



Pacific Grove Unified School District  
Preliminary Assessment Report  
Board of Trustees

CA Contracting Program GC §4217

Presented by:  
ABM Building Solutions, LLC

CSLB #976012

May  
18  
2023



# Key Preliminary Assessment Team Members

## WHO WE ARE

### PURPOSE

To take care of the people, spaces and places that are important to you

### VISION

To be the clear choice in the industries we serve through engaged people

### MISSION

To make a difference,  
every person, every day



**Robert Lallement**  
*Regional Account Manager*



**Brett Lichtenthaler**  
*Regional Vice President*



**Kevin Wolfe, PE**  
*Lead Project Developer*



**Derek Reichstein**  
*Regional Director*

# Preliminary Assessment Steps

**Introduction Meeting**  
2/23/2023

**Memorandum of Understanding**  
3/13/2022

**Preliminary Assessment**  
4/12/2023

**PA Feasibility Presentation**  
5/18/2023

We Are Here



# Mechanical Equipment & Building Controls

## Current Status

- Aging HVAC equipment and water heaters
- Some equipment well beyond useful life
- Ventilation does not currently meet recommended indoor air quality standards

## Recommended Actions

- Upgrade aging & inefficient mechanical equipment to improve efficiency and ventilation
- Integration into existing Pelican control system will be fit for purpose
- Heat exchanger upgrade to HS Boiler



# Lighting Systems

## Current Status

- LED upgrades to interior and exterior has been mostly completed
- Areas still in need of retrofits

## Recommended Actions

- Upgrade all remaining interior and exterior spaces to LED lighting
  - Electric utility savings range from 50% to 80%
  - LED bulb life – 25,000-50,000 hours (reduced maintenance)
  - Light rendering significantly better
- Upgrade stadium lighting to LED and improve overall lighting layout
- Add occupancy and daylighting controls where applicable



# Building Envelope & Water Conservation

## Current Status

- Aging buildings across the district
- Domestic fixtures are a mixture of standard, low flow and waterless fixtures
- Water usage is considerably above average

## Recommended Actions

- Door weather stripping and sealing
- Sealing of windows and other external penetrations
- Upgrade domestic water heaters
- Upgrade domestic fixtures to low flow and add pedal valves
- Upgrade all irrigation controllers to WeatherTrak smart irrigation controllers
- Window replacement



# Energy Resilience

## Current Status

- Frequent power shut-offs District Wide causing IT issues
- Loss of ~6.5 instructional and operational days per year

## Recommended Actions

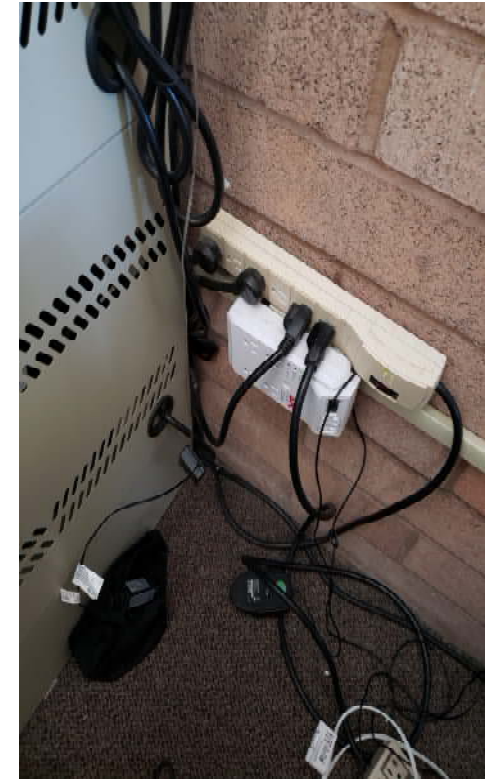
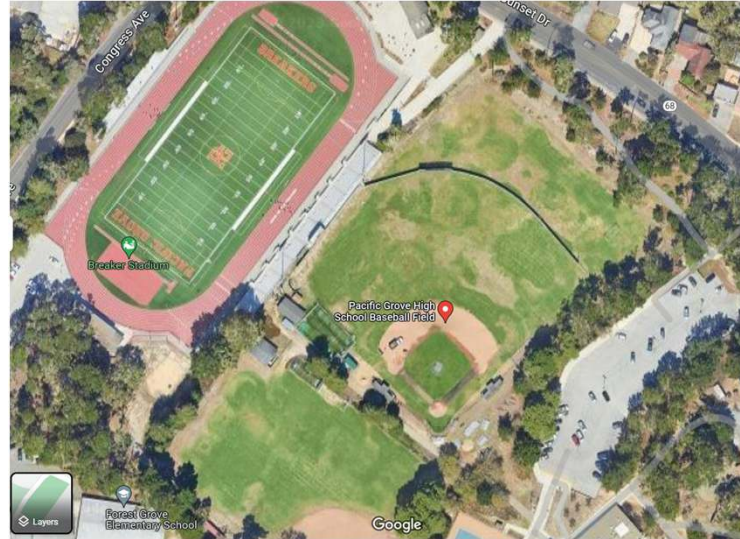
- Battery Energy Storage System at Middle School to keep IT systems running in the event of a utility shut-off
- Size battery to keep other district designated essential services running during utility shut-off event
- Strategically implement PV systems across the district



# Other Areas for Improvement

## Recommended Actions

- Baseball fields artificial turf conversion
- Plug load optimization
- Building automation improvements
- Attic insulation
- Roofing
- Electrical service upgrades
- EV charging
- Appliance upgrades





# PGUSD Estimated Utility Savings



## Utility Data Analysis



Facility Building Name	Gross Square Feet	Annual Utility Cost	Cost per Sq/Ft	Post Retrofit	
				Targeted per Sq/Ft	\$ Savings
Adult School	25,536	\$ 37,989	\$ 1.49	\$ 1.24	\$ 6,325
Robert Down Elem.	47,153	\$ 95,632	\$ 2.03	\$ 1.55	\$ 22,545
Community HS	30,919	\$ 20,996	\$ 0.68	\$ 0.58	\$ 3,063
District Office	16,550	\$ 15,207	\$ 0.92	\$ 0.77	\$ 2,418
Forest Grove	39,257	\$ 90,297	\$ 2.30	\$ 1.86	\$ 17,279
Pacific Grove High School	95,338	\$ 293,945	\$ 3.08	\$ 2.14	\$ 89,922
Pacific Grove Middle School	65,136	\$ 170,352	\$ 2.62	\$ 1.88	\$ 47,896
			\$ -	\$ -	\$ -
			\$ -	\$ -	\$ -
<b>Totals</b>	<b>319,889</b>	<b>\$ 724,419</b>	<b>\$ 2.26</b>	<b>\$ 1.67</b>	<b>\$ 189,448</b>

**% Savings 26%**

Property of ABM - Confidential and Proprietary

*\* all numbers displayed are based on available information provided by Pacific Grove Unified School District and are subject to change*

# Leveraging Savings for Funding with CA §4217

## Financial Overview

Area of Annual Savings	Amount
Utility Savings	\$189K
Maintenance and Operational Savings*	\$63K
Cost Avoidance Savings	TBD
<b>Total Annual Savings</b>	<b>\$252K-310K</b>

Solutions are funded through existing operational budget

\*US Department of Energy: *How to Determine and Verify Operating and Maintenance Savings in Energy Savings Performance Contracts*; March 2018  
[https://www.energy.gov/sites/prod/files/2018/03/f49/om\\_savings\\_guidance.pdf](https://www.energy.gov/sites/prod/files/2018/03/f49/om_savings_guidance.pdf)



**\$4.5M**  
Potential  
Infrastructure  
Improvements

# Benefits of GC §4217

- ❖ **Select** a partner who provides the best value
- ❖ Accomplish Facility, Technology & Infrastructure improvements
- ❖ **Collaborative** design
- ❖ Reduced overall project cost and time to implementation
- ❖ Reduce Utility and Operational expenses
- ❖ Savings fund the improvements
- ❖ ABM **Guarantees** the savings
- ❖ No Change orders
- ❖ No Cost overruns



*\*GC §4217 was approved in 1984 and revised in 2005 to encourage public agencies to improve building efficiency & Infrastructure*

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## Alternative Revenue Sources & Grants

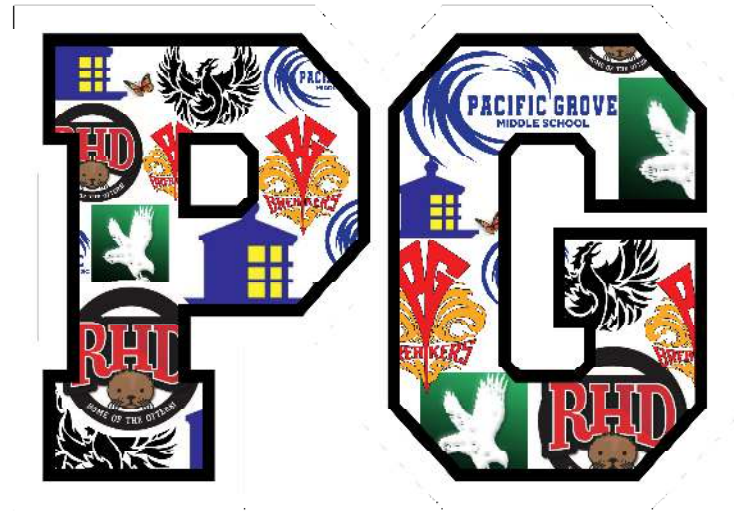
ABM's team of grant writers will help you and your staff pursue alternative revenue and grant opportunities at no additional cost.



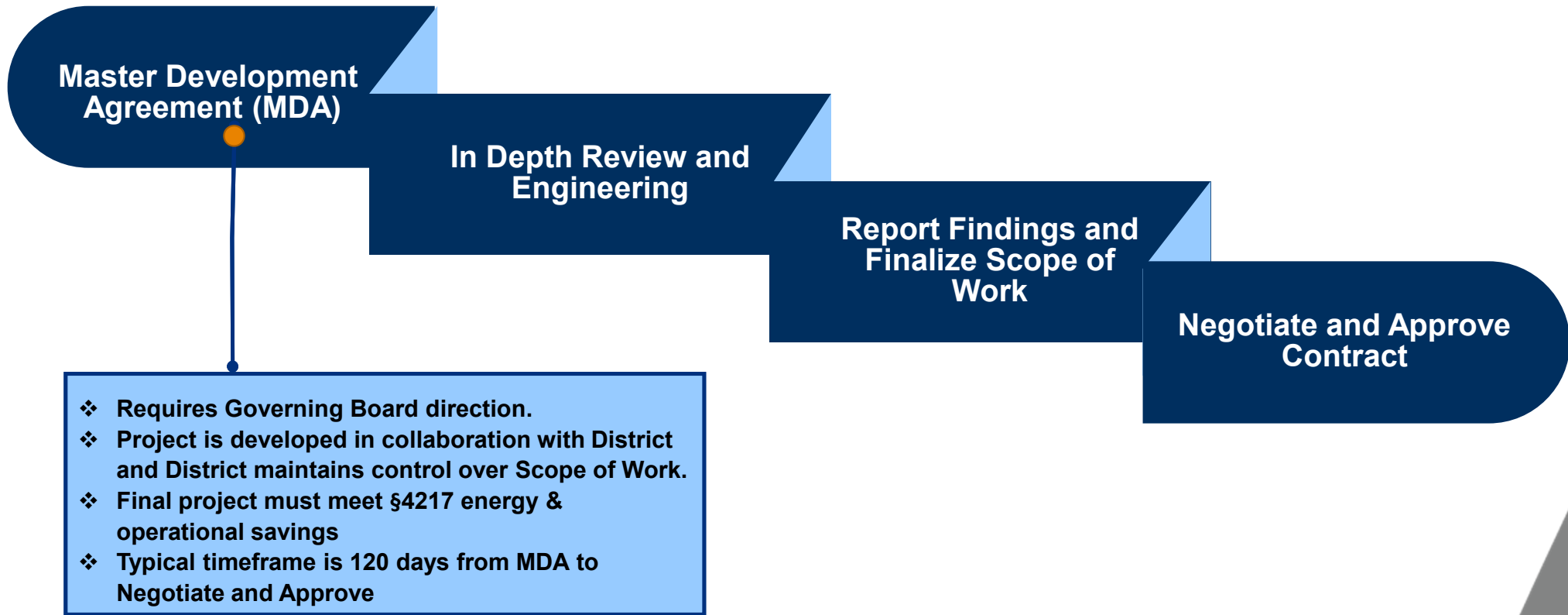
# Project Benefits to PGUSD

- Increase **productivity** and **health** of students and employees through improved learning/workspaces
- Significant energy savings and general fund relief
- Recover lost instruction caused by PG&E outages
- Significant reduction in Water use
- Meet Governing and District facility improvement initiatives
- Stretch the impact of Measure D funds
- Strengthen your role as a **positive** steward of physical and fiscal resources within the Pacific Grove Community

“Pacific Grove Unified School District, in partnership with the community and with a focus on equity, will challenge every student by providing a quality instructional program in a **positive, safe and stimulating environment.**”



# Process Beyond the Preliminary Assessment





# Thank You

ABM Building Solutions, LLC.

Robert Lallement

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# Appendix

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**ELECTRICAL**

**40,000+** parking lot poles and lights serviced and maintained



**ENERGY**

**23%** average energy reduction for client properties



**EV CHARGING**

**6,000+** EV charging stations installed and maintained



**HVAC & MECHANICAL**

**14,375+** heating and cooling systems serviced and maintained



**JANITORIAL**

**484+ million** sq. ft. of buildings cleaned and serviced



**LANDSCAPE & TURF**

**600+** properties maintained



**PARKING & TRANSPORTATION**

**300,000+** parking spaces and **500+** parking locations managed

# California

Our 20,350+ team members in California are dedicated to providing maintenance to 3,700+ facilities, including LAX, SFO, BUR, and SJC airports.

- ✓ Over 40 years in business with \$713 Million in Current Guarantees
- ✓ Adequate Financial Resources – \$1.5 billion in revenue in California



Founded in San Francisco in **1909**



We operate **LAX, SFO, BUR, and SJC** airports



**20,350+** Californians employed



**23** branch locations



**\$1.1+ billion** in revenue



**3,700+** buildings serviced and maintained

# DOE Qualifications and Licenses



- U.S. Department of Energy's (DOE) Qualified List of ESCOs: ABM has been added to the DOE's List to conduct Energy Savings Performance Contracts (ESPCs) with Federal & State Agencies. We are currently developing projects across the nation in their most mission critical environments & data centers.
- NAESCO Accredited: ABM has been accredited by the National Association of Energy Service Companies.
- State of California Department of General Services (DGS) – Prequalified ESCO
- B – General Building Contractor
- C-4 – Boiler, Hot Water Heating and Steam Fitting
- C-7 – Low Voltage Systems
- C10 – Electrical
- C20 – Warm-Air Heating, Ventilating and Air-Conditioning
- C36 – Plumbing
- C38 – Refrigeration
- C43 – Sheet Metal
- C-61 / D62 – Air and Water Balancing
- C-61 / D65 – Weatherization and Energy Conservation



# Bonding, DSA, and Litigation

- **Bonding Limits**  
\$70M on a single project & \$500M aggregate
- **DSA Experience**  
Lompoc USD, Winters USD, Newcastle ESD
- **Pending Litigation**  
ABM has no pending/recent litigation relating to any efficiency improvement project performance or measurement and verification (M&V)

*ABM's Annual Report & Audited Financial Statements are available at [www.abm.com](http://www.abm.com)*

# Government Code §4217 Improvement Examples

- Heating, Ventilation and Air Conditioning Improvements
- Park, Street and Parking Lot Lighting Retrofits
- Building Interior Lighting Retrofits
- Swimming Pool Heating and Water Conservation
- Grounds Irrigation Systems Improvements
- Ceiling Replacements
- Domestic Water Conservation Measures
- Electric or NG Buses and Work Vehicles
- Window and Door Replacements
- Roof Replacement or Repairs
- Building Automation Systems
- High Efficiency Transformers
- Hard Scape
- ADA Access
- Building Envelop Sealing
- Solar PV, Solar Thermal
- Wind Turbine Energy
- Electrical Upgrades
- Plug Load Controls
- Biomass Energy
- Battery Storage
- Sub Metering
- Green Roofs
- UPS



# SERVICES

## PERFORMANCE CONTRACTING



- Initial Feasibility Analysis
- Measurement & Verification
- Engineering Calculations & Design
- Repairs, Replacements, Retrofits & Upgrades
- Identification & Processing of Utility Rebates & EPA Tax Incentives
- Structuring Financing Terms to Generate Positive Cash Flow
- Commissioning & Retro-Commissioning
- On-Site Training

### ABM Infrastructure Solutions

High-efficiency conservation, facility modernization & technical service program that addresses both facility upgrades & funding needs of clients.

*\*Performance Contracting serviced out of HVAC & Maintenance Locations.*