RICHMOND ZONING REFRESH

EXISTING PATTERN ANALYSIS

WHY A PATTERN BOOK?

In alignment with the Zoning update, key objectives include:

1. Identify patterns that will give us information about metrics that need to be regulated, which will inform the zoning reform process

2. Communicate to the public why the zoning changes may be necessary to align the regulations with desirable existing built patterns

3. Identifying areas with nonconformities. These are areas with existing buildings that would not be legal to build under current zoning regulations.

4. Identify areas that have unbuilt zoning capacity, including unbuilt height and lot coverage, that may not be consistent with existing local built patterns.
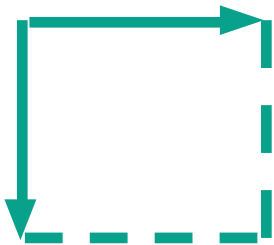
WHAT IS AN URBAN PATTERN?

+ Identify what is most prevalent FORM and USE conditions in a specific area of the city

WHAT IS A NONCONFORMITY?

+ When a property does not meet one or more of the existing requirements of the Zoning Ordinance, it is known as a "nonconformity"

FORM NONCONFORMITIES

When requirements related to the form of the building are not met

USE NONCONFORMITIES

When requirements related to the way the building is used are not met

ANALYSIS ACROSS SCALES

1. City Scale

Mapping contextual patterns and misalignments between existing patterns and zoning.

Identify areas with nonconformities and areas with unbuilt zoning capacity.

What are the most prevailing types non-conformities visible at the city scale?

RESULT: City-wide misalignments and selection of 10 representative areas to analyze at the neighborhood scale
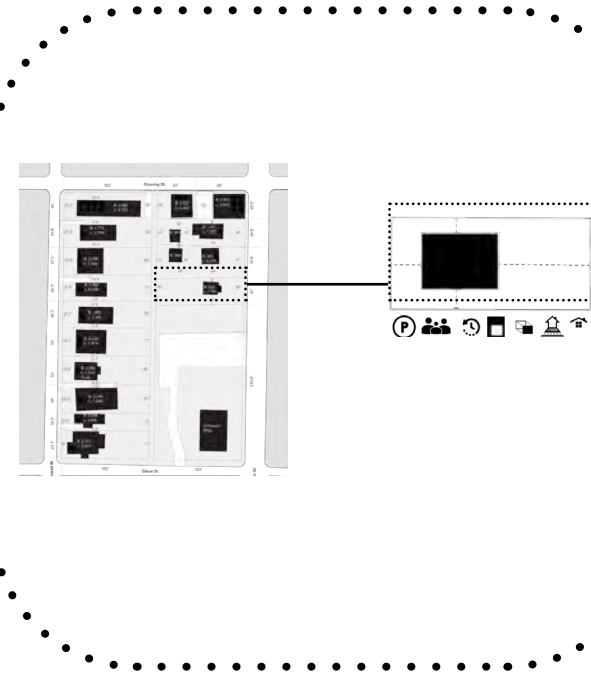
2. Neighborhood Scale
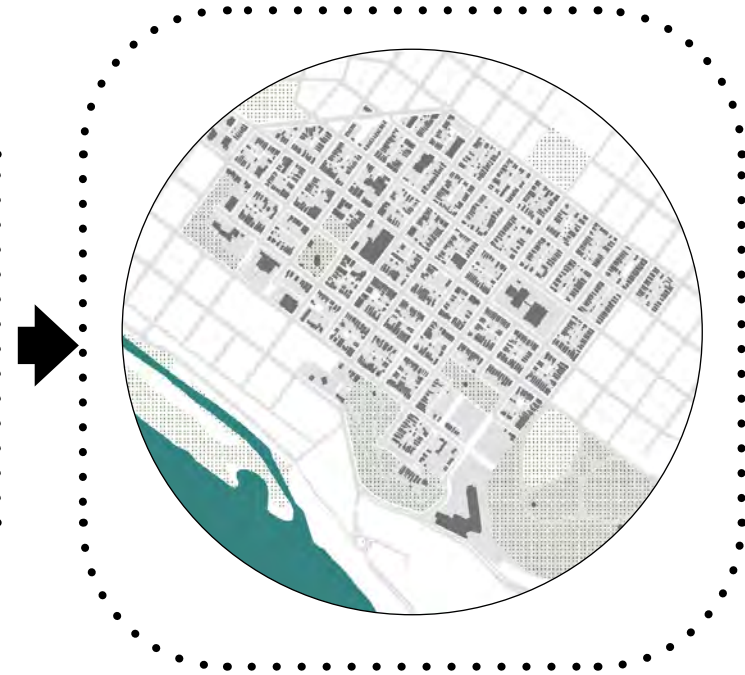
Mapping misalignments between existing patterns and zoning.

What are the most prevailing types of form non-conformities visible at the neighborhood scale?

RESULT: Sub-patterns in each representative study area. Select 12 representative blocks to test qualitative and metric-specific patterns

3. Block Scale

Illustrating misalignments between existing patterns and zoning.

Illustrating contextual patterns.

What are the most strategic things we need to regulate at the block scale?

RESULT: Sub-patterns in each block analysed

4. Building Scale

Illustrating misalignments between existing patterns and zoning.

Illustrating relationship between buildings and the public realm.

What are the most strategic things we need to regulate at the building scale?

RESULT: Building taxonomy to test potential code changes.

NEIGHBORHOOD SCALE ANALYSIS

ANALYSIS ACROSS SCALES
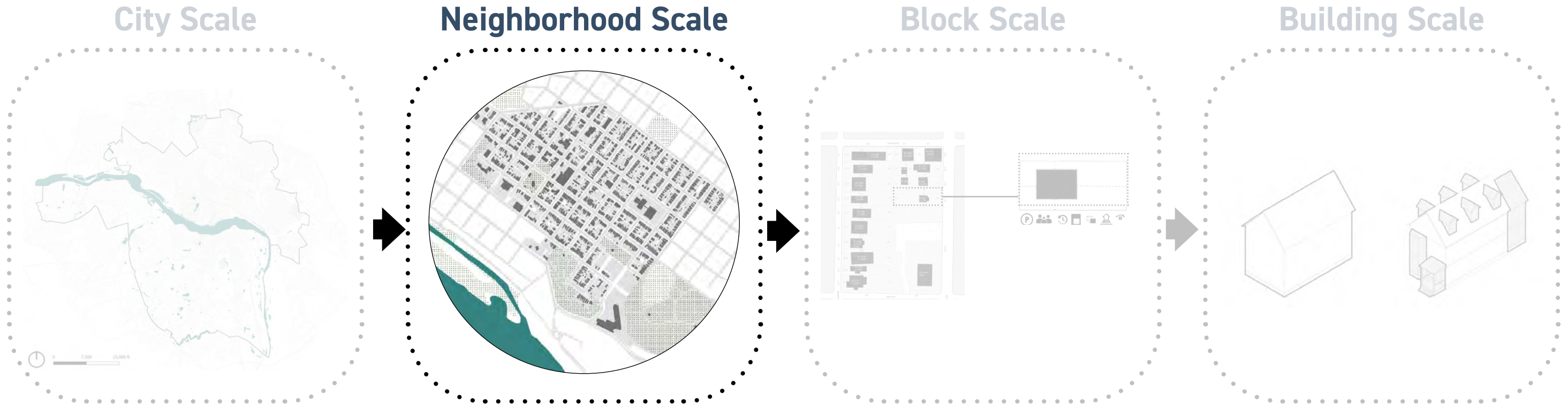
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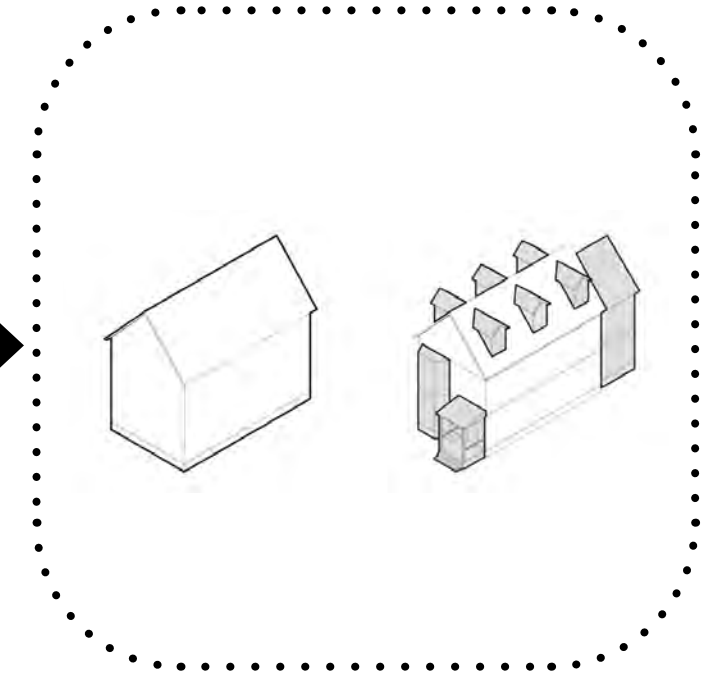
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NEIGHBORHOOD SCALE ANALYSIS

Existing Conditions

+ Current Land Use

+ Current Zoning

+ Special Use Permits Location

+ Historic Pattern

+ Residential Typology

Parcel Dimensions

+ Parcel Size and Frontage

+ Parcel Size and Frontage Nonconformity

+ Parcel Size and Frontage Distribution

Nonconformities

NEIGHBORHOOD SCALE ANALYSIS
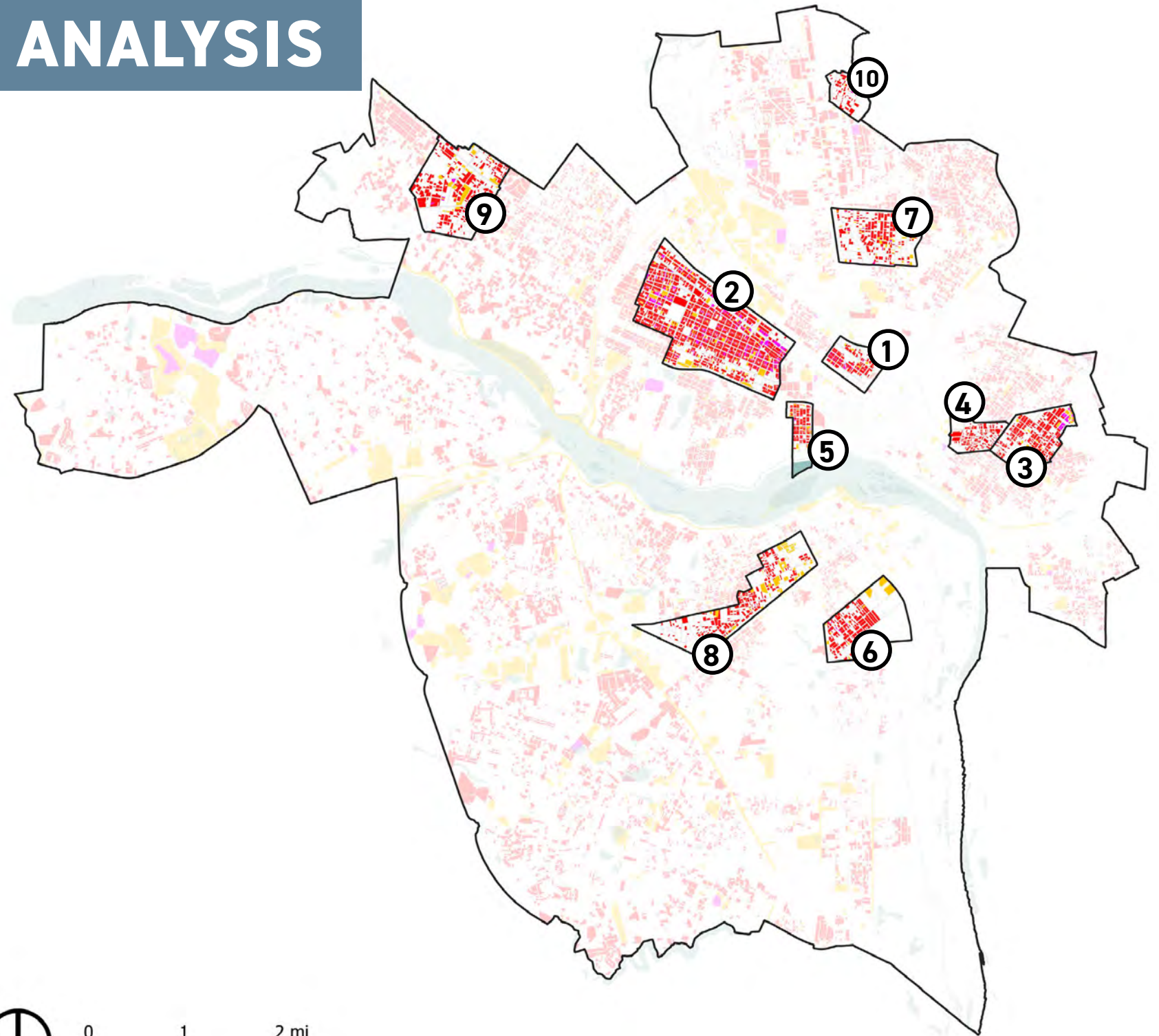
Representative Neighborhoods	Dominant Zoning
1. Jackson Ward	R-6 / R-63
2. The Fan / Museum District	R-6
3. Church Hill North	R-5 / R-6
4. Union Hill	R-63
5. Oregon Hill	R-7
6. Oak Grove	R-5
7. Northern Barton Heights	R-5
8. Swansboro / Swansboro West	R-5
9. Three Chopt / Westhampton	R-4
10. Washington Park	R-5

LAND USE

Land Use
Number of Parcels

Nonconforming uses

Land Use

- Single Family
- Duplex
- Multi-Family
- Mixed-Use
- Government
- Institutional
- Commercial
- Industrial
- Office
- Public-Open Space
- Vacant

Downtown Expy

Downtown

Idlewood Ave

S Cherry St

Albemarle St

S Laurel St

S Pine St

Spring St

R-7

China St

Holly St

Oregon Hill Pkwy

Tredegar St

2nd

0   500   1,000 ft
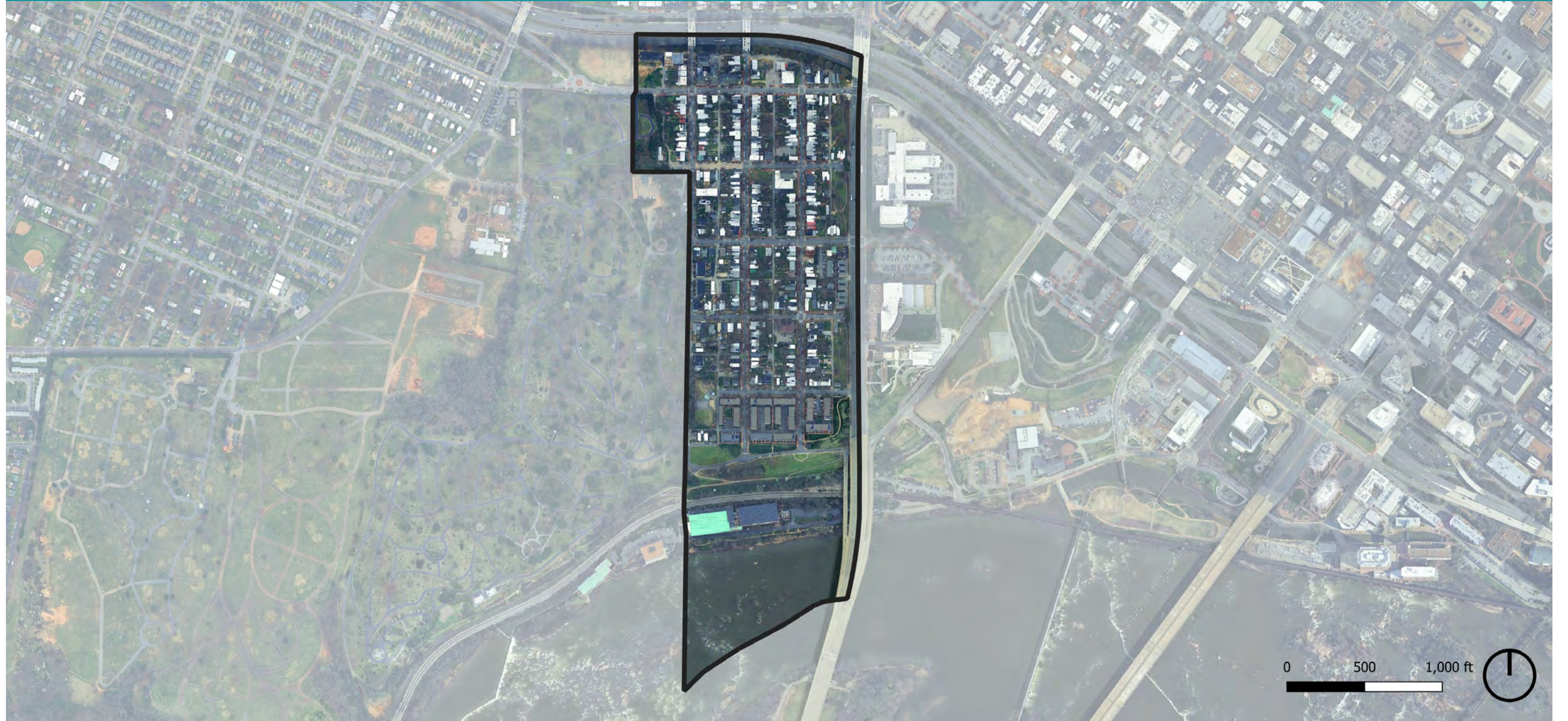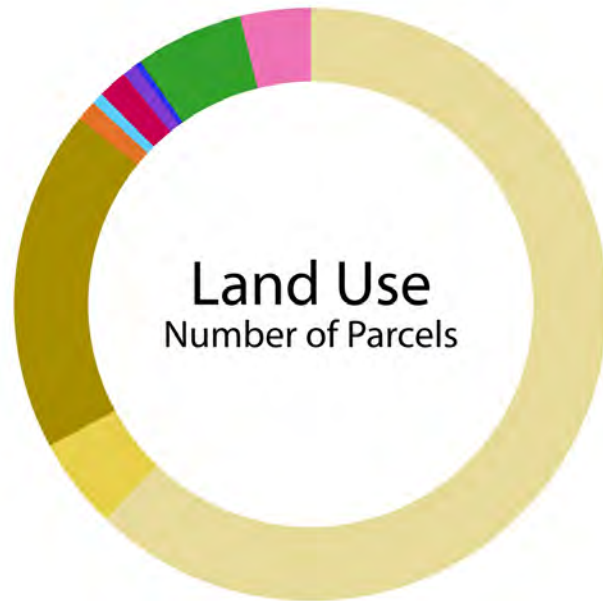
5. Oregon Hill

CURRENT ZONING

Zoning Districts
- B-1 Neighborhood Business
- B-2 Community Business
- B-3 General Business
- B-4 Central Business
- B-5 Central Business
- B-6 Mixed-Use Business
- B-7 Mixed-Use Business
- I Institutional
- M-1 Light Industrial
- M-2 Heavy Industrial
- R-2 Single-family residential
- R-4 Single-family residential
- R-5 Single-family residential
- R-6 Single-family attached residential
- R-7 Single- and two-family urban residential
- R-8 Urban residential
- R-48 Multifamily residential
- R-53 Multifamily residential
- R-63 Multifamily urban residential
- R-73 Multifamily residential
- RO-2 Residential Office
- RO-3 Residential Office
- UB Urban Business
- UB-2 Urban Business
- TOD-1 Transit-Oriented Nodal

5. Oregon Hill

SPECIAL USE PERMITS

Special Use Permits (SUPs) by location within the neighborhood.

0   500   1,000 ft

RESIDENTIAL TYPOLOGY

Residential Parcel Typology

- 100+ Units
- 50+ Units
- 25-99 Units
- 10-50 Units
- 5-49 Units
- 1-10 Units
- Multi-Family
- Mixed Use
- Mobile Home Park
- Senior Living
- Four Family
- Three Family
- Two Family
- Two Story
- One Story
- Single Family

0   500   1,000 ft

5. Oregon Hill

HISTORIC PATTERN

Parcels by Year built

ASR Parcels by Year Built
- Prior to 1800
- 1800 - 1900
- 1900 - 1920
- 1920 - 1930
- 1930 - 1945
- 1945 - 1960
- 1960 - 1975
- 1975 - 1995
- 1995 - 2010
- Post 2010

0   500   1,000 ft
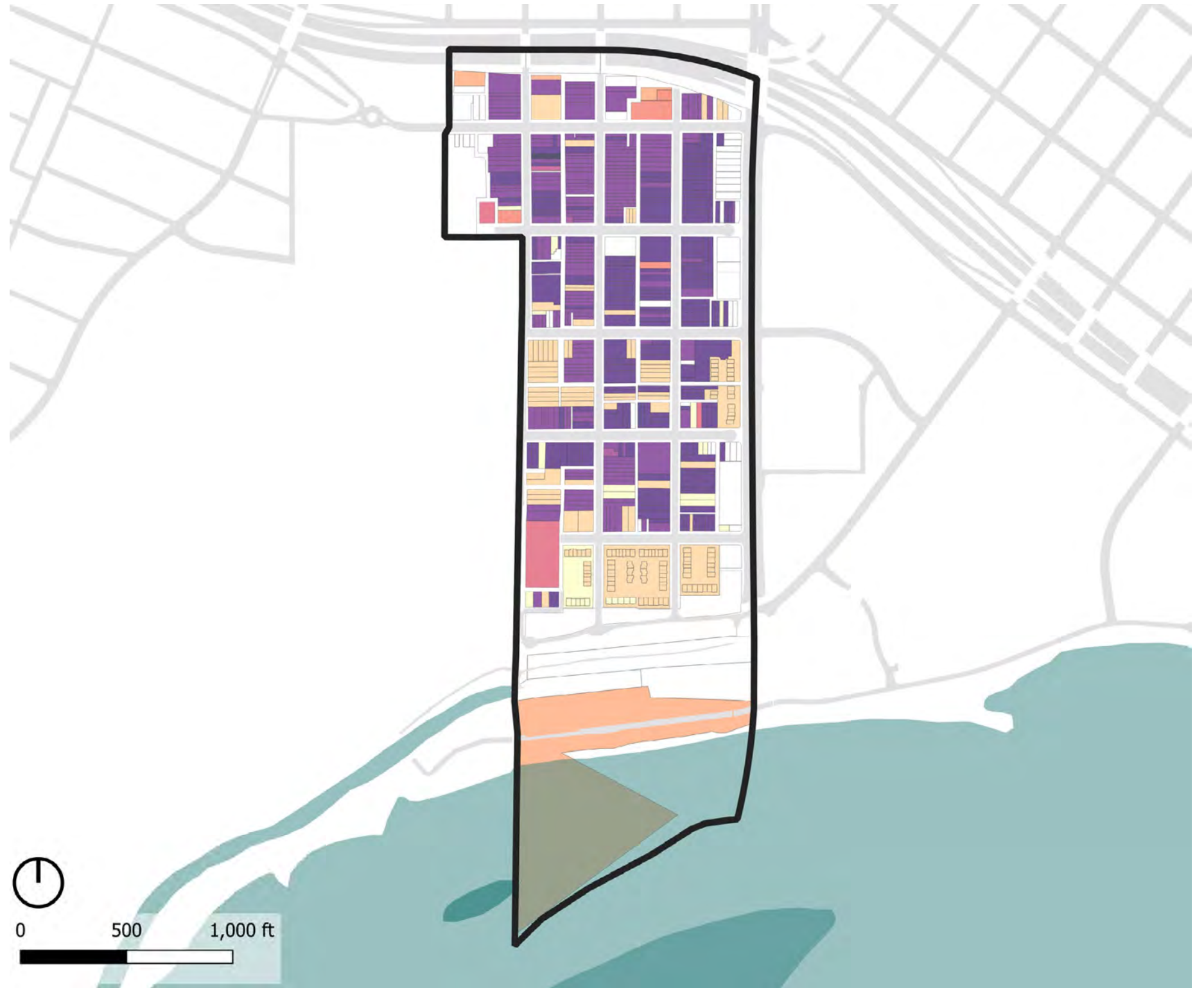
URBAN FABRIC PATTERN

Blocks by size.

City Block Size (Acres)

- 0 - 3
- 3 - 6
- 6 - 15
- 15 - 25
- 25 - 43
- 43 - 75
- 75 - 117
- 117 - 170
- 170 - 270
- 270 - 385

0   500   1,000 ft

PARCEL SIZES

Parcels by size
(thousands of square feet)
- 0 - 6
- 6 - 10
- 10 - 22
- 22 - 36
- 36 - 44
- 44 - 66
- 66 - 100
- 100+
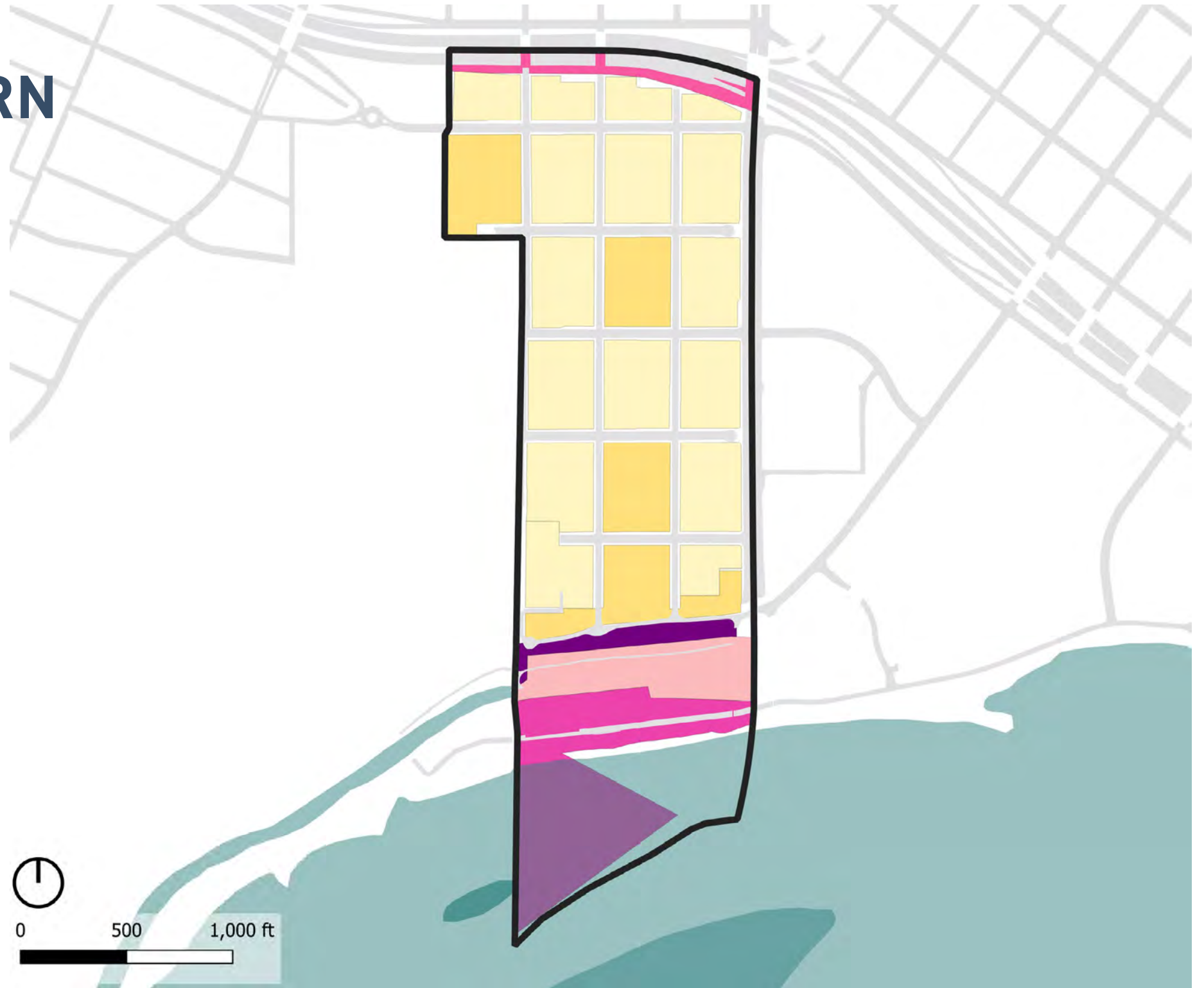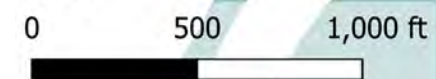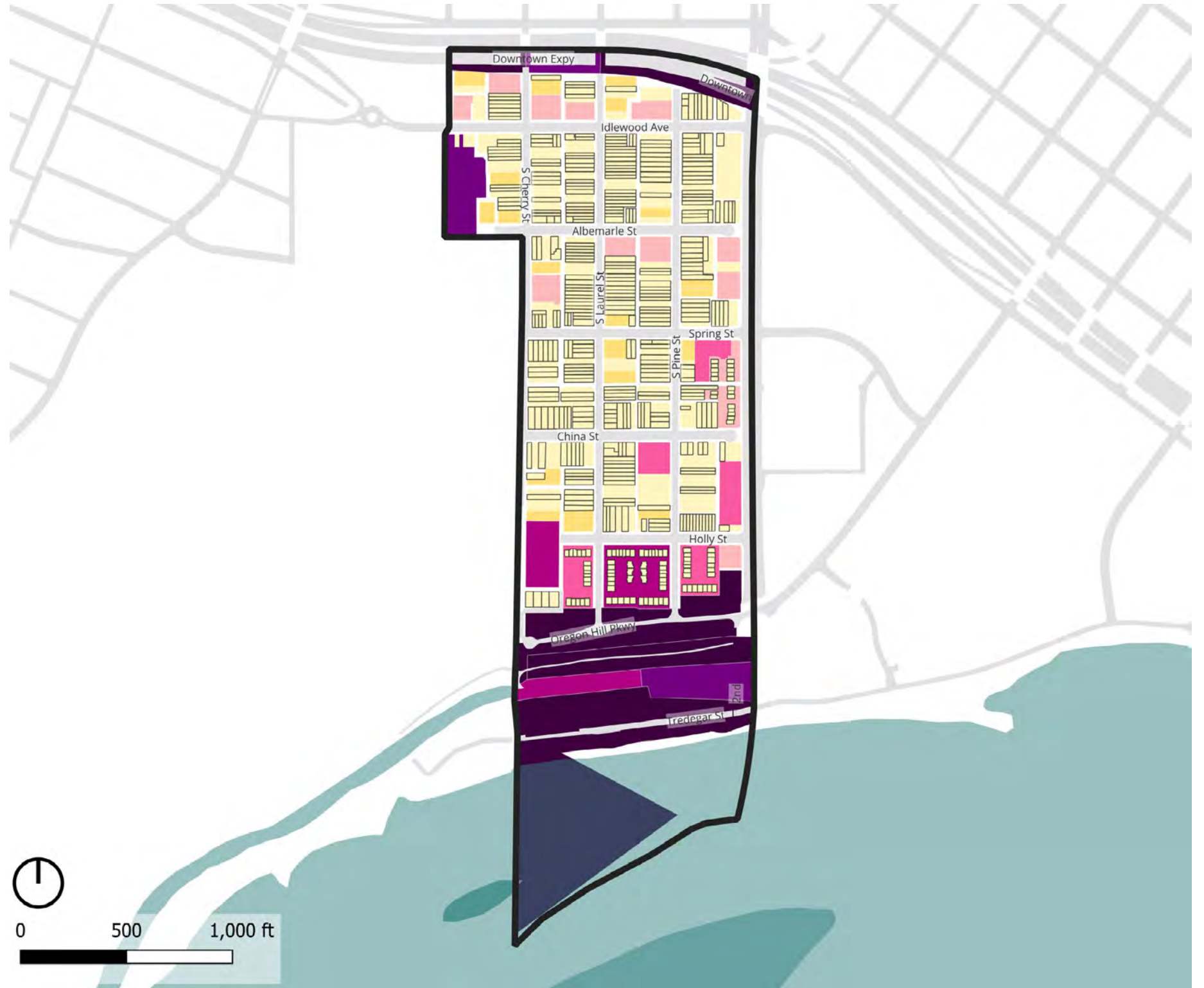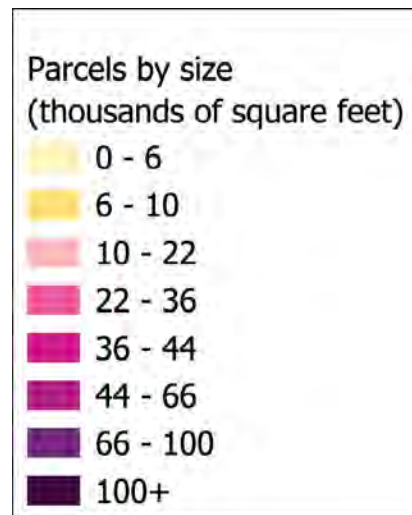
PARCEL SIZE NONCONFORMITY

Parcel size percent of nonconformity
- Within 5%
- 5% - 10%
- 10% - 20%
- 20% - 30%
- 30% - 40%
- 40% - 50%
- 50% - 75%
- 75% - 100%
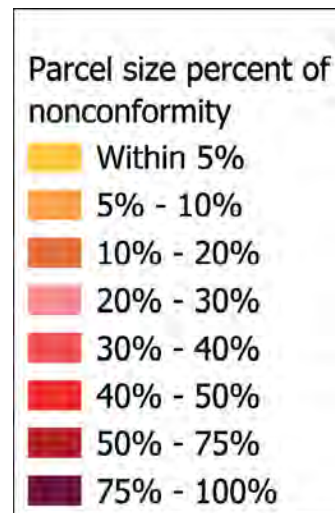
PARCEL SIZE DISTRIBUTION

PARCEL FRONTAGE

Parcel width percent of nonconformity
- Within 5%
- 5% - 10%
- 10% - 20%
- 20% - 30%
- 30% - 40%
- 40% - 50%
- 50% - 75%
- 75% - 100%
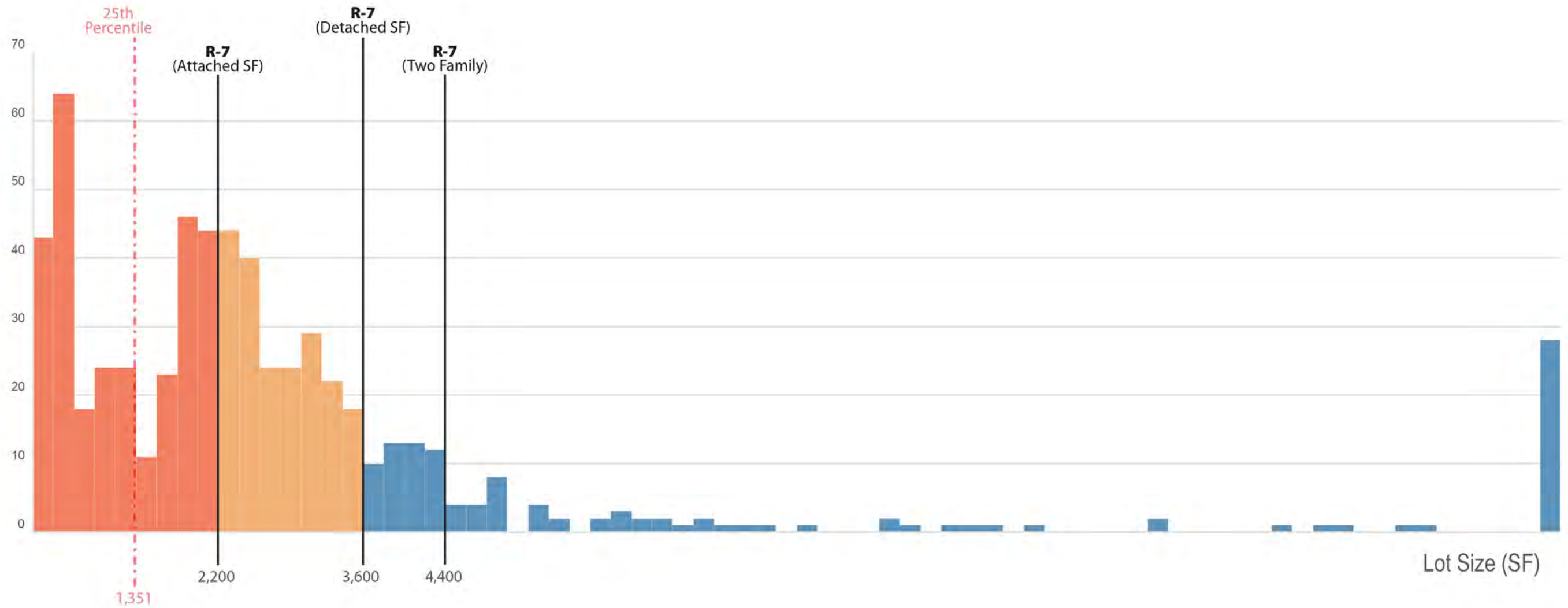
PARCEL FRONTAGE DISTRIBUTION
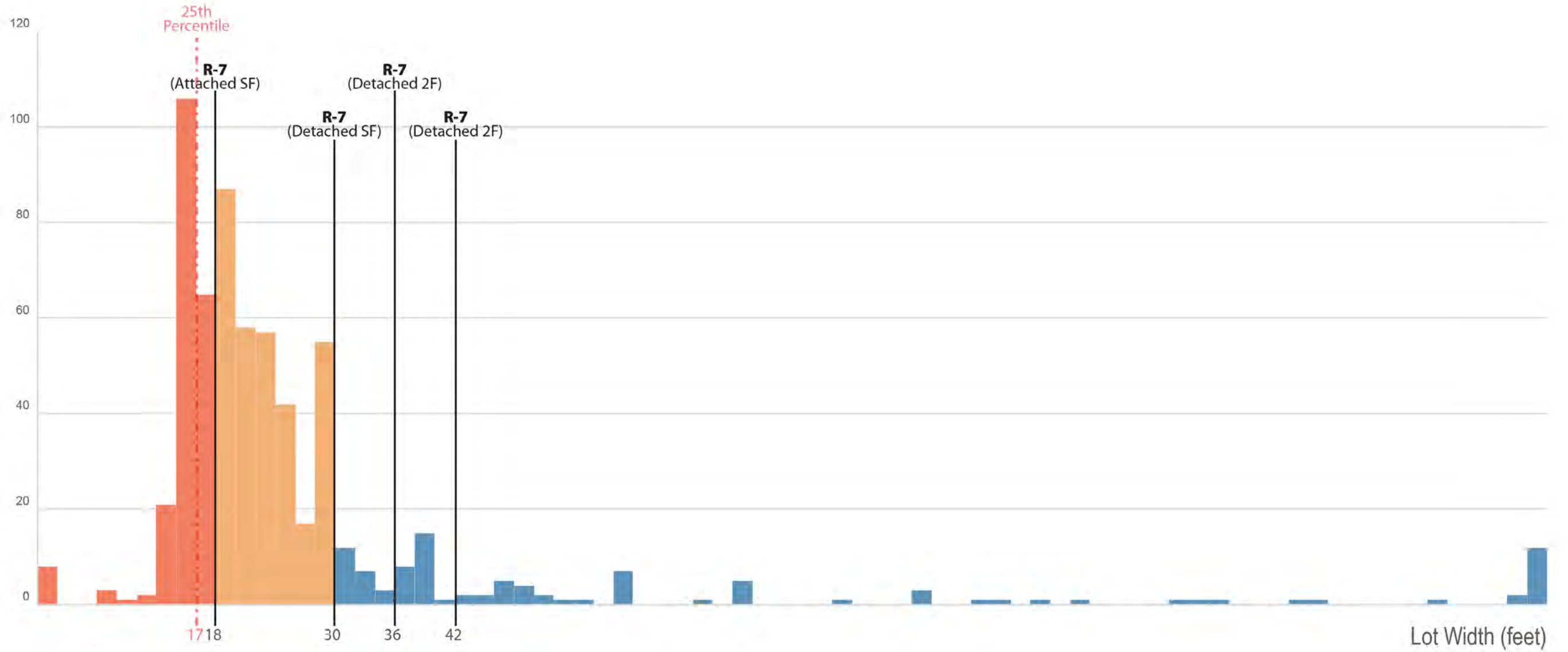
5. Oregon Hill

NONCONFORMITIES

82% of all parcels in Oregon Hill are nonconforming based on lot size, lot coverage, building height, frontage, and/or use.

13%	Due to Use
61%	Due to Form
8%	Due to Both

Predominantly zoned R-7

R-7

Selection for Block Scale Analysis

0   500   1,000 ft

BLOCK SCALE ANALYSIS

ANALYSIS ACROSS SCALES

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BLOCK SCALE ANALYSIS

Historical Context

+ Property by Year Built

Character and Frontage

+ Building Type ·········▶ **Property Type**

+ Frontage

+ Roofline Form and Fenestration

Lot Dimensions (nonconformities)

+ Lot size

+ Lot Width

Setbacks

+ Required Setbacks

+ Accessory Structure presence
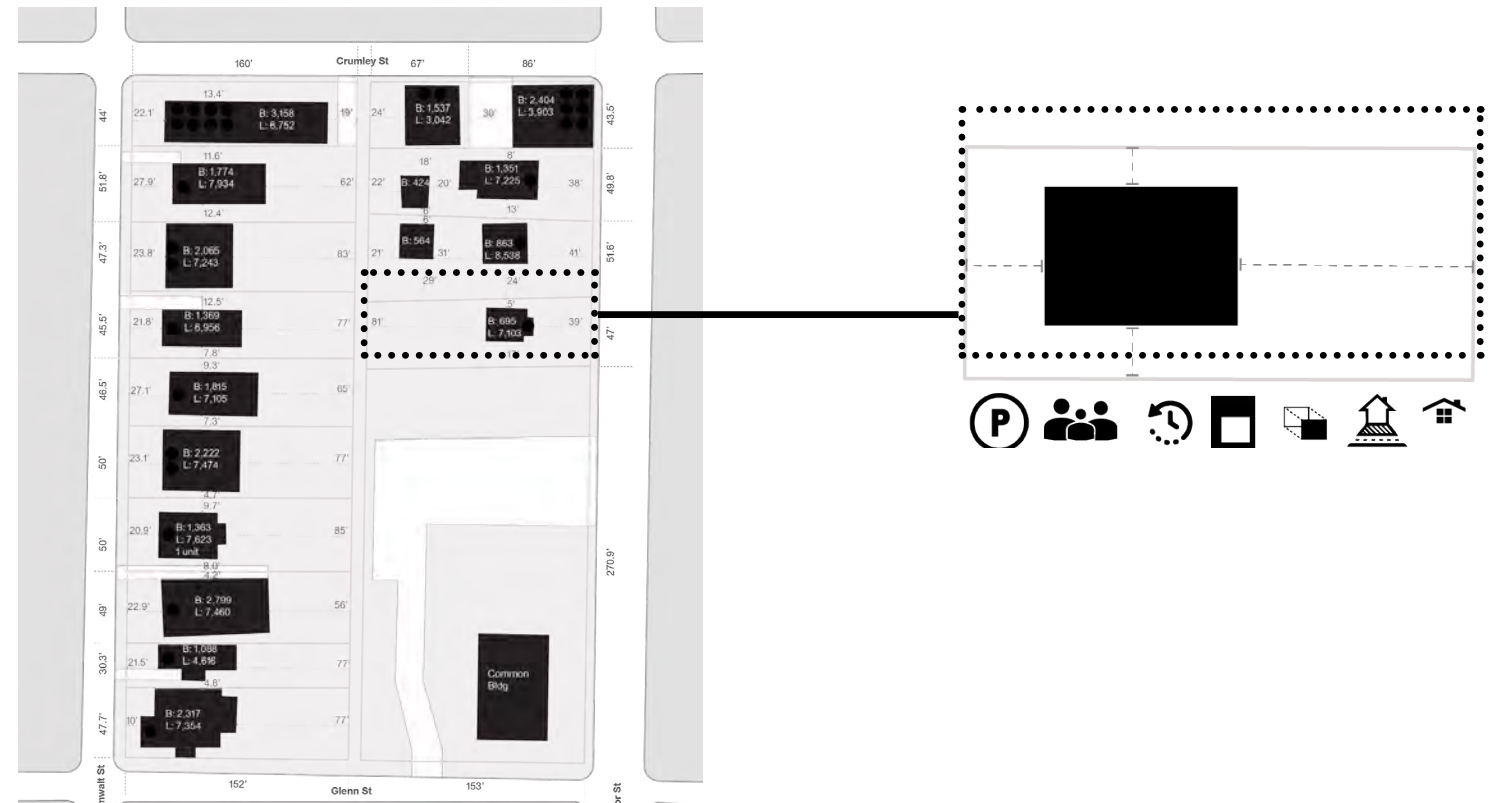
BLOCK ANALYSIS METHODOLOGY

Character and Frontage

Initial Walking Tour around selected neighborhoods. All findings in this category were then determined by examining Google Street View and Google Earth aerial imagery.

Main outcomes
- Building Type
- Frontage types
    - Semi-basements
- Rooflines
- Fenestrations

PROPERTY TYPE
Sigle, two or multi-family
+
Detached or Attached
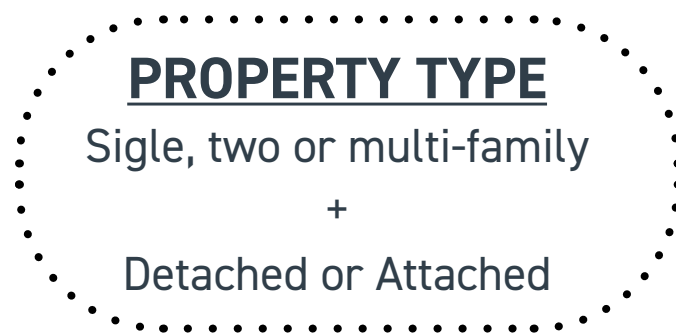
Lot Dimensions

Refinement of the nonconformity analysis after adjusting each parcel's metrics according to the defined PROPERTY TYPE.

Findings were determined by GIS analysis, parcel-by-parcel measurements, the assessors data base, visual observations on satellite imagery and the LiDAR information in Google Earth for building heights.

Main outcomes
- Lot Size
- Lot Width
- Lot Coverage
- Building Height

Setbacks

Measurement of yards to show broad trends relative to zoning; measurements are not exact as they were taken using aerial imagery. Each parcel's metrics were adjusted for lots with substandards widths (R-4, R-5) and according to the defined PROPERTY TYPE (R-6, R-7, R-63).

Setbacks were measured using Google Earth aerial imagery and LiDAR information from the estimated edge of the principal structure to the given property line.

Main outcomes
- Front Setback
- Side Setbacks (left and right)
- Rear Setback
- Accessory Structure presence

Character and Frontage   Lot Dimensions   Setbacks   Circulations

Zoning District	Street	Bldg #	Building type adjusted	Building Frontage	Fence	Semi-basement	Fenestration	Roofline type	Property Type	Lot Size	Lot Width	Building Footprint Area	Lot Coverage	Building Height (stories)	Building Height (feet*)	Front Setback	Side Setback (Left)	Side Setback (Right)	Rear Setbacks	Accessory Structure	Topography	Alley Presence	On-site Parking	Parking Location	Parking Access
				type (porch, stairs, stairs+porch, balcony, stoop)	yes/no	yes/no	low / medium / high	flat/shed/ gable/hip/ mansard	type	sf	ft	sf	%	stories	feet*	ft	ft	ft	ft	yes/no	level (=), rising (+) or falling (-)	yes/no	yes/no	front/ rear/ side	Sreet/ Alley
R-6									SF / 2F / MF	SF min 5000 or 2200 2F min 6000	min 50 or 16		max 55%	#	max 35	min 15	min 3 / 5	min 3 / 5	min 5	yes					
	hall St	400	Detached Urban	stairs+porch		yes	low	shed	SFD	2,532	24	1,134	45%	2	29	16	0	0	50	no	=	yes	no		
		402	Detached Urban	porch	yes		medium	gable	2FD	2,817	24	1,297	46%	2	24	15	0	3	42	no	=	yes	no		
		404	Semi Detached House	porch	yes		medium	shed	2FA	3,655	24	1,400	38%	2	26	15	0	3	80	no	=	yes	yes	rear	alley
		406	Semi Detached House	porch	yes		medium	mansard	2FA	3,263	20	1,698	52%	2	26	18	1	0	70	no	=	yes	yes	rear	alley
		408	Walk-up	porch	yes		medium	flat	MF	3,741	22	1,425	38%	3	40	17	3	0	78	no	=	yes	yes	rear	alley
		408 1/2	Detached Urban	porch	yes		medium	flat	2FD	3,466	22	1,404	41%	2	27	17	0	0	81	no	=	yes	yes	rear	alley
Jackson Ward - R-6	N Henry St	405	Semi Detached House	porch			medium	flat	SFA	765	24	456	60%	2	24	0	5	0	0	no	=	yes	no		
		407	Semi Detached House	porch			medium	flat	SFA	735	24	456	62%	2	24	0	0	5	0	no	=	yes	no		
		409	Semi Detached House	porch			medium	flat	SFA	831	22	456	55%	2	24	0	10	0	0	no	=	no	no		
	W Clay St	401	Detached Urban	porch	yes		medium	mansard	2FD	5,393	32	3,243	60%	2	27	14	9	0	0	yes	=	no	no		
		403	Detached Urban	porch	no		medium	shed or flat	SFD	4,231	28	2,260	53%	2	27	14	3	0	56	no	=	yes	yes	rear	alley
		405	Detached Urban	porch	yes		medium	shed or flat	SFA	4,387	30	2,359	54%	2	27	14	3	0	56	no	=	yes	yes	rear	alley
		407	Detached Urban	stairs+stoop		yes	medium	shed or flat	MF	4,976	30	2,071	42%	2	30	14	0	3	60	no	=	yes	yes	rear	alley
		409	Detached Urban	stoop+bay window	yes		medium	shed or flat	SFD	3,203	21	1,947	61%	2	26	14	0	0	0	yes	=	yes	yes	rear	alley
		411	Detached Urban	stoop+bay window	yes		medium	shed or flat	SFD	3,036	22	1,430	47%	2	26	14	3	0	60	no	=	yes	yes	rear	alley
		413	Detached Urban	porch	yes		medium	shed or flat	SFD	3,604	22	2,389	66%	2	26	14	3	0	0	yes	=	yes	yes	rear	alley
		415	Detached Urban	porch+balcony			medium	shed or flat	SFD	2,919	22	2,015	69%	2	26	14	0	0	0	yes	=	yes	yes	rear	alley
		417	Detached Urban	stoop			medium	shed or flat	SFA	2,853	22	1,625	57%	2	26	14	3	0	64	no	=	yes	yes	rear	alley
		419	Detached Urban	stairs		yes	medium	shed or flat	SFA	3,147	33	1,834	58%	2	30	14	0	3	0	yes	=	no	yes	side	street
	N Monroe St	410	Civic	stairs	yes		low	flat	church	2,641	62	1,658	63%	1	22	0	0	3	5	no	=	yes	no		
		412	Shopfront	shopfront			low	mansard						1	17						=	yes	yes	front	street

Zoomed detail (rows 400–406):

Bldg #	Building type adjusted	Building Frontage	Semi-basement	Fenestration	Roofline type	Property Type	Lot Size	Lot Width	Building Footprint Area	Lot Coverage	stories	feet	Front Setback	Side Left	Side Right	Rear	Accessory	Topography	Alley Presence	On-site Parking	Parking Location	Parking Access
400	Detached Urban	stairs+porch	yes	low	shed	SFD	2,532	24	1,134	45%	2	29	16	0	0	50	no	=	yes	no		
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404	Semi Detached House	porch	yes	medium	shed	2FA	3,655	24	1,400	38%	2	26	15	0	3	80	no	=	yes	yes	rear	alley
406	Semi Detached House	porch	yes	medium	mansard	2FA	3,263	20	1,698	52%	2	26	18	1	0	70	no	=	yes	yes	rear	alley

0 — Manually adjusted side setback for the attached portion of a building or rear setback for allowed accessory structures.

Gradient from conforming (green) to nonconforming (red), illustrating broad trends relative to zoning.

BLOCK ANALYSIS METHODOLOGY

Nonconformities

For the lot size, lot width, lot coverage, and building height fields under category *2. Lot Dimensions and Density*, and all the fields besides Accessory Structure within category *3. Setbacks,* the summary table for each analyzed block indicates whether the given metric conforms or does not conform with the applicable zoning metric. The numerical summary table used a gradient between green and red fill to indicate the approximate level of conformity/nonconformity. For the R-6, R-7, and R-63 districts, the conformity/nonconformity was set depending on the defined property type (SFD, SFA, 2FD, 2FA, MF, or others).

If a given zoning district does not have a metric for a given property type that is not allowed, for example if there was a multifamily property in an R-6 district that only allows for single and two-family residential buildings, the spreadsheet uses the strictest metric available–usually the two-family detached metric. (Note that for R-63 districts, the spreadsheet assumes no minimum lot sizes or maximum building heights for parcels with unregulated property types since the only other property types are parking lots and vacant lots.)

Gradient from conforming (green) to nonconforming (red),
illustrating broad trends relative to zoning.

METHODOLOGY DESCRIPTION

1. Character and Frontage

Initial Walking Tour around selected neighborhoods. All findings in this category were then determined by examining Google Street View and Google Earth aerial imagery.

Main outcomes

Building Type Adjusted: describes the building form, considering overall building and setback dimensions, use, proximity to neighboring buildings, floor height, and frontage type. A description of each building type analyzed can be found after the methology description.

Building Frontage: describes how the building fronts the street. The most common frontage features identified are stairs, porches, stoops, or some combinations. Stairs are only listed when the main building entrance is significantly raised from the yard or sidewalk, either by terrain change or having a semi-basement, which was determined when there were about five or more steps. Shopfront frontage refers to commercial-looking ground floors with very little to no front setback and large display windows on either side of a recessed door.

Fence: describes whether or not the front of the parcel has a fence fronting the street and along the parcel lines.

Semi-basement: describes whether or not the building has a livable basement visible from the street. These usually are linked to the building's ground floor being raised from the ground.

Fenestration: describes how much of the front facade of the building consists of windows. High indicates that windows take up more than half of the front facade, medium indicates that the ratio between windows and solid walls takes up roughly half of the front facade, and Low indicates that the window-to-wall ratio is significantly less than half of the front facade. This determination was made loosely based on imagery and not through a detailed quantitative analysis.

Roofline Type: describes the general shape of the roof. Flat roofs are leveled with a minimum slope; shed roofs are surfaces at a slant towards the back of the building; gable roofs have two slopes that join at a peak; hip roofs have four slopes that meet at a peak, and mansard roofs have a slant in the front–typically shingled and with window dormers– that then transitions into a flat or shed roof beyond the front facade.

Property Type: describes what the building appears to be used for and its form of relationship with its neighbors. This field uses a broader range of terms than the Building Type Adjusted field, as it describes the apparent use instead of the form. Apparent use was determined by examining separate entrances, mailboxes, and the general form of the building cross-referenced with assessors' data on the uses associated with each parcel and online real estate databases.
This field has been abbreviated SF for single-family, 2F for two-family, and MF for multi-family. An "A" indicates attached, and a "D" indicates detached. Other types were described by use. This definition is particularly relevant because the current zoning districts have different dimensional requirements depending on whether the parcel is single, two, or multi-family and if it is detached or attached.

METHODOLOGY DESCRIPTION

2. Lot Dimensions and Density

Lot Size was measured through GIS by calculating the area of each parcel in square feet.

Lot Width was taken from the assessor's data, specifically the "FrontSiz" field in the "REAL_ LAND" database. That dimension was later manually verified using the GIS parcel data.

Building Footprint Area was measured in GIS using the city structure data as of August 2024. This data layer does not fully align with parcel lines and shows attached structures that span multiple parcels as one polygon. The structure layer was clipped by parcel lines, and then measured the structure area inside each parcel. IMPORTANT: This analysis is not fully accurate to real conditions due to the misalignment of the structure layer and because the structure layer sometimes includes porches and other such structures that the zoning code does not count as part of the principal structure.

Lot Coverage was calculated directly in GIS by dividing the building footprint area by lot area, with every step reported in square feet. These calculations used the Building Footprint Area as reported above and thereby include the same assumptions and inaccuracies.

Building Height was measured both by stories and by height in feet. The stories field refers to physical stories visible from the primary frontage street. Stories were measured based on the number of rows of windows visible from the street on Google Street View. In the case of a perceived increase in height due to an attic, half a story (0.5) was added. No half a story was added for livable semi-basements.

The building height in feet was measured using Google Earth's elevation measurement of the roof elevation and subtracting the ground elevation. For any sloped roof type–shed, hip, or gable–the height was taken by averaging the highest and lowest points of the roof as noted in the zoning code. The elevation of the ground was measured at the base of the principal structure at the parcel's front.

Where multiple structures exist in the same parcel, the building height refers to the tallest building. Where structures not visible from the street that do have their own parcels, such as certain garages and sheds, the number of stories was assumed to be one, though the building height in feet was still measured according to the protocol laid out above.

METHODOLOGY DESCRIPTION

3. Setbacks

The purpose of measuring setbacks was to show broad and basic trends relative to zoning; measurements are not exact as they were taken using aerial imagery. The numerical summary table used a gradient between green and red fill to indicate the approximate level of conformity/nonconformity. For R-6, R-7, and R-63 districts, the conformity/nonconformity was set depending on the defined property type (SFD, SFA, 2FD, 2FA, MF, or others).

Setbacks were measured using Google Earth aerial imagery from the estimated edge of the principal structure to the given property line. These measurements excluded porches, bay windows, stoops, roof overhangs, and balconies, given that the zoning code allows these structures to encroach on the yards. To isolate the footprint of the principal structure, a combination of Google Earth LiDAR (including multiple dated images), aerial imagery, and Google Street View images were used to determine the base of the principal structure.

Property lines were assumed to end at sidewalks, alleys, fences, and yard lines when visible. When these features were not visible, a best estimate was made by cross-referencing the structure and parcel data available in the Richmond Parcel Mapper with Google Earth LiDAR and aerial imagery.
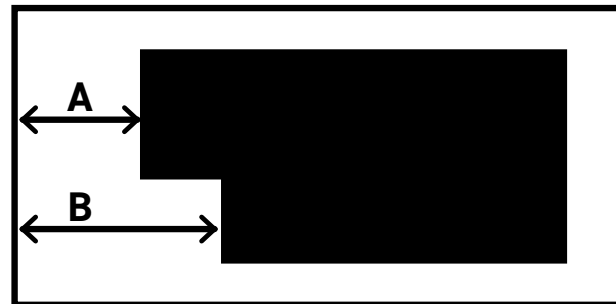
Side setbacks were measured between the principal structure and the property line. Some structures did not have a visible line between properties, or the distance between structures was too tight to measure. For these cases, the setback estimation was done using a mix of Google street view assessment, using fences and other landscaping features to determine parcel limits and consulting the Sanborn Fire Insurance Map for the most historic neighborhoods (where most of these tightly placed buildings are located). For the remaining parcels where it was impossible to determine the parcel line location, such was assumed to be equidistant from each neighboring structure.

When parcels are adjacent to alleys, the setback was measured from the parcel line; however, some percentage of the alley width could be credited from the required setback to determine conformity.

For cases where the principal structure had an uneven facade, the measurements were taken from the point of the facade closest to the property line. See the image below, where the measurement would be taken along option A.

For the setbacks diagrams, glaring errors in the automated LIDAR-generated structure footprint shapefile were corrected based on aerial images and Google Street View visual assessment. In some cases, it was not possible to verify the building footprint accurately due to obstructions in the aerial imagery. Due to the unreliable structure data, even after adjustments were made, we determined that the precise property line could not be determined using structure and parcel line GIS data. Diagrams attempt to reflect the setback conditions best, but verified building footprints were not used to measure setbacks. Diagrams are for reference only.

METHODOLOGY DESCRIPTION

4. Circulation / Service

Topography was determined by analyzing Google Street View and verifying it on Google Earth. If the overall parcel, as visible from the street, was reasonably even, it was recorded as level (=). If the principal building and front yard were reasonably elevated above the street/sidewalk and/or notably sloping up from the property line, it was recorded as rising (+). If it was reasonably beneath the street/sidewalk and/or notably sloping down from the property line, it was recorded as falling (-).

Note that this determination was made based solely on the apparent topography of the parcel and front yard. Building form conditions like raised stoops, porches, or semi-basement but in seemingly flat parcels were not included.

Alley Presence was determined by cross-referencing Google Earth aerial imagery and parcel line data. Parcels where one or more property lines were adjacent to an alley were found to have an alley presence. Most parcels in Richmond have alley access, with the most common exception being corner parcels with adjacent parcels in the secondary frontage street.

On-site parking was determined by examining Google Earth aerial imagery and, where applicable, examining Google Street View imagery. Parcels with visible garages or parking lots were found to have on-site parking. Parcels with alley access and sufficient unobstructed yard space or traces of potentially parked cars were also found to have on-site parking.

Parking Location was determined by examining parking areas on Google Earth and Google Street View imagery. It describes the location of the on-site parking spaces with respect to the primary frontage street. Where parking wrapped around multiple sides of the building, it was noted by combining both conditions. For example, a retail location with a rear parking lot wrapped around its left side would read rear+side. For parcels with no on-site parking, this field was left blank.

Parking Access was determined by examining parking areas on Google Earth and Google Street View imagery. This field describes whether on-site parking can be accessed from the street or an alley. Richmond's most common on-site parking condition is rear parking accessed from an alley.

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BUILDING TYPES

DETACHED RESIDENTIAL

DETACHED HOUSE

DETACHED URBAN

WALK-UP

WALK-UP APARTMENT

DUPLEX

ATTACHED RESIDENTIAL

SEMI-DETACHED HOUSE

ATTACHED HOUSE

GENERAL COMMERCIAL

CIVIC

SHOPFRONT

BUILDING TYPES - DETACHED RESIDENTIAL

DETACHED HOUSE:

A freestanding residential building set back from its neighbors and set back from the street by a front yard. Detached houses typically front the street with a single primary stoop or porch, even if multiple entrances exist. Most detached houses contain one primary dwelling, but additional units have been retrofitted in some cases. Some detached houses may also contain an accessory dwelling in their basement, attic, or rear.

Photos by Carlos Sainz Caccia

DETACHED URBAN:

A freestanding residential building with a more urban form than the detached houses: typically narrower buildings that go deeper into the parcel and sit closer to the street, typically fronted with porches or covered stoops. They have significantly narrow side setbacks (sometimes, buildings sit at the property line), and occasionally, multiple houses can be adjoined to one or both neighbors (with independent sidewalls), creating a building group. Most structures were built to contain one primary dwelling unit, but it is common to find them split into two or sometimes three. Sometimes, the ground floor is elevated half a floor, creating a habitable basement space frequently including an additional dwelling unit.

Photos by Carlos Sainz Caccia

BUILDING TYPES - ATTACHED RESIDENTIAL

SEMI-DETACHED HOUSE:

A residential building similar to the Detached houses types, but with one of the sides of the building attached to its neighbor, separated by a common sidewall, and sitting in two separate parcels. Typically, these buildings share a common architectural style and materials with their attached neighbor, making them look like a single building split by two different parcels. Semi-detached houses can contain one or two dwelling units. In some cases, the two parcels have been combined, technically changing the semi-detached type designation.

ATTACHED HOUSE:

A residential building that is attached to neighboring structures on both sides, separated by a common sidewall. Although each building sits in individual parcels, they produce a continuously built front to the street. Typically, these buildings share a common architectural style and materials with their attached neighbors. Attached houses can contain one or multiple dwelling units. Sometimes, parcels have been combined, technically changing the attached type designation.unit.
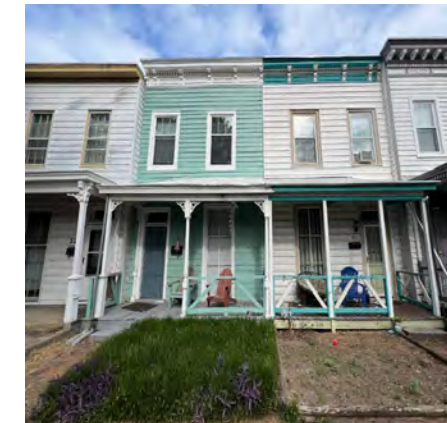
BUILDING TYPES - MULTIFAMILY

WALK-UP:

A freestanding multi-story building typically containing three to 12 dwelling units, with units stacked on top of one another like apartments. They typically front the street with one primary entrance but may have secondary entrances and multiple porches or balconies. In Richmond, walk-ups are typically two or three stories tall and similar in scale and massing to surrounding detached houses. These buildings were designed as multifamily structures but may present like large single-family homes, distinguishing this typology from retrofitted detached houses/detached urban.
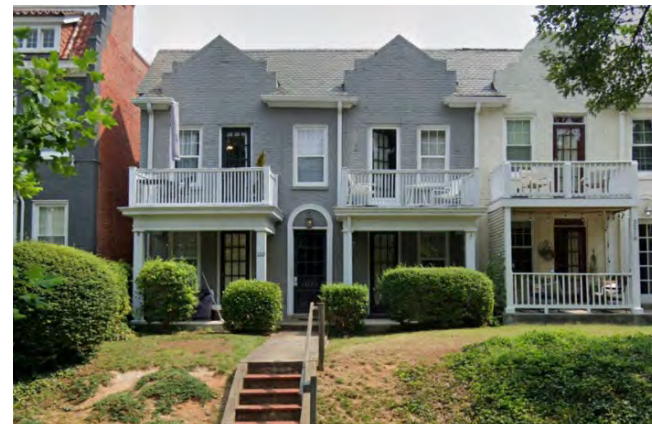
APARTMENT WALK-UP:

A freestanding multistory apartment building that tends to contain 12 or more stacked dwelling units. These buildings are usually three stories, front the street with one primary entrance, and share stairs and hallways. The buildings are larger than the surrounding single and multifamily houses previously described.

Photo by Carlos Sainz Caccia

Photo by Google Maps

Photo by Carlos Sainz Caccia

Photo by Google Maps

Photos by Carlos Sainz Caccia

BUILDING TYPES

DUPLEX:

A freestanding residential building with two dwelling units attached to each other, either side-by-side as townhouses or one above the other like apartments. In most cases, both units have distinct doors or entrances from each other. Unlike semi-detached houses, duplexes have been designed to have both units in one parcel.

Photos by Carlos Sainz Caccia

Photos by Google Maps

GENERAL COMMERCIAL:

A multi-story building designed for a vertical mix of uses, with pedestrian-oriented ground floor commercial uses and one or more residential or non-residential uses above. These buildings are usually characterized with little or no front setback and large display windows at the ground level.

Photo by Carlos Sainz Caccia

BUILDING TYPES

SHOPFRONT:

A single-story building containing pedestrian-oriented commercial uses. Shopfront buildings can range in size from single corner stores embedded within residential areas to larger neighborhood commercial districts along key corridors.

CIVIC:

Include schools, places of worship, community centers, and other governmental buildings that are typically differentiated from surrounding commercial and residential uses by their design and scale.

Photos by Google Maps

Photos by Carlos Sainz Caccia

Photo by Google Maps

Photo by Carlos Sainz Caccia

Photos by Google Maps

BLOCK SCALE ANALYSIS

Blocks Analyzed	Blocks	Dominant Zoning
1. Jackson Ward	B1	R-6
	B2	R-6 / R-63
2. The Fan / Museum District	B1	R-6
	B2	R-6
3. Church Hill North	B1	R-6
	B2	R-5
4. Union Hill	B1	R-63
5. Oregon Hill	B1	R-7
6. Oak Grove	B1	R-5
	B2	R-5
7. Northern Barton Heights	B1	R-5
8. Swansboro West	B1	R-5
9. Westhampton	B1	R-4
10. Washington Park	B1	R-5

0   1   2 mi

5. OREGON HILL

BLOCK 1

0   500   1,000 ft
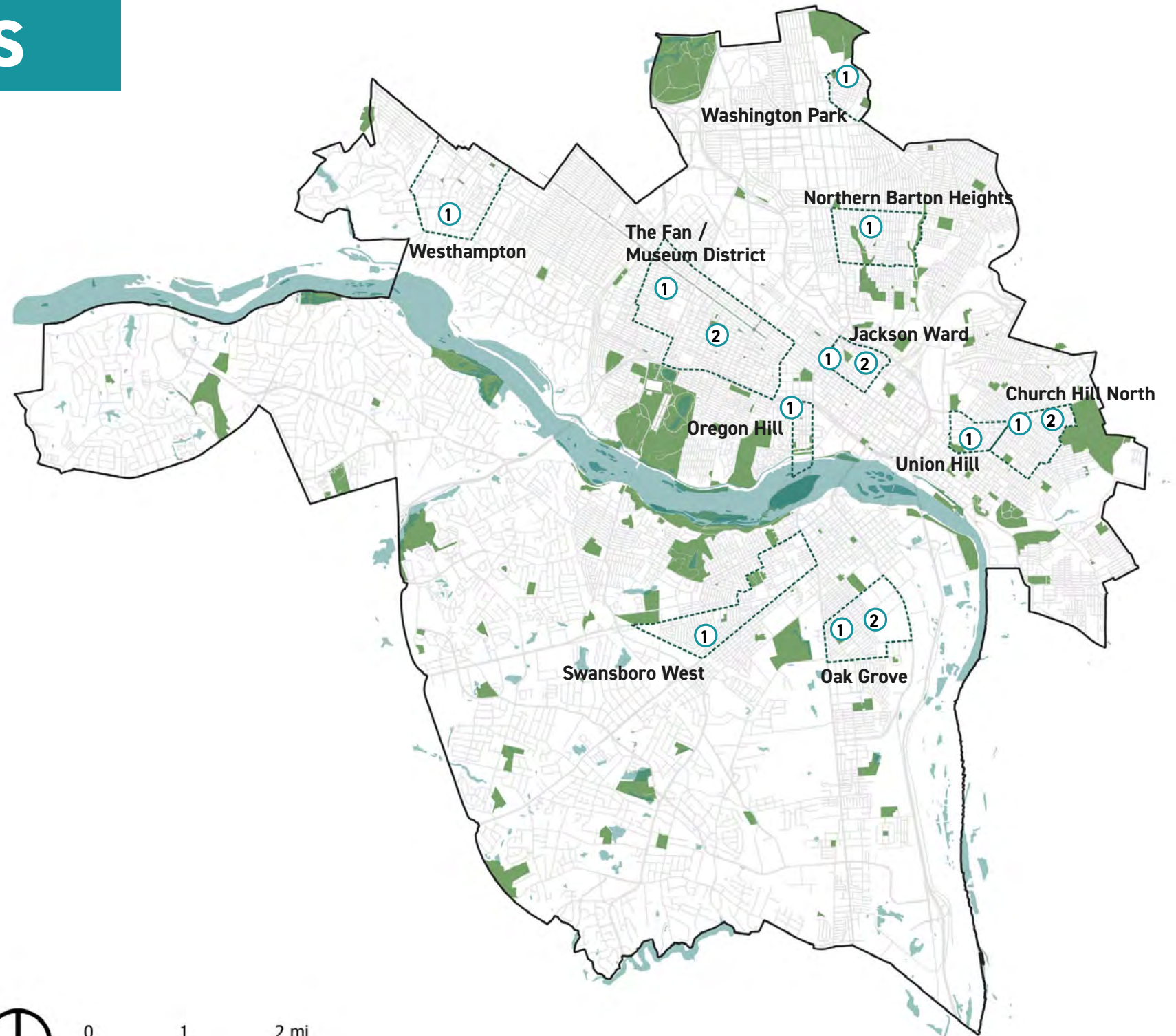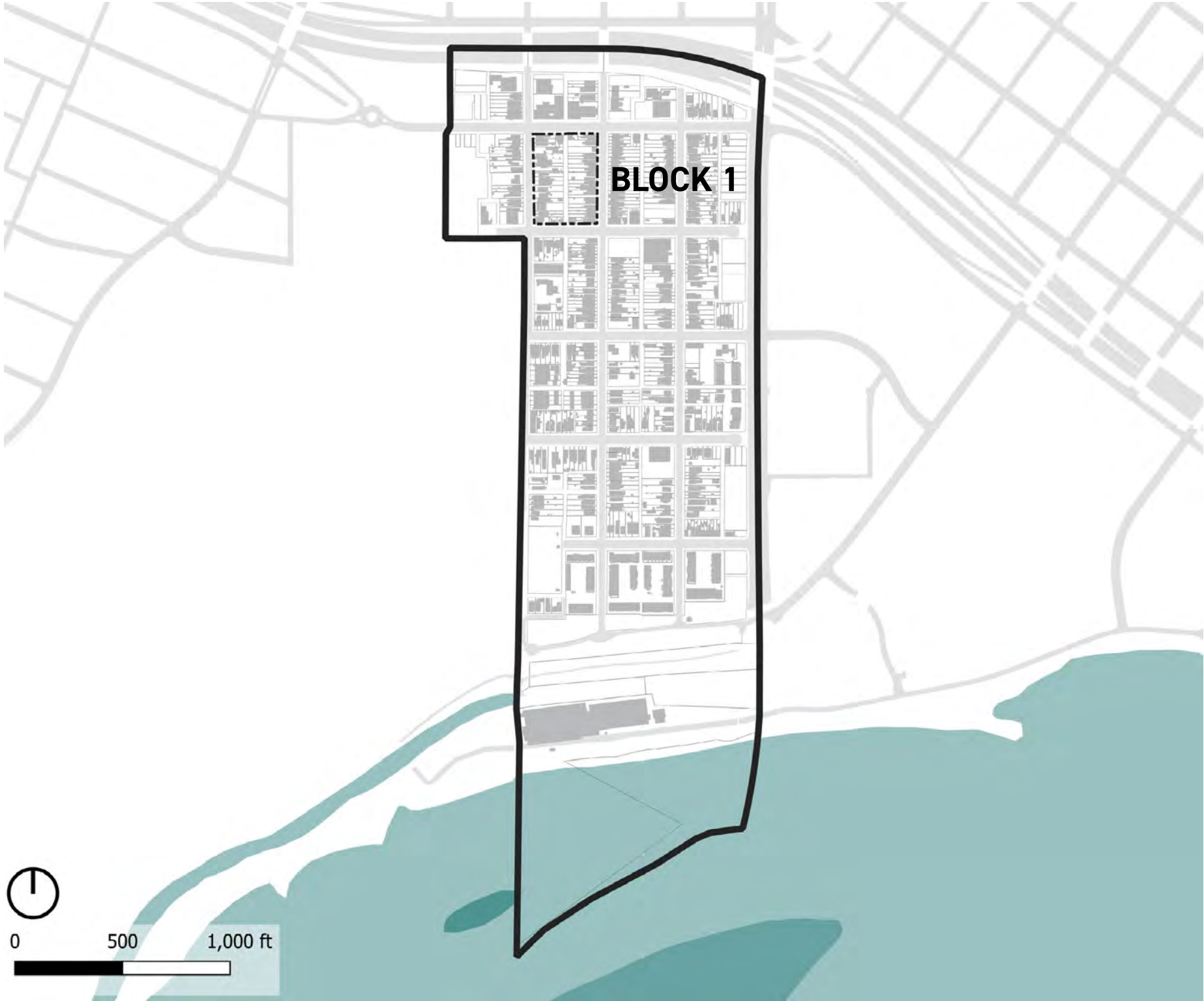
HISTORICAL CONTEXT

YEAR BUILT

- 0 - 1900
- 1900 - 1920
- 1920 - 1950
- 1950 - 1980
- 1980 - 2023
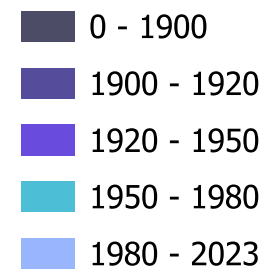
5. Oregon Hill Block 1
LOT SIZE ANALYSIS

LOT SIZE DEGREE OF NONCONFORMITY

🟨	Up to 5% Below Minimum Size
🟧	5% - 10% Below Minimum Size
🟫	10% - 20% Below Minimum Size
🟥	20% - 30% Below Minimum Size
🟥	30% - 40% Below Minimum Size
🟥	40% - 50% Below Minimum Size
🟥	50% - 75% Below Minimum Size
⬛	75% - 100% Below Minimum Size

Idlewood Ave

S Cherry St

S Laurel St

R-7

Albemarle St

2,286 sf
1,889 sf
2,063 sf
1,975 sf 1,200 sf
4,181 sf
3,894 sf
2,360 sf
2,097 sf
3,016 sf
982 sf
2,626 sf
2,760 sf
2,756 sf
4,126 sf
4,117 sf
2,808 sf
5,398 sf
1,841 sf
1,823 sf
2,290 sf

1,264 sf
1,355 sf
1,350 sf
4,135 sf
4,119 sf
3,137 sf
2,720 sf
2,713 sf
4,934 sf
2,089 sf
2,084 sf
2,080 sf
2,812 sf
3,731 sf
2,412 sf
1,495 sf
1,435 sf
988 sf

0   50   100 ft

5. Oregon Hill Block 1
LOT WIDTH ANALYSIS

LOT WIDTH DEGREE OF NONCONFORMITY

- Up to 5% Below Minimum Width
- 5% - 10% Below Minimum Width
- 10% - 20% Below Minimum Width
- 20% - 30% Below Minimum Width
- 30% - 40% Below Minimum Width
- 40% - 50% Below Minimum Width
- 50% - 75% Below Minimum Width
- 75% - 100% Below Minimum Width

5. Oregon Hill Block 1
SETBACKS ANALYSIS

LEGEND

[dashed blue box] **Required Setback***

[gray box] **Existing Building Footprint**

* Required side setbacks range between 3-5 ft depending on both form (attached vs detached) and use intensity (single or two-family). Attached buildings don't require a side yard on their attached side(s) due to their form.

The diagram represents the range of setbacks and is not accounting for zero setback on attached buildings. Diagram is for reference only.
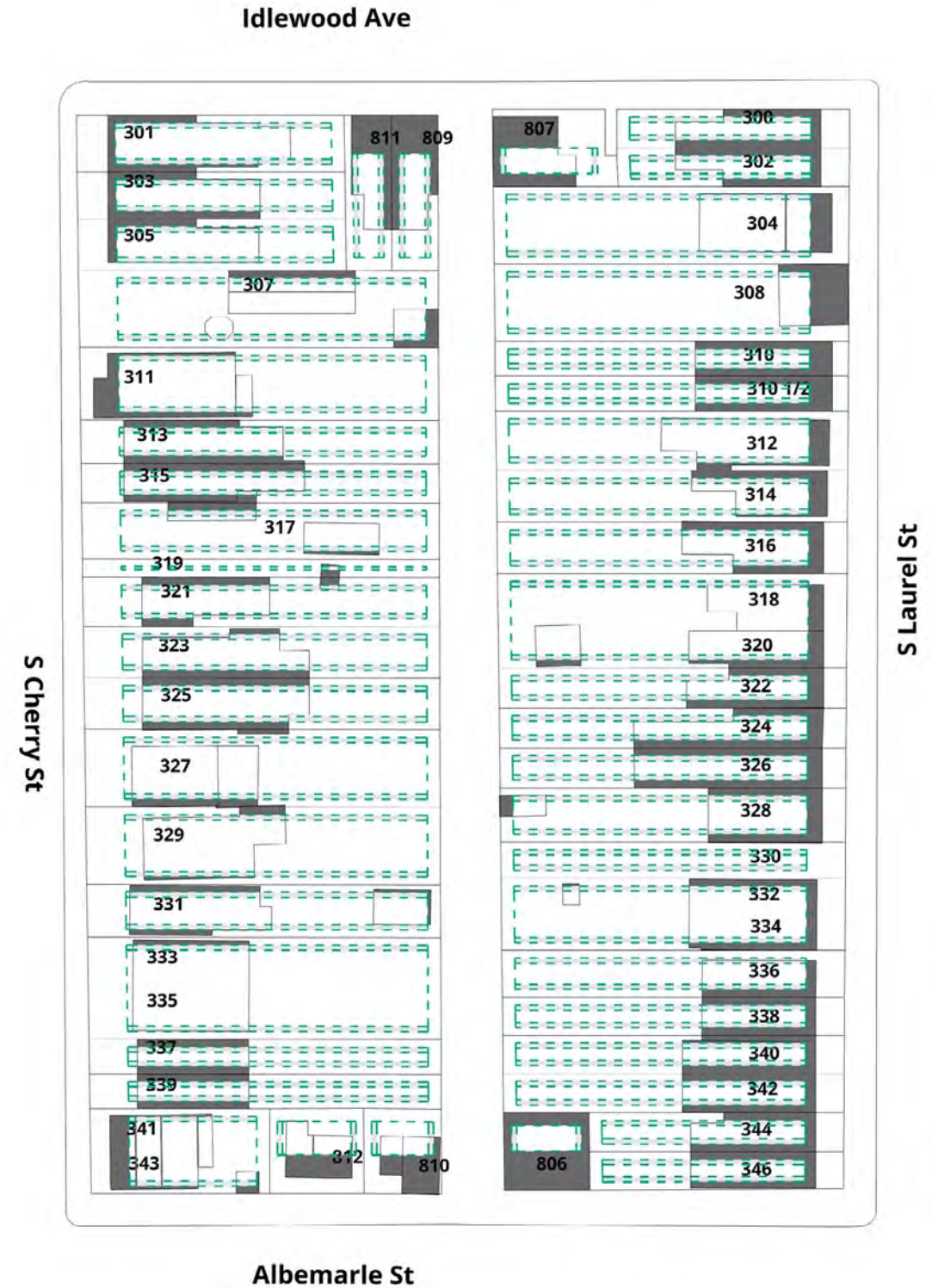
5. Oregon Hill Block 1
CHARACTER

332/334 S Laurel St - Semibasement + Porch

810 Albemarle St

301 & 303 S Cherry St - Porch

809 & 811 Idlewood Ave - Porch

BUILDING TYPE

🟨	Detached Urban	⬜	Duplex
🟨	Detached House	🟧	General Commercial
🟦	Semi-Detached House	🟥	Shopfront
🟦	Attached House	🟧	Civic
🟪	Walk-Up	🟩	Accessory Structure
🟪	Walk-Up Apartment		

Idlewood Ave

S Cherry St

S Laurel St

Albemarle St

Zoning District	Street	Bldg #	1. Character/Frontage — Building type adjusted	Building Frontage — type (porch, stairs, stairs+porch, balcony, stoop)	Fence (yes/no)	Semi-basement (yes/no)	Fenestration (low/medium/high)	Roofline type (flat/shed/gable/hip/mansard)	Property Type (SF/2F/MF)	2. Density — Lot Size (sf)	Lot Width (ft)	Building Footprint Area (sf)	Lot Coverage (%)	Building Height (stories #)	Building Height (feet*)	3. Setbacks — Front Setback (ft)	Side Setback (Left) (ft)	Side Setback (Right) (ft)	Rear Setbacks (ft)	Accessory Structure (yes/no)	4. Circulation/Service — Topography (level (=), rising (+) or falling (-))	Alley Presence (yes/no)	On-site Parking (yes/no)	Parking Location (front/rear/side)	Parking Access (Street/Alley)
R-7									SF / 2F / MF	SF min 3600 or 2200 / 2F min 4400	min 18, 30, 36 or 42		max 55%	#	max 35	min 15	min 3 / 5	min 3 / 5	min 5	yes					
R-7	S Laurel St	300	Semi Detached House	porch	no		medium	shed	SFA	1,355	15	742	55%	2	24.5	12	0	0	25	no	=	no	no		
		302	Semi Detached House	porch	yes		medium	shed	SFA	1,350	15	806	60%	2	24.5	12	0	0	25	no	=	no	no		
		304	Detached House	porch	yes		high	gable	SFD	4,135	30	1,336	32%	2	25	15	5	3	81	yes	=	yes	yes	rear	alley
		308	General Commercial	shopfront	no		high	shed	Mixed Use	4,119	30	619	15%	2	20.5	0	5	0	66	no	=	yes	no		
		310	Semi Detached House	stairs+porch	no	yes	medium	shed	2FA	1,849	13	842	46%	2	26.5	11	0	0	77	no	=	yes	yes	rear	alley
		310 1/2	Semi Detached House	stairs+porch	no	yes	medium	shed	2FA	1,845	13	844	46%	2	26.5	11	0	0	77	no	=	yes	yes	rear	alley
		312	Detached Urban	porch	no		medium	flat	SFD	3,137	23	1,104	35%	2	22	11	2	3	71	no	=	yes	yes	rear	alley
		314	Detached Urban	porch	no		medium	flat	SFD	2,720	20	785	29%	2	22	11	3	0	81	no	=	yes	yes	rear	alley
		316	Detached Urban	porch	no	yes	medium	shed	SFD	2,713	20	971	36%	2	24	11	0	0	78	no	=	yes	yes	rear	alley
		318 / 320*	Attached House	porch	yes		medium	shed	2FA	4,934	37	1,847	37%	2	22	11	0	0	77	yes	=	yes	yes	rear	alley
		322	Attached House	porch	yes		medium	flat	SFA	2,089	15	745	36%	2	22.5	11	0	0	77	no	=	yes	yes	rear	alley
		324	Attached House	porch			low	shed	SFA	2,084	15	930	45%	2	26	11	0	0	66	no	=	yes	yes	rear	alley
		326	Attached House	porch			low	shed	SFA	2,080	15	1,301	63%	2	26	11	0	0	66	no	=	yes	yes	rear	alley
		328	Attached House	stairs+porch	yes	yes	medium	shed	SFA	2,812	21	1,216	43%	2	27.5	11	0	0	94	yes	=	yes	yes	rear	alley
		330							Vacant	1,870	14	75	4%	2						no	=	yes			
		332 / 334*	Semi Detached House	stairs+porch	yes	yes	medium	shed	MF	3,731	28	1,474	40%	2	24.5	11	0	0	87	yes	=	yes	yes	rear	alley
		336	Attached House	stairs+porch	yes	yes	medium	flat	SFA	2,412	18	864	36%	2	25	11	0	3	87	no	=	yes	yes	rear	alley
		338	Attached House	stairs+porch	yes	yes	medium	shed	2FA	1,951	14	721	37%	2	25	11	0	0	87	no	=	yes	yes	rear	alley
		340	Attached House	stairs+porch		yes	medium	shed	2FA	1,948	14	783	40%	2	26	11	0	0	87	no	=	yes	yes	rear	alley
		342	Attached House	stairs+porch		yes	medium	shed	2FA	2,024	15	793	39%	2	26	11	0	0	87	no	=	yes	yes	rear	alley
		344	Attached House	porch	yes		medium	shed	SFA	1,495	15	715	48%	2	24	11	0	0	32	no	=	no	no		
		346	Attached House	porch	yes		medium	shed	SFA	1,435	14	817	57%	2	23.5	9	0	0	29	no	=	no	no		
	Albemarle St	806	General Commercial				low	gable	Mixed Use	988	33	891	90%	2	21.5	0	0	6	0	no	=	yes	no		
		810	Detached House				medium	shed	SFD	990	30	520	53%	2	13.5	0	4	0	10	no	=	yes	no		
		812	Detached House	stoop			medium	gable	SFD	1,208	37	516	43%	2	21	6	6	8	12	no	=	no	no		

Oregon Hill - Block 1

Gradient from conforming (green) to nonconforming (red), illustrating broad and basic trends relative to zoning.

5. Oregon Hill Block 1 Continued

Zoning District	Street	Bldg #	Building type adjusted	Building Frontage (type)	Fence	Semi-basement	Fenestration	Roofline type	Property Type	Lot Size (sf)	Lot Width (ft)	Building Footprint Area (sf)	Lot Coverage (%)	Bldg Height (stories)	Bldg Height (feet*)	Front Setback (ft)	Side Setback Left (ft)	Side Setback Right (ft)	Rear Setbacks (ft)	Accessory Structure	Topography	Alley Presence	On-site Parking	Parking Location	Parking Access
R-7					yes/no	yes/no	low/medium/high	flat/shed/gable/hip/mansard	SF / 2F / MF	SF min 3600 or 2200, 2F min 4400	min 18, 30, 36 or 42		max 55%	#	max 35	min 15	min 3 / 5	min 3 / 5	min 5	yes	level (=), rising (+) or falling (-)	yes/no	yes/no	front/ rear/ side	Sreet/ Alley
Oregon Hill - Block 1	S Cherry St	301	Attached House	porch			medium	shed	2FA	2,286	22	1,323	58%	2	27	11	0	0	31	no	=	no	no		
		303	Attached House	porch			medium	shed	SFA	1,889	18	1,077	57%	2	27	11	0	0	31	no	=	no	no		
		305	Attached House	porch			medium	shed	SFA	2,063	19	1,132	55%	2	27	11	0	3	31	no	=	no	no		
		307	Detached House	porch	yes		high	gable	SFD	4,181	30	1,770	42%	2	20	57	3	10	34	yes	=	yes	no		
		311	Detached Urban	porch			medium	hip	SFD	3,894	28	1,622	42%	2	22.5	9	4	0	88	no	=	yes	yes	rear	alley
		313	Semi Detached House	porch	yes		low	shed	SFA	2,360	17	1,087	46%	2	24	25	3	0	66	no	=	yes	yes	rear	alley
		315	Semi Detached House	porch	yes		low	shed	SFA	2,097	15	1,086	52%	2	24	25	0	0	66	no	=	yes	yes	rear	alley
		317							Garage	3,016	21	647	21%	2							=	yes	yes	rear	alley
		319							Vacant	982	7	90	9%	2							=	yes	yes	rear	alley
		321	Detached Urban	porch	yes		low	shed	SFD	2,626	19	879	33%	2	20.5	24	4	0	71	no	=	yes	yes	rear	alley
		323	Semi Detached House	porch	yes		low	shed	SFA	2,760	20	1,189	43%	2	21	25	3	0	47	no	=	yes	yes	rear	alley
		325	Semi Detached House	porch	yes		low	shed	SFA	2,756	20	1,195	43%	2	21	25	0	3	54	no	=	yes	yes	rear	alley
		327	Detached Urban	porch			medium	shed	SFD	4,126	30	1,256	30%	2	23.5	23	4	4	77	no	=	yes	yes	rear	alley
		329	Detached Urban	porch	yes		medium	shed	SFD	4,117	30	1,328	32%	2	23	24	4	3	64	no	=	yes	yes	rear	alley
		331	Detached Urban	stairs+porch	yes		medium	shed	SFD	2,808	20	1,503	54%	2	23	18	2	2	69	yes	=	yes	yes	rear	alley
		333 / 335	Semi Detached House	porch	yes		low	shed	2FD	5,398	39	1,674	31%	2	23.5	18	0	3	83	no	=	yes	yes	rear	alley
		337	Semi Detached House	porch			medium	shed	SFA	1,841	13	660	36%	2	24	17	0		82	no	=	yes	yes	rear	alley
		339	Semi Detached House	porch			medium	shed	SFA	1,823	13	639	35%	2	24	17	0	0	82	no	=	no	no		
		341 / 343	Semi Detached House	stoop	yes		medium	gable	2FA	2,290	33	1,198	52%	2	25	8	3	3	22	yes	=	no	no		
	Idlewood Ave	807	Detached Urban	porch			medium	shed	SFD	1,364	43	734	54%	2	23.5	3	22	4	0	no	=	yes	no		
		809	Semi Detached House	porch			high	shed	SFA	1,086	18	787	72%	2	24.5	5	6	0	9	no	=	yes	no		
		811	Semi Detached House	porch			high	shed	SFA	1,079	18	576	53%	2	24.5	5	0	6	9	no	=	no	no		

Gradient from conforming (green) to nonconforming (red), illustrating broad and basic trends relative to zoning.