

# Dark Sky information

Washoe County Code, specifically Section 110.414.21

## *Article 414*

# ***NOISE AND LIGHTING STANDARDS***

### **Sections:**

**110.414.00 110.414.05 110.414.10 110.414.15 110.414.20 110.414.21 110.414.25**

### **Purpose**

**Standards Measurement Airport Noise Exceptions**

**Light and Glare Nonconforming Use**

**Section 110.414.00 Purpose.** The purpose of this article, Article 414, Noise and Lighting Standards, is to allow for a pattern of land uses that minimizes the exposure of community residents to excessive noise.

**Section 110.414.05 Standards.** Sound levels shall not exceed the standards set forth in this section.

1. (a) Industrial Development. For property being developed within any industrial zone: seventy-five (75) Ldn at the property line.
2. (b) Residential Abutment. For property abutting areas developed residentially, or shown as residential on the area plan maps: sixty-five (65) Ldn at the property line.
3. (c) Public/Quasi-Public Facility Abutment. For property abutting local parks, schools, hospitals, group care facilities or facilities providing child care services: sixty-five (65) Ldn at the property line. Interior noise levels shall not exceed 45 Ldn.
4. (d) Development with Public/Quasi-Public Facility. For property being developed with a group care facility, school or hospital: sixty (60) Ldn at three (3) feet from any of the building's exterior walls. Interior noise levels shall not exceed 45 Ldn.
5. (e) Noise Abatement Near Highways and Railroads. Prior to approving any residential development, applicant(s) shall provide site plans indicating that outside noise levels at the residences shall not exceed a maximum of 65 dB when trains are passing or 65 Ldn next to highways.
6. (f) Other. If the sound levels affecting a project are greater than those allowed for project development, the developer or subdivider shall construct a noise attenuation barrier to bring sound levels down to required standards.

**Section 110.414.10 Measurement.** Measurement of sound levels shall be in accordance with the provisions of this section.

1. (a) A-Weighting. Sound levels shall be measured on the A-weighting network of a sound level meter meeting the requirements of USA Standards S14-1971 for General Purpose Sound Level Meters, or the latest revision published by the American National Standards Institute, Inc., using the slow meter response. An additional 10 dB weighting shall be imposed on the sound levels occurring during nighttime hours (10 p.m. to 7 a.m.) to determine the day-night average sound level (Ldn). The meter shall be calibrated and used according to the manufacturer's instructions.

2. (b) Location of Measurement. Measurements shall be taken with the microphone located at any point on the property line of the noise source, but no closer than three (3) feet from any wall and not less than three (3) feet above the ground.
3. (c) Timing and Number of Measurements. A twenty-four (24) hour measurement shall be taken. The sound level shall be the average of the hourly readings with the Ldn or day-night average sound level weighting.

**Section 110.414.15 Airport Noise.** All development proposed within the noise contours established for any airport by the Airport Authority of Washoe County shall conform to the Federal Aviation Regulation, Part 150, Land Use Compatibility Guidelines. Prior to the issuance of a building permit for any new structure within the established noise contour area and flight corridors, the property owner shall dedicate an avigation easement to the Airport Authority of Washoe County in such form and substance as established by the Airport Authority.

**Section 110.414.20 Exceptions.** The following sources of noise are exempt from the regulations of this article:

1. (a) Motor vehicles and other noise-generating equipment not under the control of the property;
2. (b) Emergency vehicles and equipment;
3. (c) Temporary construction, repair or demolition activities occurring between 7:00 a.m. and 7:00 p.m. on any day except Sunday; and
4. (d) Any use approved through a variance that specifically reviewed the issue of noise created by the use.

*[Amended by Ord. 959, provisions eff. 7/26/96.]*

**Section 110.414.21 Light and Glare.** This section sets forth criteria and standards to mitigate impacts caused by lighting and glare.

(a) Light. All light sources shall be located and installed in such a way as to prevent spillover lighting onto adjoining properties. The following provisions shall apply to all existing and proposed development:

1. (1) Any lighting facilities shall be so installed as to reflect away from adjoining properties. Covers must be installed on all lighting fixtures and lamps must not extend below the bottom of the cover.
2. (2) Light standard in or within one hundred (100) feet of residential zones shall not exceed twelve (12) feet in height. Additional standard height

may be permitted by the Director of Community Development provided such lights are a sharp cutoff lighting system.

(3) No permanent rotating searchlights shall be permitted in any regulatory zone, except that an administrative permit may be issued by the hearing examiner for a period not to exceed three (3) days for a temporary searchlight. The administrative permit shall be limited to a maximum of three (3) times in any one (1) calendar year.

2. (b) Lighting Design. The style and intensity of lighting shall consider not only function and appearance, but shall reflect the existing character of surrounding areas and shall replicate natural light as much as possible.
3. (c) Glare. Reflected glare on nearby buildings, streets or pedestrian areas shall be avoided by incorporating overhangs and awnings, using non-reflective building materials for exterior walls and roof surfaces, controlling angles of reflection, and placing landscaping and screening in appropriate locations.

4. (d) Interior Lighting. Where residential uses abut non-residential uses, interior lighting of the non-residential uses shall be controlled at night through the use of timers, window blinds, or other acceptable means. This provision shall apply to all existing and proposed development.
5. (e) Conflict with Other Portions of the Development Code. Where another provision of the Development Code may conflict with the provisions of this section, the more restrictive provision shall control.

*[Amended by Ord. 919, provisions eff. 2/1/95; Ord. 1234, provisions eff. 5/21/04.]*

**Section 110.414.25 Nonconforming Use.** Any development which was permitted by or conformed to the requirements of the zoning ordinance in effect prior to the effective date of this section shall be considered a nonconforming use subject to the provisions of Article 904, Nonconformance, except for the provisions of Section 110.414.21, Light and Glare.

*[Amended by Ord. 919, provisions eff. 2/1/95.]*

If you look closely, you will notice there is NO bulb max requirements. What does this mean??

Light pollution is defined as: Glare, light trespass, and light which is reflected into the night sky, contributing to sky glow, through the use of unshielded, misplaced, excessive, or unnecessary outdoor night lighting.

By eliminating light pollution, we can conserve energy, reduce glare and light trespass while maintaining our desirable community character, safeguarding our wildlife in their natural environment, and restoring our view of the starry night sky.

1. The American Medical Association (AMA) endorses dark-sky friendly lighting at or below 3000 Kelvin to reduce hazardous glare (especially for older drivers) and excessive light trespass which has many implications for human health including the correlation of melatonin suppression with the growth of cancerous tumors. In 2009 the AMA passed a resolution urging federal, state, and local legislative action to reduce light pollution.

Limit the use of LEDs to fixtures that are motion sensor activated and with less than 2300 Kelvin; or in 1800 Kelvin fixtures that are not operated dusk to dawn.

<https://www.darksksociety.org/handouts/LightingPlanGuidelines.pdf>