

Minutes of OLEC Meeting

3 Feb 2009

7:30 PM, Room 126 Town Hall.

Present: H. Millett, B. Kosicki; Martin Graetz, G. Green

1. The minutes for the January meeting were accepted as written and revised.
2. TM and BK discussed their meeting with J.D. Head of the Schools Facility department. It was a good meeting overall. The outdoor lighting that we discussed was agreed to not be a large part of the school electricity budget overall (less than \$20,000 vs. \$1M total).

TM and BK presented data from a March 2007 measurement campaign of the HS lighting (with students) that showed the HS levels were about 6x above accepted lighting levels as recommended by the IESNA. JD noted that these recommendations (.5 foot candles) are for commercial parking lots not educational facilities, two completely different items. JD noted that there is not an industry standard for educational facilities, but he had found specifications for educational facility building projects that called for parking lot light out-put to be in the 3 to 6 foot candle range. Additionally, JD presented measurements that he had taken with a device to measure light out-put in foot candles and the results averaged less than 2 foot candles below what was called out in project specifications at other educational facilities.

JD said that one of the main purposes of the lighting in the parking lot is to ensure safety and security, in which vandalism is a small aspect. He told of a serious vandalism issue about 5 years ago, in which all windows of one school were broken by vandals. JD mentioned that the lighting levels used at University of New Hampshire and University of Houston were consistent with High school values, and therefore that Acton wasn't out of line in lighting see above levels. JD feels that the light levels are suitable, with in industry standards for educational facilities and a small price to pay to ensure some semblance of safety and security. .

TM and BK wondered whether lighting levels would actually be effective in discouraging vandalism. Research on these issues hasn't shown a connection, and in some cases [Dark campus programs] actually has shown a decrease in vandalism in some colleges. JD does not agree with this assumption.

BK asked for additional information about the UNH and UH lighting levels. OLEC wants to know if it has the wrong idea of lighting levels for schools, since BK is scheduled to give a talk before the UMASS Citizens and Planners Training Collaborative on March 21. BK also agreed to ask several professional lighting designers that he knew of their opinion of correct lighting levels for schools, which would be forwarded to JD.

BK and TM also pointed out to JD that the lights along the edge of the high parking lot

(by Capt Browns Lane) have the house side shields turned so that the light is directed toward the houses, and now toward the parking lot. JD said he would look into this, he also noted that they are trying to light the woods a bit as the school property goes into that area and kids have congregated there in the past. JD also said that he has a good friend on Captain Browns Lane that abuts the property and he has taken measurements from their house and has found zero light pollution crossing over to abutter's property.

We anticipate other meetings with JD in the future on parking lot lighting levels. (TM, BK) JD said he would be willing to entertain using lower wattage bulbs if there were no retro fit costs involved because the return on investment would not be there with this project due to the current low costs to run the lights as is.

3. School Star Party March 2. GG will repeat his slide show. BK will send him relevant information on sky glow, which might be included in this. We will implement the Globe at Night web activity that will ask students to make a judgment of the number of stars that can be seen in Orion Constellation, and with comparison to the charts provided, allows a "magnitude rating" of Acton's skies. (GG)

4. We briefly discussed the Volunteer Coordinating Committee "Job Fair", and how we would address it.

6. Earth Hour. This is becoming a significant Town event (Acton and Boxboro). We discussed the most appropriate way to pitch it to the Town residents. We will seek Acton becoming an "official" EH city. BK will write an article for the Beacon. (BK and TM)

6. Next meeting 3 March.