## **OUTDOOR LIGHTING ORDINANCE TASK FORCE MEETING** JUNE 10, 2015 – 5:00-7:00 PM

Task Force Members in Attendance: Members of Public in Attendance:

**Ed Abrams** Carol Lynn Alpert Chris Basler **Tooum Allitsy** Andrea Boyer Kim Courtney **Peter Calkins** Lizzie deRham Steve Lenkauskas Xavier Dietrich Ranjit Singanayagam John Hawkinson Charles Teague Glenn Heinmiller **Bob Woodbury** Heather Hoffman

Erika Johnson

City Staff in Attendance: Gary Mello Iram Farooq Carol O'Hare Tracey Joyce Susan Ringler Jeff Roberts Kenneth Taylor

Marilyn Wellons

Consultants: Phil Wellons Jeffrey Berg **Robert Winters** Paul Lutkevich Quinton Zondervan

Seventh meeting of Lighting Ordinance Task Force was held in the Ball Room of the Citywide Senior Center at 806 Massachusetts Avenue, Cambridge, Massachusetts.

## **MEETING NOTES:**

Chris Basler welcomed everyone to the 7<sup>th</sup> meeting and pointed out the handouts to the Task Force Members (TFMs), including a draft of the proposed ordinance, a narrative description of the updates made since the last meeting, and a draft of the proposed "Good Neighbor Brochure".

Chris Basler conducted a presentation (see attachment) on the proposed lighting ordinance, which included information on:

- General Requirements for the ordinance
  - Creates a simple standard for all property owners.
  - Provides option for complex and creative design.
  - Provides reasonable limits without impacting safety.
  - Addresses concerns raised by Teague Petition.
  - Collaborated with Cambridge Law Department.
  - o Introduces a clear standard for ISD to apply.
  - Provides a reasonable approach to compliance.

- Changes to exemptions proposed under the ordinance, include (but not limited to):
  - City Buildings would be required to follow the ordinance.
  - Lighting for public parks and public art that were commissioned or approved by the City.
  - Architectural lighting approved by Cambridge Historical Commission or on National Register.
  - Seasonal lighting for holidays or traditions and suggested that such lighting can be used for up to 60 consecutive days but must be removed for at least 30 consecutive days.
- Administration and enforcement of the proposed ordinance:
  - Municipal ordinance is applied by ISD.
  - o Enforcement is complaint-driven.
  - o All light fixtures require an electrical permit.
  - New and replacement fixtures must comply.
  - o Replacement light bulbs must comply.
  - Existing fixtures must comply after 5 years. This allows residents to spread the cost of required improvements over multiple years. Also the model building codes are updated every 3-5 years so this would allow for any revisions to be addressed. Also, most common small business leases are over a 5-year period so new expenses could be evaluated before the start of a new lease.
  - Administrative Exemption or conditional exemption for unreasonable circumstances can be granted by the Commissioner of ISD for an applicant that can prove it is an unreasonable hardship or detrimental to the health, safety, or welfare of the public.
  - Good Neighbor Brochure and educational campaign.
- Description of the proposed Prescriptive Standard, which is based on the framework established in the Model Lighting Ordinance by the International Dark Sky Association and the Illuminating Engineering Society. See the Narrative Update from 5/29/15 for more information.
- Description of the proposed Performance Standard, which allows more creative lighting solutions by lighting designers following recognized standards. See the Narrative Update from 5/29/15 for more information.

Jeffrey Berg, Consultant, continued with the presentation to the TFMs on the LEED Sustainable Sites Light Pollution Reduction Credit and details of that standard and how it would apply as an option under the Performance Standard. This presentation is included in the attached slide presentation.

Comments and questions were solicited from the task force members. In addition, the public and Task Force Members (TFMs) were encouraged to submit written comments on the draft.

Discussion by the task force members included the following concerns:

- 1) TFMs needed clarification on how the City would be divided into the Model Lighting Ordinance Lighting Zones that would be applied under the LEED Light Pollution Reduction Credit option of the Performance Standard. City Staff responded that the lighting zones would be administered and approved by ISD as the projects are submitted under the LEED descriptions that are outlined under the Model Lighting Ordinance. TFMs requested further clarification on how the Lighting Zones would be applied over the Cambridge neighborhoods and commercial districts so the City staff agreed to provide a map outlining the Lighting Zones for Cambridge under the Model Lighting Ordinance definitions.
- 2) Some TFMs raised concerns that the Prescriptive and Performance Standards allowed up-lighting, particularly under the Performance Standard. City Staff explained that under the LEED Light Pollution Reduction option values are limited based on the Model Lighting Ordinance Lighting Zones and are more restrictive than the 8 Lux Limit at the Property Boundary option. Some TFMs raised concerns there was not enough information about the LEED standard and how it would be applied and the total amount of lumens allowed under the Performance Standards.
- 3) TFMs raised concerns about the amount of information in the proposed "Good Neighbor Brochure" and that it did not encourage property owners to limit the amount of light that was necessary or to make improvements to existing fixtures that would not require a licensed electrician. The brochure should encourage the property owner or residents to do the right thing. Further edits will be made to encourage only lighting that is necessary and shielding improvements that do not require the expense of hiring an electrician. However, the brochure should still include information on the maximum limits proposed under the draft ordinance.
- 4) Carol Lynn Alpert provided a PowerPoint slide show (attached) that presented her concerns regarding energy use, outdoor fixtures, glare and shielding requirements. In her presentation she proposed that the regulatory process should include a recourse for residents that currently live next to nuisance fixtures or future light installations that are allowed under the ordinance but still present a nuisance to neighboring properties.
- 5) Some TFMs raised concerns that the Prescriptive Standards do not limit the number of light fixtures, only the lumen level of the individual fixtures. It was proposed that there should be a limit within a certain distance. Currently the State Building Code and Electrical Code do not have a limit on the number of fixtures but City Staff will look into other standards that might limit the spacing between fixtures that could be implemented by property owners and electricians without the assistance of a lighting engineer.
- 6) Some TFMs raised concerns that the enforcement process would take too long to address inappropriate fixtures and that a resolution would have to go through the court system if a property owner chooses to not comply with the ordinance. City Staff responded that the court system is the only available process to follow if a property owner does not comply with a municipal or zoning ordinance after the review and hearing process through ISD and the respective committee.

- 7) City Staff pointed out that the proposed limits in the draft ordinance are the maximum limits and property owners will not automatically choose to use the maximum level of lumens allowed. Most choices on lighting will be driven by availability of products and cost.
- 8) Some TFMs raised concerns that five years is too long of a phase-in period.
- 9) Some TFMs raised concerns that the Administrative Exemption is inappropriate and would not be applied consistently.
- 10) Some TFMs raised concerns that lumen levels and location of fixtures should not limited to such an extent that safety becomes a concern for the property owner.
- 11) Some TFMs proposed that a lighting curfew should be included that would require outdoor and indoor lighting be turned off if an area is unoccupied. City Staff responded that the current energy code requires new construction over 5,000 SF require occupancy sensors for interior space except certain areas such as bathrooms and required means of egress.
- 12) City Staff pointed out that the state Energy Code will be changing but does not know how it will impact the proposed ordinance.

## **PUBLIC COMMENT**

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

- 1) Resident and lighting professional.
- Has concerns about the over-all light levels allowed under this ordinance and other Cambridge lighting practices.
- Would like to see dimming controls and curfew on lights included in the ordinance.
- 2) Resident and energy efficiency professional.
- Has concerns about the over-all light levels allowed under this ordinance, specifically uplighting.
- Would like to see dimming controls and curfew on lights included in the ordinance.
- Would like to see a more comprehensive process taken similar the Net Zero Task Force.
- Has concerns about the enforcement process and suggests that an ad-hoc neighborhood board be established to review lighting or hear complaints about lighting.
- 3) Resident.
- Disappointed that interior lighting has not been addressed.
- Feels that a representative from the Public Health Department should be included on this Task Force since it is a health issue that impacts quality of life and children's development.
- Current enforcement is inadequate and does not see how this proposed ordinance will change that in the future.

- 4) Resident.
- Disappointed that the new LED street lights are not included in this review and feels that the color temperature levels are a public health hazard.
- 5) Resident.
- Concerned that there is too much up-lighting, which should be prohibited.
- There should be more restrictions on temporary, holiday, and seasonal lighting.
- Public parks should be redesigned to reduce the amount of lighting.
- 6) Resident and lighting professional.
- Believes that the ordinance follows a very comprehensive authority in LEED. It is an incredibly complex issue that took lighting professionals years to establish.
- 7) Resident.
- The process for developing this proposed ordinance is problematic and not public enough.
- 8) Resident.
- Disappointed that the process has not been more comprehensive.
- Concerned that enforcement will not address future light issues since current problematic lighting has not be addressed.

The meeting was adjourned.