City of Hilshire Village Texas

Interim notes on Street Lighting

Hilshire Village City Council Meeting Russell Herron - Mayor October 12, 2021

Introduction

The purpose of this report is to organize the information gathered thus far and enumerate the facts that need to be obtained prior to formulating a plan for the improvement of street lighting in Hilshire Village. The information presented here should not be interpreted as endorsing any specific approach to street lighting. It is intended to promote careful consideration of the options before launching construction activities.

Background

Since 2020, the City has been investigating options for improving street lighting. Most of the information has been obtained through Center Point Energy.

Although there a many different styles of street lights, there are two major types to consider. They are shown in the illustration at the right. The overhead light (frequently called a Cobra style) is designed to arc out over the street and project down onto the road surface. The classic light (also called a decorative style) is mounted on top of a vertical pole and projects light in all directions. Normally, overhead lights have a mounting height that is higher than classic lights.

Currently, the majority of the street lights in Hilshire Village are the overhead type. The exceptions are Hickory Shadows, Hilshire Oaks, Hilshire Villas, and Hilshire Grove. A majority of the overhead lights in the City are mounted on wooden "telephone" poles belonging to Center

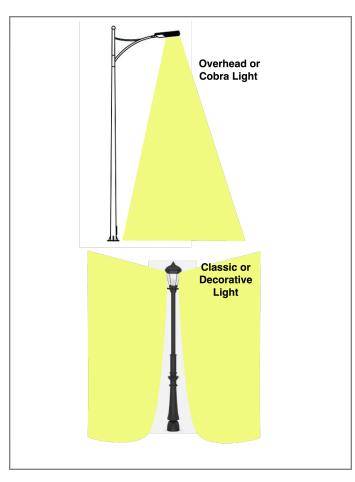


Figure 1 - Two basic styles of street lighting

Point. It appears that some of the lights were placed wherever there was a pole available without consideration of the area it is lighting. From the varying colors of

the existing lights, it appears that some have been retrofitted with LEDs and others have not. There also seems to be an inconsistency of mounting height, e.g. some



Figure 2 - Spring Valley classic street lights. Note the block party going on in the middle of the street.

are mounted at 25 feet or more while others are at 15 feet or less.

Although the current lighting in Hilshire Village is inconsistent, we have locations which are well lit. An example of an intersection in the City is shown in Figure 3 below.



Figure 3 - Example of well lit intersection in Hilshire Village

In contrast there are some areas that have no street illumination and are consequently very dark. Figure 4 compares a stretch on Glourie with and without car headlights on.





Figure 4 - Night view on Glourie with headlights on (upper) and off (lower).

Citizen and Council Response

During the discussions over the past six months topics have been introduced by both residents and council members. A summary of these points (both pro and con) are shown below:

Pro

- 1. Better lighting is needed to enhance safety of the streets.
- 2. Crime is on the rise, better lighting is needed to prevent burglaries.
- 3. Better lighting will enhance property values.
- 4. Decorative lighting will improve the aesthetics of the City.
- 5. Currently lights on telephones poles are an eyesore.

Con

- 1. Residents like the rural nature of the City and more lights will decrease property values.
- 2. Classic street lights will illuminate front yards which the owner may not want.
- 3. Increased lighting creates more light pollution.

Priorities to Guide Planning

From the topics above, we could conclude that there are a few key considerations when addressing the street lighting issue:

Safety, Property Values, Aesthetics, Light Pollution

While it is easy to get consensus on the importance of these four issues, the complexity comes when reconciling them with each other and achieving a common interpretation each one. For example, safety may be improved by lighting the City like the Kroger Center parking lot. However, it doesn't do much for the aesthetics. Decorative street lights that are in fashion today may not achieve the most effective illumination of the right of way and may contribute to skyward light pollution.

Necessary Information for Decision Making

To make intelligent decisions on what is best for the City, we need to fully understand the options. To date Center Point has not been able to supply this information. The following list enumerates many but not necessarily all of the facts that are needed.

- 1. We need an easily readable map of the City with the locations of all of the existing lights along with an approximation of their cone of light.
- 2. An inventory of which lights are on poles that have multiple functions vs only supporting a light. This should give us a better understanding of which poles could be easily replaced with more suitable supports.
- We need technical specification on the coverage of the two types of lights (overhead and classic) and how the right of way would be illuminated.
- 4. We need to know what is the optimum height for the lights. For example, is a classic light more effective with a 10 ft pole or a 13 ft pole or how high should an overhead light be to give maximum benefit.
- 5. As an adjunct to #4, how can the spacing of lights be determined given the constraints of property lines and lot sizes?
- 6. Where will new light poles need to be located. Many examples indicate that light poles should be near the curb or at the edge of the right of way. In Hilshire Village, the edge of the right away is normally in the middle of the drainage ditch.
- 7. Is there an option to use a designer or contractor other than Center Point?
- 8. An easily understood set of options needs to be prepared that demonstrates the tradeoff among Cost, Safety, Aesthetics, and Environment which can be presented to the residents for their consideration.

ADDITIONAL COMMENTS FROM COUNCIL MEMBER SCHWARZ, CHAIRMAN OF THE COMMITTEE FOR IMPROVING LIGHTING IN HILSHIRE VILLAGE:

SAFETY: Safety is the most important reason to improve the lighting

- Children playing
- Runners/Walkers
- Bikers/Rollerbladers

CRIME: Crime is on the rise in Houston and Hilshire Village

 Spring Valley Police Chief and his Department fully endorses lighting upgrades like the City of Spring Valley has installed to deter criminal activity (car breakin's, cars put on blocks and stolen tires and armed robbery) and for the safety of the residents and their guest

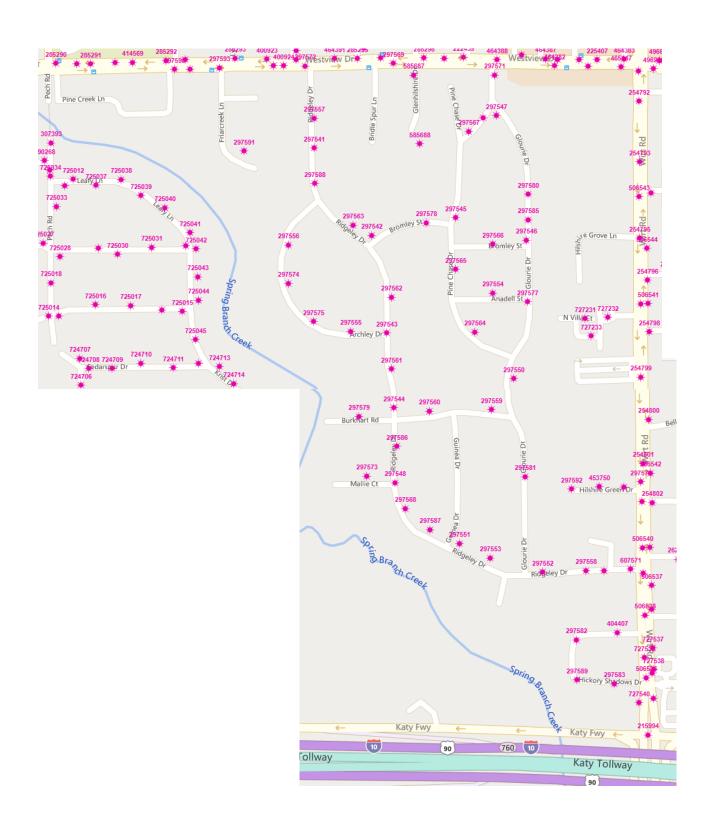
AESTHETICS AND PROPERTY VALUE:

- Better lighting will enhance property values "and the aesthetics of the city"
- Other Villages have upgraded or are planning to upgrade their lighting.
- Hilshire Village needs to continue to attract new buyers and retain its current residents

The City is in receipt of:

- Existing Light Infrastructure Maps that include type of lighting800 lumens, the color temp is 3,000k and they are 45 watts
- Data regarding lumens and watts for decorative lighting
- Map showing potential locations suggested by CenterPoint for 1st year plan

EXISTING LOCATION OF LIGHTING



LIGHTING DESIGN SERVICES

ACCOUNT SUMMARY AS OF: 9/6/2012

CITY OF HILLSHIRE VILLAGE

MV = MERCURY VAPOR

HPS = HIGH PRESSURE SODIUM

MH = METAL HALIDE

	SORTED	BY	STREET.	BLOCK
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SORIEDBYS	TREET, BLOCK				WH = WETA	L HALIDE	
LIGHT	BLOCK PI	REFIX	STREET	SUFFIX	ZIP ST	YLE TYPE	LAMPS LACE
297541	1300		RIDGELEY		77055 COBR	100W HPS	1 OH
297542	1242		RIDGELEY		77055 COBR		1 OH
297543	1218		RIDGELEY		77055 COBR		1 OH
297544	1202		RIDGELEY		77055 COBR	100W HPS	1 OH
297545	1302		PINE CHASE		77055 COBR	100W HPS	1 OH
297546	1234		GLOURIE		77055 COBR		1 OH
297547	1321		PINE CHASE		77055 COBR		1 OH
297548	1100		RIDGELEY		77055 COBR		1 OH
297549	6900		WIRT	RD	77055 COBR		1 OH
297550	1100		GLOURIE		77055 COBR		1 OH
297551	1000		RIDGELEY		77055 COBR		1 OH
297552	1000		RIDGELEY		77055 COBR	100W HPS	1 OH
297553	1000		RIDGELEY		77055 COBR	100W HPS	1 OH
297554	8000		ANADELL		77055 COBR	100W HPS	1 OH
297555	1200		ARCHLEY		77055 COBR	100W HPS	1 OH
297556	1200		ARCHLEY		77055 COBR	100W HPS	1 OH
297557	1300		RIDGELEY		77055 COBR	100W HPS	1 OH
297558	7900		RIDGELEY		77055 COBR	100W HPS	1 OH
297559	8000		BURKHART		77055 COBR	100W HPS	1 OH
297560	8000		BURKHART		77055 COBR	100W MV	1 OH
297561	1200		RIDGELEY		77055 COBR	100W HPS	1 OH
297562	1200		RIDGELEY		77055 COBR	100W HPS	1 OH
297563	1300		RIDGELEY		77055 COBR	100W HPS	1 OH
297564	1200		PINE CHASE		77055 COBR	100W MV	1 OH
297565	1200		PINE CHASE		77055 COBR	100W HPS	1 OH
297566	8000		BROMLEY		77055 COBR	100W HPS	1 OH
297567	1300	w	PINE CHASE		77055 COBR	100W HPS	1 OH
297568	1100		RIDGELEY		77055 COBR	100W HPS	1 OH
297569	1300		WESTVIEW		77055 COBR	100W MV	1 OH
297570	0		WIRT		77055 COBR	100W HPS	1 OH
297571	1327		GLOURIE		77055 COBR	175W MV	1 OH
297572	0		WESTVIEW		77055 COBR	175W MV	1 OH
297573	8000		MALLIE		77055 COBR	100W HPS	1 OH
297574	1200		ARCHLEY		77055 COBR	100W HPS	1 OH
297575	1200		ARCHLEY		77055 COBR	100W HPS	1 OH
297576	7900		RIDGELEY		77055 COBR	100W HPS	1 OH
297577	0		ANADELL		77055 COBR	100W HPS	1 OH
297578	8100		BROMLEY		77055 COBR	100W HPS	1 OH
297579	8000		BURKHART		77055 COBR	100W HPS	1 OH
297580	1300		GLOURIE		77055 COBR	100W HPS	1 OH
297581	1100		GLOURIE		77055 COBR	100W HPS	1 OH
297582	7922		HICKORY SHADO	SWC	77055 COBR		1 UG
297583	7950		HICKORY SHADO		77055 COBR		1 UG
297584	1335		GLOURIE		77055 COBR		1 OH

297585	1301	GLOURIE	77055 COBR	100W HPS	1 OH
297586	1125	RIDGELEY	77055 COBR	100W HPS	1 OH
297587	1100	RIDGELEY	77055 COBR	100W HPS	1 OH
297588	1305	RIDGELEY	77055 COBR	100W HPS	1 OH
297589	7938	HICKORY SHADOWS	77055 COBR	100W HPS	1 UG
297590	0	WESTVIEW	77055 COBR	100W MV	1 OH
297591	1300	FRIARCREEK	77055 COBR	100W HPS	1 OH
297592	7900	HILSHIRE GREEN DR	77055 COBR	100W HPS	1 OH
297593	0	WESTVIEW	77055 COBR	100W HPS	1 OH
404407	7900	HICKORY SHADOWS	77055 COBR	100W HPS	1 UG
453749	7906	HILSHIRE GREEN DR	77055 COBR	100W HPS	1 UG
453750	7914	HILSHIRE GREEN DR	77055 COBR	100W HPS	1 UG
585687	1300	GLEN HILLSHIRE DR	77055 POST	100W HPS	1 UG
585688	1332	GLEN HILLSHIRE DR	77055 POST	100W HPS	1 UG
596907	8301	WESTVIEW DR	77055 COBR	100W HPS	1 OH
607571	0	RIDGELEY DR	77055 FULL	250W HPS	1 OH