

Greater Vallejo Recreation District

GVRD promotes wellness and healthy lifestyles by providing safe parks and innovative and fun recreation programs for all residents.

BOARD OF DIRECTORS

Rizal Aliga Robert Briseño Thomas Judt Tom Starnes

GENERAL MANAGER

Gabe Lanusse

Facility and Development Committee Agenda Special Meeting Directors: Briseño and Starnes Wednesday, August 21, 2024 - 1:30 p.m. Administrative Building – Board Room, 401 Amador Street

This committee shall study and recommend acquisitions of real property and the type of facilities that should be planned for new acquisitions, all joint planning and development programs for district facilities, including any additional facility needs, and the development of present parks. This committee shall review and make recommendations for facilities and/or developments. This committee shall review matters related to the engineering and operation of facilities and short and long-range capital improvement plans.

- 1. Public Comment:
 - a. Members of the public may speak on items within the jurisdiction of the Committee. Each speaker is limited to 3 minutes and a spokesperson for an organization is limited to 5 minutes.
- 2. Presentation by Everwatt: Energy Efficient Upgrades
- 3. Hanns Park-Disc Golf Ribbon Cutting
- 4. South Vallejo Community Center Charging Stations (City of Vallejo Project)
- 5. Franking Prop. 68 Project
- 6. Lake Dalwigk Park Improvements
- 7. Meeting Adjourn





U.S. DEPARTMENT OF ENERGY QUALIFIED ENERGY SERVICE COMPANY



About

- Energy Service Company (ESCO) with the Department of Energy (DOE)
- Certified minority-owned business (MBE)

EverWatt is committed to delivering exceptional energy solutions while promoting diversity, innovation, and regulatory compliance.

We specialize in comprehensive lighting upgrades & HVAC optimization. Our team delivers custom-tailored solutions to reduce energy consumption and operational costs along side with PG&E's Energy Savings Program to utilize funding.

- Turnkey Project Management & Installation
- OSHPD (Consulting & Compliance)
- Comprehensive Assessments
- Risk Management, Advisory, & Site Safety
- Rebates, Incentives, and PG&E On Bill Financing
- Control Systems and Automation
- Site Mapping, Indexing, CAD Drawings, Engineering, and Permitting
- Energy Management Systems (EMS)
- Lighting as a Service (LaaS)
- Electrification
- Charging Stations

CA Assembly Bill 2208

Official state ban on the sale and distribution of fluorescent lamps

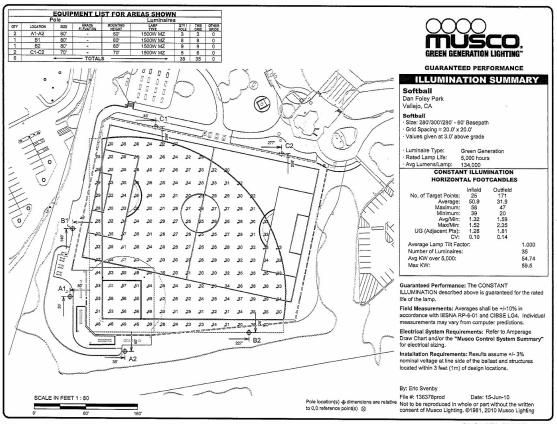
"...on and after January 1, 2024, a screw or bayonet base type compact fluorescent lamp, as defined, and, on and after January 1, 2025, a pin-base type compact fluorescent lamp or a linear fluorescent lamp, as defined, from being offered for final sale, sold at final sale, or distributed in this state as a new manufactured product"

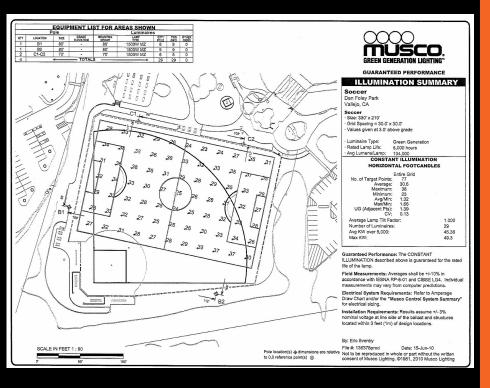
CA Assembly Bill 2208

AB 2208 & GVRD?

- Engineering will no longer be able to purchase fluorescent lamp/ballast replacements
- All existing facilities will have to convert to LED as the CA state standard for lighting

Dan Foley Soccer/Softball Field





LIGHT OUTPUT

Comparing MH to an LED- existing is using IES for each bulb (doesn't include directional shield for precise photometric analysis), the suggested replacement is using the fixture as a whole (This method can account for the integrated design and synergy of the LEDs) with better control over light distribution.

EXISTING METAL HALIDE:

- high energy consumption and degrades/significant light loss (also due to ballasts)
- Existing Photometrics have average lumens at 134,000 with the bulb lumens- but 30% of MH is using infrared, which does not contribute to visible light (divide that 134,000 by a ¹/₃ per bulb at maximum, minus 10% for lost light in the first 100 hrs, now at 84,000. After another thousand hours we have lost 20% output.
- Lifespan: 5,000 hrs

REPLACEMENT - LED:

- Replacement stadium light is at their original output, but will be brighter now bc of no light lost.
- Lumens: 165,000
- Averages are better with the entire field and meet that with less fixtures
- Lifespan: L90 > 150,000 hrs

SPECS:

OVERVIEW

Our LED SDL-6 series stadium light fixture was engineered using the highest quality components and offers a high-powered design that allows you to light up any sports arena or field with the energy-saving and long-life benefits of LED technology. The SDL-6 is the perfect solution to provide energy-efficient savings for any sports lighting application while providing unmatched light output. Our SDL-6 can dramatically reduce energy consumption by up to 80% and significantly reduce ongoing maintenance expenses.

Construction

Aluminum housing and metal board plate for thermal conduction and support.

1/2" Knockouts for easy installation

Removable driver box allows for remote driver installation

Electrical

Driver Surge protection L/N-PE: 10kV, L-N:6kV

The auto-sensing driver can operate on 220-480VAC.

High-efficiency LEDs are DLC premium and offer up to 80% energy saving compared with HID high mast solutions.

Long-life LED lighting system to deliver optimal performance with up to 150 lm/w efficacy.

Wattage adjustable

RATING

UL & DLC

Our SDL-6 features efficiency, quality, and performance, an excellent choice for commercial clients or locations seeking more light for their application. This fixture is designed to replace HID bulbs such as metal halide and high-pressure sodium bulbs.

OPTICAL

LED's available in 3000K, 4000K, 5000K or 6000K with CRI>70. 30° beam angle.

The expected service life of over 370,000 hours with lumen maintenance: L90 > 150,000 hours.

No-flicker light distribution provides superior lens brightness uniformity and visual comfort

UV-stabilized, injection-molded, impact-resistant polycarbonate lens.

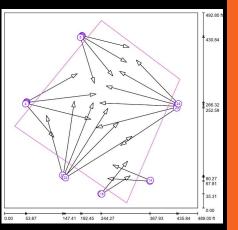
RGBW color option

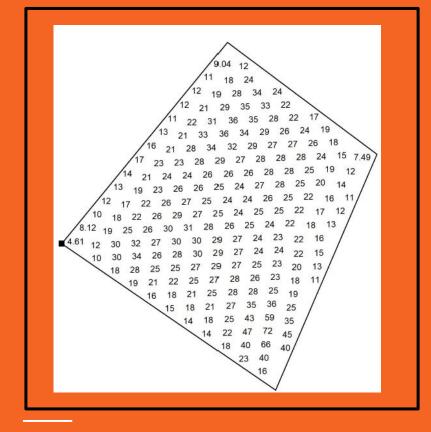
1200W Replacement



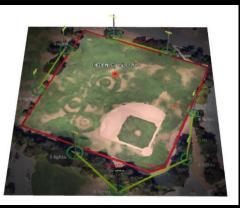
Soccer Field

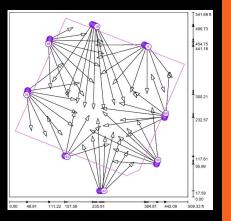


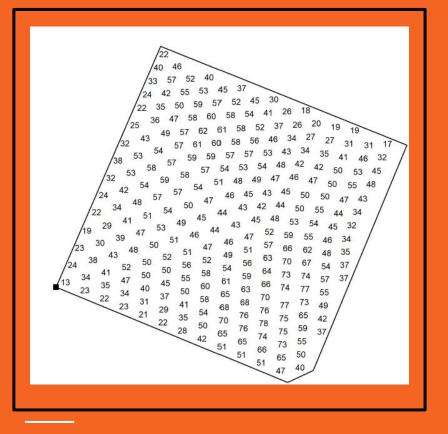




Baseball Field











Energy Efficiency Rep: Alene Travalini <u>alene@everwattlights.com</u>

PG&E Account Rep: Emily Bingham <u>E5BQ@pge.com</u>

Energy Savings

Dan Foley Park

Covered Under the PG&E Energy Savings Program:

- Materials
- Boom Lift
- PG&E Approved Electrical Engineers
- Installation
- Hazardous Waste Disposal
- Taxes
- Warranty
- Completed/Submitted Paperwork

Monthly Savings: \$2144.75

Payback: 9.79

Upfront Cost: \$0.00

Annual kWh Reduction: 75,214

Energy Savings (10 years): \$298,935

Existing & Replacements

Concessions:

Notes	Location	Existing Wattage / Fixture Type / Cieling / Bulb Type	Bulbs / Fxt Before	Fixture Qty Before	Replacement	Fixture Qty After
(3), the rest are LED	Concessions - Exterior	26W, WALL PACK, PHOTOCELL, BULB (E26)	1	3	9W MINI WALLPACK 50K W/PC (9W + 15 + 20W)	3
(1) is wall mounted	Concessions - Storage	32W, 4' LINEAR, NONE, T8 - 4'	2	3	12W 4' T8 TUBE 50K	3
	Concessions - Storage Closet	32W, 4' LINEAR, NONE, T8 - 4'	2	1	12W 4' T8 TUBE 50K	1
(2) are LED	Concessions - Men's Bathroom	26W, WALL PACK, PHOTOCELL, BULB (E26)	1	1	9W MINI WALLPACK 50K W/PC (9W + 15 + 20W)	1

Soccer Field:

(2) poles: 6 lamps; MUSCO	Foley Soccer Field	1500W, POLE LIGHT, NONE, BULB (E39)	1	6	1200W 6TH GEN STADIUM LIGHT 50K W/PC (800W + 1000W + 1200W) 277-480V	6
(1) pole: 8 lamps; MUSCO	Foley Soccer Field	1500W, POLE LIGHT, NONE, BULB (E39)	1	8	1200W 6TH GEN STADIUM LIGHT 50K W/PC (800W + 1000W + 1200W) 277-480V	8
(2) poles: 3 lamps; MUSCO	Foley Soccer Field	1500W, POLE LIGHT, NONE, BULB (E39)	1	6	1200W 6TH GEN STADIUM LIGHT 50K W/PC (800W + 1000W + 1200W) 277-480V	6
(1) pole: 9 lamps; MUSCO	Foley Soccer Field	1500W, POLE LIGHT, NONE, BULB (E39)	1	9	1200W 6TH GEN STADIUM LIGHT 50K W/PC (800W + 1000W + 1200W) 277-480V	9
	Storage Hut	26W, WALL PACK, PHOTOCELL, BULB (E26)	1	1	15W MINI WALLPACK 50K W/PC (9W + 15 + 20W)	1

Existing & Replacements

McManus Field:

(2) poles: 11 lamps	McManus Field	1500W, POLE LIGHT, NONE, BULB (E39)	1	22	1200W 6TH GEN STADIUM LIGHT 50K W/PC (800W + 1000W + 1200W) 277-480V	22
(1) pole: 14 lamps	McManus Field	1500W, POLE LIGHT, NONE, BULB (E39)	1	14	1200W 6TH GEN STADIUM LIGHT 50K W/PC (800W + 1000W + 1200W) 277-480V	14
(2) poles: 15 lamps	McManus Field	1500W, POLE LIGHT, NONE, BULB (E39)	1	30	1200W 6TH GEN STADIUM LIGHT 50K W/PC (800W + 1000W + 1200W) 277-480V	30
(2) poles: 13 lamps	McManus Field	1500W, POLE LIGHT, NONE, BULB (E39)	1	13	1200W 6TH GEN STADIUM LIGHT 50K W/PC (800W + 1000W + 1200W) 277-480V	13
(1) pole: 14 lamps	McManus Field	1500W, POLE LIGHT, NONE, BULB (E39)	1	14	1200W 6TH GEN STADIUM LIGHT 50K W/PC (800W + 1000W + 1200W) 277-480V	14

Facilities - Cultural Center:

	Facilites - Cultural Center	32W, 4' LINEAR, NONE, T8 - 4'	4	3	12W 4' T8 TUBE 50K	4
	Facilites - Cultural Center	34W, 4' LINEAR, NONE, T12 - 4'	4	3	12W 4' T8 TUBE 50K	3
	Facilites - Cultural Center	40W, 4' LINEAR, NONE, T12 - 4'	4	2	12W 4' T8 TUBE 50K	2
(1) in Side/Back Room	Facilites - Cultural Center	32W, 4' LINEAR, NONE, T8 - 4'	2	3	12W 4' T8 TUBE 50K	3

EVERWATT

QUOTE

PREPARED FOR:

PREPARED DATE:

4/19/2024

Greater Vallejo Recreation District - Dan Foley Park Attention: Chris Andrade 1461 N Camino Alto Vallejo, CA 94589

EXPIRATION DATE: 5/19/2024

Payment Summary		
Payback Period (Years)	9.78	
Upfront Cost	\$0.00	
Monthly Savings (Removed on PG&E Bill)	\$2,144.71	
Monthly Payment (Added on PG&E Bill)	\$2,126.43	

Electricity Breakdown			
Number of Fixtures Being Replaced	100		
Total Wattage of Fixtures Being Replaced (kW)	197.96		
Total Wattage of Replacement Fixtures (kW)	92.38		
Demand Reduction (kW)	105.58		
Assumed Electricity Price Increase (Annual)	3.28%		
Lighting Electricity Use Before (kWh/Year)	139,077		
Lighting Electricity Use After (kWh/Year)	63,865		
Electricity Use Reduction (kWh/Year)	75,212		

		Savi
Electricity Savings (10 Years)	\$298,928	
Maintenance Costs Savings (10 Years)	\$18,640	
Total Savings (10 Years)	\$317,568	
Cost of Delaying a Year	\$27,600	

ngs		
	Electricity	Maintenance
Year 1	\$25,736	\$1,864
Year 2	\$26,582	\$1,864
Year 3	\$27,455	\$1,864
Year 4	\$28,356	\$1,864
Year 5	\$29,287	\$1,864
Year 6	\$30,249	\$1,864
Year 7	\$31,243	\$1,864
Year 8	\$32,269	\$1,864
Year 9	\$33,328	\$1,864
Year 10	\$34,423	\$1,864

Project Costs Summ	ary
Total PG&E Project Financing	\$299,775

Breakdown of Fixtures		
Replacement Fixtures	Quantity	
9W MINI WALLPACK 50K W/PC (9W + 15 + 20W)	4	
12W 4' T8 TUBE 50K	16	
1200W 6TH GEN STADIUM LIGHT 50K W/PC (800W + 1000W + 1200W) 277-480V	79	
15W MINI WALLPACK 50K W/PC (9W + 15 + 20W)	1	
	100	

PREPARED BY:

Alene Travalini

925-639-6921

alene@everwattlights.com

Please call or email with any questions. This is only and estimate, and the savings calculations are based on the information available to us at the time. As new information is provided we will updated the calculations accordingly in an effort to provide the most accurate estimate of savings possible.