

DEVELOPMENT CODE UPDATE

Module 2 Development Standards

Joint Council Planning and Zoning Commission Workshop October 2022

Agenda

- Module 2 Contents
- Overview of Notable changes to content from existing code
- Overview of changes to outdoor lighting based on rewrite from experts from Clanton & Associates, Inc

Goal of today's session is to determine:

- Sections that don't warrant changes
- Allow tabling discussions on content that may warrant changes or elimination for later through a Parking Lot

Module 2 Table of Contents

Development Standards

Universal standards that
apply across all districts are
contained within Part 16-4
Development Standards

PART 16-4. DEVELOPMENT STANDARDS

Section 16-4-1 Dimensional Standards

Section 16-4-2 Access and Connectivity

Section 16-4-3 Off-Street Parking, Loading, and Queuing

Section 16-4-4 Landscaping, Screening, and Buffering

Section 16-4-5 Neighborhood Protection Standards

Section 16-4-6 Outdoor Lighting

Section 16-4-7 Walls, Fences and Gates

Section 16-4-8 Signage

Section 16-4-9 Building Design

Dimensional Standards

No Substantial Change

- Projections into required setbacks
- Corner lot and double frontage lot yards

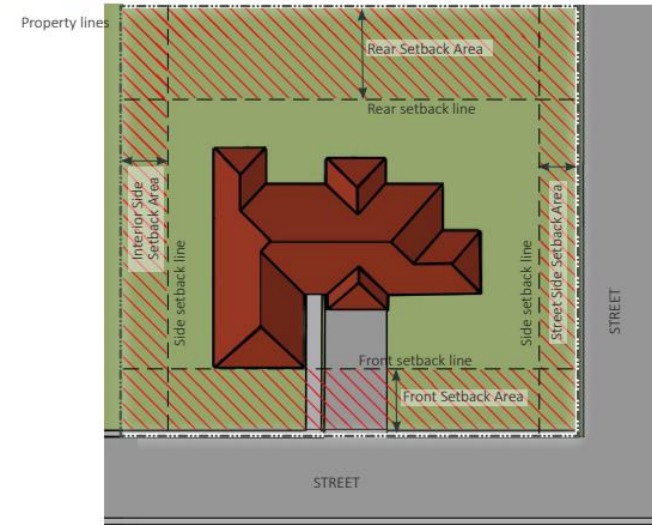
Notable Changes

- Revised language to differentiate between yards and setbacks
- Regulations for permissive projections into required setback areas

Section 16-4-1 Dimensional Standards

- 4-1(A) Required Setback Areas
- 4-1(B) Permitted Projections into Required Setback Areas....
- 4-1(C) Yard Requirements

FIGURE 21: Required Setbacks



Sec. 16-272 - Yards

Access and Connectivity

No Substantial Change

- Sight triangle requirements (Sec. 38-201, Sec. 16-271)
- Driveway separation and width standards (Sec. 16-367)

Notable Changes

- New requirements for on-site walkways, cross-access between adjacent uses, and pedestrian and bicycle circulation

Section 16-4-2 Access and Connectivity

- 4-2(A) Purpose
- 4-2(B) Applicability
- 4-2(C) Access and Connectivity Standards
- 4-2(C)(I) General
- 4-2(C)(II) Residential Development Access
- 4-2(C)(III) Multi-Family, Mixed-Use and Non-Residential Development Access
- 4-2(C)(IV) Sight Visibility Triangles
- 4-2(C)(V) Cross-Access Between Adjacent Uses
- 4-2(C)(VI) Pedestrian and Bicycle Circulation

FIGURE 29: Required On-site Pedestrian Walkways



Sec. 16-367 - Design requirements

Walls, Fences, and Gates

No Substantial Changes

- Fence permit requirements (Sec. 16-271g)
- Sight obstruction (Sec. 16-271c)
- Barbed wire regulations (Sec. 16-271e)

Notable Changes

- Added clear purpose / applicability section
- Clarified fence height measurements

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4-7(B) APPLICABILITY

The construction, replacement, and maintenance of all fences, walls, and retaining walls shall comply with the requirements of this section.

Sec. 16-271 - Fences, hedges and gates

Walls, Fences, and Gates

Notable Changes

- Revises maximum heights based on location and zone districts
- Clarifies fence height measurements
- Added materials standards
- Added retaining wall engineering requirements

TABLE 42: MAXIMUM HEIGHT OF WALLS AND FENCES

LOCATION OF FENCE/ WALL	MAXIMUM HEIGHT BY ZONE DISTRICT				
	RA, RE	SFR, RM, MHC	MFR, MU, WRTC, DTLA	GC, PO	IND
Within required front or street facing side yards	5'	3' solid 4' view	3' solid 6' view	6'	6'
≤ 10 feet from property line		6'	6'	10'	10'
> 10 feet from property line					
Within required interior side and rear yards	7'	7'	8'	10'	10'
Within the sight visibility triangle at the intersections of streets, alleys, and driveways	3', see <u>Section 4-2(C)(IV) Sight Visibility Triangles</u>				

Sec. 16-271 - Fences, hedges and gates

Building Design Updates

No Substantial Changes

- Foundation Regulations

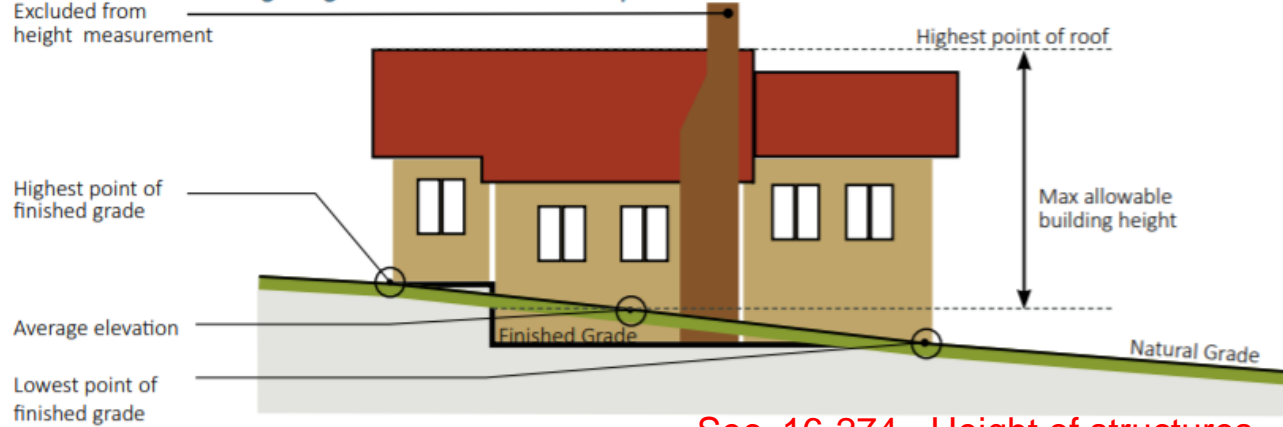
Notable Changes

- Clarifies building height measurements

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FIGURE 54: Building Height Measurement on Sloped Sites

Excluded from
height measurement



Sec. 16-274 - Height of structures,

Sec. 16-285 - Aesthetic considerations; exposed foundations

Discussion on dimensional standards, access and connectivity, walls, fences, gates, and building design

Off-Street Parking and Loading

No Substantial Change

- Dimensional standards (Sec. 16-367)
- Accessible parking standards based on ADA requirements (Sec. 16-369)
- Same motorcycle parking standards
- Similar parking design standards

Notable Changes

- Added clear purpose / applicability section

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4-3(B) APPLICABILITY

- Off-street parking and loading spaces shall be provided as an accessory use in all zone districts in accordance with the requirements of this article. The provisions of this section apply to the following:
 - Construction of a new primary building;
 - Change of use or occupancy of a building(s), including additions, that require more parking;
 - Expansion of the gross floor area of an existing building by more than 25 percent. Parking and Loading Requirements shall apply to the expanded gross floor area of the building(s).
- It shall be unlawful to discontinue, reduce, modify or otherwise dispense with parking and loading facilities that comply with the requirements of this section.

Off-Street Parking and Loading

Notable Changes

- Updated standards based on national best practice
- Revises number of parking spaces required for uses based on national best practices
- Added required bicycle parking based on number of required automobile parking spaces and bicycle parking design standards

Adopted Comp Plan Policies

Housing Infrastructure Strategy 3. Study current and anticipated parking demand and develop alternative approaches to meet that demand

TABLE 27: MINIMUM OFF-STREET PARKING REQUIREMENTS			
LAND USE		EXISTING REQUIRED PARKING	REVISED REQUIRED PARKING
Agriculture	COMMERCIAL		
	Fish hatchery		1 space per 1,000 sf
	Community garden		No Requirement
	Plant nursery or greenhouse		4 spaces per 1,000 sf
Recreation & Entertainment	Adult entertainment		1 space per 4 persons design capacity
	Golf course or country club	1 space per 4 persons at maximum capacity. Golf Course – In addition to clubhouse requirements, 5 spaces per hole	1 space per 4 persons design capacity, plus 5 spaces per hole
	Indoor entertainment facility	Bowling Alley- 4 spaces per lane Auditoriums, clubs, lodges and theaters- 1 space per 4 seats at maximum seating capacity	1 space per 4 persons design capacity
	Outdoor recreation facility	Tennis Court- 3 spaces per court	1 space per 1,000 sf of site area where persons circulate, participate, or watch activities.
	Park or playground	1 space per 3 acres open space plus spaces for recreation use as required by this chapter	1 space per 3 acres
	Sports field	Ballfields, stadiums, amphitheaters – 1 space per 3 persons at maximum capacity	1 space per 1,000 sf of site area where persons circulate, participate, or watch activities.
Lodging	Bed and breakfast	1 space per bed, plus 2 spaces per owner or manager	1 space per room, plus 2 staff spaces
	Campground or RV park.		1 space per RV or campsite
	Hotel or motel	1 space per unit	1 space per room

Sec. 16-370 - Off-street parking requirements

Off-Street Parking and Loading

Notable Changes

- Clarifies shared parking reductions (Sec. 16-372)
- Adds parking reductions for on-street parking, proximity to transit, bicycle amenities, electrical vehicle charging stations, and solar parking canopies
- Adds loading and vehicle stacking standards

Comp Plan

- Mobility Land Use Strategies 1. Integrate parking with transit
- Revisit parking requirements in relation to transit access
-
- Consider expanded opportunities for off-site parking

TABLE 30: APPLICABLE OFF-STREET PARKING REDUCTIONS

FACTOR	ALLOWED REDUCTION
On-street parking	1 on-street parking space on adjacent public streets may be counted for 1 required off-street parking space.
Proximity to transit	The total number of required parking spaces may be reduced by 20% for developments within 1,320 feet of a public transit stop.
Provisions for bicycle infrastructure	The total number of required parking spaces may be reduced by 10% for developments that provide robust bicycle amenities (i.e., lockers and repair facilities) and additional designated bicycle parking areas in excess of what is required for the project.
Electrical charging stations	1 electrical station may be counted toward 2 required parking spaces.
Solar parking canopies	The total number of required parking spaces may be reduced by 10% for developments that utilize solar parking canopies.

TABLE 34: REQUIRED VEHICLE STACKING SPACES

USE	EXISTING REQUIRED VEHICLE STACKING SPACES	PROPOSED REQUIRED VEHICLE STACKING SPACES	MEASURED FROM END OF STACKING LANE TO:
Drive-through or Drive-up Food and Beverage	Stacking for 10 cars	10 per window	Service Window
Vehicle Wash	Stacking of 3 spaces for each washing station	3 per bay	Outside of washing bay
Vehicle Fuel Sales		1 per pump	End of fuel pump island
Retail Sales		4 per drive-through station	Service window
Financial Institutions or Automated Teller Machine (ATM)		3 per drive-through station 2 per ATM	Service window ATM

Discussion on off-street parking, loading, and queuing standards

Landscaping, Screening, and Buffering

No Substantial Change

- Encourages use of native and drought-tolerant plants
- Irrigation requirements
- Retain alternative for providing 50% site landscape in ROW

Notable Changes

- Added clear purpose / applicability section
- Updated landscape standards based on national best practice
- Created screening standards

New

New

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Change since M3 – Moved landscape buffers to neighborhood protection standards for user ease / clarity

4-4(B) APPLICABILITY

The provisions of this section apply to the following:

1. New construction of multi-family, mixed-use, or non-residential structures; and the
2. Expansions of existing multi-family, mixed-use, and non-residential structures of 25 percent or more of building floor area.

Sec. 16-574 - Landscaping performance standards

Landscaping, Screening, and Buffering

Notable Changes

- Increased site landscaping requirement from 5% to 10% of site
- Added minimum plant material standards
- Added street tree standards if site landscaping is placed in ROW
- Clarified minimum parking lot landscaping standards
- Requires screening standards for outdoor vehicle storage, refuse containers, and mechanical equipment

FIGURE 34: Streetscape Landscaping Where 4 Feet Exists

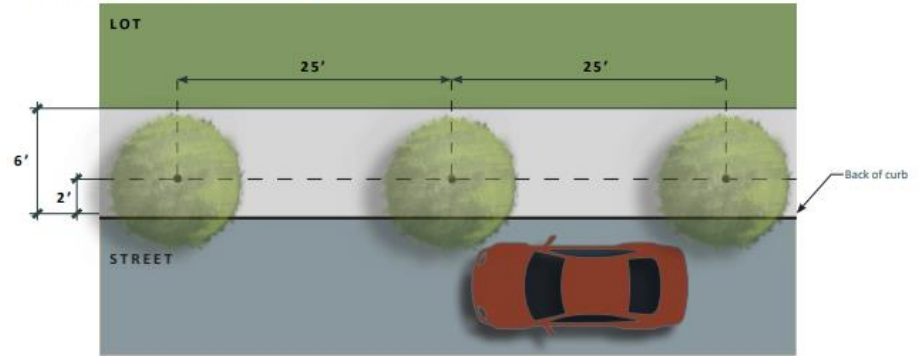
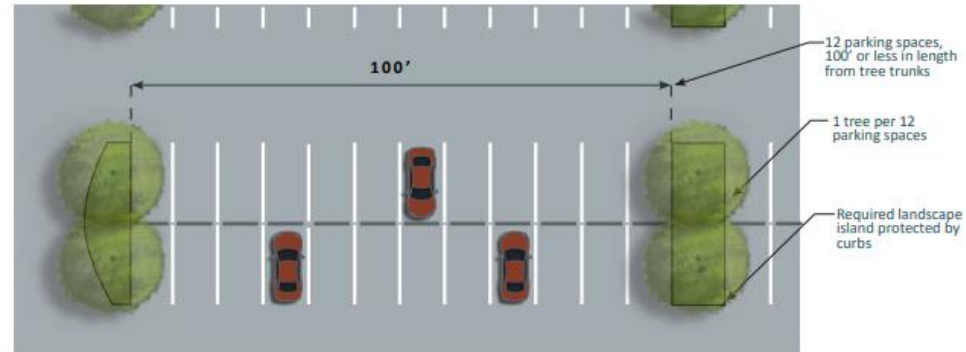


FIGURE 36: Parking Lot Tree Requirements



Discussion on landscaping, screening and buffering standards

Signage

No Substantial Changes

- Sign permit requirements (Sec. 16-403)
- Prohibited signs (Sec. 16-410)
- Exempt signs (Sec. 16-404)

Notable Changes

- Updated standards to be content-neutral

Change

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4-8(B) APPLICABILITY

1. Unless specifically exempted, the standards contained in this section shall apply to all signs within the County.
2. Any sign legally erected before the effective date of this ordinance that is no longer in compliance with the standards in this section may be retained in use, subject to the provisions of Section 16-5-4 Nonconformities.

Article X - SIGNS

Signage

Notable Changes

- Updated standards to be content-neutral
- Clarified sign measurements
- Provides table of allowable signage by zone district
- Removes temporary sign permit requirement

TABLE 43: AUTHORIZED SIGNAGE

SIGN TYPE	TOPIC	POS-PP POS-P, POS-AO, POS-PO	RA, RE, SFR, RM, RM-NC	MFR-L, MFRL-NC, MFR-M, MFR-H	MU, WRTC, DTLA	IND, PO, GC	IND
Permanent Signs	Sign area	4 sq.ft.	4 sq.ft.	2 sq.ft. per MF unit; 8 sq. ft. max	10 sq.ft. per LF building frontage; 100 sq. ft. max	10 sq.ft. per LF building frontage; 200 sq. ft. max	20 sq.ft. per LF building frontage; 100 sq. ft. max.
	Sign height	4 ft.	4 ft.	25 ft.			
	Sign illumination	Prohibited		Permitted pursuant to <u>Section 4-8(F) Sign Standards</u>			
Temporary Signs	Sign area	8 sq.ft.	10 sq.ft.	5 sq.ft. per MF unit; 20 sq.ft. max	30 sq.ft. per LF building frontage; 100 sq. ft. max.	30 sq.ft. per LF building frontage; 100 sq. ft. max.	10 sq.ft. per LF building frontage; 100 sq. ft.
	Sign height	4 ft.	4 ft.	8 ft.			
	Sign illumination	Prohibited					

LF= Linear Feet of the building frontage.

Discussion on signage standards

Outdoor Lighting

No Substantial Change

- Right-of-Way Lighting
- Prohibited lighting

Major Changes

- Updated applicability
- Introduced lighting zones
- Updated recommendations based on the latest ANSI / IES / IDA standards
- Reduced maximum CCT
- Added curfew dimming

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Outdoor Lighting

Applicability

1. All new development shall meet the requirements of this section , applicable electrical and energy codes, and applicable sections of building code.
2. Whenever there is a new use for a property (e.g. zoning or variance change), all outdoor lighting on the property will meet the requirements of this section before the new use commences.
3. Expansion, renovation, and modification to existing property that increases the developed square footage, occupant capacity, or parking spaces by twenty-five percent (25%) or more, shall cause the entire property to meet the requirements of this ordinance.
4. In the event an outdoor light fixture is not working or damaged to the extent repair costs equal at least fifty percent (50%) of replacement cost, the repair/replacement shall conform with the requirements of this section.
5. Unless otherwise noted or exempt, existing outdoor lighting that does not meet the provisions of this section shall be considered legal nonconforming until natural maintenance, modifications, change of use, or complaint enforcement obligate meeting the requirements of this ordinance.

Outdoor Lighting

Lighting Zones

Based on ANSI / IES / IDA guidance:

- Provides environmental protection where needed
- Reduces over-lighting and neighborly conflict
- Fosters human vision and transitions of travel

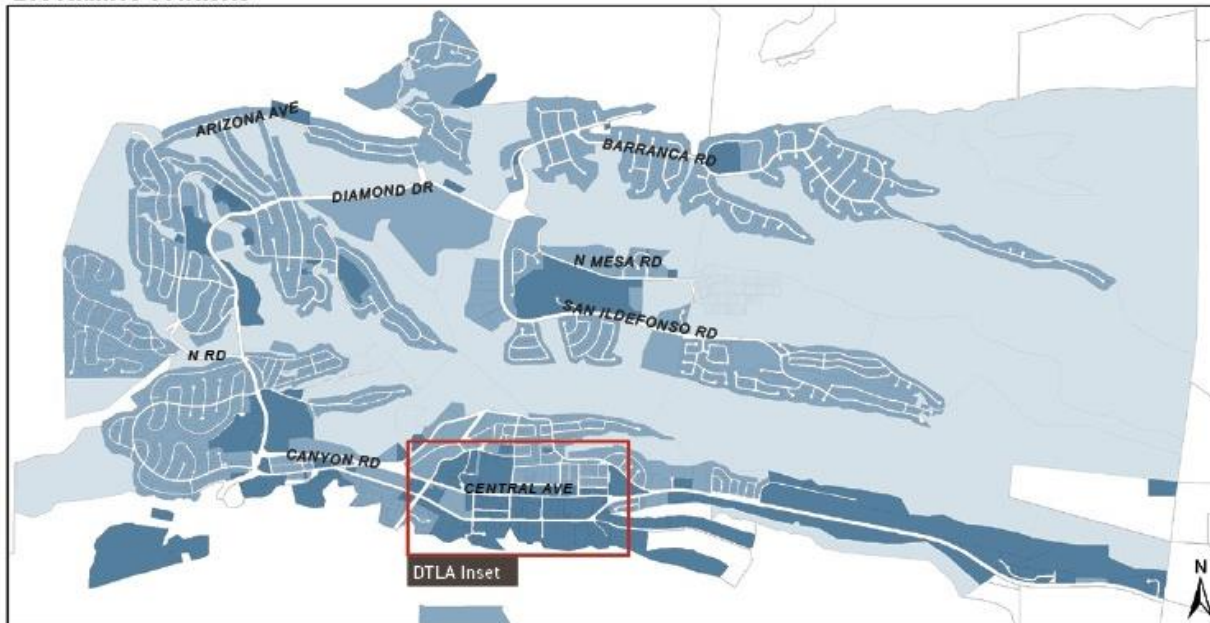
Comp Plan

Neighborhood Land Use Strategy 10. Reassess effectiveness of outdoor lighting regulations to better protect neighboring residential properties

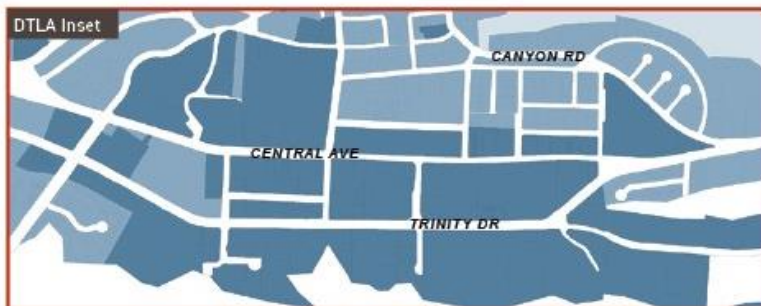
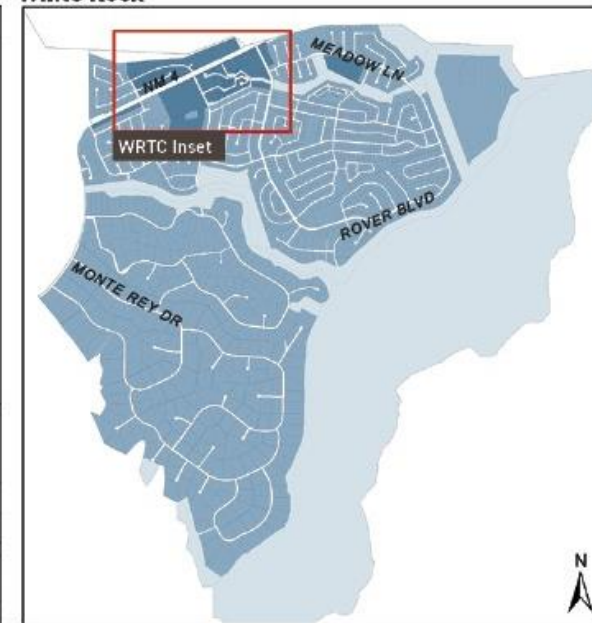
TABLE 1: Light Zone Designations

Designated Light Zones	Light Zone Characteristics / Definitions	Applicable Districts
Lighting Zone 0 (LZ0):	No Ambient Light (wilderness, protected parks, preserves)	POS-PO; POS-AO;
Lighting Zone 1 (LZ1):	Low Ambient Light (rural, residential, developed park areas)	RA; RE; SFR (all types); MFR (all types); RM (all types); MHC; POS-PP
Lighting Zone 2 (LZ2):	Ambient Light (office, commercial, mixed use, schools, light industrial)	MU; DTLA; WRTC; PO; GC; IND; INS; POS-RO
Lighting Zone 3 (LZ3):	Moderately High Ambient Light (central business, play fields, heavy industrial)	Only available for Temporary or Permit Categories;
Lighting Zone 4 (LZ4):	LZ4 - High Ambient Light (Times Square and Las Vegas)	Not applicable in Los Alamos County

Los Alamos Townsite



White Rock



Legend

- LZ0 Lighting Zone 0
- LZ1 Lighting Zone 1
- LZ2 Lighting Zone 2

Outdoor Lighting

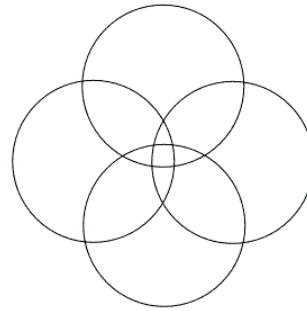
GLARE



CONTRAST



Illuminance



Luminance

ADAPTATION



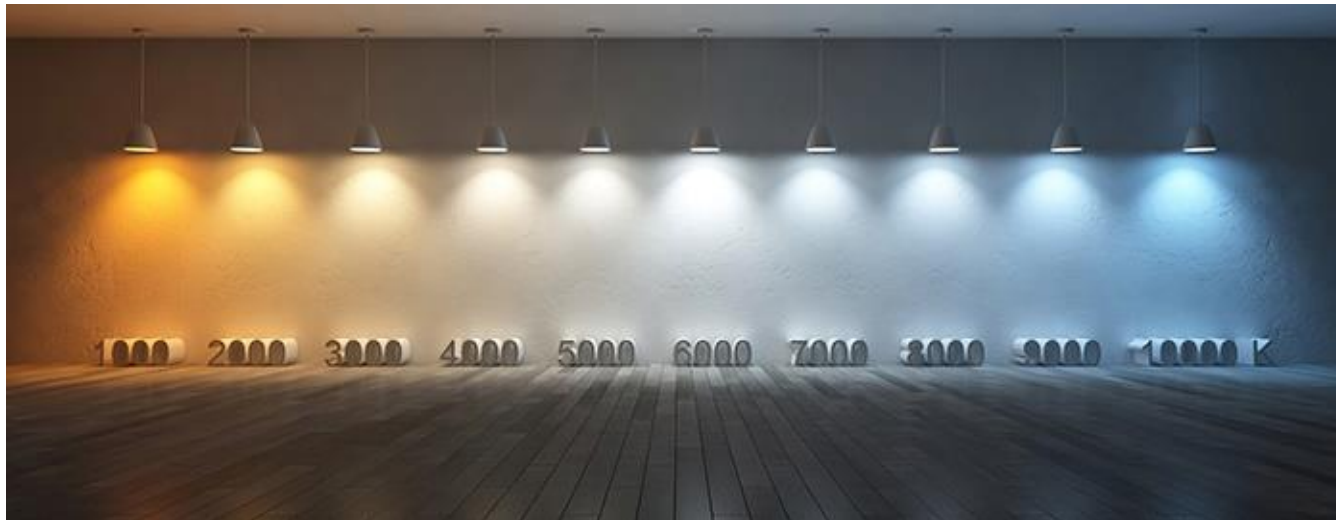
SPECTRUM



Outdoor Lighting

The Spectral Power Distribution (SPD) of a light source will ultimately determine its **Correlated Color Temperature (CCT)** and Color Rendering Index (CRI).

- The maximum CCT permissive within Los Alamos County shall be 2700K.



Outdoor Lighting

The Spectral Power Distribution (SPD) of a light source will ultimately determine its Correlated Color Temperature (CCT) and **Color Rendering Index (CRI)**.

- The maximum CCT permissive within Los Alamos County shall be 2700K.
- The Color Rendering Index (CRI) of light sources in LZ-1 and greater must be greater than 65. Lower CCT (e.g. 2200K) is allowed in all zones provided it meets the CRI requirement, and per ANSI/IES, it is encouraged in LZ-0 applications regardless of CRI.



Outdoor Lighting

Denver 2016

- ~3.4fc avg illuminance
- CCT = 1875°K
- CRI = 28



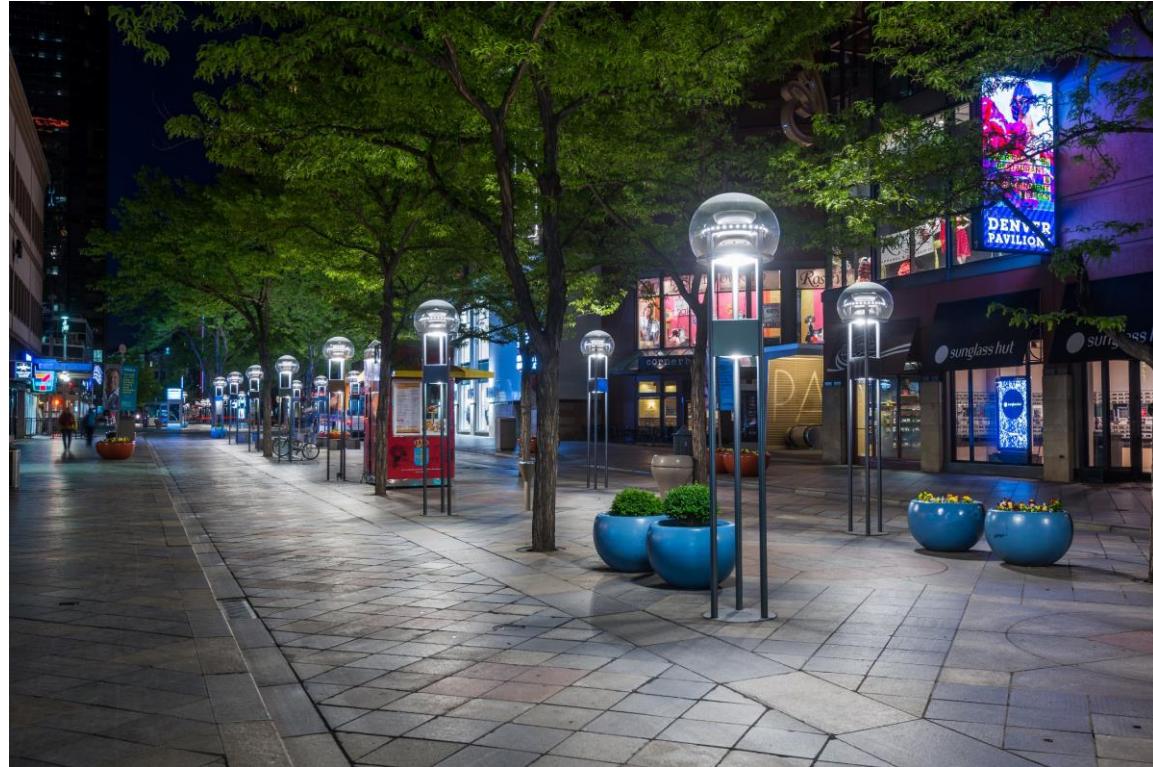
Outdoor Lighting

Denver 2017

- ~1.1fc avg illuminance
- CCT = 3100°K
- CRI = 83

Summary

- 3 x less light
- 3 x higher CRI
- 56% greater uniformity
- Increased feelings of reassurance and visual performance



Outdoor Lighting

Curfew

Lz2 lighting shall be dimmed by 50% by 10:00 p.m. or one (1) hour after business close (whichever comes latest). This Lz2 curfew shall remain in effect until 6:00 a.m. The Lz2 curfew does not apply to the following:

1. Street, Roadway, and other Department of Transportation lighting.
2. Code required lighting for public steps, stairs, walkways, and building entrances.
3. Other special use or permitted exceptions listed within this ordinance such as flag, seasonal, sports fields, and businesses which operate during these hours.

Outdoor Lighting

Other Standards

- Illuminance limits and shielding are recommended for residential and non-residential use to regulate light trespass at property lines
- Special use lighting for security, historic sites, holiday lights, sports facilities, and gas station canopies
- Right-of-way lighting

Discussion regarding outdoor lighting standards