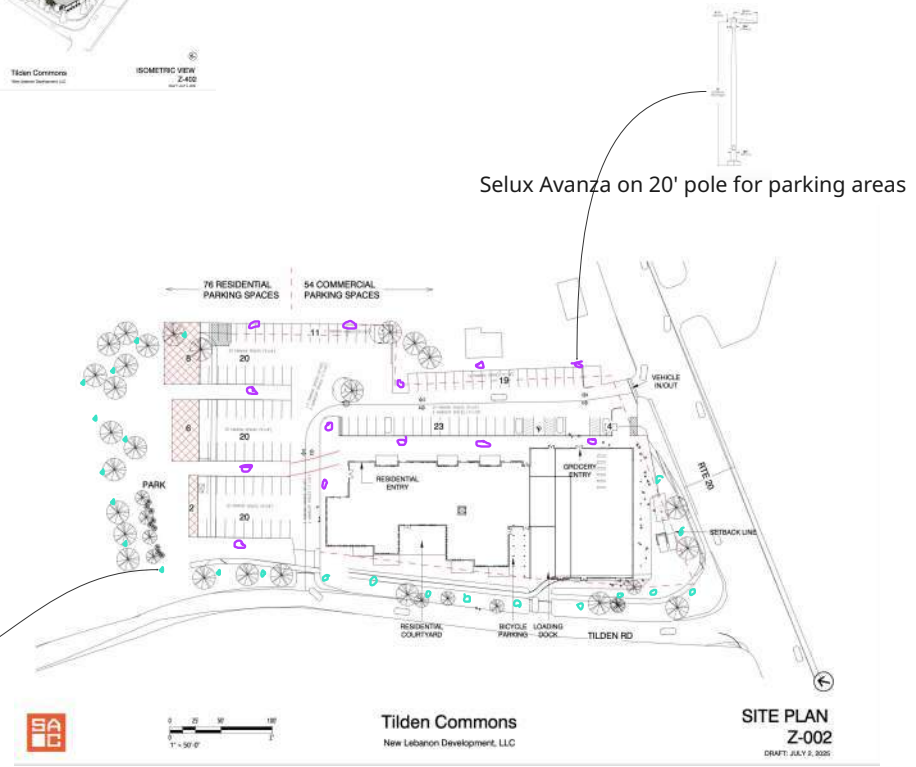


Selux Avanza on 12' pole for pedestrian path, spaced roughly 20' O.C.



SITE PLAN Z-002 DRAFT: JULY 5, 2025



Tilden Commons Site Lighting
June 16, 2025
Scale: 1" = 15'-0"

Illuminating Engineering Society (IES) Recommended Practices

PRINT DATE: 2025.06.16

IES

PARKING LOTS AND PARKING GARAGES
Recommended Maintained Illuminance Targets ^{ANSIIES RP-8-16}

TS = Task Surface. Recommended illuminances are at height of task surface above finished floor (AFF)

Application Task/Area	Horizontal (E _h)				Vertical (E _v)				
	Target E _h @ Height AFF		Uniformity	Target E _v @ Height AFF	Uniformity		Ratio		
	Max	Avg	Min	Ratio	Max	Avg	Min	Ratio	
PARKING LOTS (and Top Floor of Parking Garages)¹									
Drive Aisles / Parking Areas¹⁻³ ^{ANSIIES RP-8-16 Table 17-2}									
All Parking Lots	2@0.00	0.2@0.0	Min	20:1	Max:Min	1@1.5	0.1@0.5	Min	20:1
Transaction Areas (Pedestrian & Vehicle) ⁴ ^{ANSIIES RP-8-16 Table 17-2}									
General Areas⁵⁻⁸									
Pre-courtyard	1@0.00	0.0@0.0	Min	15:1	Max:Min	5@1.5	0.5@0.5	Min	15:1
Post-courtyard	2@0.00	0.2@0.0	Min	15:1	Max:Min	1@1.5	0.1@0.5	Min	15:1
Transaction Machines⁹									
Pre-courtyard						3@0.75	2.0@0.75		
Post-courtyard						15@0.75	1.4@0.75		

APPLICATION TASK/AREA NOTES

- Lighting should address drive aisles and adjacent parking with mixed pedestrian and vehicular activity.
- Vertical illuminance criteria are measured in the primary direction of vehicular travel, in the center of the drive lane; vertical calculations are to account for the visibility of the pedestrian face and are defined by an imaginary vertical plane oriented perpendicular to the primary direction of vehicular travel. Illuminances on each side of the plane are assessed separately.
- Motion sensing should be used to reduce lighting levels when no one is present.
- Lighting should address an area extending 3 meters (10 feet) beyond the transaction area in all directions or to curb, property line, or structure, whichever is less.
- Vertical illuminance over entire front faces of pay machines. Coordinate with any machine display lighting requirements.
- Applies to LZ1 through LZ4. No electric lighting is used in LZ0.

GENERAL NOTES

IES ILLUMINANCE RECOMMENDATIONS: PARKING LOTS AND PARKING GARAGES

General Notes:
These General Notes provide context and general guidance for the illuminance recommendations contained in this table, which include illuminance criteria for parking lots and parking garages as found in ANSIIES RP-8-16, Recommended Practice for Design and Maintenance of Roadway and Parking Facility Lighting, Chapter 17.

These tables are in the new format as of August 2020 and include updates from ANSIIES RP-9-16, Addendum 1, issued in January 2020. Addendum 1 revised Recommended Maintained Illuminance Targets for parking lots only; refer to ANSIIES RP-8-16, Table 17-2, to view parking lot table with values in effect between September 2019 and January 2020.

Notes from Table:
 a. Applications, tasks, or viewing specific encountered on any given project may be different from those described here and may necessitate different design criteria. The designer is responsible for making fine discriminations of applications, tasks, and illuminance criteria. For parking garages, security and surveillance lighting should be considered where applicable.
 b. Codes, ordinances, or mandates may supersede these values; designers should design accordingly.
 c. Values cited are to be maintained over time on the area of coverage.
 d. Target illuminance values are intended to apply to the respective plane or planes of the task.
 e. Illuminance uniformity targets offer best results when paired in conjunction with luminance ratio and surface reflectance.
 f. Illuminance criteria are for typical conditions. During periods of non-use, the illumination of certain parking facilities may be turned off or reduced to conserve energy. If reduced lighting is to be used only for the purpose of property security, it is desirable that the minimum illuminance be not less than 1 lux horizontal.

Parking Area Lighting Photometric Plan

Tilden Commons Site Lighting
June 18, 2025
NTS



Total 20' poles for parking area: 14
Total luminaire heads: 16
(2 double heads on single pole)



Luminaire Schedule							
Symbol	Qty	Label	Arrangement	Description	LLF	Luminaire Lumens	Luminaire Watts
☐	1	AV4-R5-XX-0°-L700-30-XX-XX-UNV	Single	Avanza 450, 3000K, Type 5, Low Output (36W)	0.900	3866	36
☐	12	AV4-R3W-XX-0°-L700-30-XX-XX-UNV	Single	Avanza 450, 3000K, Type 3 Wide, Low Output (36W)	0.900	3866	36
☐	2	Double-AV4-R3W-XX-0°-L700-30-XX-XX-UNV_1	Back-Back	Avanza 450, 3000K, Type 3 Wide, Low Output (36W)	0.900	3866x2	36x2

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Parking lot	Illuminance	Fc	0.90	3.1	0.2	4.50	15.50

3 lighting layers:

2 Pathway + Human Scale Lighting

- 12' Pole-mounted LED luminaires
- Full-Cutoff to meet Dark-Sky requirements
- Energy-efficient LED technology with automatic daytime shut-off

1 Parking Area Lighting

- 20' Pole-mounted LED luminaires
- Full-Cutoff to meet Dark-Sky requirements
- Energy-efficient LED technology with automatic daytime shut-off



3 Accent Lighting

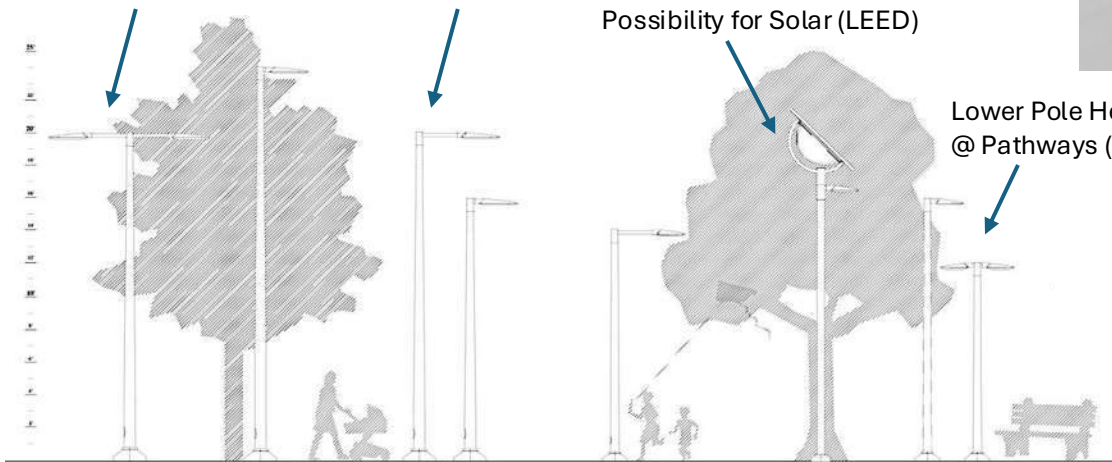
- Building Signage
- Landscape Lighting
- Terraces/Pavilion Lighting
- Building identity: entries + cupola



Higher Pole Heights @ Parking (20')

Possibility for Solar (LEED)

Lower Pole Heights @ Pathways (12')



3 lighting goals:

1 Safety + Security

- Visibility + visual comfort
- Light levels required for security equipment and feeling of safety for residents + visitors

2 Sustainable + Maintainable

- Dark-Sky Compliant
- Durable products
- Energy-efficient

3 Aesthetically Pleasing

- Classic style to complement building + town
- Warm-toned LEDs
- Glare-reducing optics

