

WAKE FOREST
UDO

comprehensive
update



from *IDEAS* to *IMPLEMENTATION*

Overview of Preliminary Chapter 4, 6, 8, 9, and 10 Content
Technical Review Group | September 6, 2023

Today's Meeting

- Project Overview and Status Update
- Per Preliminary Chapter
 - *Proposed Chapter Structure and Content Overview*
 - *Key Topic Details and Discussion*
- Next Steps





PROJECT OVERVIEW



UDO Update Process

- **Step 1:** Project Kick Off
- **Step 2:** Begin Public Engagement
- **Step 3:** Existing UDO Analysis and Preliminary Recommendations
- **Step 4:** Draft UDO Sections and Review Meetings
- **Step 5:** Manual of Specifications, Standards, and Design (MSSD) Comprehensive Update and Reorganization
- **Step 6:** Draft and Final UDO and MSSD
- **Step 7:** UDO Adoption



Goal of Meeting

- Provide a high-level overview of PRELIMINARY
 - *Chapter 4 – General Development Standards*
 - *Chapter 6 – Building Design Standards*
 - *Chapter 8 – Tree Protection, Buffers, and Landscaping*
 - *Chapter 9 – Access and Mobility*
 - *Chapter 10 – Outdoor Lighting*
- Discuss
 - *Whether the proposed regulations are appropriate for Wake Forest*
 - *How the proposed regulations should be refined to better reflect the vision of the community and modern best practices*





CHAPTER 4

GENERAL DEVELOPMENT STANDARDS



Proposed Chapter Structure and Content Overview

1. Fences, Walls, and Berms
2. Screening
3. Height Transitions
4. Residential Infill Development
5. Clear Sight Triangle
6. Utilities



Retaining Walls

Community Plan: Community Character Key Recommendations

- Height
 - 15 feet max *if visible from public ROW*
 - 20 feet max *if not visible from public ROW*
- Design
 - *Wall Type*
 - *Terracing*
 - *Required Landscape*

Discussion question: Are there alternatives to be considered if a taller retaining wall would be beneficial to the development of the site, such as if it could help preserve a specimen tree?

Proposed Retaining Wall Example



Existing Retaining Wall Example

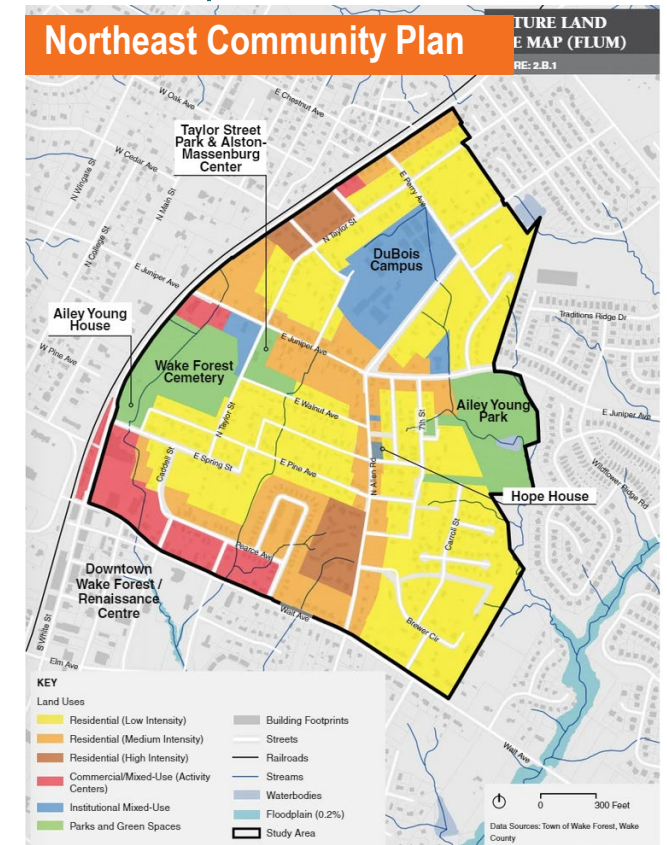
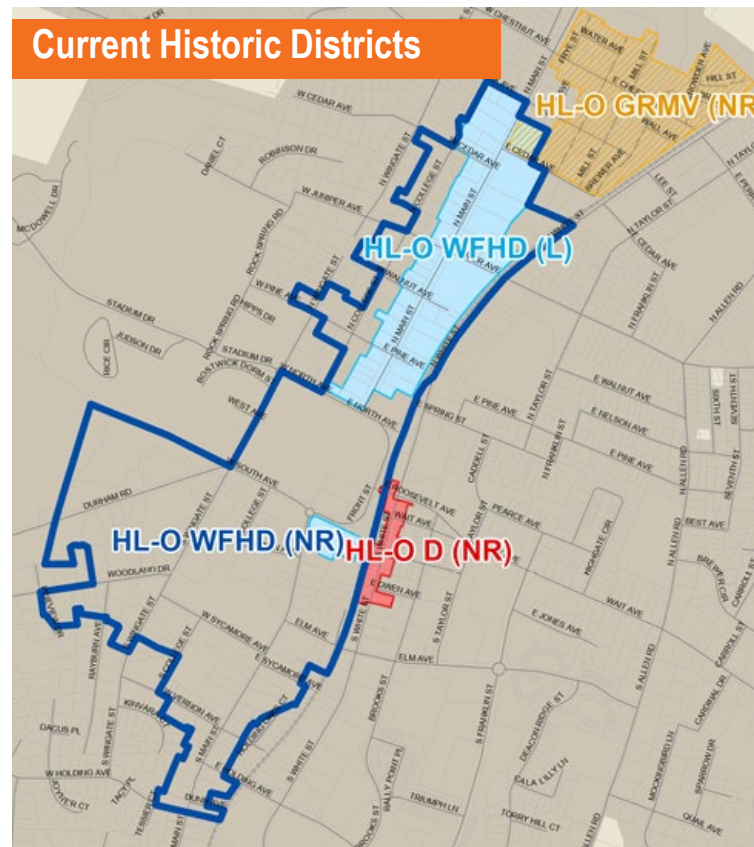
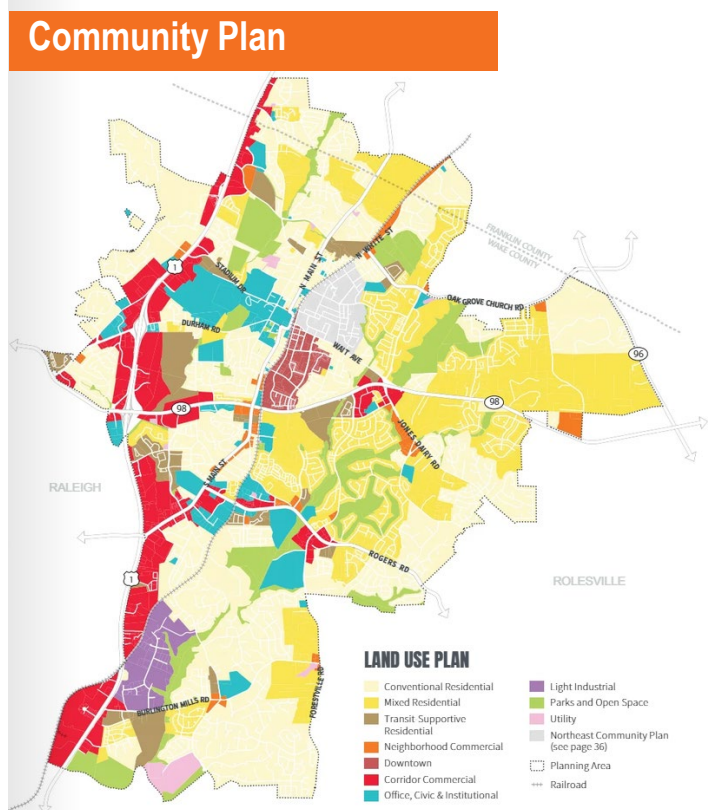


Height Transitions

Public Input: Surveys, Open Houses, Comments
 Community Plan: Residential Character, Community Character & Historic Preservation Key Recommendations

■ Purpose and Applicability

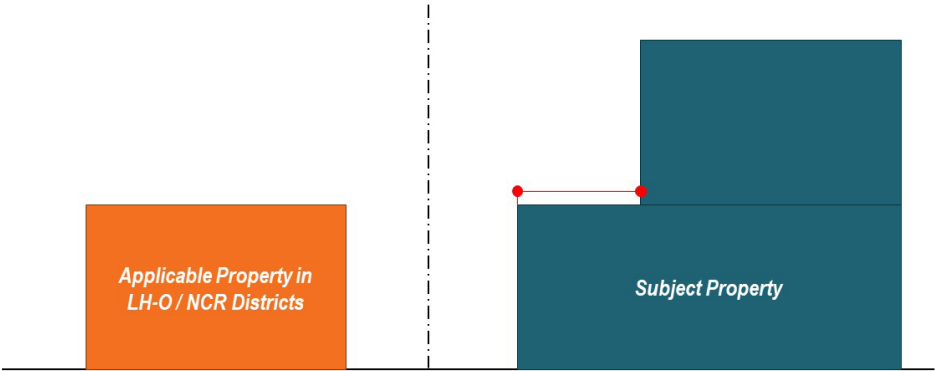
- Purpose: protect the established and/or historic character of buildings and districts
- Applicability: all buildings more than one story taller than an adjacent building in the GR, NCR, or LH-O Districts and/or a building or district on the state or national registers of historic places



Adjacent Property Transition

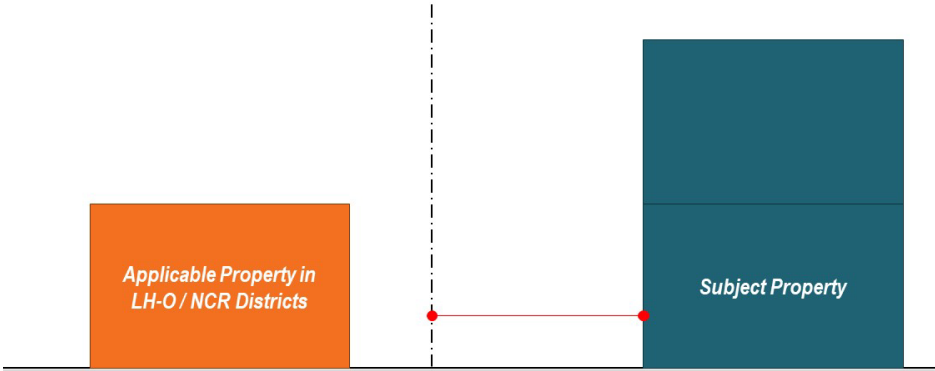
Building Height Step Down

Provide a step down in height along the shared property line to meet the height of the building on an applicable property for a minimum of 50 percent of the façade.



Building Setback Increase

Increase the setback by five feet for each story exceeding the height of the adjacent building on an applicable property.



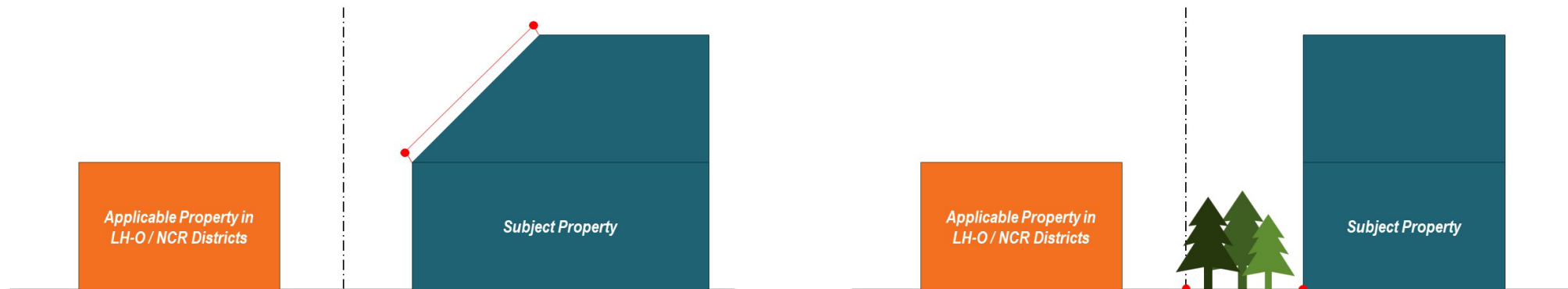
Adjacent Property Transition cntd.

Dormers/Sloping Roofs

Utilize dormers and sloping roofs to accommodate stories above the height of the adjacent building on an applicable property.

Buffer Yard

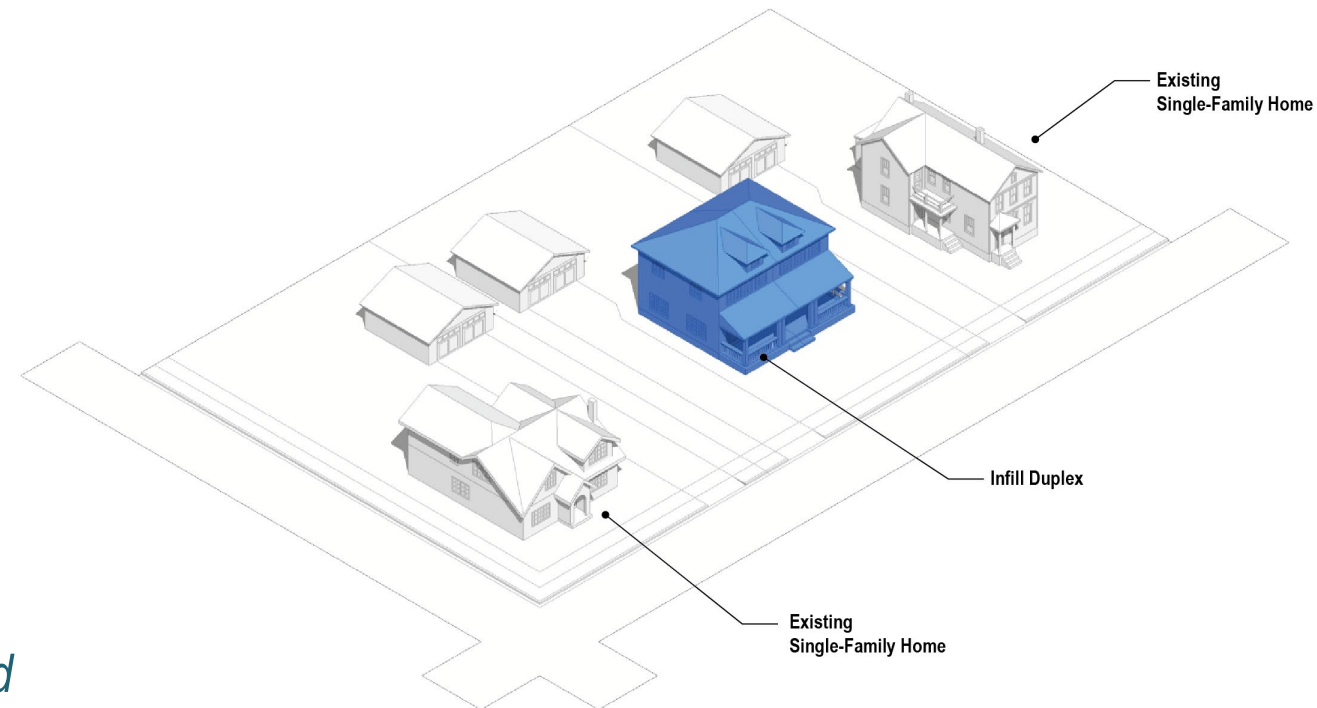
Provide a Type C Buffer to the subject property line adjacent to the applicable property.



Discussion question: Do the proposed strategies achieve desired compatibility? Are there other transition provisions to consider?

Residential Infill Development

- Infill development includes development that meets the following qualifiers:
 1. *a development site less than five acres in area; and*
 2. *development on a block that is 80% or more built out; and*
 3. *development on a lot with existing water mains along the development site frontage or*
 4. *development on a lot that was platted more than 20 years prior to the adoption of this UDO and not developed.*



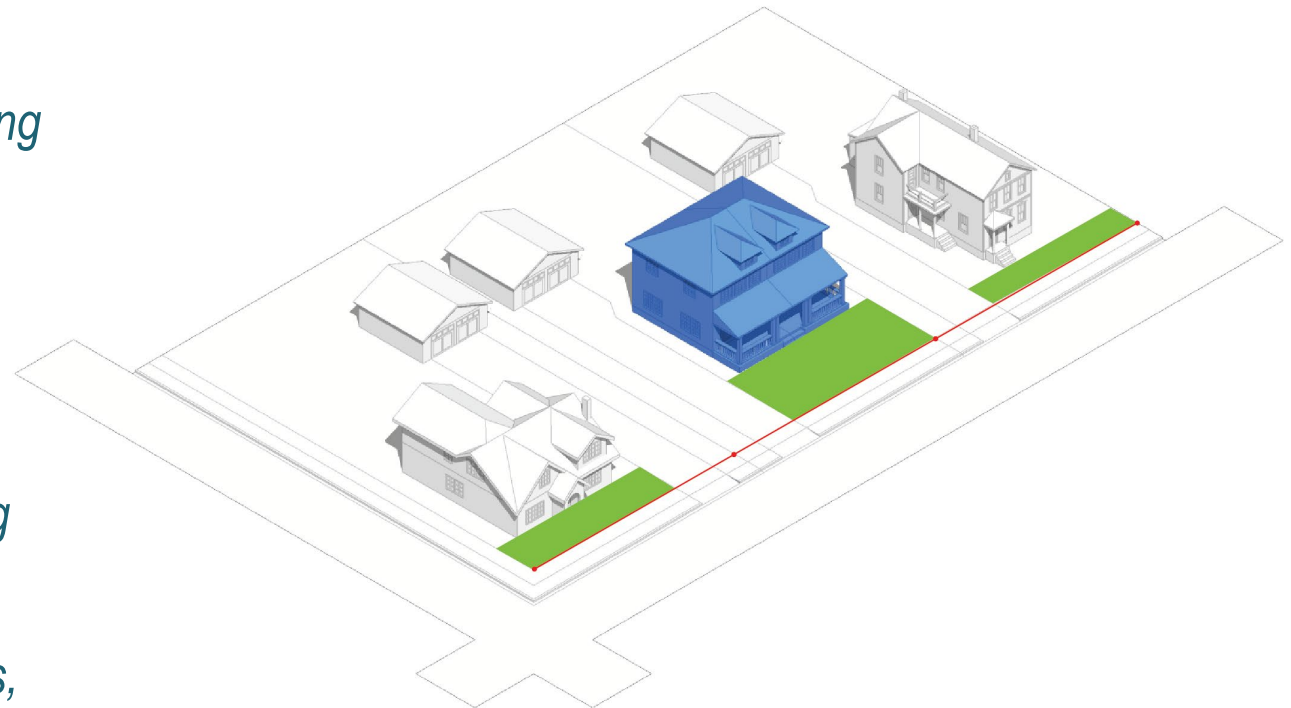
Residential Infill Development

■ Lot Width

- *Average of the lot widths of front-facing lots along the same side of the street and on the same block*
- *Widest and narrowest lot widths not included*

■ Front and Street Side Yard

- *Average of the existing setback along same side of the street and on the same block, excluding permitted encroachments (front porches, eaves, etc.)*
- *10% deviation in front yard may be approved by the Administrator*

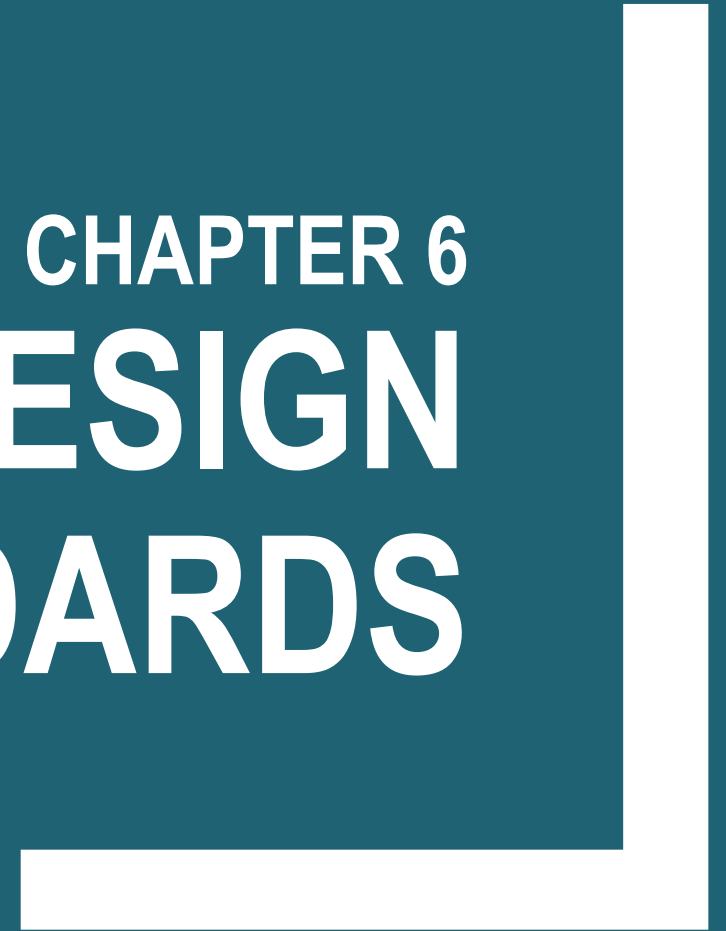


Community Plan: Residential Character Key Recommendations
Northeast Community Plan: Preserve & Protect Recommendations
Public Input: Surveys, Open Houses, Comments



CHAPTER 6

BUILDING DESIGN STANDARDS



Proposed Chapter Structure and Content Overview

1. General Provisions
2. Exterior Building Cladding Materials
3. Glazing
4. Building Entryway Design
5. Façade Design and Articulation
6. Roof Design Standards
7. Cottage Home Court Building Design Standards
8. Two Over Two Building Design Standards
9. Multifamily Building Design Standards
10. General Commercial, Greater than 100,000 sq ft Building Design Standards
11. Multibuilding Development Standards

Discussion question: Due to legislation recently passed by the State, Wake Forest can no longer regulate certain design elements of triplexes and quadplexes. Does this impact how they should be allowed in Town?

Building Entryway Design

Community Plan: Commercial Development Recommendations

■ Requirement

- *Apply to principal buildings only, except for cottage home court, triplex/ quadplex, two over two, and industrial buildings.*
- *Apply to each building entrance on a façade of an applicable building facing a front or street side yard, including building entrances at a chamfered corner.*

Discussion question: What are your thoughts on the proposed requirement for at sidewalk grade entries in the DC, TOD-O, and AC-O districts and for entries to be within 5 feet of the sidewalk grade in all other districts?



Building Entryway Design

Awning/Canopy



Portico



Building Entryway Design

Plaza



Pedestrian Arcade



Building Entryway Design

Landscape Forecourt



Courtyard



Building Entryway Design

Recessed Entry



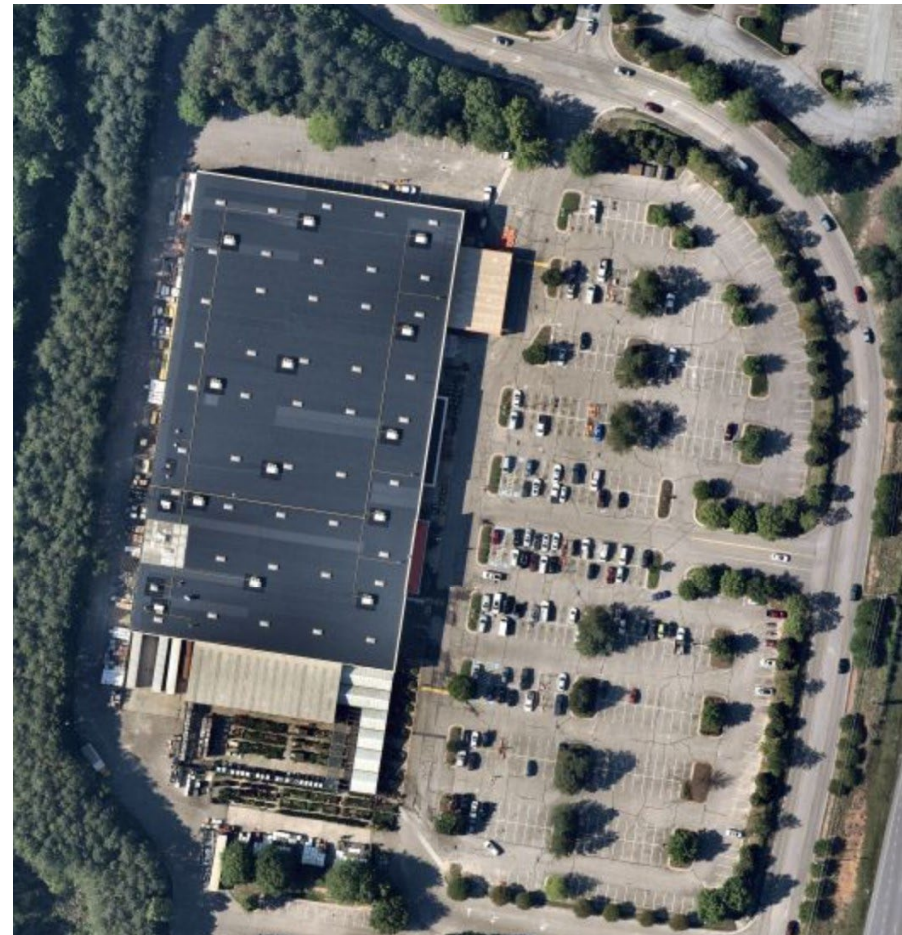
Discussion question: Are there other entry treatments recommended for smaller buildings or lots?

General Commercial, Greater than 100,000 sq ft Building Design Standards

■ Requirement

- *General commercial uses with more than 100,000 square feet of gross floor area have the potential to significantly impact the appearance and function of the commercial corridors of Wake Forest.*
- *To minimize negative impacts, outlot/liner buildings shall be utilized in conjunction with all new development including a general commercial use with more than 100,000 square feet of gross floor area.*

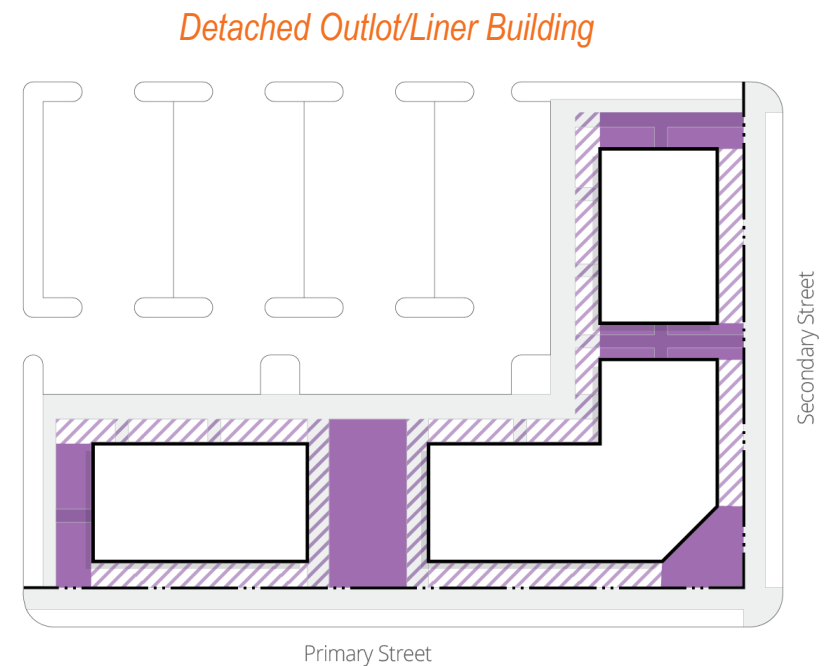
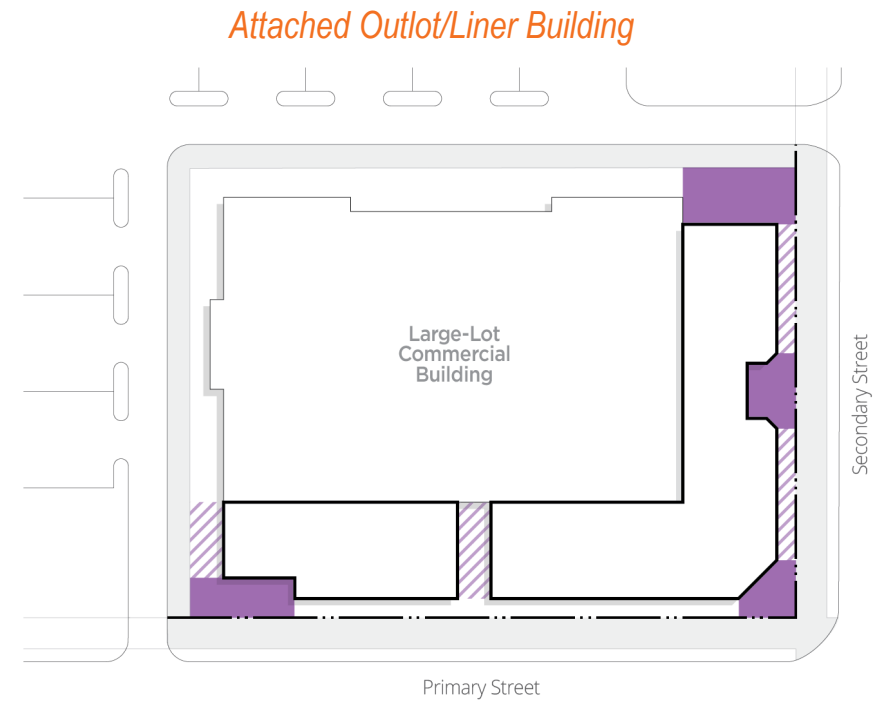
Community Plan: Commercial Development, Setbacks & Parking Lot Key Recommendations



General Commercial, >100,000 sq ft Building Design Standards

- **Description.** Outlot/liner buildings are shallow structures, with a typical width of 60 feet.
- **Front Yard Setback.** 30 feet max
- **Outlot/Liner Building Relation to 100,000 sq ft building.**
 - *Attached*
 - *Detached*

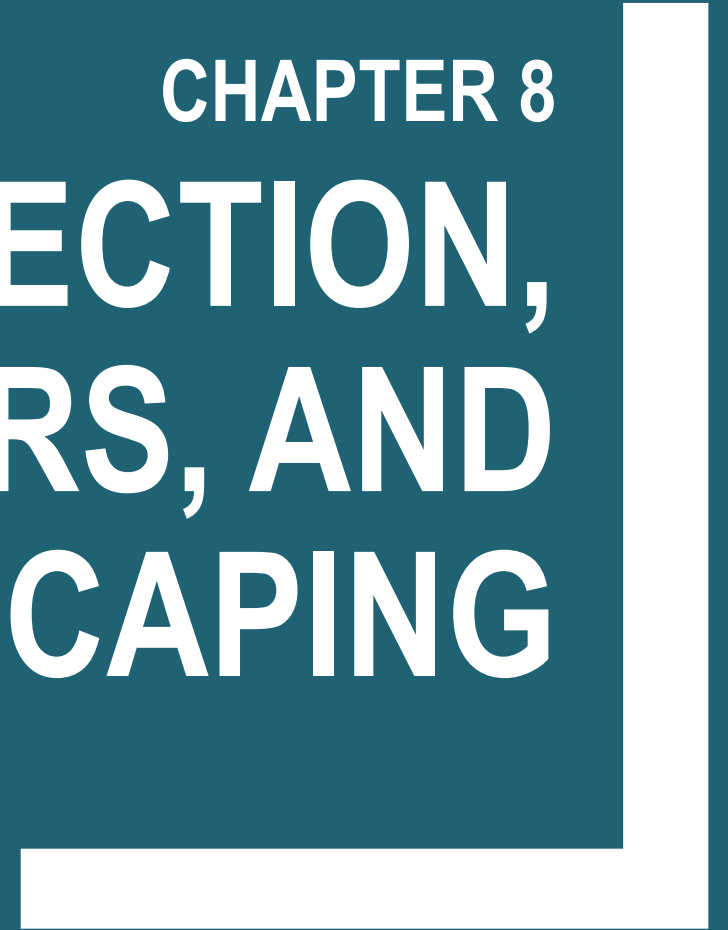
Discussion question: Is 100,000 square feet a suitable threshold?





CHAPTER 8

TREE PROTECTION, BUFFERS, AND LANDSCAPING



Proposed Chapter Structure and Content Overview

1. General Provisions
2. Tree Canopy Coverage Protection
3. Perimeter Buffer Requirements
4. Street Buffer Requirements
5. Building Foundation Landscape
6. Parking Area Landscape
7. Street Trees
8. Installation and Maintenance

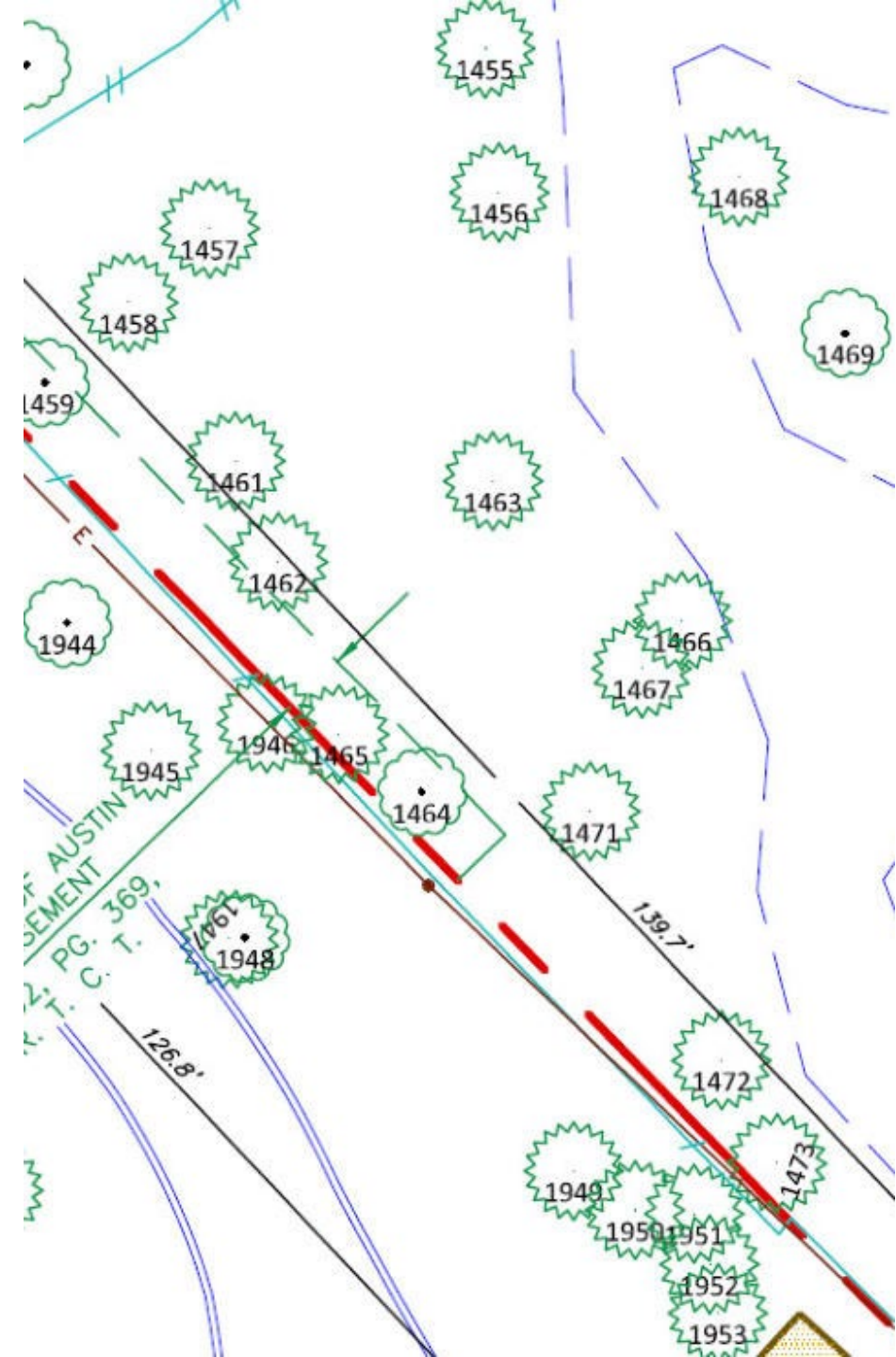


Tree Canopy Coverage and Protection

Tree Survey

- Required Trees to Survey
 - *Specimen Trees – 20 + inch dbh*
- Optional Trees to Survey
 - *Established Trees – 15-20 inch dbh*
 - *Young Trees – 5-15 inch dbh*
- If optional trees are surveyed and preserved, the Administrator may approve a credit for other on-site landscape (as detailed later)

Community Plan: Tree Canopy Key Recommendations
Public Input: Surveys, Open Houses, Comments



Tree Canopy Coverage and Protection

Discussion question: Is the proposed increase in required tree canopy coverage a great enough incentive to encourage tree preservation?

Tree Canopy Requirement

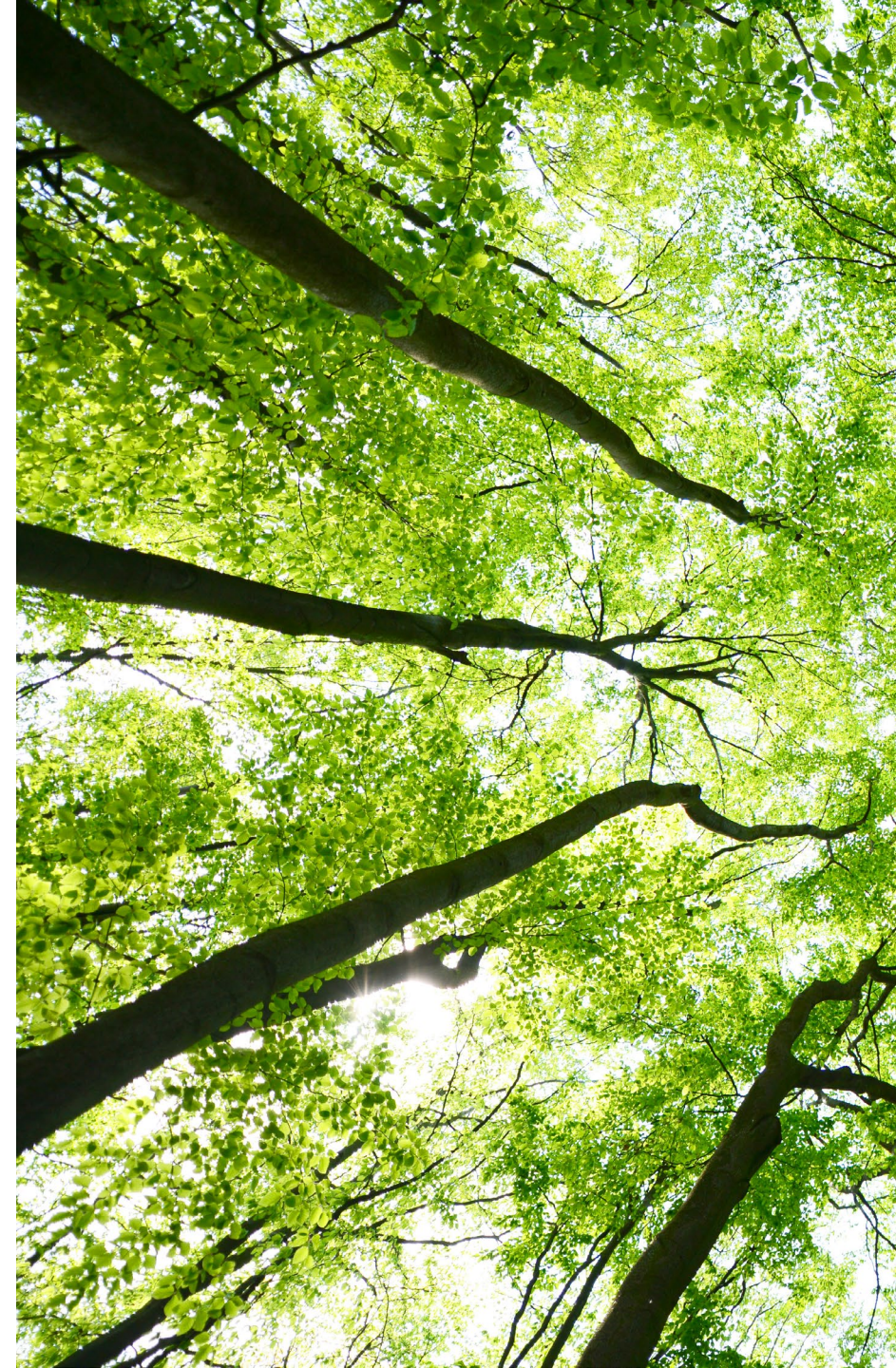
- Base requirement per district
- Additional requirement beyond base requirement dependent on percent of required tree canopy coverage met by preserved trees

District	Base Requirement	Additional Tree Canopy Coverage Required Beyond Base Requirement			
		If 25%-75% of base requirement met by retained trees		If less than 25% of base requirement met by retained trees	
GR	20%	3%	23% Total	6%	26% Total
NCR; MUR; TSR; CI; NB; CB; IND	15%	3%	18% Total	6%	21% Total
DC	0%	0%		0%	
AC-O	10%	2%	12% Total	5%	15% Total
TOD-O	5%	2%	7% Total	5%	10% Total
OS	45%	0%	45% Total	0%	45% Total
Notes					
[1] Calculation of canopy coverage shall be based on site area exclusive of public right-of-way dedication, existing natural surface waters, and existing easements.					
[2] For sites with no existing tree canopy or existing tree canopy below the base requirement percentage, the required provision of canopy shall meet the base requirement.					

Tree Canopy Coverage and Protection

Tree Canopy Retention Area

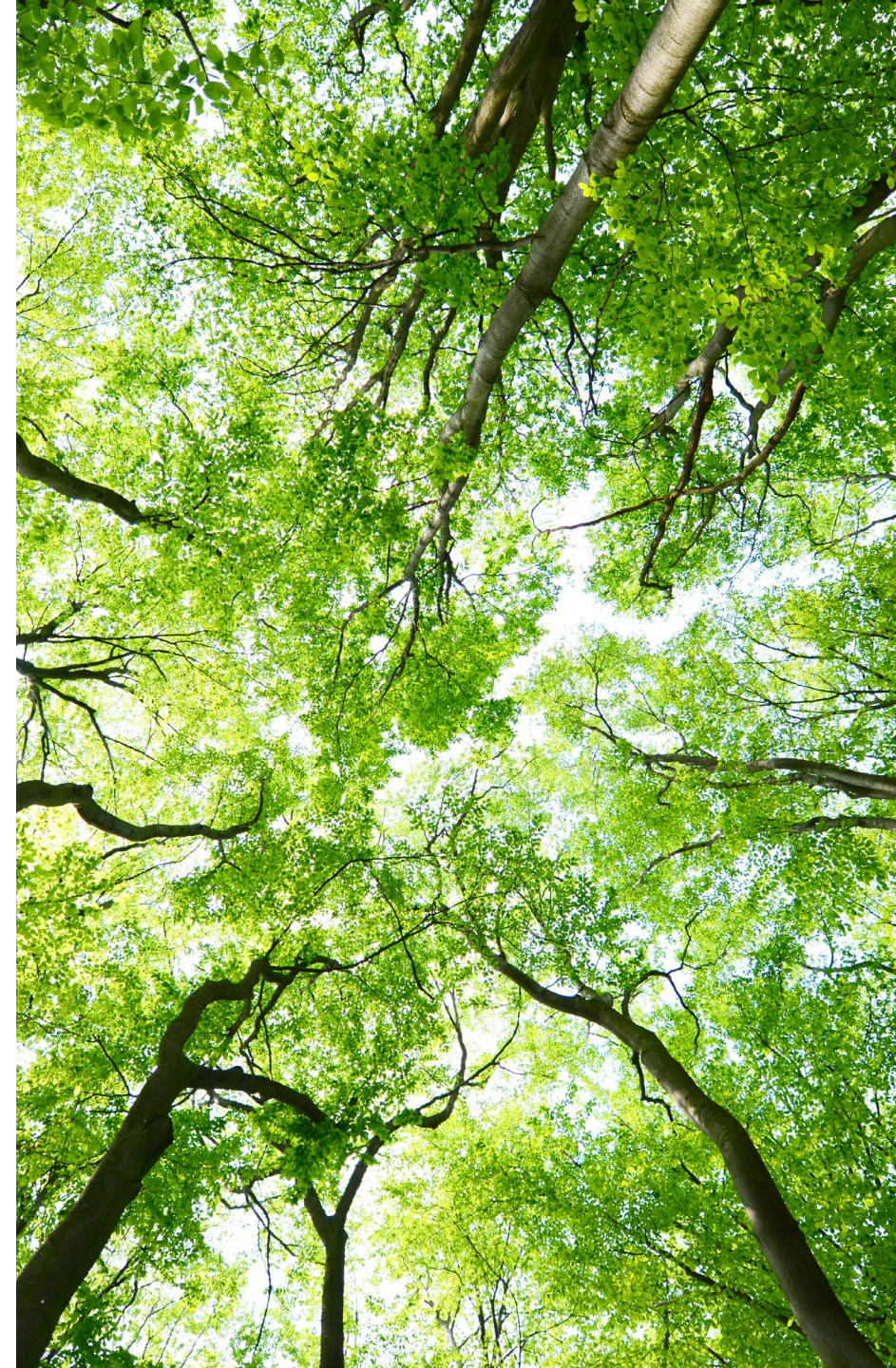
- All trees (preserved and new) required to be placed in Tree Canopy Retention Area Easement
- Priority retention areas established to direct tree canopy to preferred locations
- Certain activities prohibited in Tree Canopy Retention Area Easement
 - *Land disturbance limited to by hand underbrush removal*
 - *Fences – take root systems into account, dig post holes by hand to avoid root damage*



Tree Canopy Coverage and Protection

Calculating Tree Canopy Coverage of New Trees

- Canopy Size – Small. 50 square feet
- Canopy Size – Medium. 175 square feet
- Canopy Size – Large. 315 square feet

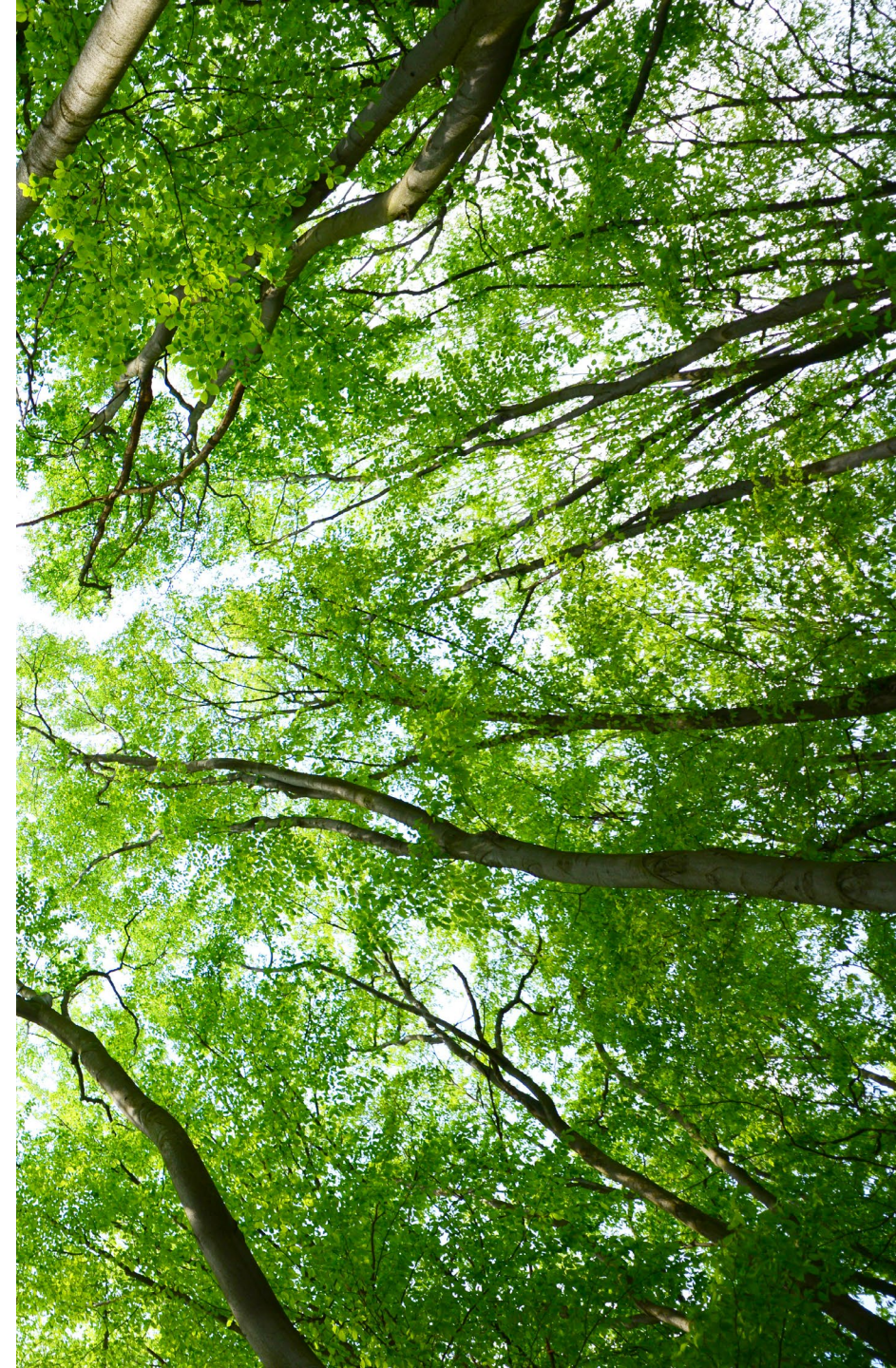


Tree Canopy Coverage and Protection

Tree Preservation Incentives

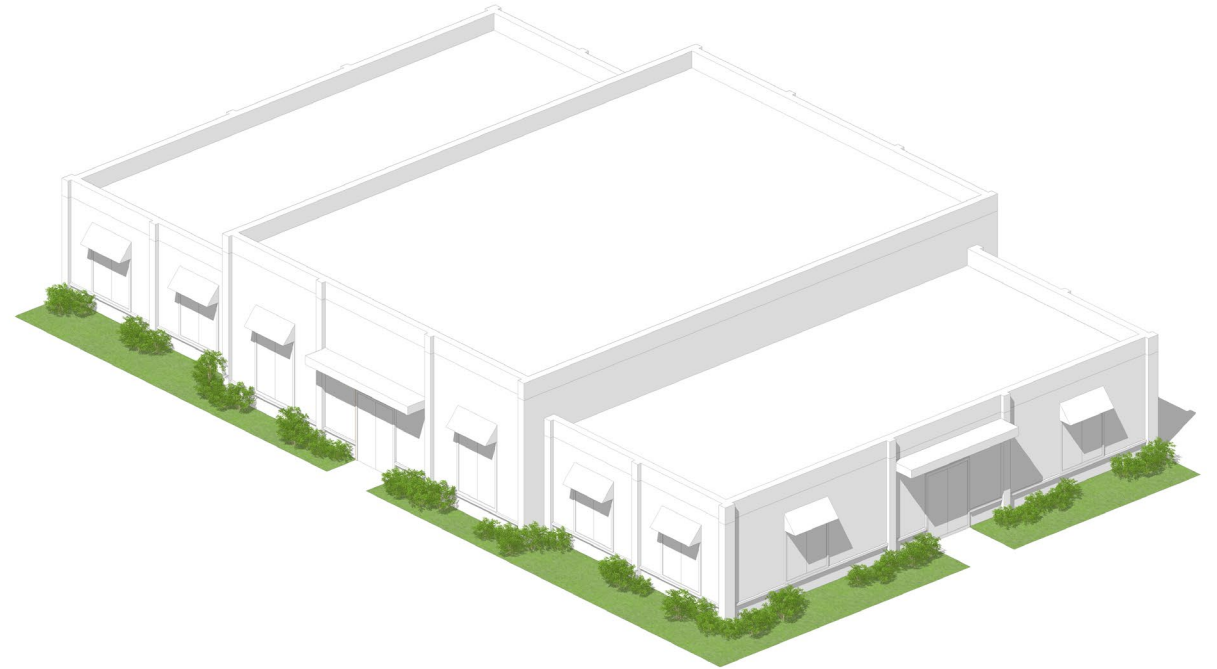
- Specimen Tree 30+ inch dbh – 5 tree credit
- Specimen Tree 20-30 inch dbh – 3 tree credit
- Established Tree – 2 tree credit
- Young Tree – 1.25 tree credit

Discussion question: Are the proposed credits a great enough incentive to encourage tree preservation?



Building Foundation Landscape

- New proposed requirement
- Required on all applicable buildings setback more than 5 feet from the ROW
- 60% of building façade facing a ROW or parking lot required to be landscaped
- Landscape will frame important views, while visually softening long expanses of walls

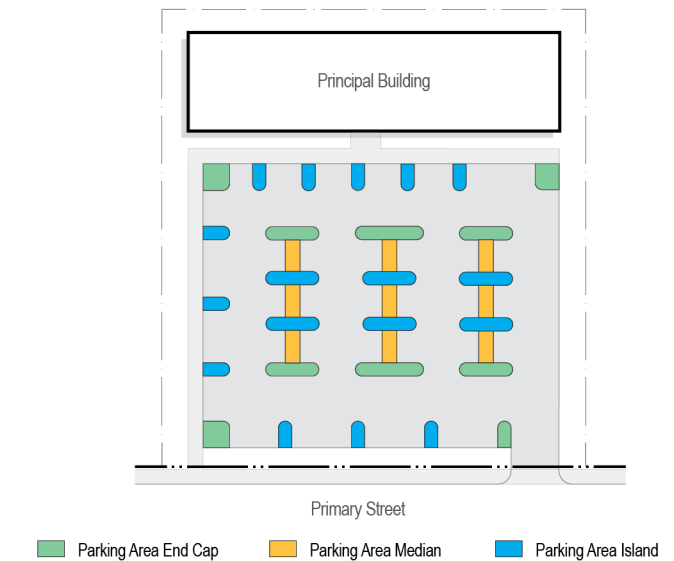


Parking Area Landscape

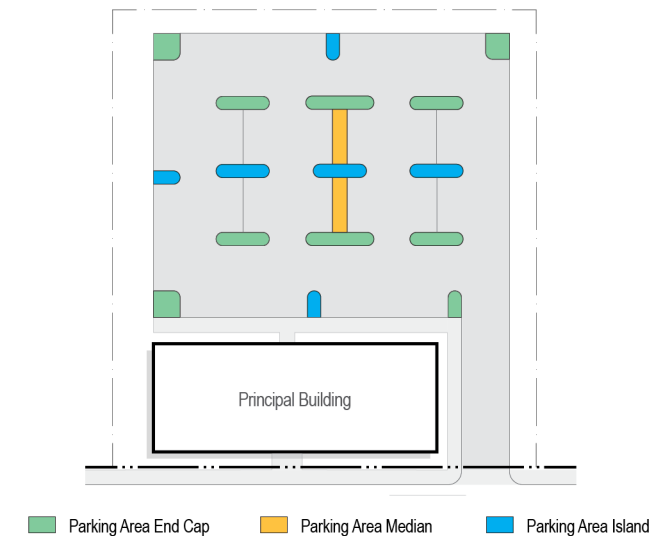
- Enhanced proposed requirement
- Divided between:
 - *Parking Area Perimeter*
 - *Parking Area Interior*
- Discreet requirements proposed to replace % coverage requirements
- Rain garden option proposed

Community Plan: Parking Lots, Tree Canopy & Sustainable Development Key Recommendations
Public Input: Surveys, Open Houses, Comments

Parking Area Located to Front / Side of Building



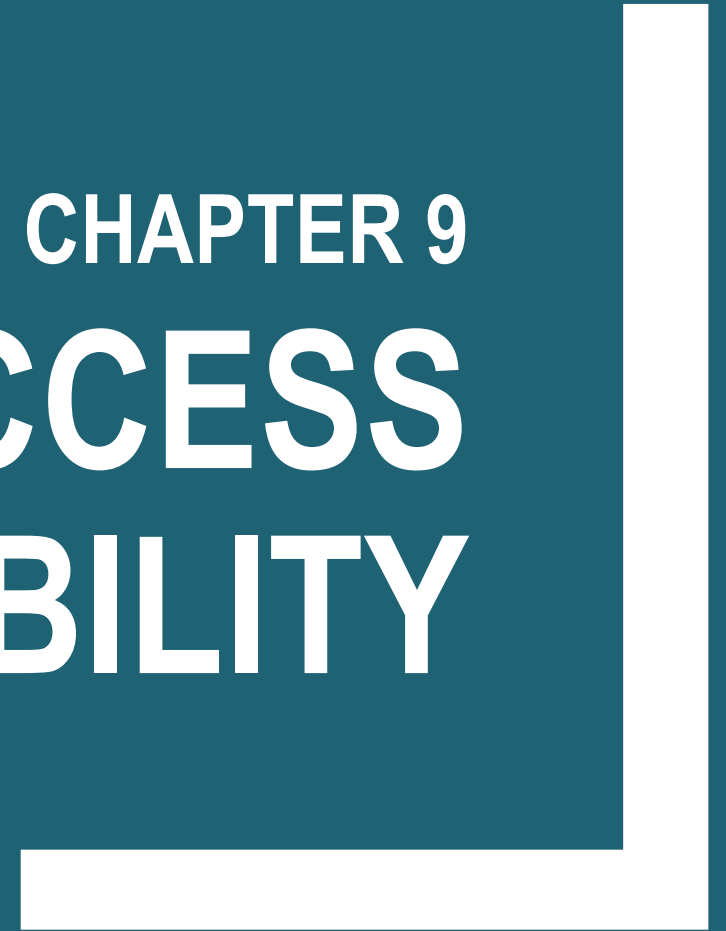
Parking Area Located to Rear of Building





CHAPTER 9

ACCESS AND MOBILITY



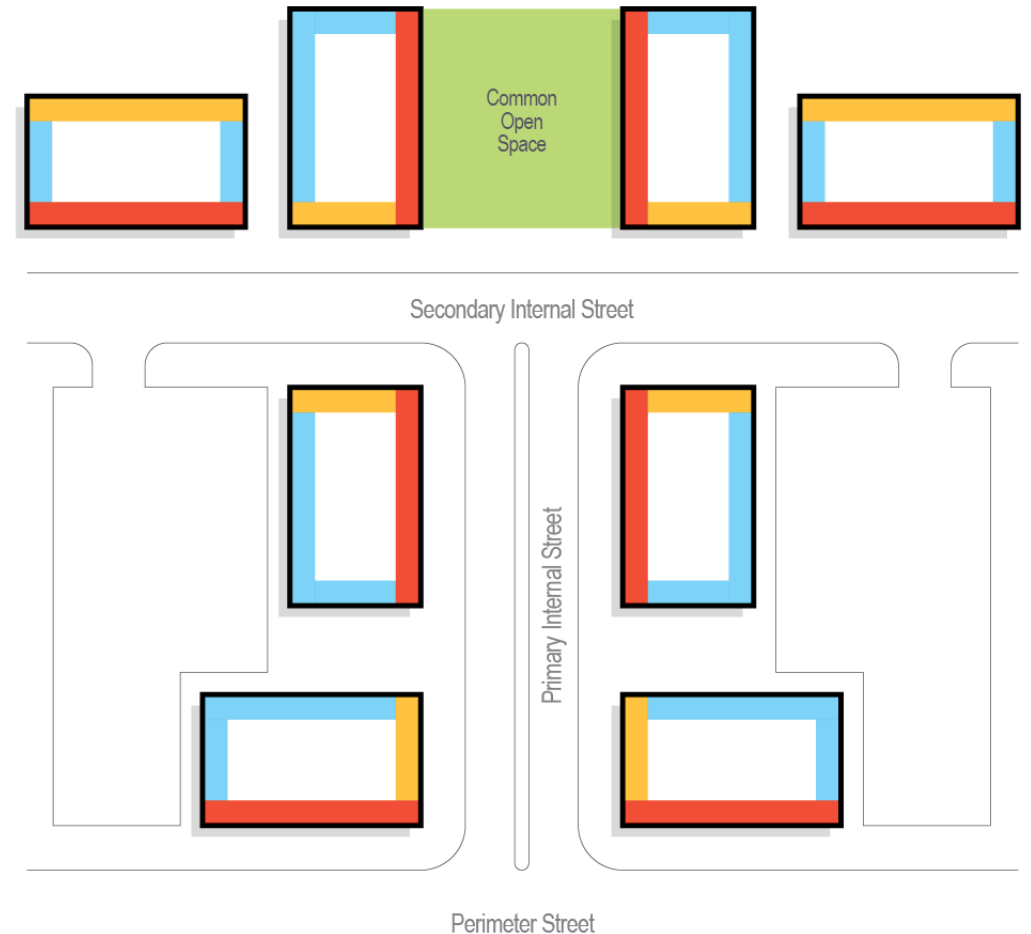
Proposed Chapter Structure and Content Overview

1. General Provisions
2. Transportation Impact Assessment
3. Frontage Improvements
4. Internal Access Drives Standards
5. Vehicle Parking
6. Loading
7. Driveways
8. Bicycle Parking
9. Sidewalks, Greenways, and Pedestrian Walkways



Internal Access Drives Standards

- Include all private vehicular travel lanes outside of drive aisles in parking areas within a multi-building development greater than 5 acres in gross area or with 200 or more parking spaces.
- Site access and circulation shall be provided via internal access drives and not drive aisles in parking areas.
- Types of Access Drives
 - *Primary*
 - *Secondary*



Internal Access Drives Standards

Primary Internal Access Drive

- Required Components
 - *Two travel lanes*
 - *Planted median*
 - *Curb and gutter*
 - *Verge*
 - *Verge landscape*
 - *Sidewalk*
- Allowed Components
 - *Bike lane*
 - *Parallel parking*
 - *Angled parking*

Secondary Internal Access Drive

- Required Components
 - *Two travel lanes*
 - *Curb and gutter*
 - *Verge*
 - *Sidewalk*
- Allowed Components
 - *Bike lane*
 - *Parallel parking*
 - *Angled parking*
 - *Verge landscape*

Vehicle Parking – Permitted Parking Area Locations

Community Plan: Parking Lots Key Recommendations

Table 9.5(A)(1): Allowed Parking Area Location

Key: ● = Allowed; ○ = Allowed Per Section ###; Blank = Not Allowed

<i>District</i>	<i>In Front of Building(s)</i>	<i>To Side of Building(s)</i>	<i>To Rear of Building(s)</i>
NCR (duplex, single-family detached)		●	●
GR (duplex, single-family detached)	●	●	●
GR; NCR (all other uses)		●	●
MUR; TSR; NB;		●	●
DC; TOD-O; AC-O			●
CB; IND; CI	○	●	●

Keep in mind, if parking area is in front or to the side of the building, a higher level of interior parking area landscape is proposed to be required.

Vehicle Parking – Minimum Requirement / Maximum Allowance

Minimum Requirement

- Minimum requirement retained for residential uses
- Adjustments to minimum parking requirements proposed
 - *Tree Preservation*
 - *Transit*
 - *On-Street Parking*
 - *Affordable Units*

Maximum Allowance

- Maximum allowance proposed for all nonresidential uses and multifamily developments
- Adjustments to maximum parking allowance proposed
 - *Permeable Surfacing*
 - *Parking Area Interior Landscape*

Vehicle Parking – Electric Vehicle Charging Stations

Parking Area / Structure	If...	Then...
Parking Area	<ul style="list-style-type: none">• Parking area serves a multifamily, mixed use, or commercial use, and• Parking area has more than 40 spaces	<ul style="list-style-type: none">• Stations required for 5% of provided parking spaces
Large Parking Structure	<ul style="list-style-type: none">• Parking structure has 50 or more parking spaces	<ul style="list-style-type: none">• EV stations required at 5% of provided parking spaces• Infrastructure required for EV stations required at additional 10% of provided spaces
Small Parking Structure	<ul style="list-style-type: none">• Parking structure has fewer than 50 parking spaces	<ul style="list-style-type: none">• Infrastructure required for EV stations required at 5% of provided spaces



CHAPTER 10

OUTDOOR LIGHTING



Proposed Chapter Structure and Content Overview

1. General Provisions
2. Prohibitions
3. Exemptions
4. Design Standards
5. Specific Lighting Type Standards
6. Maintenance



Pedestrian Scale Lighting

Community Plan: Placemaking Key Recommendations
Public Input: Surveys, Open Houses, Comments

- In the TOD-O and AC-O Districts
 - *Required in public gathering spaces and along on-site pedestrian walkways*
 - *Required instead of streetlights on local roads (except for at intersections)*





NEXT STEPS



Next Steps

- Anticipated Draft UDO Part 4 Content
 - *Chapter 5 Subdivision Standards*
 - *Chapter 7 Parks and Open Space Standards*
 - *Chapter 11 Natural Resource Protection Standards*
 - *Chapter 12 Sign Standards*
 - *Chapter 13 Performance and Maintenance*
 - *PUD standards (added to Chapter 2)*





THANK YOU!

