

LAND MANAGEMENT ORDINANCE

Advisory Committee Meeting February 28, 2023

FORWARD

ELON



CHAPTER REVIEW

CHAPTER 7 – DEVELOPMENT STANDARDS

Summary of key provisions and outcomes

Chapter 7 includes several major categories of development standards for property within Elon, such as:

- Design standards for residential & non-residential uses
- Off-street parking standards
- Landscaping & tree preservation standards
- Signage standards
- Standards for fences and walls
- Lighting standards
- Open Space standards

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CHAPTER 7 – DEVELOPMENT STANDARDS

Summary of key provisions and outcomes

- Much of Chapter 7 was reviewed during the February 8, 2023 meeting.
- The remaining items are the sections on landscaping, tree preservation, and lighting.

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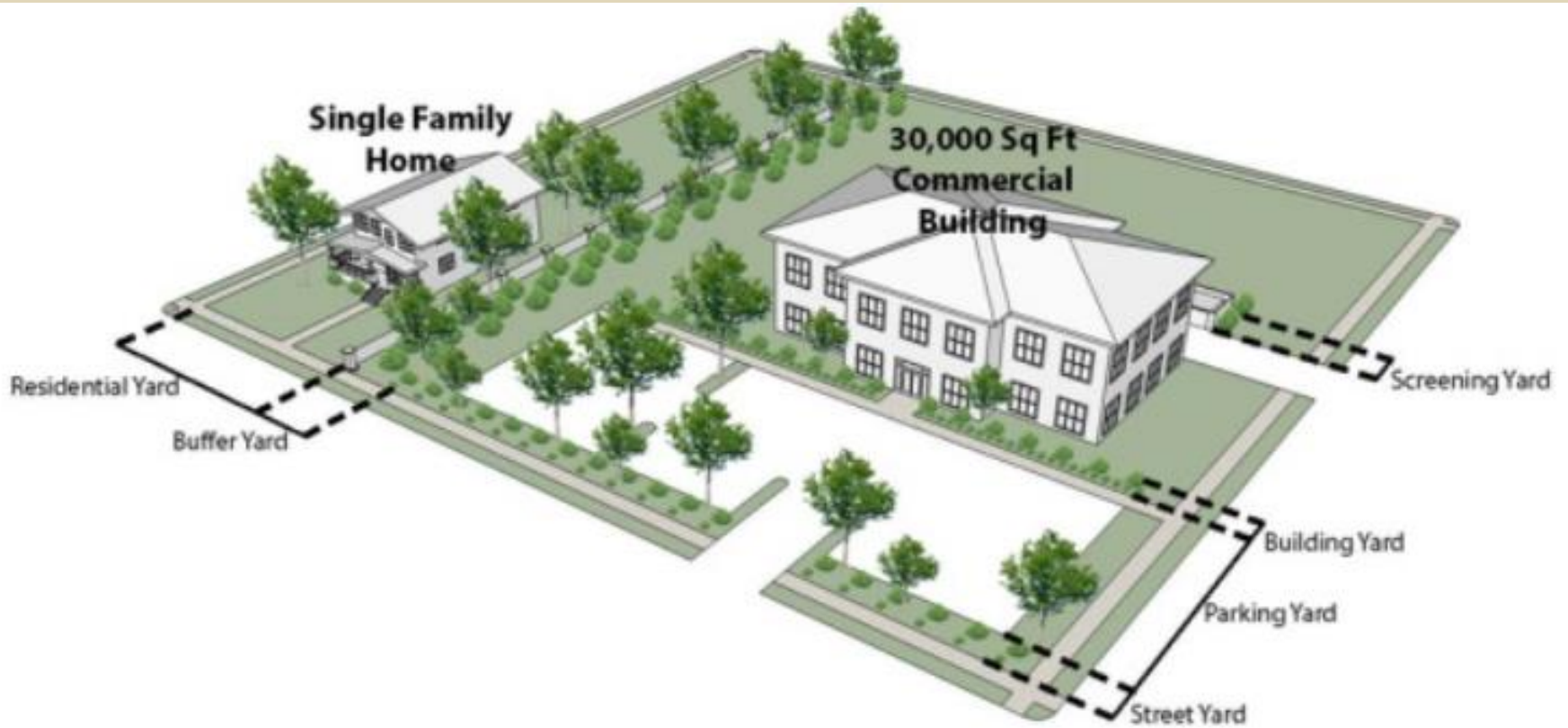
CHAPTER 7 – DEVELOPMENT STANDARDS

Landscaping and Tree Preservation Standards

- This section includes parking lot landscaping requirements, with increased flexibility included for expansion and redevelopment of existing sites.
- Each parking space must be within 75 feet of a large variety tree, or within 50 feet of a small variety tree.
- Streetyard and bufferyard trees may also serve as parking lot trees if they meet the distance requirements described above.
- The TRC may approve alternative landscaping proposals, under specified parameters.

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Landscaping and Tree Preservation Standards

- 10' wide landscaped streetyards are required where parking lots are located within 100' of the street, but not required where a building exists between the parking area and the street.
- Streetyards must include both shrubs and large variety trees.

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Landscaping and Tree Preservation Standards

- Bufferyard standards are also included in this section, and are intended to obscure the view of adjoining properties and protect the character of residential areas.
- Bufferyards are not required where like uses exist next to each other (for example, industrial development next to industrial development).
- Three types of bufferyards are proposed, with the Type III bufferyard being the most intense.

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TABLE 7.X. DETERMINATION OF BUFFERYARD

Zoning of Developing Property	Zoning of Adjacent Property			
	Single Family Residential	Low Intensity Mixed-Use	High Intensity Mixed-Use	Industrial
Single Family Residential	None	None	None	None
Low Intensity Mixed-Use	Type II	None	None	None
High Intensity Mixed-Use	Type II	Type I	None	None
Industrial	Type III	Type III	Type I	None

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TABLE 7.X. BUFFERYARD PLANTING REQUIREMENTS

Bufferyard Type	Bufferyard Width	Minimum Plant Material per One Hundred (100') Linear Feet
Type I	10'	2 deciduous large variety trees; 8 evergreen plants, 10 supplemental shrubs
	20'	2 deciduous large variety trees; 8 evergreen plants
	40'	2 deciduous large variety trees; 6 evergreen plants
	100'	2 deciduous large variety trees; 4 evergreen plants
Type II	10'	2 deciduous large variety trees; 12 evergreen plants; 14 supplemental shrubs
	20'	2 deciduous large variety trees; 12 evergreen plants; 10 supplemental shrubs
	40'	2 deciduous large variety trees; 10 evergreen plants
	100'	2 deciduous large variety trees; 6 evergreen plants
Type III	20'	3 deciduous large variety trees; 18 evergreen plants
	40'	3 deciduous large variety trees; 14 evergreen plants
	100'	3 deciduous large variety trees; 10 evergreen plants

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Landscaping and Tree Preservation Standards

- Street trees are required whenever a new street is constructed, or where new development occurs along existing streets.
- Street trees shall be planted at a rate of one large variety tree per 40 linear feet. Existing trees may help satisfy these requirements.
- Standards have also been created for screening outdoor storage areas and mechanical equipment. Screening can take the form of a 6' tall opaque fence, or a 6' tall planted buffer.

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Landscaping and Tree Preservation Standards

- Planting and maintenance standards for required trees and shrubs are delineated in this section, and are based on the standards for nursery stock of the American Association of Nurserymen.

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Landscaping and Tree Preservation Standards

- Requirements also exist for preserving existing trees on site, and the amount of the tree preservation required for any given site is still being decided.
- We have a number of precedents from municipalities across the state that take strong stances on the preservation of existing vegetation that are being used as guides for Elon's language.

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Landscaping and Tree Preservation Standards

- These precedent communities use requirements that range from 10% to 40% preservation of existing trees, and vary according to the zoning district, and in some cases how much of the site is covered with trees prior to development.
- Input from the Committee is desired on this topic, to enable us to put a final proposal together for Town Attorney review.

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Waxhaw

30% tree cover required post-development (contiguous tree preservation areas)	R-1, R-3, and R-4 Districts (single-family residential)	Where 40% or more of the site is covered pre-development
15% tree cover required post-development (contiguous tree preservation areas)	R-1, R-3, R-4, CC, EC (CC = Corridor Commercial; EC = Employment Center)	Where less than 40% of the site is covered pre-development
20% tree cover required post-development (contiguous tree preservation areas)	CC, EC	Where 40% or more of the site is covered pre-development
15% tree cover required post-development (contiguous tree preservation areas)	NC (Neighborhood Center – mix of uses in the downtown periphery area)	Appears to be a recent amendment

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Morrisville

Table 5.4.4.A: Existing Tree Canopy Retention Standards

Existing Tree Canopy Cover [1]	Minimum Percentage of Existing Tree Canopy Cover to be Retained	
	Single-Family Attached, Group Living and Multifamily Development	Nonresidential and Mixed-Use Development
92% up to 100%	19%	10%
84% up to 92%	21%	11%
76% up to 84%	23%	12%
68% up to 76%	25%	13%
60% up to 68%	27%	14%
52% up to 60%	29%	15%
44% up to 52%	31%	16%
38% up to 44%	33%	17%
30% up to 38%	35%	18%
22% up to 30%	37%	19%
14% up to 22%	39%	20%
6% up to 14%	41%	21%
0% up to 6%	n/a	n/a

Notes:
 [1] Existing tree canopy cover is the percentage of a development site (excluding proposed street rights-of-way, existing utility easements, and natural water surface areas) that is covered by existing tree canopy before development or land disturbing activity.

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Davidson

TABLE 9-2 : TREE PRESERVATION REQUIREMENT	
PLANNING AREA	MINIMUM PRESERVATION AREA
NE/RPA	40%
EC1/EC2/CC	30%
NG/VI	20%
LK/VC/VE/VCOM/NC1/ NC2/CBD/NS	10%*

NE = Neighborhood Edge

RPA = Rural Planning Area

EC1 = Employment Campus I

EC2 = Employment Campus II

CC = College Campus

NG = Neighborhood General

VI = Village Infill

LK = Lakeshore

VC = Village Center

VE = Village Edge

VCOM = Village Commerce

NC1 = Neighborhood Center I

NC2 = Neighborhood Center II

CBD = Central Business

NS = Neighborhood Services

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Wilmington

- Wilmington regulates much like the draft we currently have (though they are more stringent), but there are concerns that there is too little predictability for applicants unless we create a more objective set of standards, such as a percentage to be retained as we see in the other precedent ordinances.
- They also require that a tree removal permit application be submitted to the City Manager for the removal of any tree with a diameter greater than 4 inches dbh.

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Lighting Standards

- Lighting standards are proposed for all uses except one-and-two family dwellings and triplex/quadplexes.
- A lighting plan must be prepared by a professional engineer or lighting certified professional and demonstrate that all proposed exterior lighting meets LMO standards.
- Light levels are specified in footcandles, a common unit of measure for lighting in the US, and measures the light that reaches a surface rather than the light emitted from the source.

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Lighting Standards

- Light levels are limited to .5 footcandles at any property line abutting residential uses.
- Parking lot lighting is regulated as to uplighting and glare.
- Light poles are limited to 35 feet in height.
- There are also standards for under-canopy lighting for service stations.
- Certain types of lighting is prohibited: non-shielded wall pack lights, searchlights, lasers, and strobe lights.

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Lighting Standards

- No plans are required for routine maintenance of existing lighting
- Recreational facilities include special lighting requirements which recognize the unique nature of such facilities. Light poles for these uses may be 80 feet in height, with additional height approvable by the Town Manager if determined to have no significant adverse effect on surrounding property.

NEXT STEPS

- **Next meeting: Mid March – to update the Committee on any significant revisions or additions to the previously-reviewed drafts, including the proposed language for the UNV Zoning District.**