

ADDRESS: 4045-61 MAIN ST

Proposal: Construct multi-unit residential building

Review Requested: Final Approval

Owner: GJ Littlewood & Sons Inc.

Applicant: Adam Laver, Esq., Blank Rome

History: 1869; Littlewood & Co., Dyers and Bleachers

Individual Designation: None

District Designation: Main Street Manayunk Historic District, Significant, 12/14/1983

Staff Contact: Jon Farnham, jon.farnham@phila.gov

OVERVIEW: This application proposes constructing a multi-unit residential building at 4045-61 Main Street at the corner of Main Street and Shurs Lane in the Main Street Manayunk Historic District. The site is in the floodplain and the proposed building is designed to be sufficiently resilient to survive occasional flooding. The proposed building would be seven stories tall and include 162 residential units, 160 parking spaces, residential amenities, and a loading dock. Occupied space and mechanical equipment would be located on and above the second floor, above the Design Flood Elevation. Walls from the mill complex along Main Street would be retained and incorporated into the new building. Windows and doors in the old walls would be restored. The new building would be clad in brick and corrugated metal.

A historic mill complex stands on the site at 4045-61 Main Street. At its 10 May 2024 meeting the Historical Commission determined that the mill complex at the site cannot be feasibly adaptively reused and approved its demolition. At the same time, the Historical Commission reviewed and denied an earlier version of the proposed multi-unit residential building, finding that the proposed building would be too large in size, scale, and massing for the Main Street Manayunk Historic District. The current application proposes a revised design for the building that is intended to address the Historical Commission's concerns expressed in May. The cover letter with the application enumerates the revisions, which include additional setbacks and other features around the historic facades to give them more three-dimensionality, additional setbacks at the upper floors to reduce the height and size, and additional articulation of the facades to reduce the massing. The application materials include a series of comparisons of the original and revised design that show the setbacks, reductions in height, and other changes.

SCOPE OF WORK:

- Construct a seven-story building, incorporating the retained facades.

STANDARDS FOR REVIEW:

- *Standard 9: New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.*
 - The construction of the proposed new building will not destroy historic materials, features, and spatial relationships that characterize the property. It will be differentiated from the old. The size, scale, and massing of the proposed building have been adjusted from the previous iteration so that it will be compatible in materials, features, size, scale and proportion, and massing with the historic district.

STAFF RECOMMENDATION: The staff recommends approval, with the staff to review details, pursuant to Standard 9.



Construction Permit Application

Use this application to obtain permits for a residential or commercial construction proposal and/or excavation projects.
Mechanical / Fuel Gas, Electrical, Plumbing, and Fire Suppression trade details are found on page 2.

Property Information

Identify the location of work for the permit(s).

1

Parcel Address: 4045 Main Street, Philadelphia, PA, 19127

Specific Location: Corner of Main Street and Shurs La, Manayunk, Philadelphia, PA

Check box if this application is part of a project and provide the project number: **PR-20** - _____

Applicant Information

Identify how you are associated with the property.

2

I am the: Property Owner Tenant Equitable Owner Licensed Professional or Tradesperson

Name: Eric Leighton Company: cbp Architects

Address: 234 Market Street, 4th floor

Email: eleighton@cbparchitects.com Phone No.: 215-928-0202

Property owner Information

Identify the deeded property owner.

3

If there was a recent change of ownership, documentation such as a deed or settlement sheet is required.

The property owner is a/an: Individual Company*

Owner (1)

Name: Robert Littlewood Check box if new owner is being listed

Address: 4045 Main Street, Philadelphia, PA 19147

Owner (2)

Name: Dave Littlewood

Address: 4045 Main Street, Philadelphia, PA 19147

Design Professional in Responsible Charge

Identify the PA-licensed design professional who is legally responsible.

4

Name: Eric Leighton Firm: CBP Architects

PA License No.: RA016375 Phila. Commercial Activity License No.: 524605

Email: eleighton@cbparchitects.com Phone No.: 215-928-0202

Project Scope

Use this section to provide project details; all fields are mandatory.

5

(a) Choose the proposed occupancy of the entire building. If not one-or-two-family, provide a description of group(s) per code.

(a) Occupancy Single-Family Two-Family Other, please describe: Multi-Family

(b) Identify if the project will be new construction, an addition, interior/exterior alterations, excavation or shell.

(b) Scope of Work New Construction Excavation Addition / Alteration Shell (No Fit Out) - Option for Commercial Permits Only

(c) List the site area that will be disturbed by construction, if any. Enter 'zero' if no disturbance.

(c) Earth Disturbance Area of Earth Disturbance: 57,800 (Sq. Ft.)

(d) Note the new floor area created, including basements, cellars, and occupiable roofs. Where existing areas will be altered, list those areas separately.

(d) Building Floor Areas New Floor Area: 220,004 (Sq. Ft.) Existing Altered Area: _____ (Sq. Ft.)

(e) State the number of new or affected stories.

(e) Number of Stories 7

(f) Provide a detailed description of the work proposed (use separate sheet if needed).

(f) Description of Work 7-story (2-story podium w/ 5-floors above), multi-family apartment building (R-2 use) with accessory parking, bicycle parking and residential entry at first floor; additional parking, residential lobby, leasing office, amenities and dwelling units at the second floor; dwelling units at floors 3-5; dwelling units and amenity space (including outdoor) at the 6th floor and dwelling units at the seventh floor.

(g) Select all conditions that apply to this project (if any).

(g) Project Conditions
 New High Rise Green Roof Included Initial Fit-out of Newly Constructed Space
 Modular Construction Façade Work Project Impacts Streets/Right-of-Way*
 Project Impacts Adjacent Property**

* Provide the associated **Streets Review** number for this project, if applicable: **SR-20**

** This project includes work described below: Yes No

- Excavation work more than 5 feet below adjacent grade and within 10 feet of an adjacent building or structure.
- Excavation or construction work where historic structure is within 90 feet on the same or adjacent parcel.
- Structural alterations of a historic structure (excluding one-or-two family dwelling).
- Modifications to a party wall, including joist replacement, and additions.
- Severing of structural roof or wall covering spanning properties.

* Provide the associated Streets Review number if "Project Impacts Streets / Right-of-Way" is selected.

** If 'Yes' is selected, an Owners' Acknowledgement of Receipt form must be provided for each affected property.



Department of Licenses and Inspections

CITY OF PHILADELPHIA

Job Number: (for office use only)

Project Details, Other Permits & Contractor Information

Use this section to provide project details, pre-requisite approvals and applicable contractor information.

(a) Choose all disciplines of work for which permits are being requested.

- If 'Building' is not requested, provide the number of the associated permit that was previously issued (where applicable).
- If a Zoning Permit was issued for this work, provide the related Zoning Permit number.

(b) Identify the general contractor and estimated cost of building construction.

(c) Identify the licensed excavation contractor and estimated cost of excavation work.

(d) Identify the mechanical contractor, estimated cost of mechanical work, equipment type, and quantity as:

- Number of registers/diffusers (separate new / relocated)
- Number of appliances
- Number of Type I / Type II kitchen hoods

Where fuel gas work is included, note the estimated cost of fuel gas work.

(e) Identify the licensed electrical contractor, estimated cost of electrical work, and a registered third-party electrical inspection agency.

(f) Identify the registered master plumber, estimated cost of plumbing work, number of fixtures, and check location of work as:

- Interior
- Exterior Drainage and/or Water Distribution

(g) Identify the licensed fire suppression contractor, estimated cost of fire suppression work, and number of devices:

- Sprinkler Heads (separate new / relocated quantities)
- Standpipes
- Fire Pumps
- Stand-alone Backflow Prevention Devices
- Kitchen Extinguishing Systems
- Hydrants

***ROUGH-IN NOTICE:** If you are seeking a rough-in permit, an application for plan review must be submitted already.

(h) Provide the total improvement cost for residential (including multi-family) alterations and additions.

Check the box if your project is excluded from real estate tax exemption and exempt from Development Impact Tax.

(a) Check all that apply:

- Building Excavation Mechanical & Fuel Gas Electrical Plumbing Fire Suppression

Provide the associated Construction Permit number, if applicable: **RP or CP – 20** _____ - _____

Provide the associated Zoning Permit number for this construction, if applicable: **ZP – 20** _____ - _____

Note: Trades listed below (d, e, f, and g) are mandatory for all residential new construction jobs.

(b) General Building Construction Contractor Information

Name: TBD Cost of Building Work: \$ TBD

License Number: _____ Phone: _____

(c) Excavation Work & Contractor Information

Name: _____ Cost of Excavation Work: \$ _____

License Number: _____ Phone: _____

(d) Mechanical / Fuel Gas Work & Contractor Information

Name: _____ Cost of Mechanical Work: \$ _____

License Number: _____ Cost of Fuel Gas Work: \$ _____

Equipment Types: Registers / Diffusers Appliances Hoods Phone: _____

Equipment Details & Quantities: _____

(e) Electrical Work & Contractor Information New Installation Alteration *Rough-In

Name: _____ Cost of Electrical Work: \$ _____

License Number: _____ Phone: _____

Third Party Inspection Agency Name: _____

(f) Plumbing Work & Contractor Information New Installation Alteration *Rough-In

Name: _____ Cost of Plumbing Work: \$ _____

License Number: _____ Phone: _____

Number of Fixtures: _____

Check one: Interior Work Exterior Building Drainage Exterior Water Distribution:
line size: _____ (in.)

(g) Fire Suppression Work & Contractor Information New Installation Alteration *Rough-In

Name: _____ Cost of Fire Supp. Work: \$ _____

License Number: _____ Phone: _____

Sprinkler Heads: _____ Standpipes: _____ Fire Pumps: _____

Commercial Kitchen Systems: _____ Backflow Devices: _____ Hydrants: _____

(h) Total Improvement Cost: \$ _____ (The total improvement cost must also include the cost of all electrical, plumbing, mechanical, fire suppression systems work, and interior finishes)

Check box if your project is excluded from real estate tax exemption and exempt from Development Impact Tax (Review OPA's website for tax abatement information at: <https://www.phila.gov/services/property-lots-housing/property-taxes/get-real-estate-tax-relief/get-a-property-tax-abatement/>)

6

Declaration & Signature

All provisions of the Philadelphia Code and other City ordinances will be complied with, whether specified herein or not. Plans approved by the Department form a part of this application. I hereby certify that the statements contained herein are true and correct to the best of my knowledge and belief. I further certify that I am authorized by the owner to make the foregoing application, and that, before I accept my permit for which this application is made, the owner shall be made aware of all conditions of the permit. I understand that if I knowingly make any false statements herein, I am subject to such penalties as may be prescribed by law or ordinance, inclusive of the penalties contained in 18 Pa. C.S. § 4904.

Applicant Signature:  Date: 06 / 10 / 2024



Environmental, Planning, and Engineering Consultants

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www.akrf.com

To: Andrew Zakroff, Urban Conversions
From: AKRF, Inc.
Date: June 12, 2024
Re: 4045-61 Main Street, Philadelphia, PA
Flood Resiliency Design Review

EXECUTIVE SUMMARY

AKRF was contracted to provide a flood resiliency review of the development proposed at 4045-61 Main Street (the "Site"). The Site is located in a Special Flood Hazard Area (SFHA) with a base flood elevation (BFE) of 41.40 feet NGVD29 (National Geodetic Vertical Datum of 1929) and a design flood elevation (DFE) of 42.90 feet NGVD29 (BFE + 18-inches, per City of Philadelphia Code). AKRF conducted an analysis of the proposed architectural plans based on Philadelphia Zoning Code, American Society of Civil Engineers (ASCE) Flood Resistant Design and Construction standards, and Federal Emergency Management Agency (FEMA) technical guidance. Finished floor elevations, wet floodproofing measures, mechanical equipment locations, and building access were reviewed. The following flood resiliency measures have been incorporated:

- Finished floor elevations for residential units are 2.60 feet higher than the DFE requirement, further reducing risk of flooding in these areas.
- Finished floor elevations exceed stringent regional regulations, including the 2022 New York City Building Code, Flood-Resistant Construction and 2023 New Jersey Inland Flooding Rules.
- Openings for wet floodproofing will meet and/or exceed ASCE 24-14 standards for engineered openings and applicable Philadelphia Zoning Code requirements.
- Flood damage-resistant materials will be used in wet floodproofed spaces.
- Mechanical equipment will be located at or above the DFE wherever feasible.
- Elevators will remain at rest on the second floor, above the DFE.
- Building egress provides multiple routes, including designated emergency egress at the highest elevation feasible. Emergency exits provide direct access to higher ground.
- A green roof and stormwater planter will mitigate stormwater runoff.

- A flood evacuation plan will be developed for building operations.

A review of historic floods at this location was also performed. Based on this assessment, the proposed emergency egress routes and residential units would not have experienced flooding in the past 30 years. The proposed flood resiliency measures will mitigate risks to future tenants. As the design progresses, applicable FEMA technical guidance will be consulted.

INTRODUCTION

AKRF was contracted to provide a review of the proposed flood resiliency measures incorporated into the proposed building design for 4045-61 Main Street in Philadelphia. The development includes the construction of a 7-story residential building with two levels of parking, a coworking space, a fitness center, rooftop amenities, and supporting maintenance facilities. Portions of the existing structure's historic façade will be seamlessly incorporated into the new development.

The following review was conducted using existing conditions shown in Ruggiero Plante Land Design's "ATLA/NSPS Land Title Survey for 4045-61 Main Street and 4030-38 Main Street", dated November 17, 2023, and proposed conditions shown in CBP Architects' 4045 Main Street Zoning Plans, dated March 11, 2024. All elevations herein are on the NGVD29 vertical datum. AKRF acknowledges that materials, mechanical, electrical and plumbing plans, and other details are not represented in the March 2024 architectural plans. Review of related elements is therefore based on provided plans and discussions with CBP Architects and the project developer, Urban Conversions.

Regulations and technical documents referenced for this review include various FEMA technical guidance manuals, Philadelphia Zoning Code, and ASCE 24-14: Flood Resistant Design and Construction.

REGULATORY FLOOD ELEVATIONS

A. Design Flood Elevations:

Flood regulations are based on the 100-year storm event (1-percent annual probability) elevation at a location, as identified by FEMA. The 100-year storm event elevation, or base flood elevation, is determined by the Flood Insurance Study (FIS) for a waterway. In the case of the 4045-61 Main Street property, the FIS for the Schuylkill River was used to determine the base flood elevation (FEMA 2015). The northwest building corner, or upstream-most building corner, is approximately 445 feet downstream from Cross Section T along the Schuylkill River (shown in Figure 1 below). Given this distance, the elevation for the base flood is 41.40 ft NGVD29. The design flood elevation (DFE) requirement for the City of Philadelphia is 18 inches above the base flood elevation, or 42.90 ft NGVD29. This elevation is more conservative than ASCE 24-14 requirements for Class 2 Structures, which requires the DFE to be one foot above the base flood elevation.

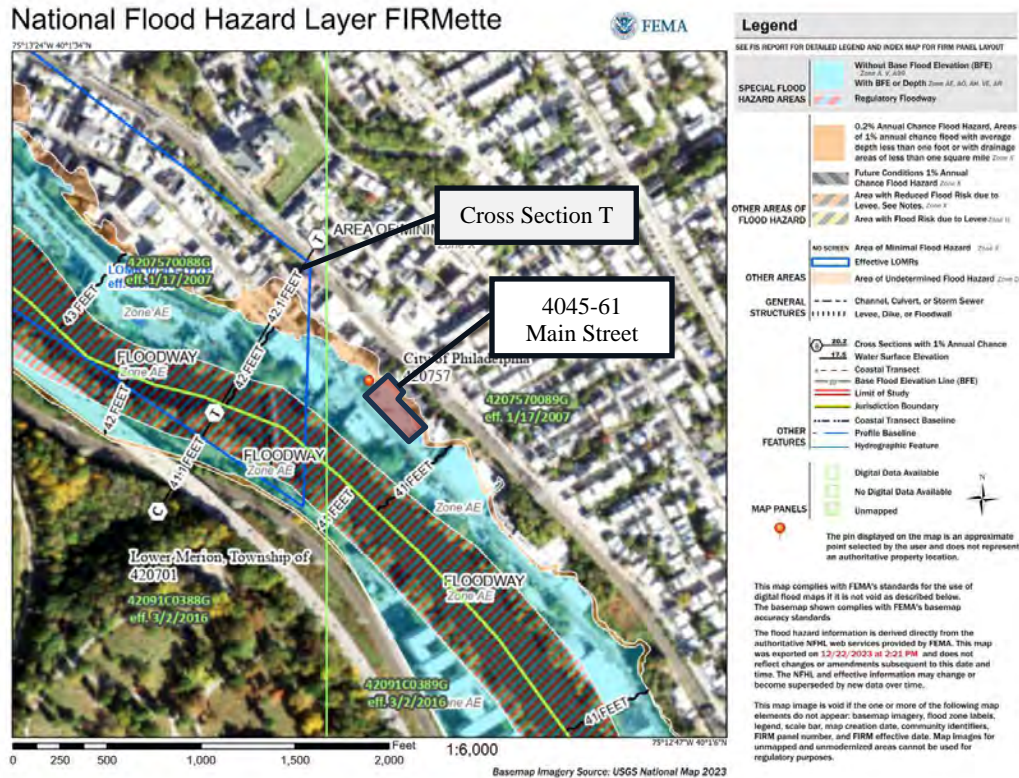


Figure 1: FEMA FIRMette Map of project Site.

B. Philadelphia Development Regulations within a Special Flood Hazard Area

The proposed project is required to meet flood development regulations outlined in the Philadelphia Zoning Code unless a variance is received. The Code requires that the finished floor of any residential structure be set at or above the DFE. Fully enclosed spaces below the DFE must be *wet floodproofed* (constructed with FLOODWAY damage-resistant materials and designed to intentionally allow entry and exit of floodwaters) (ASCE, 2015). The Philadelphia Zoning Code requires a minimum of two openings which must be a maximum of one foot above surrounding grade.

In addition to the above regulations, all mechanical equipment including air ducts, air conditioning systems, utilities, large pipes, storage tanks, and other similar objects or components must be located above the DFE.

As part of the zoning and building permit processes, Philadelphia's Department of Licenses and Inspection (L&I) requires applicants with projects in a Special Flood Hazard Area with estimated costs above \$50,000 to attend a scoping meeting. The scoping meeting reviews applicable regulations and assigns a L&I plans examiner for the project. The scoping meeting for this project was held on January 2, 2024. A copy of the Flood Protection Form – Project Summary (FP-PS) from this meeting is included as Attachment A.

REVIEW OF PROPOSED RESILIENCY MEASURES

Flood resiliency measures incorporated into the building design include:

- A. Elevated finished floor
- B. Wet floodproofing
- C. Elevated mechanical equipment
- D. Building access / Emergency egress

Additional measures including stormwater management and evacuation planning were also considered. The following sections describe these measures and compare the design elements to applicable flood regulations and technical guidance.

A. Elevated Finished Floor

The elevation of the lowest residential units must be at or above the DFE. The design proposes a finished floor elevation of 45.50 for these spaces, 2.60 feet above the DFE.



Figure 2: Elevation view of west building (per CBP Architects 6/06/24 plans) with key flood and building elevations

The lowest residential unit finished floor elevation was also compared to finished floor elevation requirements for New Jersey and New York, which have implemented flood regulations above and beyond ASCE 24-14 and FEMA technical guidance. The proposed finished floor elevation exceeds these more conservative regulations, as shown in Table 1:

Table 1: Finished Floor Elevations and Flood Regulatory Elevations				
<i>Proposed Finished Floor Elevation</i>		<i>First Floor</i>		<i>Second Floor</i>
		30.00		45.50
		Height Above/Below (FT)		
FEMA BFE	41.40	-11.40	4.10	
Philadelphia DFE (BFE + 18")	42.90	-12.90	2.60	
2022 NYC Building Code, Flood-Resistant Construction DFE (BFE + 2')	43.40	-13.40	2.10	
2023 NJ Inland Flooding DFE (BFE + 2' + 1' Freeboard)	44.40	-14.40	1.10	

The proposed design provides additional distance between these regulatory flood elevations, which will reduce the risk of flooding in residential units.

B. Wet Floodproofing

The proposed residential building provides wet floodproofing for all enclosed spaces below the DFE. This includes the entirety of the first floor and within the loading ramp and emergency egress stairwell on the second floor. Wet floodproofing measures include vents and flood damage resistant materials.

Flood Vents (Engineered Openings)

The building design includes flood vents along Main Street and within the building's interior walls to relieve hydrostatic pressure. The proposed flood vents, as manufactured by Smart Vent Products, Inc., are engineered openings and are certified by the International Code Council's Evaluation Service for 200 square feet of enclosed space coverage per vent unit. Per the flood vents' ICC-ES Evaluation Report, the product meets standards outlined in ASCE 24-14 Sections 2.7.2 and 2.7.3 for engineered openings (ICC-ES 2023).

A minimum of two openings are used for each enclosed space and vents will be positioned a maximum of 1-foot above finished grade, meeting Philadelphia Zoning Code requirements for minimum number of openings and vent position. The proposed vent quantity will be sufficient to meet ASCE 24-14 minimum net area standards for engineered openings. As the design advances, FEMA Technical Bulletin 1, Openings in Foundation Walls and Walls of Enclosures, should be consulted.

Flood Damage Resistant Materials

ASCE 24-14 requires that the flood damage-resistant materials be used below the DFE, including ramps, stairwells, and doors. Materials that should be designed for exposure to floodwaters include but are not limited to metal connectors and fasteners, concrete, structural steel, masonry, wood, and both interior and exterior finishes. Specifications for these materials can be found in FEMA Technical Bulletin 2 (2008).

While the Zoning Plans reviewed for this report do not specify materials, AKRF understands that CBP Architects intends to specify compliant materials for the first floor of the building and within

the emergency egress stairwell and vehicular loading ramp on the second floor. AKRF also advises the use of corrosion resistant materials due to the potential for corrosive materials in transported by riverine floodwaters.

Key Takeaways

The proposed vents will meet ASCE 24-14 requirements for engineered flood openings and meet Philadelphia Zoning Code requirements for minimum openings and maximum height above finished grade. Flood damage-resistant materials will meet applicable specifications in ASCE 24-14 and FEMA Technical Bulletin 2.

C. Elevated Mechanical Equipment

Per ASCE 24-14, utilities for Class 2 structures should be located at or above the DFE. Mechanical equipment is located above the DFE wherever feasible:

- Most HVAC condensers will be roof-mounted, and the remainder will be suspended from the parking garage ceiling, above 45.50.
- Electric car charging stations are located in the second-floor parking garage at elevation 48.50.
- Mechanical equipment rooms are located on the second floor.

Should equipment servicing the building entrances be necessary at a lower elevation than the DFE to provide air circulation and other necessary services, equipment will be designed to resist flood loads and prevent water from entering components (FEMA 2019).

Per ASCE 24-14, elevators shall be located above the DFE. If an elevator can descend to elevations below the DFE, the elevator will need to be equipped with controls that do not allow it to move below the DFE. The proposed elevator will remain at rest at the second story of the building or higher, above the DFE. AKRF recommends the elevator be equipped with the controls outlined in ASCE 24-14 to prevent descent to the first floor during a flood. As the design moves forward, elevators should meet standards outlined in FEMA Technical Bulletin 4, Elevator Installation.

Key Takeaways

Mechanical equipment will be elevated in accordance with Philadelphia Zoning Code wherever feasible. Mechanical rooms will be located 2.60 feet higher than the DFE. All equipment will comply with FEMA technical guidance and ASCE 24-14 Standards for areas below the DFE.

D. Building Access and Emergency Egress

Safe egress from the building during a flood event is a key element to resilient design. The building has the advantage of a sloped frontage, with 13.24 feet of grade change from the southern building corner on Main Street to the northeastern corner on Shurs Lane. Along this building face, the design proposes four pedestrian and two vehicular access points. This elevation difference allows for egress from the first and second story of the building.

Dry Conditions Buildings Access

Two pedestrian entrances and one vehicular entrance are located along Main Street and access the first floor of the building. The slope along the building's frontage results in a higher elevation for the west lobby (Elev 33.00) than the main lobby (Elev. 30.25). The vehicular entrance provides entrance and exit from the first-floor garage onto Main Street. In dry conditions, these will be the primary access points. In smaller flood events, the west lobby may remain operational while the main lobby is inundated.

Residents entering the building from the first level can access the building's second floor via elevator and staircase located in the main lobby, the elevator in the west lobby, or the vehicular ramp to the second-floor parking garage.

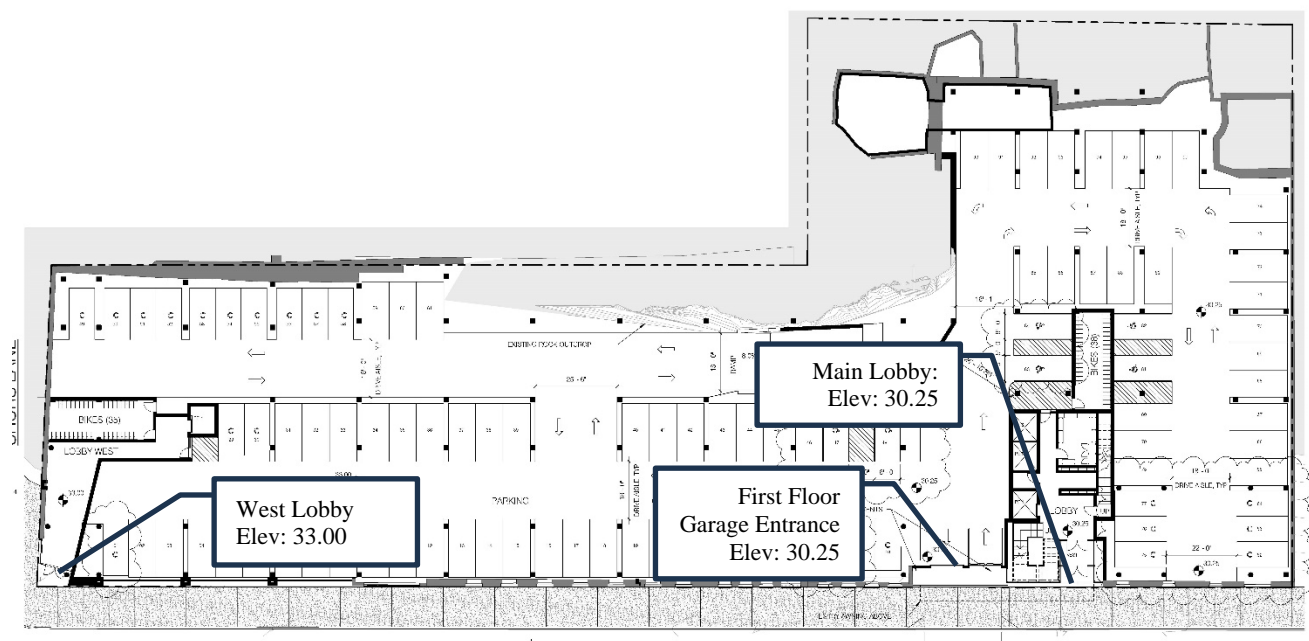


Figure 3: First floor building access points (per CBP Architect 6/06/24 plans)

Emergency Access

Emergency egress routes from the building connect residential spaces to Shurs Lane. Shurs Lane abuts the northern face of the building and has an elevation of 42.80 at the building's northeastern corner. Residents exiting from the third floor or higher may use the stairwell which meets Shurs Lane at 42.72. Second floor residents can exit the building via a second access point along Shurs Lane at 40.95. This route is an Americans with Disabilities Act (ADA) accessible route and may also be used by residents exiting the second-floor elevators.

The second-floor vehicular access is dedicated to loading during dry conditions. However, in the event of a flood, this loading entrance will become the designated vehicular emergency exit, meeting Shurs Lane at 42.30.

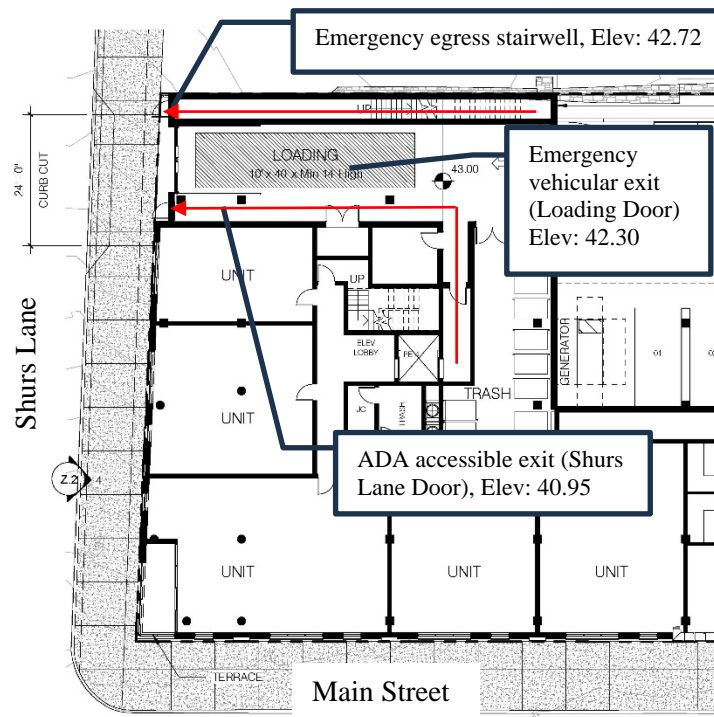


Figure 4: Second floor building access points (per CBP Architect 6/06/24 plans)

The plan for emergency egress provides exit routes at the highest feasible elevations. The emergency stairwell will include a vent and flood damage resistant materials to reduce hydrostatic pressure and reduce damages in an extreme flood event, meeting ASCE 24-14 standards for building access below the DFE. Residents using the emergency exit can travel directly uphill on Shurs Lane to higher ground.

Key Takeaways

The building provides multiple egress routes including an emergency exit at the highest feasible elevation, an alternative vehicular exit, and an ADA accessible emergency exit. Access points below the DFE will be wet floodproofed in accordance with ASCE 24-14.

D. Additional Measures

The proposed development will incorporate additional flood resilient measures including stormwater management and a flood evacuation procedure.

The project will include a green roof and stormwater planter to reduce runoff contributing to flooding. These elements have received Conceptual Approval by the Philadelphia Water Department on December 5, 2023.

Through discussions with the Design Team, AKRF understands that a flood evacuation plan will be developed for site operations. The Team is in the process of identifying alternative parking facilities for vehicle relocation and plans to develop procedures that the operator and residents can consult. AKRF recommends that the plan reflect guidance in FEMA P-2037, Flood Mitigation

Measures for Multi-Family Buildings, including designating responsible personnel, communicating vehicle and resident evacuation times, and pre-event contracts for relocation and recovery assistance. Planning should utilize resources provided by the Philadelphia Office of Emergency Management.

HISTORIC FLOODING

Historic flooding events at 4045-61 Main Street were reviewed to better understand flood risks for the development. Historic river crest and discharge data was collected from the United States Geological Survey (USGS) 01474500 Schuylkill River gage, located approximately five miles downstream of the Site. The gage data was used to identify significant flood events from 1993 to 2023.



Figure 5: Highwater mark within the building for Hurricane Floyd (1999).



Figure 6: Highwater mark within the building for Hurricane Ida (2021).

A relationship between the river crest elevations and flood elevations at the Site was developed utilizing on-site high water marks for Hurricanes Floyd and Ida (Figures 5 and 6) and the previous owner's records of drainage system surcharge observations. High water mark elevations were surveyed relative to survey elevations documented by Ruggiero Plante Land Design in 2023. Figure 7 plots the relationship between river crest elevation and Site flood elevations. A linear fit was applied to the plot.

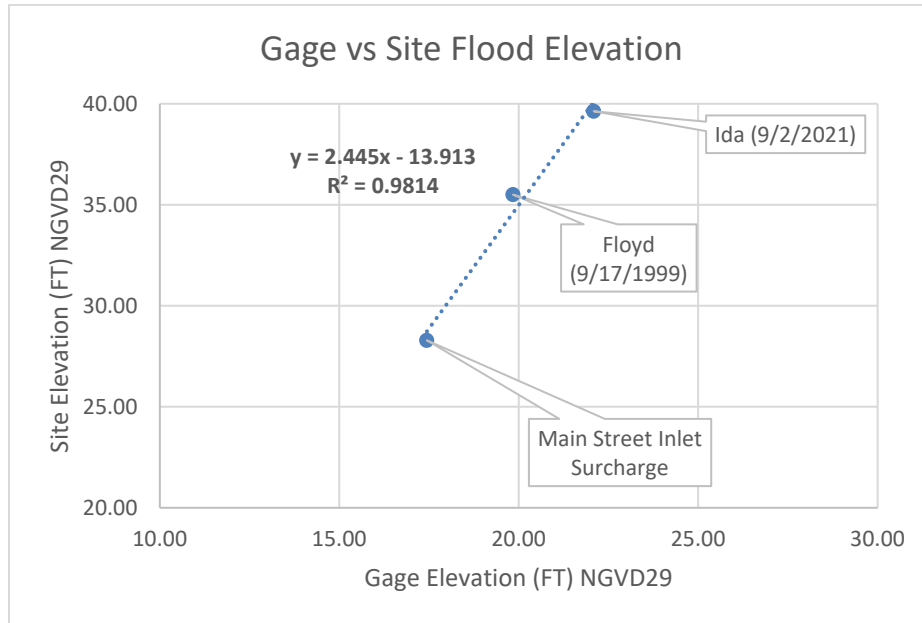


Figure 7: Flood elevation relationship between Site flood elevations and river crests measured at USGS 01474500 Schuylkill River gage.

The linear fit line was then used to estimate Site flooding elevations for the significant flood events identified between 1993 and 2023. Hurricane Ida (2021) was the highest flood event on record in this period, with an on-site flood elevation of 39.63 feet NGVD29. Hurricane Floyd (1999) was the second highest, with an on-site flood elevation of 35.50 feet NGVD29. All recorded historic flood events are below the DFE for the Site. These historic flood elevations were compared to proposed elevations for building access and finished floors (See Figure 8).

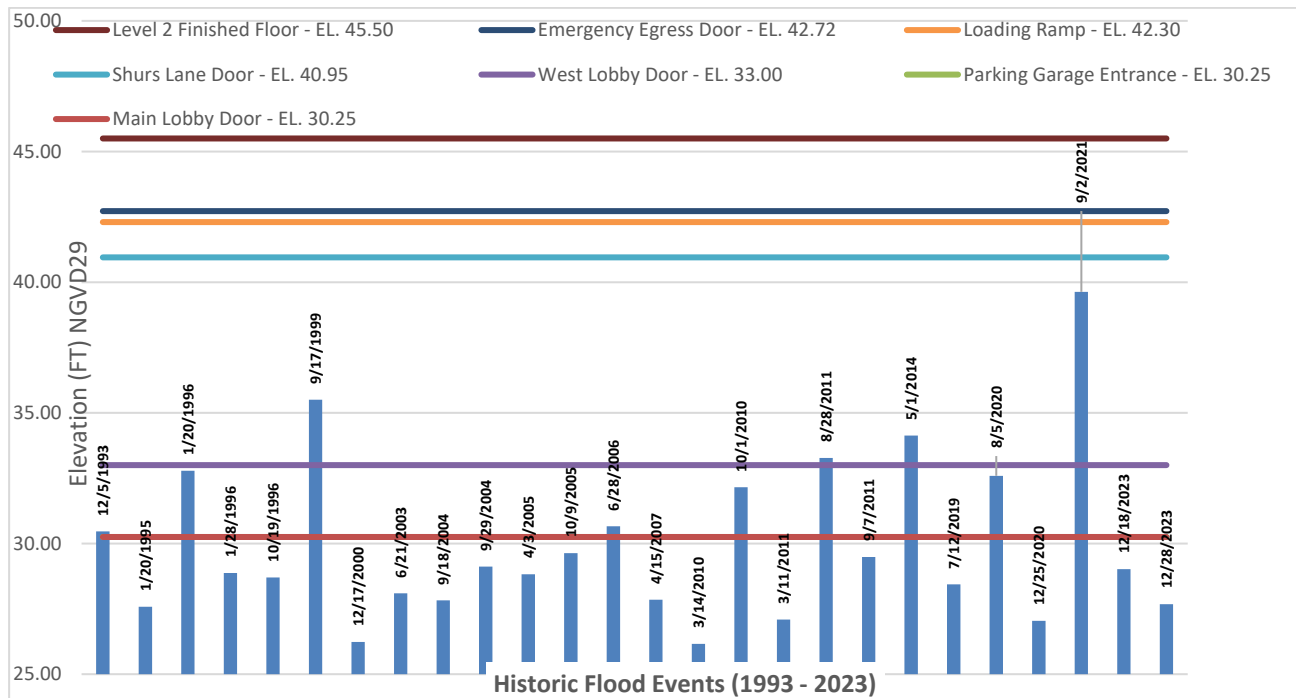


Figure 8: Approximate historic flood event elevations compared to the proposed residential building elevations.

The frequency of flood events exceeding the proposed building elevations was analyzed in Table 2. The number of years in which historic flood events over the period of analysis (1993 – 2023) would have exceeded a building elevation was used to determine the probability of annual exceedance. The Annual Chance of Exceedance indicates the probability that a building location will be flooded in any given year. The maximum flood depth above the elevation was also determined using the largest recorded event (Hurricane Ida).

Table 2: Historic Flood Elevations Compared to Proposed Building Elevations				
Location	Proposed Elevation (FT) NGVD29	Historic Flood Events (1993 - 2023)		
		Number of Flood Events Exceeding EL.	Max Flood Depth Above EL. (ft) 9/2/2021	Annual Chance of Exceedance*
Parking Garage Entrance	30.25	9	9.38	30%
Main Lobby Inner Door	30.25	9	9.38	30%
West Lobby Door	33.00	4	6.63	13%
Shurs Lane Door	40.95	0	0.00	<1%
Loading Ramp	42.30	0	0.00	<1%
Emergency Egress Door	42.72	0	0.00	<1%
Level 2 Finished Floor	45.50	0	0.00	<1%

*Annual chance of exceedance is calculated based on the 1993 – 2023 historic period of analysis only. The FEMA 1% flood event (100-year event) elevation is 41.40 feet NGVD29.

Based on the historic period of analysis, there is a 30% chance that the parking garage and main lobby inner door may flood in a given year. If this occurs, residents may exit through the West Lobby, Shurs Lane door, or emergency egress door. The Shurs Lane door (ADA-accessible emergency egress), loading ramp (emergency vehicular egress), and emergency egress stairwell would not have been impacted by flood events experienced in the past 30 years. The lowest residential units would also have remained dry.

SUMMARY

The proposed residential development, as shown in the CBP Architects Zoning Plans dated March 11, 2024, provide flood resilient design measures to mitigate flood risk in a Special Flood Hazard Area. Key takeaways from this review include:

- Finished floor elevations for residential units are 2.60 feet higher than the DFE, further reducing risk of flooding in these areas.
- Finished floor elevations exceed stringent regional regulations, including the 2022 New York City Building Code, Flood-Resistant Construction and 2023 New Jersey Inland Flooding Rules.
- Openings for wet floodproofing will meet and/or exceed ASCE 24-14 standards for engineered openings and applicable Philadelphia Zoning Code requirements.
- Flood damage-resistant materials will be used in wet floodproofed spaces.
- Mechanical equipment will be located at or above the DFE wherever feasible.
- Elevators will remain at rest on the second floor, above the DFE.
- Building egress provides multiple routes including designated emergency egress at the highest elevation feasible. Emergency exits provide direct access to higher ground.
- A green roof and stormwater planter will mitigate stormwater runoff.
- A flood evacuation plan will be developed for building operations.
- Based upon estimated historic flood elevations at the Site, emergency egress routes and residential units would not have experienced flooding in the past 30 years.

Given the regulatory and historic flood elevations at this property, the probability of exceeding the residential finished floor is low. The proposed develop will minimize risk to residents through elevated residential spaces, emergency egress, and protection of mechanical facilities. AKRF recommends that the detailed design continue to meet Philadelphia Zoning Code, FEMA technical guidance, and ASCE 24-14 standards.

REFERENCES:

1. (ASCE) American Society of Civil Engineers. (2015). "ASCE 24-14 Flood Resistant Design and Construction". Published by American Society of Civil Engineers, ISBN 978-0-7844-1379-1.
2. (FEMA) Federal Emergency Management Agency. (2015). "Flood Insurance Study: City of Philadelphia, Pennsylvania, Philadelphia County." Flood Insurance Study Number 420757V000B.
3. (FEMA) Federal Emergency Management Agency. (2019). "FEMA P-2037 Flood Mitigation Measures for Multi-Family Buildings".
4. Philadelphia Charter Commission. (2024). "The Philadelphia Code." Published by American Legal Publishing.
5. Ruggiero Plante Land Design. (2023). "ATLA/NSPS Land Tittle Survey for 4045-61 Main Street and 4030-38 Main Street."
6. (FEMA) Federal Emergency Management Agency. (2020). "Technical Bulletin 1, Openings in Foundation Walls and Walls of Enclosures."
7. (FEMA) Federal Emergency Management Agency. (2008). "Technical Bulletin 2, Flood Damage-Resistant Materials Requirements."
8. (FEMA) Federal Emergency Management Agency. (2019). "Technical Bulletin 4, Elevator Installation."
9. (FEMA) Federal Emergency Management Agency. (2022). "Technical Bulletin 7, Wet Floodproofing Requirements and Limitations."
10. (ICC-ES) International Code Council's Evaluation Service. (2023). "Smart Vent Automatic Flood Vents: Models #1540-520; #1540-521; #1540-570; #1540-574; #1540-524; #1540-414; Flood Vent Sealing Kit #1540-526." *ICC-ES Evaluation Report, ESR-2074.*

ATTACHMENT A: Flood Protection Form- Project Summary (FP-PS)

Flood Protection Scoping Meeting

Flood Protection Form- Project Summary (FP-PS)

A scoping meeting is required for all qualifying projects that are located in a Special Flood Hazard Area (SFHA). This form will serve as a record of a successful completion of the scoping meeting process.

The applicant must submit a copy of this form with the Building Permit application.

Property Information

Address 4045 Main Street

Applicant Information

Name Dennis Kurek

Email dennis@ruggiero.plante.com

Phone (267) 253-4693

Meeting Attendees

Name	Email Address
Dennis Kurek	dennis@ruggiero.plante.com
Kevin M. Flynn	kflynn@akrf.com
Aaron Miller	amiller@cbparchitects.com
Andrew Zakroff	Andrew@urbanconversions.com

Project Scope

Demo of existing structures (some facades to remain), 7 story multifamily building proposed, 167 residential units, 160 parking spaces.

General Floodplain Information

Flood Risk Zone (proposed development that touches any of these Zones) – select all that apply	
<input type="checkbox"/> A Zone	<input type="checkbox"/> AE/Floodway
<input checked="" type="checkbox"/> AE Zone	<input type="checkbox"/> FEMA Mapped 0.2% or X

Type of Work

<input checked="" type="checkbox"/> New building <input type="checkbox"/> Addition <input type="checkbox"/> Renovation/alteration <input checked="" type="checkbox"/> Earth Work <input checked="" type="checkbox"/> Retaining Wall <input checked="" type="checkbox"/> Demolition <input type="checkbox"/> Accessory Structure <input type="checkbox"/> Below grade parking <input type="checkbox"/> Seasonal/temporary <input type="checkbox"/> Floodway <input type="checkbox"/> Other:	<input type="checkbox"/> Storage of materials <input type="checkbox"/> Storage of equipment/machinery <input checked="" type="checkbox"/> Electrical <input checked="" type="checkbox"/> HVAC <input type="checkbox"/> Fuel Systems <input checked="" type="checkbox"/> Water supply <input checked="" type="checkbox"/> Elevator/escalator <input checked="" type="checkbox"/> Plumbing <input type="checkbox"/> Construction Office/Staging/Storage <input type="checkbox"/> Watercourse Alteration
--	--

Requirements for Building Permits

*documents required during construction

<input type="checkbox"/> Flood Protection Form – Existing Buildings (FP-EX)
<input type="checkbox"/> Detailed cost estimate – see instructions on FP-EX <input type="checkbox"/> Value of structure only – see instructions on FP-EX <input type="checkbox"/> Year of initial construction
<input checked="" type="checkbox"/> Flood Protection Form – General (FP-G)
<input checked="" type="checkbox"/> E1 Residential <input type="checkbox"/> E2 Non-Residential <input type="checkbox"/> E3 Below-Grade Parking <input checked="" type="checkbox"/> E4 Historic <input type="checkbox"/> E5 Accessory Structure <input type="checkbox"/> E6 Fill <input type="checkbox"/> E7 Machinery/Equipment <input type="checkbox"/> E8 Storage <input type="checkbox"/> E9 Seasonal/Temporary <input checked="" type="checkbox"/> E10 Demolition <input type="checkbox"/> E11 Floodway <input type="checkbox"/> E12 Coastal Flood Hazard Zones <input type="checkbox"/> E13 Other Building Work <input type="checkbox"/> G Other Permits (state, federal, etc.)
<input type="checkbox"/> Flood Protection Form – No Rise (FP-NR)
<input type="checkbox"/> Flood Protection Form – LOMC (FP-LOMC)
<input checked="" type="checkbox"/> Elevation Certificate (EC)
<input type="checkbox"/> If EC is not current (completed within the past 6 months), PA Design Professional must confirm that all proposed work maintains flood protection compliance from date of construction – Provide as attachment to EC on the PA Design Professional Letterhead (signed and sealed) <input checked="" type="checkbox"/> Elevation Certificate* – for lowest floor installation (during construction) <input checked="" type="checkbox"/> Elevation Certificate* – for final construction (prior to Certificate of Occupancy)
<input type="checkbox"/> FEMA Floodproofing Certificate* (FC) – for final construction (prior to Certificate of Occupancy)
<input type="checkbox"/> Flood Emergency Operations Plan
<input checked="" type="checkbox"/> Structural Design Criteria Form (SDCF) – flood loading calculations
<input type="checkbox"/> Other

Meeting Notes

*The new residential building is within the AE zone and the entire ground level will be below the DFE (BFE +18"). Wet flood proofing strategy is proposed with the engineered openings called "smart vent" along both sides of new building along Main street and Shurs Lane. Note part of the front facade will remained for historic preservation. Confirm no dry floodproofing is permitted and enclosed areas below BFE + 18": Use only for parking, building access, and incidental storage. (No lobbies with seating, mailboxes, security desks, etc.) (ASCE 24: Ch. 6)

*For any elevator where shaft is below BFE+18", then float switch must be installed, designed to resist flood load (ASCE 7), and are not required to have flood openings.

*Engineer/Architect of record shall provide final certification statement prior to issuing a C/O to certify the engineered openings are installed per design specs and manufacturer's manual to allow for automatic entry and exit of floodwaters and automatically opening hydrostatic pressure. A hold permit completion will be added on by the Department of Licenses and Inspections (for office use only)

Examiner Signature for completion of FP-Scoping Meeting

Name of Examiner **Richard Chen**

Digitally signed by Richard Chen
Date: 2024.01.02 15:42:42 -05'00'

Date **01/02/2024**

FP- Scoping Meeting Administrator Signature for when FP-Scoping Meeting is not required.

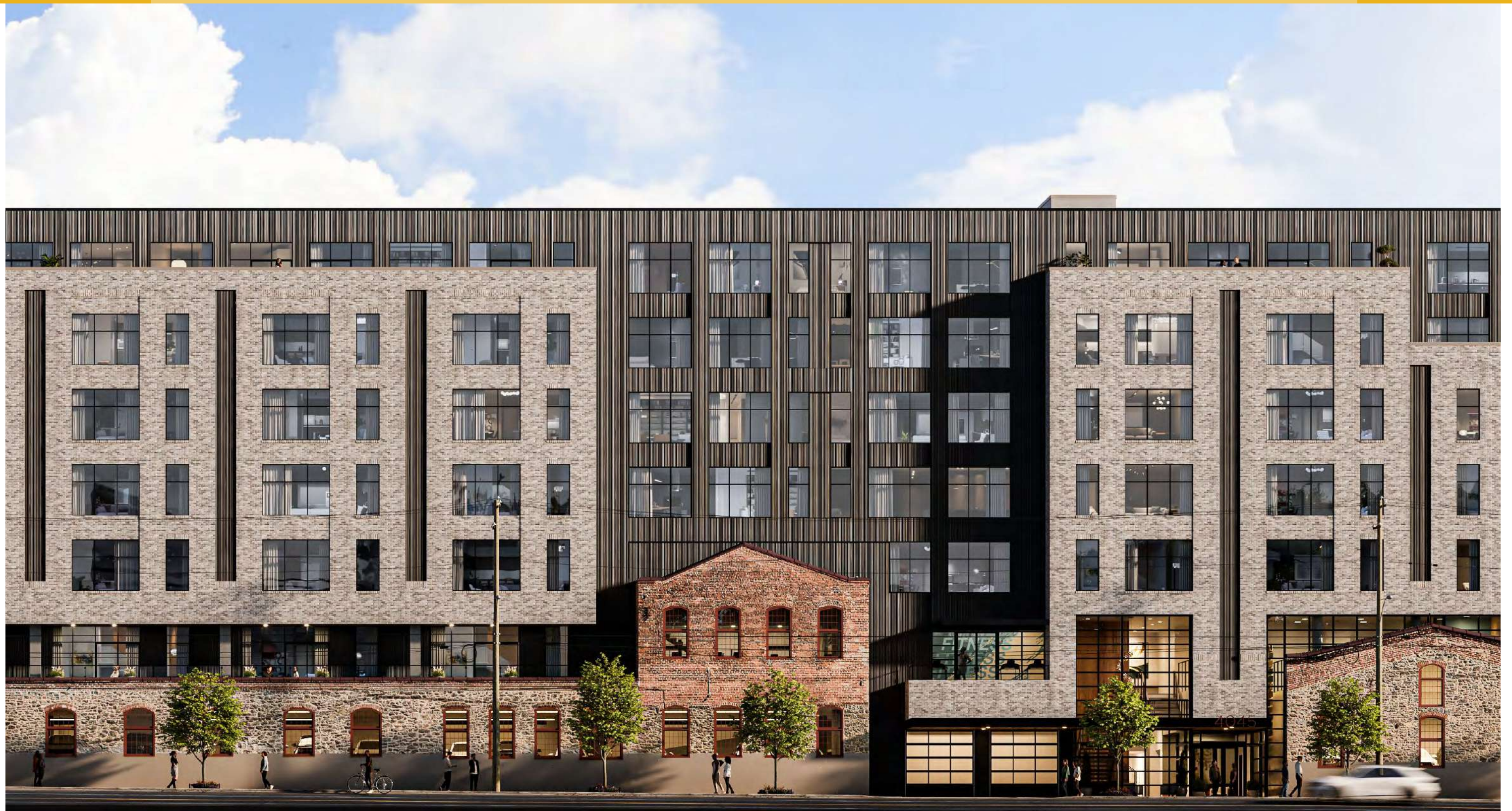
Name of FP-Scoping Meeting Administrator

Date

4045 MAIN STREET

PHILADELPHIA HISTORICAL COMMISSION

JUNE 25, 2024



DEVELOPMENT TEAM

URBAN CONVERSIONS

Owner
1900 Market Street, 8th Floor
Philadelphia, PA 19103



Architect
234 Market Street, 4th Floor
Philadelphia, PA 19106



Ruggiero Plante Land Design
Civil Engineer
5900 Ridge Avenue
Philadelphia, PA 19128

CONSULTANTS



Real Estate Consultants
1435 Walnut Street, 4th Floor
Philadelphia, PA 19102



Floodplain Resiliency Consultants
530 Walnut Street, Suite 998
Philadelphia, PA 19106



Land Use Planning
1520 Locust Street
Philadelphia, PA 19102



Transportation Engineering
1515 Market Street, Suite 1360
Philadelphia, PA 19102

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June 10, 2024

Jonathan E. Farnham, Ph.D.
Executive Director
City of Philadelphia Historical Commission
1515 Arch St, 13th Floor, Philadelphia, PA 19102

RE: Proposed Mixed-Use Development at 4045 Main Street

Dear Dr. Farnham:

This letter, along with the accompanying presentation package, which includes a building permit application and descriptive graphics, are submitted for final review and to secure a place on the agenda of the June 25, 2024 meeting of the Architectural Committee and the subsequent July 12, 2024 meeting of the Philadelphia Historical Commission (the "Commission"). As you will recall, on May 10, 2024, the Philadelphia Historical Commission found that the existing mill complex cannot be used for any purpose for which it is or may be reasonably adapted, and approved demolition, provided the site is recorded to HABS-like standards and no demolition occurs until the new construction for the site is financed, approved by the Historical Commission, and issued a building permit. At the same meeting, the Commission voted to deny the proposed new building pursuant to Standard 9.

The project in this submission is revised in response to concerns expressed by the Commission about the height, scale, and massing of the proposed project, and the minimal depth of existing facades being retained in the original proposal. Revisions include a setback of five feet surrounding and above the existing two-story gable wall, a continuous terrace setback along the top of the existing one-story wall, added glass around the lower gable wall, setback of the 6th and 7th floors at the east end of the Main St. façade, setback of the 6th and a portion of the 5th floors at the west end of the Main St. façade, and moving the amenity terrace to the 6th floor, thus reducing the massing of the west end of the proposed building. These increased setbacks from Main St. and at each end of the proposed building are to reduce the visual impact from key vantage points and transition to the lower height of adjacent buildings to the east and especially the west. Extending the setback as low as the 5th floor for a portion of the Main St. façade further breaks the massing into smaller sections, effectively reducing the visual length of the structure. Five feet of return walls and roof of the existing two-story gable will be retained so the preservation of the existing walls is less two-dimensional in appearance. To demonstrate context for the proposal, the revised submission retains images of the existing buildings, although they should be considered demolished, except what is proposed to remain.

In addition to being located in the Main Street Manayunk Historic District, this challenging site of 50,139 square feet, is zoned I-2, Medium Industrial, which is consistent with its historic use as a silk dyeing factory, which ceased operations in 2021, when the owners were unable to recover following yet another flood, which destroyed the business. Also, a substantial portion of the site is in flood zone AE, meaning that any occupied space on the site must be located at an elevation not less than 1'-6" above the base flood elevation, which along Main Street ranges from approximately 10' to 13' above the sidewalk. The proposed elevation of the second floor, the first level of occupied space, is 4'-1 1/4" above the base flood elevation due to the flood requirements, to avoid conflict with the existing window openings and the second-floor structure, and provides future flood resiliency. The project

design team includes AKRF, which has been engaged for flood resiliency consulting and has been integral in the project's design decisions regarding flood mitigation and long-term resiliency.

4045 Main Street is a proposed, seven story multi-family development that includes market-rate rental apartments with accessory automobile parking, bicycle parking, and entry lobbies on the ground floor. The second floor (above the flood elevation) will include amenities, apartments, additional accessory parking, loading and trash collection. There will be five floors of apartments above, with amenities and a common terrace on the 6th floor. Extending along Main Street from the existing adjacent Starfinder Foundation (4015 Main Street) to Shurs Lane, the proposed seven story building will include:

- 162 Dwelling Units: Located on floors 2 through 7, in a mix of studios, one-bedroom, and two-bedroom apartments.
- Residential Amenities: Lobby related seating, a fitness center, a co-working suite with adjacent outdoor terrace, and back-of-house spaces are located on the second floor and an amenity suite and roof terrace are located on the 6th floor.
- Parking: Private accessory parking for 160 automobiles is located on the first and second floors, within the building on the first floor, and to the rear of the site, primarily beneath the building at the second floor. Parking is accessed through overhead doors on Main Street with an interior ramp to the second floor, and an emergency exit above the flood plain onto Shurs Lane accessed through the loading area.
- Loading: An enclosed loading space, located in the northwest corner of the second floor, is accessed through an overhead door on Shurs Lane.

Due to the I-2 zoning, a variance will be needed for the proposed Multi-Family Use. A variance will also be needed for the overall height of the building. While the I-2 zoning has no height limit unless abutting a residential district (which this site does not), the Main Street/Manayunk and Venice Island Neighborhood Commercial Area Overlay District imposes a height limit of 38 feet. Average grade, for height measurements, is considered by the code to be 1'-0" above the regulatory flood plain. Thus, the proposed building height is 68'-1 1/4". At the property line along Main Street, the height above the sidewalk ranges from 53'-0" to 76'-0" where the cornice line transitions from sections of 4, 5, and 6 stories. Above these varying height sections of building at the street frontage, the remainder of the building is set back 5'-0", and the height above the sidewalk ranges from 79'-0" to 82'-0". This height should be considered within the context of the many existing nearby examples of similar height as well as more significantly and similarly scaled historic context that existed throughout the industrial development of Manayunk. Graphic demonstration of where these examples are, or were located, is provided in this submission.

In addition to these contextual examples, the site is not immediately adjacent to any smaller scaled residential districts. The immediately adjacent parcels are zoned CMX-2.5, ICMX and CMX-2. The closest parcels that are zoned residential are the blocks to the north; however, this area, while close in dimensional proximity, is substantially visually separated from 4045 Main Street by the existing railroad viaduct that has long been among the largest scale structures in the vicinity. This proposal rises only 29'-0" above the rail bed and only the top 3 floors should be visible from the roof decks of dwelling units on Cresson Street.

While the proposal keeps occupied space above the code required elevation (1'-6" above the base flood elevation), for the dwelling units, more resiliency for the future is incorporated through minimizing the number of dwelling units at the second floor and by increasing from 1'-6" to 4'-1 1/4" the elevation of the second floor above the base flood elevation. In the original scheme, the proposed typical floor had 34 dwelling units while the count on the second floor was limited to nine, resulting in a need for the

seventh floor with 25 units to achieve the necessary yield. While the count at the second floor remains the same as the original scheme, massing reductions and moving the amenity space to the 6th floor have resulted in fewer units on this floor, too. One additional unit is added to the 7th floor in the former location of the amenity space resulting in a total of 162 units. The setback from Shurs Lane at the top of the building, now at both the 6th and 7th floors, ranges from 28'-0" at the end towards the railroad to 31'-9" at the end closest to Main Street. Mechanical and Utility spaces such as transformers, the generator, electrical panels, pumps, etc., are also required to be above the flood elevation, thus also occupying space at the second floor.

The site is bounded by the Starfinder Foundation (4015 Main Street) to the east, Main Street to the South, and Shurs Lane to the West. The topography surrounding the existing buildings on the site rises approximately 10 feet from Main Street to 11 Shurs Lane. The north side of the site abutting 11 Shurs Lane is formed by existing retaining walls and a rock outcrop, which in several locations, projects above the surface of the existing parking lot of 11 Shurs Lane. The rock outcrop also projects into the site (and existing buildings) and will remain as part of the north edge of the first-floor parking. To the east of 11 Shurs Lane, the extents of the proposed building at the first floor will be bounded by existing retaining walls. Grade between the existing retaining walls and the Germantown/ Norristown (SEPTA) railroad viaduct slopes up steeply to meet the abutment. The railroad creates a significant barrier between buildings to its north and south. It rises about 35 feet above 11 Shurs Lane and is between 10 feet and 28 feet above Cresson Street to the north of the viaduct.

The approximately 220,000 SF proposed building is arranged in three wings, one fronting on Main Street, one on Shurs Lane, and the third extending from the Main Street wing toward the railroad viaduct, parallel to 4015 Main Street. The primary residential entry for pedestrians and vehicles is on Main Street, located at a natural break between two sections of preserved historic façades, where existing buildings that will be removed, are set back from the sidewalk. A cantilevered entry awning demarcates the primary entry and bisects a double height glass enclosed volume. A grand stair and elevator will transition residents up to the main lobby, reception, and amenity area at the second floor, above the flood elevation. Amenities on the second floor include a co-working space, a fitness center and leasing offices. At the ground floor between the historic façade and the corner at Shurs Lane, three bays of translucent divided-lite panels separated by red brick pilasters, reference the adjacent large rectangular industrial window in the historic façade and the red brick into which it is set. A secondary entrance, is recessed into the corner at Main Street and Shurs Lane. This secondary entrance is provided for convenience to the residents living in the western end of the building and provides an access point towards the more active portion of Main Street to the west. The primary elevator and stair core is located near the main lobby at the intersection of the main wing and eastern most wing. The secondary core is located at the intersection of the main wing and the wing along Shurs Lane, near the secondary entry.

New, historically accurate, windows and doors will be installed in restored original openings in the existing walls to remain. The bulk of these are currently infilled with a variety of materials that include glass block, stucco, corrugated metal, mechanical louvers, or a combination thereof. Located behind these windows at the first floor is the parking, which should not be visible due to the sill heights above the sidewalk. At the second floor, the historic window replacements to the west of the entry will open to the two-story volume of the fitness center, avoiding a visual conflict with the third floor structure. The second-floor window in the gable to the east of the entry will be spandrel glass due to the elevation of the window relative to the second-floor structure.

The historic facades are separated from the building above by a continuous five-foot-deep recess of dwelling unit terraces and a limited band of dark corrugated metal. The new walls above are set at the rear of the approximately 12" thick existing masonry walls for further distinction of the latter. The

masonry façade along Main Street and turning the corners at Shurs Lane and adjacent to the Starfinder Foundation, is composed of a series of regular brick modules separated by narrow slots of recessed corrugated metal siding and punctuated by large trios of windows at living spaces and single rectangular punched windows at bedrooms. The brick massing at the street frontage is carved away above the one-story and two-story gabled historic facades and at the upper levels. It is set back 5'-0" and clad in dark corrugated metal, providing a backdrop to the historic facades and new masonry mass at the street frontage. The east end of the building hovers above another section of the historic façade, separated by storefront windows of the lobby and co-working space. The vehicular entry to the parking garage is integrated into the architectural language of the main entry lobby. It is recessed from the building façade below the same awning that provides cover and demarcates the lobby entry. The fenestration and materials of the pair of aluminum and glass overhead doors matches the adjacent storefront of the lobby.

Materials include a light buff variegated brick, a red variegated brick to match the existing preserved facades, dark brown colored vertical corrugated metal siding, aluminum and glass storefront, metal clad windows, and a red-orange accent color believed to be the original color for the historic window replacements. The light buff brick references the color and texture of the stone in the preserved facades, while the corrugated metal references the industrial nature and past of the area such as the nearby Hare and Cute Coal Pocket.

To maintain durability at street level, the building base is comprised of the existing historic stone and brick façade, new brick base and piers, and storefront at the lobbies. Brick is also used extensively above to reference mills of the past. The scale of the single punched opening windows relates to windows in the historic facades below, while the larger grouped windows reference a more contemporary industrial loft feel, like the contemporary take on an industrial aesthetic seen at the nearby Locks Townhomes on Venice Island. A rhythm is created in the façade by alternating vertical sections of masonry and metal, or simply by recessing the brick at the spandrels between windows. The balconies at Main Street and Shurs Lane open the corner of the building, make a transition around the corner, and will become a beacon of light from within at night. This language continues up Shurs Lane until the façade wraps around to the north side, where cladding becomes entirely metal on the facades that do not face the streets. The color of the historic windows will be repeated in limited areas of the metal siding on these facades.

The developer of the project is Urban Conversions, which specializes in historic preservation/adaptive reuse within Philadelphia. When it became evident that it would not be possible to reuse the existing structures, the firm challenged us to design a scheme that preserves most of the existing facades and integrates them into the project. This will be the third Urban Conversions project in Manayunk, with the other two preserved in concert with the National Park Service as part of the Federal Historic Preservation Tax Incentives program.

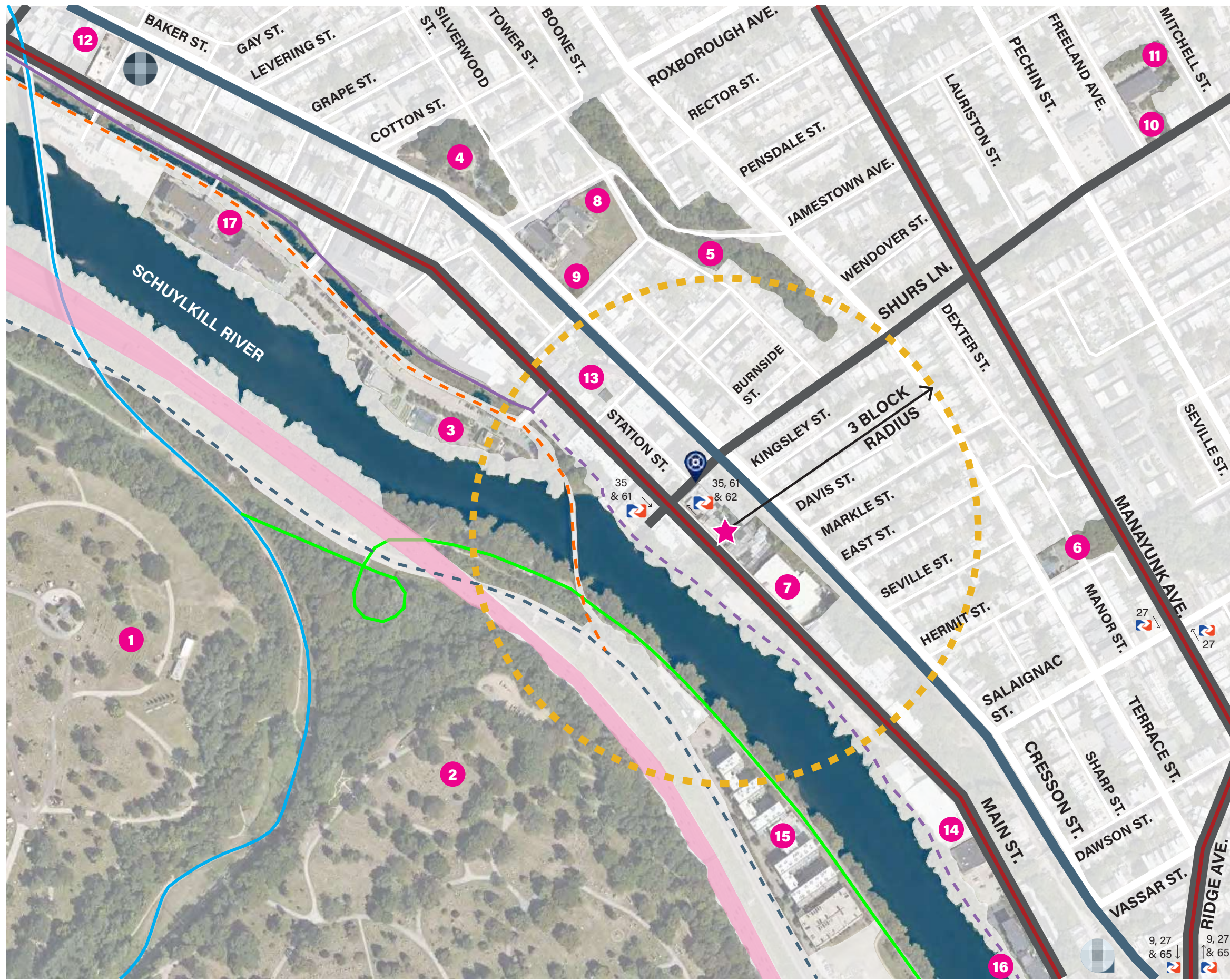
After reviewing our submission, please do not hesitate to contact us with any questions or should you require additional information, which we will make every attempt to promptly provide.

Sincerely,

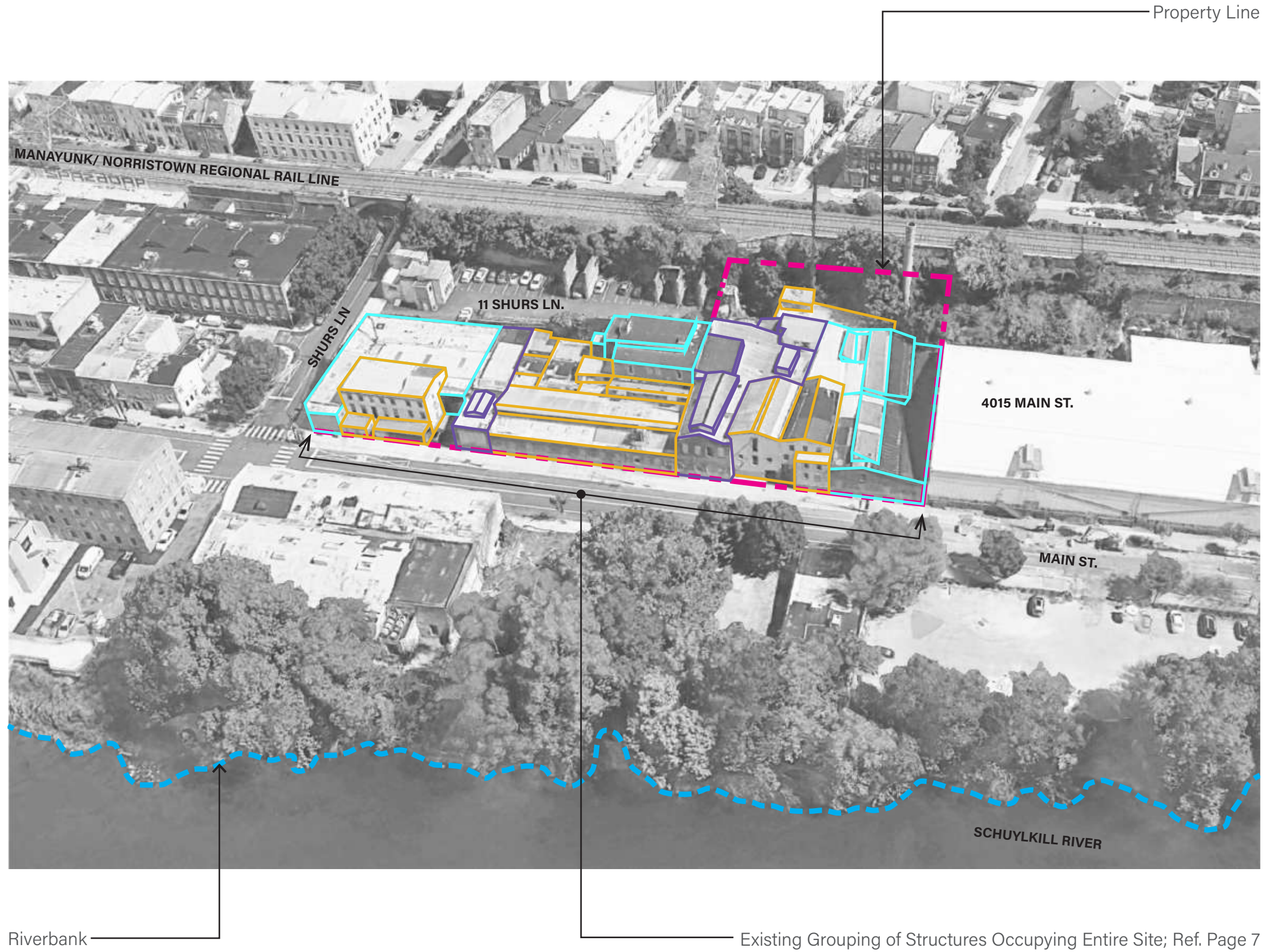


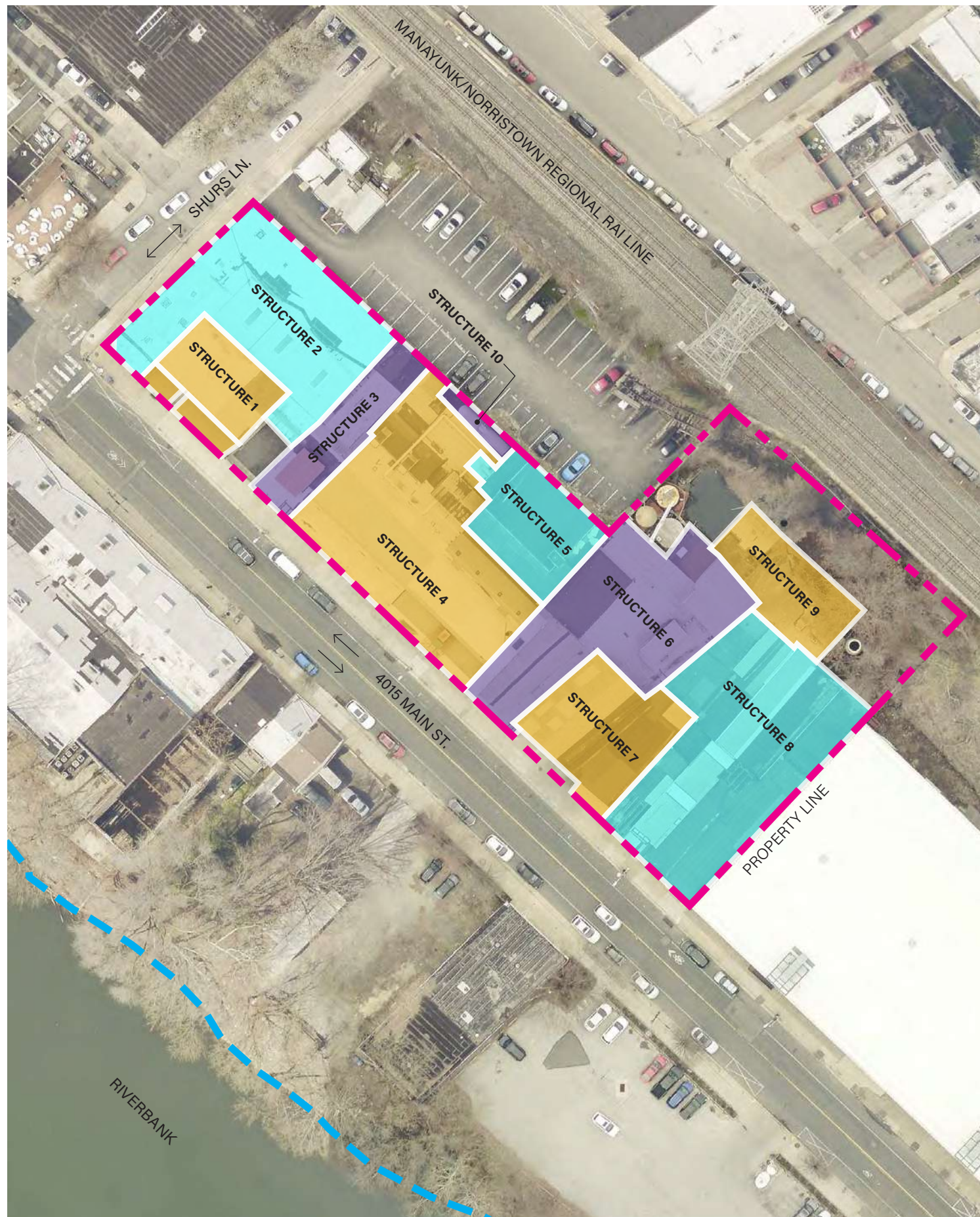
Eric Leighton, AIA

Cc: Andrew Zakroff; Adam Laver; file



- ★ SITE
- 1 Westminster Cemetery
- 2 Laurel Hill Cemetery
- 3 Venice Island Performing Arts and Rec Center
- 4 Pretzel Park
- 5 Boone Park
- 6 Neighbors Park
- 7 Starfinder Foundation
- 8 YALE School Philadelphia
- 9 St. John the Baptist Roman Catholic Church
- 10 Citylight Church
- 11 Mishkan Shalom Reconstructionist Synagogue
- 12 U.S. Postal Service
- 13 The Animedic Veterinary Hospital
- 14 CVS Pharmacy
- 15 The Yard at Pencoyd Landing (7-stories)
- 16 Bridgefive Condominium (7-stories)
- 17 The Isle (5-stories)
- Major Commercial Streets
- Major Local Streets
- Bike Lanes
- Schuylkill River Trail
- Proposed Schuylkill River Trail Extension
- Pencoyd Trail
- Barmouth Trailhead at the Cynwyd Heritage Trail
- Highway I-76
- Manayunk / Norristown Regional Rail Line
- Freight Lines
- Potential Future Rail to Trail Conversion
- Manayunk RR Station - 0.5 mi from Site
- Wissahickon RR Station - 0.6 mi from Site (0.7 mi driving)
- Indego Bike Share Station
- Buses (Route Number and Travel Direction)





PLAN VIEW

AERIAL VIEW





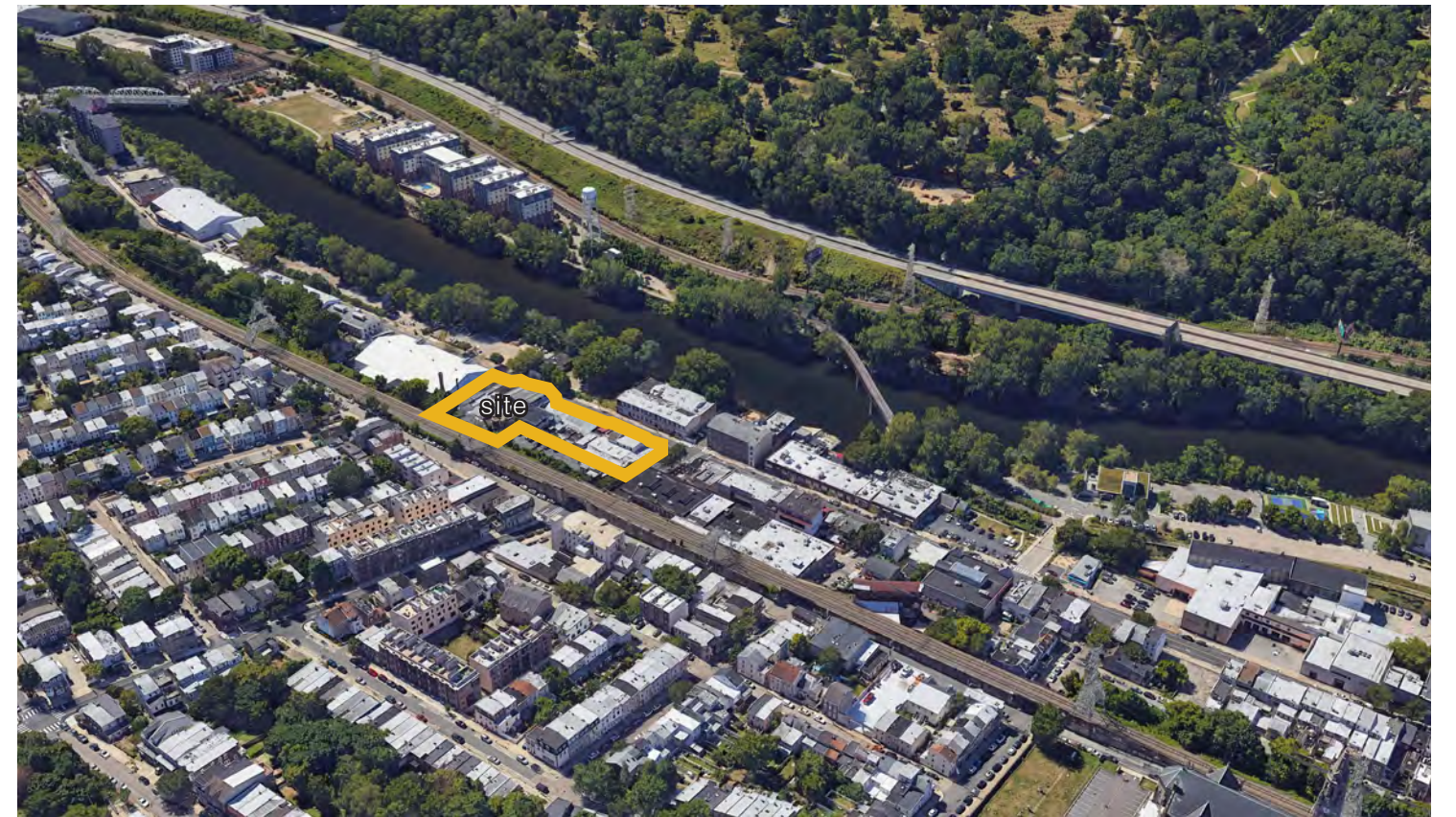
1 Northwest Aerial Perspective



2 Northeast Aerial Perspective



3 Southwest Aerial Perspective



4 Southeast Aerial Perspective



1 View of Site from Shurs Lane looking North



2 View of Site from Shurs Lane looking South



3 View of Site from Shurs Lane & Station Street looking North



4 View of Site from Main Street looking East



5 View of Site from Main Street looking East



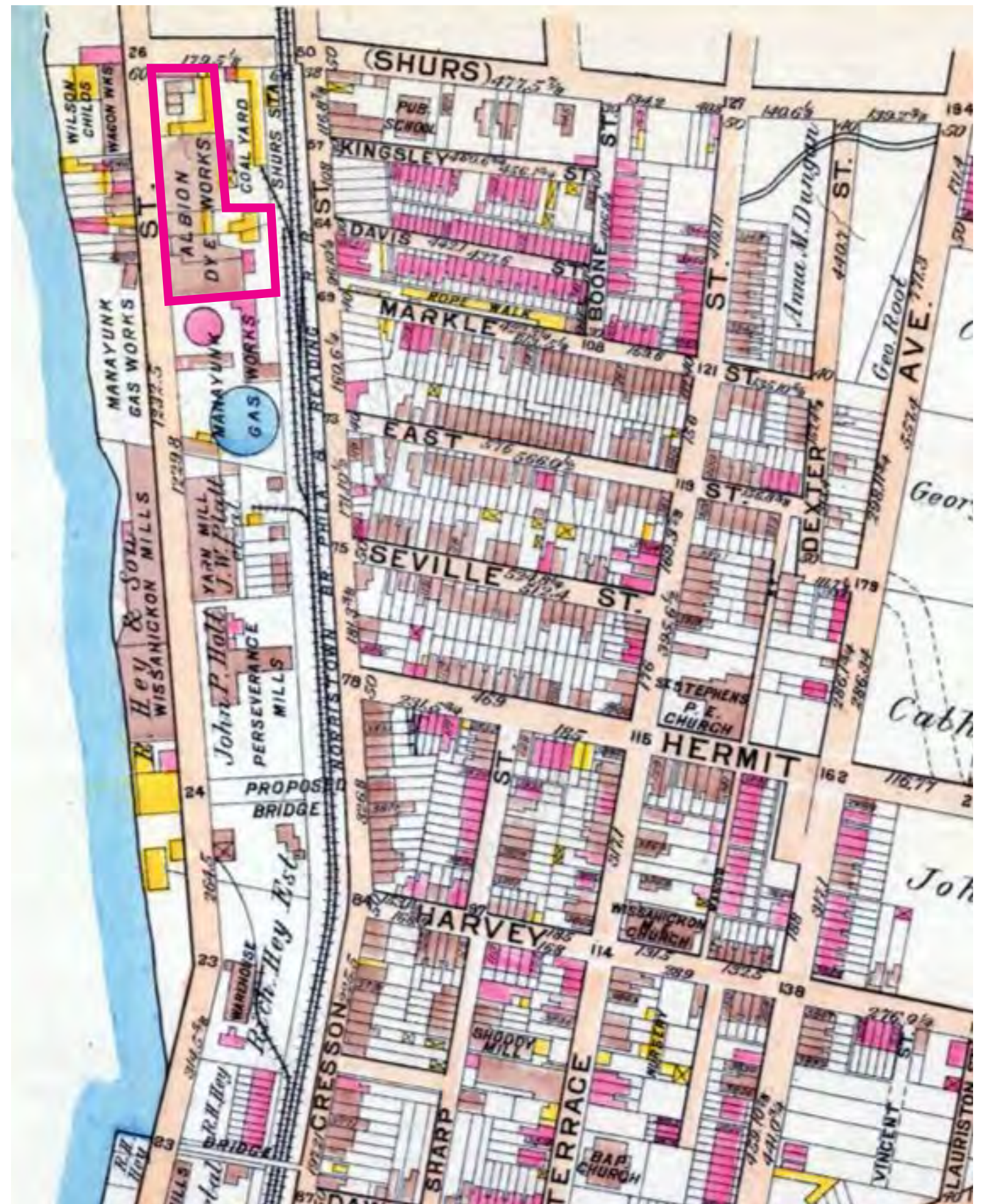
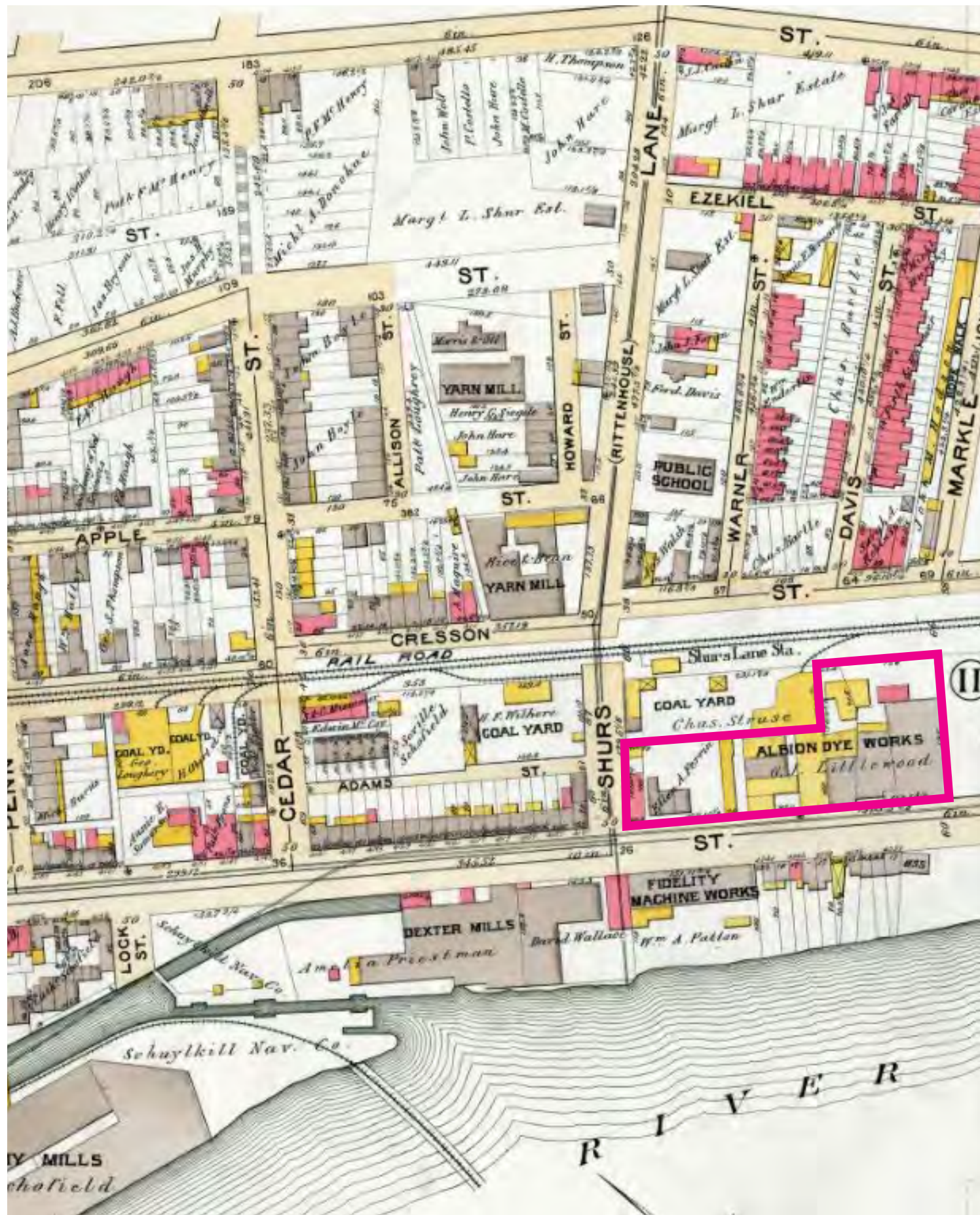
6 View of Site from Main Street looking East



7 View of Site from Main street looking West

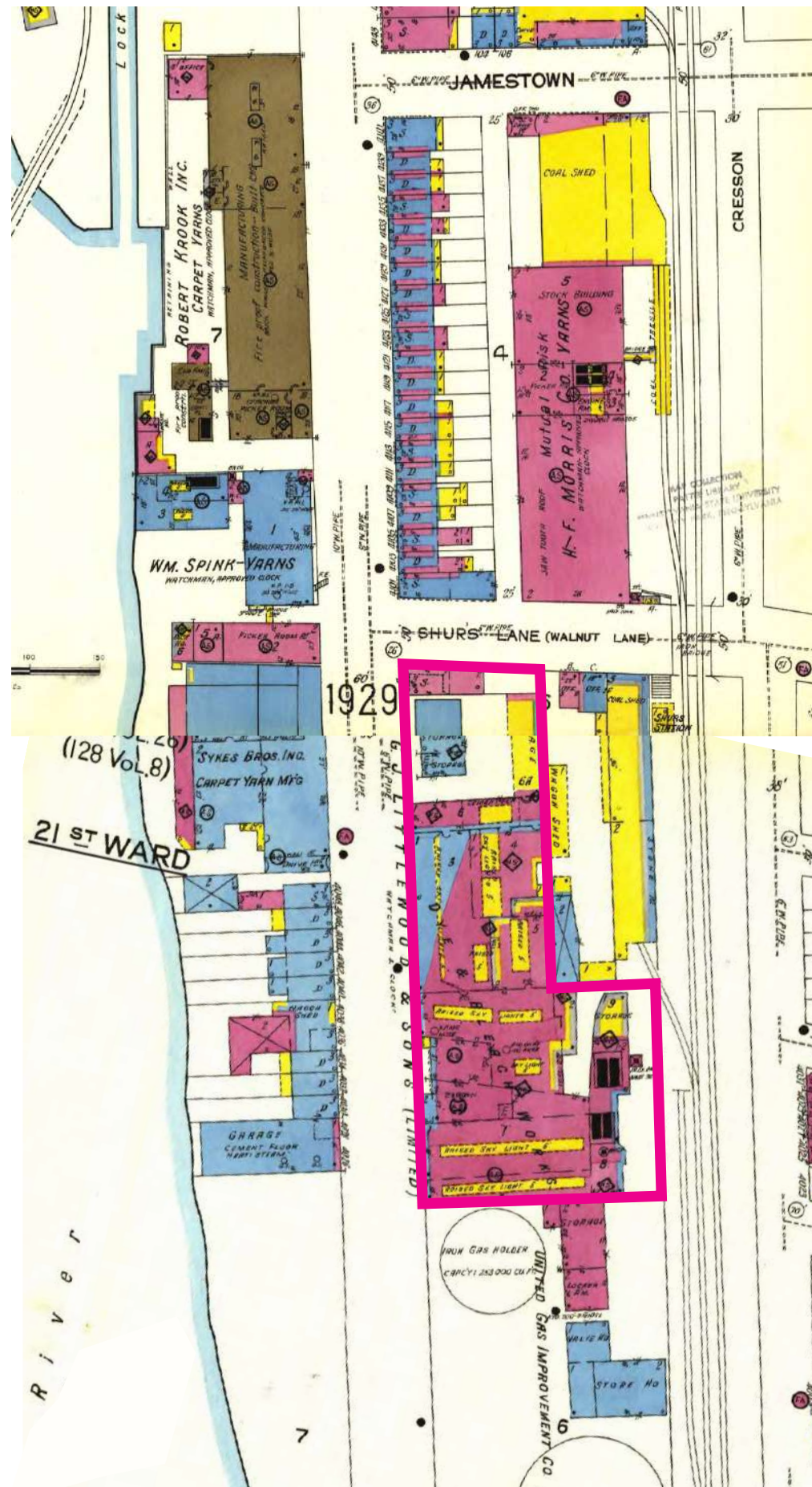


8 View of Site from Main street looking West



1892

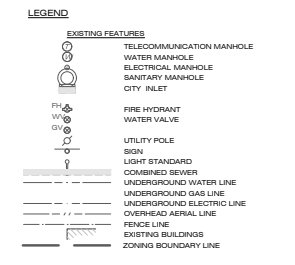
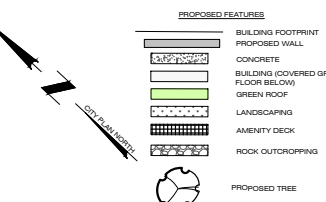
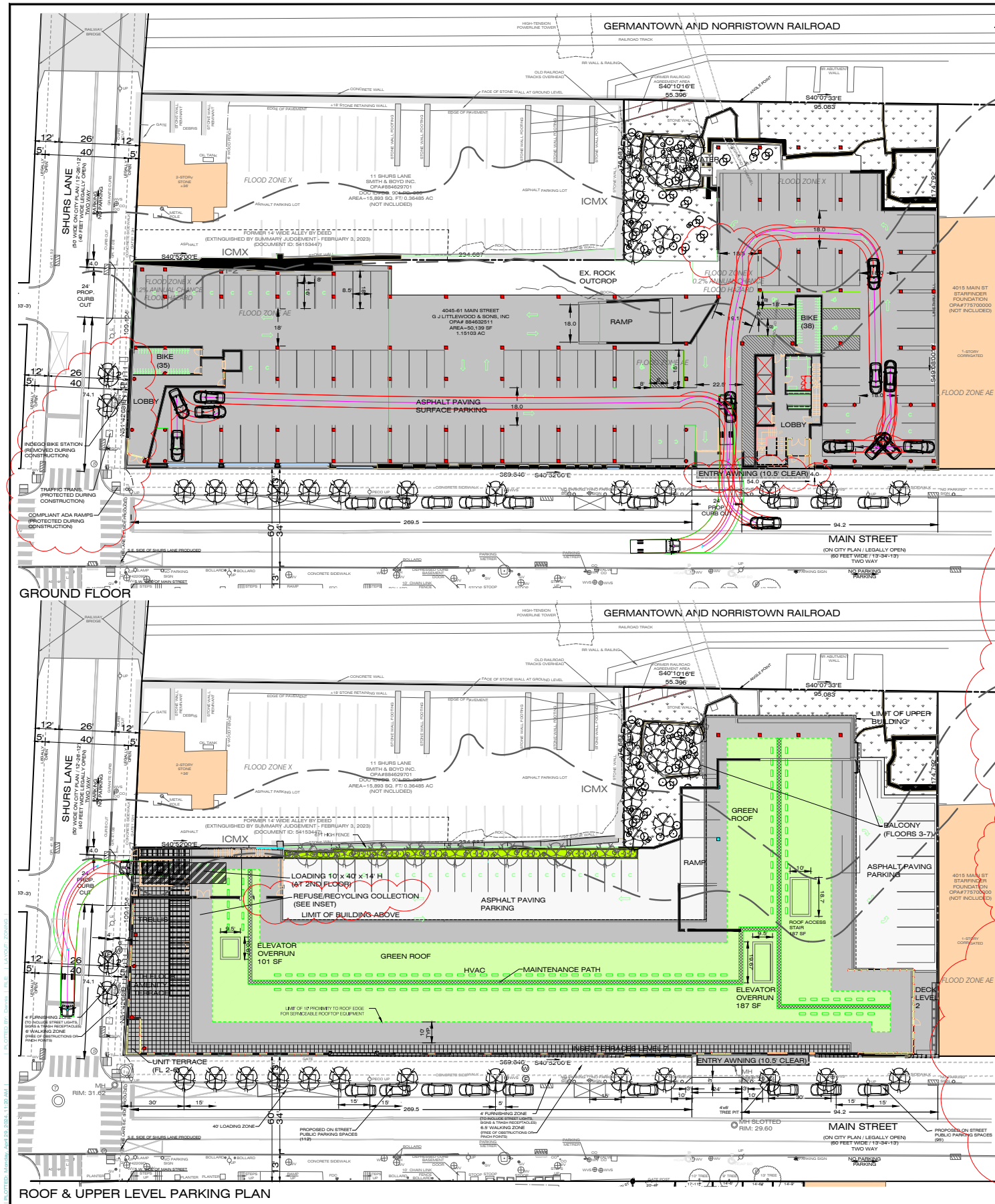
1910



1923



- Flood Zone X
- Flood Zone X (0.2% Annual chance flood hazard)
- Flood Zone AE
- Open Water



UTILITY OWNERS

DATE CONTACTED: 04/11/23
SERIAL NUMBER: 2023101974

COMPANY: COMCAST CABLEVISION
ADDRESS: 4400 WAINWINE AVE
PHILADELPHIA, PA 19140
CONTACT: bob_narvey@comcast.com
EMAIL: bob_narvey@comcast.com

COMPANY: USFC
ADDRESS: 480 S WENDELSON RD, SUITE B
KING OF PRUSSIA, PA 19406
CONTACT: gary_hewitt@usfc.com
EMAIL: gary_hewitt@usfc.com

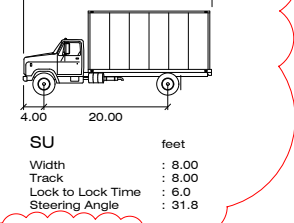
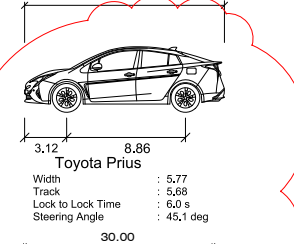
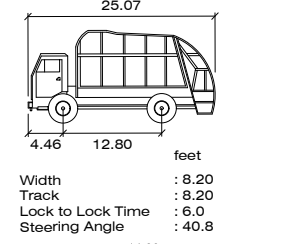
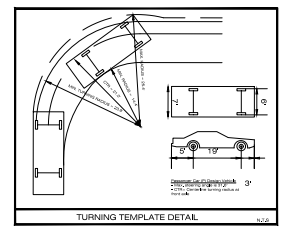
COMPANY: PHILADELPHIA CITY WATER DEPARTMENT
ADDRESS: 1101 MARKET STREET, 2ND FLOOR, APA TOWER
PHILADELPHIA, PA 19107
CONTACT: JOSEPH WISSEL
EMAIL: joseph.wissel@pcwa.gov

COMPANY: PHILADELPHIA CITY DEPARTMENT OF STREETS
ADDRESS: 800 W MONTGOMERY AVE
PHILADELPHIA, PA 19122
CONTACT: JOSEPH WISSEL
EMAIL: joseph.wissel@pcwa.gov

COMPANY: PHILADELPHIA GAS WORKS
ADDRESS: 800 W MONTGOMERY AVE
PHILADELPHIA, PA 19122
CONTACT: DAVID MONTYVIVAS
EMAIL: davidm@pcgw.com

COMPANY: SOUTHEASTERN PA TRANSPORTATION AUTHORITY
ADDRESS: 1234 MARKET ST, 12TH FL
PHILADELPHIA, PA 19107
CONTACT: DAVID MONTYVIVAS
EMAIL: davidm@pcgw.com

COMPANY: VERIZON PENNSYLVANIA, LLC
ADDRESS: 180 SHEPHERD BLVD, STE 2100 ROOM N/A
EXTN PA 19141
CONTACT: KELLY BLOUNT
EMAIL: kelly.b.blount@verizon.com



BUILDING GFA CHART

7 STORY BUILDING
167 TOTAL UNITS

LEVEL 1: 0 SF*
LEVEL 2: 20,981 SF
LEVEL 3: 33,177 SF
LEVEL 4: 33,215 SF
LEVEL 5: 33,215 SF
LEVEL 6: 33,215 SF
LEVEL 7: 28,697 SF
TOTAL GFA= 182,400 GSF

EX. INDIGO BIKE STATION NOTE:
EX. INDIGO BIKE STATION TO BE REMOVED DURING CONSTRUCTION. INDIGO HAS AGREED TO REMOVE THE BIKE SHARE STATION PRIOR TO CONSTRUCTION, OWNER TO PROVIDE 30 DAYS NOTICE.

EX. COMPLAINT ADA NOTE:
PROTECT AND MAINTAIN NEWLY CONSTRUCTED EX. ADA CURB RAMPS THROUGHOUT CONSTRUCTION. IF THE NEWLY CONSTRUCTED EX. ADA CURB RAMPS ARE DAMAGED IN ANY WAY DURING CONSTRUCTION, THEN THE DEVELOPER/CONTRACTOR/OWNER MUST RECONSTRUCT ALL DAMAGED COMPONENTS ACCORDING TO THE ORIGINAL DESIGN OR ADA STANDARDS AND SUBMIT COMPLETED AS-BUILT PENNDOT CS-4401 FORMS TO THE PSD ADA UNIT WITHIN 30 CALENDAR DAYS OF FINISHING CONSTRUCTION. FOR ALL DAMAGED/RECONSTRUCTED RAMPS.

EX. TRAFFIC TRANSFORMER NOTE:
EX. TRAFFIC TRANSFORMER ALONG SHURS WILL BE PROTECTED DURING CONSTRUCTION. IF TRANSFORMER IS DAMAGED IT WILL BE REPLACED AT OWNERS EXPENSE

I-2 Medium Industrial District Requirements

Open Space and Natural Resources - Flood Protection - Within the Special Flood Hazard Area
INCA Neighborhood Commercial Area Overlay District - Main Street/Maryland and Venice Island Subareas B
NIS Narcotics Injection Sites Overlay District
FDO Fourth District Overlay District - Fourth District Area

PROPOSED DEVELOPMENT	ALLOWED/REQUIRED	PROPOSED
MAX % COVERED AREA (50/139 SF)	100%	95%
BUILDING DIMENSIONS		
SIDE YARD SETBACK	# IF USED	0
REAR YARD SETBACK	# IF USED	0
BUILDING HT (ICX OVERLAY)	38'	38.1'
FLOOR AREA RATIO (FAR)	500%	364%
PARKING		
1/2 UNITS*	#	160
ELECTRIC SPACES (5%)	#	8
COMPACT SPACES (25% MAX)	#	40 (25%)
ADA SPACES	#	5 (1 VAS)
LOADING SPACE (10x40x14)	#	1
BICYCLE PARKING		
1 SPACE PER 3 DWELLING UNITS	56	73#

BASE FLOOD ELEVATION OF 41.40' (NGVD29)
REGULATORY FLOOD ELEVATION/DESIGN FLOOD ELEVATION 42.90' (18" BFE)
AVERAGE GRADE 43.90' (12" RFE)

AREA REGULATIONS
LOT ADDRESS:
4045-61 Main Street
#884632511

LOT AREAS:
CONSOLIDATED AREA: 50,139 SF

LIMIT OF DISTURBANCE STEEP SLOPES
DISTURBANCE NOTE:
NO STEEP SLOPE DISTURBANCE IS PROPOSED PER ALTA SURVEY



The property lies within the SCHUYLKILL WATERSHED

- NOTES**
- Boundary and Location information is based on a field survey performed by Ruggiero Plante Land Design on March 17, 2024 and updated on April 18, 2023.
 - Boundary dimensions are identified in Philadelphia District Standard feet. Other stated dimensions are in U.S. standard feet.
 - The change from inches to the more precise decimal equivalent may result in minor changes in the second and third decimal places. These are not mistakes or overights but more precise values.
 - Vertical datum is NGVD 1929, the benchmark is 'C-329' a standard brass disk set in a concrete retaining wall, having an elevation of 81.29'. Located 0.25 miles southeast along the Reading Railroad from the Station at Maryland, 50' southeast of the southeast tail of the southeast set of tracks, set in the top and at the east corner of an offset in the concrete retaining wall around the two southwest legs of a metal pylon, 8' east to the more southeasterly of the two southwest legs of the pylon, 1.7' north of a metal fence post and about level with the track. To Achieve City datum, Subtract 4.81'
 - The bearings shown herein are referenced from a PLAN OF PROPERTY, made for Aaron Hart by Israel Sorota, Surveyor and Registrar of the North Survey District of Philadelphia, dated August 1, 1968.
 - FEMA FIRM map #420757089G effective January 17, 2007 designates the site as Zone X-A Zone AE. Base Flood Elevation ranges from 41' (NGVD29) at East end of property to 41.2' (NGVD29) at West end of property.
 - Some of site improvements such as buildings, curbing, and parking have been taken from aerial photographs, other plans and from public GIS sources.
 - Only above ground visible improvements have been located. The location of the underground utilities must be field verified by contractor before commencement of any construction.
 - The property is identified as within the Industrial Zoning District I-2 and Industrial Commercial Mixed-Use (ICMX) Zoning District and Neighborhood Commercial Area Overlay District - Main Street and Open Space and Natural Resources - Flood Protection - Within the Special Flood Hazard Area and Fourth District Overlay.
 - The property has access to Main Street and Shurs Lane which are Public Streets.
 - The property described on this survey is the same as the property described in the Title Commitment.
 - At the time of the survey, there was not any evidence of earth moving or any ongoing construction on the site.
 - At the time of the survey, the surveyor was not aware of any proposed changes in street rights-of-way lines and no record street or sidewalk construction or repairs were observed.
 - At the time of the survey, there was not any evidence of wetlands delineation, observed in the process of conducting the fieldwork.

PLAN REFERENCES

- PLAN OF PROPERTY made by John Leving Surveyor & Registrar of the 8th Survey District of Philadelphia, dated August 30, 1874.
- PLAN OF PROPERTY made by K.W. Grandlund, Surveyor & Registrar of the 8th Survey District of Philadelphia, dated March 5, 1926.
- C.P. #72.
- PROPOSED LOT CONSOLIDATION PLAN, made by Ruggiero Plante Land Design, dated January 13, 2023, Revised and Approved by 9th Survey District on February 8, 2023.

OWNER OF RECORD
4045-61 MAIN STREET
G LITTLEWOOD & SONS INC
4045-61 Main St
Philadelphia, PA 19127

NOTE:
PENNSYLVANIA ACT 287 OF 1974 AS AMENDED BY ACT 121 OF 2008 REQUIRES THAT CONTRACTORS DETERMINE THE LOCATION OF ALL UTILITY, SEWER AND WATER LINES BEFORE COMMENCING CONSTRUCTION. SEE SHEET 1 FOR THE LIST OF LOCAL UTILITIES.

REVISIONS

NO.	DATE	DESCRIPTION

4045-61 MAIN STREET
Philadelphia, PA 19127
21ST WARD - OPA #88463251

prepared for:
Urban Conversions, LLC
1900 MARKET STREET
8TH FLOOR
Philadelphia, PA 19103

DAVID J. PLANTE, Professional Engineer PA. No. PE-048820-E

Ruggiero Plante Land Design
5900 Ridge Avenue Philadelphia, PA 19128
phone 215.508.3900 fax 215.508.3900 www.ruggieroplante.com

Plan Date: MARCH 22, 2024 Scale: 1" = 20'-0"

ZONING SUBMISSION
Sheet Title:
ZONING PLAN
Sheet 1 of 3

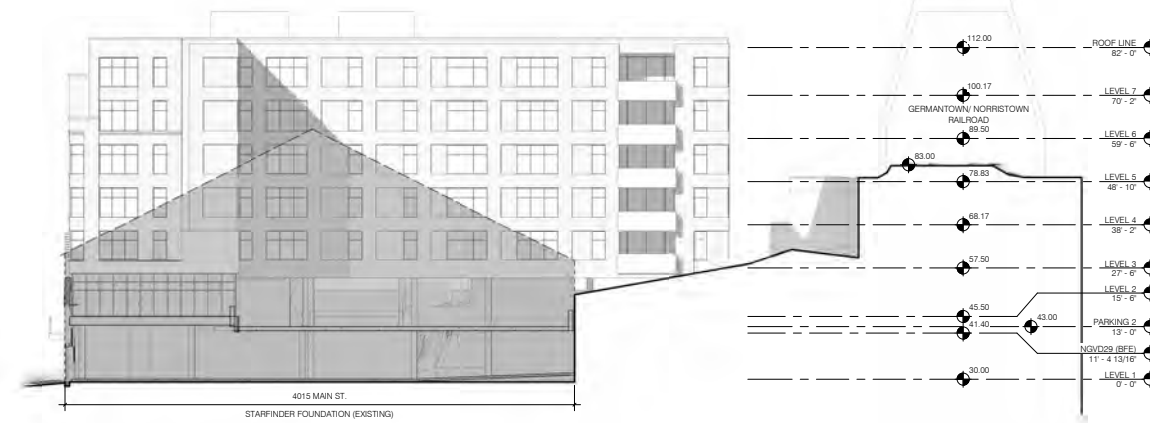
Owner
Urban Conversions
1900 Market Street, 8th Floor
Philadelphia, PA 19103
p: (415) 544-8576

Civil Engineer
Rugiero Piano Land Design
5900 Ridge Avenue
Philadelphia, PA 19128
p: (215) 508-3900

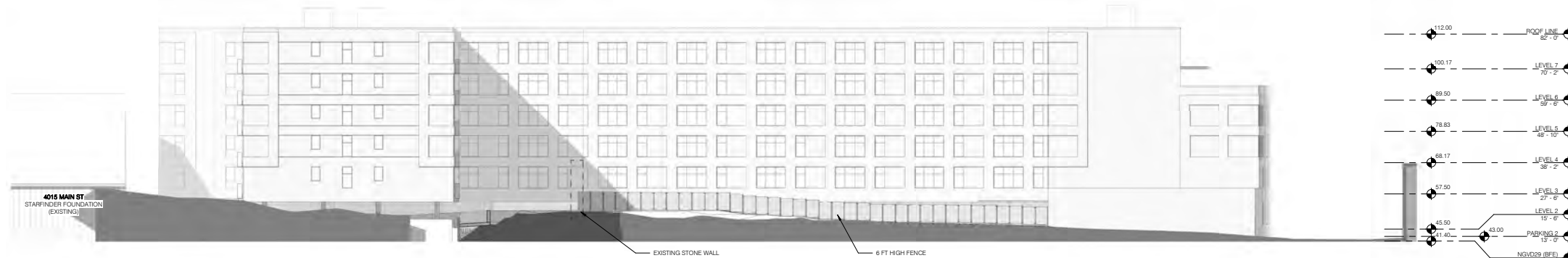
Geotechnical Engineer
Earth Engineering
115 W Germantown Pike, Suite 200
East Norriton, PA 19401
p: (610) 277-0880



④ ZONING - OVERALL WEST ELEVATION - ALONG SHURS LANE
1/16" = 1'-0"



③ ZONING - OVERALL - EAST ELEVATION
1/16" = 1'-0"



② ZONING OVERALL NORTH ELEVATION - ALONG 11 SHURS LANE
1/16" = 1'-0"



① ZONING - OVERALL SOUTH ELEVATION - ALONG MAIN STREET
1/16" = 1'-0"

REVISIONS		
No.	Date	Description

Project Phase:
ZONING

Project Name:
4045 MAIN STREET

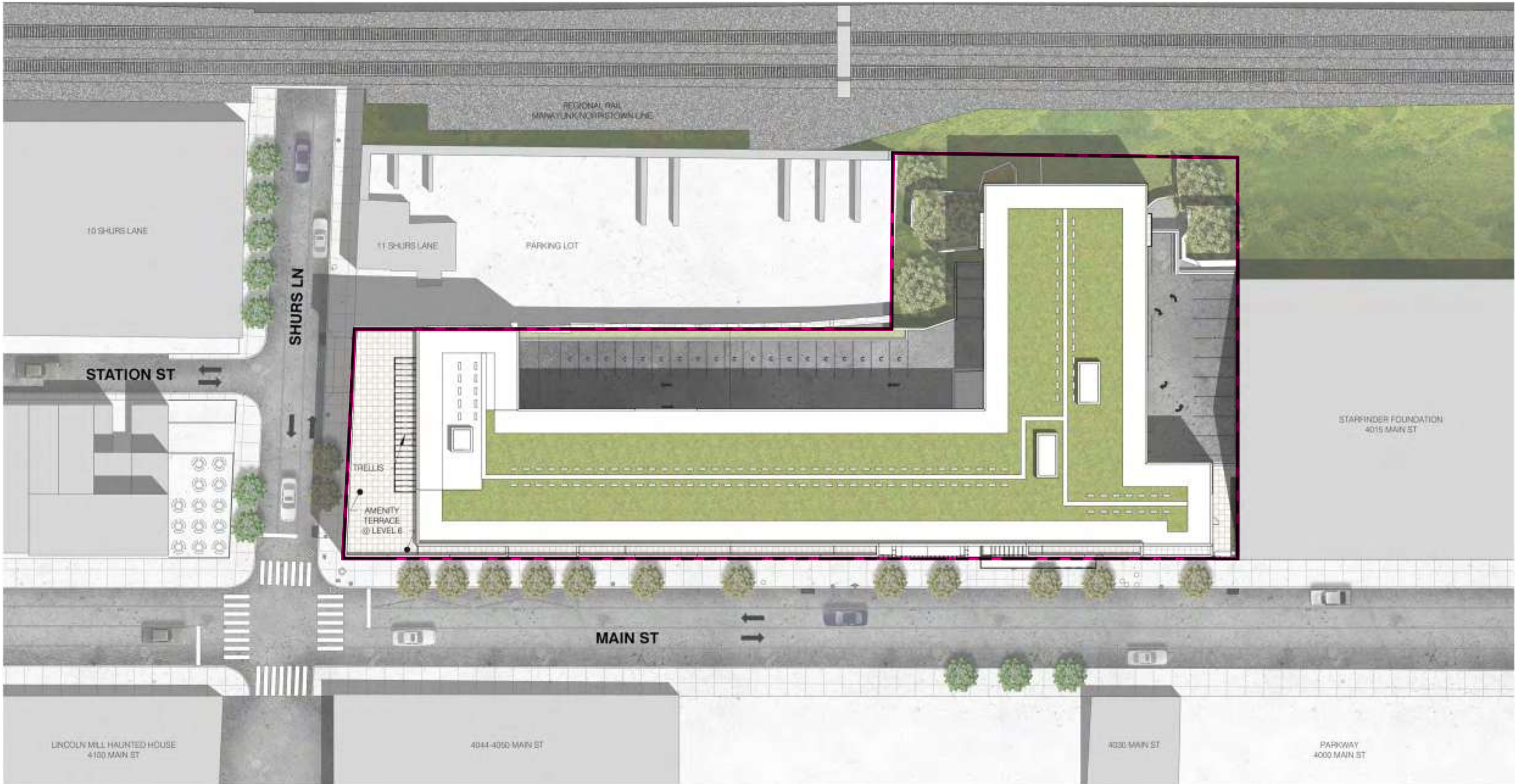
4045 MAIN STREET
PHILADELPHIA, PA 19127

Drawing Title:
ELEVATIONS

Project Number: 22302.00
Date: 06.06.2024
Drawn By: AJM
Checked By: AJM

Z.2


Scale: 1/16" = 1'-0"






TO BE DEMOLISHED 
TO REMAIN 




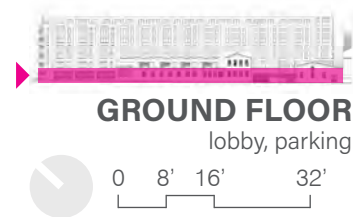
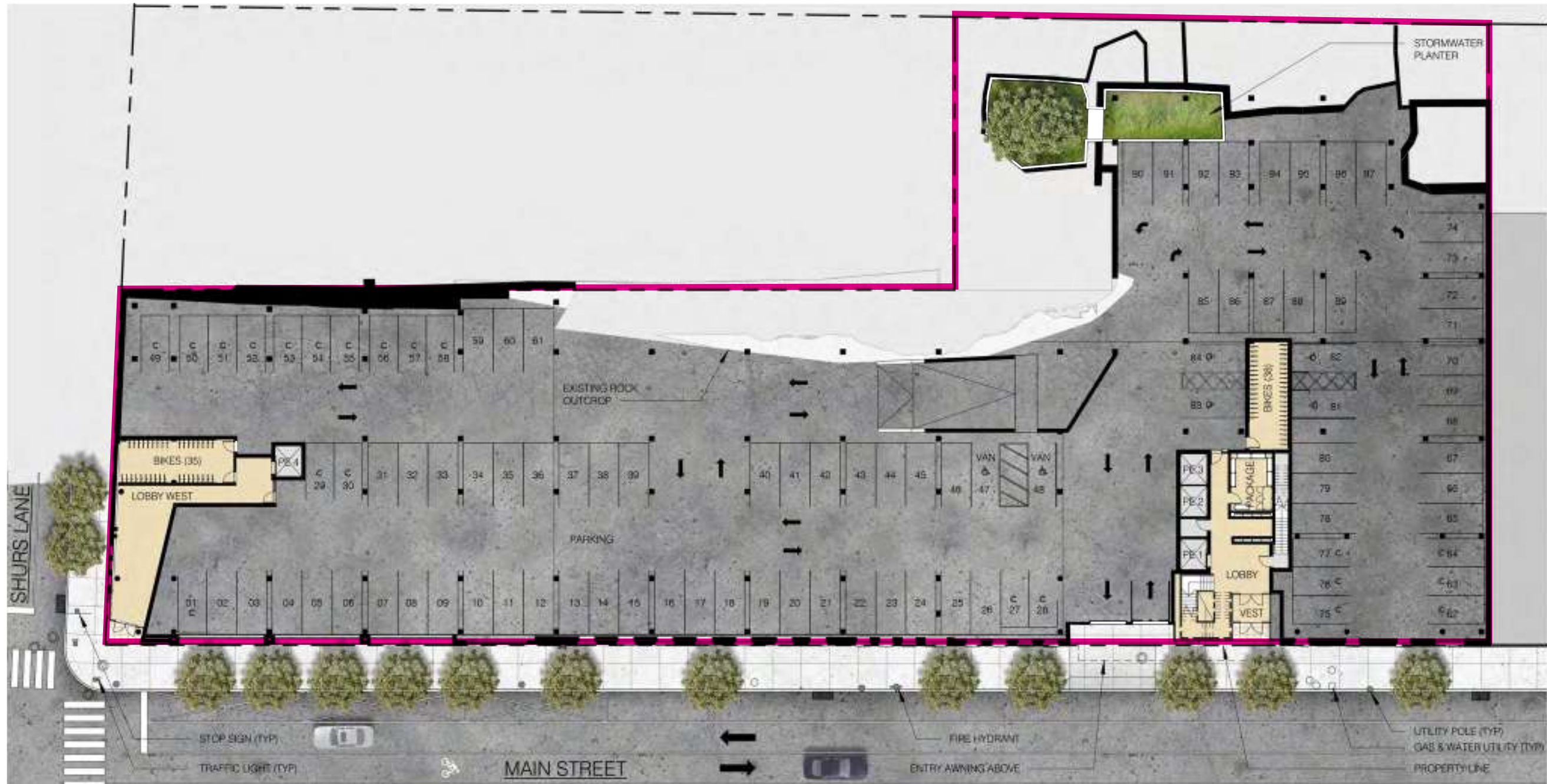
TO BE DEMOLISHED 
TO REMAIN 



TO BE DEMOLISHED 
TO REMAIN 

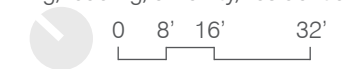


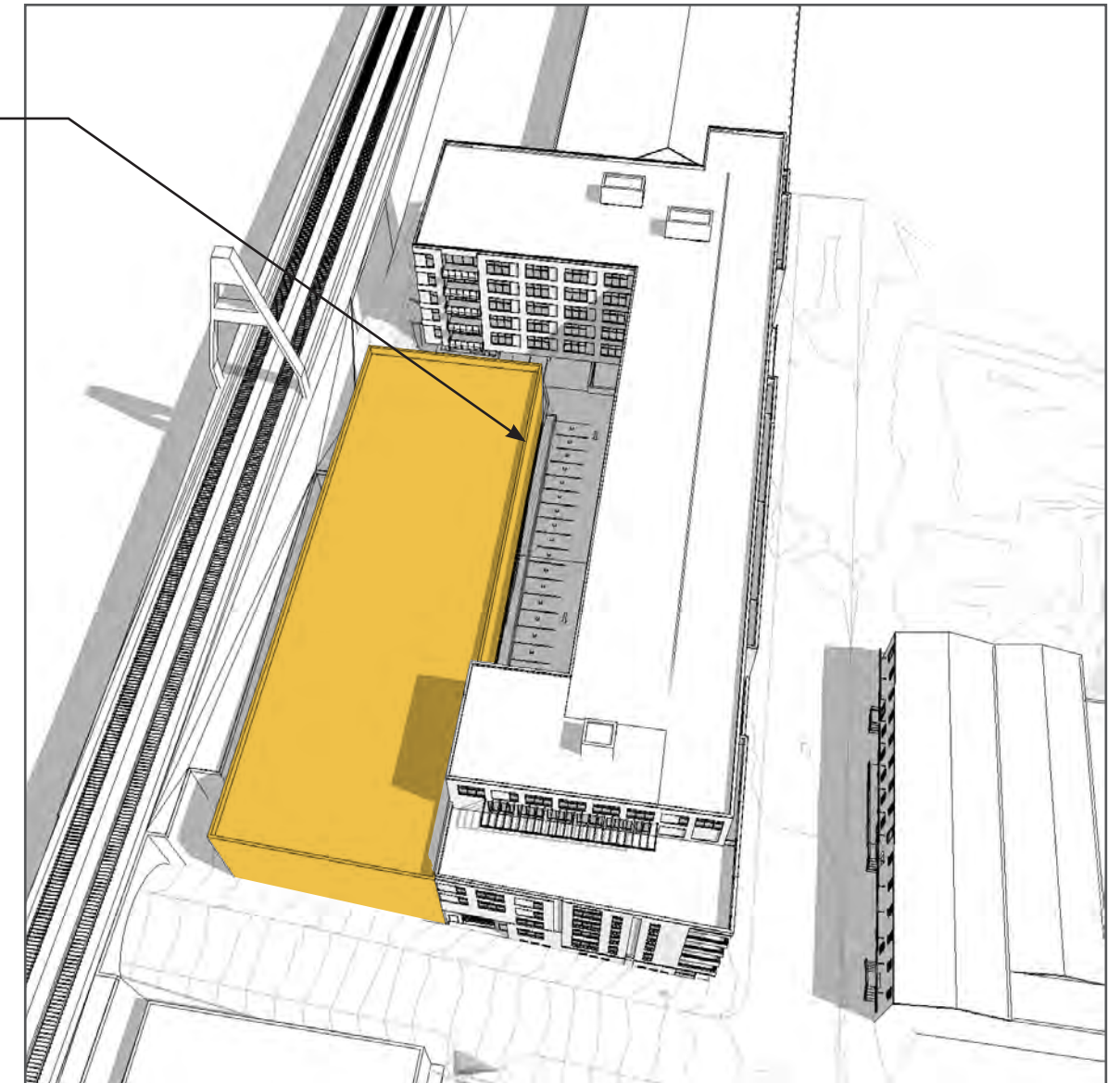
TO BE DEMOLISHED 
TO REMAIN 





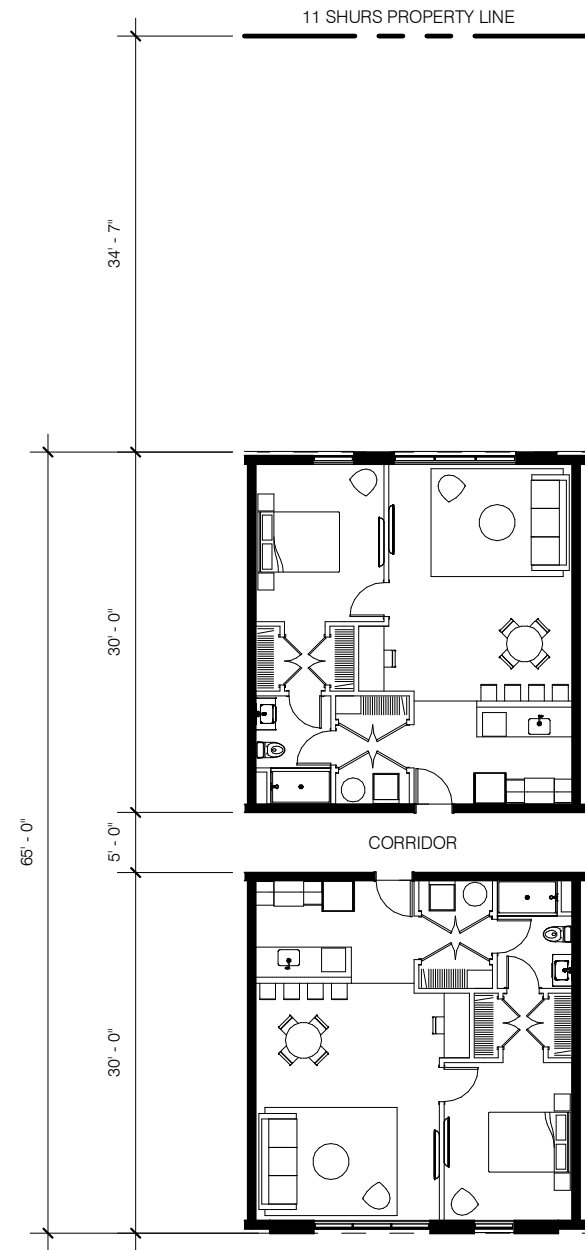
FLOOR 2
parking, loading, amenity, residential



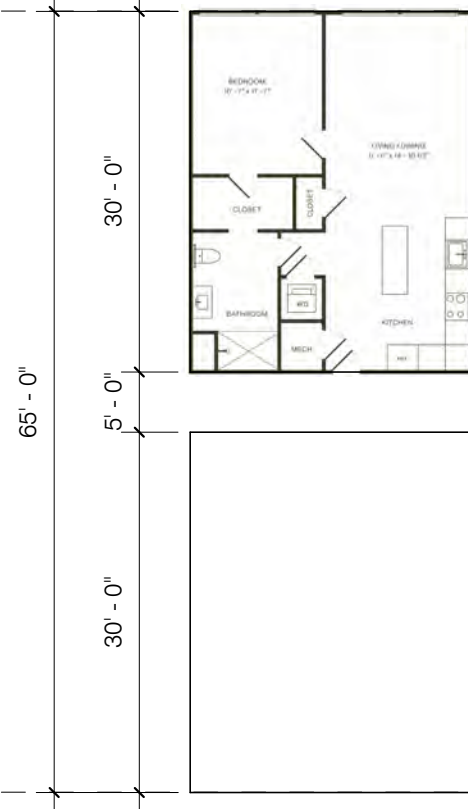


11 SHURS LANE

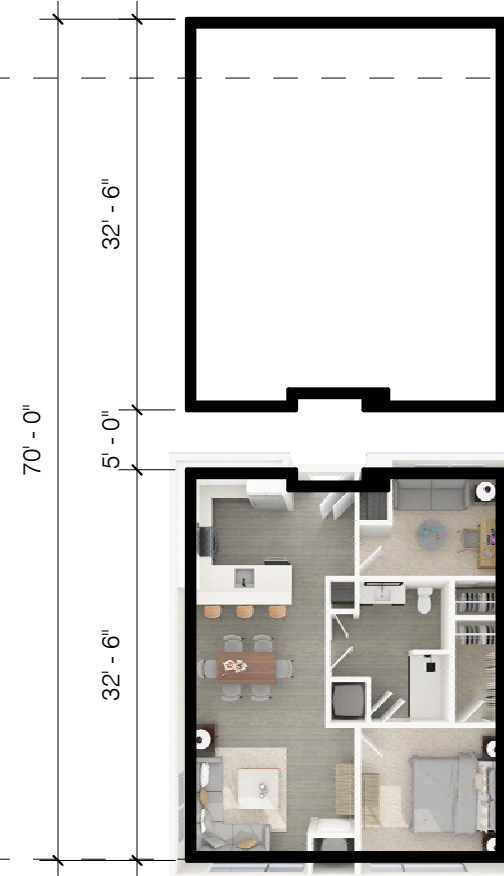
- ICMX
- Max occupied area (% of lot) - 100%
- Max FAR - 500% (4 stories/ 400% shown)
- Max Height - 38ft above average ground level
- No front, side or rear yards required



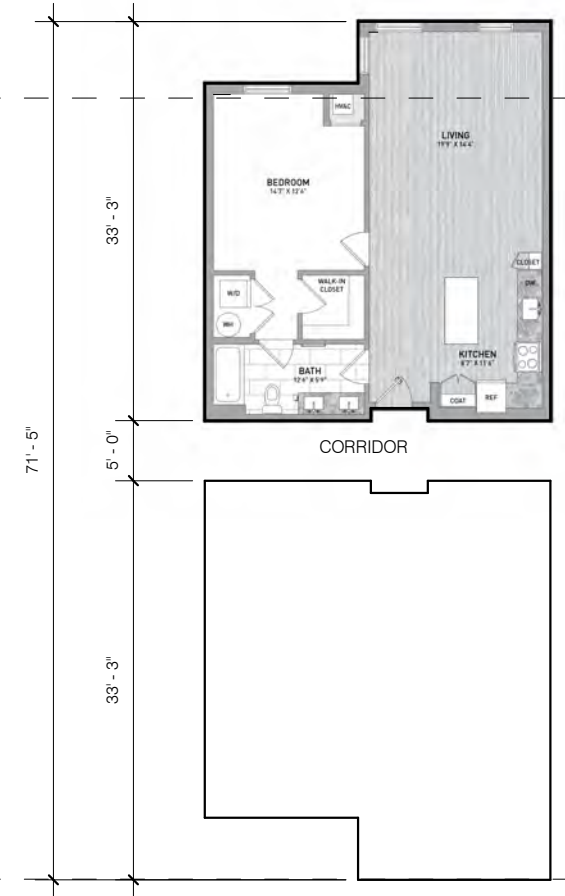
4045 Main Street - Manayunk



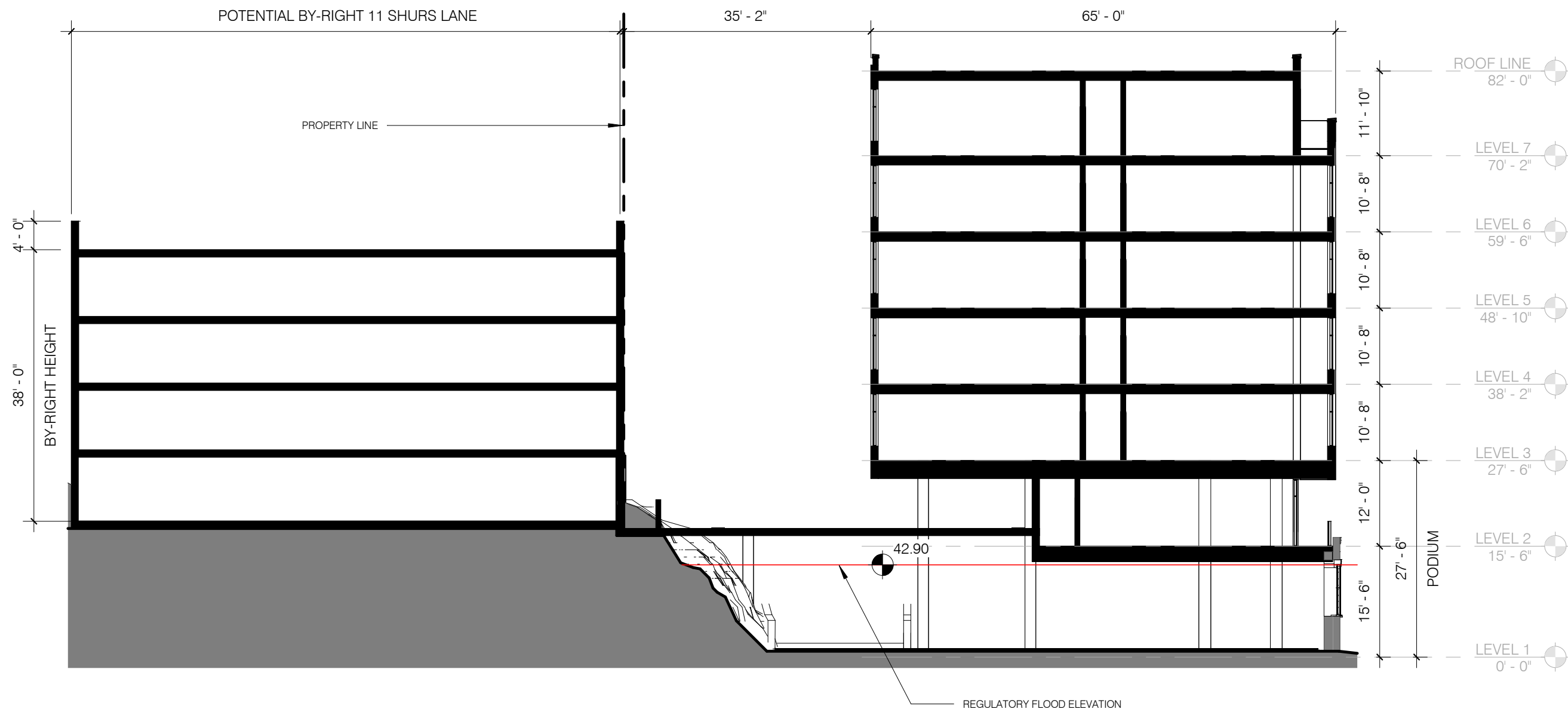
The Driftway - East Falls

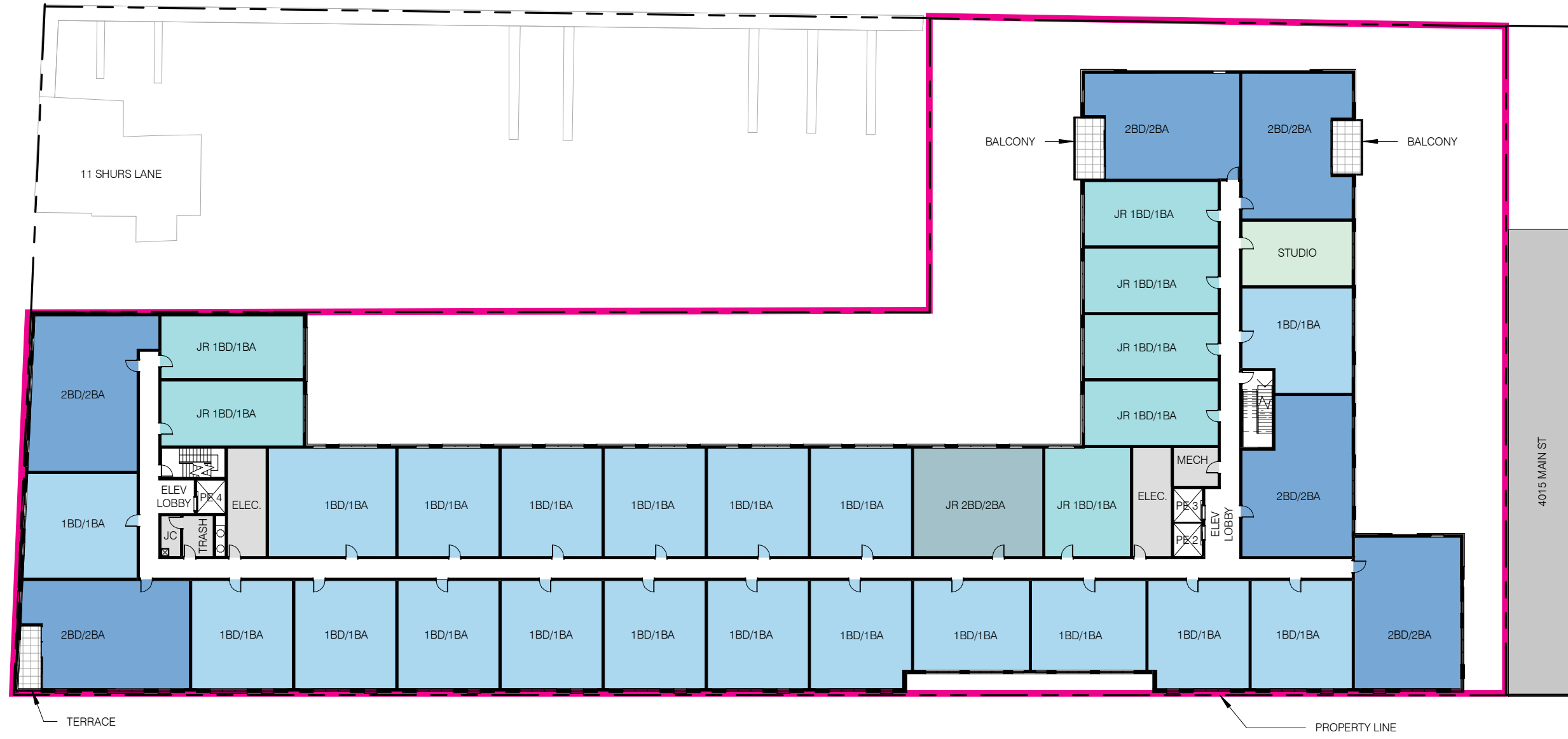


Luxor - Bala Cynwyd



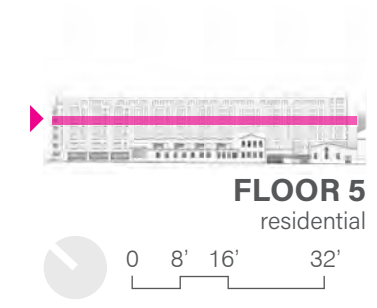
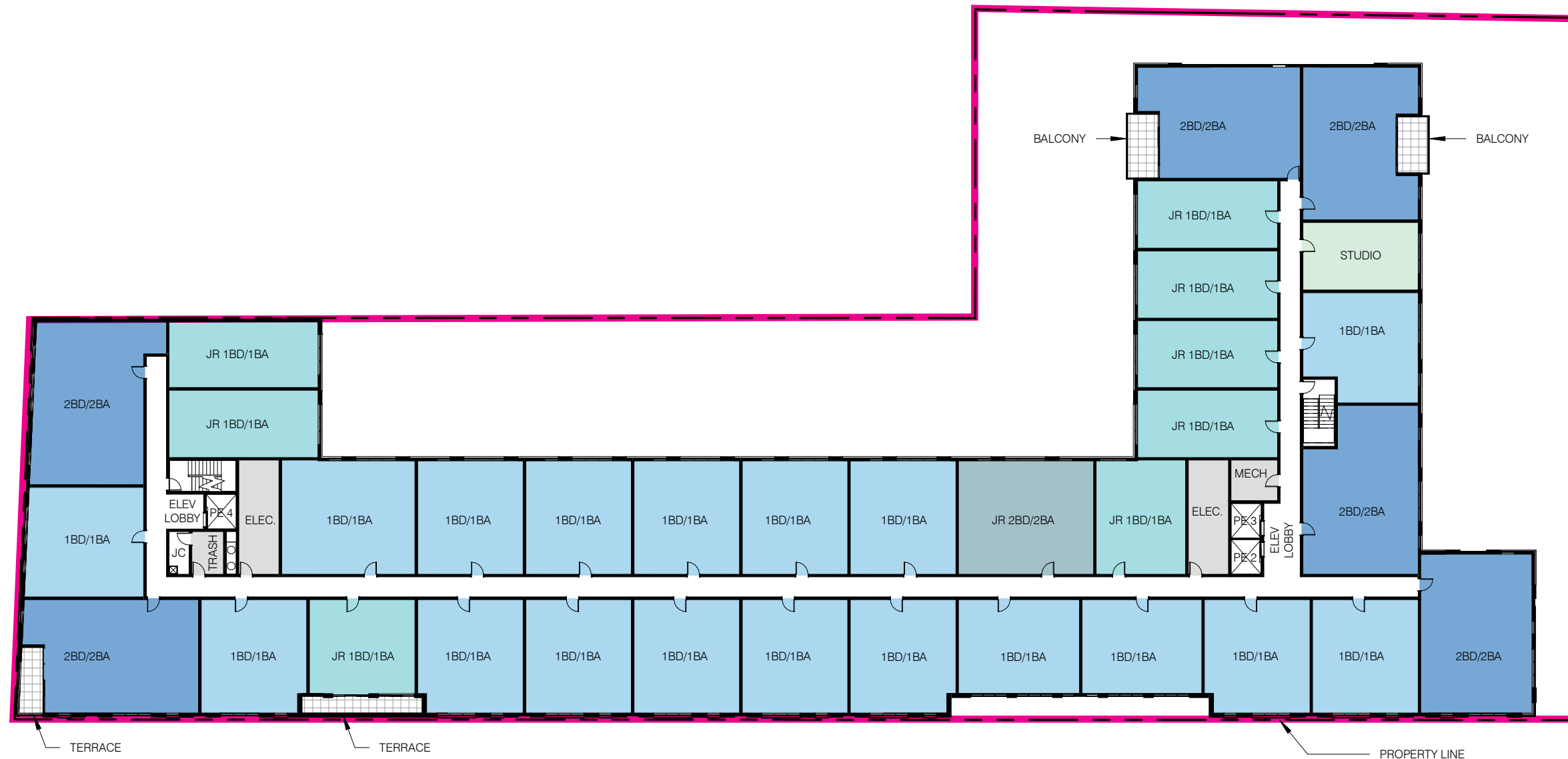
The Isle - Manayunk

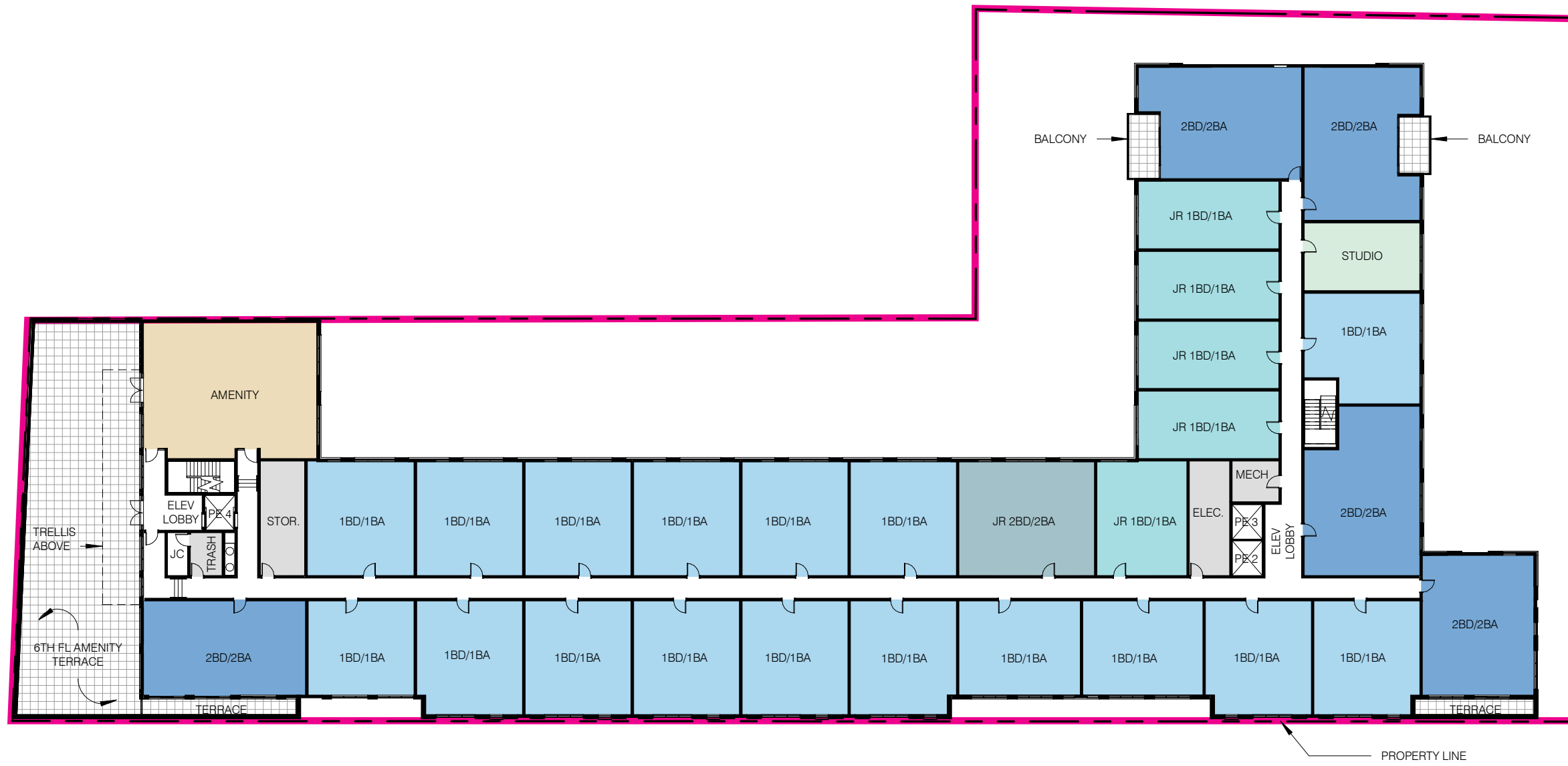




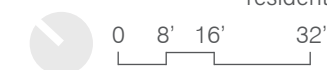
FLOOR 4
residential

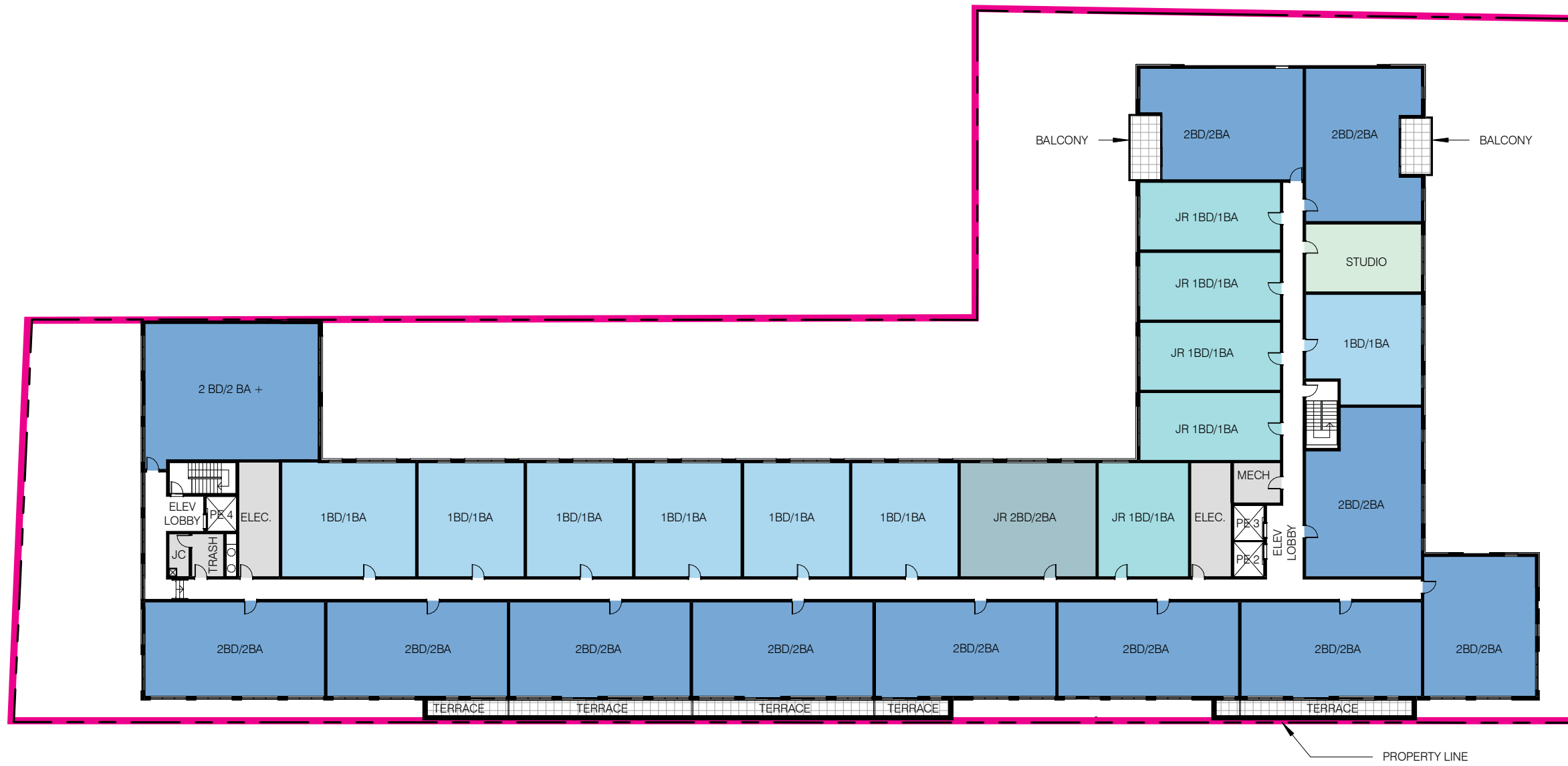






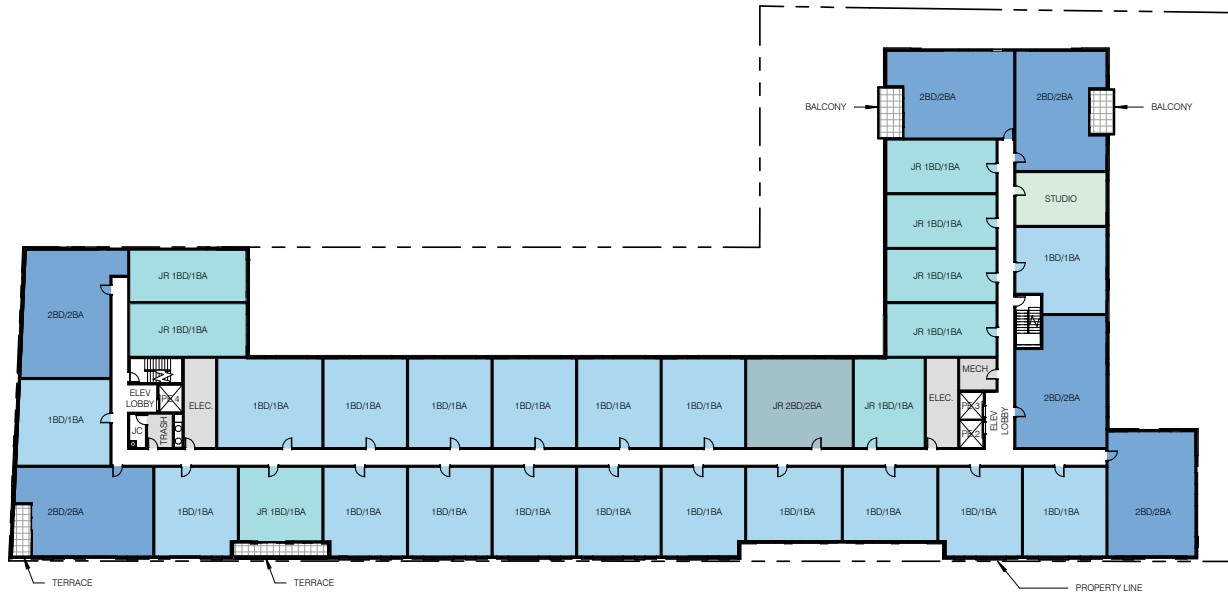
FLOOR 6
residential



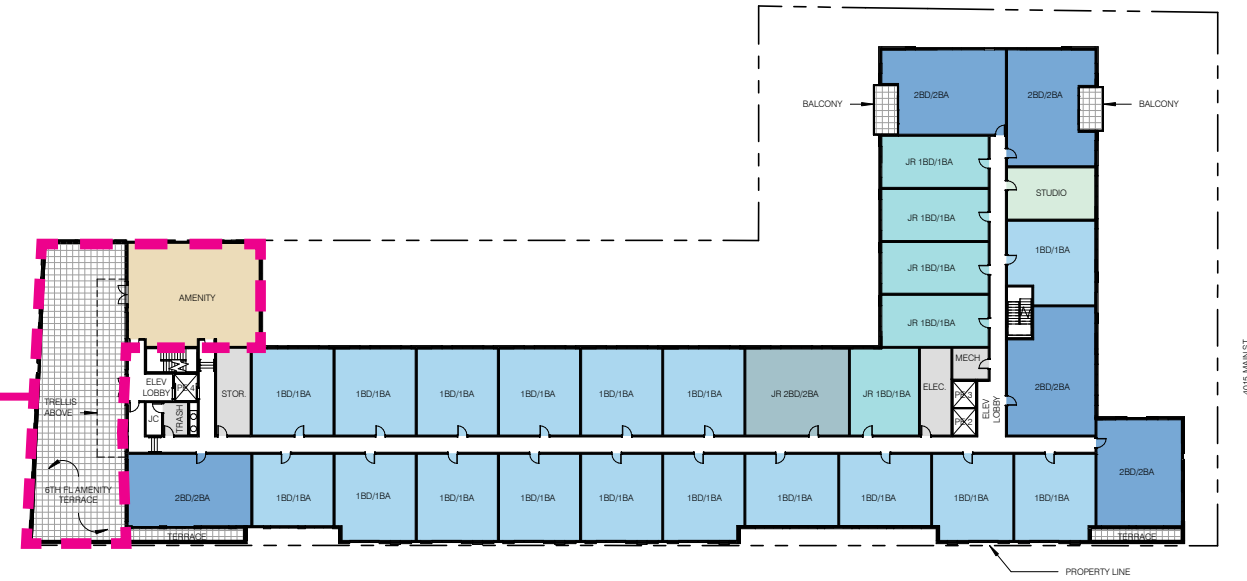


FLOOR 7
amenity, residential





TYPICAL FLOOR: 34 UNITS



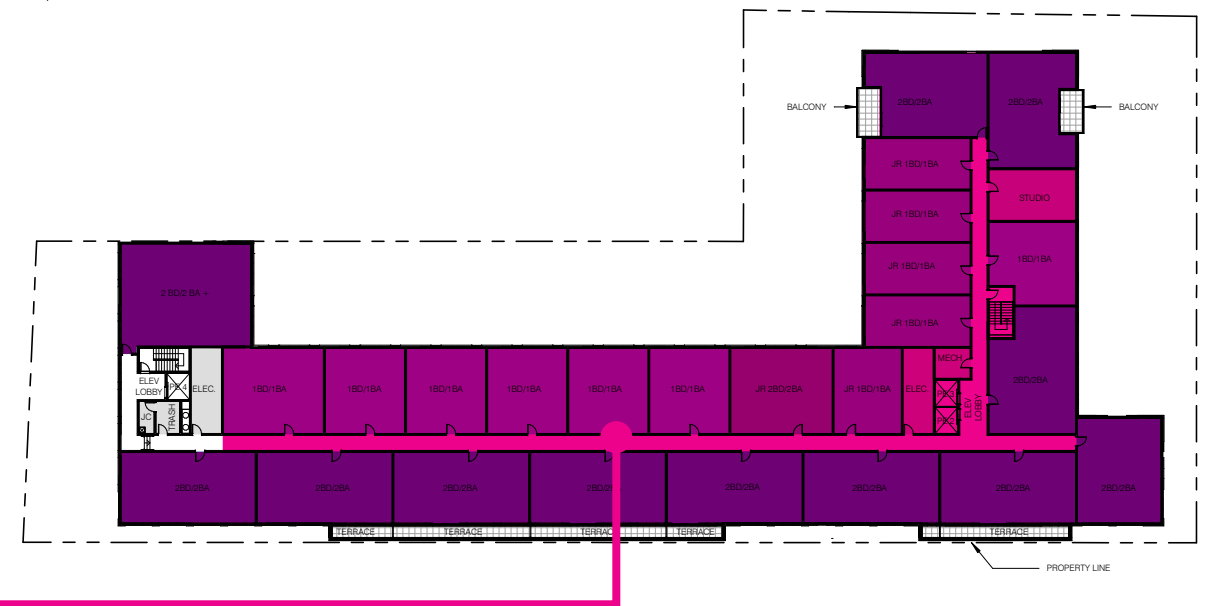
SIXTH FLOOR: 29 UNITS (-5 UNITS)



SECOND FLOOR: 9 UNITS (-25 UNITS)

-30 UNITS

+26 UNITS



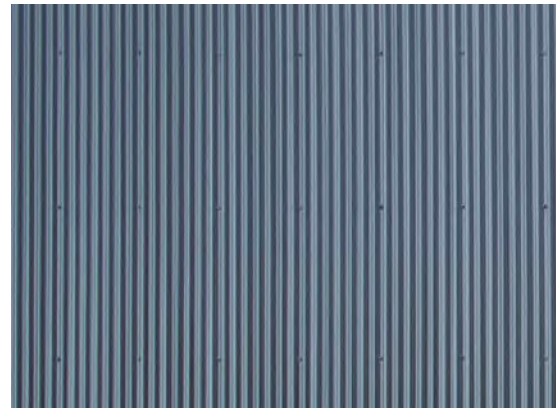
SEVENTH FLOOR: 26 UNITS (REGAIN UNITS LOST ON SECOND AND SIXTH FLOORS)



MATERIALS PALETTE



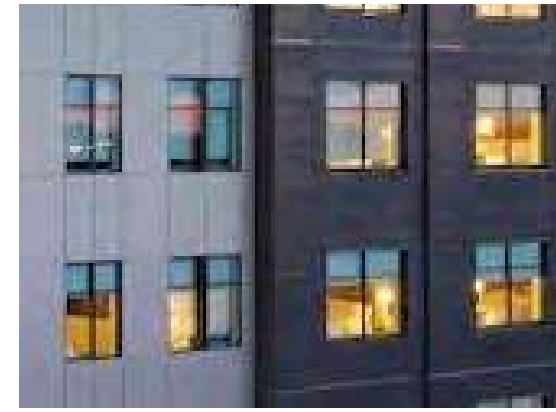
1 Modular Brick



2 Vertical Corrugated Metal Siding



3 Accent Color Metal Surround



4 Metal Clad Windows



5 Exst Window to be replaced. Paint color similar to existing.



6 Metal Storefront



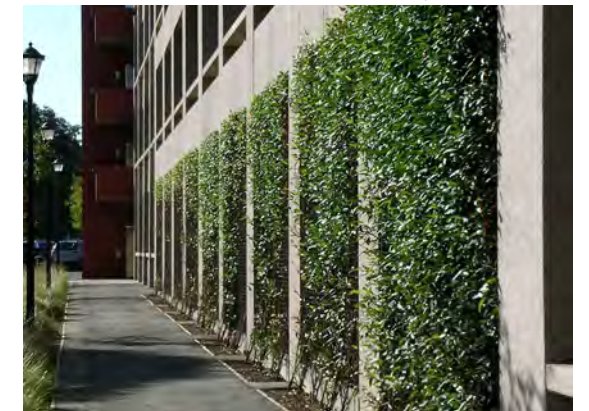
7 Translucent Panels



8 Glass Guardrail



9 Overhead Doors



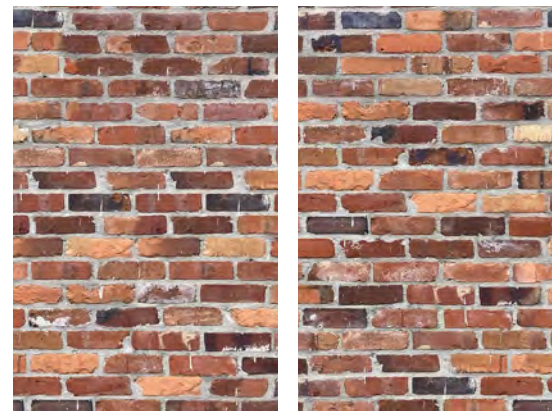
10 Trellis Fence



11 Entry Awning



12 Painted Metal C-Channel



13 Existing Brick

New Brick to match Existing

14

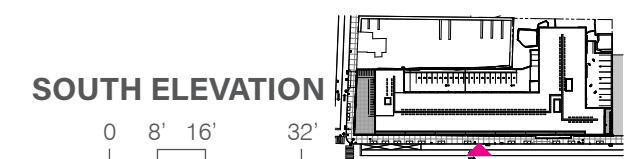


15 Existing Stone

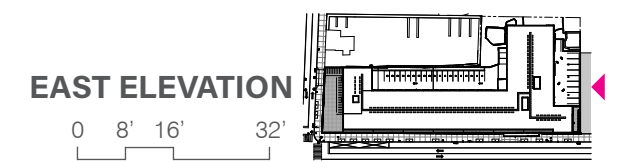


16 Existing Terracota Coping

- Modular Brick 1
- Vertical Corrugated Metal Siding 2
- Metal Clad Windows 4
- Existing Windows to be Replaced 5
- Metal Storefront 6
- Translucent Panels 7
- Glass Guardrail 8
- Overhead Doors 9
- Entry Awning 11
- Painted Metal C-Channel 12
- Existing Brick 13
- New Brick to match Existing 14
- Existing Stone 15
- Existing Terracotta Coping 16



- Modular Brick **1**
- Vertical Corrugated Metal Siding **2**
- Accent Color Metal Surround **3**
- Metal Clad Windows **4**
- Metal Storefront **6**
- Glass Guardrail **8**



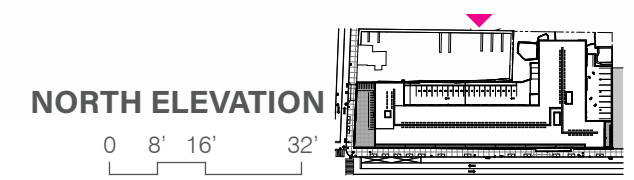
Vertical Corrugated Metal Siding 2

10 Trellis Fence

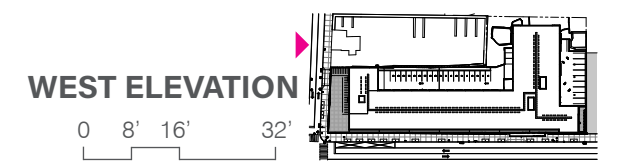
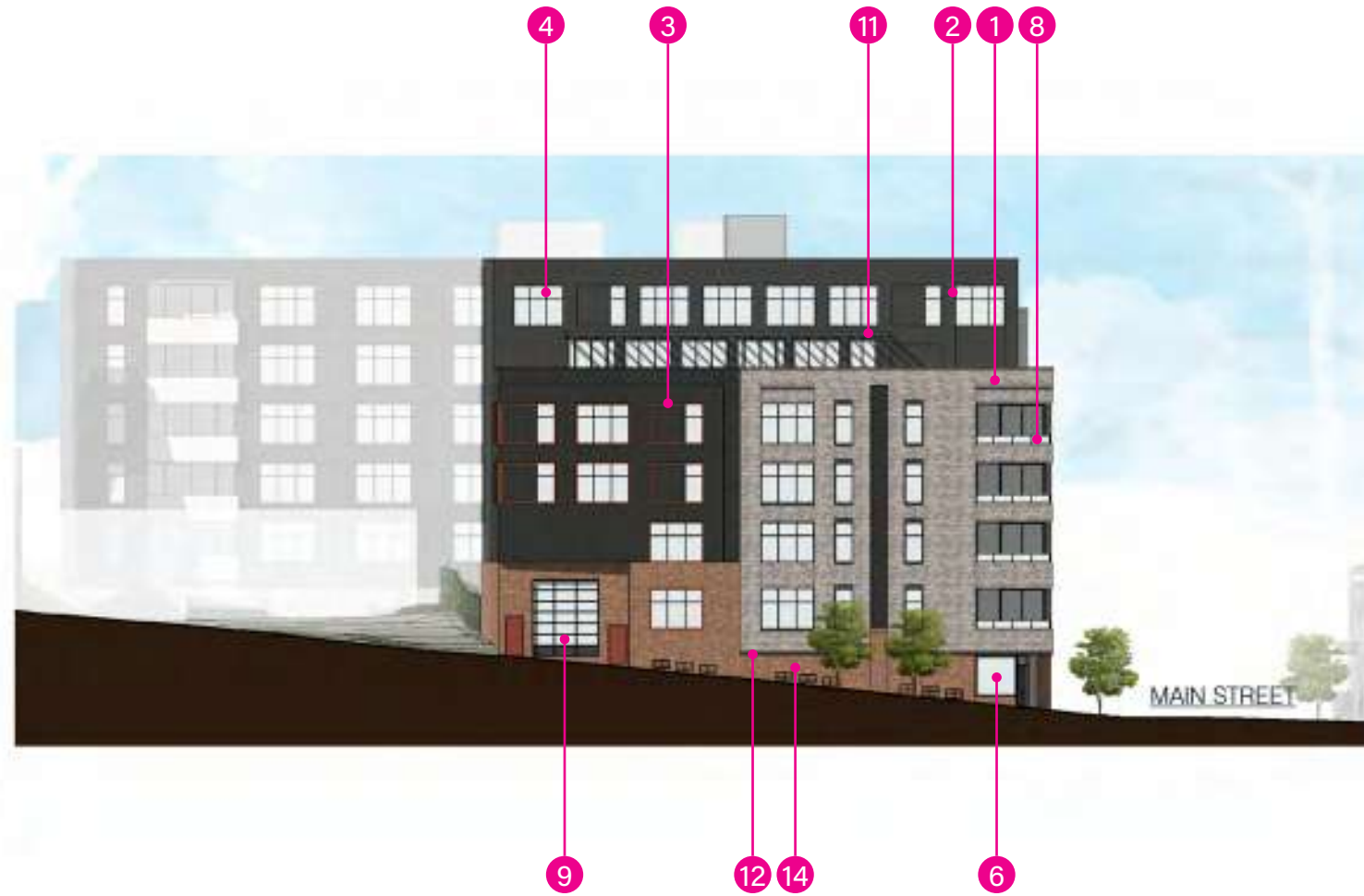
Accent Color Metal Surround 3

14 New Brick to match Existing

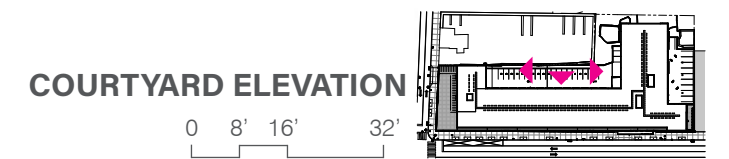
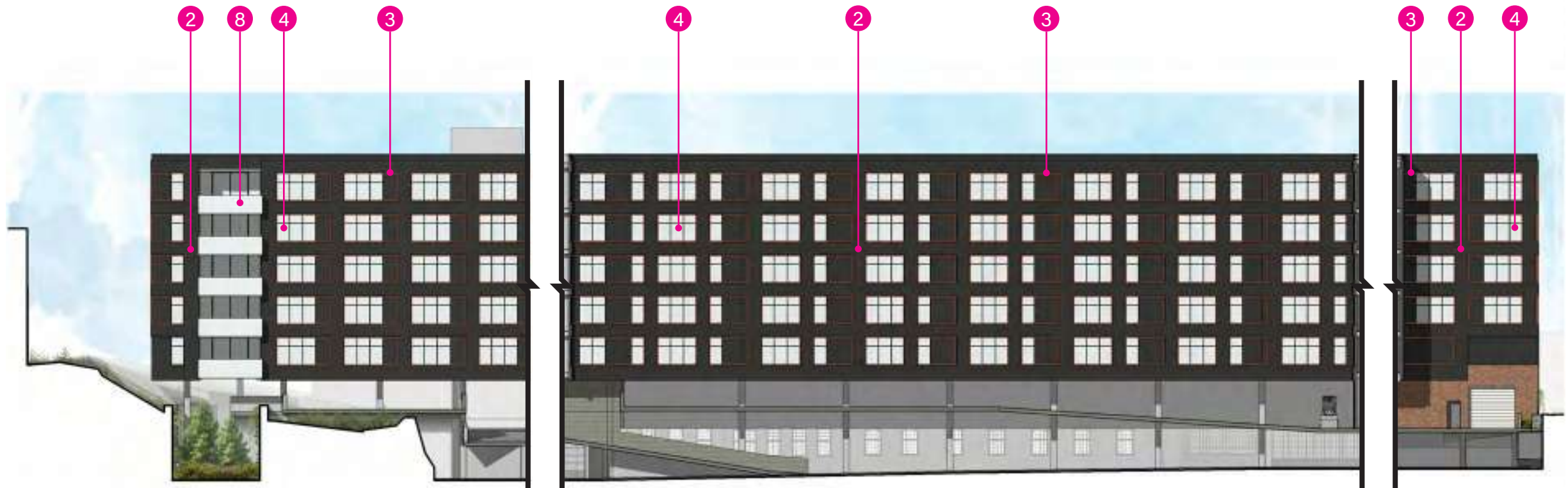
Metal Clad Windows 4



- Modular Brick **1**
- Vertical Corrugated Metal Siding **2**
- Accent Color Metal Surround **3**
- Metal Clad Windows **4**
- Metal Storefront **6**
- Glass Guardrails **8**
- Overhead Doors **9**
- Metal Trellis **11**
- Painted Metal C-Channel **12**
- New Brick to match Existing **14**



- Vertical Corrugated Metal Siding **2**
- Accent Color Metal Surround **3**
- Metal Clad Windows **4**
- Glass Guardrail **8**





Main Steet Elevation Perspective - Previous Scheme (May 10)



Main Steet Elevation Perspective



Main Street Elevation Perspective - Previous Scheme (May 10)



Main Street Elevation Perspective



Main Street Elevation Perspective - Previous Scheme (May 10)



Main Street Elevation Perspective



Aerial View looking Northeast - Previous Scheme (May 10)



Aerial View looking Northeast



View looking Northwest on Main Street - Previous Scheme (May 10)



View looking Northwest on Main Street



Aerial View looking Southeast - Previous Scheme (May 10)



Aerial View looking Southeast



Shurs Lane Elevation Perspective - Previous Scheme (May 10)



Shurs Lane Elevation Perspective



View looking East on Main Street & North on Shurs Lane - Previous Scheme (May 10)



View looking East on Main Street & North on Shurs Lane



Residential Entry Perspective - Previous Scheme (May 10)



Residential Entry Perspective



View looking East on Main Street - Previous Scheme (May 10)



View looking East on Main Street



Apex Manayunk
4601 E Flat Rock Road, Philadelphia
6 Stories - 128 Units



The Locks
Riverside Way (1 Leverington Avenue), Philadelphia
5 Stories - 63 Townhomes



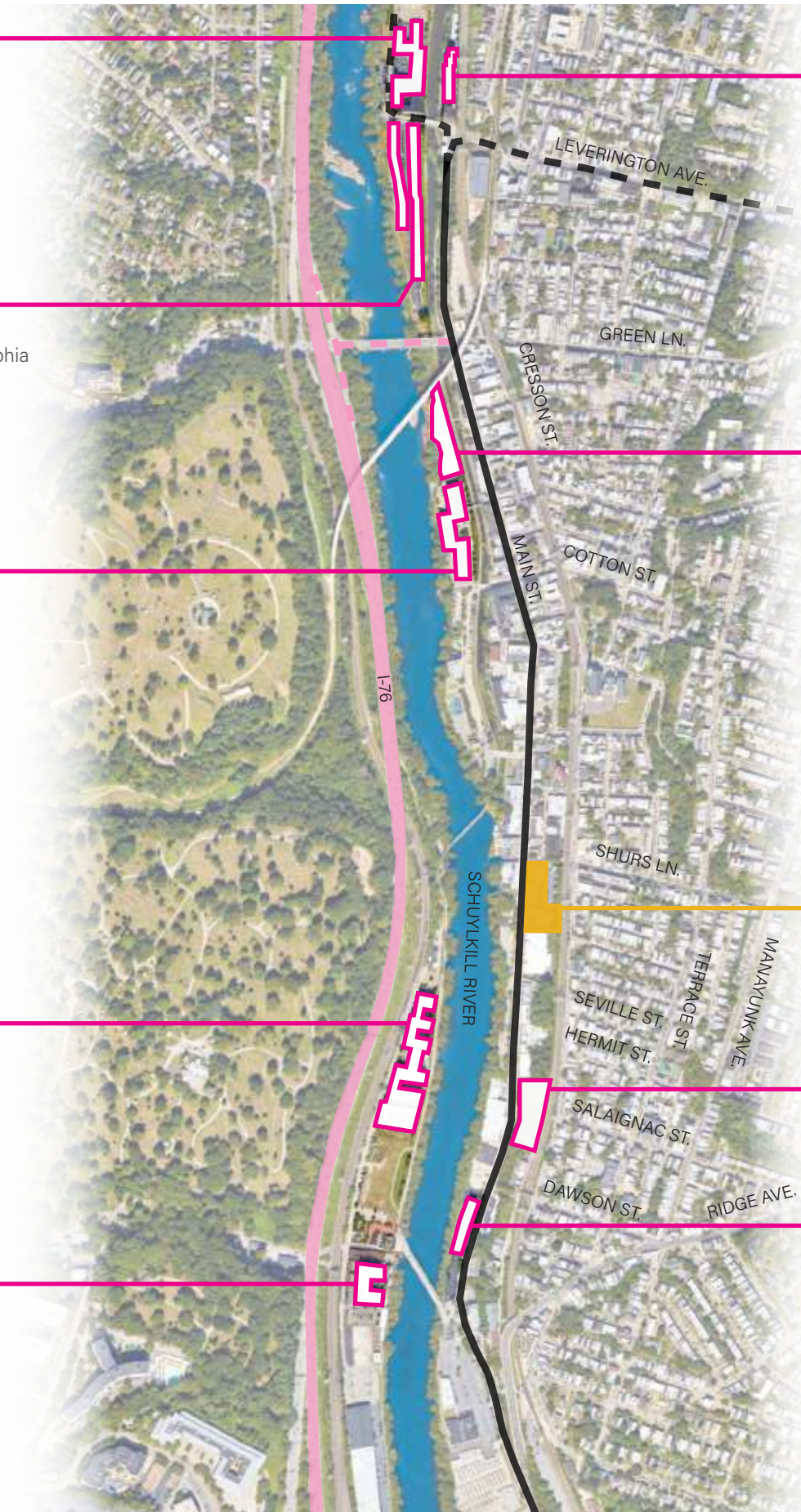
The Isle
1 Cotton Street, Philadelphia
5 Stories - 205 Units



The Yard at Pencoyd Landing
600 Righters Ferry Road, Bala Cynwyd
7 Stories - 593 Units



Residence Inn by Marriott
615 Righters Ferry Road, Bala Cynwyd
7 Stories - 124 Suites



Watermill at Manayunk
2 Leverington Avenue, Philadelphia
7 Stories



Venice Island
4436-44 Main Street, Philadelphia
5 Stories - 213 Units



Site
4045 Main Street, Philadelphia
7 Stories - 167 Units

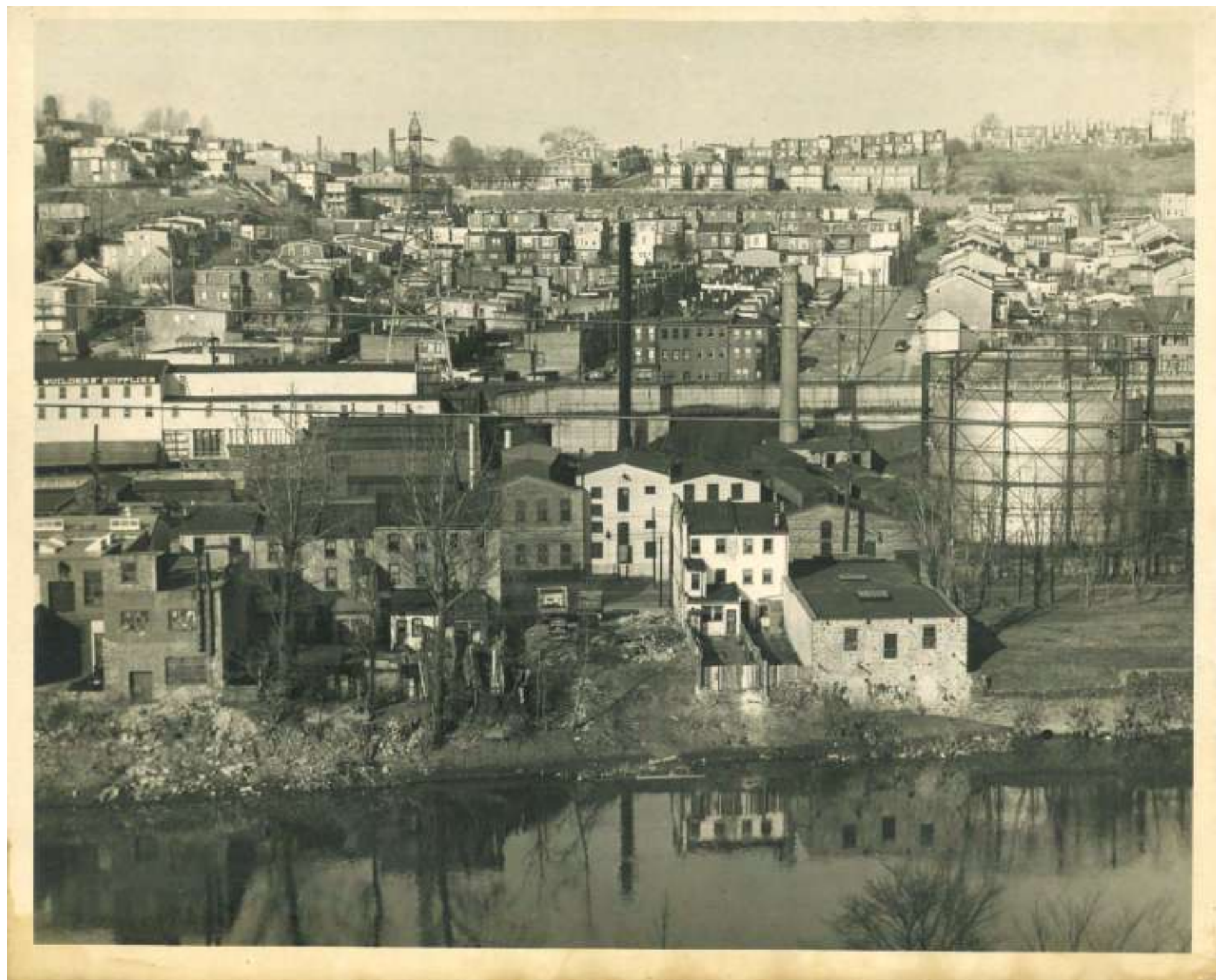
3811 Main Street (Under Construction)
6 Stories - 36 Units
5 Commercial Spaces

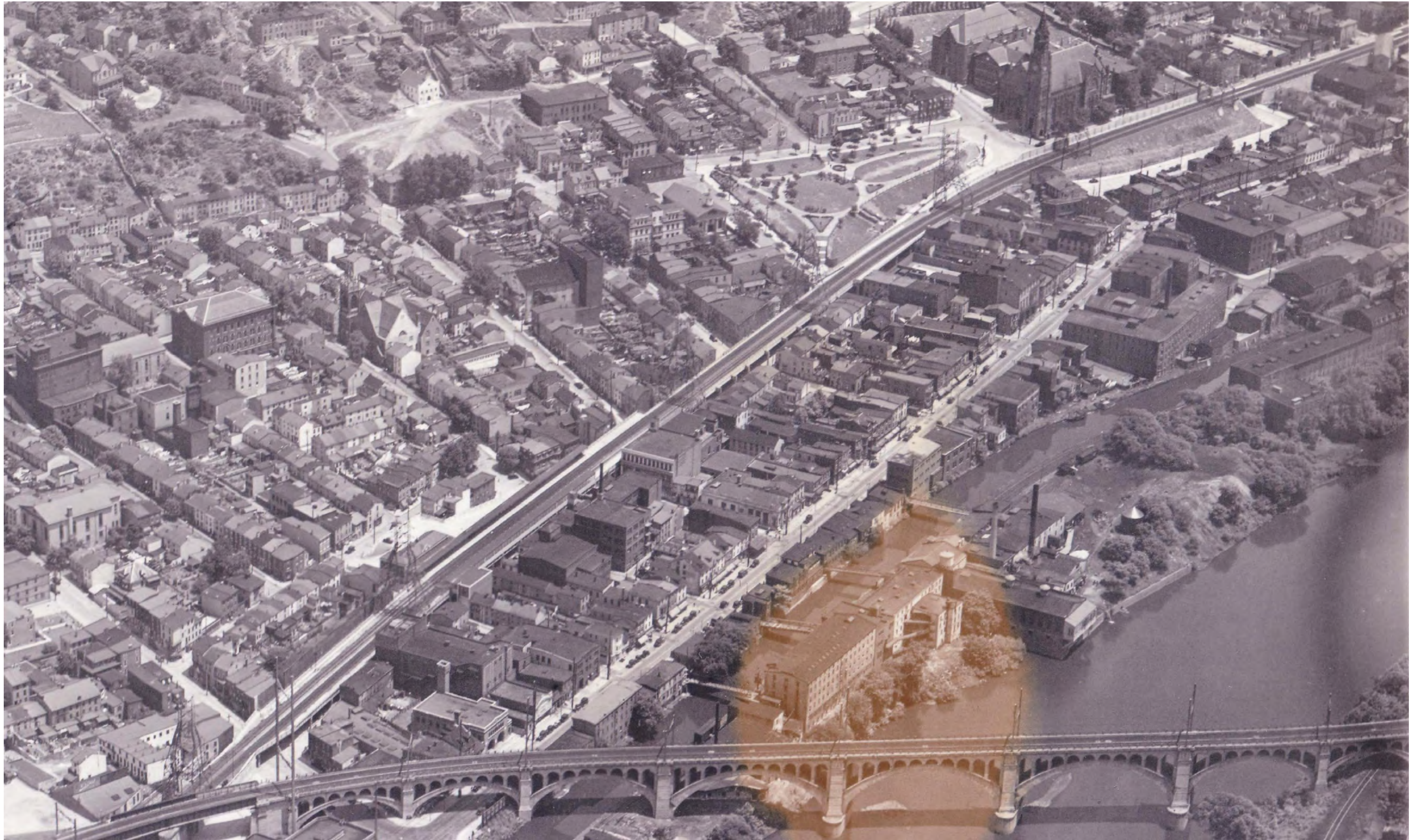
BridgeFive Condominium
3750 Main Street, Philadelphia
7 Stories - 60 Units





Aerial View looking Southeast



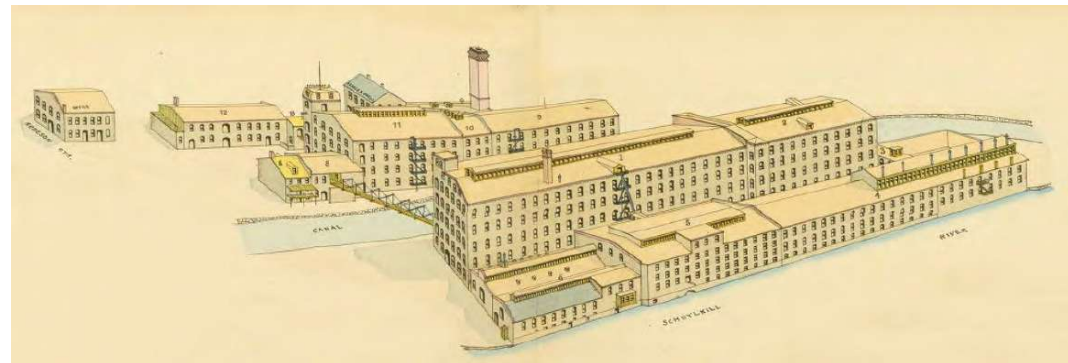
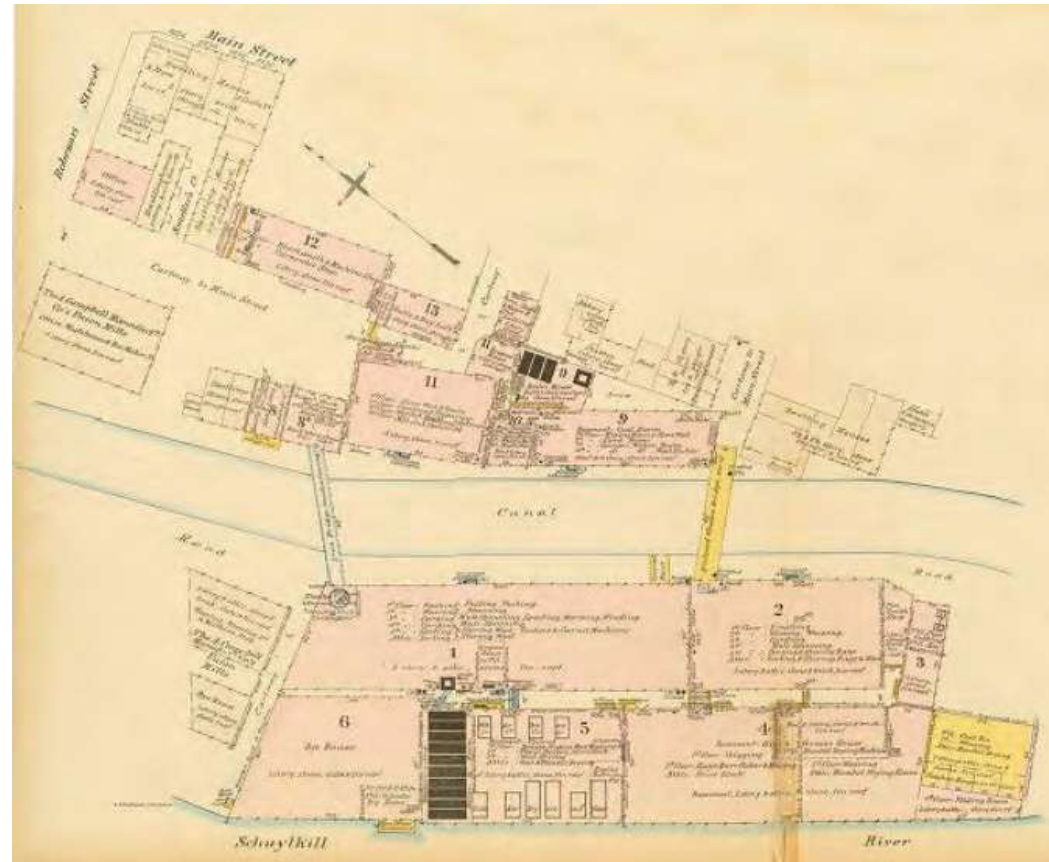




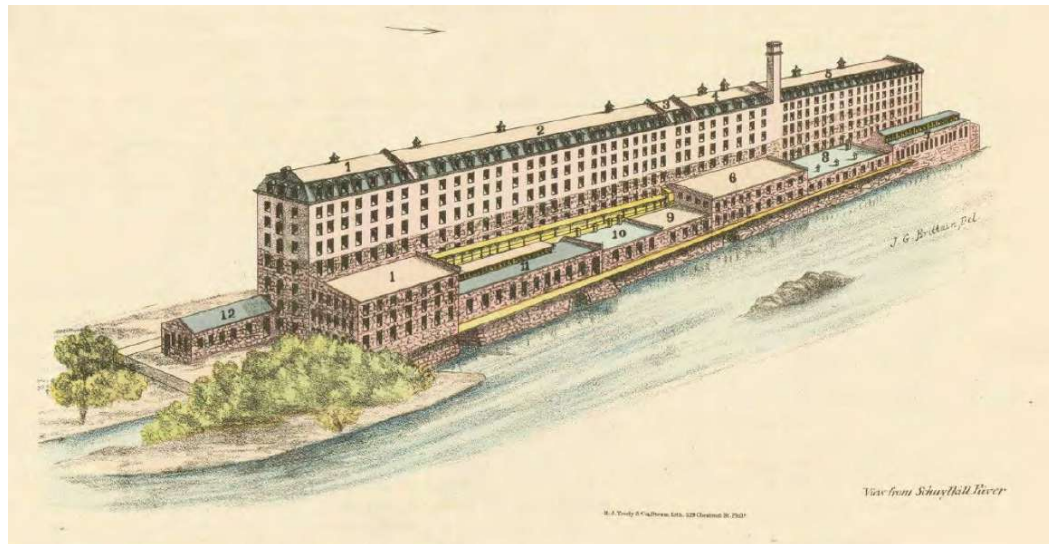
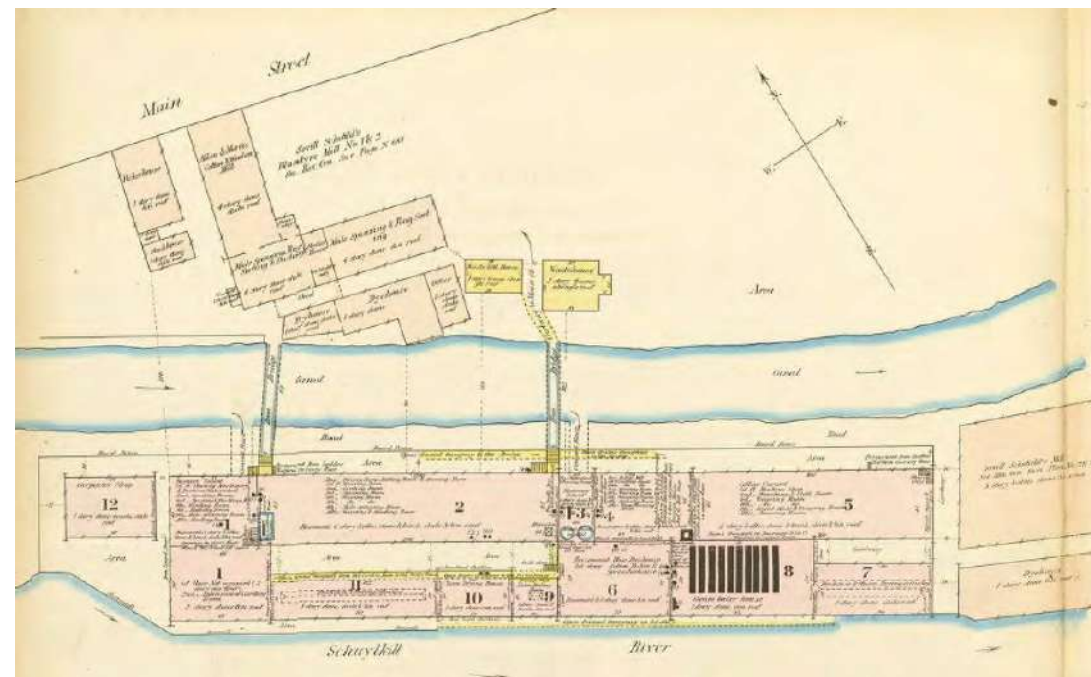




1883

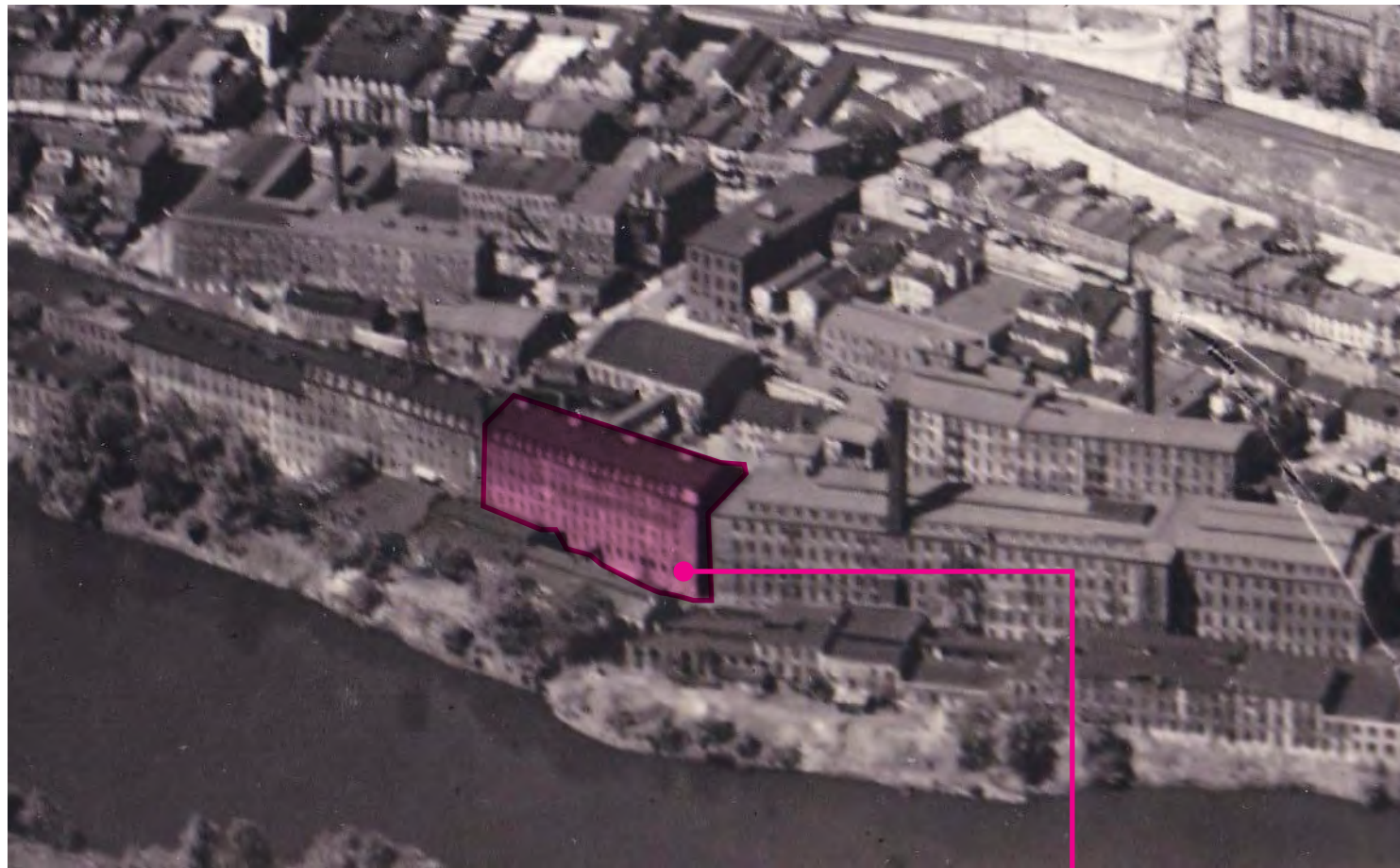


1873



2024

ECONOMY MILLS & SCHUYLKILL MILLS (VENICE ISLAND)

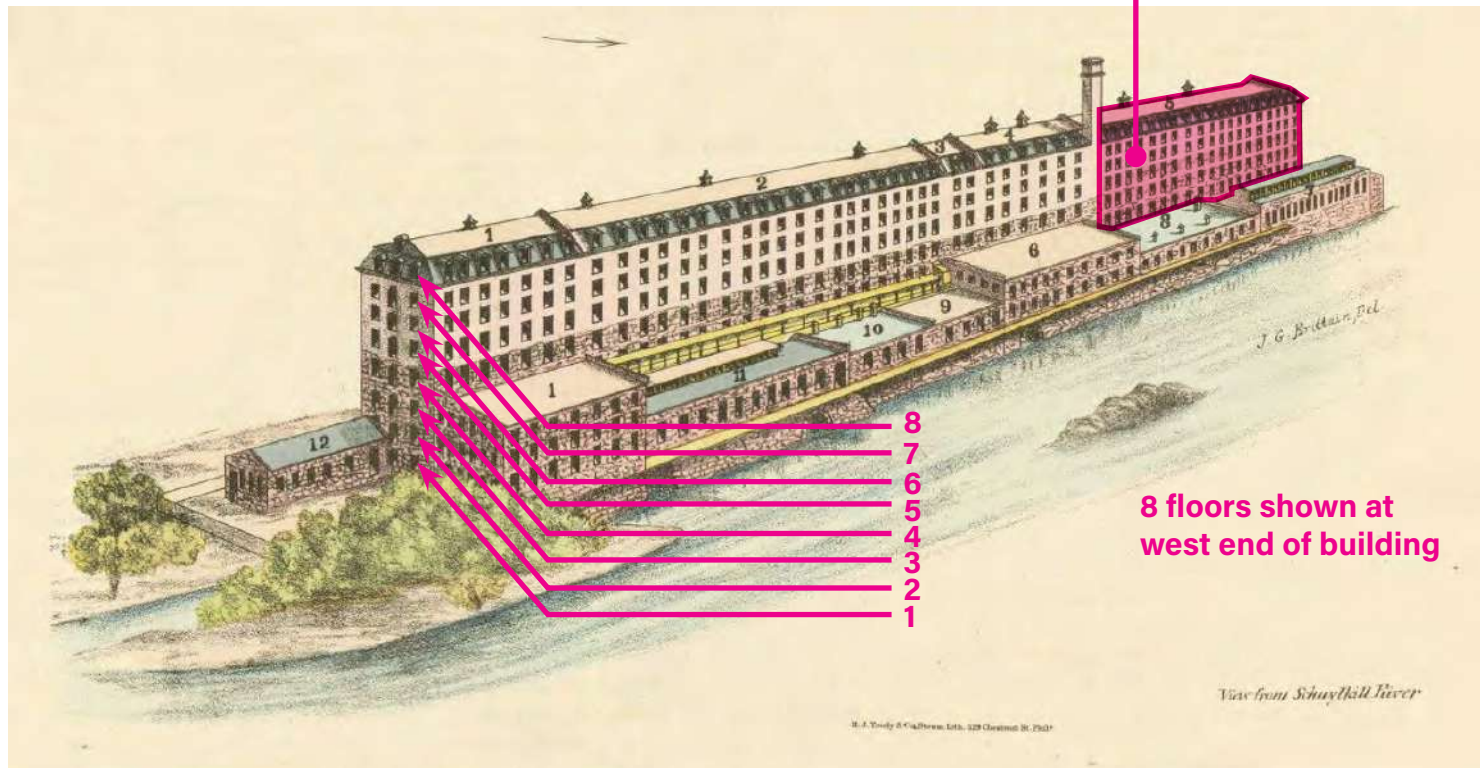


1934 Aerial Photograph

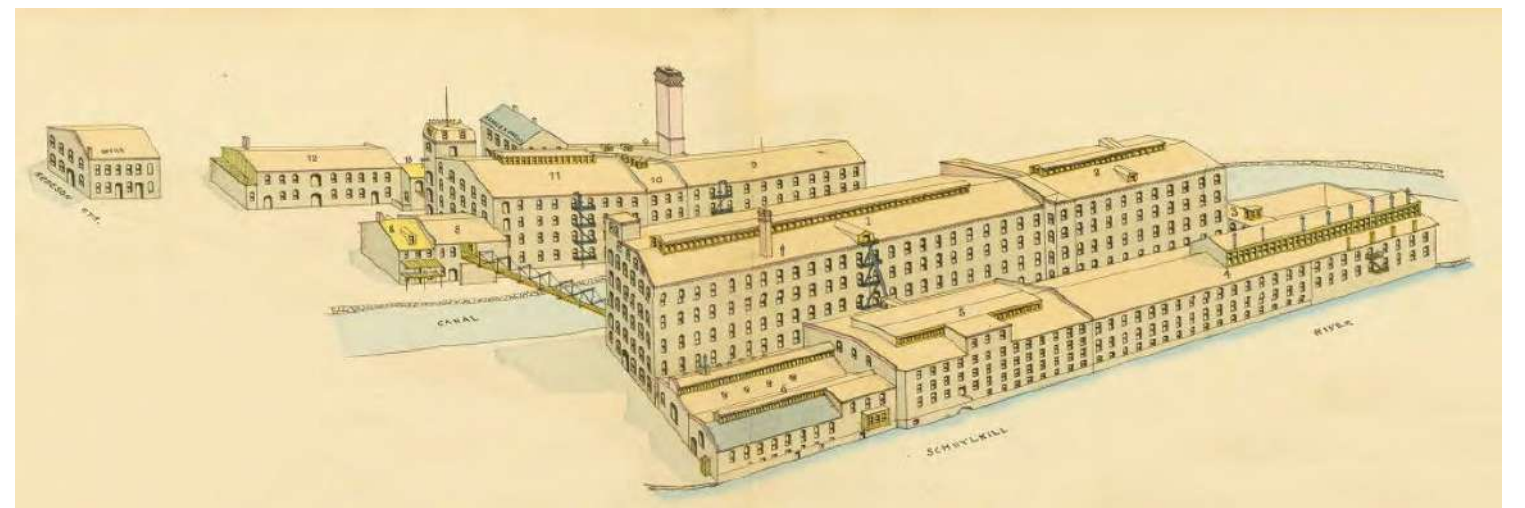


1873 Atlas

both depict 6 floors visible at east end of building

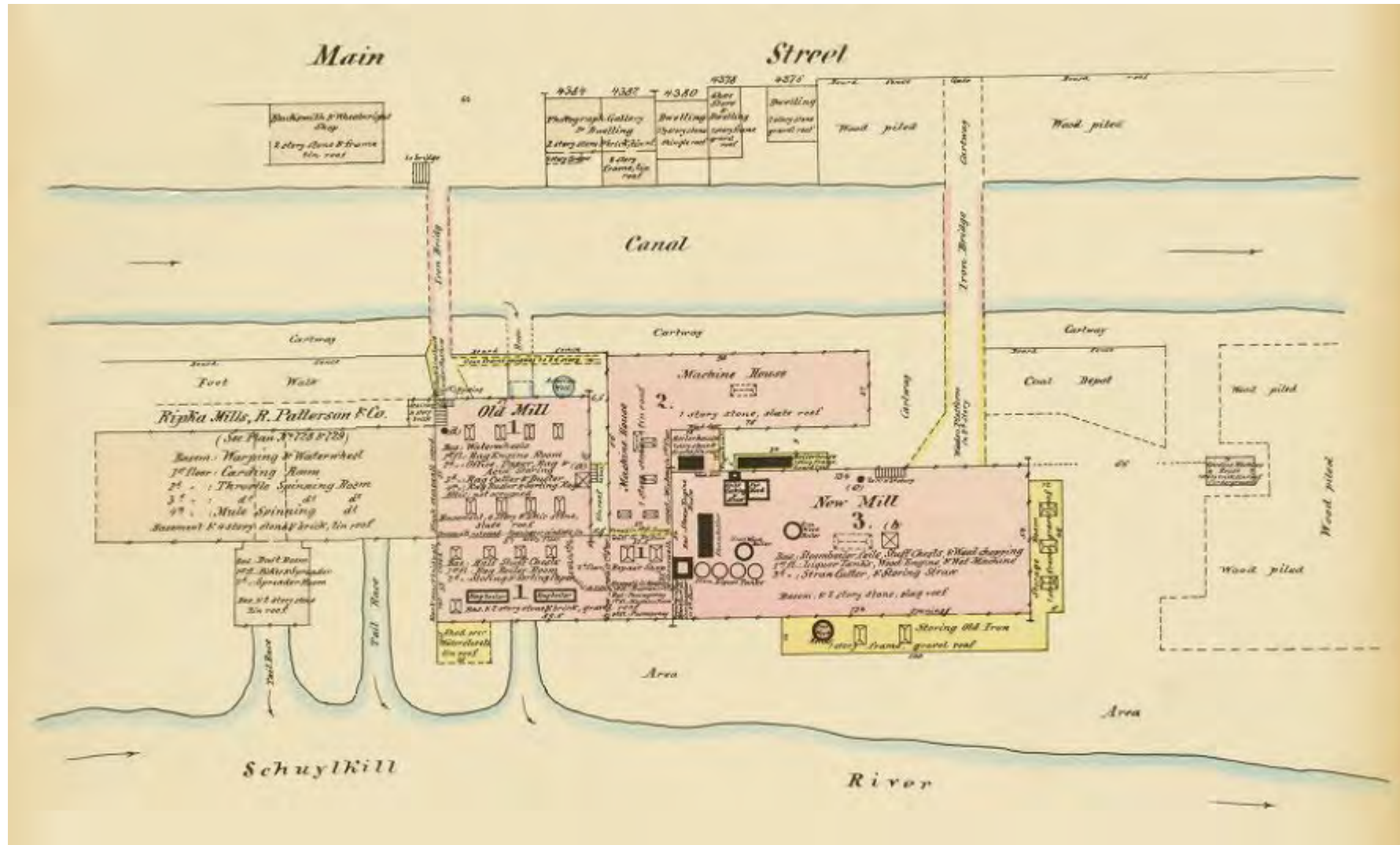


8 floors shown at west end of building



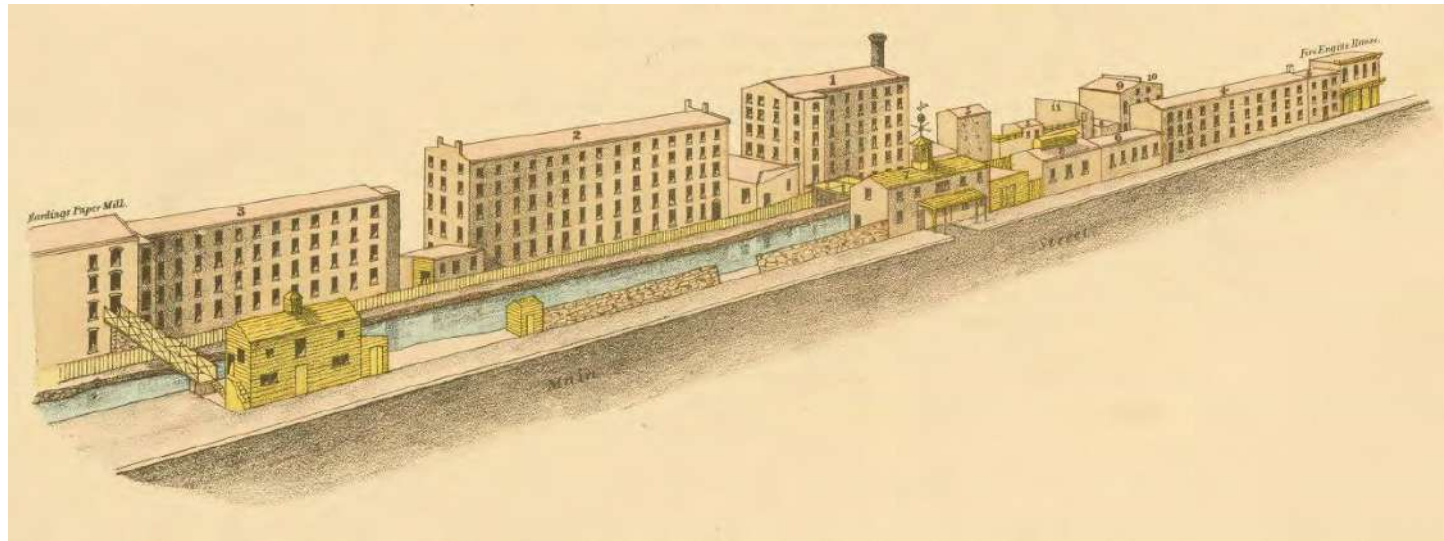
ECONOMY MILLS & SCHUYLKILL MILLS (VENICE ISLAND)

1875

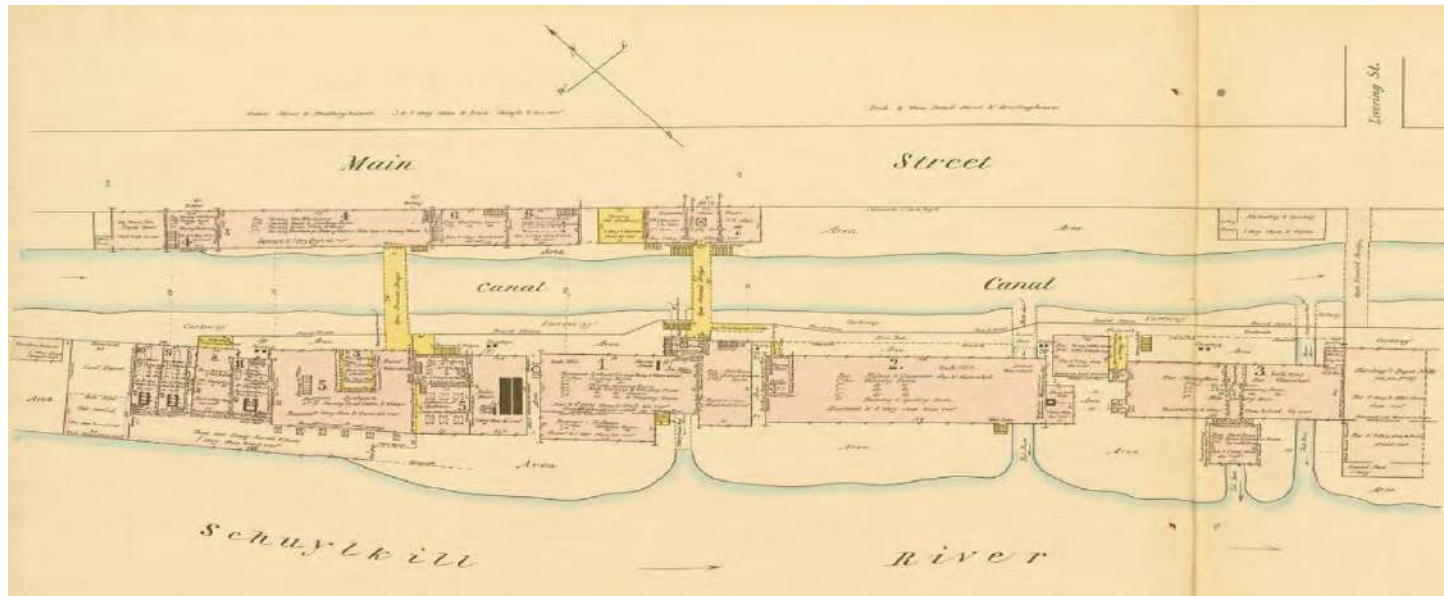


2024

INQUIRER PAPER MILLS (COTTON ST)



1873



2024

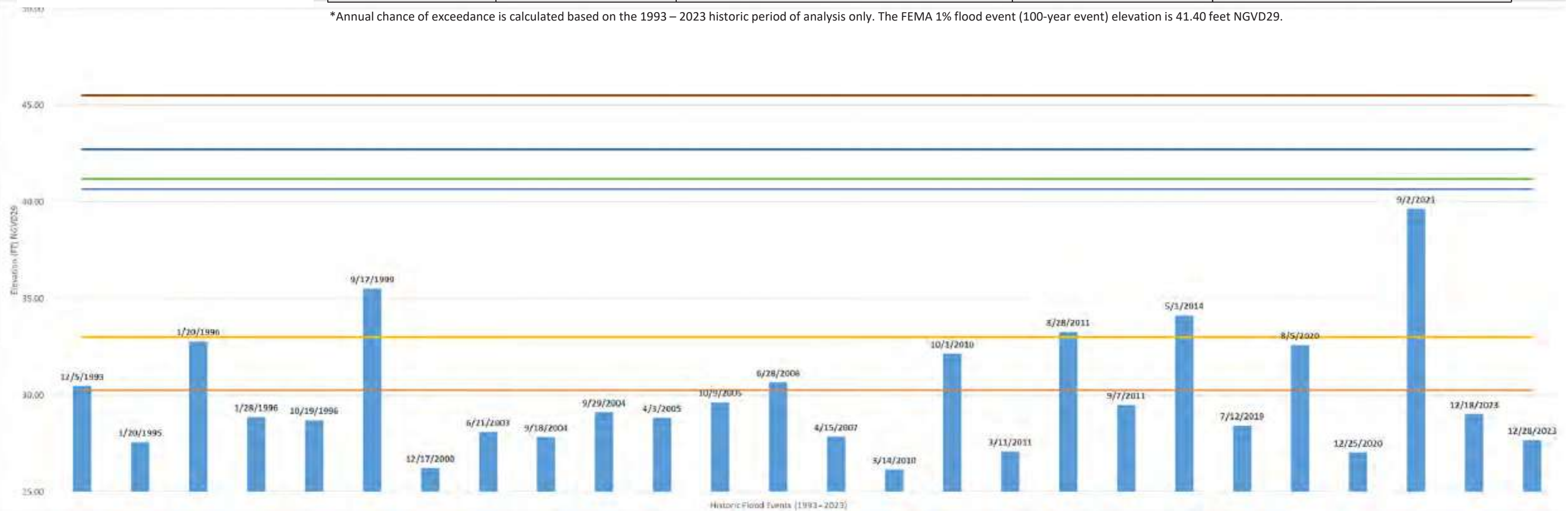
JOSEPH RIPKA'S MILLS

Historic Flood Probabilities

- Level 2 Finished Floor - EL. 45.50
- Emergency Egress Door - EL. 42.72
- Loading Ramp - EL. 41.17
- Shurs Lane Door - EL. 40.65
- West Lobby Door - EL. 33.00
- Parking Garage Entrance - EL. 30.25
- Main Lobby Door - EL. 30.25

Location	Proposed Elevation (FT) NGVD29	Historic Flood Events (1993 - 2023)		
		Number of Flood Events Exceeding EL.	Max Flood Depth Above EL. (ft) 9/2/2021	Annual Chance of Exceedance*
Parking Garage Entrance	30.25	9	9.38	30%
Main Lobby Inner Door	30.25	9	9.38	30%
West Lobby Door	33.00	4	6.63	13%
Shurs Lane Door	40.65	0	0.00	<1%
Loading Ramp	41.17	0	0.00	<1%
Emergency Egress Door	42.72	0	0.00	<1%
Level 2 Finished Floor	45.50	0	0.00	<1%

*Annual chance of exceedance is calculated based on the 1993 – 2023 historic period of analysis only. The FEMA 1% flood event (100-year event) elevation is 41.40 feet NGVD29.



Building Elevations

<i>Proposed Finished Floor Elevation</i>		<i>First Floor</i> 30.00	<i>Second Floor</i> 45.50
		Height Above/Below (FT)	
FEMA BFE (Northwestern corner of building)	41.40	-11.40	4.10
Philadelphia DFE (BFE + 18")	42.90	-12.90	2.60
2022 NYC Building Code, Flood-Resistant Construction DFE (BFE + 2')	43.40	-13.40	2.10
2023 NJ Inland Flooding DFE (BFE + 2' + 1' Freeboard)	44.40	-14.40	1.10



URBAN CONVERSIONS



Yarn Factory Lofts - Manayunk



Water Works - Manayunk



The Glassworks - Olde Kensington



The Paper Factory - Olde Kensington



Sanctuary Lofts - Graduate Hospital



709 N 2nd Street - Northern Liberties

CBP ARCHITECTS



Lippincott - Society Hill



York Square - Old City



Reach Lofts - Fishtown



Berger Building - Old City



2110 Walnut - Rittenhouse Square



Western Union - Washington Square West



Neumann - Fishtown



