

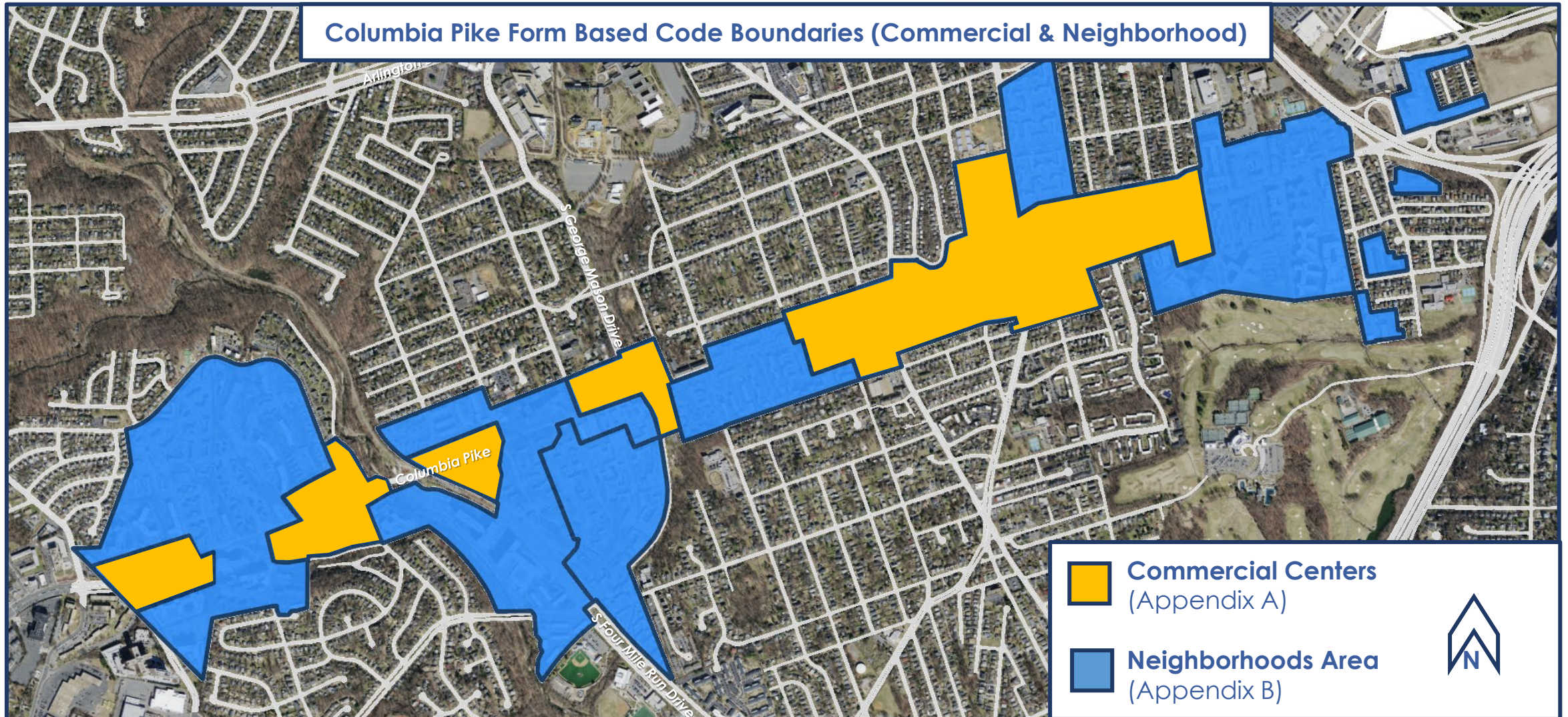
Green Building Standards Columbia Pike Form Based Code

Climate Change, Energy and Environment
Commission (C2E2) Hybrid Meeting

December 18, 2023



Form Based Code Boundaries



Project Scope

Amendments to both the (Commercial) FBC & (Neighborhoods) N-FBC:

- Commercial FBC (2003): No existing requirements
- Neighborhoods FBC (2013): LEED Silver and lower

Timeline:

- RTA: December 2023 County Board Meeting
- Amendments: February 2024 County Board Meeting

Review & Outreach:

- County Staff: Current Planning Site Plan Review, Inspection Services Division (ISD), CPHD Housing Staff, and DES Green Building Program.
- Fairfax County, City of Alexandria, and industry professionals.



FBC & N-FBC Development Project Certifications

Project	Green Building Certification	Year Approved	Status
<i>CP-FBC (Voluntary)</i>			
Pike 3400	LEED Certification	2012	Completed
Gilliam Place (APAH)	Earthcraft Platinum	2015	Completed
Elliott (Fillmore Gardens)	LEED Silver	2022	Not Built
3401 Columbia Pike (Bank of America)	LEED Certified	2023	Not Built
<i>CPN-FBC (Required)</i>			
Carver Place	LEED Silver	2015	Completed
Columbia Hills	LEED Silver	2015	Completed
Trove (Wellington)	LEED Silver	2016	Completed
Pike West (Greenbrier Apartments)	LEED Silver	2020	Not Built
Arlington View Terrace East (AHC)	Earthcraft Gold	2020	Completed
Barcroft Renovations (Section 3)	NGBS Silver	2023	Under Construction

*17 development proposals have been approved under the CP-FBC with four delivering commitments to sustainability by voluntarily agreeing to achieve LEED or Earthcraft certification.

Key Findings

Findings:

- General: Certification options preferred, emphasis on performance & outcome-based standards, Energy Star certification.
- Columbia Pike: Points for transportation, location, development footprint, open space (15-25%), and rainwater management.
- Affordable Housing: LEED Gold or Earthcraft Gold, Earthcraft is the preferred option (Ex: Arlington View Terrace East & West)
- LEED: LEED Silver proposed without incentives, LEED version 5 release date unknown, 10-point gap between Silver & Gold, certification process is lengthy and expensive.
- Earthcraft: Option offered in GBIP, technical Advisor provided (Viridiant), emphasis on performance, overhead cost is lower than LEED.



Proposed Updates (FBC & N-FBC)

	Building Envelope Standards (BES)	Existing FBC/N-FBC Minimum Standards	Proposed FBC/N-FBC Minimum Standards
MULTI-FAMILY/ MIXED-USE	Urban Mixed Use (N-FBC) Urban Residential (N-FBC)	<ul style="list-style-type: none"> • LEED Silver Certification • LEED or Earthcraft Certification (or equivalent) for VHDA projects 	<ul style="list-style-type: none"> • LEED Gold or Earthcraft Gold or Equivalent Certification* • Energy Star Certification • Energy Optimization • Additional Prerequisites
	Main Street (FBC) Avenue (FBC)	None	
TOWNHOUSE/ DUPLEX/DETACHED	Townhouse (N-FBC) Small Apartment (N-FBC) Detached (N-FBC)	<ul style="list-style-type: none"> • LEED or Earthcraft Certification or Equivalent Certification • Green Home Choice 	<ul style="list-style-type: none"> • LEED or Earthcraft Certification or Equivalent Certification* • Energy Star Certification
	Local (FBC) Neighborhood (FBC)	None	
	Major Renovations (N-FBC)	<ul style="list-style-type: none"> • LEED or Earthcraft Certification 	

*Equivalent Certifications to consider: National Green Building Standard (NGBS), Enterprise Green Communities, Passive House, Zero Energy Ready Homes, etc.

Proposed Updates (FBC & N-FBC)



LEED Gold or Earthcraft Gold or Equivalent Certification



Energy Optimization (Choose 1):

- Minimum performance improvement of 14% for LEED v4.1 EA credit Optimize Energy Performance.
- Minimum performance improvement of 24% for LEED v4 EA credit Optimize Energy Performance/ Annual Energy Use
- HERS index of 60 or lower for LEED v4.1 Multifamily EA credit Optimize Energy Performance Option 3 HERS index rating
- HERS index of 60 or lower for Earthcraft Multifamily Certification



Additional Prerequisites:

- ENERGY STAR appliances and fixtures
- WaterSense Plumbing Fixtures
- Refrigerant Leakage
- Equity, Diversity, and Inclusion program
- Energy Benchmarking
- Air Sealing of Ventilation Supply and Exhaust
- Electric Vehicle Charging Infrastructure
- Human Interaction with Nature (Biophilia)
- Bird-friendly Materials
- Renewable Energy
- Light pollution reduction

Schedule

- **October 11:** NAIOP Meeting
- **November 7:** Zoning Committee (ZOCO) Meeting
- **November 15:** Form Based Code Advisory Working Group (FBC AWG)
- **December 16:** County Board Hearing for RTA
- **December 18:** Climate Change, Energy and Environment Commission (C2E2)
- **February 2024:** Planning Commission (PC)
- **February 2024:** County Board Hearing for Amendment

For additional questions, contact Olivia Sontag (osontag@arlingtonva.us)