TOWN OF LYNDEBOROUGH STREET LIGHT STUDY COMMITTEE MEETING MINUTES Monday, August 27, 2018 at 7:00 p.m. at Citizens' Hall

Committee Membership: Chair Steve Brown, Vice Chair Andy Roeper, Greg Kreider, Rick McQuade (BOS), John Pomer, Charlie Post, Bob Rogers(Planning Board), Stephanie Roper (Heritage).

- I. Call to Order: Chair Brown called the meeting to order at 7:02 p.m.
- **II. Introduction of Members Present:** Steve Brown, Andy Roeper, Rick McQuade, John Pomer, Charlie Post, Bob Rogers, Stephanie Roper, Lisa Post, Secretary.
- III. Chair's Review of Committee's Mission and Lighting Plan: Chair Brown thanked members of the public for attending this informational session and looks forward to receiving their input. The Committee was formed based on the town's vote to begin a Street Light study to take advantage of opportunities from Eversource rebates to upgrade to LED lighting. Currently there are twenty mostly incandescent lights in town. Eversource will be discontinuing servicing them in the near future because they consume so much energy. We looked at which areas are good candidates to be upgraded, which areas might require additional lighting and areas where it would make sense to remove them because many of them have been in place for a long time and are circa 1940's or 50's. The Committee used cost as one guide as new LED's require one tenth the power consumption over current lighting. Members' felt that each light should "earn' its place and if it made sense to have a street light in that position. We gave thought to where to add lights where people may be walking. For those lights that remain, we questioned if it made sense to upgrade them. We formed the basis of our discussions around cost, light location, preservation of the town's rural character, aesthetic fixtures, light pollution and light trespass. Chair Brown provided community members with a GIS Lighting Map: Plan B 08/27/2018 (document attached) Key: X=Removal of Lighting, U=Upgrade Existing to LED, A=New LED Light. Based on our criteria the Committee recommends removing 15 lights and upgrading/adding 9 lights. There are ongoing discussions whether it makes sense to add additional lighting at the Highway Garage and Citizens' Hall. The output to this activity is a report to the Town due in October. It will go to a discussion and vote at the March 2019 Town Meeting. There was discussion on what to do with the lights we have that Eversource does not want. The Historical Society will take one, and it may be possible for citizens to purchase a piece of Lyndeborough nostalgia. We will do some initial cost estimates including rebates. The return on the Town's investment is approximately one year.

We sent notes out to community members that would be affected by the addition or deletion of lights in order to solicit input. We discussed with the Police Department additional lighting for safety concerns. We took out lights that no longer had a reason to be there. We added a light by the Library to illuminate the corridor for when the crews are walking back and forth from the Library to the Fire Station. We added a light at Route 31 and Center Road because this is a busy intersection. We are upgrading a light at Center Hall since we have gatherings there. We are adding a light on Citizens' Hall Road to illuminate when folks are walking back and forth to their cars for when there is overflow parking. We are keeping the lights across from the school for site distance. We will change the angle of the light that shines over the park and move it over to the road. This will illuminate the compact Village area. For areas that are not in the village: coming up Route 31, Pettingill Hill, Glass Factory and those by Brandy Brook will be removed.

When we talk about lights we talk about wattage: the power they consume; color temperature: yellow, blue white; lumens. The amount of light output varies by bulb type. LED lights have a more focused beam providing more light in a smaller area. They have a narrow cone angle which comes in different shapes and patterns that can be adjusted by the manufacturer. Incandescent lights are not directional and spray light everywhere. The color temperature, typically warm whites are 2700-3000K. The blues are higher, hotter color temperatures 4000K, 5000k or 6000K. Most people recommend the warm light, including the American Medical Association which did studies that shows blue light interrupts the circadian rhythm, reduces melatonin production and other health problems. It is our recommendation to go with the 3000K warm whites for the night. LED lights are only 25 Watts but they have a relatively high luminous output, so even though we are taking out lights with a higher wattage and higher power consumption, they are as good or better because they are more efficient and put out more light. The Committee is looking at input from information provided at Community Day and feedback from this evening on concerns, likes and dislikes of the plan which will be included in the October Report to the Town.

Stephanie Roper provided the history on the existing lights: The first gas lights were put up 100 years ago along Route 31. Lights were put up slightly before WWII along Putnam Hill (which as School Street) to light the way from the village to the South School. When that school closed and the Central School went in, several lights were put up along either side of the hill. Currently, this school is just a kindergarten and does not have the foot traffic the way it did before. There is a light by the "little" store which has not been open for 20 years. The light on Glass Factory Road was originally placed there for a ballfield that has not been in existence since the 1930's. The original purpose is long gone for many of these lights. This one of the reasons we are talking about eliminating these lights.

IV. Community Forum and Public Comment: Chair Brown opened the floor for comments.

Doug Powers: I have lived in town for a dozen years and read your minutes and saw that no one was coming to these meetings. With all the work you were doing, I thought someone should come and everyone did. I am very enthusiastic that when you interviewed some suppliers they talked about the being certified by the Dark Sky Association and it struck me that it is no longer a fringe idea. The Dark Sky is well-established which is the primary reason I showed up. I am convinced you are doing great job thinking about light pollution and unnecessary light. You are doing an amazing amount of detailed worked. Chair Brown replied that it was heartening for him when the Committee was talking to these companies that everyone was a full cut-off which means light does not go up past the horizontal, light is designed to go down and not up. If you have come up Route 31 during snow or ice, there are certain areas where everything is a glow because the lights that are in place are shinning up which becomes a driving distraction. Driving through, the sideways shining light goes into your eyes and closes the pupil which makes things darker which is counter intuitive. That is why it is important that the lights are a full cut-off.

Maria Brown: Regarding adding lights at the Library and Fire Department when they have a call or when we have meetings here (Citizens' Hall), can you turn the lights off when not in use? Chair Brown responded that the Committee had discussed this. The LED lumens have a photo sensor that turn on at twilight and turn off in the morning light. As the seasons change and it gets dark earlier the lights stay on for longer period of time. The Committee is not looking at lights that are controllable due to cost, complexity and effort to get them to work properly.

Doug Powers: You mentioned that the results of all this will be a report to the town in October and will go to a vote at the Town Meeting in March. Is it possible at the Town Meeting each light will be up for debate? Chair Brown indicated that it was possible. However, a very specific Warrant Article could be crafted and amended on the floor. In terms of authority, the Committee has none. We collect data, make recommendations and present it to the town; and the town decides what to do. Vice Chair Roeper suggested the place to get into the details is at Budget Hearing. Stephanie Roper added that two lights are not billed to the town. The light across from the school and the light on the north side of Pettingill Hill are billed to the School District. Charlie Post indicated that the School Board was in favor of spending up to \$250 to replace the lights. Chair Brown indicated that you pay for the cost of the fixture, you pay to put up the light and there is a rebate of \$100 per fixture. This brings the cost of the lighting fixtures we are looking at to less than \$100 per fixture and the operating cost is much less. The annual lighting bill the town pays to Eversource is \$3,209. By eliminating half the lights and going to lower wattage, the expectation is the cost will go way down.

Mark Chamberlain (Selectman): Questioned if the companies interviewed by the Committee meet the Eversource requirements for rebates. Chair Brown confirmed they do and replied Eversource does require DCL Certified fixtures on their poles.

Chair Brown questioned whether people liked the lights?

Joan Hyde commented that she likes two lights on Glass Factory Road because there is early morning traffic between 4:00-6:00 a.m. and believes the lights help to keep things safe. Vice Chair Roeper indicated that the Committee talked about safety issues associated with the trestle and are trying to get reflectors installed but mentioned that technically the Town cannot touch the bridge but can make a lot of noise.

Chair Brown states that going forward we will develop the report. We spoke to two companies who will be providing us information to the Committee. Chair Brown will work with T/A Boland to follow up on that. The Committee will meet a couple more times to discuss the public input before writing the report which will go on the Town Website. The report will include: dialog, thought processes, pros/cons and technical data. Chair Brown, Vice Chair Roeper or another Committee member will present the work the Committee has done at the Town Meeting in March. My personal hope is that the town will embrace some if not all of our recommendations. LEDs with the full-cut off are more efficient and are

focused. On the downside, incandescent lighting is quaint, rural and rustic harkening to a different time. The new LEDs fixtures are basic and may take some time to get used to them.

Stephanie Roper questioned the public whether they would like more lights for safety reasons and if there is a specific light or lights the Committee should add? There was no comment on additions from the public. Bob Rogers indicated that all meetings are open, posted and available to the public and stated if after the meeting today if anyone has any comments or suggestions, please do attend future meetings. Stephanie Roper recommended the public look up at the lighting. T/A Boland commented that there is a conflict with our next meeting scheduled for September 10.

Maria Brown questioned the cost to purchase nicer fixtures. Chair Brown responded that one vendor pulled out of a town bid with very specific lights fixtures because it became too complicated, and the other company priced custom fixtures at \$600-\$800. From a cost perspective, the Committee decided not to go that route. Vice Chair Roeper indicated that part of the decision was due to the cost of keeping a spare lumen in town to swap out. With custom fixtures there would be two additional charges, one to remove the light and the other to replace it. T/A Boland added that he spoke to other communities who said that you run the risk of losing the rebate with custom fixtures. Stephanie Roper added that our lights are on telephone poles not on ornate iron stand-alone poles.

Chair Brown encouraged the public to attend additional meetings and thanked them all for attending.

- V. Decision Making Actions: None
- VI. Old/Tabled Business: None
- VII. New Business: Review and Approval of 08/06/2018 Meeting Minutes

 A Motion was made by Bob Rogers to accept the minutes as corrected, Seconded by John Pomer. Voting: All in favor.

 Motion passed 7-0.

VIII. Items not on Agenda:

Chair Brown questioned if the Committee reached a practical end of the road or if more research work needed to be done. Overall, the Committee felt satisfied, although, Ms. Roper suggested that safety for lighting might become an issue at the Town Meeting. Chair Brown suggested the report contain specifics on each of the areas assessed to recognize that it was a consideration in the Committee's recommendations. He encouraged members to take some time to think about the process the Committee went through and document it. John Pomer suggested that the history and medical studies, as well as, the return on investment be included in the report. Vice Chair Roeper suggested preparing talking points for questions that may come up as well as providing an explanation for each light.

The Committee agreed to move the next meeting date from Monday, September 10 to Monday, September 17, 2018.

- IX. Department Head Reports: None
- X. Adjournment: 8:00 p.m.
- A Motion was made by Bob Rogers, Seconded by Andy Roeper to adjourn the meeting. Voting: All ayes. Motion passed 7-
- Respectfully Submitted,
- Lisa C.M. Post, Secretary
- Next Meeting: Monday, September 17, 2018 at Citizens' Hall 7:00 p.m.