DPW, THEIR TREES, AND THEIR SIDEWALK AND CYCLE TRACK LIGHTING

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Olmsted pictures F. B. Smith 12-23-1915 1310-59 and 1310-47

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THANK YOU to DPW Crew members:

You provide:

• Tree shade for walking and biking during hot days.

• Lighting for walking and biking in the cool of the night.

Please pay close attention to these talks because your ideas are needed.
Dark Sky Lights:

“Dark sky compliant lights” direct the light to the sidewalk and path, allow the trees to sleep, and do not shine into the sky or windows. Some of the pictures in this presentation are not dark sky.

https://www.darksky.org/our-work/lighting/
This talk will cover:

1. What we have now for drivers and what we need for walkers and bicyclists.

2. Research on trees, lighting, and safety

3. What we could have for “low down” lighting, including on poles and catenary lighting, instead of the cobra head.

4. General aesthetics in lighting.

5. Flattering lighting on faces and to see the approaching pedestrian or bicyclist.

6. Consistency in lighting so you know you are on a sidewalk or cycle track and the light level is guaranteed.
1. What we have now for drivers and what we need for walkers and bicyclists.

Trees and Lighting
During the day, “heat island effect” can be brutal.

While drivers are in air conditioned cars...
...pedestrians are walking in the sun
...bicyclists are riding in the sun.

https://www.cargurus.com/Cars/articles/what_to_do_when_your_cars_air_conditioner_stops_working

During the **night**, everyone should have quality lighting.

While drivers have headlights…
…pedestrians must hope for street lights
…bicyclist’s headlights are not effective or safe.

https://www.geico.com/living/driving/auto/auto-care/headlights/


With climate change…

We need:

a. Many mature trees for shade.
b. Lighting on the cycle track and sidewalk, not the street.
2. **Research** on trees, lighting and safety.

Trees in full leaf and low limbs block street lights

Research on trees and lighting showed limbs block the light

- In the winter, the pedestrian can see and an approaching pedestrian can see them.
- In the summer, the pedestrian is in the dark and an approaching pedestrian cannot see their face.

Research on trees and lighting showed limbs block the light. Where there are no branches blocking the light, the pedestrian can see and the approaching pedestrian can see them. With tall cobra heads, do DPW workers want to prune low branches, have no trees, or only have trees on one side of the street?

3. What we could have for low down lighting, including on poles and catenary lighting, instead of the cobra head.

Hudson River Parkway pole

Strung catenary lights

For lighting environments, we can:

- Light with sporadic storefront lights.
- Light down over the sidewalk and cycle track with strings of catenary lights.

https://www.femmecyclist.com/biking-at-night/

Brief history of the catenary light:

- The catenary light was initially hooked to the overhead streetcar wires to light the street and sidewalk. In other instances, the catenary light provided the only light on the street.


Without the streetcar wires, the catenary lights need a pole:

We don’t have streetcar poles but we do have telephone poles. What do you think of stringing catenary lights from telephone pole to telephone pole, just below cable lines and limbs?

http://www.heritagetrolley.org/defOverheadWire.htm
4. General **aesthetics** in lighting.

https://www.pinterest.com/pin/334251603589070262/
Catenary lights need aesthetics:

With catenary lights, we should not have too many poles.

Large solar panels on the poles are not aesthetic.

Residents on a street in New Jersey objected strongly to the installation of solar panels on the poles.

Low lights on telephone poles could be aesthetic.

Instead of cobra heads high on wooden telephone poles, what do you think of two short arms low down and parallel to the street on a telephone pole with dark sky lights to light the sidewalk and cycle track?

5. Flattering lighting on faces and to see the approaching pedestrian or bicyclist.
For lighting environments, we should:

• Light the faces of the approaching bicyclists and pedestrians with flattering light, as with the railing in the Dutch Hovenring.

https://bicycledutch.wordpress.com/2013/09/01/hovenring-at-night/
For lighting environments, we should also:

• Light the faces of the approaching pedestrians and bicyclists so they look younger and more handsome, as in expensive restaurants.


https://www.visitlakenorman.org/blog/post/30-outdoor-dining-spots-around-lake-norman/
6. Consistency in the lighting so you know you are on a sidewalk or cycle track and the light level is guaranteed.
Consistency in lighting

Cycle track and sidewalk lighting should be the same for way finding and to let our eyes adjust.

The fixtures can vary but the light height, intensity, and color should be the same.

The trees can vary in height and species.
Questions for you later:

1. With tall cobra heads, do DPW workers want to prune low branches, have no trees, or only have trees on one side of the street?

2. What do you think of stringing catenary lights from telephone pole to telephone pole, just below cable lines and limbs?

3. What do you think of two short arms low down and parallel to the street on a telephone pole with dark sky lights to light the sidewalk and cycle track?
Thank you

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