



# QUARTERLY FACILITIES AND ENERGY MANAGEMENT UPDATE

February 23, 2016



### **AGENDA**

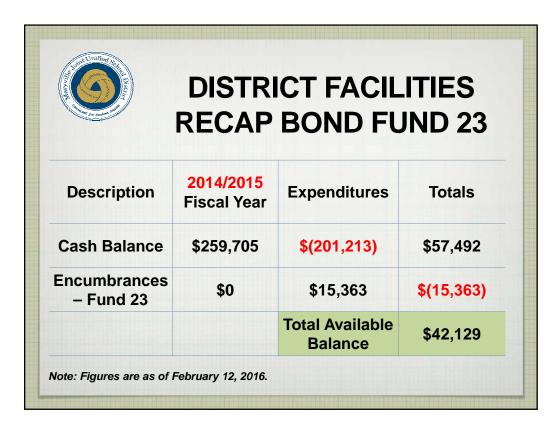
- Funding Overview
- General Fund One-Time Money Projects Update
- School Site Funded Projects Update
- Winter/Spring Maintenance and Grounds Projects
- Deferred Maintenance Update
- Prop 39/Energy Management Update
- DSA Legacy Projects
- Facilities Master Plan

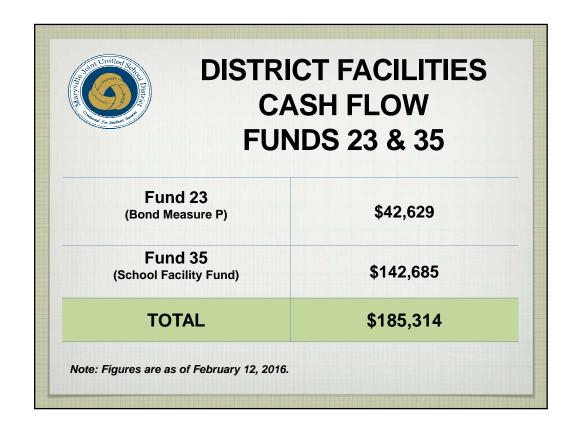




CURRENT ENCUMBRANCES CURRENT PROJECTS/CLOSEOUT – FUND 23	
Professional Services:	\$20,713
Architect Fees:	\$0
Federal & State Fees:	\$0
Labor Compliance:	\$4,868
Land Improvement:	\$184,121
Testing & Inspection:	\$0
Other Costs/Services:	\$7,874
TOTAL	\$217,575









OTHER FUN	NDING SOURCES
Emergency Repair – (6225)	\$54,023 (2015/2016) Expenditures (as of 02/12/16): \$(7,283); Encumbrances (as of 02/12/16): \$(500) \$46,240 (remaining as of 02/12/16)
Routine Restricted Maintenance (8150)	\$2,022,040 (2015/2016) Expenditures (as of 02/12/16): \$(1,163,681); Encumbrances (as of 02/12/16): \$(726,359) \$132,010 (remaining as of 02/12/16)
Deferred Maintenance - Fund 14	\$1,401,047 - 2015/2016 (incl. \$820,000 annually through LCAP) \$(1,367,077) (allocated as of 02/12/16) \$36,055 (remaining as of 02/12/16)
General Fund One-Time Money Includes One-Time Discretionary and Previously allocated General Fund EFB	\$5,104,178 - 2015/2016 \$(4,959,083) (allocated as of 02/12/16) \$145,095 (remaining as of 02/12/16)
Prop 39 MJUSD – Clean Energy (Fund 01 - Restricted MJUSD)	\$2.2 Million (Over 5 Years)
Prop 39 MCAA – Clean Energy (Fund 09 - Restricted MJUSD)	<u>\$250,000</u> (Over 5 Years)

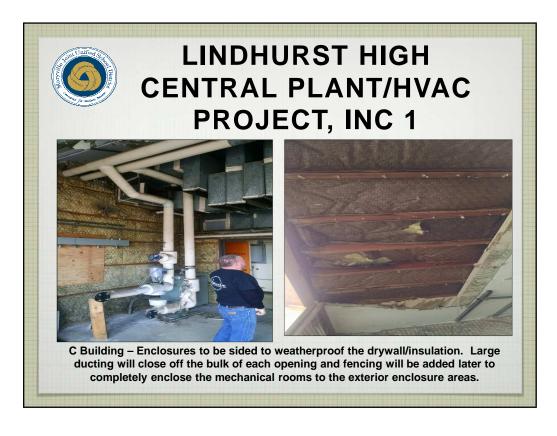


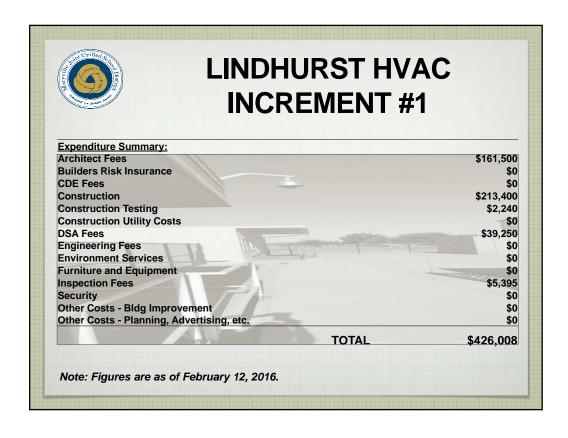
















# LINDHURST HVAC INC. 2 PROPOSED DESIGN

#### Building B - Main Gym and Locker Rooms (Rooms B1 and B2):

30 Ton Carrier Brand. Three units and controls.

#### **Building E - Classrooms:**

Two 30 ton units and controls.

DESIGN UNDERWAY
Anticipated Fall Start Date



# LINDHURST HVAC, INC. 3 PROPOSED DESIGN

#### **Building G – Auto and Wood Shop:**

25 Ton Carrier Brand; ground mounted system and controls. Note: Custom Evaporative Coolers are likely.

#### **Building A – Main Administrative Offices:**

Roof mounted system – removal of the system in the attic and the installation of the new roof mounted unit requires the removal of a portion of the roof and controls.

#### **Science Building Controls:**

Remove the Siemens Controls (closed system; proprietary). Replace with "open" controls (non-proprietary) – Carrier System Controls Design.

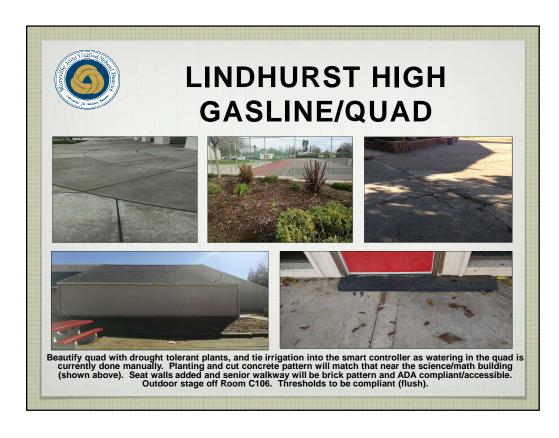
#### Miscellaneous Related Scope:

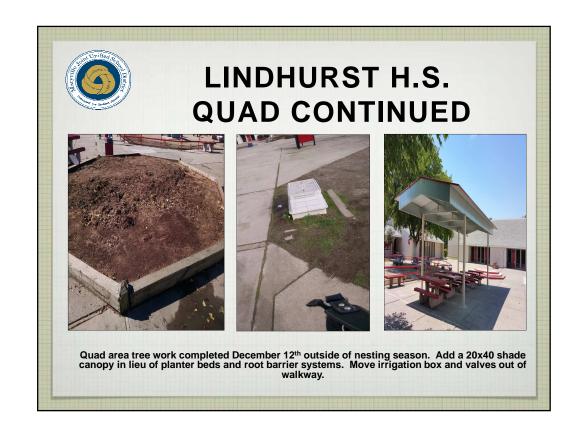
Final Decommissioning of the central plant.

Removal and capping of the chilled waterlines and other components.

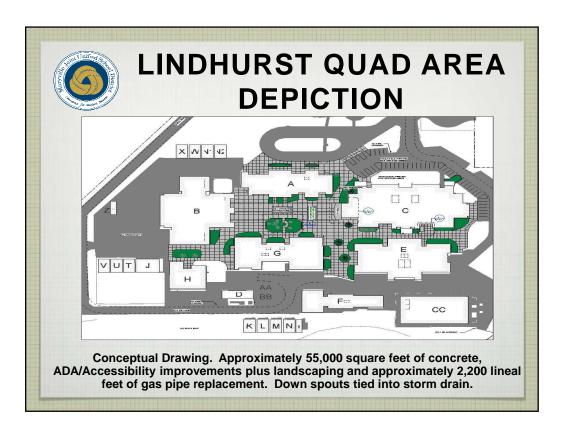
Note: Subject to available funding





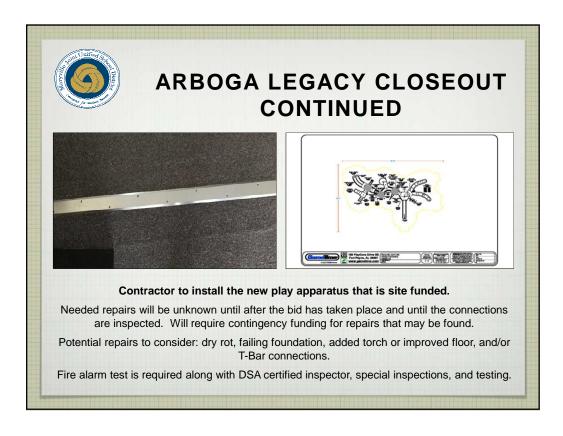






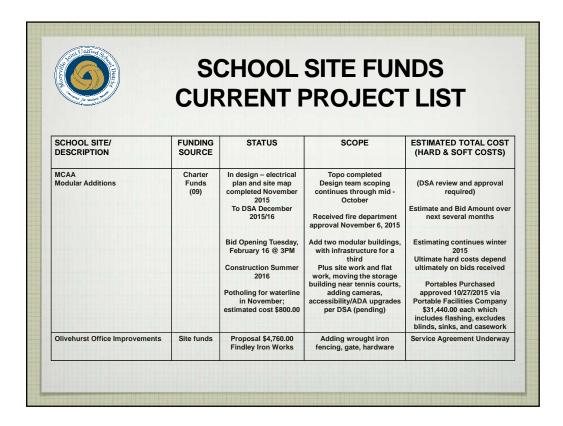






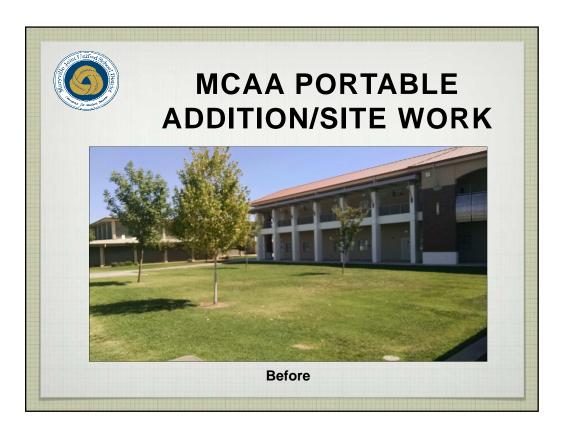


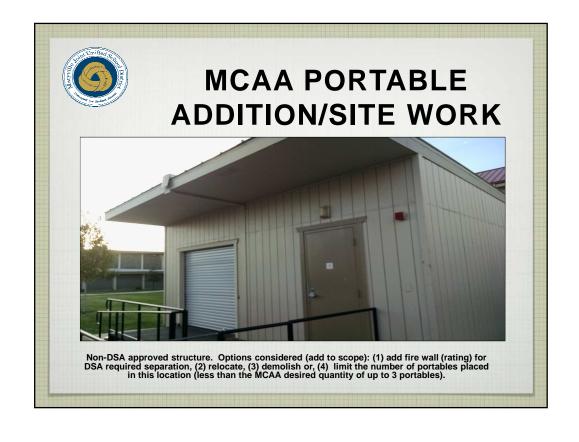




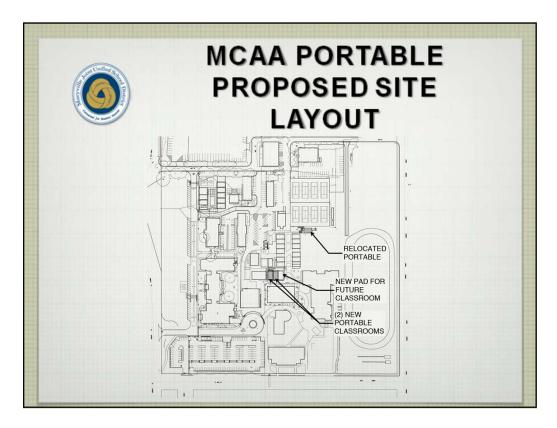






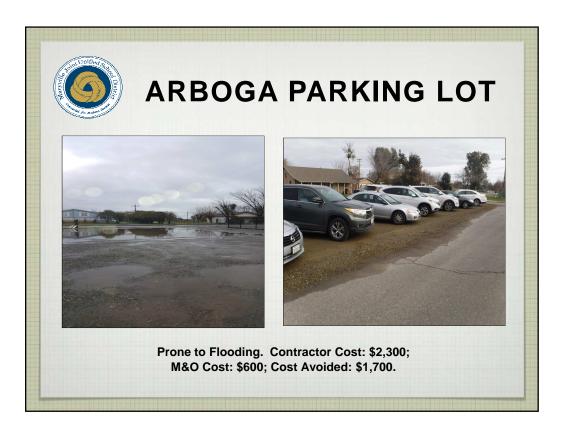


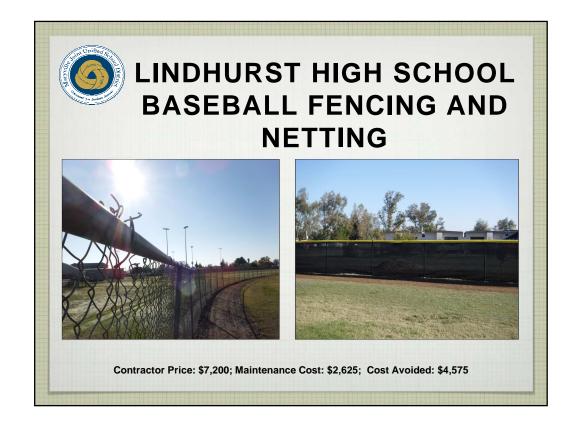






















## MHS POOL PUMP REBUILT AND INSTALLED





Contractor price refurbish and reinstall Pump: \$3,600; M&O cost to install refurbished Pump: \$600; Avoided cost: \$3,000.



## OTHER M&O IMPROVEMENTS & COST SAVING MEASURES

#### SCHOOLS

- Cedar Lane Replaced HVAC Room C105
- Kynoch Replaced RTPU Room 26 and 27
- Linda Bathroom and Main office Refresh
- Lindhurst Emergency Lighting Repair
- Marysville High School Electrical Infrastructure Upgrades wood shop
- Transportation Office Refresh Carpet replacement, paint, removal of old counters, installation of new office furniture
- · Yuba Feather, Indian Ed. HVAC Replacement

#### **DISTRICT WIDE**

- EPA compliance
- In-house HVAC Preventative maintenance/Belt and Filter Changes District wide
- · Asbestos and Lead Awareness Training annual 2 hour each as required
- AHERA Compliance/Inspections/Training (facilities and maintenance)
- Foothill Schools Water Studies (facilities and maintenance)
- Spill Prevention Plan (underway as required per Yuba County Environmental)

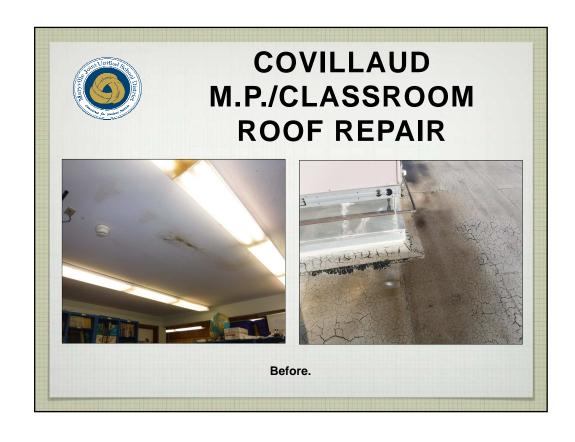














# PROP 39 AND ENERGY MANAGEMENT PROGRESS





### **PROP 39 OVERVIEW**

#### **MJUSD** (excluding MCAA)

- Plan Submitted to California Energy Commission on December 22<sup>nd</sup>
- Review underway as of January 2016 Approval Pending
- Funds Follow CEC approval of Energy Expenditure Plan (EEP)
- Funds contemplated in Spring or early Summer 2016

#### **MCAA**

- EEP submitted to California Energy Commission and approved Fall 2015
- With this approval, year 2 and 3 (of 5 total) funds follow estimated to be paid Mid to Late March 2016

#### Ongoing Requirements (MCAA and MJUSD) and Data:

- Only items included and approved in the EEP may be paid for via this funding source
- Yearly reporting and site audits are required for completed measures
- Use of these funds are restricted to EEP Components. Actual costs may be higher than the approved estimates so the EEP's are updated yearly as needed





## **PROP 39 - MCAA OVERVIEW** OF IMPROVEMENTS

- 1. Internet Based Programmable Thermostats installed, programmed to bell and holiday schedule, staff training completed.
  - Parts \$9,305 / Labor \$900 = Total \$10,475.
- 2. 3 of 18 BARD units to be quoted and to be replaced by M&O HVAC staff in the Spring (main office Room E1 and E2).

Note: Contractor Price \$26,780; Maintenance to install; Materials = \$11,541. Savings = \$15,239.

- 3. Lighting retrofits to LED to be quoted and replaced
  - LED Lighting trial since spring 2015; 34 watt fluorescent lamps to LED 17 watt lamps. Went from three lamps per fixture to two lamps per fixture = energy saving. Cleaner lighting.
- 4. Installation of 25 occupancy sensors Board approval 2/9/16. Cost is \$10,530. Work to be completed Spring 2016.
- 5. Installation of some new dual pane windows Board approval 2/9/16. Cost is \$14,779. Work to be completed Spring 2016.



## **PROP 39 –** INTERNET BASED HVAC **CONTROLS OVERVIEW**

- Internet Based Programmable Thermostats for all portables included in
- **Benefits of these Programmable Thermostats:** 
  - Temperatures to be set individually per room and from the internet.
  - Principal and their designee receive a login as well as M&O HVAC
  - The HVAC units are set to turn down or off during unoccupied times such as weekends or holidays with upper and lower limits so they don't overheat or get too cold.
  - · The units do not rely on site staff or M&O staff to shut the controls off so energy is saved and the units last longer.
  - · Moving toward a standard for HVAC controls.

#### Sites with portables Included in EEP:

Arboga, Browns Valley, Cedar Lane, Community Day, Covillaud, Dobbins, Ella, Kynoch, Lindhurst, Loma Rica, CDS/Indep. Study, McKenney, SLHS, MCAA, and Yuba Gardens.





## HVAC/LIGHTING EEP COMPONENTS

- 1. Program 8155 DSA Exemption Approved (\$400).
  - United Building Construction, Inc. = low bidder: \$369,998.00 plus soft costs.
- 2. 8155 Scope Includes: Replacing 18 HVAC units, installation of sensors and 9 parking lot lighting heads to LED.
- 3. Classroom Lighting (T8 34 watt to LED 17 Watts) and exterior wall packs lighting retrofits to follow (outside of program 8155) and based on receipt of Funds.



## LINDHURST H.S. EEP COMPONENTS

- Installation of Occupancy Sensors in Rooms and Offices
- De Lamp 192 34 watt fluorescent fixtures and Re Lamp with LED 17 watt
- Replace all exterior lighting fixtures: 29 Pole mounted parking lot plus wall packs
- Add 3 exterior lighting Controllers
- Install 2 Economizer on Air handlers and a 3 VFD's on Cooling Towers
  - Note: Not likely now as the central plant is being replaced
- Replace 18 HVAC Controls in Portables (cover in previous slide above)

Note: Items above are per KW Engineering Report dated January 22, 2015 and as commissioned by CEC on behalf of MJUSD. Completion of Improvements contingent on availability of Prop 39 funds and based on actual costs.





## MARYSVILLE H.S. EEP COMPONENTS

- Install 35 Occupancy Sensors in classrooms and offices
- · Replace 50 Incandescent Light with CFL's
- · Convert 35 CFL Exit Signs to LED
- · Replace 75 HPS/MV Lights to Induction
- De Lamp 245 34 watt fluorescent fixtures and Re Lamp with LED 17 watt
- · Replace all exterior lighting fixtures: 23 Pole mounted parking lot/ wall packs
- Replace 24 roof top package units (# of tons vary)
- · Replace 47 manual thermostats and replace with SMART programmable controls
- Replace old refurbished pool pump and add a 15 H.P. VFD (to regulate the rate of water turn over and minimize speed). Specialist needed to verify minimum speed. Quote received but must be bid to move forward due to cost over \$15K.
- · Install 15 vending machine misers.

Note: Items above are per KW Engineering Report dated January 22, 2015 and as commissioned by CEC on behalf of MJUSD. Completion of Improvements contingent on availability of Prop 39 funds and based on actual costs.



## **ENERGY MANAGEMENT**

- 1. Continual "shut downs" as current staffing levels allows including:
  - · Shut off HVAC, computer labs, lights, and other equipment
  - Prop 39 improvements will save energy
  - Modernization and maintenance projects help with energy savings
  - Ongoing monitoring of energy and natural resources usage
  - Find and repair leaks
  - · Install drip systems and irrigation controls where feasible





# DSA LEGACY PROJECTS

- <u>Legacy Defined</u>: DSA projects 1995 or older that were not completed as required by DSA. Additional work will be required to obtain completion with certification.
- Complexity: Varies widely.
- <u>Significance</u>: No new projects that require DSA review can move forward or the scope of the legacy must be included in new project, per site or specific to site.



# RECAP DSA LEGACY PROJECTS CLOSED

#### **Legacy Projects Closed Since Winter 2015**

- District Office (facilities) DSA 02-109162 (2009)
- Johnson Park DSA # 02-110582 (2013)
- Linda DSA #02-103371 (2003)
- Marysville High School DSA #54817 (1999)
- Lindhurst High School DSA #65394 (1997)
- D.O. Portables/Facilities #02-109162 (2009)
- Yuba Feather DSA #54526 (1995)





# RECAP DSA LEGACY PROJECTS CONTINUED

#### **Legacy Projects - Open/Currently Compiling Details**

- Alicia DSA #54782 (1999)
- Cedar Lane (3 total)
  - DSA #53787 (1990-1996)
  - DSA # 02-101291 (1999-2003)
  - DSA #02-100606 (2000)
- Cordua DSA #02-105103 (2003)
- Ella (3 total)
  - DSA #02-109315 (2009)
  - DSA #54665 (unknown)
  - DSA #58272 (unknown)
- D.O. Portables/Facilities #02-109162 (2009)



# RECAP DSA LEGACY PROJECTS CONTINUED

#### **Legacy Projects - Open/Currently Compiling Details**

- Johnson Park DSA #02-106605 (2008-2010)
  - Documents Submitted 4/15/15 resubmitted 1/15/16
- Linda DSA #02-103371 (2003)
- Lindhurst High School DSA #65394 (1997)
- Marysville High School DSA #54817 (1999)
- McKenney DSA #67937 (1999)
- Olivehurst DSA #54781 (1999)
- Yuba Feather DSA #54662 (1995)
- Yuba Feather DSA #02-106502 (2008) (8013 Generator, 2 Bldgs. M/P & 8 Relo.)
- Yuba Gardens DSA 02-106501 (2006)



