ZPH2025-00024 Lighting Text Amendment

Presented by

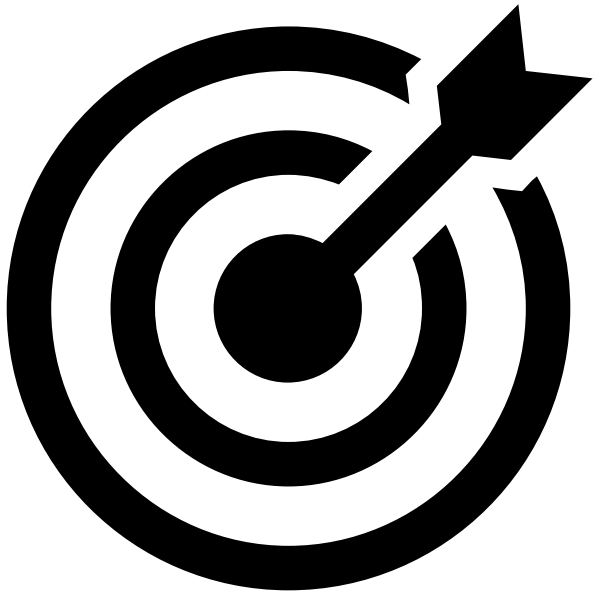
Shannon Capezzali

Planning & Development Department

AGENDA

1. Purpose
2. Lighting 101
3. Equity Analysis
4. Other Jurisdictions
5. Existing County Ordinances
6. Proposed Text Amendment
7. Comprehensive Plan Alignment

PURPOSE



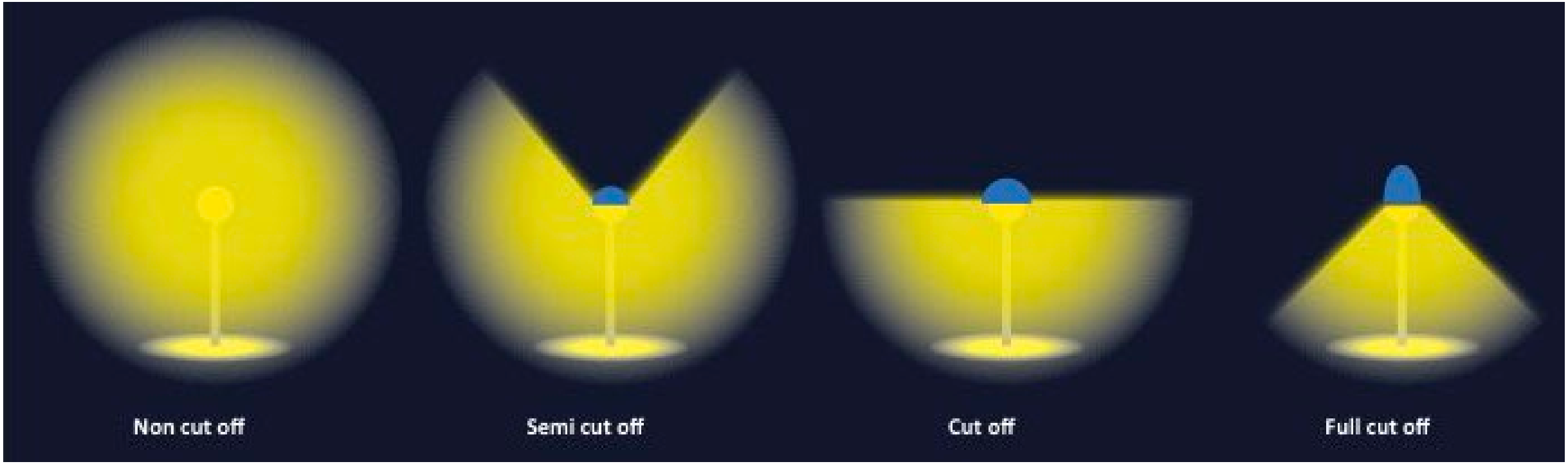
The purpose of the proposed text amendments will be to address Exterior Commercial Lighting Standards from the Buncombe County Zoning Ordinance.

These standards are intended to:

- **Minimize light pollution**
- **Reduce light trespass and glare**
- **Promote energy efficient practices**

LIGHTING CRASH COURSE

CUTOFF TYPES – The design of a light fixture to direct light



GOAL: Direct light where it is needed and prevent light trespass into areas where it is unwanted *(neighbor's properties, into the sky, etc.)*

LIGHTING CRASH COURSE

KELVIN – COLOR TEMPERATURE



Healthier for humans
and wildlife

Impacts sleep
causes glare/eye strain
increases accidents

LIGHTING CRASH COURSE

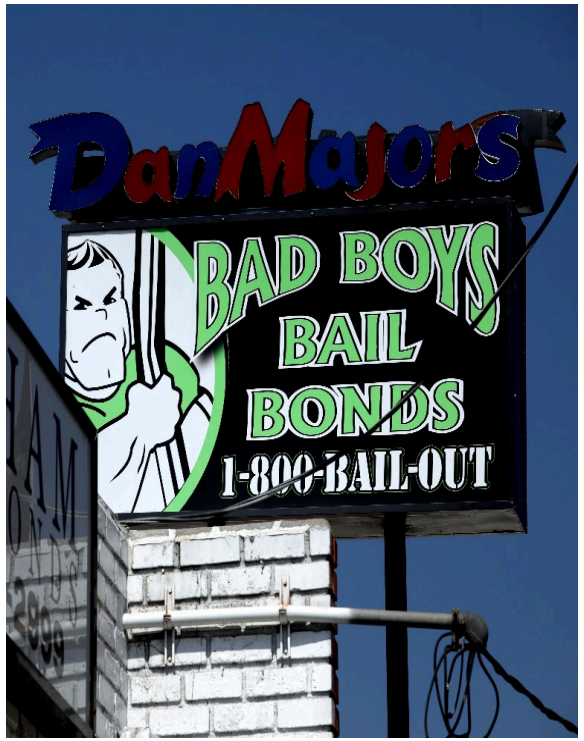
ADVERTISING LIGHTING



Electronic Message Displays



Pylon Sign



Backlit & Internally-lit signs



Everything all together

LIGHTING CRASH COURSE

AREA LIGHTING



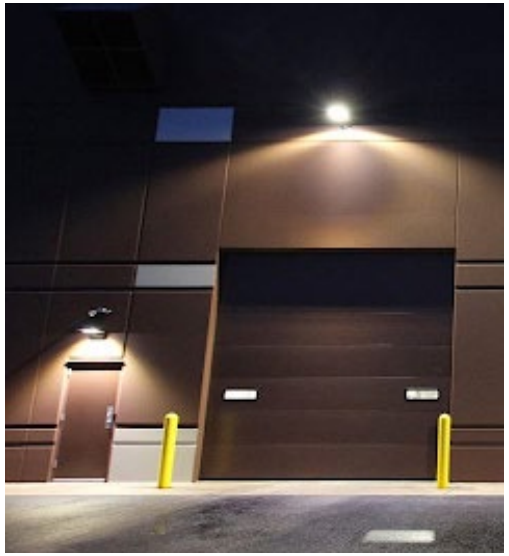
Facade lighting



Accent lighting

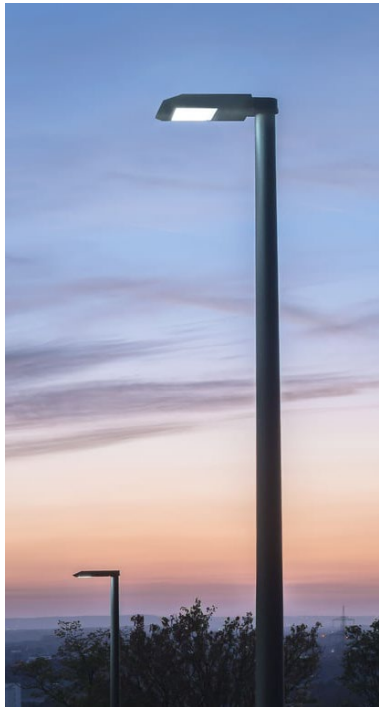


Ornamental Gas Flame Lamps



Wall Pack





Pole Light

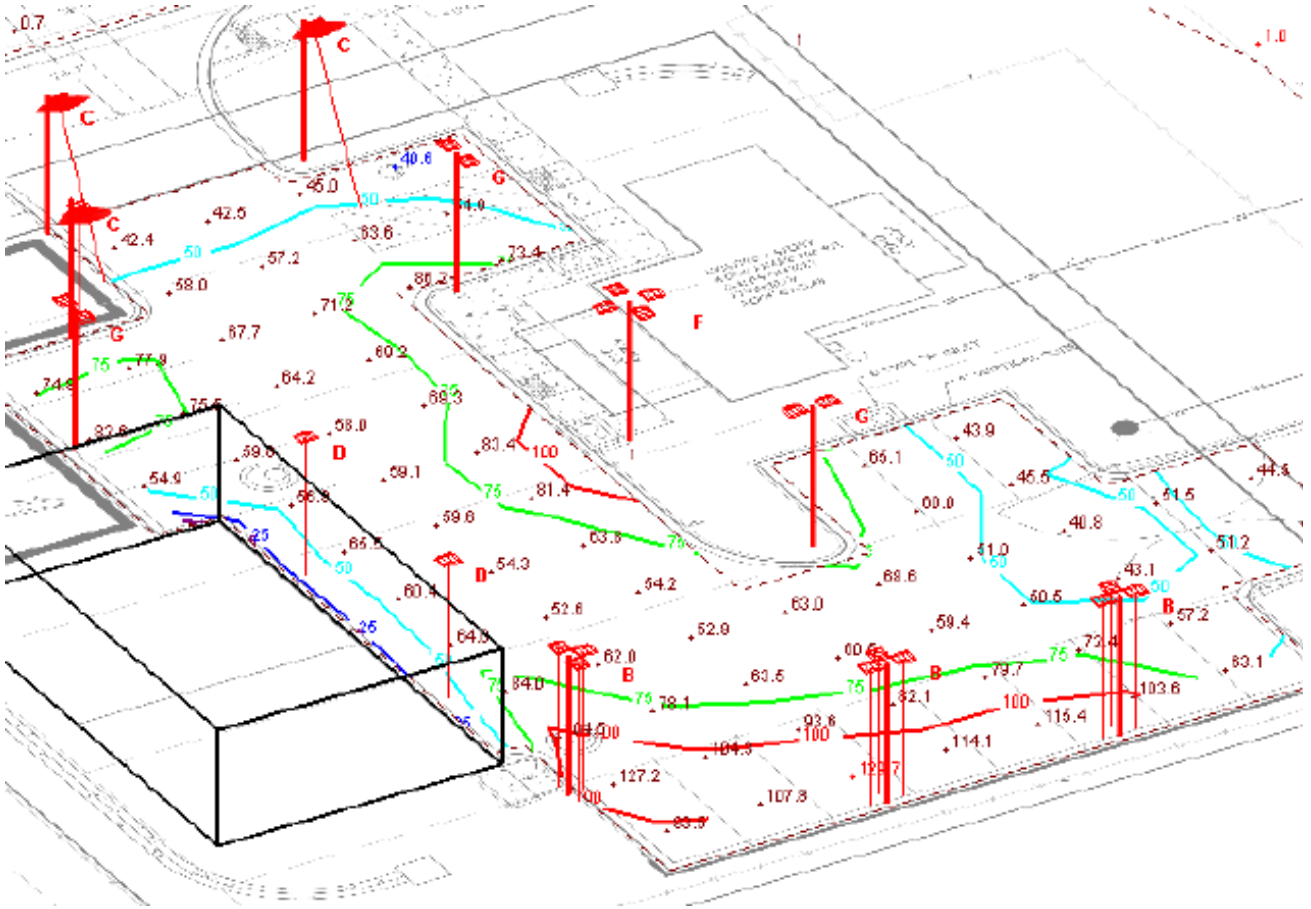
LIGHTING CRASH COURSE

FOOTCANDLES

- Light level at a specific point
- Reviewed on Photometric Plans

Limits on:

- Average for the entire developed area
- Level at property line



LIGHTING CRASH COURSE

GLARE



LIGHT POLLUTION



EQUITY ANALYSIS



Light pollution exposure has negative mental and physical impacts to humans.



Night lighting can harm wildlife, plants, and ecosystems.



Non-white communities and renters were impacted by light pollution at a rate twice that of white communities.



Light pollution is an environmental justice issue that disproportionately impacts communities of color and lower socioeconomic households.

OTHER JURISDICTIONS

Location	Lighting Regulation Examples
Asheville, NC	Regulates residential and commercial lighting, requiring full cutoff fixtures. Requires BUG rating and 4,300 kelvin or less. Prohibits blinking or changing displays and internally lit wall panels. Exempts temporary seasonal lighting, historic landmark lighting, string lights for residential or over dining areas, and ornamental gas lights.
Henderson County, NC	Requires exterior lighting be fully shielded with exceptions for flag poles and other uses. Sets a maximum amount of light trespass at property lines, and prohibits flood lights. Requires existing buildings to bring lighting into full compliance if they repair or replace 50% or more total existing exterior lighting within a 12 month period.
Chatham County, NC	Requires lighting in natural areas to be reduced after midnight. Requires lighting plans to demonstrate how they will be energy efficient, reduce lighting, and utilize timers or other methods to eliminate lights. Sets standards specific to type of use. Sets standards for light measurement techniques for permitting.

SUMMARY OF PROPOSED TEXT AMENDMENTS

- Create a definition of Accent Lighting, Electronic Message Display, and Façade Lighting
- Update lighting standard purpose statement
- Remove assembly standard and dusk to dawn 5-year conformity standard
- Add exemptions for gas flame lamps and low volt landscape lighting
- Prohibit outward-facing lights and animated or flashing lights
- Clarify sections that are vague or conflicting
- Re-organize all footcandle, kelvin, and height standards into tables and add new standards
- Add graphics to illustrate key concepts
- Require lighting to be aimed and shielded, with exceptions
- Create options for non-conforming sites to update lighting
- Update or create standards for motion-activated lighting, street lights, outdoor sports fields, electronic message displays, and backlit signs
- Create options for smaller-scale lighting plans to bypass photometric requirements
- Remove the as-built drawing requirement for permits and the 10 business day review reference

COMPREHENSIVE PLAN



Growth, Equity, Conservation

- **Action 6:** Support the protection of agricultural and forest lands, environmentally sensitive areas, and rural communities.

Farms, Forests, Environment

- **Policy 2:** Preserve Buncombe County's natural heritage.
- **Policy 3:** Promote ecosystem enhancement…

Health & Recreation

- **Policy 5:** Utilize environmental protection and land conservation to… promote health.

Infrastructure & Energy

- **Action 2:** Implement policies around new development and re-development that advance decarbonization and sustainability goals

NEXT STEPS/QUESTIONS