



QUARTERLY FACILITIES AND ENERGY MANAGEMENT UPDATE

May 24, 2016



AGENDA

- Funding Overview
- General Fund One-Time Money Projects Update
- Bond Project Update
- School Site Funded Projects Update
- Maintenance and Operations Projects
- Deferred Maintenance Update
- Prop 39/Energy Management Update
- Facilities Master Plan

FUNDING OVERVIEW





FUNDING SOURCES

<p>General Fund One-Time Money <i>Includes One-Time Discretionary and Previously allocated General Fund EFB</i></p>	<p>\$5,104,178 (2015/2016) \$2,373,101 (allocated as of 5/13/16) <u>\$2,731,077 (remaining as of 5/13/16)</u></p>
<p>Bond Fund 23</p>	<p>\$298,062 (2015/2016) Expenditures (as of 5/13/16): \$198,753; Encumbrances (as of 5/13/16): \$5,390 <u>\$93,919 (remaining as of 5/13/16)</u></p>
<p>Fund 35 – State Match</p>	<p>\$184,365 (2015/2016) Expenditures (as of 5/13/16): \$41,557; Encumbrances (as of 5/13/16): \$0 <u>\$142,808 (remaining as of 5/13/16)</u></p>
<p>Routine Restricted Maintenance (Resource 8150)</p>	<p>\$2,895,700 (2015/2016) Expenditures (as of 5/13/16): \$2,431,473; Encumbrances (as of 5/13/16): \$422,203 <u>\$42,024 (remaining as of 5/13/16)</u></p>



FUNDING SOURCES

Emergency Repair (Resource 6225)

\$54,023 (2015/2016)
Expenditures (as of 5/13/16): \$7,783;
Encumbrances (as of 5/13/16): \$0
\$46,240 (remaining as of 5/13/16)

Deferred Maintenance – Fund 14

\$1,401,047 (2015/2016)
(incl. \$820,000 annually through LCAP)
\$1,078,524 (allocated as of 5/13/16)
\$322,522 (remaining as of 5/13/16)

**Prop 39 MJUSD – Clean Energy
(Fund 1 - Restricted MJUSD)**

\$2.2 Million (estimated)
(Over 5 Years)

**Prop 39 MCAA – Clean Energy
(Fund 9 - Restricted MJUSD)**

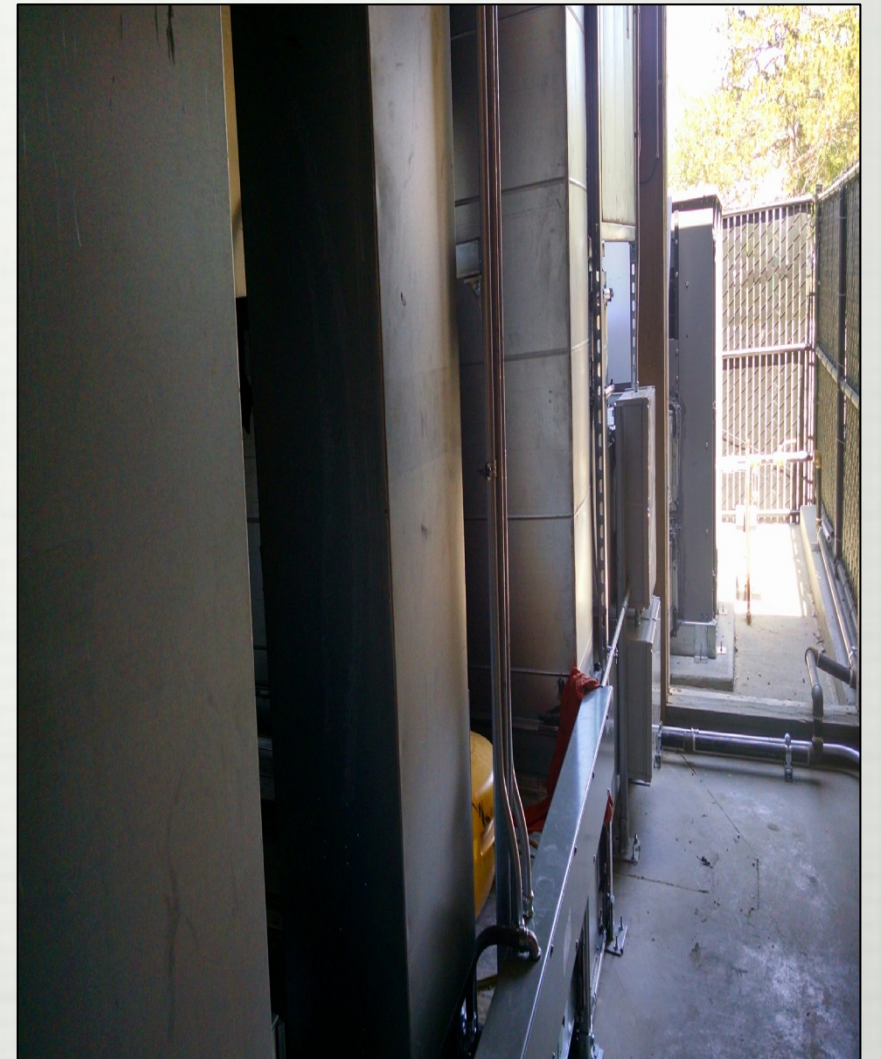
\$250,000 (estimated)
(Over 5 Years)

GENERAL FUND ONE-TIME MONEY PROJECTS





LINDHURST HIGH HVAC PROJECT INCREMENT 1



C Building – Before and After



LINDHURST HIGH HVAC PROJECT INCREMENT 1



C and F Buildings: Demolition of cement, removal of old boiler(s), chilled water lines, gas lines, and some ducting; added electrical, cement pads for air handlers and enclosures. Encountered soft soils (added excavation, compacting, fill, testing/ inspections). In order to obtain manufacturer warranties on HVAC equipment required that change in unit enclosure design shown above on the right. A \$42K credit has been requested from Carrier (in progress).



LINDHURST HVAC INCREMENT 1

Expenditure Summary:

Architect Fees	\$181,004
Builders Risk Insurance	\$0
CDE Fees	\$0
Construction	\$1,405,877
Construction Testing	\$12,675
Construction Utility Costs	\$0
DSA Fees	\$873
Engineering Fees	\$0
Environment Services	\$0
Furniture and Equipment	\$0
Inspection Fees	\$36,335
Security	\$0
Other Costs - Bldg Improvement	\$75
Other Costs - Planning, Advertising, etc.	\$3,931

TOTAL	\$1,680,020
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Note: Figures are as of May 13, 2016. Note: Split funded with Fund 14. Placed on OPSC's unfunded list for \$889,929 (60% match based on Architect estimate).



LINDHURST HVAC INCREMENT 2 PROPOSED DESIGN

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

Four ground mounted units, Carrier brand, with compatible controls. Removal of all old air handlers, chilled water lines, electrical upgrades, duct cleaning and/or replacement and controls.

Metal Shop/Classroom – H Building:

Replace cooling/heating for Classroom and Staff Office and add controls. Electrical upgrades (400 AMP Panel components) and ducting cleaning and/or replacement. Add controls.

Building E – Classrooms:

Complete commissioning to assist in interim period as well as Increment 3 design and subsequent construction project.

Anticipated Bid Opening: Thursday, August 4th
Bid Award: Tuesday, August 23rd



LINDHURST HIGH HVAC, INCREMENT 2



Existing Conditions



LINDHURST HVAC INCREMENT 3

Proposed Scope:

Building E – Classrooms:

Ground mounted systems plus the installation of controls. Added louvers, vents, duct cleaning, insulation and sealing, electrical upgrades. Removal of all air handlers, chilled water lines and other related equipment. Fenced enclosures with gates. Ducting redo in the crawl spaces.

Building A – Main Administrative Offices:

Ground mounted systems plus the installation of controls. Fenced enclosures with gates and landscaping.

Science Building Controls:

Replacement of Siemens Controls (closed system; proprietary). Replace with “open” controls (non-proprietary) – Carrier System/Compatible Controls.

Miscellaneous Related Scope:

Final decommissioning of the central plant. Removal and capping of all chilled waterlines and other components not previously completed.

Note: Subject to future available funding.



LINDHURST HIGH QUAD/GAS LINE



Beautify quad with drought tolerant plants and tie irrigation into the smart controller as watering in the quad is currently done manually. Concrete pattern will match newer existing near the science/math building (shown above). Seat walls added with brick senior walkway, all hardscape to be ADA compliant/accessibile. Outdoor stage added off Room C106. Start May 12th, end Sept 2nd.



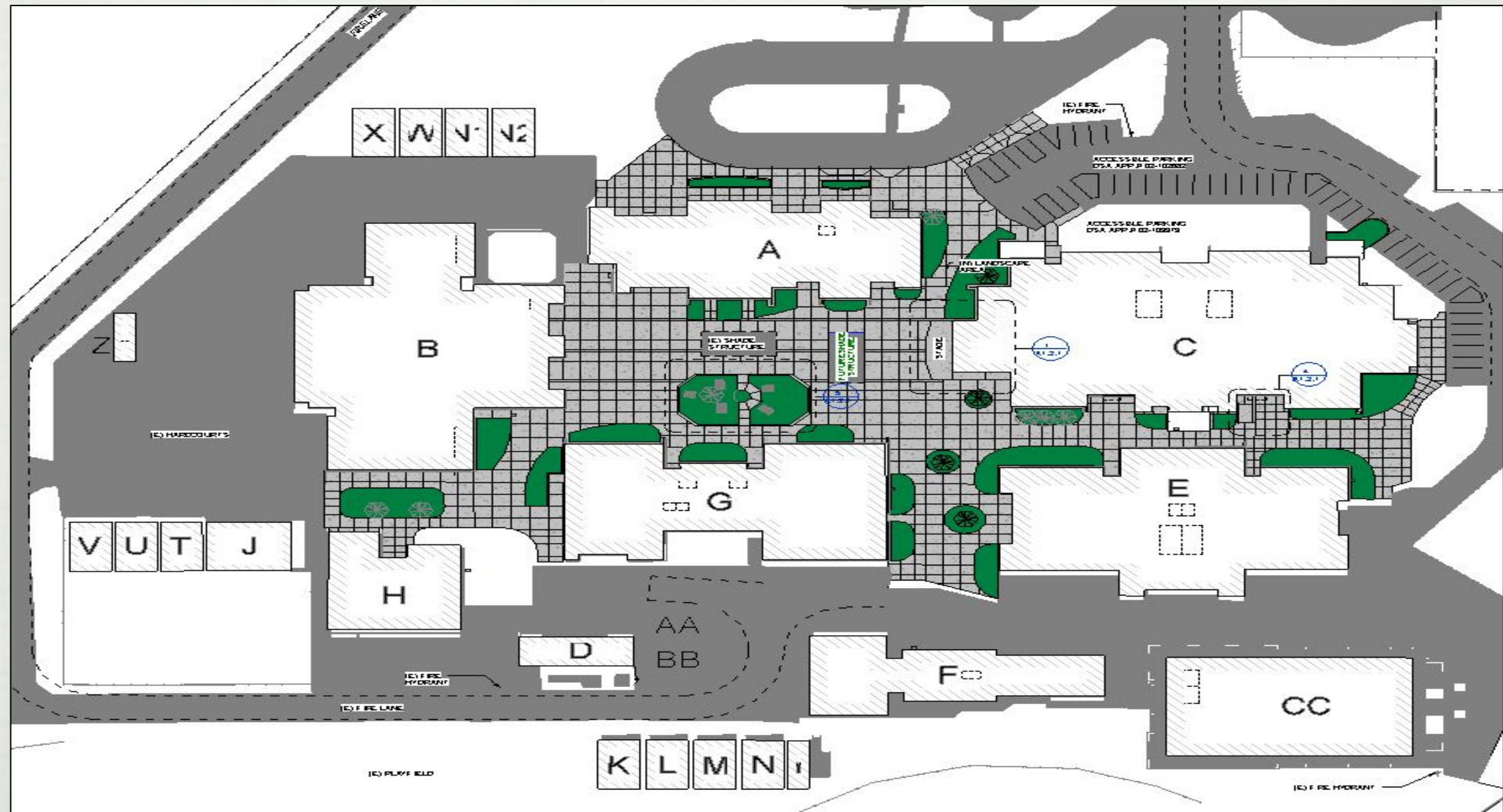
LINDHURST HIGH QUAD/GAS LINE



Quad area tree work completed December of last year outside of nesting season. Add a 20x40 shade canopy in lieu of planter beds and root barrier systems. Move irrigation box and valves from main walkways. **PA PO split between 8075 and 8173 (Quad and Canopy)**



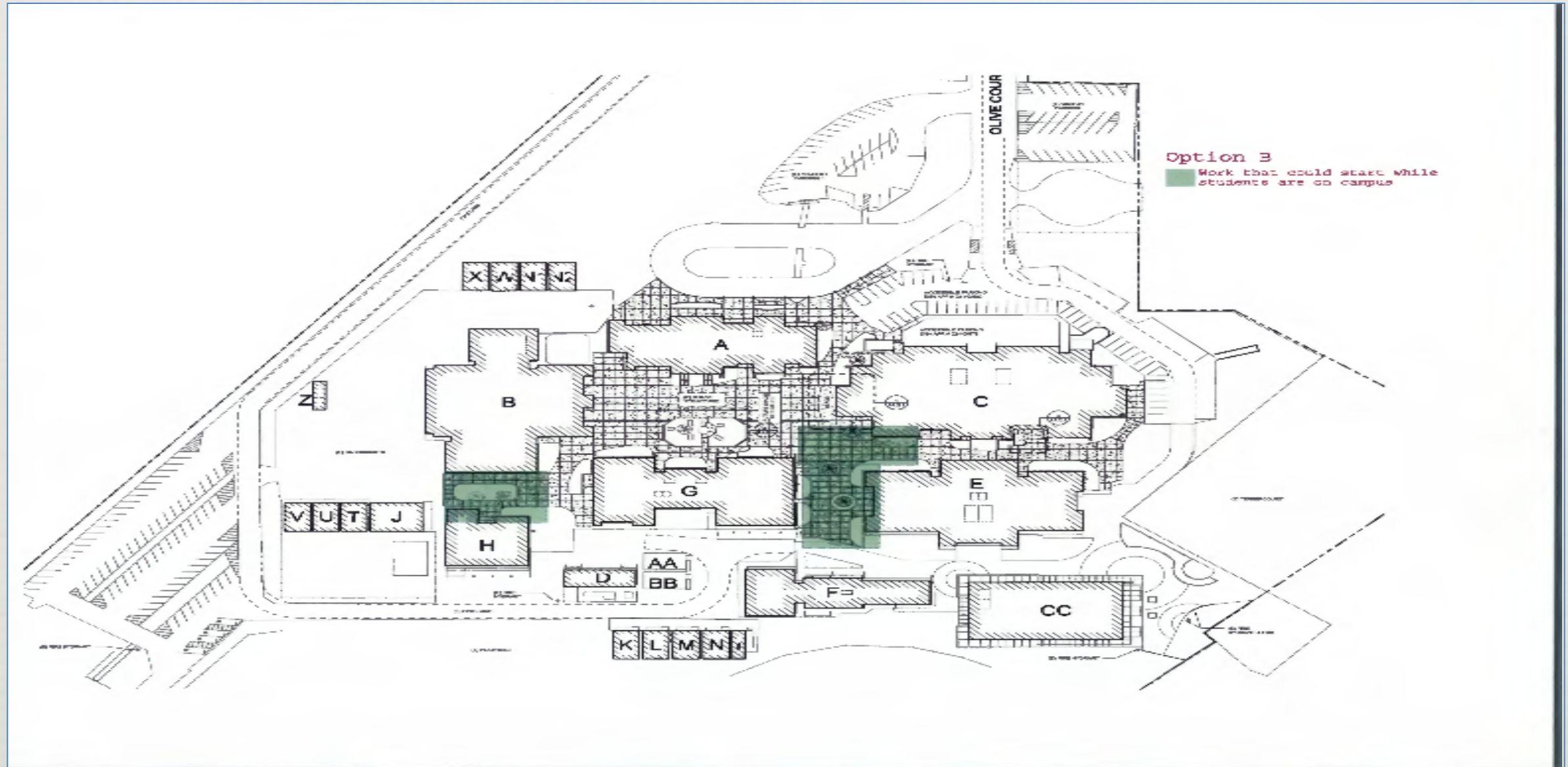
LINDHURST QUAD AREA DEPICTION



Conceptual Drawing. Approximately 55,000 square feet of concrete, ADA/Accessibility improvements plus landscaping and approximately 2,200 lineal feet of gas pipe replacement. Down spouts tied into storm drain.



LINDHURST QUAD



Phasing Plan – Extend the construction period from June 6 through September 2 with punch and closeout to follow. Begin with frontage and main interior quad with shaded areas follow.



LINDHURST QUAD

Expenditure Summary:

Architect Fees	\$162,500
Builders Risk Insurance	\$0
CDE Fees	\$0
Construction	\$0
Construction Testing	\$3,838
Construction Utility Costs	\$0
DSA Fees	\$3,000
Engineering Fees	\$0
Environment Services	\$0
Furniture and Equipment	\$0
Inspection Fees	\$1,755
Security	\$0
Other Costs - Bldg Improvement	\$5,500
Other Costs - Planning, Advertising, etc.	\$3,345
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TOTAL	\$179,937

Note: Figures are as of May 13, 2016. Note: Fund 1. Low Bidder: BRCO @ 2,048,000.



LINDHURST QUAD SHADE CANOPY

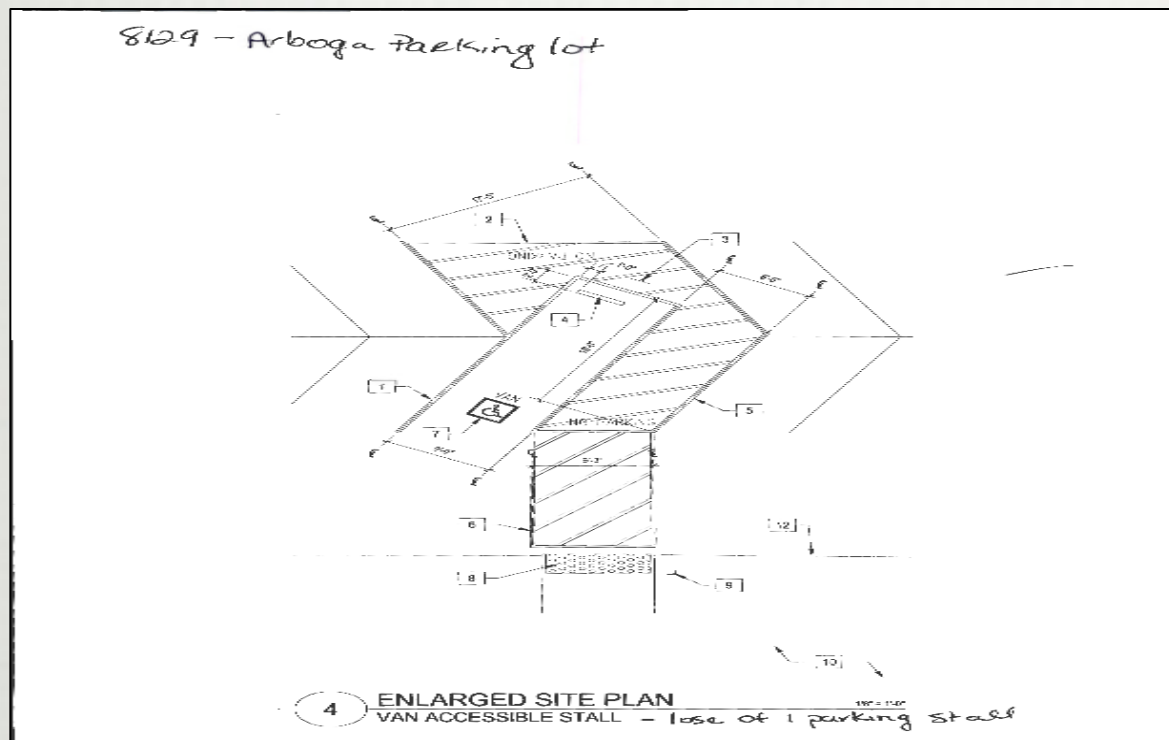
Expenditure Summary:

Architect Fees	\$0
Builders Risk Insurance	\$0
CDE Fees	\$0
Construction	\$0
Construction Testing	\$0
Construction Utility Costs	\$0
DSA Fees	\$1,150
Engineering Fees	\$0
Environment Services	\$0
Furniture and Equipment	\$0
Inspection Fees	\$0
Security	\$0
Other Costs - Bldg Improvement	\$0
Other Costs - Planning, Advertising, etc.	\$1,827
TOTAL	\$2,977

**Note: Figures are as of May 13, 2016. Note: Fund 1. Low Bidder: United Bldg. @ \$64,880.
RGA PA PO split between 8075 and 8173.**



ARBOGA LEGACY CLOSEOUT WITH DSA CERTIFICATION (6) PORTABLES/SITE WORK



Low Bidder United Building Contractors at \$249,900 including contingency for unknowns.

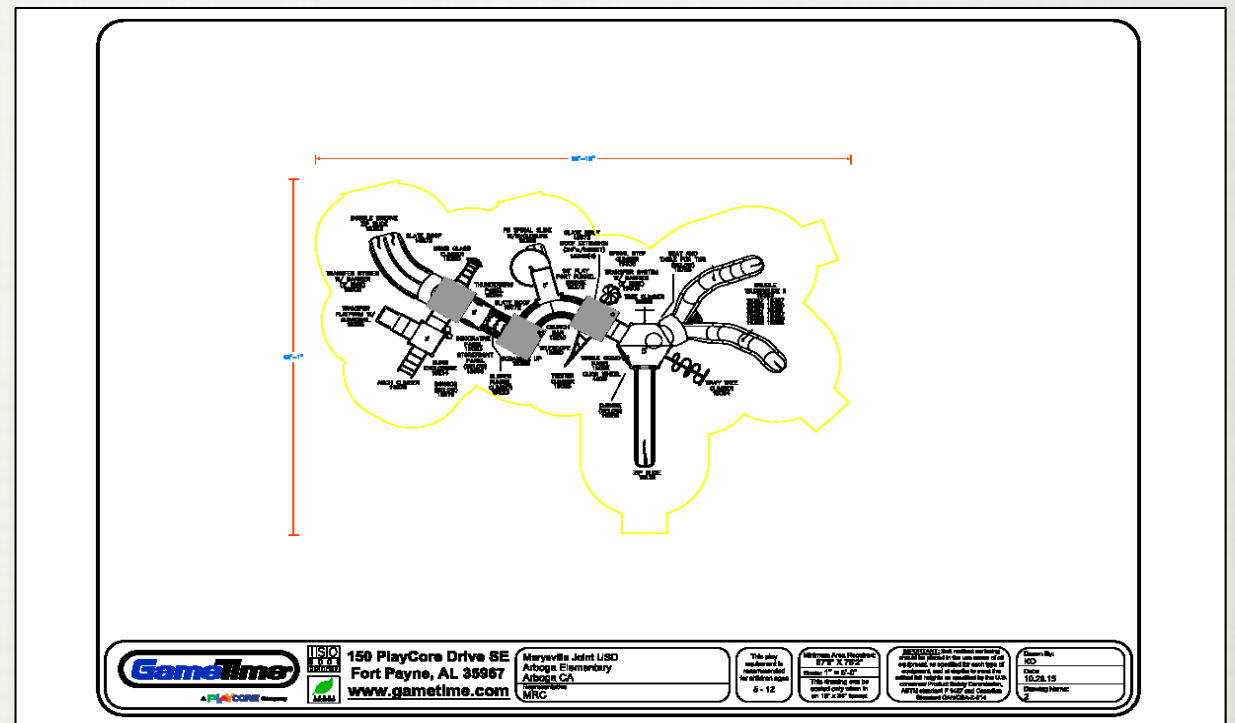
Original project pre-2006 - DSA is requiring this past work to be closed with certification with a deadline of Summer 2016.

Resubmittal to DSA is required for the path of travel to the playground area for accessibility compliance (ADA).

In addition, site work includes new van accessible parking stall and sign, new walkway from lot through campus interior around portable 15. New fencing and gate near the parking lot into campus.



ARBOGA LEGACY CLOSEOUT



Contractor to install the new play apparatus that is site funded.

Needed repairs will be unknown until the connections are inspected. Will require contingency funding for repairs that may be found.

Potential repairs to consider: dry rot, failing foundation, improved flooring, and/or T-Bar connections.

Fire alarm test is required along with DSA certified inspector, special inspections, and testing.



ARBOGA LEGACY CLOSEOUT

Expenditure Summary:

Architect Fees	\$14,778
Builders Risk Insurance	\$0
CDE Fees	\$0
Construction	\$0
Construction Testing	\$0
Construction Utility Costs	\$0
DSA Fees	\$0
Engineering Fees	\$0
Environment Services	\$0
Furniture and Equipment	\$13,000
Inspection Fees	\$980
Security	\$0
Other Costs - Bldg Improvement	\$2,732
Other Costs - Planning, Advertising, etc.	\$5,570
TOTAL	\$37,060

Note: Figures are as of May 13, 2016.

BOND PROJECT





JOHNSON PARK & OLIVEHURST LANDSCAPING PROJECT

Proposed Scope:

- Irrigation and Controls
- Grading and Fine Grading
- Hydro-seeding and Fertilizing



SCHOOL SITE FUNDED PROJECTS





MCAA PORTABLE PROJECT

Expenditure Summary:

Architect Fees	\$23,389
Builders Risk Insurance	\$0
CDE Fees	\$0
Construction	\$33,304
Construction Testing	\$0
Construction Utility Costs	\$0
DSA Fees	\$4,725
Engineering Fees	\$0
Environment Services	\$0
Furniture and Equipment	\$13,123
Inspection Fees	\$280
Security	\$0
Other Costs - Bldg Improvement	\$8,250
Other Costs - Planning, Advertising, etc.	\$4,627

TOTAL	\$87,698
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Note: Figures are as of May 13, 2016. Note: Site Funded. Low Bidder United Building @ \$358,500.



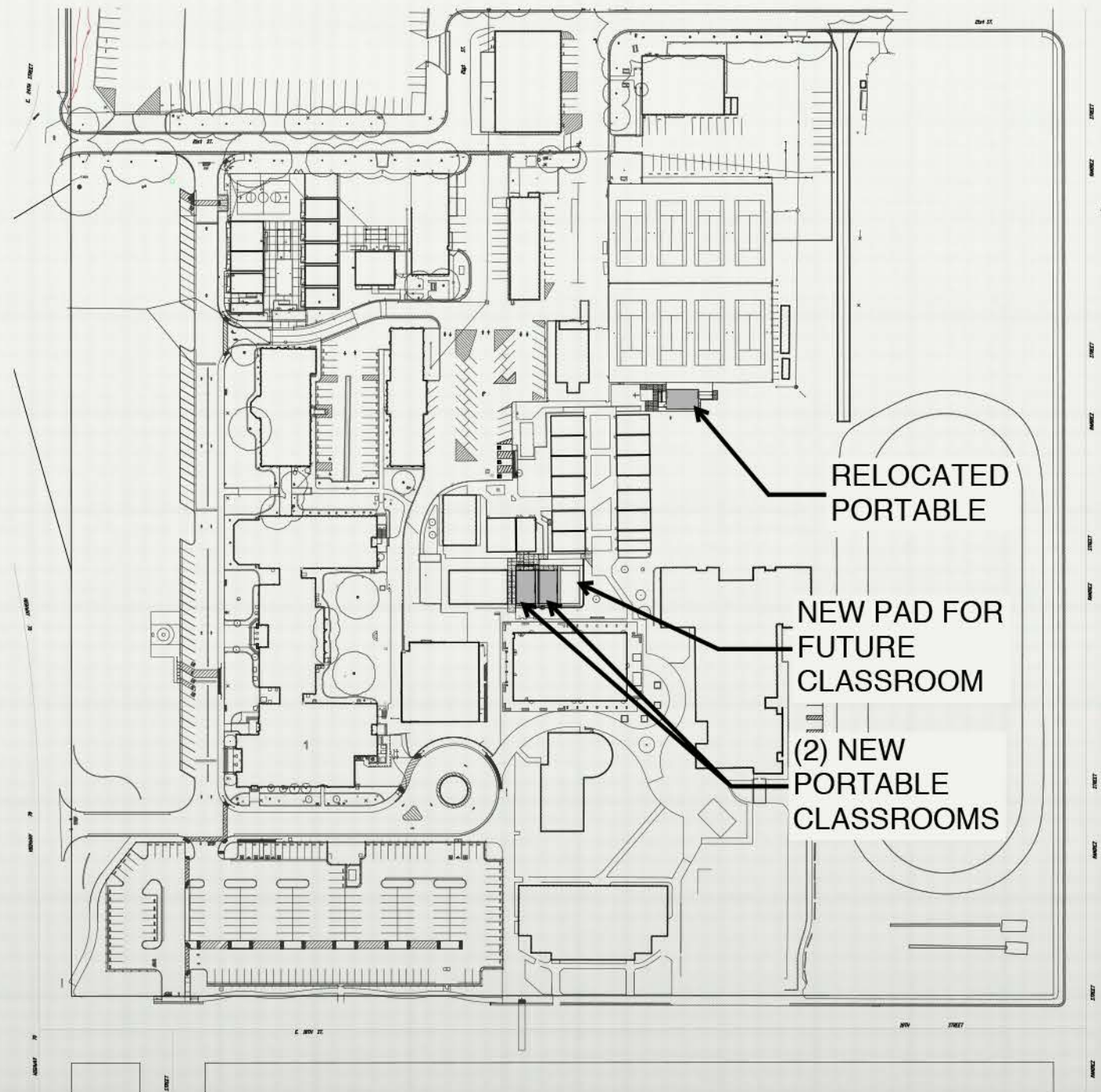
MCAA PORTABLE PROJECT



Before



MCAA PORTABLE PROPOSED SITE LAYOUT



DEFERRED MAINTENANCE PROJECTS





MHS KITCHEN

Expenditure Summary:

Architect Fees	\$23,490
Builders Risk Insurance	\$0
CDE Fees	\$0
Construction	\$2,625
Construction Testing	\$475
Construction Utility Costs	\$0
DSA Fees	\$400
Engineering Fees	\$0
Environment Services	\$0
Furniture and Equipment	\$0
Inspection Fees	\$0
Security	\$0
Other Costs - Bldg Improvement	\$0
Other Costs - Planning, Advertising, etc.	\$2,894

TOTAL	\$29,884.00
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Note: Figures are as of May 13, 2016. Low Bidder is United Building @ \$66,255.

MAINTENANCE AND OPERATIONS PROJECTS





BROWNS VALLEY GARDEN FENCING



M&O Price = \$500; Contractor Price = \$3,300. Savings = \$2,800.



COVILLAUD MAIN ADMINISTRATION BLDG. ROOF REPAIR



Before



After



COVILLAUD UNDER GROUND STORAGE TANK



M&O staff oversaw this project. Removal required by Yuba County Environmental Health.



DISTRICT WIDE SIDING REPLACEMENT



Replacing Rotted Siding on portables throughout the District



DISTRICT WIDE TRIPPING HAZARDS



Removal/Replacement or grinding of tripping hazards throughout the District.

MHS pool deck pictured above.



DISTRICT OFFICE POTHOLE PATCHING



Before



After



DOBBINS EROSION CONTROL



M&O Price = \$1,000. Contractor price =\$9,000. Savings = \$8,000.



LHS SUPPLY AIR DUCTING



A Building – Ducting Reattached by M&O Staff



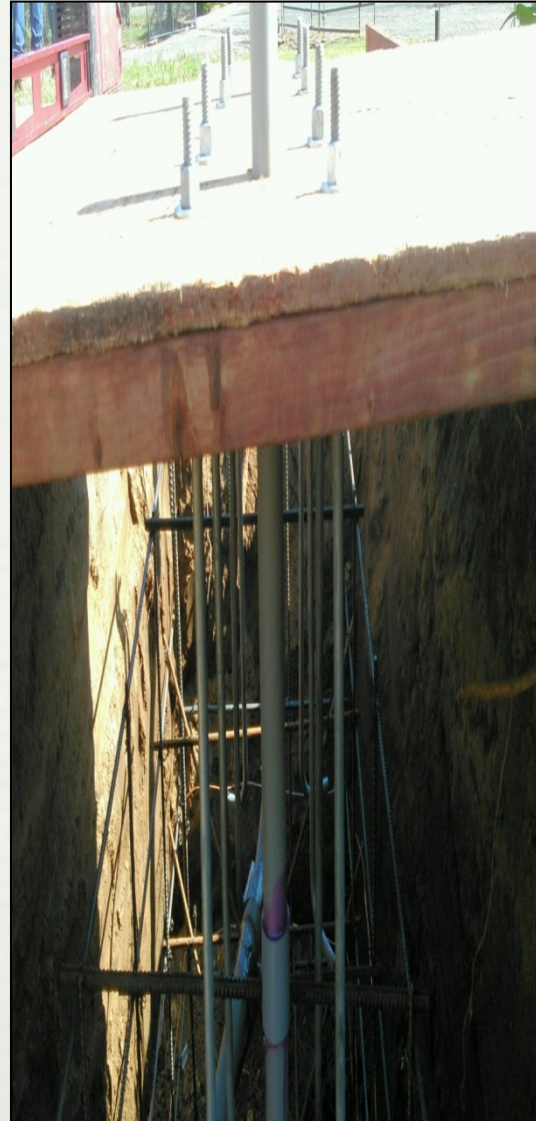
LHS MEDIA CLASSROOM



Maintenance cost \$7,000; Contractor estimated cost \$48,000; Cost Avoided: \$41,000



LHS MARQUEE



Maintenance and grounds staff removed the old marquee, demolished the old concrete, fabricated/reinforced new slab, added the electrical conduit and ran new power and data



LHS METALS STORAGE ROOM



Maintenance cost : \$1,200; Contractor estimated cost \$9,500; Cost avoided: \$8,300



LOMA RICA GRADING/DRAINAGE



M&O Price = \$360; Contractor price = \$4,100. Savings = \$3,740.



MHS TREE WORK



**M&O Removed 10 Dead trees. Contractor Price = \$38,000. Grounds Price = \$400.00.
Savings = \$37,600.**



MHS TENNIS COURTS PAINTING



Before



After



MHS SCIENCE BUILDING PAINTING



Before



After



YUBA FEATHER EROSION CONTROL



M&O Price = \$2,000. Contractor price =\$13,000. Savings = \$11,000.



OTHER M&O IMPROVEMENTS & COST SAVING MEASURES

DISTRICT WIDE:

- **EPA compliance**
- **In-house HVAC Preventative Maintenance/Belt and Filter Changes – District wide (1400 filters to be changed each quarter)**
- **Asbestos and Lead Awareness Training – annual 2 hour each as required**
- **AHERA Compliance/Inspections/Training**
- **Foothill Schools Water Studies**
- **Spill Prevention Plan - (underway as required per Yuba County Environmental)**



SUMMER 2016 PROJECTS LIST:

- Covillaud Preschool – Install 3 fire alarms
- DO Installation of 3 Pipe Gates on back road
- District wide Bleacher Inspections
- Repair all district outside bleachers as needed
- District wide Painting of Fire Lanes
- District wide Siding Replacement
- LHS Metals Shop and Culinary Classrooms improvements
- Install Marquee at LHS
- LHS Science/New Media room remodel
- M&O Yard clean up and disposal of obsolete items
- Door Install front office at Olivehurst
- Fix sink hole in playground at JP
- Install 5 new exterior drinking Fountains at LHS
- New asphalt center at Foothill playground
- Repair roof at LHS front office (leaking roof)
- Replace and repair sheet rock at Covillaud
- Replace windows at DO above break room
- Foothill Landscape and Irrigation project
- Paint exterior of LHS front office
- Paint exterior of Johnson Park
- Paint 2 classrooms at Cedar Lane
- Clean and repair all gutters District wide
- Replace 15 old faucets at Kynoch
- Build a ball wall at Cedar Lane
- Clean storm drains District wide (Vac Trailer)
- Install Shoreline power at Cedar Lane & Olivehurst
- Preventative Maintenance on Plumbing
- Preventative Maintenance on HVAC
- Patch and repair road by transportation

Note: Subject to change. Additional details will be shared at the next quarterly presentation.

PROP 39 AND ENERGY MANAGEMENT PROGRESS





PROP 39 OVERVIEW

MJUSD Update Since March 2016:

- Completed an application for another comprehensive audits via CEC under Bright Schools Grant for: Yuba Gardens, McKenney, and Olivehurst. Audits completed 05/10 and 5/11.
 - This grant for audits is limited to three schools at a time. These site were chosen due to the large size of the schools along with the age of these facilities.
- Once the audits are complete an energy Expenditure Plan is submitted for approval with approval for funds to follow thereafter (year 3 is likely as fiscal year 2016/17 is the estimated time frame).
- Additional audits will follow until Prop 39 funds are depleted.



PROP 39 - MCAA PENDING IMPROVEMENTS

Interior and Exterior Lighting Replacements:

Interior – Going from 252 (three 32 watts lamps per fixture) to one 14 watt lamp each

Estimated annual savings: \$3,226.80; estimated monthly savings: \$268.90

Note: Star Energy Management to complete the work Summer 2016
approved May 10 at \$12,202.00.

Exterior – Going from 30 metal halide (150 watt)/CFL's (15/26watt) to 30 LED Fixtures (16 or 41 watt)

Estimated annual savings: \$770.76; estimated monthly savings: \$64.23.



PROP 39 MCAA - 3 BARD UNITS REPLACED



M&O price = \$200.00; Contractor Price = \$14,000.00; Savings = \$13,800.



PROP 39 - MCAA OVERVIEW OF IMPROVEMENTS



**Window replacements completed over spring break by
Buttacavoli Enterprises.**



LINDA ELEMENTARY HVAC/LIGHTING EEP COMPONENTS

- Program 8155 - DSA Exemption Approved (\$400).
 - United Building Construction, Inc. = low bidder: \$369,998.00 plus soft costs. Scope Includes: Replacing 18 HVAC units, installation of 37 sensors and 9 parking lot lighting heads to LED.
- 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 which are anticipated in late June 2016 for year 2.



LINDA HVAC PROP 39

Expenditure Summary:

Architect Fees	\$45,176
Builders Risk Insurance	\$0
CDE Fees	\$0
Construction	\$16,122
Construction Testing	\$625
Construction Utility Costs	\$0
DSA Fees	\$400
Engineering Fees	\$0
Environment Services	\$0
Furniture and Equipment	\$0
Inspection Fees	\$350
Security	\$0
Other Costs - Bldg Improvement	\$0
Other Costs - Planning, Advertising, etc.	\$3,488

TOTAL	\$66,161.
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Note: Figures are as of May 13, 2016. Note: Low Bidder United Building at \$336,698.



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 lights plus wall packs**
- **Add 3 exterior lighting controllers**
- **Install 2 economizers on air handlers and 3 VFD's on Cooling Towers**
 - **Note: Not likely now as the central plant is being replaced**
- **Replace 18 HVAC controls in portables**

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.



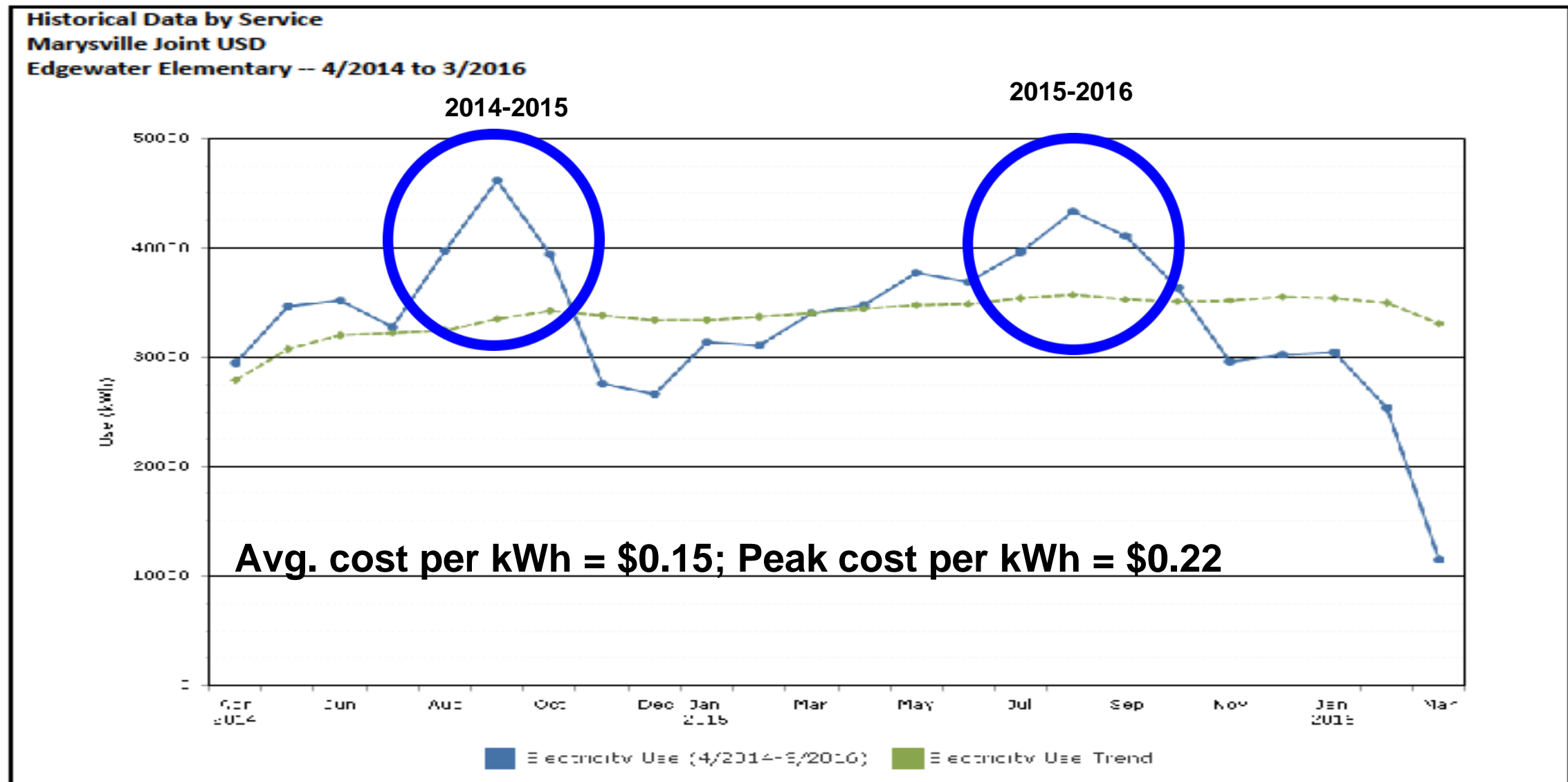
MARYSVILLE H.S. EEP COMPONENTS

- **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) to ground mounted (if possible).**
- **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 DATABASE – SAMPLE



Historical Data by Service report produced by Cynthia Jensen on 04/25/2016 at 3:03 PM

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Edgewater Energy Use April 2014 to March 2015. Use shown versus costs as rates increase even if use is lowered. Peak prices are effective in afternoons during summer months.



ENERGY MANAGEMENT

1. Facilities Staff - Continual “shut downs” and audits:

- Shut off HVAC, computer labs, lights, and other equipment
- Prop 39 improvements will save energy as well as other retrofits
- Modernization and maintenance projects help with energy savings
- Ongoing monitoring of energy and natural resources usage
- Find and repair leaks
- Data entry utility bills – approximately 300 accounts per month ongoing
 - Excludes propane and trash service for now

2. Summer 2016 Shut Off Checklists to be distributed tomorrow:

- Site Administrators for offices and teachers – *Incentive is 25% of savings*
- M&O staff for grounds and custodians
- Food Services for commercial kitchens

3. Baseline data:

- Summer 2014 and Summer 2015 use and cost per unit of use per utility will be distributed to Principals
- Some site are not on a separate meter so tracking some school site savings will be difficult. LHS use will be elevated as the HVAC projects are completed. Begin a “new” baseline once projects are completed.



ENERGY MANAGEMENT SUMMER SHUT DOWN LIST

Please post the completed checklist on your interior door, as this will help us when completing the Summer Energy Audits

Things to do prior to Summer Break:		Done
1.	Turn off all lights and reset outdoor lighting timers to be on from dusk to dawn.	
2.	Shut down computers.	
3.	Shut off equipment: Fans, Monitors, Printer, Copiers, SMARTBoard, Elmos, projectors, ice machines and other items. ⚡ This does NOT apply to telephones, computer CPUs, or LAN servers! Contact the Technology Dept. prior to shutting off or unplugging these items.	
4.	Unplug miscellaneous electronic devices: TV, DVD player, radio, fan, calculator, shredder, plug-in fragrance warmers, electric hole puncher, electric stapler, electric pencil sharpener, etc.	
5.	Empty and unplug all personal appliances including microwaves and coffee makers.	
6.	Empty, unplug, and defrost personal refrigerators (plan to manage the drainage) and leave them open.	
7.	Unplug all water fountains and vending machines that are in vacant areas.	
8.	Windows: Make sure your windows are tightly closed. Close all blinds and window shades.	
9.	Doors: Make sure all exterior doors are tightly closed. Report drafts due to poor insulation.	
10.	Thermostats: Where possible, turn thermostats to 'off'. Otherwise set individual thermostats to 'cool', fan to 'auto', and 90°.	
11.	Plants, animals, and fish should be taken home (if possible).	
12.	Water Fixtures: Check and report any water fixtures that drip or leak.	
13.	Help out your neighbors! If someone in a nearby room is not able to complete the summer shutdown, please help make sure it gets done.	

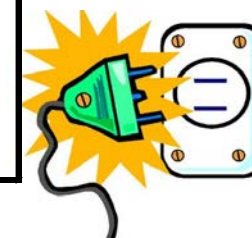
If you have energy saving ideas or any further questions, please contact the
Facilities & Energy Management Department:

Cynthia Jensen- Director of Facilities and Energy Management, cjensen@mjud.com phone: 530.749.6151

Serena Wilden- Facilities Technician, swilden@mjud.com phone: 530.749.6131

Notes/Comments:

If you send comments/ideas using this form, please include your name, contact information, and site/room/department.



Thank You!



FACILITIES MASTER PLAN

- Draft Facilities Master Plan presented for approval at June 28th Board meeting
- Yearly update needed to Needs Assessment and Facilities Master Plan to add further details



THANK YOU



QUESTIONS?