North Central Corridor Study
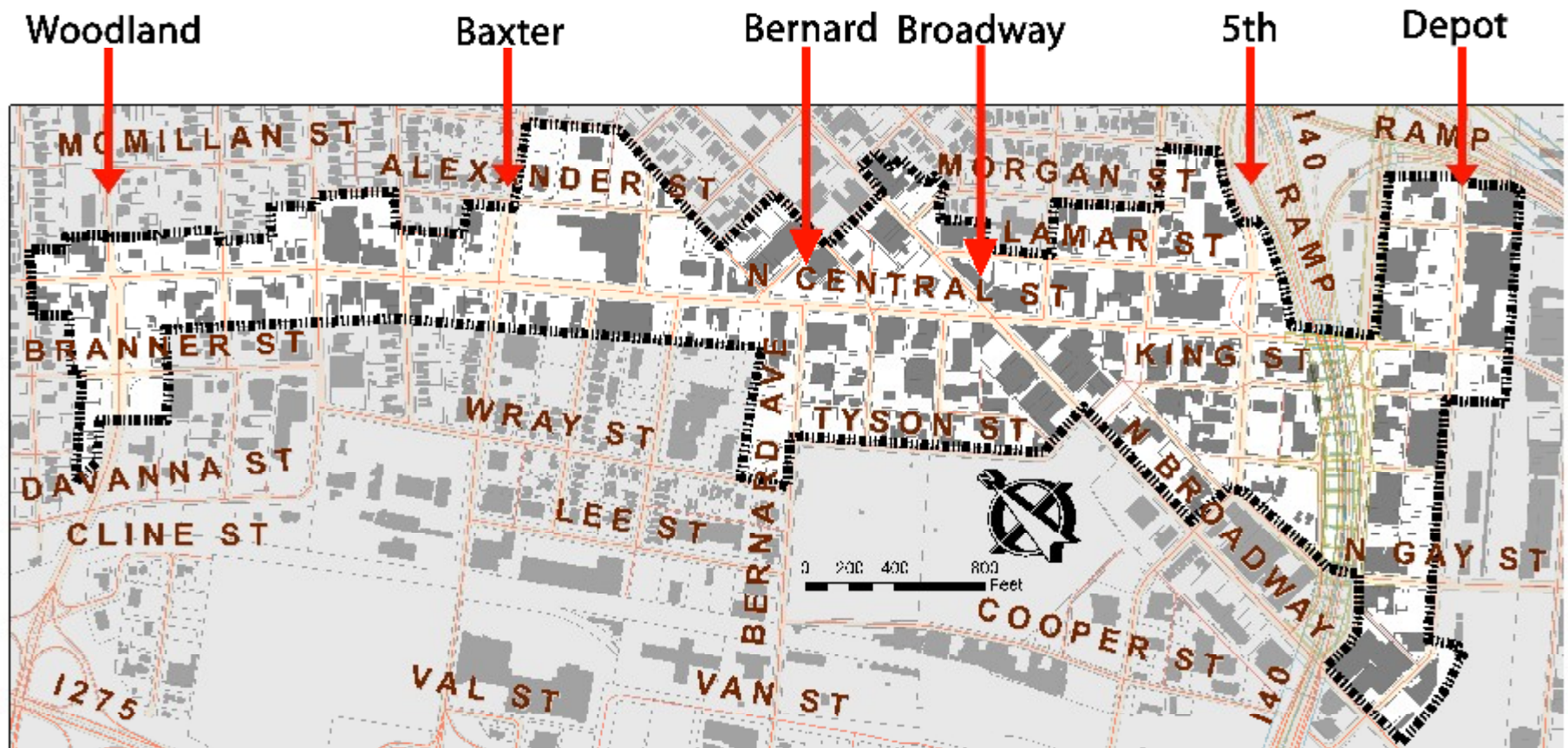
Mike Reynolds, MPC

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North Central Urban Corridor Study Area

Mike Reynolds, MPC

Nathan Benditz, TPO

Overview

- Overall concepts
- How we got here
  - Broadway-Central-Emory Small Area Plan
- Public Realm
  - Road Diet
    - Reduction of travel lanes on Central Street
    - Enhancement of pedestrian environment
- Private Realm
  - Form-Based Code
    - Components to create predictable public realm
- Goal: Create "Complete Streets"
  - Pedestrian friendly spaces

Overall Concept:
# Elements to Achieve
Pedestrian Friendly Places

SHADE TREES & LIGHTING

DEFINING PEDESTRIAN SPACE

FOSTERING TRANSIT

How We Got Here

DOWNTOWN NORTH

- Adopted May 8, 2007
- Key Recommendation
  - Rehabilitate/Redevelop the Central Street Corridor

    1) *Create more pedestrian-friendly street, with wider sidewalks, fewer travel lanes, landscaping and, in the long term, on-street parking*

    2) *Foster changes to the present "commercial-only" zoning that would allow various types of housing, office buildings and mixed-use buildings along the street.*

Public

Private

Broadway-Central-Emory Place Small Area Plan
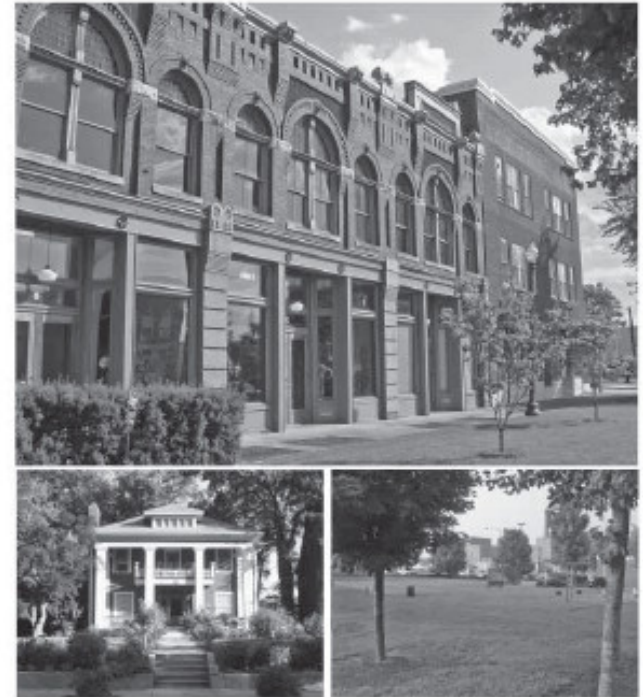
March 2007

Public Realm

"Road Diet"
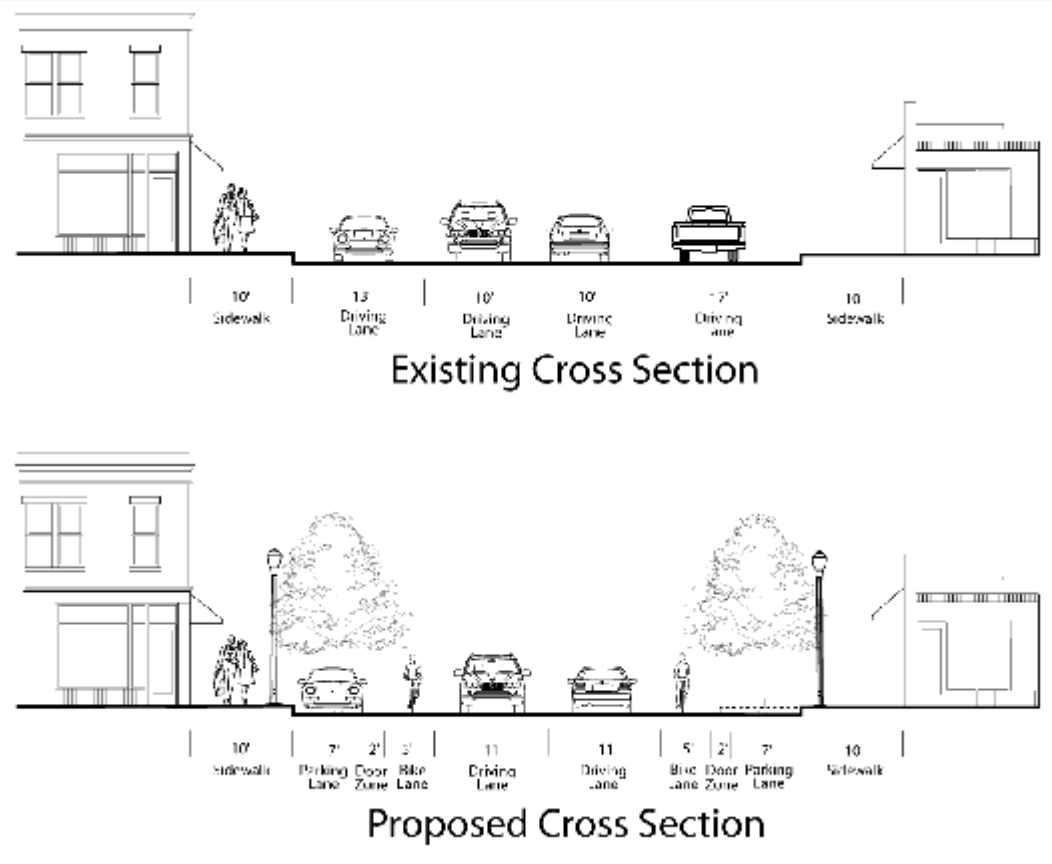
- Reduce travel lanes
- Add bike lanes, where space allows
- Add on-street parking
- Add landscaping in bulbouts and planting strips
- Enhance mass transit access

Existing Cross Section

Proposed Cross Section

Happy Hollow

Traffic Implications

- The reduction in travel lanes in turn leads to a reduction in roadway capacity.

- North Central Street currently has excess capacity.

- In order to determine that levels of service throughout the corridor are maintained, a Synchro network was developed.

Analyzed Intersections

- Signalized:
  - North Central Street and 5th Avenue
  - North Central Street and Broadway
  - North Central Street and Bernard Avenue
  - North Central Street and Baxter Avenue
  - North Central Street and Anderson Avenue
  - North Central Street and Woodland Avenue
- Unsignalized:
  - North Central Street and Dameron Avenue
  - North Central Street and Scott Avenue

Level of Service

- Level of Service (LOS) corresponds to a driver's acceptability of average delay experienced at an intersection.

- As part of this traffic operations analysis, AM and PM peak hours for the corridor were analyzed.

- The following table shows the comparison of existing to proposed alignments.

LOS Comparison

Cross Street	AM Existing		AM 2-Lane		PM Existing		PM 2-Lane	
	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)
5th Avnue	B	18.6	B	18.6	B	20.0	B	20.0
Broadway	C	20.6	C	28.8	C	21.0	C	27.5
Bernard Avenue	A	5.8	A	7.8	A	9.4	B	11.4
Dameron Avenue	A	0.8	A	0.9	A	0.8	A	0.9
Baxter Avenue	B	16.1	B	17.3	B	15.4	B	17.4
Anderson Avenue	A	4.4	A	6.9	A	5.3	A	8.5
Scott Avenue	A	2.3	A	2.7	A	2.3	A	2.7
Woodland Avenue	C	30.5	C	30.5	D	45.2	D	45.2
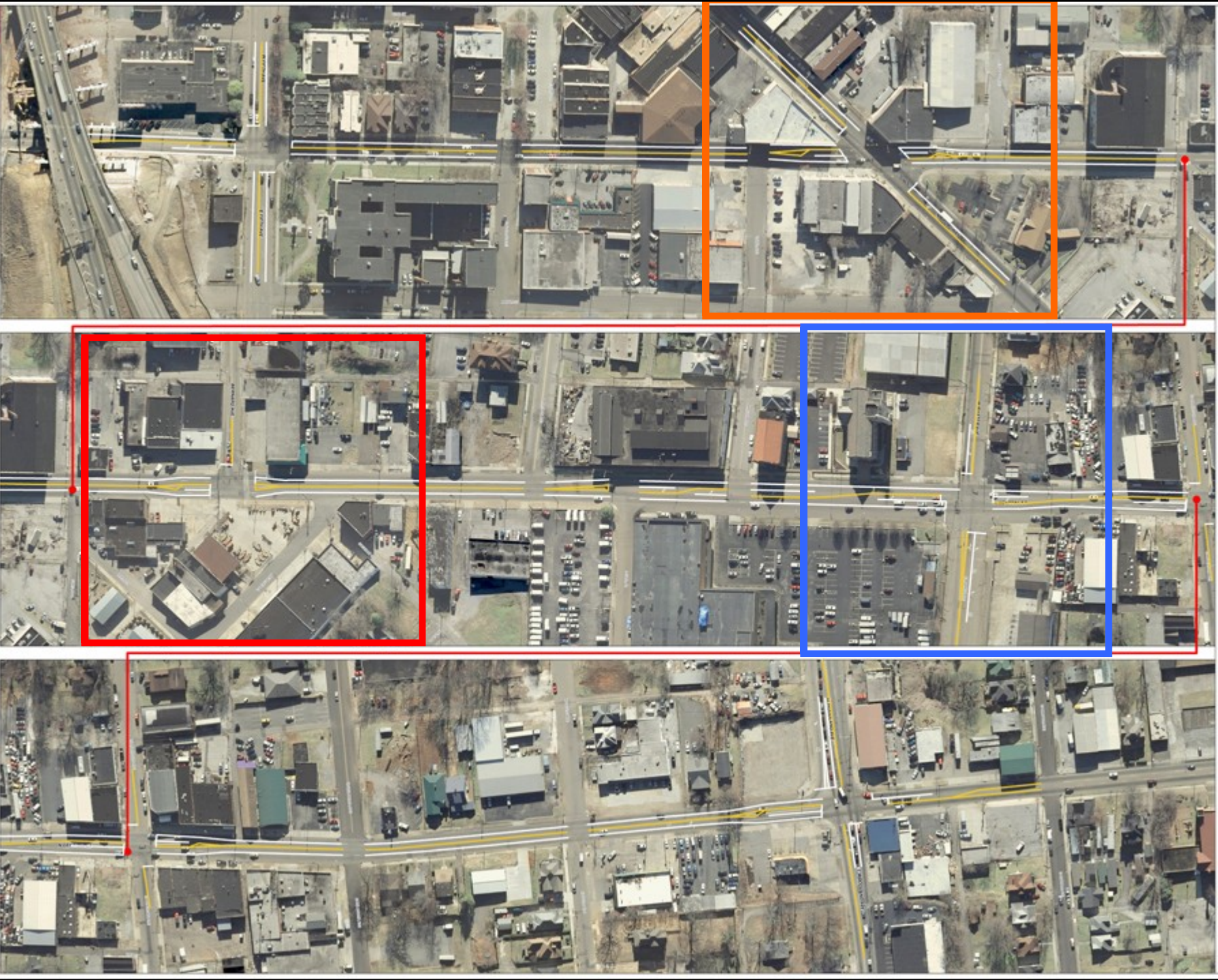
1 inch equals 50 feet

0
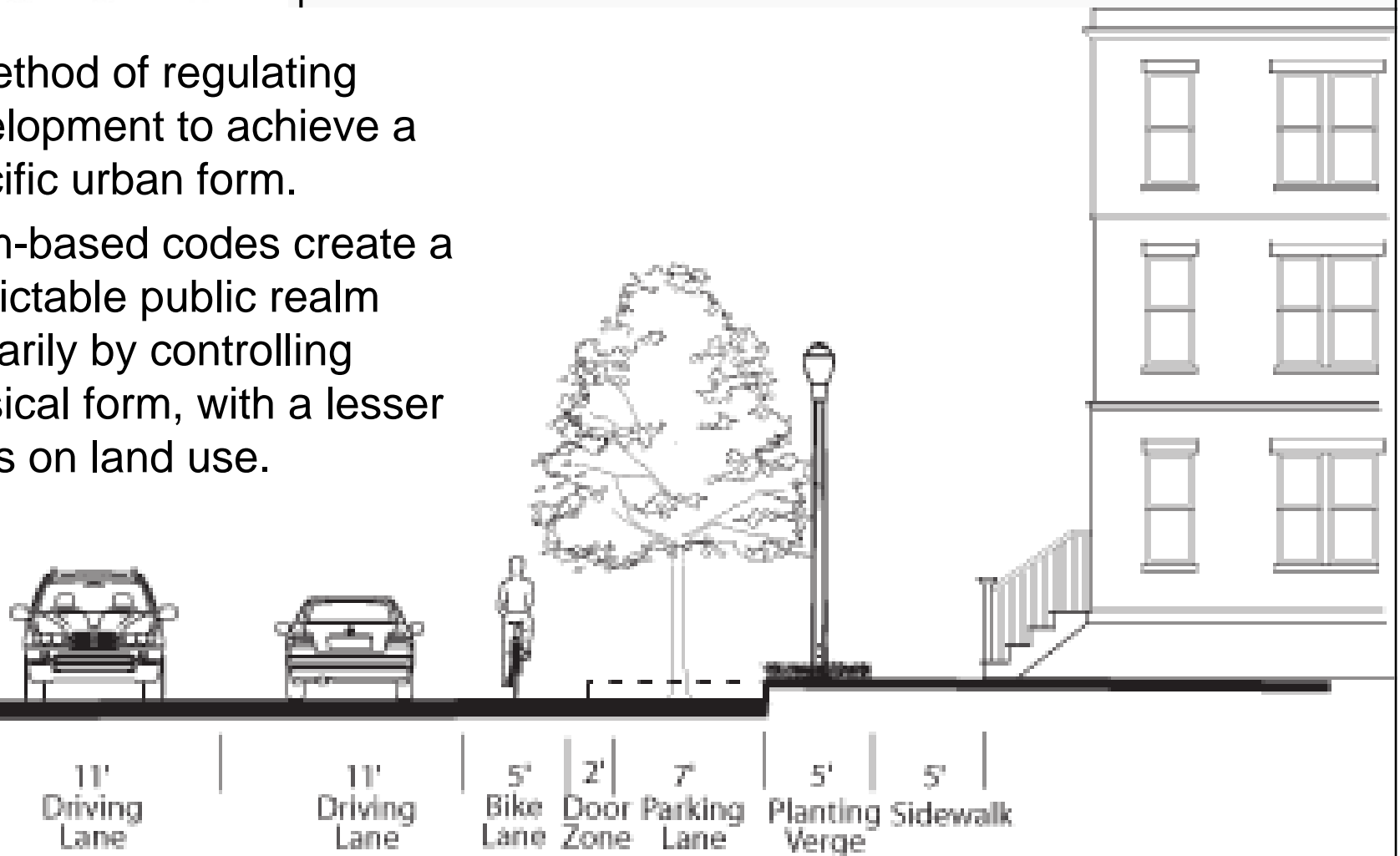50
100
200
300
400
Feet

Private Realm

Form-Based Codes

DOWNTOWN NORTH

- A method of regulating development to achieve a specific urban form.

- Form-based codes create a predictable public realm primarily by controlling physical form, with a lesser focus on land use.

11' Driving Lane

11' Driving Lane

5' Bike Lane

2' Door Zone

7' Parking Lane

5' Planting Verge

5' Sidewalk

Source: Form-Based Codes Institute

Form-Based Code

- ## Specific Urban Form
  - Provides guidance for the height and placement of buildings
    - Establishes the setting relative to the street
      - Creates a predictable edge to the Public Realm

- ## Less Focus on Land Use
  - More focus on form
  - Allow a mix of uses within a building
    - Similar to Downtown

- ## Reduced Parking Standards

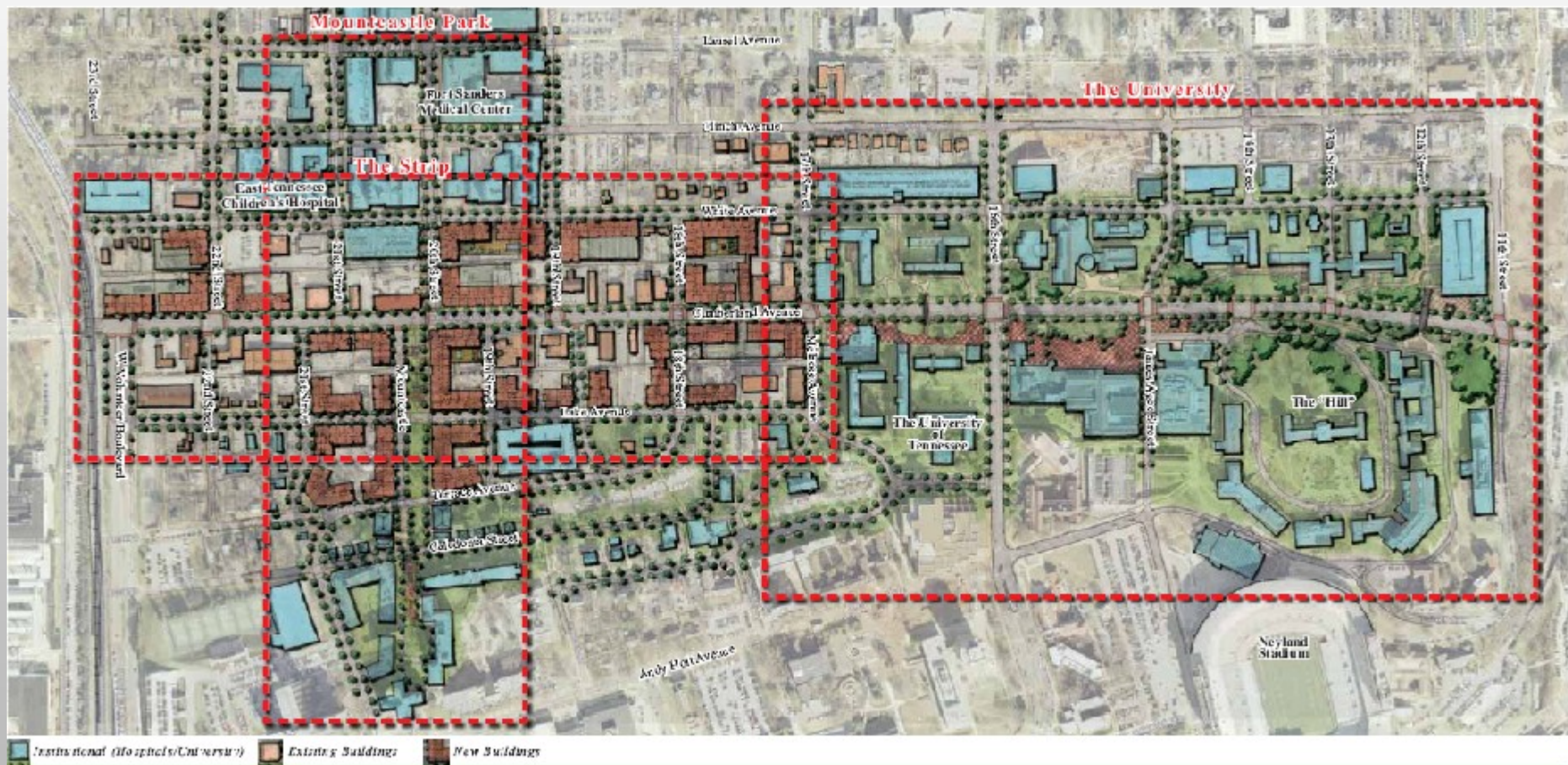# Existing Form Code District: South Waterfront

Potential Form Code District: Cumberland Avenue

Form-Based Code

- ## Key Components:
  - ### Regulating Plan (District and Height Map)
    - Frontage Typologies (Storefront, Stoop, Porch)
    - Siting Requirements
      - Setbacks: Front, Side Street, Side, Rear
    - Height Requirements
      - Minimum and Maximum Height
  - ### Parking Requirements
    - Parking Setbacks/Location
    - Parking Standards
    - Parking Requirement Reductions
   - Bicycle Parking Requirements

Form-Based Code: Additional Elements

- **General Provisions**
  - Guiding principles
  - How to use the code
  - General rules for new & existing buildings
- **Architectural Standards**
  - General principles
  - Roofs and parapets
  - Facades
  - Doors and windows
  - Older existing buildings & additions
  - Exterior building materials
  - Lighting & mechanical equipment
- **Street Specifications**
  - Form District Specifications

- **Streetscape Standards**
  - General principles
  - Standards
  - Materials and configurations
- **Sign Standards**
  - Design, construction and maintenance
  - Illumination of signs
  - Prohibited and exempt signs
  - Standards – All form districts
  - Standards – Specific district
- **Parking Requirements**
  - Standards
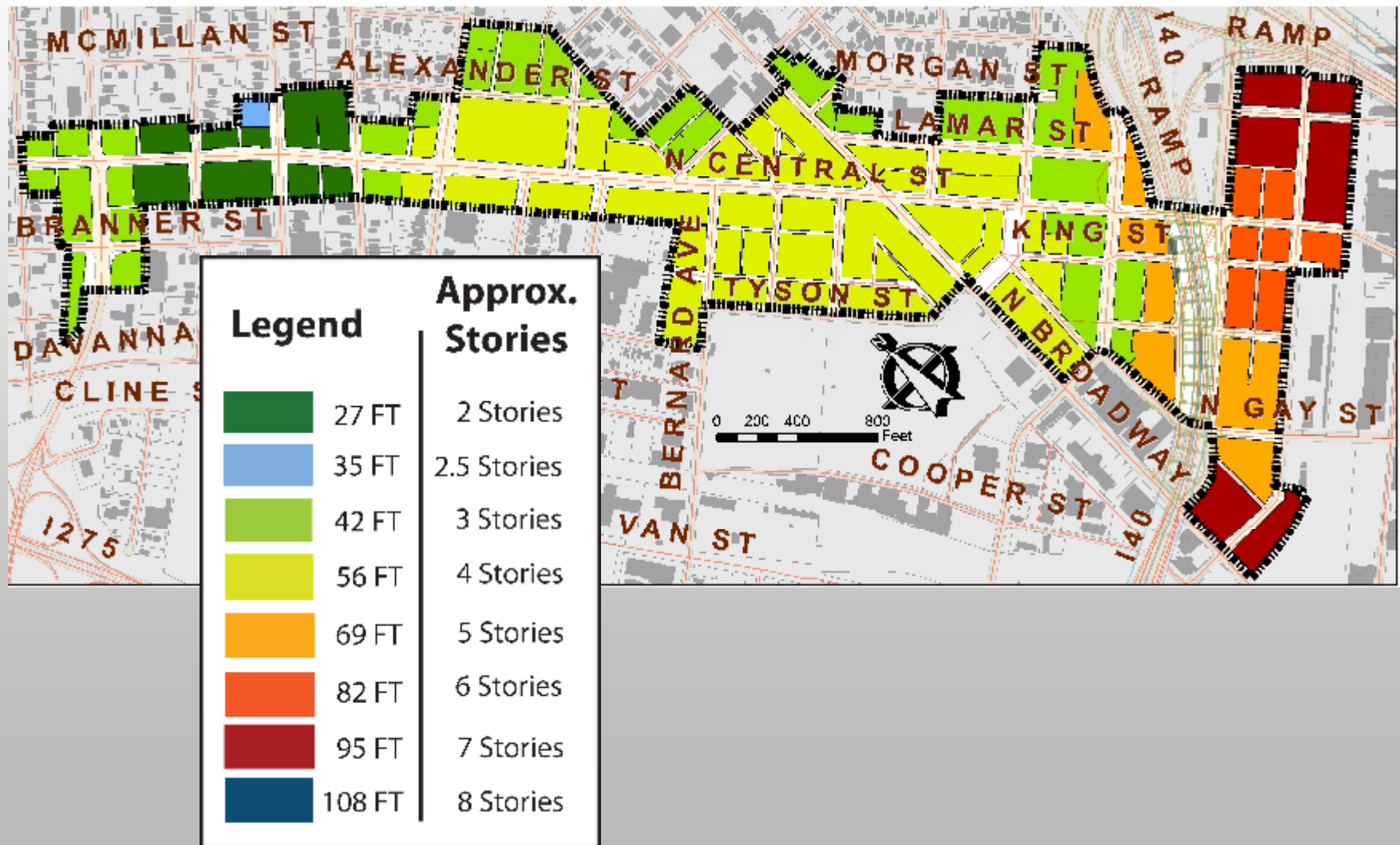   - Surface & structured
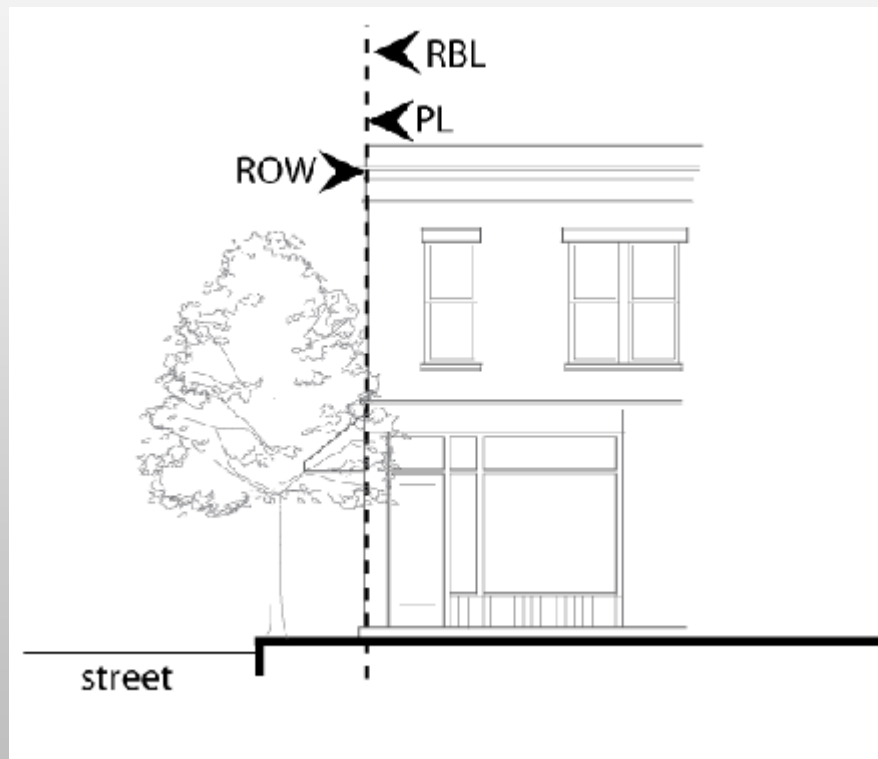 - Specific District Requirements
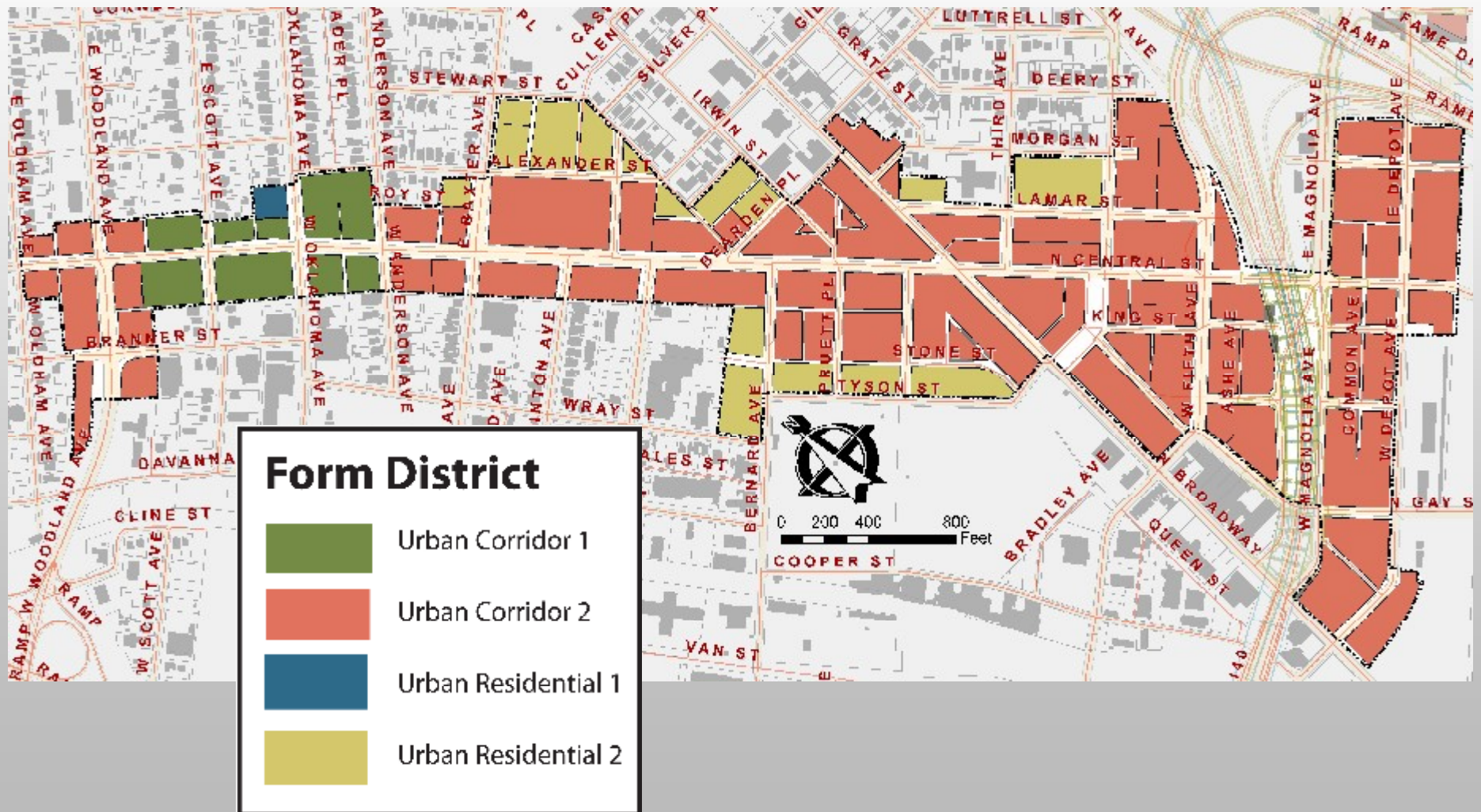
Regulating Plan: Maximum Height Map

DOWNTOWN NORTH

Legend	Approx. Stories
27 FT	2 Stories
35 FT	2.5 Stories
42 FT	3 Stories
56 FT	4 Stories
69 FT	5 Stories
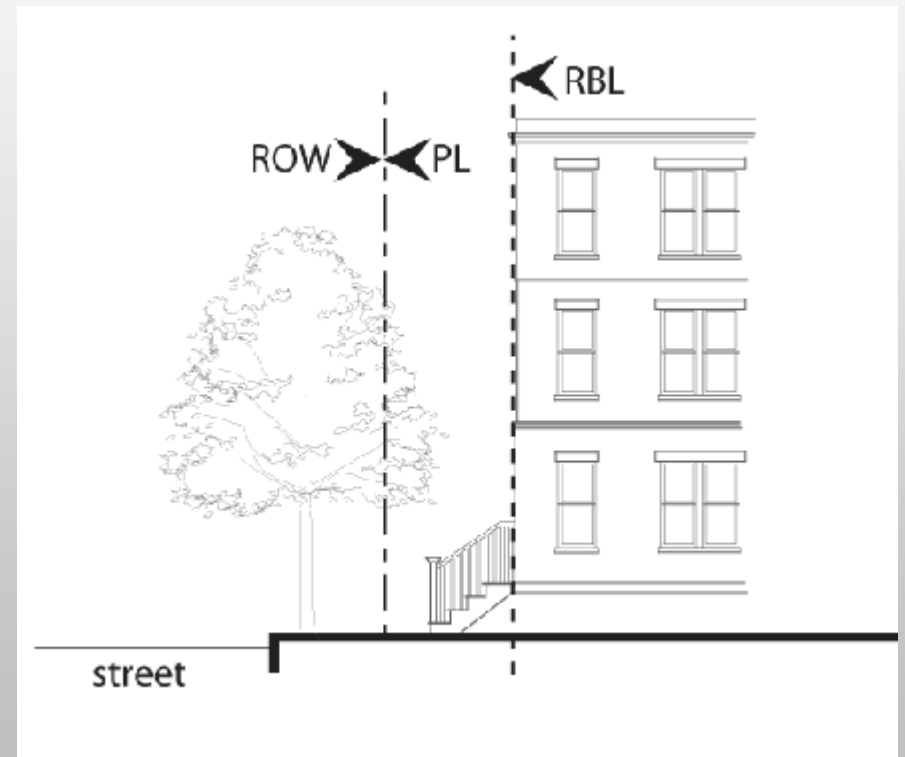82 FT	6 Stories
95 FT	7 Stories
108 FT	8 Stories

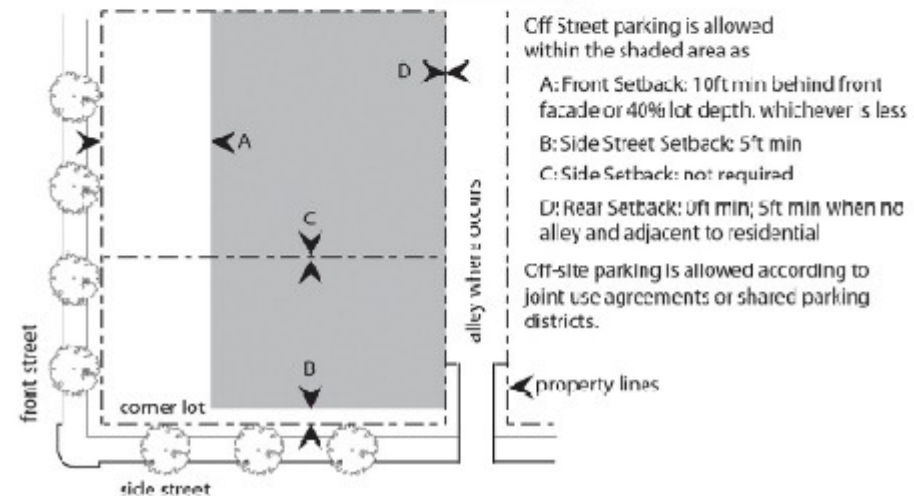# Regulating Plan Element:
Frontage Typology

Storefront

Stoop

Regulating Plan Element:
Principle Building Siting and Parking Location

Siting

Buildings shall be placed within the shaded areas as shown.

A: Front Setback: 0 ft; 15 ft max for 75% min of frontage
  * front facade must maintain 10ft from back of curb

B: Side Street Setback: 0 ft; 15 ft max for 40% min of frontage

C: Sideyard Setback: 0 ft, 25ft max
  *3 ft min when not attached, with a min 5ft between structures

D: Rear Setback: 5ft min

Parking

Off Street parking is allowed within the shaded area as

A: Front Setback: 10ft min behind front facade or 40% lot depth, whichever is less

B: Side Street Setback: 5ft min

C: Side Setback: not required

D: Rear Setback: 0ft min; 5ft min when no alley and adjacent to residential

Off-site parking is allowed according to joint use agreements or shared parking districts.

Regulating Plan Element:
Building Height

Minimum

Maximum

Legend	Approx. Stories
27 FT	2 Stories
35 FT	2.5 Stories
42 FT	3 Stories
56 FT	4 Stories
69 FT	5 Stories
82 FT	6 Stories
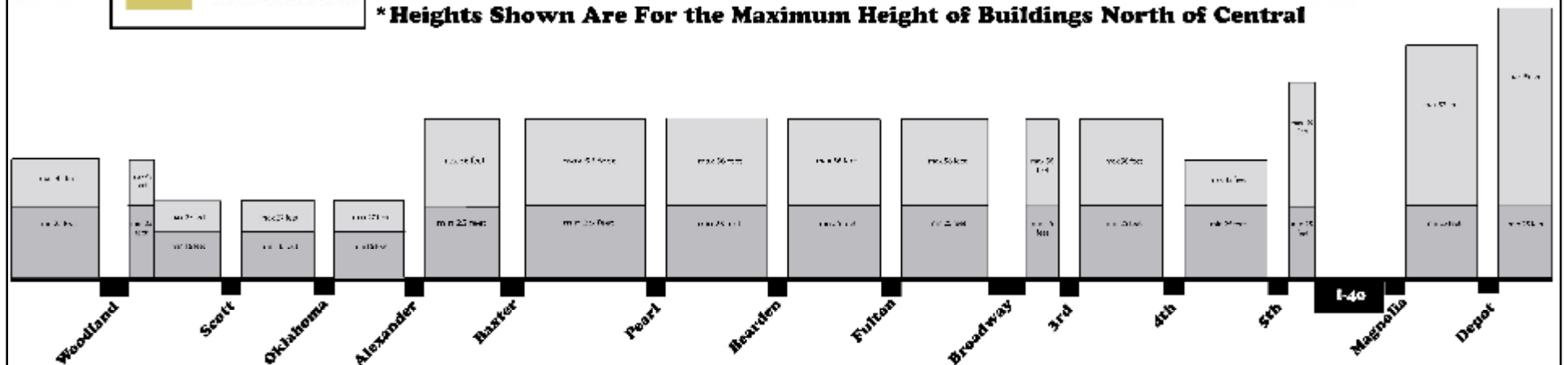95 FT	7 Stories
108 FT	8 Stories

North Central Building Heights

Form District

- Urban Corridor 1
- Urban Corridor 2
- Urban Residential 1
- Urban Residential 2

*Heights Shown Are For the Maximum Height of Buildings North of Central

Scale: 0 200 400 800 Feet

Street labels:
BURNET, E WOODLAND AVE, E SCOTT AVE, OKLAHOMA AVE, ADER PL, ANDERSON AVE, STEWART ST, CULLEN PL, CAS, SILVER PL, IRWIN ST, GIL, GRATZ ST, LUTTRELL ST, DEERY ST, FAME DR, RAMP, AVE, MORGAN ST, THIRD AVE, LAMAR ST, ALEXANDER ST, ROY ST, E BAXTER AVE, BEARDEN AVE, PRUETI PL, N CENTRAL ST, E MAGNOLIA AVE, E DEPOT AVE, RAM, W OKLAHOMA AVE, W ANDERSON AVE, BRANNER ST, KING ST, STONE ST, TYSON ST, W FIFTH AVE, ASHE AVE, COMMON AVE, W DEPOT AVE, E OLDHAM AVE, W OLDHAM AVE, W WOODLAND AVE, RAMP, DAVANNA ST, W BAXTER AVE, MORELAND AVE, HINTON AVE, WRAY ST, BALES ST, LEE ST, BERNARD AVE, BRADLEY AVE, N BROADWAY, QUEEN ST, N GAY S, W MAGNOLIA AVE, COOPER ST, VAL ST, VAN ST, I-40

Chart labels (bottom): Woodland, Scott, Oklahoma, Alexander, Baxter, Pearl, Bearden, Fulton, Broadway, 3rd, 4th, 5th, I-40, Magnolia, Depot

Parking Element:
Off-Street Parking Standards

- **Conventional Codes**
  - Restricts development in urban areas by requiring excess parking
    - Requires too much land area
  - Primarily does not regulate the location

- **Form-Based Codes**
  - Reduces parking standards
  - Utilizes park once ideology (similar to Downtown)
  - Allows for shared parking spaces
  - Emphasizes on-street parking
  - Requires/incentives parking for bicycles
  - Requires parking to be to the rear or side of buildings

Parking Element:
Possible Parking Standards

	Form Code	Conventional Code
Retail/office	3 spaces per 1000 sqft	4.5 spaces per 1000 sqft
Residential (One and two bedroom requirement)	1 and 1.5 spaces with a max. of 2 spaces per DU	1.5 and 2 spaces with no maximum per DU

• Form Code: Credit on-street parking spaces (up to 25% of the required off-street)

Parking Element:
Parking Reduction Example

New Structure Size

- 8400 sqft per floor
- 1 floor commercial
- 2 floors residential
    - 10 two bedroom units

Parking Requirements

1. Current Parking Requirements
    - Retail – 4.5 spaces per 1000 sqft
        - 38 spaces
    - Residential – 2 spaces per unit
        - 20 spaces
    - Total 58 Spaces Required
    - **Parking Area – 18,850 sqft (.44 ac)**

2. Reduced Parking Requirements
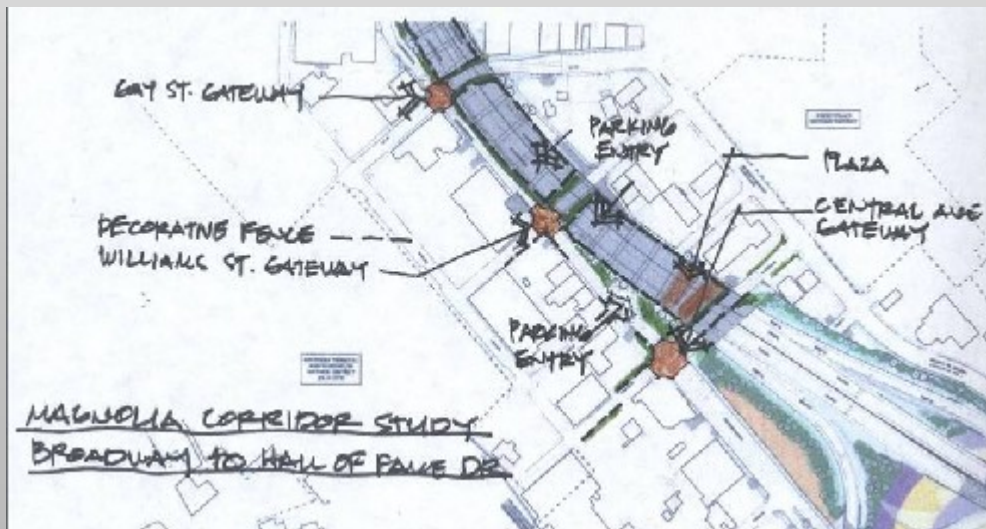   - Retail – 3 spaces per 1000 sqft
        - 25 spaces
    - Residential – 1.5 spaces per unit
        - 15 spaces
    - On-street parking credit – 9 spaces
    - Total of 31 Spaces Required
    - **Parking Area – 10,075 sqft (.23 ac)**

Reduced parking requirement does not take into consideration credit for shared parking between uses.
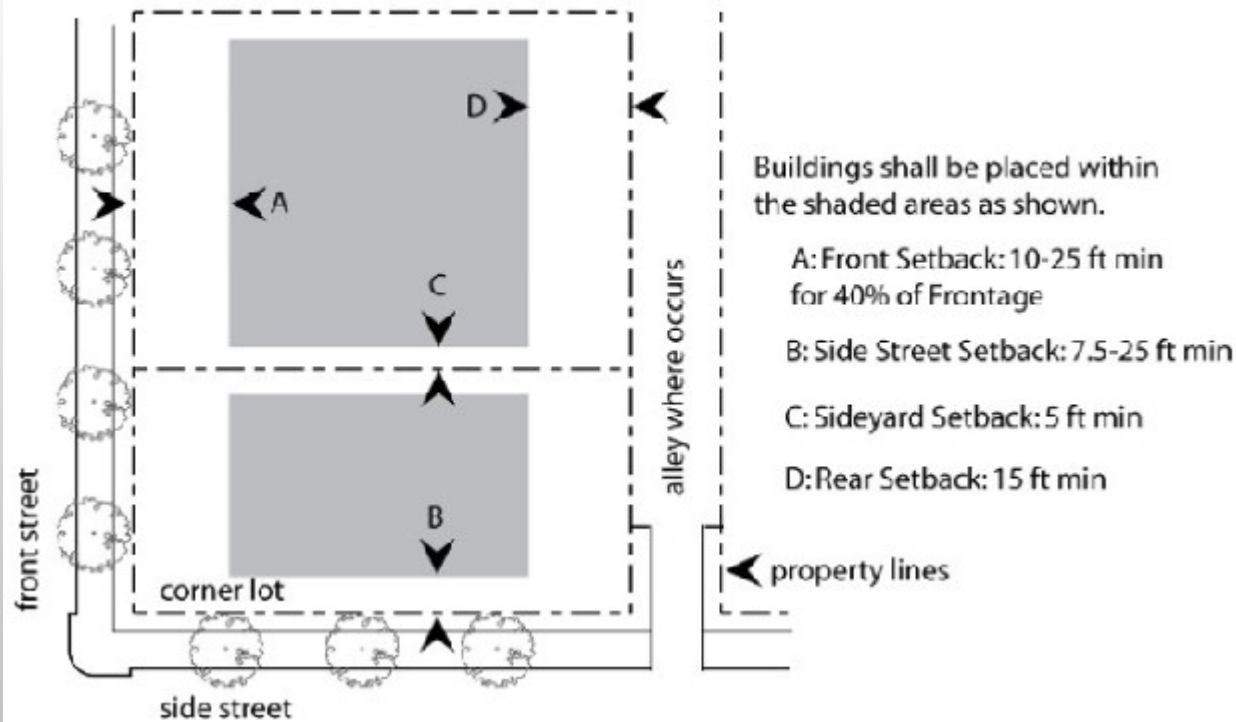
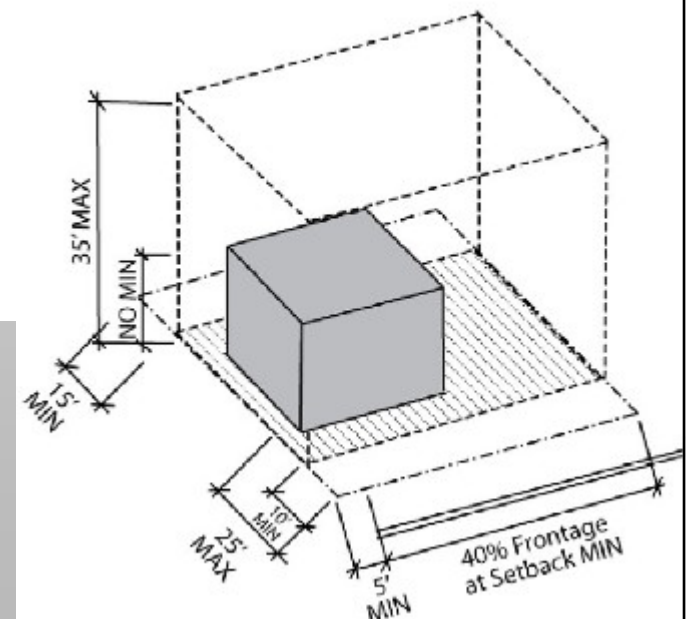# Parking Under Interstate Opportunity

Specific Districts

DOWNTOWN NORTH

SITING
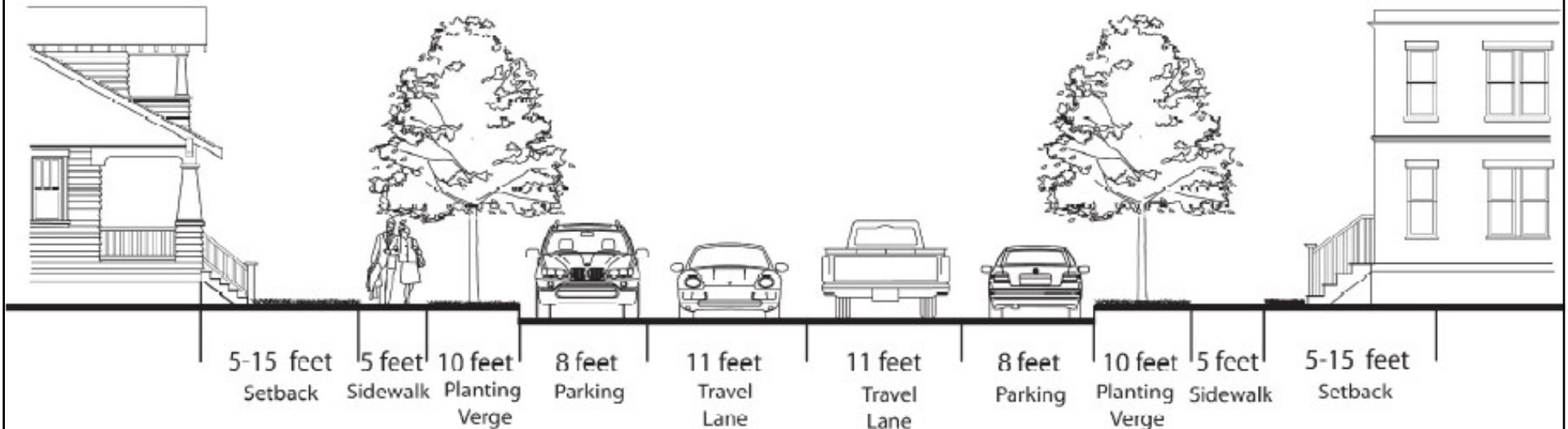

Buildings shall be placed within the shaded areas as shown.

A: Front Setback: 10-25 ft min for 40% of Frontage

B: Side Street Setback: 7.5-25 ft min

C: Sideyard Setback: 5 ft min

D: Rear Setback: 15 ft min

◄ property lines

front street

corner lot

side street

alley where occurs

AXONOMETRIC

35' MAX

NO MIN

15' MIN

25' MAX

10' MIN

5' MIN

40% Frontage at Setback MIN

- Allows detached houses and townhouses

Urban Residential 1 District

Downtown North

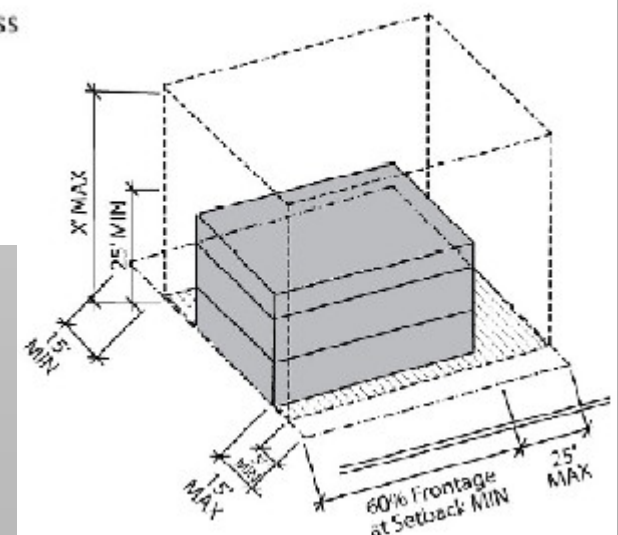| 5-15 feet Setback | 5 feet Sidewalk | 10 feet Planting Verge | 8 feet Parking | 11 feet Travel Lane | 11 feet Travel Lane | 8 feet Parking | 10 feet Planting Verge | 5 feet Sidewalk | 5-15 feet Setback |

SITING

Buildings shall be placed within the shaded areas as shown.

A: Front Setback: 5-15-ft for 60% of the min frontage

B: Side Street Setback: 5-25 ft for 40% of the min frontage

C: Sideyard Setback: 0-25 ft
  * 3 ft min when not attached, with a min 6 ft between structures

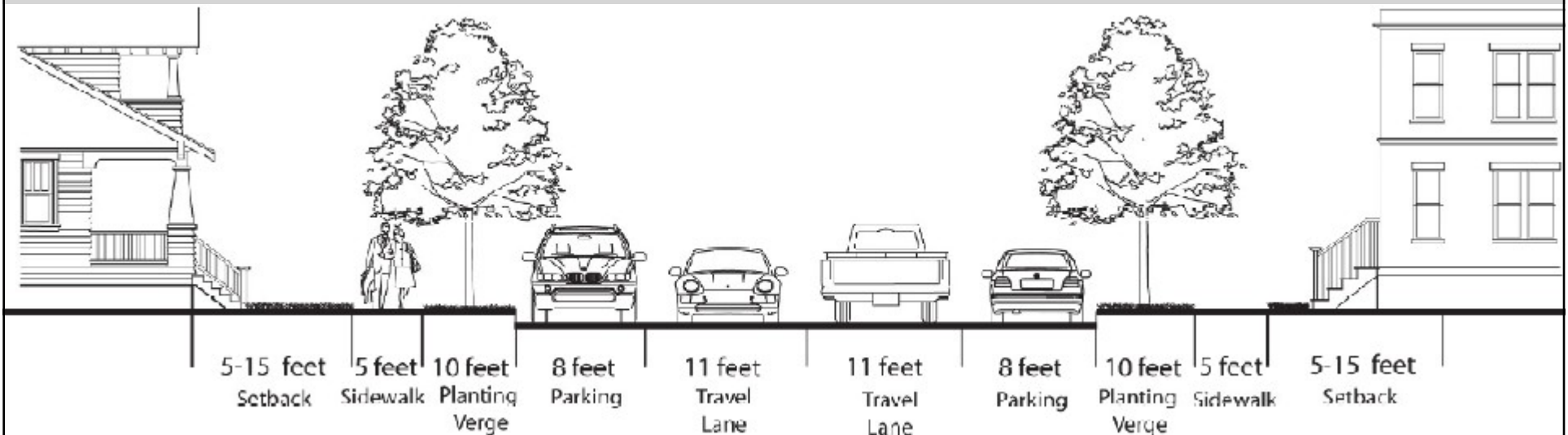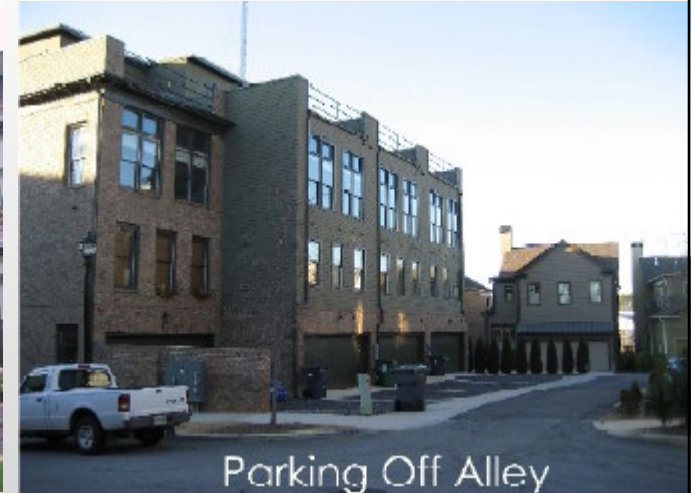D: Rear Setback: 15 ft with alley access, 25 ft without alley access

property lines

AXONOMETRIC

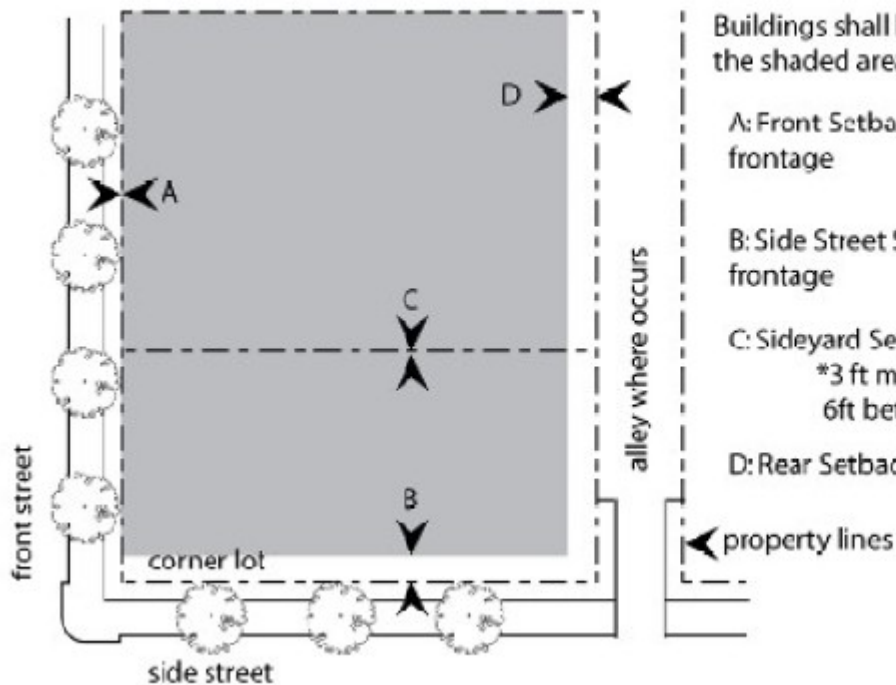- Vertical residential uses
- Maximum heights vary on location

Urban Residential 2 District

Parking Off Alley

| 5-15 feet Setback | 5 feet Sidewalk | 10 feet Planting Verge | 8 feet Parking | 11 feet Travel Lane | 11 feet Travel Lane | 8 feet Parking | 10 feet Planting Verge | 5 feet Sidewalk | 5-15 feet Setback |

Urban Corridor 1 District

Siting

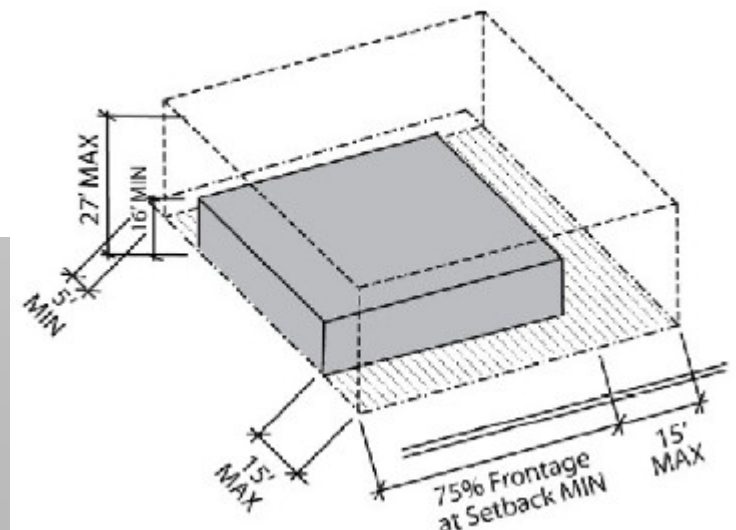Buildings shall be placed within the shaded areas as shown.

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B: Side Street Setback: 0 ft; 15 ft max for 40% min of frontage

C: Sideyard Setback: 0 ft, 25 ft max
   *3 ft min when not attached, with a min 6 ft between structures
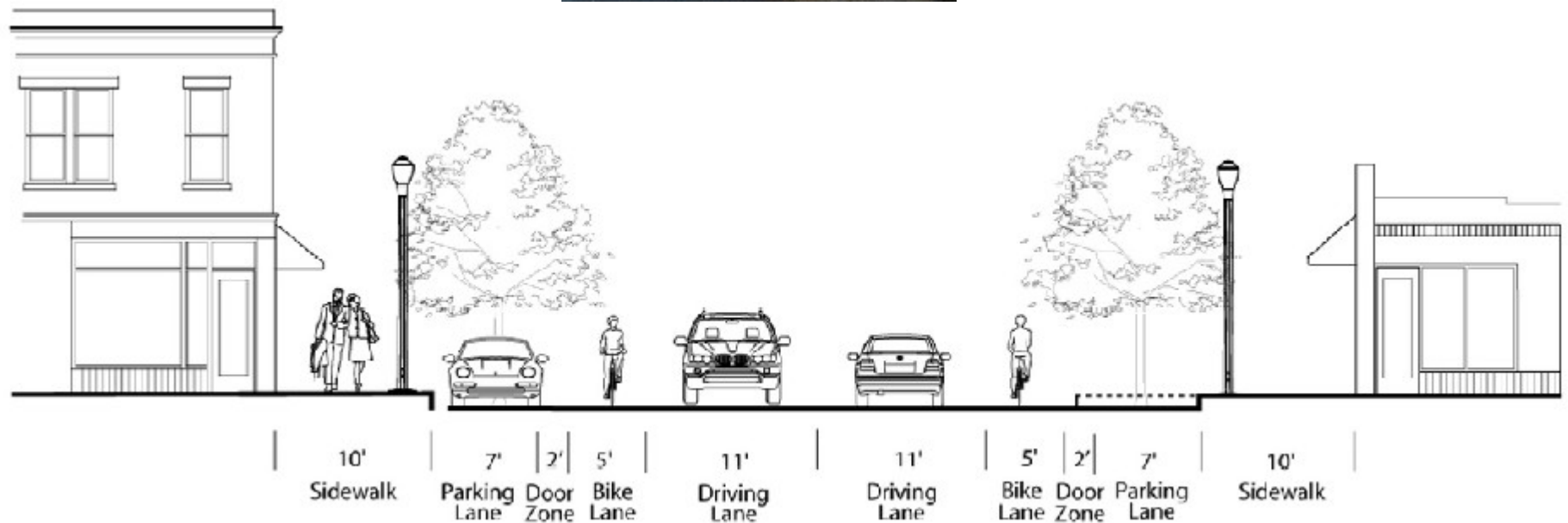
D: Rear Setback: 5 ft min

property lines

Axonometric (3-D)

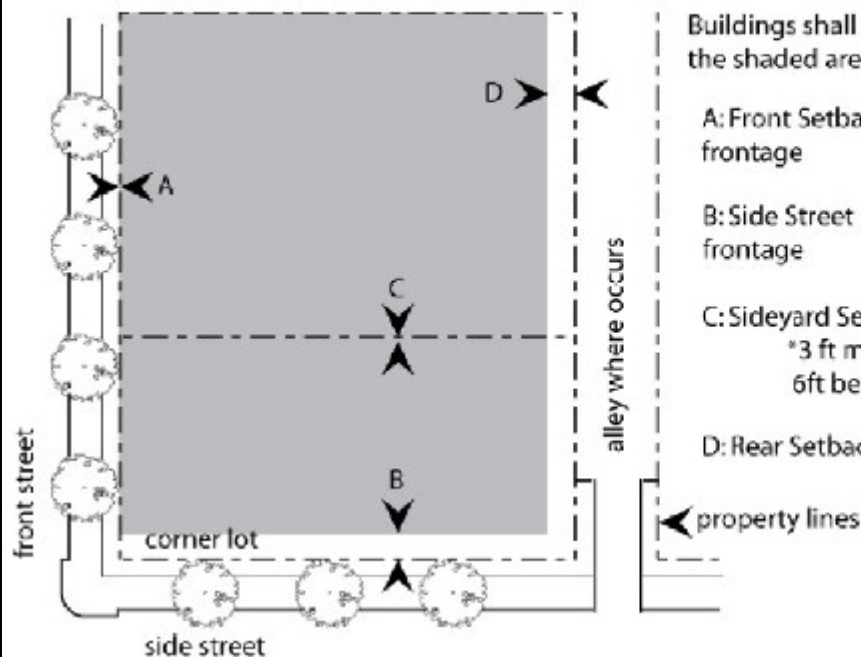- Mixed-use district modeled after Happy Hollow

Urban Corridor 1 District

Urban Corridor 2 District

SITING

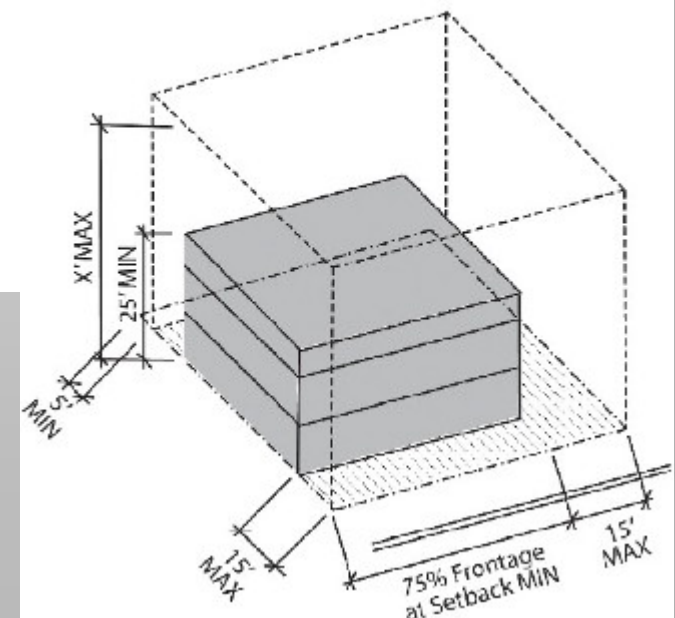Buildings shall be placed within the shaded areas as shown.

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   *3 ft min when not attached, with a min 6ft between structures

D: Rear Setback: 5ft min
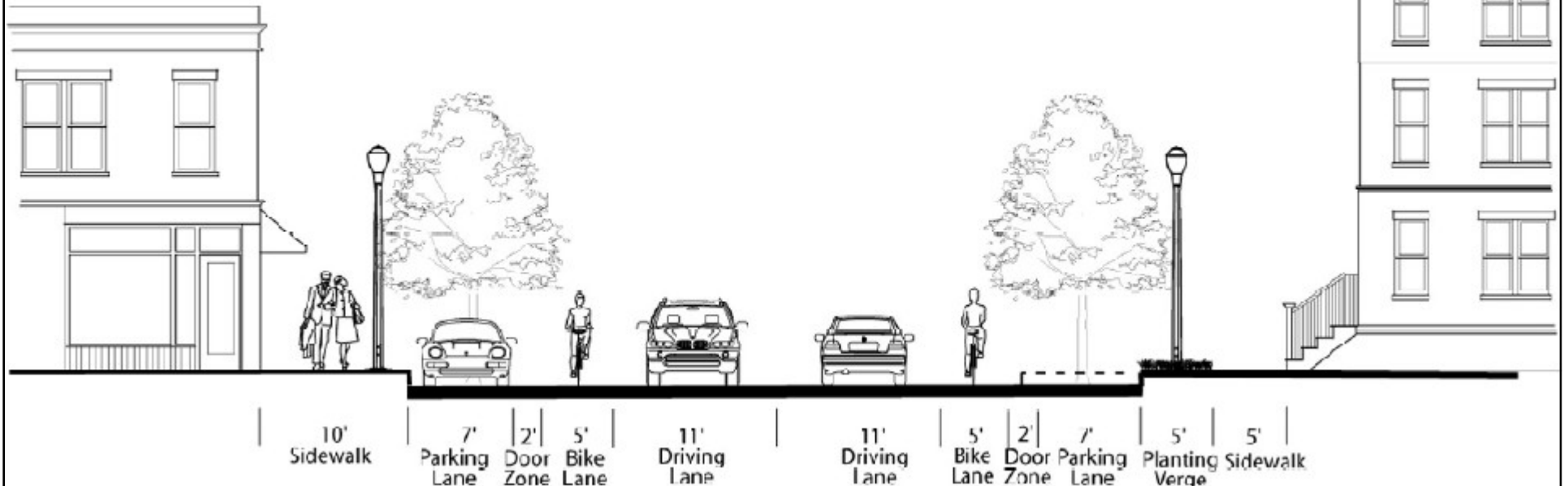
property lines

corner lot
front street
side street
alley where occurs

AXONOMETRIC

X'MAX
25'MIN
5' MIN
15' MAX
75% Frontage at Setback MIN
15' MAX

- Vertical mixed-use district
- Maximum heights vary depending on location

Urban Corridor 2 District

| 10'
Sidewalk | 7'
Parking
Lane | 2'
Door
Zone | 5'
Bike
Lane | 11'
Driving
Lane | 11'
Driving
Lane | 5'
Bike
Lane | 2'
Door
Zone | 7'
Parking
Lane | 5'
Planting
Verge | 5'
Sidewalk |

Conclusion

- **Complete Streets!**
  - Public Realm
    - Streets designed and operated to enable access for all users. Pedestrians, bicyclists, motorists and transit riders of all abilities.
      - Improve safety
      - Encourage more walking and bicycling
  - Private Realm
    - Development formed to compliment and enhance the public realm.

- To be an valuable rehabilitation/redevelopment tool as the Broadway-Central-Emory Place Small Area Plan recommends, these two proposals must coincide as one to be effective.

Source:
http://www.completestreets.org/

Thank You for Attending and Your Feedback is Appreciated