

Minutes of OLEC Meeting

3 Mar 2009

7:30 PM, Room 126 Town Hall.

Present: H. Millett, B. Kosicki; Martin Graetz, Gary Green, Tom McDonagh; Guests Bill Flood, Steve Pratt

1. The minutes for the February meeting were accepted as written and revised.
2. OLEC listened to and agreed to accept the changes to the February minutes about a meeting between JD Head, Schools facility, and Tom McDonagh and Bernie Kosicki of OLEC. The changed minutes on this meeting, which resulted on input from JD Head, are below:

Changed entry of Feb Minutes regarding this meeting.:

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. .

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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. We discussed the interaction between OLEC and JD Head further. TM will look up some of the references that JD used to justify the ABRHS parking lot. These were a document that JD read from UNH, and another from University of Houston. He was unable to supply an exact URL to either of these references.

BK will solicit references from professional lighting designers on how they would design for a school parking lot.

MG will review the connection between lighting and crime (or vandalism), one of the motivations used by JD for the increased levels of lighting. So far, OLEC has found only neutral connections between lighting and crime. On the other hand, people seem to FEEL that more lighting is helpful in reducing crime (vandalism). This distinction is formally recognized in a Illuminating Engineering Society of North America report.

4. Sidewalk committee. The sidewalk committee is writing a set of guidelines for sidewalks in Acton, and has asked OLEC to recommend lighting requirements for sidewalks. HM volunteered to act as the liaison to the sidewalk committee.

5. Earth Hour. Acton was proclaimed an "EH" town on the official EH website- Acton was the first town in New England to be designated. We will ask Dean and the town Manager what actions they plan to take. TM will contact the Globe to see if they will cover our story.

6. Website. We will ask Janice Ward (webmaster of PIP), and Laura Mason (Acton IT person) for advice with our website. Steve Pratt volunteered to look into upgrading the OLEC website. BK will send him our link.

7. Massachusetts Light Pollution bill. A bill for requiring shielding on all State and Town lights that are purchased with public funds is working its way through the House and Senate. BK will ask Terra Friedrichs whether and how the Acton Board of Selectmen could support this bill.

8. Next meeting April 14, Tuesday, at 7:30PM in room 121.