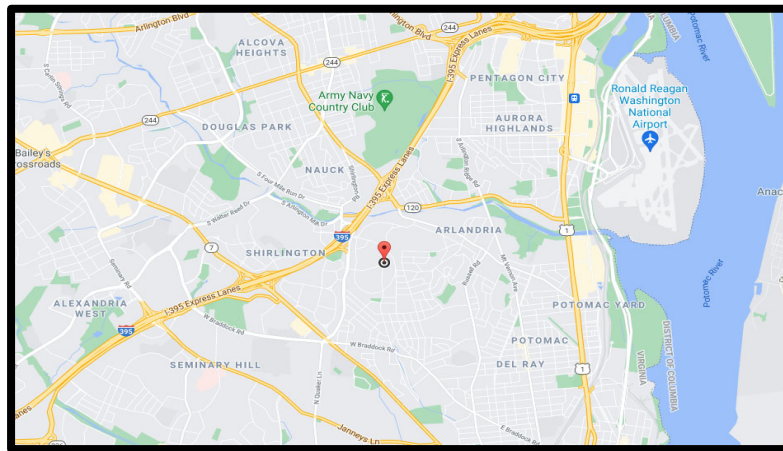


# SITE SURVEY & LIGHTING ASSESSMENT



## Parkfairfax Condominium - Alexandria, VA



**3360 Gunston Road  
Alexandria, VA 22302**

**Inspection Date: 05.11.2021**

**Report Date: 07.09.2021**

**On-Site Lighting  
& Survey, LLC**

# Table of Contents

<b>Summary . . . . .</b>	<b>1</b>
<b>Wall Pack Replacement . . . . .</b>	<b>2</b>
<b>Flood Replacement . . . . .</b>	<b>3</b>
<b>Deco Post Top Option . . . . .</b>	<b>4-5</b>
<b>Bollard Option . . . . .</b>	<b>6-7</b>
<b>Site Map . . . . .</b>	<b>8</b>
<b>Photometric Readings/Night Photos . . . . .</b>	<b>9-21</b>



# SUMMARY

**During our visit to Parkfairfax on May 11th, 2021, we confirmed that the parking lots and surrounding walkways have very low light levels. Besides just switching out your existing fixtures into more powerful and resourceful LED fixtures, there are a few different options that we can explore.**

**Option 1) Add more floods to the existing buildings to provide more light to wherever you want your needs may be.**

**Option 2) Add more of the decorative post top fixtures that would be similar to the existing ones that are by the pools.**

**Option 3) Add some decorative bollards throughout to light up those dark walkways. There are also solar bollards that could be an option we could explore if that's something that interests you.**

**\*All of these options would be dependent on how accessible power will be. Labor costs for projects like this would be hard to estimate. So once we really figure out what type of project you want to pursue, then a scope of work and more accurate labor numbers can be gathered.**

**Pages 2-7 are specification sheets and photos on what we recommend to replace the existing fixtures and the three options to add more fixtures.**

**Pages 8 will show the site map and pages 9-21 will show the footcandle levels found when we were on site. The table below is the IES Recommendations for lighting levels. Lighting zone 1 is the recommended light levels for the residential use of these areas. Comparing these recommended numbers to what we were reading, you can see that your existing light levels are much lower.**

	Average Maintained Footcandles (Horizontal) (FC)	Range of Maintained Footcandles (Horizontal) (FC)	Average Maintained Footcandles (Vertical)(FC)	Range of Maintained Footcandles (Vertical) (FC)
<b>Parking (Open) (Medium Activity)</b>				
Lighting Zone 3 (Urban)	1.5	.75 - 3	0.8	.4 - 1.6
Lighting Zone 2 (Suburban)	1	.5 - 2	0.6	.3 - 1.2
<b>**Lighting Zone 1 (Residential)</b>	<b>0.5</b>	<b>.25 - 1</b>	<b>0.4</b>	<b>.2 - .8</b>

**\*\*RECOMMENDED MINIMUM LIGHT LEVELS**

**Shown below, is the specification sheet for the Sylvania UltraLED Mini Wallpack.**

**This would be for the 50 existing wallpacks like the one shown in the photo to the right. We recommend the 15-watt wallpack that is priced at around \$55 per fixture.**



[www.sylvania.com/luminaires](http://www.sylvania.com/luminaires)

## SYLVANIA Luminaires

### UltraLED™ Mini Wallpack

#### Application

The UltraLED Mini Wallpack luminaires are environmentally preferable LED alternatives to traditional HID luminaires, offering up to 70% in energy savings. Ideal in place of traditional luminaires, or as new installations, the Mini wall pack series is offered in several wattages/lumen packages for illuminating building exteriors, outdoor corridors, walkways, and stairwells.

#### Benefits and Features

- CCT Selectable (3000K, 4000K, or 5000K) enabled through switch located inside fixture
- IP65 rated body with aluminum backplate and polycarbonate lens offers easy mounting, reducing installation and maintenance costs
- High color rendering and DLC Premium listing ensure energy efficiency and provide uniform and even lighting
- Photosensor included provides additional energy savings
- Up to 130 LPW
- Selectable CCT of 3000, 4000, or 5000K
- CRI >80
- Offered in 15 and 30 watts
- Non-cutoff distribution
- Energy savings up to 70%

#### Electrical

- 120-277VAC
- Power Factor >90%
- THD <20%
- 0-10V dimmable

#### Rated Life

- 150,000 hours (L70)

#### Warranty

- 5-year

#### Ambient Operating Range

- -40°F to +104°F (-40°C to +40°C)

Item #	
Type	
Project	
Notes	
Date	



#### Wattage Comparison

Traditional Source	Traditional System Wattage	LED System Wattage	Energy Savings
23W CFL	23	15	35%
35W HPS	45	15	67%
42W CFL	46	15	67%
100W Incandescent	100	30	68%
150W Incandescent	150	30	70%

#### Certifications and Listings

- cULus
- RoHS
- FCC
- DLC Premium
- IP65

#### Installation

- Luminaire mounts to recessed outlet box or can be surface mounted




LEDLUM093R1 5-21







**This is the NLS Classic 1 fixture that we recommend as an option to getting better light levels throughout the walkways on the property. We would need to get confirmation that power would be able to be provided before we start specifying locations for them. These are priced at \$745 per fixture, along with about \$600 per pole. The next page is a glimpse at what it would possibly look like with these installed in the walkways between buildings.**




## CLASSIC 1

ARCHITECTURAL LIGHTING


The Classic LED Post Top Lantern blends traditional design with modern LED and optical technology. The Classic is able to provide illumination at (70) seventy percent energy savings compared to previous technology. The Classic LED is also virtually maintenance free with the LEDs lasting up to 483,000 hours and beyond.

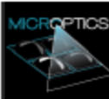
The Classic is Dark Sky Friendly and features a full cutoff optical reflector system. Micro Optics—recessed within the fixture's surface and can distribute light up to five times the mounting height, creating powerful uniformity. The Classic LED provides uniform illumination with up to four to five mounting heights. The optical system is completely concealed inside the fixture top eliminating glare. The Classic is available in 3000, 4000 and 5000 Kelvin and is available from 18-71 watts. The Classic LED Series is the perfect luminaire for traditional American neighborhoods.

The standard Classic LED comes with flat glass lens in the top of the fixture with open sides. Opal, Frosted, and Clear side lenses can be ordered as options.



\*Standard Clear Top Lens





**MICRO OPTIC SYSTEM**

Our new cell-enclosed, Micro Optic silicone modules produce high clarity and outstanding performance.

**LED WATTAGE CHART**

	16L	32L
350 milliamps	18w	-
530 milliamps	28w	-
700 milliamps	36w	71w
1050 milliamps	55w	-

Project Name:

Type:


Cat #	Light Dist.	No. of LEDs	Milliamps	Kelvin	Volts	Color	Mounting	Options
Classic 1 (CLA-1)	Type 2 (T2)	16 (16L)	350 (35) <small>*16L Only</small>	3000K (30K)	120-277 (UNV)	Bronze (BRZ)	Post Top Over 2-3/8 OD (T2R)	Marine Grade Finish (MGF)
	Type 3 (T3)	32 (32L)	530 (53)	4000K (40K)		White (WHT)	Post Top Over 3 OD (T3R)	Photocell (PC)
	Type 4 (T4)	<small>*16L Only</small>	700 (7)	5000K (50K)		Silver (SVR)	Arm Mount (AM)	*Universal Voltage 120-277 Photocell + Receptacle (PCR)
	Type 5 (T5)	<small>*16L Only</small>	1050 (1)	Graphite (GPH)		Pendant Mount (Comes with 1/2" Coupling)	Receptacle + Shortening Cap (PER)	
	<small>*16L Only</small>	Grey (GRY)	1' (PM1) 2' (PM2) 3' (PM3) 4' (PM4) 5' (PM5)	NEMA 7 Pin Receptacle + Shortening Cap (7PIN)				
			Custom (CS)				Surge Protector (10K) House Side Shield (HSS) Opal Side Lens (OSL) Clear Side Lens (CSL) Frosted Side Lens (FSL) Terminal Block (TB) Toolless Entry (TE)	



**The photo below is a similar look at what the Classic 1 fixture would look like installed in the walkways from the parking lots to between the buildings.**



**This is the NLS Radian Bollard that we recommend as an option to getting better light levels throughout the walkways on the property. We would need to get confirmation that power would be able to be provided before we start specifying locations for them. These are priced at approximately \$635 per bollard. The next page is a glimpse at what it would possibly look like with these installed in the walkways between buildings. Another route that could be specified would be a solar bollard. If this is something that would interest you, options can be looked into.**





## RADIAN BOLLARD


BOLLARD + LANDSCAPE LIGHTING

The Radian Bollard is a fusion of contemporary design and state of the art lighting technology. The performance of this bollard produces a smooth uniform light pattern at a broad angle at extremely efficient low wattages.

The Radian is available in 3000, 4000 or 5000 Kelvin temperatures to blend with any residential, retail, or pathway environment. The lens is standard clear with Paracline Optic.







**STAR POWER OPTICAL SYSTEM**

The Star Power reflector is an excellent system which provides great value and performance.

**LED WATTAGE CHART**

	16L
360 millamps	17w
630 millamps	26w
700 millamps	35w

Project Name

Type:

Cat #	Length	Shaft Dim	Light Dist.	No. of LEDs	Millamps	Kelvin	Volts	Mounting	Color	Shields	Options
Radian (RDN)	20" (2)	6" Round (6R)	Type 3 (T3)	16 (16L)	350 (35)	3000K (30K)	120-277 (UNV)	Anchor Base (AB)	Bronze (BRZ)	House Side Shield (HSS)	Photocell (PC) <small>*Universal Voltage 120-277</small>
	30" (3)		Type 5 (T5)		530 (53)	4000K (40K)	347-480 (HV)		White (WHT)		Dimming Ballast (DB)
	40" (4)				700 (7)	5000K (50K)			Silver (SVR)		Surge Protector (10K)
									Hunter Green (HGN)		Marine Grade Finish (MGF)
									Black (BLK)		Vandal Resistant Base (VRB)
									Graphite (GPH)		
									Grey (GRY)		
									Custom (CS)		



**The photo below is a look at what the Radian bollard would look like installed in the walkways from the parking lots to between the buildings.**

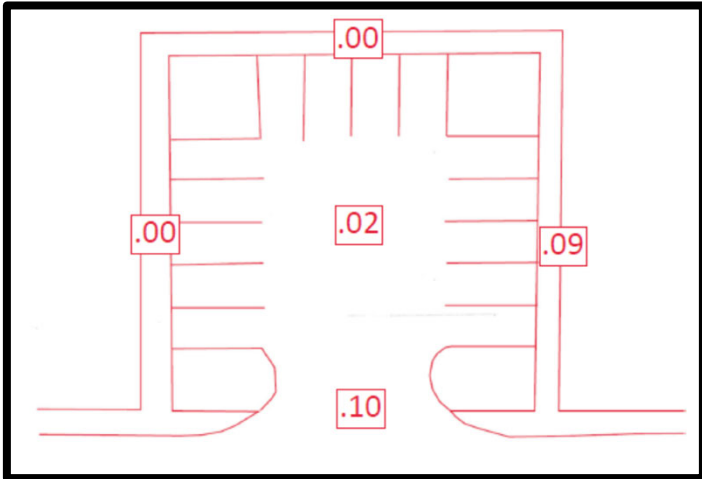


## Site Map: Parkfairfax- Alexandria, VA





## Parking Area # 1

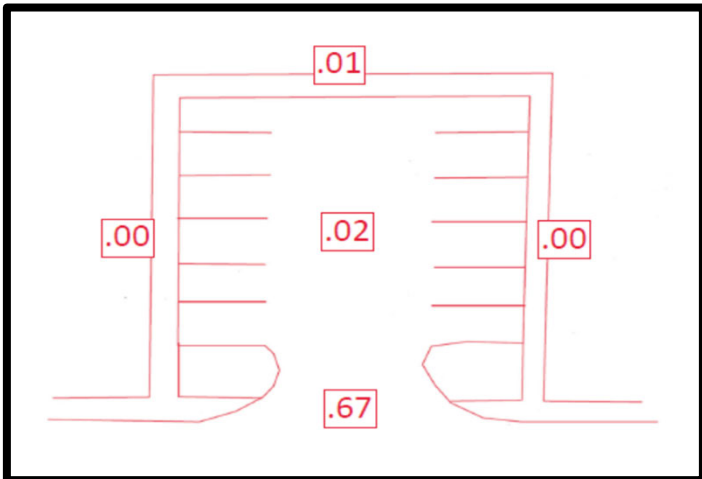


Footcandle Readings Found



Night Photo

## Parking Area # 2

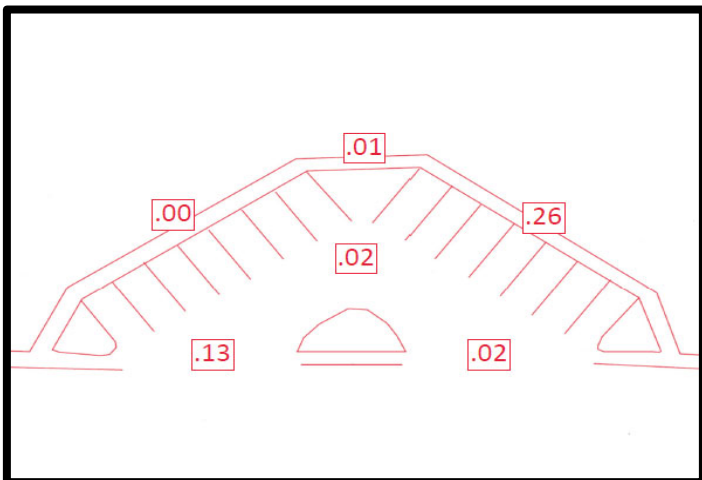


Footcandle Readings Found

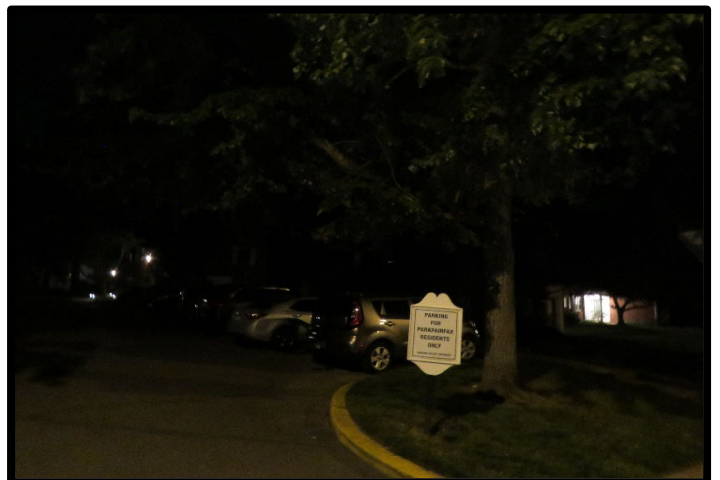


Night Photo

## Parking Area # 3



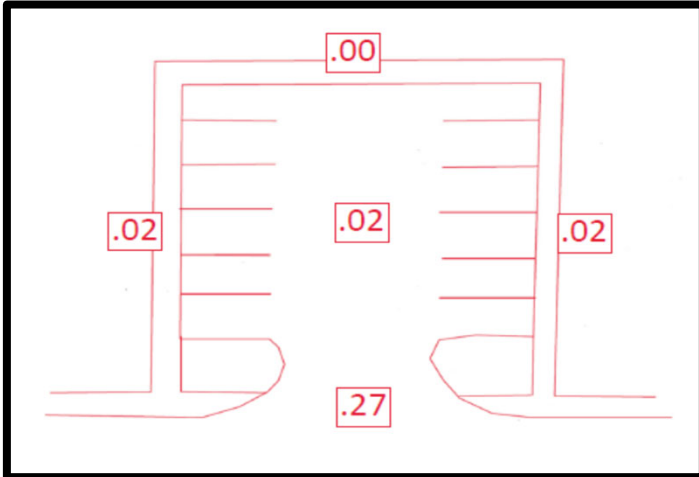
Footcandle Readings Found



Night Photo



## Parking Area # 4

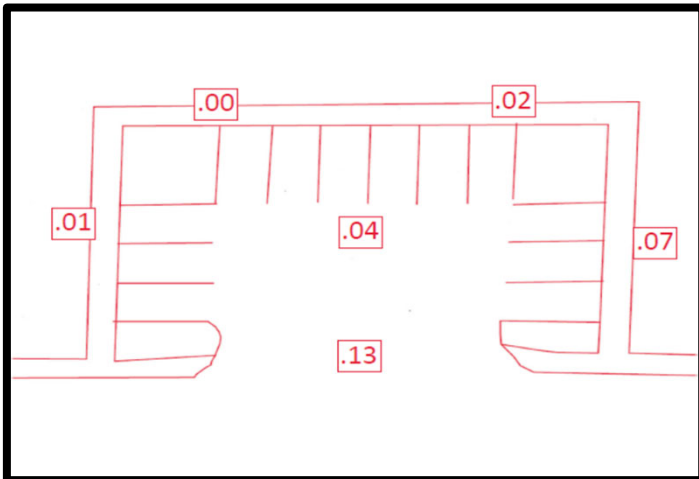


Footcandle Readings Found



Night Photo

## Parking Area # 5

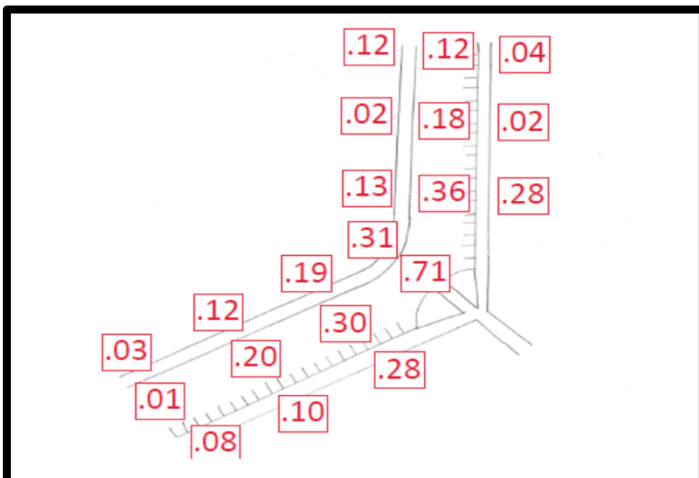


Footcandle Readings Found



Night Photo

## Parking Area # 6

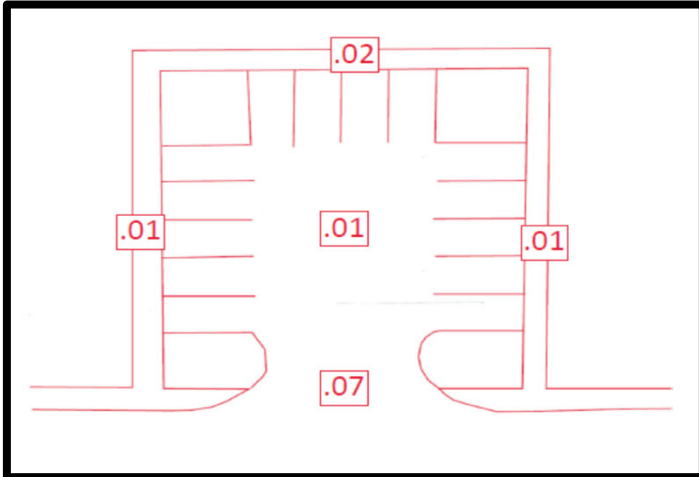


Footcandle Readings Found



Night Photo

## Parking Area # 7

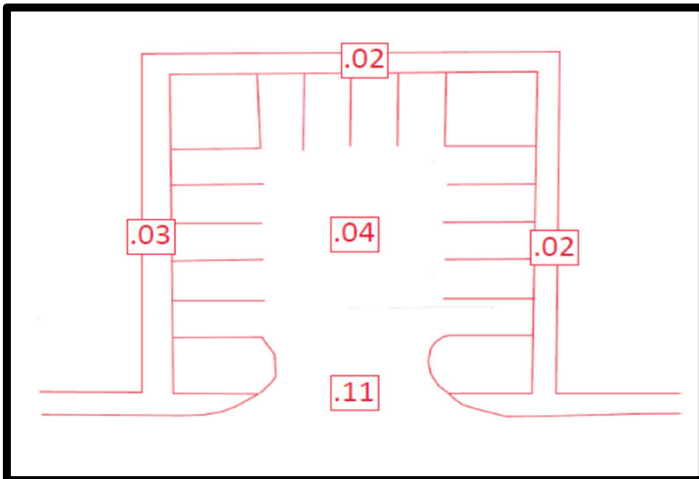


Footcandle Readings Found

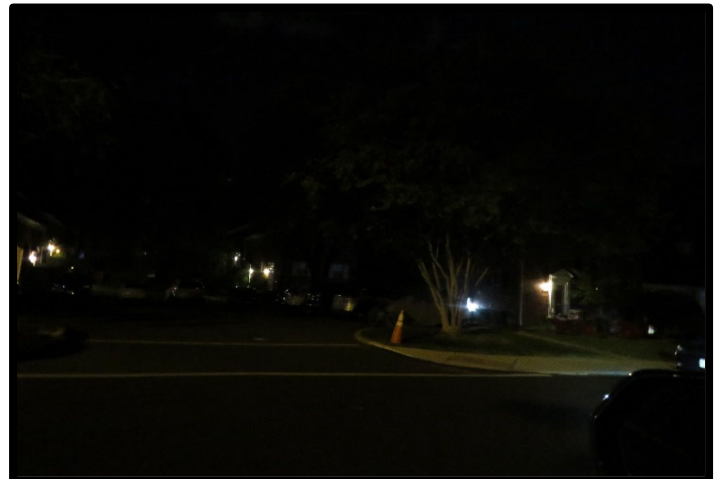


Night Photo

## Parking Area # 8

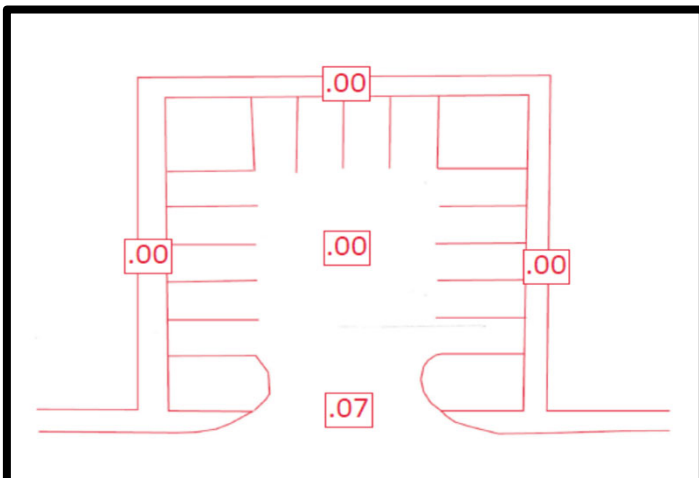


Footcandle Readings Found

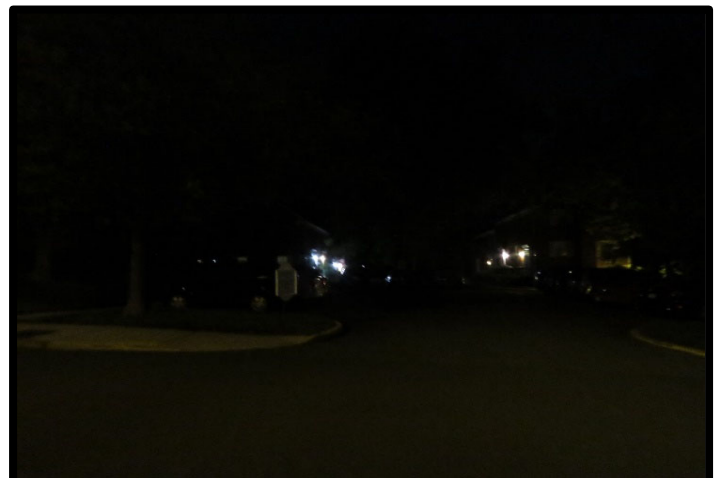


Night Photo

## Parking Area # 9

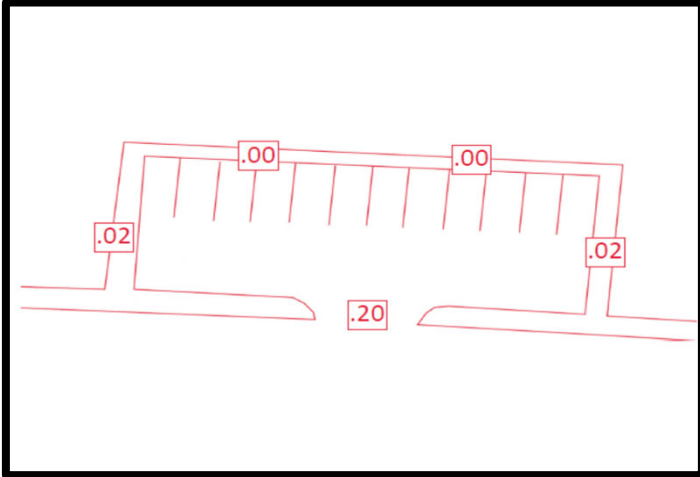


Footcandle Readings Found



Night Photo

## Parking Area # 10

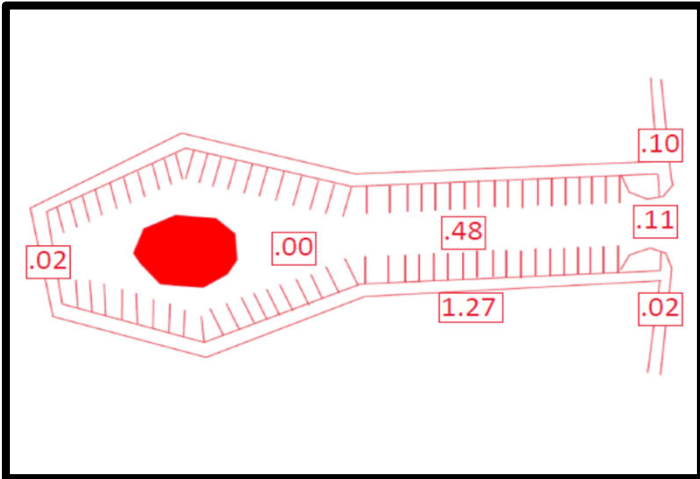


Footcandle Readings Found



Night Photo

## Parking Area # 11

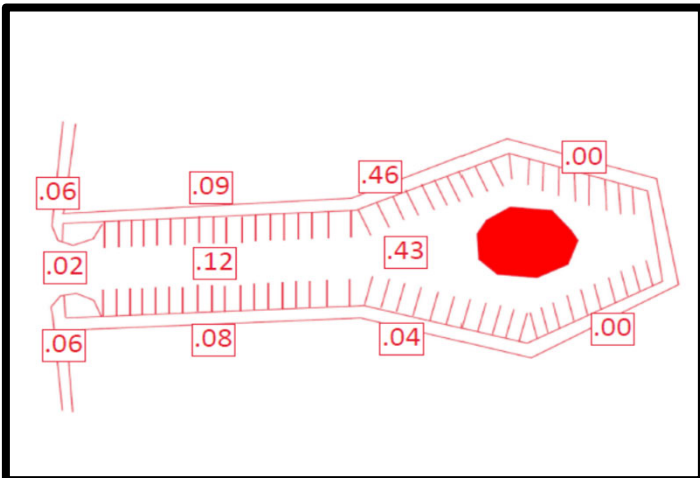


Footcandle Readings Found



Night Photo

## Parking Area # 12



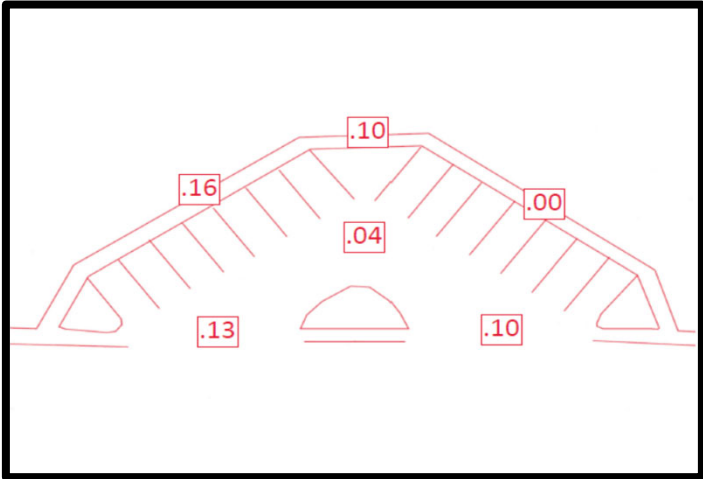
Footcandle Readings Found



Night Photo



Parking Area # 13

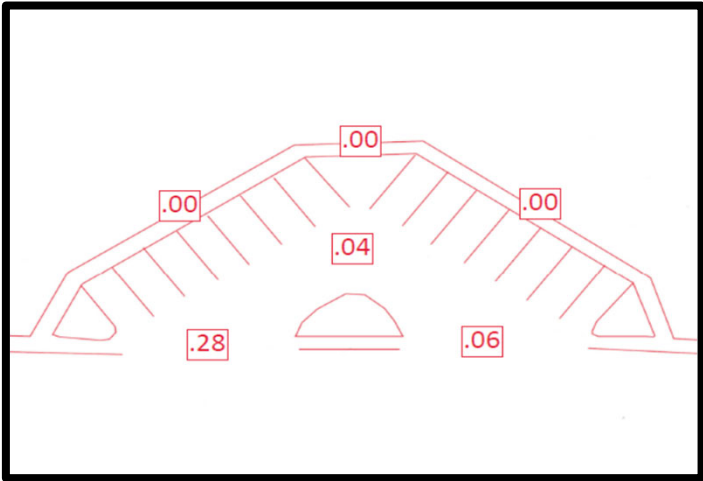


Footcandle Readings Found



Night Photo

Parking Area # 14

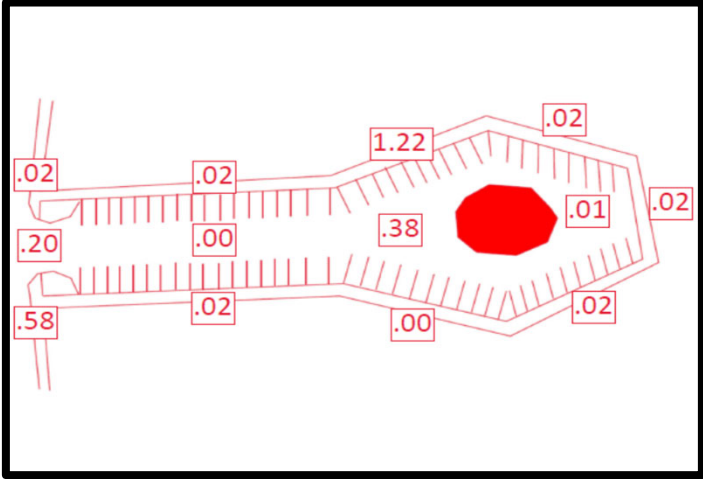


Footcandle Readings Found



Night Photo

Parking Area # 15

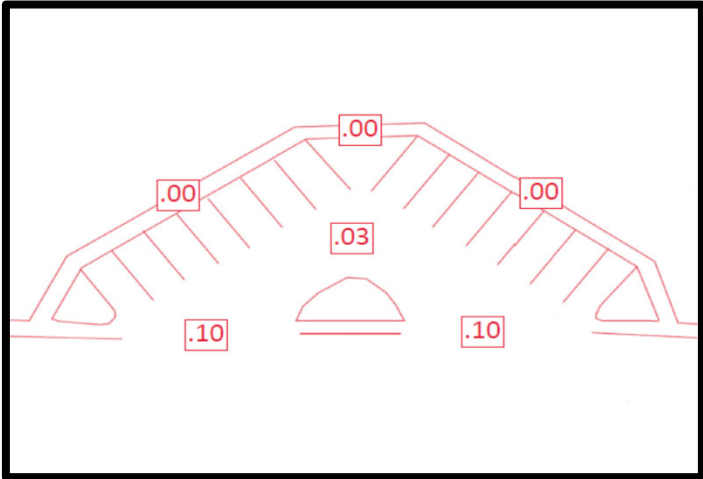


Footcandle Readings Found



Night Photo

Parking Area # 16

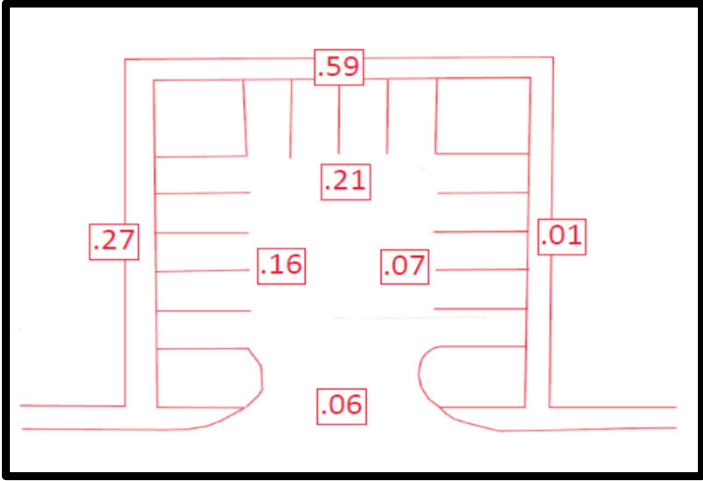


Footcandle Readings Found



Night Photo

Parking Area # 17

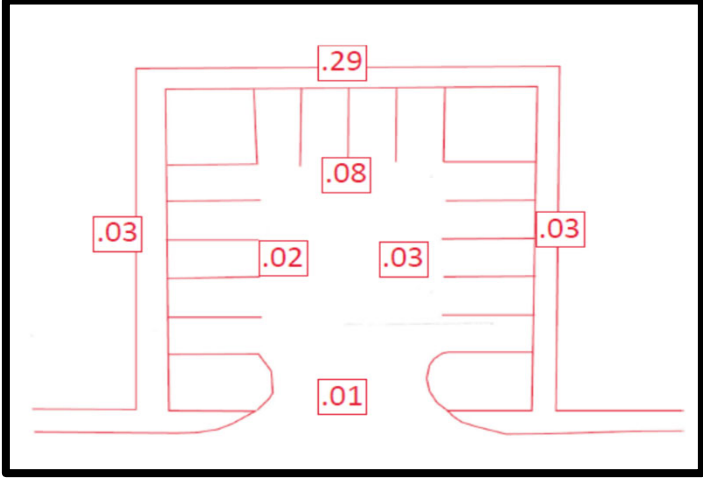


Footcandle Readings Found



Night Photo

Parking Area # 18

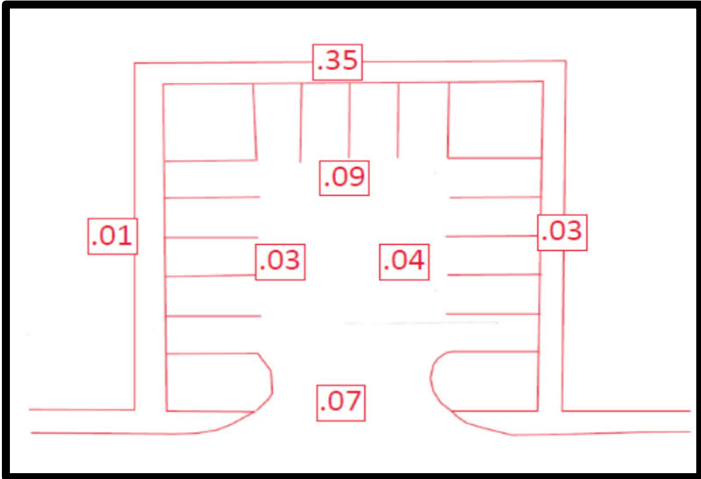


Footcandle Readings Found



Night Photo

Parking Area # 19

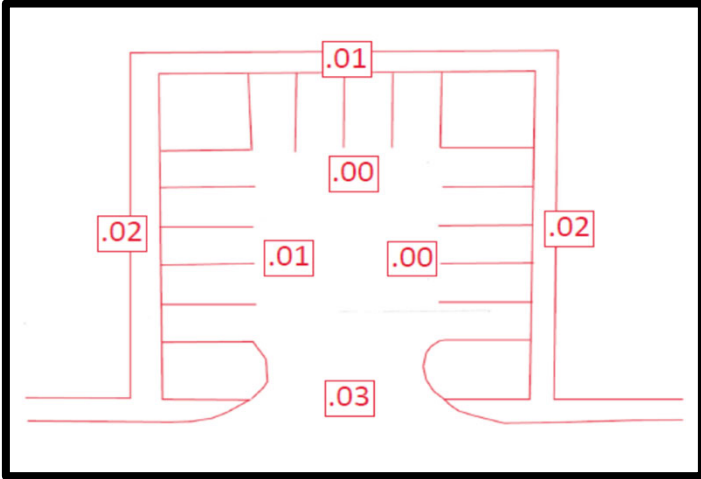


Footcandle Readings Found



Night Photo

Parking Area # 20

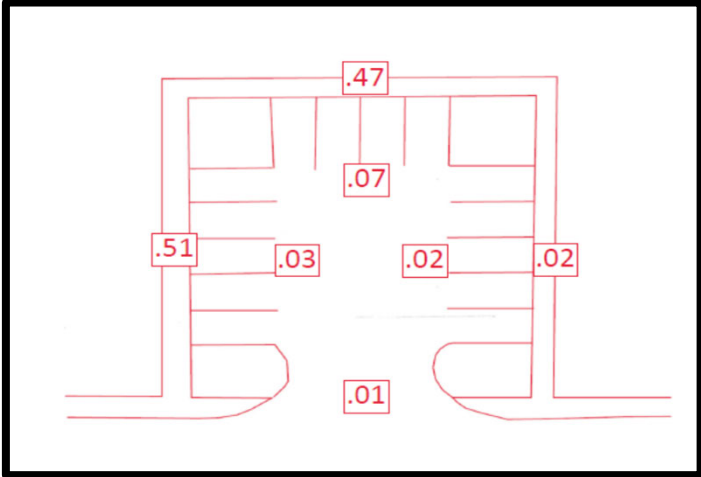


Footcandle Readings Found



Night Photo

Parking Area # 21



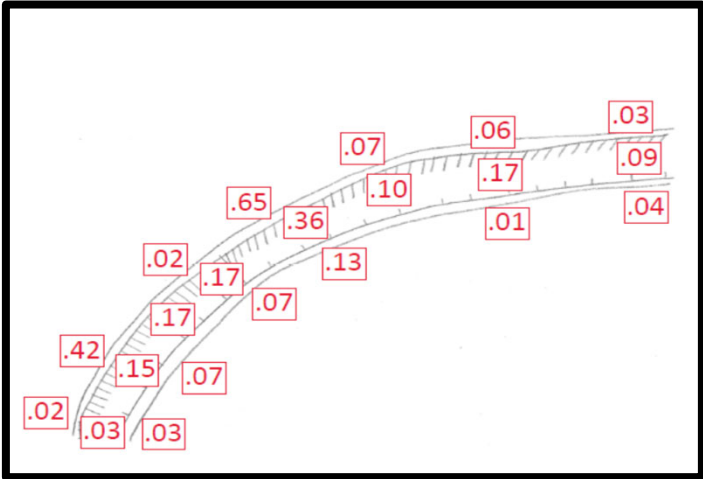
Footcandle Readings Found



Night Photo



Parking Area # 22

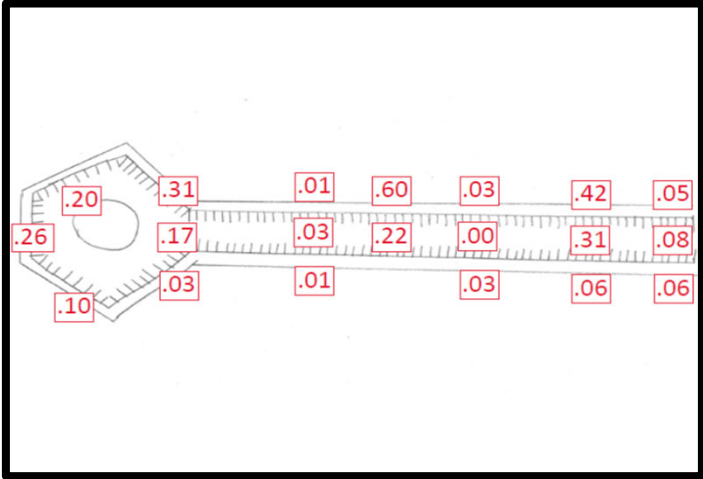


Footcandle Readings Found



Night Photo

Parking Area # 23

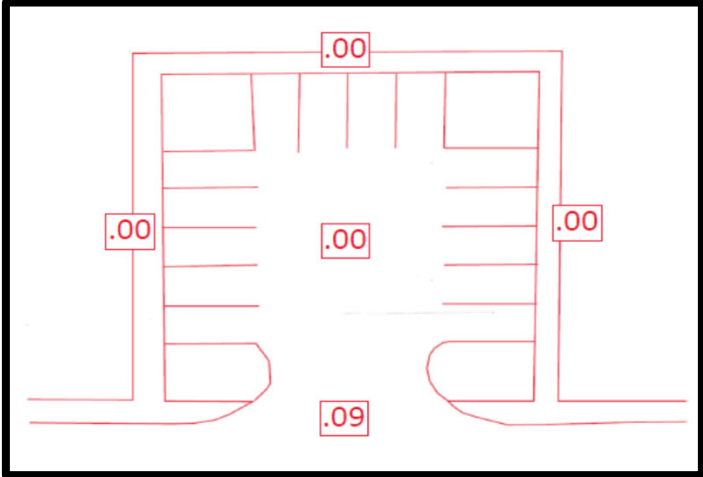


Footcandle Readings Found



Night Photo

Parking Area # 24

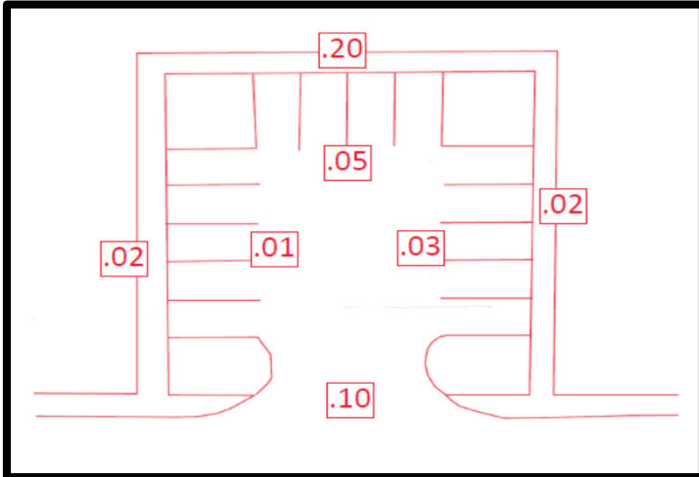


Footcandle Readings Found



Night Photo

## Parking Area # 25

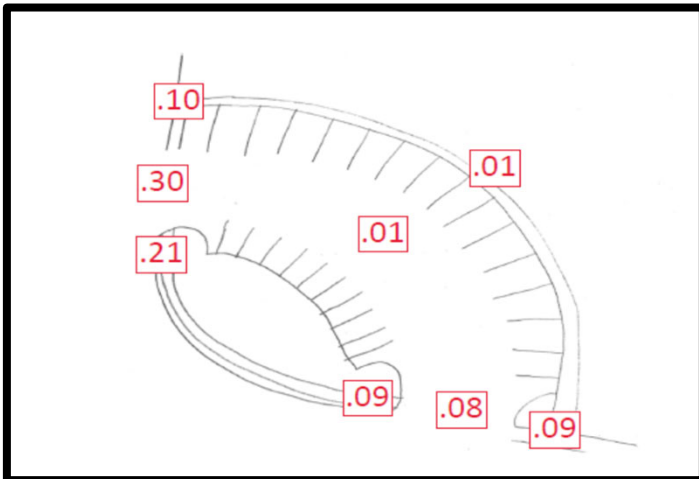


Footcandle Readings Found



Night Photo

## Parking Area # 26

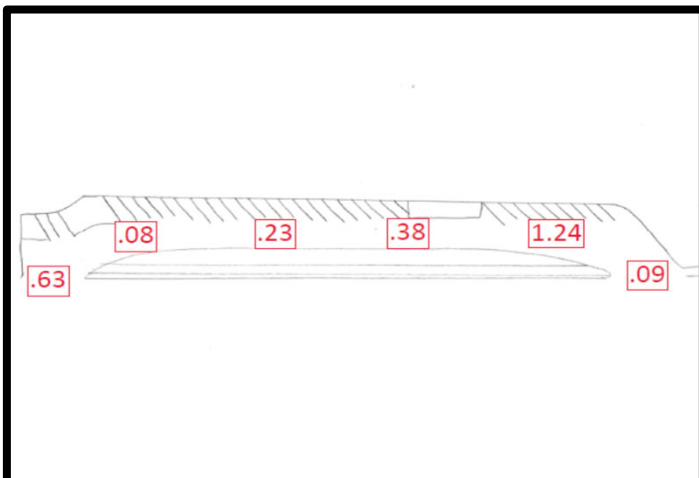


Footcandle Readings Found



Night Photo

## Parking Area # 27

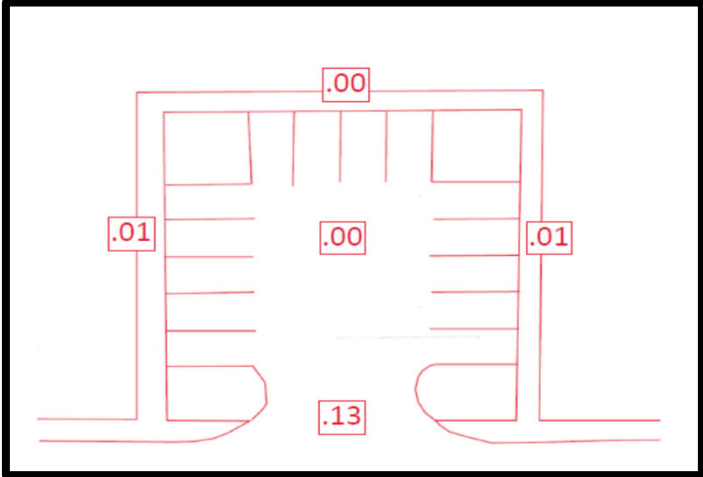


Footcandle Readings Found

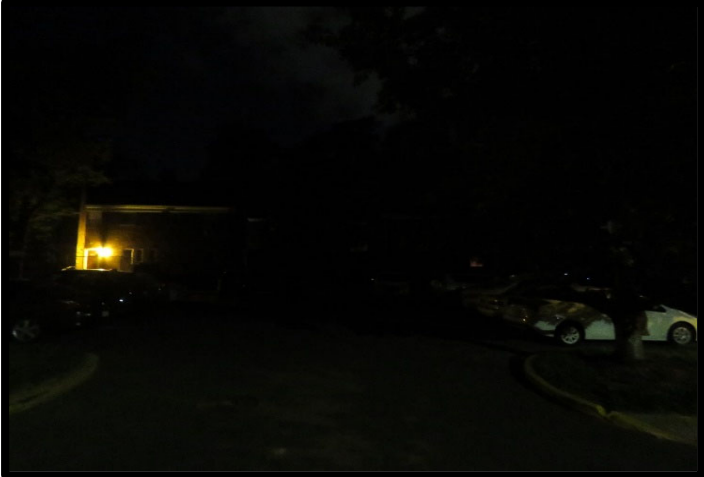


Night Photo

Parking Area # 28

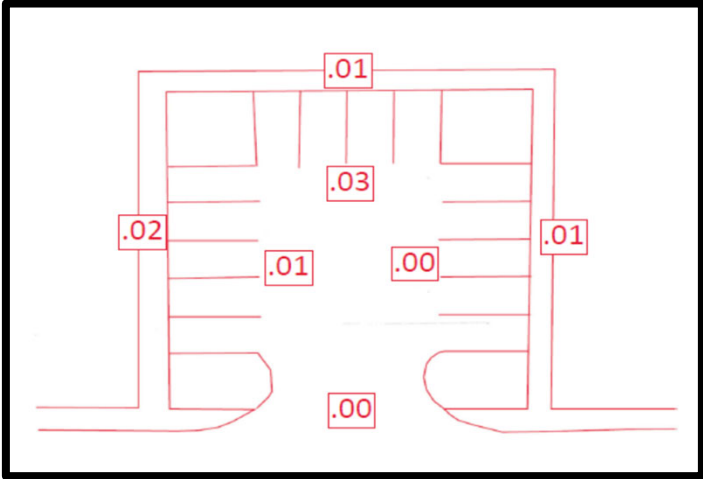


Footcandle Readings Found



Night Photo

Parking Area # 29

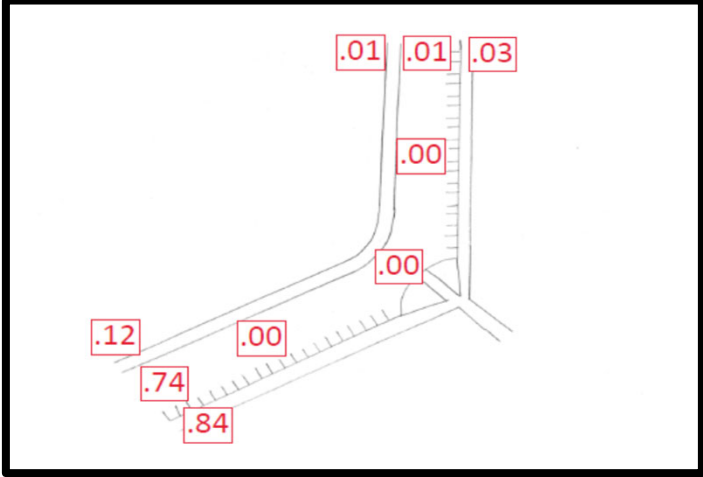


Footcandle Readings Found



Night Photo

Parking Area # 30



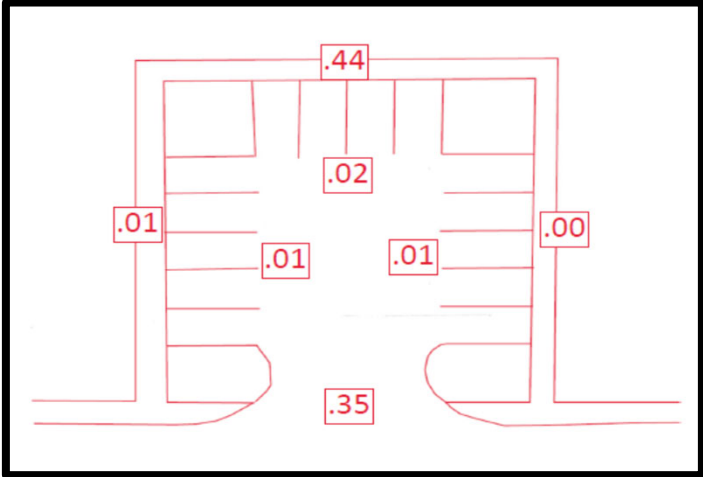
Footcandle Readings Found



Night Photo



Parking Area # 31

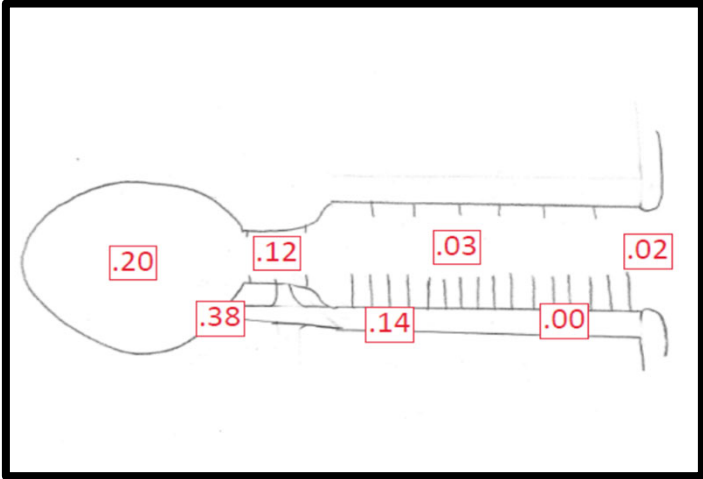


Footcandle Readings Found



Night Photo

Parking Area # 32

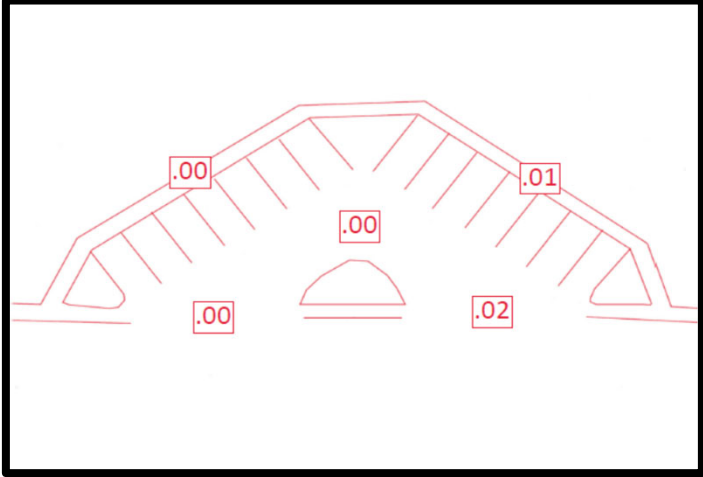


Footcandle Readings Found



Night Photo

Parking Area # 33

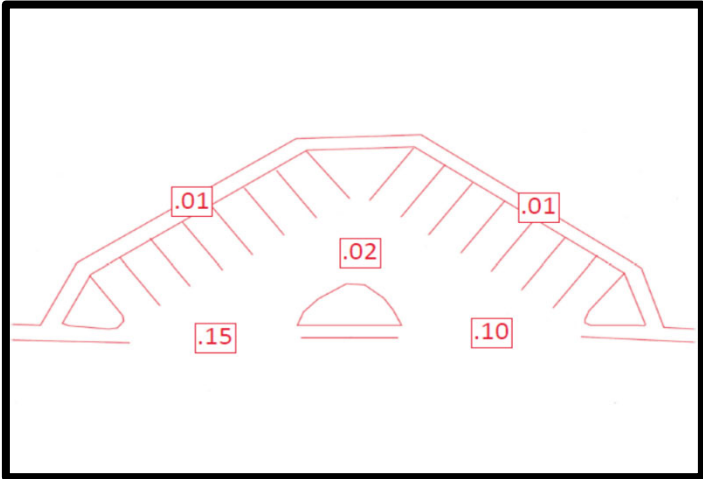


Footcandle Readings Found



Night Photo

Parking Area # 34

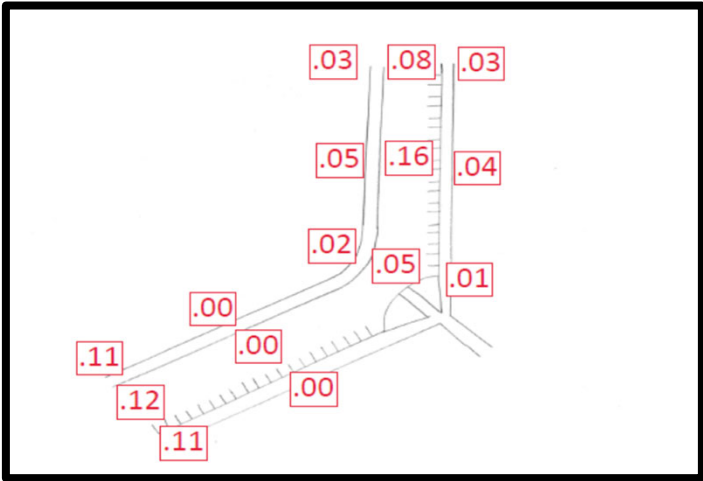


Footcandle Readings Found



Night Photo

Parking Area # 35

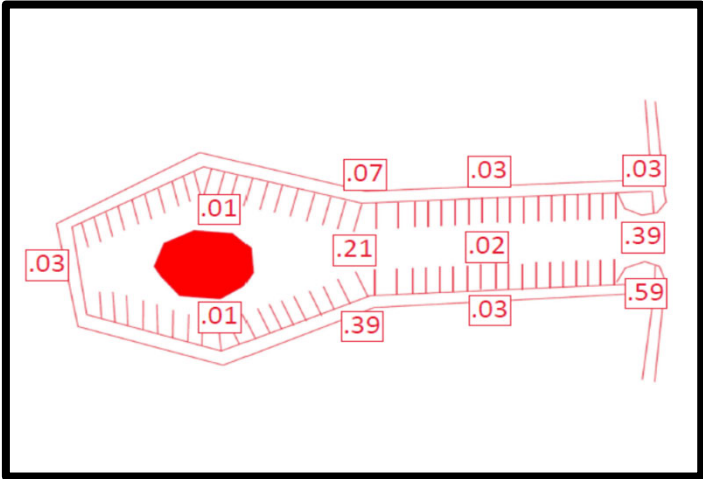


Footcandle Readings Found



Night Photo

Parking Area # 37



Footcandle Readings Found



Night Photo

## Parking Area # 36



Footcandle Readings Found



Night Photo