

## **OUTDOOR LIGHTING ORDINANCE TASK FORCE MEETING**

### **FEBRUARY 25, 2016 – 4:00-6:20 PM**

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#### Task Force Members in Attendance:

Carol Lynn Alpert  
Chris Basler  
Peter Calkins  
David Chilinski  
Steve Lenkauskas  
Ranjit Singanayagam  
Charles Teague

#### Members of Public in Attendance:

Torgun Austin  
Kelly Beatty  
Ed Brody  
John Greenup  
Glenn Heinmiller  
Betty Saccoccio  
Marie Saccoccio  
Kenneth Taylor

#### City Staff in Attendance:

Rona Abrahams  
Stuart Dash  
Lt. Leonard DiPietro  
Lisa Hemmerle

Fourteenth meeting of Lighting Ordinance Task Force was held in the First Floor Community Room of the Cambridge Police Station, 125 Sixth Street, Cambridge, Massachusetts.

### **MEETING NOTES:**

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Lisa Hemmerle welcomed everyone to the 14<sup>th</sup> meeting and pointed out the handouts to the Task Force Members (TFMs), including the meeting agenda, a copy of the revised outdoor lighting ordinance draft dated February 22, 2016, Redlined and Clean copy, and additional materials, including images of outdoor lights and how these fixtures would comply with the proposed ordinance, suggested definitions to include in the ordinance, and a copy of the Cambridge Zoning Code, Article 19 – Project Review.

Lisa thanked everyone for their continued participation in the process, especially for Carol Lynn Alpert and Charlie Teague for meeting with her to outline outstanding issues. Lisa introduced Stuart Dash, Director of Community Planning. Stuart started the discussion about Article 19 and how outdoor lighting would be reviewed by the Planning Board and staff with the Community Development Department (CDD). The intent of Article 19 is to establish traffic and urban design standards for development projects likely to have significant impact on abutting properties.

In addition to describing the general process that all projects follow that qualify under Article 19, Stuart pointed out sections of the zoning ordinance that would call for review of outdoor lighting by staff or the Planning Board, including applicable zoning districts and special district thresholds for projects at least 50,000 gross square feet, with smaller projects under review under certain circumstances. The specific considerations can be found in the text of the

Cambridge Zoning Ordinance, Article 19, Project Review on the CDD website, <http://www.cambridgema.gov/CDD/zoninganddevelopment/Zoning/Ordinance> .

Areas in the ordinance that could cover outdoor lighting reviewed by the Planning Board when projects require a Special Permit include:

Section 19.24 (4) Urban Design Objectives Narrative;

Section 19.25.2 Urban Design Findings;

Section 19.30 Citywide Urban Design Objectives;

Section 19.33 The building and site design should mitigate adverse environmental impacts of a development up its neighbors;

Section 19.33 (1) Mechanical equipment design; and

Section 19.33 (9) Outdoor lighting is designed to provide minimum lighting necessary to ensure adequate safety, night vision, and comfort, while minimizing light pollution.

Additional non-binding review opportunities for outdoor lighting are under section 19.40 – Citywide Advisory Development Consultation Procedures. City staff and the general public can review and comment on developmental proposals prior to the developer filing plans for a building permit. This public process is for small and large projects that occur in zoning districts identified as Areas of Special Concern. While Stuart reiterated that recommendations which come from the review process under section 19.40 are non-binding, good things often come from this public process and the developer will often incorporate the suggestions into the project.

After Stuart’s presentation, Task Force Members (TFMs) posed a variety of questions about Article 19. Carol Lynn asked if the Performance Standard and Prescriptive Standard as drafted for the proposed Outdoor Lighting Ordinance would work with the Project Review Process. Stuart answered that it would work and that Planning Board members and City staff can refer to the ordinance as guidance, if appropriate. It was pointed out that the Planning Board cannot absolve projects from following an enacted outdoor lighting ordinance; it can only place additional requirements and make recommendations for the design areas indicated in Article 19.

Carol Lynn asked about how the Planning Board anticipates or allows for changes in technology. Stuart responded that the make-up of the Planning Board are resident volunteers that include professionals with design, planning, engineering and legal backgrounds. The Board members will keep abreast of advances in building technology through their own respective careers and with the assistance of City staff when new technology impacts projects brought to CDD for review. Carol Lynn suggested that the Planning Board go through an education process regarding the new ordinance. Stuart noted that with any new zoning the Planning Board and City staff receive additional training on key issues.

Stuart also suggested that lighting could be added to Article 19, Section 19.24 (4) – Urban Design Objectives Narrative, to give emphasis for the need to review lighting plans for projects.

This could include conceptual renderings and illustrations of projects at night to inform the Planning Board on lighting installations that will be visible to the surrounding community. The uplighting of the mechanical equipment screens on top of the Zinc Building, 22 Water Street, is an example of a lighting installation that was not reviewed by the Planning Board because the original application for a Special Permit indicated there would be no rooftop lighting. If this type of installation was included in the application then the Planning Board could ask for additional information to determine if it was appropriate. Stuart pointed out that you might get a different opinion from each Planning Board member but at least it would put the lighting under Planning Board review and additional restrictions could be placed on its operation. For example, the Planning Board could require that buildings with large architectural light installations have dimming control devices to allow the Board to see the proposed light installation and make adjustments without replacing the fixtures or lamps if it is determined the light level is too bright.

Concerns were raised by some TFMs that the proposed Performance Standard, using LEED Light Pollution Reduction Credit (LPRC) as the model, would exempt architectural lighting such as the rooftop lights on top of the Zinc Building. While those lights would be exempt from Uplight and Light Trespass requirements under LEED, architectural lighting would need to be turned off from Midnight to 6:00 AM. Carol Lynn expressed concerns that the exemption for architectural lighting under LEED would allow too much light pollution.

Peter Calkins pointed out that the LEED LPRC standard was developed by lighting design professionals and the exemption for architectural lighting should remain in the Performance Standard as outlined in LEED. He further proposed that the Planning Board is a more suitable venue to review architectural lighting for projects that qualify since they can apply a comprehensive review over the entire project.

David Chilinski stipulated that more resources and education about LEED LPRC and how it should be applied to projects in Cambridge needs to happen in conjunction with this ordinance. Planning Board members, developers and designers in the planning stages need to become familiar with the Performance Standard and be aware that the Planning Board can include additional requirements beyond those in LEED.

Peter also suggested that designers should provide particular attention to illustrations that effectively portray proposed projects at night when presenting to the Planning Board. Both Peter and David related their past experience presenting to the Planning Board and confirmed that projects are thoroughly vetted, even though specific details on each fixture are not reviewed. That level of detail is the responsibility of the Inspectional Services Department (ISD) during the building permit process. However, Stuart and Peter pointed out that if the building's lighting plan does not end up like the one proposed to the Planning Board then ISD could require the building lights to be shut off.

Charlie raised concerns that if a development project gets approval for a Special Permit with a subjective review by the Planning Board that it could be a blanket exemption from following the

outdoor lighting ordinance. Not every detail is reviewed by the Planning Board and items that get approved could remain for the life of the property. It was pointed out that development projects still need to follow all ordinances and building codes and that the Planning Board can only make addition requirements, but not waive or lessen requirements.

Stuart agreed that not all items are automatically reviewed by the Planning Board but there are 4-5 City staff in CDD that look through the project to determine if it meets stated requirements and give opinions on the subjective categories when warranted. Stuart also pointed out that this is before the required review by the ISD for code compliance, which would include the rules outlined in the proposed Outdoor Lighting Ordinance.

Carol Lynn asked about the impact of the Rooftop Mechanicals Ordinance on the Planning Board review process. Stuart responded that it has improved since the adoption of the recommendations submitted in 2003. Prior to the recommendations, designers would not include rooftop equipment on the illustrations. The impact on the existing streetscape and skyline, along with noise mitigation, are a regular part of the Planning Board's review of a project and must be included with the application for a Special Permit.

Chris Basler asked Stuart if the Planning Board was bound by precedent and past decisions when looking at new projects. Stuart indicated the Planning Board is not bound by precedent and can take into consideration new technology. Carol Lynn agreed that it would be important during the review process that the Planning Board be aware of new innovations and the impact it has on adjacent neighborhoods. Lighting improvements often mean brighter lights with greater energy savings but it still has a negative impact on the environment, despite the technology advance. This is particularly present in architectural lighting.

Glenn Heinmiller, lighting design professional, stipulated that the LEED LPRC does not define architectural, façade, or landscape lighting and the Task Force can include definitions that narrow the type of lights that fall under these categories.

Charlie raised the concern that the community needs to remain vigilant about the impact of proposed development on neighborhoods since City staff and Planning Board members can unintentionally fall back on past decisions if similar designs and lighting equipment from past projects are used in a current proposals, even if it has different impacts. Stuart suggests that the Planning Board does much better at reviewing broader categories, such as architectural lighting, with subjective review for the overall aesthetic and skyline appeal and how it relates or impacts the neighborhood. They will ask about the intent of the lighting rather than specifications. This design review would be able to capture the architectural lighting that is exempted under the LEED LPRC for buildings that must go through a review process under Article 19.

Carol Lynn asked about the Planning Board's review of lights that are technically inside the building envelope but act as beacons or outdoor lights. Ranjit Singanayagam and Chris proposed including a new definition for Outdoor Lighting that included lights outside of a

building thermal envelope as defined by the International Energy Conservation Code. This would capture most light fixtures outside of conditioned spaces. Those fixtures that fall inside conditioned spaces but act like outdoor lights would be reviewable by the Planning Board if the building proposal is subject the Article 19 and the terms of the Outdoor Lighting Ordinance would apply. Stuart indicated that the Planning Board can be kept aware of these type of light and architectural features. Chris pointed out that illustrations showing the building at night will help the Planning Board to ask the right questions.

Lisa pointed out that the introduction of building thermal envelope in the outdoor lighting definition will capture fixtures in parking decks that were considered indoor lighting in earlier ordinance drafts.

Since there were members of the public that would like to provide comment, Lisa asked the TFMs where we stand with the LEED LPRC's exemption of architectural lighting in Lighting Zone 3. Charlie is concerned that the LEED LPRC is not clear and would like to know how bright lights can be if a new development follows LEED. He is concerned that there are holes in the process and there needs to be flexibility to address unintended consequences.

Carol Lynn raised a question about how to get people to make better choices for lighting and pointed out the excessive lighting on the Weeks Footbridge. Glenn pointed out that the BUG rated method makes it easy and economical for lighting designers to choose fixtures that meet LEED requirements; reduces inappropriate lighting and does not require computer modelling for every installation.

Stuart suggested that the Planning Board can ask developers for stricter requirements for projects that fall under Article 19 and Ranjit can address the rest of the lighting with the proposed ordinance. The Task Force can request additional documentation for larger projects to make it easier for the City to review properties over 10,000 square feet. Carol Lynn asked if that property size was appropriate for additional documentation and Stuart, along with other City staff, agreed it was.

Bob Woodbury requested that we go over the suggested edits to the proposed ordinance in detail at the next meeting. He had questions about some of the new definitions.

Lisa closed the discussion period by the Task Force and opened the comment period by the public.

## **PUBLIC COMMENT**

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Comments and concerns raised by members of the public attending include:

- 1) Glenn Heinmiller, resident and lighting professional.

- The LED light fixtures used in most large projects are easy to dim and can make the calculations necessary to adjust to the preference of the Planning Board if the initial approval does not appear to be appropriate.
  - The Planning Board should reserve the right to require projects to dim lighting installations as part of the Special Permit conditions.
  - Does the Planning Board have a peer review of proposed lighting projects a requirement of an application for a Special Permit? This could be a process that can be incorporated by the applicant rather than stretching City staff resources.
  - Be careful about creating a line between light trespass or pollution and aesthetics. It is very difficult to determine where that line sits and is highly subjective.
- 2) Ken Taylor, resident and lighting professional.
- Backlit panels on buildings should be included in the façade lighting definition since it is exclusively used for the outdoor illumination.
  - Provided an update that City staff and stakeholders are going to have an initial meeting about the Light Cambridge proposal and hopes that future projects under this program will be exempted under future ordinance.
- 3) Ed Brody, resident.
- Congratulates the Task Force on the strides it has made to create this ordinance since June 2015.
  - Agrees that a lighting plan requirement needs to be added to the Planning Board design narrative.
  - Can the Planning Board address light trespass of any kind? Points to 1030 Massachusetts Avenue as an example of a building that needs to be considered with interior lights that pour into neighboring residential properties. Review of site conditions and types/hours of activities and how the negative impacts on neighboring residential areas can be mitigated need to be discussed with the developer at Planning Board hearings.
- 4) Marie Elena Saccoccio, resident.
- Concerned that the changes in lifestyle and the evolving society are not considered when reviewing designs for buildings that are active 24/7. Ordinances and review powers need to evolve with the changing lifestyles.
    - David Chilinski pointed out that this was an opportunity to bring the good neighbor lighting campaign into practice so developers, designers, and property owners can think about the impacts before they get to the final design stages.

Lisa thanked everyone for their time and the meeting was adjourned.

The next meeting is Thursday, March 10<sup>th</sup> in the 4<sup>th</sup> Floor Conference Room at the City Hall Annex, 344 Broadway from 4:00-6:00 PM.