



GREEN ADVISORY BOARD
AGENDA
MARCH 2, 2015
6:30 PM
ACTON MEMORIAL LIBRARY – CONFERENCE ROOM
486 MAIN STREET

Link to documents numbered on this agenda:

<http://doc.acton-ma.gov/dsweb/View/Collection-6721>

Please see separate links below for items not numbered.

- Green Communities Grant Reports
 - Quarterly & Reports - Town & Schools (010 - 011)
 - Final Report Schools - (012)
- 2015 Grant Application - Project Candidates
 - *Street Light Conversion:* <http://doc.acton-ma.gov/dsweb/View/Collection-6720>
 - *School Projects:* <http://doc.acton-ma.gov/dsweb/View/Collection-6739>
- Discussion - Zero Net Energy Buildings (ZNEB)
- Discussion - Community Solar
- Charge - Proposed Draft Amendment (020)
- Green Communities Division Advisory Committee - K. Crosby appointed (*no action needed*) (030)
- Approve Minutes - January 5, 2015



**GREEN ADVISORY BOARD
MINUTES
MARCH 2, 2015
6:30 PM
ACTON MEMORIAL LIBRARY – CONFERENCE ROOM
486 MAIN STREET**

MEMBERS PRESENT: Bruce Friedman, Eric Hudson, Dennis Loria, Cameren Cousins, Mary Smith

ASSOCIATE MEMBER: Padamaja Kuchimanchi

SELECTMAN LIAISON: Peter Berry

MUNICIPAL PROPERTIES DIRECTOR: Dean Charter

CONSERVATION ANYLIST: Pamela Cady

GREEN ADVISOR TO THE SCHOOLS: Kate Crosby

RECORDING SECRETARY: Andrea Ristine

VISITORS: JD Head

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6:38 Meeting called to order.

Minutes - Approval of January 5 minutes tabled until the next meeting.

Discussion - Zero Net Energy Buildings (ZNEB)

Mr. Friedman reported that he will do more research and provide further information to the Board for future recommendation to the Selectmen suggesting that all new public building construction and renovations be ZNEB.

Discussion - Community Solar

Mr. Hudson inquired of the Board about having Jill Appel attend a future meeting regarding a solar garden. Upon query Ms. Crosby noted that Jill is from a commercial entity, Astrum Solar. The Board agreed to have Ms. Appel present information.

Charge - Proposed Draft Amendment (020) - tabled until the next meeting

SMART/ Pay as you Throw

Mr. Berry announced the public forum being held on March 4 at the Town Hall, sponsored by Green Acton which will be on the Annual Town Meeting (ATM) Warrant.

Green Communities Division Advisory Committee

Ms. Crosby has been appointed to the Committee and will attend quarterly meetings.

Green Communities Grant Reports

- Quarterly & Reports - Town & Schools (010 - 011)
- Final Report Schools - (012)

Mr. Charter reported that the 2014 Green Communities Grant projects are complete, all invoices have been paid; some funds were returned back to the State due to reduced costs from increased utility incentives. The Regional Coordinator, Kelly Brown from Massachusetts Department of Energy Resources (MDOER) is scheduled for inspections for final approval on March 17.

2015 Grant Application - Project Candidates

- *Street Light Conversion:* <http://doc.acton-ma.gov/dsweb/View/Collection-6720>

Mr. Charter reported that the next grant application due date is March 27, if more information is needed by the Board for a final recommendation to the Town Manager beyond this meeting another Board meeting can be held on March 16. The Town Manager will approve what he feels is appropriate for the grant application. Due to ATM schedule, Mr. Charter requested that all application information be provided by March 20 for submittal to MDOER. Since the Selectmen have voted it a high priority goal to complete the conversion of all of the Town's street lights to light-emitting diodes (LED), Mr. Charter is proposing to convert Acton's remaining 739 street lights, a few being mercury vapor (MV) and most being metal halide (MH) to LED fixtures. The existing 50 watt MH lights would be converted to 27 watt LEDs and the 100 watt MH would be converted to 51 watt LEDs. These conversions would reduce consumption by 50%. The cost for converting to LEDs has been reduced to \$341 per light from the previous \$1,500 per light. The total cost for this project is \$231,000; NSTAR has stated that they would provide a \$40,000 utility incentive bringing the cost down to \$191,000; the payback period would be 3.75 years. The life expectancy of LEDs is 10 years where currently it is two to four years with the existing lights. In recent past, any lights that have burned out have been converted to LEDs. This proposed conversion not only reduces electricity consumption by \$25,000 annually but also will reduce the annual maintenance costs by \$25,000 as well.

Upon query by Mr. Friedman, Mr. Charter noted that once converted only a replacement bulb would be needed, not the whole light head, if a light burned out.

Upon query by Mr. Loria, Mr. Charter reported that the Town purchased all of its street lights approximately 15 years ago; the Town currently has a maintenance contract with Wellesley Municipal Light Plant (WMLP), who install new street lights, repair and replace existing ones which is an additional cost beyond the monthly maintenance fee. Once the LED conversion is complete, WMLP is willing to let the Town out of the maintenance agreement but be available for repairs when needed.

Upon query by Mr. Hudson, Mr. Charter noted that the problem with an incremental/partial conversion is not being able to eliminate the service maintenance contract; it would behoove the Town to do all conversions at once, not some, the maintenance contract is a significant portion of the cost savings.

Upon query by Mr. Friedman, Mr. Charter reported that the utility incentive is significant and there is approximately \$60,000 in the Town's Energy Efficiency Fund.

Upon query by Mr. Loria, Mr. Charter stated that the intent is to submit for the full amount of \$191,000 for the street light conversion.

➤ *School Projects:* <http://doc.acton-ma.gov/dsweb/View/Collection-6739>

Ms. Crosby noted that as a Green Community (GC), Acton is currently at 14% and needs to get to 20%. The School's projects are based on the list within the "*Green Communities projects ABRSD 2.27.15*" available at the link above. She noted that the Blanchard School, in Boxborough, has an astonishing natural gas footprint based on a small technical assistance study by National Grid.

Ms. Smith inquired about the Blanchard School being in Boxborough and how it would affect the 20% reduction goal for Acton as a Green Community. Ms. Crosby reported that DOER rendered a decision that Blanchard is eligible for grant funds even though that building is not included in Acton's original GC benchmark. The Board may choose to support Blanchard for grant funds; she is not recommending Blanchard for this grant application.

Ms. Crosby reviewed the multiple proposed projects listed for Parker Damon, High School, Douglas, Conant and RJ Grey schools. Ms. Crosby suggested that the full amount of grant funds be committed to the School's projects for greenhouse gas reductions and the use of the Energy Efficiency Funds (EEF) be used towards the Town's street light conversion project.

Mr. Charter noted that the \$52,439 savings are real cost savings to the tax payers of Acton, DOER wants to see utility incentives and the street light conversion is attractive since some of the funds would also come from the EEF which is an added value for the State's consideration.

Ms. Smith suggested that if the Parker Damon project proposed by Ms. Crosby waited for another grant, the street light conversion might be able to be fully funded with grant funds.

Mr. Charter also noted that street lighting is not always allowable in GCG applications, and is allowed in this 2015 grant round. Ms. Cady stated that all Acton residents would see and benefit from street light conversion.

Upon query by Mr. Friedman, Ms. Crosby stated that the current focus of the Parker Damon lighting is U-florescent and cove lighting. LED lighting is plateauing now.

Upon query by Mr. Hudson, Ms. Crosby stated that she could provide representation of the payback to non-energy saving costs.

Upon query by Mr. Head, Mr. Charter stated that the Town will try to do the street light conversion regardless of grant funds but it will take approximately four years to complete by using just the EEF and it would not yield the savings on consumption or the maintenance contract; the full amount of funds from this grant would allow the Town to do the whole project at once and look onto other future projects in other buildings.

Mr. Charter briefly reviewed the three year history of DOER grant funds and how much the Schools received compared to the Town.

Mr. Hudson noted the budget relevant to the percent divided between the Schools and the Town, the Schools receive the higher percent of the tax dollar.

Mr. Charter also noted that the vehicle fuels are higher on the Town side due to highway, fire and police vehicles.

Ms. Smith noted that if the Board foregoes just one proposed school project on the list there would be enough funds possible for both proposals.

Upon query by Ms. Smith, Mr. Charter reported that there is approximately \$60,000 in the EEF.

Ms. Smith suggested that the proposed LED project at the Parker/Damon wait until another grant round.

Mr. Loria noted that the numbers are similar between both proposed LED projects

Upon query by Mr. Friedman, Ms. Crosby stated that the thermostat project is more important with her proposed lighting projects being at the bottom and all of the School's projects would pass with DOER.

Upon query by Mr. Friedman, Mr. Charter noted that with the EEF balance factored in it would bring the proposed street light conversion down to \$130,000 within the grant application request.

Upon query by Ms. Cousins, Mr. Charter reported that the full rebate from NStar (now Eversource) would not be provided and the maintenance service contract would remain in place for several years until the conversion is complete, it is also difficult to convert the billing with NStar.

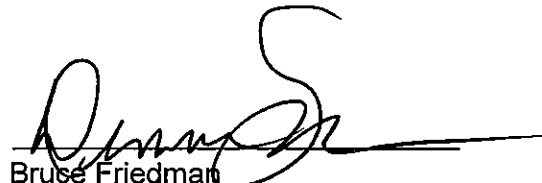
Upon query by Mr. Friedman, Mr. Charter stated that the existing 50 and 100 watt bulb fixtures are separated by side and main streets; WMLP conducts the work for the same price regardless of the type of lights converted to LED.

Mr. Loria moved that the Board submit the grant application for the School's projects as presented and the remaining portion of the grant application be used towards the street light conversion project replacing the fixtures with the greatest savings (100 watt) first. Mr. Hudson 2nd, motion passed four aye; one abstained (Ms. Smith, not currently re-sworn in as a member).

Next meeting May 4 due to Annual Town Meeting on April 6; no meeting to be held on March 16.

Mr. Charter stated that his office will need all necessary documentation by March 20 or earlier for the grant submittal; the Board agreed and supported the deadline request.

8:20 Meeting adjourned.


Bruce Friedman
Chair

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