Letter of Transmittal

4314 Old William Penn Hwy
Suite 101
Monroeville, PA 15146
724.325.1215o
866.295.5226f
Development Services
Due Diligence
Surveyors
Engineers
Owners

To: **Pittsburgh City-County Building**
414 Grant St
Pittsburgh, PA 15219

Date: 02.12.2021

Project No.: 19-1247

Project Name: **Safe Investments US – Wharton St**
Block & Lot #(s): 12-F-248
Pittsburgh, PA 15203

Attention: **Martina Battistone**
Senior Environmental Planner

File Code: 26.00

Sheet No.: 1 **of** 1

We Are Sending: ☒Attached ☐Under Separate Cover via ☐*Overnite* ☐*2nd Day* ☐*Regular* mail the following items:

☐Shop Drawings ☒Prints ☐Sepias ☐Mylars ☐Samples ☐Change Order

☐Copy of Letter ☒Reports ☐Specifications ☐Cost Estimates ☐Electronic Media

☐Other:

Item	Rev. No.	Quantity	Description	Action
1	-	1	PADEP SFPM Component 4A	F,G
2	-	1	PADEP SFPM Component 4C	C
3	-	1	PADEP SFPM Component 3	C
4	-	1	Project Narrative	C
5	-	1	Letters from CTMA and ALCOSAN	C
6	-	1	Project Utility & Architectural Plans	C
7	-	1	Project USGS Vicinity Map	C
8	-	1	Sewage Flow Path Map	C
9	-	1	Project PNDI Package & Response	C

Action Codes: A. *Action Indicated on Item Transmitted* B. *See Remarks Below* C. *For Your Use* D. *As Requested* E. *For Information Only* F. *For Review & Comment* G. *For Approval*

Remarks: Enclosed is the Planning Module Component 3 and supporting documents for the specified project. Please fill out Component 4A and return to me at your earliest convenience. Feel free to call or email (m.priest@redswinggroup.com) me if you have any questions, comments, or concerns regarding the submitted materials.

Thank you and have a great day,

Makenzie

Copies: ; File

Signed: Makenzie Priest

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER

INSTRUCTIONS FOR COMPLETING COMPONENT 4A
MUNICIPAL PLANNING AGENCY REVIEW

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

Background

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

Who Should Complete the Component?

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

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

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

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

Section A. Project Name

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

Section B. Review Schedule

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

Section C. Agency Review

1. Answer the yes/no questions and provide any descriptive information necessary on the lines provided. Attach additional sheets, if necessary.

2. Complete the name, title, and signature block.

Section D. Additional Comments

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

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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
Safe Investments US - Wharton St

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

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

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

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

SECTION C. AGENCY REVIEW (continued)

Yes	No		
☒	☐	13.	Is this proposal consistent with the ordinance? If no, describe the inconsistencies _____
☒	☐	14.	Is this plan consistent with the municipal Official Sewage Facilities Plan? If no, describe the inconsistencies _____
☐	☒	15.	Are there any wastewater disposal needs in the area adjacent to this proposal that should be considered by the municipality? If yes, describe _____
☐	☒	16.	Has a waiver of the sewage facilities planning requirements been requested for the residual tract of this subdivision?
☐	☐		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: _____

Title: _____

Signature: _____

Date: _____

Name of Municipal Planning Agency: _____

Address _____

Telephone Number: _____

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

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

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BUREAU OF CLEAN WATER

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

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

Background

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

Who Should Complete the Component?

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

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

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

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

Section A. Project Name

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

Section B. Review Schedule

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

Section C. Agency Review

1. Answer the yes/no questions and provide any descriptive information necessary on the lines provided. Attach additional sheets, if necessary.

2. Complete the name, title, and signature block.

Section D. Additional Comments

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

3850-FM-BCW0362C 6/2016

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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

Safe Investments US - Wharton Street

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

1. Date plan received by county or joint county health department February 9, 2021

   Agency name Allegheny County Health Department (ACHD)

2. Date review completed by agency February 10, 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 10, 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.

3800-FM-BPNPSM0353 Rev. 2/2015
Form

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

Code No.

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

SEWAGE FACILITIES PLANNING MODULE

Component 3. Sewage Collection and Treatment Facilities

(Return completed module package to appropriate municipality)

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

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

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

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

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

A. PROJECT INFORMATION (See Section A of instructions)

1. Project Name Safe Investments US - Wharton Street

2. Brief Project Description Project will consist of new construction of eight residential town houses, with parking, in a currently vacant lot.

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

Municipality Name	County	City	Boro	Twp
Pittsburgh	Allegheny	☒	☐	☐

Municipality Contact Individual - Last Name	First Name	MI	Suffix	Title
Battistone	Martina			Senior Planner

Additional Individual Last Name	First Name	MI	Suffix	Title

Municipality Mailing Address Line 1	Mailing Address Line 2
414 Grant Street	

Address Last Line -- City	State	ZIP+4
Pittsburgh	PA	15219

Area Code + Phone + Ext.	FAX (optional)	Email (optional)
412-255-2516		martina.battistone@pittsburghpa.gov

C. SITE INFORMATION (See Section C of instructions)

Site (Land Development or Project) Name

Safe Investments US - Wharton Street

Site Location Line 1	Site Location Line 2
2139 Wharton St	

Site Location Last Line -- City	State	ZIP+4	Latitude	Longitude
Pittsburgh	PA	15203	40°25'49.7"	79°58'28.8"

Detailed Written Directions to Site From Waterfront Drive: take 30th St Bridge to 31st St Bridge. Take PA-28S, Exit 1A, I-579 S, Armstrong Tunnel and S 10th St Bridge/Phillip Murray Bridge to Muriel St. Follow Muriel St to Wharton St.

Description of Site Vacant grassed lot with concrete pad areas spread throughout on corner of Wharton St and S 22nd St.

Site Contact (Developer/Owner)

Last Name	First Name	MI	Suffix	Phone	Ext.
Abraham	Tal			412-552-3479	

Site Contact Title	Site Contact Firm (if none, leave blank)
Owner	Safe Investments US
FAX	Email
	tal@safeinvestments.us

Mailing Address Line 1	Mailing Address Line 2
Nathan Alterman 2/72	

Mailing Address Last Line -- City	State	ZIP+4
Rehovot	Israel	7656259

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

Last Name	First Name	MI	Suffix
Turka	Louis	A	

Title	Consulting Firm Name
Civil Engineer 2	Red Swing Group

Mailing Address Line 1	Mailing Address Line 2
3824 Northern Pike, Suite 800	

Address Last Line – City	State	ZIP+4	Country
Monroeville	PA	15146	US

Email	Area Code + Phone	Ext.	Area Code + FAX
l.turka@redswinggroup.com	724-325-1215	205	866-295-5226

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 8

Connections 2

Name of:

existing collection or conveyance system 15" CSS in Wharton St; 15" CSS in Merriman Way

owner PWSA

existing interceptor Lower Monongahela

owner ALCOSAN

2. **WASTEWATER TREATMENT FACILITY**

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

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

☐ New facility ☒ Existing facility ☐ Upgrade of existing facility ☐ Expansion of existing facility

Name of existing facility ALCOSAN Wastewater Treatment Facility

NPDES Permit Number for existing facility PA0025984

Clean Streams Law Permit Number PA 0025894

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 permitee 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. Sparbanie, P.E.

Agent Signature _____ Date 1-26-21

(Also see Section I. 4.)

G. PROPOSED WASTEWATER DISPOSAL FACILITIES (Continued)

3. **PLOT PLAN**

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

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

4. **WETLAND PROTECTION**

	YES	NO	
a.	☐	☒	Are there wetlands in the project area? If yes, ensure these areas appear on the plot plan as shown in the mapping or through on-site delineation.
b.	☐	☒	Are there any construction activities (encroachments, or obstructions) proposed in, along, or through the wetlands? If yes, Identify any proposed encroachments on wetlands and identify whether a General Permit or a full encroachment permit will be required. If a full permit is required, address time and cost impacts on the project. Note that wetland encroachments should be avoided where feasible. Also note that a feasible alternative **MUST BE SELECTED** to an identified encroachment on an exceptional value wetland as defined in Chapter 105. Identify any project impacts on streams classified as HQ or EV and address impacts of the permitting requirements of said encroachments on the project.

5. **PRIME AGRICULTURAL LAND PROTECTION**

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

6. **HISTORIC PRESERVATION ACT**

YES	NO	
☐	☒	Sufficient documentation is attached to confirm that this project is consistent with DEP Technical Guidance 012-0700-001 *Implementation of the PA State History Code* (available online at the DEP website at www.dep.state.pa.us, select “subject” then select “technical guidance”). As a minimum this includes copies of the completed Cultural Resources Notice

(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 permitee. The permitee 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 3200 gpd
2. Total Sewage Flows to Facilities (pathway from point of origin through treatment plant)

   When providing "treatment facilties" 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	3,062,113	10,717,396	57,000	199,500	60,810	212,835
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 1/6/2021

☐ 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 3200 gpd
2. Total Sewage Flows to Facilities (pathway from point of origin through treatment plant)

   When providing "treatment facilties" 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	3,062,113	10,717,396	57,000	199,500	60,810	212,835
Conveyance		2,992,000	33,000	38,000	36,562	41,612
Treatment		250,000,000	209,300,000	250,000,000	219,700,000	295,000,000

3. Collection and Conveyance Facilities

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

   YES NO

   a. ☐ ☐ 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 BKK Date 1/6/2021

☒ 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 1-26-21

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 1-26-21

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

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

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

☐ 1. Spray irrigation (other than individual residential spray systems (IRSIS)) or other land application is proposed, and the information requested in Section K.1. of the planning module instructions are attached.

☐ 2. Recycle and reuse is proposed and the information requested in Section K-2 of the planning module instructions is attached.

☐ 3. A discharge to a dry stream channel is proposed, and the information requested in Section K.3. of the planning module instructions are attached.

☐ 4 A discharge to a perennial surface water body is proposed, and the information requested in Section K.4. of the planning module instructions are attached.

☐ L. PERMEABILITY TESTING (See Section L of instructions)

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

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

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

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

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

O. SEWAGE MANAGEMENT (See Section O of instructions)

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

	Yes	No	
1.	☐	☒	Is connection to, or construction of, a DEP permitted, non-municipal sewage facility or a local agency permitted, community onlot sewage facility proposed.

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

2. Project Flows _____ gpd

	Yes	No	
3.	☐	☐	Is the use of nutrient credits or offsets a part of this project?

If yes, attach a letter of intent to puchase 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.

Lou Turka	
Name (Print)	Signature
Civil Engineer II	8/3/2020
Title	Date
3824 Northern Pike Monroeville, PA 15146	724-325-1215
Address	Telephone Number

R. REVIEW FEE (See Section R of instructions)

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

☐ I request DEP calculate the review fee for my project and send me an invoice for the correct amount. I understand DEP's review of my project will not begin until DEP receives the correct review fee from me for the project.

☒ I have calculated the review fee for my project using the formula found below and the review fee guidance in the instructions. I have attached a check or money order in the amount of $400 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.

   #8 Lots (or EDUs) X $50.00 = $ 400

   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:

   #_____ Lots (or EDUs) X $35.00 = $ _____

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

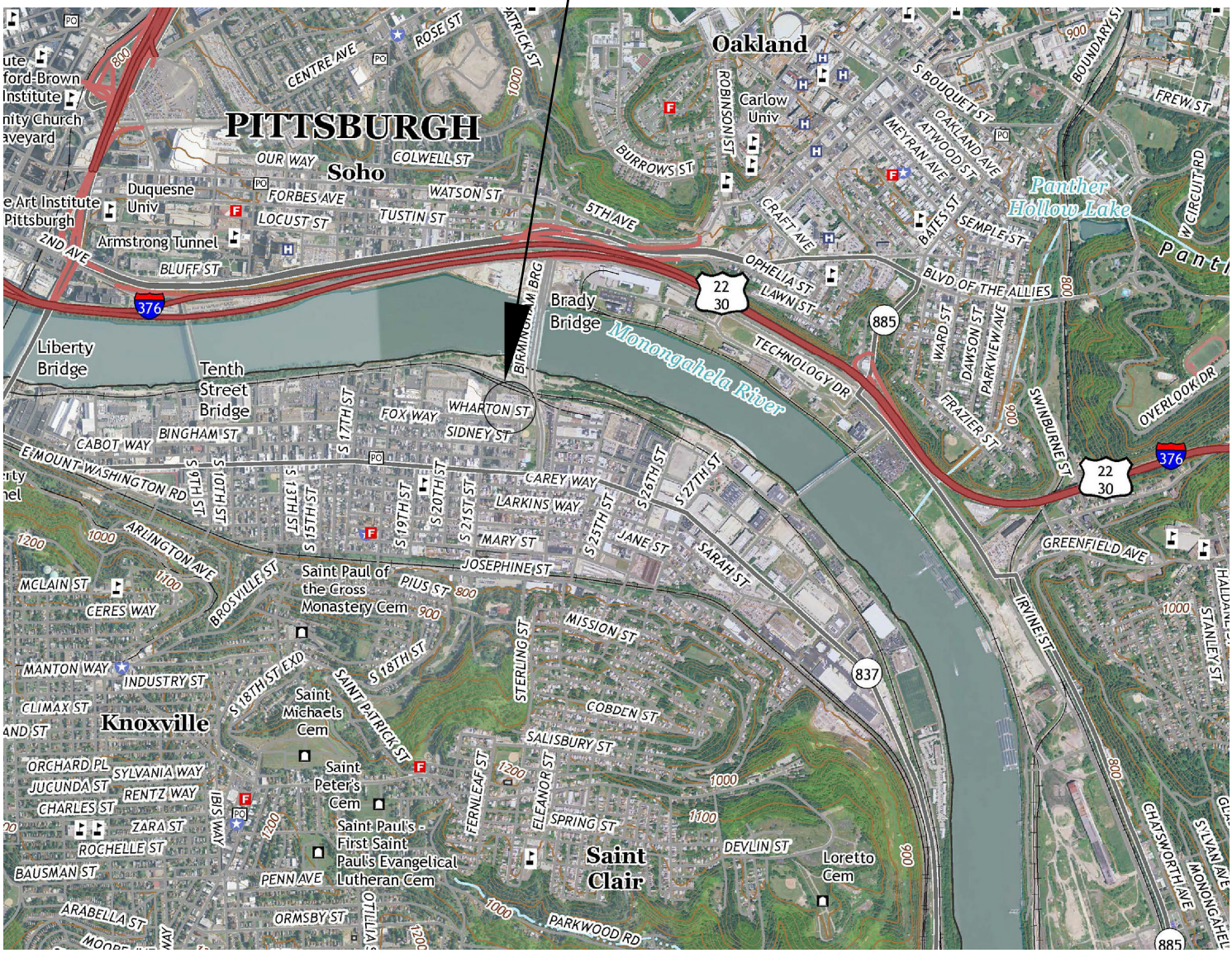
   The fee is based upon:

   - 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)

SITE LOCATION



REFERENCE:
PITTSBURGH EAST, PA - 2016 USGS QUADRANGLE

REVISIONS	
DATE	BY

SAFE INVESTMENT US

2139 WHARTON STREET

USGS VICINITY MAP

RED SWING GROUP

DEVELOPMENT SERVICES/DUE DILIGENCE/ ENGINEERS/ OWNERS/ SURVEYORS

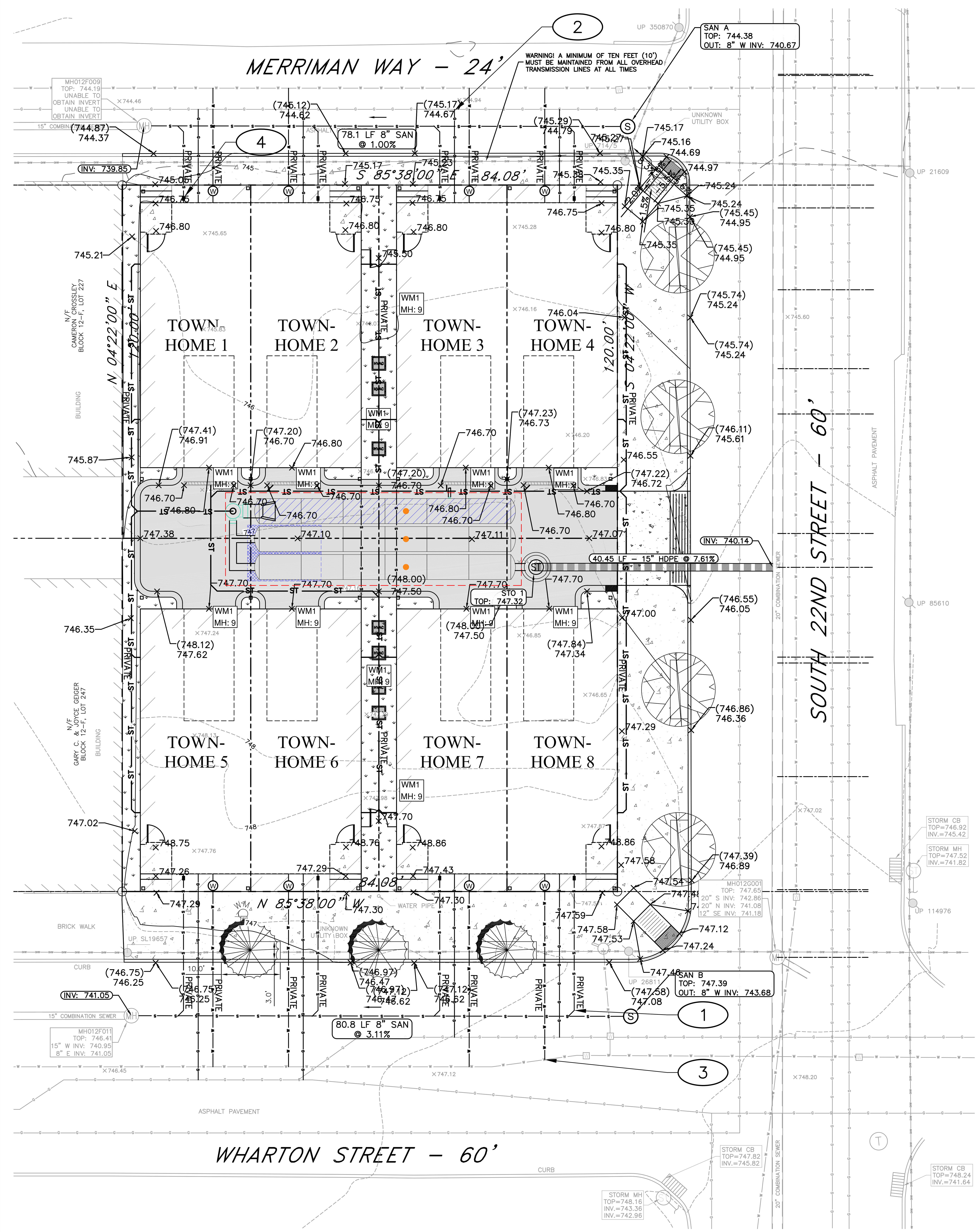
ONE MONROEVILLE CENTER
3824 NORTHERN PIKE, SUITE 800
MONROEVILLE, PA 15146
OFFICE: 724.325.1215

RSG PROJECT NO: 19-1247

DATE:2/25/2020

SCALE:1"=2000'

SHEET NO.
1 OF 1



SITE UTILITY NOTES

1. PROPOSED 4" SANITARY SEWER LATERAL (TYP.). CONTRACTOR TO COORDINATE WITH SANITARY SEWER SERVICE PROVIDER FOR FIELD CONNECTION TO EXISTING SYSTEM.
2. PROPOSED GAS SERVICE LATERAL (TYP.). CONTRACTOR TO COORDINATE WITH GAS SERVICE PROVIDER FOR FIELD CONNECTION TO EXISTING SYSTEM.
3. PROPOSED 1" WATER SERVICE LATERAL (TYP.). CONTRACTOR TO COORDINATE WITH WATER SERVICE PROVIDER FOR FIELD CONNECTION.
4. PROPOSED HOUSE TRAP WITH FRESH AIR INLET & CLEANOUT. (TYP. PER TOWN HOME)

LEGEND

- EXISTING GAS LINE
- EXISTING WATER LINE
- EXISTING OVERHEAD UTILITY LINE
- EXISTING SANITARY LATERAL
- EXISTING SANITARY LINE
- EXISTING STORM LINE
- PROPOSED GAS LINE
- PROPOSED UNDERGROUND ELECTRIC LINE
- PROPOSED TELEPHONE/COMMUNICATIONS LINE
- PROPOSED SANITARY LINE
- PROPOSED SANITARY LATERAL
- PROPOSED STORM LINE
- PROPOSED WATER LINE

SANITARY SEWER

PWSA
1200 PENN AVENUE
PITTSBURGH, PA. 15222
CONTACT: RICK OBERMEIER
ROBERMEIER@PGH2O.COM

WATER SERVICE

PWSA
1200 PENN AVENUE
PITTSBURGH, PA. 15222
CONTACT: RICK OBERMEIER
ROBERMEIER@PGH2O.COM

TELEPHONE SERVICES

VERIZON BUSINESS FORMERLY MCI
400 INTERNATIONAL PARKWAY
RICHARDSON, TX. 75081
CONTACT: DEAN BOYERS
INVESTIGATIONS@VERIZON.COM

VERIZON PENNSYLVANIA LLC
1026 HAY ST
PITTSBURGH, PA. 15221
CONTACT: DEBORAH BARUM
DEBORAH.D.DELIA@VERIZON.COM

ELECTRIC SERVICES

DUQUESNE LIGHT COMPANY
2645 NEW BEAVER AVE
PITTSBURGH, PA. 15233
CONTACT: KYLIE PARISON
EMAIL: KPARISON@DUQLIGHT.COM

ALLEGHENY CITY ELECTRIC INC
3080 BABCOCK BLVD
PITTSBURGH, PA. 15237
CONTACT: TOM ULIZZI
TMU@ALLEGHENYCITYELECTRIC.COM

GAS SERVICES

COLUMBIA GAS OF PA INC
251 W MAIDEN STREET
WASHINGTON, PA. 15301
CONTACT: GRACE BACHISH
GBACHISM@NISOURCE.COM

PEOPLES GAS COMPANY LLC
375 NORTH SHORE DRIVE
PITTSBURGH, PA. 15212
CONTACT: MICHAEL DENNY
MICHAEL.DENNY@PEOPLES-GAS.COM

CABLE

COMCAST
1530 CHARTIERS AVE
PITTSBURGH, PA. 15204
CONTACT: CHARLES DETWILER
CHARLES_DETWILER@CABLE.COMCAST.COM

CENTRY LINK
1025 ELDORADO BLVD
BROOMFIELD, CO. 80021
CONTACT: CENTURY LINK OPERATOR PERSONNEL
NATIONALRELO@CENTURYLINK.COM

Know what's **below.** **Call** before you dig.

GRAPHIC SCALE
0 5 10 20
(IN FEET)
1 inch = 10 ft.

CALL BEFORE YOU DIG!
PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS NOTICE IN DESIGN STAGE.
STOP CALL
PENNSYLVANIA ONE CALL SYSTEM, INC.
1-800-242-1776

RED SWING GROUP
ONE MONROEVILLE CENTER
3824 NORTHERN PIKE, SUITE 800
MONROEVILLE, PA 15146
OFFICE: 724.325.1215

A&E SEAL:

SAFE INVESTMENTS US
WHARTON STREET

PITTSBURGH, PA 15203
ALLEGHENY COUNTY
CITY OF PITTSBURGH - 16TH WARD

REVISIONS:

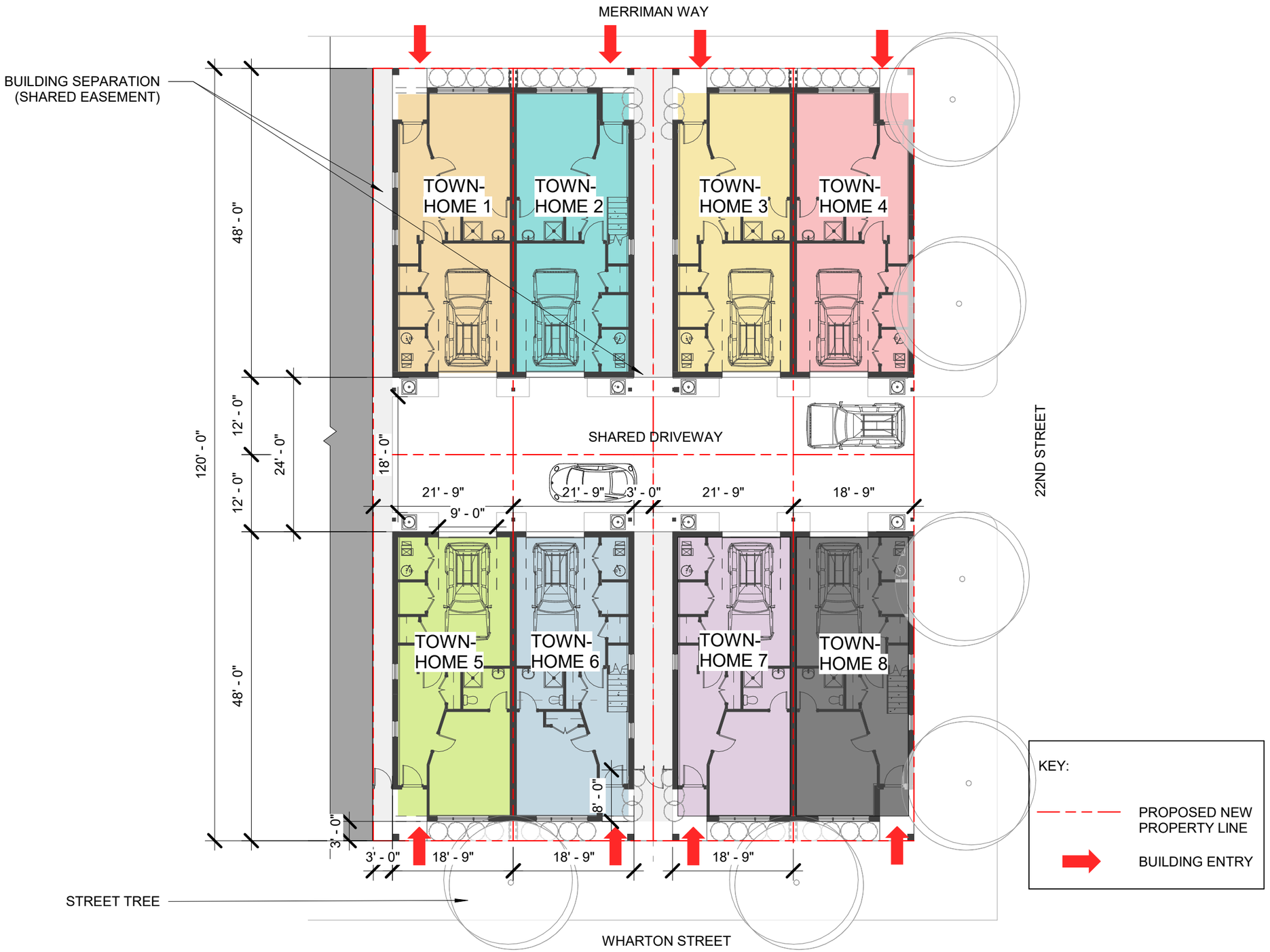
MARK	DATE	DESCRIPTION
0	6/26/2020	ISSUED FOR REVIEW

PROJ NO: 19-1247
SCALE: AS SHOWN
DATE: 9/30/2020
DESIGNED BY: ZM
DRAWN BY: CK
CHECKED BY: SN

SHEET TITLE:
UTILITY PLAN

SHEET NO.
C5.1

IF THIS DRAWING IS LESS THAN 24" X 36" IT IS A REDUCED SIZE DRAWING



6/13/2020 12:53:43 PM

PERFIDO
WEISKOPF
WAGSTAFF +
GOETTEL

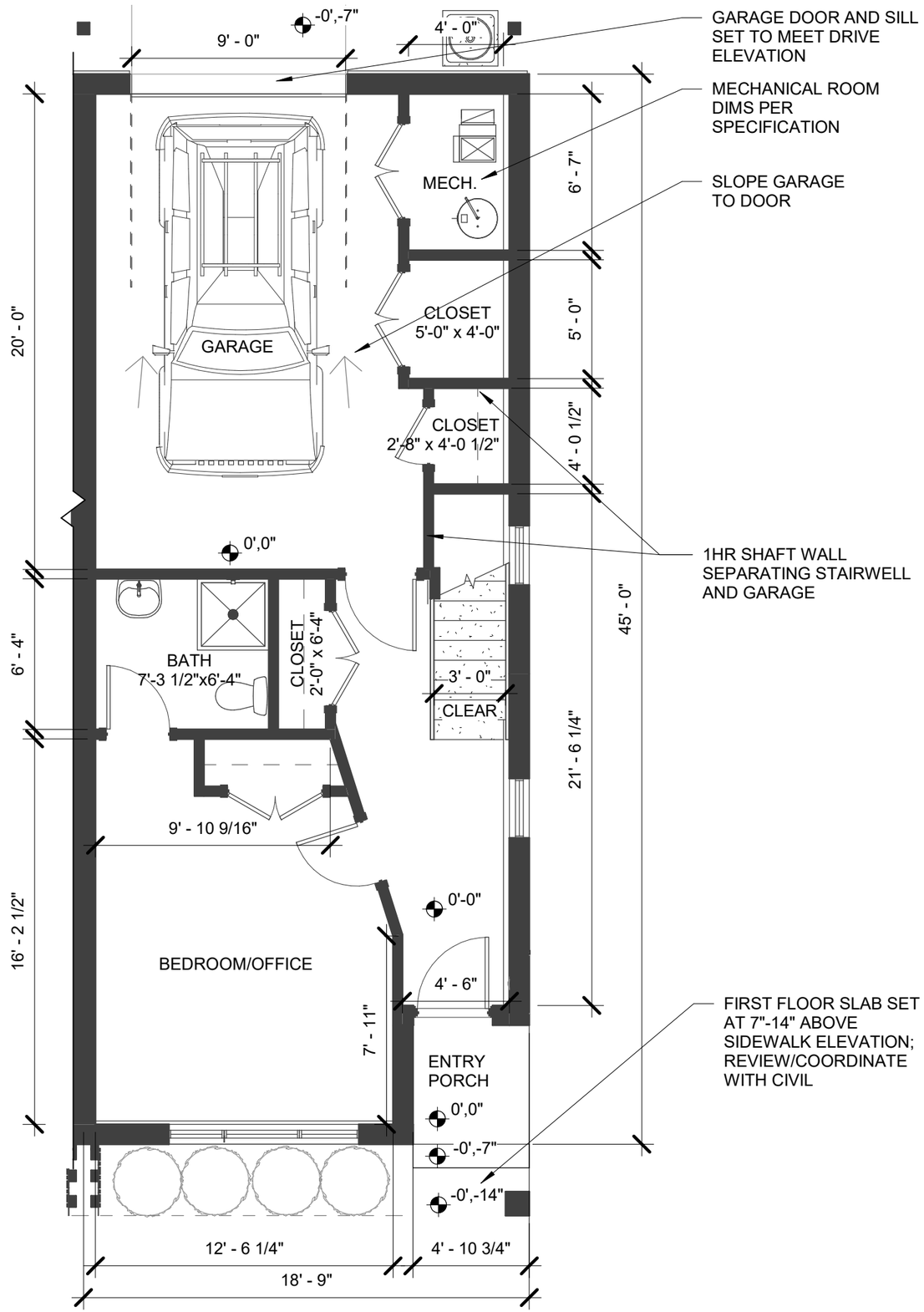
WHARTON STREET
LOT; SCHEMATIC
DESIGN

2139 WHARTON STREET

TAL ABRAHAM; SAFE INVESTMENTS US

1/16" = 1'-0"

PROPOSED SITE PLAN



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PERFIDO WEISKOPF WAGSTAFF + GOETTEL

WHARTON STREET LOT; SCHEMATIC DESIGN

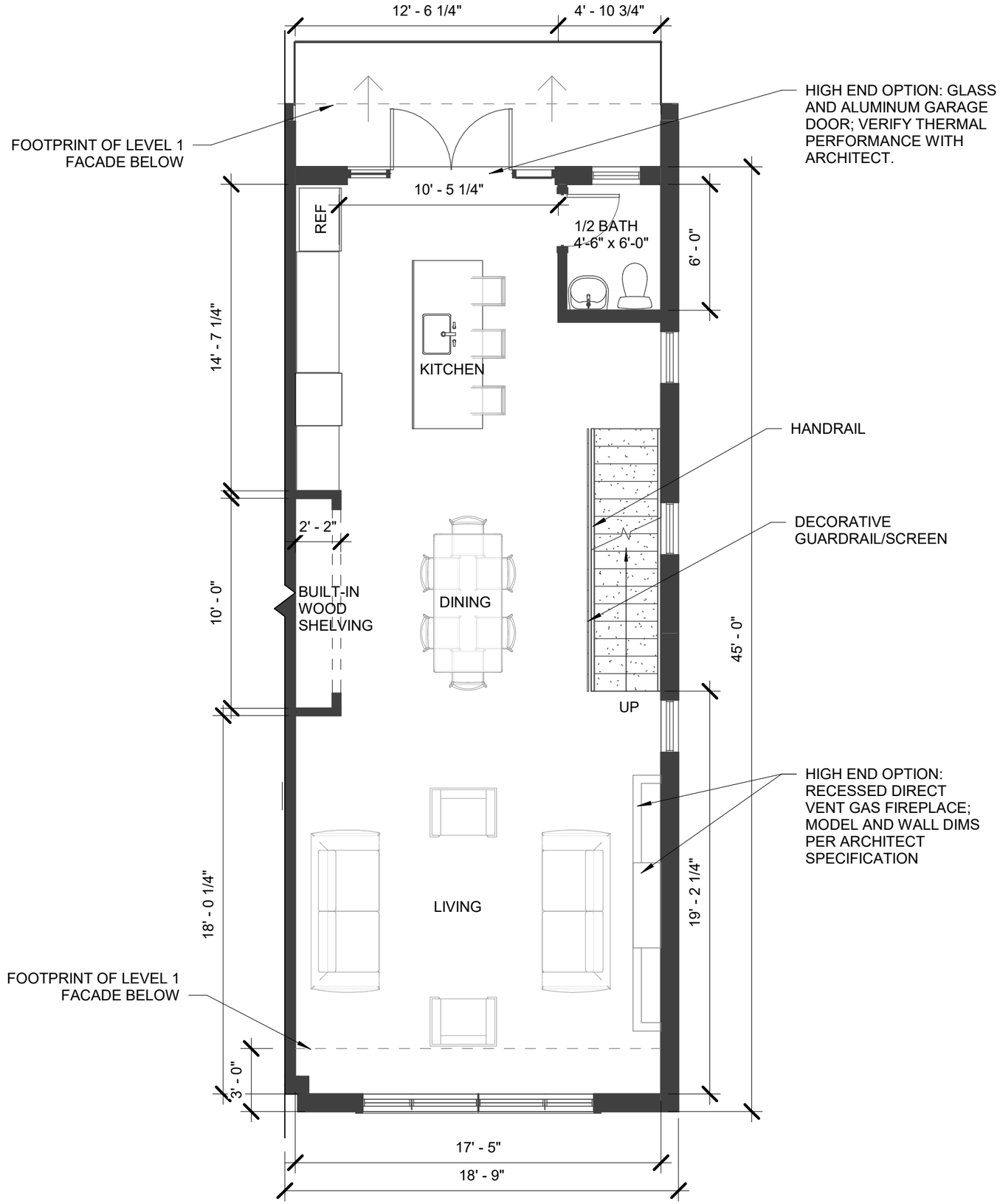
2139 WHARTON STREET

TAL ABRAHAM; SAFE INVESTMENTS US

LEVEL GSF: 522

3/16" = 1'-0"

First Floor Plan



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PERFIDO WEISKOPF WAGSTAFF + GOETTEL

WHARTON STREET LOT; SCHEMATIC DESIGN

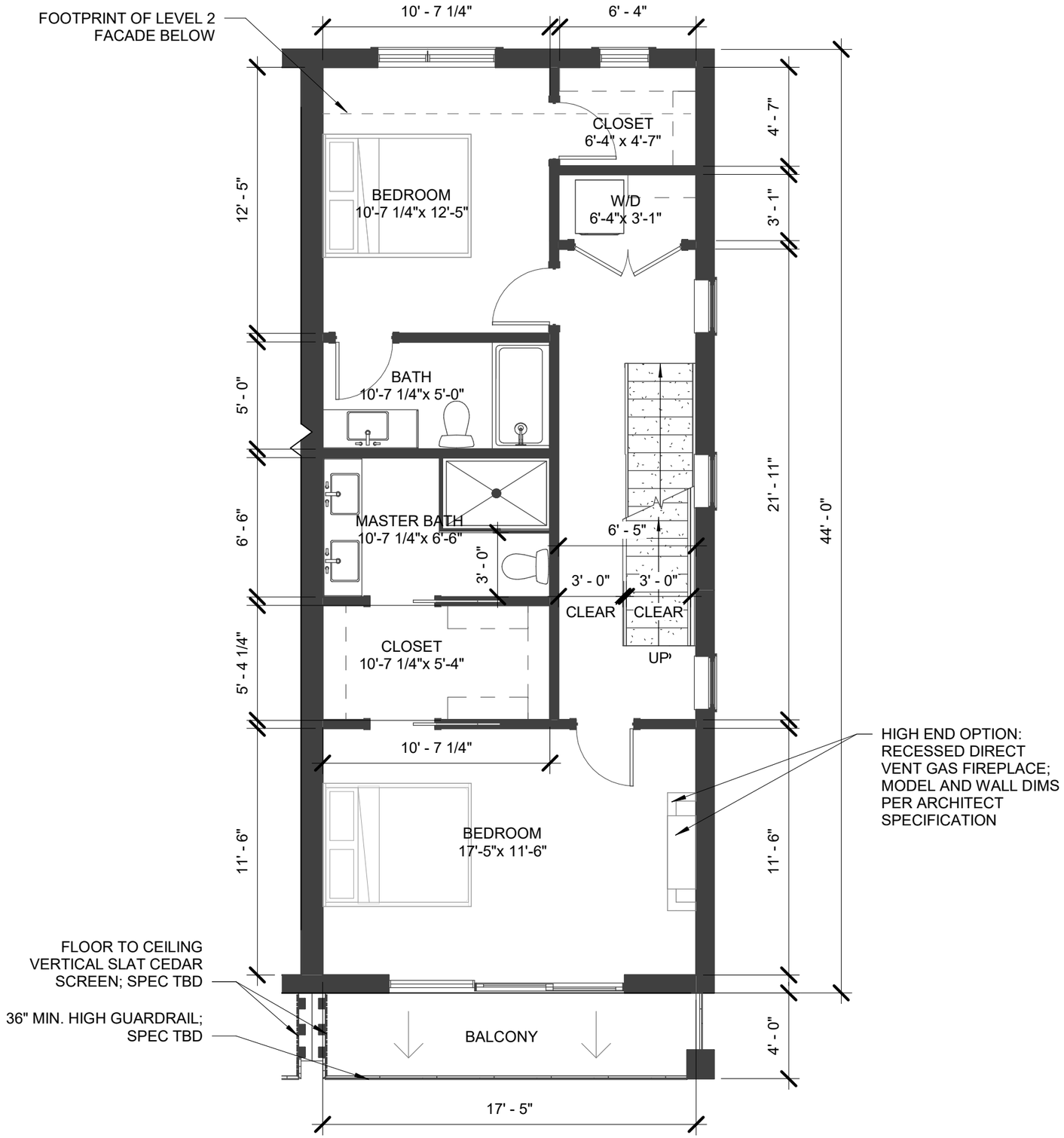
2139 WHARTON STREET

TAL ABRAHAM; SAFE INVESTMENTS US

LEVEL GSF: 844

3/16" = 1'-0"

SECOND FLOOR PLAN



LEVEL GSF: 825

3/16" = 1'-0"

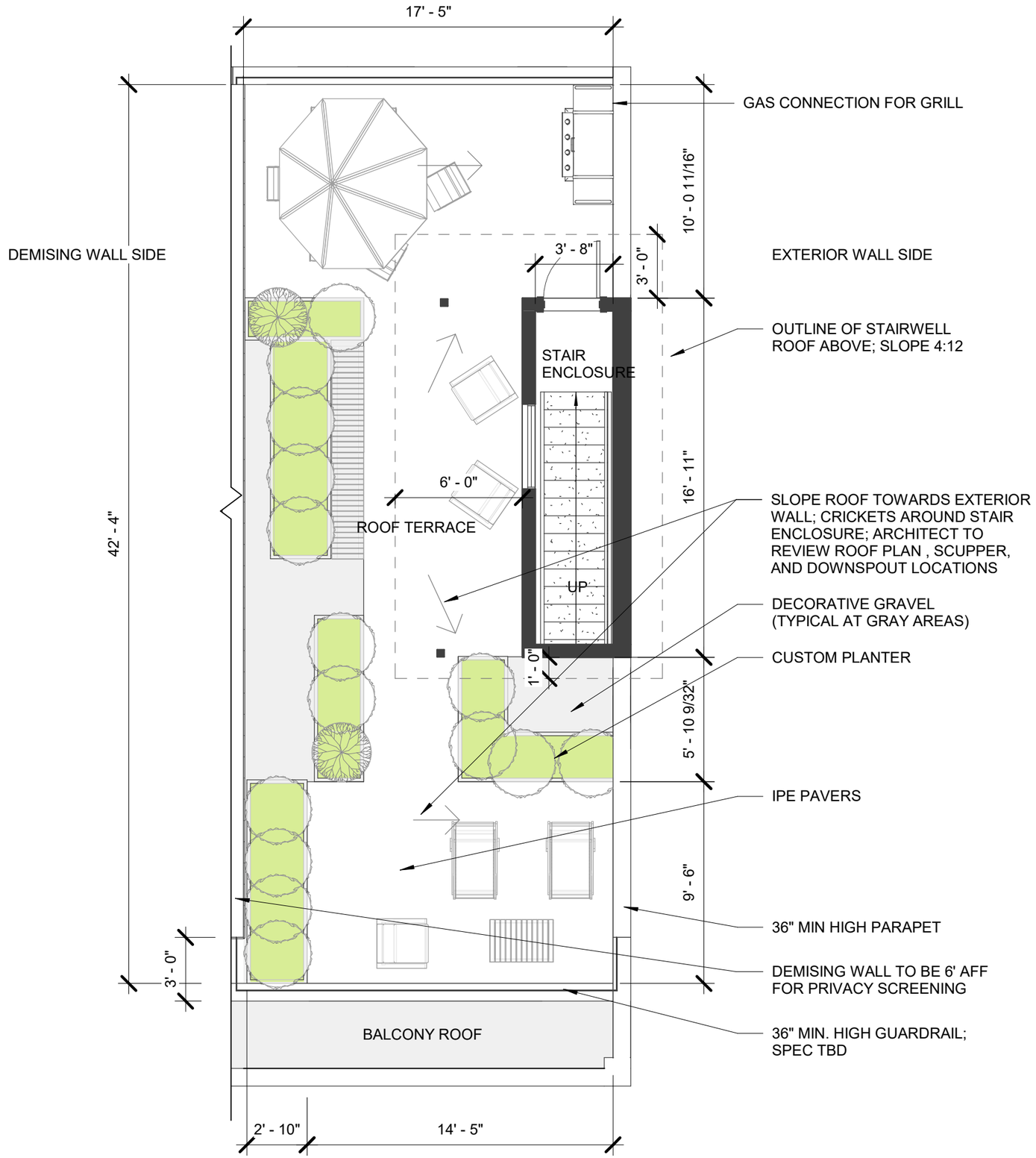
THIRD FLOOR PLAN

PERFIDO WEISKOPF WAGSTAFF + GOETTEL

WHARTON STREET LOT; SCHEMATIC DESIGN

2139 WHARTON STREET

TAL ABRAHAM; SAFE INVESTMENTS US



PERFIDO WEISKOPF WAGSTAFF + GOETTEL

WHARTON STREET LOT; SCHEMATIC DESIGN

2139 WHARTON STREET

TAL ABRAHAM; SAFE INVESTMENTS US

LEVEL GSF: 80

3/16" = 1'-0"

ROOF DECK

SAFE INVESTMENTS US – WHARTON STREET
EIGHT TOWNHOMES
PROJECT NARRATIVE

PROJECT NAME: Safe Investments US – Wharton Street
2139 Wharton Street
Pittsburgh, PA 15203

SITE DESCRIPTION & ANALYSIS LOCATION

The project involves the construction of eight townhomes on an existing vacant lot, currently located in the Southside Flats neighborhood of Pittsburgh. The existing lot has been subdivided and each townhome has been assigned its own lot and address. The associated addresses for the eight townhomes are 2130-2137 Wharton Street, Pittsburgh, PA 15203.

The project site in its existing condition consists of a vacant grassed lot with concrete pad areas spread throughout.

The project proposes a new sanitary lateral from each town home. Four (4) homes will be on Wharton St. It is proposed that a new 8" sanitary line be installed along Wharton Street to which these four homes will connect. The new 8" line in Wharton Street is proposed to connect to an existing manhole (MH012F011) in a combined sewer in Wharton Street. Four homes will be on Merriman Way. It is proposed that a new 8" sanitary line be installed along Merriman Way to which these four homes will connect. The new 8" line in Merriman Way is proposed to connect to an existing manhole (MH012F009) in a combined sewer in Merriman Way.

Storm laterals will run from roof leaders on each of the eight townhomes, which will be routed and connected to trench drains, and then to the underground detention facility, which will eventually connect into the 20" combined sewer within S 22nd Street. One new water service lateral is also proposed to serve each townhome, with four connecting to the existing 8" PWSA water line within Wharton Street, and four connecting to the existing 6" PWSA water line within Merriman Way.

PROPOSED SEWER FLOWS

All values derived from PA Code 025 Chapter 73 §73.17. Sewage Flows.

Single family residences

400 GPD per Unit

8 Units x 400 GPD = 3,200 GPD
400 GPD = 1 EDU
3,200 GPD (1 EDU/400GPD) = 8 EDUs

TOTAL GPD: 3,200 GPD or 8 EDUs

EXISTING SEWER FLOWS

No previous sanitary flows for the vacant property can be assessed.

NET SEWER FLOWS

TOTAL PROPOSED INCREASE: 3,200 GPD – 0 GPD = 3,200 GPD (8.0 EDU's)

Based on the above calculations, a PADEP Sewage Facilities Planning Module IS ANTICIPATED TO BE REQUIRED.

STORM FLOW CALCULATIONS

Rainfall data was obtained from NOAA's Precipitation Frequency Data Server. The rational equation was utilized to determine flow data.

EXISTING STORM FLOWS

For the existing storm flow calculations, the property was considered as 25% impervious (C=0.95) and 75% grass area with D soils (C=0.35). A 25-year storm event was considered (PWSA Developers Manual) and a time of concentration was estimated to be 5 minutes.

C = 0.50
I (NOAA) = 7.13 in/hr
A = 0.23 acres

Q = CiA
Q = 0.50 (7.13) (0.23)
Q = 0.82 cfs

PROPOSED STORM FLOWS

For the proposed storm flow calculations, the property areas were divided as seen in the table. A 25-year storm event was considered (PWSA Developers Manual) and a time of concentration was estimated to be 5 minutes.

Area 1 consists of the proposed building footprints (7,200 SF).
Area 2 consists of the improved surfaces (1,940 SF).
Area 3 consists of the grassed remainder of the lot (283 SF).

AREA NUMBER	C VALUE	FORMULA	AMOUNT OF SW (CFS)
1	0.95	Q=(0.95)(7.13)(0.17)	1.15
2	0.95	Q=(0.95)(7.13)(0.05)	0.34
3	0.40	Q=(0.40)(7.13)(0.01)	0.03
		SUM	1.52

EXISTING CONDITIONS

Type of Establishment	Gallons/Unit/ Day	Number of Units	GPD
Hotels and Motels	100		
Multiple family dwellings and apartments, including townhouses, duplexes and condominiums	400		
Rooming houses (per unit)	200		
Single Family Residences***400 GPD for 3 BR or less, for each BR over 3, add 100 GPD	400		
Airline Catering (per meal served)	3		
Airports (per passenger - not including food)	5		
Airports (per employee)	10		
One licensed operater Beauty shops	200		
Bus service ares not including food (per patron and employee)	5		
Country clubs not including food (per patron and employee)	30		
Drive-in theaters (not includign food - per space)	10		
Factories and plants exclusive of industrial wastes (per employee)	35		
Laundries, self-service (gallons/washer)	400		
Mobile home parks, independent (per space)	400		
Movie theaters (not including food, per auditorium seat)	5		
Offices (per employee)	10		
Restaurants (toilet and kitchen wasters per patron)	10		
(Additional for bars and cocktail lounges)	2		
Restaurants (kitchen and toilet wastes, single-service utensils/person)	8.5		
Restaurants (kitchen waste only, single-service utensils/patron)	3		
Stores (per public toilet)	400		
Warehouses (per employee)	35		
Work or construction camps (semipermanent) with flush toilets (per employee)	50		
Work or construction camps (semipermanent) without flush toilets (per employee)	35		
Churches (per seat)	3		
Churches (additional kitchen waste per meal served)	3		
Chuches (additioanl with paper service per meal served)	1.5		
Hospitals (per bed space, with laundry)	300		
Hospitals (per bed space, without laundry)	220		
Institutional food service (per meal)	20		
Institutions other than hospitals (per bed space)	125		
Schools, boarding (per resident)	100		
Schools, day (wihout cafeterias, gyms or showers per student and employee)	15		
Schools, day (with cafeterias, but no gym or showers per student and employee)	20		
Schools, day (with cafeterias, gym and showers per student and employee)	25		
Camps, day (no meals served)	10		
Camps, hunting and summer residential (night and day) with limited plumbing including water-carried toilet wastes (per person)	50		
Campgrounds, with individual sewer and water hookup (per space)	100		
Campgrounds with water hookup only and/or central comfort station which includes water-carried toilet wastes (per space)	50		
Fairgrounds and parks, picnic - with bathhouses, showers, and flush toilets (per person)	15		
Fairgrounds and parks, picnic (toilet wastes only, per person)	5		
Swimming pools and bathhouses (per person)	10		

*Gallons/Unit/Day values taken from 25 PA Code 73.17

Total GPD (Existing)	0
GPD/EDU	400
Total EDU (Existing)	0

PROPOSED CONDITIONS

Type of Establishment	Gallons/Unit/ Day	Number of Units	GPD
Hotels and Motels	100		
Multiple family dwellings and apartments, including townhouses, duplexes and condominiums	400	8	3200
Rooming houses (per unit)	200		
Single Family Residences***400 GPD for 3 BR or less, for each BR over 3, add 100 GPD	400		
Airline Catering (per meal served)	3		
Airports (per passenger - not including food)	5		
Airports (per employee)	10		
One licensed operater Beauty shops	200		
Bus service ares not including food (per patron and employee)	5		
Country clubs not including food (per patron and employee)	30		
Drive-in theaters (not includign food - per space)	10		
Factories and plants exclusive of industrial wastes (per employee)	35		
Laundries, self-service (gallons/washer)	400		
Mobile home parks, independent (per space)	400		
Movie theaters (not including food, per auditorium seat)	5		
Offices (per employee)	10		
Restaurants (toilet and kitchen wasters per patron)	10		
(Additional for bars and cocktail lounges)	2		
Restaurants (kitchen and toilet wastes, single-service utensils/person)	8.5		
Restaurants (kitchen waste only, single-service utensils/patron)	3		
Stores (per public toilet)	400		
Warehouses (per employee)	35		
Work or construction camps (semipermanent) with flush toilets (per employee)	50		
Work or construction camps (semipermanent) without flush toilets (per employee)	35		
Churches (per seat)	3		
Churches (additional kitchen waste per meal served)	3		
Chuches (additioanl with paper service per meal served)	1.5		
Hospitals (per bed space, with laundry)	300		
Hospitals (per bed space, without laundry)	220		
Institutional food service (per meal)	20		
Institutions other than hospitals (per bed space)	125		
Schools, boarding (per resident)	100		
Schools, day (wihout cafeterias, gyms or showers per student and employee)	15		
Schools, day (with cafeterias, but no gym or showers per student and employee)	20		
Schools, day (with cafeterias, gym and showers per student and employee)	25		
Camps, day (no meals served)	10		
Camps, hunting and summer residential (night and day) with limited plumbing including water-carried toilet wastes (per person)	50		
Campgrounds, with individual sewer and water hookup (per space)	100		
Campgrounds with water hookup only and/or central comfort station which includes water-carried toilet wastes (per space)	50		
Fairgrounds and parks, picnic - with bathhouses, showers, and flush toilets (per person)	15		
Fairgrounds and parks, picnic (toilet wastes only, per person)	5		
Swimming pools and bathhouses (per person)	10		

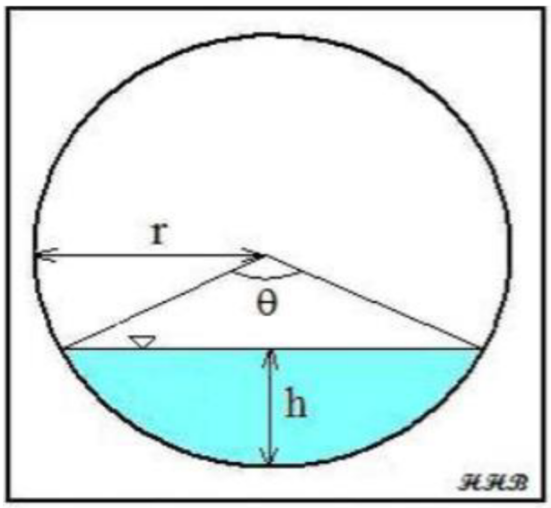
*Gallons/Unit/Day values taken from 25 PA Code 73.17

Total GPD (Proposed)	3200
Total EDU (Proposed)	8
Total GPD (Existing)	0
Net GPD	3200

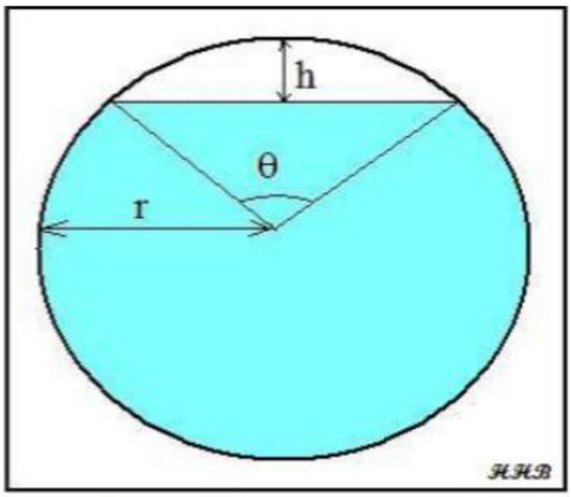
Sewage Facilties Planning Module
Most Limited Capacity Sewer (MLCS) Calculations

Project: Safe Investments: Wharton Street

Mannings Equation



Partially Full Pipe Flow Parameters
(Less Than Half Full)



Partially Full Pipe Flow Parameters
(More Than Half Full)

Variables

Variable	Units	Description
Q	ft^3	Volumetric Flowrate
n		Mannings Roughness Coefficient
A	ft^2	Cross-Sectional Area of Flow
R	ft	Hydraulic Radius
S	ft/ft	Slope of Hydraulic Grade Line
P	ft	Wetted Perimeter
r	ft	Radius
h	ft	Depth of Flow
θ	rad	Central Angle

Equations Used

$Q = (1.49/n) A R^{(2/3)} S^{(1/2)}$

$R = A/P$

$\theta = 2 \cos^{-1} (r-h/r)$

>50%	$A = \pi r^2 [r^2 (\theta-\sin\theta)/2]$	$P = 2\pi r - r\theta$
<50%	$A = r^2 (\theta-\sin\theta)/2$	$P = r\theta$

Calculation Data

Flow Depth Information

Per PWSA, the Most Limited Capacity Sewer (MLCS) was identified between the manholes and street identified below. Flow depth measurements were taken on the date and at the manhole specified in the attached results of the 30-day flow study.

MH1: MH012B004
MH2: MH012F012
Street: S 21st Street
Flow Depth Taken @ MH012B004
Dates : 10/9/2020 to 11/8/2020
Flow Study Perfomed by: Drnach Environmental

Pipe/System Properties

Combined Sewer?	Yes	
Peaking Factor	3.5	
Proposed Project Flow (Qp)	3200	GPD

Pipe Mat'l	VCP	
S	0.033	ft/ft
D	1.5	ft
n	0.015	
h	see test results	
PF	3.5	

Pipe Info From: PWSA MLCS Spreadsheet

Upstream Invert	726.14
Downstream Invert	719.09
Pipe Length	212.2

Calculations for Design and Permitted Capacities

Qd avg = Average Design Capcity = Full Pipe Flow Conditions / Peaking Factor
Qd peak = Peak Design Capacity = Full Pipe Flow Conditions

Qd avg = 3,062,113 gpd

D	1.500	ft
r	0.750	ft
A	1.767	ft^2
P	4.712	ft
R	0.375	ft
Qd peak	**16.582**	**cfs**
Qd peak	**10,717,396**	**gpd**

Calculations for Present Flows: Results of 30-day Flow Study

Qex avg = Average Present Flows (from 30-day flow study)
Qex peak = Qex avg x Peaking Factor

Qex avg = 57,000 GPD

Qex peak = 199,500 GPD

Calculations for Projected Flows in Five (5) Years

Qproj avg = Average Projected Flows in Five (5) Years = Qproj peak / PF
Qproj peak = Peak Projected Flows in Five (5) Years = (Qex peak + Qp) x 1.05

Qproj avg = 60810 gpd
Qproj peak = 212835 gpd

Summary Table

Variable	GPD
Qd avg	3,062,113
Qd peak	10,717,396
Qex avg	57,000
Qex peak	199,500
Qproj avg	60,810
Qproj peak	212,835

MH 012B004 October 10, 2020 through November 8, 2020

Line Size: 18 " 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)
10/10/2020	0.050	6:00 PM	0.042	12:00 PM	0.056	0.00
10/11/2020	0.050	4:00 AM	0.032	7:00 AM	0.060	0.00
10/12/2020	0.049	3:00 AM	0.044	3:00 PM	0.057	0.00
10/13/2020	0.053	12:00 AM	0.042	4:00 AM	0.102	0.10
10/14/2020	0.049	2:00 AM	0.041	6:00 PM	0.056	0.00
10/15/2020	0.056	11:00 AM	0.043	11:00 PM	0.119	0.17
10/16/2020	0.068	1:00 PM	0.048	1:00 AM	0.138	0.25
10/17/2020	0.050	9:00 AM	0.042	10:00 AM	0.058	0.00
10/18/2020	0.049	7:00 AM	0.044	7:00 PM	0.055	0.00
10/19/2020	0.084	3:00 AM	0.040	10:00 AM	0.268	0.60
10/20/2020	0.076	2:00 AM	0.047	6:00 PM	0.129	0.09
10/21/2020	0.072	8:00 PM	0.047	12:00 AM	0.111	0.00
10/22/2020	0.053	4:00 AM	0.044	3:00 PM	0.061	0.00
10/23/2020	0.051	7:00 AM	0.043	8:00 AM	0.058	0.00
10/24/2020	0.061	12:00 AM	0.044	2:00 AM	0.219	0.27
10/25/2020	0.045	4:00 AM	0.039	11:00 AM	0.051	0.00
10/26/2020	0.047	3:00 AM	0.037	10:00 PM	0.058	0.01
10/27/2020	0.049	6:00 PM	0.041	12:00 AM	0.058	0.03
10/28/2020	0.049	12:00 AM	0.041	12:00 PM	0.059	0.12
10/29/2020	0.125	6:00 PM	0.044	3:00 PM	0.413	0.94
10/30/2020	0.072	5:00 AM	0.045	2:00 AM	0.201	0.00
10/31/2020	0.052	2:00 PM	0.045	4:00 AM	0.061	0.00
11/01/2020	0.050	1:00 PM	0.041	12:00 AM	0.064	0.01
11/02/2020	0.052	10:00 PM	0.045	6:00 PM	0.058	0.00
11/03/2020	0.048	6:00 AM	0.033	11:00 AM	0.055	0.00
11/04/2020	0.050	6:00 AM	0.044	3:00 PM	0.062	0.00
11/05/2020	0.050	5:00 AM	0.040	3:00 PM	0.056	0.00
11/06/2020	0.048	7:00 PM	0.041	1:00 PM	0.067	0.00
11/07/2020	0.043	5:00 AM	0.037	8:00 PM	0.052	0.00
11/08/2020	0.046	5:00 AM	0.031	1:00 PM	0.057	0.00

Average	0.057	0.042	0.097
Minimum	0.043	0.031	0.051
Maximum	0.125	0.048	0.413

2.59 Total

Total Flow 1.698 MG

MH 012B004 October 10, 2020 through November 8, 2020

	Time	Head inches	Velocity fps	Flow MGD		Precip. inches
10/10/2020	12:00 AM	0.83	2.73	0.052		0.00
	1:00 AM	0.86	2.62	0.052		0.00
	2:00 AM	0.80	2.59	0.046		0.00
	3:00 AM	0.80	2.48	0.045		0.00
	4:00 AM	0.78	2.48	0.043		0.00
	5:00 AM	0.84	2.50	0.049		0.00
	6:00 AM	0.84	2.59	0.050		0.00
	7:00 AM	0.83	2.60	0.049		0.00
	8:00 AM	0.87	2.59	0.053		0.00
	9:00 AM	0.82	2.63	0.050		0.00
	10:00 AM	0.85	2.43	0.048		0.00
	11:00 AM	0.83	2.66	0.051		0.00
	12:00 PM	0.86	2.82	0.056		0.00
	1:00 PM	0.78	2.57	0.045		0.00
	2:00 PM	0.83	2.81	0.053		0.00
	3:00 PM	0.89	2.46	0.052		0.00
	4:00 PM	0.81	2.61	0.048		0.00
	5:00 PM	0.88	2.51	0.051		0.00
	6:00 PM	0.75	2.53	0.042		0.00
	7:00 PM	0.81	2.62	0.049		0.00
	8:00 PM	0.87	2.60	0.053		0.00
	9:00 PM	0.84	2.59	0.050		0.00
	10:00 PM	0.88	2.63	0.054		0.00
	11:00 PM	0.88	2.59	0.054		0.00
	MIN	0.75	2.43	0.042	MIN	0.00
	MAX	0.89	2.82	0.056	MAX	0.00
	AVE	0.84	2.59	0.050	TOTAL	0.00
10/11/2020	12:00 AM	0.81	2.57	0.047		0.00
	1:00 AM	0.81	2.45	0.045		0.00
	2:00 AM	0.81	2.49	0.046		0.00
	3:00 AM	0.78	2.56	0.044		0.00
	4:00 AM	0.64	2.50	0.032		0.00
	5:00 AM	0.80	2.56	0.046		0.00
	6:00 AM	0.77	2.56	0.044		0.00
	7:00 AM	0.90	2.81	0.060		0.00
	8:00 AM	0.84	2.55	0.049		0.00
	9:00 AM	0.77	2.56	0.043		0.00
	10:00 AM	0.87	2.63	0.054		0.00
	11:00 AM	0.79	2.70	0.047		0.00
	12:00 PM	0.90	2.60	0.056		0.00
	1:00 PM	0.86	2.67	0.053		0.00
	2:00 PM	0.89	2.75	0.058		0.00
	3:00 PM	0.89	2.55	0.053		0.00
	4:00 PM	0.89	2.57	0.054		0.00
	5:00 PM	0.88	2.60	0.053		0.00
	6:00 PM	0.84	2.59	0.050		0.00
	7:00 PM	0.84	2.47	0.047		0.00
	8:00 PM	0.85	2.60	0.051		0.00
	9:00 PM	0.92	2.67	0.059		0.00
	10:00 PM	0.81	2.65	0.048		0.00
	11:00 PM	0.83	2.52	0.048		0.00
	MIN	0.64	2.45	0.032	MIN	0.00
	MAX	0.92	2.81	0.060	MAX	0.00
	AVE	0.83	2.59	0.050	TOTAL	0.00

	Time	Head inches	Velocity fps	Flow MGD		Precip. inches
10/12/2020	12:00 AM	0.83	2.55	0.048		0.00
	1:00 AM	0.81	2.51	0.046		0.00
	2:00 AM	0.80	2.46	0.044		0.00
	3:00 AM	0.80	2.45	0.044		0.00
	4:00 AM	0.80	2.50	0.045		0.00
	5:00 AM	0.82	2.56	0.048		0.00
	6:00 AM	0.85	2.53	0.050		0.00
	7:00 AM	0.80	2.50	0.045		0.00
	8:00 AM	0.87	2.68	0.054		0.00
	9:00 AM	0.83	2.70	0.051		0.00
	10:00 AM	0.80	2.68	0.048		0.00
	11:00 AM	0.76	2.74	0.046		0.00
	12:00 PM	0.87	2.61	0.053		0.00
	1:00 PM	0.86	2.65	0.053		0.00
	2:00 PM	0.83	2.64	0.051		0.00
	3:00 PM	0.90	2.65	0.057		0.00
	4:00 PM	0.84	2.69	0.052		0.00
	5:00 PM	0.84	2.63	0.051		0.00
	6:00 PM	0.85	2.53	0.049		0.00
	7:00 PM	0.89	2.62	0.055		0.00
	8:00 PM	0.85	2.52	0.049		0.00
	9:00 PM	0.87	2.58	0.052		0.00
	10:00 PM	0.84	2.58	0.050		0.00
	11:00 PM	0.79	2.54	0.045		0.00
	MIN	0.76	2.45	0.044	MIN	0.00
	MAX	0.90	2.74	0.057	MAX	0.00
	AVE	0.83	2.59	0.049	TOTAL	0.00
10/13/2020	12:00 AM	0.76	2.53	0.042		0.00
	1:00 AM	0.76	2.53	0.042		0.00
	2:00 AM	0.78	2.52	0.044		0.00
	3:00 AM	0.82	2.55	0.052		0.04
	4:00 AM	1.11	3.40	0.102		0.06
	5:00 AM	0.91	2.67	0.059		0.00
	6:00 AM	0.84	2.56	0.050		0.00
	7:00 AM	0.88	2.46	0.051		0.00
	8:00 AM	0.88	2.65	0.055		0.00
	9:00 AM	0.87	2.65	0.054		0.00
	10:00 AM	0.84	2.84	0.055		0.00
	11:00 AM	0.85	2.63	0.052		0.00
	12:00 PM	0.94	2.73	0.064		0.00
	1:00 PM	0.84	2.66	0.052		0.00
	2:00 PM	0.85	2.61	0.051		0.00
	3:00 PM	0.85	2.61	0.051		0.00
	4:00 PM	0.80	2.84	0.051		0.00
	5:00 PM	0.84	2.62	0.051		0.00
	6:00 PM	0.85	2.54	0.050		0.00
	7:00 PM	0.79	2.66	0.047		0.00
	8:00 PM	0.85	2.60	0.051		0.00
	9:00 PM	0.79	2.59	0.045		0.00
	10:00 PM	0.87	2.54	0.052		0.00
	11:00 PM	0.85	2.58	0.050		0.00
	MIN	0.76	2.46	0.042	MIN	0.00
	MAX	1.11	3.40	0.102	MAX	0.06
	AVE	0.85	2.65	0.053	TOTAL	0.10

	Time	Head inches	Velocity fps	Flow MGD		Precip. inches
10/14/2020	12:00 AM	0.82	2.57	0.048		0.00
	1:00 AM	0.82	2.53	0.047		0.00
	2:00 AM	0.77	2.44	0.041		0.00
	3:00 AM	0.80	2.39	0.043		0.00
	4:00 AM	0.82	2.43	0.045		0.00
	5:00 AM	0.79	2.40	0.042		0.00
	6:00 AM	0.86	2.49	0.050		0.00
	7:00 AM	0.83	2.80	0.053		0.00
	8:00 AM	0.79	2.64	0.047		0.00
	9:00 AM	0.88	2.58	0.054		0.00
	10:00 AM	0.84	2.69	0.052		0.00
	11:00 AM	0.82	2.71	0.050		0.00
	12:00 PM	0.78	2.84	0.049		0.00
	1:00 PM	0.84	2.63	0.051		0.00
	2:00 PM	0.78	2.70	0.047		0.00
	3:00 PM	0.89	2.62	0.055		0.00
	4:00 PM	0.84	2.56	0.049		0.00
	5:00 PM	0.82	2.65	0.049		0.00
	6:00 PM	0.90	2.65	0.056		0.00
	7:00 PM	0.83	2.54	0.048		0.00
	8:00 PM	0.86	2.48	0.050		0.00
	9:00 PM	0.88	2.54	0.053		0.00
	10:00 PM	0.87	2.57	0.053		0.00
	11:00 PM	0.87	2.56	0.053		0.00
	MIN	0.77	2.39	0.041	MIN	0.00
	MAX	0.90	2.84	0.056	MAX	0.00
	AVE	0.83	2.58	0.049	TOTAL	0.00
10/15/2020	12:00 AM	0.83	2.52	0.048		0.00
	1:00 AM	0.82	2.51	0.047		0.00
	2:00 AM	0.86	2.50	0.050		0.00
	3:00 AM	0.86	2.49	0.049		0.00
	4:00 AM	0.86	2.54	0.050		0.00
	5:00 AM	0.87	2.64	0.054		0.00
	6:00 AM	0.84	2.72	0.053		0.00
	7:00 AM	0.85	2.53	0.050		0.00
	8:00 AM	0.81	2.71	0.049		0.00
	9:00 AM	0.83	2.67	0.051		0.00
	10:00 AM	0.78	2.69	0.047		0.00
	11:00 AM	0.75	2.68	0.043		0.00
	12:00 PM	0.80	2.74	0.050		0.00
	1:00 PM	0.83	2.74	0.053		0.00
	2:00 PM	0.84	2.78	0.053		0.00
	3:00 PM	0.84	2.74	0.053		0.00
	4:00 PM	0.79	2.66	0.047		0.00
	5:00 PM	0.77	2.58	0.044		0.00
	6:00 PM	0.83	2.53	0.048		0.00
	7:00 PM	0.79	2.58	0.046		0.01
	8:00 PM	0.87	2.99	0.062		0.04
	9:00 PM	1.13	3.47	0.105		0.05
	10:00 PM	0.93	3.09	0.069		0.02
	11:00 PM	1.15	3.82	0.119		0.05
	MIN	0.75	2.49	0.043	MIN	0.00
	MAX	1.15	3.82	0.119	MAX	0.05
	AVE	0.85	2.75	0.056	TOTAL	0.17

	Time	Head inches	Velocity fps	Flow MGD		Precip. inches
10/16/2020	12:00 AM	1.09	4.11	0.118		0.06
	1:00 AM	1.26	3.91	0.138		0.04
	2:00 AM	1.17	3.74	0.120		0.03
	3:00 AM	1.18	3.46	0.113		0.05
	4:00 AM	1.14	3.85	0.119		0.06
	5:00 AM	0.95	3.01	0.070		0.01
	6:00 AM	0.80	2.92	0.053		0.00
	7:00 AM	0.83	2.70	0.051		0.00
	8:00 AM	0.81	2.74	0.050		0.00
	9:00 AM	0.80	2.85	0.051		0.00
	10:00 AM	0.83	2.80	0.053		0.00
	11:00 AM	0.80	2.74	0.049		0.00
	12:00 PM	0.90	2.85	0.062		0.00
	1:00 PM	0.79	2.71	0.048		0.00
	2:00 PM	0.87	2.58	0.053		0.00
	3:00 PM	0.81	2.78	0.051		0.00
	4:00 PM	0.86	2.63	0.053		0.00
	5:00 PM	0.87	2.63	0.053		0.00
	6:00 PM	0.88	2.66	0.055		0.00
	7:00 PM	0.90	2.68	0.057		0.00
	8:00 PM	0.87	2.78	0.057		0.00
	9:00 PM	0.81	2.67	0.049		0.00
	10:00 PM	0.91	2.71	0.059		0.00
	11:00 PM	0.87	2.67	0.055		0.00
	MIN	0.79	2.58	0.048	MIN	0.00
	MAX	1.26	4.11	0.138	MAX	0.06
	AVE	0.92	2.97	0.068	TOTAL	0.25
10/17/2020	12:00 AM	0.86	2.60	0.052		0.00
	1:00 AM	0.82	2.60	0.049		0.00
	2:00 AM	0.83	2.63	0.050		0.00
	3:00 AM	0.79	2.52	0.044		0.00
	4:00 AM	0.81	2.58	0.048		0.00
	5:00 AM	0.81	2.46	0.045		0.00
	6:00 AM	0.81	2.37	0.044		0.00
	7:00 AM	0.85	2.52	0.050		0.00
	8:00 AM	0.82	2.70	0.051		0.00
	9:00 AM	0.75	2.56	0.042		0.00
	10:00 AM	0.90	2.72	0.058		0.00
	11:00 AM	0.89	2.60	0.055		0.00
	12:00 PM	0.76	2.64	0.044		0.00
	1:00 PM	0.82	2.68	0.050		0.00
	2:00 PM	0.85	2.66	0.052		0.00
	3:00 PM	0.84	2.63	0.052		0.00
	4:00 PM	0.80	2.55	0.046		0.00
	5:00 PM	0.85	2.67	0.052		0.00
	6:00 PM	0.90	2.68	0.057		0.00
	7:00 PM	0.92	2.55	0.057		0.00
	8:00 PM	0.83	2.63	0.051		0.00
	9:00 PM	0.88	2.59	0.053		0.00
	10:00 PM	0.88	2.62	0.054		0.00
	11:00 PM	0.85	2.57	0.051		0.00
	MIN	0.75	2.37	0.042	MIN	0.00
	MAX	0.92	2.72	0.058	MAX	0.00
	AVE	0.84	2.60	0.050	TOTAL	0.00

	Time	Head inches	Velocity fps	Flow MGD		Precip. inches
10/18/2020	12:00 AM	0.81	2.54	0.047		0.00
	1:00 AM	0.83	2.53	0.048		0.00
	2:00 AM	0.82	2.53	0.047		0.00
	3:00 AM	0.87	2.54	0.051		0.00
	4:00 AM	0.83	2.50	0.048		0.00
	5:00 AM	0.83	2.53	0.048		0.00
	6:00 AM	0.81	2.58	0.047		0.00
	7:00 AM	0.78	2.54	0.044		0.00
	8:00 AM	0.85	2.61	0.051		0.00
	9:00 AM	0.86	2.68	0.054		0.00
	10:00 AM	0.88	2.55	0.052		0.00
	11:00 AM	0.78	2.62	0.046		0.00
	12:00 PM	0.80	2.68	0.048		0.00
	1:00 PM	0.84	2.60	0.050		0.00
	2:00 PM	0.81	2.65	0.049		0.00
	3:00 PM	0.86	2.49	0.050		0.00
	4:00 PM	0.84	2.58	0.050		0.00
	5:00 PM	0.80	2.55	0.046		0.00
	6:00 PM	0.83	2.57	0.049		0.00
	7:00 PM	0.91	2.53	0.055		0.00
	8:00 PM	0.85	2.53	0.049		0.00
	9:00 PM	0.82	2.58	0.048		0.00
	10:00 PM	0.89	2.47	0.052		0.00
	11:00 PM	0.84	2.61	0.050		0.00
	MIN	0.78	2.47	0.044	MIN	0.00
	MAX	0.91	2.68	0.055	MAX	0.00
	AVE	0.84	2.57	0.049	TOTAL	0.00
10/19/2020	12:00 AM	0.80	2.46	0.045		0.00
	1:00 AM	0.79	2.56	0.045		0.00
	2:00 AM	0.83	2.55	0.049		0.00
	3:00 AM	0.77	2.37	0.040		0.00
	4:00 AM	0.82	2.40	0.044		0.00
	5:00 AM	0.83	2.49	0.047		0.00
	6:00 AM	0.82	2.54	0.048		0.00
	7:00 AM	0.80	2.51	0.045		0.00
	8:00 AM	0.82	2.69	0.051		0.03
	9:00 AM	1.53	4.77	0.225		0.18
	10:00 AM	1.63	4.82	0.268		0.16
	11:00 AM	1.38	4.33	0.183		0.07
	12:00 PM	1.21	3.77	0.126		0.03
	1:00 PM	1.15	3.57	0.111		0.03
	2:00 PM	1.24	3.94	0.136		0.05
	3:00 PM	1.18	3.68	0.118		0.05
	4:00 PM	0.99	3.13	0.077		0.00
	5:00 PM	0.85	2.96	0.058		0.00
	6:00 PM	0.82	2.71	0.051		0.00
	7:00 PM	0.81	2.87	0.053		0.00
	8:00 PM	0.78	2.53	0.044		0.00
	9:00 PM	0.88	2.62	0.054		0.00
	10:00 PM	0.86	2.57	0.051		0.00
	11:00 PM	0.89	2.59	0.055		0.00
	MIN	0.77	2.37	0.040	MIN	0.00
	MAX	1.63	4.82	0.268	MAX	0.18
	AVE	0.98	3.06	0.084	TOTAL	0.60

	Time	Head inches	Velocity fps	Flow MGD		Precip. inches
10/20/2020	12:00 AM	0.90	2.58	0.055		0.01
	1:00 AM	0.88	2.56	0.053		0.00
	2:00 AM	0.84	2.47	0.047		0.01
	3:00 AM	0.89	2.61	0.054		0.00
	4:00 AM	0.85	2.58	0.051		0.00
	5:00 AM	0.87	2.52	0.052		0.00
	6:00 AM	0.84	2.55	0.049		0.00
	7:00 AM	0.88	2.58	0.054		0.00
	8:00 AM	0.94	2.60	0.059		0.00
	9:00 AM	0.86	2.77	0.056		0.00
	10:00 AM	0.84	2.75	0.054		0.00
	11:00 AM	1.01	3.20	0.088		0.04
	12:00 PM	1.01	3.18	0.083		0.00
	1:00 PM	0.89	2.85	0.061		0.00
	2:00 PM	0.83	2.74	0.052		0.00
	3:00 PM	0.81	2.78	0.051		0.00
	4:00 PM	0.95	2.90	0.071		0.00
	5:00 PM	1.16	3.89	0.121		0.03
	6:00 PM	1.25	3.72	0.129		0.00
	7:00 PM	1.25	3.50	0.122		0.00
	8:00 PM	1.20	3.40	0.112		0.00
	9:00 PM	1.28	3.47	0.126		0.00
	10:00 PM	1.14	3.40	0.105		0.00
	11:00 PM	1.23	3.40	0.116		0.00
	MIN	0.81	2.47	0.047	MIN	0.00
	MAX	1.28	3.89	0.129	MAX	0.04
	AVE	0.98	2.96	0.076	TOTAL	0.09
10/21/2020	12:00 AM	1.20	3.38	0.111		0.00
	1:00 AM	1.13	3.35	0.102		0.00
	2:00 AM	1.19	3.34	0.108		0.00
	3:00 AM	1.14	3.30	0.100		0.00
	4:00 AM	1.18	3.01	0.096		0.00
	5:00 AM	1.20	3.13	0.103		0.00
	6:00 AM	1.20	3.23	0.106		0.00
	7:00 AM	1.19	3.27	0.106		0.00
	8:00 AM	1.20	3.35	0.110		0.00
	9:00 AM	0.82	2.67	0.050		0.00
	10:00 AM	0.85	2.68	0.053		0.00
	11:00 AM	0.91	2.82	0.062		0.00
	12:00 PM	0.85	2.71	0.053		0.00
	1:00 PM	0.85	2.65	0.052		0.00
	2:00 PM	0.76	2.80	0.047		0.00
	3:00 PM	0.85	2.66	0.052		0.00
	4:00 PM	0.87	2.61	0.053		0.00
	5:00 PM	0.86	2.53	0.050		0.00
	6:00 PM	0.91	2.62	0.057		0.00
	7:00 PM	0.89	2.73	0.057		0.00
	8:00 PM	0.79	2.66	0.047		0.00
	9:00 PM	0.91	2.60	0.056		0.00
	10:00 PM	0.88	2.51	0.052		0.00
	11:00 PM	0.88	2.57	0.053		0.00
	MIN	0.76	2.51	0.047	MIN	0.00
	MAX	1.20	3.38	0.111	MAX	0.00
	AVE	0.98	2.88	0.072	TOTAL	0.00

	Time	Head inches	Velocity fps	Flow MGD		Precip. inches
10/22/2020	12:00 AM	0.85	2.60	0.051		0.00
	1:00 AM	0.80	2.53	0.046		0.00
	2:00 AM	0.82	2.44	0.045		0.00
	3:00 AM	0.83	2.54	0.048		0.00
	4:00 AM	0.83	2.32	0.044		0.00
	5:00 AM	0.84	2.48	0.048		0.00
	6:00 AM	0.85	2.50	0.049		0.00
	7:00 AM	0.83	2.51	0.047		0.00
	8:00 AM	0.91	2.62	0.057		0.00
	9:00 AM	0.92	2.61	0.057		0.00
	10:00 AM	0.87	2.82	0.057		0.00
	11:00 AM	0.87	2.61	0.053		0.00
	12:00 PM	0.85	2.70	0.053		0.00
	1:00 PM	0.89	2.68	0.057		0.00
	2:00 PM	0.84	2.63	0.051		0.00
	3:00 PM	0.92	2.75	0.061		0.00
	4:00 PM	0.88	2.60	0.053		0.00
	5:00 PM	0.91	2.74	0.059		0.00
	6:00 PM	0.94	2.65	0.060		0.00
	7:00 PM	0.88	2.65	0.056		0.00
	8:00 PM	0.91	2.67	0.058		0.00
	9:00 PM	0.88	2.86	0.059		0.00
	10:00 PM	0.84	2.58	0.050		0.00
	11:00 PM	0.84	2.69	0.052		0.00
	MIN	0.80	2.32	0.044	MIN	0.00
	MAX	0.94	2.86	0.061	MAX	0.00
	AVE	0.87	2.62	0.053	TOTAL	0.00
10/23/2020	12:00 AM	0.89	2.58	0.055		0.00
	1:00 AM	0.83	2.61	0.049		0.00
	2:00 AM	0.83	2.53	0.048		0.00
	3:00 AM	0.85	2.56	0.050		0.00
	4:00 AM	0.84	2.54	0.049		0.00
	5:00 AM	0.87	2.66	0.054		0.00
	6:00 AM	0.82	2.57	0.048		0.00
	7:00 AM	0.78	2.52	0.043		0.00
	8:00 AM	0.87	2.83	0.058		0.00
	9:00 AM	0.91	2.69	0.058		0.00
	10:00 AM	0.83	2.67	0.050		0.00
	11:00 AM	0.83	2.80	0.053		0.00
	12:00 PM	0.85	2.61	0.051		0.00
	1:00 PM	0.80	2.61	0.047		0.00
	2:00 PM	0.86	2.59	0.052		0.00
	3:00 PM	0.92	2.54	0.056		0.00
	4:00 PM	0.81	2.55	0.047		0.00
	5:00 PM	0.90	2.66	0.057		0.00
	6:00 PM	0.83	2.66	0.050		0.00
	7:00 PM	0.85	2.58	0.050		0.00
	8:00 PM	0.90	2.59	0.055		0.00
	9:00 PM	0.84	2.53	0.049		0.00
	10:00 PM	0.83	2.59	0.049		0.00
	11:00 PM	0.80	2.47	0.044		0.00
	MIN	0.78	2.47	0.043	MIN	0.00
	MAX	0.92	2.83	0.058	MAX	0.00
	AVE	0.85	2.61	0.051	TOTAL	0.00

	Time	Head inches	Velocity fps	Flow MGD		Precip. inches
10/24/2020	12:00 AM	0.81	2.44	0.044		0.00
	1:00 AM	0.86	2.73	0.059		0.06
	2:00 AM	1.54	4.49	0.219		0.17
	3:00 AM	0.93	3.32	0.077		0.00
	4:00 AM	1.10	3.07	0.088		0.03
	5:00 AM	0.91	2.96	0.064		0.00
	6:00 AM	0.90	2.67	0.057		0.00
	7:00 AM	0.84	2.49	0.048		0.00
	8:00 AM	0.86	2.56	0.051		0.00
	9:00 AM	0.90	2.58	0.055		0.00
	10:00 AM	0.88	2.60	0.054		0.00
	11:00 AM	0.88	2.58	0.053		0.01
	12:00 PM	0.84	2.62	0.051		0.00
	1:00 PM	0.86	2.56	0.051		0.00
	2:00 PM	0.88	2.62	0.054		0.00
	3:00 PM	0.84	2.54	0.049		0.00
	4:00 PM	0.87	2.48	0.051		0.00
	5:00 PM	0.82	2.63	0.049		0.00
	6:00 PM	0.81	2.59	0.048		0.00
	7:00 PM	0.83	2.60	0.050		0.00
	8:00 PM	0.82	2.62	0.049		0.00
	9:00 PM	0.87	2.60	0.053		0.00
	10:00 PM	0.81	2.62	0.048		0.00
	11:00 PM	0.80	2.48	0.045		0.00
	MIN	0.80	2.44	0.044	MIN	0.00
	MAX	1.54	4.49	0.219	MAX	0.17
	AVE	0.89	2.73	0.061	TOTAL	0.27
10/25/2020	12:00 AM	0.82	2.49	0.046		0.00
	1:00 AM	0.85	2.43	0.047		0.00
	2:00 AM	0.78	2.47	0.043		0.00
	3:00 AM	0.80	2.43	0.044		0.00
	4:00 AM	0.76	2.36	0.039		0.00
	5:00 AM	0.77	2.42	0.041		0.00
	6:00 AM	0.81	2.34	0.043		0.00
	7:00 AM	0.80	2.42	0.044		0.00
	8:00 AM	0.80	2.51	0.045		0.00
	9:00 AM	0.77	2.62	0.044		0.00
	10:00 AM	0.84	2.51	0.049		0.00
	11:00 AM	0.85	2.60	0.051		0.00
	12:00 PM	0.78	2.56	0.045		0.00
	1:00 PM	0.80	2.54	0.046		0.00
	2:00 PM	0.81	2.60	0.048		0.00
	3:00 PM	0.80	2.61	0.046		0.00
	4:00 PM	0.77	2.49	0.042		0.00
	5:00 PM	0.77	2.62	0.045		0.00
	6:00 PM	0.82	2.57	0.048		0.00
	7:00 PM	0.83	2.60	0.050		0.00
	8:00 PM	0.80	2.51	0.045		0.00
	9:00 PM	0.85	2.55	0.050		0.00
	10:00 PM	0.81	2.57	0.047		0.00
	11:00 PM	0.75	2.53	0.042		0.00
	MIN	0.75	2.34	0.039	MIN	0.00
	MAX	0.85	2.62	0.051	MAX	0.00
	AVE	0.80	2.52	0.045	TOTAL	0.00

	Time	Head inches	Velocity fps	Flow MGD		Precip. inches
10/26/2020	12:00 AM	0.79	2.40	0.042		0.00
	1:00 AM	0.83	2.45	0.046		0.00
	2:00 AM	0.78	2.43	0.042		0.00
	3:00 AM	0.77	2.16	0.037		0.00
	4:00 AM	0.74	2.45	0.039		0.00
	5:00 AM	0.75	2.30	0.037		0.00
	6:00 AM	0.78	2.30	0.040		0.00
	7:00 AM	0.80	2.50	0.045		0.00
	8:00 AM	0.82	2.62	0.049		0.00
	9:00 AM	0.83	2.61	0.050		0.00
	10:00 AM	0.80	2.85	0.052		0.00
	11:00 AM	0.79	2.67	0.048		0.00
	12:00 PM	0.81	2.82	0.051		0.01
	1:00 PM	0.77	2.71	0.046		0.00
	2:00 PM	0.80	2.74	0.049		0.00
	3:00 PM	0.81	2.68	0.049		0.00
	4:00 PM	0.77	2.62	0.045		0.00
	5:00 PM	0.78	2.66	0.045		0.00
	6:00 PM	0.85	2.64	0.052		0.00
	7:00 PM	0.79	2.60	0.046		0.00
	8:00 PM	0.78	2.71	0.048		0.00
	9:00 PM	0.83	2.53	0.048		0.00
	10:00 PM	0.93	2.61	0.058		0.00
	11:00 PM	0.91	2.63	0.057		0.00
	MIN	0.74	2.16	0.037	MIN	0.00
	MAX	0.93	2.85	0.058	MAX	0.01
	AVE	0.80	2.57	0.047	TOTAL	0.01
10/27/2020	12:00 AM	0.90	2.72	0.058		0.00
	1:00 AM	0.90	2.65	0.056		0.00
	2:00 AM	0.91	2.60	0.056		0.00
	3:00 AM	0.79	2.52	0.044		0.00
	4:00 AM	0.83	2.59	0.049		0.00
	5:00 AM	0.80	2.50	0.045		0.00
	6:00 AM	0.81	2.52	0.046		0.00
	7:00 AM	0.84	2.58	0.050		0.00
	8:00 AM	0.86	2.70	0.054		0.00
	9:00 AM	0.89	2.66	0.056		0.00
	10:00 AM	0.73	2.70	0.043		0.00
	11:00 AM	0.82	2.71	0.051		0.00
	12:00 PM	0.80	2.65	0.047		0.00
	1:00 PM	0.79	2.62	0.047		0.00
	2:00 PM	0.82	2.69	0.050		0.00
	3:00 PM	0.85	2.60	0.052		0.00
	4:00 PM	0.82	2.72	0.051		0.00
	5:00 PM	0.77	2.66	0.045		0.00
	6:00 PM	0.73	2.63	0.041		0.00
	7:00 PM	0.78	2.57	0.044		0.00
	8:00 PM	0.79	2.58	0.045		0.00
	9:00 PM	0.81	2.50	0.045		0.00
	10:00 PM	0.75	2.67	0.043		0.01
	11:00 PM	0.74	2.86	0.046		0.02
	MIN	0.73	2.50	0.041	MIN	0.00
	MAX	0.91	2.86	0.058	MAX	0.02
	AVE	0.81	2.63	0.049	TOTAL	0.03

	Time	Head inches	Velocity fps	Flow MGD		Precip. inches
10/28/2020	12:00 AM	0.70	2.77	0.041		0.02
	1:00 AM	0.81	2.63	0.048		0.00
	2:00 AM	0.80	2.58	0.046		0.02
	3:00 AM	0.75	3.14	0.051		0.01
	4:00 AM	0.71	2.76	0.042		0.01
	5:00 AM	0.74	2.84	0.047		0.02
	6:00 AM	0.74	3.07	0.049		0.01
	7:00 AM	0.77	2.87	0.048		0.01
	8:00 AM	0.81	2.91	0.054		0.01
	9:00 AM	0.84	2.83	0.056		0.00
	10:00 AM	0.84	2.86	0.055		0.00
	11:00 AM	0.81	2.92	0.053		0.01
	12:00 PM	0.85	2.93	0.059		0.00
	1:00 PM	0.75	2.93	0.049		0.00
	2:00 PM	0.78	2.77	0.048		0.00
	3:00 PM	0.79	2.72	0.048		0.00
	4:00 PM	0.80	2.69	0.048		0.00
	5:00 PM	0.77	2.78	0.047		0.00
	6:00 PM	0.77	2.72	0.046		0.00
	7:00 PM	0.86	2.56	0.052		0.00
	8:00 PM	0.84	2.58	0.050		0.00
	9:00 PM	0.78	2.54	0.044		0.00
	10:00 PM	0.81	2.47	0.045		0.00
	11:00 PM	0.80	2.46	0.044		0.00
	MIN	0.70	2.46	0.041	MIN	0.00
	MAX	0.86	3.14	0.059	MAX	0.02
	AVE	0.79	2.76	0.049	TOTAL	0.12
10/29/2020	12:00 AM	0.82	2.52	0.047		0.00
	1:00 AM	0.82	2.58	0.048		0.01
	2:00 AM	0.86	2.89	0.061		0.03
	3:00 AM	1.20	4.00	0.133		0.07
	4:00 AM	1.48	4.68	0.211		0.11
	5:00 AM	1.18	3.96	0.130		0.04
	6:00 AM	1.20	3.75	0.124		0.05
	7:00 AM	1.11	4.05	0.119		0.04
	8:00 AM	1.20	3.89	0.128		0.02
	9:00 AM	1.12	3.59	0.107		0.03
	10:00 AM	1.16	3.85	0.125		0.05
	11:00 AM	1.29	4.22	0.161		0.06
	12:00 PM	1.20	3.75	0.123		0.02
	1:00 PM	1.31	3.72	0.154		0.06
	2:00 PM	1.69	4.88	0.268		0.11
	3:00 PM	2.08	5.46	0.413		0.19
	4:00 PM	1.05	3.67	0.101		0.00
	5:00 PM	0.83	2.89	0.055		0.00
	6:00 PM	0.73	2.79	0.044		0.00
	7:00 PM	0.98	3.74	0.092		0.04
	8:00 PM	1.09	3.49	0.100		0.01
	9:00 PM	0.80	2.94	0.054		0.00
	10:00 PM	0.99	3.66	0.095		0.00
	11:00 PM	1.08	3.66	0.105		0.00
	MIN	0.73	2.52	0.044	MIN	0.00
	MAX	2.08	5.46	0.413	MAX	0.19
	AVE	1.14	3.69	0.125	TOTAL	0.94

	Time	Head inches	Velocity fps	Flow MGD		Precip. inches
10/30/2020	12:00 AM	1.09	4.11	0.121		0.00
	1:00 AM	1.10	3.72	0.107		0.00
	2:00 AM	1.43	4.65	0.201		0.00
	3:00 AM	1.15	3.99	0.124		0.00
	4:00 AM	0.83	3.08	0.058		0.00
	5:00 AM	0.76	2.71	0.045		0.00
	6:00 AM	0.92	2.57	0.057		0.00
	7:00 AM	0.93	2.61	0.058		0.00
	8:00 AM	0.82	2.78	0.052		0.00
	9:00 AM	0.79	2.66	0.048		0.00
	10:00 AM	0.90	3.14	0.070		0.00
	11:00 AM	1.19	4.14	0.136		0.00
	12:00 PM	1.08	3.71	0.104		0.00
	1:00 PM	0.83	2.67	0.051		0.00
	2:00 PM	0.80	2.69	0.049		0.00
	3:00 PM	0.87	2.74	0.056		0.00
	4:00 PM	0.80	2.68	0.048		0.00
	5:00 PM	0.82	2.84	0.053		0.00
	6:00 PM	0.77	2.85	0.048		0.00
	7:00 PM	0.79	2.76	0.049		0.00
	8:00 PM	0.83	2.71	0.051		0.00
	9:00 PM	0.78	2.76	0.048		0.00
	10:00 PM	0.88	2.70	0.056		0.00
	11:00 PM	0.81	2.66	0.048		0.00
	MIN	0.76	2.57	0.045	MIN	0.00
	MAX	1.43	4.65	0.201	MAX	0.00
	AVE	0.92	3.08	0.072	TOTAL	0.00
10/31/2020	12:00 AM	0.92	2.69	0.059		0.00
	1:00 AM	0.81	2.78	0.051		0.00
	2:00 AM	0.89	2.68	0.057		0.00
	3:00 AM	0.96	2.52	0.059		0.00
	4:00 AM	0.95	2.61	0.061		0.00
	5:00 AM	0.91	2.50	0.054		0.00
	6:00 AM	0.86	2.63	0.052		0.00
	7:00 AM	0.92	2.57	0.057		0.00
	8:00 AM	0.82	2.64	0.049		0.00
	9:00 AM	0.81	2.65	0.048		0.00
	10:00 AM	0.77	2.65	0.045		0.00
	11:00 AM	0.79	2.72	0.048		0.00
	12:00 PM	0.75	2.76	0.045		0.00
	1:00 PM	0.80	2.69	0.049		0.00
	2:00 PM	0.75	2.77	0.045		0.00
	3:00 PM	0.86	2.73	0.055		0.00
	4:00 PM	0.82	2.80	0.052		0.00
	5:00 PM	0.81	2.74	0.051		0.00
	6:00 PM	0.78	2.72	0.047		0.00
	7:00 PM	0.77	2.72	0.047		0.00
	8:00 PM	0.81	2.74	0.051		0.00
	9:00 PM	0.85	2.65	0.053		0.00
	10:00 PM	0.86	2.70	0.055		0.00
	11:00 PM	0.95	2.63	0.061		0.00
	MIN	0.75	2.50	0.045	MIN	0.00
	MAX	0.96	2.80	0.061	MAX	0.00
	AVE	0.84	2.68	0.052	TOTAL	0.00

	Time	Head inches	Velocity fps	Flow MGD		Precip. inches
11/01/2020	12:00 AM	0.98	2.67	0.064		0.00
	1:00 AM	0.93	2.68	0.060		0.00
	2:00 AM	0.91	2.62	0.057		0.00
	3:00 AM	0.87	2.61	0.053		0.00
	4:00 AM	0.86	2.59	0.052		0.00
	5:00 AM	0.87	2.57	0.053		0.00
	6:00 AM	0.89	2.46	0.052		0.00
	7:00 AM	0.85	2.59	0.050		0.00
	8:00 AM	0.79	2.54	0.045		0.00
	9:00 AM	0.74	2.63	0.042		0.00
	10:00 AM	0.75	2.70	0.045		0.00
	11:00 AM	0.77	2.76	0.047		0.01
	12:00 PM	0.74	2.90	0.047		0.00
	1:00 PM	0.71	2.70	0.041		0.00
	2:00 PM	0.75	2.85	0.047		0.00
	3:00 PM	0.74	2.71	0.044		0.00
	4:00 PM	0.78	2.81	0.049		0.00
	5:00 PM	0.75	2.72	0.045		0.00
	6:00 PM	0.82	2.83	0.053		0.00
	7:00 PM	0.77	2.68	0.046		0.00
	8:00 PM	0.80	2.68	0.049		0.00
	9:00 PM	0.82	2.76	0.052		0.00
	10:00 PM	0.94	2.69	0.061		0.00
	11:00 PM	0.94	2.66	0.061		0.00
	MIN	0.71	2.46	0.041	MIN	0.00
	MAX	0.98	2.90	0.064	MAX	0.01
	AVE	0.82	2.68	0.050	TOTAL	0.01
11/02/2020	12:00 AM	0.90	2.59	0.056		0.00
	1:00 AM	0.84	2.73	0.053		0.00
	2:00 AM	0.80	2.66	0.048		0.00
	3:00 AM	0.89	2.57	0.054		0.00
	4:00 AM	0.89	2.59	0.054		0.00
	5:00 AM	0.87	2.50	0.051		0.00
	6:00 AM	0.86	2.59	0.052		0.00
	7:00 AM	0.83	2.62	0.050		0.00
	8:00 AM	0.84	2.66	0.051		0.00
	9:00 AM	0.82	2.68	0.051		0.00
	10:00 AM	0.86	2.64	0.053		0.00
	11:00 AM	0.77	2.76	0.047		0.00
	12:00 PM	0.81	2.82	0.052		0.00
	1:00 PM	0.82	2.85	0.053		0.00
	2:00 PM	0.81	2.98	0.055		0.00
	3:00 PM	0.88	2.58	0.054		0.00
	4:00 PM	0.84	2.57	0.050		0.00
	5:00 PM	0.80	2.68	0.049		0.00
	6:00 PM	0.93	2.61	0.058		0.00
	7:00 PM	0.85	2.55	0.051		0.00
	8:00 PM	0.90	2.51	0.054		0.00
	9:00 PM	0.84	2.68	0.052		0.00
	10:00 PM	0.79	2.56	0.045		0.00
	11:00 PM	0.82	2.57	0.049		0.00
	MIN	0.77	2.50	0.045	MIN	0.00
	MAX	0.93	2.98	0.058	MAX	0.00
	AVE	0.84	2.65	0.052	TOTAL	0.00

	Time	Head inches	Velocity fps	Flow MGD		Precip. inches
11/03/2020	12:00 AM	0.78	2.55	0.044		0.00
	1:00 AM	0.80	2.51	0.045		0.00
	2:00 AM	0.78	2.45	0.043		0.00
	3:00 AM	0.80	2.45	0.044		0.00
	4:00 AM	0.78	1.99	0.034		0.00
	5:00 AM	0.76	2.07	0.035		0.00
	6:00 AM	0.74	2.05	0.033		0.00
	7:00 AM	0.83	2.37	0.045		0.00
	8:00 AM	0.85	2.56	0.050		0.00
	9:00 AM	0.88	2.63	0.054		0.00
	10:00 AM	0.87	2.65	0.054		0.00
	11:00 AM	0.89	2.63	0.055		0.00
	12:00 PM	0.82	2.88	0.054		0.00
	1:00 PM	0.86	2.67	0.053		0.00
	2:00 PM	0.85	2.59	0.051		0.00
	3:00 PM	0.84	2.68	0.052		0.00
	4:00 PM	0.84	2.79	0.053		0.00
	5:00 PM	0.78	2.71	0.047		0.00
	6:00 PM	0.88	2.57	0.053		0.00
	7:00 PM	0.86	2.60	0.052		0.00
	8:00 PM	0.83	2.67	0.051		0.00
	9:00 PM	0.83	2.64	0.050		0.00
	10:00 PM	0.79	2.57	0.045		0.00
	11:00 PM	0.80	2.45	0.044		0.00
	MIN	0.74	1.99	0.033	MIN	0.00
	MAX	0.89	2.88	0.055	MAX	0.00
	AVE	0.82	2.53	0.048	TOTAL	0.00
11/04/2020	12:00 AM	0.84	2.58	0.050		0.00
	1:00 AM	0.82	2.48	0.046		0.00
	2:00 AM	0.81	2.48	0.045		0.00
	3:00 AM	0.83	2.44	0.047		0.00
	4:00 AM	0.81	2.47	0.045		0.00
	5:00 AM	0.83	2.51	0.048		0.00
	6:00 AM	0.79	2.51	0.044		0.00
	7:00 AM	0.83	2.59	0.049		0.00
	8:00 AM	0.83	2.51	0.047		0.00
	9:00 AM	0.80	2.70	0.049		0.00
	10:00 AM	0.86	2.61	0.052		0.00
	11:00 AM	0.84	2.70	0.053		0.00
	12:00 PM	0.84	2.70	0.052		0.00
	1:00 PM	0.84	2.57	0.050		0.00
	2:00 PM	0.83	2.70	0.051		0.00
	3:00 PM	0.93	2.75	0.062		0.00
	4:00 PM	0.86	2.63	0.053		0.00
	5:00 PM	0.84	2.65	0.051		0.00
	6:00 PM	0.90	2.67	0.057		0.00
	7:00 PM	0.85	2.62	0.051		0.00
	8:00 PM	0.79	2.69	0.048		0.00
	9:00 PM	0.87	2.58	0.053		0.00
	10:00 PM	0.82	2.51	0.047		0.00
	11:00 PM	0.81	2.59	0.047		0.00
	MIN	0.79	2.44	0.044	MIN	0.00
	MAX	0.93	2.75	0.062	MAX	0.00
	AVE	0.84	2.59	0.050	TOTAL	0.00

	Time	Head inches	Velocity fps	Flow MGD		Precip. inches
11/05/2020	12:00 AM	0.80	2.55	0.046		0.00
	1:00 AM	0.79	2.46	0.043		0.00
	2:00 AM	0.84	2.56	0.049		0.00
	3:00 AM	0.80	2.44	0.044		0.00
	4:00 AM	0.82	2.49	0.046		0.00
	5:00 AM	0.74	2.50	0.040		0.00
	6:00 AM	0.80	2.42	0.044		0.00
	7:00 AM	0.82	2.47	0.046		0.00
	8:00 AM	0.83	2.53	0.048		0.00
	9:00 AM	0.86	2.60	0.054		0.00
	10:00 AM	0.83	2.58	0.049		0.00
	11:00 AM	0.83	2.67	0.051		0.00
	12:00 PM	0.83	2.74	0.052		0.00
	1:00 PM	0.86	2.67	0.054		0.00
	2:00 PM	0.89	2.59	0.054		0.00
	3:00 PM	0.85	2.75	0.056		0.00
	4:00 PM	0.86	2.63	0.052		0.00
	5:00 PM	0.87	2.72	0.055		0.00
	6:00 PM	0.86	2.68	0.054		0.00
	7:00 PM	0.89	2.62	0.055		0.00
	8:00 PM	0.84	2.68	0.052		0.00
	9:00 PM	0.88	2.65	0.054		0.00
	10:00 PM	0.85	2.60	0.051		0.00
	11:00 PM	0.87	2.60	0.053		0.00
	MIN	0.74	2.42	0.040	MIN	0.00
	MAX	0.89	2.75	0.056	MAX	0.00
	AVE	0.84	2.59	0.050	TOTAL	0.00
11/06/2020	12:00 AM	0.86	2.61	0.052		0.00
	1:00 AM	0.83	2.53	0.048		0.00
	2:00 AM	0.79	2.57	0.045		0.00
	3:00 AM	0.79	2.48	0.044		0.00
	4:00 AM	0.79	2.54	0.045		0.00
	5:00 AM	0.77	2.51	0.043		0.00
	6:00 AM	0.83	2.47	0.047		0.00
	7:00 AM	0.81	2.55	0.047		0.00
	8:00 AM	0.81	2.55	0.047		0.00
	9:00 AM	0.80	2.67	0.048		0.00
	10:00 AM	0.82	2.68	0.050		0.00
	11:00 AM	0.81	2.70	0.049		0.00
	12:00 PM	0.86	2.91	0.058		0.00
	1:00 PM	0.94	2.94	0.067		0.00
	2:00 PM	0.77	2.78	0.048		0.00
	3:00 PM	0.85	2.57	0.050		0.00
	4:00 PM	0.79	2.65	0.047		0.00
	5:00 PM	0.79	2.62	0.046		0.00
	6:00 PM	0.77	2.75	0.047		0.00
	7:00 PM	0.73	2.59	0.041		0.00
	8:00 PM	0.82	2.57	0.048		0.00
	9:00 PM	0.75	2.58	0.042		0.00
	10:00 PM	0.86	2.58	0.051		0.00
	11:00 PM	0.81	2.45	0.045		0.00
	MIN	0.73	2.45	0.041	MIN	0.00
	MAX	0.94	2.94	0.067	MAX	0.00
	AVE	0.81	2.62	0.048	TOTAL	0.00

	Time	Head inches	Velocity fps	Flow MGD		Precip. inches
11/07/2020	12:00 AM	0.79	2.51	0.044		0.00
	1:00 AM	0.80	2.51	0.045		0.00
	2:00 AM	0.73	2.37	0.037		0.00
	3:00 AM	0.78	2.21	0.038		0.00
	4:00 AM	0.76	2.24	0.037		0.00
	5:00 AM	0.77	2.15	0.037		0.00
	6:00 AM	0.79	2.17	0.038		0.00
	7:00 AM	0.73	2.50	0.039		0.00
	8:00 AM	0.79	2.46	0.044		0.00
	9:00 AM	0.75	2.51	0.041		0.00
	10:00 AM	0.77	2.58	0.044		0.00
	11:00 AM	0.77	2.49	0.042		0.00
	12:00 PM	0.83	2.48	0.047		0.00
	1:00 PM	0.81	2.60	0.048		0.00
	2:00 PM	0.78	2.71	0.047		0.00
	3:00 PM	0.78	2.53	0.044		0.00
	4:00 PM	0.75	2.50	0.041		0.00
	5:00 PM	0.72	2.56	0.040		0.00
	6:00 PM	0.80	2.57	0.046		0.00
	7:00 PM	0.80	2.53	0.045		0.00
	8:00 PM	0.85	2.64	0.052		0.00
	9:00 PM	0.78	2.53	0.044		0.00
	10:00 PM	0.85	2.58	0.051		0.00
	11:00 PM	0.81	2.52	0.046		0.00
	MIN	0.72	2.15	0.037	MIN	0.00
	MAX	0.85	2.71	0.052	MAX	0.00
	AVE	0.78	2.48	0.043	TOTAL	0.00
11/08/2020	12:00 AM	0.77	2.43	0.041		0.00
	1:00 AM	0.74	2.52	0.041		0.00
	2:00 AM	0.69	2.48	0.037		0.00
	3:00 AM	0.76	2.48	0.041		0.00
	4:00 AM	0.77	2.35	0.040		0.00
	5:00 AM	0.66	2.30	0.031		0.00
	6:00 AM	0.75	2.50	0.041		0.00
	7:00 AM	0.79	2.40	0.042		0.00
	8:00 AM	0.78	2.54	0.044		0.00
	9:00 AM	0.79	2.51	0.044		0.00
	10:00 AM	0.84	2.56	0.049		0.00
	11:00 AM	0.80	2.61	0.047		0.00
	12:00 PM	0.76	2.63	0.044		0.00
	1:00 PM	0.88	2.80	0.057		0.00
	2:00 PM	0.86	2.46	0.049		0.00
	3:00 PM	0.80	2.70	0.048		0.00
	4:00 PM	0.81	2.55	0.047		0.00
	5:00 PM	0.87	2.57	0.052		0.00
	6:00 PM	0.88	2.63	0.054		0.00
	7:00 PM	0.81	2.51	0.046		0.00
	8:00 PM	0.86	2.63	0.053		0.00
	9:00 PM	0.81	2.61	0.048		0.00
	10:00 PM	0.82	2.56	0.048		0.00
	11:00 PM	0.82	2.55	0.048		0.00
	MIN	0.66	2.30	0.031	MIN	0.00
	MAX	0.88	2.80	0.057	MAX	0.00
	AVE	0.80	2.54	0.046	TOTAL	0.00

COUNTY OF ALLEGHENY

RICH FITZGERALD
COUNTY EXECUTIVE

February 11, 2021

Makenzie Priest, E.I.T.
Red Swing Group
4314 Old William Penn Hwy, Suite 101
Monroeville, PA 15146

RE: SEWAGE FACILITIES PLANNING MODULE; ALLEGHENY COUNTY
Safe Investments US – Wharton Street, City of Pittsburgh

Dear Ms. Priest:

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 9, 2021. The project proposes the following:

Project Description:	Safe Investments US - Wharton Street. Proposing the construction of eight townhomes on a subdivided existing vacant lot (12-F-248) located on Wharton St (4 homes) and Merriman Way (4 homes) in the City of Pittsburgh, Allegheny County.
Sewage Flow:	3,200 GPD
Conveyance:	The flow from this site will be conveyed to the Pittsburgh Water and Sewer Authority (PWSA) collection system to ALCOSAN POC M-17 to the Monongahela River interceptor and then to the ALCOSAN Treatment Plant at Woods Run.
Sewer's Owner:	PWSA (collection) and ALCOSAN (interceptor)
Name of Sewage Treatment Plant:	ALCOSAN

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

DEBRA BOGEN, MD, 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

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, 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,

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)

alcosan
allegheny county sanitary authority

RECEIVED
2-5-21

January 26, 2021

Lou Turka
Red Swing Group
3824 Northern Pike, Suite 800
Monroeville, PA 15146

Re: Safe Investments US – Wharton Street
2139 Wharton Street, Pittsburgh, PA 15203
PA DEP Sewage Facilities Planning Module
ALCOSAN Regulator Structure M-17-00

Dear Mr. Turka:

We have reviewed the Component 3 Planning Module for the referenced project to be located in the City of Pittsburgh, 16th Ward. The project will generate a peak flow of 3,200 GPD in the ALCOSAN Monongahela River Interceptor and Woods Run Treatment Plant.

The capacity of the ALCOSAN M-17-00 Diversion Structure is approximately 2.99 MGD. The peak dry weather flow is approximately 0.038 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)
D. Thornton (w/o attachment)
M. Lichte (w/o attachment)
B. King/ PWSA (w/o attachment)
T. Flanagan/ PaDEP (w/o attachment)
F. Fields/ ACHD (w/o attachment)

PGH2O Pittsburgh Water & Sewer Authority

January 7, 2021

Lou Turka
Red Swing Group
4314 Old William Penn Hwy, Suite 101
Monroeville, PA 15146

Subject: Sewage Facilities Planning Module (SFPM)
Approval for Collection System Flows
Project Name: 2139 Wharton Street (Project)
PWSA Project No.: 20013.87

Dear Lou:

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 x5533 or AGallina@pgh2o.com.

Sincerely,

Anthony Gallina

Anthony Gallina
Associate Project Manager

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

PGH2O Pittsburgh Water & Sewer Authority

MEMO

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

From: Anthony Gallina

Date: 1/6/2021

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

Chapter 94 Consistency Determination

Project Name: 2139 Wharton Street (Project)

Project Address: 2139 Wharton Street Pittsburgh, PA 15203

PWSA Project Number: 20013.87

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,

Anthony Gallina

Anthony Gallina
Associate Project Manager

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

Penn Liberty Plaza I
1200 Penn Avenue
Pittsburgh PA 15222

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T 412.255.2423
F 412.255.2475

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@pgh2o

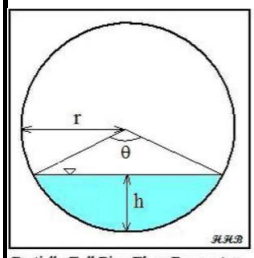
Customer Service /
Emergencies:
412.255.2423

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

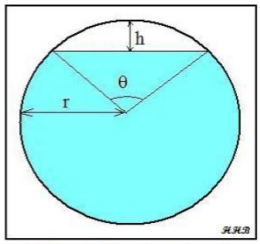
PROJECT NAME:	2139 Wharton Street
PWSA PROJECT NUMBER:	20013.87
PWSA REVIEWER:	Anthony Gallina
DATE:	January 4, 2021

LEGEND: Input Data | Output Data

Section A: Manning Equation for Partially Filled Pipes



Partially Full Pipe Flow Parameters (Less Than Half Full)



Partially Full Pipe Flow Parameters (More Than Half Full)

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

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

$$A_{<50\%\ Full} = \frac{r^2(\Theta - \sin\Theta)}{2} \qquad P_{<50\%\ Full} = r \times \Theta$$

OR

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

Section B: Data for Calculations

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

Proposed Project Flows		
Variable	Value	Units
Q_p	3,200	gpd

Variable	*Value*	*Units*
Material	VCP	
n	0.015	unitless
S	0.033	ft/ft
h	0.079	ft
D	1.50	ft
P.F.	3.5	unitless

Section C: Calculations for Design and/or Permitted Capacities

Variable	*Description*	*Definition*
$Q_{d,\ avg}$	Design Capacity, Average	= full pipe flow conditions / peaking factor
$Q_{d,\ peak}$	Design Capacity, Peak	full pipe flow conditions

Design Capacity, Average	*Design Capacity, Peak*

Variable	Value	Unit
$Q_{d, avg}$	3,072,469	gpd

Variable	Value	Unit
D	1.500	ft
r	0.750	ft
A	1.767	ft^2
P	4.712	ft
R	0.375	ft
$Q_{d, peak}$	17	cfs
$Q_{d, peak}$	10,753,643	gpd

Section D: Calculations for Present Flows

Variable	Description	Definition
$Q_{ex, avg}$	Present Flows, Average	existing flow conditions per site investigations
$Q_{ex, peak}$	Present Flows, Peak	= existing flow conditions x peaking factor

Present Flows, Average		
Variable	Value	Unit
D	1.500	ft
r	0.750	ft
Θ	0.92	rad
h/D	0.052388889	ft/ft
A	0.04	ft^2
P	0.69	ft
R	0.051	ft
$Q_{ex, avg}$	0	cfs
$Q_{ex, avg}$	57,049	gpd

Present Flows, Peak		
Variable	Value	Unit
$Q_{ex, peak}$	199,671	gpd

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

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

Projected Flow Calculations		
Variable	Value	Unit
$Q_{proj, avg}$	60,861	gpd
$Q_{proj, peak}$	213,015	gpd

Section F: Compare Results with Applicant's Submission

Variable	PWSA, gpd	Applicant, gpd	Difference, gpd	Difference, %
$Q_{d, avg}$	3,072,469	3,062,113	10,356	0%
$Q_{d, peak}$	10,753,643	10,717,396	36,247	0%
$Q_{ex, avg}$	57,049	57,000	49	0%
$Q_{ex, peak}$	199,671	199,500	171	0%
$Q_{proj, avg}$	60,861	60,810	51	0%
$Q_{proj, peak}$	213,015	212,835	180	0%

PGH2O Pittsburgh Water & Sewer Authority

RECEIVED 5/17/19

May 13, 2019

Zach Milanak
3824 Northern Pike, Suite 800
Monroeville, PA 15146

RE: Water and Sewer Availability
2139 Wharton Street

Dear Mr. Milanak:

In response to your inquiry on 5/3/2019 concerning water and sewer availability for the area referenced above, please be advised that both water and sewers are available near the site, and water and sewer service will be provided in accordance with the policies and procedures of the Pittsburgh Water and Sewer Authority.

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

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

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

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

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

Sincerely,

Wendy M. Dean
Engineering Tech II

cc: PWSA File

Penn Liberty Plaza I
1200 Penn Avenue
Pittsburgh PA 15222

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Customer Service /
Emergencies:
412.255.2423

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:	Ponte Vista Lofts, LLC
Address of Property:	2139 Wharton Street, Pittsburgh, PA 15203
Proposed Use of Site:	Apartment Building(s)
Closest street intersection to the property:	Wharton Street and S 22nd Street

Requestor Name:	Zach Milanak	Date of Request:	5/3/2019
Requestor Address:	3824 Northern Pike, Suite 800, Monroeville, PA 15146		
Requestor Phone Number:	724-325-1215		

Please submit the completed form to:

Pittsburgh Water and Sewer Authority
1200 Penn Avenue
Pittsburgh, PA 15222
Attn: Permits
(permitinfo@pgh2o.com)

PWSA Use Only:

PWSA Water Service Available: ☑ Yes ☐ No — Water Size / Location: 6" Merriman Way; 6" S. 22nd Street; 8" Wharton Street

PWSA Sewer Service Available: ☑ Yes ☐ No — Sewer Size / Location: 15" Merriman Way; 15" Wharton Street; 20" S. 22nd Street

Applicant must contact separate agency for water and/or sewer service: ☐ Yes ☑ No

Name of separate agency: _____

PWSA Approval Authority:

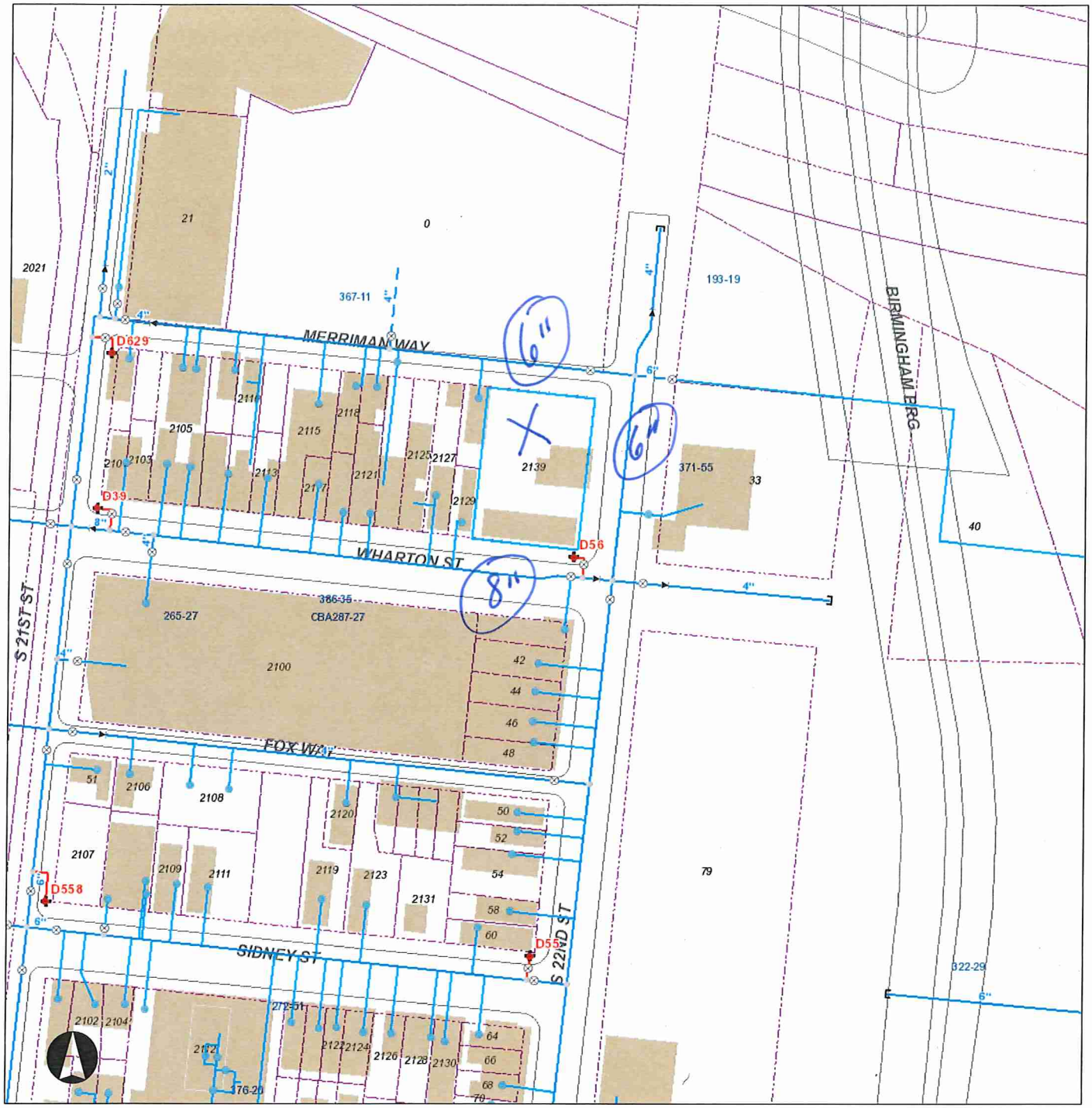
Signature and Date: Wendy M. Dean 5-13-19

Name (printed): Wendy M. Dean

Title: Engineering Tech II

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.

2139 Wharton Street - Water



Legend

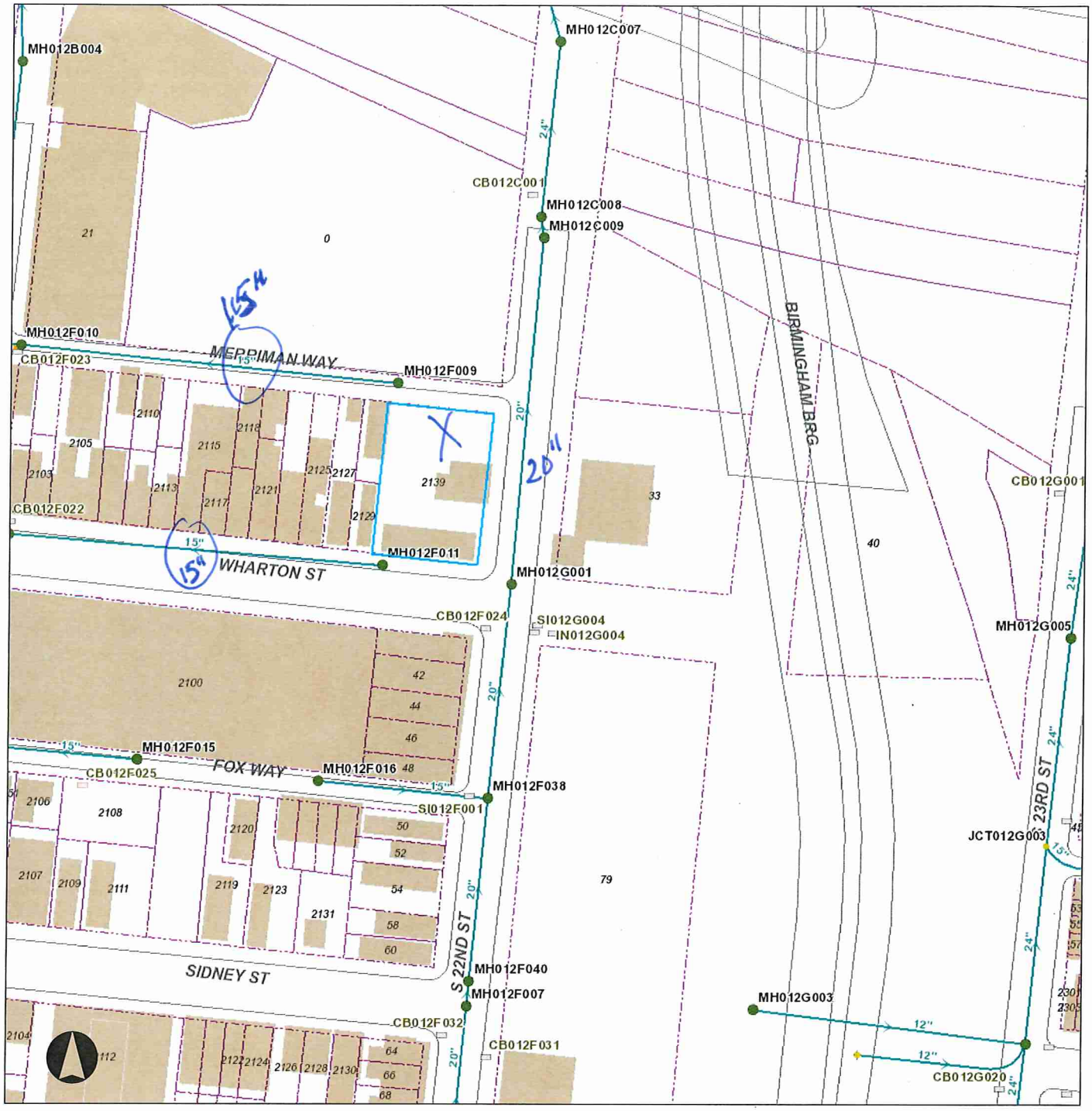
Meter	Water Manhole	Outfall
Pump	Rising Main	End Cap
Hydrant	Supply Main	Sewer Pump Station
Hydrant- Out of Service	Transmission Main	Combined Sewer
System Valve	Distribution Main	Sanitary Sewer
Dividing Pressure Valve	Hydrant Branch	Storm Sewer
Cap	Private Main	Regulated Combined Sewer
Tee or Cross	Water Service Line	Overflow Sewer
Reducer	Manhole	Interceptor
Coupling	Junction	Sewer Force Main
Wash Out	Inlet	Private Sewer
	Private Inlet	Undefined Sewer

Feet
0 75 150

PGH2O

Date: 5/9/2019

2139 Wharton Street - Sewer



Legend

Meter	Rising Main	End Cap
Pump	Supply Main	Sewer Pump Station
Hydrant	Transmission Main	Combined Sewer
Hydrant- Out of Service	Distribution Main	Sanitary Sewer
System Valve	Hydrant Branch	Storm Sewer
Dividing Pressure Valve	Private Main	Regulated Combined Sewer
Cap	Water Service Line	Overflow Sewer
Tee or Cross	Manhole	Interceptor
Reducer	Junction	Sewer Force Main
Coupling	Inlet	Private Sewer
Wash Out	Private Inlet	Undefined Sewer
Water Manhole	Outfall	

Feet
0 75 150

PGH2O

Date: 5/9/2019

1. PROJECT INFORMATION

Project Name: **2139 Wharton Street Townhomes**
Date of Review: **7/28/2020 12:14:47 PM**
Project Category: **Development, Residential, Subdivision containing more than 2 lots and/or 2 single-family units**
Project Area: **1.40 acres**
County(s): **Allegheny**
Township/Municipality(s): **PITTSBURGH**
ZIP Code: **15203**
Quadrangle Name(s): **PITTSBURGH EAST**
Watersheds HUC 8: **Lower Monongahela**
Watersheds HUC 12: **Streets Run-Monongahela River**
Decimal Degrees: **40.430488, -79.974671**
Degrees Minutes Seconds: **40° 25' 49.7571" N, 79° 58' 28.8140" 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.

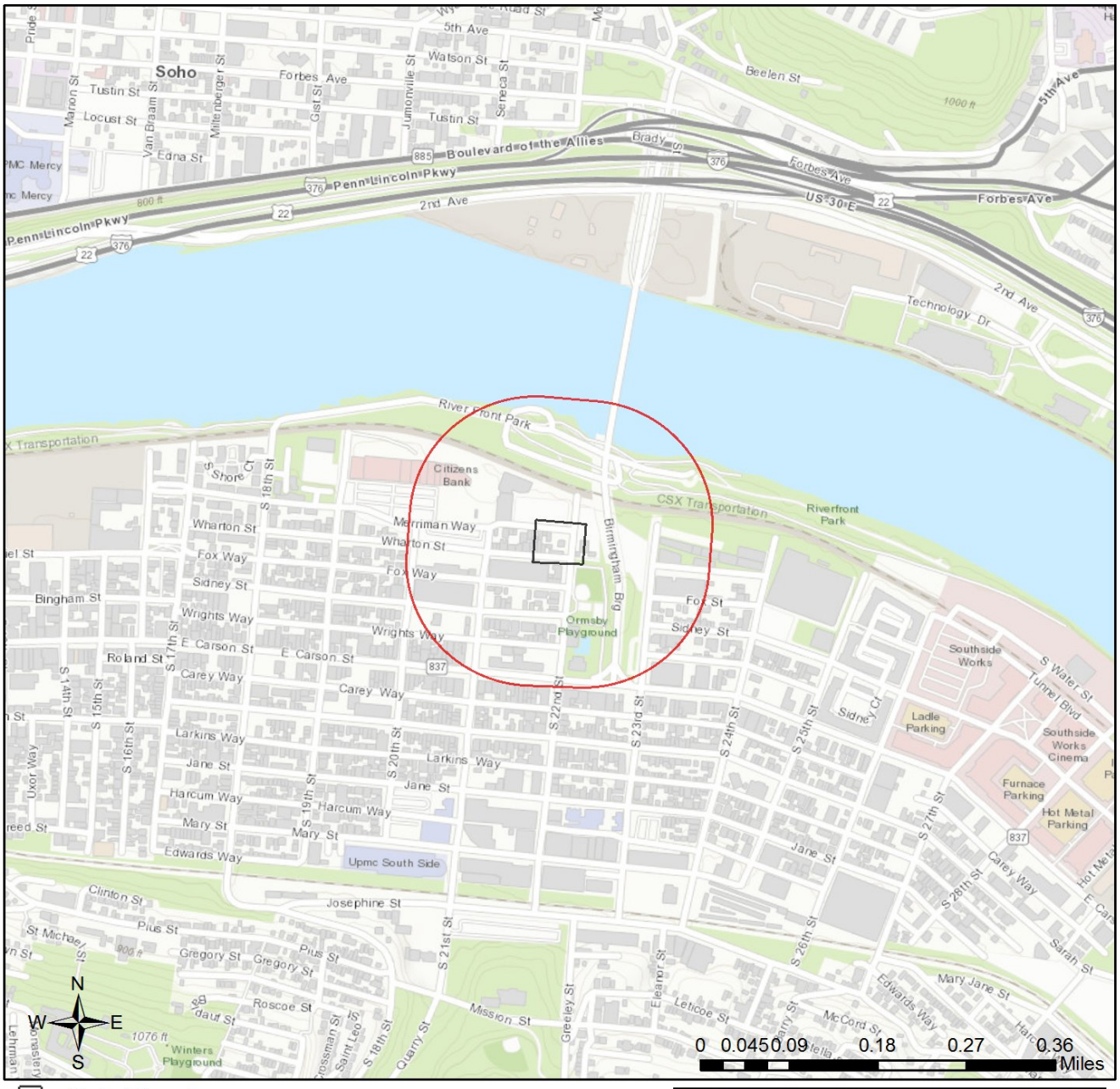
2139 Wharton Street Townhomes

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

2139 Wharton Street Townhomes



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 jursidictional 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

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 Fish and Boat Commission
Division of Environmental Services
595 E. Rolling Ridge Dr., Bellefonte, PA 16823
Email: RA-FBPACENOTIFY@pa.gov

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: Makenzie Priest
Company/Business Name: Red Swing Group
Address: 3824 Northern Pike, Suite 800
City, State, Zip: Monroeville, PA 15146
Phone: (724) 325-1215 Fax: (866) 295-5226
Email: m.priest@redswinggroup.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.

M. Priest — 7/28/2020

applicant/project proponent signature — date