



A FULL-SERVICE CIVIL ENGINEERING FIRM

C-46072-0004

September 2023

Astrobotic

1106 Reedsdale Street
City of Pittsburgh
Allegheny County, PA 15233

PREPARED FOR

Astrobotics Real Estate Holdings,
LLC
1016 N Lincoln Ave, Pittsburgh,
PA 15233-2132

SUBMITTED BY

Sanghamithra Devaram
The Gateway Engineers, Inc.
100 McMorris Road
Pittsburgh, PA 15205
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SEWAGE FACILITIES PLANNING MODULE



EXHIBITS

EXHIBIT A. Sewage Facilities Planning Module – Component 3 – Sewage Collection and Treatment Facilities

EXHIBIT B. PWSA Water and Sewer Availability Letter

EXHIBIT C. Project Narrative and Flow Map

EXHIBIT D. Flow Calculations (Signed and Sealed)

EXHIBIT E. USGS Site Location Map

EXHIBIT F. Pennsylvania Natural Diversity Inventory (PNDI) Environmental Review

EXHIBIT G. Plot Plan

EXHIBIT H. Sewage Flow Calculations

EXHIBIT I. Component 4A

EXHIBIT J. Component 4C

EXHIBIT A.

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



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

Code No.

SEWAGE FACILITIES PLANNING MODULE

Component 3. Sewage Collection and Treatment Facilities

(Return completed module package to appropriate municipality)

DEP USE ONLY

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

2. Brief Project Description Remodelling of existing 5- story warehouse/building to an office and laboratory area along with a cafe area.

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

Municipality Name	County	City	Boro	Twp
Pittsburgh	Allegheny	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Municipality Contact Individual - Last Name	First Name	MI	Suffix	Title
Prendergast	Kyla			Senior Environmental Planner
Additional Individual Last Name	First Name	MI	Suffix	Title
Municipality Mailing Address Line 1	Mailing Address Line 2			
Department of City Planning	200 Ross Street, Suite 4			
Address Last Line -- City	State	ZIP+4		
Pittsburgh	PA	15219		
Area Code + Phone + Ext.	FAX (optional)	Email (optional)		
412-255-2516				

C. SITE INFORMATION (See Section C of instructions)

Site (Land Development or Project) Name

ASTROBOTIC

Site Location Line 1

1106 Reedsdale Street

Site Location Line 2

Site Location Last Line -- City

Pittsburgh

State

PA

ZIP+4

15233-2125

Latitude

Longitude

Detailed Written Directions to Site Take Exit 1B on I-279N, going towards Reedsdale Street, continue on Reedsdale Street. After crossing Allegheny Metro Station, turn right on the Walker Street and the project site will be on the right.

Description of Site Remodeling of existing 5-story building/warehouse to be replaced with a 5-story office building with the 1st floor being a incubator space and a restaurant. 2nd floor being a laboratory space and 3-5 stories being workstations.

Site Contact (Developer/Owner)

Last Name

Bujaky

First Name

Lisa

MI

Suffix

Phone

Ext.

Site Contact Title

General Manager

Site Contact Firm (if none, leave blank)

Astrobotic Real Estate Holdings, LLC

FAX

Email

lisa.bujaky@astrobotic.com

Mailing Address Line 1

1016 N. Lincoln Ave

Mailing Address Line 2

Mailing Address Last Line -- City

Pittsburgh

State

PA

ZIP+4

15233

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

Last Name

Galbraith

First Name

Joseph

MI

Suffix

M

Title

Project Manager

Consulting Firm Name

The Gateway Engineers, Inc.

Mailing Address Line 1

100 McMorris Road

Mailing Address Line 2

Address Last Line -- City

Pittsburgh

State

PA

ZIP+4

15205

Country

United States

Email

jgalbraith@gatewayengineers.com

Area Code + Phone

412-409-2289

Ext.

125

Area Code + FAX

E. AVAILABILITY OF DRINKING WATER SUPPLY

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

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

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

Name of water company: Pittsburgh Water and Sewer Authority (PWSA)

F. PROJECT NARRATIVE (See Section F of instructions)

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

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

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

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

1. COLLECTION SYSTEM

a. Check appropriate box concerning collection system

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

Clean Streams Law Permit Number _____

b. Answer questions below on collection system

Number of EDU's and proposed connections to be served by collection system. EDU's 10.25

Connections 1

Name of:

existing collection or conveyance system Reedsdale Street - 15" VCP

owner The Pittsburgh Water and Sewer Authority

existing interceptor OhioRiver Interceptor (O-43)

owner Allegheny County Sanitary Authority (ALCOSAN)

2. WASTEWATER TREATMENT FACILITY

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

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

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

Name of existing facility ALCOSAN Woods Run WWTP

NPDES Permit Number for existing facility PA0025984

Clean Streams Law Permit Number _____

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

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

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

Name of Permittee Agency, Authority, Municipality ALCOSAN

Name of Responsible Agent Shawn P. McWilliams, EIT

Agent Signature *Shawn P. McWilliams* Date 10/02/2023

(Also see Section I. 4.)

G. PROPOSED WASTEWATER DISPOSAL FACILITIES (Continued)

3. PLOT PLAN

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

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

4. WETLAND PROTECTION

YES NO

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

5. PRIME AGRICULTURAL LAND PROTECTION

YES NO

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

6. HISTORIC PRESERVATION ACT

YES NO

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

7. PROTECTION OF RARE, ENDANGERED OR THREATENED SPECIES

Check one:

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

Applicant or Consultant Initials _____.

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

- An alternative sewage facilities analysis has been prepared as described in Section H of the attached instructions and is attached to this component.
The applicant may choose to include additional information beyond that required by Section H of the attached instructions.

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

1. Waters designated for Special Protection

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

2. Pennsylvania Waters Designated As Impaired

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

3. Interstate and International Waters

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

4. Tributaries To The Chesapeake Bay

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

Name of Permittee Agency, Authority, Municipality _____

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

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

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 1,650 gpd
2. Total Sewage Flows to Facilities (pathway from point of origin through treatment plant)

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

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

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

	a. Design and/or Permitted Capacity (gpd)		b. Present Flows (gpd)		c. Projected Flows in 5 years (gpd) (2 years for P.S.)	
	Average	Peak	Average	Peak	Average	Peak
Collection	975033	2925098	4682	14047	5476	16429
Conveyance	—	4,170,000	465,000	584,000	473,800	594,000
Treatment	—	250,000,000	194,200,000	250,000,000	248,800,000	295,000,000

3. Collection and Conveyance Facilities

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

YES NO

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

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

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

b. Collection System

Name of Agency, Authority, Municipality PWSA

Name of Responsible Agent Robert Herring

Agent Signature Robert Herring Date 9/8/2023
 2023.09.08 11:27:49 -04'00'

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

c. Conveyance System

Name of Agency, Authority, Municipality ALCOSAN

Name of Responsible Agent Shawn P. McWilliams, EIT

Agent Signature *Shawn P. McWilliams*

Date 10/02/2023

4. Treatment Facility

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

YES NO ***ALCOSAN IS UNDER A CONSENT DECREE TO ADDRESS WET WEATHER OVERFLOWS.**

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

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

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

b. Name of Agency, Authority, Municipality ALCOSAN

Name of Responsible Agent Shawn P. McWilliams, EIT

Agent Signature *Shawn P. McWilliams*

Date 10/02/2023

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

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

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

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

L. PERMEABILITY TESTING (See Section L of instructions)

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

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

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

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

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

O. SEWAGE MANAGEMENT (See Section O of instructions)

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

Yes No

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

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

2. Project Flows _____ gpd

Yes No

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

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

(For completion by non-municipal facility agent)

4. Collection and Conveyance Facilities

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

Yes No

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

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

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

- b. Collection System

Name of Responsible Organization _____

Name of Responsible Agent _____

Agent Signature _____

Date _____

- c. Conveyance System

Name of Responsible Organization _____

Name of Responsible Agent _____

Agent Signature _____

Date _____

5. Treatment Facility

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

Yes No

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

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

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

b. Name of Facility _____

Name of Responsible Agent _____

Agent Signature _____

Date _____

(For completion by the municipality)

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

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

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

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

Yes No

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

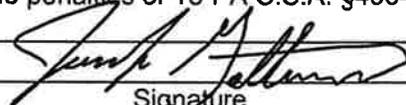
P. PUBLIC NOTIFICATION REQUIREMENT cont'd. (See Section P of instructions)

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

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

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

Joseph Galbraith
Name (Print)
Project Manager
Title
100 McMorris Road, Pittsburgh, PA 15205
Address


Signature
2023-09-06
Date
(412) 409-2289
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 \$512.50 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.

$$\# 4.125 \quad \text{Lots (or EDUs)} \times \$50.00 = \$ 206.25$$

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:

$$\begin{aligned} & \$ 1,500 \text{ per submittal (non-municipal)} \\ & \$ 500 \text{ per submittal (municipal)} \end{aligned}$$

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

$$\# \underline{\hspace{2cm}} \quad \text{Lots (or EDUs)} \times \$35.00 = \$ \underline{\hspace{2cm}}$$

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:

$$\begin{aligned} & \$ 1,500 \text{ per submittal (non-municipal)} \\ & \$ 500 \text{ per submittal (municipal)} \end{aligned}$$



October 2, 2023

Members of the Board

Sylvia C. Wilson
Chair Person

Shannah Tharp-Gilliam, Ph.D.
Harry Readshaw
Emily Kinkead
Paul Klein
Theresa Kail-Smith
Darrin Kelly

Arletta Scott Williams
Executive Director

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

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

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

Karen Fantoni, CPA, CGMA
*Director
Finance*

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

Jeanne K. Clark
*Director
Governmental Affairs*

Julie Motley-Williams
*Director
Administration*

Mr. Joseph Galbraith
Gateway Engineers
100 McMorris Road
Pittsburgh, PA 15205

**Re: Astrobotic – 1106 Reedsdale Street
City of Pittsburgh – 21st Ward
PA DEP Sewage Facilities Planning Module
ALCOSAN Point of Connection O-43**

Dear Mr. Galbraith:

We have reviewed the Component 3 Planning Module for the referenced project to be located in City of Pittsburgh, 21st Ward. The project will generate peak flows of 4,100 gpd in the ALCOSAN Ohio River Interceptor and Woods Run Treatment Plant.

The capacity at the ALCOSAN O-43 structure is approximately 4.17 MGD. The previously monitored peak dry weather flows are 584,000 gpd. Dry weather capacity exists for this connection. However, the ALCOSAN Ohio River Interceptor and the Woods Run Treatment Plant do not have the capacity for the flows generated by tributary communities during wet weather periods. This limitation will be addressed as ALCOSAN implements its Clean Water Plan.

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

Sincerely,

ALLEGHENY COUNTY SANITARY AUTHORITY

Shawn P. McWilliams, EIT
Project Engineer

Attachment

cc: Christina Dean (w/o attachment) Robert Herring/ PWSA (w/o attachment)
Leslie Sanford (w/o attachment) Mahbuba Iasmin/ PADEP (w/o attachment)
Michael Lichte (w/o attachment) Gina Caligiri/ ACHD (w/o attachment)

EXHIBIT B.

PWSA Water and Sewer Availability Letter



09/21/2023

Sanghamithra Devaram
The Gateway Engineers, Inc.
100 McMorris Rd, Pittsburgh PA 15205-9445

RE: Water and Sewer Availability
1106 Reedsdale St, Pittsburgh PA 15233-2125

Dear Sanghamithra Devaram

In response to your inquiry concerning water and sewer availability for the area referenced above, please be advised that water and sewer service will be provided in accordance with the policies and procedures of the Pittsburgh Water and Sewer Authority as described below:

Water service available: Yes

Sewer service available: Yes

12" Reedsdale Street

36" Walker Street

6" Boyce Street

15" Reedsdale Street

6" Walker Street

18" Reedsdale Street

We wish to advise you that, if it is your desire to tap our water and sewer mains for service, your plans must be approved through a development permit application in accordance with the PWSA Developer's Manual.

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

Sincerely,

A handwritten signature in black ink that reads 'Wendy M. Dean'.

Wendy M. Dean
Engineering Tech II

EXHIBIT C.

Project Narrative and Flow Map

Project Narrative

Astrobotic – Real Estate Holdings, LLC
1106 Reedsdale Street, City of Pittsburgh, PA 15233-2125

The proposed Astrobotics project consists of the construction of a 5-story apartment building with Office area, laboratory space and restaurant area. Floor 1 consists of incubator space and restaurant area, floor 2 consists of office space and laboratory area. Floor 3-5 consists of workstations. The building will be remodeled at 1106 Reedsdale Street where an existing 5-story building/warehouse is located. The property of interest is tax parcel 7-H-178 in Reedsdale Street, City of Pittsburgh and is currently owned by Astrobotic Real Estate Holdings, LLC per the Allegheny County GIS viewer. The project area encompasses the entire 0.41-acre lot.

The project site will experience an increase in water consumption and sanitary flow due to the construction of the office space and cafe in the building where the warehouse currently exists. The existing water consumption and sanitary flow is assumed to be 2,450 GPD.

The proposed floor plans and peak flows provided in Table 2-1 of PWSA's Developers Manual were utilized to determine the proposed peak sewage flow and water consumption for the apartment building. A total peak flow of 4,100 GPD (10.25 EDUs) is proposed for the Astrobotics – 1106 Reedsdale Street.

This project will require the termination of existing, active taps as well as the construction of a new domestic water service lateral. A new sanitary lateral will also be provided. The water service lateral connections required for the proposed building will be made using the existing public facilities located in Reedsdale Street. The sanitary lateral connection will be made using the existing public facility in Reedsdale Street. Associated tap-in plans for the private water and sanitary connections will be submitted to PWSA for review and approval.

The sanitary sewer in Reedsdale Street is a 15” PWSA owned VCP combination gravity sewer and connects into the Allegheny River Interceptor Sewer O-43 and then to ALCOSAN’s treatment plant where the sewage receives final treatment. Domestic water and fire service will be provided off the existing 12” PWSA owned water main located in Reedsdale Street.

Flow Calculation Summary

Present Flows – Peak Flow Measurement

Five peak flow measurements were completed by Drnach over a one-hour period in MH007M022 to determine the existing average and peak flows in the sewer of interest. The Measurements began on 07/24/2023 from 6:45 AM to 7:45 AM. **Analysis of the received data reports an existing average flow of 0.014 MGD and a peak hourly flow of 0.0046 MGD.**

Design Capacity

The existing sewer’s average and peak hydraulic capacity were calculated by determining the existing slope of the sewer of interest using as-built information and the 3RWW Atlas between the monitoring manhole (MH007M022) and the next upstream manhole (MH007M021). The sewer was analyzed under full flow conditions, and a peaking factor of 3.0% (separate sewer) was applied to obtain the peak hydraulic capacity per the PWSA Developer’s Manual. **The average hydraulic capacity was calculated to be 0.975 MGD and the peak hydraulic capacity was calculated to be 2.925 MGD.**

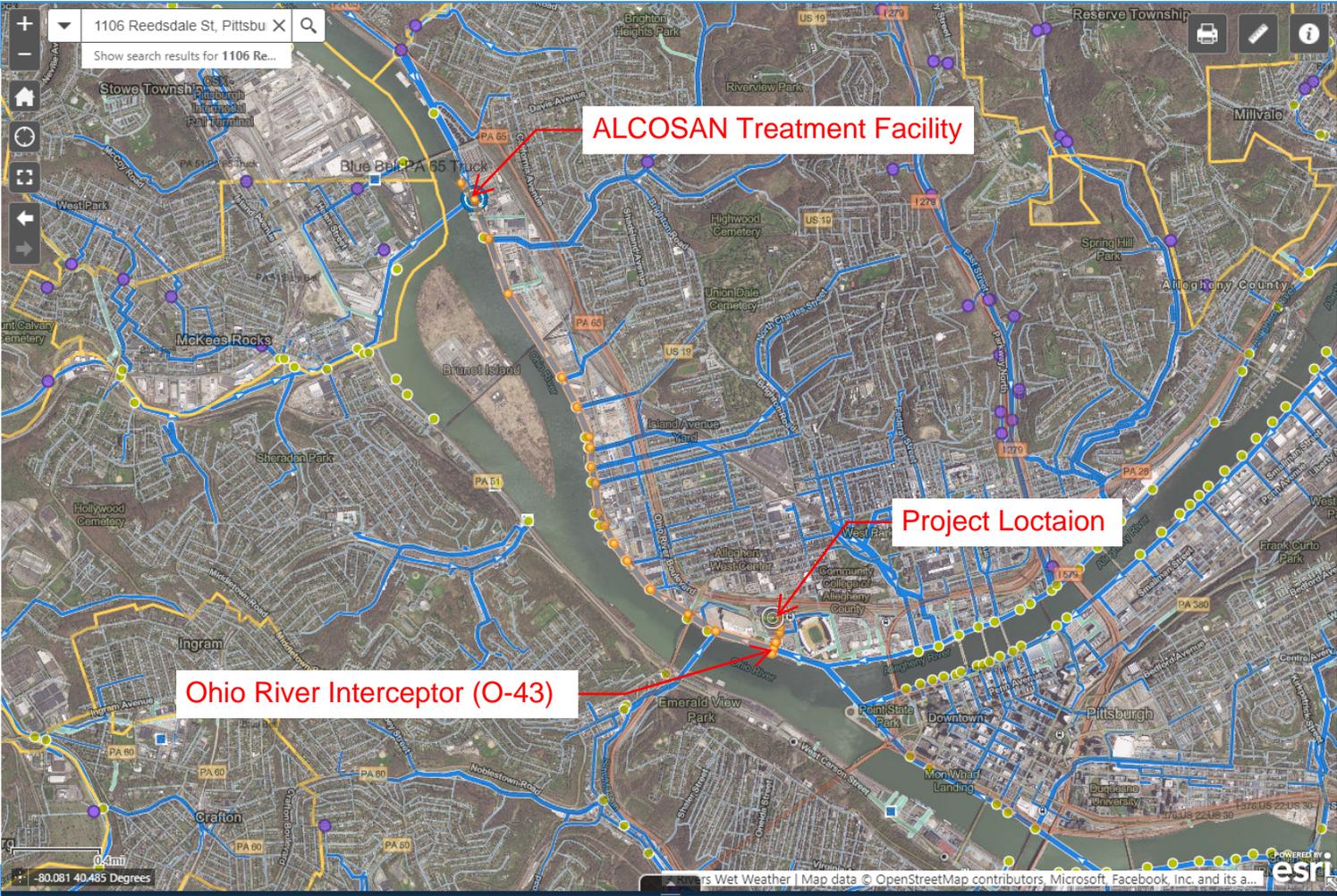
5-Year Projected Flow

Using the equations in the PWSA Developer's Manual, the net flow 1,650 GPD, was added to the present average and peak flows to determine the projected flow in 5 years. **The projected average flow is estimated to be 0.005 MGD and the projected peak flow is estimated to be 0.016 MGD.** Since the 5-year flows are less than the calculated design capacity of the sewer, the additional flow due to the construction of Astrobotics will not overload the sewer.

Sewer Mapping

Astrobotic Real Estate Holdings, LLC

1106 Reedsdale Street, Pittsburgh PA 15233-2125



Source: 3RWW Sewer Atlas

EXHIBIT D.

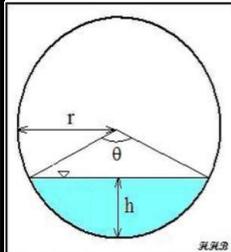
Flow Calculations (Signed and Sealed)

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

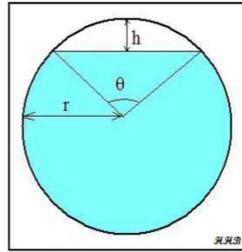
PROJECT NAME: 1106 Reedsdale St
PWSA PROJECT NUMBER: DEV-294-0623
PWSA REVIEWER: Midori Bridges
DATE: August 1, 2023

LEGEND: Input Data Output Data

Section A: Manning Equation for Partially Filled Pipes



Partially Full Pipe Flow Parameters
(Less Than Half Full)



Partially Full Pipe Flow Parameters
(More Than Half Full)

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

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

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

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

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

OR

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

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

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

Section B: Data for Calculations

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

Proposed Project Flows		
Variable	Value	Units
Q _p	1,600	gpd

Variable	Value	Units
Material	VCP	
n	0.015	unitless
S	0.007	ft/ft
h	0.063	ft
D	1.25	ft
P.F.	3	unitless

Section C: Calculations for Design and/or Permitted Capacities

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

Design Capacity, Average		
Variable	Value	Unit
Q _{d, avg}	975,033	gpd

Design Capacity, Peak		
Variable	Value	Unit
D	1.250	ft
r	0.625	ft
A	1.227	ft ²
P	3.927	ft
R	0.313	ft
Q _{d, peak}	5	cfs
Q _{d, peak}	2,925,098	gpd

Section D: Calculations for Present Flows

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

Present Flows, Average		
Variable	Value	Unit
Q _{ex, avg}	4,682	gpd

Present Flows, Peak		
Variable	Value	Unit
D	1.250	ft
r	0.625	ft
θ	0.90	rad
h/D	0.05	ft/ft
A	0.02	ft ²
P	0.56	ft
R	0.041	ft
Q _{ex, peak}	0	cfs
Q _{ex, peak}	14,047	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}	5,476	gpd
Q _{proj, peak}	16,429	gpd

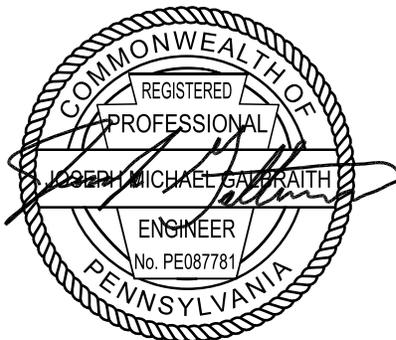
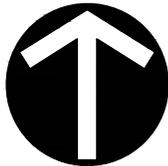
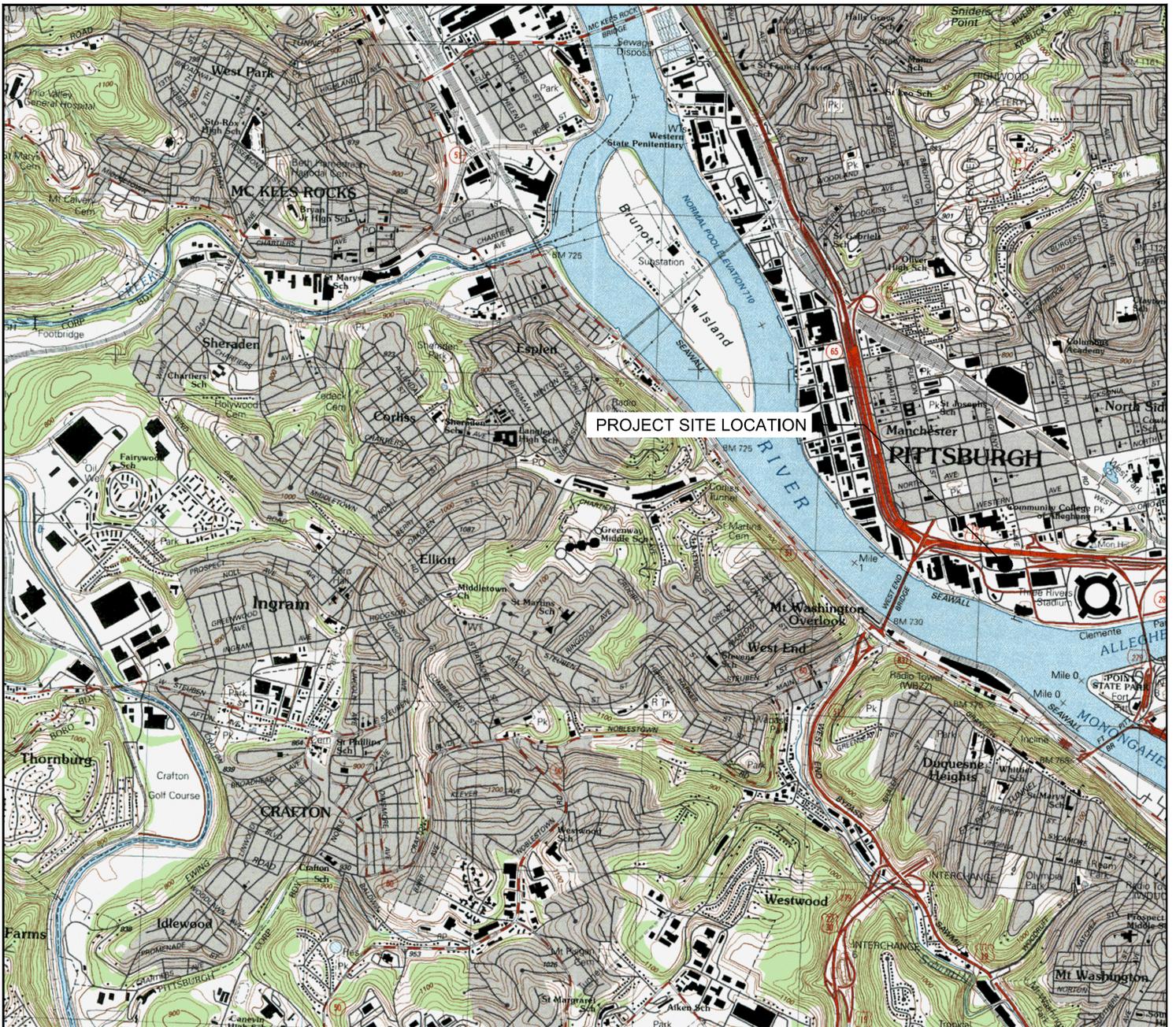


EXHIBIT E.

USGS Site Location Map



NORTH

USGS SITE LOCATION MAP
 PITTSBURGH WEST QUADRANGLE
 SCALE: 1" = 2,000'

THE GATEWAY ENGINEERS, INC. RETAINS OWNERSHIP RIGHTS OF ALL DATA WITHIN THE PLANS. DATA CONTAINED WITHIN IS ONLY TO BE USED FOR ITS INTENDED PURPOSE BY ITS RESPONSIBLE PARTY. THE USE, REPLICATION, REPRODUCTION, OR REDISTRIBUTION OF DATA CONTAINED WITHIN IS STRICTLY PROHIBITED AND SUBJECT TO LEGAL ACTION.

USGS SITE LOCATION
 MAP - USGS

Project Number: 46072-0004
 Drawing Scale: Viewout/Scale
 Date Issued: APRIL 2023
 Index Number: _____
 Drawn By: GRS
 Checked By: JMG
 Project Manager: JMG

ASTROBOTICS REEDSDALE

1106 REEDSDALE STREET
 PITTSBURGH, PA 15233

PREPARED FOR:
ASTROBOTICS
 1016 N. LINCOLN AVENUE
 PITTSBURGH, PA 15233

Date	No	REVISION RECORD
2023-06-02	01	CITY OF PITTSBURGH SUBMISSION - SCHEMATIC DESIGN
2023-06-16	02	CITY OF PITTSBURGH SUBMISSION - REVISED DESIGN
2023-08-29	03	CITY OF PITTSBURGH SUBMISSION - DRAFT COMMENT REPONSE
-	04	-
-	05	-
-	06	-
-	07	-
-	08	-



WWW.GATEWAYENGINEERS.COM | HILLSBORO, OH | 1-800-234-2094

EXHIBIT F.

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

1. PROJECT INFORMATION

Project Name: **Astrobotic**
Date of Review: **9/13/2023 02:20:23 PM**
Project Category: **Development, Other**
Project Area: **1.81 acres**
County(s): **Allegheny**
Township/Municipality(s): **PITTSBURGH**
ZIP Code:
Quadrangle Name(s): **PITTSBURGH WEST**
Watersheds HUC 8: **Upper Ohio**
Watersheds HUC 12: **Kilbuck Run-Ohio River**
Decimal Degrees: **40.448044, -80.019356**
Degrees Minutes Seconds: **40° 26' 52.9576" N, 80° 1' 9.6821" 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	Conservation Measure	No Further Review Required, See Agency Comments
U.S. Fish and Wildlife Service	Conservation Measure	No Further Review Required, See Agency Comments

Pennsylvania Natural Diversity Inventory (PNDI) records indicate that while threatened and endangered and/or special concern species and resources are in the project vicinity and that recommended Conservation Measures should be implemented in their entirety to avoid and minimize impacts to these species, no further coordination is required with the jurisdictional agencies. If a DEP permit is required for this project, DEP has the discretion to incorporate one or more Conservation Measures into its permit. This response does not reflect potential agency concerns regarding potential impacts to other ecological resources, such as wetlands.

Astrobotic



-  Buffered Project Boundary
-  Project Boundary



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

Astrobotic



-  Buffered Project Boundary
-  Project Boundary



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

RESPONSE TO QUESTION(S) ASKED

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

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

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

Your answer is: No

3. AGENCY COMMENTS

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

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

PA Game Commission

RESPONSE:

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

PA Department of Conservation and Natural Resources

RESPONSE:

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

PA Fish and Boat Commission

RESPONSE:

Conservation Measure: The natural flow regime and water quality in this watershed are important to maintaining habitats occupied by rare fish and mussels. PFBC recommends that you take measures to maintain a natural flow regime, high water quality, and quantity. Maintenance or restoration of the riparian corridor will aid in connecting habitats and improving water quality and quantity for fish and mussels. PFBC recommends retaining (or restoring, if not already present) a riparian buffer (100 to 300 feet, if possible) on each side of the waterway (river, stream, creek). This buffer should be vegetated with native plant species. When adequately vegetated, this upland buffer will act to stabilize the streambanks (preventing or minimizing erosion), and filter pollutants (e.g., sediment, fertilizers, pesticides, road salt, oil). Where streambanks have become badly eroded (e.g., due to previous removal of native riparian vegetation), streambank fencing and/or bioengineering restoration techniques are recommended (geotextile, root wads, vegetative stabilization), rather than riprapping the streambanks; removing gravel bars; or attempting to dredge, ditch, channelize, or widen the stream. Use stringent erosion and sedimentation controls before, during, and after project implementation to ensure that sediment and contaminants do not enter any waterway(s) (rivers, creeks, streams, tributaries) or waterbodies (lakes, ponds).

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

Scientific Name	Common Name	Current Status
Leptodea fragilis	Fragile Papershell	Special Concern Species*
Quadrula quadrula	Mapleleaf	Special Concern Species*

U.S. Fish and Wildlife Service

RESPONSE:

Conservation Measure: Voluntary implementation of the following recommendations will contribute to the conservation and recovery of endangered and threatened species. -- In order to maintain or improve water quality for endangered aquatic species, retain (or restore, if not already present) a 100- to 300-foot wide buffer on each side of the waterway (river, stream, creek) or waterbody (lake). Avoid construction, earth disturbance, and chemical application in this buffer. The buffer should be vegetated with native plant species. When adequately vegetated, this upland buffer will act to stabilize the streambanks (preventing or minimizing erosion), and filter pollutants (e.g., sediment, fertilizers, pesticides, road salt, oil). Where streambanks have become badly eroded (e.g., due to removal of native riparian vegetation), streambank fencing and/or bioengineering restoration techniques are recommended (geotextile, root wads, vegetative stabilization), rather than riprapping the streambanks; removing gravel bars; or attempting to dredge, ditch, channelize, or widen the stream.

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

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

4. DEP INFORMATION

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

5. ADDITIONAL INFORMATION

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

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

6. AGENCY CONTACT INFORMATION

PA Department of Conservation and Natural Resources

Bureau of Forestry, Ecological Services Section
400 Market Street, PO Box 8552
Harrisburg, PA 17105-8552
Email: RA-HeritageReview@pa.gov

PA Fish and Boat Commission

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

U.S. Fish and Wildlife Service

Pennsylvania Field Office
Endangered Species Section
110 Radnor Rd; Suite 101
State College, PA 16801
Email: IR1_ESPenn@fws.gov
NO Faxes Please

PA Game Commission

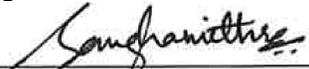
Bureau of Wildlife Management
Division of Environmental Review
2001 Elmerton Avenue, Harrisburg, PA 17110-9797
Email: RA-PGC_PNDI@pa.gov
NO Faxes Please

7. PROJECT CONTACT INFORMATION

Name: Sanghamithra Devaram
Company/Business Name: The Gateway Engineers, Inc.
Address: 100 McMorris Rd
City, State, Zip: Pittsburgh, PA 15205
Phone: (412) 505-8821 Fax: ()
Email: sdevaram@gatewayengineers.com

8. CERTIFICATION

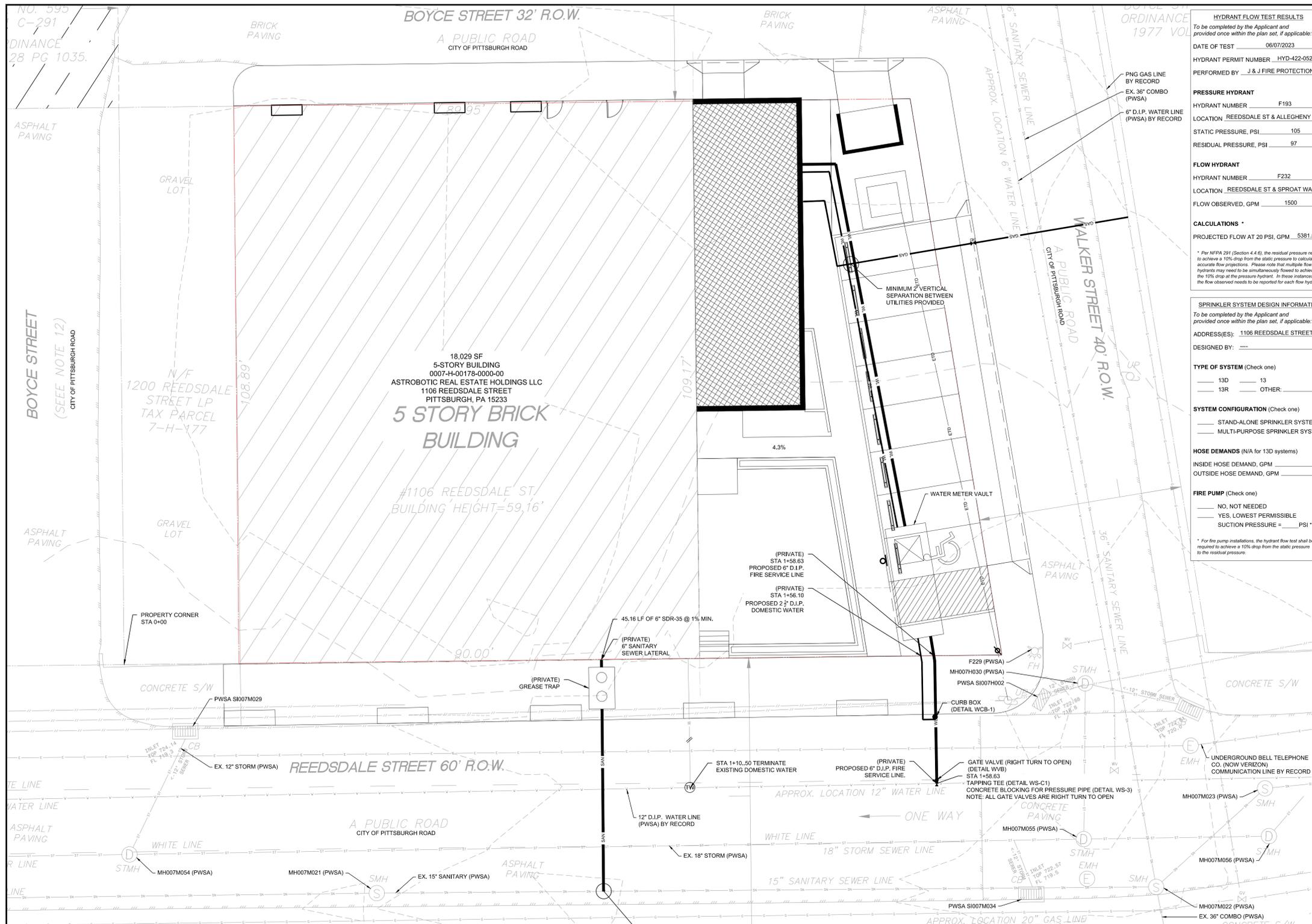
I certify that ALL of the project information contained in this receipt (including project location, project size/configuration, project type, answers to questions) is true, accurate and complete. In addition, if the project type, location, size or configuration changes, or if the answers to any questions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


applicant/project proponent signature

10/05/2023
date

EXHIBIT G.

Plot Plan



HYDRANT FLOW TEST RESULTS
 To be completed by the Applicant and provided once within the plan set, if applicable:
 DATE OF TEST: 08/07/2023
 HYDRANT PERMIT NUMBER: HYD-422-0523
 PERFORMED BY: J & J FIRE PROTECTION

PRESSURE HYDRANT
 HYDRANT NUMBER: F193
 LOCATION: REEDSDALE ST & ALLEGHENY AVE
 STATIC PRESSURE, PSI: 105
 RESIDUAL PRESSURE, PSI: 97

FLOW HYDRANT
 HYDRANT NUMBER: F232
 LOCATION: REEDSDALE ST & SPROAT WAY
 FLOW OBSERVED, GPM: 1500

CALCULATIONS *
 PROJECTED FLOW AT 20 PSI, GPM: 5381.0

* Per NFPA 291 (Section 4.4.6), the residual pressure needs to achieve a 10% drop from the static pressure to calculate accurate flow projections. Please note that multiple flow hydrants may need to be simultaneously flowed to achieve the 10% drop at the pressure hydrant. In these instances, the flow observed needs to be reported for each flow hydrant.

SPRINKLER SYSTEM DESIGN INFORMATION
 To be completed by the Applicant and provided once within the plan set, if applicable:
 ADDRESS(ES): 1106 REEDSDALE STREET
 DESIGNED BY: _____

TYPE OF SYSTEM (Check one)
 13D 13
 13R OTHER: _____

SYSTEM CONFIGURATION (Check one)
 STAND-ALONE SPRINKLER SYSTEM
 MULTI-PURPOSE SPRINKLER SYSTEM

HOSE DEMANDS (N/A for 13D systems)
 INSIDE HOSE DEMAND, GPM: _____
 OUTSIDE HOSE DEMAND, GPM: _____

FIRE PUMP (Check one)
 NO, NOT NEEDED
 YES, LOWEST PERMISSIBLE
 SUCTION PRESSURE = _____ PSI *

* For the pump installations, the hydrant flow test shall be required to achieve a 10% drop from the static pressure to the residual pressure.



THE PITTSBURGH WATER & SEWER AUTHORITY APPROVAL BLOCK
 To be completed by the Applicant and provided on each sheet within the plan set:

(Check all that apply)

NEW WATER CONNECTION(S)
 NEW SEWER CONNECTION(S)
 REUSE EXISTING WATER CONNECTION(S)
 REUSE EXISTING SEWER CONNECTION(S)
 TERMINATE EXISTING WATER CONNECTION(S)
 TERMINATE EXISTING SEWER CONNECTION(S)
 PRIVATE CONSTRUCTION OF PUBLIC FACILITIES

To be completed by the PWSA:
 (Required for ALL approvals)

REVIEWER, DEPT. OF ENGINEERING AND CONSTRUCTION _____

SENIOR PROJECT MANAGER, DEPT. OF ENGINEERING AND CONSTRUCTION _____

DIRECTOR OF OPERATIONS _____

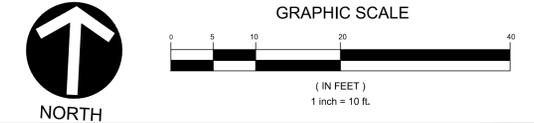
(Required for "Private Construction of Public Facilities" ONLY)

DIRECTOR, DEPT. OF ENGINEERING AND CONSTRUCTION _____

PWSA PROJECT NUMBER _____

TAP C RECORD NUMBER _____

The PWSA approval was based on information provided by others under the assumption that this information was accurate and complete. Please refer to the PWSA Developer's Manual for detailed information on the regulations and procedures for obtaining water and sewer service.



1106 REEDSDALE STREET
ASTROBOTICS TECHNOLOGY, INC.
 PLAN PREPARER: THE GATEWAY ENGINEERS, INC. (CONTACT: JOSEPH GALBRAITH)
 412-409-2289 JGALBRAITH@GATEWAYENGINEERS.COM

WATER & SEWER TAP CONNECTION AND TAP TERMINATION PLANS

1106 REEDSDALE STREET
 21ST WARD, CITY OF PITTSBURGH, PA 15233

SCALE: 1" = 10'
 DATE: SEPTEMBER 2023

SHEET NO. 1 OF 3
 ACCESSION NO. _____
 CASE NO. _____

PEAK DAILY SANITARY FLOW DEMANDS
 To be completed by the Applicant and provided once within the plan set, if applicable:

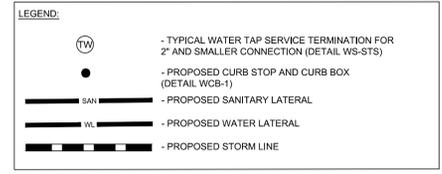
PROJECT FLOW, GPD	4,100 GPD
EXISTING FLOW, GPD	2,450 GPD
NET FLOW, GPD	1,650 GPD

PEAK OPERATING WATER DEMANDS
 To be completed by the Applicant and provided once within the plan set, if applicable:

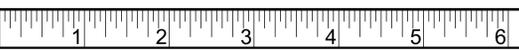
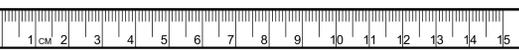
METER INFORMATION				DOMESTIC SYSTEM		FIRE SYSTEM	
QUANTITY	SIZE	TYPE	USE	FLOW, GPM	PRESSURE, PSI	FLOW, GPM	PRESSURE, PSI
1	2"	---	FIRE	N/A	N/A	---	---
1	2"	---	DOMESTIC	---	---	N/A	N/A

METER SIZE: 1/2", 3/4", 1", 2", 3", 4", 6", 8", 10", 12", 16"
 METER TYPE: POSITIVE DISPLACEMENT, COMPOUND, ELECTROMAGNETIC, ULTRASONIC, TURBINE
 METER USE: DOMESTIC, FIRE, COMBINATION

GENERAL NOTE:
 EXISTING SEWER WYES TO BE CONFIRMED DURING CONSTRUCTION ACTIVITIES AS THE PROVIDED CCTV FOOTAGE DID NOT ACCOUNT FOR THIS INFORMATION.



ENGINEER _____



P:\Projects\6000\6072_1106_Reedsdale_Sheet\DWG\02-Sheet\PWSA_Tap Plan.dwg
 Plot Date: 9/21/2023 1:46 PM
 Save Date: 9/21/2023 1:45 PM

EXHIBIT H.

Sewage Flow Calculations

Anticipated Sewage Flow Calculations

Astrobotics
1106 Reedsdale Street, City of Pittsburgh

Peak Existing Flow

1106 Reedsdale Street, Pittsburgh, PA 15233

Parcel ID: 0007-H-00178-0000-00

Water Use and Sanitary Flows from Table 1 of Section 3 within the PWSA Developer's Manual¹:
Office = 10 GPD/employee

Total Area = 24,451 sf *

*Half of the building area accounted for to calculate the existing sewage flows for more accurate representation of existing conditions.

Maximum Floor Area Allowances per occupant²: Business area = 100 sf per occupant
Total Number of Employees = 24,451 sf / 100 sf per occupant = 245 employees

Total Peak Existing Flow

No. of employees (245) x (10 GPD/employee)] = 2,450 GPD

Peak Proposed Flow

Parcel ID: 0007-H-00178-0000-00

First Floor Area:

Office Area = 6,110 sf
Restaurant Area = 2,250 sf
Total Area = 8,360 sf

Second Floor Area:

Lab/Office Area = 7,715 sf

Third Floor to Fifth Floor Area:

Consolidated Office Area = 24,797 sf

Maximum Floor Area Allowances per occupant²: Business area = 100 sf per occupant
Total Office Area = 38,622 sf
Total Number of Employees = 38,622 sf / 100 sf per occupant = 387 employees

Maximum Floor Area Allowances per occupant²: Business area = 100 sf per occupant
Restaurant Area = 2,250 sf
Total Number of Customers = 2,250 sf / 100 sf per occupant = 23 customers

Water Use and Sanitary Flows from Table 1 of Section 3 within the PWSA Developer's Manual¹:
Office = 10 GPD/employee
Restaurant = 10 GPD/employee

Peak Flow Calculation:
[387 x (10 GPD/unit)] + [23 x (10 GPD/unit)] = 3,870 + 230 = 4,100 GPD

Net Flow

Net Sewage Flow = Peak Proposed Flow – Peak Existing Flow

Net Sewage Flow = 4,100 GPD – 2,450 GPD

Net Sewage Flow = 1,650 GPD

Net Sewage Flow = Net Water Use ∴

Net Water Usage = 1,650 GPD

Sources:

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

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

EXHIBIT I.

Component 4A



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.



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
Astrobotic

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

1. Date plan received by municipal planning agency 10/5/2023
2. Date review completed by agency 10/30/2023

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

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

SECTION C. AGENCY REVIEW (continued)

- | Yes | No | |
|-------------------------------------|-------------------------------------|--|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 13. Is this proposal consistent with the ordinance?
If no, describe the inconsistencies _____ |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 14. Is this plan consistent with the municipal Official Sewage Facilities Plan?
If no, describe the inconsistencies _____ |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 15. Are there any wastewater disposal needs in the area adjacent to this proposal that should be considered by the municipality?
If yes, describe _____ |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 16. Has a waiver of the sewage facilities planning requirements been requested for the residual tract of this subdivision? |
| <input type="checkbox"/> | <input type="checkbox"/> | If yes, is the proposed waiver consistent with applicable ordinances?
If no, describe the inconsistencies
_____ |

17. Name, title and signature of planning agency staff member completing this section:
 Name: Kyla Prendergast
 Title: Senior Environmental Planner
 Signature: *Kyla Prendergast*
 Date: 10/30/2023
 Name of Municipal Planning Agency: Department of City Planning
 Address 100 Ross Street, Suite 202, Pittsburgh, PA 15219
 Telephone Number: 412-255-2676

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

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

The planning agency must complete this component within 60 days.

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

EXHIBIT J.

Component 4C



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.

**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.

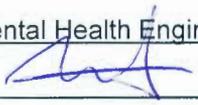
SECTION A. PROJECT NAME (See Section A of instructions)

Project Name
 ASTROBOTIC

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

1. Date plan received by county or joint county health department 10/05/2023
 Agency name Allegheny County Health Department (ACHD)
2. Date review completed by agency 10/05/2023

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

- | | | |
|-------------------------------------|-------------------------------------|---|
| Yes | No | |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1. Is the proposed plan consistent with the municipality's Official Sewage Facilities Plan?
If no, what are the inconsistencies? _____ |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 2. Are there any wastewater disposal needs in the area adjacent to this proposal that should be considered by the municipality?
If yes, describe _____ |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 3. Is there any known groundwater degradation in the area of this proposal?
If yes, describe _____ |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. The county or joint county health department recommendation concerning this proposed plan is as follows: <u>ACHD recommends approval. Please see attached letter.</u> |
| | | 5. Name, title and signature of person completing this section:
Name: <u>Issa Tijani</u>
Title: <u>Environmental Health Engineer</u>
Signature: <u></u>
Date: <u>10/11/2023</u>
Name of County Health Department: <u>Allegheny County Health Department</u>
Address: <u>3901 Penn Avenue, Building #5, Pittsburgh, PA 15224</u>
Telephone Number: <u>412-578-8046</u> |

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.

COUNTY OF



ALLEGHENY

RICH FITZGERALD
COUNTY EXECUTIVE

October 11, 2023

Joseph Galbraith, PE
Gateway Engineers, Inc.
100 McMorris Road
Pittsburgh, PA 15205

**RE: SEWAGE FACILITIES PLANNING MODULE; ALLEGHENY COUNTY
Astrobotic - City of Pittsburgh**

Dear Mr. Galbraith:

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 October 5, 2023. The project proposes the following:

Project Description:	The proposed project would involve construction of 5-story apartment building with office area, laboratory space and restaurant. As a result, there will increase in water usage and sanitary flow. The project will require termination of existing, active taps water as well the construction of new domestic water service lateral. A new sanitary will also be provided. The water service lateral connections required for the proposed building will be made using the existing public facilities located in Reedsdale Street.
Sewage Flow:	1650 GPD
Conveyance:	Sewage from the proposed building will flow through 15" PVC gravity pipes PWSA collection system and conveyed via Ohio Interceptor (O-43) then to ALCOSAN Woods Run Treatment Plant.
Sewer's Owner:	PWSA (collection), ALCOSAN (interceptor)
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.



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

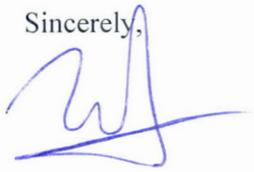


Mr. Joseph Galbraith P.E.
October 11, 2023
Page 2

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, please contact Drew Grese, Plumbing Program Manager at 412-578-8055.

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

Sincerely,



Issa Tijani
Environmental Health Engineer II
Water Pollution Control & Solid Waste Management

Enclosure

cc: Regis Ryan, PA Department of Environmental Protection w/attachment
Drew Grese, ACHD w/attachment