

EMAN Zoning Committee
Variance Request Review: 224 E Sharpnack St.
Application Number: ZP-2021-006198
224 E Sharpnack St – RSA5 Zoning District

Existing
Single House & Garage
≈ 60-ft by 150-ft, 8998 sf

Proposed
6-unit Multi-family
*Building**



This EMAN Zoning Committee draft variance review has been prepared for consideration by the Applicant, Near Neighbors and the E Mt Airy community. This review identifies potential issues related to the 224 E Sharpnack St. variance request in accordance with the ZBA criteria for accepting or denying a zoning variance request.

This draft will be updated based on written and/or oral comments from the Applicant, Near Neighbors and community members during the Oct. 13, 2021, EMAN Zoning Committee Community Meeting for this variance request.

*L&I and Applicant disagree on single-family vs multi-family building designation. See text for explanation.

L&I Notice of Refusal, 6/12/21 and ZBA Application for Appeal, 6/28/21: L&I issued a notice of refusal for the proposed 224 E Sharpnack zoning permit application by PB Jack Properties LLC (Applicant) on 6/12/21, Exhibit 1. The image below shows L&I's 2 zoning non-compliances:

1. Multi-family household living prohibited in an RSA5 zoning district
2. Minimum rear yard depth of 9-ft is required, no rear yard provided.

Application for:

For the erection of six semi-detached townhouse structures each with a full basement, private roof deck accessed by exterior access stairs and an interior parking garage. For the use as Multi-Family Household Living (6 dwelling units).

The permit for the above location cannot be issued because the proposal does not comply with the following provisions of the Philadelphia Zoning Code. (Codes can be accessed at www.phila.gov.)

Code Section(s):	Code Section Title(s):	Reason for Refusal:
Table 14-602-1	Uses Allowed in Residential Districts - Refusal	Whereas, the proposed use of Multi-Family Household Living is expressly prohibited in the RSA-5 Zoning District.
Table 14-701-1	Minimum Rear Yard Depth	A Minimum Rear Yard Depth of 9 feet is required. Whereas, there is no rear yard proposed.

The Applicant submitted a ZBA Application for Appeal on 6/28/21, Exhibit 2.

REASONS FOR APPEAL:

Applicant seeks to build six new single-family homes with off-street parking on one lot and faces a hardship in doing so by right. Applicant's proposal will not harm neighbors or existing city infrastructure. Proposed homes will be governed by an PUD/HOA. Applicant reserves the right to present additional grounds in support of its appeal at the time of its hearing before the Zoning Board of Adjustment.

Zoning Committee Comment 1:

There is a discrepancy between the L&I Notice of Refusal statement that application is for "**use of Multi-Family Household**" and the Applicant's Application for Appeal – Reason for Appeal statement: "**applicant seeks to build six new single-family homes ...**" and "**Proposed homes will be governed by an PUD/HOA**".

The Applicant needs to clarify whether their variance request is for a 6-unit multi-family building or 6 single-family houses with a PUD/HOA?

224 E Sharpnack St Property: This property is approximately 30-ft by 150-ft, equivalent to 8,998 sf. It is zoned RSA5, residential single-family attached.

The adjacent image shows an aerial view of the property from Philadelphia’s Pictometry web site.

A 2-story apartment building abuts the subject property.



Historical Context of 224 E Sharpnack St Property: Exhibit 3 shows a part of Baist’s 1895 Property Atlas, Plate 38 which shows 224 E Sharpnack St to be one of 4 similarly designed homes just 1 block from the Franklin Yarn Mill.

E Sharpnack Street is one of E Mt Airy’s earliest east-west cross streets, an 1848¹ map shows the Sharpnack family home but no Sharpnack street. A 1851² map shows E Sharpnack St. extending from Germantown Ave. to Township Line Road, today’s Stenton Ave. Joseph Randall & Brothers established the Franklin Yarn Mill in the 100 block of E Sharpnack St in 1856.³ The Franklin Mill was a major employer in the 1860 – 1900 time period so that it is possible that the 224 E Sharpnack St. house was related to the Franklin Mill operation.

Zoning Committee Comment No. 2:

The Owner should investigate the history of this 125+ year old house to determine whether there is any historical connection between the Franklin Mill and the 224 E Sharpnack St. house and ascertain the merits of having it designated by the Philadelphia Historic Commission.

In the 1930s, the US Homeowners Loan Corporation (HOLC) assigned grades to areas of Philadelphia and other urban areas. These grades were used in issuing mortgages. The lower the grade, the harder to get a mortgage. Redlined areas were particularly hurt by this grading system.⁴ Exhibit 4 shows the E Mt Airy HOLC grades which varied from A to D. Sharpnack St.

¹ Map of the Township of Germantown, 1848, J.C. Sidney, C.E., Germantown Historical Society

² Map of the Township of Germantown, 1851, A.E. Rogerson and E.J. Murphy, CE, Germantown Historical Society

³ Philadelphia Historic commission, Historic Preservation Recommendations for Upper Northwest Planning district, page 35.

⁴ Mapping the Legacy of Structural Racism in Philadelphia, Office of City Controller, January 23, 2020

and Montana St. between Germantown Ave. and Chew Ave. were the only areas designated as grade “D - Hazardous”, redlined, in E Mt. Airy.

RSA5 By-Right Options: RSA5 zoning requirements provide several new home building options that could include preserving the existing house and/ or building up to 3 new single-family attached houses facing E Sharpnack St. The 3 new single-family houses option is shown in Exhibit 5 for illustration of what the Applicant could do by-right.

Zoning Committee Comment No. 3:

The Applicant is asked to provide information on what by-right options they have considered and the rationale for selecting the proposed 6-unit multi-family project design which require both a use variance and several dimensional variances.

Proposed Front and Rear Lot Setbacks: The RSA5 code minimum setback requirements for front, side and rear yards are summarized below:

RSA5 Front, Side Yard and Rear Yard Setback/ Depth – Ft	
Table 14-701-1.	
Min. Front Setback	Based on adjacent (4), (5) <i>Adjacent apartment building has a 10-ft setback from the front of their property line.</i>
Min. Side Yard Width	5 ft
Min. Rear Yard Depth	9 ft (7)

(4) “If abutting lots on both sides of an attached building contain only two stories of enclosed area, the **stories above the second story of the attached house shall be set back an additional eight ft.** from the minimum distance between the front facades and the front lot line required by § 14-701(2)(b)[5] below; except this requirement shall not apply to corner lots.”

(5) “In the RSA-5 and RSA-6 districts, front facades shall comply with the following: (.a) On any given street, the distance between the front facade and the front lot line shall be no greater than the distance between the front facade and the front lot line of the principal building on the immediately adjacent lot on such street with the greater distance between its front facade and its front lot line; and **shall be no less than the distance between the front facade and the front lot line of the principal building on the immediately adjacent** lot on such street with the lesser distance between its front facade and its front lot line.”

(7) *In the RSA-5 district, the minimum rear yard depth for lots equal to or less than 45 ft. in depth shall be 7 ft.*

These minimum setback dimensions would limit a new RSA5 building to 50-ft width [(60-ft-(5+5))] and 131-ft length [150-ft-(10-ft front+ 9-ft rear)]. The Applicant’s proposed building would be 31-ft by 150-ft, exceeding the RSA5 allowable length for this parcel by 19-ft.

The Applicant has stated that they propose to rotate the building the building entrances to front the driveway, not E Sharpnack St so that the 9-ft rear setback should be adjusted accordingly. If L&I were to agree to this interpretation, the allowable building size would be 31-ft [60-(20-ft driveway + 9-ft rear setback)] and the allowable length would be 140-ft [150 – (5-ft + 5-ft side yards)]. Even with the building rotation, the proposed 31-ft by 150-ft building would still be in violation of the maximum allowable building 31-ft by 140-ft size for this RSA5 property

Zoning Committee Comment 4:

The Zoning Committee does not believe that the proposed front, side yard and rear setbacks meet the RSA5 minimum setback requirements. If the Applicant prevails in applying the 9-ft rear setback argument for their proposed rotated building, there is still an RSA5 requirement to provide 5-ft side yard setbacks on both sides, limiting the allowable rotated building length to 140-ft, not the 150-ft proposed length.

Zoning Committee Comment 5:

Notes (4) and (5) to the RSA5 Table 14-701-1 require an additional 8-ft setback for stories above the 2nd floor and require the front façade of the proposed building to be the same as the abutting 2-story apartment building. The Applicant should explain how they comply with these 2 RSA5 dimensional requirements.

Building Height: The proposed 6-unit multi-family building would include 3 stories and a roof deck for total height of 38-ft. This building would be significantly taller than the adjacent 2-story apartment complex and the row houses in the Near Neighbors' area.

Unnecessary Hardship: The Applicant's response on their ZBA Application for Appeal, Exhibit 2, does not identify any specific size, shape, contours or physical dimensions of the property that cause an unnecessary hardship.

Zoning Committee Comment No. 6:

The Zoning Committee requests that the Applicant explain how *"compliance with the requirements of the zoning code cause an unnecessary hardship due to size, shape, contours or physical dimensions of your property."*

Least Modification Possible: The Applicant's response on their ZBA Application for Appeal, Exhibit 2, does not justify or explain how a 6-unit building constitutes a least possible modification.

The RSA5 code would allow the Applicant to build up to 3 housing units by-right within the constraints of the dimensional requirements.

Zoning Committee Comment No. 7:

The Zoning Committee requests that the Applicant specifically explain how the proposed 6-unit project meets the least modification variance approval criteria.

Near Neighbors’ Base Zoning Districts and Current Use: There are 160 parcels within the Near Neighbor 250-ft radius.^{5,6} Exhibit 6 shows the base zoning districts for the 160 parcels in the Near Neighbors’ area for 2 zoning base districts:

Base District	Description	Count
RSA3	Residential Single Family - 3	11
RSA5	Residential Single Family - 5	149

The majority of parcels are zoned RSA5.

The PWD maintains data on building types across the City as part of their stormwater billing. Exhibit 7 summarizes PWD data on 242 E Sharpnack Near Neighbors’ buildings. There are 7 parcel building types in the Near Neighbors’ area.

Building Description	Count
Row House	112
Semi Detached House	21
Detached House	8
Apartment Building	3
Converted Apartment	2
Industrial	1
Vacant	18

The majority of Near Neighbors’ buildings are classified as single-family Row Houses, 18 parcels are classified as vacant.

Street Widths⁷ and Traffic Direction: Street rights-of-way vary from 80-ft for Chew Ave. to 66-ft for Upsal St. to just 40-ft for E Sharpnack and E Montana Streets.

Street	Right- of-Way ft	Pavement Width - ft	Curb to Property Line – ft	Traffic Direction	Parking Sides
Chew Ave.	80	40	20	2 Way	2
E Upsal St.	66	36	15	2 Way	2
Musgrave St.	50	30	10	2 Way	2
E Sharpnack, E Montana	40	24	8	1 Way	1 2

⁵ The Near Neighbors list includes all properties within 250-ft of the variance property and properties in the same 100 block as variance property.

⁶ The RCP Notification web page shows 151 notification addresses, the Dept. of Revenue property database shows 160 individual parcels. Several parcels are grouped together for property notification purposes.

⁷ Street Department Legal Street Cards

E Sharpnack St and E Montana St have the narrowest pavement width and curb to property right-of-way.

Housing Density: The 224 E Sharpnack Near Neighbors Area has a large proportion of row homes, 112 out of 160 parcels. The high number of row houses along E Montana Streets and the narrow (24-ft) pavement widths and narrow (8-ft) curb to property lines contribute to a very high housing density. This area has the highest housing density in E Mt Airy.

Tree Canopy – Heat Stress – Public Health: Philadelphia Parks & Recreation⁸ conducted a tree canopy assessment in 2018 that found a decline in Philadelphia tree canopy between 2008 and 2018. The City’s goal is to have 30% tree canopy coverage for all neighborhoods. Exhibit 8 presents the Parks & Recreation data for the 224 E Sharpnack St Near Neighbors area.

Tree canopy is very limited along the 200 block of E Sharpnack St. The 224 E Sharpnack St property had a significant tree loss in the 2008 – 2018 time period.

The proposed project would remove a large, mature tree and eliminate the possibility of planting new trees in this 8,998 sf parcel. The Applicant has proposed to plant just 1 street tree.

Zoning Committee Comment No. 8:

The Zoning Committee believes that the 3 house by-right option would allow the Applicant to maintain the existing mature tree and provide substantial space for additional trees in the back yards of the 3 new homes.

Historic Wingohocking Watershed Stormwater CSO Pollution and Flash Flooding Risk: Exhibit 9 is a reproduction of PWD’s stormwater billing information sheet for 224 E Sharpnack St. The property currently has 3,521 sf of impervious cover out of a total property area of 8,998 sf, equivalent to 39.1% impervious cover.

The proposed 6-unit building plan would significantly increase the impervious cover to an estimated 7,877 sf , equivalent to an impervious cover of 87.5%, potentially doubling the stormwater runoff from the site during rainfall events.

The site plan shows a “Yard Drain” in the rear open space of each building unit which will send stormwater directly to the combined sewer system.

The Upper Northwest 2035 Plan⁹ identified flash flooding risks in parts of E Mt Airy, Germantown and Ogontz, as shown in Exhibit 9. PWD¹⁰ has issued a summary report that identified 16 flood-prone intersections, Exhibit 10, and over 2,700 hundred basements subject to stormwater backwater during intense rainstorms.

⁸ Philadelphia Tree Canopy Assessment, Philadelphia Parks and Recreation, Dec. 2018.

⁹ Philadelphia Planning Commission, Upper Northwest 2035 Plan, Oct. 2019.

¹⁰ Philadelphia Water Department, Germantown Flood Risk Capital Improvement Plan, Task 6 Executive Summary.

PWD has initiated a green stormwater program to reduce combined sewer overflows and resulting Frankford Creek pollution from the Wingohocking outfall, I and Ramona streets, during rainstorms. Properties over 15,000 sf are required to prepare stormwater control plans to reduce stormwater runoff during storm events to reduce Wingohocking combined sewer overflows.

Zoning Committee Comment No. 9:

The Zoning Committee notes that the variance proposal would double the impervious cover for 224 E Sharpnack St., worsening both the downstream combined sewer overflow water pollution problem and increase flooding risks for 8 flood prone intersections downstream of 224 E Sharpnack St.

The Zoning Committee requests that the Applicant:

- Confirm and/or calculate existing and proposed impervious cover and anticipated stormwater runoff impacts.
- Agree to implement the same PWD stormwater controls that would be required if the project met the City's 15,000 sf threshold for stormwater controls.

List of Exhibits

1. L&I Notice of Refusal, 224 E Sharpnack St., 6/12/21
2. 224 E Sharpnack St. – ZBA Application for Appeal, 6/28/21
3. Baist’s 1895 Property Atlas, Plate 38
4. East Mt Airy and Redlining, 1937
5. 224 E Sharpnack St. By-Right Option
6. 224 E Sharpnack Near Neighbors Base Zoning Districts
7. 224 E Sharpnack St. Near Neighbors Building Types
8. 224 E Sharpnack St. Near Neighbors Tree Canopy Changes (2008-2018)
9. Upper Northwest 2035 Plan, Wingohocking Flash Flood Risk
10. PWD Flood Prone Intersections, Germantown Stormwater Flood Risk Capital Improvement Plan, Task 6 Executive Summary
11. 224 E Sharpnack St. Stormwater Billing Report - PWD

Notice of: **Refusal** **Referral**

Application Number: ZP-2021-006198	Zoning District(s): RSA5	Date of Refusal: 6/12/2021
Address/Location: 224 E SHARP NACK ST, Philadelphia, PA 19119-2261 Parcel (PWD Record)		Page Number Page 1 of 1
Applicant Name: Kevin O'Neill DBA: KJO ARCHITECTURE LLC	Applicant Address: 2424 E York St Ste 209 Philadelphia, PA 19125 USA	

Application for:

For the erection of six semi-detached townhouse structures each with a full basement, private roof deck accessed by exterior access stairs and an interior parking garage. For the use as Multi-Family Household Living (6 dwelling units).

The permit for the above location cannot be issued because the proposal does not comply with the following provisions of the Philadelphia Zoning Code. (Codes can be accessed at www.phila.gov.)

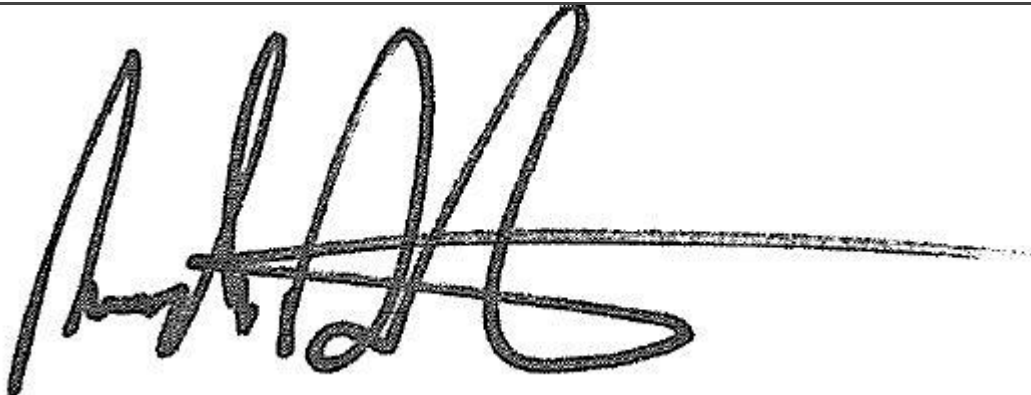
<u>Code Section(s):</u>	<u>Code Section Title(s):</u>	<u>Reason for Refusal:</u>
Table 14-602-1	Uses Allowed in Residential Districts - Refusal	Whereas, the proposed use of Multi-Family Household Living is expressly prohibited in the RSA-5 Zoning District.
Table 14-701-1	Minimum Rear Yard Depth	A Minimum Rear Yard Depth of 9 feet is required. Whereas, there is no rear yard proposed.

ONE (1) USE REFUSAL
ONE (1) ZONING REFUSAL

Fee to File Appeal: \$ 300.00

Parcel Owner:

JENKINS YVONNE P



Andrew DiDonato
PLANS EXAMINER

6/12/2021
DATE SIGNED

City of Philadelphia Zoning Board of Adjustment



Application for Appeal

CALENDAR # _____ (FOR OFFICE USE ONLY)

WHEN COMPLETED, MAIL TO:

CITY OF PHILADELPHIA
 Department of Planning & Development
 Zoning Board of Adjustment
 One Parkway Building
 1515 Arch St, 18th Floor
 Philadelphia, PA 19102

APPLICANT MUST COMPLETE ALL INFORMATION BELOW. PRINT CLEARLY AND PROVIDE FULL DETAILS

LOCATION OF PROPERTY (LEGAL ADDRESS)

224 E Sharpnack Street

PROPERTY OWNER'S NAME:

PB Jack Properties LLC

PHONE #: c/o 215.385.5291

E-MAIL: c/o Leo@FishtownLaw.com

PROPERTY OWNER'S ADDRESS (INCLUDE CITY, STATE, AND ZIP)

C/o Box 3664
 Philadelphia, PA 19125

A CORPORATION MUST BE REPRESENTED BY AN ATTORNEY LICENSED TO PRACTICE IN PENNSYLVANIA

APPLICANT:

Leo M. Mulvihill, Jr.

FIRM/COMPANY:

Mulvihill LLC

PHONE #: 215.385.5291

APPLICANT'S ADDRESS (INCLUDE CITY, STATE, AND ZIP)

315 Green Street, First Floor
 Philadelphia, PA 19123

E-MAIL: Leo@FishtownLaw.com

RELATIONSHIP TO OWNER: TENANT/LESEE ATTORNEY DESIGN PROFESSIONAL CONTRACTOR EXPEDITOR OTHER

APPEAL RELATED TO ZONING/USE REGISTRATION PERMIT APPLICATION # ZP-2021-006198

IF A VARIANCE IS REQUESTED, PLEASE PROVIDE AN EXPLANATION OF EACH OF THE FOLLOWING CRITERIA AS REQUIRED FOR THE GRANTING OF A VARIANCE:

Does compliance with the requirements of the zoning code cause an unnecessary hardship due to the size, shape, contours or physical dimensions of your property? Did any action on your part cause or create the special conditions or circumstances? Explain.

Yes. No. Applicant seeks to build six new single-family homes, each with one with off-street parking space accessed by a common driveway. While refusal states there is no rear yard, each home is planned to have a 9' rear yard, but due to the homes' orientation perpendicular to the street, a refusal was issued as they are defined as "side yard".

Will the variance you seek represent the least modification possible of the code provision to provide relief from the requirements of the zoning code? Explain.

Yes. Applicant seeks to build six single-family style homes and provide off-street parking for each home.

Will the variance you seek increase congestion in public streets or in any way endanger the public? Explain.

No. Applicant's proposal will create off-street parking spaces.

Will the variance you seek substantially or permanently harm your neighbors' use of their properties or impair an adequate supply of light and air to those properties? Explain.

No. Applicant's proposal will not harm neighbors' use of their properties or impede light and air.

Will the variance you seek substantially increase traffic congestion in public streets or place undue burden on water, sewer, school park or other public facilities? Explain.

No.

Will the variance you seek create environmental damage, pollution, erosion, or siltation, or increase the danger of flooding? Explain.

No.

REASONS FOR APPEAL:

Applicant seeks to build six new single-family homes with off-street parking on one lot and faces a hardship in doing so by right. Applicant's proposal will not harm neighbors or existing city infrastructure. Proposed homes will be governed by an PUD/HOA. Applicant reserves the right to present additional grounds in support of its appeal at the time of its hearing before the Zoning Board of Adjustment.

I hereby certify that the statements contained herein are true and correct to the best of my knowledge and belief. I understand that if I knowingly make any false statements herein I am subject to possible revocation of any licenses issued as result of my false application, and such other penalties as may be prescribed by law.

Applicant's Signature: /s/ Leo M. Mulvihill, Jr. Date: June 28 2021
MONTH DATE YEAR

City of Philadelphia
Zoning Board of Adjustment
Application for Appeal



City of Philadelphia Zoning Board of Adjustment

Project Information Form

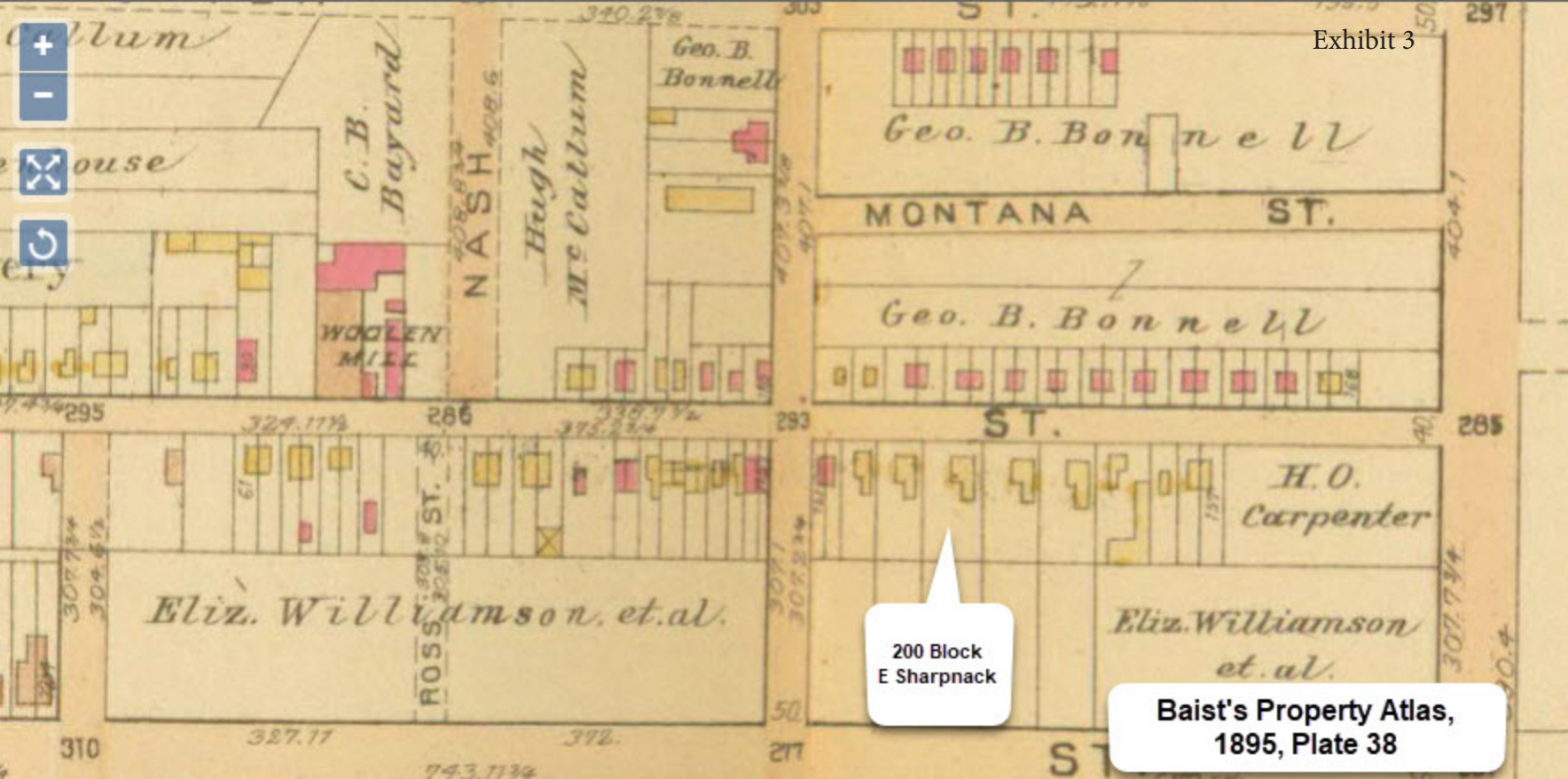
Applicants must also complete a **Project Information Form (PIF)**.

This form can be found at: <https://forms.phila.gov/form/project-information-form/>.

You **MUST** print out your completed Project Information Form (PIF) and submit it to the Zoning Board of Adjustment (ZBA) with your appeal paperwork.

NOTE: THE ZBA WILL NOT ACCEPT YOUR APPEAL PAPERWORK WITHOUT A COMPLETED PROJECT INFORMATION FORM.

This requirement can be found in Section §14-303 (15)(a)(.3)(.A) of the Philadelphia Code, "an applicant who seeks either a special exception or a variance must submit to the Board, at the time the appeal is filed, a copy of the Project Information Form for such application, if the preparation of a Project Information Form is required for such application..."



200 Block
E Sharpnack

Baist's Property Atlas,
1895, Plate 38

East Mt Airy and Redlining 1937

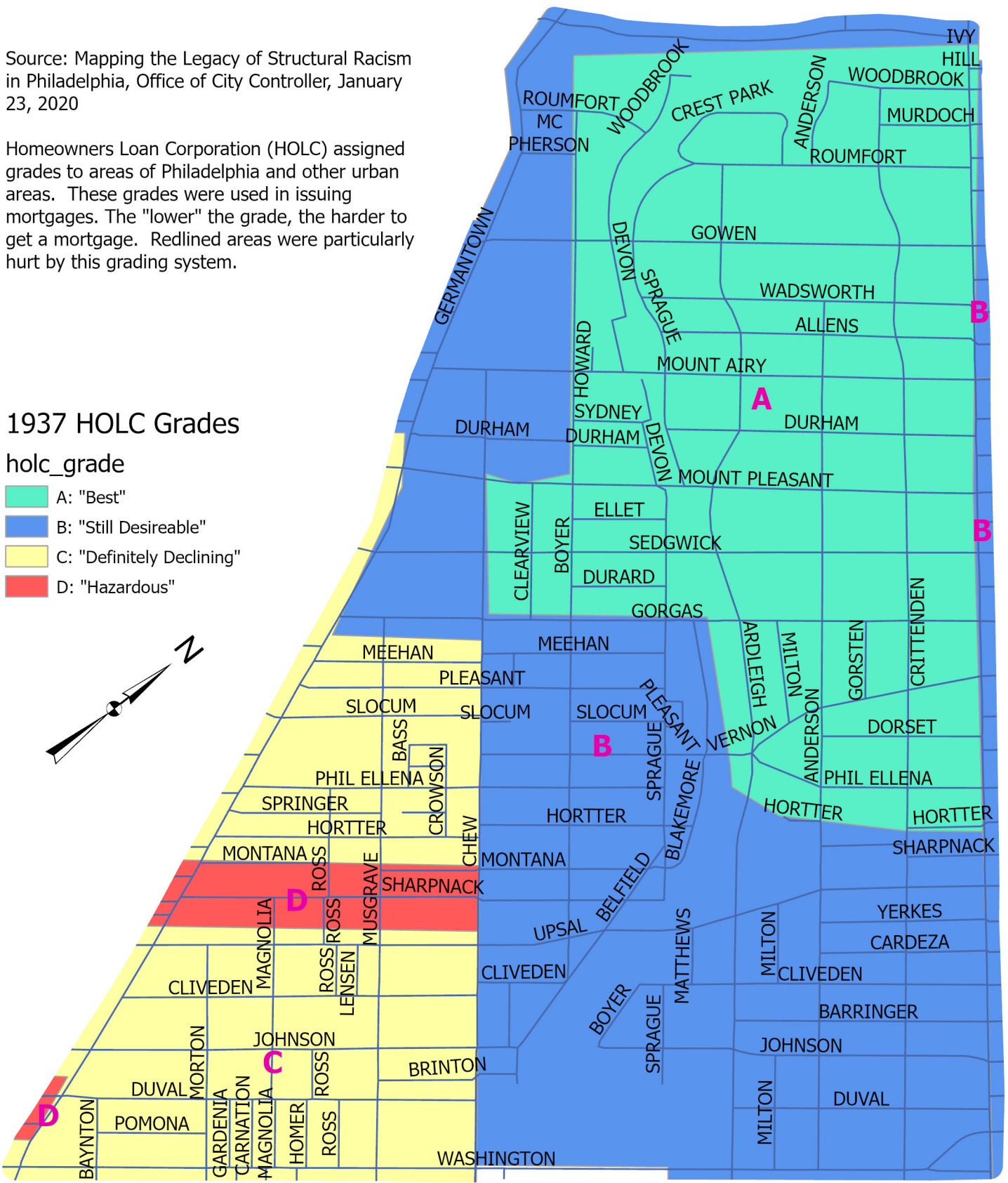
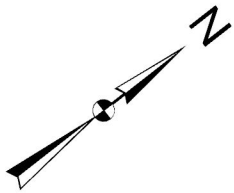
Source: Mapping the Legacy of Structural Racism in Philadelphia, Office of City Controller, January 23, 2020

Homeowners Loan Corporation (HOLC) assigned grades to areas of Philadelphia and other urban areas. These grades were used in issuing mortgages. The "lower" the grade, the harder to get a mortgage. Redlined areas were particularly hurt by this grading system.

1937 HOLC Grades

holc_grade

- A: "Best"
- B: "Still Desirable"
- C: "Definitely Declining"
- D: "Hazardous"



0 1,000 Feet

K O'Day, 9/30/21

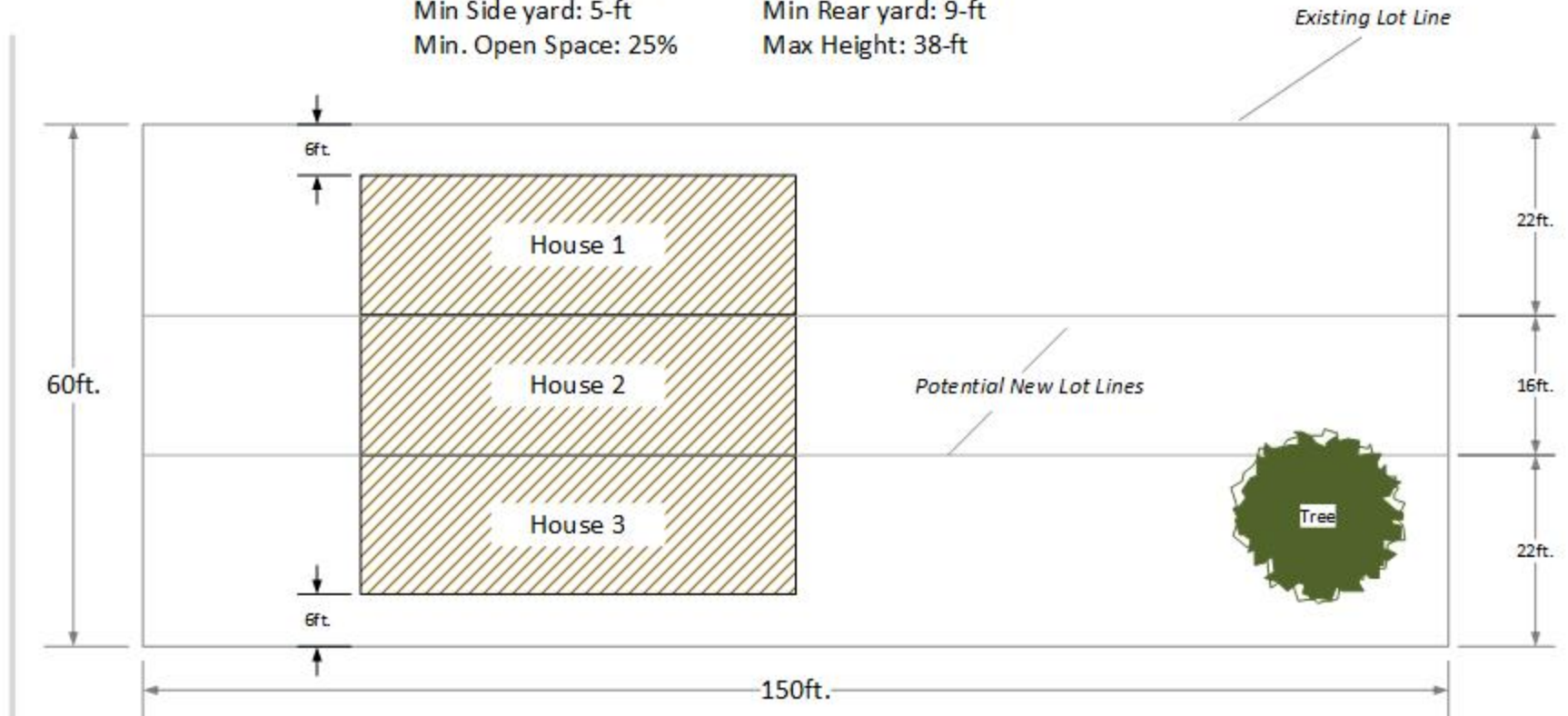
224 E Sharpnack St. By- Right Development Option



Parcel Area: 8,998 sf **Impervious Cover:** 3,521 sf, 39.1% of total area
Dimensions: 60-ft by 150-ft
Zoning: RSA5

Min Lot Size: 1,440 sf Min Lot Width: 16-ft
Min Side yard: 5-ft Min Rear yard: 9-ft
Min. Open Space: 25% Max Height: 38-ft

200 Block
E Sharpnack St.



By-Right Option Summary

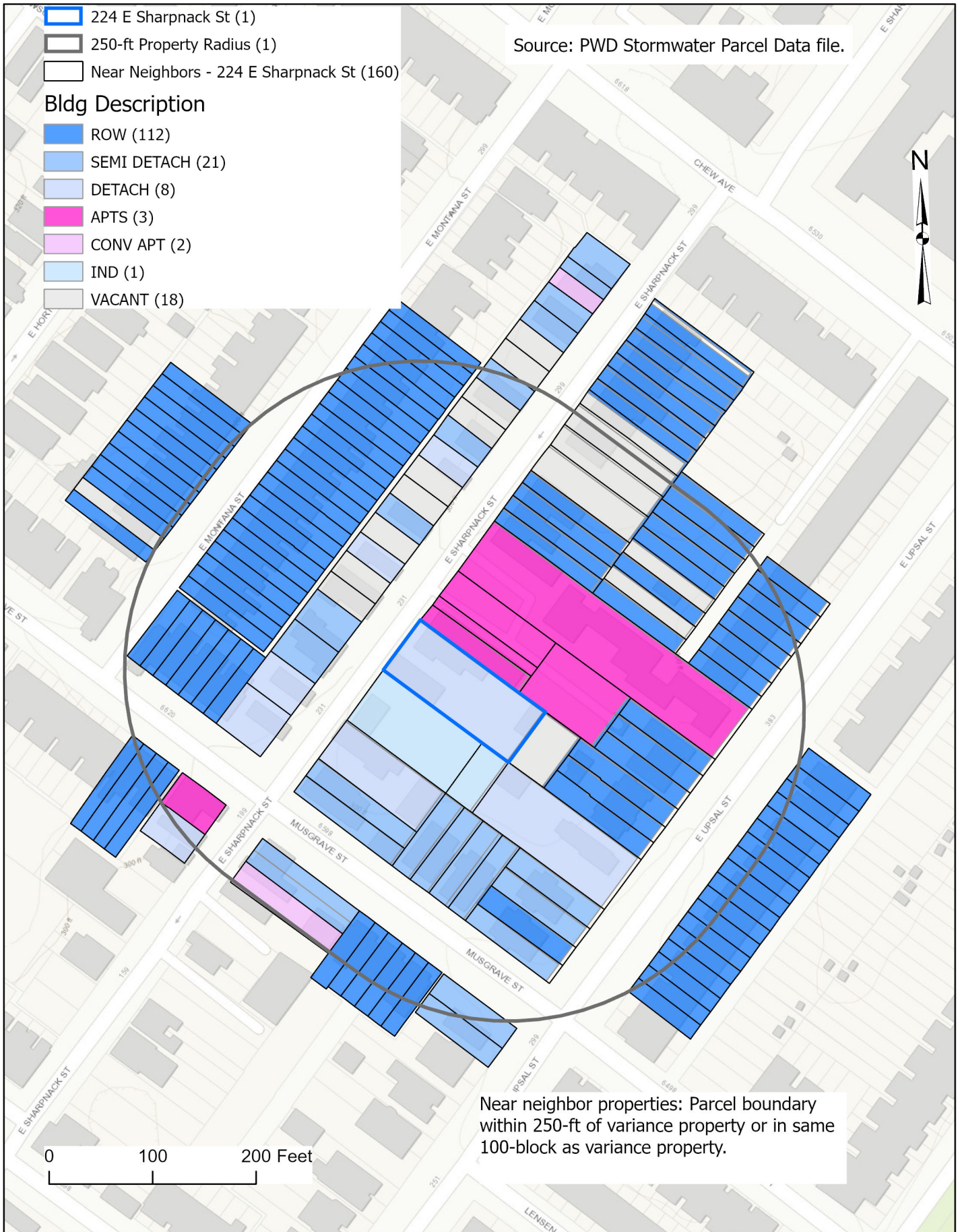
- 3 new row houses facing E Sharpnack St
- Houses 1 & 3 have 6-ft Side yards
- Numerous options for front setback and rear yards

1 inch = 20 feet

224 E Sharpnack Variance Review Near Neighbor Properties - Base Zoning Districts



224 E Sharpnack Variance Review Near Neighbor Properties - Building Description



224 E Sharpnack Variance Review Near Neighbor Properties - Tree Canopy Changes (2008-2018)

Source: Philadelphia Tree Canopy Assessment, Dec. 2019, Phila. Parks & Recreation



- 224 E Sharpnack St
 - 250-ft Property Radius
 - Near Neighbor Properties - 224 E Sharpnack St
- ### Tree Canopy Changes (2008-2018)
- No Change
 - Gain
 - Loss



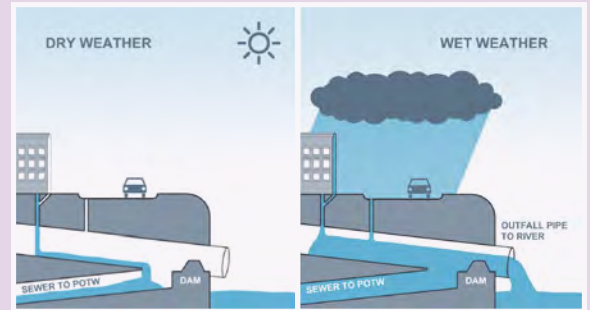
Near neighbor properties: Parcel boundary within 250-ft of variance property or in same 100-block as variance property.

FLASH FLOODS

The two branches of the Wingohocking Creek were converted into underground sewers to facilitate land development in the late 19th and early 20th centuries. The Wingohocking Creek watershed, spanning across portions of Germantown, Mount Airy, and beyond, is heavily developed with hard surfaces like buildings and asphalt. Rainwater that falls in this watershed, plus wastewater generated by homes, businesses, and institutions, eventually drains to the covered sewer.

Because rainwater travels quickly over hard surfaces, there is little opportunity for it to be absorbed into the soil. Heavy rain storms can overwhelm the sewer system. On several occasions, rain water has backed up in to basements and risen into streets, usually with little warning. Flood waters usually recede very quickly, but still create dangerous situations and lead to property damage.

Combined Sewer Overflow



Types of Flooding in the Upper Northwest

Overland or Street Runoff

Flooding on the ground and streets. This flooding can be made worse when combined sewers can't handle the volume of water. Some areas of Philadelphia have overland flooding because they don't have sewers. Overland runoff can also lead to flash floods.

Basement Backups

Extreme amounts of rain can overwhelm the sewer system. At times, water is forced into basement through drains, sinks, and toilets.

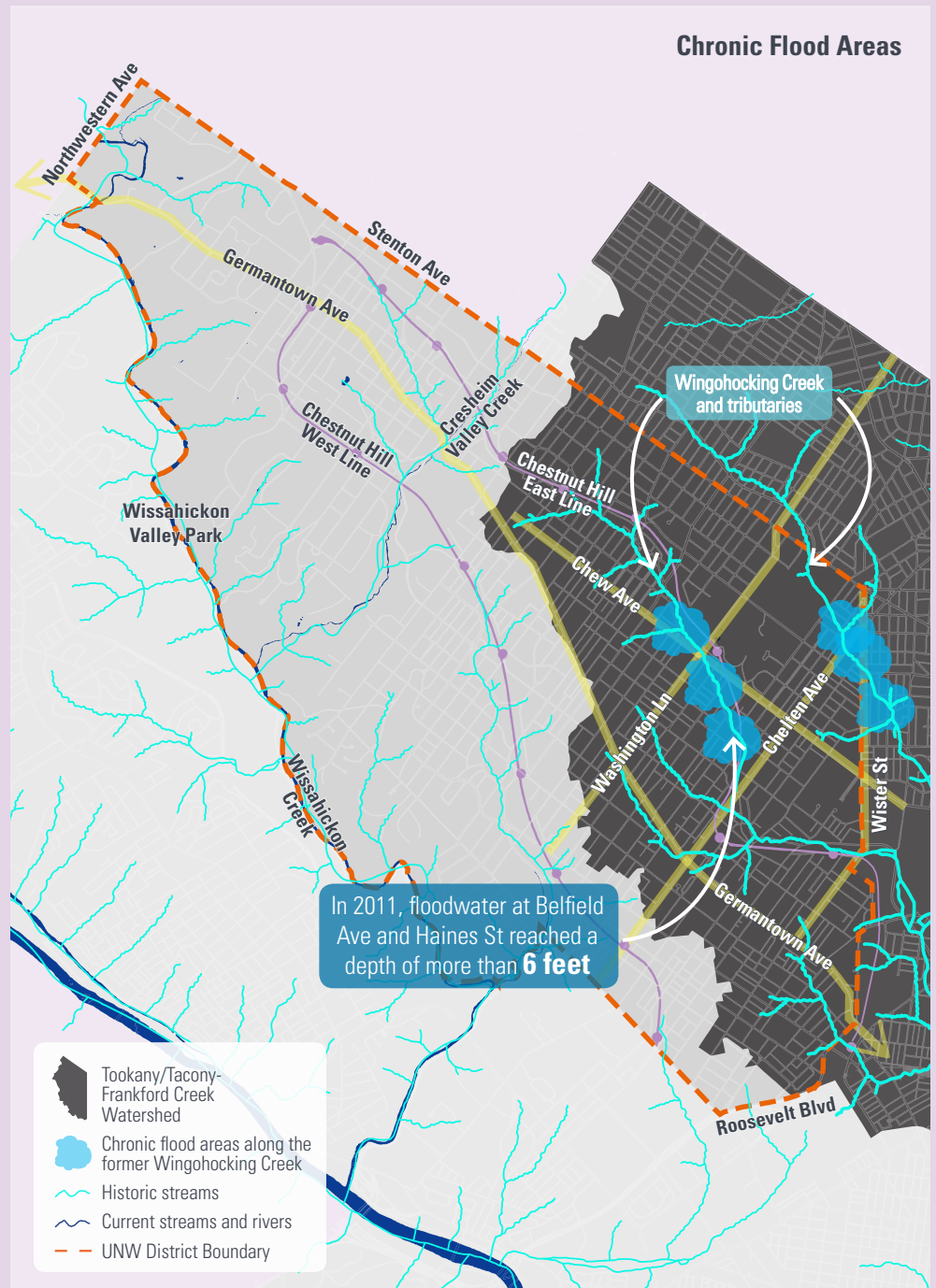
Definition | Combined Sewer Systems

In combined sewer systems, both rain and household water goes into the same pipes. The pipes take it to treatment plants, where it is treated then released into rivers and creeks. However, during the heaviest storms, there is not enough space for rain and household water in the pipes and treatment plants. The extra water is released through combined sewer overflows (CSO). These overflows cause the untreated water to be released into nearby rivers and streams.

Definition | Watershed

A watershed is an area of land within which water from rain or snow drains into a body of water, such as a river, lake or ocean

Chronic Flood Areas



The Philadelphia Water Department (PWD) is studying the flooding problem to find the best solution. Ultimately, the solution will include a combination of regulations, policies, and physical improvements aimed to reduce flooding in the Germantown area. PWD is committed to recommending a system of improvements that is affordable, long-lasting, supported by the Germantown Community, and capable of timely design and construction.

Tool Box: Flood Mitigation

PLANNING AND POLICY

Controls that may limit housing in flood areas and require or encourage builders to capture rainwater before it enters the sewer. These solutions cannot be used in all areas.



Zoning controls & incentives to reduce flood risks



Early warning systems & coordinated emergency management



Basement controls in flood hot-spots



Prioritizing city-owned land in flood hot-spots for rain water management

0 - 5 Years

GREEN STORMWATER INFRASTRUCTURE

Low-cost solutions that use soil or plant systems to hold rainwater, evaporate it back into the air, put it back into the ground, or slowly release it back into the sewer system.



Stormwater Planter



Rain Gardens



Green Roofs

5 - 15 Years

TRADITIONAL STORMWATER INFRASTRUCTURE

High-cost, high-impact systems such as tunnels, tanks, and pipes. Some of these options are very expensive, disruptive, or both.



Conveyance Upgrades (bigger pipes)



Storage Tanks



Relief Tunnels

15 - 30 Years

SOLUTIONS

TIME FRAME



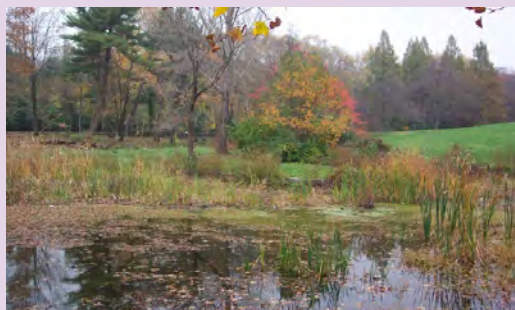
Wingohocking Creek joined with Tacony Creek to form Frankford Creek. Source: Philadelphia City Archives, 1916



Wingohocking sewer outlet. Source: Department of Records, 1929



Frankford Creek looking south from junction of Tacony and Wingohocking Creeks. Source: Department of Records, 1916

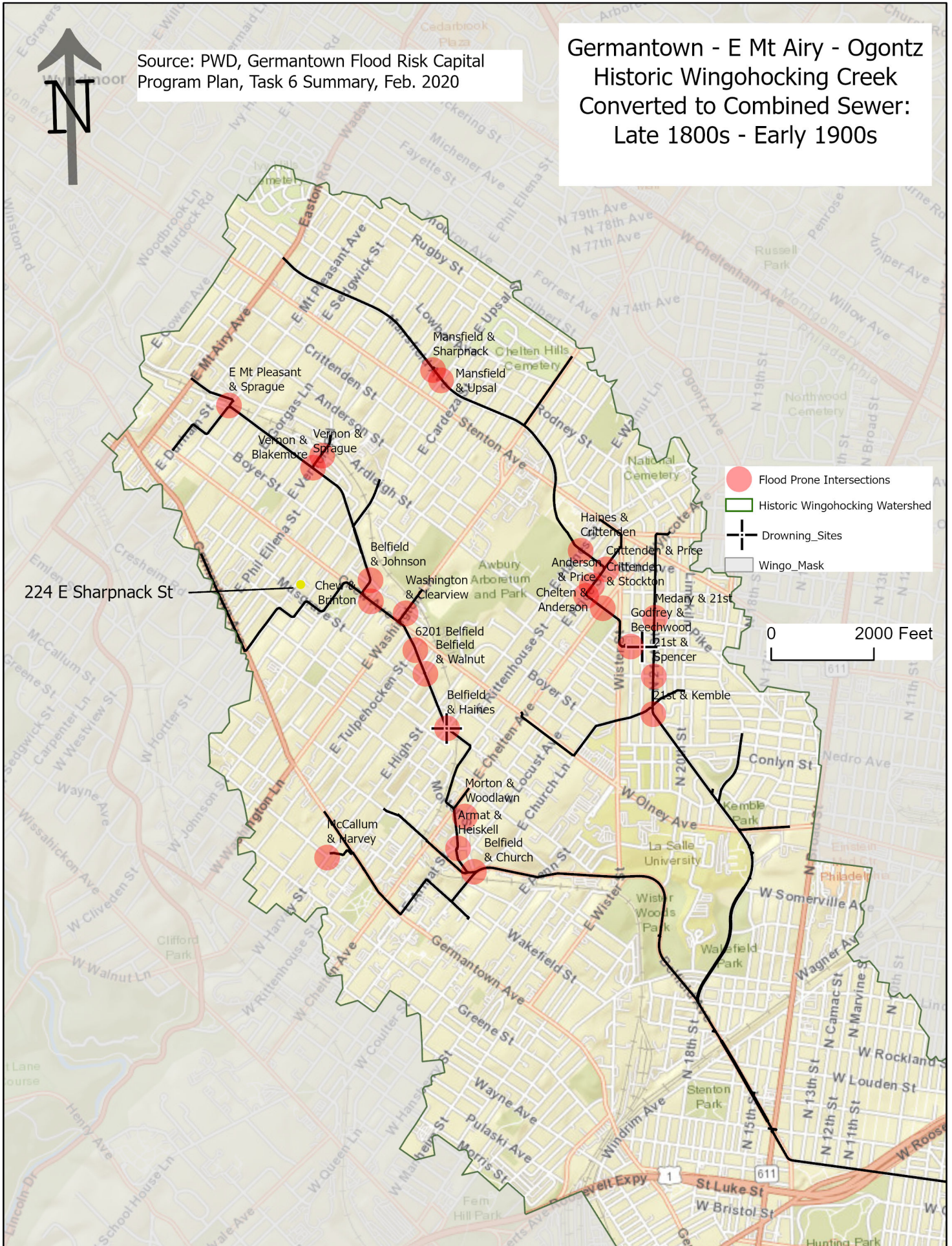


Wetlands area of Awbury Arboretum was once the Wingohocking Creek, but the current form reflects designed landscape alterations. Source: Awbury Arboretum

Flood Prone Intersections - Historic Wingohocking Watershed

Source: PWD, Germantown Flood Risk Capital Program Plan, Task 6 Summary, Feb. 2020

Germantown - E Mt Airy - Ogontz
Historic Wingohocking Creek
Converted to Combined Sewer:
Late 1800s - Early 1900s





BRT/OPA Account Number: 221110500
 Stormwater Billing Class: Single (Detached)
 Parcel Address: 224 E SHARPNACK ST
 Parcel Owner: JENKINS YVONNE P

Legend

- Selected Parcel
- Other Parcels
- Impervious Surfaces
- Roof
- Other Impervious



Parcel Area (square feet)

	<u>Gross Area</u>	<u>Impervious Area</u>	
Total:	8,998	3,521	39.1% impervious Cover
Credit:	0	0	

Monthly Stormwater Charge

Fiscal Year	07/01/2016 - 06/30/2017	07/01/2017 - 08/31/2018	09/01/2018 - 08/31/2019	09/01/2019 - 08/31/2021	09/01/2021 - 08/31/2022
Parcel - Total	\$14.12	\$14.71	\$15.53	\$15.80	\$16.86
Account # - 034-72200-00224-001	\$14.12	\$14.71	\$15.53	\$15.80	\$16.86