29.36 STREET LIGHTING, UTILITIES, AND MAILBOXES

29.36.010 Requirements

This chapter outlines the requirements for street lighting, including whether lighting is required, installation, maintenance responsibilities, and acceptable poles and luminaries. Utilities are discussed for their placement in the rights-of-way.

29.36.015 Telecommunication Facilities

Small cell telecommunication facilities shall be designed and implemented in accordance with the Grand Junction Small Cell Infrastructure Standards.

29.36.020 Street Lighting

Street lighting shall be installed on all new public streets at the expense of the developer. Streetlights shall be designed, furnished and installed by the utility company responsible for supplying electrical power to the development or area. The location of all streetlights shall be shown on the traffic plan or street plan, or other design drawings as required by the City or County. All street lighting must conform to city ordinances on Dark Sky requirements.

29.36.030 Luminance Requirements

Street lighting shall provide average illuminance in accordance with Table 29.36-1. A lighting plan is required for all street designs with the exception of local residential streets.

Table 29.36-1 Average Maintained Illuminance (Foot Candles) on Public Streets

Street Classification	Area Classification		
	Commercial	Intermediate	Residential
Arterial	1.7	1.3	0.9
Collector	1.2	0.9	0.6
Local	0.9	0.7	*

* On local residential streets, a standard light shall be located at each street intersection, at or near the throat of each cul-de-sac, and at a maximum spacing of 250 feet measured along the centerline of the roadway. Additional lights may be required on horizontal curves and at other locations.

29.36.040 Acceptable Poles and Luminaires

The standard streetlights are shown in Table 29.36-2.

Table 29.36-2 Standard Street Lights

Street Light Style	Used on Street Classification	Wattage	Pole Color
GE Salem Luminaire Full-Cutoff	Local Residential, Residential Collector	N/A	Black
Cobra Head Full-Cutoff – Flat Lens	Collectors, Arterials, Commercial	250-400	Black
Cobra Head Full-Cutoff – Flat Lens	Arterials (for existing overhead power), State Highways	100-400	Black, Silver, Galvanized or existing wood pole

Height and wattage shall be determined by Utility Company in accordance with current IES standards. Where these standards conflict with existing lighting, design consideration will be given to consistency in the area. Supply chain or other circumstances may require substitutions which must be approved by the City.

29.36.050 Pedestrian and Bikeway Lighting

When required, lighting for detached public pedestrian and bicycle pathways and trails shall be designed, furnished and installed by the utility company responsible for supplying electrical power to the development or area. The lighting standard shall be the cutoff luminaire style that meets the illuminance requirements. Commercial grade solar lighting may be an option when A/C power is cost prohibitive.

Lighting for pedestrian walkways and bikeways should be considered in the following scenarios:

- Stairs and access ramps
- Pedestrian underpasses
- Conflict points along pathways
- Other locations depending on the context of the situation

Lighting levels can be set based on the level of pedestrian activity in the area as indicated in Table 29.36-3.

Table 29.36-3 Pedestrian and Bicycle Pathways and Trails Illuminance Standards

Conflict Type	Average Horizontal Illuminance (fc)	Average Vertical Illuminance	Horizontal Uniformity (avg:min)
Average illuminance with anticipated pedestrian activity (typically > 10 pedestrians per hour)	0.5	0.2	4
Average illuminance with minimal pedestrian activity (typically < 10 pedestrians per hour)	0.2	0.1	10

Based on Section 2.2.8 of the CDOT Light Design Guidelines.

Refer to section 2.2.8 of the CDOT Light Design Guidelines for additional guidance and best practices on lighting applications for pedestrian walkways and bikeways.

Pedestrian lighting is not considered in street light illuminance calculations. Attached sidewalk lighting is often provided by adjacent street lighting. On streets where there is a sidewalk only on one side, lighting must be provided on that side of the street. The need for pedestrian lighting should be considered as part of the lighting process.

Pedestrian lighting is not normally required in residential subdivisions. The primary exception is along pedestrian pathways, typically located mid-block or at cul-de-sacs that provide pedestrian connectivity to adjacent streets. On these pathways pedestrian-scale bollard lighting may be required to enhance safety and visibility at night. Street lights are recommended at each end where a pathway meets the street.

Bollard lighting is only required in the following locations along these pathways:

- Locations where the pathway is greater than 100 feet in length from where the pathway meets a street. This assumes a street light is present at at least one end.
- Locations where there is a bend or horizontal curvature in the pathway.
- Locations where there is insufficient adjacent street lighting where the pathway meets the street.

When required along pedestrian pathways, bollard lighting should provide an average illuminance consistent with the standards set in Table 29.36-3 for minimal pedestrian activity. Commercial grade solar powered bollard lights are considered acceptable so long as they are demonstrated to reliably meet the illuminance standards.

Pedestrian lighting that is installed for decorative purposes or is along pathways (connecting cul-de-sacs or adjacent streets) that are not along a designated Active

Transportation Corridor (see the Active Transportation Corridor layer on the Grand Junction GIS Transportation Map) shall be the responsibility of the homeowner's association or private developers for installation, cost of utilities, and maintenance.

29.36.060 Breakaway Structures and Lateral Clearances

All fixed objects such as utility, street light poles, fire hydrants, telephone junction boxes, installed in the right-of-way shall be of the breakaway type meeting AASHTO construction specifications regardless of roadway classification, with the exception of locations with high pedestrian activity. The breakaway type of design may not be appropriate in contexts with high pedestrian activity. In locations where required, if breakaway type construction cannot be provided, a minimum of 10 feet horizontal clearance shall be provided between the flowline of the street (or the edge of the paved traveled way) and any new or relocated non-breakaway structure in excess of 4 inches in height. For local streets, a 5-foot lateral clearance is recommended. If sufficient right-of-way or easement is not available for the 10-foot clear zone, all installations must be placed "as near as practical" to the edge of the public right-of-way. This policy is applicable to all local and collector roadways whose posted speed limit is in excess of 30 miles per hour and is intended to provide minimum standards for the purpose of protecting the public health, safety, and welfare. Dynamic performance for breakaway objects shall be evaluated in accordance with current AASHTO specifications. Arterial and major collector classifications should evaluate clear zone requirements per current AASHTO clear zone standards.

29.36.070 Utilities

All utilities shall be placed in the roadway section as set forth in the City of Grand Junction Standard Contract Documents for Capital Improvements Construction.

29.36.080 Mailboxes - Location

(a) Mailboxes may be located within public rights-of-way so as not to obstruct pedestrian or vehicular traffic.

(b) In no case shall a mailbox obstruct a sidewalk, the traveled way of a roadway, the road shoulder, or impede maintenance activities associated with the facility. Mailboxes shall not be permitted within sidewalks, pathways, or roadside ditches.

(c) On roads without a curb, the mailbox face shall be located a minimum of eight feet from the traveled way and adequate shoulder areas shall be provided for mail pickup and delivery.

(d) Streets with a curb and detached sidewalk: the mailbox face shall be located a minimum of 2 foot behind the curb face. Mailboxes must not pose an obstruction to the site zone. The mailbox should have a rear-facing door to facilitate mail removal without stepping into the street. Streets with attached sidewalk: the mailbox face shall be located a minimum of 2 foot behind back of walk.

(e) Group, gang mailboxes, or neighborhood box units shall not be placed in the area designated for sight distance or sight zone. Neighborhood mailboxes shall be considered a commercial location and must maintain the required driveway setback from intersections. Neighborhood mailboxes shall be shown on the utility composite and road plans. Group mailboxes should be placed a minimum of 2ft behind the sidewalk. Group mailboxes shall be illuminated by a streetlight.

29.36.090 Mailbox Construction Standards

Mailboxes erected on public right-of-way shall be of light sheet metal or plastic construction conforming to the requirements of the U.S. Postal Service. Construction of supports and details shall be in accordance with the current CDOT standards.

29.36.100 Mailbox Support Standards

(a) A single 4-inch x 4-inch square wooden post embedded no more than 36 inches into the ground; a single 4½ inch diameter wooden post embedded no more than 36 inches into the ground; a single metal post with a strength no greater than a 2-inch standard strength steel pipe (2 3/8" O. D.) and embedded no more than 24 inches into the ground will be acceptable as a mailbox support.

(b) A metal post shall not be fitted with an anchor plate, but it should have an anti-twist device that extends no more than 10 inches below the ground surface.

(c) Supports shall not be set in concrete unless the support design has been shown to be safe by crash tests when so installed.

(d) The post-to-box attachment details should be of sufficient strength to prevent the box from separating from the post top if a vehicle strikes the installation.

(e) No more than two mailboxes may be mounted on a support structure unless the support structure and mailbox arrangement have been shown to be safe by crash testing, or meet the requirements set forth in the above AASHTO guidelines.

(f) Mailbox support designs that differ from the AASHTO guidelines are subject to the exception process outlined in Chapter 14.

(g) Lightweight newspaper boxes may be mounted below the mailbox on the side of the mailbox support. Newspaper delivery boxes shall be of light sheet metal or plastic construction of minimum dimensions suitable for holding a newspaper.