



# EGAN ROOF PROJECT

LASD Board Meeting

March 12, 2018

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# OVERVIEW

- Roof on 2-story building is leaking and should be replaced
  - Significant damage to walls and ceilings
  - Leaking has led to mold and mildew issues
- HVAC system mounted on roof and over 15 years old
- We can take advantage of Prop 39 and PG&E funding to make the building more energy efficient
  - Prop 39 energy efficiency measures done as separate project

# PARTNERS IN THIS PROJECT

- Gelfand Partners Architects
  - EDesignC (mechanical, electrical, plumbing consultant)
- PG&E
  - Integral Group (deep green energy consultant)
- Blach Construction
  - Constructability review, cost estimating, construction management (including acting as general contractor)

# EGAN ROOF



Persistent leaks at penetrations and equipment and skylight curbs

Interference with drainage and lack of access to roof membrane for repair

Multiple patches and continued failure of roof membrane

## Solutions:

- Relocate electric panels and conduit below roof
- Lift and replace equipment and skylights on higher curbs
- Raise height of parapets to fix perimeter leaks
- New roof due to the list of items above and membrane failure

## EGAN ROOF PROJECT COST OPINION<sup>1</sup>

○ Repair and Replace Roof	\$561,000
○ Relocate Electrical Off of Roof	\$98,000
○ Replace HVAC	\$629,000
○ Replace Skylights	\$106,000
○ Wall Repair and Coating	\$113,000
○ General Trades	\$352,000
○ <u>Construction Management</u>	<u>\$345,000</u>
○ <b>Total</b>	<b>\$2,204,000</b>

*Estimate excludes architect, inspector, and DSA fees  
(estimated at \$100,000 in total)*

<sup>1</sup>Cost Opinion provided by Blach Construction

# EGAN ENERGY UPGRADES

- Energy efficiency measures we can implement in the 2-story building to reduce energy consumption level to a point where we qualify for PG&E Zero Net Energy (ZNE) funding
  - Select efficient new HVAC equipment
  - Replace skylights
  - Repair leaking windows
  - Upgrade lighting (done under Prop 39 energy grant project)
  - Solar power (done as separate project)

# Egan 2 Story Building: Project Components



## Roof Repair

- Replace roof
- Relocate electrical
- New HVAC

## Zero Net Energy

- New HVAC (part of roof project)
- Repair leaking (air gaps) windows
- Upgrade skylights
- Lighting upgrades (done under separate project)

## Solar

- To fully power the building
- Done separately, not part of this project

# ANNUAL OPERATING COST SAVINGS

- Roof Project:
  - \$2,304,000 one-time costs
  - **\$11,000 annual savings**
- Prop 39 Energy Project (lighting upgrades)
  - \$153,000 one-time costs (covered by grant)
  - **\$9,500 annual savings**
- Solar Project
  - **\$8,500 estimated annual savings** (based on 2 story building square footage compared to rest of campus)



# FUNDING SOURCES FOR ROOF PROJECT

- PG&E: \$250,000
- District: Balance Needed
  - The roofing project can be paid for out of bond funds (see next slide)

# MEASURE N LANGUAGE

## (EXTRACT FROM BOND PROJECT LIST)

- **“SCHOOL UPGRADES AND REPAIRS TO KEEP EDUCATIONAL FACILITIES SAFE, CLEAN AND IN GOOD REPAIR”**
  - “Replace aging roofs, utilities, heating, ventilation and air conditioning (HVAC) systems, emergency and fire systems and provide for other needed major maintenance by establishing programs to support repair work needed for classrooms, labs and other school facilities for the next decade.”

## PROJECT TIMELINE (EGAN ROOF)

- Plans previously approved by DSA 2017
- Board Approval 3/12
- Bid Documents to Trade Contractors 4/03
- Award bids 5/14
- Construction Starts 6/11
- Occupancy of Building 8/10
- Monitoring Energy Usage on-going

# CONCLUSION

- Staff recommends board approval of plans for Egan Roof Project and Energy Upgrades to 2 Story Building and authorize staff to solicit bids from trade contractors for the project