

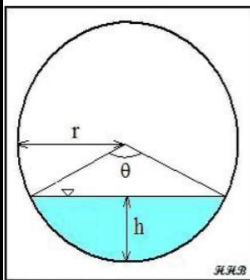
PROJECT NAME: 3500 Forbes Avenue
PWSA PROJECT NUMBER: 20013.75
PWSA REVIEWER: Shannon Connell
DATE: January 22, 2021

LEGEND:

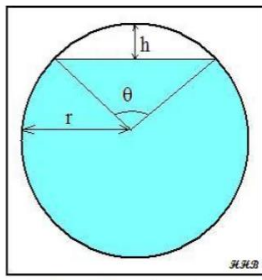
Input Data

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

$$Q = \left(\frac{1.49}{n}\right) \times A \times R^{2/3} \times S^{1/2}$$

$$R = \frac{A}{P}$$

$$\theta = 2 \times \cos^{-1} \left(\frac{r-h}{r} \right)$$

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

OR

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

$$P_{<50\% \text{ Full}} = r \times \theta$$

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

Section B: Data for Calculations

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

Proposed Project Flows		
Variable	Value	Units
Q _p	81,465	gpd

Variable	Value	Units
Material	RCP	
n	0.013	unitless
S	0.009	ft/ft
h	4.500	ft
D	4.50	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
$Q_{d, avg}$	33,569,620	gpd

Design Capacity, Peak		
Variable	Value	Unit
D	4.500	ft
r	2.250	ft
A	15.904	ft ²
P	14.137	ft
R	1.125	ft
$Q_{d, peak}$	182	cfs
$Q_{d, peak}$	117,493,670	gpd

Section D: Calculations for Present Flows

Variable	Description	Definition
$Q_{ex, avg}$	Present Flows, Average	determined via flow monitoring data
$Q_{ex, peak}$	Present Flows, Peak	determined via flow monitoring data

Present Flows, Average		
Variable	Value	Unit
$Q_{ex, avg}$	617,000	gpd

Present Flows, Peak		
Variable	Value	Unit
$Q_{ex, peak}$	1,383,000	gpd

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

Variable	Description	Definition
$Q_{proj, avg}$	Projected Flows in Five (5) Years, Average	= $Q_{proj, peak} \div P.F.$
$Q_{proj, peak}$	Projected Flows in Five (5) Years, Peak	= $(Q_{ex, peak} + Q_p) \times 1.05$

Projected Flow Calculations		
Variable	Value	Unit
$Q_{proj, avg}$	439,340	gpd
$Q_{proj, peak}$	1,537,688	gpd

Section F: Compare Results with Applicant's Submission

Variable	PWSA, gpd	Applicant, gpd	Difference, gpd	Difference, %
$Q_{d, avg}$	33,569,620	33,470,698	98,922	0%
$Q_{d, peak}$	117,493,670	117,147,443	346,227	0%
$Q_{ex, avg}$	617,000	617,000	0	0%
$Q_{ex, peak}$	1,383,000	1,383,000	0	0%
$Q_{proj, avg}$	439,340	439,340	-1	0%
$Q_{proj, peak}$	1,537,688	1,537,688	0	0%

APPENDIX B

Resolution for Plan Revision for New Land Development

Fiscal Impact Statement
Updated 1/29/2020 to satisfy City Code §219.07

Department	Law
Preparer	Ben Smith
Standing Committee Representative	Paul Ceriani, P.E. (Langan Engineering) 724-514-5167
Type of Legislation	Other

Description of Legislation

CA Ventures has proposed the development of a certain parcel of land identified as the 3500 Forbes Avenue, 3500 Forbes Avenue, Pittsburgh, PA 15213, Allegheny County, at lot and block 28-F-322, 28-F-330, 28-F-360, 28-F-354, and 28-F-356, in the Fourth Ward of the City of Pittsburgh, Pennsylvania and described in the attached Sewage Facilities Planning Module (the "Planning Module") for land development and proposes that project be served by use of existing connections to the City of Pittsburgh sewage systems; and

The City of Pittsburgh must adopt, and applicant must submit, the Planning Module for land development to the Department of Environmental Protection for its approval as a Plan Revision to the City of Pittsburgh's Official Sewage Facilities Plan.

Total Cost	\$ 0			
Frequency of Expenditure	<input type="checkbox"/> One-Time		<input type="checkbox"/> Multi-Year	
Funding Source	<input type="checkbox"/> Operating	<input type="checkbox"/> Capital	<input type="checkbox"/> Grant	<input type="checkbox"/> Trust Fund
Is this item budgeted?	<input type="checkbox"/> Yes		<input type="checkbox"/> No	

JDE Account Information

N/A

Additional Operational Costs

N/A

Impact on City Revenue

N/A

City of Pittsburgh
Sewer Facilities Planning Module Questionnaire

PROJECT NAME: 3500 Forbes Avenue

1) What was the previous permitted use for this property?

Gas Station

2) What is the proposed use for the property?

Student housing, parking, and retail/restaurant space

3) How is green stormwater mitigation being integrated into the proposed project?

The proposed project includes proposed green infrastructure including green roof assemblies and underground detention vaults. The stormwater management facilities implemented as part of this project will reduce the rate and volume of the proposed runoff and improve the quality of the proposed stormwater runoff.

4) Will the development result in a net positive or net negative change in stormwater flow?

After the implementation of the proposed stormwater management system, the development will result in a net negative change in stormwater flow.

Resolution No. _____

CITY OF PITTSBURGH

Introduced:

Bill No:

Committee: Intergovernmental Affairs Committee

Status:

Sponsored by:

Resolution adopting Plan Revision to the City of Pittsburgh's Official Sewage Facilities Plan for the 3500 Forbes Avenue, 3500 Forbes Avenue, Pittsburgh, PA 15213.

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

WHEREAS, CA Ventures has proposed the development of a certain parcel of land 3500 Forbes Avenue, 3500 Forbes Avenue, Pittsburgh, PA 15213, Allegheny County, at lot and block 28-F-322, 28-F-330, 28-F-360, 28-F-354, 28-F-356 in the 4th Ward of the City of Pittsburgh and described in the attached Sewage Facilities Planning Module (the "Planning Module") for land development and proposes that project be served by a sewer tap-in to the City of Pittsburgh sewage systems; and

WHEREAS, the Pittsburgh Water Sewer Authority, the Allegheny County Sanitary Authority, the City of Pittsburgh Planning Department and the Allegheny County Health Department have reviewed the respective components of the attached Planning Module in regard to each authority/department's expertise and have approved the respective components as explained in the attached Planning Module.

WHEREAS, based upon the approval of the above authorities and departments, the City of Pittsburgh finds that the project described in the attached Planning Module for land development conforms to applicable zoning, subdivision, other municipal ordinances and plans, and to a comprehensive program of pollution control and water quality management.

**BE IT RESOLVED BY THE COUNCIL OF THE CITY OF PITTSBURGH AS
FOLLOWS:**

SECTION 1. The City of Pittsburgh hereby adopts and submits to the Department of Environmental Protection for its approval as a Plan Revision to the City of Pittsburgh's Official Sewage Facilities Plan, the above-referenced Planning Module for land development, which is attached hereto as **Exhibit A**.

Said Planning Module includes the 3500 Forbes Avenue, 3500 Forbes Avenue, Pittsburgh, PA 15213, Allegheny County, at lot and block 28-F-322, 28-F-330, 28-F-360, 28-F-354, 28-F-356 in the 4th Ward of the City of Pittsburgh.

Finally, that any Ordinance or Resolution or part thereof conflicting with the provisions of this Resolution, is hereby repealed so far as the same affects this Resolution.

Effective Date: _____

Passed in Council: _____

Approved: _____

Recorded in R.B. ___ page _____ in City Clerk's Office.

APPENDIX C

Component 3, Narrative Description of Project, Supporting Documentation



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

Code No.

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)

- Project Name 3500 Forbes Avenue
- Brief Project Description CA Ventures is proposing to construct an 398,500 gross square foot multi-story residential building in the Oakland neighborhood of Pittsburgh. The proposed building will mainly serve as housing for University of Pittsburgh students and will also include a parking garage and first floor retail/restaurant space. The proposed site area will include impervious pedestrian walkways, a service driveway, parking garage access, tree pits, and landscaping. The project is generally bounded by Semple Street to the Northeast, Parcel 25-F-337 to the Southeast, McKee Place to the Southwest, and Forbes Avenue to the Northwest. The proposed sanitary service will be provided by two laterals. One 10-inch onsite gravity sewer lateral will connect to the existing PWSA 36-inch RCP combination sewer in McKee Place. One 10-inch on-site gravity sewer lateral will connect to the existing PWSA 15-inch VCP combination sewer in McKee Place. The proposed storm service will accommodate three separate 8-inch storm laterals from the proposed building to the existing PWSA 24-inch RCP storm sewer in Semple Street. All three PWSA sewers will ultimately be conveyed via the Mongahela Interceptor to the ALCOSAN Wastewater Treatment Facility and discharge to the Ohio River.

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

Municipality Name	County	City	Boro	Twp
City of Pittsburgh	Allegheny	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Municipality Contact Individual - Last Name	First Name	MI	Suffix	Title
Smith	Benjamin			
Additional Individual Last Name	First Name	MI	Suffix	Title

Municipality Mailing Address Line 1

Mailing Address Line 2

City of Pittsburgh Law Department		414 Grant St. Suite 313	
Address Last Line -- City		State	ZIP+4
Pittsburgh		PA	15219
Area Code + Phone + Ext.	FAX (optional)	Email (optional)	
412-255-2014			

C. SITE INFORMATION (See Section C of instructions)

Site (Land Development or Project) Name

3500 Forbes Avenue

Site Location Line 1

3500 Forbes Avenue

Site Location Line 2

Site Location Last Line -- City

Pittsburgh

State

PA

ZIP+4

15213

Latitude

40.439831

Longitude

-79.961172

Detailed Written Directions to Site Head S on Waterfront Dr toward Three Rivers Heritage Trail. Continue straight onto 30th St Bridge. Turn right onto River Ave. Turn left onto 31st St Bridge. Turn left onto PA-28 S. Take exit 1A for I-579 S/I-376 E. Continue onto I-579 S. Take the exit toward I-376 E/Oakland/Monroeville, then take the Forbes Avenue exit.

Continue on Forbes Avenue the site is directly after the intersection of Forbes Avenue and McKee Place

Description of Site The site is currently composed of impervious area, paved parking lots, driveways, and Scaife Hall.

Site Contact (Developer/Owner)

Last Name

Sugiyama

First Name

Joe

MI

Suffix

Phone

312-994-0870

Ext.

Site Contact Title

Vice President of Pre-Construction

Site Contact Firm (if none, leave blank)

CA Ventures

FAX

312-994-0870

Email

jsugiyama@ca-ventures.com

Mailing Address Line 1

130 East Randolph Street

Mailing Address Line 2

Suite 2100

Mailing Address Last Line -- City

Chicago

State

IL

ZIP+4

60601

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

Last Name

Rowland

First Name

Scott

MI

Suffix

Title

Principal/Vice President

Consulting Firm Name

Langan Engineering & Environmental Services, Inc.

Mailing Address Line 1

2400 Ansys Drive

Mailing Address Line 2

Suite 403

Address Last Line -- City

Canonsburg

State

PA

ZIP+4

15317

Country

Washington

Email

srowland@langan.com

Area Code + Phone

724-514-5123

Ext.

Area Code + FAX

724-514-5101

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: 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 204

Connections 5

Name of:

existing collection or conveyance system Coltart Ave 54" VCP Comb Sewer

owner Pittsburgh Water and Sewer Authority (PWSA)

existing interceptor Monongahela Interceptor

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 Allegheny County Sanitary Authority (ALCOSAN) Wastewater Treatment Facility

NPDES Permit Number for existing facility PA 0025984

Clean Streams Law Permit Number PA 0025984

Location of discharge point for a new facility. Latitude 40.476720 Longitude -80.042911

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. Sparbarie, P.E.

Agent Signature [Signature] Date 2-9-21

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

4. WETLAND PROTECTION

YES NO

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

5. PRIME AGRICULTURAL LAND PROTECTION

YES NO

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

6. HISTORIC PRESERVATION ACT

YES NO

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

7. PROTECTION OF RARE, ENDANGERED OR THREATENED SPECIES

Check one:

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

Applicant or Consultant Initials _____.

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

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

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

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

1. Waters designated for Special Protection

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

2. Pennsylvania Waters Designated As Impaired

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

3. Interstate and International Waters

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

4. Tributaries To The Chesapeake Bay

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

Name of Permittee Agency, Authority, Municipality _____

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

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

☒ **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 81,465 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	33470698	117147443	617000	1383000	439340	1537688
Conveyance		<u>2,830,000</u>	<u>1,290,000</u>	<u>1,610,000</u>	<u>1,385,200</u>	<u>1,708,400</u>
Treatment		<u>250,000,000</u>	<u>209,300,000</u>	<u>250,000,000</u>	<u>219,700,000</u>	<u>295,000,000</u>

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 1/25/2021

☒ **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 2/9/21

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. ☐ ☒ 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 2/9/21

☐ **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 sponsor), 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.

Paul Ceriani, P.E.

Name (Print)

Senior Project Manager

Title

2400 Ansys Drive, Suite 403

Canonsburg, PA 15317

Address



Signature

January 20, 2021

Date

724-514-5167

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 \$10,200.00 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.

$$\#204 \quad \text{Lots (or EDUs)} \times \$50.00 = \$ 10,200.00$$

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)

SECTION F SEWAGE FACILITIES PLANNING MODULE COMPONENT 3

**Re: Project Narrative
3500 Forbes Avenue
City of Pittsburgh, Allegheny County, Pennsylvania
Langan Project No.: 250084602**

The project site is located in the Oakland neighborhood, northeast of the intersection of Forbes Avenue and McKee Place, in the EMI, Educational/Medical Institution District within the City of Pittsburgh, Allegheny County, Pennsylvania. CA Ventures is proposing to redevelop approximately 1.51 acres on Parcels 28-F-322, 28-F-330, 28-F-360, 28-F-354, and 28-F-356, to include the proposed 398,500 gross square foot multi-story residential building to replace the existing gas station, impervious pedestrian walkways, landscaped areas, a concrete driveway, stormwater management facilities and associated site features. The proposed development will be owned and operated by CA Ventures.

The project proposes two on-site gravity sewer laterals for the proposed building. One 10-inch sanitary lateral will connect to the existing PWSA 36-inch RCP combination sewer in McKee Place. A separate 10-inch sanitary lateral will connect to the existing 15-inch VCP combination sewer in McKee Place. Sewage will then be conveyed and treated by Allegheny County Sanitary Authority (ALCOSAN) Wastewater Treatment Facility.

The existing site has an estimated combined sanitary sewage flow of 14,194 gallons per day. Following the proposed development, the building will have an estimated combined sanitary sewage flow of 89,648 gallons per day. The proposed increase in combined sanitary sewage flow as a result of the proposed improvements is 81,465 gallons per day (204 EDU's). A reference for the approximate sewage flow for the proposed development can be found within Appendix C. The proposed lateral will remain private and will not create any undue financial burdens to the City of Pittsburgh, PWSA, or ALCOSAN.

Water service will ultimately be provided by Pittsburgh Water and Sewer Authority (PWSA). Water service to this site will be provided by an 8-inch fire service lateral that will connect to the existing PWSA 8-inch water main in Semple Street. A 6-inch domestic service lateral will tee off the 8-inch fire service lateral before both laterals connect to the building. Additional water service to this site will be provided by a 6-inch fire service lateral that will connect to the existing PWSA 6-inch water main in Forbes Avenue.

The existing site has an estimated water demand of 14,194 gallons per day. Following the proposed development, the building will have an estimated water demand of 89,648 gallons per day. The proposed increase in water demand as a result of the proposed improvements is 75,454 gallons per day. The existing municipal system is expected to adequately meet proposed demands. A copy of the water availability letter from PWSA can be found in Appendix C.

Section J of Component 3 was completed using the flow monitoring data provided by Drnach Environmental and the calculation methodology and procedures outlined by the PWSA's Developer's Manual, revised April 24th, 2020. As identified in PWSA's Water and Sewer Use Application Approval, the most limited capacity sewer was deemed to be the 54-inch combined concrete sewer in Coltart Ave just upstream of PWSA MH #028L018. Drnach Environmental monitored the flow in MH #028L018 between 12/16/2020 and 01/14/2021 (see additional data and charts in Appendix C). The Present Average Flow and Present Peak Flow were derived from these monitoring results. Pipe capacity information provided by PWSA was used in conjunction with Manning's Equation to estimate the Peak Design Capacity, and a Peak Factor of 3.5 was used to estimate the Present Average Dry Flow and Average Design Capacity. The Projected Peak Flow was calculated by multiplying the sum of the Present Peak Flow and the Anticipated Flow Contribution for the project by a factor of 1.05 to estimate the projected flow in 5 years. The Projected Average Flow was calculated by once again dividing the Projected Peak Flow by the Peak Factor of 3.5. Based on these calculations, it has been determined that the anticipated flow contribution for the proposed project will not create undue stress on the existing PWSA system's capacity.

ANTICIPATED SEWAGE FLOW REFERENCE

LANGAN

Technical Excellence
Practical Experience
Client Responsiveness

DATE : 7/23/2020
PROJECT : 3500 FORBES AVE
JOB NO. : 250084602
BY : MMC
CHECKED BY : PJC

EXISTING WATER AND SEWER FLOW ESTIMATION

Existing Account	5 Year ¹ Maximum Monthly Water Usage (Gallons/Month) ²	Calculated Average Daily Usage (GPD) ³	Peak Factor ⁴	Calculated Peak Daily Flow (GPD)
328 Semple St. - 5003228	12,000	387	2.5	968
3514 Forbes Ave. - 5003229	42,000	1355	2.5	3387
3514 Forbes Ave. - 5003230	122,000	3935	2.5	9839
TOTAL (GPD)				14194

ESTIMATED EXISTING PEAK DAILY FLOW (GPD)	14194
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Notes

1. The maximum monthly usage data was taken for the 5 year period of 2014 - 2019 in accordance with the PWSA Developer's Manual.
2. Consumption values taken from account usage data provided by PWSA and assumed to be in increments of 1,000 gallons per PWSA's sample bill online.
3. Number of days was based on peak month as follows:
328 Semple St. (5003228): January 2016 - 31 days
3514 Forbes Ave. (5003229): May 2016 - 31 days
3514 Forbes Ave. (5003230): January 2014 - 31 days
4. Peak Factor provided by PWSA during Pre-Application Meeting Held 7/1/2020

Residential Tower Proposed Flow Calculations			
	Gal/Unit per Day	Qty	Total Gal/Day
Efficiency	150	53	7,950
1-Bedroom	150	52	7,800
2-Bedroom	300	86	25,800
>2 Bedroom	400	105	42,000
Residential Unit Max HVAC Condensate	6011	1	6,011
Total Res		297	89,561
	Gal/Unit per Day	Qty	Total Gal/Day
Option A: Retail (per public toilet)	400	6	2400
Option A: Retail (per public sink)	200	6	1200
Option B: Restaurant**	12	163	5868
Commercial Space HVAC Condensate	230	1	230
Option A: Total Building Sanitary Demand (GPD)			93,391
Option A: Total Building Water Demand (GPD)			87,150
Option B: Total Building Sanitary Demand (GPD)			95,659
Option B: Total Building Water Demand (GPD)			89,648

*Flow Calculations based off of Table 1 in the PWSA Developer's Manual

**Turnover Rate of 3 used per discussion with PWSA

**PROPOSED SANITARY PIPE CALCULATIONS
3500 FORBES AVE**

Q_{max}	Based on Total Units Discharging
Q_{design}	$3.5 * Q_{max}$
Q_{full}	$1.49/n * A_{pipe} * R^{2/3} * S^{1/2}$
Q_{half}	FLOW AT HALF FULL = $0.48 * Q_{full}$
V_{max}	VELOCITY AT 80% FULL = $1.15 * Q_{full} / A_{pipe}$
V_{half} , (fps)	VELOCITY OF FLOW AT HALF FULL = $Q_{half} / (A_{pipe} * 0.5)$
PIPE SIZED ACCORDINGLY	CHECKS IF Q_{design} IS LESS THAN Q_{half}

FROM BLDG TO EXISTING 36-IN COMBO SEWER IN MCKEE PLACE

MINIMUM SLOPE WITHIN THIS ENTIRE RUN = 2.0%

MATERIAL	PVC	Q_{full} , cfs	Q_{full} , gpd	Q_{half} , cfs	Q_{half} , gpd	V_{max} , fps	V_{half} , fps
LENGTH, ft	32	3.67	2,371,919	1.76	1,138,521	7.74	6.73
DIAMETER, in	10						
SLOPE	2.00%	PIPE SIZED ACCORDINGLY: TRUE					
n	0.011	$V_{max} < 10$ fps: TRUE					
Q_{max} , gpd	81,465	$V_{half} > 2$ fps: TRUE					
Q_{design} , gpd	285,128						

FROM BLDG TO EXISTING 15-IN COMBO SEWER IN MCKEE PLACE

MINIMUM SLOPE WITHIN THIS ENTIRE RUN = 2.0%

MATERIAL	PVC	Q_{full} , cfs	Q_{full} , gpd	Q_{half} , cfs	Q_{half} , gpd	V_{max} , fps	V_{half} , fps
LENGTH, ft	36	3.67	2,371,919	1.76	1,138,521	7.74	6.73
DIAMETER, in	10						
SLOPE	2.00%	PIPE SIZED ACCORDINGLY: TRUE					
n	0.011	$V_{max} < 10$ fps: TRUE					
Q_{max} , gpd	81,465	$V_{half} > 2$ fps: TRUE					
Q_{design} , gpd	285,128						



Scott D. Rowland, P.E.
Professional Engineer License No. PE-080536-E

**3500 Forbes Avenue
Coltart Avenue 54-IN PWSA Sanitary Sewer
Dry Flow Comparison Calculations**

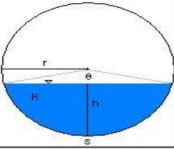
Given Information	
Pipe Location:	Coltart Ave.
Pipe Type:	Concrete
Pipe Diameter (IN):	54
Slope:	0.85%
Manning's n Value:	0.013
Peak Factor:	3.5

Solve for Design (Full) Flow	
Radius of Pipe, r (IN):	27
Flow Area, K (IN ²):	2290.22
Wetted Perimeter (IN):	169.65
Hydraulic Radius (IN):	13.500
Hydraulic Radius (FT):	1.125
Velocity (FT/S):	11.40
Design Peak Flow (CFS):	181.29
Design Peak Flow (GPD):	117,147,443
Design Avg. Flow (GPD):	33,470,698

Summary	
Anticipated Flow Contribution (GPD) ⁽¹⁾ :	81,465
Present Average Flow (GPD) ⁽²⁾ :	617,000
Present Peak Flow (GPD) ⁽²⁾ :	1,383,000
Design/Permitted Average Capacity (GPD):	33,470,698
Design/Permitted Peak Capacity (GPD):	117,147,443
Average Projected Flow (GPD)	439,340
Peak Projected Flow (GPD)	1,537,688

$$V = \frac{k}{n} R^{2/3} S^{1/2} \quad k=1.4859 \text{ ft}^{1/3}/s \quad Q = VA$$

- Flow estimation provided by DLR Group, based on PA Code Title 25, Chapter 73, Paragraph 73.17
- Present Flows monitored by Drnach Environmental between 12/16/2020 & 01/14/2021. See additional flow data and charts provided.

step	solve for	if flow depth < radius
		
1	circular segment height	$h = d$
2	central angle	$\theta = 2 \arccos \left(\frac{r-h}{r} \right)$
3	circular segment area	$K = \frac{r^2 (\theta - \sin \theta)}{2}$
4	arc length	$s = r \times \theta$
5	flow area	$A = K$
6	wetted perimeter	$P_w = s$
7	hydraulic radius	$R_h = \frac{A}{P_w}$



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Date:	12/16/2020	12/17/2020	12/18/2020	12/19/2020	12/20/2020	12/21/2020	12/22/2020	12/23/2020	12/24/2020	12/25/2020	12/26/2020	12/27/2020	12/28/2020	12/29/2020	12/30/2020	12/31/2020
Flow:	0.569	0.582	0.533	0.484	0.708	0.627	0.600	0.480	1.050	0.548	0.504	0.482	0.620	0.513	0.590	0.742
Precip.:	0.37	0.36	0.00	0.00	0.32	0.02	0.04	0.00	0.86	0.01	0.00	0.07	0.00	0.00	0.07	0.25

Date:	01/01/2021	01/02/2021	01/03/2021	01/04/2021	01/05/2021	01/06/2021	01/07/2021	01/08/2021	01/09/2021	01/10/2021	01/11/2021	01/12/2021	01/13/2021	01/14/2021
Flow:	1.383	0.537	0.928	0.543	0.540	0.527	0.538	0.522	0.504	0.502	0.588	0.569	0.573	0.610
Precip.:	0.67	0.05	0.41	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

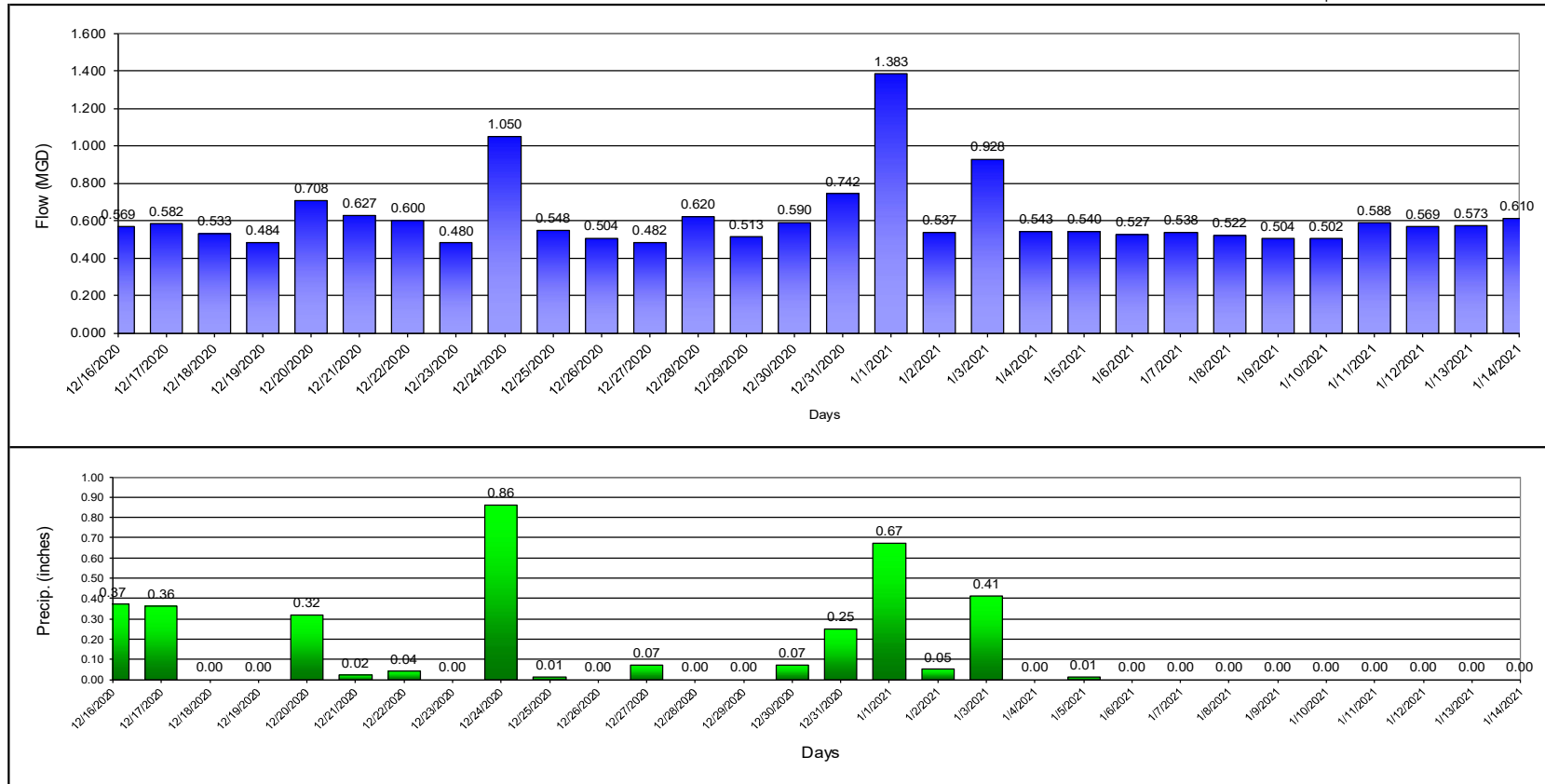
MH028L018

Line Size:

54 "

Manhole Depth:

0 "



MH028L018

December 16, 2020 through January 14, 2021

Line Size:		54 "		Manhole Depth:		0 "	
Date	Average Daily Flow (MGD)	Minimum Hourly Flow (Time)	Minimum Hourly Flow (MGD)	Maximum Hourly Flow (Time)	Maximum Hourly Flow (MGD)	Total 24 hr. Precip. (inches)	

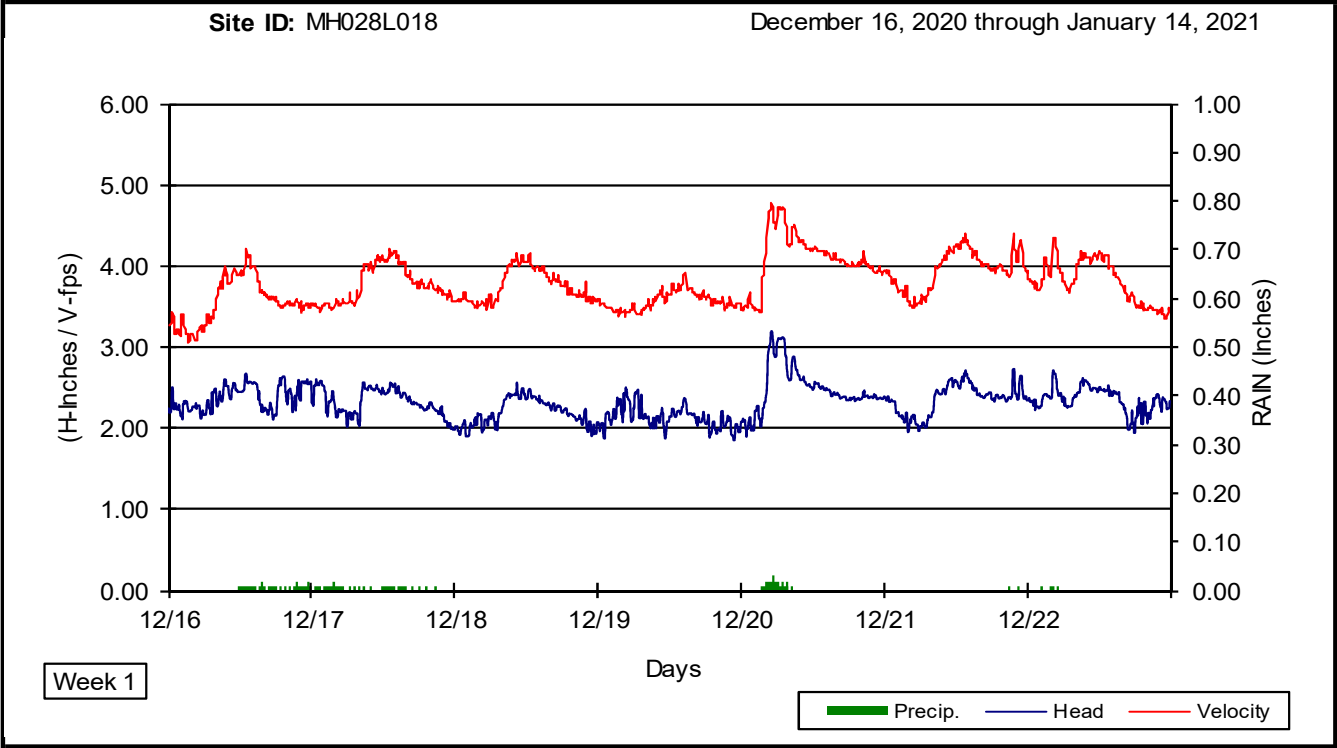
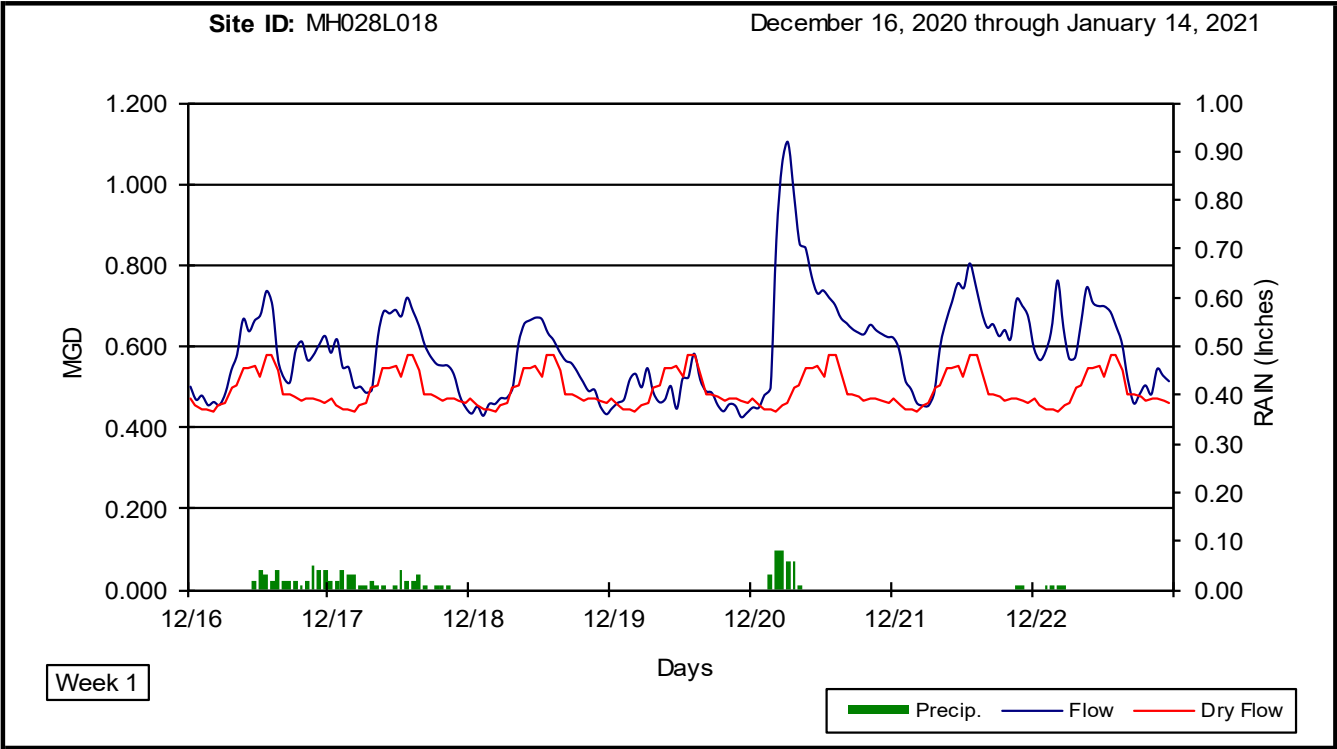
12/16/2020	0.569	3:00 AM	0.454	1:00 PM	0.736	0.37	
12/17/2020	0.582	11:00 PM	0.448	1:00 PM	0.719	0.36	
12/18/2020	0.533	2:00 AM	0.428	11:00 AM	0.670	0.00	
12/19/2020	0.484	10:00 PM	0.425	2:00 PM	0.581	0.00	
12/20/2020	0.708	1:00 AM	0.448	6:00 AM	1.103	0.32	
12/21/2020	0.627	5:00 AM	0.453	1:00 PM	0.804	0.02	
12/22/2020	0.600	5:00 PM	0.459	4:00 AM	0.762	0.04	
12/23/2020	0.480	2:00 AM	0.393	1:00 PM	0.576	0.00	
12/24/2020	1.050	2:00 AM	0.341	8:00 PM	1.839	0.86	
12/25/2020	0.548	11:00 PM	0.452	4:00 AM	0.642	0.01	
12/26/2020	0.504	4:00 AM	0.444	1:00 PM	0.584	0.00	
12/27/2020	0.482	6:00 AM	0.405	2:00 PM	0.585	0.07	
12/28/2020	0.620	12:00 AM	0.432	9:00 AM	0.853	0.00	
12/29/2020	0.513	7:00 PM	0.407	11:00 AM	0.650	0.00	
12/30/2020	0.590	7:00 AM	0.418	10:00 PM	0.759	0.07	
12/31/2020	0.742	6:00 PM	0.444	1:00 AM	1.364	0.25	
01/01/2021	1.383	8:00 AM	0.455	3:00 PM	8.985	0.67	
01/02/2021	0.537	7:00 AM	0.443	1:00 AM	0.922	0.05	
01/03/2021	0.928	12:00 AM	0.437	11:00 AM	4.812	0.41	
01/04/2021	0.543	4:00 AM	0.421	10:00 AM	0.731	0.00	
01/05/2021	0.540	4:00 AM	0.431	1:00 PM	0.698	0.01	
01/06/2021	0.527	4:00 AM	0.409	10:00 AM	0.717	0.00	
01/07/2021	0.538	2:00 AM	0.434	12:00 PM	0.700	0.00	
01/08/2021	0.522	5:00 AM	0.428	9:00 AM	0.682	0.00	
01/09/2021	0.504	11:00 PM	0.447	7:00 AM	0.583	0.00	
01/10/2021	0.502	7:00 PM	0.418	8:00 AM	0.589	0.00	
01/11/2021	0.588	10:00 PM	0.470	11:00 AM	0.760	0.00	
01/12/2021	0.569	7:00 PM	0.453	2:00 PM	0.709	0.00	
01/13/2021	0.573	3:00 AM	0.460	11:00 AM	0.734	0.00	
01/14/2021	0.610	8:00 PM	0.497	1:00 PM	0.741	0.00	

Average	0.617	0.435	1.186
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Minimum	0.480	0.341	0.576
Maximum	1.383	0.497	8.985

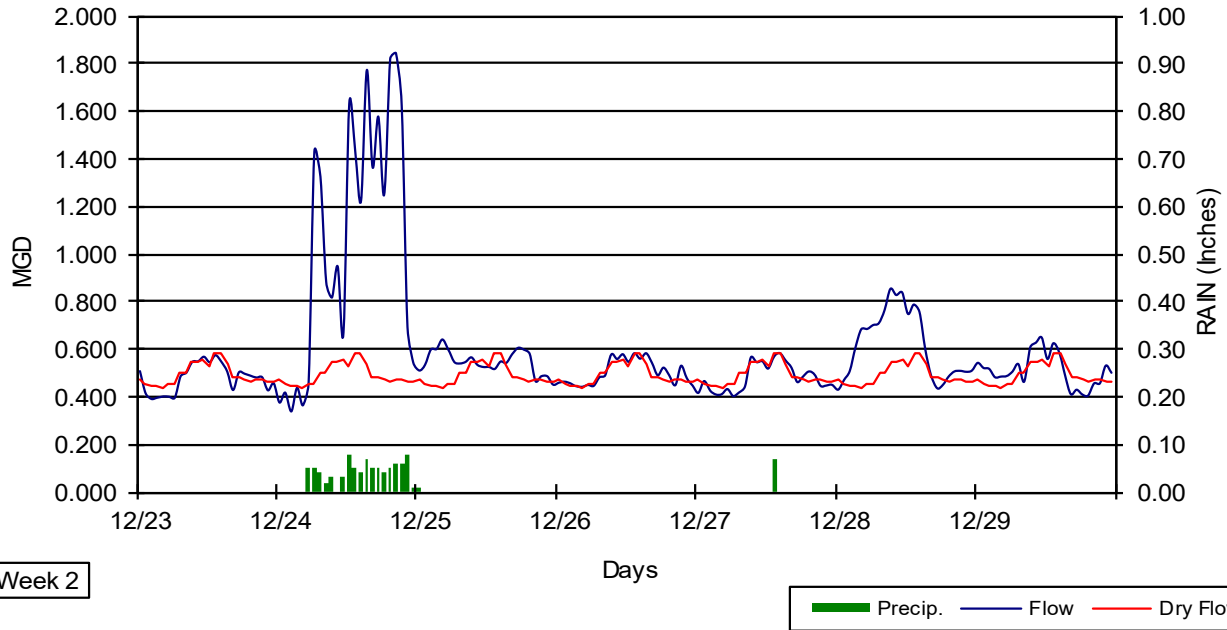
Total Flow	18.496	MG
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3.51	Total
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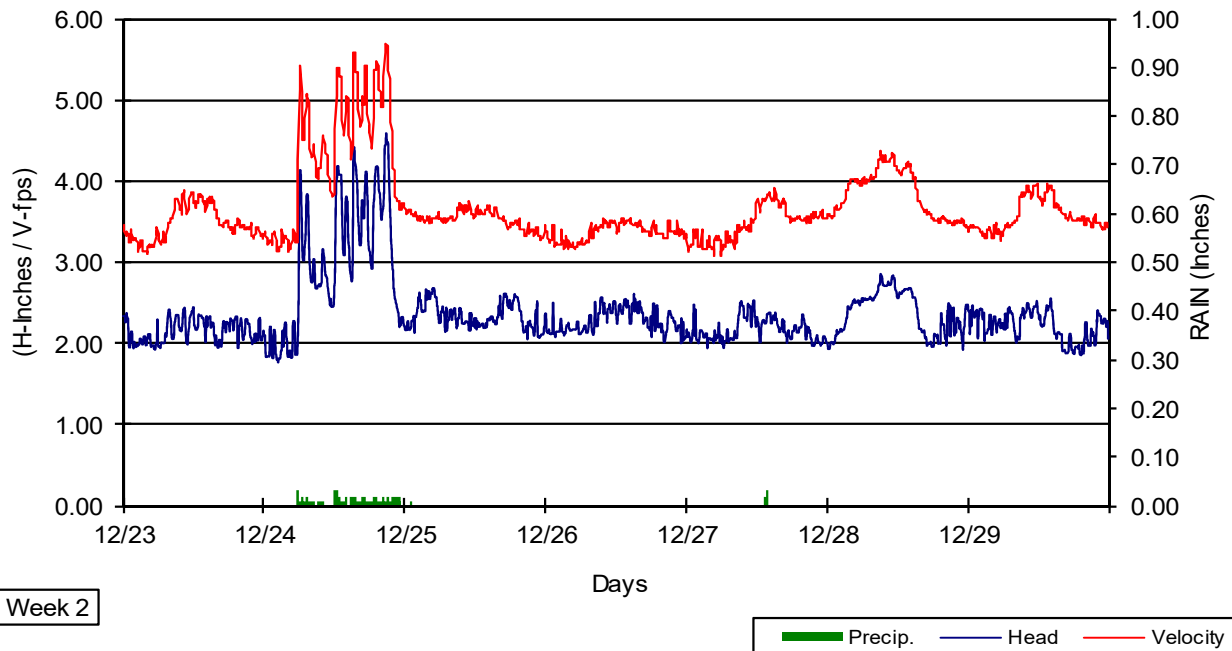
Site ID: MH028L018

December 16, 2020 through January 14, 2021



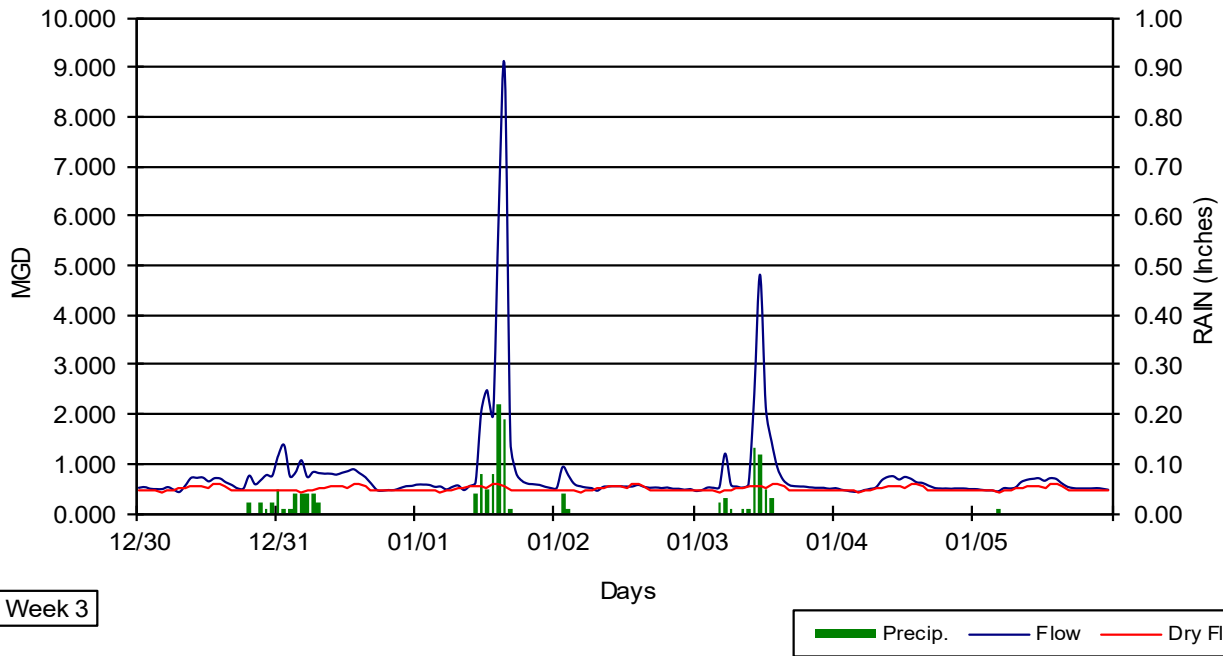
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December 16, 2020 through January 14, 2021



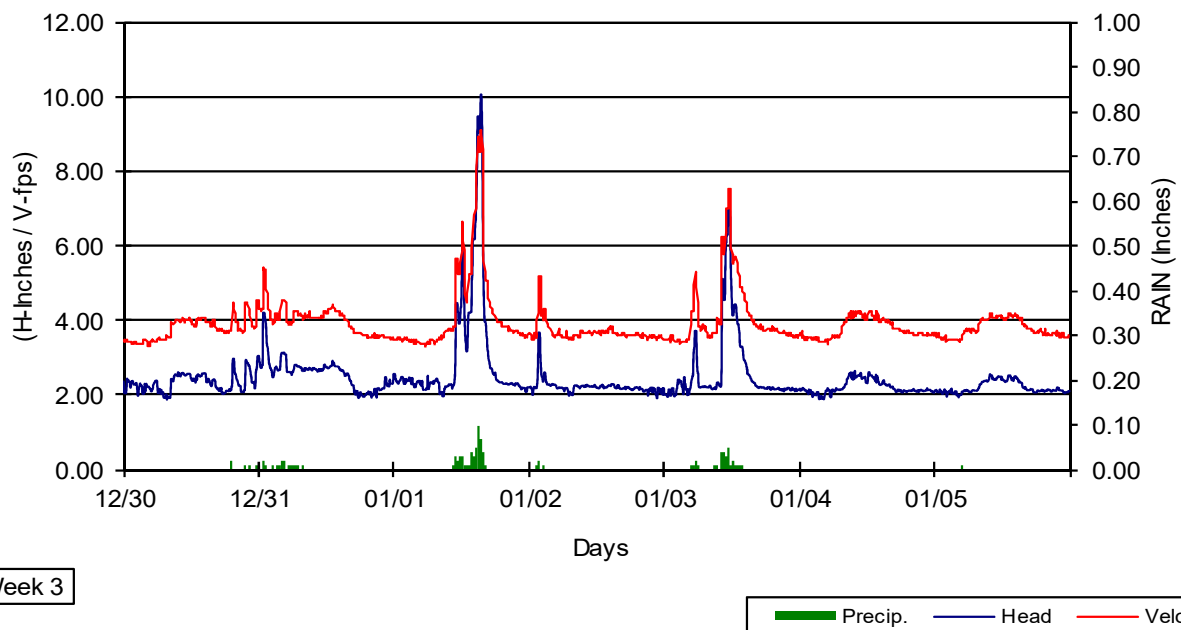
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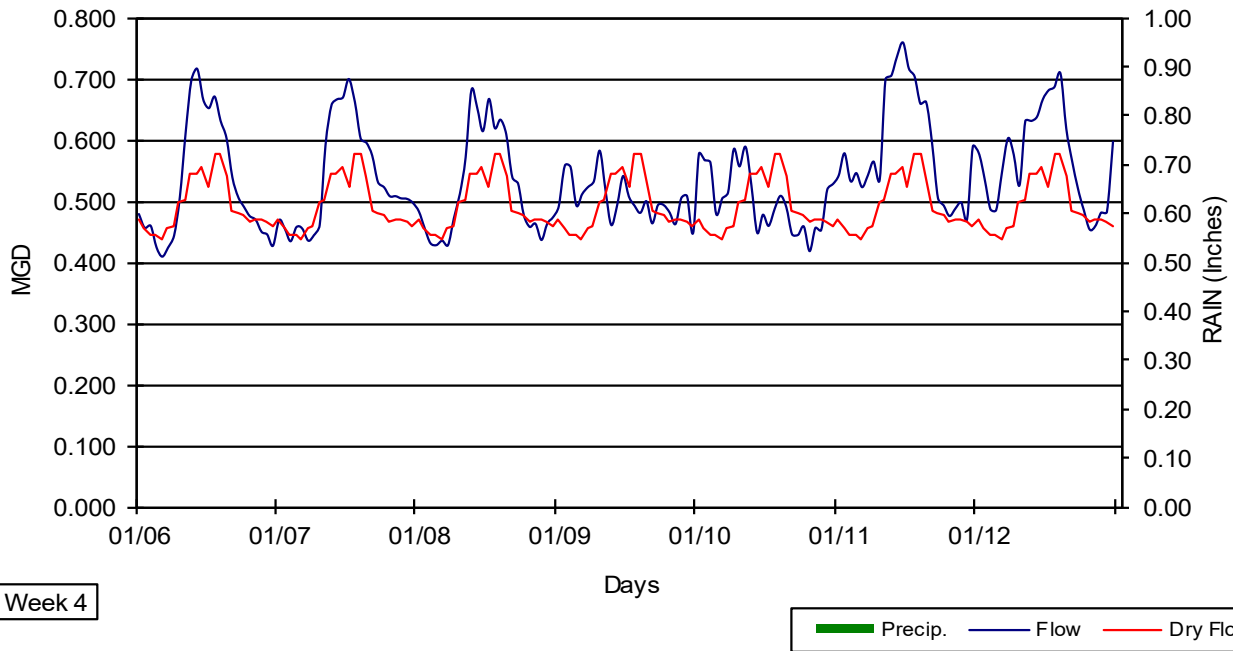
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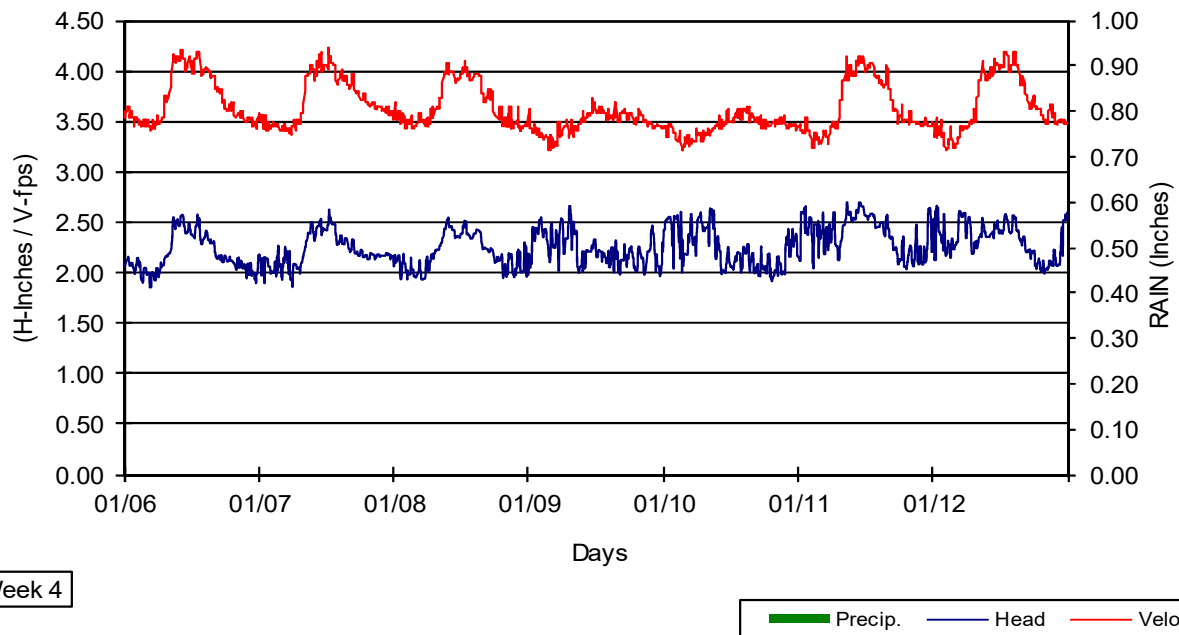
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December 16, 2020 through January 14, 2021



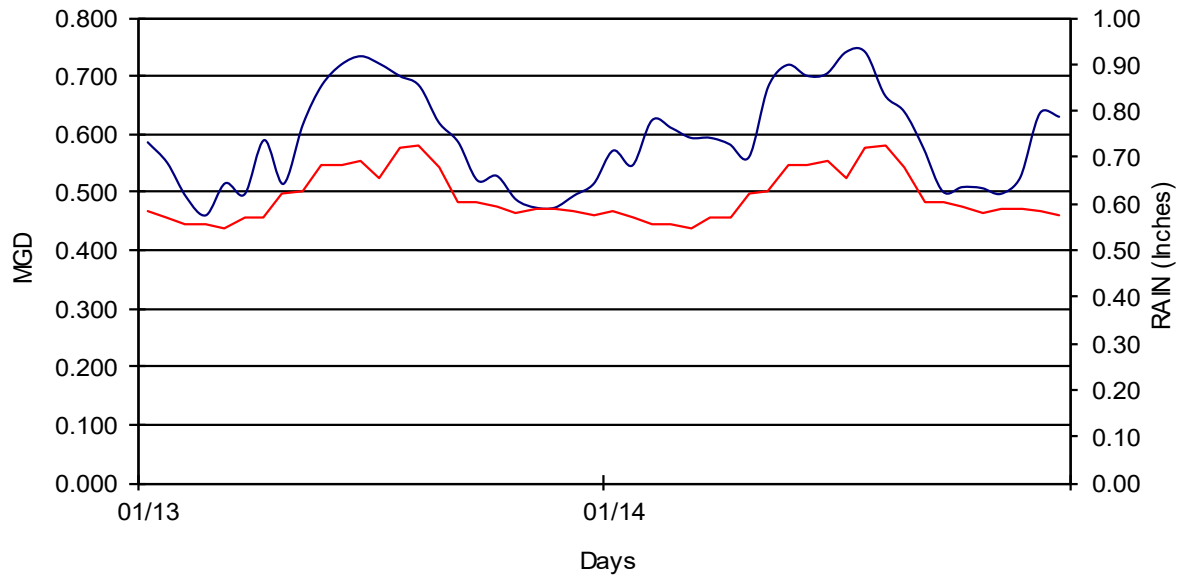
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December 16, 2020 through January 14, 2021



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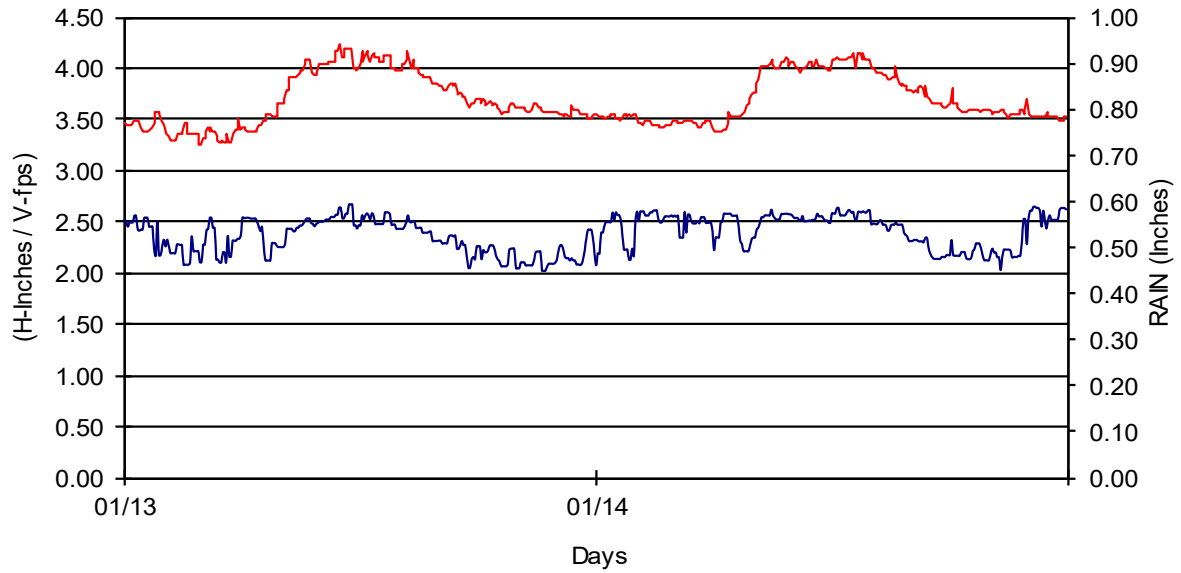
December 16, 2020 through January 14, 2021



Week 5

Site ID: MH028L018

December 16, 2020 through January 14, 2021



Week 5

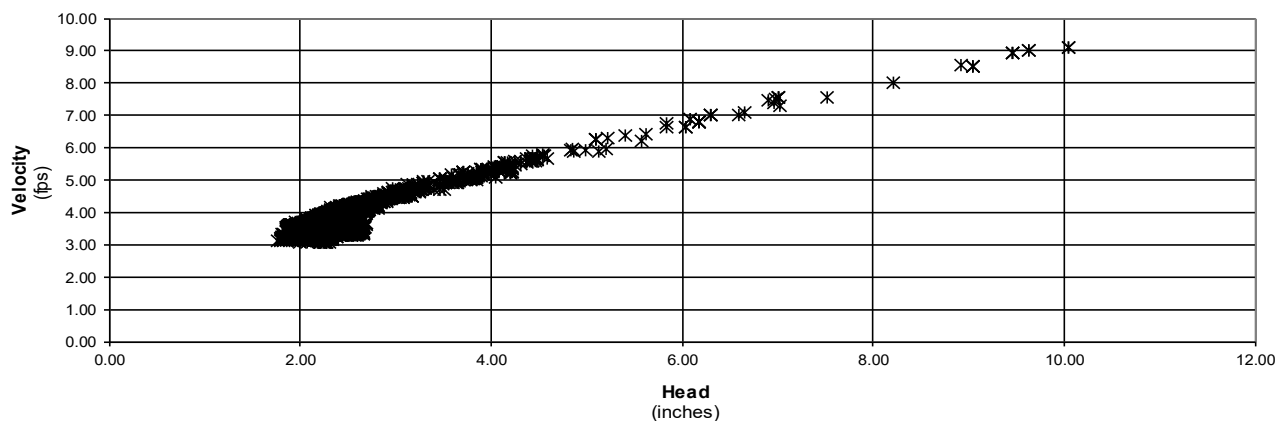
Line Size: 54 "

Manhole Depth: 0 "

MH028L018

December 16, 2020 through January 14, 2021

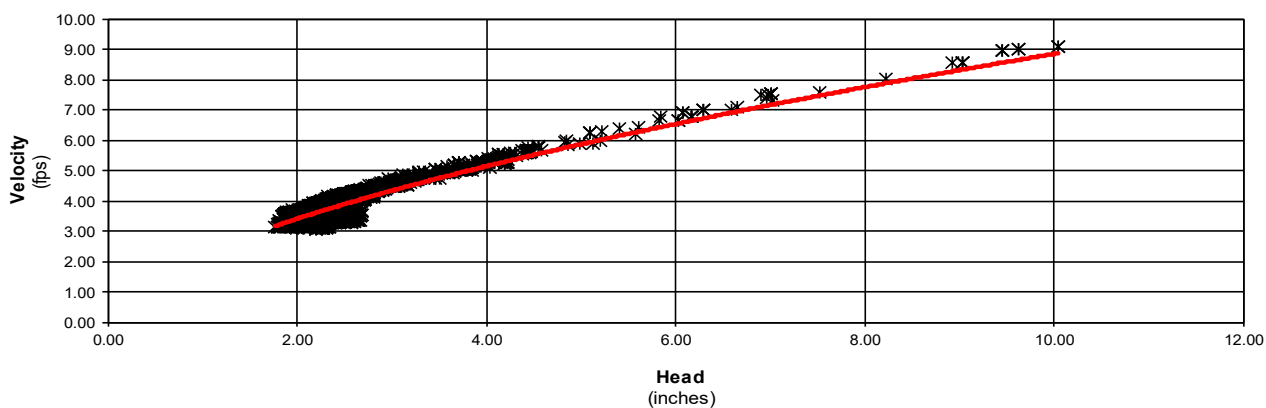
Scatter Plot (Head Vs Velocity)



MH028L018

December 16, 2020 through January 14, 2021

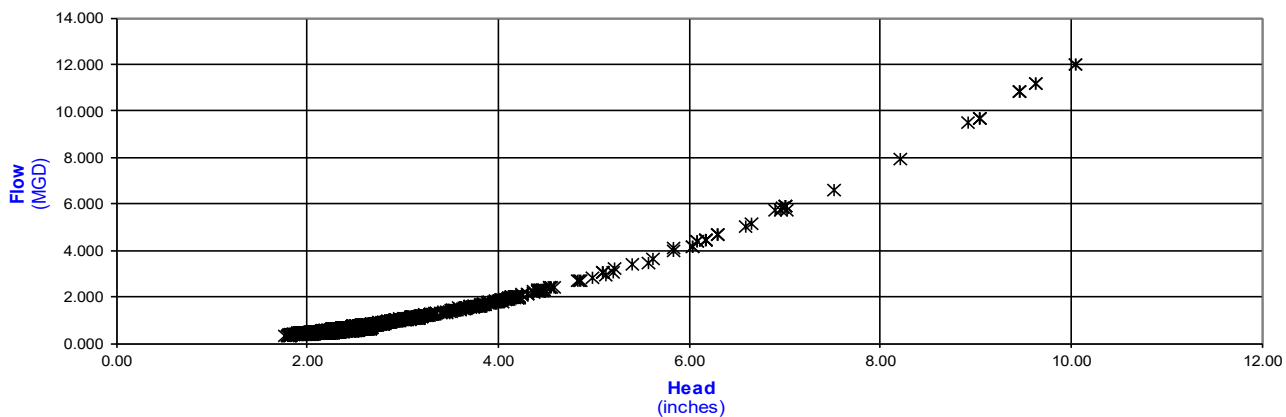
Scatter Plot (Free Flow)



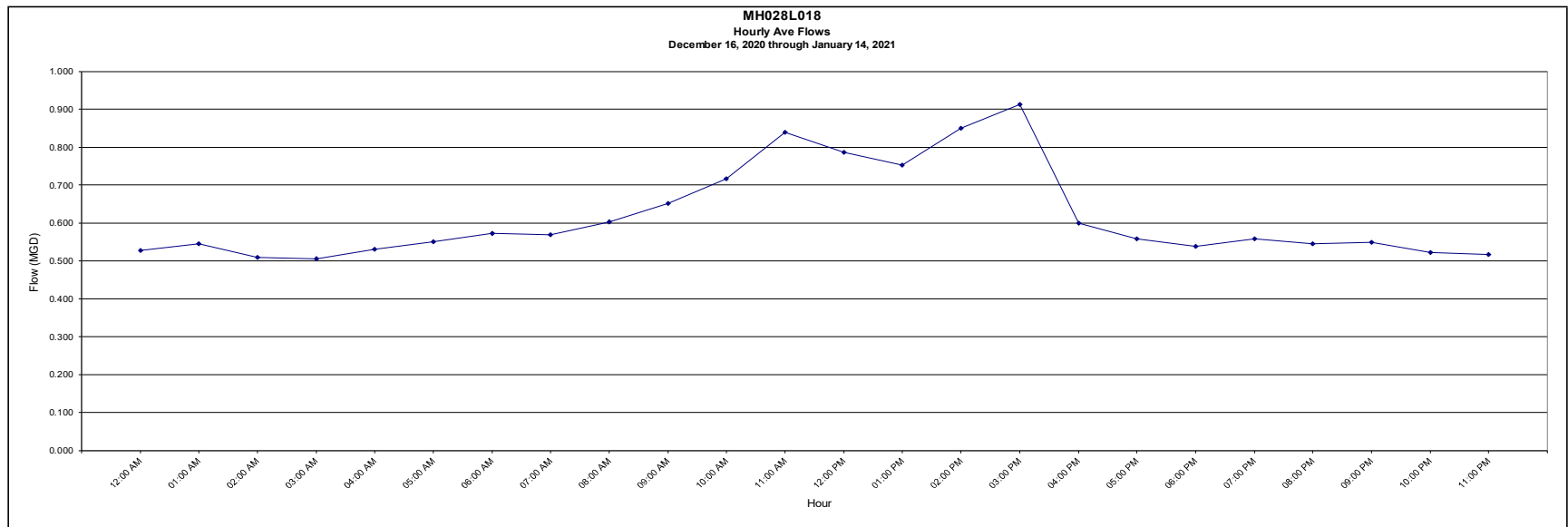
MH028L018

December 16, 2020 through January 14, 2021

Scatter Plot (Head Vs Flow)



Average Hourly Flow										December 16, 2020 through January 14, 2021																											
	2020	12/16	12/17	12/18	12/19	12/20	12/21	12/22	12/23	12/24	12/25	12/26	12/27	12/28	12/29	12/30	12/31	01/01	01/02	01/03	01/04	01/05	01/06	01/07	01/08	01/09	01/10	01/11	01/12	01/13	01/14	Average					
12:00 AM	0.499	0.583	0.433	0.447	0.448	0.619	0.595	0.509	0.378	0.512	0.461	0.419	0.432	0.544	0.499	1.164	0.568	0.498	0.437	0.493	0.475	0.479	0.469	0.483	0.491	0.578	0.542	0.579	0.585	0.571		0.526					
01:00 AM	0.467	0.616	0.451	0.460	0.448	0.590	0.565	0.415	0.419	0.536	0.465	0.468	0.471	0.523	0.515	1.364	0.565	0.922	0.456	0.464	0.462	0.456	0.454	0.455	0.558	0.567	0.579	0.536	0.550	0.546		0.545					
02:00 AM	0.478	0.547	0.428	0.468	0.479	0.516	0.588	0.393	0.341	0.599	0.458	0.428	0.509	0.518	0.481	0.737	0.558	0.754	0.509	0.440	0.450	0.459	0.434	0.430	0.556	0.563	0.533	0.487	0.490	0.624		0.508					
03:00 AM	0.454	0.548	0.457	0.517	0.497	0.494	0.643	0.398	0.440	0.602	0.446	0.411	0.609	0.484	0.474	0.815	0.521	0.576	0.502	0.423	0.447	0.424	0.457	0.428	0.492	0.479	0.546	0.485	0.460	0.610		0.505					
04:00 AM	0.462	0.498	0.457	0.531	0.861	0.460	0.762	0.403	0.365	0.642	0.444	0.413	0.684	0.487	0.477	1.056	0.524	0.530	0.514	0.421	0.431	0.409	0.455	0.435	0.511	0.504	0.523	0.547	0.515	0.593		0.530					
05:00 AM	0.455	0.500	0.471	0.498	1.048	0.453	0.646	0.402	0.459	0.600	0.451	0.434	0.686	0.489	0.516	0.719	0.468	0.508	1.193	0.454	0.494	0.423	0.435	0.428	0.523	0.513	0.542	0.603	0.496	0.593		0.550					
06:00 AM	0.485	0.485	0.472	0.545	1.103	0.453	0.569	0.398	1.427	0.548	0.448	0.405	0.702	0.508	0.460	0.821	0.518	0.491	0.564	0.479	0.489	0.443	0.444	0.471	0.533	0.585	0.565	0.576	0.589	0.582		0.572					
07:00 AM	0.541	0.492	0.497	0.487	0.975	0.487	0.572	0.487	1.323	0.541	0.483	0.420	0.709	0.539	0.418	0.802	0.546	0.443	0.528	0.514	0.507	0.507	0.461	0.512	0.583	0.557	0.535	0.526	0.514	0.560		0.569					
08:00 AM	0.680	0.624	0.606	0.462	0.851	0.603	0.656	0.481	0.882	0.548	0.491	0.446	0.765	0.464	0.548	0.785	0.455	0.520	0.505	0.655	0.616	0.612	0.591	0.571	0.518	0.589	0.700	0.631	0.617	0.681		0.602					
09:00 AM	0.696	0.685	0.654	0.468	0.842	0.663	0.744	0.548	0.817	0.567	0.579	0.566	0.853	0.608	0.699	0.788	0.541	0.528	0.573	0.724	0.663	0.699	0.658	0.682	0.461	0.526	0.705	0.631	0.685	0.719		0.651					
10:00 AM	0.636	0.680	0.664	0.501	0.773	0.709	0.708	0.550	0.946	0.536	0.560	0.546	0.827	0.628	0.705	0.768	0.614	0.534	2.391	0.731	0.680	0.717	0.667	0.654	0.494	0.448	0.737	0.639	0.720	0.700		0.715					
11:00 AM	0.663	0.689	0.670	0.445	0.730	0.754	0.698	0.569	0.669	0.526	0.580	0.550	0.839	0.650	0.707	0.806	2.056	0.530	4.812	0.671	0.696	0.667	0.670	0.615	0.541	0.477	0.760	0.667	0.734	0.703		0.838					
12:00 PM	0.677	0.673	0.666	0.519	0.737	0.743	0.698	0.547	1.627	0.527	0.548	0.520	0.748	0.560	0.633	0.836	2.476	0.524	2.132	0.720	0.646	0.653	0.700	0.668	0.508	0.459	0.718	0.682	0.720	0.741		0.787					
01:00 PM	0.736	0.719	0.633	0.523	0.719	0.804	0.684	0.576	1.425	0.518	0.584	0.570	0.788	0.625	0.693	0.875	1.983	0.528	1.442	0.681	0.698	0.671	0.663	0.620	0.492	0.487	0.705	0.687	0.699	0.741		0.752					
02:00 PM	0.700	0.685	0.614	0.581	0.701	0.753	0.648	0.549	1.222	0.549	0.561	0.585	0.756	0.590	0.688	0.801	6.183	0.558	0.918	0.610	0.679	0.632	0.603	0.634	0.480	0.509	0.660	0.709	0.683	0.667		0.850					
03:00 PM	0.565	0.650	0.587	0.517	0.670	0.687	0.606	0.507	1.768	0.544	0.584	0.553	0.602	0.491	0.611	0.713	0.985	0.524	0.665	0.598	0.594	0.602	0.596	0.609	0.500	0.490	0.663	0.619	0.620	0.639		0.912					
04:00 PM	0.520	0.603	0.564	0.489	0.656	0.646	0.519	0.430	1.361	0.580	0.544	0.524	0.492	0.413	0.561	0.582	1.459	0.504	0.558	0.549	0.521	0.539	0.574	0.539	0.463	0.445	0.593	0.566	0.586	0.575		0.599					
05:00 PM	0.510	0.575	0.558	0.484	0.641	0.654	0.459	0.504	1.574	0.607	0.492	0.464	0.437	0.431	0.490	0.455	0.797	0.508	0.535	0.502	0.494	0.507	0.531	0.528	0.493	0.444	0.505	0.521	0.520	0.500		0.557					
06:00 PM	0.590	0.556	0.538	0.454	0.633	0.624	0.481	0.498	1.246	0.599	0.524	0.488	0.451	0.412	0.490	0.444	0.642	0.498	0.526	0.485	0.490	0.490	0.523	0.476	0.493	0.458	0.492	0.485	0.528	0.508		0.537					
07:00 PM	0.611	0.552	0.511	0.439	0.629	0.639	0.503	0.490	1.815	0.582	0.492	0.508	0.486	0.407	0.748	0.456	0.587	0.505	0.521	0.487	0.490	0.475	0.508	0.458	0.481	0.418	0.475	0.453	0.487	0.507		0.557					
08:00 PM	0.565	0.551	0.489	0.456	0.652	0.617	0.481	0.482	1.839	0.467	0.451	0.493	0.508	0.458	0.572	0.455	0.572	0.483	0.505	0.485	0.486	0.469	0.508	0.462	0.462	0.456	0.488	0.459	0.473	0.497		0.545					
09:00 PM	0.577	0.528	0.492	0.453	0.639	0.715	0.543	0.483	1.619	0.488	0.531	0.447	0.510	0.458	0.658	0.492	0.556	0.478	0.500	0.490	0.497	0.450	0.504	0.436	0.505	0.452	0.497	0.481	0.473	0.525		0.549					
10:00 PM	0.604	0.477	0.451	0.425	0.630	0.699	0.527	0.428	0.694	0.488	0.479	0.449	0.506	0.532	0.759	0.531	0.521	0.465	0.500	0.487	0.482	0.445	0.503	0.463	0.508	0.518	0.470	0.482	0.494	0.636		0.522					
11:00 PM	0.625	0.448	0.432	0.435	0.622	0.672	0.513	0.458	0.545	0.452	0.448	0.452	0.512	0.502	0.747	0.539	0.496	0.472	0.483	0.478	0.463	0.426	0.496	0.473	0.447	0.528	0.590	0.597	0.514	0.629		0.516					
AVG.	0.569	0.582	0.533	0.484	0.708	0.627	0.600	0.480	1.050	0.548	0.504	0.482	0.620	0.513	0.590	0.742	1.383	0.537	0.928	0.543	0.540	0.527	0.538	0.522	0.504	0.502	0.588	0.569	0.573	0.610		0.617					
Precip. :	0.37	0.36	0.00	0.00	0.32	0.02	0.04	0.00	0.86	0.01	0.00	0.07	0.00	0.00	0.07	0.25	0.67	0.05	0.41	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						



MH028L018
Hourly Ave Dry Weather Flows
December 16, 2020 through January 14, 2021

Flow (MGD)

Hour

Legend:

- Dry Flow
- Avg. Flow

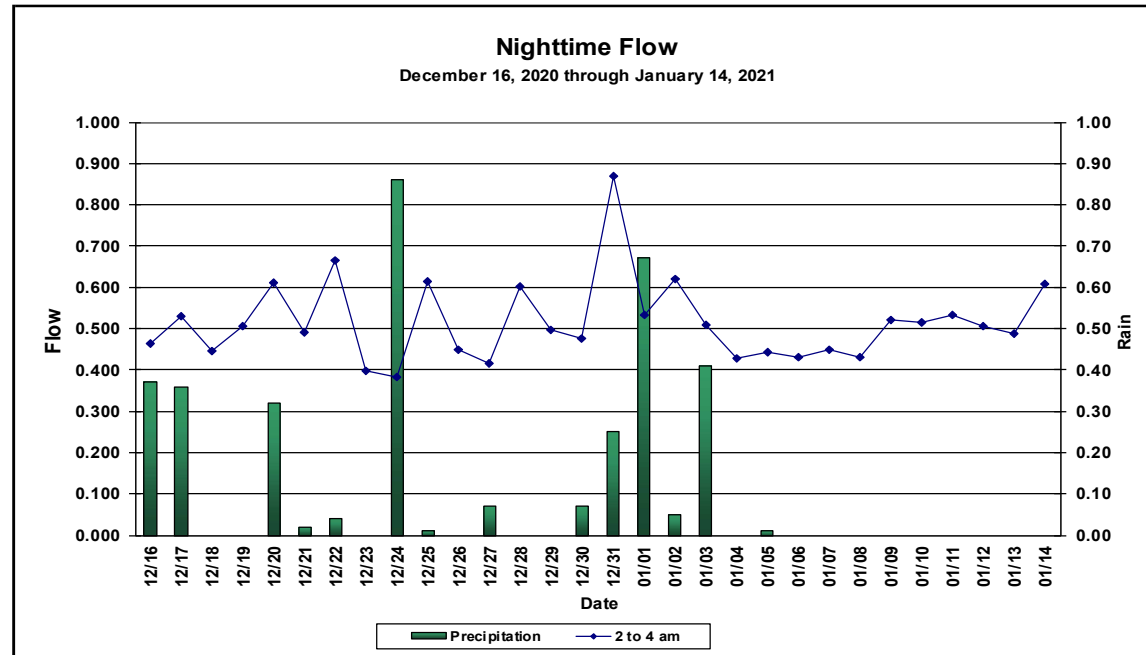
Hour	Dry Flow (MGD)	Avg. Flow (MGD)
12:00 AM	0.46	0.52
01:00 AM	0.45	0.54
02:00 AM	0.44	0.51
03:00 AM	0.44	0.50
04:00 AM	0.43	0.52
05:00 AM	0.45	0.54
06:00 AM	0.45	0.57
07:00 AM	0.50	0.56
08:00 AM	0.50	0.60
09:00 AM	0.54	0.65
10:00 AM	0.54	0.71
11:00 AM	0.55	0.84
12:00 PM	0.52	0.78
01:00 PM	0.58	0.75
02:00 PM	0.58	0.85
03:00 PM	0.54	0.91
04:00 PM	0.48	0.59
05:00 PM	0.47	0.55
06:00 PM	0.47	0.53
07:00 PM	0.46	0.56
08:00 PM	0.47	0.54
09:00 PM	0.47	0.55
10:00 PM	0.46	0.52
11:00 PM	0.46	0.51

MH028L018

Nighttime Flow

Date	Total 24 hr Precipitation	Ave flow 2 to 4 am
12/16	0.37	0.464
12/17	0.36	0.531
12/18	0.00	0.447
12/19	0.00	0.505
12/20	0.32	0.612
12/21	0.02	0.490
12/22	0.04	0.664
12/23	0.00	0.398
12/24	0.86	0.382
12/25	0.01	0.614
12/26	0.00	0.449
12/27	0.07	0.417
12/28	0.00	0.601
12/29	0.00	0.496
12/30	0.07	0.477
12/31	0.25	0.869
01/01	0.67	0.534
01/02	0.05	0.620
01/03	0.41	0.508
01/04	0.00	0.428
01/05	0.01	0.443
01/06	0.00	0.430
01/07	0.00	0.448
01/08	0.00	0.431
01/09	0.00	0.520
01/10	0.00	0.515
01/11	0.00	0.534
01/12	0.00	0.506
01/13	0.00	0.488
01/14	0.00	0.609

AVG	0.12	0.514
MIN	0.00	0.382
MAX	0.86	0.869



Nighttime Flows During Dry Weather Flow is Commonly Estimated to be 90% Ground Water Infiltration According to EPA SSOAP Toolbox

MH028L018

December 16, 2020 through January 14, 2021

	Time	Head inches	Velocity fps	Flow MGD	Precip. inches
12/16/2020	12:00 AM	2.29	3.32	0.499	0.00
	1:00 AM	2.25	3.18	0.467	0.00
	2:00 AM	2.24	3.27	0.478	0.00
	3:00 AM	2.24	3.12	0.454	0.00
	4:00 AM	2.27	3.11	0.462	0.00
	5:00 AM	2.19	3.22	0.455	0.00
	6:00 AM	2.25	3.32	0.485	0.00
	7:00 AM	2.37	3.40	0.541	0.00
	8:00 AM	2.35	3.72	0.580	0.00
	9:00 AM	2.51	3.87	0.666	0.00
	10:00 AM	2.45	3.83	0.636	0.00
	11:00 AM	2.48	3.92	0.663	0.02
	12:00 PM	2.50	3.95	0.677	0.04
	1:00 PM	2.58	4.09	0.736	0.03
	2:00 PM	2.55	3.97	0.700	0.02
	3:00 PM	2.30	3.73	0.565	0.04
	4:00 PM	2.22	3.63	0.520	0.02
	5:00 PM	2.20	3.60	0.510	0.02
	6:00 PM	2.45	3.54	0.590	0.02
	7:00 PM	2.52	3.52	0.611	0.01
	8:00 PM	2.39	3.53	0.565	0.02
	9:00 PM	2.41	3.55	0.577	0.05
	10:00 PM	2.51	3.49	0.604	0.04
	11:00 PM	2.56	3.52	0.625	0.04

MIN	2.19	3.11	0.454	MIN	0.00
MAX	2.58	4.09	0.736	MAX	0.05
AVE	2.38	3.56	0.569	TOTAL	0.37

12/17/2020	12:00 AM	2.44	3.52	0.583	0.02
	1:00 AM	2.55	3.49	0.616	0.02
	2:00 AM	2.33	3.54	0.547	0.04
	3:00 AM	2.36	3.48	0.548	0.03
	4:00 AM	2.19	3.54	0.498	0.03
	5:00 AM	2.19	3.55	0.500	0.01
	6:00 AM	2.14	3.57	0.485	0.01
	7:00 AM	2.16	3.58	0.492	0.02
	8:00 AM	2.39	3.86	0.624	0.01
	9:00 AM	2.50	4.00	0.685	0.01
	10:00 AM	2.49	4.00	0.680	0.00
	11:00 AM	2.47	4.10	0.689	0.01
	12:00 PM	2.44	4.08	0.673	0.04
	1:00 PM	2.52	4.14	0.719	0.02
	2:00 PM	2.46	4.09	0.685	0.02
	3:00 PM	2.41	4.01	0.650	0.03
	4:00 PM	2.34	3.87	0.603	0.01
	5:00 PM	2.30	3.78	0.575	0.00
	6:00 PM	2.26	3.77	0.556	0.01
	7:00 PM	2.26	3.75	0.552	0.01
	8:00 PM	2.25	3.75	0.551	0.01
	9:00 PM	2.21	3.70	0.528	0.00
	10:00 PM	2.09	3.64	0.477	0.00
	11:00 PM	2.01	3.61	0.448	0.00

MIN	2.01	3.48	0.448	MIN	0.00
MAX	2.55	4.14	0.719	MAX	0.04
AVE	2.32	3.77	0.582	TOTAL	0.36

	Time	Head inches	Velocity fps	Flow MGD	Precip. inches
12/18/2020	12:00 AM	1.98	3.57	0.433	0.00
	1:00 AM	2.02	3.62	0.451	0.00
	2:00 AM	1.97	3.57	0.428	0.00
	3:00 AM	2.07	3.52	0.457	0.00
	4:00 AM	2.07	3.53	0.457	0.00
	5:00 AM	2.11	3.55	0.471	0.00
	6:00 AM	2.11	3.54	0.472	0.00
	7:00 AM	2.13	3.68	0.497	0.00
	8:00 AM	2.35	3.87	0.606	0.00
	9:00 AM	2.41	4.03	0.654	0.00
	10:00 AM	2.42	4.05	0.664	0.00
	11:00 AM	2.43	4.08	0.670	0.00
	12:00 PM	2.42	4.08	0.666	0.00
	1:00 PM	2.38	3.98	0.633	0.00
	2:00 PM	2.34	3.97	0.614	0.00
	3:00 PM	2.30	3.88	0.587	0.00
	4:00 PM	2.26	3.83	0.564	0.00
	5:00 PM	2.25	3.80	0.558	0.00
	6:00 PM	2.21	3.76	0.538	0.00
	7:00 PM	2.17	3.69	0.511	0.00
	8:00 PM	2.12	3.65	0.489	0.00
	9:00 PM	2.12	3.66	0.492	0.00
	10:00 PM	2.02	3.60	0.451	0.00
	11:00 PM	1.97	3.59	0.432	0.00

MIN	1.97	3.52	0.428	MIN	0.00
MAX	2.43	4.08	0.670	MAX	0.00
AVE	2.19	3.75	0.533	TOTAL	0.00

12/19/2020	12:00 AM	2.03	3.54	0.447	0.00
	1:00 AM	2.10	3.49	0.460	0.00
	2:00 AM	2.13	3.46	0.468	0.00
	3:00 AM	2.29	3.44	0.517	0.00
	4:00 AM	2.33	3.44	0.531	0.00
	5:00 AM	2.22	3.46	0.498	0.00
	6:00 AM	2.37	3.44	0.545	0.00
	7:00 AM	2.20	3.45	0.487	0.00
	8:00 AM	2.09	3.51	0.462	0.00
	9:00 AM	2.09	3.57	0.468	0.00
	10:00 AM	2.15	3.66	0.501	0.00
	11:00 AM	2.00	3.61	0.445	0.00
	12:00 PM	2.18	3.71	0.519	0.00
	1:00 PM	2.19	3.72	0.523	0.00
	2:00 PM	2.30	3.83	0.581	0.00
	3:00 PM	2.18	3.71	0.517	0.00
	4:00 PM	2.12	3.64	0.489	0.00
	5:00 PM	2.11	3.64	0.484	0.00
	6:00 PM	2.03	3.61	0.454	0.00
	7:00 PM	2.00	3.56	0.439	0.00
	8:00 PM	2.05	3.56	0.456	0.00
	9:00 PM	2.07	3.50	0.453	0.00
	10:00 PM	1.97	3.53	0.425	0.00
	11:00 PM	2.00	3.53	0.435	0.00

MIN	1.97	3.44	0.425	MIN	0.00
MAX	2.37	3.83	0.581	MAX	0.00
AVE	2.13	3.57	0.484	TOTAL	0.00

	Time	Head inches	Velocity fps	Flow MGD	Precip. inches
12/20/2020	12:00 AM	2.06	3.49	0.448	0.00
	1:00 AM	2.04	3.54	0.448	0.00
	2:00 AM	2.16	3.46	0.479	0.00
	3:00 AM	2.14	3.63	0.497	0.03
	4:00 AM	2.71	4.41	0.861	0.08
	5:00 AM	3.02	4.61	1.048	0.08
	6:00 AM	3.09	4.69	1.103	0.06
	7:00 AM	2.91	4.52	0.975	0.06
	8:00 AM	2.73	4.36	0.851	0.01
	9:00 AM	2.70	4.38	0.842	0.00
	10:00 AM	2.59	4.28	0.773	0.00
	11:00 AM	2.52	4.20	0.730	0.00
	12:00 PM	2.53	4.22	0.737	0.00
	1:00 PM	2.51	4.18	0.719	0.00
	2:00 PM	2.48	4.15	0.701	0.00
	3:00 PM	2.42	4.11	0.670	0.00
	4:00 PM	2.40	4.07	0.656	0.00
	5:00 PM	2.37	4.05	0.641	0.00
	6:00 PM	2.36	4.01	0.633	0.00
	7:00 PM	2.36	4.01	0.629	0.00
	8:00 PM	2.39	4.07	0.652	0.00
	9:00 PM	2.39	4.00	0.639	0.00
	10:00 PM	2.38	3.94	0.630	0.00
	11:00 PM	2.37	3.93	0.622	0.00

MIN	2.04	3.46	0.448	MIN	0.00
MAX	3.09	4.69	1.103	MAX	0.08
AVE	2.48	4.10	0.708	TOTAL	0.32

12/21/2020	12:00 AM	2.36	3.93	0.619	0.00
	1:00 AM	2.33	3.82	0.590	0.00
	2:00 AM	2.17	3.71	0.516	0.00
	3:00 AM	2.12	3.67	0.494	0.00
	4:00 AM	2.08	3.53	0.460	0.00
	5:00 AM	2.05	3.55	0.453	0.00
	6:00 AM	2.04	3.59	0.453	0.00
	7:00 AM	2.10	3.67	0.487	0.00
	8:00 AM	2.34	3.87	0.603	0.00
	9:00 AM	2.44	4.02	0.663	0.00
	10:00 AM	2.50	4.13	0.709	0.00
	11:00 AM	2.58	4.20	0.754	0.00
	12:00 PM	2.54	4.24	0.743	0.00
	1:00 PM	2.64	4.31	0.804	0.00
	2:00 PM	2.57	4.22	0.753	0.00
	3:00 PM	2.45	4.12	0.687	0.00
	4:00 PM	2.39	4.02	0.646	0.00
	5:00 PM	2.42	3.99	0.654	0.00
	6:00 PM	2.37	3.95	0.624	0.00
	7:00 PM	2.39	4.00	0.639	0.00
	8:00 PM	2.36	3.91	0.617	0.00
	9:00 PM	2.51	4.11	0.715	0.01
	10:00 PM	2.46	4.16	0.699	0.01
	11:00 PM	2.44	4.06	0.672	0.00

MIN	2.04	3.53	0.453	MIN	0.00
MAX	2.64	4.31	0.804	MAX	0.01
AVE	2.36	3.95	0.627	TOTAL	0.02

	Time	Head inches	Velocity fps	Flow MGD	Precip. inches
12/22/2020	12:00 AM	2.34	3.83	0.595	0.00
	1:00 AM	2.28	3.77	0.565	0.00
	2:00 AM	2.33	3.81	0.588	0.01
	3:00 AM	2.40	3.99	0.643	0.01
	4:00 AM	2.59	4.20	0.762	0.01
	5:00 AM	2.41	3.97	0.646	0.01
	6:00 AM	2.30	3.76	0.569	0.00
	7:00 AM	2.31	3.75	0.572	0.00
	8:00 AM	2.43	3.98	0.656	0.00
	9:00 AM	2.58	4.14	0.744	0.00
	10:00 AM	2.51	4.09	0.708	0.00
	11:00 AM	2.48	4.12	0.698	0.00
	12:00 PM	2.48	4.12	0.698	0.00
	1:00 PM	2.47	4.08	0.684	0.00
	2:00 PM	2.43	3.94	0.648	0.00
	3:00 PM	2.37	3.82	0.606	0.00
	4:00 PM	2.19	3.69	0.519	0.00
	5:00 PM	2.04	3.62	0.459	0.00
	6:00 PM	2.15	3.51	0.481	0.00
	7:00 PM	2.22	3.49	0.503	0.00
	8:00 PM	2.16	3.48	0.481	0.00
	9:00 PM	2.36	3.45	0.543	0.00
	10:00 PM	2.32	3.43	0.527	0.00
	11:00 PM	2.29	3.41	0.513	0.00

MIN	2.04	3.41	0.459	MIN	0.00
MAX	2.59	4.20	0.762	MAX	0.01
AVE	2.35	3.81	0.600	TOTAL	0.04

12/23/2020	12:00 AM	2.30	3.36	0.509	0.00
	1:00 AM	2.03	3.30	0.415	0.00
	2:00 AM	1.99	3.23	0.393	0.00
	3:00 AM	2.03	3.17	0.398	0.00
	4:00 AM	2.04	3.19	0.403	0.00
	5:00 AM	1.99	3.28	0.402	0.00
	6:00 AM	1.98	3.28	0.398	0.00
	7:00 AM	2.22	3.38	0.487	0.00
	8:00 AM	2.18	3.60	0.503	0.00
	9:00 AM	2.26	3.71	0.548	0.00
	10:00 AM	2.25	3.75	0.550	0.00
	11:00 AM	2.29	3.78	0.569	0.00
	12:00 PM	2.24	3.75	0.547	0.00
	1:00 PM	2.30	3.79	0.576	0.00
	2:00 PM	2.25	3.74	0.549	0.00
	3:00 PM	2.15	3.70	0.507	0.00
	4:00 PM	2.00	3.49	0.430	0.00
	5:00 PM	2.23	3.48	0.504	0.00
	6:00 PM	2.25	3.41	0.498	0.00
	7:00 PM	2.20	3.46	0.490	0.00
	8:00 PM	2.18	3.45	0.482	0.00
	9:00 PM	2.19	3.44	0.483	0.00
	10:00 PM	2.05	3.36	0.428	0.00
	11:00 PM	2.14	3.35	0.458	0.00

MIN	1.98	3.17	0.393	MIN	0.00
MAX	2.30	3.79	0.576	MAX	0.00
AVE	2.15	3.48	0.480	TOTAL	0.00

	Time	Head inches	Velocity fps	Flow MGD	Precip. inches
12/24/2020	12:00 AM	1.91	3.29	0.378	0.00
	1:00 AM	2.04	3.30	0.419	0.00
	2:00 AM	1.82	3.18	0.341	0.00
	3:00 AM	2.11	3.30	0.440	0.00
	4:00 AM	1.88	3.24	0.365	0.00
	5:00 AM	2.11	3.40	0.459	0.05
	6:00 AM	3.52	4.92	1.427	0.05
	7:00 AM	3.42	4.79	1.323	0.04
	8:00 AM	2.82	4.30	0.882	0.02
	9:00 AM	2.74	4.15	0.817	0.03
	10:00 AM	2.92	4.37	0.946	0.00
	11:00 AM	2.50	3.90	0.669	0.03
	12:00 PM	3.77	5.04	1.627	0.08
	1:00 PM	3.53	4.91	1.425	0.05
	2:00 PM	3.27	4.71	1.222	0.04
	3:00 PM	3.91	5.19	1.768	0.07
	4:00 PM	3.47	4.87	1.361	0.05
	5:00 PM	3.71	5.07	1.574	0.05
	6:00 PM	3.31	4.72	1.246	0.04
	7:00 PM	4.00	5.26	1.815	0.05
	8:00 PM	4.01	5.27	1.839	0.06
	9:00 PM	3.75	5.05	1.619	0.06
	10:00 PM	2.54	3.93	0.694	0.08
	11:00 PM	2.27	3.68	0.545	0.01

MIN	1.82	3.18	0.341	MIN	0.00
MAX	4.01	5.27	1.839	MAX	0.08
AVE	2.97	4.33	1.050	TOTAL	0.86

12/25/2020	12:00 AM	2.19	3.63	0.512	0.01
	1:00 AM	2.27	3.60	0.536	0.00
	2:00 AM	2.48	3.54	0.599	0.00
	3:00 AM	2.49	3.52	0.602	0.00
	4:00 AM	2.61	3.52	0.642	0.00
	5:00 AM	2.48	3.55	0.600	0.00
	6:00 AM	2.34	3.52	0.548	0.00
	7:00 AM	2.31	3.53	0.541	0.00
	8:00 AM	2.33	3.55	0.548	0.00
	9:00 AM	2.33	3.68	0.567	0.00
	10:00 AM	2.25	3.66	0.536	0.00
	11:00 AM	2.24	3.61	0.526	0.00
	12:00 PM	2.23	3.63	0.527	0.00
	1:00 PM	2.21	3.62	0.518	0.00
	2:00 PM	2.29	3.64	0.549	0.00
	3:00 PM	2.28	3.64	0.544	0.00
	4:00 PM	2.43	3.53	0.580	0.00
	5:00 PM	2.54	3.46	0.607	0.00
	6:00 PM	2.50	3.49	0.599	0.00
	7:00 PM	2.47	3.46	0.582	0.00
	8:00 PM	2.17	3.36	0.467	0.00
	9:00 PM	2.22	3.40	0.488	0.00
	10:00 PM	2.23	3.37	0.488	0.00
	11:00 PM	2.14	3.32	0.452	0.00

MIN	2.14	3.32	0.452	MIN	0.00
MAX	2.61	3.68	0.642	MAX	0.01
AVE	2.33	3.54	0.548	TOTAL	0.01

	Time	Head inches	Velocity fps	Flow MGD	Precip. inches
12/26/2020	12:00 AM	2.17	3.31	0.461	0.00
	1:00 AM	2.18	3.31	0.465	0.00
	2:00 AM	2.18	3.26	0.458	0.00
	3:00 AM	2.17	3.20	0.446	0.00
	4:00 AM	2.17	3.20	0.444	0.00
	5:00 AM	2.18	3.22	0.451	0.00
	6:00 AM	2.17	3.23	0.448	0.00
	7:00 AM	2.23	3.34	0.483	0.00
	8:00 AM	2.24	3.37	0.491	0.00
	9:00 AM	2.46	3.45	0.579	0.00
	10:00 AM	2.40	3.47	0.560	0.00
	11:00 AM	2.44	3.50	0.580	0.00
	12:00 PM	2.38	3.44	0.548	0.00
	1:00 PM	2.46	3.50	0.584	0.00
	2:00 PM	2.39	3.50	0.561	0.00
	3:00 PM	2.47	3.46	0.584	0.00
	4:00 PM	2.37	3.43	0.544	0.00
	5:00 PM	2.25	3.36	0.492	0.00
	6:00 PM	2.31	3.43	0.524	0.00
	7:00 PM	2.25	3.36	0.492	0.00
	8:00 PM	2.13	3.33	0.451	0.00
	9:00 PM	2.34	3.42	0.531	0.00
	10:00 PM	2.20	3.38	0.479	0.00
	11:00 PM	2.11	3.35	0.448	0.00

MIN	2.11	3.20	0.444	MIN	0.00
MAX	2.47	3.50	0.584	MAX	0.00
AVE	2.28	3.37	0.504	TOTAL	0.00

12/27/2020	12:00 AM	2.08	3.22	0.419	0.00
	1:00 AM	2.18	3.34	0.468	0.00
	2:00 AM	2.11	3.22	0.428	0.00
	3:00 AM	2.07	3.18	0.411	0.00
	4:00 AM	2.07	3.20	0.413	0.00
	5:00 AM	2.10	3.28	0.434	0.00
	6:00 AM	2.03	3.22	0.405	0.00
	7:00 AM	2.07	3.26	0.420	0.00
	8:00 AM	2.13	3.30	0.446	0.00
	9:00 AM	2.44	3.43	0.566	0.00
	10:00 AM	2.39	3.41	0.546	0.00
	11:00 AM	2.35	3.52	0.550	0.00
	12:00 PM	2.18	3.71	0.520	0.00
	1:00 PM	2.29	3.79	0.570	0.07
	2:00 PM	2.33	3.80	0.585	0.00
	3:00 PM	2.25	3.77	0.553	0.00
	4:00 PM	2.20	3.70	0.524	0.00
	5:00 PM	2.08	3.56	0.464	0.00
	6:00 PM	2.17	3.52	0.488	0.00
	7:00 PM	2.22	3.53	0.508	0.00
	8:00 PM	2.17	3.54	0.493	0.00
	9:00 PM	2.03	3.56	0.447	0.00
	10:00 PM	2.03	3.58	0.449	0.00
	11:00 PM	2.04	3.57	0.452	0.00

MIN	2.03	3.18	0.405	MIN	0.00
MAX	2.44	3.80	0.585	MAX	0.07
AVE	2.17	3.47	0.482	TOTAL	0.07

	Time	Head inches	Velocity fps	Flow MGD	Precip. inches
12/28/2020	12:00 AM	1.98	3.57	0.432	0.00
	1:00 AM	2.07	3.64	0.471	0.00
	2:00 AM	2.16	3.69	0.509	0.00
	3:00 AM	2.35	3.88	0.609	0.00
	4:00 AM	2.49	4.01	0.684	0.00
	5:00 AM	2.51	3.98	0.686	0.00
	6:00 AM	2.54	4.00	0.702	0.00
	7:00 AM	2.55	4.03	0.709	0.00
	8:00 AM	2.63	4.14	0.765	0.00
	9:00 AM	2.76	4.29	0.853	0.00
	10:00 AM	2.72	4.25	0.827	0.00
	11:00 AM	2.74	4.27	0.839	0.00
	12:00 PM	2.60	4.11	0.748	0.00
	1:00 PM	2.66	4.18	0.788	0.00
	2:00 PM	2.62	4.11	0.756	0.00
	3:00 PM	2.34	3.85	0.602	0.00
	4:00 PM	2.12	3.66	0.492	0.00
	5:00 PM	1.99	3.59	0.437	0.00
	6:00 PM	2.06	3.52	0.451	0.00
	7:00 PM	2.16	3.53	0.486	0.00
	8:00 PM	2.23	3.51	0.508	0.00
	9:00 PM	2.25	3.48	0.510	0.00
	10:00 PM	2.23	3.50	0.506	0.00
	11:00 PM	2.26	3.47	0.512	0.00

MIN	1.98	3.47	0.432	MIN	0.00
MAX	2.76	4.29	0.853	MAX	0.00
AVE	2.38	3.84	0.620	TOTAL	0.00

12/29/2020	12:00 AM	2.37	3.43	0.544	0.00
	1:00 AM	2.31	3.42	0.523	0.00
	2:00 AM	2.33	3.35	0.518	0.00
	3:00 AM	2.21	3.38	0.484	0.00
	4:00 AM	2.22	3.37	0.487	0.00
	5:00 AM	2.24	3.35	0.489	0.00
	6:00 AM	2.27	3.43	0.508	0.00
	7:00 AM	2.34	3.46	0.539	0.00
	8:00 AM	2.08	3.56	0.464	0.00
	9:00 AM	2.37	3.83	0.608	0.00
	10:00 AM	2.41	3.87	0.628	0.00
	11:00 AM	2.44	3.92	0.650	0.00
	12:00 PM	2.27	3.77	0.560	0.00
	1:00 PM	2.40	3.88	0.625	0.00
	2:00 PM	2.32	3.83	0.590	0.00
	3:00 PM	2.11	3.68	0.491	0.00
	4:00 PM	1.91	3.58	0.413	0.00
	5:00 PM	1.98	3.55	0.431	0.00
	6:00 PM	1.93	3.52	0.412	0.00
	7:00 PM	1.91	3.54	0.407	0.00
	8:00 PM	2.08	3.51	0.458	0.00
	9:00 PM	2.08	3.51	0.458	0.00
	10:00 PM	2.32	3.46	0.532	0.00
	11:00 PM	2.25	3.43	0.502	0.00

MIN	1.91	3.35	0.407	MIN	0.00
MAX	2.44	3.92	0.650	MAX	0.00
AVE	2.22	3.57	0.513	TOTAL	0.00

	Time	Head inches	Velocity fps	Flow MGD	Precip. inches
12/30/2020	12:00 AM	2.23	3.45	0.499	0.00
	1:00 AM	2.31	3.39	0.515	0.00
	2:00 AM	2.20	3.38	0.481	0.00
	3:00 AM	2.16	3.44	0.474	0.00
	4:00 AM	2.20	3.38	0.477	0.00
	5:00 AM	2.29	3.42	0.516	0.00
	6:00 AM	2.10	3.48	0.460	0.00
	7:00 AM	1.95	3.53	0.418	0.00
	8:00 AM	2.22	3.77	0.548	0.00
	9:00 AM	2.53	4.00	0.699	0.00
	10:00 AM	2.55	3.99	0.705	0.00
	11:00 AM	2.54	4.02	0.707	0.00
	12:00 PM	2.41	3.91	0.633	0.00
	1:00 PM	2.51	4.02	0.693	0.00
	2:00 PM	2.50	4.02	0.688	0.00
	3:00 PM	2.35	3.91	0.611	0.00
	4:00 PM	2.25	3.83	0.561	0.00
	5:00 PM	2.09	3.72	0.490	0.00
	6:00 PM	2.11	3.69	0.490	0.00
	7:00 PM	2.57	4.11	0.748	0.02
	8:00 PM	2.27	3.83	0.572	0.00
	9:00 PM	2.39	3.99	0.658	0.02
	10:00 PM	2.61	4.11	0.759	0.01
	11:00 PM	2.58	4.08	0.747	0.02

MIN	1.95	3.38	0.418	MIN	0.00
MAX	2.61	4.11	0.759	MAX	0.02
AVE	2.33	3.77	0.590	TOTAL	0.07

12/31/2020	12:00 AM	3.16	4.59	1.164	0.05
	1:00 AM	3.45	4.82	1.364	0.01
	2:00 AM	2.62	4.01	0.737	0.01
	3:00 AM	2.73	4.16	0.815	0.04
	4:00 AM	3.08	4.51	1.056	0.04
	5:00 AM	2.60	3.95	0.719	0.04
	6:00 AM	2.75	4.16	0.821	0.04
	7:00 AM	2.71	4.14	0.802	0.02
	8:00 AM	2.69	4.12	0.785	0.00
	9:00 AM	2.70	4.10	0.788	0.00
	10:00 AM	2.67	4.07	0.768	0.00
	11:00 AM	2.72	4.15	0.806	0.00
	12:00 PM	2.74	4.25	0.836	0.00
	1:00 PM	2.80	4.30	0.875	0.00
	2:00 PM	2.69	4.18	0.801	0.00
	3:00 PM	2.56	4.02	0.713	0.00
	4:00 PM	2.31	3.81	0.582	0.00
	5:00 PM	2.02	3.65	0.455	0.00
	6:00 PM	1.99	3.62	0.444	0.00
	7:00 PM	2.05	3.57	0.456	0.00
	8:00 PM	2.05	3.58	0.455	0.00
	9:00 PM	2.15	3.58	0.492	0.00
	10:00 PM	2.29	3.53	0.531	0.00
	11:00 PM	2.32	3.52	0.539	0.00

MIN	1.99	3.52	0.444	MIN	0.00
MAX	3.45	4.82	1.364	MAX	0.05
AVE	2.58	4.02	0.742	TOTAL	0.25

	Time	Head inches	Velocity fps	Flow MGD	Precip. inches
01/01/2021	12:00 AM	2.41	3.51	0.568	0.00
	1:00 AM	2.41	3.48	0.565	0.00
	2:00 AM	2.40	3.46	0.558	0.00
	3:00 AM	2.30	3.45	0.521	0.00
	4:00 AM	2.33	3.40	0.524	0.00
	5:00 AM	2.17	3.36	0.468	0.00
	6:00 AM	2.30	3.42	0.518	0.00
	7:00 AM	2.38	3.44	0.546	0.00
	8:00 AM	2.06	3.54	0.455	0.00
	9:00 AM	2.24	3.73	0.541	0.00
	10:00 AM	2.37	3.83	0.614	0.04
	11:00 AM	4.23	5.49	2.056	0.08
	12:00 PM	4.55	5.55	2.476	0.05
	1:00 PM	4.21	5.24	1.983	0.08
	2:00 PM	7.15	7.41	6.183	0.22
	3:00 PM	8.52	8.25	8.985	0.19
	4:00 PM	3.53	5.01	1.459	0.01
	5:00 PM	2.64	4.27	0.797	0.00
	6:00 PM	2.39	4.00	0.642	0.00
	7:00 PM	2.31	3.84	0.587	0.00
	8:00 PM	2.30	3.79	0.572	0.00
	9:00 PM	2.29	3.70	0.556	0.00
	10:00 PM	2.21	3.64	0.521	0.00
	11:00 PM	2.16	3.59	0.496	0.00

MIN	2.06	3.36	0.455	MIN	0.00
MAX	8.52	8.25	8.985	MAX	0.22
AVE	3.08	4.27	1.383	TOTAL	0.67

01/02/2021	12:00 AM	2.16	3.61	0.498	0.00
	1:00 AM	2.77	4.28	0.922	0.04
	2:00 AM	2.56	4.23	0.754	0.01
	3:00 AM	2.28	3.84	0.576	0.00
	4:00 AM	2.26	3.59	0.530	0.00
	5:00 AM	2.19	3.61	0.508	0.00
	6:00 AM	2.16	3.56	0.491	0.00
	7:00 AM	2.04	3.51	0.443	0.00
	8:00 AM	2.24	3.58	0.520	0.00
	9:00 AM	2.23	3.66	0.528	0.00
	10:00 AM	2.24	3.67	0.534	0.00
	11:00 AM	2.23	3.67	0.530	0.00
	12:00 PM	2.21	3.68	0.524	0.00
	1:00 PM	2.22	3.68	0.528	0.00
	2:00 PM	2.27	3.77	0.558	0.00
	3:00 PM	2.22	3.64	0.524	0.00
	4:00 PM	2.17	3.62	0.504	0.00
	5:00 PM	2.20	3.60	0.508	0.00
	6:00 PM	2.16	3.60	0.498	0.00
	7:00 PM	2.18	3.61	0.505	0.00
	8:00 PM	2.12	3.60	0.483	0.00
	9:00 PM	2.12	3.57	0.478	0.00
	10:00 PM	2.09	3.53	0.465	0.00
	11:00 PM	2.11	3.53	0.472	0.00

MIN	2.04	3.51	0.443	MIN	0.00
MAX	2.77	4.28	0.922	MAX	0.04
AVE	2.23	3.68	0.537	TOTAL	0.05

	Time	Head inches	Velocity fps	Flow MGD	Precip. inches
01/03/2021	12:00 AM	2.03	3.48	0.437	0.00
	1:00 AM	2.07	3.52	0.456	0.00
	2:00 AM	2.26	3.44	0.509	0.00
	3:00 AM	2.24	3.44	0.502	0.00
	4:00 AM	2.17	3.67	0.514	0.02
	5:00 AM	3.16	4.81	1.193	0.03
	6:00 AM	2.24	3.85	0.564	0.01
	7:00 AM	2.21	3.70	0.528	0.00
	8:00 AM	2.19	3.59	0.505	0.01
	9:00 AM	2.25	3.89	0.573	0.01
	10:00 AM	4.36	5.62	2.391	0.13
	11:00 AM	6.31	7.05	4.812	0.12
	12:00 PM	4.28	5.60	2.132	0.05
	1:00 PM	3.51	5.05	1.442	0.03
	2:00 PM	2.81	4.48	0.918	0.00
	3:00 PM	2.42	4.07	0.665	0.00
	4:00 PM	2.23	3.85	0.558	0.00
	5:00 PM	2.20	3.78	0.535	0.00
	6:00 PM	2.18	3.77	0.526	0.00
	7:00 PM	2.16	3.76	0.521	0.00
	8:00 PM	2.15	3.68	0.505	0.00
	9:00 PM	2.15	3.65	0.500	0.00
	10:00 PM	2.16	3.63	0.500	0.00
	11:00 PM	2.13	3.57	0.483	0.00

MIN	2.03	3.44	0.437	MIN	0.00
MAX	6.31	7.05	4.812	MAX	0.13
AVE	2.66	4.12	0.928	TOTAL	0.41

01/04/2021	12:00 AM	2.15	3.60	0.493	0.00
	1:00 AM	2.09	3.52	0.464	0.00
	2:00 AM	2.03	3.51	0.440	0.00
	3:00 AM	1.99	3.47	0.423	0.00
	4:00 AM	2.00	3.43	0.421	0.00
	5:00 AM	2.08	3.49	0.454	0.00
	6:00 AM	2.13	3.55	0.479	0.00
	7:00 AM	2.16	3.73	0.514	0.00
	8:00 AM	2.40	4.05	0.655	0.00
	9:00 AM	2.52	4.17	0.724	0.00
	10:00 AM	2.52	4.21	0.731	0.00
	11:00 AM	2.42	4.09	0.671	0.00
	12:00 PM	2.50	4.19	0.720	0.00
	1:00 PM	2.44	4.12	0.681	0.00
	2:00 PM	2.31	4.00	0.610	0.00
	3:00 PM	2.28	3.99	0.598	0.00
	4:00 PM	2.20	3.88	0.549	0.00
	5:00 PM	2.11	3.76	0.502	0.00
	6:00 PM	2.09	3.68	0.485	0.00
	7:00 PM	2.11	3.66	0.487	0.00
	8:00 PM	2.12	3.62	0.485	0.00
	9:00 PM	2.12	3.66	0.490	0.00
	10:00 PM	2.12	3.62	0.487	0.00
	11:00 PM	2.10	3.61	0.478	0.00

MIN	1.99	3.43	0.421	MIN	0.00
MAX	2.52	4.21	0.731	MAX	0.00
AVE	2.21	3.78	0.543	TOTAL	0.00

	Time	Head inches	Velocity fps	Flow MGD	Precip. inches
01/05/2021	12:00 AM	2.10	3.59	0.475	0.00
	1:00 AM	2.09	3.53	0.462	0.00
	2:00 AM	2.07	3.48	0.450	0.00
	3:00 AM	2.06	3.49	0.447	0.00
	4:00 AM	2.01	3.48	0.431	0.01
	5:00 AM	2.11	3.70	0.494	0.00
	6:00 AM	2.10	3.71	0.489	0.00
	7:00 AM	2.13	3.74	0.507	0.00
	8:00 AM	2.33	3.99	0.616	0.00
	9:00 AM	2.42	4.06	0.663	0.00
	10:00 AM	2.44	4.10	0.680	0.00
	11:00 AM	2.47	4.12	0.696	0.00
	12:00 PM	2.38	4.05	0.646	0.00
	1:00 PM	2.47	4.14	0.698	0.00
	2:00 PM	2.44	4.11	0.679	0.00
	3:00 PM	2.28	3.97	0.594	0.00
	4:00 PM	2.15	3.82	0.521	0.00
	5:00 PM	2.11	3.71	0.494	0.00
	6:00 PM	2.10	3.70	0.490	0.00
	7:00 PM	2.11	3.67	0.490	0.00
	8:00 PM	2.12	3.63	0.486	0.00
	9:00 PM	2.14	3.66	0.497	0.00
	10:00 PM	2.12	3.60	0.482	0.00
	11:00 PM	2.07	3.56	0.463	0.00

MIN	2.01	3.48	0.431	MIN	0.00
MAX	2.47	4.14	0.698	MAX	0.01
AVE	2.20	3.77	0.540	TOTAL	0.01

01/06/2021	12:00 AM	2.11	3.60	0.479	0.00
	1:00 AM	2.06	3.54	0.456	0.00
	2:00 AM	2.08	3.51	0.459	0.00
	3:00 AM	1.98	3.48	0.424	0.00
	4:00 AM	1.95	3.45	0.409	0.00
	5:00 AM	1.99	3.47	0.423	0.00
	6:00 AM	2.04	3.51	0.443	0.00
	7:00 AM	2.15	3.71	0.507	0.00
	8:00 AM	2.33	3.96	0.612	0.00
	9:00 AM	2.48	4.12	0.699	0.00
	10:00 AM	2.52	4.14	0.717	0.00
	11:00 AM	2.42	4.08	0.667	0.00
	12:00 PM	2.39	4.06	0.653	0.00
	1:00 PM	2.42	4.10	0.671	0.00
	2:00 PM	2.36	4.00	0.632	0.00
	3:00 PM	2.31	3.96	0.602	0.00
	4:00 PM	2.19	3.84	0.539	0.00
	5:00 PM	2.13	3.74	0.507	0.00
	6:00 PM	2.13	3.63	0.490	0.00
	7:00 PM	2.10	3.60	0.475	0.00
	8:00 PM	2.09	3.57	0.469	0.00
	9:00 PM	2.05	3.53	0.450	0.00
	10:00 PM	2.04	3.52	0.445	0.00
	11:00 PM	2.00	3.47	0.426	0.00

MIN	1.95	3.45	0.409	MIN	0.00
MAX	2.52	4.14	0.717	MAX	0.00
AVE	2.18	3.73	0.527	TOTAL	0.00

	Time	Head inches	Velocity fps	Flow MGD	Precip. inches
01/07/2021	12:00 AM	2.11	3.53	0.469	0.00
	1:00 AM	2.09	3.46	0.454	0.00
	2:00 AM	2.02	3.46	0.434	0.00
	3:00 AM	2.11	3.44	0.457	0.00
	4:00 AM	2.10	3.43	0.455	0.00
	5:00 AM	2.05	3.41	0.435	0.00
	6:00 AM	2.05	3.48	0.444	0.00
	7:00 AM	2.08	3.54	0.461	0.00
	8:00 AM	2.30	3.89	0.591	0.00
	9:00 AM	2.43	4.01	0.658	0.00
	10:00 AM	2.44	4.04	0.667	0.00
	11:00 AM	2.44	4.06	0.670	0.00
	12:00 PM	2.50	4.09	0.700	0.00
	1:00 PM	2.43	4.03	0.663	0.00
	2:00 PM	2.32	3.93	0.603	0.00
	3:00 PM	2.31	3.91	0.596	0.00
	4:00 PM	2.26	3.90	0.574	0.00
	5:00 PM	2.19	3.78	0.531	0.00
	6:00 PM	2.18	3.73	0.523	0.00
	7:00 PM	2.16	3.69	0.508	0.00
	8:00 PM	2.17	3.66	0.508	0.00
	9:00 PM	2.17	3.63	0.504	0.00
	10:00 PM	2.17	3.61	0.503	0.00
	11:00 PM	2.17	3.58	0.496	0.00

MIN	2.02	3.41	0.434	MIN	0.00
MAX	2.50	4.09	0.700	MAX	0.00
AVE	2.22	3.72	0.538	TOTAL	0.00

01/08/2021	12:00 AM	2.13	3.56	0.483	0.00
	1:00 AM	2.06	3.53	0.455	0.00
	2:00 AM	2.01	3.48	0.430	0.00
	3:00 AM	2.01	3.46	0.428	0.00
	4:00 AM	2.01	3.51	0.435	0.00
	5:00 AM	1.99	3.50	0.428	0.00
	6:00 AM	2.11	3.52	0.471	0.00
	7:00 AM	2.20	3.60	0.512	0.00
	8:00 AM	2.30	3.78	0.571	0.00
	9:00 AM	2.48	4.03	0.682	0.00
	10:00 AM	2.43	3.98	0.654	0.00
	11:00 AM	2.36	3.92	0.615	0.00
	12:00 PM	2.45	4.01	0.668	0.00
	1:00 PM	2.36	3.93	0.620	0.00
	2:00 PM	2.39	3.96	0.634	0.00
	3:00 PM	2.35	3.88	0.609	0.00
	4:00 PM	2.23	3.72	0.539	0.00
	5:00 PM	2.21	3.70	0.528	0.00
	6:00 PM	2.12	3.55	0.476	0.00
	7:00 PM	2.07	3.53	0.458	0.00
	8:00 PM	2.09	3.51	0.462	0.00
	9:00 PM	2.02	3.48	0.436	0.00
	10:00 PM	2.11	3.46	0.463	0.00
	11:00 PM	2.14	3.46	0.473	0.00

MIN	1.99	3.46	0.428	MIN	0.00
MAX	2.48	4.03	0.682	MAX	0.00
AVE	2.19	3.67	0.522	TOTAL	0.00

	Time	Head inches	Velocity fps	Flow MGD	Precip. inches
01/09/2021	12:00 AM	2.21	3.44	0.491	0.00
	1:00 AM	2.42	3.42	0.558	0.00
	2:00 AM	2.45	3.34	0.556	0.00
	3:00 AM	2.26	3.32	0.492	0.00
	4:00 AM	2.34	3.29	0.511	0.00
	5:00 AM	2.34	3.36	0.523	0.00
	6:00 AM	2.33	3.45	0.533	0.00
	7:00 AM	2.49	3.42	0.583	0.00
	8:00 AM	2.30	3.42	0.518	0.00
	9:00 AM	2.09	3.51	0.461	0.00
	10:00 AM	2.17	3.55	0.494	0.00
	11:00 AM	2.27	3.64	0.541	0.00
	12:00 PM	2.20	3.59	0.508	0.00
	1:00 PM	2.16	3.58	0.492	0.00
	2:00 PM	2.13	3.55	0.480	0.00
	3:00 PM	2.18	3.58	0.500	0.00
	4:00 PM	2.08	3.55	0.463	0.00
	5:00 PM	2.16	3.57	0.493	0.00
	6:00 PM	2.17	3.54	0.493	0.00
	7:00 PM	2.13	3.55	0.481	0.00
	8:00 PM	2.08	3.53	0.462	0.00
	9:00 PM	2.24	3.48	0.505	0.00
	10:00 PM	2.26	3.45	0.508	0.00
	11:00 PM	2.07	3.45	0.447	0.00

MIN	2.07	3.29	0.447	MIN	0.00
MAX	2.49	3.64	0.583	MAX	0.00
AVE	2.23	3.48	0.504	TOTAL	0.00

01/10/2021	12:00 AM	2.48	3.41	0.578	0.00
	1:00 AM	2.44	3.43	0.567	0.00
	2:00 AM	2.48	3.33	0.563	0.00
	3:00 AM	2.24	3.28	0.479	0.00
	4:00 AM	2.31	3.31	0.504	0.00
	5:00 AM	2.33	3.33	0.513	0.00
	6:00 AM	2.53	3.36	0.585	0.00
	7:00 AM	2.44	3.37	0.557	0.00
	8:00 AM	2.51	3.41	0.589	0.00
	9:00 AM	2.31	3.45	0.526	0.00
	10:00 AM	2.06	3.47	0.448	0.00
	11:00 AM	2.12	3.55	0.477	0.00
	12:00 PM	2.08	3.52	0.459	0.00
	1:00 PM	2.14	3.57	0.487	0.00
	2:00 PM	2.19	3.60	0.509	0.00
	3:00 PM	2.15	3.56	0.490	0.00
	4:00 PM	2.04	3.51	0.445	0.00
	5:00 PM	2.04	3.49	0.444	0.00
	6:00 PM	2.09	3.48	0.458	0.00
	7:00 PM	1.97	3.47	0.418	0.00
	8:00 PM	2.07	3.51	0.456	0.00
	9:00 PM	2.07	3.49	0.452	0.00
	10:00 PM	2.28	3.46	0.518	0.00
	11:00 PM	2.32	3.45	0.528	0.00

MIN	1.97	3.28	0.418	MIN	0.00
MAX	2.53	3.60	0.589	MAX	0.00
AVE	2.24	3.45	0.502	TOTAL	0.00

	Time	Head inches	Velocity fps	Flow MGD	Precip. inches
01/11/2021	12:00 AM	2.36	3.43	0.542	0.00
	1:00 AM	2.47	3.43	0.579	0.00
	2:00 AM	2.39	3.32	0.533	0.00
	3:00 AM	2.42	3.34	0.546	0.00
	4:00 AM	2.35	3.35	0.523	0.00
	5:00 AM	2.40	3.36	0.542	0.00
	6:00 AM	2.42	3.46	0.565	0.00
	7:00 AM	2.25	3.63	0.535	0.00
	8:00 AM	2.55	3.96	0.700	0.00
	9:00 AM	2.55	3.99	0.705	0.00
	10:00 AM	2.60	4.06	0.737	0.00
	11:00 AM	2.64	4.08	0.760	0.00
	12:00 PM	2.56	4.04	0.718	0.00
	1:00 PM	2.54	4.02	0.705	0.00
	2:00 PM	2.47	3.92	0.660	0.00
	3:00 PM	2.47	3.93	0.663	0.00
	4:00 PM	2.36	3.77	0.593	0.00
	5:00 PM	2.19	3.58	0.505	0.00
	6:00 PM	2.17	3.54	0.492	0.00
	7:00 PM	2.13	3.52	0.475	0.00
	8:00 PM	2.17	3.52	0.488	0.00
	9:00 PM	2.21	3.47	0.497	0.00
	10:00 PM	2.13	3.49	0.470	0.00
	11:00 PM	2.49	3.46	0.590	0.00

MIN	2.13	3.32	0.470	MIN	0.00
MAX	2.64	4.08	0.760	MAX	0.00
AVE	2.39	3.65	0.588	TOTAL	0.00

01/12/2021	12:00 AM	2.48	3.42	0.579	0.00
	1:00 AM	2.36	3.40	0.536	0.00
	2:00 AM	2.28	3.26	0.487	0.00
	3:00 AM	2.25	3.30	0.485	0.00
	4:00 AM	2.43	3.32	0.547	0.00
	5:00 AM	2.54	3.44	0.603	0.00
	6:00 AM	2.45	3.47	0.576	0.00
	7:00 AM	2.25	3.59	0.526	0.00
	8:00 AM	2.39	3.94	0.631	0.00
	9:00 AM	2.39	3.95	0.631	0.00
	10:00 AM	2.38	4.00	0.639	0.00
	11:00 AM	2.43	4.05	0.667	0.00
	12:00 PM	2.45	4.08	0.682	0.00
	1:00 PM	2.46	4.09	0.687	0.00
	2:00 PM	2.50	4.13	0.709	0.00
	3:00 PM	2.35	3.95	0.619	0.00
	4:00 PM	2.27	3.81	0.566	0.00
	5:00 PM	2.20	3.67	0.521	0.00
	6:00 PM	2.10	3.65	0.485	0.00
	7:00 PM	2.05	3.56	0.453	0.00
	8:00 PM	2.07	3.55	0.459	0.00
	9:00 PM	2.13	3.57	0.481	0.00
	10:00 PM	2.15	3.50	0.482	0.00
	11:00 PM	2.50	3.49	0.597	0.00

MIN	2.05	3.26	0.453	MIN	0.00
MAX	2.54	4.13	0.709	MAX	0.00
AVE	2.33	3.67	0.569	TOTAL	0.00

	Time	Head inches	Velocity fps	Flow MGD	Precip. inches
01/13/2021	12:00 AM	2.48	3.45	0.585	0.00
	1:00 AM	2.38	3.46	0.550	0.00
	2:00 AM	2.25	3.34	0.490	0.00
	3:00 AM	2.15	3.36	0.460	0.00
	4:00 AM	2.32	3.35	0.515	0.00
	5:00 AM	2.26	3.35	0.496	0.00
	6:00 AM	2.52	3.40	0.589	0.00
	7:00 AM	2.23	3.54	0.514	0.00
	8:00 AM	2.39	3.84	0.617	0.00
	9:00 AM	2.50	4.00	0.685	0.00
	10:00 AM	2.55	4.09	0.720	0.00
	11:00 AM	2.56	4.12	0.734	0.00
	12:00 PM	2.54	4.11	0.720	0.00
	1:00 PM	2.51	4.05	0.699	0.00
	2:00 PM	2.48	4.03	0.683	0.00
	3:00 PM	2.38	3.90	0.620	0.00
	4:00 PM	2.32	3.82	0.586	0.00
	5:00 PM	2.19	3.69	0.520	0.00
	6:00 PM	2.22	3.66	0.528	0.00
	7:00 PM	2.13	3.61	0.487	0.00
	8:00 PM	2.09	3.61	0.473	0.00
	9:00 PM	2.10	3.58	0.473	0.00
	10:00 PM	2.17	3.56	0.494	0.00
	11:00 PM	2.23	3.54	0.514	0.00

MIN	2.09	3.34	0.460	MIN	0.00
MAX	2.56	4.12	0.734	MAX	0.00
AVE	2.33	3.69	0.573	TOTAL	0.00

01/14/2021	12:00 AM	2.40	3.53	0.571	0.00
	1:00 AM	2.33	3.53	0.546	0.00
	2:00 AM	2.58	3.47	0.624	0.00
	3:00 AM	2.55	3.45	0.610	0.00
	4:00 AM	2.49	3.48	0.593	0.00
	5:00 AM	2.50	3.46	0.593	0.00
	6:00 AM	2.48	3.43	0.582	0.00
	7:00 AM	2.35	3.59	0.560	0.00
	8:00 AM	2.50	3.96	0.681	0.00
	9:00 AM	2.56	4.04	0.719	0.00
	10:00 AM	2.53	4.01	0.700	0.00
	11:00 AM	2.53	4.02	0.703	0.00
	12:00 PM	2.60	4.09	0.741	0.00
	1:00 PM	2.59	4.10	0.741	0.00
	2:00 PM	2.48	3.95	0.667	0.00
	3:00 PM	2.44	3.87	0.639	0.00
	4:00 PM	2.31	3.77	0.575	0.00
	5:00 PM	2.15	3.65	0.500	0.00
	6:00 PM	2.18	3.63	0.508	0.00
	7:00 PM	2.20	3.59	0.507	0.00
	8:00 PM	2.17	3.57	0.497	0.00
	9:00 PM	2.25	3.57	0.525	0.00
	10:00 PM	2.58	3.53	0.636	0.00
	11:00 PM	2.57	3.52	0.629	0.00

MIN	2.15	3.43	0.497	MIN	0.00
MAX	2.60	4.10	0.741	MAX	0.00
AVE	2.43	3.70	0.610	TOTAL	0.00

APPENDIX D

Alternative Sewage Facilities Analysis

SECTION H SEWAGE FACILITIES PLANNING MODULE COMPONENT 3

**Re: Alternative Sewage Facilities Analysis
3500 Forbes Avenue
City of Pittsburgh, Allegheny County, Pennsylvania
Langan Project No.: 250084602**

The project site is located in the Oakland neighborhood, northeast of the intersection of Forbes Avenue and McKee Place, in the EMI, Educational/Medical Institution District within the City of Pittsburgh, Allegheny County, Pennsylvania. CA Ventures is proposing to redevelop approximately 1.51 acres on Parcels 28-F-322, 28-F-330, 28-F-360, 28-F-354, and 28-F-356, to include the proposed 398,500 gross square foot multi-story residential building to replace the existing gas station, impervious pedestrian walkways, landscaped areas, a concrete driveway, stormwater management facilities and associated site features. The proposed development will be owned and operated by CA Ventures.

The project site is generally bound by Semple Street to the Northeast, Parcel 28-F-337, McKee Place to the Southeast, and Forbes Avenue to the Northwest. The site is currently occupied by a gas station, a parking lot with landscaped areas and impervious pedestrian walkways.

The project proposes two on-site gravity sewer laterals for the proposed building. One 10-inch sanitary lateral will connect to the existing PWSA 36-inch RCP combination sewer in McKee Place. A separate 10-inch sanitary lateral will connect to the existing 15-inch VCP combination sewer in McKee Place. Sewage will then be conveyed and treated by Allegheny County Sanitary Authority (ALCOSAN) Wastewater Treatment Facility in Pittsburgh, PA. This ultimate method will provide for disposal of the net total combined daily flow of 81,465 gallons per day (204 EDU's). A reference for the approximate sewage flow for the proposed development can be found in Appendix C. The proposed lateral will remain private and will not create any undue financial burdens to the City of Pittsburgh, PWSA, or ALCOSAN.

Alternative methods of sewage disposal that could be considered include on-site subsurface disposal systems (septic systems) and an individual package wastewater treatment plant. The existing developments in the area are all currently connected to the public sewer system; therefore, an on-site septic system would not be consistent with the neighboring buildings, nor would it be a practical solution to provide adequate service for the site. The nearest discharge point from the site for a stream discharge is the Monongahela River, approximately 0.62 miles southwest of the site. A package wastewater treatment plant with discharge to the Monongahela River is not feasible due to the size and cost of the site.

APPENDIX E

Public Notice

**SECTION P
SEWAGE FACILITIES PLANNING
MODULE COMPONENT 3**

**Re: Public Notice
3500 Forbes Avenue
City of Pittsburgh, Allegheny County, Pennsylvania
Langan Project No.: 250084602**

A public notification is required for this project since one item in Section P of Component 3 (Appendix C) is applicable to this project. *(The project will change the flow at an existing sewage treatment facility by more than 50,000 gallons per day.)*

The Public Notice was posted in the XXX on XXX XX, 2021. A 30-day public comment period was facilitated with CA Ventures Attn: Joe Sugiyama, 130 East Randolph Street, Suite 2100, Chicago, IL 60601 from XXX XX, 2021 until XXX XX, 2021. A copy of the Public Notice and the proof of publication are enclosed.

APPENDIX F

USGS Map and Plot Plans



LANGAN

Langan Engineering and
 Environmental Services, Inc.
 2400 Ansys Drive, Suite 403
 Canonsburg, PA 15317-9540

T: 724.514.5100 F: 724.514.5101
 www.langan.com

Project

**3500
 FORBES
 AVENUE**
 PITTSBURGH

ALLEGHENY COUNTY

PA

Drawing Title

**SITE
 LOCATION
 MAP**

Project No.

250084602

Date

7/10/2020

Scale

1" = 2,000 feet

Drawn By

LDB

Figure

1

PARKING

PARCEL NO. 28-F-322	PARCEL NO. 28-F-356
19 PARKING SPACES	0 HANDICAP PARKING SPACES
0 HANDICAP PARKING SPACES	0 HANDICAP PARKING SPACES
19 TOTAL PARKING SPACES	0 TOTAL PARKING SPACES
PARCEL NO. 28-F-330 & 28-F-360	PARCEL NO. 28-F-351
47 PARKING SPACES	0 PARKING SPACES
0 HANDICAP PARKING SPACES	0 HANDICAP PARKING SPACES
47 TOTAL PARKING SPACES	0 TOTAL PARKING SPACES
66 TOTAL PARKING SPACES	

BASIS OF BEARINGS

MERIDIAN IS REFERENCED TO PENNSYLVANIA STATE PLANE COORDINATE SYSTEM, SOUTH ZONE, NAD 83, PER GPS OBSERVATIONS IN JUNE, 2019.

DATUM

VERTICAL DATUM IS NAVD 88 OBTAINED FROM GPS OBSERVATIONS ON 06/10/2019

BENCHMARK

BM 2 - MAG NAIL, ELEV=903.63

UTILITY INFORMATION

DESIGN TICKET 20191611614
DIG TICKET 20191611604

ENCROACHMENTS

- PARKING SHED ENCROACHES ONTO SUBJECT PARCEL AS SHOWN
- WOOD WALL ENCROACHES ONTO RIGHT OF WAY AS SHOWN

LEGAL DESCRIPTION - AS SURVEYED

PARCEL 1

COMMENCING AT THE INTERSECTION OF THE SOUTHEAST RIGHT OF WAY LINE OF FORBES AVENUE, 60 FEET WIDE, WITH THE SOUTHWEST RIGHT OF WAY LINE OF SEMPLE STREET, 50 FEET WIDE, THENCE SOUTH 42°04'19" EAST ALONG SAID SEMPLE STREET RIGHT OF WAY, A DISTANCE OF 287.00 FEET TO A POINT, SAID POINT BEING THE PLACE OF BEGINNING FOR THE PARCEL HEREIN DESCRIBED;

COURSE NO.1 THENCE SOUTH 42°04'19" EAST ALONG THE SOUTHWESTERLY RIGHT OF WAY OF SAID SEMPLE STREET, A DISTANCE OF 40.00 FEET TO A NORTHERLY CORNER OF ALLEGHENY COUNTY PARCEL 28-F-354 NOW OR FORMERLY OWNED BY COMHDAN REALTY LP AS RECORDED IN VOLUME 15347, PAGE 31 OF THE ALLEGHENY COUNTY RECORDS;

COURSE NO.2 THENCE SOUTH 47°57'11" WEST, ALONG SAID COMHDAN LAND, A DISTANCE OF 80.00 FEET TO A POINT ALONG A NORTHEASTERY LINE OF ALLEGHENY COUNTY PARCEL 28-F-337 NOW OR FORMERLY OWNED BY FAMILY HOUSE AS RECORDED IN VOLUME 7337, PAGE 305 OF THE ALLEGHENY COUNTY RECORDS;

COURSE NO.3 THENCE NORTH 42°04'19" WEST, ALONG SAID FAMILY HOUSE LAND, A DISTANCE OF 40.00 FEET TO A POINT ALONG A SOUTHEASTERY LINE OF ALLEGHENY COUNTY PARCEL 28-F-330 AND 360 NOW OR FORMERLY OWNED BY COMHDAN REALTY LP AS RECORDED IN VOLUME 15347, PAGE 31 OF THE ALLEGHENY COUNTY RECORDS;

COURSE NO.4 THENCE NORTH 47°57'11" EAST ALONG SAID COMHDAN LAND, A DISTANCE OF 80.00 FEET TO THE PLACE OF BEGINNING, SAID PARCEL CONTAINING 3,200 SQUARE FEET OF LAND ACCORDING TO A SURVEY BY LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES AND BEING THE SAME MORE OR LESS AND BEING SUBJECT TO ALL LEGAL HIGHWAYS AND EASEMENTS. THE BASIS OF BEARINGS OF THIS SURVEY IS BASED ON THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM, NAD 83 DERIVED FROM GPS OBSERVATIONS AND BEARINGS ARE TO DENOTE ANGLES ONLY.

PARCEL 2

SITUATED IN WHAT IS NOW THE FOURTH WARD OF THE CITY OF PITTSBURGH, COUNTY OF ALLEGHENY, STATE OF PENNSYLVANIA AND BEING MORE FULLY BOUNDED AND DESCRIBED AS FOLLOWS:

COMMENCING AT THE INTERSECTION OF THE SOUTHEAST RIGHT OF WAY LINE OF FORBES AVENUE, 60 FEET WIDE, WITH THE SOUTHWEST RIGHT OF WAY LINE OF SEMPLE STREET, 50 FEET WIDE, THENCE SOUTH 42°04'19" EAST ALONG SAID SEMPLE STREET RIGHT OF WAY, A DISTANCE OF 307.00 FEET TO A POINT, SAID POINT BEING THE PLACE OF BEGINNING FOR THE PARCEL HEREIN DESCRIBED;

COURSE NO.1 THENCE SOUTH 42°04'19" EAST ALONG THE SOUTHWESTERLY RIGHT OF WAY OF SAID SEMPLE STREET, A DISTANCE OF 20.00 FEET TO A NORTHERLY CORNER OF ALLEGHENY COUNTY PARCEL 28-F-337 NOW OR FORMERLY OWNED BY FAMILY HOUSE AS RECORDED IN VOLUME 7337, PAGE 305 OF THE ALLEGHENY COUNTY RECORDS;

COURSE NO.2 THENCE SOUTH 47°57'11" WEST, ALONG SAID FAMILY HOUSE, A DISTANCE OF 80.00 FEET TO AN ANGLE POINT THEREON;

COURSE NO.3 THENCE NORTH 42°04'19" WEST, ALONG SAID FAMILY HOUSE, A DISTANCE OF 20.00 FEET TO A SOUTHERLY CORNER OF ALLEGHENY COUNTY PARCEL 28-F-356 NOW OR FORMERLY OWNED BY COMHDAN REALTY LP AS RECORDED IN VOLUME 15347, PAGE 31 OF THE ALLEGHENY COUNTY RECORDS;

COURSE NO. 4 THENCE NORTH 47°57'11" EAST ALONG SAID COMHDAN LAND, A DISTANCE OF 80.00 FEET TO THE PLACE OF BEGINNING, SAID PARCEL CONTAINING 1,600 SQUARE FEET OR 0.0367 ACRES OF LAND ACCORDING TO A SURVEY BY LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES AND BEING THE SAME MORE OR LESS AND BEING SUBJECT TO ALL LEGAL HIGHWAYS AND EASEMENTS. THE BASIS OF BEARINGS OF THIS SURVEY IS BASED ON THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM, NAD 83 DERIVED FROM GPS OBSERVATIONS AND BEARINGS ARE TO DENOTE ANGLES ONLY.

PARCEL 3

SITUATED IN WHAT IS NOW THE FOURTH WARD OF THE CITY OF PITTSBURGH, COUNTY OF ALLEGHENY, STATE OF PENNSYLVANIA AND BEING MORE FULLY BOUNDED AND DESCRIBED AS FOLLOWS:

COMMENCING AT THE INTERSECTION OF THE SOUTHEAST RIGHT OF WAY LINE OF FORBES AVENUE, 60 FEET WIDE, WITH THE SOUTHWEST RIGHT OF WAY LINE OF SEMPLE STREET, 50 FEET WIDE, THENCE SOUTH 42°04'19" EAST ALONG SAID SEMPLE STREET RIGHT OF WAY, A DISTANCE OF 136.57 FEET TO A POINT, SAID POINT BEING THE PLACE OF BEGINNING FOR THE PARCEL HEREIN DESCRIBED;

COURSE NO.1 THENCE SOUTH 42°04'19" EAST ALONG THE SOUTHWESTERLY RIGHT OF WAY OF SAID SEMPLE STREET, A DISTANCE OF 130.43 FEET TO A NORTHERLY CORNER OF ALLEGHENY COUNTY PARCEL 28-F-356 NOW OR FORMERLY OWNED BY COMHDAN REALTY LP AS RECORDED IN VOLUME 15347, PAGE 31 OF THE ALLEGHENY COUNTY RECORDS;

COURSE NO.2 THENCE SOUTH 47°57'11" WEST, ALONG SAID COMHDAN LAND, A DISTANCE OF 80.00 FEET TO A POINT AT A NORTHERLY CORNER OF ALLEGHENY COUNTY PARCEL 28-F-337 NOW OR FORMERLY OWNED BY FAMILY HOUSE AS RECORDED IN VOLUME 7337, PAGE 305 OF THE ALLEGHENY COUNTY RECORDS;

COURSE NO.3 THENCE CONTINUING SOUTH 47°57'11" WEST, ALONG SAID FAMILY HOUSE LAND, A DISTANCE OF 96.00 FEET TO A POINT ALONG THE NORTHEASTERY RIGHT OF WAY OF MOCKE PLACE, 60 FEET WIDE;

COURSE NO.4 THENCE NORTH 42°04'19" WEST ALONG SAID MOCKE PLACE, A DISTANCE OF 70.00 FEET TO A SOUTHERLY CORNER OF ALLEGHENY COUNTY PARCEL 28-F-322 NOW OR FORMERLY OWNED BY COMHDAN REALTY LP AS RECORDED IN VOLUME 15347, PAGE 57 OF THE ALLEGHENY COUNTY RECORDS;

COURSE NO.5 THENCE NORTH 47°57'11" EAST ALONG SAID COMHDAN LAND, A DISTANCE OF 96.00 FEET TO AN ANGLE POINT THEREON;

COURSE NO.6 THENCE NORTH 42°04'19" WEST ALONG SAID COMHDAN LAND, A DISTANCE OF 59.85 FEET TO AN ANGLE POINT THEREON;

COURSE NO.7 THENCE NORTH 47°57'11" EAST, ALONG SAID COMHDAN LAND, A DISTANCE OF 1.44 FEET TO AN ANGLE POINT THEREON;

COURSE NO.8 THENCE NORTH 42°04'19" WEST, ALONG SAID COMHDAN LAND, A DISTANCE OF 0.29 FEET TO AN ANGLE POINT THEREON;

COURSE NO.9 THENCE NORTH 47°57'11" EAST, ALONG SAID COMHDAN LAND, A DISTANCE OF 15.18 FEET TO AN ANGLE POINT THEREON;

COURSE NO.10 THENCE NORTH 42°04'19" WEST, ALONG SAID COMHDAN LAND, A DISTANCE OF 0.29 FEET TO AN ANGLE POINT THEREON;

COURSE NO. 11 THENCE NORTH 47°57'11" EAST, ALONG SAID COMHDAN LAND, A DISTANCE OF 63.47 FEET TO THE PLACE OF BEGINNING, SAID PARCEL CONTAINING 17,161 SQUARE FEET OR 0.3939 ACRES OF LAND ACCORDING TO A SURVEY BY LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES AND BEING THE SAME MORE OR LESS AND BEING SUBJECT TO ALL LEGAL HIGHWAYS AND EASEMENTS. THE BASIS OF BEARINGS OF THIS SURVEY IS BASED ON THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM, NAD 83 DERIVED FROM GPS OBSERVATIONS AND BEARINGS ARE TO DENOTE ANGLES ONLY.

PARCEL 4

SITUATED IN WHAT IS NOW THE FOURTH WARD OF THE CITY OF PITTSBURGH, COUNTY OF ALLEGHENY, STATE OF PENNSYLVANIA AND BEING MORE FULLY BOUNDED AND DESCRIBED AS FOLLOWS:

COMMENCING AT THE INTERSECTION OF THE SOUTHEAST RIGHT OF WAY LINE OF FORBES AVENUE, 60 FEET WIDE, WITH THE SOUTHWEST RIGHT OF WAY LINE OF SEMPLE STREET, 50 FEET WIDE, BEING THE PLACE OF BEGINNING FOR THE PARCEL HEREIN DESCRIBED;

COURSE NO.1 THENCE SOUTH 42°04'19" EAST ALONG THE SOUTHWESTERLY RIGHT OF WAY OF SAID SEMPLE STREET, A DISTANCE OF 136.57 FEET TO A NORTHERLY CORNER OF ALLEGHENY COUNTY PARCEL 28-F-330 AND 28-F-360 NOW OR FORMERLY OWNED BY COMHDAN REALTY LP AS RECORDED IN VOLUME 15347, PAGE 31 OF THE ALLEGHENY COUNTY RECORDS;

COURSE NO.2 THENCE SOUTH 47°57'11" WEST, ALONG SAID COMHDAN LAND, A DISTANCE OF 63.47 FEET TO AN ANGLE POINT THEREON;

COURSE NO.3 THENCE SOUTH 42°04'19" EAST, ALONG SAID COMHDAN LAND, A DISTANCE OF 0.29 FEET TO AN ANGLE POINT THEREON;

COURSE NO.4 THENCE SOUTH 47°57'11" WEST, ALONG SAID COMHDAN LAND, A DISTANCE OF 15.18 FEET TO AN ANGLE POINT THEREON;

COURSE NO.5 THENCE SOUTH 42°04'19" EAST, ALONG SAID COMHDAN LAND, A DISTANCE OF 0.29 FEET TO AN ANGLE POINT THEREON;

COURSE NO.6 THENCE SOUTH 47°57'11" WEST, ALONG SAID COMHDAN LAND, A DISTANCE OF 1.44 FEET TO AN ANGLE POINT THEREON;

COURSE NO.7 THENCE SOUTH 42°04'19" EAST, ALONG SAID COMHDAN LAND, A DISTANCE OF 59.85 FEET TO AN ANGLE POINT THEREON;

COURSE NO.8 THENCE SOUTH 47°57'11" WEST, ALONG SAID COMHDAN LAND, A DISTANCE OF 96.00 FEET TO THE NORTHEASTERY RIGHT OF WAY OF MOCKE PLACE, 60 FEET WIDE;

COURSE NO.9 THENCE NORTH 42°04'19" WEST, ALONG SAID MOCKE PLACE, A DISTANCE OF 196.90 FEET TO THE INTERSECTION WITH THE SOUTHEAST RIGHT OF WAY OF SAID FORBES AVENUE;

COURSE NO.10 THENCE NORTH 47°57'11" WEST, ALONG SAID FORBES AVENUE RIGHT OF WAY, A DISTANCE OF 176.09 FEET TO THE PLACE OF BEGINNING, SAID PARCEL CONTAINING 28,846 SQUARE FEET OR 0.6652 ACRES OF LAND ACCORDING TO A SURVEY BY LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES AND BEING THE SAME MORE OR LESS AND BEING SUBJECT TO ALL LEGAL HIGHWAYS AND EASEMENTS. THE BASIS OF BEARINGS OF THIS SURVEY IS BASED ON THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM, NAD 83 DERIVED FROM GPS OBSERVATIONS AND BEARINGS ARE TO DENOTE ANGLES ONLY.

UTILITY COMPANY	ADDRESS
PEOPLES GAS COMPANY LLC	375 NORTH SHORE DRIVE, PITTSBURGH, PA. 15212
VERIZON PENNSYLVANIA LLC	1026 HAY ST, PITTSBURGH, PA. 15221
PITTSBURGH WATER & SEWER AUTHORITY	1200 PENN AVE., PITTSBURGH, PA. 15222
PITTSBURGH CITY DEPT. OF PUBLIC WORKS	611 SECOND AVE., PITTSBURGH, PA. 15219
DUQUESNE LIGHT COMPANY	2645 NEW BEAVER AVE., PA-TO, PITTSBURGH, PA. 15233
DQE COMMUNICATIONS LLC	424 S. 27TH ST, SUITE 220, PITTSBURGH, PA. 15203
LIGHTTOWER FIBER NETWORKS LLC	N/A
CENTURY LINK	1025 ELDORADO BLVD, BROOMFIELD, CO. 80021
COMCAST CABLEVISION	1530 CHARTIERS AVE, PITTSBURGH, PA. 15204
UPMC MERCY HEALTH SYSTEM	200 LOTHROP ST., PITTSBURGH, PA. 15213
UNIVERSITY OF PITTSBURGH	3400 FORBES AVE., PITTSBURGH, PA. 15260

SITE DEVELOPMENT STANDARD	UPR-A DISTRICT
MINIMUM FRONT SETBACK	0 FEET
MINIMUM REAR SETBACK	0 FEET
WHEN NOT ADJACENT TO WAY	20 FEET
WHEN ADJACENT TO WAY	0 FEET
MINIMUM INTERIOR SIDEYARD SETBACK	0 FEET
MINIMUM STREET SIDEYARD SETBACK	0 FEET
MAXIMUM HEIGHT	85 FEET

NOTE: 1. ZONING INFORMATION NOT PROVIDED FROM CLIENT, PROVIDED BY THE CITY OF PITTSBURGH ZONING WEBSITE.
2. SEE SECTION 908.03.D.3.F FOR SPECIAL EXCEPTION FOR ADDITIONAL HEIGHT.

SCHEDULE B SECTION II EXCEPTIONS -

PER FIRST AMERICAN TITLE INSURANCE COMPANY COMMITMENT FOR TITLE INSURANCE FILE NO. NCS-962998-CH2 WITH A COMMITMENT DATE OF NOVEMBER 22, 2019.

ITEMS 1 THROUGH 8 AND 11 NOT SURVEY RELATED

9

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13

14

9. SUBJECT TO ALL MATTERS SHOWN ON THE PLAN AS RECORDED IN THE RECORDER'S OFFICE OF ALLEGHENY COUNTY, PENNSYLVANIA IN PLAN BOOK VOLUME 12, PAGE 184. (PLAN SHOWS LOT LAYOUT FROM 1893, LOT LINES, BUILDING LINES AND BLOCK NUMBERS SHOWN HEREON.)

10. COAL, OIL, GAS, AND/OR OTHER MINERAL RIGHTS GRANTED OR RESERVED AS SET FORTH IN DEED BOOK VOLUME 15114, PAGE 478. (INCLUDES SUBJECT PARCEL NUMBER 28-F-356 (PARCEL ONE), PARCEL NUMBER 28-F-354 (PARCEL TWO), AND PARCEL NUMBERS 28-F-330 AND 28-F-360 (PARCEL THREE).)

12. INTENTIONALLY DELETED

13. COAL, OIL, GAS, AND/OR OTHER MINERAL RIGHTS GRANTED OR RESERVED, EASEMENTS, RIGHTS, COVENANTS, AND CONDITIONS, AND HAZARDOUS WASTE NOTICE AS SET FORTH IN DEED BOOK VOLUME 15347, PAGE 46. (INCLUDES SUBJECT PARCEL NUMBER 28-F-322, SUBJECT PARCEL SHOWN HEREON.)

14. TERMS AND CONDITIONS OF LEASE TO TRI-STATE PETROLEUM CORPORATION AS EVIDENCED BY A MEMORANDUM THEREOF RECORDED IN DEED BOOK VOLUME 11294, PAGE 316. (MEMORANDUM OF PURCHASE OPTION AND RIGHT OF FIRST REFUSAL SET FORTH IN DEED BOOK VOLUME 11294, PAGE 217. (LEASE DESCRIBES PARCEL NUMBER 28-F-322, SUBJECT PARCEL SHOWN HEREON.)

PER FIRST AMERICAN TITLE INSURANCE COMPANY COMMITMENT FOR TITLE INSURANCE FILE NO. NCS-962998-CH2 WITH A COMMITMENT DATE OF NOVEMBER 22, 2019.

PARCEL ONE:

ALL THAT CERTAIN PARCEL OF LAND SITUATE IN THE FOURTH WARD OF THE CITY OF PITTSBURGH, COUNTY OF ALLEGHENY AND COMMONWEALTH OF PENNSYLVANIA, BEING PART OF LOT NO. 29 IN THE MOCKE PLACE PLAN OF LOTS RECORDED IN PLAN BOOK VOLUME 12, PAGE 184, MORE PARTICULARLY BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING ON THE SOUTHWESTERLY SIDE OF SEMPLE STREET AT A DISTANCE 267 FEET, MORE OR LESS, FROM THE SOUTHWESTERLY CORNER OF FORBES STREET AND SEMPLE STREET; THENCE ALONG THE WESTERLY SIDE OF SEMPLE STREET, SOUTH 43°31'30" EAST, 40 FEET TO A POINT; THENCE SOUTH 48°30' WEST, 80 FEET TO A POINT; THENCE NORTH 43°31'30" WEST ALONG THE LINE OF PROPERTY NOW OR LATE OF FRANK WERBANIC, 40 FEET TO A POINT ON THE LINE OF OTHER PROPERTY FORMERLY OF GEORGE E. PEETZ AND MARY E. PEETZ, HUSBAND AND WIFE; THENCE ALONG SAID LINE, NORTH 46°30' EAST, 80 FEET TO THE PLACE OF BEGINNING.

PARCEL TWO:

ALL THAT CERTAIN PARCEL OF LAND SITUATE IN THE FOURTH WARD OF THE CITY OF PITTSBURGH, COUNTY OF ALLEGHENY AND COMMONWEALTH OF PENNSYLVANIA, BEING PART OF LOTS 29 AND 30 IN THE MOCKE PLACE PLAN OF LOTS RECORDED IN PLAN BOOK VOLUME 12, PAGE 184, MORE PARTICULARLY BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING ON THE SOUTHWESTERLY SIDE OF SEMPLE STREET AT A POINT DISTANT 307 FEET, MORE OR LESS, FROM THE SOUTHWESTERLY CORNER OF FORBES STREET AND SEMPLE STREET; THENCE ALONG THE WESTERLY SIDE OF SEMPLE STREET, SOUTH 43°31'30" EAST, 20 FEET TO A POINT; THENCE SOUTH 48°30' WEST, 80 FEET TO A POINT; THENCE NORTH 43°31'30" WEST ALONG THE LINE OF PROPERTY NOW OR LATE OF FRANK WERBANIC, 40 FEET TO A POINT ON THE LINE OF OTHER PROPERTY FORMERLY OF GEORGE E. PEETZ AND MARY E. PEETZ, HUSBAND AND WIFE; THENCE ALONG SAID LINE, NORTH 46°30' EAST, 80 FEET TO THE PLACE OF BEGINNING.

PARCEL THREE:

ALL THAT CERTAIN LOT OR PIECE OF GROUND SITUATE IN THE FOURTH WARD OF THE CITY OF PITTSBURGH, COUNTY OF ALLEGHENY AND COMMONWEALTH OF PENNSYLVANIA, BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT FIXED AND LOCATED BY A LINE, SOUTH 43°31'30" EAST, 136.57 FEET FROM AN EXISTING RAILROAD SPIKE AT THE CORNER OF THE INTERSECTION OF THE RIGHT OF WAY LINES OF FORBES AVENUE AND SEMPLE STREET; THENCE ALONG THE RIGHT OF WAY LINE OF SAID SEMPLE STREET, SOUTH 43°31'30" EAST, 130.43 FEET TO A POINT; THENCE SOUTH 46°30' WEST, 176.09 FEET TO A POINT; THENCE ALONG THE RIGHT OF WAY LINE OF MOCKE PLACE, 60 FEET TO A POINT; THENCE NORTH 46°30' EAST, 96 FEET TO A POINT; THENCE NORTH 43°31'30" WEST, 59.85 FEET TO A POINT; THENCE NORTH 46°30' EAST 1.44 FEET TO A POINT; THENCE NORTH 43°31'30" WEST, 0.29 FEET TO A POINT; THENCE NORTH 46°30' EAST, 15.18 FEET TO A POINT; THENCE NORTH 43°31'30" WEST, 0.29 FEET TO A POINT; THENCE NORTH 46°30' EAST, 63.47 FEET TO THE POINT AT THE PLACE OF BEGINNING.

PARCEL FOUR:

ALL THAT CERTAIN LOT OR PIECE OF LAND SITUATE IN THE FOURTH WARD OF THE CITY OF PITTSBURGH, COUNTY OF ALLEGHENY AND COMMONWEALTH OF PENNSYLVANIA, BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF THE SOUTHEAST SIDE OF FORBES AVENUE (60' ROW) WITH THE SOUTHWEST SIDE OF SEMPLE STREET (50' ROW); THENCE ALONG SAID SIDE OF SEMPLE STREET, SOUTH 43°18'53" EAST, 136.57 FEET TO LINE OF LAND NOW OR FORMERLY OF VIN GAR, INC. (DEED BOOK VOLUME 8341, PAGE 491); THENCE ALONG SAID LAND THE FOLLOWING 7 COURSES AND DISTANCES: (A) SOUTH 46°42'37" WEST, 63.47 FEET; (B) SOUTH 43°18'53" EAST, 0.29 FEET; (C) SOUTH 46°42' 37" WEST, 15.18 FEET; (D) SOUTH 43°18'53" EAST, 0.29 FEET; (E) SOUTH 46°42'37" WEST, 1.44 FEET TO A POINT; (F) SOUTH 43°18'53" EAST, 59.85 FEET TO A POINT; (G) SOUTH 46°42'37" WEST, 0.29 FEET TO A POINT; THENCE ALONG THE NORTHEASTERY RIGHT-OF-WAY OF MOCKE PLACE (60' ROW) NORTH 43°18'53" WEST, A DISTANCE OF 196.90 FEET TO A POINT AT THE NORTHEASTERY INTERSECTION WITH THE AFORESAID MOCKE PLACE AND SOUTHEASTERY RIGHT-OF-WAY OF FORBES AVENUE; THENCE NORTH 46° 40' 40" EAST, A DISTANCE OF 176.09 FEET TO THE POINT AND PLACE OF BEGINNING.

BEING PARCEL NO. 28-F-356 (PARCEL ONE), 28-F-354 (PARCEL TWO), 28-F-330 (PARCEL THREE), 28-F-360 (PARCEL THREE), 28-F-322 (PARCEL FOUR)

BEING (PARCEL ONE, TWO AND THREE) THE SAME PREMISES WHICH GARY T. NAPOTNIK AND CAROL A. NAPOTNIK, MARRIED INDIVIDUALS, BY DEED DATED 12/28/2012 AND RECORDED 12/28/2012 IN THE DEPARTMENT OF REAL ESTATE OFFICE OF ALLEGHENY COUNTY AT DEED BOOK VOLUME 15114 PAGE 478, GRANTED AND CONVEYED UNTO COMHDAN REALTY, L.P., A PENNSYLVANIA LIMITED PARTNERSHIP, IN FEE.

ALSO BEING (PARCEL ONE, TWO AND THREE) THE SAME PREMISES WHICH GARY T. NAPOTNIK AND CAROL A. NAPOTNIK, MARRIED INDIVIDUALS, BY SPECIAL WARRANTY DEED OF CONFIRMATION DATED 12/28/2012 AND RECORDED 08/21/2013 IN THE DEPARTMENT OF REAL ESTATE OFFICE OF ALLEGHENY COUNTY AT DEED BOOK VOLUME 15347 PAGE 31, GRANTED AND CONVEYED UNTO COMHDAN REALTY, L.P., A PENNSYLVANIA LIMITED PARTNERSHIP, IN FEE.

BEING (PARCEL FOUR, LAND ONLY) THE SAME PREMISES WHICH COLLEEN C. MCGLIN, EDWARD J. COYNE II, ERIN C. MERRICK AND SHEILA C. ROMANEK, BY DEED DATED 08/16/2013 AND RECORDED 08/21/2013 IN THE DEPARTMENT OF REAL ESTATE OFFICE OF ALLEGHENY COUNTY AT DEED BOOK VOLUME 15347 PAGE 57, GRANTED AND CONVEYED UNTO COMHDAN REALTY, L.P., A PENNSYLVANIA LIMITED PARTNERSHIP, IN FEE.

BEING (PARCEL FOUR, BUILDING, FIXTURES AND IMPROVEMENTS ONLY) THE SAME PREMISES WHICH CONVENIENCE REALTY, L.P., A VIRGINIA LIMITED PARTNERSHIP, BY QUIT CLAIM DEED DATED 06/19/2019 AND RECORDED 06/24/2019 IN THE DEPARTMENT OF REAL ESTATE OFFICE OF ALLEGHENY COUNTY AT DEED BOOK VOLUME 17665 PAGE 447, GRANTED AND CONVEYED UNTO COMHDAN REALTY, L.P., A PENNSYLVANIA LIMITED PARTNERSHIP, IN FEE.

SURVEYOR'S CERTIFICATION

- CLARY STREET HOLDINGS, LLC, A DELAWARE LIMITED LIABILITY COMPANY
- CA PITTSBURGH GP, LLC, A DELAWARE LIMITED LIABILITY COMPANY
- FIRST AMERICAN TITLE INSURANCE COMPANY
- CASL PITTSBURGH PROPERTY OWNER, LLC

THIS IS TO CERTIFY THAT THIS MAP OR PLAN AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2016 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 2, 3, 4, 5, 6(A), 6 (B), 7(A), 7(B)-1, 8, 9, 10, 11, 13, 14, 16, 17, 18, 19, AND 20 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED IN JUNE 2019.

Shaun F. Higgins
SHAUN F. HIGGINS
PROFESSIONAL LAND SURVEYOR
PA LIC. NO. SU-051088-E

SHAUN F. HIGGINS

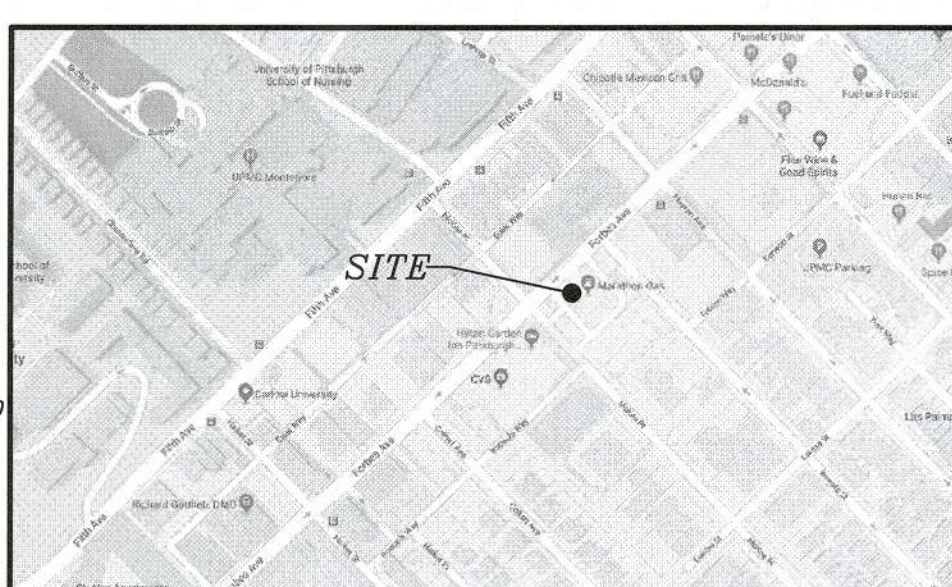
PROFESSIONAL LAND SURVEYOR
PA LIC. NO. SU-051088-E

ZONING

AS PER THE CITY OF PITTSBURGH INTERACTIVE ZONING DISTRICTS MAP, THE SUBJECT PARCEL IS ZONED OPR-C, OKLAND PUBLIC REAM DISTRICT, FIFTH IN FIVE DISTRICTS. NO ZONING INFORMATION PROVIDED BY THE INSURER. FOR MORE INFORMATION SEE THE CITY OF PITTSBURGH, PENNSYLVANIA DEVELOPMENT CODE.

FLOOD CERTIFICATION

AS PER THE NATIONAL FLOOD INSURANCE PROGRAM (FIRM) MAP TITLED "ALLEGHENY COUNTY, PENNSYLVANIA AND INCORPORATED AREAS, PANEL 354 OF 558, MAP NUMBER 42003C0354H," WITH AN EFFECTIVE DATE OF SEPTEMBER 26, 2014, THE SUBJECT PARCEL IS LOCATED IN ZONE X (NOT SHADED), AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL FLOODPLAIN.



PROJECT LOCATION MAP

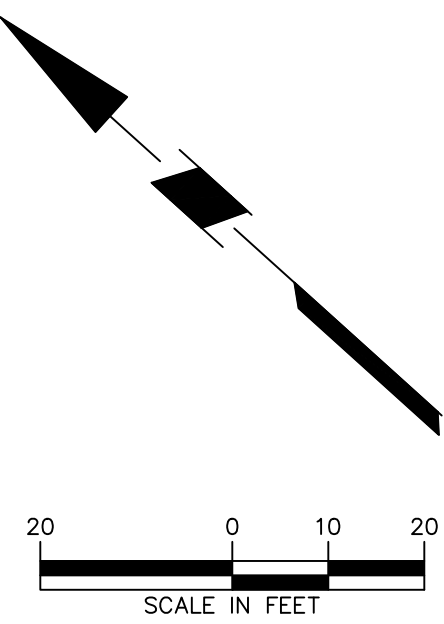
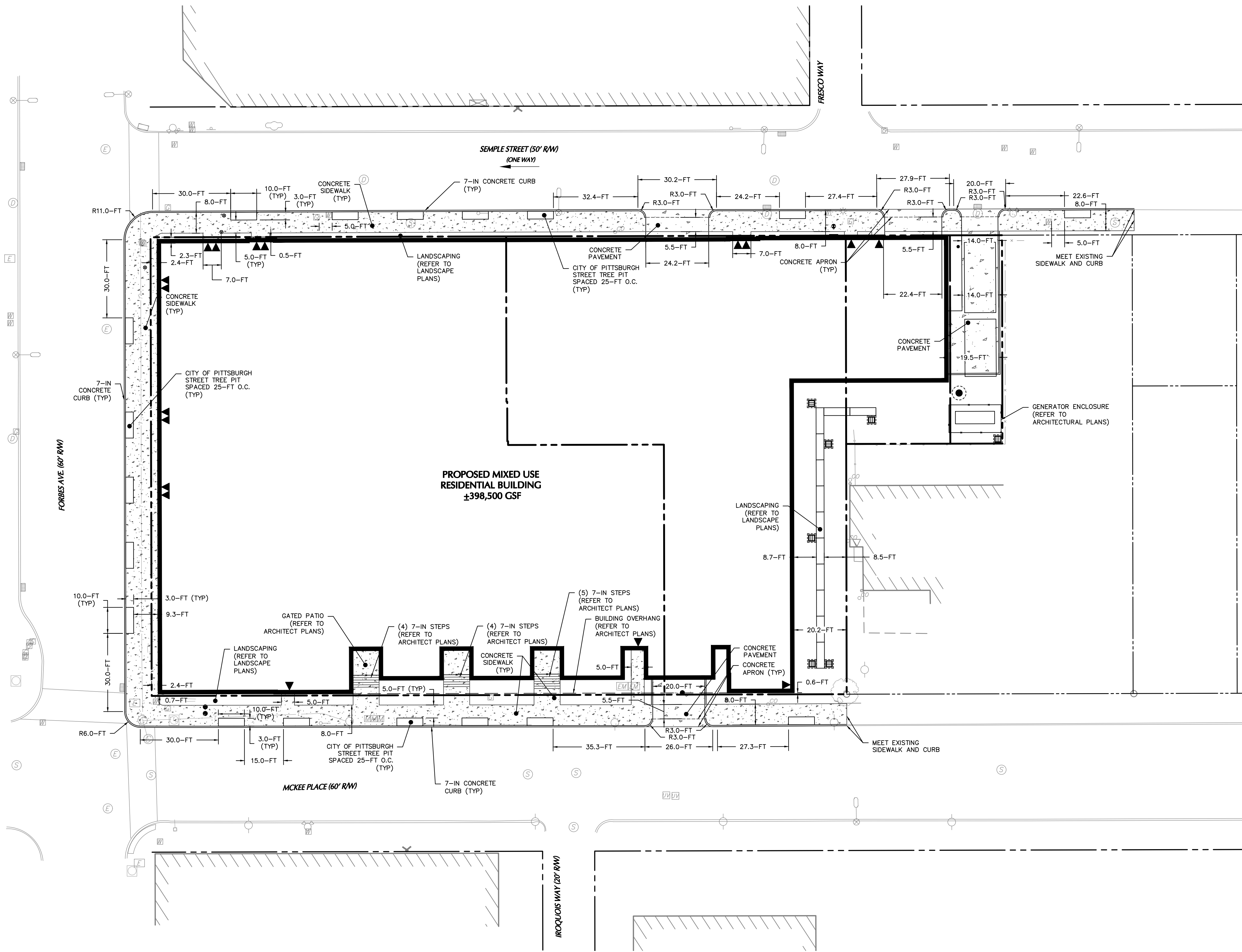
SCALE: NOT TO SCALE

SOURCE: WWW.GOOGLE.COM/MAPS

SCALE: 1 INCH = 30 FEET

LEGEND (NOT SHOWN TO SCALE)

MONUMENTATION FOUND (TYPE AS NOTED)	REC.	DEED OF RECORD
SET "X" 30" STEEL PIN WITH CAP "LANGAN"	AC.	ACRES
SET DRILL HOLE	CALC.	CALCULATED
STAND PIPE	OB.	OBSERVED
ROOF DRAIN	SG. FT.	SQUARE FEET
BOLLARD	CSR.	CITY SURVEY RECORD
STREET LIGHT	APN	AUDITOR'S FILE NUMBER
AREA LIGHT	PN	PARCEL NUMBER
SIGNAL POLE	VL	DEED VOLUME
POWER POLE	PG.	PAGE
GUY WIRE	LSA	LANDSCAPE AREA
MANHOLE (TYPE AS LABELED)	CP	CONCRETE PAD
WATER VALVE	CC	CONCRETE CURB
GAS VALVE	EP	EDGE OF PAVEMENT
UNKNOWN VALVE	CC	FENCE (TYPE AS NOTED)
CATCH BASIN	CC	SUBJECT PROPERTY LINE
CLEAN OUT	CC	ADJOINING PROPERTY LINE
SION	CC	EASEMENT LINE
BOLLARD	CC	TREE LINE
ELECTRIC BOX	CC	GUIDE RAIL (TYPE AS NOTED)
ELECTRIC METER	CC	STEAM LINE
WATER METER	CC	OVERHEAD WIRE
TELEPHONE BOX	CC	COMBINED SEWER LINE
TRAFFIC SIGNAL POLE	CC	GAS LINE
DOOR	CC	WATER LINE
DOUBLE DOOR	CC	ELECTRIC LINE
GARAGE DOOR	CC	COMMUNICATION LINE
	CC	SANITARY LINE
	CC	DRAINAGE LINE
	CC	REFERENCE UTILITY LINE (TYPE AS NOTED) - PLOTTED FROM EXISTING MAPPING



GENERAL SITE NOTES

- EXISTING BOUNDARY AND TOPOGRAPHY INFORMATION IS BASED ON A PLAN TITLED "ALTA/NSPS LAND TITLE SURVEY" FOR THE "3500 FORBES AVENUE" PROJECT SITUATED IN THE "CITY OF PITTSBURGH, ALLEGHENY COUNTY, PENNSYLVANIA," PREPARED BY LANGAN ENGINEERING & ENVIRONMENTAL SERVICES, INC., DATED JUNE 28, 2019.
- THESE PLANS REPRESENT THE OVERALL SITEWORK IMPROVEMENTS REQUIRED FOR PROJECT CONSTRUCTION. THE CONTRACTOR SHALL FURNISH, INSTALL, TEST AND COMPLETE ALL WORK TO THE SATISFACTION OF THE ENGINEER AND OWNER IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION; AS SUCH, THESE PLANS DO NOT COMPLETELY REPRESENT, NOR ARE THEY INTENDED TO REPRESENT, ALL SPECIFIC INSTRUCTIONS REQUIRED FOR SITEWORK CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONSTRUCT ALL IMPROVEMENTS DEPICTED ON THESE PLANS IN ACCORDANCE WITH ALL APPLICABLE RULES, REGULATIONS AND LAWS IN EFFECT AT THE TIME OF CONSTRUCTION.
- THE CONTRACTOR SHALL ACCEPT THE SITE AS IS. THE CONTRACTOR SHALL ASSESS CONDITIONS, AND THE KIND, QUALITY AND QUANTITY OF WORK REQUIRED. THE OWNER MAKES NO GUARANTEE IN REGARD TO THE ACCURACY OF ANY AVAILABLE INFORMATION WHICH WAS OBTAINED DURING INVESTIGATIONS. THE CONTRACTOR SHALL MAKE A THOROUGH SITE INSPECTION IN ORDER TO FIELD CHECK EXISTING SITE CONDITIONS, CORRELATE CONDITIONS WITH THE DRAWINGS AND RESOLVE ANY POSSIBLE CONSTRUCTION CONFLICTS WITH THE OWNER AND ENGINEER PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR SHALL MAKE ADDITIONAL TOPOGRAPHIC SURVEYS HE/SHE DEEMS NECESSARY, PROVIDED THEY ARE COORDINATED WITH THE OWNER. ANY CONDITIONS DETERMINED BY THE CONTRACTOR THAT DIFFER FROM THE INFORMATION SHOWN ON THE DRAWINGS THAT ARE NOT BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER PRIOR TO THE START OF WORK SHALL NOT BE CONSIDERED GROUNDS FOR ADDITIONAL PAYMENT OR CHANGES TO THE CONTRACT DURATION, OR ANY OTHER CLAIMS AGAINST THE OWNER OR OWNER'S ENGINEER.
- THE CONTRACTOR SHALL, WHEN THEY DEEM NECESSARY, PROVIDE WRITTEN REQUESTS FOR INFORMATION (RFIS) TO THE OWNER AND ENGINEER PRIOR TO THE CONSTRUCTION OF ANY SPECIFIC SITEWORK ITEM. THE RFI SHALL BE IN A FORM ACCEPTABLE TO OWNER AND ENGINEER AND SHALL ALLOW FOR A MINIMUM OF FIVE WORK DAYS OR ADDITIONAL REASONABLE TIME FOR A WRITTEN REPLY. RFIS SHALL BE NUMBERED CONSECUTIVELY BY DATE SUBMITTED. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SITEWORK ITEMS CONSTRUCTED DIFFERENTLY THAN INTENDED OR AS DEPICTED ON THE PLANS.
- INFORMATION RELATED TO ELEVATIONS AND PROPOSED UTILITIES (SUCH AS ROADWAY GRADES, INVERT ELEVATIONS, RIM ELEVATIONS, GRATE ELEVATIONS, BUILDING FINISHED FLOOR ELEVATIONS, ETC.) MAY BE FOUND IN MORE THAN ONE LOCATION IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL SUFFICIENTLY REVIEW ALL PLANS, PROFILES AND ANY OTHER INFORMATION IN THE CONTRACT DOCUMENTS FOR CONSISTENCY PRIOR TO CONSTRUCTION. ANY INCONSISTENCIES OR DISCREPANCIES THAT ARE FOUND BY THE CONTRACTOR OR HIS/HER ASSIGNS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER IN WRITING, IN THE FORMAT OF AN RFI PRIOR TO CONSTRUCTION.
- THERE ARE ADDITIONAL NOTES, SPECIFICATIONS AND REQUIREMENTS CONTAINED THROUGHOUT THE PLAN SET AS WELL AS REFERENCES TO SPECIFICATIONS FROM APPLICABLE GOVERNING AUTHORITIES AND INDUSTRY STANDARDS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN, REVIEW AND ADHERE TO ALL THESE DOCUMENTS.
- REMOVE EXISTING CURB AS SHOWN ON THE DEMOLITION PLAN. REMOVE EXISTING PAVEMENT AS NECESSARY TO ACCOMMODATE CURB REMOVAL AND REPLACE WITH NEW CURB AS SHOWN ON THIS PLAN. REPAIR PAVEMENT AND ADJACENT CURB AS NECESSARY.
- PAVEMENT AFFECTED BY TRENCHING OR OTHER CONSTRUCTION ACTIVITIES SHALL BE RESTORED TO ITS ORIGINAL AND PROPER CONDITION.
- SEE LANDSCAPE DOCUMENTS FOR MATERIALS UNLESS OTHERWISE NOTED.
- A BUILDING PERMIT IS REQUIRED FOR ALL WALLS GREATER THAN 4'-FT IN HEIGHT.
- APPROXIMATE LOCATION OF CITY OF PITTSBURGH R.O.W. BASED ON GIS PARCEL DATA AS WELL AS THE LEGAL DESCRIPTION FROM CITY OF PITTSBURGH ORDINANCE NO. 135.
- CONTRACTOR TO COORDINATE ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY WITH THE CITY OF PITTSBURGH DEPARTMENT OF PUBLIC WORKS.

LEGEND

EXISTING	PROPOSED
ROW BOUNDARY	
BUILDING LINE	
BUILDING OVERHANG	
CONCRETE CURB	
FENCE	
UTILITY MANHOLE	
BOLLARD	
INLET	
UTILITY MANHOLE	
CLEANOUT	
FIRE HYDRANT	
LIGHT POST	
GUY WIRE	
UTILITY POLE	
MAILBOX	
UTILITY BOX/VALVE	
ELECTRICITY METER	
SIGN	
PARKING METER	
UNIDENTIFIED STRUCTURE	
CONCRETE SIDEWALK	
CONCRETE PAVEMENT	

Date	Description	No.
Revisions		

Signature SCOTT ROWLAND Date PROFESSIONAL ENGINEER PA Lic No. PE080563

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Project

3500 FORBES AVENUE

PN: 28-F-322, 28-F-330, 28-F-360, AND 28-F-356

CITY OF PITTSBURGH ALLEGHENY COUNTY PENNSYLVANIA

Drawing Title

SITE PLAN

Project No.

250084602

Date

09/04/2020

Drawn By

RIM

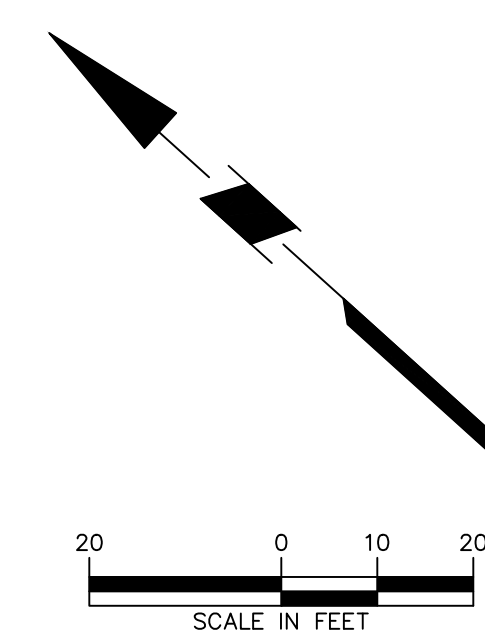
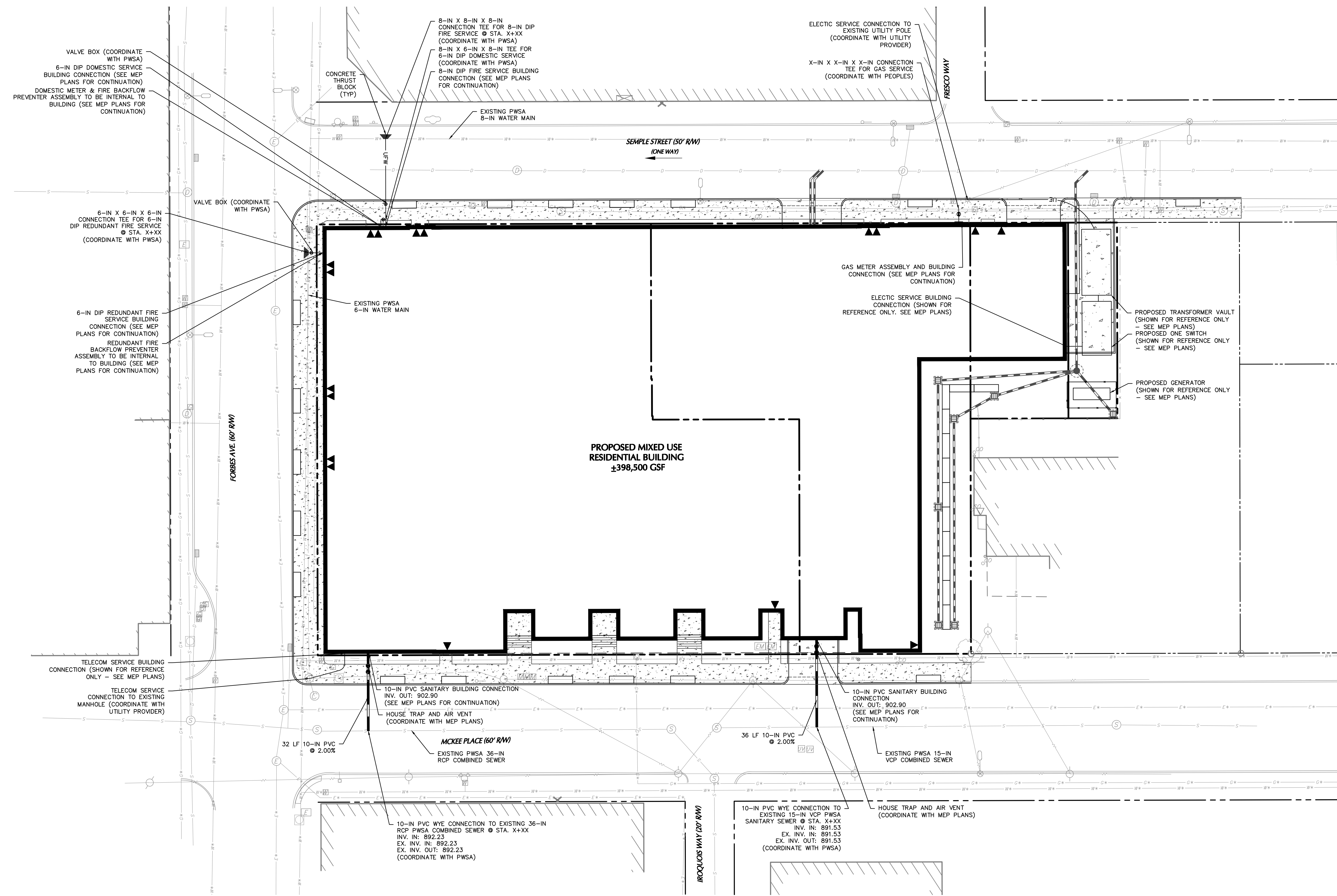
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Drawing No.

CS-101

Sheet 2 of 13



UTILITY NOTES

- EXISTING BOUNDARY AND TOPOGRAPHY INFORMATION IS BASED ON A PLAN TITLED "ALTA/NSPS LAND TITLE SURVEY" FOR THE "3500 FORBES AVENUE" PROJECT SITUATED IN THE "CITY OF PITTSBURGH, ALLEGHENY COUNTY, PENNSYLVANIA," PREPARED BY LANGAN ENGINEERING & ENVIRONMENTAL SERVICES, INC., DATED JUNE 28, 2019.
- THE CONTRACTOR SHALL FURNISH, INSTALL, TEST AND COMPLETE ALL WORK TO THE SATISFACTION OF THE ENGINEER AND OWNER IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION, AS SUCH, THESE PLANS DO NOT COMPLETELY REPRESENT, NOR ARE THEY INTENDED TO REPRESENT, ALL SPECIFIC INSTRUCTIONS REQUIRED FOR SITEMARK CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE TO CONSTRUCT ALL IMPROVEMENTS DEPICTED ON THESE PLANS IN ACCORDANCE WITH ALL APPLICABLE RULES, REGULATIONS AND LAWS IN EFFECT AT THE TIME OF CONSTRUCTION.
- THE CONTRACTOR SHALL ACCEPT THE SITE AS IS, THE CONTRACTOR SHALL ASSESS CONDITIONS, AND THE KIND, QUALITY AND QUANTITY OF WORK REQUIRED. THE OWNER AND ENGINEER MAKE NO GUARANTEE IN REGARD TO THE ACCURACY OF ANY INFORMATION THAT WAS OBTAINED DURING INVESTIGATIONS. THE CONTRACTOR SHALL MAKE A THOROUGH SITE INSPECTION IN ORDER TO FIELD CHECK EXISTING SITE CONDITIONS, CORRELATE CONDITIONS WITH THE DRAWINGS, AND, RESOLVE ANY POSSIBLE CONSTRUCTION CONFLICTS WITH THE OWNER AND ENGINEER PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR SHALL PERFORM ADDITIONAL TOPOGRAPHIC SURVEYS HE/SHE DEEMS NECESSARY, PROVIDED THEY ARE COORDINATED WITH THE OWNER. ANY CONDITIONS DETERMINED BY THE CONTRACTOR THAT DIFFER FROM THE INFORMATION SHOWN ON THE DRAWINGS THAT ARE NOT BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER PRIOR TO THE START OF WORK SHALL NOT BE CONSIDERED GROUNDS FOR ADDITIONAL PAYMENT OR CHANGES TO THE CONTRACT DURATION, OR ANY OTHER CLAIMS AGAINST THE OWNER OR OWNER'S ENGINEER.
- THE CONTRACTOR SHALL, WHEN HE/SHE DEEMS NECESSARY, PROVIDE A WRITTEN REQUEST FOR INFORMATION (RFI) TO THE OWNER AND/OR OWNER'S DESIGNATED REPRESENTATIVE, AND ENGINEER PRIOR TO THE CONSTRUCTION OF ANY SPECIFIC SITEMARK ITEM. THE RFI SHALL BE IN A FORM ACCEPTABLE TO OWNER AND/OR OWNER'S DESIGNATED REPRESENTATIVE, AND ENGINEER AND SHALL ALLOW FOR A MINIMUM OF THREE WORK DAYS FOR A WRITTEN REPLY. RFIS SHALL BE NUMBERED CONSECUTIVELY BY DATE SUBMITTED. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SITEMARK ITEMS CONSTRUCTED DIFFERENTLY THAN INTENDED OR AS DEPICTED ON THE PLANS.
- INFORMATION RELATED TO ELEVATIONS AND PROPOSED UTILITIES (SUCH AS ROADWAY GRADES, INVERT ELEVATIONS, RIM ELEVATIONS, GRATE ELEVATIONS, BUILDING FINISHED FLOOR ELEVATIONS, ETC.) MAY BE FOUND IN MORE THAN ONE LOCATION IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL THOROUGHLY REVIEW ALL PLANS, PROFILES AND ANY OTHER INFORMATION IN THE CONTRACT DOCUMENTS FOR CONFLICTS PRIOR TO BID. ANY INCONSISTENCIES OR DISCREPANCIES THAT ARE FOUND BY THE CONTRACTOR OR HIS/HER ASSIGNS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER IN WRITING, IN THE FORMAT OF AN RFI PRIOR TO BID.
- THERE ARE ADDITIONAL NOTES, SPECIFICATIONS AND REQUIREMENTS CONTAINED THROUGHOUT THE PLAN SET AS WELL AS REFERENCES TO SPECIFICATIONS FROM APPLICABLE GOVERNING AUTHORITIES AND INDUSTRY STANDARDS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN, REVIEW AND ADHERE TO ALL THESE DOCUMENTS.
- CONTRACTOR IS SPECIFICALLY CAUTIONED THAT ALL CONSTRUCTION STAKEOUT FOR THIS PROJECT MUST BE COMPLETED FROM THE SITE SPECIFIC SURVEY CONTROL (HORIZONTAL AND VERTICAL), UPON WHICH THE DESIGN IS BASED. THE CONTRACTOR SHOULD NOT RELY ON OR RE-ESTABLISH SURVEY CONTROL BY GPS OR OTHER METHODS FOR USE IN CONSTRUCTION STAKEOUT OR ANY OTHER PURPOSE FOR THIS PROJECT. ANY DISCREPANCIES BETWEEN THE EXISTING HORIZONTAL OR VERTICAL DATA SHOWN ON THESE DRAWINGS AND THAT ENCOUNTERED IN THE FIELD MUST BE REPORTED TO THE DESIGN TEAM PRIOR TO CONSTRUCTION FOR RESOLUTION.
- WHERE CONFLICTS ARISE BETWEEN EXISTING OR PROPOSED WATER, GAS, AND ELECTRIC LINES AND PROPOSED STORMWATER CONVEYANCE PIPES OR STRUCTURES, THE WATER, GAS, AND ELECTRIC LINES SHALL BE ADJUSTED BENEATH OR AROUND THE PROPOSED STORMWATER CONVEYANCE PIPES OR STRUCTURES AS NECESSARY IN ACCORDANCE WITH ACCEPTED CONSTRUCTION PRACTICES.
- ONCE EXISTING UTILITIES TO REMAIN ARE LOCATED, ANY POTENTIAL CONFLICTS WITH OTHER UTILITIES, RELOCATED UTILITY POLES, ETC. SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
- ADJUST ALL EXISTING AND PROPOSED UTILITY FRAMES, GRATES, MANHOLE COVERS, VALVE BOXES, ETC. TO BE FLUSH WITH THE PROPOSED SURFACE ELEVATIONS WITHIN THE LIMITS OF CONSTRUCTION.
- TRENCH DEPTH REQUIREMENTS MEASURED FROM FINISHED GRADE SHALL MEET THE FOLLOWING:
 - STORM SEWER: DEPTHS, ELEVATIONS, AND GRADES AS INDICATED ON DRAWINGS.
 - SANITARY SEWER: DEPTHS, ELEVATIONS AND GRADES AS INDICATED ON DRAWINGS.
 - WATER MAINS: 48 INCHES TO TOP OF PIPE BARREL OR 6 INCHES BELOW THE FIRST LINE OR ESTABLISHED BY THE LOCAL BUILDING OFFICIAL OR WATER COMPANY, WHICHEVER IS DEEPER.
 - GAS MAINS AND SERVICE: 30 INCHES MINIMUM TO TOP OF PIPE, OR AS REQUIRED BY THE LOCAL UTILITY COMPANY, WHICHEVER IS DEEPER.
 - ELECTRICAL CONDUITS: 24 INCHES MINIMUM TO TOP OF CONDUIT OR AS REQUIRED BY NEC 300-5 / NEC 710-36 CODES, OR THE LOCAL UTILITY COMPANY REQUIREMENTS, WHICHEVER IS DEEPER.
 - TELEPHONE / TV CONDUITS: 18 INCHES MINIMUM TO TOP OF CONDUIT OR AS REQUIRED BY THE LOCAL UTILITY COMPANY, WHICHEVER IS DEEPER.
- UTILITY TESTING INCLUDING (BUT NOT LIMITED TO) WATER PRESSURE TESTING, WATER SYSTEM FLUSHING, BACTERIOLOGICAL TESTING, VIDEO CAMERA TESTING, MANHOLE TESTING, OR ANY OTHER TESTING REQUIRED BY LOCAL, COUNTY, OR STATE AGENCIES PRIOR TO FINAL ACCEPTANCE OF THE PROJECT AND CERTIFICATE OF OCCUPANCIES BEING ISSUED SHALL BE COORDINATED AND PAID FOR BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. THE ENGINEER OF RECORD SHALL BE GIVEN 48 HOURS NOTICE PRIOR TO ALL TESTING. THE CONTRACTOR IS SOLELY RESPONSIBLE TO CONTACT AND COORDINATE THE LOCAL AND COUNTY OFFICIALS THAT ARE REQUIRED TO BE PRESENT AT ALL INSPECTIONS. LOCAL FIRE INSPECTORS SHALL BE INVITED TO INSPECT ALL FIRE SERVICE LINES PRIOR TO BACKFILLING OF TRENCHES.
- ALL WATER MAINS SHALL BE HYDROSTATICALLY TESTED AND DISINFECTED IN ACCORDANCE WITH AWWA STANDARDS, LATEST REVISIONS. HYDROSTATIC TESTING FOR PVC MAINS SHALL BE 150 PSI FOR MINIMUM OF 2 HOURS AND MEET AWWA STANDARD C-605. DUCTILE IRON MAINS SHALL BE TESTED AT 150 PSI FOR 2 HOURS AND MEET AWWA STANDARD C-600. ALL NEW MAINS SHALL BE DISINFECTED PER AWWA STANDARD C-651. BACTERIOLOGICAL TESTS FOR 2 CONSECUTIVE DAYS SHALL BE APPROVED PRIOR TO PLACING SYSTEM INTO SERVICE. CONTRACTOR SHALL PROVIDE THE OWNER AND ENGINEER OF RECORD WITH AWWA C906 AND NSF-61 CERTIFICATIONS.
- PVC POTABLE WATER MAINS SHALL BE SOLID BLUE IN COLOR. DUCTILE IRON WATER MAINS SHALL BE PAINTED WITH BLUE DYES. CONTRACTORS SHALL INSTALL AND INSTALL ALL NEW OR ALTERED WATER PIPES IN ACCORDANCE WITH APPLICABLE AWWA STANDARDS AND / OR ACCORDANCE WITH MANUFACTURER'S RECOMMENDED PROCEDURES.
- ALL WATER LINES ARE TO BE INSPECTED BY A LICENSED PROFESSIONAL ENGINEER DURING INSTALLATION.
- ALL WATER LINES SHALL HAVE AN "EARLY WARNING" PROTECTION TAPE INSTALLED CONTINUOUSLY ALONG THE ENTIRE LENGTH. THE PROTECTION TAPE SHALL BE INSTALLED DURING THE BACKFILLING 2 FEET ABOVE PIPE AND 2 FEET BELOW FINISHED GRADE DIRECTLY OVER THE PIPE AND BE CONTINUOUSLY MARKED WITH "CAUTION WATER PIPE". THE TAPE SHALL HAVE AN EMBEDDED METALLIC DETECTABLE STRIP AND BE BLUE IN COLOR. PROTECTION TAPE SHALL BE TERRA-TAPE OR APPROVED EQUAL.
- ALL SANITARY SEWER LINES SHALL HAVE AN "EARLY WARNING" PROTECTION TAPE INSTALLED CONTINUOUSLY ALONG THE ENTIRE LENGTH. THE PROTECTION TAPE SHALL BE INSTALLED DURING BACKFILLING AT LEAST 2 FEET ABOVE THE PIPE, AT LEAST 2 FEET BELOW THE FINISHED GRADE, AND AT MOST 4 FEET BELOW THE FINISHED GRADE. THE PROTECTION TAPE SHALL BE PLACED DIRECTLY OVER THE PIPE AND BE CONTINUOUSLY MARKED WITH "SEWER". THE PROTECTION TAPE MUST BE ELECTRONICALLY LOCATABLE AND BE BRIGHTLY COLORED PLASTIC. THE SELECTION AND INSTALLATION OF THE PROTECTION TAPE MUST MEET THE REQUIREMENTS SPECIFIED WITHIN THE PWSA PROCEDURES MANUAL.
- AT THE POINT WHERE THE PROPOSED SANITARY SEWER CONSTRUCTION MEETS A LIVE OR EXISTING SEWER, THE NEW SANITARY SEWER SHALL BE SECURELY FLUSHED UNTIL THE ENTIRE NEW SANITARY SEWER CONSTRUCTION IS COMPLETED AND READY FOR FINAL INSPECTION.
- SANITARY SEWER CLEANOUTS SHALL BE PROVIDED WITHIN 5 FEET OF ALL BUILDING CONNECTIONS FOR ALL SEWER CONNECTIONS TO COMBINED SEWERS.
- ALL GRAVITY SANITARY SEWER PIPE SHALL BE PVC SDR35.
- GRAVITY SANITARY SEWER LINES SHALL BE TESTED FOR INFILTRATION BY MEASURING FLOW OVER A V-NOTCH OR TESTED FOR EXFILTRATION BY FILLING THE LINE WITH WATER TO 10 FEET ABOVE THE INVERT OF THE MANHOLE. THE LIMITING RATE OF INFILTRATION SHALL NOT EXCEED 200 GALLONS PER 1-INCH DIAMETER PER MILE PER 24 HOURS. AN ALTERNATE TESTING METHOD SHALL BE AIR PRESSURE TESTING AT 5 PSI FOR A DURATION OF 10 MINUTES YIELDING NO OBSERVED DROP IN PRESSURE.
- ALL GAS LINES SHALL HAVE AN "EARLY WARNING" PROTECTION TAPE INSTALLED CONTINUOUSLY ALONG THE ENTIRE LENGTH. THE PROTECTION TAPE MUST BE INSTALLED DURING THE BACKFILLING APPROXIMATELY 6 INCHES BELOW THE FINISHED GRADE. THE PROTECTION TAPE SHALL BE PLACED DIRECTLY OVER THE PIPE AND BE CONTINUOUSLY MARKED WITH "CAUTION-GAS PIPE BELOW". THE PROTECTION TAPE SHALL BE 6 INCH WIDE YELLOW PLASTIC PAIRED WITH A SOLID COPPER TRACER WIRE WITH YELLOW THERMOPLASTIC COATING OF AT LEAST #12 AWG. THE SELECTION AND INSTALLATION OF THE PROTECTION TAPE AND TRACER WIRE MUST MEET THE REQUIREMENTS SPECIFIED WITHIN THE PEOPLE'S NATURAL GAS SERVICE LINE INSTALLATION STANDARDS (INSTALLER'S GUIDE).
- ANY WATER, SANITARY AND STORM UTILITY WITH 18 INCHES OR LESS VERTICAL SEPARATION BETWEEN OUTSIDE OF PIPE AND OUTSIDE OF PIPE SHALL BE CONCRETE ENCASED.
- ALL TRENCHING, PIPE LAYING, AND BACKFILLING SHALL BE IN ACCORDANCE WITH FEDERAL OSHA REGULATIONS AND ANY LOCAL AUTHORITIES.
- STREET PAVEMENT AFFECTED BY TRENCHING OR OTHER CONSTRUCTION ACTIVITIES SHALL BE RESTORED TO ITS ORIGINAL AND PROPER CONDITION. ALL WORK PERFORMED WITHIN THE PUBLIC RIGHT-OF-WAY AND ALL RESTORATION OF STREET PAVEMENTS SHALL ABIDE BY THE POLICES SET FORTH IN THE CITY OF PITTSBURGH RIGHT-OF-WAY PROCEDURES.
- ALL SEWER CONNECTIONS MUST BE APPROVED AND INSPECTED BY THE LOCAL GOVERNING AUTHORITY. CONTRACTOR TO RECEIVE APPROVAL FROM THE LOCAL AUTHORITY PRIOR TO CONSTRUCTION.
- PROPOSED LIGHTING TO BE COORDINATED WITH ELECTRICAL DOCUMENTS.

LEGEND		
	EXISTING	PROPOSED
ROW BOUNDARY		
SANITARY SEWER		
SANITARY MANHOLE		
COMBINATION SEWER LINE		
STORM SEWER		
STORM MANHOLE/OUTLET CONTROL STRUCTURE		
INLET		
TRENCH DRAIN		
UNDERGROUND WATER LINE		
UNDERGROUND FIRE LINE		
FIRE HYDRANT		
WATER VALVE		
GAS LINE		
UNDERGROUND COMMUNICATIONS AND ELECTRIC LINE		
UNDERGROUND TELEPHONE LINE		
UNDERGROUND ELECTRIC LINE		
OVERHEAD ELECTRIC LINE		
ELECTRIC MANHOLE		
ELECTRIC STRUCTURE		
UTILITY POLE		

UTILITY PROVIDERS	
WATER THE PITTSBURGH WATER AND SEWER AUTHORITY ADDRESS: PENN LIBERTY PLAZA I 1200 PENN AVENUE PITTSBURGH, PA 15222 PHONE: 412-255-8800 CONTACT: JULIE ASIOLLA	
SEWER THE PITTSBURGH WATER AND SEWER AUTHORITY ADDRESS: PENN LIBERTY PLAZA I 1200 PENN AVENUE PITTSBURGH, PA 15222 PHONE: 412-255-8800 CONTACT: JULIE ASIOLLA	
GAS PEOPLES NATURAL GAS COMPANY LLC ADDRESS: 375 NORTH SHORE DRIVE, SUITE 600 PITTSBURGH, PA 15212 PHONE: 878-645-6892 CONTACT: TIM VITULLO	
ELECTRICITY DUQUESNE LIGHT COMPANY ADDRESS: 2825 NEW BEAVER AVENUE PITTSBURGH, PA 15233 PHONE: 412-393-7812 CONTACT: EARL ELDER	
COMMUNICATIONS COMCAST CABLE - KEYSTONE REGION WEST ADDRESS: 5335 ENTERPRISE BLVD BETHEL PARK, PA 15102 412-580-1442 PHONE: 412-237-2291 CONTACT: DAN BARREN	
COMMUNICATIONS VERIZON OF PA - PIKE TELECOM ADDRESS: 501 HOLIDAY DRIVE PITTSBURGH, PA 15220 PHONE: 412-237-2291 CONTACT: DAN BARREN	

Project

Drawing Title

Project No.

Date

Drawn By

Checked By

250084602

09/04/2020

RLM

PJC

Drawing No.

CU-101

Sheet 9 of 13

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Project

28-F-322, 28-F-330, 28-F-360, AND 28-F-356

CITY OF PITTSBURGH

ALLEGHENY COUNTY

3500 FORBES AVENUE

UTILITY PLAN

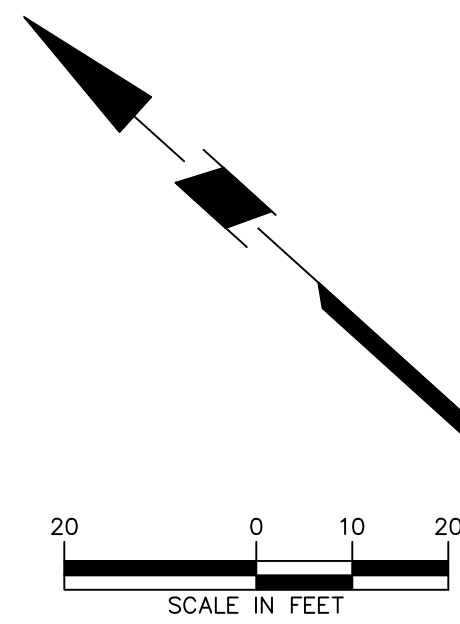
Signature

SCOTT ROWLAND

PROFESSIONAL ENGINEER PA Lic No. PE080563

Date

Project No. 250084602
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1. EXISTING BOUNDARY AND TOPOGRAPHY INFORMATION IS BASED ON A PLAN TITLED "ALTA/NSPS LAND TITLE SURVEY" FOR "3000 FORBES AVENUE" PROJECT SITUATED IN THE "CITY OF PITTSBURGH, ALLEGHENY COUNTY, PENNSYLVANIA," PREPARED BY LAND SURVEYING & DRAINAGE DESIGN SERVICES, INC., DATED JUNE 29, 2019.

2. THE CONTRACTOR SHALL FURNISH, INSTALL, TEST AND COMPLETE ALL WORK TO THE SATISFACTION OF THE ENGINEER AND OWNER IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION. AS SUCH, THESE PLANS DO NOT COMPLETELY REPRESENT, NOR ARE THEY INTENDED TO REPRESENT, ALL SPECIFIC INFORMATION REQUIRED FOR THE DETAILED CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE TO OBTAIN ALL INFORMATION AND DETAILS DEPICTED ON THESE PLANS IN ACCORDANCE WITH ALL APPLICABLE RULES, REGULATIONS AND LAWS IN EFFECT AT THE TIME OF CONSTRUCTION.

3. THE CONTRACTOR SHALL ACCEPT THE SITE AS IS. THE CONTRACTOR SHALL ASSESS CONDITIONS, AND THE KIND, QUALITY AND QUANTITY OF WORK REQUIRED. THE OWNER AND ENGINEER MAKE NO GUARANTEE IN REGARD TO THE ACCURACY OF ANY INFORMATION THAT WAS OBTAINED DURING INVESTIGATIONS. THE CONTRACTOR SHALL MAKE A THOROUGH SITE INSPECTION IN ORDER TO FULLY UNDERSTAND AND ADEQUATELY ADDRESS ALL EXISTING CONDITIONS WITH THE DRAWINGS, AND RESOLVE ANY POSSIBLE CONSTRUCTION CONFLICTS WITH THE OWNER AND ENGINEER PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR SHALL PERFORM ADDITIONAL TOPOGRAPHIC SURVEYS WHEN HE/SH DEEMS NECESSARY, PROVIDED THEY ARE COORDINATED WITH THE OWNER. ANY INFORMATION DETERMINED TO BE NECESSARY FOR THE CONSTRUCTION SHALL BE SHOWN ON THE DRAWINGS THAT ARE NOT BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER PRIOR TO THE START OF WORK SHALL NOT BE CONSIDERED GROUNDS FOR CONTRACTOR PAYMENT OR CHANGES TO THE CONTRACT DURATION, OR ANY OTHER CLAIMS AGAINST THE OWNER OR OWNER'S ENGINEER.

4. THE CONTRACTOR SHALL, WHEN HE/SH DEEMS NECESSARY, PROVIDE A WRITTEN REQUEST FOR INFORMATION (RFI) TO THE OWNER AND/OR OWNER'S DESIGNATED REPRESENTATIVE, AND ENGINEER PRIOR TO THE CONSTRUCTION OF ANY SPECIFIC SITEWORK ITEM. THE RFI SHALL BE IN A FORM ACCEPTABLE TO OWNER AND/OR OWNER'S DESIGNATED REPRESENTATIVE, AND ENGINEER AND SHALL INCLUDE THE MINIMUM DATA REQUIRED FOR THE ENGINEER TO REVIEW. THE REQUEST SHALL BE NUMBERED CONSECUTIVELY BY DATE SUBMITTED. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SITEWORK ITEMS CONSTRUCTED DIFFERENTLY THAN INTENDED OR AS DEPICTED ON THE PLANS.

5. INFORMATION RELATED TO ELEVATIONS AND PROPOSED UTILITIES (SUCH AS ROADWAY GRADES, INVERT ELEVATIONS, RM ELEVATIONS, GRADE ELEVATIONS, FINISHED FLOOR ELEVATIONS, ETC.) MAY BE FOUND IN MORE THAN ONE LOCATION IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL SUFFICIENTLY REVIEW ALL PLANS, PROFILES AND ANY OTHER INFORMATION IN THE CONTRACT DOCUMENTS FOR CONFLICTS. IF CONFLICTS ARE IDENTIFIED, THE CONTRACTOR SHALL BE NUMBERED CONSECUTIVELY BY DATE. IF HIS ASSIGNS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER IN WRITING, IN THE FORMAT OF AN RFI PRIOR TO BID.

6. THERE ARE ADDITIONAL NOTES, SPECIFICATIONS AND REQUIREMENTS CONTAINED THROUGHOUT THE PLAN SET AS WELL AS REFERENCES TO SPECIFICATIONS, STANDARDS, ADOPTED AUTHORITIES AND INDUSTRY STANDARDS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN, REVIEW AND ADHERE TO ALL THESE DOCUMENTS.

7. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT ALL CONSTRUCTION STAKEOUT FOR THIS PROJECT MUST BE COMPLETED FROM THE SITE SPECIFIC SURVEY CONTROL (HORIZONTAL AND VERTICAL) UPON WHICH THE DESIGN IS BASED. THE CONTRACTOR SHOULD NOT ATTEMPT TO ESTABLISH SURVEY CONTROL, BY GPS OR OTHER METHODS FOR USE IN CONSTRUCTION STAKEOUT OR ANY OTHER PURPOSE FOR THIS PROJECT. ANY DISCREPANCIES BETWEEN THE EXISTING HORIZONTAL OR VERTICAL DATA SHOWN ON THESE DRAWINGS AND THAT ENCOUNTERED IN THE FIELD MUST BE REPORTED TO THE DESIGN TEAM PRIOR TO CONSTRUCTION FOR RESOLUTION.

8. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS, UTILITY LOCATIONS, DEPTHS AND INVERTS PRIOR TO CONSTRUCTION. ANY CONDITIONS FOUND TO DIFFER FROM THOSE SHOWN BY THESE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER.

9. WHERE CONFLICTS ARISE BETWEEN EXISTING OR PROPOSED WATER, GAS, AND ELECTRIC LINES AND PROPOSED STORMWATER CONVEYANCE PIPES OR STRUCTURES, THE WATER, GAS, AND ELECTRIC LINES SHALL BE ADJUSTED BENEATH OR AROUND THE PROPOSED STORMWATER CONVEYANCE PIPES OR STRUCTURES AS NECESSARY IN ACCORDANCE WITH ACCEPTED CONSTRUCTION PRACTICES.

10. EXISTING UTILITIES TO REMAIN ARE LOCATED, ANY POTENTIAL CONFLICTS WITH OTHER UTILITIES, RELOCATED UTILITY POLES, ETC. SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.

11. ADJUST ALL EXISTING AND PROPOSED UTILITY FRAMES, GRATES, MANHOLE COVERS, VALVE BOXES, ETC. TO BE FLUSH WITH THE PROPOSED SURFACE ELEVATIONS WITHIN THE LIMITS OF CONSTRUCTION.

12. ALL TRENCHING, PIPE LAYING, AND BACKFILLING SHALL BE IN ACCORDANCE WITH FEDERAL OSHA REGULATIONS AND ANY LOCAL AUTHORITY.

13. ALL DRAINAGE STRUCTURES SHALL BE PRE-CAST UNLESS NOTED.

14. ALL INLET FRAMES, GRATES, TOP UNITS, AND BOXES SHALL BE IN ACCORDANCE WITH PENNDOT PAVEMENT 408, AND COMPLY WITH THE MINIMUM REQUIREMENTS OF THE AASHTO M294 TYPE 5 FOR PIPE AND FITTINGS. MATERIAL SHALL MEET ASTM A1028 TYPE II, CATEGORY 4, GRADE P33, CLASS C, OR ASTM D3350 CELL CLASSIFICATION 3242C00. PIPE SHALL BE SURE-LOCK 10.0 PIPES MANUFACTURED BY THE AASHTO APPROVED MANUFACTURERS. JOINTS ACCORDING TO THE REQUIREMENTS OF ASTM D3212 OR APPROVED EQUIVALENT. INSTALLATION SHALL BE IN ACCORDANCE WITH ASTM D3221 AND MANUFACTURER SPECIFICATIONS.

15. ALL AREA DRAINS SHALL BE MANUFACTURED BY NYLOPLAST OR APPROVED EQUAL. SEE MANUFACTURER'S DETAILS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION. ALL GRATES SHALL BE ADA AND BICYCLE SAFE. ALL GRATES IN TRAFFIC AREAS SHALL BE HOV 3+ LOAD RATED.

16. PARKING LOT AREA SUBGRADES SHALL BE FIRM AND NON-YIELDING. SOFT AREAS AND UNSUITABLE MATERIAL SHALL BE REMOVED AND REPLACED WITH APPROVED FILL AND COMPACTED AS DIRECTED BY THE GEOTECHNICAL ENGINEER.

17. SLOP ELEVATIONS IN PARKING AREAS REPRESENT SURFACE PAVEMENT ELEVATIONS.

18. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PERFORM DEWATERING OF THE SITE DURING CONSTRUCTION, BASED ON THE SITE INVESTIGATION. GROUNDWATER AT THE SITE CONTAINS CONCENTRATIONS OF CONSTITUENTS OF CONCERN (COCs) WHICH EXCEED THE PADEP RESIDENTIAL AND NON-RESIDENTIAL GROUNDWATER ACT 2 MEDIUM-SPECIFIC CONCENTRATIONS (MS2Cs). FLUIDS MANAGEMENT AND MONITORING WITH APPLICABLE REGULATIONS AND STANDARDS. ANY GROUNDWATER THAT IS REMOVED VIA DEWATERING WILL BE MANAGED FOLLOWING THE FLOW CHART PROCESS PROVIDED AS FIGURE 5 IN THE AUGUST 2020 MATERIALS MANAGEMENT PLAN. ANY CONTAMINATED WATER WILL BE CHARACTERIZED FOR OFF-SITE DISPOSAL IF DISCHARGED TO THE LOCAL SEWER SYSTEM, OR TO THE PRE-TREATED WASTEWATER TREATMENT PLANT.

19. CONTRACTOR TO COORDINATE ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY WITH THE CITY OF PITTSBURGH DEPARTMENT OF PUBLIC WORKS.

	EXISTING	PROPOSED
ROW BOUNDARY		
COMBO SEWER		
SANITARY MANHOLE		
STORM SEWER		
INLET/AREA DRAIN		
TRENCH DRAIN		
STORM MANHOLE		
STORM CLEANOUT		
BIORETENTION AREA		
MAJOR CONTOUR		
MINOR CONTOUR		

1. PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES, CONTRACTOR IS TO INSTALL ALL SURFACE EROSION AND SEDIMENT CONTROL DEVICES (ROCK CONSTRUCTION ENTRANCES, FILTER SOCKS, INLET PROTECTION, CONCRETE WASH AREAS, ETC.).
2. DIG TRENCHES TO NECESSARY DEPTH FOR SPECIFIED STORMWATER SYSTEM INVERT ELEVATION. IF EXISTING DITCH OR TRENCH CONTAINING REDBUDS, LOG JACKS OR LIMBS, OR OTHER MATERIAL UNABLE TO PROVIDE LONG-TERM UNIFORM PIPE SUPPORT ARE IDENTIFIED AS UNSUITABLE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING THEM. IF INSTALLATION REQUIRED WHERE THE TRENCH BODIES IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIALS AS DIRECTED BY THE ENGINEER. NO FILL SHALL BE PERMITTED MURGING INTO BACKFILL. USE SYNTHETIC GEOTEXTILE FABRIC TO SEPARATE NATIVE SOIL FROM BACKFILL. CONTRACTOR SHALL UTILIZE AN APPROPRIATELY DESIGNED SLOPE PROTECTION SYSTEM ON ANY SLOPE STEEPER THAN 4:1 HORIZONTAL TO 1 VERTICAL, INCLUDING BUT NOT LIMITED TO, SLOPING, SHORING AND/or FEELD SHEILDING.
3. BEGIN CONSTRUCTION OF UNDERGROUND UTILITIES.
4. INSTALL PROPOSED INLETS, PIPES, AND STRUCTURES. ENSURE PIPES AND STRUCTURES ARE CLEAR OF ALL DEBRIS AND ALL CONNECTIONS ARE ADEQUATE.
5. INSTALL INLET PROTECTION ON ALL INLETS IMMEDIATELY AFTER STRUCTURE PLACEMENT AND AS SPECIFIED BY THE DESIGN. INSPECT AND REPAIR ALL INSTALLED INLETS TO PREVENT PROPER EROSION AND SEDIMENT CONTROL MEASURES DURING CONSTRUCTION OF THE STORMWATER MANAGEMENT SYSTEM. EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE MAINTAINED UNTIL THE SITE IS COVERED WITH GRASS OR VEGETATION.
6. BEGIN INSTALLATION OF UNDERGROUND DETENTION SYSTEM UNDER THE INSPECTION OF A LICENSED PROFESSIONAL ENGINEER AS SPECIFIED IN THE PENNSYLVANIA STORMWATER BEST MANAGEMENT PRACTICES MANUAL.
7. LOWER EACH PIPE INTO TRENCH BY HAND, OR USE NYLON STRAPS AND EXCAVATING EQUIPMENT TO LOWER JOINTS AND RINGS. REMOVE EXCESSIVE MOISTURE FROM TRENCH OR BRUSH TO LUBRICATE BELL WITH PIPE LUBRICANT. CLEAN SPIGOT END OF PIPE. REMOVE PROTECTIVE WRAP FROM GASKET AND LUBRICATED EXPOSED GASKET WITH PIPE LUBRICANT. LOWER LOWERED SECTION INTO TRENCH. DO NOT DRIFT OR FORCE MANHOLE. GASKETS MUST ADHERE TO SURFACE AND COMPROMISE JOINT INTEGRITY. PLACE SPIGOT INTO BELL AND TIGHTEN DOWN. BELLS AND SPIGOTS ARE ADEQUATELY HOMED FOR PROPER INSTALLATION AND TIGHT JOINING SEAL.
8. AT THE BASE OF THE MANHOLE, INLETS, AND TRENCH DRAINS, USE A MINIMUM OF 6 INCHES OF CLASS 1 BEDDING MATERIAL, COMPACTED TO A MINIMUM 90% PROCTOR DENSITY IN AN AREA 12 INCHES BEYOND THE OUTSIDE EDGE OF THE STRUCTURE. THE USER SHALL PROTECT THE INCOMING AND OUTGOING PIPES THROUGHOUT THE ENTIRE PROJECT. THE USER SHALL PROTECT THE INCOMING AND OUTGOING PIPES SHOULD BE TREATED THE SAME TO PREVENT SHEARING OF PIPES AND PROVIDE PROPER ALIGNMENT FOR THE WATERTIGHT CONNECTOR/PIPE INTERFACE. LEVEL THE STRUCTURE BASE IN BOTH DIRECTIONS.
 5. INSTALL STORMWATER STRUCTURES USING AN APPROVED LIFTING DEVICE THAT WILL SAFELY LIFT THE WEIGHT OF THE STRUCTURE WITH APPLICABLE OSHA SAFETY FACTOR REQUIREMENTS (TITLE 29 PART 1926).
 6. CONNECT STORMWATER PIPES TO PROPOSED INLETS, AND MANHOLES AS SPECIFIED BY THE PRODUCT MANUFACTURER'S INSTRUCTIONS.
 7. UNDERGROUND UTILITY CONSTRUCTION IS COMPLETED.
 8. AFTER ALL STORMWATER STRUCTURES, CONVEYANCE AND CONCRETE DETENTION VAULT AND CONNECTIONS HAVE BEEN PROPERLY INSTALLED UNDER THE INSPECTION OF A LICENSED PROFESSIONAL ENGINEER, BEGIN BACKFILLING ALL TRENCHED AREAS USING THE ACCEPTABLE BACKFILL MATERIALS AND CONSTRUCTION REQUIREMENTS SHOWN ON SITE DETAIL DRAWINGS.
 9. CLASS I MATERIALS CAN BE BACKFILLED AROUND HDPE PIPES. VOIDS MUST BE ELIMINATED BY ROUGHING UP AND AROUND PIPES. NON-COMPRESS SAND, GRAVEL, CRUSHED ROCKS AND OTHER CLASS II AND III MATERIALS MUST BE COMPACTED TO A MINIMUM 80% AND 90% STANDARD PROCTOR DENSITY, RESPECTIVELY. ORGANIC SILTS, AND/OR SILTY CLAYS, OR SILTY CLAYS, AND OTHER CLASS IV MATERIALS ARE NOT PERMITTED.
 14. PLACE AND COMPACT BACKFILL IN LAYERS NO LARGER THAN HALF THE DIAMETER OF THE HDPE PIPE OR PER THE PROJECT SPECIFICATIONS, WHICHEVER IS LESS.
 15. ONCE BACKFILL HAS BEEN ADEQUATELY COMPACTED, CONTINUE WITH SITE CONSTRUCTION AS DETAILED IN THE EROSION AND SEDIMENT CONTROL PLANS. MAINTAIN A MINIMUM OF 2 FEET COVER OVER ALL STORMWATER STRUCTURES DURING CONSTRUCTION.
 16. BEGIN INSTALLATION OF GREEN ROOF AREAS UNDER THE INSPECTION OF A LICENSED PROFESSIONAL ENGINEER AS SPECIFIED IN THE PENNSYLVANIA STORMWATER BEST MANAGEMENT PRACTICES MANUAL. REFER TO GREEN ROOF SPECIFICATIONS FOR DETAILED INSTALLATION INSTRUCTIONS.
 17. ONCE SITE HAS BEEN BROUGHT TO FINAL GRADE, BEGIN INSTALLATION OF PLANTED AREAS PER THE SPECIFICATIONS AND DETAILS INCLUDED IN THE CONSTRUCTION DOCUMENT SET.
 18. CRITICAL STAGES OF CONSTRUCTION FOR POST-CONSTRUCTION STORMWATER MANAGEMENT INCLUDE THE INSTALLATION OF THE FOLLOWING ITEMS:
 - PROPOSED UNDERGROUND DETENTION SYSTEM
 - PROPOSED GREEN ROOF AREAS
 19. CERTIFICATION FROM A LICENSED PENNSYLVANIA PROFESSIONAL ENGINEER IS REQUIRED TO INDICATE THAT THEY HAVE PROVIDED ON-SITE SUPERVISION DURING THE INSTALLATION OF THE ABOVE LISTED CRITICAL STAGE ITEMS.

CONVEYANCE SYSTEM	TWICE PER YEAR AND AFTER RAINFALL EVENTS EXCEEDING ONE INCH	FRENCH DRAINS, INLET STRUCTURES, YARD DRAINS, MANHOLES, AND PIPES TO BE INSPECTED FOR CLOGGING AND EXCESSIVE DEBRIS AND SEDIMENT ACCUMULATION AT LEAST TWICE PER YEAR AND AFTER EVERY STORM EXCEEDING ONE INCH OF RAINFALL.
DETENTION VAULT	ONCE PER YEAR AND AFTER RAINFALL EVENTS EXCEEDING ONE INCH	A POST-INSTALLATION INSPECTION SHOULD BE PERFORMED TO ALLOW THE OWNER TO MEASURE THE INVERT PRIOR TO ACCUMULATION OF SEDIMENT. THE SEDIMENT BUILDUP AT EACH RISER AND CLEAN-OUT LOCATION SHALL BE MEASURED DURING INSPECTION. THE OUTLET PIPE SHALL BE INSPECTED FOR SEDIMENT BUILDUP, OBSTRUCTION, OR OTHER PROBLEMS. OBSTRUCTIONS SHALL BE REMOVED. IF SEDIMENT BUILDUP IS BET 5%-20% OF THE PIPE DIAMETER, CLEANING SHOULD BE PERFORMED AT THE EARLIEST OPPORTUNITY. A THOROUGH CLEANING OF THE SYSTEM (MANIFOLD AND LATERALS) SHALL BE PERFORMED BY EITHER MANUAL METHODS OR BY A VACUUM TRUCK.
GREEN ROOF AREAS	TWICE PER YEAR AND AFTER RAINFALL EVENTS EXCEEDING ONE INCH	MAINTENANCE FOR THE GREEN ROOF WILL INCLUDE PERIODIC IRRIGATION DURING THE PLANT ESTABLISHMENT PERIOD, THREE TO FOUR VISITS DURING THE PLANT ESTABLISHMENT PERIOD FOR BASIC WEEDING, FERTILIZATION, AND IN-FILL PLANTING IS ALSO RECOMMENDED. AFTER THE PLANT ESTABLISHMENT PERIOD, ONLY TWO ANNUAL VISITS FOR INSPECTION AND LIGHT WEEDING WILL BE NEEDED

Signature _____ Date _____

SCOTT ROWLAND
PROFESSIONAL ENGINEER PA Lic No. PE080563

Langan Engineering and
Environmental Services, Inc.
2400 Ansys Drive, Suite 403
Canonsburg, PA 15317
T: 724.514.5100 F: 724.514.5101 www.langan.com

Project

3500 FORBES AVENUE

PN: 28-F-322, 28-F-330, 28-F-360, AND 28-F-356

CITY OF PITTSBURGH

ALLEGHENY COUNTY PENNSYLVANIA

Drawing Title

**POST-CONSTRUCTION
STORMWATER
MANAGEMENT PLAN**

Project No.	Drawing No.
250084602	CG-102
Date	
09/04/2020	
Drawn By	
MMC	Sheet 8 of 13
Checked By	
PJC	

APPENDIX G

Cultural Resource Notice

**SECTION G
SEWAGE FACILITIES PLANNING
MODULE COMPONENT 3**

**Re: Cultural Resources Notice
3500 Forbes Avenue
City of Pittsburgh, Allegheny County, Pennsylvania
Langan Project No.: 250084602**

Per DEP Document #0120-PM-PY0003a – Section F, a Cultural Resource Notice is not required for this project because the project area is less than 10 acres, and does not contain any existing historical buildings.

APPENDIX H

PNDI

1. PROJECT INFORMATION

Project Name: **3500 Forbes Avenue**

Date of Review: **7/14/2020 04:39:50 PM**

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

Project Area: **1.53 acres**

County(s): **Allegheny**

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

ZIP Code: **15213**

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

Watersheds HUC 8: **Lower Monongahela**

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

Decimal Degrees: **40.439652, -79.958682**

Degrees Minutes Seconds: **40° 26' 22.7485" N, 79° 57' 31.2542" W**

2. SEARCH RESULTS

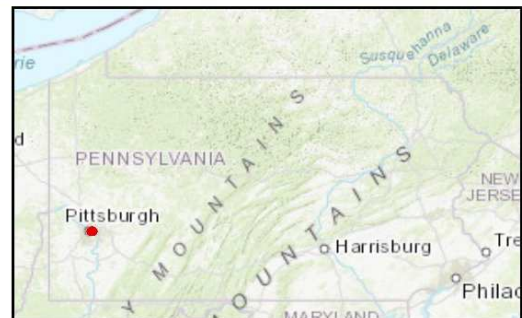
Agency	Results	Response
PA Game Commission	No Known Impact	No Further Review Required
PA Department of Conservation and Natural Resources	No Known Impact	No Further Review Required
PA Fish and Boat Commission	No Known Impact	No Further Review Required
U.S. Fish and Wildlife Service	No Known Impact	No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

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

3500 Forbes Avenue

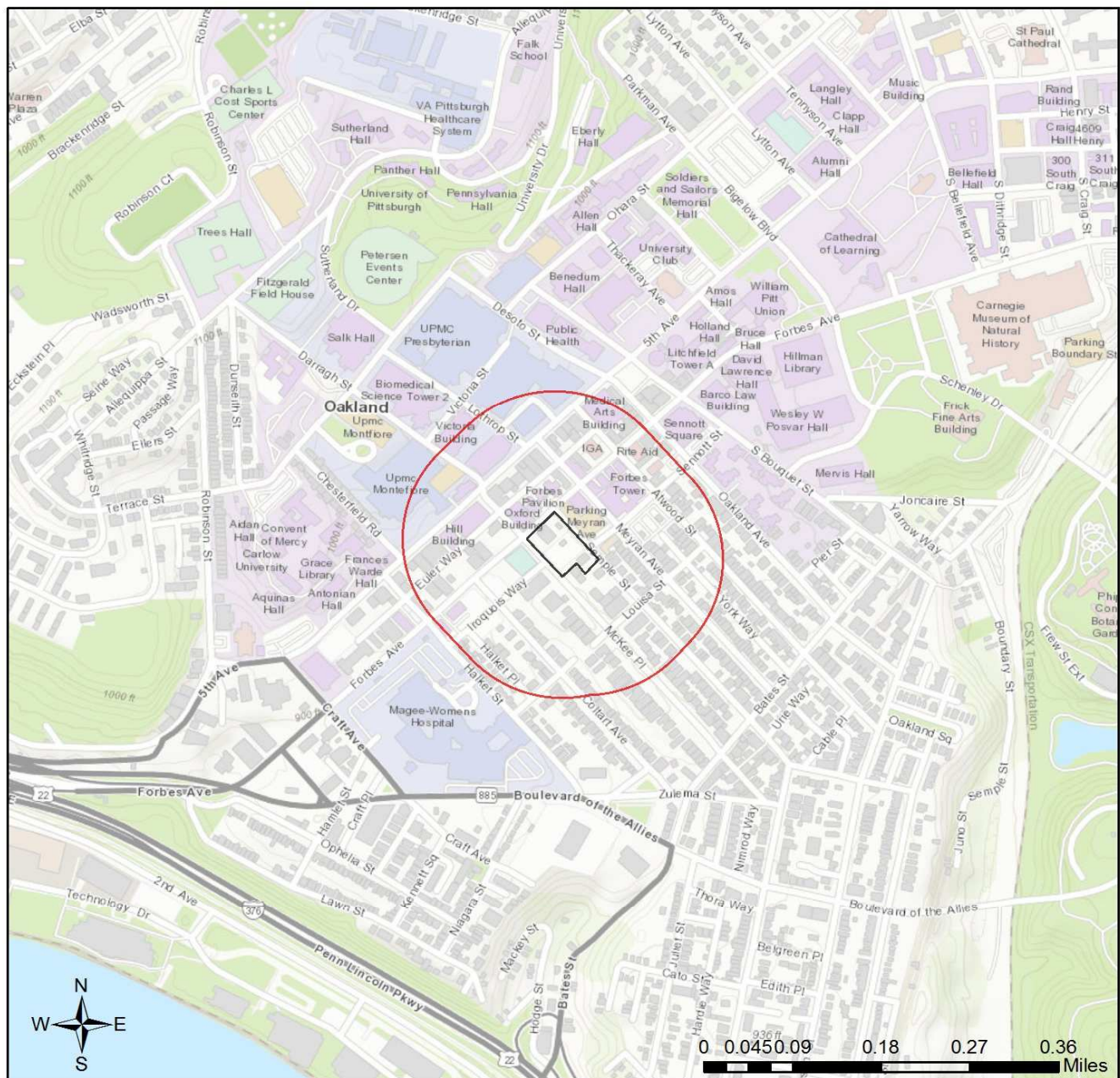


- Project Boundary
- Buffered Project Boundary



Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China

3500 Forbes Avenue



- Project Boundary
- Buffered Project Boundary

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community



RESPONSE TO QUESTION(S) ASKED

Q1: The proposed project is in the range of the Indiana bat. Describe how the project will affect bat habitat (forests, woodlots and trees) and indicate what measures will be taken in consideration of this. Round acreages up to the nearest acre (e.g., 0.2 acres = 1 acre).

Your answer is: No forests, woodlots or trees will be affected by the project.

Q2: Is tree removal, tree cutting or forest clearing of 40 acres or more necessary to implement all aspects of this project?

Your answer is: No

3. AGENCY COMMENTS

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

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

PA Game Commission

RESPONSE:

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

PA Department of Conservation and Natural Resources

RESPONSE:

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

PA Fish and Boat Commission

RESPONSE:

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

U.S. Fish and Wildlife Service

RESPONSE:

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

4. DEP INFORMATION

The Pa Department of Environmental Protection (DEP) requires that a signed copy of this receipt, along with any required documentation from jurisdictional agencies concerning resolution of potential impacts, be submitted with applications for permits requiring PNDI review. 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). 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

PA Fish and Boat Commission

Division of Environmental Services
595 E. Rolling Ridge Dr., Bellefonte, PA 16823
Email: 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
NO Faxes Please

PA Game Commission

Bureau of Wildlife Habitat Management
Division of Environmental Planning and Habitat Protection
2001 Elmerton Avenue, Harrisburg, PA 17110-9797
Email: RA-PGC_PNDI@pa.gov
NO Faxes Please

7. PROJECT CONTACT INFORMATION

Name: Marci Carter
Company/Business Name: Langan Engineering & Environmental Services, Inc.
Address: 2400 Ansys Drive, Suite 403
City, State, Zip: Canonsburg, PA 15317
Phone: (724) 514-5182 Fax: (724) 514-5101
Email: mcarter@langan.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

7/14/2020

date

APPENDIX I

Component 4A



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
3500 Forbes Ave.

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

1. Date plan received by municipal planning agency March 9, 2021
2. Date review completed by agency March 9, 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>Senior Environmental Planner</u> Signature: <u><i>Martina Wolf Battistone</i></u> Date: <u>March 9, 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.

APPENDIX J

Component 4C



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

DEP Code #:

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

3500 Forbes Avenue

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

1. Date plan received by county or joint county health department February 24, 2021

Agency name Allegheny County Health Department (ACHD)

2. Date review completed by agency February 26, 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 Fields

Title: Environmental Health Engineer III

Signature: *Freddie Fields*

Date: February 26, 2021

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.

APPENDIX K

Completeness Checklist

Checklist



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

Completeness Checklist

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

Sewage Collection and Treatment Facilities

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

Municipal Action

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

Signature of Municipal Official

Date submittal determined complete