

## APPENDIX H

# Streetlight Policy

### I. SUMMARY:

The goal of this policy is to provide for effective procedures for review, approval, and installation of streetlighting throughout the City of Friendswood. This Policy will enforce requirements specifically targeting areas where existing lighting conditions are deemed to be insufficient for public safety and areas of new residential, commercial, and industrial development.

### II. GENERAL:

Streetlight installation is intended as the basis for fixed lighting on all roadways. Careful considerations shall be taken in making streets and roadways safe during hours of darkness. Certain criteria as shown in the Warranting section of this policy shall be a part of the evaluation process for the need of streetlights. Streetlights are to be installed on City owned streets to illuminate the roadway. They are not to be installed on private streets, parking lots, or for security lighting. A street segment shall be in the City Limits in order to be eligible for streetlights. All streetlights are installed, owned, and maintained by Texas New Mexico Power Company (in Galveston County) or CenterPoint Energy (in Harris County). Once a streetlight is installed, the City shall pay the monthly operating and maintenance cost of the streetlight.

### III. WARRANTING:

The Warranting Process that is used is based on the Transportation Association of Canada (TAC) Guide for Roadway Lighting (27) which was based on the Roadway Lighting Handbook published by the U.S. Department of Transportation. This Streetlight Warrant system is conditional based and not observed based system. Factors that are taken into consideration are divided into four sections: 1) Geometric, 2) Operational, 3) Environmental, and 4) Collision. Each individual factor is rated from 1 to 5 in accordance with the parameters listed in the warranting worksheet. Each individual factor is weighted as a percentage of the whole, and on a point system of 0 to 100, the warranting condition must achieve a minimum of 60 points to warrant the installation of a streetlight, yet the City Engineer is the final authority of approval for a streetlight.

#### a. GEOMETRIC SECTION:

There are eight factors that are considered under the Geometric Section of the Streetlight Warranting Process:

- Total number of lanes including center turn lanes.

- Width of the lanes.
- Number of median openings per mile.
- Number of driveways and entrances per mile.
- Horizontal curve radius.
- Vertical grade.
- Sight distance.
- Parking.

b. OPERATIONAL SECTION:

There are five factors that are considered under the Operational Section of the Streetlight Warranting Process:

- Signalized intersections.
- Left turn lanes.
- Median width.
- Posted speed.
- Pedestrian activity.

c. ENVIRONMENTAL SECTION:

There are five factors that are considered under the Environmental Section of the Streetlight Warranting Process:

- Percentage of development adjacent to roadway.
- Area classification
- Distance from development to roadway.
- Ambient lighting.
- Raised median curb.

d. COLLISION SECTION:

There is only one factor in the Collision Section of the Streetlight Warranting Process. This is a Night-to-Day ration of accidents occurring on the street that is being reviewed.

Lighting is warranted where a total point-score of 60 or more is achieved. Lighting of equal scores may be prioritized by also using the different sections in the Warranting Worksheet.

#### IV. NEW SUBDIVISION INSTALLATION

As per the approved Streetlight Policy for New Development approved by Friendswood City Council Action, the following shall apply:

- a. All subdivision plats shall include a provision for streetlighting using concrete poles.
- b. Streetlights shall be provided at all corners and intersections and, in addition, at two hundred fifty (250) foot intervals along residential streets. Additional lights may be required at the option of the City Engineer.
- c. Each streetlight shall be at least one hundred (100) watts on local and collector streets and two hundred fifty (250) watts on major thoroughfares.
- d. All necessary easements for streetlighting shall be shown on the final plat prior to final approval by the City and the Planning and Zoning Commission.
- e. The City shall authorize the installation of public streetlights after acceptance of the subdivision by the City for the contractor's one-year maintenance period.

#### V. PRIVATE SUBDIVISION INSTALLATION

- a. The Developer/Owner may install a private streetlight system in accordance with the standards outlined above, except that ornamental poles other than concrete may be used. Wood poles shall not be used in any new streetlighting system.
- b. The Developer/Owner shall be required to provide for the installation of this private streetlight system and also provide for its perpetual operation and maintenance.
- c. The final plat shall indicate that streetlighting is private and this shall also be labeled on all construction plans.

#### VI. EXISTING SUBDIVISION INSTALLATION

The City's franchise utilities Texas-New Mexico Power (in Galveston County) and CenterPoint Energy (in Harris County) have established programs for installing streetlights in the City. The City will evaluate all requests for streetlights within the guidelines of this policy and the warranting system.

##### a. STREETLIGHT POLE TYPES

In all cases, any pole to be installed shall match any existing poles already installed inside the subdivision.

- Wooden Poles – lights shall only be installed on existing wooden utility poles served by overhead distribution. The light shall be installed on the existing wooden pole. An additional wooden pole may be installed to serve a specific need. Other than stated previously, no wooden shall be used in areas where the power is distributed underground.

- Concrete Poles – shall be installed on other areas such as commercial/industrial/collector roads within the city limits.
- Metal Poles – shall be used on all thoroughfare roads inside the City Limits.
- The exception to the aforementioned poles would be the streetlights required in the Downtown District by the Design Criteria Manual.

b. STREETLIGHT SPACING AND PATTERN

- All intersections shall have a minimum of one (1) streetlight.
- Undivided roadways less than sixty (60) foot width from back of curb to back of curb shall stagger the streetlighting along both sides of the roadway.
- Undivided roadways greater than sixty (60) foot width from back of curb to back of curb shall pair the streetlighting along both sides of the roadway.
- Divided roadways shall pair the streetlighting along both sides of the roadway or as an option approved by the City Engineer, substitute one (1) streetlight in the middle of the median/dividing device in lieu of two (2) along both inside lanes of the divided roadway.
- Spacing in rural areas that have large acreage lots may be extended to five hundred (500) foot spacing and staggered along both sides of the roadway.

c. STREETLIGHT COST

The cost of installing new or additional streetlighting would be absorbed by the City of Friendswood, however in the event that there is not available power on the roadway (either overhead or underground), the City would partner with the Homeowners Association (HOA) or other responsible entity.

- In either case, the City would need to have a letter from the HOA or other entity approving the installation and location of the new streetlight.
- The HOA or other entity approving the installation would be required, if power is not available in the Right-Of-Way of the roadway, to purchase,

provide, have surveyed, and recorded all necessary easements for the installation of said pole.

## VII. STREETLIGHT REQUEST PROCEDURE

- a. Applicant completes a request form (Exhibit “A”) and submits to the Engineering Department at [www.ci.friendswood.tx.us/350/Publications-Forms](http://www.ci.friendswood.tx.us/350/Publications-Forms).
- b. Engineering informs approving authority of the request, and steps needed to complete the process.
- c. Engineering gathers information for Warranting Worksheet.
- d. Engineering draws Exhibits and forwards information to the City Engineer for review.
- e. After City Engineer approves, Engineering requests the City Manager approve the installation of the streetlight and gives authorization to the appropriate franchise utility to install.
- f. The appropriate franchise utility reviews the streetlight request and conducts the installation (if approved) of the proposed streetlight within a designated time period.
- g. Engineering distributes confirmation letter to the applicant and approving authority giving an approximate date of installation.

## VIII. LIGHTING PROBLEMS

All streetlights, poles, and wiring remain the property of the franchise utility. If the streetlight is not working properly, or is damaged please contact the appropriate franchise utility.

- a. Galveston County would be Texas New Mexico Power at (281) 996-0453.
- b. Harris County would be CenterPoint Energy at (713) 207-2222.

Please give the franchise utility the pole number (approximately six (6) feet above ground) facing the roadway. If one is not visible, get the address or distance from the nearest intersection.

If tree limbs are blocking the light, please call the Public Works Department at (281) 996-3380.